

on - off



per trasformare un pensiero
in un'azione serve un dito

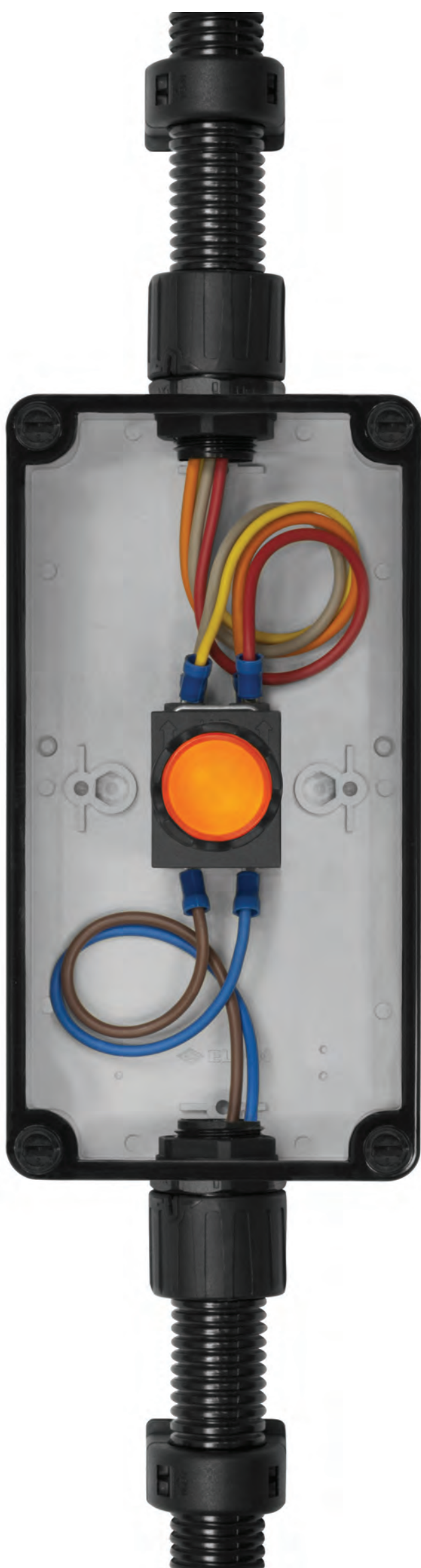
per trasformare un'azione
in un comando serve un dispositivo

noi li chiamiamo
pulsante

to turn a thought into
action you need a finger

to turn an action
into a command you need a device

we call it
push-button



Catalogo generale IV EDIZIONE General catalogue IV EDITION

Benvenuti nella nuova
edizione del catalogo
generale New Elfin.
Vi ricordiamo di visitare
costantemente
il nostro website
www.newelfin.com

Welcome to the
latest edition of the
New Elfin catalogue.
Visit our website
regularly
www.newelfin.com
and keep up with
the latest news.

NEW ELFIN - COMMAND AND CONTROL

Pulsantera d'eccellenza Pulsantera d'eccellenza



XXX

COMMANDS AND
CONTROLS DAILY
PRODUCED



Made in Italy dal 1967

Progettazione, costruzione di attrezzature, stampaggio delle materie plastiche, assemblaggi automatizzati, collaudi e spedizioni.

**E COSTANTI INVESTIMENTI
IN RICERCA E SVILUPPO.**

Made in Italy since 1967

Design, construction of equipment, stamping of raw materials, automated assemblies, testing and delivery.

**INVESTMENT IN RESEARCH
AND DEVELOPMENT.**

E

like Elfin

New Elfin per essere precisi

**UN'AZIENDA CHE SI
METTE IN DISCUSSIONE
OGNI GIORNO.**

C'è qualcosa di nuovo. Sempre.
La novità è nel contenuto,
non nella ragione sociale.

New Elfin to be precise

**A COMPANY THAT
CHALLENGES ITSELF EVERY
DAY.**

That makes always something
new. Where novelty is the
content.

E

like Elected

Qualità e creatività italiana

**IN QUESTO CATALOGO
SI PARLA DI QUALITÀ
INVISIBILE, NELLA
RICERCA DELLA
PERFEZIONE DI MATERIALI
E FORME.**

Qualità percepita, nell'ergonomia e nel design della parte tangibile dall'utilizzatore. Qualità nell'aria, dei servizi e dell'assistenza. In questi prodotti c'è la creatività italiana. E un approccio nord-europeo per renderli perfetti.

Italian quality & creativity

**IN THIS CATALOGUE THE
QUALITY OF MATERIAL
AND SHAPE PERFECTION
RESEARCH, ERGONOMICS
AND DESIGN IS A TANGIBLE
SENSATION.**

The quality of services and assistance is well perceived. Italian creativity and northern Europe approach is a good recipe to get perfect products.

E

like Energy

Collega pensieri e azioni

**ACCENDERE, CHIUDERE
IL CIRCUITO, INSERIRE
LA FORZA, ARRESTARE
UN MACCHINARIO...
SONO OPERAZIONI
SCONTATE.**

Ma quando sono le tonnellate di un treno che deve fermarsi o un macchinario in azione, la precisione e la certezza del comando sono fondamentali.

Links idea to actions

**SWITCH ON, CLOSE THE
CIRCUIT, POWER UP,
STOP A MACHINE...
ARE ROUTINE
OPERATIONS.**

But when a train weighing tons or a machine in operation has to be stopped, the command accuracy and reliability are essential.

E

like Enea

Un uomo che vede lontano

**INSEGUE UN'IDEA DI
AZIENDA COSÌ PERFETTA
CHE AL CONFRONTO
LA PENTOLA D'ORO ALLA
BASE DELL'ARCOBALENO
È TROPPO FACILE
DA RAGGIUNGERE.**

È il presidente. Ma lo potete trovare anche seduto sul carrello elevatore se una nuova idea deve essere verificata. Personalmente. Come sempre.

A man who is looking ahead

**HE FOLLOWS A CONCEPT
OF SUCH A PERFECT
COMPANY THAT THE
GOLD POT AT THE BASE
OF THE RAINBOW IS
TOO EASY TO BE
REACHED.**

He is the President. But you can even see him sitting on a forklift truck if a new idea has to be checked.

L'esperienza va condivisa e fatta crescere
L'esperienza va condivisa e fatta crescere



41

AVERAGE AGE
OF EMPLOYEES

E

like Empathy

**L'energia
senza
simpatia
non muove
nulla**

**Energy
without
liking
moves
nothing**

**GIOVANI, BRILLANTI
E DINAMICI.**

Sono i benvenuti per entrare
nel vortice di questa azienda.

**YOUNG, BRILLANT, DYNAMIC
PEOPLE.**

Are welcome to enter the
vortex of this company. The
experience is to be shared and
increased.

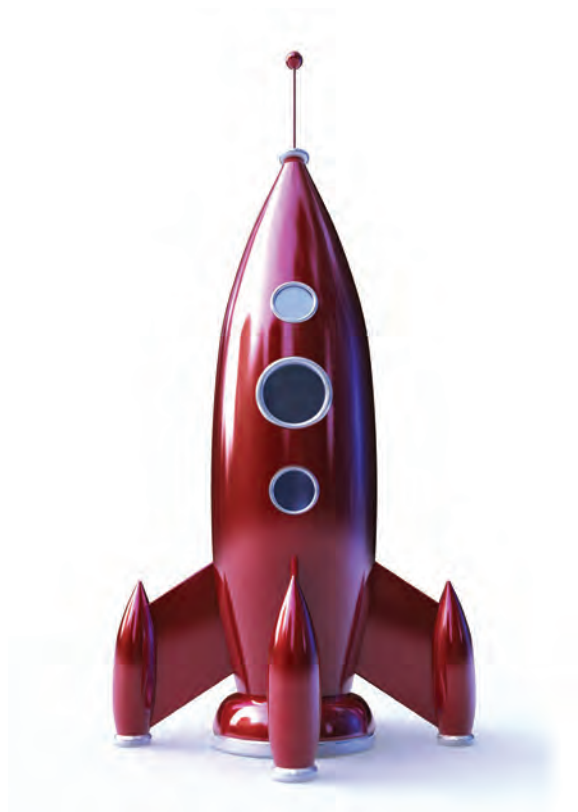
NEW ELFIN - COMMAND AND CONTROL

Il 90% delle materie prime è di origine italiana
90% of raw materials are originally italian



100%

CONTROL OVER
OUR PRODUCTION
PROCESSES



**La tecnologia corre,
l'importante é non fermarsi mai**

Technology runs, never stopping that's important

URTI, GHIACCIO, CALORE, POLVERE E ACQUA, SONO I BENVENUTI NEL NOSTRO LABORATORIO. EFFETTUIAMO IN CASA TUTTI I TEST PIÙ SEVERI PERCHÉ VOGLIAMO CHE I NOSTRI PRODOTTI RESISTANO ANCHE A VOI.

SHOCKS, ICE, HEAT, POWDER AND WATER ARE WELCOME TO OUR LABORATORY. WE HAVE BEEN RUNNING ALL THE MOST SEVERE TESTS IN HOUSE BECAUSE WE WANT OUR PRODUCTS TO WITHSTAND YOU AS WELL.

Usiamo i prodotti, li mettiamo alla prova, progettiamo e riprogettiamo. Li usiamo per i nostri cancelli e li inseriamo sui nostri macchinari. Non ci accontentiamo di risultati buoni, puntiamo alla perfezione. Ascoltiamo le vostre richieste, perché li possiate usare esattamente come e dove volete.

We use and test the products, we design and re-design. We use them for our gates and fit them to our machines. We are not satisfied with good results, we aim at perfection. We listen to your requirements, so you can use the products exactly how and where you want.

Amiamo i nostri pulsanti

Questa non è un'azienda gestita da contabili, ma da chi ha lavorato in questo campo per anni. Ci siamo sporcati le mani, sappiamo quali possono essere i problemi, sappiamo come montare e smontare i nostri prodotti e quanto sia importante farlo velocemente ed in sicurezza. Per questo i nostri prodotti sono modulari e possono essere montati con utensili standard in pochissimo tempo.

We love our push-buttons

This is not a company managed by accountants, but by people who have been working in this field of application for years. We have dirtied our hands, we know the problems we may experience, we know how to assemble and disassemble our products and how important it is to make it quickly and safely. That's why our products are modular and can be fitted using standard tools in short time.



Perfetti,
perchè in punta di dita
la perfezione si sente...

Perfect,
because the perfection
is felt at fingertips...



Armonici,
perchè il suono
rivela la qualità
che non si vede...

Harmonious,
because the sound
reveals the quality
of what is concealed...



Vanitosi,
perchè l'occhio
vuole la sua parte
di design...

Vain,
because aesthetical
look is always
important...

NEW ELFIN - COMMAND AND CONTROL

13.000 prodotti codificati
13.000 codified items



5000

ARTICLES READY
FOR DISPATCH



Agli ordini!

DISPONIAMO DI UN
MAGAZZINO DI 7000 MQ,
CON 13000 PRODOTTI
CODIFICATI

Amiamo la velocità, forse per questo la nostra azienda è vicina ad uno dei più grandi aeroporti italiani. Il nostro magazzino completamente automatizzato lavora a ritmi incessanti per non farvi aspettare un minuto di più.

Yes, Sir!

WE HAVE A 7000 SQ M
WAREHOUSE WITH 13000
CODED ITEMS.

We love speed, maybe it's because our company is close to one of the biggest Italian airports. Our fully automated warehouse operates at full speed, so you should not wait one minute more.

Innovazione tecnologia e servizi al cliente

ALLA RICERCA DELL'AZIENDA PERFETTA, NELLE TECNOLOGIE E NEI SERVIZI AL CLIENTE, PER DIMOSTRARE COME I PRODOTTI ITALIANI SIANO COMPETITIVI ANCHE ALL'ESTERO.

Guardiamo lontano, non ci fermiamo mai. Se nasce una buona intuizione la perseguiamo. La nostra squadra è affiatata, ma soprattutto abbiamo sempre l'umiltà di imparare dagli altri per cercare di migliorarci. Mettersi in discussione è la nostra chiave per crescere.

Technological innovation and customer service

IN SEARCH OF THE PERFECT COMPANY FOR TECHNOLOGY AND CUSTOMER SERVICE TO PROVE HOW THE ITALIAN PRODUCTS ARE COMPETITIVE EVEN ABROAD.

We are looking ahead, we never stop. If a good idea comes up, we follow it. Our team is a close-knit team but first of all we have the hummility to learn from others in order to improve ourselves. Our challenge is the key to growth.



Forti,
per resistere anche
ad usi estremi...

Strong,
to stand extreme
use, too...



Sicuri,
per gli utilizzi nei campi
più pericolosi...

Sure,
for use in the more
dangerous fields of
application...

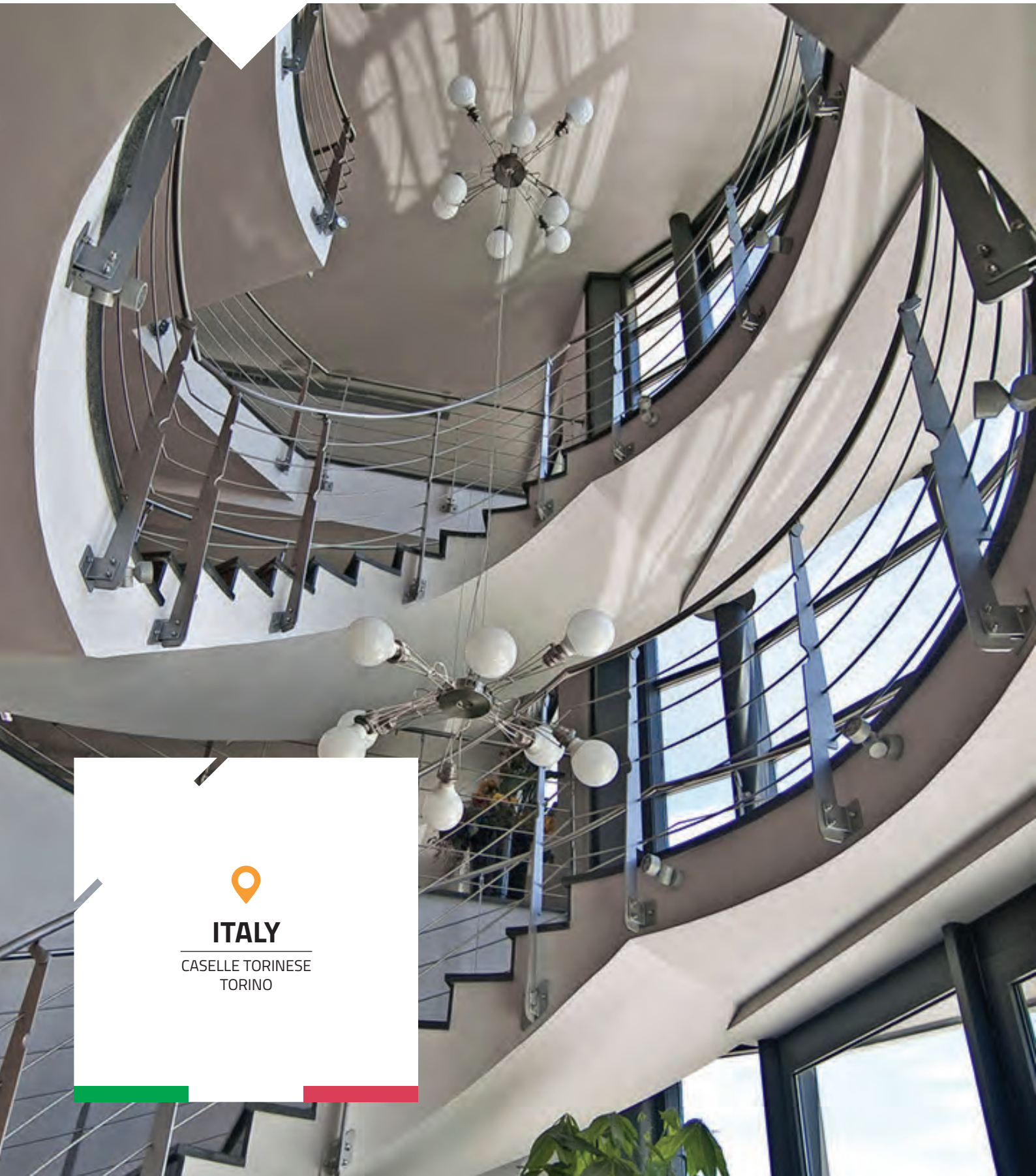


Puliti,
perché non sempre
l'ambiente lo è.

Clean,
because the environment
needs to be cleaned...

NEW ELFIN - COMMAND AND CONTROL

Esportiamo in 55 paesi
55 countries export



ITALY

CASELLE TORINESE
TORINO





Più facile a farsi che a dirsi.

Il modo più semplice per scegliere il prodotto giusto. Il catalogo, chiaro e completo, è disponibile sul nostro sito newelfin.com

Resterai stupito dalla nostra rete vendita internazionale.

Easier done than said.

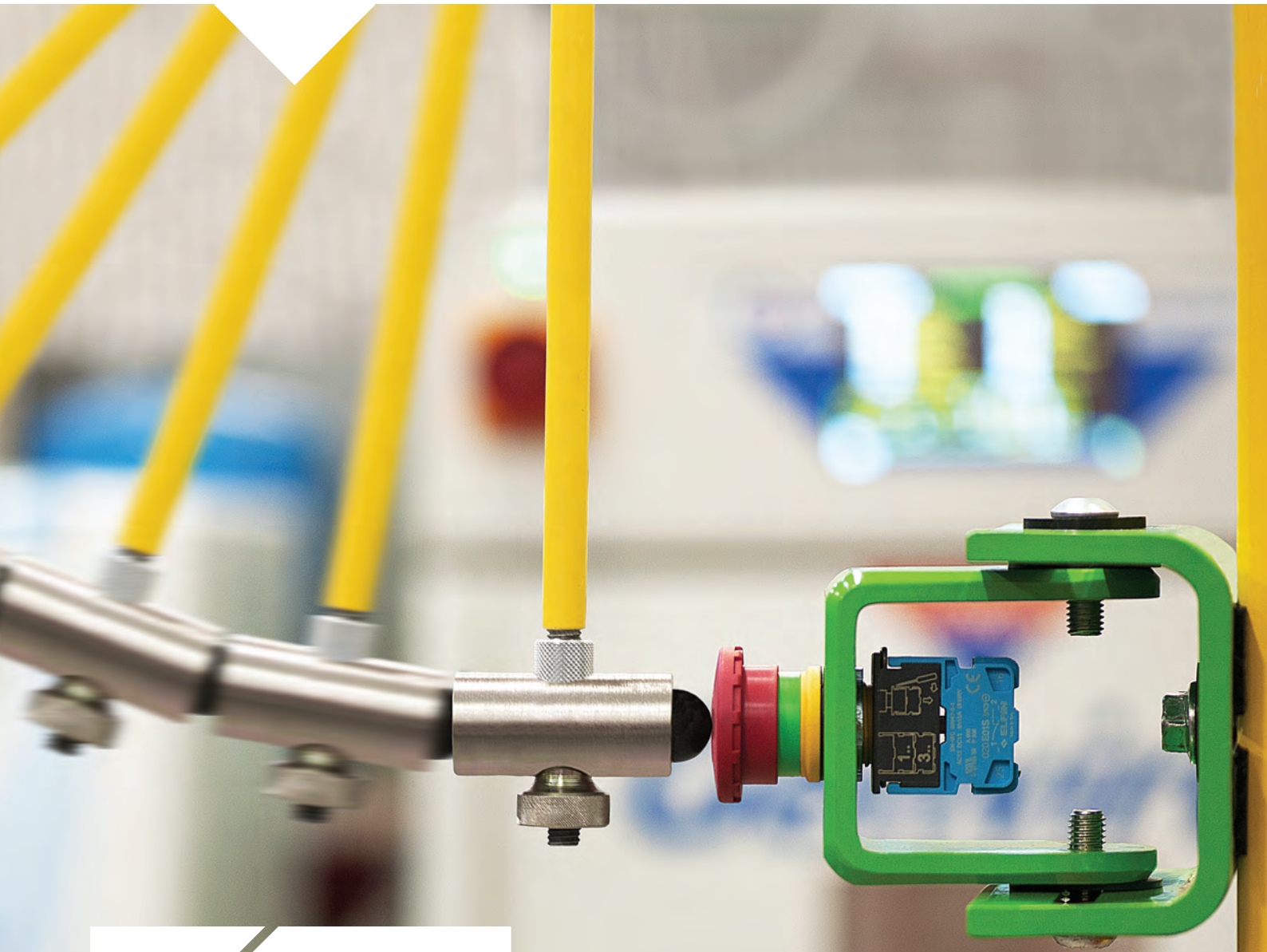
The most simple way to choose commands and controls. The easy and complete catalogue is ready to be discovered on our website newelfin.com

You will be gratified by our worldwide sales network.

NEW ELFIN - COMMAND AND CONTROL

Soddisfare esigenze sempre diverse è una sfida che abbiamo vinto tante volte.

Soddisfare esigenze sempre diverse è una sfida che abbiamo vinto tante volte.



ITALY

CASELLE TORINESE
TORINO





Amiamo il controllo

SOTTO TUTTI I PUNTI DI VISTA. OGNI FASE DI LAVORO È ALL'INTERNO DEL NOSTRO STABILIMENTO.

I nostri prodotti, ci siamo affezionati, li pensiamo, li progettiamo, li realizziamo, ma alla fine siamo anche disposti a personalizzarli per voi.

"ET" significa "Elettroforniture Torinesi". Per noi è il legame con il passato e con il saper fare italiano.

Il rispetto delle normative è una prerogativa per tutti i nostri prodotti, anche quando non sono obbligatorie. Quante persone diverse affidano la sicurezza ad un pulsante luminoso? Dall'installazione alla pulizia teniamo conto di ogni momento dell'utilizzo già in fase di progettazione.

We love control

FORM ALL VIEWPOINTS. EVERY WORKING STEP IS PERFORMED IN-HOUSE.

We thought out, design and manufacture our products, we are very fond of, but at the end we are even open to customise them for you.

"ET" means "Electrical supplies Turin". It is our relation to the past and to the Italian know-how.

The compliance with standards is the main quality for all our products, even when we are not obliged to comply with. How many people do entrust the safety to an illuminated push-button? From the fitting to the cleaning we take into account every step of their use even during designing.

010



020



032



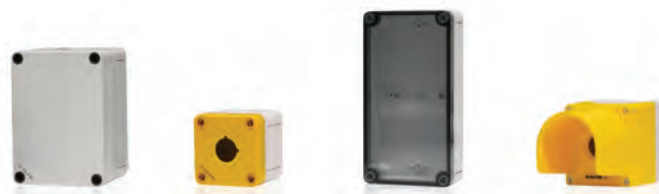
030



040



080



050



060



090



P. 54

LAMPADINE, PRESSACAVI ED ACCESSORI
LAMPS, CABLE GLANDS AND ACCESSORIES

010

P. 54

COMANDO E SEGNALAZIONE SM2 Ø22
COMMAND AND SIGNALLING SM2 Ø22

020

P. 54

COMANDO E SEGNALAZIONE FILO PANNELLO SM2 Ø30
COMMAND AND SIGNALLING FLUSH-MOUNT SM2 Ø30

032

P. 54

COMANDO E SEGNALAZIONE EL-SG Ø30
COMMAND AND SEGNALLING EL-SG Ø30

030

P. 54

SCATOLE E CASSETTE PULSANTIERE IN METALLO
METAL PUSH-BUTTONM BOXES, ENCLOSURE

040

P. 54

SCATOLE E CASSETTE PULSANTIERE IN TERMOPLASTICO
THERMOPLASTIC PUSH-BUTTON BOXES, ENCLOSURE

080

P. 54

SEGNALAZIONE ED ILLUMINAZIONE QUADRI ELETTEICI
CONTROL CABINET SIGNALLIG AND LIGHTNG

050

P. 54

DISPOSITIVI DI COMANDO DI SICUREZZA
SAFETY CONTROL DEVICES

060

P. 54

CONTATTORI, RELÈ, INTERRUTTORI SALVAMOTORE
CONTACTORS, RELAYS AND MOTOR CIRCUIT BREAKERS

090





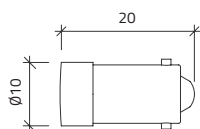
010

**LAMPADINE, PRESSACAVI
ED ACCESSORI**

**LAMPS, CABLE GLANDS AND
ACCESSORIES**

Lampadine Lamps

BA9S Led luce fissa BA9S Steady light led lamps



6V AC-DC

	g	n	cod
● Rosso / Red	2	5	010BA9SLR6
● Giallo / Yellow	2	5	010BA9SLG6
● Verde / Green	2	5	010BA9SLV6
● Blu / Blue	2	5	010BA9SLBL6
○ Bianco / White	2	5	010BA9SLB6

12V AC-DC

● Rosso / Red	2	5	010BA9SLR12
● Giallo / Yellow	2	5	010BA9SLG12
● Verde / Green	2	5	010BA9SLV12
● Blu / Blue	2	5	010BA9SLBL12
○ Bianco / White	2	5	010BA9SLB12

24V AC-DC

● Rosso / Red	2	5	010BA9SLR24
● Giallo / Yellow	2	5	010BA9SLG24
● Verde / Green	2	5	010BA9SLV24
● Blu / Blue	2	5	010BA9SLBL24
○ Bianco / White	2	5	010BA9SLB24

36V AC-DC

● Rosso / Red	2	5	010BA9SLR36
● Giallo / Yellow	2	5	010BA9SLG36
● Verde / Green	2	5	010BA9SLV36
● Blu / Blue	2	5	010BA9SLBL36
○ Bianco / White	2	5	010BA9SLB36

48V AC-DC

● Rosso / Red	2	5	010BA9SLR48
● Giallo / Yellow	2	5	010BA9SLG48
● Verde / Green	2	5	010BA9SLV48
● Blu / Blue	2	5	010BA9SLBL48
○ Bianco / White	2	5	010BA9SLB48

130V AC-DC

● Rosso / Red	2	5	010BA9SLR110
● Giallo / Yellow	2	5	010BA9SLG110
● Verde / Green	2	5	010BA9SLV110
● Blu / Blue	2	5	010BA9SLBL110
○ Bianco / White	2	5	010BA9SLB110

240V AC-DC

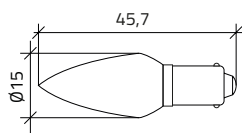
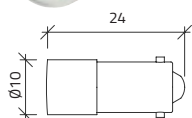
● Rosso / Red	2	5	010BA9SLR240
● Giallo / Yellow	2	5	010BA9SLG240
● Verde / Green	2	5	010BA9SLV240
● Blu / Blue	2	5	010BA9SLBL240
○ Bianco / White	2	5	010BA9SLB240

400V AC-DC

● Rosso / Red	2	5	010BA9SLR400
● Giallo / Yellow	2	5	010BA9SLG400
● Verde / Green	2	5	010BA9SLV400
● Blu / Blue	2	5	010BA9SLBL400
○ Bianco / White	2	5	010BA9SLB400

Lampadine Lamps

BA9S Led luce fissa BA9S Steady light led lamps



24÷30V AC-DC con Diodo Zener integrato / 24÷30V AC-DC with integrated Zener Diode

○ Bianco / White

g

cod

2

010BA9SZLB30

24V AC-DC

● Rosso / Red

2

010BA9ALR24

● Giallo / Yellow

2

010BA9ALG24

● Verde / Green

2

010BA9ALV24

● Blu / Blue

2

010BA9ALBL24

○ Bianco / White

2

010BA9ALB24

240V AC-DC

● Rosso / Red

2

010BA9ALR220

● Giallo / Yellow

2

010BA9ALG220

● Verde / Green

2

010BA9ALV220

● Blu / Blue

2

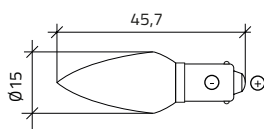
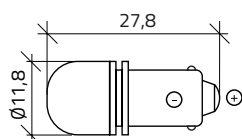
010BA9ALBL220

○ Bianco / White

2

010BA9ALB220

Led <60V non polarizzati 110-240 V polarizzati Led lamps <60V non-polarized 110-240 V polarized



Led luce lampeggiante / Flashing light led

Led ultraluminoso tensioni $\pm 15\%$ non polarizzata / Ultra-bright led, voltage $\pm 15\%$ non-polarized
AC-DC 6 12 24 48 110 AC 220 mA 30 20 14 7 5 16

24V AC-DC

● Rosso / Red

2

010BA9SLLR24

130V AC-DC

● Rosso / Red

2

010BA9SLLR110

240V AC-DC

● Rosso / Red

2

010BA9SLLR220

24V AC-DC

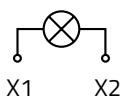
● Rosso / Red

2

010BA9ALLR24

Lampadine Lamps

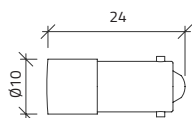
Nuove lampade due colori, tecnologia led alta luminosità New bi-colour led lamp, high brightness



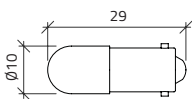
1 = X1+ X2-
2 = X1- X2+

24V DC 15mA

	g	n	cod
● Verde, rosso / Green, red	2		010BA9SLVR24
● Verde, giallo / Green, yellow	2		010BA9SLVG24
● Blu, rosso / Blue, red	2		010BA9SLBLR24
● Blu, giallo / Blue, yellow	2		010BA9SLBLG2

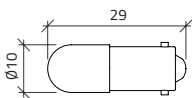


BA9S Lampadine ad incandescenza BA9S Incandescent lamps



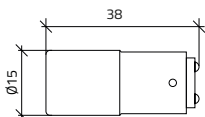
	g	n	cod
6V 0,6W	1,3	10	010BA9S6V-0.6W
24V 1,2 W	1,3	10	010BA9S24V-1.2W
24V 3W	1,3	10	010BA9S24V-3W
30V 1,2W	1,3	10	010BA9S30V-1.2W
30V 3W	1,3	10	010BA9S30V-3W
48V 1,2W	1,3	10	010BA9S48V-1.2W
60V 1,2 W	1,3	10	010BA9S60V-1.2W
60V 3W	1,3	10	010BA9S60V-3W
110V 1,9W	1,3	10	010BA9S130V-1.9
220V 2W	1,3	10	010BA9S220V-2W

BA9S Lampadine al neon / BA9S neon lamps



	g	n	cod	
Neon AC				
● Arancio / Orange	65V 0,05W	2,3	10	010BA9SN65
● Arancio / Orange	130V 0,1W	2,3	10	010BA9SN110
● Verde / Green	130V 0,1W	2,3	10	010BA9NV110
● Arancio / Orange	240V 0,3W	2,3	10	010BA9SN220
● Verde / Green	240V 0,3W	2,3	10	010BA9NV220
● Arancio / Orange	400V 0,5W	2,3	10	010BA9SN380
● Verde / Green	400V 0,5W	2,3	10	010BA9NV380

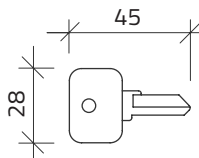
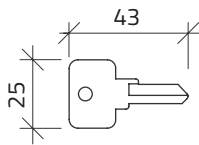
BA15D Lampadine led / BA15D led lamps



	g	n	cod
24V AC-DC			
○ Bianco / White	2		010BA15DLB24
230V AC-DC			
○ Bianco / White	2		010BA15DLB220

Chiavi

Keys



Chiavi / Keys

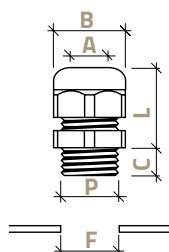
	g	c	n	cod
	11	3095	2	010K95
	11	3353	2	010K53
	11	9901	2	010K01
	11	9902	2	010K02
	11	9903	2	010K03
	11	9904	2	010K04
	11	9905	2	010K05
	11	9910	2	010K10
	11	9916	2	010K16
	11	9919	2	010K19

Versione secondo normativa FIAT / Version according to FIAT standards

● Nero / Black	11	73034	2	010K34
● Rosso / Red	11	73037	2	010K37
● Giallo / Yellow	11	73033	2	010K33
● Blu / Blue	11	73038	2	010K38
● Arancio / Orange	11	73040	2	010K40

Pressacavi in termoplastico

Thermoplastic cable glands

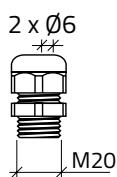


Pressacavi / Cable glands

P g F A B C L cod

Poliammide PA6 autoestingente cl. V2 (UL94) - Temperatura di impiego -20°/+90°
V2 (UL94) self-extinguishing PA6 polyamide - Operating temperature -20°/+90°

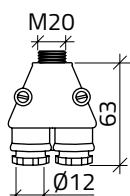
● Nero / Black	M12 x 1,5	4	12,5	3-6,5	15	8	25	010NM12
● Nero / Black	M16 x 1,5	7	16,5	5-10	22	10	32	010NM16
● Nero / Black	M20 x 1,5	11	20,5	6-12	24	10	32	010NM20
● Nero / Black	M20 x 1,5	11	20,5	10-14	27	10	32	010NM20A
● Nero / Black	M25 x 1,5	16	25,5	13-18	33	10	38	010NM25
● Nero / Black	M32 x 1,5	23	32,5	18-25	42	15	43	010NM32
● Nero / Black	PG7	4	12,5	3-6,5	15	8	25	010NPG7
● Nero / Black	PG9	6	15,5	4-8	19	8	27	010NPG9
● Nero / Black	PG11	9	19	5-10	22	8	32	010NPG11
● Nero / Black	PG11	9	19	4-7	22	8	32	010NPG11R
● Nero / Black	PG13,5	11	20,5	6-12	24	10	32	010NPG13
● Nero / Black	PG16	13	22,5	10-14	27	10	32	010NPG16
● Nero / Black	PG21	21	29	13-18	33	12	38	010NPG21
○ Bianco / White	PG29	27	38	18-25	42	11	35-40	010NPG29



Pressacavo 2 ingressi / 2-hole cable gland

g cod

10 **0102P20**



Pressacavo 2 vie / Double entry cable gland

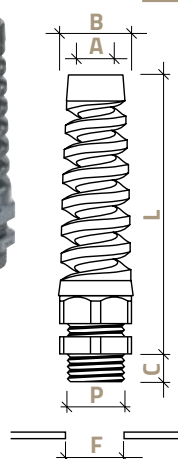
45 **010N2M20**

P g F A B C L cod

Pressacavi con spirale / Spiral cable glands

Poliammide PA6 autoestingente cl. V2 (UL94) - Temperatura di impiego -20°/+90°
V2 (UL94) self-extinguishing PA6 polyamide - Operating temperature -20°/+90°

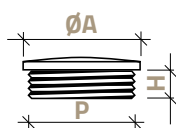
M12 x 1,5	7	12,5	3-6,5	15	8	58	010FM12
M16 x 1,5	10	16,5	5-10	22	10	83	010FM16
M20 x 1,5	19	20,5	6-12	24	10	96	010FM20
M20 x 1,5	19	20,5	10-14	27	10	96	010FM20A
M25 x 1,5	33	25,5	13-18	33	10	119	010FM25
PG11	16	19	5-10	22	8	83	010FPG11
PG13,5	19	20,5	6-12	24	10	96	010FPG13
PG16	25	22,5	10-14	27	10	106	010FPG16
PG21	25	29	13-18	33	11	119	010FPG21



Tappi, riduzioni e controdadi in termoplastico

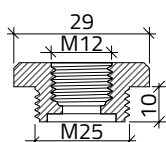
Thermoplastic hole plugs, reducers and locknuts

Tappi di chiusura / Hole plugs

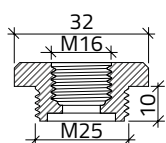


P	ØA	H	g	cod
Polistirene PS - Temperatura di impiego -20°/+60° PS Polystyrene - Operating temperature -20°/+60°				
M12 x 1,5	15	10	1	010TM12
M16 x 1,5	19,5	10	2	010TM16
M20 x 1,5	25	10	2,4	010TM20
M25 x 1,5	30	10	4	010TM25
M32 x 1,5	37	10	4,2	010TM32
PG7	15	10	1	010TPG7
PG9	19,5	10	1,5	010TPG9
PG11	22	10	2	010TPG11
PG13,5	25	10	2	010TPG13
PG16	27	10	3	010TPG16
PG21	33	10	4	010TPG21

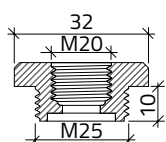
Riduzioni in plastica / Plastic reducers



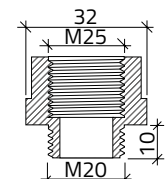
D	d	H		g	cod
M25	M12	10	29	8	010RM25M12



M25	M16	10	32	9	010RM25M16
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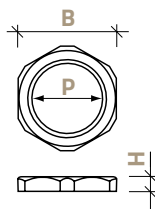


M25	M20	10	32	7,8	010RM25M20
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M20	M25	10	32	6,8	010RM20M25
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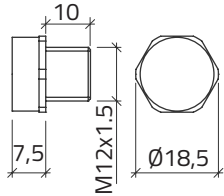
Controdadi / Locknuts



P	B	H	g	n	cod
Poliammide PA6 autoestinguente cl. V2 (UL94) - Temperatura di impiego -20°/+90° V2 (UL94) self-extinguishing PA6 polyamide - Operating temperature -20°/+90°					
● Nero / Black	M12 x 1,5	18	5	10	010DM12
● Nero / Black	M16 x 1,5	24	6	1,5	010DM16
● Nero / Black	M20 x 1,5	27	6	2	010DM20
● Nero / Black	M25 x 1,5	34	7	3	010DM25
● Nero / Black	M32 x 1,5	41	7	4	010DM32
● Nero / Black	PG7	19	5	1	010DPG7
● Nero / Black	PG9	22	5	2	010DPG9
● Nero / Black	PG11	24	5	2	010DPG11
● Nero / Black	PG13,5	27	6	2,5	010DPG13
● Nero / Black	PG16	30	6	3	010DPG16
● Nero / Black	PG21	36	7	3,5	010DPG21
○ Bianco / White	PG29	46	7,5	5	010DPG29

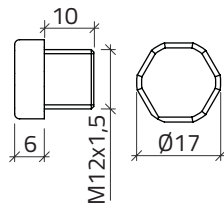
Valvole di ventilazione anticondensa

Ventilation plugs (to prevent condensation)



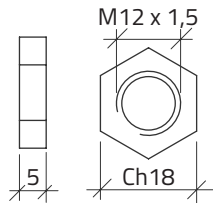
Permeabilità all'aria / Air permeability 2lt./min.Δp =70mbar
 Pressione ingresso acqua / Water inlet pressure max 0,2 bar / 60 s

● Nero / Black 1,5 10 **010VV**

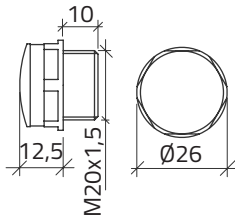


Permeabilità all'aria / Air permeability 0,4it./min.Δp =70mbar
 Pressione ingresso acqua / Water inlet pressure max 0,6 bar / 60 s

● Grigio / Grey 1,5 **010VV400**

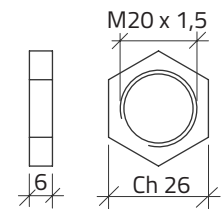


● Nero / Black 0,7 10 **010DM12**



Permeabilità all'aria / Permeability to air 12,5lt./min.Δp =70mbar
 Pressione ingresso acqua / Water inlet pressure max 0,1 bar / 60 s

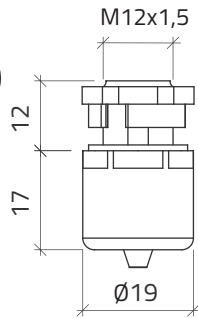
● Nero / Black 6,0 **010VV12500**



● Nero / Black 2 **010DM20**

Valvole di drenaggio Drain plugs

Valvola di drenaggio Drain plugs



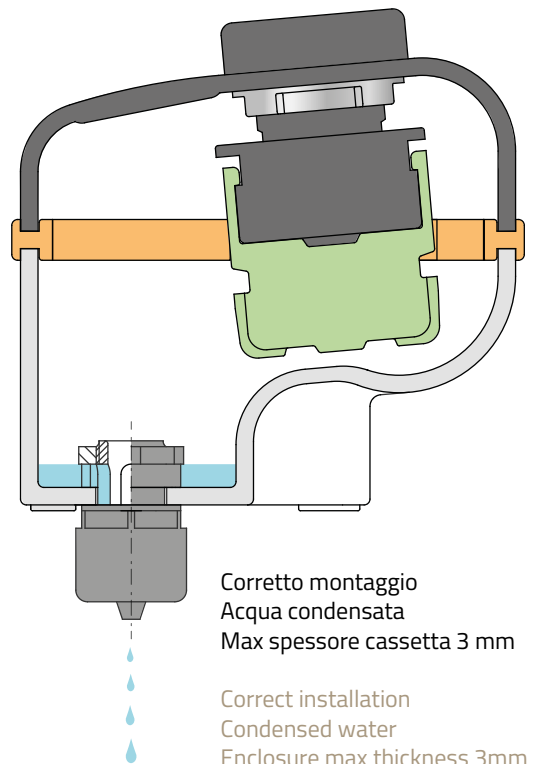
Valvola con dado / Plugs and special lock nut
Poliammide / Polyamide

● Nero / Black

g n cod

5

010VD



Cavi USB

USB cables

Cavo tipo M-M (maschio-maschio)

Cable type M-M (male-male)

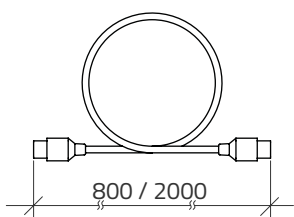


mt 0,8
mt 0,8
 ● Nero / Black

g

cod

37

010CUSBMM8

mt 2
mt 2
 ● Nero / Black

77

010CUSBMM20

Cavo maschio tipo A - libero

Cable male type A - free



mt 0,8
mt 0,8
 ● Nero / Black

g


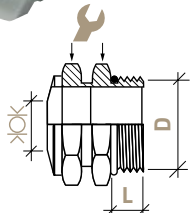
cod



30

010CUSBML8

Pressacavi e riduzioni in metallo OTTONE NICHELATO


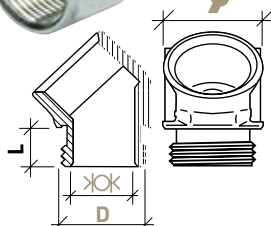
Metal cable glands and adapters NICKEL-PLATED BRASS






g	D			L	cod
14	M16x1,5	5 ÷ 9	18	17	010POM16
20	M20x1,5	8 ÷ 12	22	22	010POM20
34	M25x1,5	11 ÷ 16	28	28	010POM25
50	M32x1,5	15 ÷ 21	35	35	010POM32

Pressacavi / Cable glands


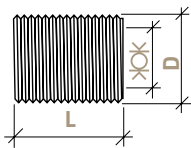
14	M16x1,5	5 ÷ 9	18	17	010POM16
20	M20x1,5	8 ÷ 12	22	22	010POM20
34	M25x1,5	11 ÷ 16	28	28	010POM25
50	M32x1,5	15 ÷ 21	35	35	010POM32





g	D			L	cod
26	M16x1,5	11,5	19	10	010GIM16
38	M20x1,5	15	23	10	010GIM20
55	M25x1,5	20	28	10	010GIM25
90	M32x1,5	27	36	10	010GIM32

Raccordo a gomito 45° / Elbow fittings to 45°


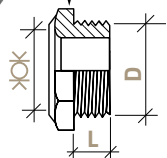
26	M16x1,5	11,5	19	10	010GIM16
38	M20x1,5	15	23	10	010GIM20
55	M25x1,5	20	28	10	010GIM25
90	M32x1,5	27	36	10	010GIM32






g	D		L	cod
8	M16x1,5	12	21	010NPM16
20	M20x1,5	15	24,5	010NPM20
18	M25x1,5	20	25	010NPM25
30	M32x1,5	26	32	010NPM32

Nippli / Nipples


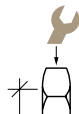
8	M16x1,5	12	21	010NPM16
20	M20x1,5	15	24,5	010NPM20
18	M25x1,5	20	25	010NPM25
30	M32x1,5	26	32	010NPM32





g	D			L	cod
18	M16x1,5	12	22	12	010BM16
22	M20x1,5	15	26	14	010BM20
20	M25x1,5	21	30	14	010BM25
28	M32x1,5	28	40	15	010BM32

Riduzioni / Adapters

18	M16x1,5	12	22	12	010BM16
22	M20x1,5	15	26	14	010BM20
20	M25x1,5	21	30	14	010BM25
28	M32x1,5	28	40	15	010BM32

g	D		S	cod
4	M16x1,5	19	3	010GM16
6	M20x1,5	24	3,5	010GM20
12	M25x1,5	30	3,5	010GM25
26	M32x1,5	36	4,5	010GM32

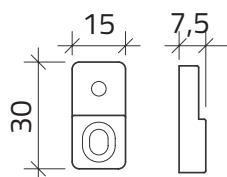
Controdadi / Locknuts

4	M16x1,5	19	3	010GM16
6	M20x1,5	24	3,5	010GM20
12	M25x1,5	30	3,5	010GM25
26	M32x1,5	36	4,5	010GM32

Accessori per scatole pulsantiere

Accessories for push-button enclosures

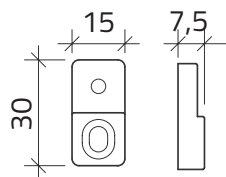
L g cod



Kit di staffe di fissaggio 10 mm
Set of mounting brackets 10 mm

28

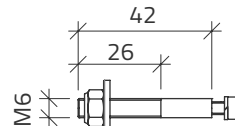
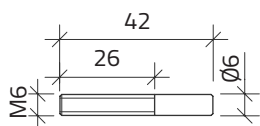
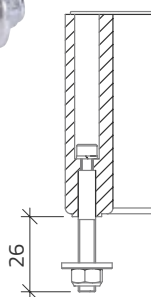
010S10



Kit di staffe di fissaggio 25 mm
Set of mounting brackets 25 mm

32

010S25



Kit di fissaggio con prigionieri (M4/M10)
Fixing kit with (M4/M10) studs

26

010SFP



Cinghia tracolla / Shoulder belt
25X1400 mm

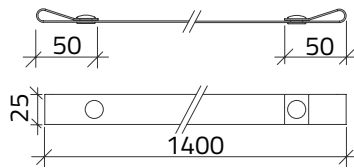
L

g

cod

46

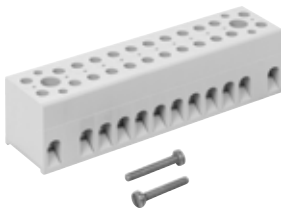
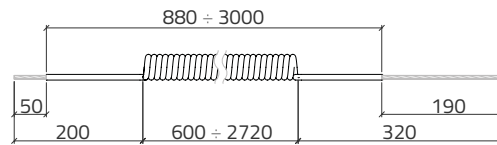
010CT25



Cavo Spiralo / Spiral cable
12x0,5 mm²

700

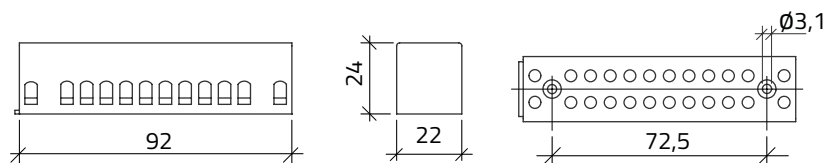
010CSN12X05-4



Morsettiera 12 poli
Terminal block 12 poles

86

010M12





ELFIN
TORINO - ITALY
016 P3P xx
PATENTED

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TORINO - ITALY
016 P3P xx
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016 P3P xx
PATENTED

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TORINO - ITALY
016 P3P xx
PATENTED

016

**PULSANTI DI ABILITAZIONE
ED ACCESSORI**

**ENABLING SWITCHES
AND ACCESSORIES**

Pulsanti di abilitazione a 3 posizioni Ø16

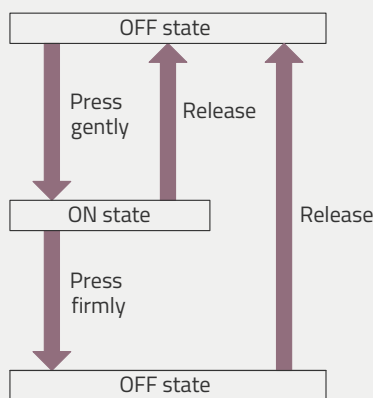
3-position enabling switches Ø16

I Il pulsante di abilitazione a 3 posizioni antipánico é un comando manuale utilizzato nelle aree di pericolo dei sistemi di automazione industriale. Questo dispositivo supplementare è usato in combinazione con un comando di avviamento che, solo se attivato ed in modo mantenuto, consente alla macchina di funzionare.

T The 3-position enabling device is a manual control used in the tool machine danger zone in industrial automatic systems. This supplementary device is used in conjunction with a start control which, only when activated and maintained in the active position, it enables the operation of the machine.

Il pulsante di abilitazione può essere usato per la messa a punto, l'apprendimento, il cambio di lavorazione, la ricerca guasti, la pulizia e/o manutenzione della macchina, ovvero dove è necessario spostare o rimuovere le protezioni o escludere i dispositivi di sicurezza tradizionali. Per effettuare queste operazioni è necessario che la macchina possa essere avviata anche in situazioni pericolose mantenendo la sicurezza dell'operatore al livello più alto possibile. Azionando il dispositivo di comando solo in una determinata posizione vengono autorizzati i funzionamenti dei meccanismi potenzialmente pericolosi. Per mantenere controllata e sicura tutta l'azione è necessario che tutto l'apparecchio sia controllato in condizioni di rindondanza con un relè di sicurezza a doppia catena ad un arresto in categoria 0 o 1.

Nel montaggio evitare qualsiasi pressione nella parte centrale in modo da non bloccare il meccanismo



The engagement button can be used for tuning, training, changing the working process, searching for faults, cleaning and maintaining the machine, and in all cases where it is necessary to move or remove safety guards or disconnected traditional safety devices.

To carry out these operations it must be possible to start up the machine in dangerous situations, maintaining safe working conditions at the highest possible level.

By activating the control in a specific position, potentially dangerous mechanisms can be activated.

To ensure that the whole action is safe and under control, the equipment must be checked while idle with a double chain safety relay with stoppage in category 0 or 1.

During assembly avoid placing pressure on the central point as this could block the mechanism.

Il pulsante di abilitazione può essere fornito fino ad una combinazione di quattro contatti NO+NC a camere separate permettendo così di controllare in retroazione l'efficienza dei vari elementi.

- **posizione 1:** interruttore in funzione di messa fuori tensione (attuatore non attivato)
- **posizione 2:** funzione di consenso (attuatore attivato nella sua posizione intermedia)
- **posizione 3:** interruttore in funzione di messa fuori tensione (attuatore attivato al di là della posizione intermedia)

Quando si torna alla posizione 1 dalla posizione 3 il funzionamento non deve essere consentito. La NEW ELFIN fornisce questo dispositivo di abilitazione con estrema attenzione ai principi ergonomici; la dimensione miniaturizzata permette l'installazione in diverse complesse applicazioni. Le distanze di posizione e il differenziale d'intervento danno un funzionamento certo ed intuitivo.

The enabling device can be supplied in a combination of up to four NO+NC components in separate chambers, thus enabling retroactive check of the efficiency of the various elements.

- **position 1:** off (actuator not engaged)
- **position 2:** enabled (actuator engaged in the intermediate position)
- **position 3:** off (actuator engaged beyond the intermediate position)

When returning to position 1 from position 3, operation must not be allowed.

NEW ELFIN supplies this enabling device paying extreme attention to ergonomic principles; its small size enables installation in various complex applications. The positioning distances and operating differential make operation sure and intuitive.

Pulsanti di abilitazione a 3 posizioni Ø16

3-position enabling switches Ø16

Caratteristiche tecniche

Rispondenza alle norme	IEC EN 60947-5-8 / CEI EN 60204-1 CEI EN 11161 / UNI 10218-1
Temperatura tollerata	Temperatura di funzionamento -30 °C / + 70 °C
Grado di protezione	IP40 / IP66 con cappuccio in gomma
Forze di azionamento	Posizione 1 > 2 : 10n, posizione 2 > 3 : 25n
Durata meccanica	3 x 10 ⁵ operazioni UNI EN ISO 1349-1 B10d = 100.000 Operazioni
Microinterruttori	Commutazione contatti a scatto rapido a doppia rottura Vn: 250V ac/dc max In: 5A max Ith: 10A Ui: 300V Durata elettrica: 2x10 ⁴ cicli di manovre (250V-5A-cosφ 0,8) Terminali: faston clip 2,8 x 0,5 - T7 a saldare
Omologazioni	UL - CSA (switch)

Technical data

Compliance to standards	IEC EN 60947-5-8 / CEI EN 60204-1 CEI EN 11161 / UNI 10218-1
Tolerated temperature	Working temperatures -30 °C / + 70 °C
Degree of protection	IP40 / IP66 with rubber cap
Actuating forces	Position 1 > 2 : 10n, position 2 > 3 : 25n
Mechanical durability	3 x 10 ⁵ operations UNI EN ISO 1349-1 B10d = 100.000 operations
Microswitches	Snap action double break switch Vn: 250V ac/dc max In: 5A max Ith: 10A Ui: 300V Electrical durability: 2x10 ⁴ operations (250V-5A-cosφ 0,8) Terminals: faston clip 2,8 x 0,5 - T7 solder
Approvals	UL - CSA (switch)

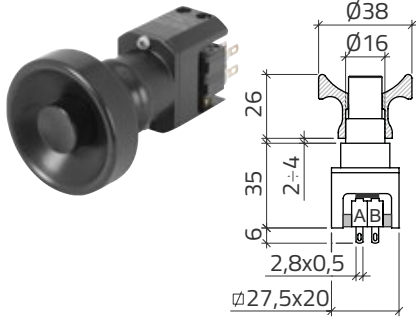
Pulsanti di abilitazione a 3 posizioni Ø16

3-position enabling switches Ø16

Terminali Faston Faston terminals

g

cod



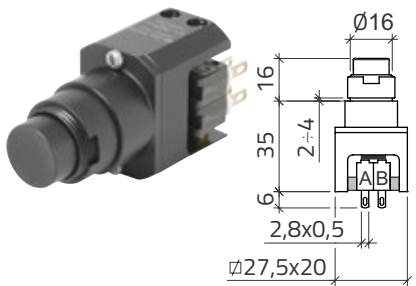
Pulsante 3 posizioni con impugnatura ergonomica 3-position push-button with ergonomic handle

Microinterruttori con terminali faston 2,8 x 0,5
Microswitches with faston terminals 2.8 x 0.5

2NO + 2NC A+B

70

016P3PE22F



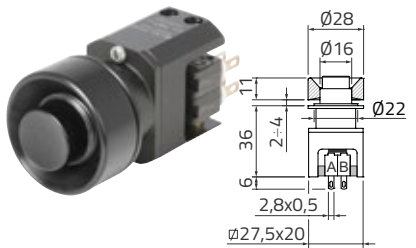
Pulsante 3 posizioni senza guardia 3-position push-button without guard

Microinterruttori con terminali faston 2,8 x 0,5
Microswitches with faston terminals 2.8 x 0.5

2NO + 2NC A+B

44

016P3P22F



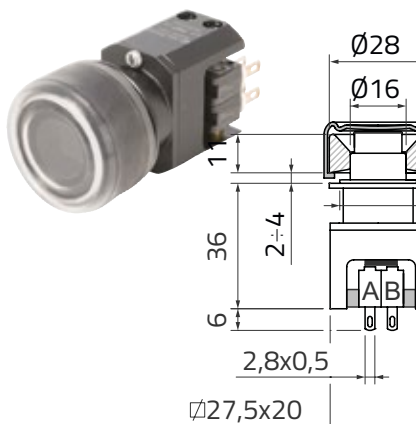
Pulsante 3 posizioni con guardia 3-position push-button with guard

Microinterruttori con terminali faston 2,8 x 0,5
Microswitches with faston terminals 2.8 x 0.5

2NO + 2NC A+B

30

016P3PG22F



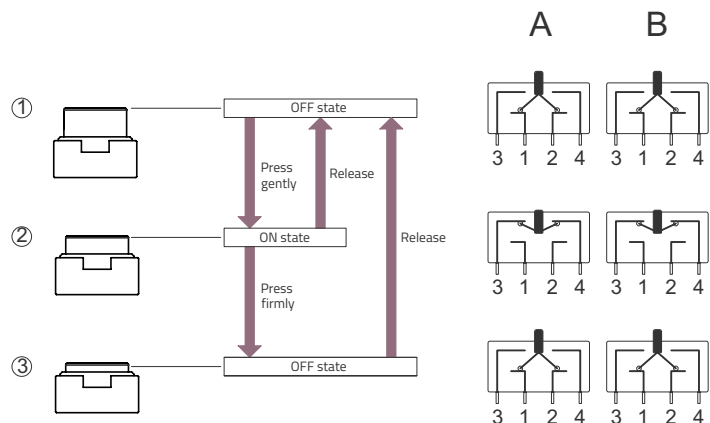
Pulsante 3 posizioni con cappuccio in gomma 3-position push-button with rubber cap

Microinterruttori con terminali faston 2,8 x 0,5
Microswitches with faston terminals 2.8 x 0.5

2NO + 2NC A+B

48

016P3PCG22F



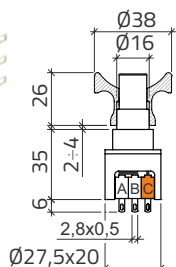
Pulsanti di abilitazione a 3 posizioni Ø16

3-position enabling switches Ø16

Terminali Faston con controllo di posizione
Faston terminals with position control

g

cod



Pulsante 3 posizioni con impugnatura ergonomica

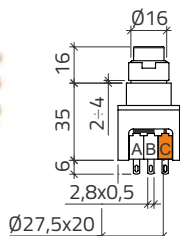
3-position push-button with ergonomic handle

Microinterruttori con terminali faston 2,8 x 0,5
 Microswitches with faston terminals 2.8 x 0.5

3NO + 3NC A+B+C

70

016P3PE33F



Pulsante 3 posizioni senza guardia

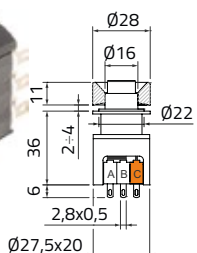
3-position push-button without guard

Microinterruttori con terminali faston 2,8 x 0,5
 Microswitches with faston terminals 2.8 x 0.5

3NO + 3NC A+B+C

70

016P3P33F



Pulsante 3 posizioni con guardia

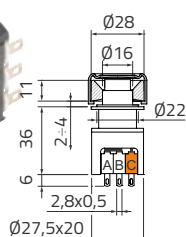
3-position push-button with guard

Microinterruttori con terminali faston 2,8 x 0,5
 Microswitches with faston terminals 2.8 x 0.5

3NO + 3NC A+B+C

70

016P3PG33F



Pulsante 3 posizioni con cappuccio in gomma

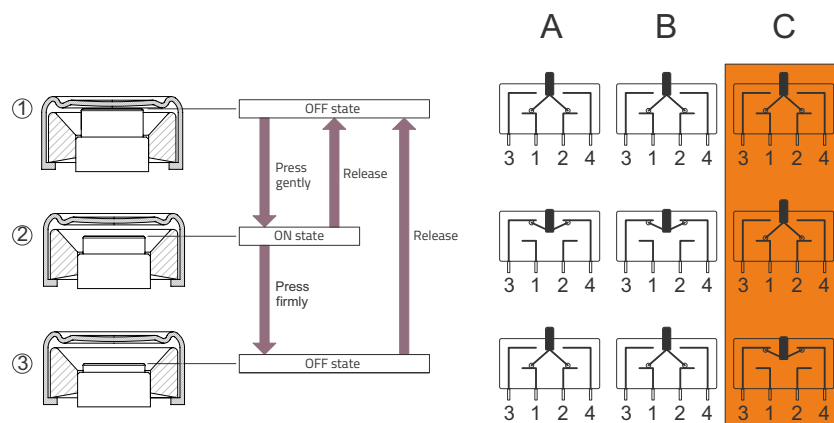
3-position push-button with rubber cap

Microinterruttori con terminali faston 2,8 x 0,5
 Microswitches with faston terminals 2.8 x 0.5

3NO + 3NC A+B+C

49

016P3PCG33F



1-2 contatto NC / 3-4 contatto NA
 1-2 NC contact / 3-4 NO contact



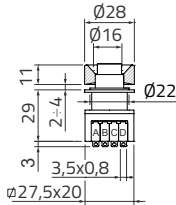
Pulsanti di abilitazione a 3 posizioni Ø16

3-position enabling switches Ø16

Terminali a saldare T7
T7 solder terminals

g

cod

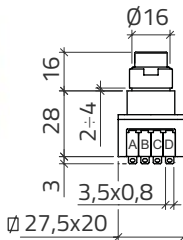


Pulsante 3 posizioni con guardia

3-position guarded push-button

Microinterruttori con terminali T7 a saldare
 Microswitches with T7 solder terminals

2NO + 2NC	A+B	42	016P3PG22
3NO + 3NC	A+B+C	44	016P3PG33
4NO + 4NC	A+B+C+D	45	016P3PG44

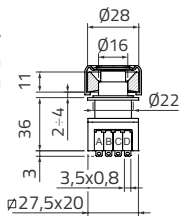


Pulsante 3 posizioni senza guardia

3-position push-button without guard

Microinterruttori con terminali T7 a saldare
 Microswitches with T7 solder terminals

2NO + 2NC	A+B	30	016P3P22
3NO + 3NC	A+B+C	31	016P3P33
4NO + 4NC	A+B+C+D	32	016P3P44

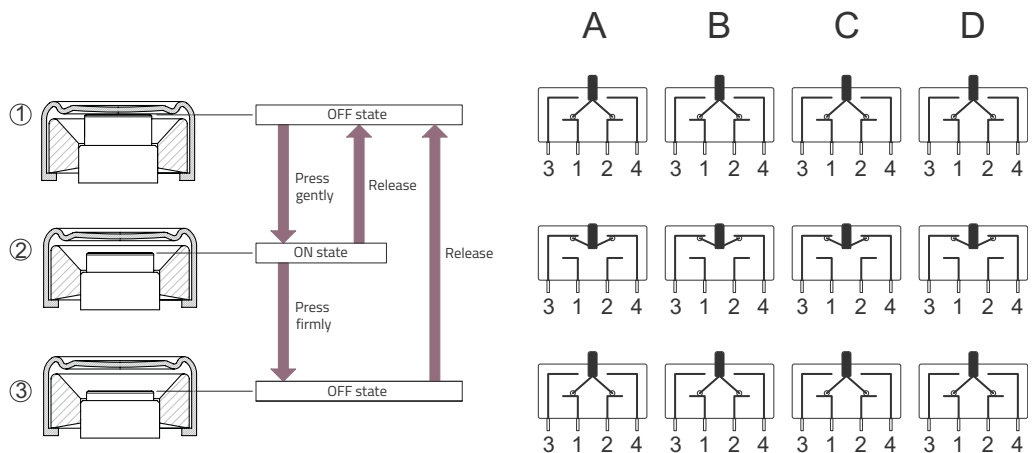


Pulsante 3 posizioni con cappuccio in gomma

3-position push-button with rubber cap

Microinterruttori con terminali T7 a saldare
 Microswitches with T7 solder terminals

2NO + 2NC	A+B	46	016P3PCG22
3NO + 3NC	A+B+C	47	016P3PCG33
4NO + 4NC	A+B+C+D	48	016P3PCG44

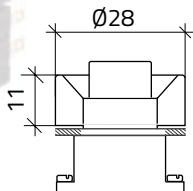


1-2 contatto NC / 3-4 contatto NA
 1-2 NC contact / 3-4 NO contact



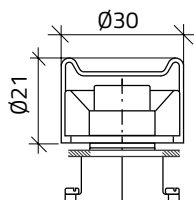
Accessori

Accessories



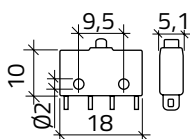
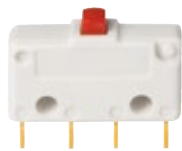
Ghiera di riduzione \varnothing 22,5 / \varnothing 16
Reduction ring \varnothing 22,5 / \varnothing 16

g	n	cod
12,8		016GP28



Cappuccio in gomma / Rubber cap

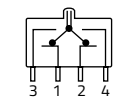
3,5	5	020CGS
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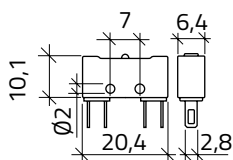
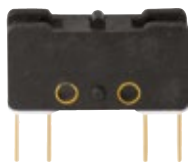
Contatto / Contact block

Microinterruttori con terminali T7 a saldare
 Microswitches with T7 solder terminals
 1NO + 1 NC

1,3		016E11
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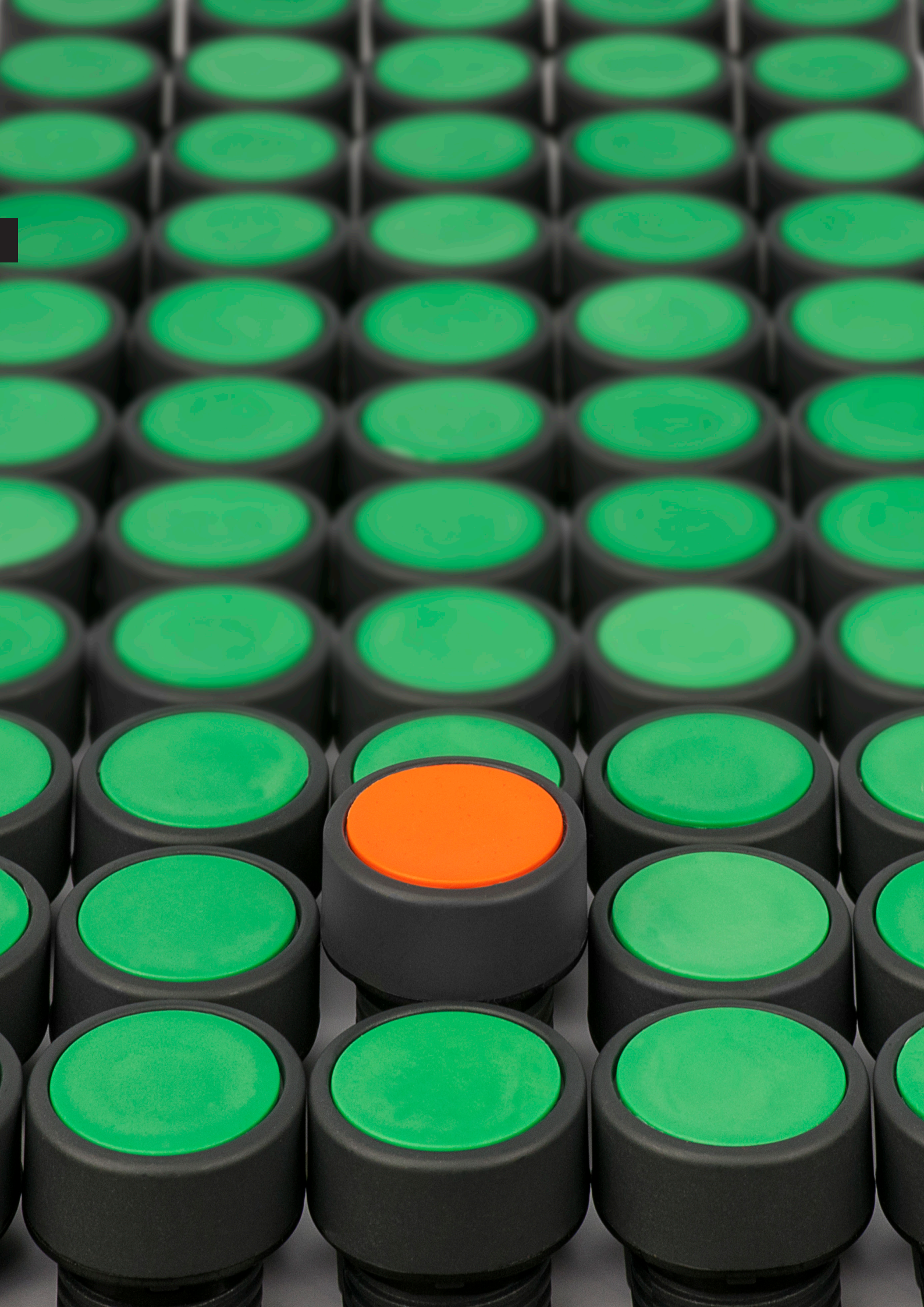
Schema del circuito
 Circuit diagram
 1+2 NC / 3+4 NO



Contatto / Contact

Microinterruttori con terminali faston 2,8 x 0,5
 Microswitches with faston terminals 2.8x0-5
 1NO + 1 NC faston

1,3		016E11F
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020

**COMANDO
E SEGNALAZIONE SM2 Ø22**

**COMMAND AND SIGNALLING
SM2 Ø22**

SISTEMA MODULARE 22

MODULAR SYSTEM 22

LA SERIE SM2

La serie SM2 "SISTEMA MODULARE 22" è progettata per un utilizzo sicuro, facile e intuitivo; le soluzioni adottate facilitano la realizzazione di varie combinazioni garantendo risparmio di tempo e risorse.

Le operazioni di montaggio e manutenzione possono essere svolte con normali utensili e con estrema accessibilità agli operatori.

LA STRUTTURA

Tutti gli operatori possono essere fissati con ghiera metalliche. Il filetto a sezione trapezoidale e l'accoppiamento plastica / metallo garantisce serraggi sicuri e permanenti. L'ancoraggio tra operatori ed elementi di contatto o elementi portalampada, è costruito con un profondo incasso poi trattenuto con una molla in acciaio inox.

La struttura degli elementi di contatto è realizzata con estrema robustezza e flessibilità. La componibilità del sistema permette di comporre gli elementi retro pannello in molteplici configurazioni.

La dimensionatura dei blocchi e le sezioni dei sistemi di serraggio garantiscono notevole resistenza alle tensioni da strappo. I contatti degli operatori New Elfin sono caratterizzati dalle grandi dimensioni delle superfici di contatto e dalla particolare conformazione che garantisce performance di efficienza operativa e di durata superiori alla media.

I nostri prodotti sono progettati e costruiti con tecnopolimeri Hi-tech. Gli spessori applicati e l'aggiunta di materiale di rinforzo conferiscono a tutte le parti grande robustezza e resistenza.

Le parti metalliche sono in acciaio inox o in acciaio trattato, mentre le guarnizioni in gomma resistono a tutte le condizioni climatiche. Queste caratteristiche consentono l'utilizzo in ambienti critici.

DISPOSITIVI D'EMERGENZA

Tutti i sistemi di comando possono essere dotati di un esclusivo dispositivo di arresto d'emergenza, che difende i segnali di arresto di emergenza, mantenendoli coerenti ai requisiti per i quali sono stati progettati.

Il dispositivo neutralizza fattori esterni non controllabili quali forti shock, corrosioni, errori di utilizzo, inadeguata manutenzione ecc.

CAPSULA DI PROTEZIONE

La capsula di protezione è un particolare accessorio per la protezione degli elementi di contatto per l'utilizzo in situazioni ambientali particolarmente gravose.

Garantisce una chiusura ermetica nella parte retropannello ed è particolarmente adatto per l'uso nei settori agricolo, marittimo, cementificio ecc.

THE SM2 SERIES

The SM2 "MODULAR SYSTEM 22" series is designed for a safe, easy, intuitive use; the solutions adopted facilitate the execution of a range of combinations guaranteeing time and resources saving.

Assembly and maintenance can be performed by using standard tools and with easy access to the operators.

STRUCTURE

All operators can be secured by metal locking rings.

The trapezoidal thread and the plastic / metal combination guarantee secure and permanent tightening.

The anchoring mechanism between operators and contact blocks or lampholders consists of a deep recess and a stainless steel spring holding the operator in place.

The structure of the contact blocks is extremely sturdy and flexible.

The modular system allows to compose the rear panel elements in multiple configurations.

The block size and the sections of the tightening systems guarantee considerable tear resistance.

The New Elfin operator contacts feature a large-sized contact surface and a special shape which guarantee above-average efficiency and life.

Our products are designed and manufactured using Hi-tech technopolymers.

The thickness applied and the addition of reinforcement material give all parts great sturdiness and resistance.

The metallic parts are in stainless or treated steel, while the rubber gaskets are resistant to all climatic conditions allowing their use in critical environments.

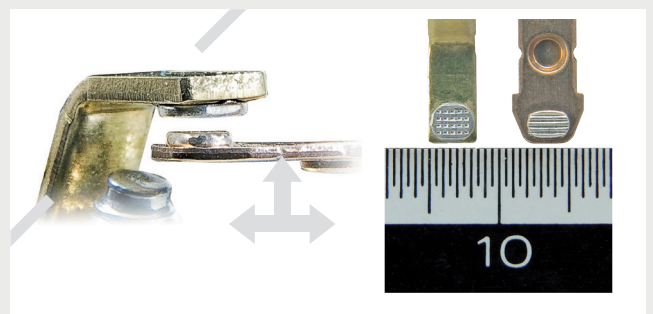
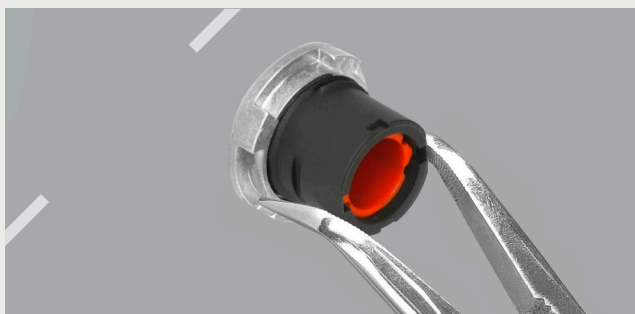
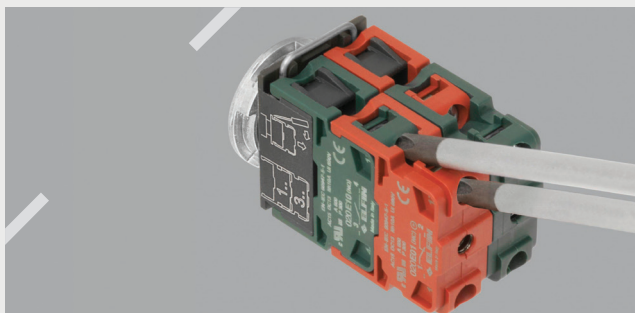
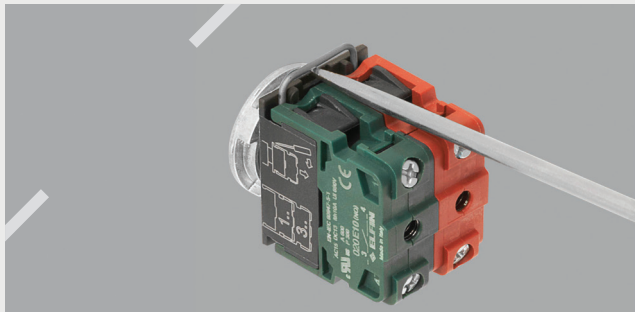
EMERGENCY DEVICES

All command systems can be equipped with an exclusive emergency stop device, which protects the emergency stop signals, keeping them coherent to the design requirements. The device neutralizes external uncontrollable factors, such as strong shocks, corrosion, incorrect use, unsuitable maintenance, etc.

PROTECTION CAP

The protection cap is a special accessory protecting the contact blocks for use under particularly severe environmental conditions. It guarantees a hermetic sealing in the rear panel area and it is suitable for use in the farming and maritime sectors, cement factories, etc.

SISTEMA MODULARE 22 MODULAR SYSTEM 22

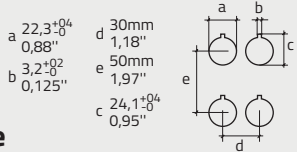


Caratteristiche tecniche

Technical data

Caratteristiche generali

Rispondenza alle norme	UNI CEI EN 45545-2 CEI EN 61373 EN/IEC 60947-1, EN/IEC 60947-5-1 EN/IEC-5-4, EN/IEC 60947-5-5, EN/ISO 13850, EN/IEC 60204-1, IEC 60364-5-53, UL 508 CSA C22-2 N° 14
Omologazioni	UL, CSA, RINA
Protezioni climatiche	In esecuzione normale T.C. tutti i climi(40° -UR35%)
Limiti di temperatura	Funzionamento ≥-40°C÷ ≤+70°C Stoccaggio -45°C +75°C Serie con ghiera in metallo Funzionamento : ≥-25°C÷ ≤+65°C Stoccaggio -35°C +70°C
Posizione di funzionamento	←→↑↓
Protezione contro scossa elettrica	Classe II secondo IEC 61140
Altitudine d' impiego	≤ 3.000 m
Grado di protezione	IP66 pulsanti normali, luminosi, lampade,selettori. IP68 pulsanti con cappuccio in gomma e manipolatori. Secondo norma EN/IEC 60529 IP69K secondo norma EN/IEC DIN 40050 Serie con ghiera in metallo IP65 pulsanti normali,luminosi,lampade,selettori. IP66 pulsanti con cappuccio in gomma. Secondo norma EN/IEC 60529
Dimensioni di montaggio	Pannelli con spessore 1-6 mm Foratura secondo EN/IEC 60947-5-1

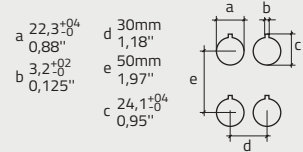


Caratteristiche meccaniche

Resistenza agli urti	50g (durata: 11ms) mezza sinusoide secondo IEC 60068-2-7												
Resistenza alle vibrazioni	16g 40-500 Hz secondo IEC 60068-2-6												
Coppia di serraggio	Ghiera di fissaggio operatori: 2÷3 Nm, Viti terminali: 0,8÷ 1,0 Nm												
Viti terminali	Testa combinata taglio e Phillips Ph2 in acciaio zincato o acciaio inox per versioni E10AU/E01AU Capacità di chiusura : ≥1 x 0,5 mm / ≤2x2,5 mm Capicorda a forcella "spring spade"												
Forze di azionamento	Pulsante con contatto NO: 5N - selettore: 0,15 Nm contatti aggiuntivi NO /NC: 1,5 N												
Funzionamento contatti	NO/NC ad azione lenta con autopulitura a strisciamento- Contatti NC ad apertura positiva ↻ secondo EN/EIC947-5-1, allegato K												
Corsa e commutazioni contatti	<table border="1"> <tr> <td>1mm</td> <td>NC</td> <td>Normalmente Chiuso</td> </tr> <tr> <td>3,6mm</td> <td>NO</td> <td>Normalmente Aperto</td> </tr> <tr> <td>2,5mm</td> <td>NCR</td> <td></td> </tr> <tr> <td>1,9mm</td> <td>NOA</td> <td></td> </tr> </table>	1mm	NC	Normalmente Chiuso	3,6mm	NO	Normalmente Aperto	2,5mm	NCR		1,9mm	NOA	
1mm	NC	Normalmente Chiuso											
3,6mm	NO	Normalmente Aperto											
2,5mm	NCR												
1,9mm	NOA												
Forza di apertura positiva	Pulsante normale: 5 N Pulsante a fungo: 40 N												
Velocità di azionamento	Min. 10 mm / sec Max. 20mm / sec												
Durata meccanica	Pulsanti normali, luminosi: 3 milioni di manovre. Selettori, manipolatori: 1 milione di manovre. Emergenza fungo aggancio e stabili: 500.000 manovre												
Grado di protezione	Morsetti IP20 secondo IEC60529												
Identificazione morsetti	1° cifra: ordine di montaggio su flangia di connessione - 2° cifra: funzione contatto su elemento 1-2 NC / 3 4 NO												

General features

Standards compliance	UNI CEI EN 45545-2 CEI EN 61373 EN/IEC 60947-1, EN/IEC 60947-5-1 EN/IEC-5-4, EN/IEC 60947-5-5, EN/ISO 13850, EN/IEC 60204-1, IEC 60364-5-53, UL 508 CSA C22-2 N° 14
Approvals	UL,CSA,RINA
Climatic protection	Normal operation for all climates (40° - RH35%)
Temperature ranges	Operating ≥-40°C÷ ≤+70°C Storage -45°C +75°C Metal bezel series Operating: ≥-25°C÷ ≤+65°C Storage -35°C +70°C
Operating positions	←→↑↓
Electrical shock protection	Class II in compliance with IEC 61140
Operating altitude	≤ 3.000 m
Protection degree	IP66 normal, twin, illuminated push-buttons, lamps, selector switches. IP68 push-buttons with rubber cap and joysticks. In compliance with EN/IEC 60529 IP69K in compliance with EN/IEC DIN 40050 Metal bezel series: IP65 normal, illuminated push buttons, lamps, selector switches . IP66 push-buttons with rubber cap In compliance with EN/IEC 606529
Mounting dimensions	1-6 mm panels. Drilling in compliance with EN/IEC 60947-5-1



Mechanical features

Shock resistance	50g (duration:11ms) half sine wave in compliance with IEC 60068-2-27												
Vibration resistance	16g 40-500 Hz in compliance with IEC 60068-2-6												
Tightening torque	Operator locking ring: 2 ÷ 3 Nm. Terminal screws: 0,8÷1,0 Nm												
Terminal screws	Combined slot and Phillips Ph2 head, zinc plated or stainless steel for E10AU /E01AU. Connection capacity : ≥1 x 0,5 mm / ≤2x2,5 mm Fork spring spade terminals												
Operating forces	Push-button with NO contact: 5N - selector switch: 0.15 Nm, additional NO/NC contacts: 1.5 N												
Contact operation	NO/NC slow action with wiping, self-cleaning. NC contacts, positive opening ↻ in compliance with EN/EIC947-5-1, annex K												
Contact travel and switching points	<table border="1"> <tr> <td>1mm</td> <td>NC</td> <td>Normally Closed</td> </tr> <tr> <td>3,6mm</td> <td>NO</td> <td>Normally Open</td> </tr> <tr> <td>2,5mm</td> <td>NCR</td> <td></td> </tr> <tr> <td>1,9mm</td> <td>NOA</td> <td></td> </tr> </table>	1mm	NC	Normally Closed	3,6mm	NO	Normally Open	2,5mm	NCR		1,9mm	NOA	
1mm	NC	Normally Closed											
3,6mm	NO	Normally Open											
2,5mm	NCR												
1,9mm	NOA												
Positive opening force	Normal push-button: 5 N Mushroom push-button: 40 N												
Operating speed	Min. 10 mm / sec Max. 20mm / sec												
Mechanical life	Normal,illuminated push-buttons: 3 million cycles. Selector switches, joysticks: 1 million cycles. Emergency stop mushroom push-buttons, latching or maintained: 500.000 cycles												
Degree of protection	Terminals IP20 in compliance with IEC60529												
Identification of terminals	1 st digit: assembling order on connection flange 2 nd digit: element contact function 1-2 NC / 3-4 NO												



Caratteristiche tecniche

Technical data

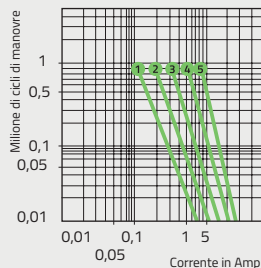
Caratteristiche elettriche

Tensione nominale isolamento	Ui 690 V grado di inquinamento 3 secondo EN/IEC 60947-1																																												
Tensione di tenuta agli impulsi	Uimp 4kV secondo EN/IEC 60947-1																																												
Corrente nominale termica	Ith10A secondo EN/IEC 60947-5-1																																												
Protezione corto circuito	Fusibili DIAZED 10A classe d'intervento gL/gG forma D II secondo IEC 60269-1																																												
Materiale contatti	Pastiglie di contatto in Ag 1000/1000 per versioni Au: Ag 1000/1000, dorati																																												
Categorie nominali d'impiego	Secondo EN/IEC 947-5-1 / UL 508 <table border="1"> <thead> <tr> <th colspan="2">Cat AC15 / A600</th> <th colspan="2">Cat.DC13 / P300</th> </tr> <tr> <th>Ue V</th> <th>Ie A</th> <th>Ue V</th> <th>Ie A</th> </tr> </thead> <tbody> <tr> <td>24</td> <td>10</td> <td>24</td> <td>5</td> </tr> <tr> <td>48</td> <td>8</td> <td>48</td> <td>2,7</td> </tr> <tr> <td>60</td> <td>6</td> <td>60</td> <td>2</td> </tr> <tr> <td>110</td> <td>6</td> <td>110</td> <td>1,1</td> </tr> <tr> <td>220</td> <td>3</td> <td>220</td> <td>0,55</td> </tr> <tr> <td>380</td> <td>2</td> <td></td> <td></td> </tr> <tr> <td>400</td> <td>1,5</td> <td></td> <td></td> </tr> <tr> <td>500</td> <td>1,5</td> <td></td> <td></td> </tr> <tr> <td>600</td> <td>1,2</td> <td></td> <td></td> </tr> </tbody> </table>	Cat AC15 / A600		Cat.DC13 / P300		Ue V	Ie A	Ue V	Ie A	24	10	24	5	48	8	48	2,7	60	6	60	2	110	6	110	1,1	220	3	220	0,55	380	2			400	1,5			500	1,5			600	1,2		
Cat AC15 / A600		Cat.DC13 / P300																																											
Ue V	Ie A	Ue V	Ie A																																										
24	10	24	5																																										
48	8	48	2,7																																										
60	6	60	2																																										
110	6	110	1,1																																										
220	3	220	0,55																																										
380	2																																												
400	1,5																																												
500	1,5																																												
600	1,2																																												

Durata elettrica

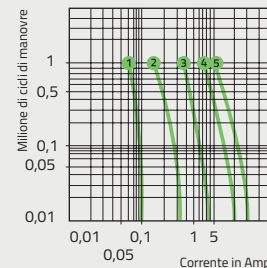
Corrente alternata 50-60 Hz cat AC15

- 500 V
- 380 V
- 220 V
- 127 V
- 12/48 V



Corrente continua cat DC 13

- 400 V
- 220 V
- 110 V
- 48 V
- 24/12 V



Affidabilità elettrica (percentuale di guasto)

Secondo EN/IEC 947-5-4
 Contatti O20 E10/E01 12V-5mA <10⁻⁸
 Contatti O20 E10AU/E01AU 5V-1mA <10⁻⁷

Portalampada operatori luminosi

Attacco BA9S: lampade incandescenza, neon, multiled. Potenze raccomandate: lampade 2,6 W pulsanti, selettori 1,2 W

Durata lampade

Incandescenza ≤1000h-Neon ≤3000h
 Multiled ≥50.000h

Configurazione contatti

Max N° 2 CONTATTI
Selettori luminosi.
Anche per serie ghiera metallica.

Max N° 4 CONTATTI
Pulsanti stabili, pulsanti doppi, manipolatori, emergenza ad aggancio.
Anche per serie ghiera metallica.

Max 6 CONTATTI
Pulsanti a fungo momentanei.
Serie ghiera metallica: Pulsanti non luminosi, pulsanti luminosi, pulsanti a fungo momentanei, selettori

Max 8 CONTATTI
Pulsanti non luminosi, pulsanti luminosi, selettori.
Non applicabile alla serie ghiera metallica.

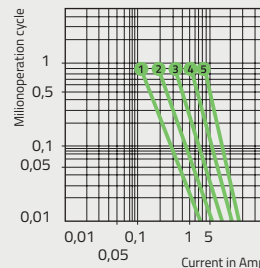
Electrical features

Rated insulation voltage	Ui 690 V pollution degree 3 in compliance with EN/IEC 60947-1																																												
Impulse withstand voltage	Uimp 4kV in compliance with EN/IEC 60947-1																																												
Rated thermal current	Ith10A in compliance with EN/IEC 60947-5-1																																												
Short circuit protection	Fuses DIAZED 10 A operating class gLgG shape D II in conformity with IEC 60269-1																																												
Contact material	Contact pads on Ag 1000/1000 for models Au: Ag 1000/1000, gold plated																																												
Electrical ratings	In compliance with EN/IEC 947-5-1 / UL 508 <table border="1"> <thead> <tr> <th colspan="2">Cat AC15 / A600</th> <th colspan="2">Cat.DC13 / P300</th> </tr> <tr> <th>Ue V</th> <th>Ie A</th> <th>Ue V</th> <th>Ie A</th> </tr> </thead> <tbody> <tr> <td>24</td> <td>10</td> <td>24</td> <td>5</td> </tr> <tr> <td>48</td> <td>8</td> <td>48</td> <td>2,7</td> </tr> <tr> <td>60</td> <td>6</td> <td>60</td> <td>2</td> </tr> <tr> <td>110</td> <td>6</td> <td>110</td> <td>1,1</td> </tr> <tr> <td>220</td> <td>3</td> <td>220</td> <td>0,55</td> </tr> <tr> <td>380</td> <td>2</td> <td></td> <td></td> </tr> <tr> <td>400</td> <td>1,5</td> <td></td> <td></td> </tr> <tr> <td>500</td> <td>1,5</td> <td></td> <td></td> </tr> <tr> <td>600</td> <td>1,2</td> <td></td> <td></td> </tr> </tbody> </table>	Cat AC15 / A600		Cat.DC13 / P300		Ue V	Ie A	Ue V	Ie A	24	10	24	5	48	8	48	2,7	60	6	60	2	110	6	110	1,1	220	3	220	0,55	380	2			400	1,5			500	1,5			600	1,2		
Cat AC15 / A600		Cat.DC13 / P300																																											
Ue V	Ie A	Ue V	Ie A																																										
24	10	24	5																																										
48	8	48	2,7																																										
60	6	60	2																																										
110	6	110	1,1																																										
220	3	220	0,55																																										
380	2																																												
400	1,5																																												
500	1,5																																												
600	1,2																																												

Electrical durability

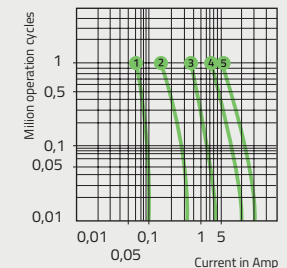
Alternated current 50-60 Hz cat AC15

- 500 V
- 380 V
- 220 V
- 127 V
- 12/48 V



Direct current cat DC 13

- 400 V
- 220 V
- 110 V
- 48 V
- 24/12 V



Electrical reliability (failure percentage)

In compliance with EN/IEC 947-5-4
 Contact O20 E10/E01 12V-5mA <10⁻⁸
 Contact O20 E10AU/E01AU 5V-1mA <10⁻⁷

Lampholder illuminated operators

BA9S socket: incandescent, neon, multiled lamps
 Recommended power: lamps 2.6W push-buttons, selector switches 1.2W

Lamp life

Incandescent ≤1000h-Neon ≤3000h
 Multiled ≥50.000h

Contact configuration

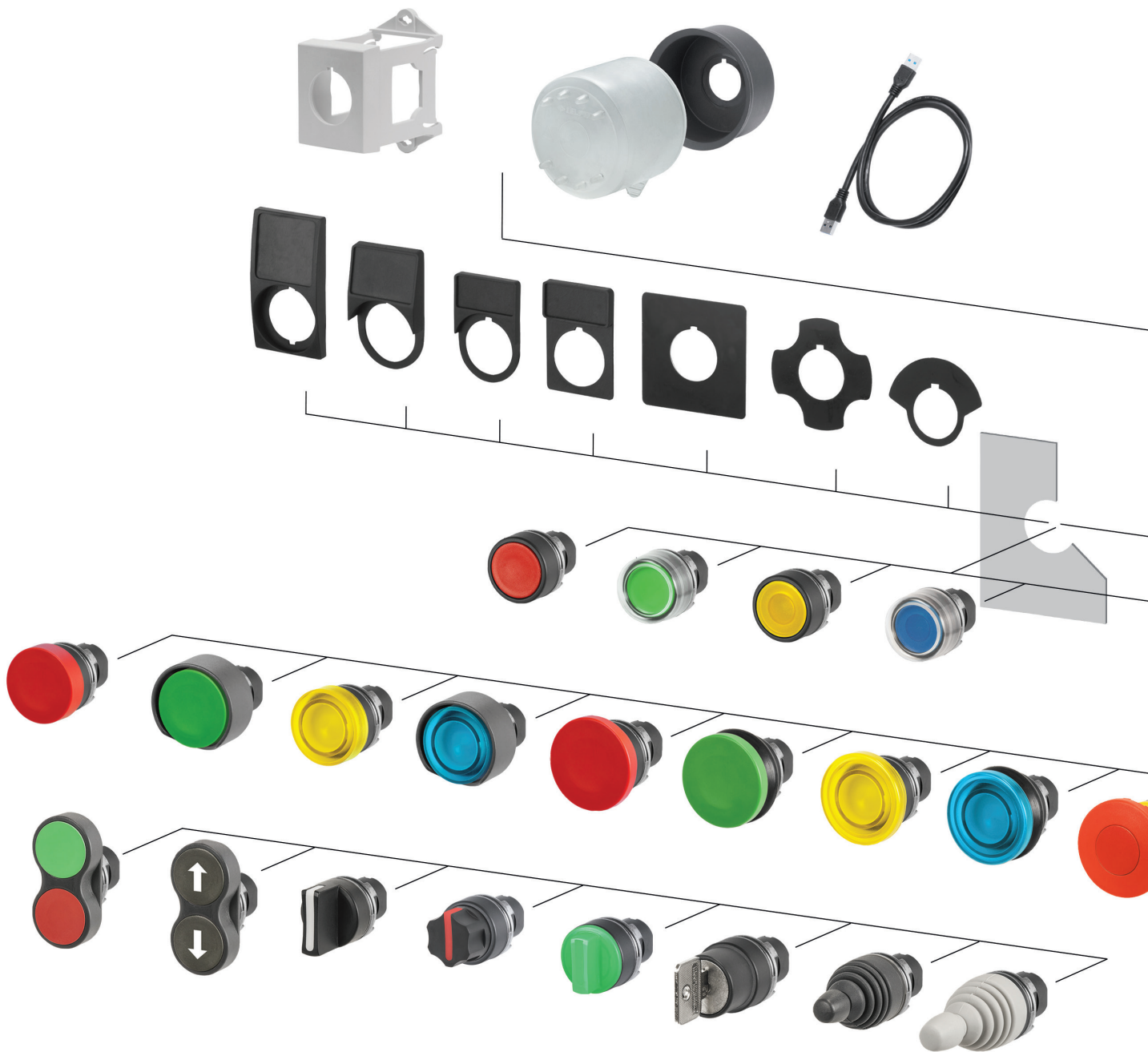
Max 2 CONTACTS
Illuminated selector switches.
Also for Metal bezel series.

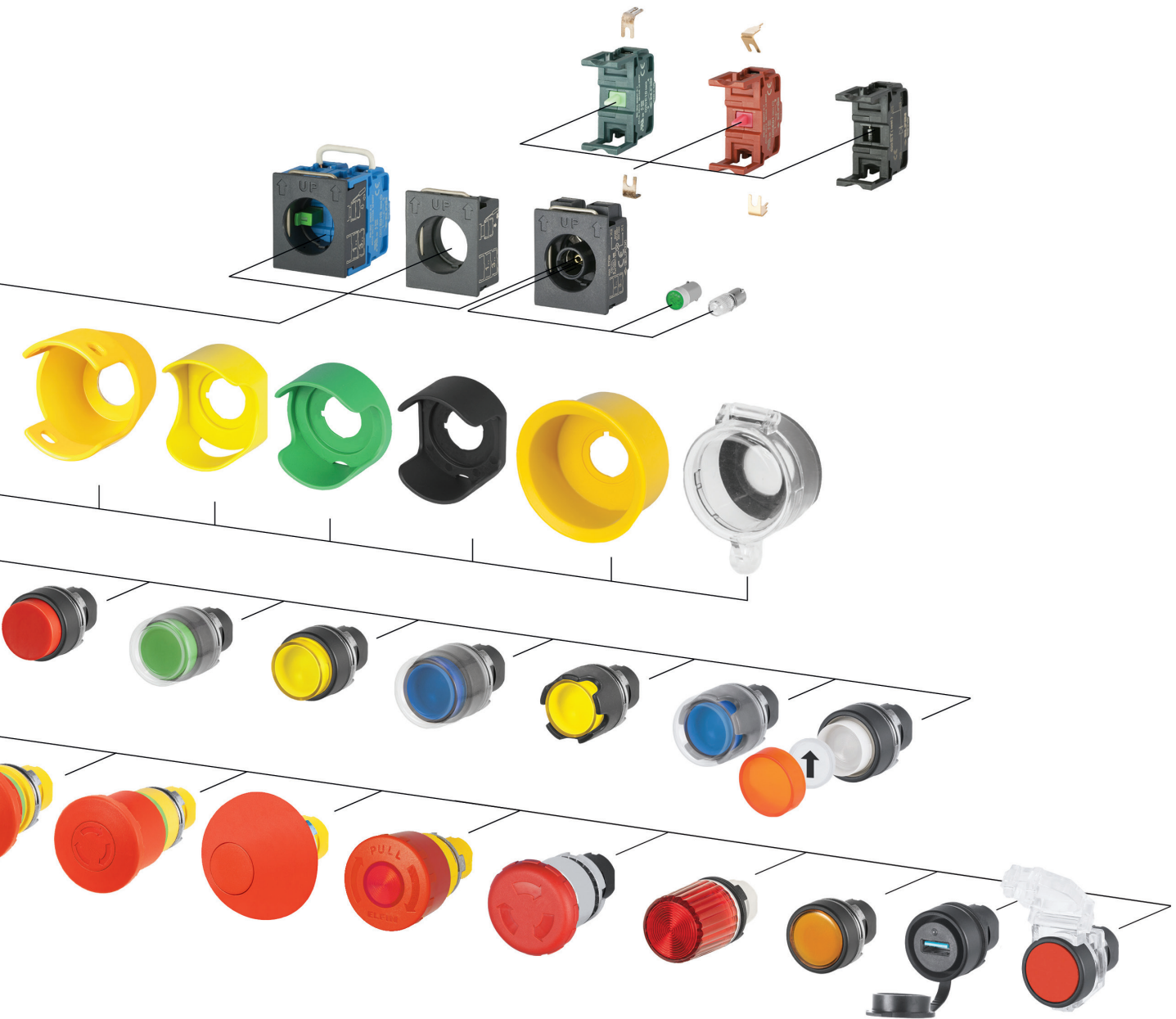
Max 4 CONTACTS
Maintained push-buttons, twin push-buttons, joysticks latching emergency push-buttons.
Also for Metal bezel series.

Max 6 CONTACTS
Momentary mushroom push-buttons.
Metal bezel series: Non-illuminated push-buttons, momentary mushroom push-buttons, selector switches.

Max 8 CONTACTS
Non-illuminated push-buttons, illuminated push-buttons, selector switches.
Not applicable to Metal bezel series.







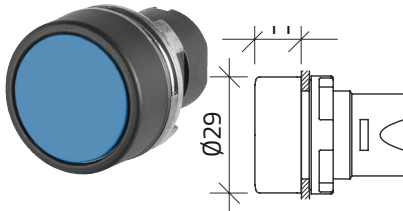
Pulsanti normali Ø22

Normal push-buttons Ø22

Pulsanti normali / Normal push-buttons

g

cod



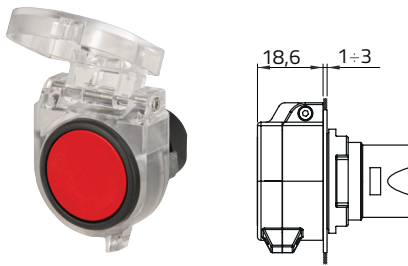
Pulsanti con guardia / Guarded push-buttons

Per marcatura consultare pag. 50 / For marking see page 50

● Nero / Black	19	020PIN
● Rosso / Red	19	020PIR
● Verde / Green	19	020PIV
● Giallo / Yellow	19	020PIG
● Blu / Blue	19	020PIBL
● Blu di prussia / Dark blue	19	020PIBP
○ Bianco / White	19	020PIB
● Grigio / Grey	19	020PIGR
● Arancio / Orange	19	020PIA

Stabili / Maintained

● Nero / Black	19	020PPIN
● Rosso / Red	19	020PPIR
● Verde / Green	19	020PPIV



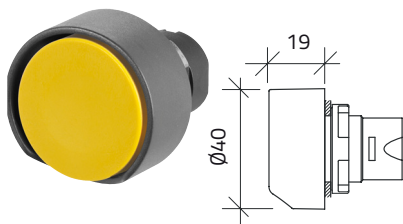
Pulsanti con guardia, protezione piombabile

Guarded push-buttons, sealable protection

● Nero / Black	28	020PINPP
● Verde / Green	28	020PIVPP
● Giallo / Yellow	28	020PIGPP
● Rosso / Red	28	020PIRPP

Stabili / Maintained

● Nero / Black	28	020PPINPP
● Verde / Green	28	020PPIVPP
● Giallo / Yellow	28	020PIGPP
● Rosso / Red	28	020PIRPP



Pulsanti con guardia Ø32 / Guarded push-buttons Ø32

● Nero / Black	30	020PFG3N
● Rosso / Red	30	020PFG3R
● Verde / Green	30	020PFG3V
● Giallo / Yellow	30	020PFG3G
● Blu / Blue	30	020PFG3BL
● Blu di prussia / Dark blue	30	020PFG3BP
● Grigio / Grey	30	020PFG3GR



Pulsanti sporgenti / Projecting push-buttons

● Nero / Black	22	020PSN
● Rosso / Red	22	020PSR
● Verde / Green	22	020PSV
● Giallo / Yellow	22	020PSG
● Blu / Blue	22	020PSBL
○ Bianco / White	22	020PSB
● Grigio / Grey	22	020PSGR
● Arancio / Orange	22	020PSA

Stabili / Maintained

● Nero / Black	22	020PPSN
● Rosso / Red	22	020PPSR
● Verde / Green	22	020PPSV

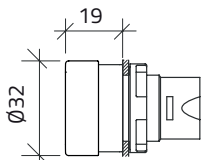
Pulsanti normali Ø22

Normal push-buttons Ø22

Pulsanti normali / Normal push-buttons

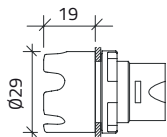
g

cod



Pulsanti sporgenti Ø32 / Projecting push-buttons Ø32

● Nero / Black	24	020PF3N
● Rosso / Red	24	020PF3R
● Verde / Green	24	020PF3V
● Giallo / Yellow	24	020PF3G
● Blu / Blue	24	020PF3BL
● Blu di prussia / Dark blue	24	020PF3BP
● Grigio / Grey	24	020PF3GR



Pulsanti con guardia estesa / Push-buttons with extended guard

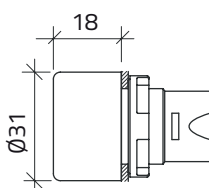
● Nero / Black	23	020PIPn
● Rosso / Red	23	020PIPR

Pulsanti con cappuccio in gomma

Push-buttons with rubber cap

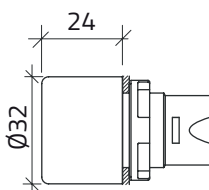
g

cod



Pulsanti con guardia / Guarded push-buttons

● Nero / Black	21	020PICGN
● Rosso / Red	21	020PICGR
● Verde / Green	21	020PICGV
● Giallo / Yellow	21	020PICGG
● Blu / Blue	21	020PICGBL
● Blu di prussia / Dark blue	21	020PICGBP
○ Bianco / White	21	020PICGB
● Grigio / Grey	21	020PICGGR
● Arancio / Orange	21	020PICGA



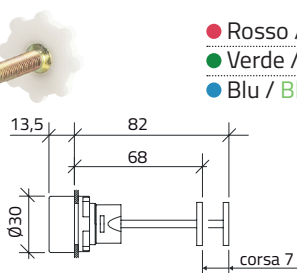
Pulsanti sporgenti / Projecting push-buttons

● Nero / Black	21	020PSCGN
● Rosso / Red	21	020PSCGR
● Verde / Green	21	020PSCGV
● Giallo / Yellow	21	020PSCGG
● Blu / Blue	21	020PSCGBL
○ Bianco / White	21	020PSCGB
● Grigio / Grey	21	020PSCGGR
● Arancio / Orange	21	020PSCGA

Pulsanti di riarmo / Reset push-buttons

g

cod



● Rosso / Red	31	020RTAIR
● Verde / Green	31	020RTAIV
● Blu / Blue	31	020RTAIBL

Pulsanti normali Ø22

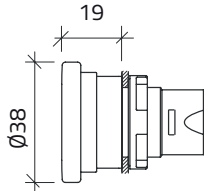
Normal push-buttons Ø22

Pulsanti a fungo momentanei

Momentary mushroom push-buttons

g

cod

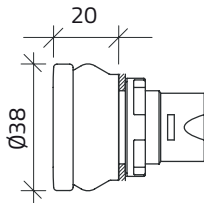


Pulsanti a fungo Ø38 / Mushroom push-buttons Ø40

● Nero / Black	24	020PFN
● Rosso / Red	24	020PFR
● Verde / Green	24	020PFV
● Giallo / Yellow	24	020PFG
● Blu / Blue	24	020PFBL
● Blu di prussia / Dark blue	24	020PFBP
● Grigio / Grey	24	020PFGR

Stabili / Maintained

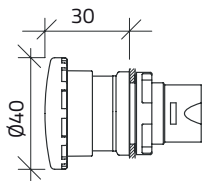
● Nero / Black	24	020PPFN
● Rosso / Red	24	020PPFR
● Verde / Green	24	020PPFV
● Giallo / Yellow	24	020PPFG



Pulsanti a fungo Ø38 con soffiutto

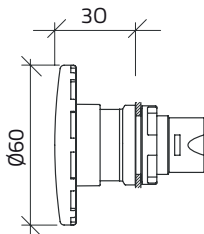
Mushroom push-buttons Ø38 with bellows

● Nero / Black	24	020PFSGN
● Rosso / Red	24	020PFSGR
● Verde / Green	24	020PFSGV
● Giallo / Yellow	24	020PFSGG
● Blu / Blue	24	020PFSGBL
● Blu di prussia / Dark blue	24	020PFSGBP
● Grigio / Grey	24	020PFSGGR



Pulsanti a fungo Ø40 / Mushroom push-buttons Ø40

● Nero / Black	32	020PTFN
● Verde / Green	32	020PTFV
● Giallo / Yellow	32	020PTFG



Pulsanti a fungo Ø60 / Mushroom push-buttons Ø60

● Nero / Black	36	020PTFFN
● Grigio / Grey	36	020PTFFGR
● Verde / Green	36	020PTFFV



Pulsanti a fungo Ø60

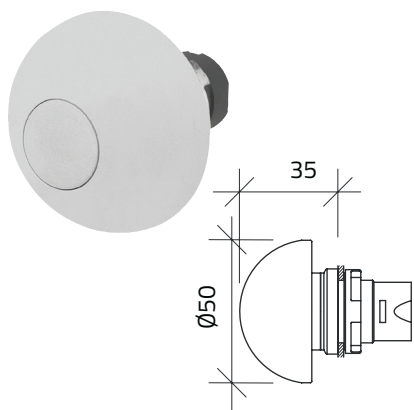
Mushroom push-buttons Ø60

● Nero / Black	71	020PTFFPN
● Grigio / Grey	71	020PTFFPGR
● Verde / Green	71	020PTFFPV

Pulsanti normali Ø22

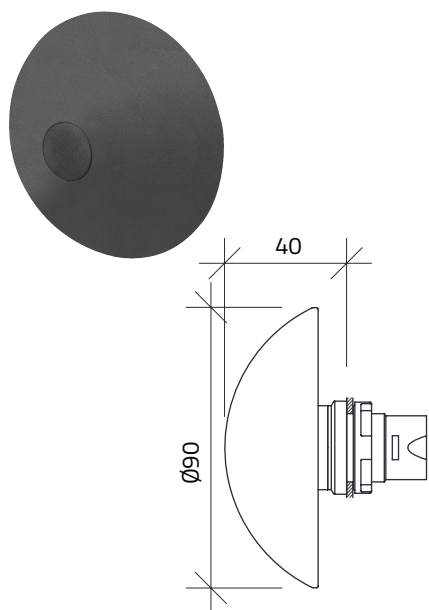
Normal push-buttons Ø22

Pulsanti a fungo momentanei Momentary mushroom push-buttons



Pulsanti a fungo sferico Ø50 / Palm push-buttons Ø50

	g	cod
● Nero / Black	38	020PTF5MN
● Grigio / Grey	38	020PTF5MGR



Pulsanti a fungo sferico Ø90 / Palm push-buttons Ø90

● Nero / Black	55	020PTF9MN
● Giallo / Yellow	55	020PTF9MG
● Grigio / Grey	55	020PTF9MGR

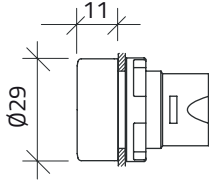
Pulsanti luminosi Ø22 Illuminated push-buttons Ø22

020

Pulsanti luminosi Illuminated push-buttons

g

cod



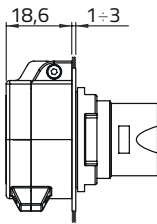
Pulsanti con guardia / Guarded push-buttons

Per marcatura consultare pag. 50 / For marking see page 50

● Rosso / Red	19	020PLIR
● Verde / Green	19	020PLIV
● Giallo / Yellow	19	020PLIG
● Blu / Blue	19	020PLIBL
○ Bianco / White	19	020PLIB
● Arancio / Orange	19	020PLIA

Stabili / Maintained

● Rosso / Red	19	020PPLIR
● Verde / Green	19	020PPLIV
● Giallo / Yellow	19	020PPLIG
● Blu / Blue	19	020PPLIBL
○ Bianco / White	19	020PPLIB

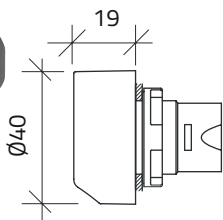


Pulsanti con guardia, protezione piombabile Guarded push-buttons, sealable protection

● Rosso / Red	28	020PLIRPP
● Verde / Green	28	020PLIVPP
● Giallo / Yellow	28	020PLIGPP
○ Bianco / White	28	020PLIBPP

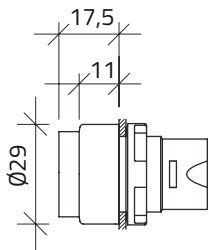
Stabili / Maintained

● Rosso / Red	28	020PPLIRPP
● Verde / Green	28	020PPLIVPP
● Giallo / Yellow	28	020PPLIGPP
○ Bianco / White	28	020PPLIBPP



Pulsanti con guardia Ø32 / Guarded push-buttons Ø32

● Rosso / Red	30	020PFLG3R
● Verde / Green	30	020PFLG3V
● Giallo / Yellow	30	020PFLG3G
● Blu / Blue	30	020PFLG3BL
○ Trasparente / Clear	30	020PFLG3I



Pulsanti sporgenti / Projecting push-buttons

● Rosso / Red	22	020PLSR
● Verde / Green	22	020PLSV
● Giallo / Yellow	22	020PLSG
● Blu / Blue	22	020PLSBL
○ Bianco / White	22	020PLSB
● Arancio / Orange	22	020PLSA
○ Trasparente / Clear	22	020PLSI

Stabili / Maintained

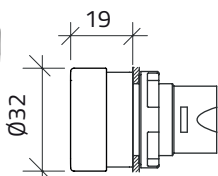
● Rosso / Red	22	020PPLSR
● Verde / Green	22	020PPLSV
● Giallo / Yellow	22	020PPLSG
● Blu / Blue	22	020PPLSBL
○ Trasparente / Clear	22	020PPLSI



Pulsanti luminosi Ø22

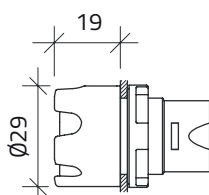
Illuminated push-buttons Ø22

Pulsanti luminosi Illuminated push-buttons



Pulsanti sporgenti Ø32 / Projecting push-buttons Ø32

	g	cod
● Rosso / Red	24	020PFL3R
● Verde / Green	24	020PFL3V
● Giallo / Yellow	24	020PFL3G
● Blu / Blue	24	020PFL3BL
○ Trasparente / Clear	24	020PFL3I



Pulsanti con guardia completa / Push-buttons with full guard

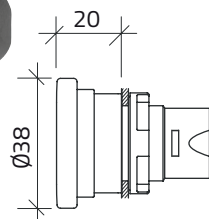
Per marcatura consultare pag. 50 / For marking see page 50

● Rosso / Red	23	020PLPR
● Verde / Green	23	020PLPV
● Giallo / Yellow	23	020PLPG
● Blu / Blue	23	020PLPBL
○ Bianco / White	23	020PLPB
● Arancio / Orange	23	020PLPA
○ Trasparente / Clear	23	020PLPI

Stabili / Maintained

● Rosso / Red	23	020PPLPR
● Verde / Green	23	020PPLPV
● Giallo / Yellow	23	020PPLPG
● Blu / Blue	23	020PPLPBL
○ Trasparente / Clear	23	020PPLPI

Pulsanti luminosi a fungo Illuminated mushroom push-buttons

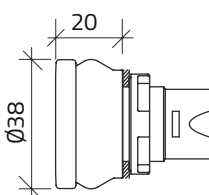


Pulsanti a fungo Ø38 / Mushroom push-buttons Ø40

	g	cod
● Rosso / Red	24	020PFLR
● Verde / Green	24	020PFLV
● Giallo / Yellow	24	020PFLG
● Blu / Blue	24	020PFLBL
○ Trasparente / Clear	24	020PFLI

Stabili / Maintained

● Rosso / Red	24	020PPFLR
● Verde / Green	24	020PPFLV
● Giallo / Yellow	24	020PPFLG
● Blu / Blue	24	020PPFLBL



Pulsanti a fungo Ø38 con soffiutto Mushroom push-buttons Ø30 with bellows

● Rosso / Red	29	020PFLSGR
● Verde / Green	29	020PFLSGV
● Giallo / Yellow	29	020PFLSGG
● Blu / Blue	29	020PFLSGBL
○ Trasparente / Clear	29	020PFLSGI

Pulsanti luminosi Ø22

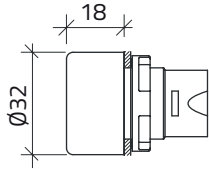
Illuminated push-buttons Ø22

Pulsanti luminosi con cappuccio in gomma

Illuminated push-buttons with rubber cap

g

cod

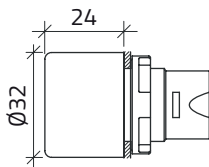


Pulsanti con guardia / Guarded push-buttons

● Rosso / Red	21	020PLICGR
● Verde / Green	21	020PLICGV
● Giallo / Yellow	21	020PLICGG
● Blu / Blue	21	020PLICGBL
○ Bianco / White	21	020PLICGB
● Arancio / Orange	21	020PLICGA

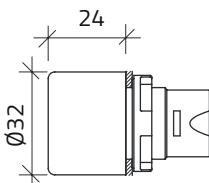
Stabili / Maintained

● Rosso / Red	21	020PPLICGR
● Verde / Green	21	020PPLICGV
● Giallo / Yellow	21	020PPLICGG
● Blu / Blue	21	020PPLICGBL



Pulsanti con guardia completa / Push-buttons with full guard

● Rosso / Red	23	020PLPCGR
● Verde / Green	23	020PLPCGV
● Giallo / Yellow	23	020PLPCGG
● Blu / Blue	23	020PLPCGBL
○ Bianco / White	23	020PLPCGB
● Arancio / Orange	23	020PLPCGA
○ Trasparente / Clear	23	020PLPCGI

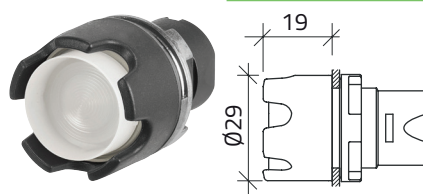


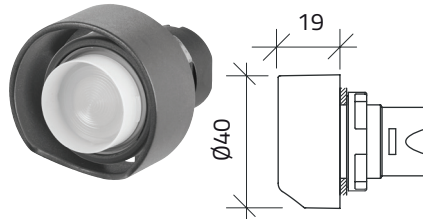
Pulsanti sporgenti / Projecting push-buttons

● Rosso / Red	24	020PLSCGR
● Verde / Green	24	020PLSCGV
● Giallo / Yellow	24	020PLSCGG
● Blu / Blue	24	020PLSCGBL
○ Bianco / White	24	020PLSCGB
● Arancio / Orange	24	020PLSCGA
○ Trasparente / Clear	24	020PLSCGI

Pulsanti componibili Ø22 Modular push-buttons Ø22


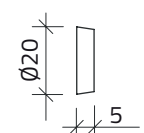
Pulsanti componibili Modular push-buttons

	g	cod	
	Pulsante con guardia / <i>Guarded push-button</i>	22	020PLP
	Stabile / <i>Maintained</i>	22	020PPLP

	Pulsante con guardia / <i>Guarded push-button</i>	28	020PFLG3
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	Pulsante sporgente / <i>Projecting push-button</i>	20	020PLS
	Stabile / <i>Maintained</i>	20	020PPLS

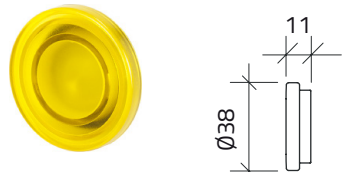
Diffusori con simbolo / Diffusers caps with symbol

	g	n	cod	
	Completa il codice con il suffisso del simbolo desiderato vedi pag 52 Code to be completed with the suffix of the desired symbol, see page 52.			
	Per pulsanti / <i>For push-buttons</i>	1	10	020DI

Gemme per pulsanti / Lenses for push-buttons

	g	n	cod
	Gemme per pulsanti sporgenti o con guardia completa Lenses for push-buttons with full guard or projecting		
● Rosso / <i>Red</i>	2	5	020BPLR
● Verde / <i>Green</i>	2	5	020BPLV
● Giallo / <i>Yellow</i>	2	5	020BPLG
● Blu / <i>Blue</i>	2	5	020BPLBL
○ Bianco / <i>White</i>	2	5	020BPLB
● Arancio / <i>Orange</i>	2	5	020BPLA
○ Trasparente / <i>Clear</i>	2	5	020BPLI

Gemme per pulsanti a fungo / Lenses for mushroom push-buttons

	● Rosso / <i>Red</i>	2	5	020BFLR
	● Verde / <i>Green</i>	2	5	020BFLV
	● Giallo / <i>Yellow</i>	2	5	020BFLG
	○ Trasparente / <i>Clear</i>	2	5	020BFLI

Gemme per pulsanti con guardia / Lenses for guarded push-buttons

	● Rosso / <i>Red</i>	4	5	020BFL3R
	● Verde / <i>Green</i>	4	5	020BFL3V
	● Giallo / <i>Yellow</i>	4	5	020BFL3G
	○ Trasparente / <i>Clear</i>	4	5	020BFL3I

Pulsanti d' emergenza non luminosi Ø22

Non-illuminated emergency stop push-buttons Ø 22

Momentanei / Momentary

g

cod

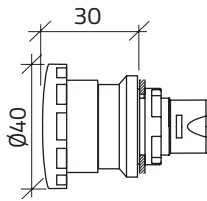


Pulsanti a fungo Ø 40 / Mushroom push-button Ø 40

● Rosso / Red

32

020PTFR

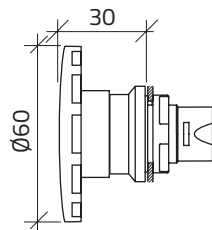


Pulsanti a fungo Ø 60 / Mushroom push-button Ø 60

● Rosso / Red

36

020PTFFR

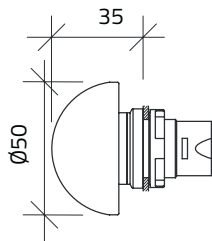


Pulsanti a fungo sferico Ø 50 / Palm push-button Ø 50

● Rosso / Red

38

020PTF5MR

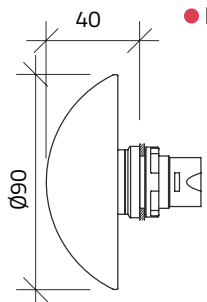


Pulsanti a fungo sferico Ø 90 / Palm push-button Ø 90

● Rosso / Red

55

020PTF9MR



Pulsanti d' emergenza non luminosi Ø22

Non-illuminated emergency stop push-buttons Ø 22

Pulsanti a fungo ad aggancio

Latching mushroom push-buttons

g

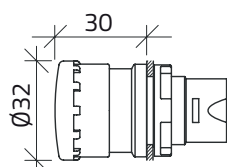
cod



Pulsanti a fungo Ø 32, sgancio rotazione

Mushroom push-button Ø 32, twist release

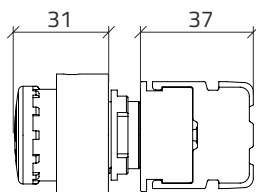
● Rosso / Red	30	020PTAR
● Nero / Black	30	020PTAN
● Giallo / Yellow	30	020PTAG



Pulsanti a fungo Ø 40, sgancio rotazione, ghiera lucchettabile

Mushroom push-button Ø 40, twist release, padlockable guard

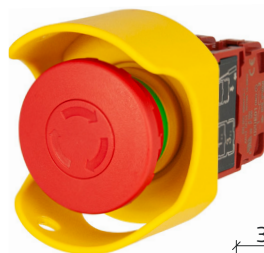
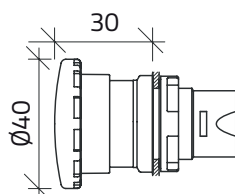
● Rosso / Red	83	020PTARP02
● Rosso, automonitoraggio / Red, self-monitoring	83	020PTARP02S
● Nero / Black	83	020PTANP02



Pulsanti a fungo Ø 40, sgancio rotazione

Mushroom push-button Ø 40, twist release

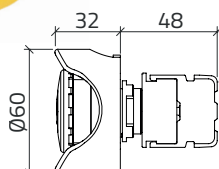
● Rosso / Red	35	020PTFAR
● Nero / Black	35	020PTFAN
● Giallo / Yellow	30	020PTFAG



Pulsanti a fungo Ø 40, sgancio rotazione, ghiera lucchettabile

Mushroom push-button Ø 40, twist release, padlockable guard

● Rosso / Red	83	020PTFARP02
● Rosso, automonitoraggio / Red, self-monitoring	83	020PTFARP02S



Pulsanti d' emergenza non luminosi Ø22

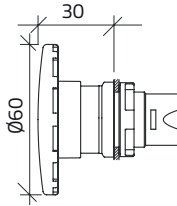
Non-illuminated emergency stop push-buttons Ø 22

Pulsanti a fungo ad aggancio

Latching mushroom push-buttons

g

cod



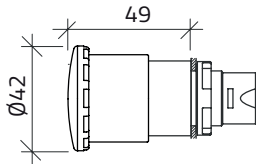
Pulsanti a fungo Ø 60, sgancio rotazione

Mushroom push-button Ø 60, twist release

● Rosso / Red

39

020PTFFAR



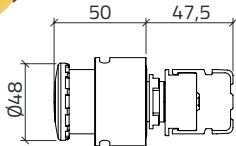
Pulsante a fungo Ø 42, sgancio rotazione

Mushroom push-button Ø 42, twist release

● Rosso / Red

55

020PTFASRV



Pulsante a fungo Ø 42, sgancio rotazione, ghiera lucchettabile telescopica

Mushroom push-button Ø 42, twist release, telescopic padlockable guard

● Rosso / Red

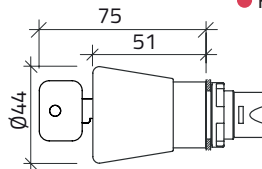
106

020PTFASRVPO2

● Rosso, automonitoraggio / Red, self-monitoring

106

020PTFASRVPO2S



Pulsante a fungo Ø 44, sgancio a chiave

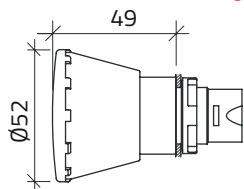
Mushroom push-button Ø 44, key release

chiave 73037 con impugnatura colore rosso / key 73037 with red cap

● Rosso / Red

55

020PTHCSRK



Pulsante a fungo Ø 52, sgancio rotazione

Mushroom push-button Ø 52, twist release

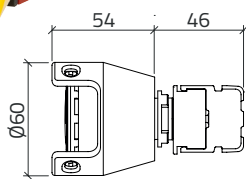
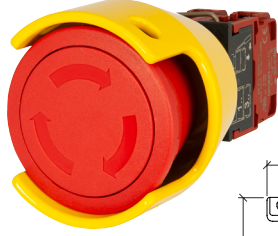
● Rosso / Red

55

020PTAASRK

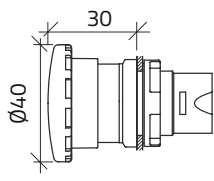
Pulsanti d' emergenza non luminosi Ø22 Non-illuminated emergency stop push-buttons Ø 22

Pulsanti a fungo ad aggancio Latching mushroom push-buttons



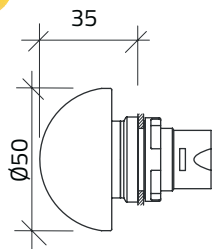
Pulsante a fungo Ø 52, sgancio rotazione, ghiera lucchettabile Mushroom push-button Ø 52, twist release, padlockable guard

● Rosso / Red	74	020PTAASRK02
● Rosso, automonitoraggio / Red, self-monitoring	74	020PTAASRK02S



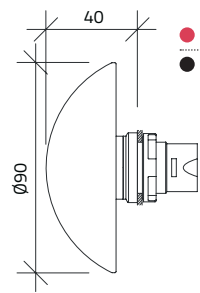
Pulsante a fungo Ø 40, sgancio trazione Mushroom push-button Ø 40, pull release

● Rosso / Red	35	020PTFPTR
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Pulsante a fungo sferico Ø 50, sgancio trazione Palm push-button Ø 50, pull release

● Rosso / Red	38	020PTF5PTR
● Nero / Black	38	020PTF5PTN



Pulsante a fungo sferico Ø 90, sgancio trazione Palm push-button Ø 90, pull release

● Rosso / Red	55	020PTF9PTR
● Nero / Black	55	020PTF9PTN

Pulsanti d' emergenza luminosi Ø22

Illuminated emergency stop push-buttons Ø 22

Pulsante a fungo Ø 40, sgancio rotazione-trazione
Mushroom push-button Ø 40, twist-pull release

g

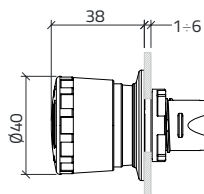
cod

Pulsante luminoso a fungo Ø 40, sgancio rotazione-trazione
Illuminated mushroom push-button Ø 40, twist-pull release

● Rosso / Red

36

020PTFALR



Pulsanti d' emergenza luminosi Ø22 Illuminated emergency stop push-buttons Ø 22

Pulsante a fungo Ø 40, sgancio rotazione-trazione, con disco
Mushroom push-button Ø 40, twist-pull release, yellow disc

g

cod

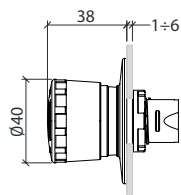


**Pulsante a fungo Ø 42, sgancio rotazione-trazione,
disco giallo Ø 45**
Illuminated mushroom push-button Ø 40, twist-pull release,
yellow disc Ø 45

● Rosso / Red

42

020PTFALR4

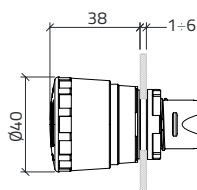


**Pulsante a fungo Ø 42, sgancio rotazione-trazione,
disco giallo Ø 60**
Illuminated mushroom push-button Ø 40, twist-pull release,
yellow disc Ø 60

● Rosso / Red

44

020PTFALR6



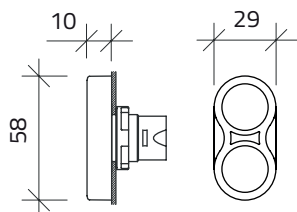
Pulsanti doppi Ø22

Twin push-buttons Ø22

Pulsanti a doppio comando

Twin push-buttons

g cod



76 020P2RV



76 020P2RVS



76 020P2RN



76 020P2RNS



76 020P2NBS



76 020P2NN



76 020P2NNS45



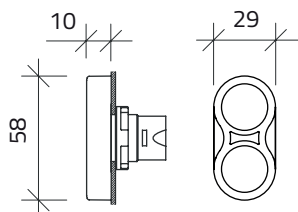
76 020P2NNS46



76 020P2NNS47

Pulsanti doppi luminosi Ø22 Illuminated twin push-buttons Ø22

Pulsanti a doppio comando Twin push-buttons



g

cod

76

020P2LRV



76

020P2LRVS



76

020P2LRN



76

020P2LRNS



76

020P2LNBS



76

020P2LNN



76

020P2LNNS45



76

020P2LNNS46



76

020P2LNNS47



Lampade spia Ø22 Pilot lights Ø22

Per parti sciolte vedi accessori pag. 58 / For spare parts, see accessory on page. 58

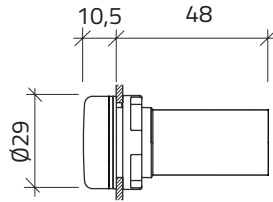
Lampada spia monoblocco BA9S Monolithic pilot lights BA9S



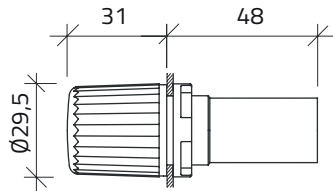
Alimentazione diretta / Direct supply

~ IP 66- BA9S 400V - 2W max.

Lampadina non inclusa / Bulb not included

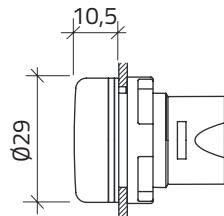


	g	n	cod
● Rosso / Red	18	5	020LMR
● Verde / Green	18	5	020LMV
● Giallo / Yellow	18	5	020LMG
● Blu / Blue	18	5	020LMBL
○ Bianco / White	18	5	020LMB
○ Trasparente / Clear	18	5	020LMI
● Arancio / Orange	18	5	020LMA

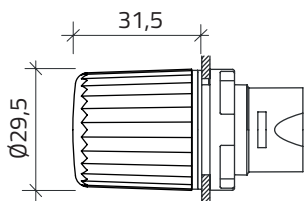


● Rosso / Red	22	5	020LMAR
● Verde / Green	22	5	020LMAV
● Giallo / Yellow	22	5	020LMAG
● Blu / Blue	22	5	020LMABL
○ Bianco / White	22	5	020LMAB
○ Trasparente / Clear	22	5	020LMAI
● Arancio / Orange	22	5	020LMAA

Lampade spia modulare / Modular pilot lights

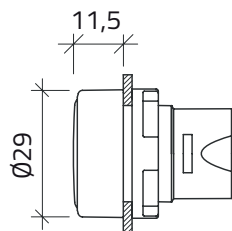


	g	n	cod
● Rosso / Red	9	5	020ULR
● Verde / Green	9	5	020ULV
● Giallo / Yellow	9	5	020ULG
● Blu / Blue	9	5	020ULBL
○ Bianco / White	9	5	020ULB
○ Trasparente / Clear	9	5	020ULI
● Arancio / Orange	9	5	020ULA



● Rosso / Red	13	5	020ULAR
● Verde / Green	13	5	020ULAV
● Giallo / Yellow	13	5	020ULAG
● Blu / Blue	13	5	020ULABL
○ Bianco / White	13	5	020ULAB
○ Trasparente / Clear	13	5	020ULAI
● Arancio / Orange	13	5	020ULAA

Lampade spia inviolabili / Tamper-proof pilot lights



	g	n	cod
● Rosso / Red	21	5	020ULPR
● Verde / Green	21	5	020ULPV
● Giallo / Yellow	21	5	020ULPG
● Blu / Blue	21	5	020ULPBL
○ Bianco / White	21	5	020ULPB
○ Trasparente / Clear	21	5	020ULPI
● Arancio / Orange	21	5	020ULPA

Segnalatore acustico e luminoso Ø22 Buzzer with flashing led beacon Ø22

Segnalatore acustico e luminoso Buzzer with flashing led beacon

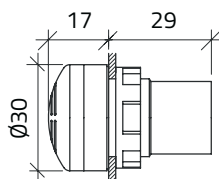


Con LED lampeggiante rosso With red flashing led beacon

Assorbimento : 20 mA / Current consumption : 20 mA

Intensità sonora : 80 db / Sound level : 80 db

Protezione IP44 / Protection IP44



24V AC-DC	20	020SAL24
130V AC-DC	20	020SAL13
230V AC	20	020SAL22

Segnalatore acustico Buzzer

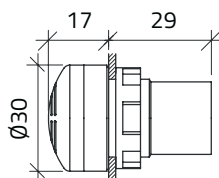


Solo sonoro / Only sound

Assorbimento : 20 mA / Current consumption : 20 mA

Intensità sonora : 80 db / Sound level : 80 db

Protezione IP44 / Protection IP44



24V AC-DC	20	020SA24
130V AC-DC	20	020SA13
230V AC	20	020SA22

Selettori a manopola Ø22 Knob selector switches Ø22

Cercare la combinazione di schemi a pag. 31-32 / See diagram combination on page 31-32

020

2 posizioni / 2 positions

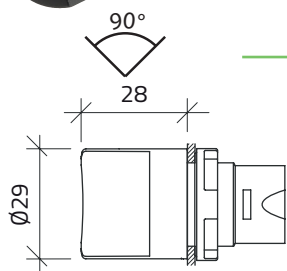
g

cod



CAM A

○ Bianco / White	27,4	020SMAN
● Rosso / Red	27,4	020SMAR
● Verde / Green	27,4	020SMAV
● Giallo / Yellow	27,4	020SMAG
● Blu / Blue	27,4	020SMABL



CAM B

○ Bianco / White	27,4	020SMBN
● Rosso / Red	27,4	020SMBR
● Verde / Green	27,4	020SMBV
● Giallo / Yellow	27,4	020SMBG
● Blu / Blue	27,4	020SMBBL



CAM B

○ Bianco / White	27,4	020SMBND
● Rosso / Red	27,4	020SMBRD
● Verde / Green	27,4	020SMBVD
● Giallo / Yellow	27,4	020SMBGD
● Blu / Blue	27,4	020SMBBLD



CAM C

○ Bianco / White	27,4	020SMCN
● Rosso / Red	27,4	020SMCR
● Verde / Green	27,4	020SMCV
● Giallo / Yellow	27,4	020SMCG
● Blu / Blue	27,4	020SMCBL



CAM C

○ Bianco / White	27,4	020SMCNS
● Rosso / Red	27,4	020SMCRS
● Verde / Green	27,4	020SMCVS
● Giallo / Yellow	27,4	020SMCGS
● Blu / Blue	27,4	020SMCBL S

2 posizioni con protezione piombabile 2 positions with sealable protection

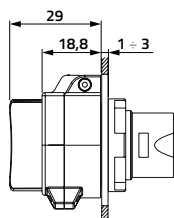
g

cod



CAM B

○ Bianco / White	27,4	020SMBNP
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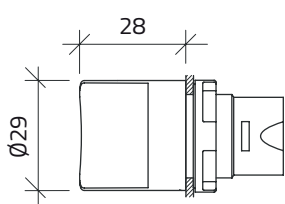
CAM B

○ Bianco / White	27,4	020SMBNDP
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Selettori a manopola Ø22 Knob selector switches Ø22

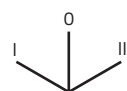
Cercare la combinazione di schemi a pag. 31-32 / See diagram combination on page 31-32



3 posizioni / 3 positions

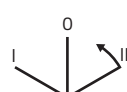
g

cod



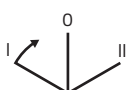
CAM O

○ Bianco / White	27,4	020SMON
● Rosso / Red	27,4	020SMOR
● Verde / Green	27,4	020SMOV
● Giallo / Yellow	27,4	020SMOG
● Blu / Blue	27,4	020SMOBL



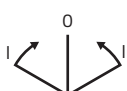
CAM O

○ Bianco / White	27,4	020SMOND
● Rosso / Red	27,4	020SMORD
● Verde / Green	27,4	020SMOVD
● Giallo / Yellow	27,4	020SMOGD
● Blu / Blue	27,4	020SMOBLD



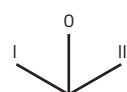
CAM O

○ Bianco / White	27,4	020SMONS
● Rosso / Red	27,4	020SMORS
● Verde / Green	27,4	020SMOVS
● Giallo / Yellow	27,4	020SMOGS
● Blu / Blue	27,4	020SMOBS



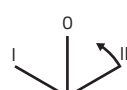
CAM O

○ Bianco / White	27,4	020SMONC
● Rosso / Red	27,4	020SMORC
● Verde / Green	27,4	020SMOVC
● Giallo / Yellow	27,4	020SMOGC
● Blu / Blue	27,4	020SMOBLC



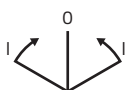
CAM T

○ Bianco / White	27,4	020SMTN
● Rosso / Red	27,4	020SMTR
● Verde / Green	27,4	020SMTV
● Giallo / Yellow	27,4	020SMTG
● Blu / Blue	27,4	020SMTBL



CAM T

○ Bianco / White	27,4	020SMTND
● Rosso / Red	27,4	020SMTRD
● Verde / Green	27,4	020SMTVD
● Giallo / Yellow	27,4	020SMTGD
● Blu / Blue	27,4	020SMTBLD



CAM T

○ Bianco / White	27,4	020SMTNC
● Rosso / Red	27,4	020SMTRC
● Verde / Green	27,4	020SMTVC
● Giallo / Yellow	27,4	020SMTGC
● Blu / Blue	27,4	020SMTBLC

Selettori a manopola Ø22 Knob selector switches Ø22

Cercare la combinazione di schemi a pag. 31-32 / See diagram combination on page 31-32

020

4 posizioni / 4 positions

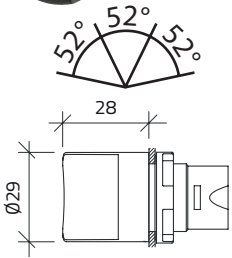
g

cod



CAM Q

○ Bianco / White	27,4	020SMQN
● Rosso / Red	27,4	020SMQR
● Verde / Green	27,4	020SMQV
● Giallo / Yellow	27,4	020SMQG
● Blu / Blue	27,4	020SMQBL



CAM U

○ Bianco / White	27,4	020SMUND
● Rosso / Red	27,4	020SMURD
● Verde / Green	27,4	020SMUVD
● Giallo / Yellow	27,4	020SMUGD
● Blu / Blue	27,4	020SMUBLD

5 posizioni / 5 positions

g

cod



CAM R

○ Bianco / White	27,4	020SMRN
● Rosso / Red	27,4	020SMRR
● Verde / Green	27,4	020SMRV
● Giallo / Yellow	27,4	020SMRG
● Blu / Blue	27,4	020SMRBL



CAM V

○ Bianco / White	27,4	020SMVN
● Rosso / Red	27,4	020SMVR
● Verde / Green	27,4	020SMVV
● Giallo / Yellow	27,4	020SMVG
● Blu / Blue	27,4	020SMVBL

3 posizioni con protezione piombabile 3 positions with sealable protection

g

cod



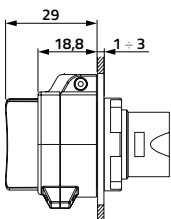
CAM O

○ Bianco / White	27,4	020SMONP
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CAM O

○ Bianco / White	27,4	020SMONDP
------------------	------	------------------

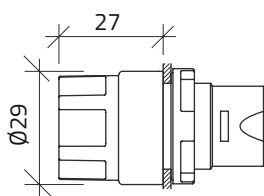
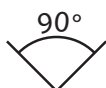


Selettori luminosi a manopola Ø22

Illuminated knob selector switches Ø22

Cercare la combinazione di schemi a pag. 49-50 / See diagram combination on page 49-50

Selettori luminosi utilizzare max. 2 elementi di contatto / For the illuminated selector switches, use max 2 contact blocks



2 posizioni / 2 positions

g

cod



CAM A

○ Bianco / White	27	020SMLAB
● Rosso / Red	27	020SMLAR
● Verde / Green	27	020SMLAV
● Giallo / Yellow	27	020SMLAG
● Blu / Blue	27	020SMLABL
● Arancio / Orange	27	020SMLAA



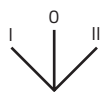
CAM A

○ Bianco / White	27	020SMLABD
● Rosso / Red	27	020SMLARD
● Verde / Green	27	020SMLAVD
● Giallo / Yellow	27	020SMLAGD
● Blu / Blue	27	020SMLABLD
● Arancio / Orange	27	020SMLAAD

3 posizioni / 3 positions

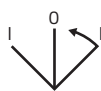
g

cod



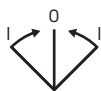
CAM O

○ Bianco / White	27	020SMLOB
● Rosso / Red	27	020SMLOR
● Verde / Green	27	020SMLOV
● Giallo / Yellow	27	020SMLOG
● Blu / Blue	27	020SMLOBL
● Arancio / Orange	27	020SMLOA



CAM O

○ Bianco / White	27	020SMLOBD
● Rosso / Red	27	020SMLORD
● Verde / Green	27	020SMLOVD
● Giallo / Yellow	27	020SMLOGD
● Blu / Blue	27	020SMLOBLD
● Arancio / Orange	27	020SMLOAD



CAM O

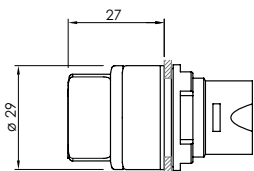
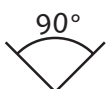
○ Bianco / White	27	020SMLOBC
● Rosso / Red	27	020SMLORC
● Verde / Green	27	020SMLOVC
● Giallo / Yellow	27	020SMLOGC
● Blu / Blue	27	020SMLOBLC
● Arancio / Orange	27	020SMLOAC

Selettori luminosi a manopola Ø22

Illuminated knob selector switches Ø22

Cercare la combinazione di schemi a pag. 31-32 / See diagram combination on page 31-32

2 posizioni / 2 positions



CAM A

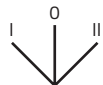
	g	cod
○ Bianco / White	38	020SMTLAB
● Rosso / Red	38	020SMTLAR
● Verde / Green	38	020SMTLAV
● Giallo / Yellow	38	020SMTLAG
● Blu / Blue	38	020SMTLABL
● Arancio / Orange	38	020SMTLAA



CAM A

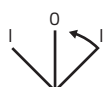
○ Bianco / White	38	020SMTLABD
● Rosso / Red	38	020SMTLAR
● Verde / Green	38	020SMTLAVD
● Giallo / Yellow	38	020SMTLAGD
● Blu / Blue	38	020SMTLABLD
● Arancio / Orange	38	020SMTLAAD

3 posizioni / 3 positions



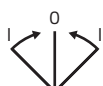
CAM O

	g	cod
○ Bianco / White	38	020SMTLOB
● Rosso / Red	38	020SMTLOR
● Verde / Green	38	020SMTLOV
● Giallo / Yellow	38	020SMTLOG
● Blu / Blue	38	020SMTLOBL
● Arancio / Orange	38	020SMTLOA



CAM O

○ Bianco / White	38	020SMTLOBD
● Rosso / Red	38	020SMTLORD
● Verde / Green	38	020SMTLOVD
● Giallo / Yellow	38	020SMTLOGD
● Blu / Blue	38	020SMTLOBLD
● Arancio / Orange	38	020SMTLOAD



CAM O

○ Bianco / White	38	020SMTLOBC
● Rosso / Red	38	020SMTLORC
● Verde / Green	38	020SMTLOVC
● Giallo / Yellow	38	020SMTLOGC
● Blu / Blue	38	020SMTLOBLC
● Arancio / Orange	38	020SMTLOAC

Selettori a chiave Ø22 Key selector switches Ø22

Cercare la combinazione di schemi a pag. 31-32 / See diagram combination on page 31-32

		2 posizioni 2 positions				
		g	k	cod	k	cod
	CAM A 	76		020SCA		
		76		020SCA2		
		76		020SCA1		
	CAM B 	76		020SCB		020SCBD
		76		020SCB2		
		76		020SCB0		
	CAM C 	76		020SCC		020SCCS
		76		020SCC0		
		76		020SCC1		
		3 posizioni 3 positions				
		g	k	cod	k	cod
	CAM O	76		020SCO		020SCOC
		76		020SCO0		020SCOD
		76		020SCO10		020SCOD1
		76		020SCO02		020SCOD0
		76		020SCO1		020SCOS
		76		020SCO2		020SCOS2
		76		020SCO12		020SCOS0
		CAM T 	76		020SCT	
76			020SCT0		020SCTD	
76			020SCT10		020SCTD0	
76			020SCT02		020SCTD1	
76			020SCT1			
76			020SCT2			
76			020SCT12			

Selettori a chiave Ø22 Key selector switches Ø22

Cercare la combinazione di schemi a pag. 31-32 / See diagram combination on page 31-32

020

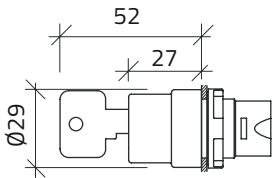
4 posizioni 4 positions



	g	k	cod	k	cod	
CAM Q		76		020SCQ		020SCQ1

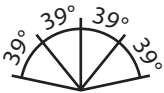


CAM U		76		020SCUD	020SCUD1
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5 posizioni 5 positions

	g	k	cod	k	cod	
CAM R		76		020SCR		020SCR0



CAM V		76		020SCV		020SCV1
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Chiavi speciali Special keys



	c	suf
--	----------	------------

Chiave standard 3095, per chiavi speciali far seguire al codice del selettore il suffisso
Standard key 3095, for special keys complete the selector code with the suffix

● Nero / Black	73034	K34
● Rosso / Red	73037	K37
● Giallo / Yellow	73033	K33
● Blu / Blue	73038	K38
● Arancio / Orange	73040	K40



	3353	K53
	9901	K01
	9902	K02
	9903	K03
	9904	K04
	9905	K05
	9910	K10
	9916	K16
	9919	K19

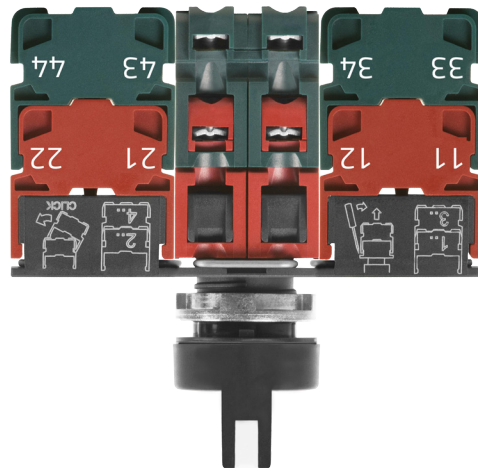


Combinazione di schemi Diagram combination

			Schema Diagram	Contatti flangiati Flanged contacts
	CAM A	13 — 14	E10	020E10 020G
	CAM A	21 — 22 13 — 14	E01 E10	020E01 020E10 020G
	CAM B	21 — 22 13 — 14	E01 E10	020E01 020E10 020G
	CAM C	21 — 22 13 — 14	E01 E10	020E01 020E10 020G
	CAM O	23 — 24 13 — 14	E10 E10	020E10 020E10 020G
	CAM O	21 — 22 13 — 14	E01 E10	020E01 020E10 020G
	CAM O	43 — 44 33 — 34 21 — 22 11 — 12	E10 E10 E01 E01	020E01 020E01 020E10 020E10 020G
	CAM T	21 — 22 13 — 14	E01 E10	020E01 020E10 020G
	CAM T	33 — 34 21 — 22 11 — 12	E10 E01 E01	020E10 020E01 020E01 020G

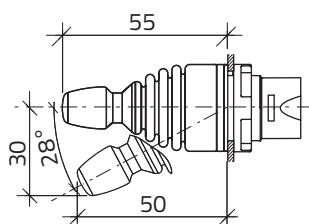
Combinazione di schemi Diagram combination

		Schema Diagram	Contatti flangiati Flanged contacts
	CAM Q 43 — 44 33 — 34 21 — 22 11 — 12		 020E10 020E10 020E01 020E01 020G
	CAM U 43 — 44 21 — 22 13 — 14		 020E10 020E10 020E01 020G
	CAM R 43 — 44 33 — 34 21 — 22 11 — 12		 020E10 020E10 020E01 020E01 020G
	CAM V 43 — 44 33 — 34 21 — 22 11 — 12		 020E10 020E10 020E01 020E01 020G



Manipolatori H 55 Ø22

Joysticks H 55 Ø22



2 posizioni 2 positions

					g	cod
①	● RAL 7016	1-2	permanenti / maintained		40	020MT2P
①	● RAL 7035	1-2	permanenti / maintained		40	020MT2PGR
②	● RAL 7016	1-2	temporanee / spring return		40	020MT2T
②	● RAL 7035	1-2	temporanee / spring return		40	020MT2TGR
	● RAL 7016	1	permanente / maintained			
		2	temporanea / spring return		40	020MT1P1T
	● RAL 7035	1	permanente / maintained			
		2	temporanea / spring return		40	020MT1P1TGR

3 posizioni 3 positions



					g	cod
①	● RAL 7016	1-2-3	permanenti / maintained		40	020MT3P
② ③	● RAL 7035	1-2-3	permanenti / maintained		40	020MT3PGR
	● RAL 7016	1-2-3	temporanee / spring return		40	020MT3T
	● RAL 7035	1-2-3	temporanee / spring return		40	020MT3TGR

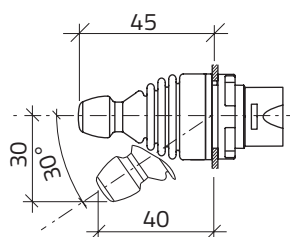
4 posizioni 4 positions

					g	cod
①	● RAL 7016	1-2-3-4	permanenti / maintained		40	020MT4P
③ ④	● RAL 7035	1-2-3-4	permanenti / maintained		40	020MT4PGR
②	● RAL 7016	1-2-3-4	temporanee / spring return		40	020MT4T
	● RAL 7035	1-2-3-4	temporanee / spring return		40	020MT4TGR
	● RAL 7016	1	permanente / maintained			
		2-3-4	temporanea / spring return		40	020MT1P3T
	● RAL 7035	1	permanente / maintained			
		2-3-4	temporanea / spring return		40	020MT1P3TGR
	● RAL 7016	1-2-3	permanenti / maintained			
		4	temporanea / spring return		40	020MT1T3P
	● RAL 7035	1-2-3	permanenti / maintained			
		4	temporanea / spring return		40	020MT1T3PGR
	● RAL 7016	1-2	permanenti / maintained			
		3-4	temporanea / spring return		40	020MT2P2T
	● RAL 7035	1-2	permanenti / maintained			
		3-4	temporanea / spring return		40	020MT2P2TGR

Manipolatori H 45 Ø22

Joysticks H 45 Ø22

2 posizioni 2 positions



				g	cod
①	● RAL 7016	1-2	permanenti / maintained	40	020MTR2P
①	● RAL 7035	1-2	permanenti / maintained	40	020MTR2PGR
②	● RAL 7016	1-2	temporanee / spring return	40	020MTR2T
	● RAL 7035	1-2	temporanee / spring return	40	020MTR2TGR
	● RAL 7016	1	permanente / maintained	40	020MTR1P1T
		2	temporanea / spring return		
	● RAL 7035	1	permanente / maintained	40	020MTR1P1TGR
		2	temporanea / spring return		

3 posizioni 3 positions



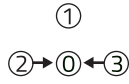
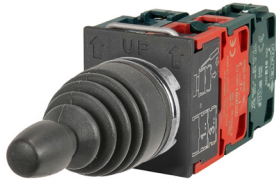
				g	cod
①	● RAL 7016	1-2-3	permanenti / maintained	40	020MTR3P
② ③	● RAL 7035	1-2-3	permanenti / maintained	40	020MTR3PGR
	● RAL 7016	1-2-3	temporanee / spring return	40	020MTR3T
	● RAL 7035	1-2-3	temporanee / spring return	40	020MTR3TGR

4 posizioni 4 positions

				g	cod
①	● RAL 7016	1-2-3-4	permanenti / maintained	40	020MTR4P
③ ④	● RAL 7035	1-2-3-4	permanenti / maintained	40	020MTR4PGR
②	● RAL 7016	1-2-3-4	temporanee / spring return	40	020MTR4T
	● RAL 7035	1-2-3-4	temporanee / spring return	40	020MTR4TGR
	● RAL 7016	1	permanente / maintained	40	020MTR1P3T
		2-3-4	temporanea / spring return		
	● RAL 7035	1	permanente / maintained	40	020MTR1P3TGR
		2-3-4	temporanea / spring return		
	● RAL 7016	1-2-3	permanenti / maintained	40	020MTR1T3P
		4	temporanea / spring return		
	● RAL 7035	1-2-3	permanenti / maintained	40	020MTR1T3PGR
		4	temporanea / spring return		
	● RAL 7016	1-2	permanenti / maintained	40	020MTR2P2T
		3-4	temporanea / spring return		
	● RAL 7035	1-2	permanenti / maintained	40	020MTR2P2TGR
		3-4	temporanea / spring return		

Manipolatori H 45 Ø22 Joysticks H 45 Ø22

Manipolatori speciali 3 posizioni Special joysticks 3 positions



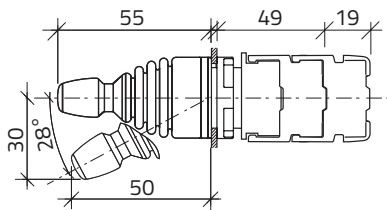
● RAL 7016

1-2-3 permanenti / maintained

g

cod

90 **020MT1P2T21A**



Manipolatori speciali 4 posizioni Special joysticks 4 positions



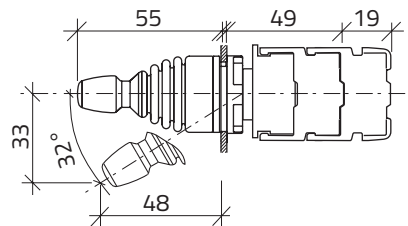
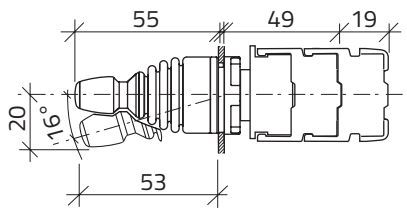
● RAL 7016

1-2-3-4 temporanee / spring return

g

cod

90 **020MT4TL40AR**

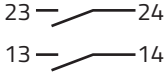
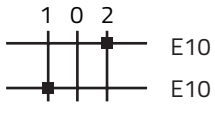
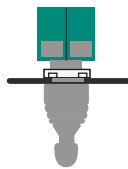
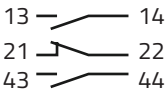
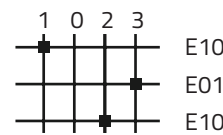
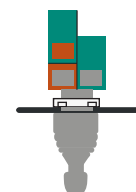
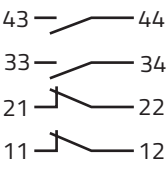
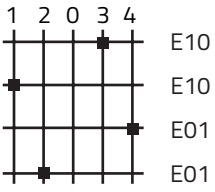
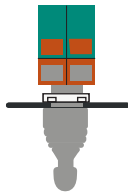
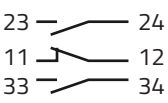
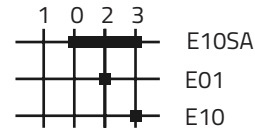
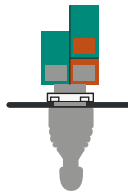
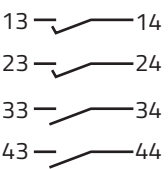
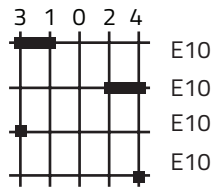
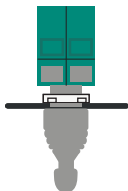


Combinazione di schemi Diagram combination

020

**Schema
Diagram**

**Contatti flangiati
Flanged contacts**

<p>① ②</p> 			<p>020E10 020E10 020G</p>
<p>① ② ③</p> 			<p>020E10 020E10 020E01 020G</p>
<p>① ③ ④</p> 			<p>020E10 020E10 020E01 020E01 020G</p>
<p>① ② → ③ ←</p> 			<p>020E10 020E01 020E10SA 020G</p>
<p>③ ① ② ④</p> 			<p>020E10 020E10 020E10 020E10 020G</p>



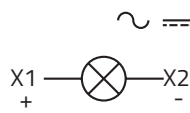
Portalampana BA9S Lampholders BA9S

Portalampana / Lampholders

g

n

cod



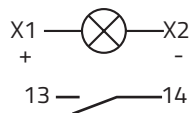
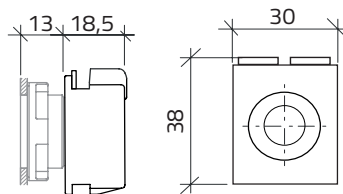
Alimentazione diretta / Direct supply

IEC: BA9S 400V. max 2W
UL - CSA: BA9S 250V. max 2W
lampadina non inclusa / bulb not included

16 10 **020PD9**

UL - CSA: BA9S 250V. max 2W terminali ad occhiello / ring lug

16 10 **020PD9TO**

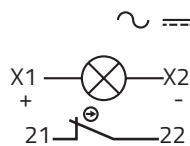
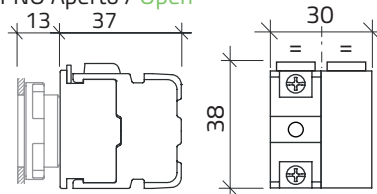


Alimentazione diretta / Direct supply

IEC: BA9S 400V. max 2W
UL - CSA: BA9S 250V. max 2W
lampadina non inclusa / bulb not included

26 5 **020PD910**

1 NO Aperto / Open

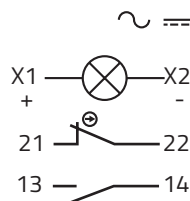
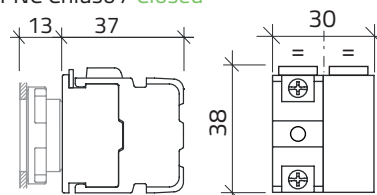


Alimentazione diretta / Direct supply

IEC: BA9S 400V. max 2W
UL - CSA: BA9S 250V. max 2W
lampadina non inclusa / bulb not included

26 5 **020PD901**

1 NC Chiuso / Closed



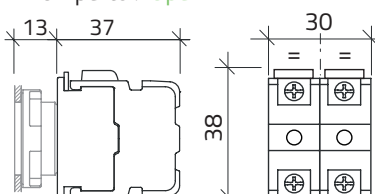
Alimentazione diretta / Direct supply

IEC: BA9S 400V. max 2W
UL - CSA: BA9S 250V. max 2W
lampadina non inclusa / bulb not included

26 5 **020PD911**

1 NC Chiuso / Closed

1 NO Aperto / Open



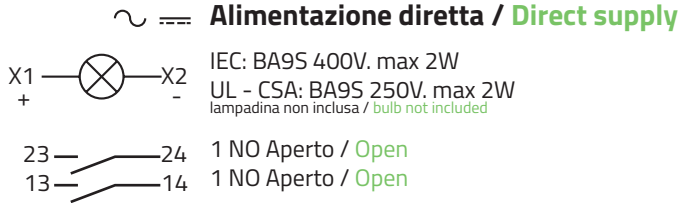
Portalampana BA9S Lampholders BA9S

Portalampana / Lampholders

g

n

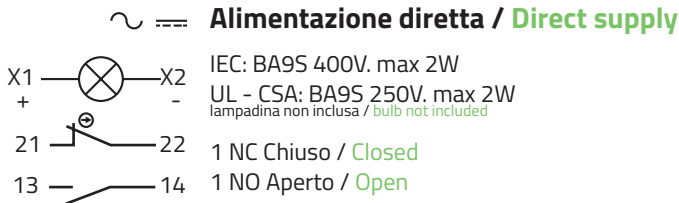
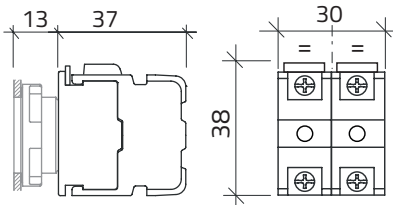
cod



37

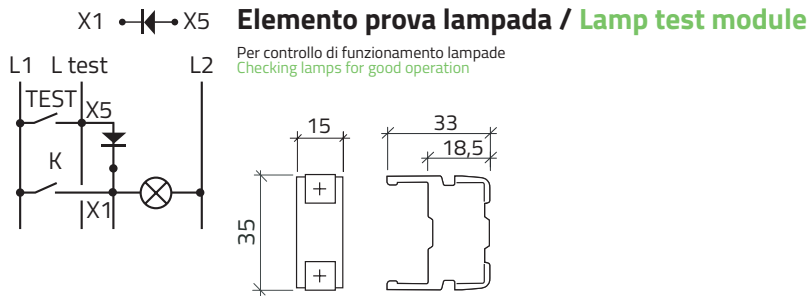
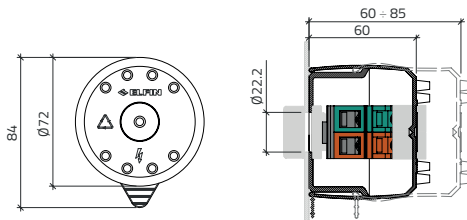
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020PD920



95

020PD911CP



16

020ET

Elementi di contatto

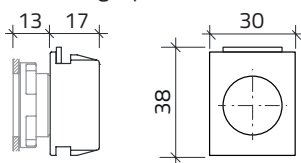
Contact blocks

Elementi di contatto / Contact blocks

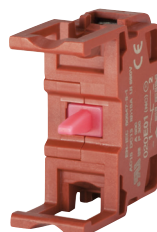
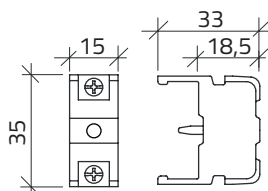
g	n	cod
8	10	020G



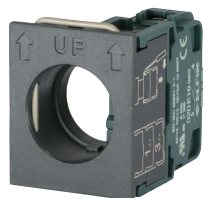
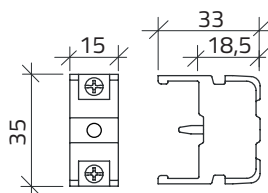
Flangia per contatti / Flange for contacts



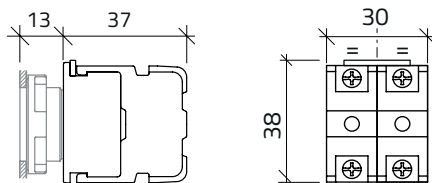
	1 NO	10	10	020E10
	1 NO Chiusura anticipata / 1 NO Early make	10	5	020E10A
	1 NO	10	5	020E10AU
<small>Contatti dorati e viti terminali inox. Idoneo per ambienti con fenomeni di corrosione Gold-plated contacts and stainless steel terminal screws suitable for corrosive environment</small>				
	1 NO Terminale ad occhiello / Ring lug	10	5	020E10TO



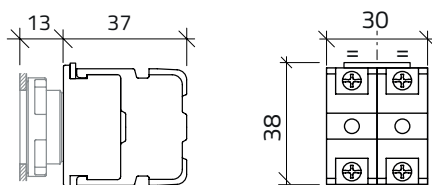
	1 NC	10	10	020E01
	1 NC Apertura ritardata / 1 NC Late break	10	5	020E01R
	1 NC	10	5	020E01AU
<small>Contatti dorati e viti terminali inox. Idoneo per ambienti con fenomeni di corrosione Gold-plated contacts and stainless steel terminal screws suitable for corrosive environment</small>				
	1 NC Terminale ad occhiello / 1 NC Ring lug	10	5	020E01TO



	1 NO con flangia / 1NO with flange	19	5	020GE10
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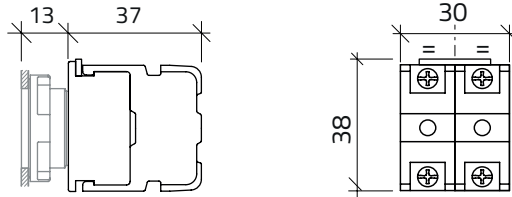
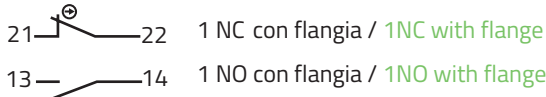
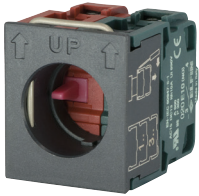
	1 NC con flangia / 1NC with flange	19	5	020GE01
--	------------------------------------	----	---	---------



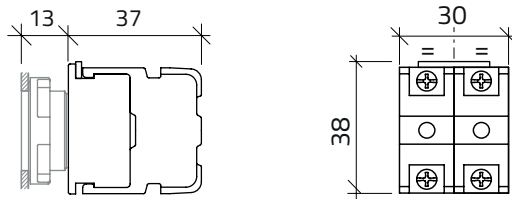
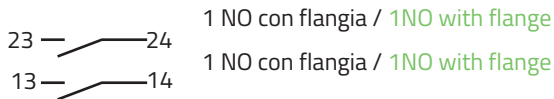
Elementi di contatto Contact blocks

Elementi di contatto / Contact blocks

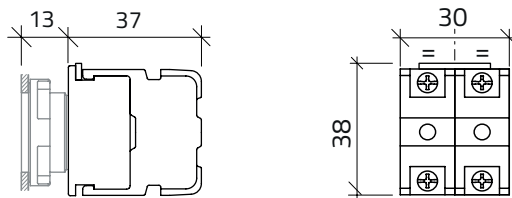
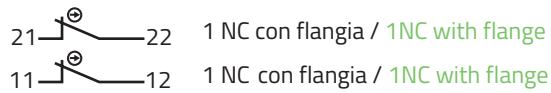
g **n** **cod**



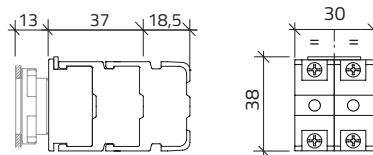
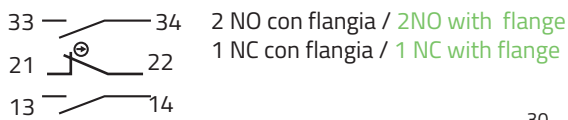
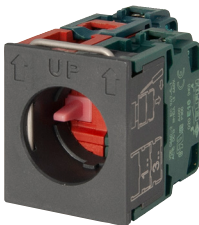
19 5 **020GE11**



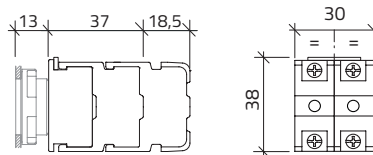
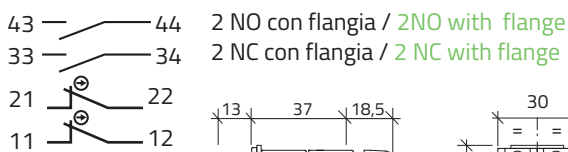
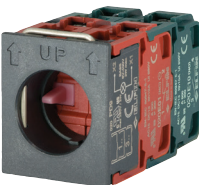
19 5 **020GE20**



19 5 **020GE02**



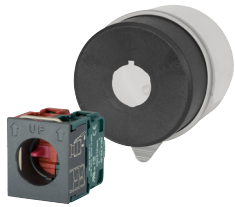
50 5 **020GE21**



50 5 **020GE22**

Elementi di contatto Contact blocks

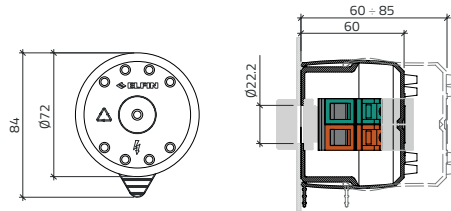
Elementi di contatto / Contact blocks



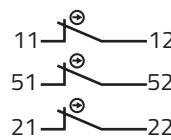
1 NC con flangia, con cappuccio di protezione / 1NC with flange, with protective cap
1 NO con flangia con cappuccio di protezione / 1NO with flange with protective cap

g **n** **cod**

88 5 **020GE11CP**



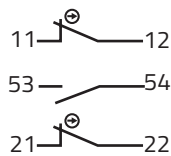
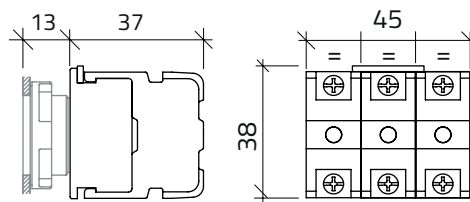
Elementi di contatto affiancati / Flanked contact blocks



3 NC affiancati con flangia 3 sedi
3NC flanked with 3-slot flange

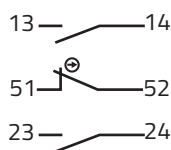
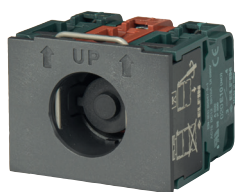
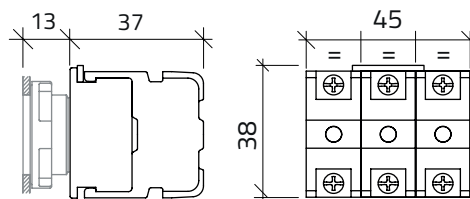
g **n** **cod**

x 5 **020G3E03**



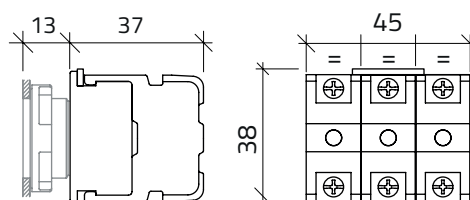
1 NO + 2 NC affiancati con flangia 3 sedi
1 NO + 2 NC flanked with 3-slot flange

x 5 **020G3E12**



2 NO + 1 NC affiancati con flangia 3 sedi
2 NO + 1 NC flanked with 3-slot flange

x 5 **020G3E21**



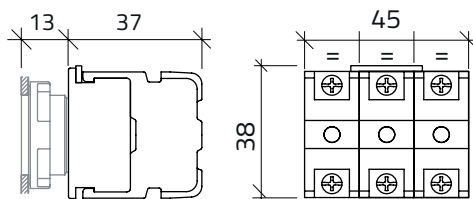
Elementi di contatto Contact blocks

Elementi di contatto affiancati / Flanked contact blocks



13 — 14 3 NO affiancati con flangia 3 sedi
3 NO flanked with 3-slot flange

53 — 54
23 — 24



g

n

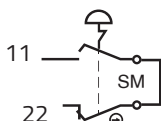
cod

x

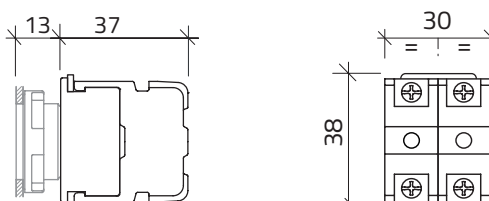
5

020G3E30

Elementi di contatto con automonitoraggio Contact blocks with self-monitoring



Elemento di contatto con automonitoraggio
Contact block with self-monitoring



g

n

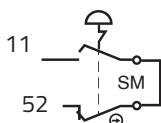
cod

19

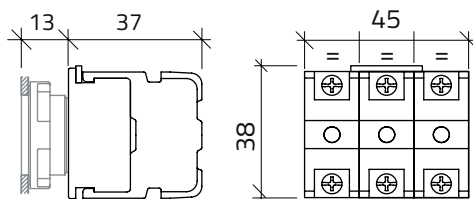
5

020GE01AM

Elementi di contatto affiancati con automonitoraggio Flanked contact blocks with self-monitoring



1 NC affiancato con automonitoraggio
1 NC flanked with self-monitoring



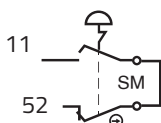
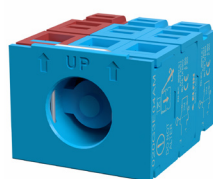
g

n

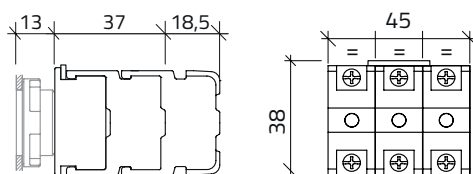
cod

x

020G3E02AM



2 NC affiancati con automonitoraggio
2 NC flanked with self-monitoring



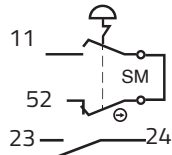
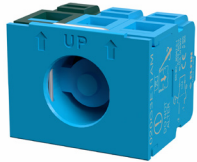
x

020G3E04AM

Elementi di contatto Contact blocks

Elementi di contatto affiancati con automonitoraggio Flanked contact blocks with self-monitoring

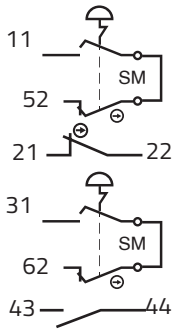
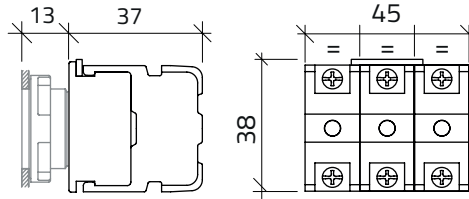
g n cod



1 NO affiancato con automonitoraggio
1 NO flanked with self-monitoring

x

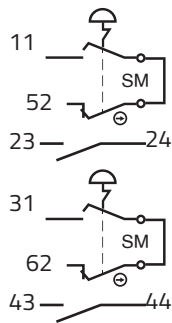
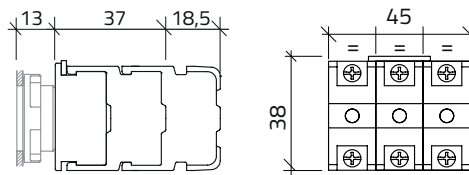
020G3E11AM



1 NO + 1 NC affiancati con automonitoraggio
1 NO + 1 NC flanked with self-monitoring

x

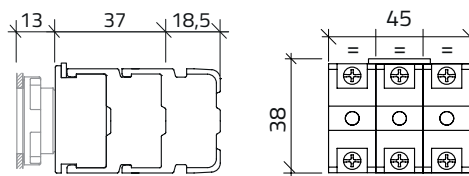
020G3E13AM



1 NO + 1 NC affiancati con automonitoraggio
1 NO + 1 NC flanked with self-monitoring

x

020G3E22AM

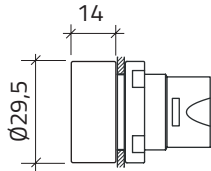


Pulsanti normali Ø22 Ghiera in metallo

Normal push-buttons Ø22 Metal bezel

020

Pulsanti normali / Normal push-buttons

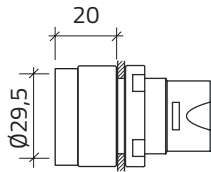


Pulsanti con guardia / Guarded push-buttons

	g	cod
● Nero / Black	33	020PTAINW
● Rosso / Red	33	020PTAIRW
● Verde / Green	33	020PTAIVW
● Giallo / Yellow	33	020PTAIGW
● Blu / Blue	33	020PTAIBLW
○ Bianco / White	33	020PTAIBW
● Grigio / Grey	33	020PTAIGRW
● Arancio / Orange	33	020PTAIAW

Stabili / Maintained

● Nero / Black	33	020PPTAINW
● Rosso / Red	33	020PPTAIRW
● Verde / Green	33	020PPTAIVW

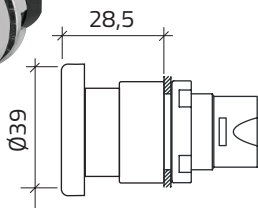


Pulsanti sporgenti / Projecting push-buttons

● Nero / Black	34	020PTASNW
● Rosso / Red	34	020PTASRW
● Verde / Green	34	020PTASVW
● Giallo / Yellow	34	020PTASGW
● Blu / Blue	34	020PTASBLW
○ Bianco / White	34	020PTASBW
● Grigio / Grey	34	020PTASGRW

Stabili / Maintained

● Nero / Black	34	020PPTASNW
● Rosso / Red	34	020PPTASRW
● Verde / Green	34	020PPTASVW



Pulsanti a fungo Ø40 / Mushroom push-buttons Ø40

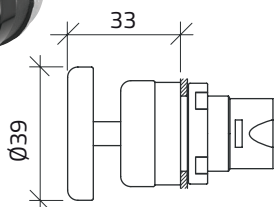
● Nero / Black	44	020PTAFNW
● Rosso / Red	44	020PTAFRW
● Verde / Green	44	020PTAFVW
● Giallo / Yellow	44	020PTAFGW
● Blu / Blue	44	020PTAFBLW

Stabili / Maintained

● Verde / Green	44	020PPTAFVW
● Giallo / Yellow	44	020PPTAFGW

Pulsanti a fungo oscillanti Ø40

Floating mushroom push-buttons Ø40



	g	cod
● Nero / Black	44	020PTAFONK
● Rosso / Red	44	020PTAFORK

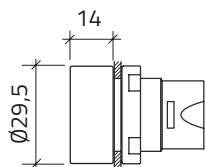
Pulsanti luminosi Ø22 Ghiera in metallo

Illuminated push-buttons Ø22 Metal bezel

Pulsanti luminosi / Illuminated push-buttons

g

cod

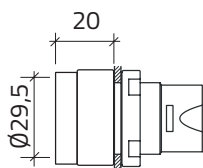


Pulsanti con guardia / Guarded push-buttons

● Rosso / Red	33	020PTAILRW
● Verde / Green	33	020PTAILVW
● Giallo / Yellow	33	020PTAILGW
● Blu / Blue	33	020PTAILBLW
○ Bianco / White	33	020PTAILBW
● Arancio / Orange	33	020PTAILAW
○ Trasparente / Clear	33	020PTAILIW

Stabili / Maintained

● Rosso / Red	33	020PPTAILRW
● Verde / Green	33	020PPTAILVW
● Giallo / Yellow	33	020PPTAILGW

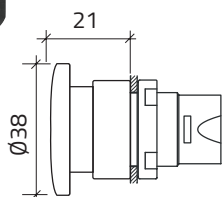


Pulsanti sporgenti / Projecting push-buttons

● Rosso / Red	35	020PTASLRW
● Verde / Green	35	020PTASLVW
● Giallo / Yellow	35	020PTASLGW
● Blu / Blue	35	020PTASBLW
○ Bianco / White	35	020PTASLBW
● Arancio / Orange	35	020PTASLAW
○ Trasparente / Clear	35	020PTASLIW

Stabili / Maintained

● Rosso / Red	35	020PPTASLRW
● Verde / Green	35	020PPTASLVW
● Giallo / Yellow	35	020PPTASLGW

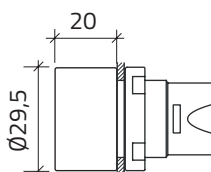


Pulsanti a fungo Ø38 / Mushroom push-buttons Ø38

● Rosso / Red	36	020PTAFLRW
● Verde / Green	36	020PTAFLVW
● Giallo / Yellow	36	020PTAFLGW

Stabili / Maintained

● Rosso / Red	36	020PPTAFLRW
● Giallo / Yellow	36	020PPTAFLGW



Pulsanti con guardia completa / Push-buttons with full guard

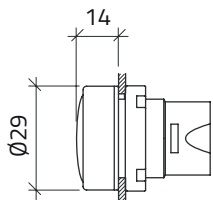
● Rosso / Red	29	020PTSSLRW
● Verde / Green	29	020PTSSLVW
● Giallo / Yellow	29	020PTSSLGW
● Blu / Blue	29	020PTSSLBLW
○ Bianco / White	29	020PTSSLBW
● Arancio / Orange	29	020PTSSLAW
○ Trasparente / Clear	29	020PTSSLIW

Lampade spia Ø22 Ghiera in metallo

Pilot lights Ø22 Metal bezel

020

Lampade spia inviolabile Tamper-proof pilot lights

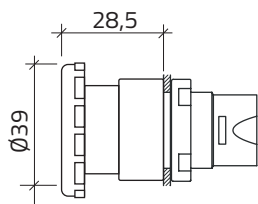


	g	cod
● Rosso / Red	30	020LTBBRW
● Verde / Green	30	020LTBBVW
● Giallo / Yellow	30	020LTBBGW
● Blu / Blue	30	020LTBBBLW
○ Bianco / White	30	020LTBBBW
○ Trasparente / Clear	30	020LTBBIW
● Arancio / Orange	30	020LTBBAW

Pulsanti d' emergenza Ø22 Ghiera in metallo

Emergency stop push-buttons Ø22 Metal bezel

Pulsante a fungo ad aggancio Ø40 Latching mushroom push-button Ø40



Sgancio rotazione / Twist realese

● Rosso / Red

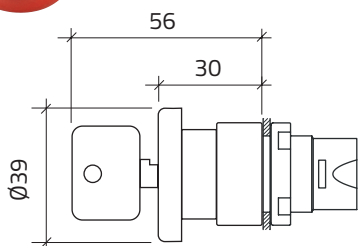
g

45

cod

020PTAARW

Pulsante a fungo a chiave Ø40 Key mushroom push-button Ø40



Sgancio a chiave / Key realese

chiave 73037 con impugnatura colore rosso / key 73037 with red cap

● Rosso / Red

g

94

cod

020PTHCRW

Selettori a manopola Ø22 Ghiera in metallo Knob selector switches Ø22 Metal bezel

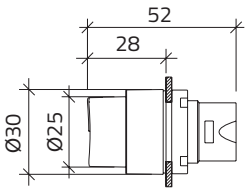
Cercare la combinazione di schemi a pag. 49-50 / See diagram combination on page 49-50

020

2 posizioni / 2 positions

g

cod



CAM A

● Nero / Black	38	020STAMANW
● Rosso / Red	38	020STAMARW
● Verde / Green	38	020STAMAVW
● Giallo / Yellow	38	020STAMAGW
● Blu / Blue	38	020STAMABLW



CAM B

● Nero / Black	38	020STAMBNW
● Rosso / Red	38	020STAMBRW
● Verde / Green	38	020STAMBVW
● Giallo / Yellow	38	020STAMBGW
● Blu / Blue	38	020STAMBBLW



CAM B

● Nero / Black	38	020STAMBNWD
● Rosso / Red	38	020STAMBRWD
● Verde / Green	38	020STAMBVWD
● Giallo / Yellow	38	020STAMBGWD
● Blu / Blue	38	020STAMBBLWD



CAM C

● Nero / Black	38	020STAMCNW
● Rosso / Red	38	020STAMCRW
● Verde / Green	38	020STAMCVW
● Giallo / Yellow	38	020STAMCGW
● Blu / Blue	38	020STAMCBLW

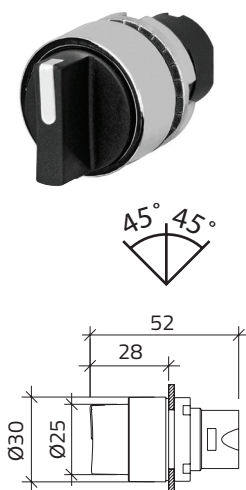


CAM C

● Nero / Black	38	020STAMCNWS
● Rosso / Red	38	020STAMCRWS
● Verde / Green	38	020STAMCVWS
● Giallo / Yellow	38	020STAMCGWS
● Blu / Blue	38	020STAMCBLWS

Selettori a manopola Ø22 Ghiera in metallo Knob selector switches Ø22 Metal bezel

Cercare la combinazione di schemi a pag. 49-50 / See diagram combination on page 49-50



3 posizioni / 3 positions

g

cod

CAM O			
	● Nero / Black	38	020STAMONW
	● Rosso / Red	38	020STAMORW
	● Verde / Green	38	020STAMOVW
	● Giallo / Yellow	38	020STAMOGW
	● Blu / Blue	38	020STAMOBLW

CAM O			
	● Nero / Black	38	020STAMONWD
	● Rosso / Red	38	020STAMORWD
	● Verde / Green	38	020STAMOVWD
	● Giallo / Yellow	38	020STAMOGWD
	● Blu / Blue	38	020STAMOBLWD

CAM O			
	● Nero / Black	38	020STAMONWS
	● Rosso / Red	38	020STAMORWS
	● Verde / Green	38	020STAMOVWS
	● Giallo / Yellow	38	020STAMOGWS
	● Blu / Blue	38	020STAMOBLWS

CAM O			
	● Nero / Black	38	020STAMONWC
	● Rosso / Red	38	020STAMORWC
	● Verde / Green	38	020STAMOVWC
	● Giallo / Yellow	38	020STAMOGWC
	● Blu / Blue	38	020STAMOBLWC

CAM E			
	● Nero / Black	38	020STAMENW

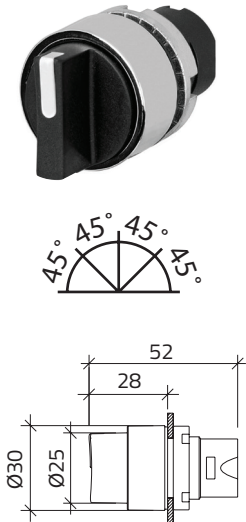
CAM E			
	● Nero / Black	38	020STAMENWD

CAM T			
	● Nero / Black	38	020STAMTNW
	● Rosso / Red	38	020STAMTRW
	● Verde / Green	38	020STAMTVW
	● Giallo / Yellow	38	020STAMTGW
	● Blu / Blue	38	020STAMTBLW

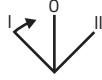
CAM T			
	● Nero / Black	38	020STAMTNWD
	● Rosso / Red	38	020STAMTRWD
	● Verde / Green	38	020STAMTVWD
	● Giallo / Yellow	38	020STAMTGWD
	● Blu / Blue	38	020STAMTBLWD

Selettori a manopola Ø22 Ghiera in metallo Knob selector switches Ø22 Metal bezel

Cercare la combinazione di schemi a pag. 49-50 / See diagram combination on page 49-50

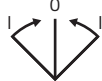


3 posizioni / 3 positions



CAM T

● Nero / Black	38	020STAMTNWS
● Rosso / Red	38	020STAMTRWS
● Verde / Green	38	020STAMTVWS
● Giallo / Yellow	38	020STAMTGWS
● Blu / Blue	38	020STAMTBLWS



CAM T

● Nero / Black	38	020STAMTNWC
● Rosso / Red	38	020STAMTRWC
● Verde / Green	38	020STAMTVWC
● Giallo / Yellow	38	020STAMTGWC
● Blu / Blue	38	020STAMTBLWC

4 posizioni / 4 positions



CAM Q

● Nero / Black	38	020STAMQNW
● Rosso / Red	38	020STAMQRW
● Verde / Green	38	020STAMQVW
● Giallo / Yellow	38	020STAMQGW
● Blu / Blue	38	020STAMQBLW



CAM U

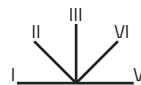
● Nero / Black	38	020STAMUNW
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5 posizioni / 5 positions



CAM R

● Nero / Black	38	020STAMRNW
● Rosso / Red	38	020STAMRRW
● Verde / Green	38	020STAMRVW
● Giallo / Yellow	38	020STAMRGW
● Blu / Blue	38	020STAMRBLW

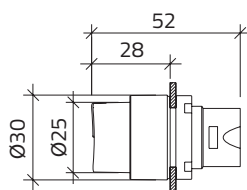


CAM Z

● Nero / Black	38	020STAMZNW
● Rosso / Red	38	020STAMZRW
● Verde / Green	38	020STAMZVW
● Giallo / Yellow	38	020STAMZGW
● Blu / Blue	38	020STAMZBLW

Selettori luminosi a manopola Ø22 Ghiera in metallo Illuminated knob selector switches Ø22 Metal bezel

Cercare la combinazione di schemi a pag. 49-50 / See diagram combination on page 49-50



2 posizioni / 2 positions

g

cod



CAM A

● Rosso / Red	38	020STAMLARW
● Verde / Green	38	020STAMLAVW
● Giallo / Yellow	38	020STAMLAGW
● Blu / Blue	38	020STAMLABLW
○ Bianco / White	38	020STAMLABW
● Arancione / Orange	38	020STAMLAAW
○ Trasparente / Clear	38	020STAMLAIW



CAM A

● Rosso / Red	38	020STAMLARWD
● Verde / Green	38	020STAMLAVWD
● Giallo / Yellow	38	020STAMLAGWD
● Blu / Blue	38	020STAMLABLWD
○ Bianco / White	38	020STAMLABWD
● Arancione / Orange	38	020STAMLAAWD
○ Trasparente / Clear	38	020STAMLAIWD

3 posizioni / 3 positions

g

cod



CAM O

● Rosso / Red	38	020STAMLORW
● Verde / Green	38	020STAMLOVW
● Giallo / Yellow	38	020STAMLOGW
● Blu / Blue	38	020STAMLOBLW
○ Bianco / White	38	020STAMLOBW
● Arancione / Orange	38	020STAMLOAW
○ Trasparente / Clear	38	020STAMLOIW



CAM O

● Rosso / Red	38	020STAMLORWD
● Verde / Green	38	020STAMLOVWD
● Giallo / Yellow	38	020STAMLOGWD
● Blu / Blue	38	020STAMLOBLWD
○ Bianco / White	38	020STAMLOBWD
● Arancione / Orange	38	020STAMLOAWD
○ Trasparente / Clear	38	020STAMLOIWD



CAM O

● Rosso / Red	38	020STAMLORWC
● Verde / Green	38	020STAMLOVWC
● Giallo / Yellow	38	020STAMLOGWC
● Blu / Blue	38	020STAMLOBLWC
○ Bianco / White	38	020STAMLOBWC
● Arancione / Orange	38	020STAMLOAWC
○ Trasparente / Clear	38	020STAMLOIWC

Selettori a chiave Ø22 Ghiera in metallo

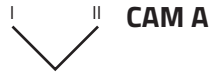
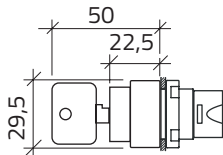
Key selector switches Ø22 Metal bezel

Cercare la combinazione di schemi a pag. 49-50 / See diagram combination on page 49-50

020

2 posizioni
2 positions

g k cod k cod



CAM A

95



020STACAW



020STACAW2

95



020STACAW4



CAM B

95



020STACBW



020STACBW2

95



020STACBW4



CAM B

95



020STACBWD



CAM C

95



020STACCW



020STACCW2

95



020STACCW4



CAM C

95




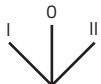







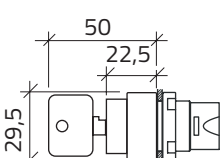
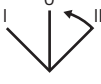



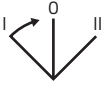



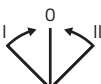

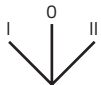







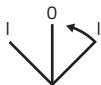



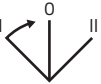





020STACCWS



Selettori a chiave Ø22 Ghiera in metallo

Key selector switches Ø22 Metal bezel

Cercare la combinazione di schemi a pag. 49-50 / See diagram combination on page 49-50

		3 posizioni 3 positions				
		g	k	cod	k	cod
		CAM O				
		95		020STACOW		020STACOW2
		95		020STACOW3		020STACOW4
		95		020STACOW5		020STACOW6
		95		020STACOW7		
		CAM O				
		95		020STACOWD		020STACOWD2
		95		020STACOWD3		
		CAM O				
		95		020STACOWS		020STACOWS3
		95		020STACOWS4		
		CAM O				
		95		020STACOWC		
		CAM T				
		95		020STACTW		020STACTW2
		95		020STACTW3		020STACTW4
		95		020STACTW5		020STACTW6
		95		020STACTW7		
		CAM T				
		95		020STACTWD		020STACTWD2
		95		020STACTWD3		
		CAM T				
		95		020STACTWS		020STACTWS3
		95		020STACTWS4		
		CAM T				
		95		020STACTWC		

Combinazione di schemi Ø22 Ghiera in metallo

Diagram combination Ø22 Metal bezel

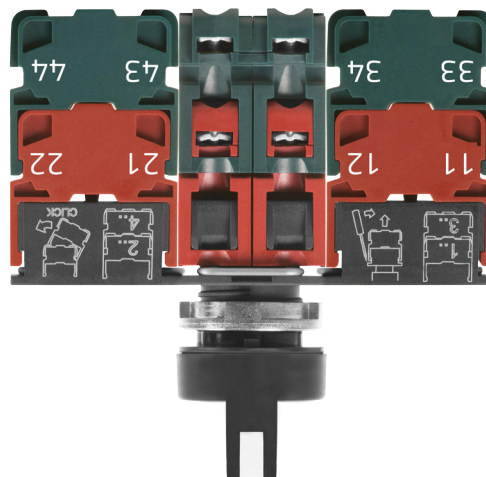
020

			Schema Diagram	Contatti flangiati Flanged contacts
	CAM A	13 — 14		 020E10 020G
	CAM A	21 — 22 13 — 14		 020E01 020E10 020G
	CAM B	21 — 22 13 — 14		 020E01 020E10 020G
	CAM C	21 — 22 13 — 14		 020E01 020E10 020G
	CAM O	23 — 24 13 — 14		 020E10 020E10 020G
	CAM O	21 — 22 13 — 14		 020E10 020E10 020G
	CAM O	43 — 44 33 — 34 21 — 22 11 — 12		 020E10 020E10 020E01 020E01 020G
	CAM E	21 — 22 13 — 14		 020E01 020E10 020G
	CAM T	21 — 22 13 — 14		 020E01 020E10 020G
	CAM T	33 — 34 21 — 22 11 — 12		 020E10 020E01 020E01 020G



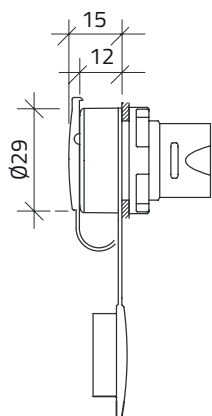
Combinazione di schemi Ø22 Ghiera in metallo Diagram combination Ø22 Metal bezel

		Schema Diagram	Contatti flangiati Flanged contacts
	CAM Q 43 — 44 33 — 34 21 — 22 11 — 12		 020E10 020E10 020E01 020E01 020G
	CAM U 43 — 44 21 — 22 13 — 14		 020E10 020E10 020E01 020G
	CAM R 43 — 44 33 — 34 21 — 22 11 — 12		 020E10 020E10 020E01 020E01 020G
	CAM Z 43 — 44 33 — 34 21 — 22 11 — 12		 020E10 020E10 020E01 020E01 020G



Presse USB 3.0 Ø22 3.0 USB socket Ø22

020



Presse USB 3.0 3.0 USB socket

g

cod

Tipo A-A (femmina-femmina) A-A type (female-female)

● Nero / Black

24

020PUSB

Tipo C-A (femmina-femmina) C-A type (female-female)

● Nero / Black

24

020PUSBC

Cavo USB USB cable

Cavo USB tipo M-M (maschio-maschio) USB cable type M-M (male-male)



mt 0,8
mt 0,8

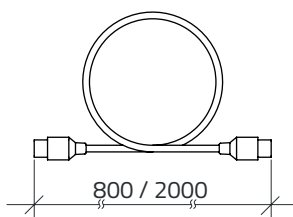
● Nero / Black

g

cod

37

010CUSBMM8



mt 2
mt 2

● Nero / Black

77

010CUSBMM20

Cavo maschio tipo A - libero Cable male type A - free



mt 0,8
mt 0,8

● Nero / Black

g

cod

37

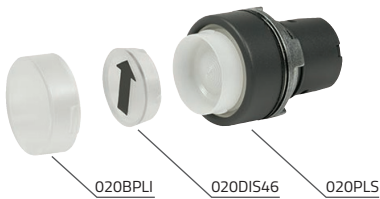
010CUSBML8

Simboli per operatore Ø22

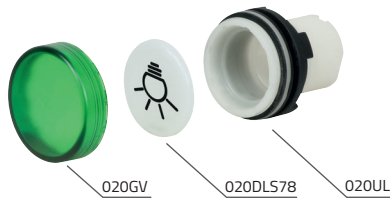
Symbols for operators Ø22

Far seguire al codice articolo il suffisso del simbolo desiderato / Complete the item code with the suffix of the desired symbol

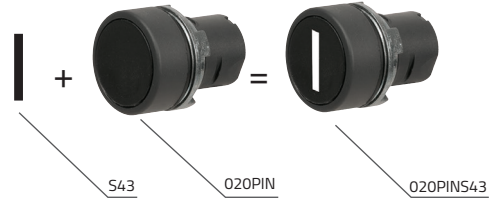
Esempio per pulsanti luminosi sporgenti e a fungo
Example for illuminated push-button: projecting and mushroom



Esempio per lampade spia
Example for pilot lights



Esempio per marcatura pulsanti
Example for push-button marking



Simboli per veicoli raccolta rifiuti

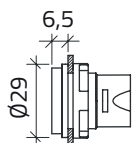
Symbols for waste collection vehicles

SIMBOLO SYMBOL	NORMA STANDARD	SUFFISSO SUFFIX	SIMBOLO SYMBOL	NORMA STANDARD	N° N°	SUFFISSO SUFFIX	SIMBOLO SYMBOL	NORMA STANDARD	N° N°	SUFFISSO SUFFIX
→	IEC 5022a	S 47		UNI EN 1501-1	01	S E01		UNI EN 1501-1	19	S E19
↑	IEC 5022a	S 46		UNI EN 1501-1	02	S E02		UNI EN 1501-1	20	S E20
←	IEC 5022a	S 475		UNI EN 1501-1	03	S E03		UNI EN 1501-1	21	S E21
↓	IEC 5022a	S 46B		UNI EN 1501-1	04	S E04		IEC 5007a ISO 700	22	S E22
+	IEC 5005a	S 44		UNI EN 1501-1	05	S E05	○	IEC 5008a ISO 700	23	S E23
-	IEC 5006a	S 45		UNI EN 1501-1	06	S E06		IEC 5013a ISO 70001	24	S E24
	ISO 0096	S 48		UNI EN 1501-1	07	S E07		IEC 1141a ISO 7000	25	S E25
	IEC 5007a	S 43		UNI EN 1501-1	08	S E08		UNI EN 1501-1	26	S E26
○	IEC 5008a	S 42		UNI EN 1501-1	09	S E09		UNI EN 1501-1	27	S E27
⊖	IEC 5010a	S 67		UNI EN 1501-1	10a	S E10a		UNI EN 1501-1	28	S E28
⊕	IEC 5011a	S 68		UNI EN 1501-1	10b	S E10b		IEC 0004a ISO 7000	29	S E29
	IEC 5036a	S 72		UNI EN 1501-1	11	S E11		IEC 0004a ISO 7000	30	S E30
	ISO 0434	S 73		UNI EN 1501-1	12	S E12		UNI EN 1501-2	31	S E31
	IEC 5014a	S 76		UNI EN 1501-1	13	S E13		UNI EN 1501-2	32	S E32
	IEC 5012a	S 78		UNI EN 1501-1	14	S E14				S E16M
	ISO 0085	S 38		UNI EN 1501-1	15	S E15				S E93M
	IEC 5178a	S 138		UNI EN 1501-1	16	S E16				S E98M
	IEC 5638a	S 144		UNI EN 1501-1	17	S E17				S E99M
				UNI EN 1501-1	18	S E18				



Accessori Ø22 Accessories Ø22

Corpo per lampade spia / Pilot light body



Completare articolo con gemma ed eventuale diffusore con simbolo
To be fitted with lens and possible diffuser with symbol

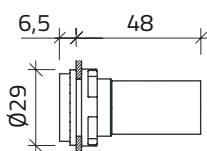
g	n	cod
6	5	020UL

Corpo per lampada spia monoblocco Monolithic pilot light body

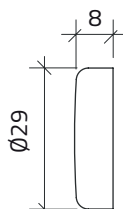


Completare articolo con gemma ed eventuale diffusore con simbolo
To be fitted with lens and possible diffuser with symbol
Alimentazione diretta / Direct supply

g	n	cod
14	5	020LM

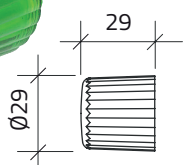


Gemme per lampade spia / Lenses for pilot lights



- Rosso / Red
- Verde / Green
- Giallo / Yellow
- Blu / Blue
- Bianco / White
- Arancio / Orange
- Trasparente / Clear

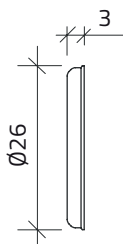
g	n	cod
3	5	020GR
3	5	020GV
3	5	020GG
3	5	020GBL
3	5	020GB
3	5	020GA
3	5	020GI



- Rosso / Red
- Verde / Green
- Giallo / Yellow
- Blu / Blue
- Bianco / White
- Arancio / Orange
- Trasparente / Clear

7	5	020GAR
7	5	020GAV
7	5	020GAG
7	5	020GABL
7	5	020GAB
7	5	020GAA
7	5	020GAI

Diffusori con simbolo / Diffusers caps with symbol




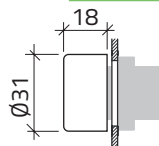

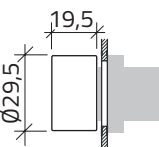

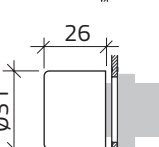

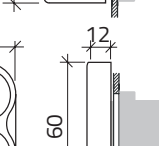

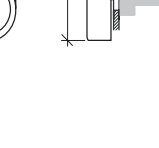
Completa il codice con il suffisso del simbolo desiderato vedi pag 52
Code to be completed with the suffix of the desired symbol, see page 52.

Per lampade spia / For pilot lights

g	n	cod
0,8	10	020DL***

Accessori Ø22 Accessories Ø22

Cappucci in gomma / Rubber caps



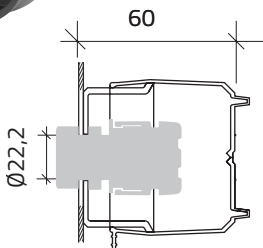
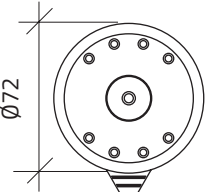
	g	n	cod
  <p>Silicone trasparente / Clear silicone</p>			
  <p>Pulsanti con guardia / Guarded push-button</p>	3,5	5	020CS
  <p>Pulsanti con guardia metallica / Push-button with metal bezel</p>	3,5	5	020CGS
  <p>Pulsanti sporgenti / Projecting push-button</p>	3,5	5	020CSGS
  <p>Pulsanti doppi / Twin push-button</p>	3,5	5	020CGP2

Soffietti di protezione per pulsanti a fungo Bellows for mushroom push-buttons

	g	n	cod
  <ul style="list-style-type: none"> ● Nero / Black ● Rosso / Red ● Verde / Green ● Giallo / Yellow ● Blu / Blue 	3	5	020SGFN
	3	5	020SGFR
	3	5	020SGFV
	3	5	020SGFG
	3	5	020SGFBL

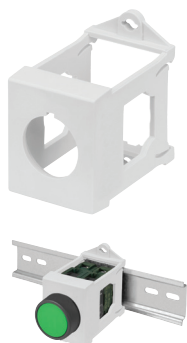


Cappucci di protezione contatti Protective caps for contacts

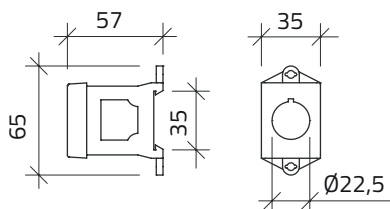
	g	cod
   	58	020PC22

Accessori Ø22 Accessories Ø22

Supporto operatore per guida DIN DIN rail mounting adapter for operator



● RAL 7035



g

16

cod

020SOGD

Tappi di chiusura / Hole plugs



● RAL 7035

● Nero / Black

○ Trasparente / Clear

● RAL 7016

g

5

n

10

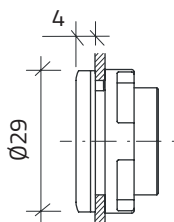
cod

020TTP

020TTPN

020TTPT

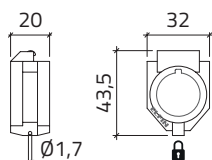
020TTPGR



Accessori Ø22 Accessories Ø22

020

Protezioni lucchettabili e piombabili Padlockable and sealable protective covers



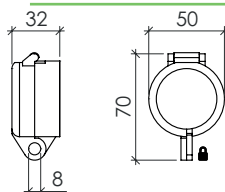
Piombabile / Sealable

g

cod

6

020PTPP



Lucchettabile / Padlockable

14

020PTLO

Accessori di protezione / Protective guards



● RAL 7016
● Giallo/ Yellow

g

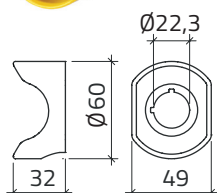
cod

16

020PEO

16

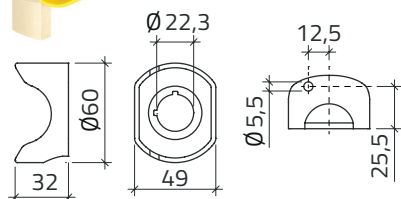
020PEOG



Versione lucchettabile / Padlockable type
● Giallo/ Yellow

15

020PEOGL



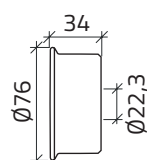
● RAL 7016
● Giallo/ Yellow

35

020GP22

35

020GPG22



Accessori Ø22

Accessories Ø22

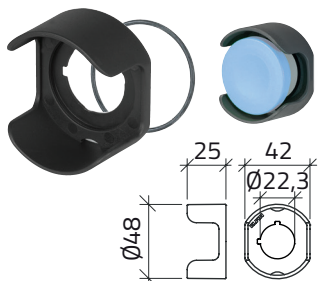
Accessori di protezione in termoplastica

Thermoplastic protective guards



- RAL 7016
- Rosso / Red
- Verde / Green
- Giallo / Yellow
- Blu / Blue

g	cod
13	020GPF
13	020GPFR
13	020GPFV
13	020GPFY
13	020GPFBL



- RAL 7016

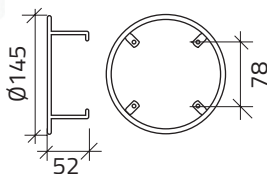
8	020GPF42
---	----------

Accessori di protezione in metallo

Metal protective guards



- Giallo/Yellow



g	cod
35	020SPE

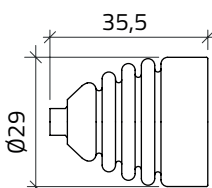
Soffietto per manipolatore

Joystick bellows



- RAL 7016
- RAL 7035

g	cod
5	020SM16
5	020SM35



Accessori Ø22

Accessories Ø22

Terminali / Terminals



Collegamenti con elemento di comando e portalampada, compatibilità con spinotti 1 x 6.3 / 2 x 2.8 mm tipo isolato / Connection with control element and lampholders 1x6.3 / 2x2.8 mm pins, insulated type

Terminali Faston / Faston terminals

g

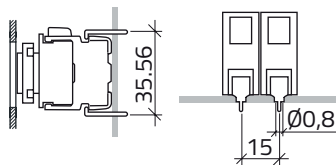
n

cod

35

10

020TF



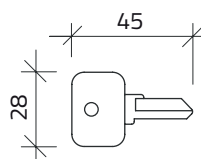
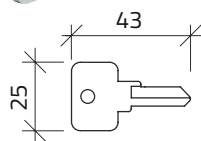
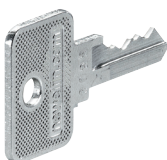
Terminali a saldare / Solder terminals

35

10

020TS

Chiavi / Keys



Versione secondo normativa FIAT / Version according to FIAT standards

	g	c	n	cod
● Nero / Black	11	73034	2	010K34
● Rosso / Red	11	73037	2	010K37
● Giallo / Yellow	11	73033	2	010K33
● Blu / Blue	11	73038	2	010K38
● Arancio / Orange	11	73040	2	010K40

g

c

n

cod

11

3095

2

010K95

11

3353

2

010K53

11

9901

2

010K01

11

9902

2

010K02

11

9903

2

010K03

11

9904

2

010K04

11

9905

2

010K05

11

9910

2

010K10

11

9916

2

010K16

11

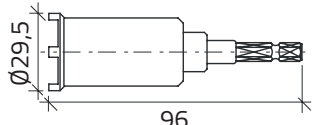
9919

2

010K19

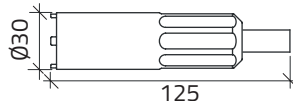
Accessori Ø22 Accessories Ø22

Chavi di serraggio ghiera / Locking ring wrenches



Chiave di serraggio acciaio, per avvitatore $\frac{1}{4}$ "
Steel locking ring wrench for screwdriver $\frac{1}{4}$ "

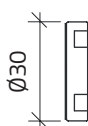
g	cod
100	020CGA



Chiave di serraggio plastica / Plastic locking ring wrench
● Nero / Black

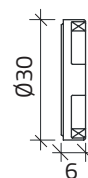
32	020CGN
----	--------

Ghiere di fissaggio operatori Locking rings for operators



Filettatura passo 2, metallo / Thread pitch 2, metal

g	n	cod
8	5	020GF2



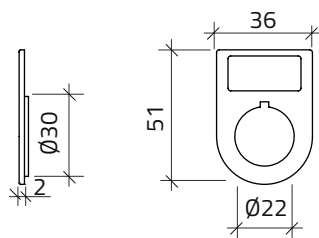
Per lampade spia e tappi / For pilot lights and plugs
Filettatura passo 2, plastica / Thread pitch 2, plastic

4	5	020GF2P
---	---	---------



Per serie ghiera metallo e filo pannello / For metal bezel and flush-mount series
Filettatura passo 1, metallo / Thread pitch 1, metal

8	5	020GF
---	---	-------

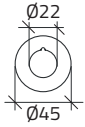


Con supporto targhetta / With label support
Flangia di riduzione da Ø30 a Ø22
Reductive flange from Ø30 to Ø22

8	020FR
---	-------

Targhette Ø22 Legend plates Ø22

Targhette emergenza, secondo VDE 0113 Emergency stop legend plates, according to VDE 0113

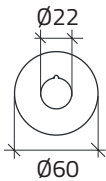


Ø 45

Senza testo / Blank

g **cod**

2 **020D**



Ø 60

Senza testo / Blank

ARRESTO EMERGENZA

EMERGENCY STOP

NOT-AUS

ARRET D'URGENCE

PARO EMERGENCIA

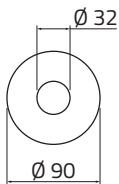
NOOD UIT

EMERGENCIA PARAGEM

NOOD STOP

NØD STOP

2 **020D0**
2 **020D21**
2 **020D23**
2 **020D39**
2 **020D36**
2 **020D37**
2 **020D91**
2 **020D95**
2 **020D107**
2 **020D123**



Ø 90

Senza testo / Blank

ARRESTO EMERGENZA

EMERGENCY STOP

NOT-AUS

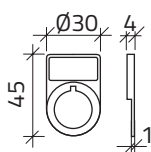
ARRET D'URGENCE

PARO EMERGENCIA

EMERGENCIA PARAGEM

5,3 **020DD0**
5,3 **020DD21**
5,3 **020DD23**
5,3 **020DD39**
5,3 **020DD36**
5,3 **020DD37**
5,3 **020DD95**

Porta targhette / Legend plate holders



13x27

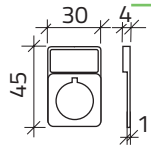
● Nero / Black

● Giallo / Yellow

● RAL 7016

g **n** **cod**

2 10 **020ST**
2 10 **020STG**
2 10 **020STGR**

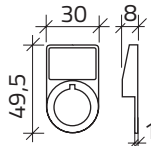


13x27

● Giallo / Yellow

● RAL 7016

2 10 **020SQG**
2 10 **020SQGR**



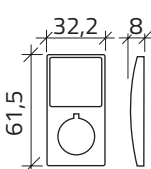
18x27

● Nero / Black

● Giallo / Yellow

● RAL 7016

2,5 10 **020ST18**
2,5 10 **020ST18G**
2,5 10 **020ST18GR**



27x27

● Nero / Black

● Giallo / Yellow

● RAL 7016

3 10 **020ST27N**
3 10 **020ST27G**
3 10 **020ST27GR**

Targhette Ø22 Legend plates Ø22

Targhette adesive con diciture Adhesive labels with texts



cod

cod

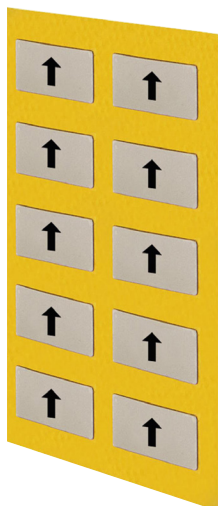
cod

Dicitura / Texts

Quantità per confezione n° 10 / Pack quantity n° 10
Colore alluminio, scritta nera / Silver colour, with black text

Marcia	02001T	Emergenza	02021T	1 0 2	02041T
Arresto	02002T	Lavoro	02022T	Reset	02055T
Avanti	02003T	Stop	02023T	Test	02056T
Indietro	02004T	Arresto-Marcia	02024T	Nood Uit	02091T
Salita	02005T	Inser. Disinser.	02025T	ON O Off	02092T
Discesa	02006T	Start	02026T	Manu O Auto	02093T
Destra	02007T	Abbassa	02027T	Danger	02094T
Sinistra	02008T	Alza	02028T	Order Spanning	02095T
Apri	02009T	Alt	02029T	Sous Tension	02096T
Chiude	02010T	Apri Chiude	02030T	Hand O Auto	02097T
Lento	02011T	Aut. Semiaut.	02031T	Arret	02098T
Veloce	02012T	Aut O Man	02032T	Marche	02099T
Avviamento	02013T	O 1	02033T	Marcha	020100T
Arresto Ciclo	02014T	Tensione in linea	02034T	Arranque	020101T
Ciclo Automatico	02016T	Blocco	02035T	Subir	020102T
Ripristino Ciclo	02017T	Arret d'Urgence	02036T	Bajar	020103T
Inserito	02018T	Paro Emergencia	02037T	Parada	020104T
Corrente Inserita	02019T	Not Aus	02039T		
Disinserito	02020T	O 1 2	02040T		

Targhette adesive con simboli Adhesive labels with symbols



cod

cod

Simbolo / Symbol

Quantità per confezione n° 10 / Pack quantity n° 10
Colore alluminio, scritta nera / Silver colour, with black symbol

↑	02046T	○	02042T
→	02047T	☞	02076T
☞	02048T	—	02045T
⊕	02068T	⊖	02067T
⚠	02038T	⚙	02078T
	02043T	⚙	020144T
⚡	02072T	⚠	02073T
⚙	020138T		
+	02044T		

Targhette Ø22 Legend plates Ø22

020



Rotoli etichette adesive in alluminio Aluminium adhesive labels rolls

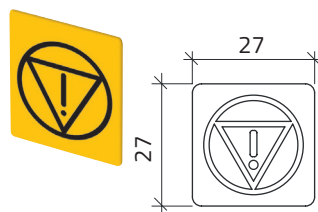
		g	cod
13x27 mm	rotolo da 1500 pz / roll of 1500 pc	170	020RE
18x27 mm	rotolo da 1500 pz / roll of 1500 pc	280	020RE18
27x27 mm	rotolo da 1300 pz / roll of 1300 pc	240	020RE27
60x15 mm	rotolo da 1500 pz / roll of 1500 pc	380	020RE615
60x40 mm	rotolo da 700 pz / roll of 700 pc	500	020RE640
60x60 mm	rotolo da 500 pz / roll of 500 pc	450	020RE660
60x60 mm foro / hole Ø22	rotolo da 500 pz / roll of 500 pc	450	020RE660D
60x80 mm	rotolo da 400 pz / roll of 400 pc	580	020RE680
60x110 mm	rotolo da 300 pz / roll of 300 pc	580	020RE6110

Etichette protettive adesive Adhesive protective labels



	g	n	cod
Pellicola trasparente / Protective film			
13x27 mm	2	10	020PE
18x27 mm	2	10	020PE18
27x27 mm	2	10	020PE27

Etichetta adesiva emergenza Adhesive emergency label

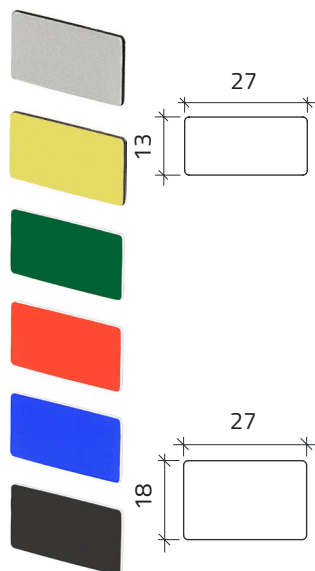


	g	cod
Targhetta adesiva / Adhesive label		
27x27 mm	0,2	020144T27



Targhette Ø22 Legend plates Ø22

Etichette neutre adesive / Blank adhesive labels



13x27

Incisione meccanica / Mechanical engraving

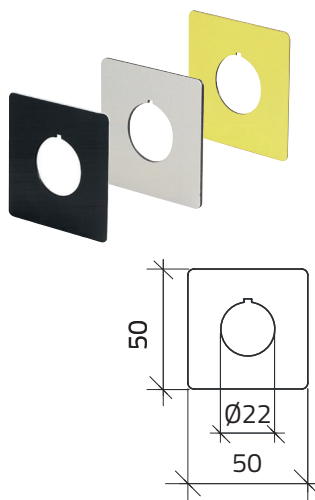
	g	n	cod
● Silver- <i>Incisione nera / Silver-Black engraving</i>	0,2	10	02000T
○ Bianco- <i>Incisione nera / White-Black engraving</i>	0,2	10	02000TB
● Giallo- <i>Incisione nera / Yellow-Black engraving</i>	0,2	10	02000TG
● Nero- <i>Incisione bianca / Black-White engraving</i>	0,2	10	02000TN
● Rosso- <i>Incisione bianca / Red-White engraving</i>	0,2	10	02000TR
● Verde- <i>Incisione bianca / Green-White engraving</i>	0,2	10	02000TV
● Blu- <i>Incisione bianca / Blue-White engraving</i>	0,2	10	02000TBL

18x27

Incisione meccanica / Mechanical engraving

● Silver- <i>Incisione nera / Silver-Black engraving</i>	0,2	10	02000T18
○ Bianco- <i>Incisione nera / White-Black engraving</i>	0,2	10	02000TB18
● Giallo- <i>Incisione nera / Yellow-Black engraving</i>	0,2	10	02000TG18
● Nero- <i>Incisione bianca / Black-White engraving</i>	0,2	10	02000TN18
● Rosso- <i>Incisione bianca / Red-White engraving</i>	0,2	10	02000TR18
● Verde- <i>Incisione bianca / Green-White engraving</i>	0,2	10	02000TV18
● Blu- <i>Incisione bianca / Blue-White engraving</i>	0,2	10	02000TBL18

Etichette adesive Adhesive labels



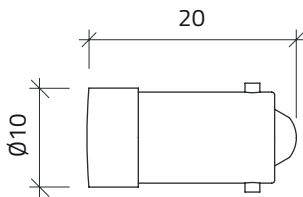
50X50

	g	cod
● Silver- <i>Incisione nera / Silver-Black engraving</i>	1,8	020T50
● Giallo- <i>Incisione nera / Yellow-Black engraving</i>	1,8	020T50G
● Nero- <i>Incisione bianca / Black-White engraving</i>	1,8	020T50N

Lampadine Lamps

020

BA9S Led luce fissa BA9S Steady light led lamps

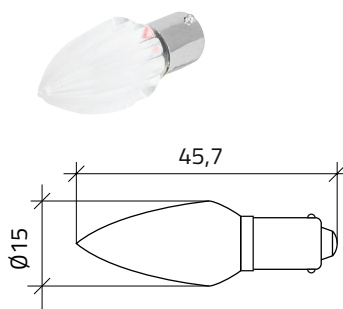


	g	n	cod
6V AC-DC			
● Rosso / Red	2	5	010BA9SLR6
● Verde / Green	2	5	010BA9SLV6
● Giallo / Yellow	2	5	010BA9SLG6
● Blu / Blue	2	5	010BA9SLBL6
○ Bianco / White	2	5	010BA9SLB6
12V AC-DC			
● Rosso / Red	2	5	010BA9SLR12
● Verde / Green	2	5	010BA9SLV12
● Giallo / Yellow	2	5	010BA9SLG12
● Blu / Blue	2	5	010BA9SLBL12
○ Bianco / White	2	5	010BA9SLB12
24V AC-DC			
● Rosso / Red	2	5	010BA9SLR24
● Verde / Green	2	5	010BA9SLV24
● Giallo / Yellow	2	5	010BA9SLG24
● Blu / Blue	2	5	010BA9SLBL24
○ Bianco / White	2	5	010BA9SLB24
36V AC-DC			
● Rosso / Red	2	5	010BA9SLR36
● Verde / Green	2	5	010BA9SLV36
● Giallo / Yellow	2	5	010BA9SLG36
● Blu / Blue	2	5	010BA9SLBL36
○ Bianco / White	2	5	010BA9SLB36
48V AC-DC			
● Rosso / Red	2	5	010BA9SLR48
● Verde / Green	2	5	010BA9SLV48
● Giallo / Yellow	2	5	010BA9SLG48
● Blu / Blue	2	5	010BA9SLBL48
○ Bianco / White	2	5	010BA9SLB48
130V AC-DC			
● Rosso / Red	2	5	010BA9SLR110
● Verde / Green	2	5	010BA9SLV110
● Giallo / Yellow	2	5	010BA9SLG110
● Blu / Blue	2	5	010BA9SLBL110
○ Bianco / White	2	5	010BA9SLB110
240V AC-DC			
● Rosso / Red	2	5	010BA9SLR240
● Verde / Green	2	5	010BA9SLV240
● Giallo / Yellow	2	5	010BA9SLG240
● Blu / Blue	2	5	010BA9SLBL240
○ Bianco / White	2	5	010BA9SLB240
400V AC-DC			
● Rosso / Red	2	5	010BA9SLR400
● Verde / Green	2	5	010BA9SLV400
● Giallo / Yellow	2	5	010BA9SLG400
● Blu / Blue	2	5	010BA9SLBL400
○ Bianco / White	2	5	010BA9SLB400



Lampadine Lamps

BA9S Led luce fissa BA9S Steady light led lamps



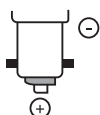
24V AC-DC

	g	cod
● Rosso / Red	2	010BA9ALR24
● Verde / Green	2	010BA9ALV24
● Giallo / Yellow	2	010BA9ALG24
● Blu / Blue	2	010BA9ALBL24
○ Bianco / White	2	010BA9ALB24

240V AC-DC

● Rosso / Red	2	010BA9ALR220
● Verde / Green	2	010BA9ALV220
● Giallo / Yellow	2	010BA9ALG220
● Blu / Blue	2	010BA9ALBL220
○ Bianco / White	2	010BA9ALB220

Led <60V non polarizzati 110-240 V polarizzati Led lamps <60V non-polarized 110-240 V polarized

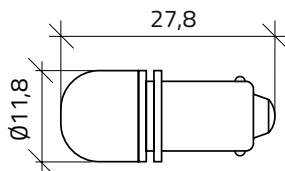


Led luce lampeggiante / Flashing light led

Led ultraluminoso tensioni ±15% non polarizzata / Ultra-bright led, voltage ±15% non-polarized
AC-DC 6 12 24 48 110 AC 220 mA 30 20 14 7 5 16

24V AC-DC

● Rosso / Red	2	010BA9SLLR24
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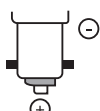


130V AC-DC

● Rosso / Red	2	010BA9SLLR110
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240V AC-DC

● Rosso / Red	2	010BA9SLLR220
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24V AC-DC

● Rosso / Red	2	010BA9ALLR24
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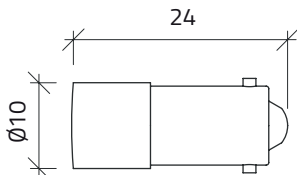
Nuove lampade due colori , tecnologia led alta luminosità New bi-colour led lamps,high brightness



X1 X2
1 = X1+ X2-
2 = X1- X2+

24V DC 15mA

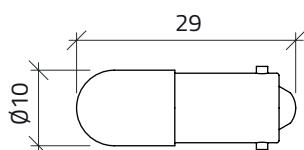
1 2		
● ● Verde, rosso / Green, red	2	010BA9SLVR24
● ● Verde, giallo / Green, yellow	2	010BA9SLVG24
● ● Blu, rosso / Blue, red	2	010BA9SLBLR24
● ● Blu, giallo / Blue, yellow	2	010BA9SLBLG24



Lampadine Lamps

020

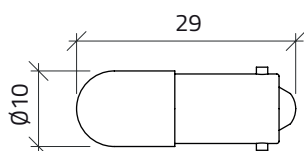
BA9S Lampadine ad incandescenza BA9S Incandescent lamps



Lampadine BA9S ad incandescenza / Incandescent bulbs BA9S

			g	n	cod
6V	0,6W		1,3	10	010BA9S6V-0.6W
24V	1,2 w		1,3	10	010BA9S24V-1.2W
24V	3W		1,3	10	010BA9S24V-3W
30V	1,2W		1,3	10	010BA9S30V-1.2W
30V	3W		1,3	10	010BA9S30V-3W
48V	1,2W		1,3	10	010BA9S48V-1.2W
60V	1,2 w		1,3	10	010BA9S60V-1.2W
60V	3W		1,3	10	010BA9S60V-3W
110V	1,9W		1,3	10	010BA9S130V-1.9
220V	2W		1,3	10	010BA9S220V-2W

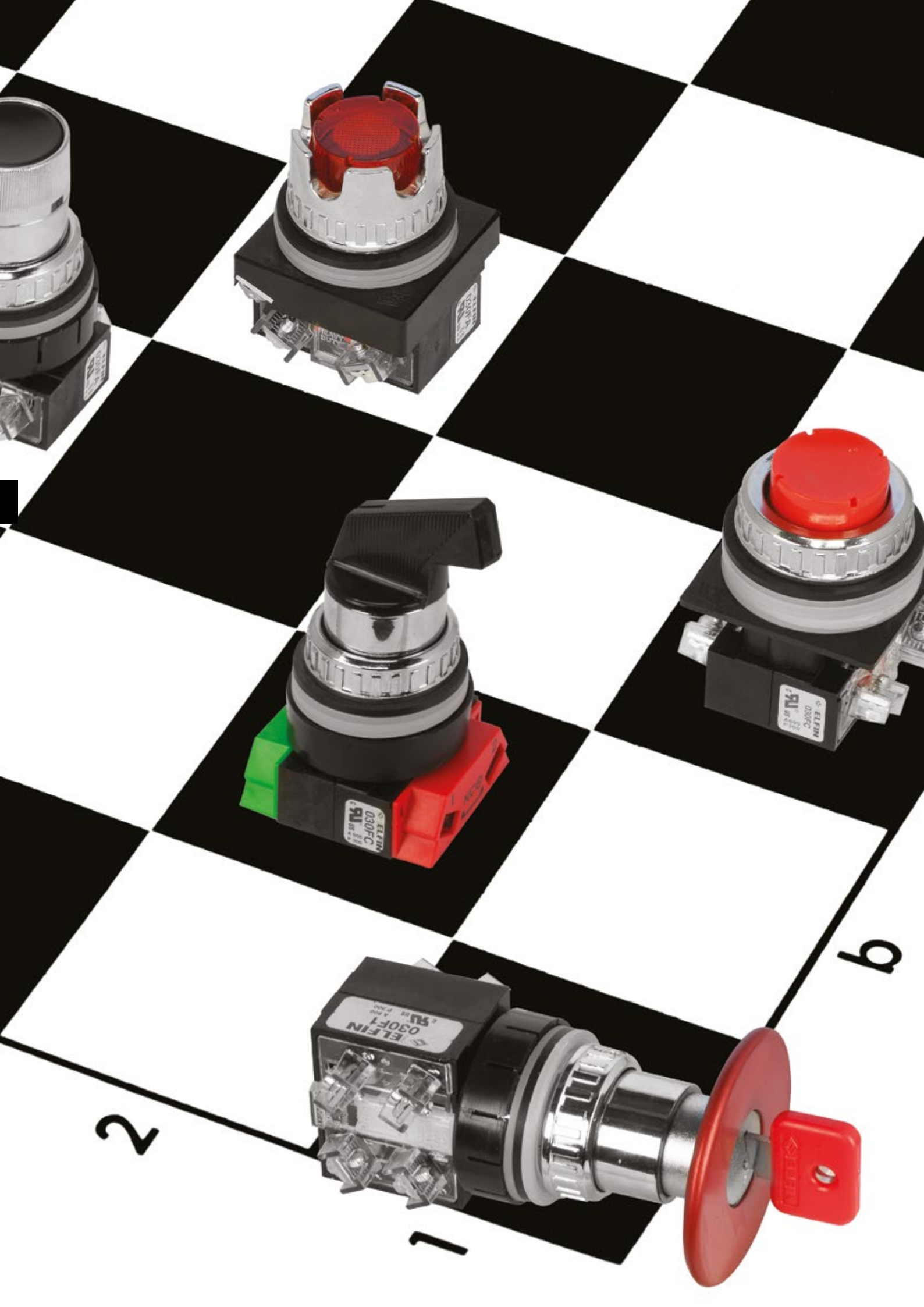
BA9S Lampadine al neon / BA9S neon lamps



Neon AC

			g	n	cod
● Arancio / Orange	65V	0,05W	2,3	10	010BA9SN65
● Arancio / Orange	130V	0,1W	2,3	10	010BA9SN110
● Verde / Green	130V	0,1W	2,3	10	010BA9NV110
● Arancio / Orange	240V	0,3W	2,3	10	010BA9SN220
● Verde / Green	240V	0,3W	2,3	10	010BA9NV220
● Arancio / Orange	400V	0,5W	2,3	10	010BA9SN380
● Verde / Green	400V	0,5W	2,3	10	010BA9NV380





2

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9

030

**COMANDO
E SEGNALAZIONE EL-SG Ø30**

**COMMAND AND SIGNALLING
EL-SG Ø30**

030



Pulsanteria Ø30

Push-buttons Ø30

La pulsanteria Ø 30 trova impiego in settori particolarmente gravosi dal punto di vista della robustezza, dell'affidabilità e nella lunga vita operativa, là dove è necessaria precisione, certezza dell'esecuzione, duttilità nelle soluzioni tecniche, i nostri operatori trovano il loro ambiente operativo ideale.

Nella gamma Ø 30, grazie al know-how sviluppato in anni di ricerche e produzione, troviamo differenti soluzioni di operatori con diversi tipi di guardia. Soluzioni con corpi cromati o con superficie nera antiriflesso.

Differenti bottoni con ampia possibilità di configurazioni di elementi di contatto.

Questa serie è stata progettata per resistere e lavorare in situazioni gravose.

I pulsanti hanno un robusto soffietto per isolare completamente l'operatore.

Il sistema di fissaggio è sicuro e forte grazie alle robuste ghiera metalliche con speciale design che permette un serraggio manuale; le installazioni sono agevolate dagli anelli di riscontro.

I punti di forza di questa serie sono gli elementi di contatto che adottano particolari componenti in lega di ottone + nichel con pastiglie in argento 1000/1000 di elevate dimensioni.

Speciali viti consentono svariate configurazioni di blocchi di elementi di contatto aumentando la possibilità di esecuzioni con schemi speciali.



The Ø 30 push-buttons are used in particularly demanding sectors because of its sturdiness, reliability and long operating life.

Our operators find their ideal working environment where precision, certainty of execution and versatility in technical solutions are required.

In this range, thanks to the know-how developed over many years of research and production, there are different operator solutions with diverse types of guards.

Solutions with chromed bodies or with black anti-reflection surfaces.

Different buttons with a vast possibility of configurations of contact elements.

This series has been designed for durability and operation in demanding situations.

The buttons have robust bellows to insulate the operator completely.

The locking system is safe and strong thanks to the sturdy special design ring nuts in metal allowing manual tightening; installation are facilitated by backing rings.

The strong point of this range are the contact elements that use particular components in brass + nichel alloy with raised 1000/1000 silver pads.

Special screws allow different configurations of blocks of contact elements, increasing the possibilities of versions with special schemes.



Caratteristiche tecniche

Technical data

Caratteristiche generali

Rispondenza alle norme	IEC 947-5-1, VDE 0660 - NFC - CEI EN60947.5.1 - UTE -BSI -CENELEC EN 50007																																								
Omologazioni	UL (USA)-CSA CANADA)																																								
Protezioni climatiche	Clima temperato cat.23/50 (DIN 50014) Clima umido cat.23/83 (DIN 50015) Clima caldo umido cat. 40/ 92 (DIN 50015) Clima umido variabile cat. FW24 (DIN 50016)																																								
Limiti di temperatura	Funzionamento -25°C ÷ +70°C Stoccaggio -40°C ÷ +70°C																																								
Grado di protezione operatori	IP65 secondo EN60529 IP66 Pulsanti con cappuccio in gomma																																								
Grado di protezione terminali	IP2X secondo EN60529 con protezione 030PFA / 030PFC																																								
Tensione nominale d'isolamento	Ui 690 V grado di inquinamento 3 secondo EN/IEC 60947-1																																								
Tensione di tenuta ad impulso	4kV secondo EN60947.1																																								
Categoria d'isolamento	Gruppo C secondo VDE 0110																																								
Protezione da scossa elettrica	Classe I secondo IEC536																																								
Protezione al corto circuito	Fusibili da 10A gl secondo EN60947-5-1																																								
Funzionamento dei contatti	Azionamento lento. Ag 1000/1000. Protezione trasparente per controllo visivo usura e movimento. Autopulenti. Apertura forzata del contatto NC. Doppia rottura oltre corsa per maggiore affidabilità.																																								
Categorie nominali d'impiego	Corrente nominale termica $i_{th} = 10$ A - limiti d'impiego secondo EN60947-5-1 <table border="1"> <thead> <tr> <th colspan="2">Cat.AC15 (UL-CSA: A600)</th> <th colspan="2">Cat.DC13 (UL-CSA: P300)</th> </tr> <tr> <th>Ue V</th> <th>Ie A</th> <th>Ue V</th> <th>Ie A</th> </tr> </thead> <tbody> <tr> <td>24</td> <td>10</td> <td>24</td> <td>5</td> </tr> <tr> <td>48</td> <td>10</td> <td>48</td> <td>2.7</td> </tr> <tr> <td>60</td> <td>10</td> <td>60</td> <td>2</td> </tr> <tr> <td>110</td> <td>6</td> <td>110</td> <td>1.1</td> </tr> <tr> <td>220</td> <td>3</td> <td>220</td> <td>0.55</td> </tr> <tr> <td>380</td> <td>2</td> <td>380</td> <td>0.3</td> </tr> <tr> <td>500</td> <td>1.1</td> <td>500</td> <td>0.22</td> </tr> <tr> <td>600</td> <td>1.2</td> <td>600</td> <td>0.22</td> </tr> </tbody> </table>	Cat.AC15 (UL-CSA: A600)		Cat.DC13 (UL-CSA: P300)		Ue V	Ie A	Ue V	Ie A	24	10	24	5	48	10	48	2.7	60	10	60	2	110	6	110	1.1	220	3	220	0.55	380	2	380	0.3	500	1.1	500	0.22	600	1.2	600	0.22
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600	1.2	600	0.22																																						

Durata meccanica	Manipolatori, pulsanti a chiave, pulsanti a fungo ad aggancio: 500000 manovre Selettori a manopola, selettori a leva, selettori a chiave, selettori luminosi: 1 milione di manovre Pulsanti selettori, pulsanti luminosi: 1 milione di manovre Pulsanti normali e a fungo momentanei: 3 milioni di manovre
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Resistenza agli urti	Pulsanti aggancio: 7g (20 ÷ 500 Hz) IEC 60068-2-6
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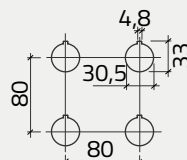
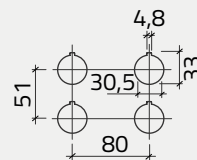
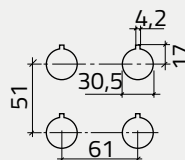
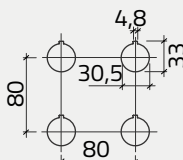
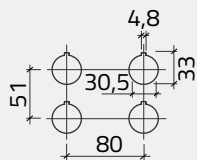
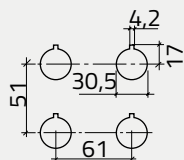
Resistenza alle vibrazioni	Pulsanti, selettori Manipolatori: 15g (20 ÷ 500 Hz) IEC 60068-2-6 50g IEC 60068-2-27
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Viti terminali	Testa combinata taglio e Phillips Ph2 in acciaio zincato. Capacità di chiusura : $\geq 1 \times 0,5$ mm / $\leq 2 \times 2,5$ mm. Capicorda a forcella "spring spade"
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Porta lampada operatori luminosi	Attacco BA9S. Pulsanti e lampade spia: max 3W Selettori potenza: max 2W. Si raccomanda l' utilizzo di lampadine LED
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Durata lampade	Incandescenza ≤ 1000 h-Neon ≤ 3000 h Multiled ≥ 50.000 h
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Dimensioni di montaggio	Pannelli con spessore 1 ÷ 6mm. Foratura secondo EN/IEC 60947-5-1
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General features

Standards compliance	IEC 947-5-1, VDE 0660 - NFC - CEI EN60947.5.1 - UTE -BSI -CENELEC EN 50007																																								
Approvals	UL (USA)-CSA CANADA)																																								
Climatic protection	Temperate climate cat.23/50 (DIN 50014) Humid climate cat.23/83 (DIN 50015) Hot-humid climate cat. 40/ 92 (DIN 50015) Humid variable climate cat. FW24 (DIN 50016)																																								
Temperature ranges	Operating -25°C ÷ +70°C Storage -40°C ÷ +70°C																																								
Protection degree operators	IP65 in compliance with EN60529 IP66 Push-buttons with rubber cap																																								
Protection degree terminals	IP2X in compliance with EN60529 with protection 030PFA / 030PFC																																								
Rated insulation voltage	Ui 690 V pollution degree 3 in compliance with EN/IEC 60947-1																																								
Impulse withstand voltage	4kV in compliance with EN60947.1																																								
Insulation class	C group in compliance with VDE 0110																																								
Electrical shock protection	Class I in compliance with IEC536																																								
Short circuit protection	10A gl fuses in compliance with EN60947-5-1																																								
Contact operation	Slow action Ag 1000/1000. Clear cover for visual inspection of wear and movement. Self-cleaning. Forced opening of NC contact. Double breakage for a higher reliability.																																								
Electrical ratings	Rated thermal current $i_{th} = 10$ A - operating range in compliance with EN60947-5-1 <table border="1"> <thead> <tr> <th colspan="2">Cat.AC15 (UL-CSA: A600)</th> <th colspan="2">Cat.DC13 (UL-CSA: P300)</th> </tr> <tr> <th>Ue V</th> <th>Ie A</th> <th>Ue V</th> <th>Ie A</th> </tr> </thead> <tbody> <tr> <td>24</td> <td>10</td> <td>24</td> <td>5</td> </tr> <tr> <td>48</td> <td>10</td> <td>48</td> <td>2.7</td> </tr> <tr> <td>60</td> <td>10</td> <td>60</td> <td>2</td> </tr> <tr> <td>110</td> <td>6</td> <td>110</td> <td>1.1</td> </tr> <tr> <td>220</td> <td>3</td> <td>220</td> <td>0.55</td> </tr> <tr> <td>380</td> <td>2</td> <td>380</td> <td>0.3</td> </tr> <tr> <td>500</td> <td>1.1</td> <td>500</td> <td>0.22</td> </tr> <tr> <td>600</td> <td>1.2</td> <td>600</td> <td>0.22</td> </tr> </tbody> </table>	Cat.AC15 (UL-CSA: A600)		Cat.DC13 (UL-CSA: P300)		Ue V	Ie A	Ue V	Ie A	24	10	24	5	48	10	48	2.7	60	10	60	2	110	6	110	1.1	220	3	220	0.55	380	2	380	0.3	500	1.1	500	0.22	600	1.2	600	0.22
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380	2	380	0.3																																						
500	1.1	500	0.22																																						
600	1.2	600	0.22																																						

Mechanical life	Joysticks, key push-buttons, latching mushroom push-buttons: 500000 cycles Knob, lever and key selector switches, illuminated selector switches: 1 million cycles Push-button selector switches, illuminated push-buttons: 1 million cycles Normal and mushroom push-buttons, momentary: 3 million cycles
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Shock resistance	Latching push-buttons: 7g (20-500 Hz) IEC 60068-2-6
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Vibration resistance	Push-buttons, selector switches Joysticks: 15g (20 ÷ 500 Hz) IEC 60068-2-6 50g IEC 68-2-27
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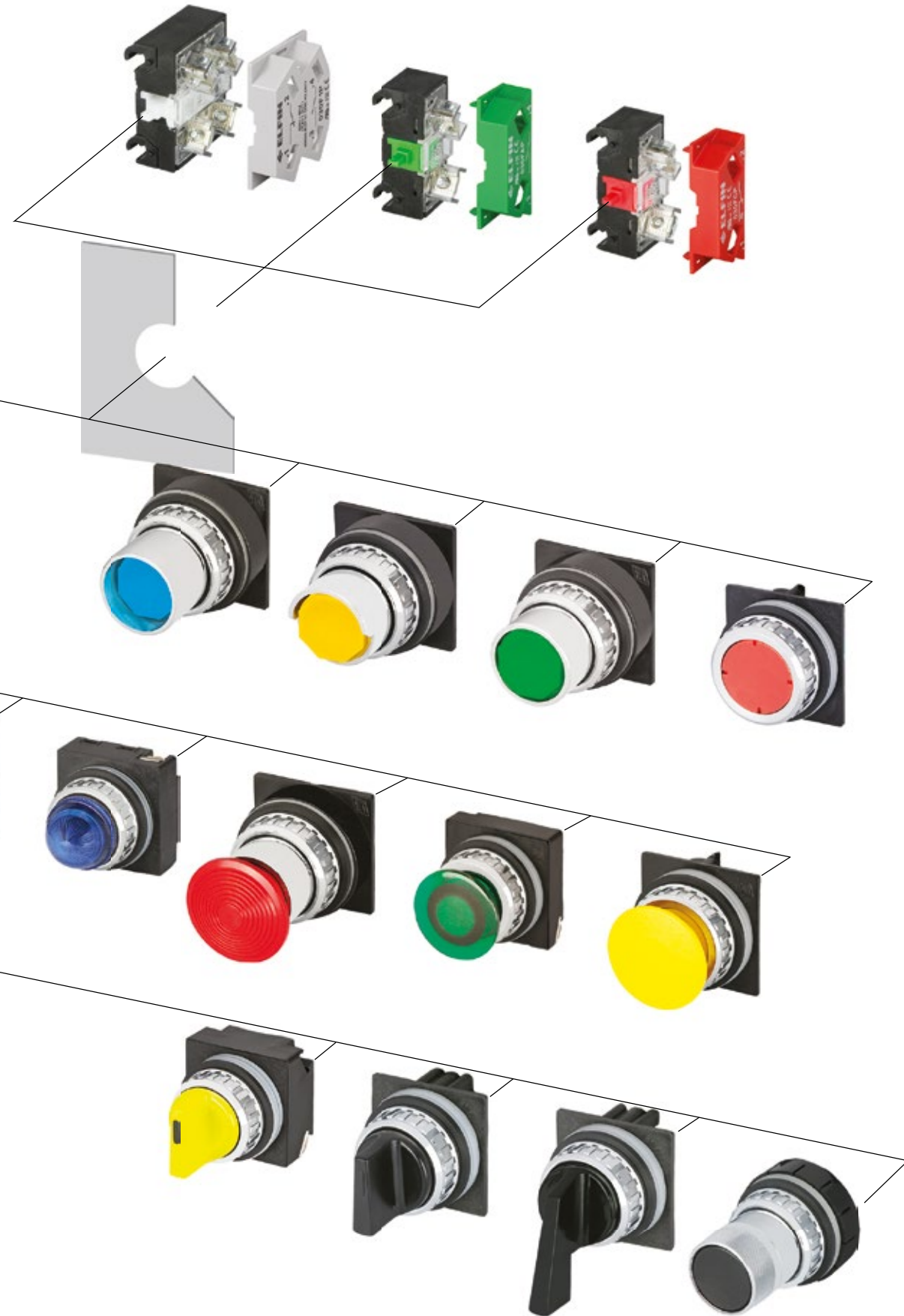
Terminal screws	Combined slot and Phillips Ph2 head, zinc plated. Connection capacity : $\geq 1 \times 0,5$ mm / $\leq 2 \times 2,5$ mm Fork spring spade terminals
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Lamp holder illuminated operators	BA9S socket. Push-buttons and pilot lights: max 3W. Selector switches: max. 2W. LED lamps are recommended
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Lamp life	Incandescent ≤ 1000 h-Neon ≤ 3000 h Multiled ≥ 50.000 h
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Mounting dimensions	1-6mm panels. Drilling in compliance with EN/IEC 60947-5-1
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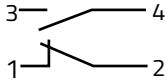
Pulsanti normali Ø30

Normal push-buttons Ø30

Pulsanti normali / Normal push-buttons

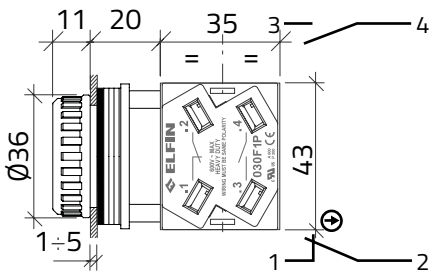
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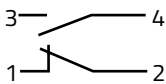
Pulsanti con guardia / Guarded push-buttons

● Nero / Black	84	030RINF1
● Rosso / Red	84	030RIRF1
● Verde / Green	84	030RIVF1
● Giallo / Yellow	84	030RIGF1
● Blu / Blue	84	030RIBLF1
● Arancio / Orange	84	030RIAF1



● Nero / Black	66	030RINF A
● Rosso / Red	66	030RIRFA
● Verde / Green	66	030RIVFA
● Giallo / Yellow	66	030RIGFA
● Blu / Blue	66	030RIBLFA
● Arancio / Orange	66	030RIAF A

● Nero / Black	66	030RINF C
● Rosso / Red	66	030RIRFC
● Verde / Green	66	030RIVFC
● Giallo / Yellow	66	030RIGFC
● Blu / Blue	66	030RIBLFC
● Arancio / Orange	66	030RIAF C



Pulsanti sporgenti / Projecting push-button

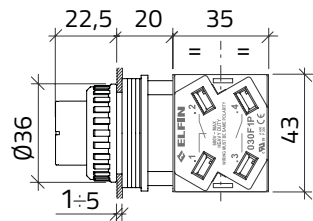
● Nero / Black	86	030RRNF1
● Rosso / Red	86	030RRRF1
● Verde / Green	86	030RRVF1
● Giallo / Yellow	86	030RRGF1
● Blu / Blue	86	030RRBLF1
● Arancio / Orange	86	030RRAF1



● Nero / Black	68	030RRNFA
● Rosso / Red	68	030RRRFA
● Verde / Green	68	030RRVFA
● Giallo / Yellow	68	030RRGFA
● Blu / Blue	68	030RRBLFA
● Arancio / Orange	68	030RRAF A



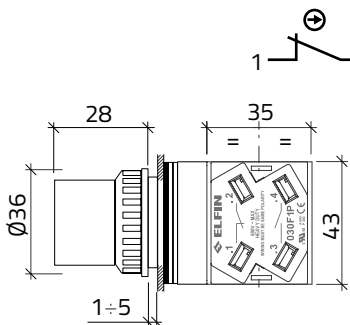
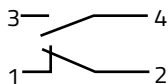
● Nero / Black	68	030RRNFC
● Rosso / Red	68	030RRRFC
● Verde / Green	68	030RRVFC
● Giallo / Yellow	68	030RRGFC
● Blu / Blue	68	030RRBLFC
● Arancio / Orange	68	030RRAF C



Pulsanti normali Ø30

Normal push-buttons Ø30

Pulsanti normali / Normal push-buttons

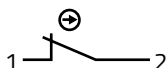


Pulsanti con guardia intera / Push-buttons with full guard

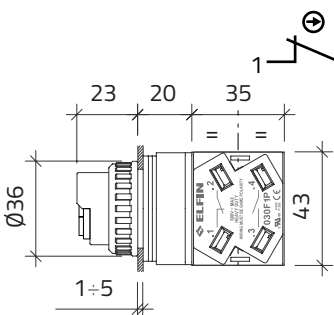
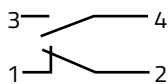
Color	Weight (g)	Code
● Nero / Black	93	030PINF1
● Rosso / Red	93	030PIRF1
● Verde / Green	93	030PIVF1
● Giallo / Yellow	93	030PIGF1
● Blu / Blue	93	030PIBLF1
● Arancio / Orange	93	030PIAF1



● Nero / Black	75	030PINFA
● Rosso / Red	75	030PIRFA
● Verde / Green	75	030PIVFA
● Giallo / Yellow	75	030PIGFA
● Blu / Blue	75	030PIBLFA
● Arancio / Orange	75	030PIAFA



● Nero / Black	75	030PINFC
● Rosso / Red	75	030PIRFC
● Verde / Green	75	030PIVFC
● Giallo / Yellow	75	030PIGFC
● Blu / Blue	75	030PIBLFC
● Arancio / Orange	75	030PIAFC



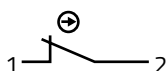
Pulsanti con mezza guardia

Push-buttons with half guard

● Nero / Black	91	030PNNF1
● Rosso / Red	91	030PNRF1
● Verde / Green	91	030PNVF1
● Giallo / Yellow	91	030PNGF1
● Blu / Blue	91	030PNBLF1
● Arancio / Orange	91	030PNAF1



● Nero / Black	73	030PNNFA
● Rosso / Red	73	030PNRFA
● Verde / Green	73	030PNVFA
● Giallo / Yellow	73	030PNGFA
● Blu / Blue	73	030PNBLFA
● Arancio / Orange	73	030PNAFA



● Nero / Black	73	030PNNFC
● Rosso / Red	73	030PNRFC
● Verde / Green	73	030PNVFC
● Giallo / Yellow	73	030PNGFC
● Blu / Blue	73	030PNBLFC
● Arancio / Orange	73	030PNAFC

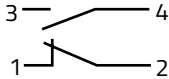
Pulsanti normali Ø30

Normal push-buttons Ø30

Pulsanti normali / Normal push-buttons

g

cod

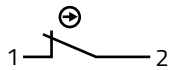


Senza guardia / Without guard

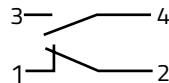
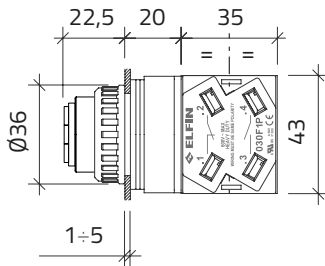
● Nero / Black	93	030PRNF1
● Rosso / Red	93	030PRRF1
● Verde / Green	93	030PRVF1
● Giallo / Yellow	93	030PRGF1
● Blu / Blue	93	030PRBLF1
● Arancio / Orange	93	030PRAF1



● Nero / Black	75	030PRNFA
● Rosso / Red	75	030PRRFA
● Verde / Green	75	030PRVFA
● Giallo / Yellow	75	030PRGFA
● Blu / Blue	75	030PRBLFA
● Arancio / Orange	75	030PRAFA

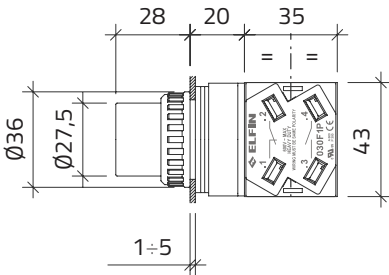


● Nero / Black	75	030PRNFC
● Rosso / Red	75	030PRRFC
● Verde / Green	75	030PRVFC
● Giallo / Yellow	75	030PRGFC
● Blu / Blue	75	030PRBLFC
● Arancione / Orange	75	030PRAFC



Pulsanti con guardia estesa Push-buttons with extended guard

● Nero / Black	95	030PPNF1
● Rosso / Red	95	030PPRF1
● Verde / Green	95	030PPVF1
● Giallo / Yellow	95	030PPGF1
● Blu / Blue	95	030PPBLF1
● Arancio / Orange	95	030PPAF1

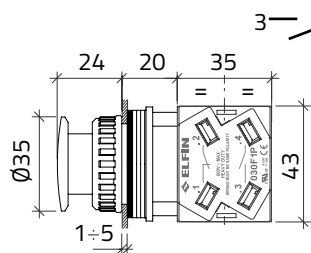
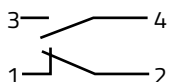


Pulsanti normali Ø30

Normal push-buttons Ø30

Pulsanti a fungo momentanei

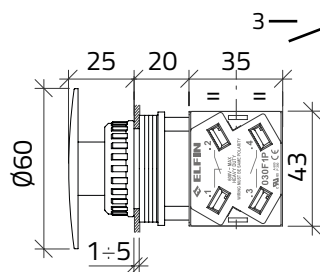
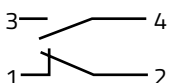
Momentary mushroom push-buttons



Pulsanti a fungo Ø 35 / Mushroom push-button Ø 35

Color	Weight (g)	Code
● Nero / Black	120	030RFNF1
● Verde / Green	120	030RFVF1
● Giallo / Yellow	120	030RFGF1

Color	Weight (g)	Code
● Nero / Black	100	030RFNFA
● Verde / Green	100	030RFVFA
● Giallo / Yellow	100	030RFGFA



Pulsanti a fungo Ø 60 / Mushroom push-buttons Ø 60

Color	Weight (g)	Code
● Nero / Black	130	030RFFNF1
● Verde / Green	130	030RFFVF1
● Giallo / Yellow	130	030RFFGF1

Color	Weight (g)	Code
● Nero / Black	110	030RFFNFA
● Verde / Green	110	030RFFVFA
● Giallo / Yellow	110	030RFFGFA



Pulsanti a fungo Ø 60 con guardia metallica

Mushroom push-buttons with metal guard Ø 60

Color	Weight (g)	Code
● Nero / Black	140	030RFFPNFAFC
● Verde / Green	140	030RFFPVFAFC
● Giallo / Yellow	140	030RFFPGFAFC

Pulsanti normali Ø30

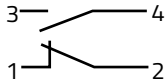
Normal push-buttons Ø30

Pulsanti a fungo momentanei

Momentary mushroom push-buttons

g

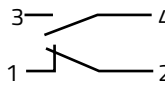
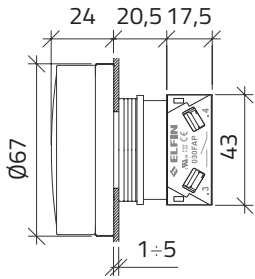
cod



Pulsanti a fungo Ø 60 con guardia metallica

Mushroom push-buttons with metal guard Ø 60

● Nero / Black	165	03ORFFPMNFAFC
● Rosso / Red	165	03ORFFPMRFAFC

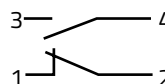
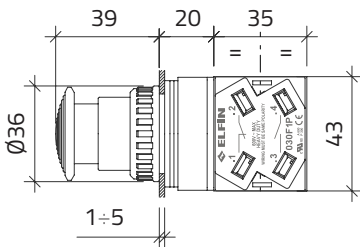


Pulsanti a fungo Ø 35 / Mushroom push-button Ø 35

● Nero / Black	120	030PFNF1
● Verde / Green	120	030PFVF1
● Giallo / Yellow	120	030PFGF1



● Nero / Black	100	030PFNFA
● Verde / Green	100	030PFVFA
● Giallo / Yellow	100	030PFGFA

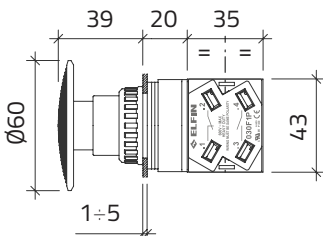


Pulsanti a fungo Ø 60 / Mushroom push-buttons Ø 60

● Nero / Black	130	030PFFNF1
● Verde / Green	130	030PFFVF1
● Giallo / Yellow	130	030PFFGF1



● Nero / Black	110	030PFFNFA
● Verde / Green	110	030PFFVFA
● Giallo / Yellow	110	030PFFGFA



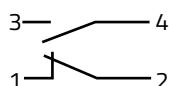
Pulsanti luminosi Ø30

Illuminated push-buttons Ø30

Pulsanti luminosi Illuminated push-button

g

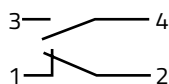
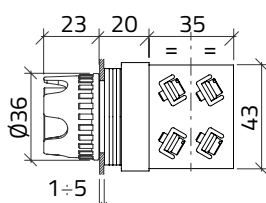
cod



Pulsanti con guardia completa Push-button with full guard

Alimentazione diretta 24V AC/DC / Direct supply 24V AC/DC
Lampadina LED BA9S inclusa / BA9S LED lamp included

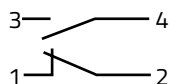
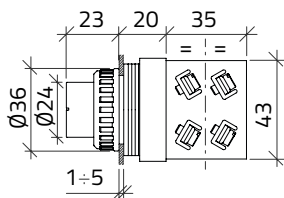
● Rosso / Red	103	030RPLSRFAFC24
● Verde / Green	103	030RPLSVFAFC24
● Giallo / Yellow	103	030RPLSGFAFC24
● Blu / Blue	103	030RPLSBLFAFC24
○ Bianco / White	103	030RPLSBFAFC24



Pulsanti sporgenti / Projecting push-buttons

Alimentazione diretta 24V AC/DC / Direct supply 24V AC/DC
Lampadina LED BA9S inclusa / BA9S LED lamp included

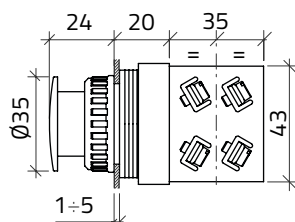
● Rosso / Red	97	030RPLRFAFC24
● Verde / Green	97	030RPLVFAFC24
● Giallo / Yellow	97	030RPLGFAFC24
● Blu / Blue	97	030RPLBLFAFC24
○ Bianco / White	97	030RPLBFAFC24



Pulsanti a fungo momentanei Momentary mushroom push-buttons

Alimentazione diretta 24V AC/DC / Direct supply 24V AC/DC
Lampadina LED BA9S inclusa / BA9S LED lamp included

● Rosso / Red	98	030RFLRFAFC24
● Verde / Green	98	030RFLVFAFC24
● Giallo / Yellow	98	030RFLGFAFC24
● Blu / Blue	98	030RFLBLFAFC24
○ Bianco / White	98	030RFLBFAFC24



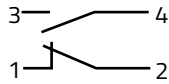
Pulsanti di emergenza Ø30

Emergency stop push-buttons Ø30

Pulsanti a fungo momentanei Momentary mushroom push-buttons

g

cod



Pulsanti a fungo Ø 35 / Mushroom push-buttons Ø 35

● Rosso / Red

120

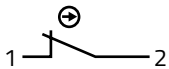
030RFRF1



● Rosso / Red

100

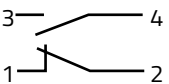
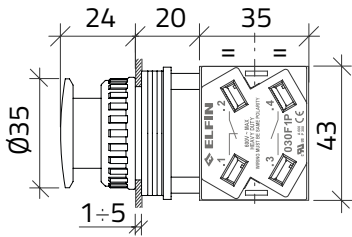
030RFRFA



● Rosso / Red

100

030RFRFC



Pulsanti a fungo Ø 60 / Mushroom push-buttons Ø 60

● Rosso / Red

130

030RFRF1



● Rosso / Red

110

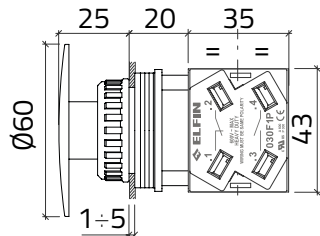
030RFRFA



● Rosso / Red

110

030RFRFC



Pulsanti di emergenza Ø30

Emergency stop push-buttons Ø30

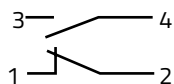
Pulsanti a fungo momentanei Momentary mushroom push-buttons

g

cod



Pulsanti a fungo Ø 35 / Mushroom push-buttons Ø 35



● Rosso / Red

120

030PFRF1



● Rosso / Red

100

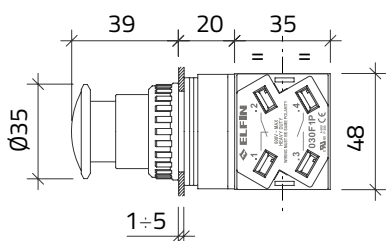
030PFRFA



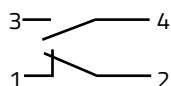
● Rosso / Red

100

030PFRFC



Pulsanti a fungo Ø 60 / Mushroom push-buttons Ø 60



● Rosso / Red

130

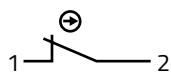
030PFRF1



● Rosso / Red

110

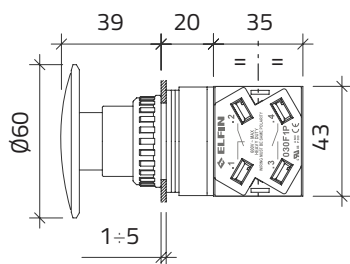
030PFRFA



● Rosso / Red

110

030PFRFC



Pulsanti di emergenza Ø30

Emergency stop push-buttons Ø30

Pulsanti a fungo ad aggancio

Latching mushroom push-buttons

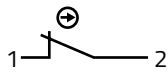
g

cod



Pulsanti a fungo Ø 35, sgancio rotazione

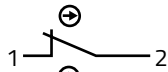
Mushroom push-buttons Ø 35, twist release



● Rosso / Red

100

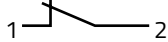
030PFARFC



● Rosso / Red

115

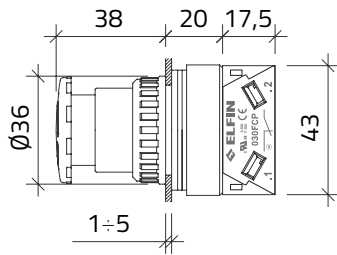
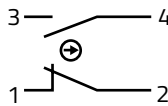
030PFAR2FC



● Rosso / Red

115

030PFARFAFC



Pulsanti a fungo Ø 60, sgancio rotazione

Mushroom push-buttons Ø 60, twist release



● Rosso / Red

110

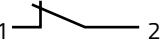
030PFFARFC



● Rosso / Red

125

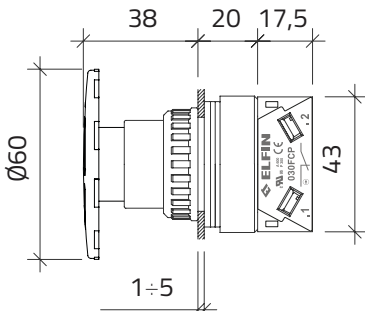
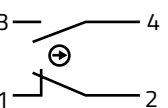
030PFFAR2FC



● Rosso / Red

110

030PFFARFAFC



Pulsanti di emergenza Ø30

Emergency stop push-buttons Ø30

Pulsanti a fungo ad aggancio

Latching mushroom push-buttons

g

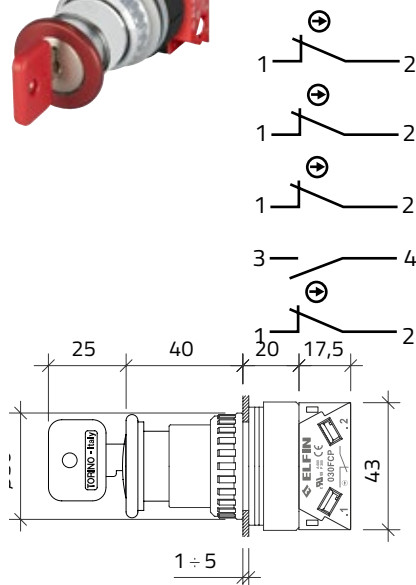
cod



Pulsanti a fungo Ø 35, sgancio a chiave

Mushroom push-buttons Ø 35, key release

Chiave 73037 / Key model



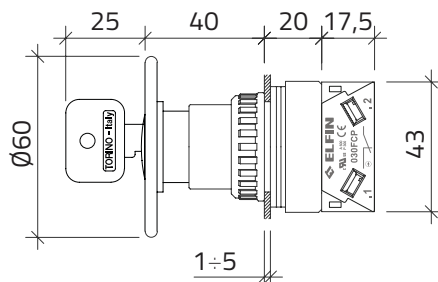
	● Rosso / Red	162	030PFBAFC
	● Rosso / Red	176	030PFBA2FC
	● Rosso / Red	176	030PFBAFAFC



Pulsanti a fungo Ø 60, sgancio a chiave

Mushroom push-buttons Ø 60 key release

Chiave 73037 / Key 73037



	● Rosso / Red	172	030PFFBAFC
	● Rosso / Red	186	030PFFBA2FC
	● Rosso / Red	186	030PFFBAFAFC

Pulsanti a chiave Ø30

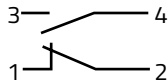
Key push-buttons Ø30

Pulsanti bloccabili con chiave

Key lockable push-buttons

g

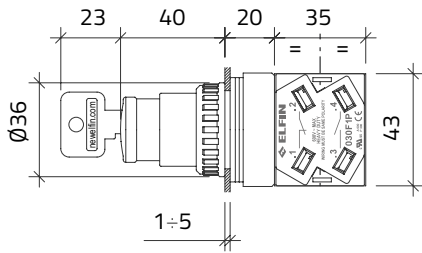
cod



Chiave standard 3095

Standard key 3095

BA	158	030PBAF1
BB	158	030PBBF1
LB	158	030PLBF1



Caratteristiche tecniche

Le chiavi sono estraibili con azionatore sia libero che premuto.

Si fornisce chiave standard

- BA agganciabile in posizione di premuto
- BB bloccabile in posizione di libero e premuto
- LB bloccabile in posizione di libero

Technical data

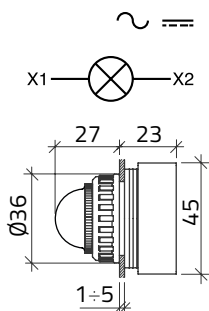
The keys can be removed with the actuator both free and depressed.

- BA latched, key release to "free" position
- BB lockable in both positions (free and depressed)
- LB lockable in one position (free).



Lampade spia Ø30

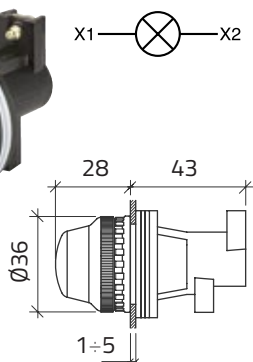
Pilot lights Ø30



Alimentazione diretta / Direct supply

Lampadina LED BA9S non inclusa / BA9S LED lamp not included

● Rosso / Red	61	030LSR
● Verde / Green	61	030LSV
● Giallo / Yellow	61	030LSG
● Blu / Blue	61	030LSBL
○ Bianco / White	61	030LSB



Alimentazione diretta / Direct supply

Lampadina E14 7W max non inclusa / Lamp E14 7W max not included

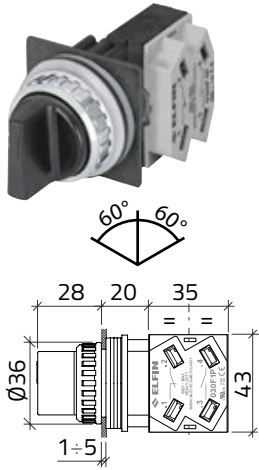
● Rosso / Red	35	030LE14R
● Verde / Green	35	030LE14V
● Giallo / Yellow	35	030LE14G
● Blu / Blue	35	030LE14BL
○ Bianco / White	35	030LE14B

g

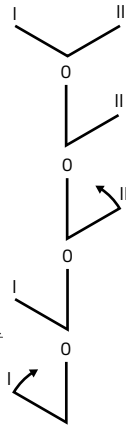
cod

Selettori a manopola Ø30 Knob selector switches Ø30

Cercare la combinazione di schemi a pag. 26 / See the diagram combination on page 26

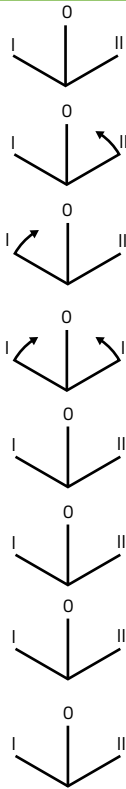


2 posizioni / 2 positions



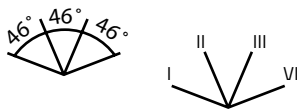
	g	cod
CAM A	85	030RSMNAF1
CAM B	85	030RSMNBF1
CAM B	85	030RSMNBF1D
CAM C	85	030RSMNCF1
CAM C	85	030RSMNCF1S

3 posizioni / 3 positions



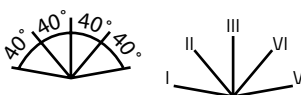
	g	cod
CAM O	85	030RSMNO2F1
CAM O	85	030RSMNO2F1D
CAM O	85	030RSMNO2F1S
CAM O	85	030RSMNO2F1C
CAM T	85	030RSMNT2F1
CAM S	85	030RSMNSF1
CAM P	85	030RSMNPF1
CAM F	85	030RSMNFF1

4 posizioni / 4 positions



	g	cod
CAM Q	85	030RSMNQ2F1

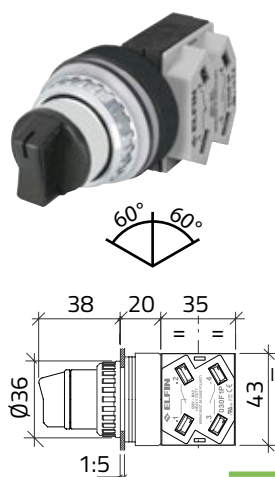
5 posizioni / 5 positions



	g	cod
CAM R	87	030RSMNR2F1
CAM V	87	030RSMNV2F1

Selettori a manopola Ø30 Knob selector switches Ø30

Cercare la combinazione di schemi a pag. 26 / See the diagram combination on page 26



2 posizioni / 2 positions

	g	cod
CAM A	100	030SMNAF1
CAM B	100	030SMNBF1
CAM B	100	030SMNBF1D
CAM C	100	030SMNCF1
CAM C	100	030SMNCF1S

3 posizioni / 3 positions

	g	cod
CAM O	100	030SMN02F1
CAM O	100	030SMN02F1D
CAM O	100	030SMN02F1S
CAM O	100	030SMN02F1C
CAM T	100	030SMNT2F1
CAM S	100	030SMNSF1
CAM P	100	030SMNPF1
CAM F	100	030SMNFF1

4 posizioni / 4 positions

	g	cod
CAM Q	100	030SMNQ2F1

5 posizioni / 5 positions

	g	cod
CAM R	100	030SMNR2F1
CAM V	100	030SMNV2F1

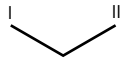
Selettori luminosi a manopola Ø30 Illuminated knob selector switches Ø30

Cercare la combinazione di schemi a pag. 26 / See the diagram combination on page 26

2 posizioni / 2 positions

g

cod

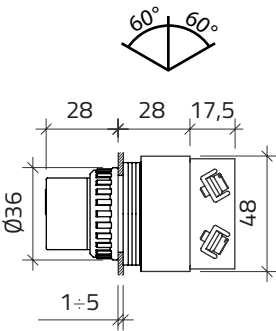


Alimentazione diretta 24V AC/DC
Direct supply 24V AC/DC
Lampadina LED BA9S inclusa / BA9S LED lamp included
CAM A

○ Bianco / White	96	030SMLABFAFC24
● Rosso / Red	96	030SMLARFAFC24
● Verde / Green	96	030SMLAVFAFC24
● Giallo / Yellow	96	030SMLAGFAFC24
● Blu / Blue	96	030SMLBLFAFC24

CAM B

○ Bianco / White	96	030SMLBBFAFC24
● Rosso / Red	96	030SMLBRFAFC24
● Verde / Green	96	030SMLBVFAFC24
● Giallo / Yellow	96	030SMLBGFAC24
● Blu / Blue	96	030SMLBBLFAFC24

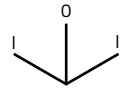


3 posizioni / 3 positions

g

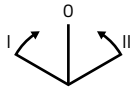
cod

Alimentazione diretta 24V AC/DC
Direct supply 24V AC/DC
Lampadina LED BA9S inclusa / BA9S LED lamp included
CAM O



○ Bianco / White	128	030SMLOB2FA24
● Rosso / Red	128	030SMLOR2FA24
● Verde / Green	128	030SMLOV2FA24
● Giallo / Yellow	128	030SMLOG2FA24
● Blu / Blue	128	030SMLOBL2FA24

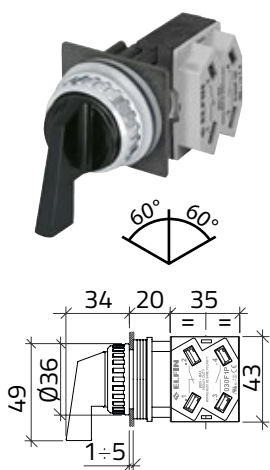
CAM O



○ Bianco / White	128	030SMLOB2FAC24
● Rosso / Red	128	030SMLOR2FAC24
● Verde / Green	128	030SMLOV2FAC24
● Giallo / Yellow	128	030SMLOG2FAC24
● Blu / Blue	128	030SMLOBL2FAC24

Selettori a leva Ø30 Lever selector switches Ø30

Cercare la combinazione di schemi a pag. 26 / See the diagram combination on page 26



2 posizioni / 2 positions

	g	cod
CAM A	87	030RSLNAF1
CAM B	87	030RSLNBF1
CAM B	87	030RSLNBF1D
CAM C	87	030RSLNCF1
CAM C	87	030RSLNCF1S

3 posizioni / 3 positions

	g	cod
CAM O	87	030RSLN02F1
CAM O	87	030RSLN02F1D
CAM O	87	030RSLN02F1S
CAM O	87	030RSLN02F1C
CAM T	87	030RSLNT2F1
CAM S	87	030RSLNSF1
CAM P	87	030RSLNPF1
CAM F	87	030RSLNFF1

4 posizioni / 4 positions

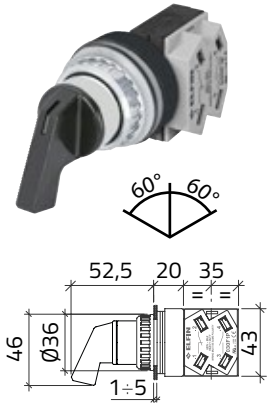
	g	cod
CAM Q	87	030RSLNQ2F1

5 posizioni / 5 positions

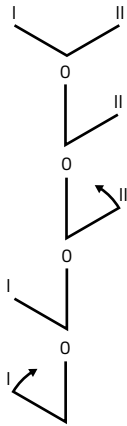
	g	cod
CAM R	87	030RSLNR2F1
CAM V	87	030RSLNV2F1

Selettori a leva Ø30 Lever selector switches Ø30

Cercare la combinazione di schemi a pag. 26 / See the diagram combination on page 26

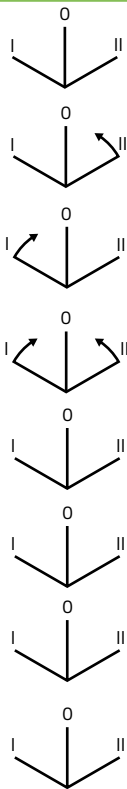


2 posizioni / 2 positions



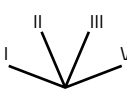
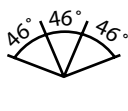
	g	cod
CAM A	102	030SLNAF1
CAM B	102	030SLNBF1
CAM B	102	030SLNBF1D
CAM C	102	030SLNCF1
CAM C	102	030SLNCF1S

3 posizioni / 3 positions



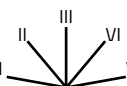
	g	cod
CAM O	102	030SLNO2F1
CAM O	102	030SLNO2F1D
CAM O	102	030SLNO2F1S
CAM O	102	030SLNO2F1C
CAM T	102	030SLNT2F1
CAM S	102	030SLNSF1
CAM P	102	030SLNPF1
CAM F	102	030SLNFF1

4 posizioni / 4 positions



	g	cod
CAM Q	102	030SLNQ2F1

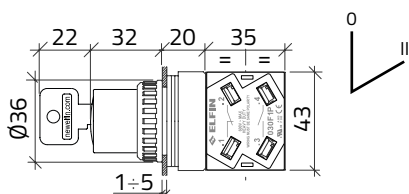
5 posizioni / 5 positions



	g	cod
CAM R	102	030SLNR2F1
CAM V	102	030SLNV2F1

Selettori a chiave Ø30 Key selector switches Ø30

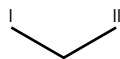
Cercare la combinazione di schemi a pag. 26 / See the diagram combination on page 26



2 posizioni / 2 positions

g — k — cod — k — cod

CAM A



148		030SCAF1
148		030SCAF12
148		030SCAF14

CAM B



148		030SCBF1		030SCBF1D
148		030SCBF14		
148		030SCBF12		

CAM C

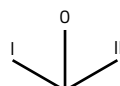


148		030SCCF1		030SCCF1S
148		030SCCF14		
148		030SCCF12		

3 posizioni / 3 positions

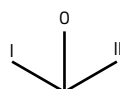
g — k — cod — k — cod

CAM O



148		030SC02F1		030SC02F1C
148		030SC02F13		030SC02F1D
148		030SC02F15		030SC02F1D2
148		030SC02F17		030SC02F1D3
148		030SC02F12		030SC02F1S3
148		030SC02F14		030SC02F1S
148		030SC02F16		030SC02F1S4

CAM T



148		030SCT2F1		030SCT2F1C
148		030SCT2F13		030SCT2F1D
148		030SCT2F15		030SCT2F1D3
148		030SCT2F17		030SCT2F1D2
148		030SCT2F14		
148		030SCT2F16		

Selettori a chiave Ø30

Key selector switches Ø30

Cercare la combinazione di schemi a pag. 26 / See the diagram combination on page 26

Chiavi speciali Special key

c

suf



Chiave standard 3095, per chiavi speciali far seguire al codice del selettore il suffisso
Standard key 3095, for special keys complete the selector code with the suffix

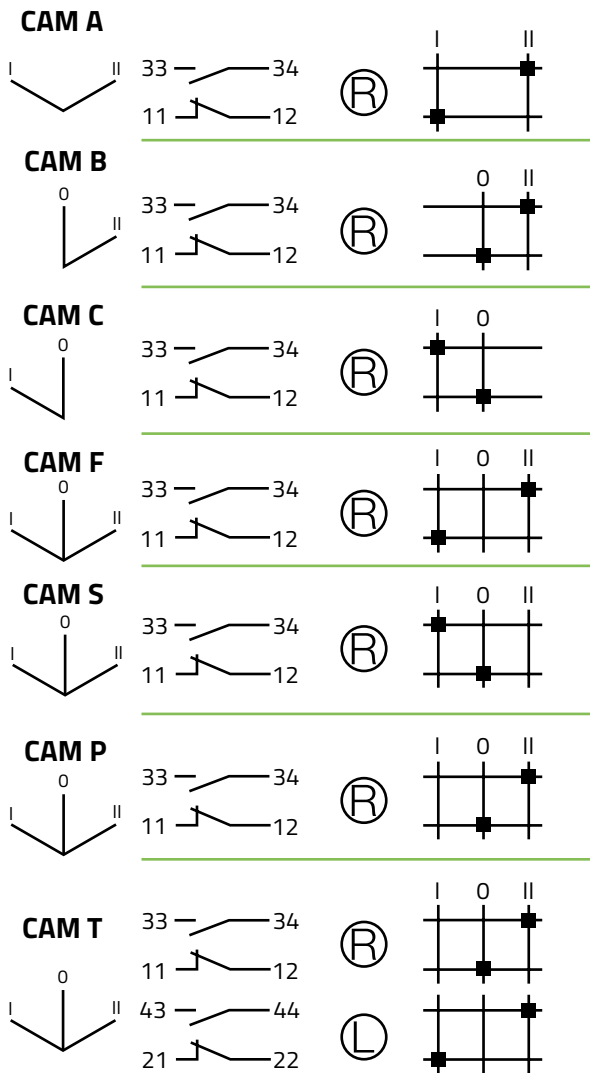
● Nero / Black	73034	K34
● Rosso / Red	73037	K37
● Giallo / Yellow	73033	K33
● Blu / Blue	73038	K38
● Arancio / Orange	73040	K40



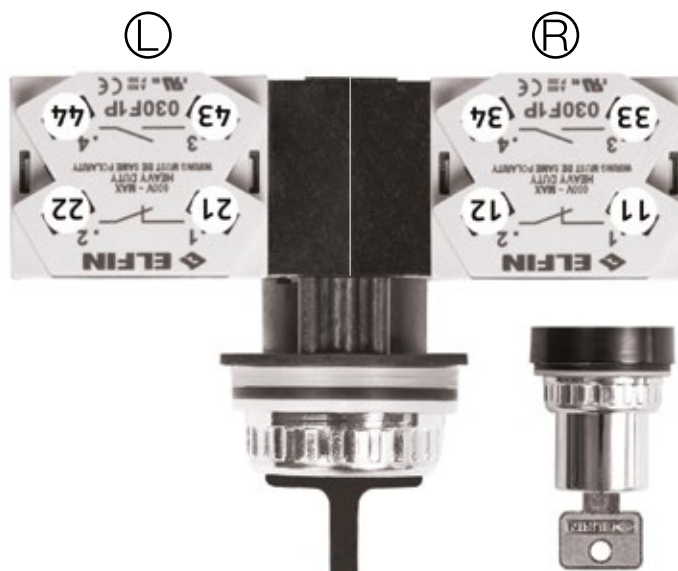
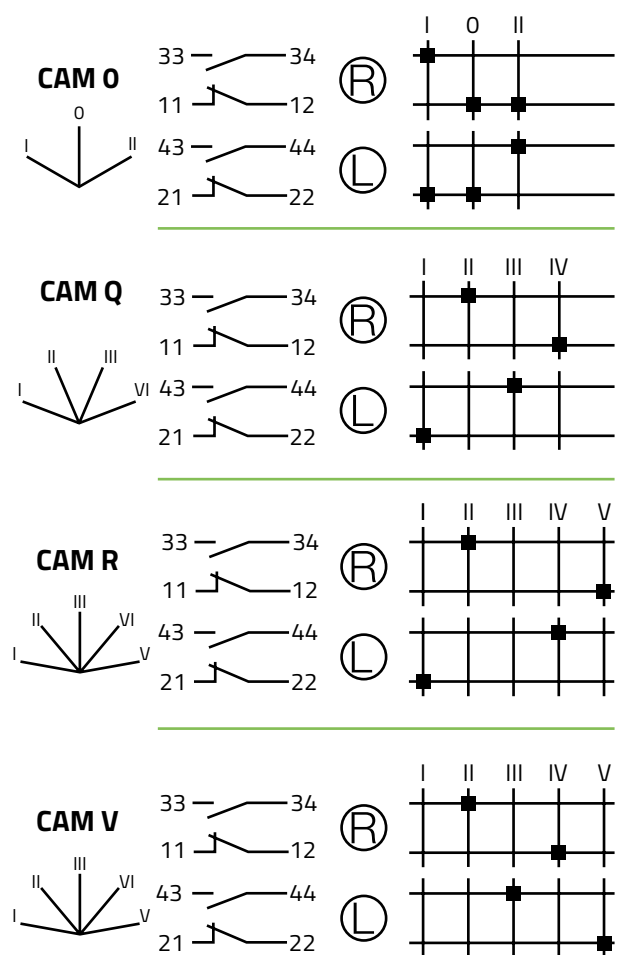
	3353	K53
	9901	K01
	9902	K02
	9903	K03
	9904	K04
	9905	K05
	9910	K10
	9916	K16
	9919	K19

Combinazione di schemi selettori Diagram combination for selector switches

Selettori Selector switches



Selettori Selector switches

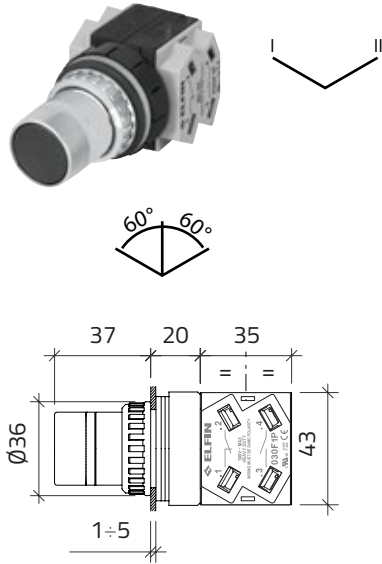


Pulsanti selettori Ø30

Push-button selector switches Ø30

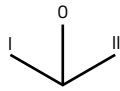
Vedi schemi a pag. 28-29 / See the diagram combination on page 28-29

2 posizioni / 2 positions



	g	cod
CAM 01	166	030PSN01
CAM 02	166	030PSN02
CAM 03	166	030PSN03
CAM 04	166	030PSN04
CAM 05	166	030PSN05
CAM 06	166	030PSN06
CAM 11	166	030PSN11
CAM 12	166	030PSN12
CAM 13	166	030PSN13
CAM 21	166	030PSN21
CAM 22	166	030PSN22
CAM 31	166	030PSN31
CAM 32	166	030PSN32
CAM 33	166	030PSN33
CAM 34	166	030PSN34
CAM 35	166	030PSN35
CAM 36	166	030PSN36

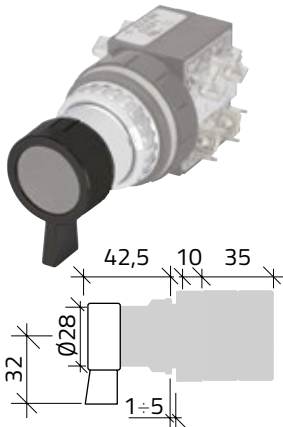
3 posizioni / 3 positions



	g	cod
CAM 51	166	030PSN51
CAM 52	166	030PSN52
CAM 53	166	030PSN53
CAM 54	166	030PSN54
CAM 55	166	030PSN55
CAM 14	166	030PSN14
CAM 15	166	030PSN15
CAM 56	166	030PSN56
CAM 57	166	030PSN57
CAM 23	166	030PSN23
CAM 25	166	030PSN25

Leva per pulsante selettore

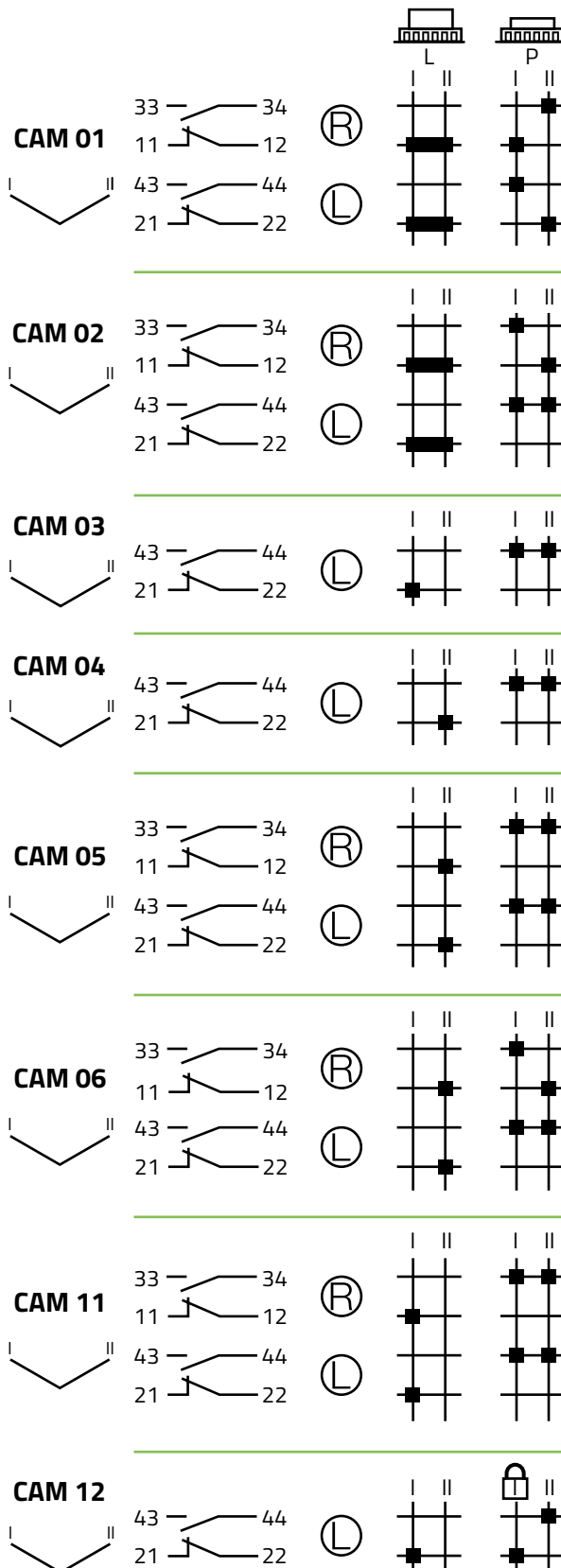
Lever for push-button selector switch



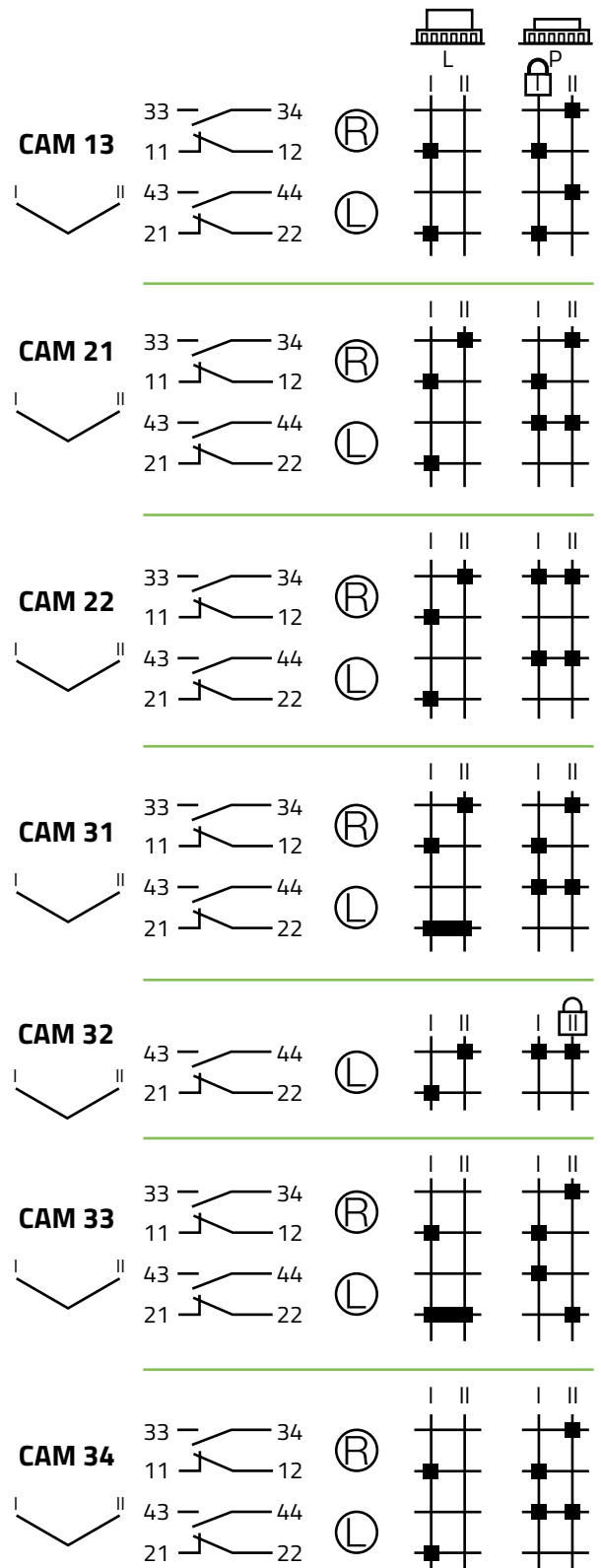
	g	cod
	6	030LPS

Combinazione di schemi pulsanti selettori Diagram combination for push-button selector switches

Pulsanti selettori Push-button selector switches



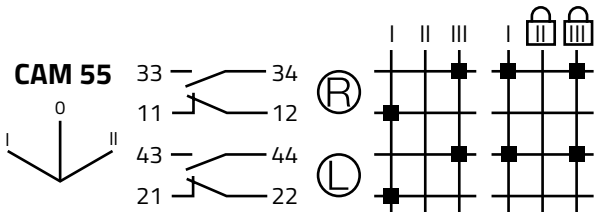
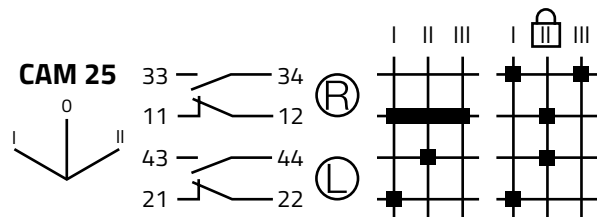
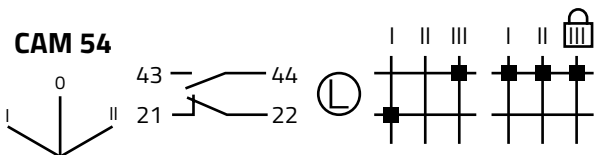
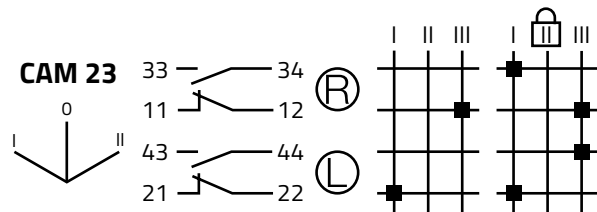
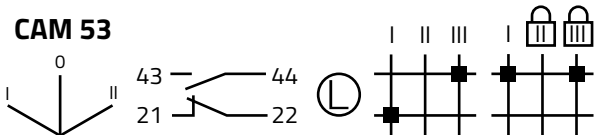
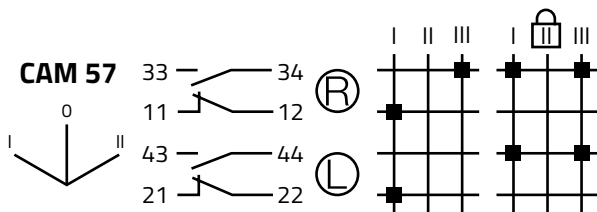
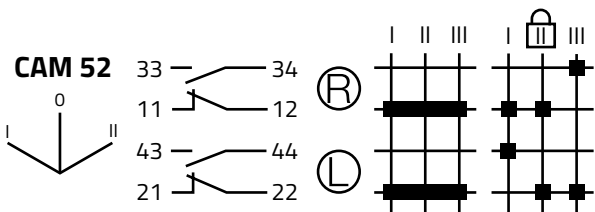
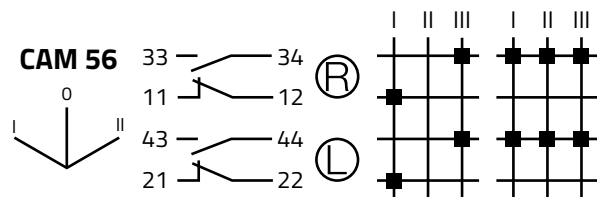
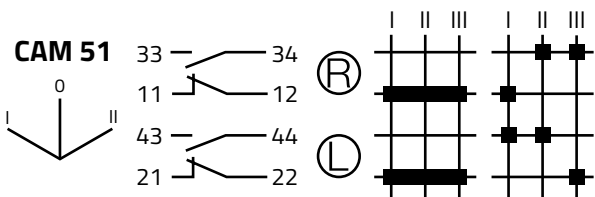
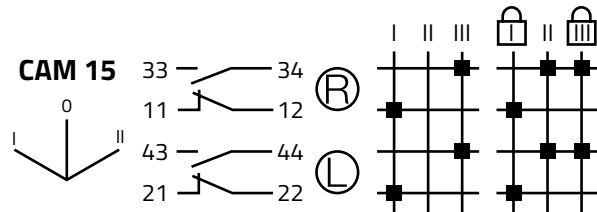
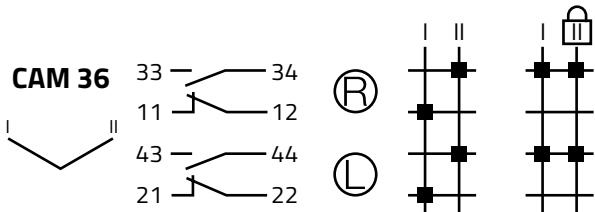
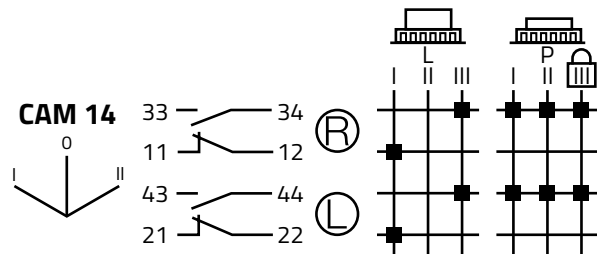
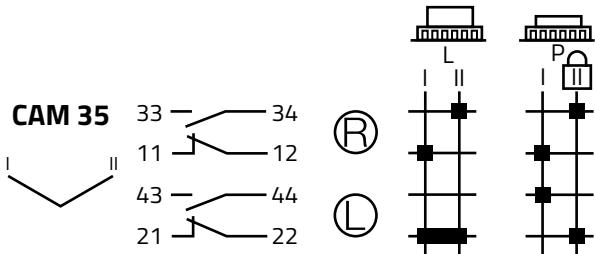
Pulsanti selettori Push-button selector switches



Combinazione di schemi pulsanti selettori Diagram combination for push-button selector switches

Pulsanti selettori Push-button selector switches

Pulsanti selettori Push-button selector switches



Manipolatori Ø30 Joysticks Ø30

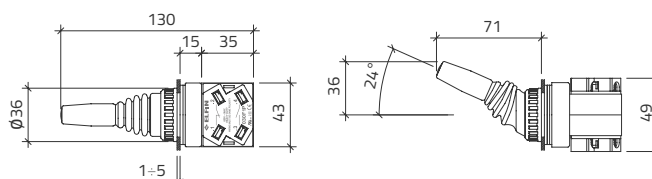
Vedi schemi a pag. 34 / See the diagram combination on page 34

2 posizioni / 2 positions



① ① ②

		g	cod
1-2	permanenti / maintained	140	030MPPN
1-2	temporanee / spring return	140	030MTTN
1	temporanea / spring return		
2	permanente / maintained	140	030MTPN

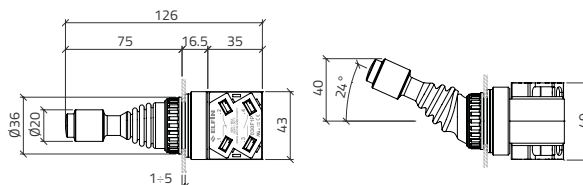


2 posizioni con blocco di sicurezza / 2 positions with safety interlock



① ① ②

		g	cod
1-2	permanenti / maintained	165	030MPPNB
1-2	temporanee / spring return	165	030MTTNB

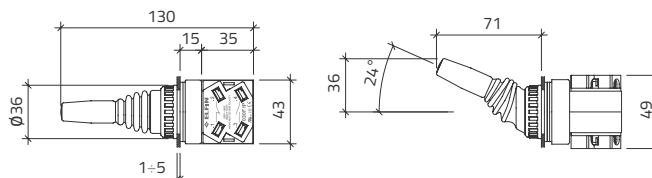


4 posizioni / 4 positions



③
① ① ②
④

		g	cod
1-2-3-4	permanenti / maintained	140	030MPPPN
1-2-3-4	temporanee / spring return	140	030MTTTN
1-2	temporanee / spring return		
3-4	permanenti / maintained	140	030MPTPN
1-3	permanenti / maintained		
4-2	temporanee / spring return	140	030MPPTN
1-2-3	permanenti / maintained		
4	temporanea / spring return	40	030MPPPTN
3	permanente / maintained		
1-4-2	temporanee / spring return	40	030MPTTTN

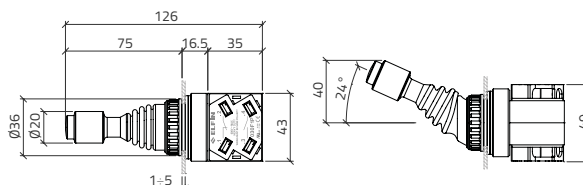


4 posizioni con blocco di sicurezza / 4 positions with safety interlock



③
① ① ②
④

		g	cod
1-2-3-4	permanenti / maintained	165	030MPPPNB
1-2-3-4	temporanee / spring return	165	030MTTTNB



Manipolatori Ø30 Joysticks Ø30

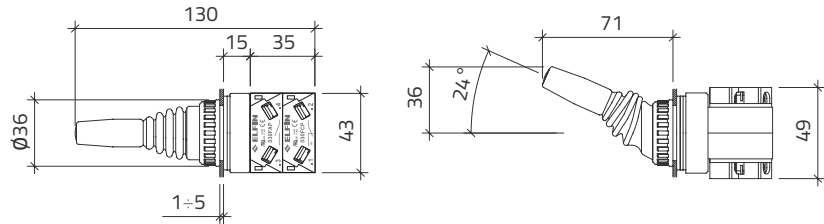
Vedi schemi a pag. 34 / See the diagram combination on page 34

Manipolatori a 2 posizioni speciali Special joysticks, 2 positions



① ②

1-2	permanenti / maintained	140	030MPPRN
1-2	temporanee / spring return	140	030MTTRN
1	temporanea / spring return		
2	permanente / maintained	140	030MTPRN

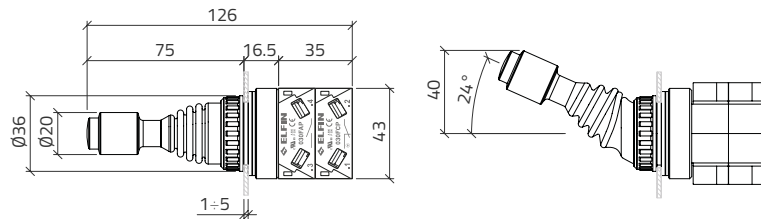


2 posizioni, schema speciale con blocco di sicurezza 2-position, special diagram with safety interlock



① ②

2	permanenti / maintained	165	030MPPRNB
2	temporanee / spring return	165	030MTTRNB

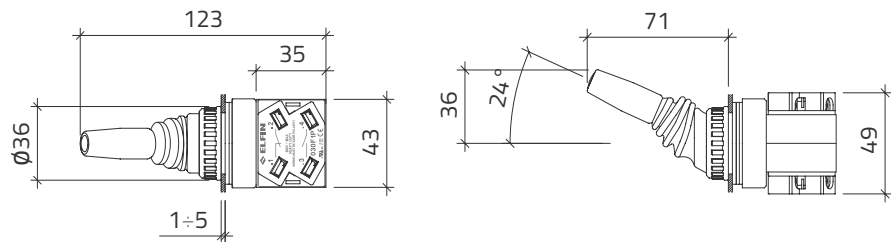


2 posizioni opposte / 2 opposite positions



① ②

1	permanente / maintained		
2	permanente / maintained	140	030MPN2F1
1	permanente / maintained		
2	temporanea / spring return	140	030MTN2F1



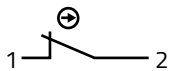
Manipolatori Ø30 Joysticks Ø30

Vedi schemi a pag. 34 / See the diagram combination on page 34

Manipolatori d'emergenza Emergency stop joysticks

g

cod

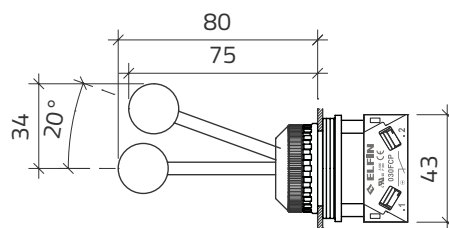
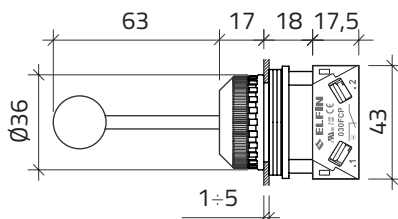


Svolge la sua azione di comando in qualsiasi direzione venga manovrata la leva.
It operates in any direction the lever is moved

● Rosso / Red

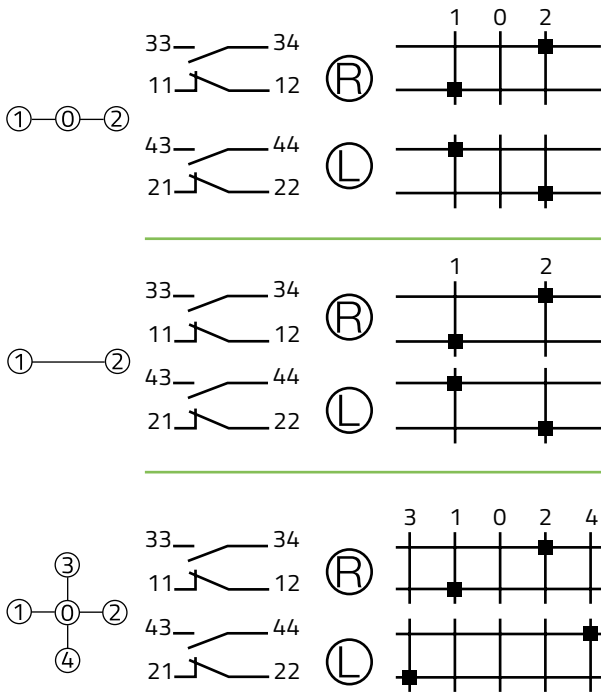
100

030MERFC

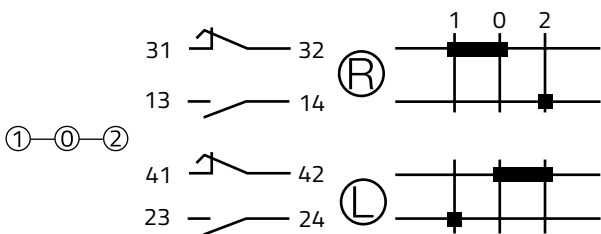


Combinazione di schemi manipolatori Diagram combination

Manipolatore Joystick

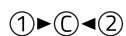


Manipolatore schema speciale Joystick, special diagram



Manipolatori Ø30 Joysticks Ø30

2 posizioni temporanee 2 spring return



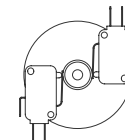
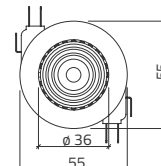
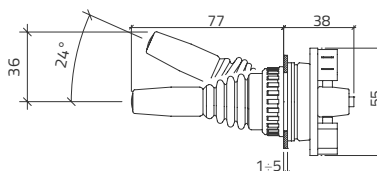
Microinterruttori 1 - 2
Microswitches 1-2

g

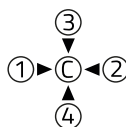
cod

190

030M2T22



4 posizioni temporanee 4 spring return



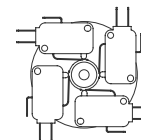
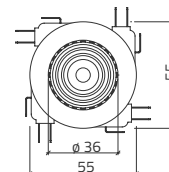
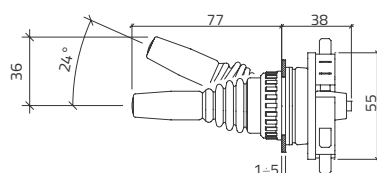
Microinterruttori 1 - 2 - 3 - 4
Microswitches 1-2 - 3 - 4

g

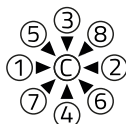
cod

208

030M4T44



8 posizioni temporanee 8 spring return



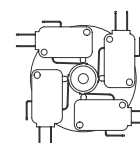
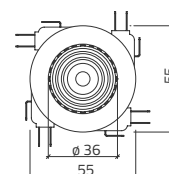
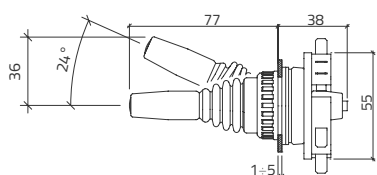
Microinterruttori 1 - 2 - 3 - 4
Microswitches 1-2 - 3 - 4

g

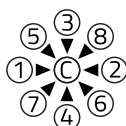
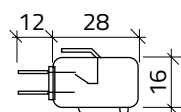
cod

208

030M8T44



Microinterruttore aggiuntivo Additional microswitch



1 microinterruttore con viti lunghe
1 microswitch with long screws

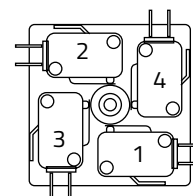
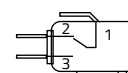
g

cod

10

030M11

		8	6	4	2	0	1	3	5	7
MICROINTERRUTTORE MICROSWITCHES	1									
	2									
	3									
	4									



Elementi di contatto

Contact blocks

Elementi di contatti / Contact blocks



		g	n	cod
3	4			
1	2			
	1NO-1NC	32		030F1
	1NO-NC, contatti dorati / gold-plated contacts	32		030F1AU



3	4	1NO	16	030FA
3	4	1NO Chiusura anticipata / 1NO Early make	16	030FAA
1	2	1NC	16	030FC



1	2	1NC Apertura ritardata / 1NC Late-break	16	030FCR
---	---	---	----	---------------

Contatti con protezione / Contact block with protections



3	4	1NO + 1NC	38	2	030F1P
---	---	-----------	----	---	---------------



3	4	1NO	23	2	030FAP
1	2	1NC	23	2	030FCP

Protezioni elementi di contatto

Contact block protections



		g	n	cod
	Coperchio protezione contatto NO + NC			
	Cover for contact block NO + NC	6	10	030PF1
	Coperchio protezione contatto NO			
	Cover for contact block NO	4	10	030PFA
	Coperchio protezione contatto NC			
	Cover for contact block NC	4	10	030PFC

Elementi di contatto Ø30 Contact blocks Ø30

Viti per elementi di contatto Screws for contact blocks

		g	n	cod
		2,0	10	030V28
		3,5	10	030V46
		4,0	10	030V64
		5,5	10	030V80
		7,5	10	030V98
		0,5	10	030IC
		1,0	10	030IO

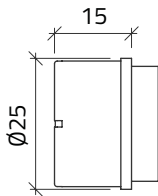
Terminale Faston / Faston terminal

		g	n	cod
		1	10	030TF

Per elementi di comando e portalamпада.
Idoneo per faston femmina 6,3 x 0,8
For contact blocks and lampholders
Suitable for female Faston terminals 6,3x0,8

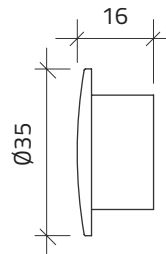
Accessori Ø30 Accessories Ø30

Gemme Lenses



Gemme per pulsanti sporgenti luminosi Lenses for projecting illuminated push-buttons

	g	cod
● Rosso / Red	5	030RLAR
● Verde / Green	5	030RLAV
● Giallo / Yellow	5	030RLAG
● Blu / Blue	5	030RLABL
○ Bianco / White	5	030RLAB
○ Trasparente / Transparent	5	030RLAI
● Arancio / Orange	5	030RLAA

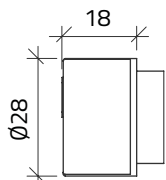


Gemme per pulsanti a fungo luminosi Ø35 Lenses for illuminated mushroom push-buttons Ø35

No su pulsanti con guardia completa / Not suitable for push-button with full guard

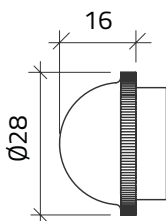
● Rosso / Red	6	030RLFRR
● Verde / Green	6	030RLFV
● Giallo / Yellow	6	030RLFYG
● Blu / Blue	6	030RLFBL
○ Bianco / White	6	030RLFBB
○ Trasparente / Transparent	6	030RLFBI
● Arancio / Orange	6	030RLFAR

Manopole per selettori luminosi Knobs for illuminated selector switches



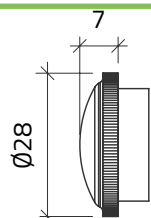
	g	cod
● Rosso / Red	4	030GMRR
● Verde / Green	4	030GMV
● Giallo / Yellow	4	030GMYG
● Blu / Blue	4	030GMBL
○ Bianco / White	4	030GMB
○ Trasparente / Transparent	4	030GMI
● Arancio / Orange	4	030GMA

Gemme sferiche per lampade spia Dome lenses for pilot lights



	g	cod
● Rosso / Red	7	030GLNR
● Verde / Green	7	030GLNV
● Giallo / Yellow	7	030GLNG
● Blu / Blue	7	030GLNBL
○ Bianco / White	7	030GLNB
○ Trasparente / Transparent	7	030GLNI
● Arancio / Orange	7	030GLNA

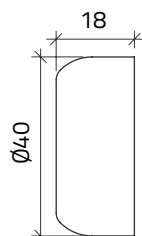
Gemme piatte con diffusore per lampade spia Flat lenses with diffuser for pilot lights



	g	cod
● Rosso / Red	4	030GLSR
● Verde / Green	4	030GLSV
● Giallo / Yellow	4	030GLSG
● Blu / Blue	4	030GLSBL
○ Bianco / White	4	030GLSB
○ Trasparente / Transparent	4	030GLSI
● Arancio / Orange	4	030GLSA

Accessori Ø30 Accessories Ø30

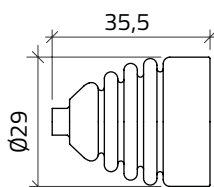
Cappuccio protettivo per pulsanti tipo 030RI Protective cap for push-buttons type 030RI



○ Trasparente / Clear

g	cod
22	030CG

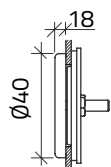
Soffietto per manipolatore Joystick bellows



● RAL 7016

g	n	cod
5	5	030SM

Tappo di chiusura / Hole plug



● RAL 7035
● RAL 7016

g	cod
38	030CP
38	030CP16

Accessori Accessories

Accessori di protezione / Protective guards



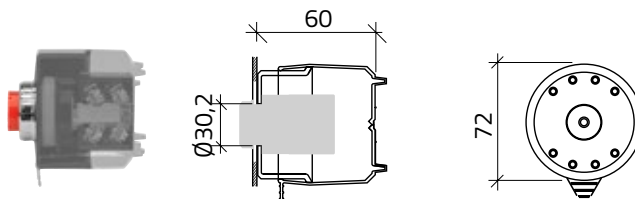
Cappuccio di protezione elementi di contatto Ø 30
Protective cap for contact blocks Ø 30

g

cod

58

030CPC30

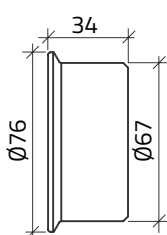
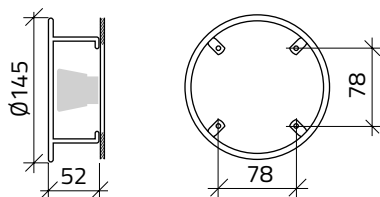


Contro l'azionamento accidentale senza impedire l'accessibilità dell'attuatore
Against accidental operation without hindering the access to the push-button

● Giallo / Yellow

150

020SPE

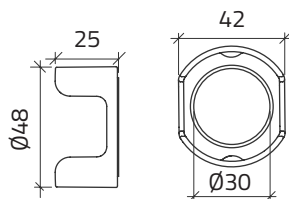


● Grigio / Grey
● Giallo / Yellow

35

030GP30
030GPG30

35



● Grigio / Grey
● Giallo / Yellow

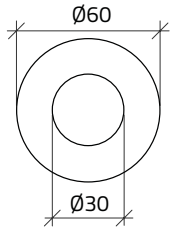
150

030GPF42
030GPF42G

150

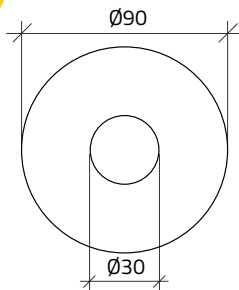
Targhette Ø30 Legend plates Ø30

Targhette emergenza Emergency legend plates



Ø60

	g	cod
Senza testo / Blank	2	030D0
Arresto emergenza	2	030D21
Emergency stop	2	030D23
Arresto emergenza Emergency stop	2	030D32


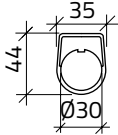

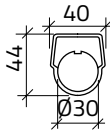

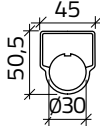

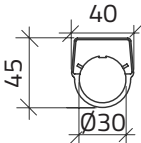

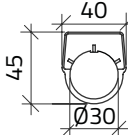

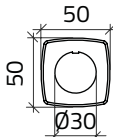

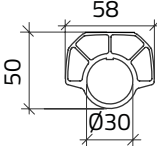

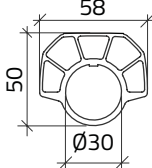


Ø90

Senza testo / Blank	5,3	030DD0
Arresto emergenza	5,3	030DD21
Emergency stop	5,3	030DD23

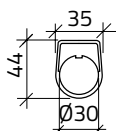
Targhette Ø30 Legend plates Ø30

Targhette neutre / Blank legend plates

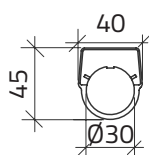
		g	cod
		1	030TN1-0
		1	030TN1A
		1	030TN4-0
		1	030TN2-0
		1	030TN3-0
		1	030TN5-0
		1	030TN8-0
		1	030TN9-0

Targhette Ø30 Legend plates Ø30

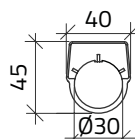
Targhette con diciture Legend plates with texts



	g	cod
Marcia	1	030TN1-1
Arresto	1	030TN1-2
Avanti	1	030TN1-3
Indietro	1	030TN1-4
Salita	1	030TN1-5
Discesa	1	030TN1-6
Destra	1	030TN1-7
Sinistra	1	030TN1-8
Apri	1	030TN1-9
Chiudi	1	030TN1-10
Lento	1	030TN1-11
Veloce	1	030TN1-12
Avviamento	1	030TN1-13
Ciclo	1	030TN1-14
Ciclo manuale	1	030TN1-15
Arresto ciclo	1	030TN1-16
Inizio ciclo	1	030TN1-17
Ciclo automatico	1	030TN1-18
Ripristino ciclo	1	030TN1-19
Inserito	1	030TN1-20
Corrente inserita	1	030TN1-21
Disinserito	1	030TN1-22
Emergenza	1	030TN1-23
Lavoro	1	030TN1-24
Tensione in linea	1	030TN1-25
Arresto motore	1	030TN1-26
Avviamento motore	1	030TN1-27
Corr. alla macchina	1	030TN1-28



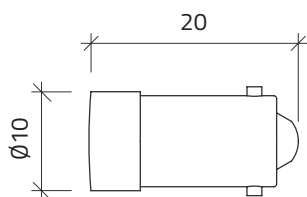
Apri	chiudi	1	030TN2-1
Automatico	semiautom.	1	030TN2-2
Automatico	manuale	1	030TN2-3
Escluso	incluso	1	030TN2-4
Inserito	disinserito	1	030TN2-5
0	1	1	030TN2-6
	Ciclo		
manuale	autom.	1	030TN2-7
	Ciclo		
automatico	semiautom.	1	030TN2-8
	Corrente		
inserita	disinserita	1	030TN2-9
Marcia	arresto	1	030TN2-10



0	1	2	1	030TN3-1
1	0	2	1	030TN3-2
	Ciclo			
manuale	0	autom.	1	030TN3-3

Lampadine Lamps

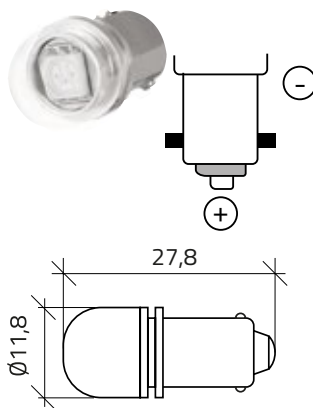
BA9S Led luce fissa BA9S Steady light led lamps



	g	n	cod
6V AC-DC			
● Rosso / Red	2	5	010BA9SLR6
● Giallo / Yellow	2	5	010BA9SLG6
● Verde / Green	2	5	010BA9SLV6
● Blu / Blue	2	5	010BA9SLBL6
○ Bianco / White	2	5	010BA9SLB6
12V AC-DC			
● Rosso / Red	2	5	010BA9SLR12
● Giallo / Yellow	2	5	010BA9SLG12
● Verde / Green	2	5	010BA9SLV12
● Blu / Blue	2	5	010BA9SLBL12
○ Bianco / White	2	5	010BA9SLB12
24V AC-DC			
● Rosso / Red	2	5	010BA9SLR24
● Giallo / Yellow	2	5	010BA9SLG24
● Verde / Green	2	5	010BA9SLV24
● Blu / Blue	2	5	010BA9SLBL24
○ Bianco / White	2	5	010BA9SLB24
36V AC-DC			
● Rosso / Red	2	5	010BA9SLR36
● Giallo / Yellow	2	5	010BA9SLG36
● Verde / Green	2	5	010BA9SLV36
● Blu / Blue	2	5	010BA9SLBL36
○ Bianco / White	2	5	010BA9SLB36
48V AC-DC			
● Rosso / Red	2	5	010BA9SLR48
● Giallo / Yellow	2	5	010BA9SLG48
● Verde / Green	2	5	010BA9SLV48
● Blu / Blue	2	5	010BA9SLBL48
○ Bianco / White	2	5	010BA9SLB48
130V AC-DC			
● Rosso / Red	2	5	010BA9SLR110
● Giallo / Yellow	2	5	010BA9SLG110
● Verde / Green	2	5	010BA9SLV110
● Blu / Blue	2	5	010BA9SLBL110
○ Bianco / White	2	5	010BA9SLB110
240V AC-DC			
● Rosso / Red	2	5	010BA9SLR240
● Giallo / Yellow	2	5	010BA9SLG240
● Verde / Green	2	5	010BA9SLV240
● Blu / Blue	2	5	010BA9SLBL240
○ Bianco / White	2	5	010BA9SLB240
400V AC-DC			
● Rosso / Red	2	5	010BA9SLR400
● Giallo / Yellow	2	5	010BA9SLG400
● Verde / Green	2	5	010BA9SLV400
● Blu / Blue	2	5	010BA9SLBL400
○ Bianco / White	2	5	010BA9SLB400

Lampadine Lamps

Led <60V non polarizzati 110-240 V polarizzati Led <60V non-polarized 110-240 V polarized



Led luce lampeggiante / Led flashing light

Led ultraluminoso tensioni ±15% non polarizzata / Ultra-bright led voltages ±15% non-polarized
AC-DC 6 12 24 48 110 AC 220 mA 30 20 14 7 5 16

24V AC-DC

● Rosso / Red 2 **010BA9SLLR24**

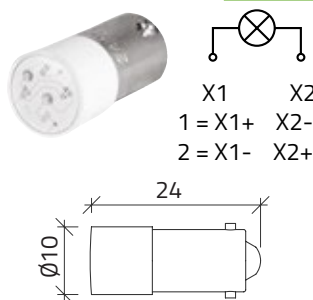
130V AC-DC

● Rosso / Red 2 **010BA9SLLR110**

240V AC-DC

● Rosso / Red 2 **010BA9SLLR220**

Nuove lampade due colori , tecnologia led alta luminosità New bi-colour led lamps, high brightness



24V DC 15mA

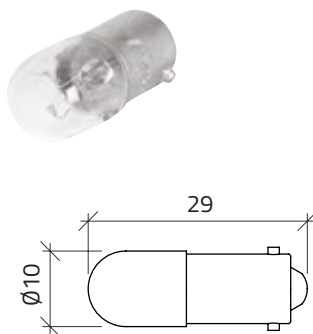
1 2
● ● Verde, rosso / Green, red 2 **010BA9SLVR24**

● ● Verde, giallo / Green, yellow 2 **010BA9SLVG24**

● ● Blu, rosso / Blue, red 2 **010BA9SLBLR24**

● ● Blu, giallo / Blue, yellow 2 **010BA9SLBLG24**

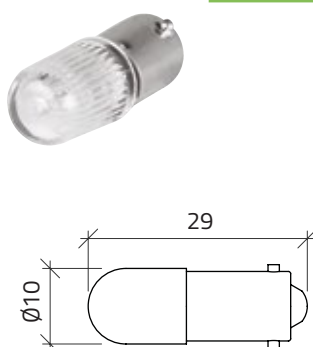
BA9S Lampadine ad incandescenza BA9S Incandescent lamps



Lampadine BA9S ad incandescenza / BA9S incandescent lamps

Voltage	Power	g	n	cod
6V	0,6W	1,3	10	010BA9S6V-0.6W
24V	1,2 w	1,3	10	010BA9S24V-1.2W
24V	3W	1,3	10	010BA9S24V-3W
30V	1,2W	1,3	10	010BA9S30V-1.2W
30V	3W	1,3	10	010BA9S30V-3W
48V	1,2W	1,3	10	010BA9S48V-1.2W
60V	1,2 w	1,3	10	010BA9S60V-1.2W
60V	3W	1,3	10	010BA9S60V-3W
110V	1,9W	1,3	10	010BA9S130V-1.9
220V	2W	1,3	10	010BA9S220V-2W

BA9S Lampadine led / BA9S led lamps



Neon AC

Color	Voltage	Power	g	n	cod
● Arancio / Orange	65V	0,05W	2,3	10	010BA9SN65
● Arancio / Orange	130V	0,1W	2,3	10	010BA9SN110
● Verde / Green	130V	0,1W	2,3	10	010BA9NV110
● Arancio / Orange	240V	0,3W	2,3	10	010BA9SN220
● Verde / Green	240V	0,3W	2,3	10	010BA9NV220
● Arancio / Orange	400V	0,5W	2,3	10	010BA9SN380
● Verde / Green	400V	0,5W	2,3	10	010BA9NV380



032

**COMANDO E SEGNALAZIONE
FILO PANNELLO SM2 Ø30**

**COMMAND AND SIGNALLING
FLUSH-MOUNT SM2 Ø30**

032



SISTEMA MODULARE 30

MODULAR SYSTEM 30

LA SERIE 032

La serie 032 "SISTEMA MODULARE 30" è progettata per un utilizzo sicuro, facile e intuitivo; le soluzioni adottate facilitano la realizzazione di varie combinazioni garantendo risparmio di tempo e risorse. Il corpo in alluminio anodizzato permette il montaggio a filo pannello, donando eleganza e funzionalità al quadro di comando.

Le operazioni di montaggio e manutenzione possono essere svolte con normali utensili e con estrema accessibilità agli operatori.

LA STRUTTURA

Tutti gli operatori possono essere fissati con ghiera metalliche. L'accoppiamento plastica / metallo garantisce serraggi sicuri e permanenti. L'ancoraggio tra operatori ed elementi di contatto o elementi portalampada, è costruito con un profondo incasso poi trattenuto con una molla in acciaio inox.

La struttura degli elementi di contatto è realizzata con estrema robustezza e flessibilità. La componibilità del sistema permette di comporre gli elementi retro pannello in molteplici configurazioni.

La dimensionatura dei blocchi e le sezioni dei sistemi di serraggio garantiscono notevole resistenza alle tensioni da strappo. I contatti degli operatori New Elfin sono caratterizzati dalle grandi dimensioni delle superfici di contatto e dalla particolare conformazione che garantisce performance di efficienza operativa e di durata superiori alla media. I nostri prodotti sono progettati e costruiti con tecnopolimeri Hi-tech. Gli spessori applicati e l'aggiunta di materiale di rinforzo conferiscono a tutte le parti grande robustezza e resistenza.

Le parti metalliche interne sono in acciaio inox o in acciaio trattato, mentre le guarnizioni in gomma resistono a tutte le condizioni climatiche.

DISPOSITIVI D'EMERGENZA

Tutti i sistemi di comando possono essere dotati di un esclusivo dispositivo di arresto d'emergenza, che difende i segnali di arresto di emergenza, mantenendoli coerenti ai requisiti per i quali sono stati progettati.

Il dispositivo neutralizza fattori esterni non controllabili quali forti shock, corrosioni, errori di utilizzo, inadeguata manutenzione ecc.

THE 032 SERIES

The 032 "MODULAR SYSTEM 30" series is designed for a safe, easy, intuitive use; the solutions adopted facilitate the execution of a range of combinations guaranteeing time and resources saving.

Assembly and maintenance can be performed by using standard tools and with easy access to the operators.

The body in anodized aluminum allows a flush mountig, giving elegance and functionality to the control panel

STRUCTURE

All operators can be secured by metal locking rings .

The plastic / metal combination guarantee secure and permanent tightening.

The anchoring mechanism between operators and contact blocks or lampholders consists of a deep recess and a stainless steel spring holding the operator in place.

The structure of the contact blocks is extremely sturdy and flexible.

The modular system allows to compose the rear panel elements in multiple configurations.

The block size and the sections of the tightening systems guarantee considerable tear resistance.

The New Elfin operator contacts feature a large-sized contact surface and a special shape which guarantee above-average efficiency and life.

Our products are designed and manufactured using Hi-tech technopolymers.

The thickness applied and the addition of reinforcement material give all parts great sturdiness and resistance.

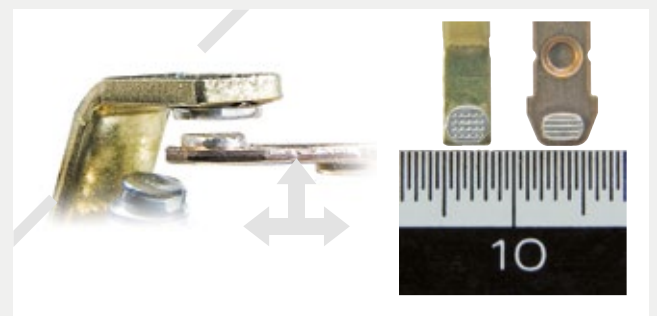
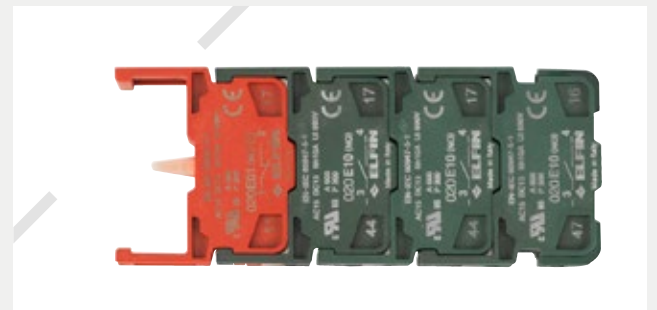
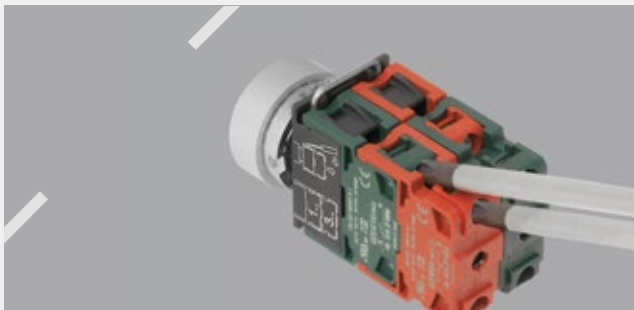
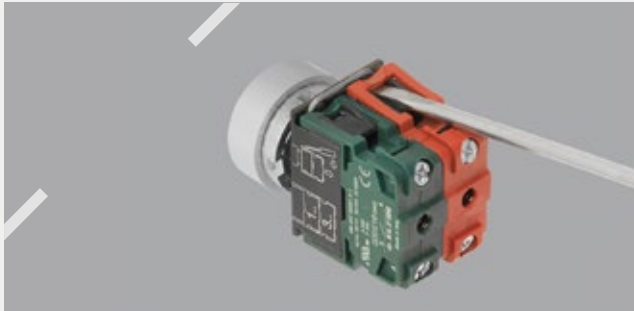
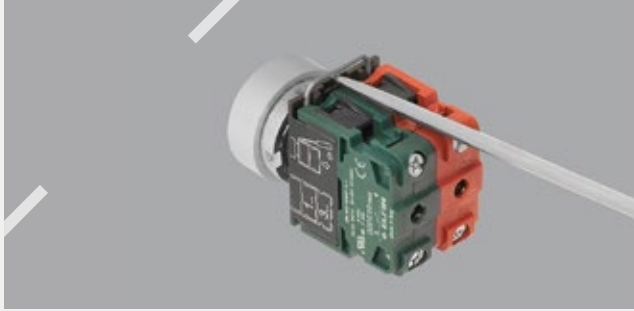
The internal metallic parts are in stainless or treated steel, while the rubber gaskets are resistant to all climatic conditions.

EMERGENCY DEVICES

All command systems can be equipped with an exclusive emergency stop device, which protects the emergency stop signals, keeping them coherent to the design requirements.

The device neutralizes external uncontrollable factors, such as strong shocks, corrosion, incorrect use, unsuitable maintenance, etc.

SISTEMA MODULARE 30 MODULAR SYSTEM 30

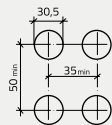


Caratteristiche tecniche

Technical data

Caratteristiche generali

Rispondenza alle norme	EN/IEC 60947-1, EN/IEC 60947-5-1 EN/IEC-5-4, EN/IEC 60947-5-5, EN/ISO 13850, EN/IEC 60204-1, IEC 60364-5-53, UL 508 CSA C22-2 N° 14 UNI CEI EN45545-2 CEI EN61373 EN60077-2
Omologazioni	UL,CSA,EAC
Protezioni climatiche	In esecuzione normale T.C. tutti i climi(40° -UR35%)
Limiti di temperatura	Funzionamento : ≥-25 °C+ ≤+65 °C Stoccaggio -35 °C +70 °C
Posizione di funzionamento	←→↕
Protezione contro scossa elettrica	Classe II secondo IEC 61140
Altitudine d'impiego	≤ 3.000 m
Grado di protezione	IP65 pulsanti normali, luminosi, lampade, selettori, manipolatori.
Dimensioni di montaggio	Pannelli con spessore 1-6 mm Foratura secondo EN/IEC 60947-5-1

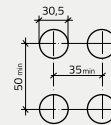


Caratteristiche meccaniche

Resistenza agli urti	50g (durata: 11ms) mezza sinusoide secondo IEC 60068-2-7											
Resistenza alle vibrazioni	16g 40-500 Hz secondo IEC 60068-2-6											
Coppia di serraggio	Ghiera di fissaggio operatori: 2-3 Nm, Viti terminali: 0,8- 1,0 Nm											
Viti terminali	Testa combinata taglio e Phillips Ph2 in acciaio zincato o acciaio inox per versioni E10AU/E01AU Capacità di chiusura : ≥1 x 0,5 mm / ≤2x2,5 mm Capicorda a forcella "spring spade"											
Forze di azionamento	Pulsante con contatto NO: 5N - selettore: 0,15 Nm contatti aggiuntivi NO /NC: 1,5 N											
Funzionamento contatti	NO/NC ad azione lenta con autopulitura a strisciamento- Contatti NC ad apertura positiva ↻ secondo EN/EIC947-5-1 allegato K											
Corsa e commutazioni contatti	<table border="1"> <tr> <td>1mm</td> <td>NC</td> <td rowspan="5"> <input checked="" type="checkbox"/> Normalmente Chiuso <input type="checkbox"/> Normalmente Aperto </td> </tr> <tr> <td>3,6mm</td> <td>NO</td> </tr> <tr> <td>2,5mm</td> <td>NCR</td> </tr> <tr> <td>1,9mm</td> <td>NOA</td> </tr> <tr> <td>0</td> <td>1 2 3 4 5</td> </tr> </table>	1mm	NC	<input checked="" type="checkbox"/> Normalmente Chiuso <input type="checkbox"/> Normalmente Aperto	3,6mm	NO	2,5mm	NCR	1,9mm	NOA	0	1 2 3 4 5
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3,6mm	NO											
2,5mm	NCR											
1,9mm	NOA											
0	1 2 3 4 5											
Forza di apertura positiva	Pulsante normale: 5 N Pulsante a fungo: 40 N											
Velocità di azionamento	Min. 10 mm / sec Max. 20mm / sec											
Durata meccanica	Pulsanti normali, luminosi: 3 milioni di manovre. Selettori, manipolatori: 1 milione di manovre. Emergenza fungo aggancio e stabili: 500.000 manovre											
Grado di protezione	Morsetti IP20 secondo IEC60529											
Identificazione morsetti	1° cifra: ordine di montaggio su flangia di connessione - 2° cifra: funzione contatto su elemento 1-2 NC / 3 4 NO											

General features

Standards compliance	EN/IEC 60947-1, EN/IEC 60947-5-1 EN/IEC-5-4, EN/IEC 60947-5-5, EN/ISO 13850, EN/IEC 60204-1, IEC 60364-5-53, UL 508 CSA C22-2 N° 14 UNI CEI EN45545-2 CEI EN61373 EN60077-2
Approvals	UL,CSA,EAC
Climatic protection	Normal operation for all climates (40° - RH35%)
Temperature ranges	Operating: ≥-25 °C+ ≤+65 °C Storage -35 °C +70 °C
Operating positions	←→↕
Electrical shock protection	Class II in compliance with IEC 61140
Operating altitude	≤ 3.000 m
Protection degree	IP65 normal, illuminated push buttons lamps, selector switches, joysticks .
Mounting dimensions	1-6 mm panels. Drilling in compliance with EN/IEC 60947-5-1



Mechanical features

Shock resistance	50g (duration:11ms) half sine wave in compliance with IEC 60068-2-7											
Vibration resistance	16g 40-500 Hz in compliance with IEC 60068-2-6											
Tightening torque	Operator locking ring: 2-3 Nm. Terminal screws: 0.8- 1.0 Nm											
Terminal screws	Combined slot and Phillips Ph2 head, zinc plated or stainless steel for E10AU /E01AU. Connection capacity : ≥1 x 0.5 mm / ≤2x2.5 mm Fork spring spade terminals											
Operating forces	Push-button with NO contact: 5N - selector switch: 0.15 Nm, additional NO/NC contacts: 1.5 N											
Contact operation	NO/NC slow action with wiping, self-cleaning, NC contacts, positive opening ↻ in compliance with EN/EIC947-5-1, annex K											
Contact travel and switching points	<table border="1"> <tr> <td>1mm</td> <td>NC</td> <td rowspan="5"> <input checked="" type="checkbox"/> Normally Closed <input type="checkbox"/> Normally Open </td> </tr> <tr> <td>3,6mm</td> <td>NO</td> </tr> <tr> <td>2,5mm</td> <td>NCR</td> </tr> <tr> <td>1,9mm</td> <td>NOA</td> </tr> <tr> <td>0</td> <td>1 2 3 4 5</td> </tr> </table>	1mm	NC	<input checked="" type="checkbox"/> Normally Closed <input type="checkbox"/> Normally Open	3,6mm	NO	2,5mm	NCR	1,9mm	NOA	0	1 2 3 4 5
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3,6mm	NO											
2,5mm	NCR											
1,9mm	NOA											
0	1 2 3 4 5											
Positive opening force	Normal push-button: 5 N Mushroom push-button: 40 N											
Operating speed	Min. 10 mm / sec Max. 20mm / sec											
Mechanical life	Normal,illuminated push-buttons: 3 million cycles. Selector switches, joysticks: 1 million cycles. Emergency stop mushroom push-buttons, latching or maintained: 500.000 cycles											
Degree of protection	Terminals IP20 in compliance with IEC60529											
Identification of terminals	1 st digit: assembling order on connection flange 2 nd digit: element contact function 1-2 NC / 3-4 NO											



Caratteristiche tecniche

Technical data

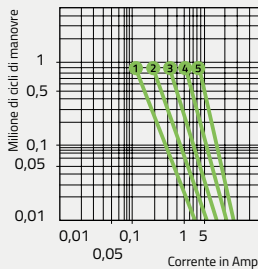
Caratteristiche elettriche

Tensione nominale isolamento	Ui 690 V grado di inquinamento 3 secondo EN/IEC 60947-1																																												
Tensione di tenuta agli impulsi	Uimp 4KV secondo EN/IEC 60947-1																																												
Corrente nominale termica	Ith10A secondo EN/IEC 60947-5-1																																												
Protezione corto circuito	Fusibili DIAZED 10A classe d'intervento gL/gG forma D II secondo IEC 60269-1																																												
Materiale contatti	Pastiglie di contatto in Ag 1000/1000 per versioni Au: Ag 1000/1000, dorati																																												
Categorie nominali d'impiego	Secondo EN/IEC 947-5-1 / UL 508 <table border="1"> <thead> <tr> <th colspan="2">Cat AC15 / A600</th> <th colspan="2">Cat.DC13 / P300</th> </tr> <tr> <th>Ue V</th> <th>Ie A</th> <th>Ue V</th> <th>Ie A</th> </tr> </thead> <tbody> <tr> <td>24</td> <td>10</td> <td>24</td> <td>5</td> </tr> <tr> <td>48</td> <td>8</td> <td>48</td> <td>2.7</td> </tr> <tr> <td>60</td> <td>6</td> <td>60</td> <td>2</td> </tr> <tr> <td>110</td> <td>6</td> <td>110</td> <td>1.1</td> </tr> <tr> <td>220</td> <td>3</td> <td>220</td> <td>0.55</td> </tr> <tr> <td>380</td> <td>2</td> <td></td> <td></td> </tr> <tr> <td>400</td> <td>1.5</td> <td></td> <td></td> </tr> <tr> <td>500</td> <td>1.5</td> <td></td> <td></td> </tr> <tr> <td>600</td> <td>1.2</td> <td></td> <td></td> </tr> </tbody> </table>	Cat AC15 / A600		Cat.DC13 / P300		Ue V	Ie A	Ue V	Ie A	24	10	24	5	48	8	48	2.7	60	6	60	2	110	6	110	1.1	220	3	220	0.55	380	2			400	1.5			500	1.5			600	1.2		
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Durata elettrica

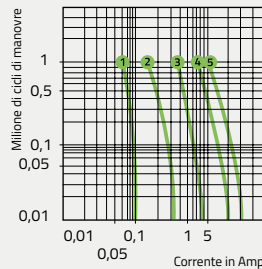
Corrente alternata 50-60 Hz cat AC15

- 1 500 V
- 2 380 V
- 3 220 V
- 4 127 V
- 5 12/48 V



Corrente continua cat DC 13

- 1 400 V
- 2 220 V
- 3 110 V
- 4 48 V
- 5 24/12 V



Affidabilità elettrica (percentuale di guasto)

Secondo EN/IEC 947-5-4
 Contatti 020 E10/E01 12V-5mA <10⁻⁸
 Contatti 020 E10AU/E01AU 5V-1mA <10⁻⁷

Porta lampada operatori luminosi

Attacco BA9S: lampade incandescenza, neon, multiled. Potenze raccomandate: lampade 2,6 W pulsanti, selettori 1,2 W

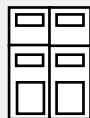
Durata lampade

Incandescenza ≤1000h-Neon ≤3000h
 Multiled ≥50.000h

Configurazione contatti



Max N° 2 CONTATTI
 Selettori luminosi.



Max N° 4 CONTATTI
 Pulsanti stabili, pulsanti doppi, manipolatori, emergenza ad aggancio.



Max 6 CONTATTI
 Pulsanti non luminosi, pulsanti luminosi, pulsanti a fungo momentanei, selettori

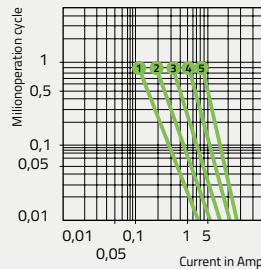
Electrical features

Rated insulation voltage	Ui 690 V pollution degree 3 in compliance with EN/IEC 60947-1																																												
Impulse withstand voltage	Uimp 4KV in compliance with EN/IEC 60947-1																																												
Rated thermal current	Ith10A in compliance with EN/IEC 60947-5-1																																												
Short circuit protection	Fuses DIAZED 10 A operating class gLgG shape D II in conformity with IEC 60269-1																																												
Contact material	Contact pads on Ag 1000/1000 for models Au: Ag 1000/1000, gold plated																																												
Electrical ratings	In compliance with EN/IEC 947-5-1 / UL 508 <table border="1"> <thead> <tr> <th colspan="2">Cat AC15 / A600</th> <th colspan="2">Cat.DC13 / P300</th> </tr> <tr> <th>Ue V</th> <th>Ie A</th> <th>Ue V</th> <th>Ie A</th> </tr> </thead> <tbody> <tr> <td>24</td> <td>10</td> <td>24</td> <td>5</td> </tr> <tr> <td>48</td> <td>8</td> <td>48</td> <td>2.7</td> </tr> <tr> <td>60</td> <td>6</td> <td>60</td> <td>2</td> </tr> <tr> <td>110</td> <td>6</td> <td>110</td> <td>1.1</td> </tr> <tr> <td>220</td> <td>3</td> <td>220</td> <td>0.55</td> </tr> <tr> <td>380</td> <td>2</td> <td></td> <td></td> </tr> <tr> <td>400</td> <td>1.5</td> <td></td> <td></td> </tr> <tr> <td>500</td> <td>1.5</td> <td></td> <td></td> </tr> <tr> <td>600</td> <td>1.2</td> <td></td> <td></td> </tr> </tbody> </table>	Cat AC15 / A600		Cat.DC13 / P300		Ue V	Ie A	Ue V	Ie A	24	10	24	5	48	8	48	2.7	60	6	60	2	110	6	110	1.1	220	3	220	0.55	380	2			400	1.5			500	1.5			600	1.2		
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Electrical durability

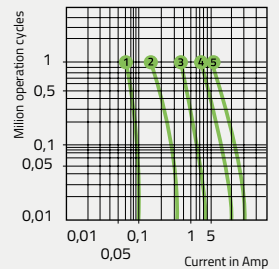
Alternated current 50-60 Hz cat AC15

- 1 500 V
- 2 380 V
- 3 220 V
- 4 127 V
- 5 12/48 V



Direct current cat DC 13

- 1 400 V
- 2 220 V
- 3 110 V
- 4 48 V
- 5 24/12 V



Electrical reliability (failure percentage)

In compliance with EN/IEC 947-5-4
 Contact 020 E10/E01 12V-5mA <10⁻⁸
 Contact 020 E10AU/E01AU 5V-1mA <10⁻⁷

Lamp holder illuminated operators

BA9S socket: incandescent, neon, multiled lamps
 Recommended power: lamps 2.6W push-buttons, selector switches 1.2W

Lamp life

Incandescent ≤1000h-Neon ≤3000h
 Multiled ≥50.000h

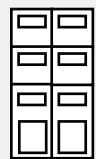
Contact configuration



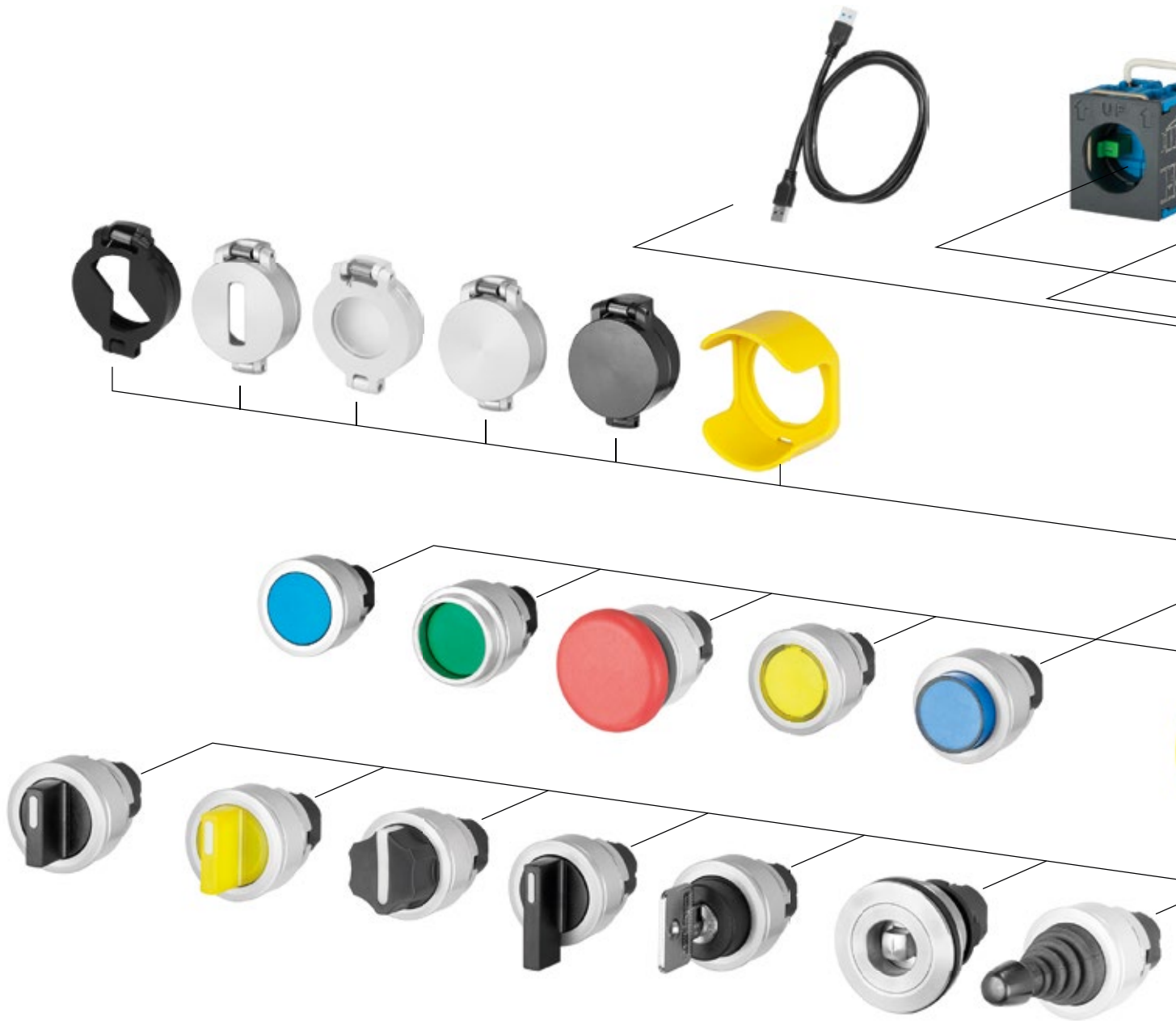
Max 2 CONTACTS
 Illuminated selector switches.

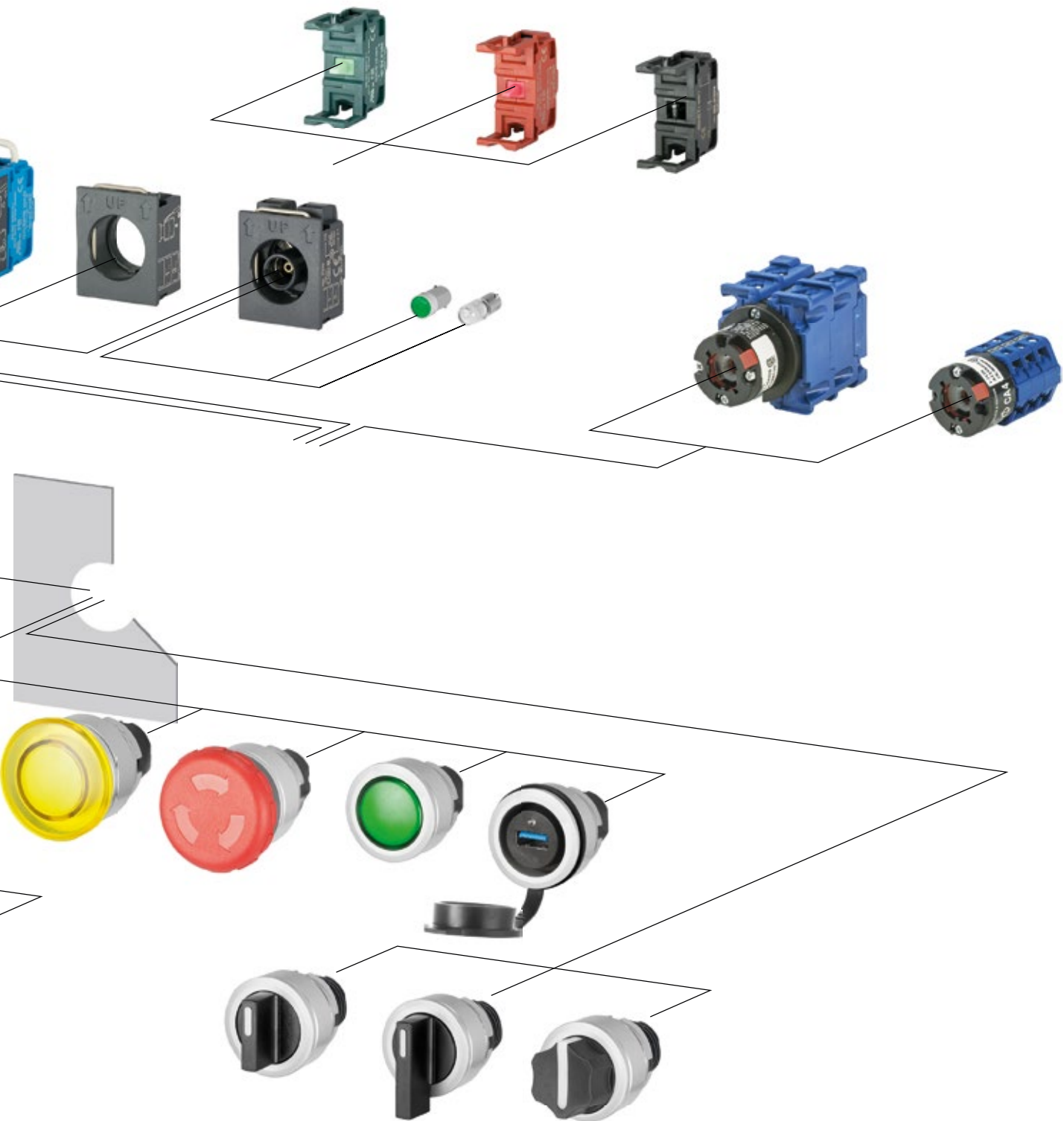


Max 4 CONTACTS
 Maintained push-buttons, twin push-buttons, joysticks latching emergency push-buttons.



Max 6 CONTACTS
 Metal bezel series: Non-illuminated push-buttons, momentary mushroom push-buttons, selector switches.





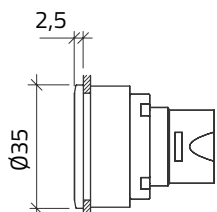
Pulsanti normali Ø30

Normal push-buttons Ø30

Pulsanti normali / Normal push-buttons

g

cod

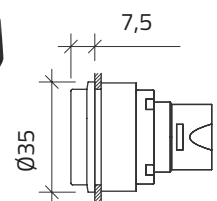


Pulsanti con guardia / Guarded push-buttons

● Nero / Black	34	030PPFIN
● Rosso / Red	34	030PPFIR
● Verde / Green	34	030PPFIV
● Giallo / Yellow	34	030PPFIG
● Blu / Blue	34	030PPFIBL
○ Bianco / White	34	030PPFIB

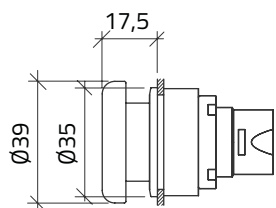
Stabili / Maintained

● Nero / Black	34	030PPFIN
● Rosso / Red	34	030PPFIR
● Verde / Green	34	030PPFIV
● Giallo / Yellow	34	030PPFIG
● Blu / Blue	34	030PPFIBL
○ Bianco / White	34	030PPFIB



Pulsanti con guardia estesa / Push-buttons with extended guard

● Nero / Black	37	030PFGEN
● Rosso / Red	37	030PFGER
● Verde / Green	37	030PFGEV
● Giallo / Yellow	37	030PFGEY
● Blu / Blue	37	030PFGEBL
○ Bianco / White	37	030PFGEB



Pulsanti a fungo Ø40 / Mushroom push-buttons Ø40

● Nero / Black	48	030PFAFMN
● Rosso / Red	48	030PFAFMR
● Verde / Green	48	030PFAFMV
● Giallo / Yellow	48	030PFAFMG

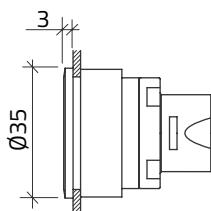
Pulsanti luminosi Ø30

Illuminated push-buttons Ø30

Pulsanti luminosi / Illuminated push-buttons

g

cod

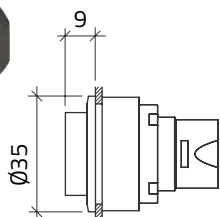


Pulsanti con guardia / Guarded push-buttons

● Rosso / Red	34	030PFLIR
● Verde / Green	34	030PFLIV
● Giallo / Yellow	34	030PFLIG
● Blu / Blue	34	030PFLIBL
○ Trasparente / Clear	34	030PFLII

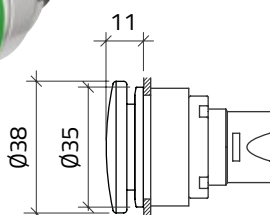
Stabili / Maintained

● Rosso / Red	34	030PPFLIR
● Verde / Green	34	030PPFLIV
● Giallo / Yellow	34	030PPFLIG
● Blu / Blue	34	030PPFLIBL
○ Trasparente / Clear	34	030PPFLII



Pulsanti sporgenti / Projecting push-buttons

● Rosso / Red	34	030PFLSR
● Verde / Green	34	030PFLSV
● Giallo / Yellow	34	030PFLSG
● Blu / Blue	34	030PFLSBL
○ Trasparente / Clear	34	030PFLSI



Pulsanti a fungo Ø38 / Mushroom push-buttons Ø38

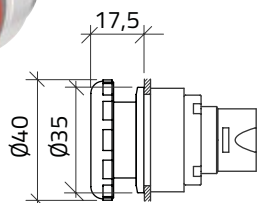
● Rosso / Red	38	030PFAFLR
● Verde / Green	38	030PFAFLV
● Giallo / Yellow	38	030PFAFLG

Pulsanti di emergenza Ø30

Emergency stop push-buttons Ø30

Pulsanti di emergenza a fungo Ø40

Emergency stop mushroom push-buttons Ø40



Aggancio rapido (sgancio rotazione)

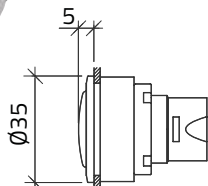
Fast latching (rotation release)

● Nero / Black	49	030PFAAN
● Rosso / Red	49	030PFAAR

g

cod

Lampade spia Ø30 Pilot lights Ø30



Lampade spia / Pilot lights

	g	cod
● Rosso / Red	33	030LFIR
● Verde / Green	33	030LFIV
● Giallo / Yellow	33	030LFIG
● Blu / Blue	33	030LFIBL
○ Bianco / White	33	030LFIB
● Arancio / Orange	33	030LFIA

Selettori a manopola Ø30 Knob selector switches Ø30

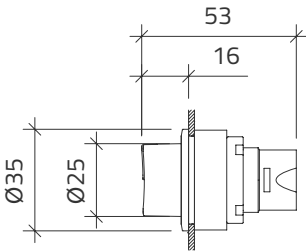
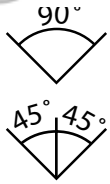
Cercare la combinazione di schemi a pag. 20 / See diagram combination on page 20

032

2 posizioni / 2 positions

g

cod



CAM A

39

030SFMAN



CAM B

39

030SFMBN



39

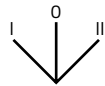
030SFMBND

3 posizioni / 3 positions

g

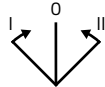
cod

CAM O



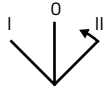
39

030SFMON



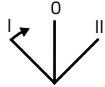
39

030SFMONC



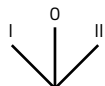
39

030SFMOND



39

030SFMONS



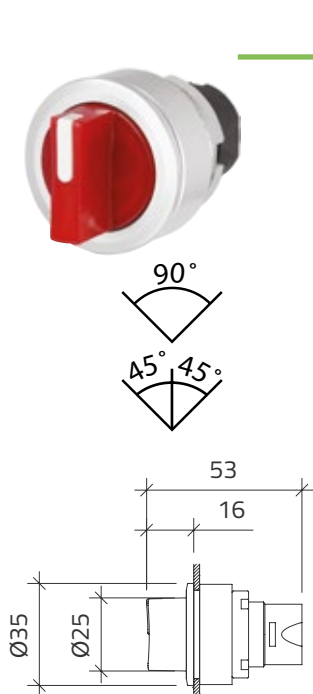
CAM T

39

030SFMTN

Selettori luminosi a manopola Ø30 Illuminated selector switches Ø30

Cercare la combinazione di schemi a pag. 20 / See diagram combination on page 20



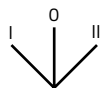
2 posizioni / 2 positions



CAM A

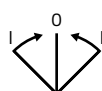
	g	cod
○ Bianco / White	36	030SFMLAB
● Rosso / Red	36	030SFMLAR
● Verde / Green	36	030SFMLAV
● Giallo / Yellow	36	030SFMLAG
● Blu / Blue	36	030SFMLABL

3 posizioni / 3 positions



CAM O

	g	cod
○ Bianco / White	36	030SFMLOB
● Rosso / Red	36	030SFMLOR
● Verde / Green	36	030SFMLOV
● Giallo / Yellow	36	030SFMLOG
● Blu / Blue	36	030SFMLOBL



CAM O

	g	cod
○ Bianco / White	36	030SFMLOBC
● Rosso / Red	36	030SFMLORC
● Verde / Green	36	030SFMLOVC
● Giallo / Yellow	36	030SFMLOGC
● Blu / Blue	36	030SFMLOBLC

Selettori luminosi a manopola Ø30

Illuminated knob selector switches Ø30

Cercare la combinazione di schemi a pag. 20 / See diagram combination on page 20



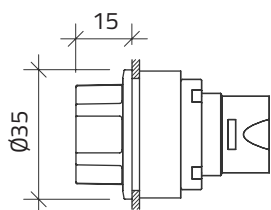
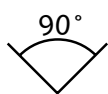
2 posizioni / 2 positions

g

cod

CAM A

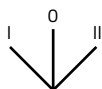
○ Bianco / White	36	030SFPLAB
● Rosso / Red	36	030SFPLAR
● Verde / Green	36	030SFPLAV
● Giallo / Yellow	36	030SFPLAG



3 posizioni / 3 positions

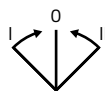
g

cod



CAM O

○ Bianco / White	36	030SFPLOB
● Rosso / Red	36	030SFPLOR
● Verde / Green	36	030SFPLOV
● Giallo / Yellow	36	030SFPLOG



CAM O

○ Bianco / White	36	030SFPLOBC
● Rosso / Red	36	030SFPLORC
● Verde / Green	36	030SFPLOVC
● Giallo / Yellow	36	030SFPLOGC

Selettori a leva Ø30 Lever selector switches Ø30

Cercare la combinazione di schemi a pag. 20 / See diagram combination on page 20

		2 posizioni / 2 positions		
		g	cod	
	<p>CAM A</p>	39	030SFLAN	
	<p>CAM B</p>	39	030SFLBN	
		39	030SFLBND	
			3 posizioni / 3 positions	
			g	cod
	<p>CAM O</p>	39	030SFLON	
<p>CAM T</p>	39	030SFLTN		

Commutatore rotativo 10A Ø30

Rotary selector switches 10A Ø30

Commutatore rotativo a leva corta

Short lever rotary selector switch



Schema 401 / Diagram 401

g

cod

59

030SFMNSC401

Commutatore rotativo a leva lunga

Long lever rotary selector switch



Schema 401 / Diagram 401

g

cod

59

030SFLNSC401

Commutatore rotativo a manopola

Knob rotary selector switch



Schema 401 / Diagram 401

g

cod

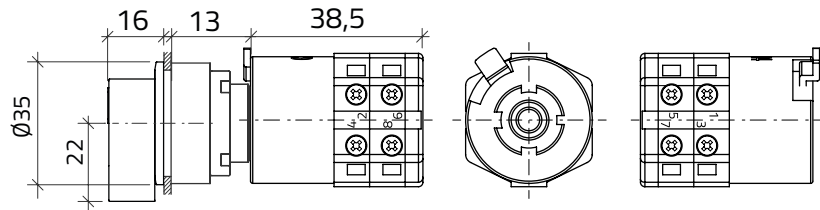
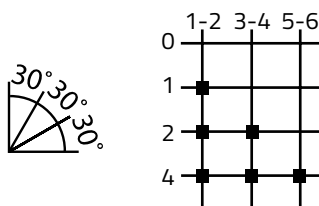
59

030SFPNSC401

ESEMPIO SCHEMA 401

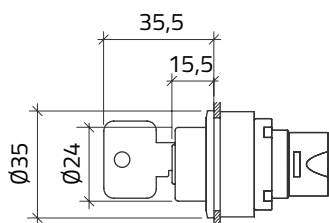
EXAMPLE DIAGRAM 401

Per altri schemi consultare il nostro ufficio commerciale / For further diagram contact our commercial office



Selettori a chiave Ø30 Key selector switches Ø30

Cercare la combinazione di schemi a pag. 20 / See diagram combination on page 20



2 posizioni / 2 positions

g	k	cod	k	cod
CAM A				
82		030SFCA		030SFCA2
82		030SFCA4		
CAM B				
82		030SFCB		030SFCB2
82		030SFCBD		

3 posizioni / 3 positions

g	k	cod	k	cod
CAM O				
82		030SFCO		030SFCO2
82		030SFCO3		030SFCO4
82		030SFCOC		
82		030SFCOD		




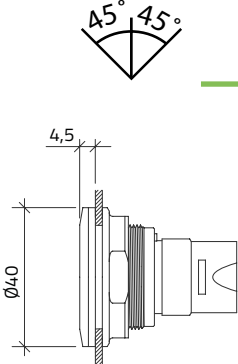
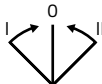
Chiavi speciali Special key



c	suf
Chiave standard 3095, per chiavi speciali far seguire al codice del selettore il suffisso Standard key 3095, for special keys complete the selector code with the suffix	
● Nero / Black	73034 K34
● Rosso / Red	73037 K37
● Giallo / Yellow	73033 K33
● Blu / Blue	73038 K38
● Arancio / Orange	73040 K40
	3353 K53
	9901 K01
	9902 K02
	9903 K03
	9904 K04
	9905 K05
	9910 K10
	9916 K16
	9919 K19

Selettori a chiave quadra Ø30 Square key selector switches Ø30

Cercare la combinazione di schemi a pag. 20 / See diagram combination on page 20

		2 posizioni / 2 positions	
		g	cod
	 <p>CAM B</p>	110	030SFKQB
		110	030SFKQBD
		3 posizioni / 3 positions	
		g	cod
	 <p>CAM O</p>	110	030SFKQOC

Combinazione di schemi Ø30 Diagram combination Ø30

			Schema Diagram		Contatti flangianti Flanged contacts
	CAM A	13 — 14			020E10 020G
	CAM A	21 — 22 13 — 14			020E01 020E10 020G
	CAM B	21 — 22 13 — 14			020E01 020E10 020G
	CAM O	23 — 24 13 — 14			020E10 020E10 020G
	CAM T	21 — 22 13 — 14			020E01 020E10 020G

Presa USB filopannello 3.0 Ø30 3.0 flushmount USB socket Ø30

Presa USB 3.0
3.0 USB socket

g

cod



Tipo A-A (femmina-femmina)
A-A type (female-female)

● Nero / Black

39

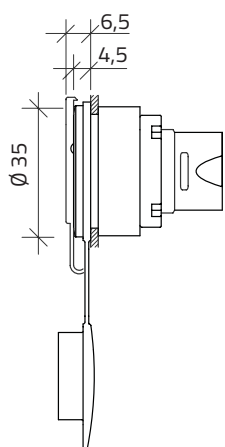
030PFUSB

Tipo C-A (femmina-femmina)
C-A type (female-female)

● Nero / Black

39

030PFUSBC



Cavo USB USB cable

Cavo tipo M-M (maschio-maschio) Cable type M-M (male-male)



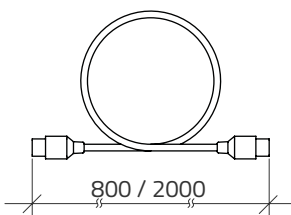
mt 0,8
mt 0,8
● Nero / Black

g

cod

37

010CUSBMM8



mt 2
mt 2
● Nero / Black

77

010CUSBMM20

Cavo maschio tipo A - libero Cable male type A - free



mt 0,8
mt 0,8
● Nero / Black

g

cod

37

010CUSBML8

Manipolatori Ø30 Joysticks Ø30

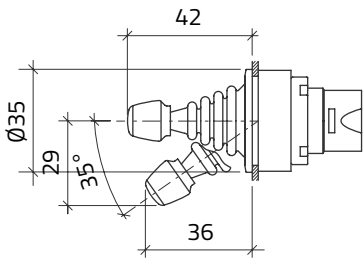
2 posizioni / 2 positions

g

cod



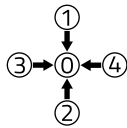
1-2	permanenti/maintained	40	030MF2P
1-2	temporanee/spring return	40	030MF2T



4 posizioni / 4 positions

g

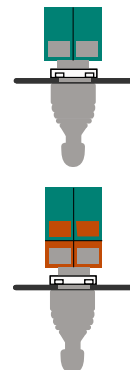
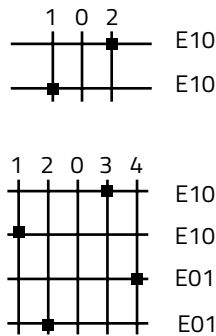
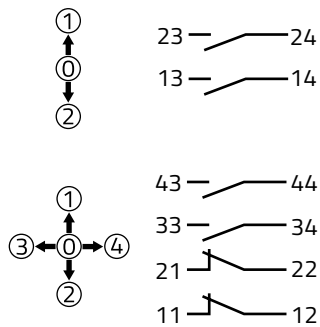
cod



1-2-3-4	permanenti/maintained	40	030MF4P
1-2-3-4	temporanee/spring return	40	030MF4T

Schema Diagram

Contatti flangiati Flanged contacts


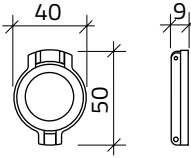

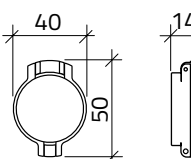

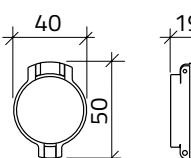

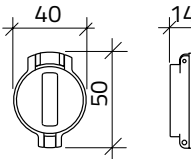

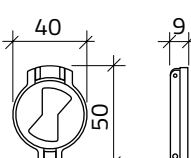

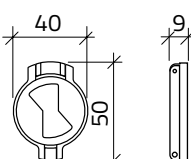

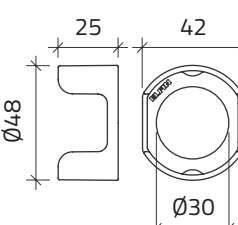


020E10
020E10
020G

020E10
020E10
020E01
020E01
020G

Accessori Ø30 Accessories Ø30

Protezioni in alluminio piombabili Sealable aluminum covers

			g	cod
		Per pulsanti / For push-buttons Alluminio / Aluminium	12	030PFPLPA
		Per pulsanti / For push-buttons Alluminio / Aluminium ● Nero / Black	15 15	030PFPPA 030PFPP
		Per pulsanti sporgenti / For projecting push-buttons Alluminio / Aluminium ● Nero / Black	19 19	030PFPSPA 030PFPS
		Per selettori con blocco / For selector switches with lock Alluminio / Aluminium ● Nero / Black	14 14	030PFPSBA 030PFPS
		Per abilitazione selettore a DX / For selector enable to RH ● Nero / Black	12	030PFPS2P-0D
		Per abilitazione selettore a SX / For selector enable to SH ● Nero / Black	12	030PFPS2P-S0
		Ghiere di protezione pulsanti a fungo Guards for mushroom push-buttons ● Grigio / Grey ● Giallo / Yellow		030GPF42 030GPF42G

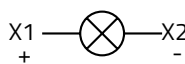
Portalampana BA9S Lampholders BA9S

Portalampana / Lampholders

g n cod



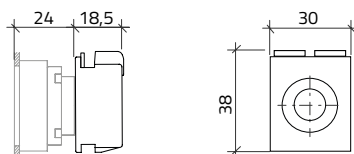
~ = Alimentazione diretta / Direct supply



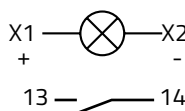
IEC: BA9S 380V. max 2W esclusa / excluded
Valori certificati IMQ / IMQ certified values

UL - CSA: BA9S 250V. max 2W esclusa / excluded

16 10 020PD9



~ = Alimentazione diretta / Direct supply

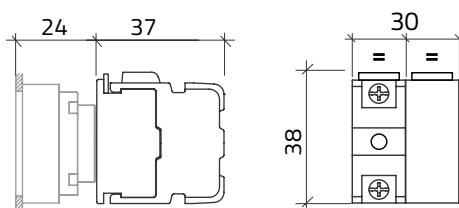


IEC: BA9S 380V. max 2W esclusa / excluded
Valori certificati IMQ / IMQ certified values

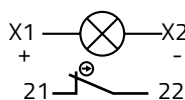
UL - CSA: BA9S 250V. max 2W esclusa / excluded

1 NO Aperto / Open

26 5 020PD910



~ = Alimentazione diretta / Direct supply

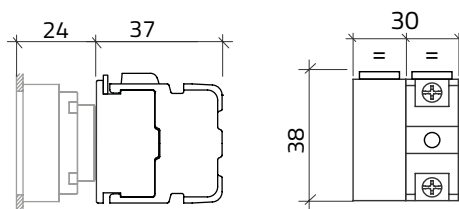


IEC: BA9S 380V. max 2W esclusa / excluded
Valori certificati IMQ / IMQ certified values

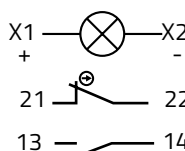
UL - CSA: BA9S 250V. max 2W esclusa / excluded

1 NC Chiuso / Closed

26 5 020PD901



~ = Alimentazione diretta / Direct supply



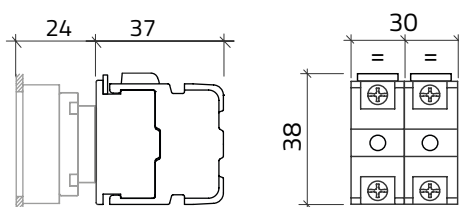
IEC: BA9S 380V. max 2W esclusa / excluded
Valori certificati IMQ / IMQ certified values

UL - CSA: BA9S 250V. max 2W esclusa / excluded

1 NC Chiuso / Closed

1 NO Aperto / Open

26 5 020PD911



Portalampada BA9S Lampholders BA9S

Portalampada / Lampholders

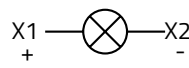
g

n

cod

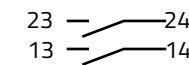


Alimentazione diretta / Direct supply



IEC: BA9S 380V, max 2W *esclusa / excluded*
Valori certificati IMQ / IMQ certified values

UL - CSA: BA9S 250V, max 2W *esclusa / excluded*



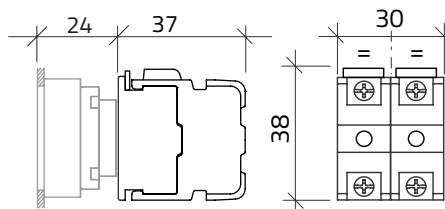
1 NO Aperto / Open

1 NO Aperto / Open

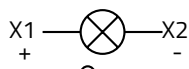
37

5

020PD920



Alimentazione diretta / Direct supply



IEC: BA9S 400V, max 2W

UL - CSA: BA9S 250V, max 2W
lampadina non inclusa / bulb not included

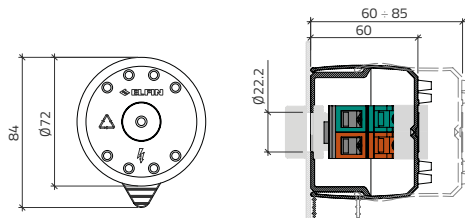


1 NC Chiuso / Closed

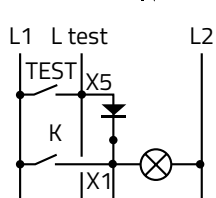
1 NO Aperto / Open

95

020PD911CP



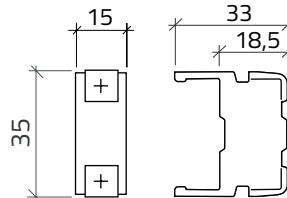
Elemento prova lampada / Lamp test module



Per controllo di funzionamento lampade
Checking lamps for good operation

16

020ET

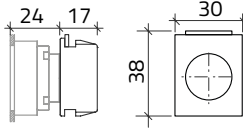


Elementi di contatto

Contact blocks

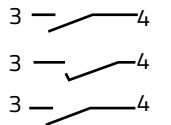
Elementi di contatto / Contact blocks

g **n** **cod**



Flangia per contatti / Flange for contacts

8 10 **020G**



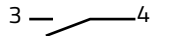
1 NO

10 10 **020E10**



1 NO Chiusura anticipata / 1 NO Early make

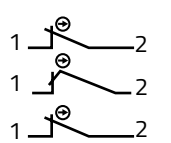
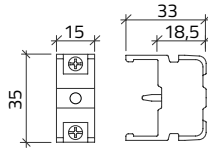
10 5 **020E10A**



1 NO

10 5 **020E10AU**

Contatti dorati e viti terminali inox. Idoneo per ambienti con fenomeni di corrosione
Gold-plated contacts and stainless steel terminal screws suitable for corrosive environment



1 NC

10 10 **020E01**



1 NC Apertura ritardata / 1 NC Late break

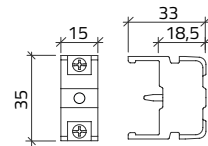
10 5 **020E01R**



1 NC

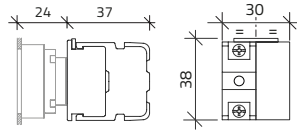
10 5 **020E01AU**

Contatti dorati e viti terminali inox. Idoneo per ambienti con fenomeni di corrosione
Gold-plated contacts and stainless steel terminal screws suitable for corrosive environment



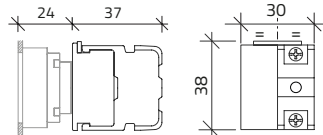
1 NO con flangia / 1NO with flange

19 5 **020GE10**



1 NC con flangia / 1NC with flange

19 5 **020GE01**




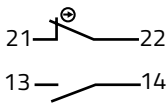
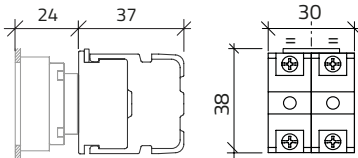

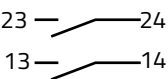
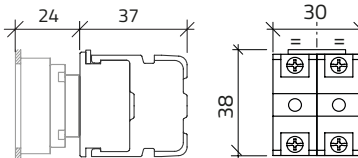

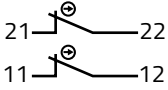
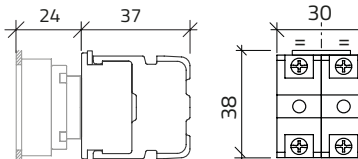

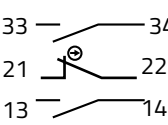
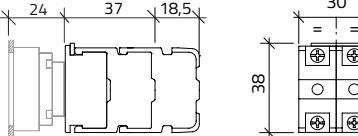

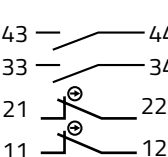
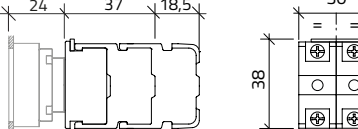
1 NO con flangia / 1NO with flange
1 NC con flangia / 1NC with flange

50 **020GE22**

Elementi di contatto

Contact blocks

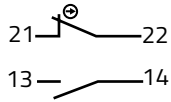
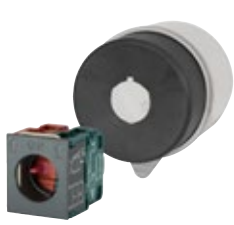
Elementi di contatto / Contact blocks

			g	n	cod
	 <p>21 — 22 13 — 14</p>	<p>1 NC con flangia / 1NC with flange 1 NO con flangia / 1NO with flange</p>	19	5	020GE11
					
	 <p>23 — 24 13 — 14</p>	<p>1 NO con flangia / 1NO with flange 1 NO con flangia / 1NO with flange</p>	19	5	020GE20
					
	 <p>21 — 22 11 — 12</p>	<p>1 NC con flangia / 1NC with flange 1 NC con flangia / 1NC with flange</p>	19	5	020GE02
					
	 <p>33 — 34 21 — 22 13 — 14</p>	<p>2 NO con flangia / 2NO with flange 1 NC con flangia / 1NC with flange</p>	50		020GE21
					
	 <p>43 — 44 33 — 34 21 — 22 11 — 12</p>	<p>2 NO con flangia / 2NO with flange 2 NC con flangia / 2NC with flange</p>	50		020GE22
					

Elementi di contatto

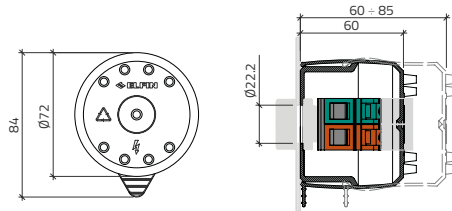
Contact blocks

Elementi di contatto / Contact blocks

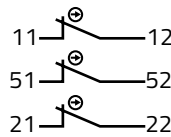


1 NC con flangia, con cappuccio di protezione / 1NC with flange, with protective cap
 1 NO con flangia con cappuccio di protezione / 1NO with flange with protective cap

g n cod
 88 5 020GE11CP



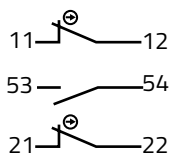
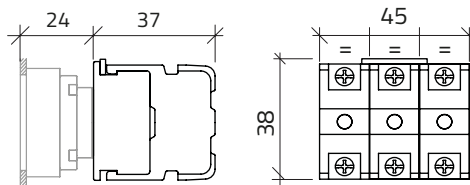
Elementi di contatto affiancati / Flanked contact blocks



3 NC affiancati con flangia 3 sedi
 3NC flanked with 3-slot flange

g n cod

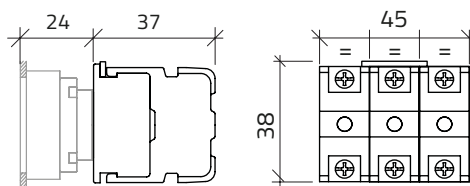
x 5 020G3E03



1 NO + 2 NC affiancati con flangia 3 sedi
 1 NO + 2 NC flanked with 3-slot flange

g n cod

x 5 020G3E12



Elementi di contatto

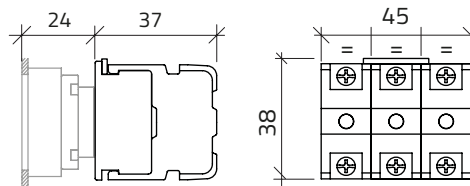
Contact blocks

Elementi di contatto affiancati / Flanked contact blocks



13 — 14 2 NO + 1 NC affiancati con flangia 3 sedi
 51 — 52 2 NO + 1 NC flanked with 3-slot flange

23 — 24

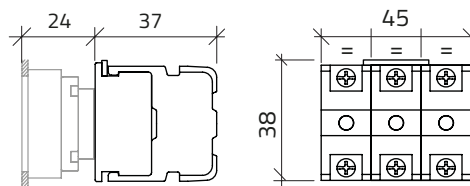


g	n	cod
x	5	020G3E21



13 — 14 3 NO affiancati con flangia 3 sedi
 53 — 54 3 NO flanked with 3-slot flange

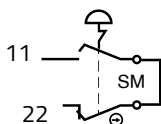
23 — 24



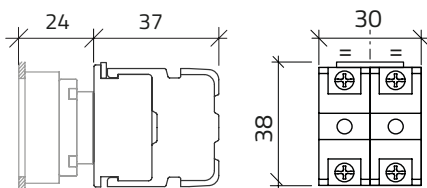
x	5	020G3E30
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Elementi di contatto Contact blocks

Elementi di contatto con automonitoraggio Contact blocks with self-monitoring



Elemento di contatto con automonitoraggio
Contact block with self-monitoring



g

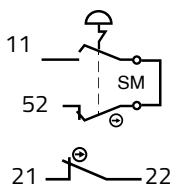
n

cod

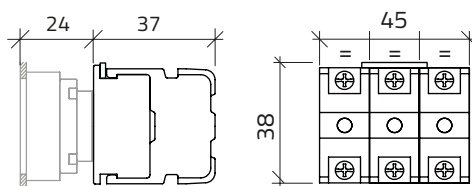
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5 **020GE01AM**

Elementi di contatto affiancati con automonitoraggio Flanked contact blocks with self-monitoring



1 NC affiancato con automonitoraggio
1 NC flanked with self-monitoring



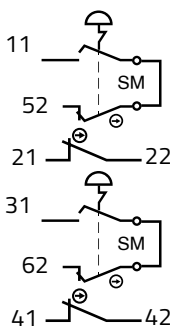
g

n

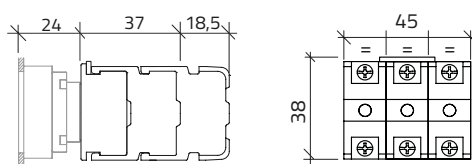
cod

x

020G3E02AM



2 NC affiancati con automonitoraggio
2 NC flanked with self-monitoring



x


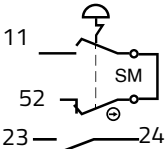
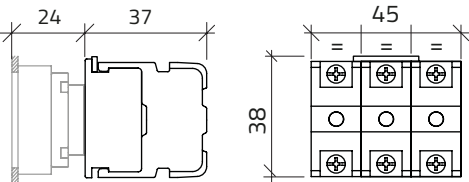

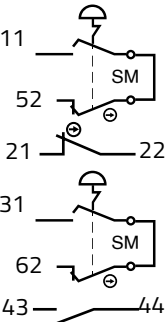
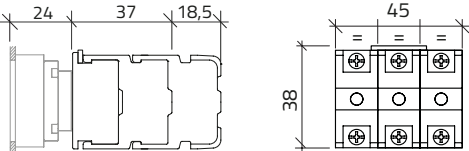

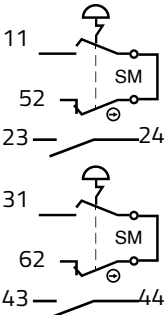
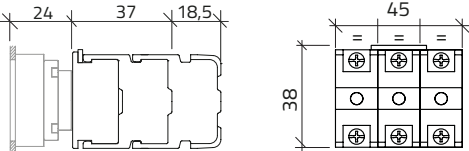
020G3E04AM

Elementi di contatto

Contact blocks

Elementi di contatto affiancati con automonitoraggio

Flanked contact blocks with self-monitoring

			g	n	cod
		<p>1 NO affiancato con automonitoraggio 1 NO flanked with self-monitoring</p>	x		020G3E11AM
					
		<p>1 NO + 1 NC affiancati con automonitoraggio 1 NO + 1 NC flanked with self-monitoring</p>	x		020G3E13AM
					
		<p>1 NO + 1 NC affiancati con automonitoraggio 1 NO + 1 NC flanked with self-monitoring</p>	x		020G3E22AM
					



040-080

**CONTENITORI CARATTERISTICHE
TECNICHE**

**ENCLOSURES
TECHNICAL DATA**

040 080





ESTETICA

La New Elfin nella realizzazione dei suoi progetti tiene in particolare conto, ovviamente oltre agli aspetti tecnici, il design e l'estetica, sempre in funzione della perfetta integrazione con le apparecchiature in cui i contenitori andranno ad essere installati. Inoltre ci sono grandi possibilità di personalizzazione dei prodotti su specifiche dei clienti.

THE AESTHETICS

New Elfin, while projecting, obviously considers all the technical aspects but also the design and the aesthetics, so as to always perfectly integrate the equipment that the enclosure will house. Moreover, there are many possibilities to customize the products according to customer's specifications.

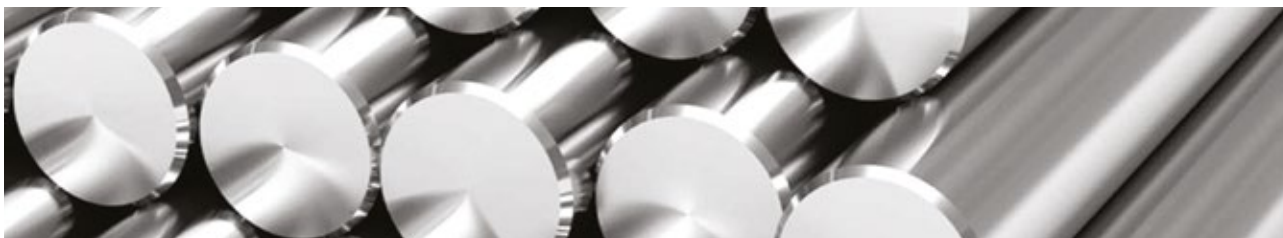


ALLUMINIO

Contenitori robusti e leggeri adatti a tutte le applicazioni, si dividono in: **M4** collaudata serie di contenitori previsti in svariate realizzazioni. **M10** scatole dove robustezza, design, innovazione e versatilità ne caratterizzano il progetto. **M5** contenitori di grandi dimensioni, idonei per accogliere PC industriali, visualizzatori, pulpiti di comando, con spessori rilevanti, particolarmente adatti dove le caratteristiche meccaniche sono prioritarie. **Cassette di derivazione** una gamma esauriente e razionale di contenitori in grado di soddisfare gli installatori più esigenti.

ALUMINIUM

Strong and lightweight enclosures, suitable for any use; they are divided into: **M4** a tested set of enclosures manufactured in different models. **M10** where strength, innovation and versatility characterise the project. **M5** Enclosures of big dimensions, suitable to accommodate industrial PCs, display devices, control panels, with significant thicknesses, are particularly used where mechanical properties are a priority. **Junction Boxes**: a complete and rational line of enclosures capable of satisfying the most exigent installers.



ACCIAIO INOX

Una attenta analisi di applicazioni in situazioni speciali ha stimolato la New Elfin a realizzare la serie di contenitori in acciaio inox dal design particolarmente accattivante e hi-tech; questi prodotti sono particolarmente adatti all'uso nei settori alimentare, farmaceutico, chimico ecc, con caratteristiche altamente performanti.

STAINLESS STEEL

A careful analysis of applications in special situations induced New Elfin to develop this line of enclosures in stainless steel with a particularly attractive and hi-tech design; these products are particularly suitable for use in the food and beverage, pharmaceutical and chemical sectors, where high performance characteristics are required.



TERMOPLASTICO

Questa gamma prevede diversi tipi di materiale termoplastico, due tipi di altezze, una vasta scelta di formati comprendenti soluzioni con coperchi trasparenti, con operatori, e con diverse opzioni di foratura inoltre è possibile realizzare piccoli quadri per automazione con l'assistenza e la garanzia del nostro ufficio tecnico.

THERMOPLASTIC

This line provides different types of thermoplastic materials, two different heights, a large variety of sizes, including models with transparent lids, with operators and various hole options. It is possible to carry out small enclosures for automation with the help and assistance of our technical department.





CONDIZIONI AMBIENTALI

La prima considerazione da fare è in quali condizioni ambientali viene installata l'apparecchiatura, se in esterno o in interno, con la possibilità di operare in ambienti quali : industrie farmaceutiche, chimiche, alimentari, fonderie, navali, agricole, ecc.

ENVIRONMENTAL CONDITIONS

The first factor to think about is what environmental conditions are going to be where the equipment will be installed: outside or inside, and what type of industry will it be used in: pharmaceutical, chemical, food, casting, naval, agricultural, etc.



TIPOLOGIA E APPLICAZIONE

Scegliere un contenitore appropriato è una fase determinante nello sviluppo di un progetto. È necessario procedere con una indagine sistematica, valutare con metodo le variabili di applicazione: dove installiamo la nostra apparecchiatura? In quali condizioni ambientali? Quale grado di protezione deve avere? Qual'è lo spazio a disposizione? Come dovrà essere allestita? Elaborando queste informazioni si arriva a definire il prodotto più adatto alle esigenze del progetto.

TYPE AND APPLICATION

Choosing a right product is fundamental in a project development. A systematic survey and evaluation of all the application variables are required, such as where are you going to install the equipment? In which environmental conditions will it be fitted? What protection degree? What is the available space? How will it be equipped...



DIMENSIONI

Altro passo fondamentale è stabilire in anticipo le dimensioni dello spazio disponibile all'inserimento del contenitore o dei componenti. E' evidentemente spiacevole scoprire troppo tardi che tutto il nostro lavoro è da rifare per non aver controllato con cura i dettagli del progetto.

SIZES

Another fundamental step is to find out ahead of time the dimensions of the space where the enclosure will be inserted with its components. Obviously, it is unpleasant to discover too late that you have to repeat all your work because you didn't take all the project details into account.



ACCESSORI

Stabilite le premesse fondamentali possiamo operare la nostra scelta fra le varie opzioni senza dimenticare gli accessori e i componenti che vanno ad integrarsi nel contenitore per la realizzazione del progetto.

THE ACCESSORIES

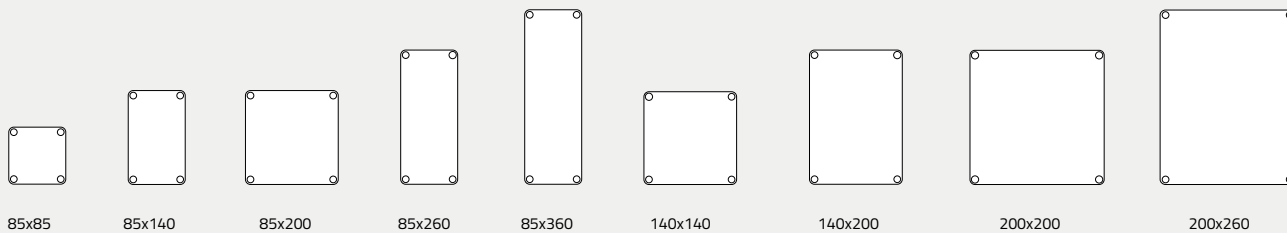
After defining all these fundamental elements, you can examine and choose among the various options, but don't forget the accessories and the components that have to be integrated in the enclosure to complete the project.

Panorama dei formati

Size overview

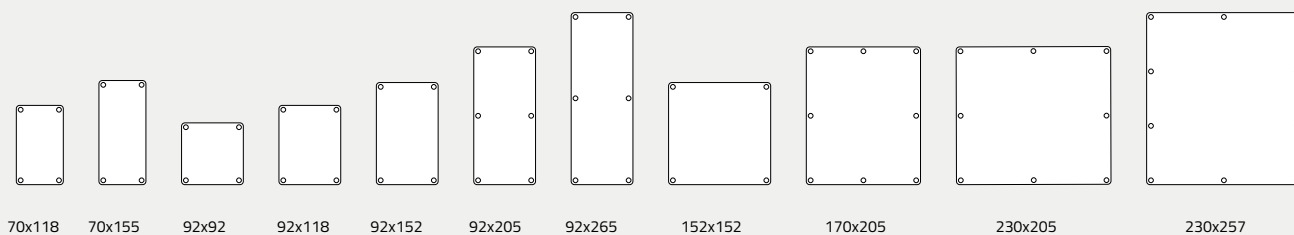
Contenitori in alluminio M10- 8 formati - più di 100 modelli

Aluminium M10 enclosures - 8 sizes - more than 100 types



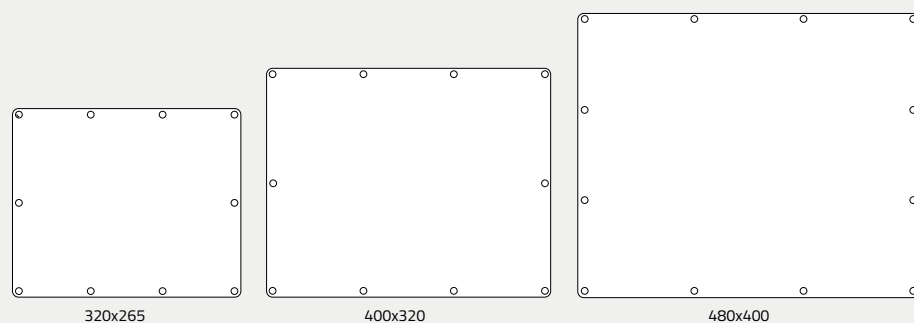
Contenitori in alluminio M4 - 11 formati - più di 240 modelli

Aluminium M4 enclosures - 11 sizes - more than 240 types



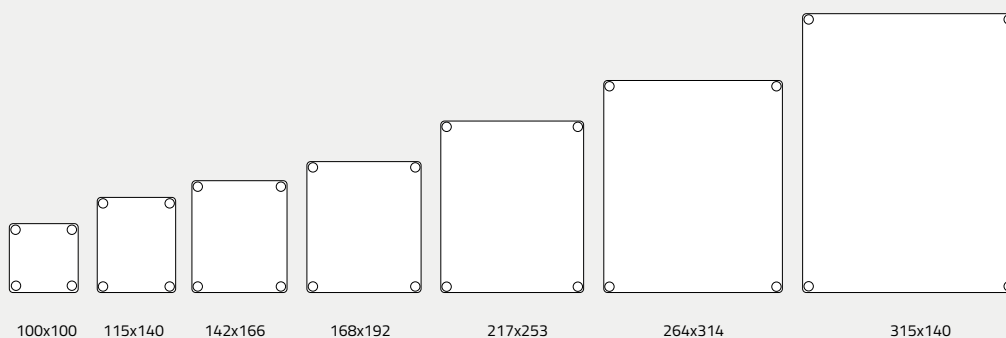
Contenitori in alluminio M5 - 3 formati

Aluminium M5 enclosures - 3 sizes



Scatole di derivazione alluminio - 7 formati - 7 modelli

Aluminium junction boxes - 7 sizes - 7 types

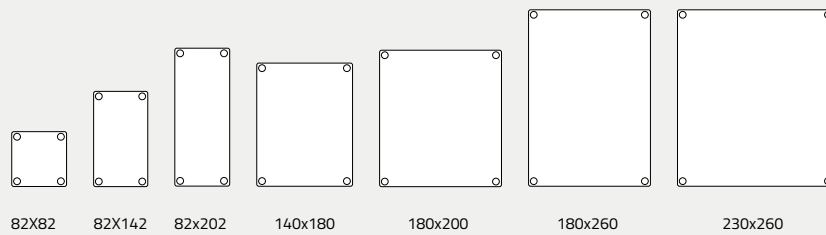


Panorama dei formati

Size overview

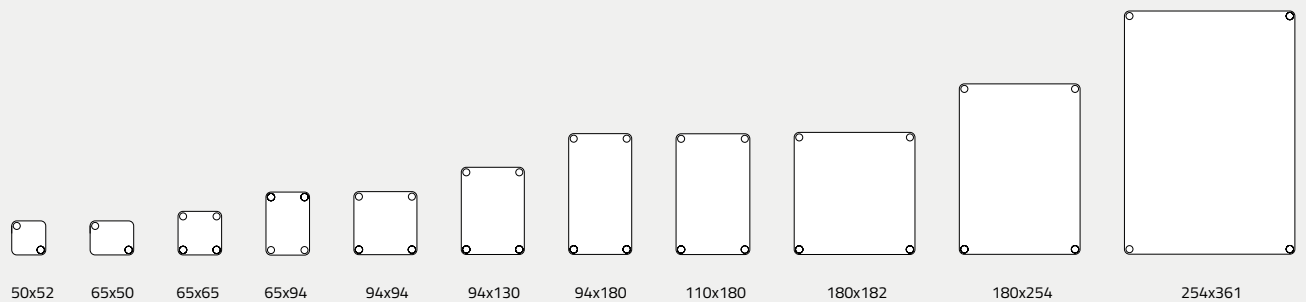
Contenitori in acciaio inox - 7 formati - più di 20 modelli

Stainless steel enclosures - 7 sizes - more than 20 types



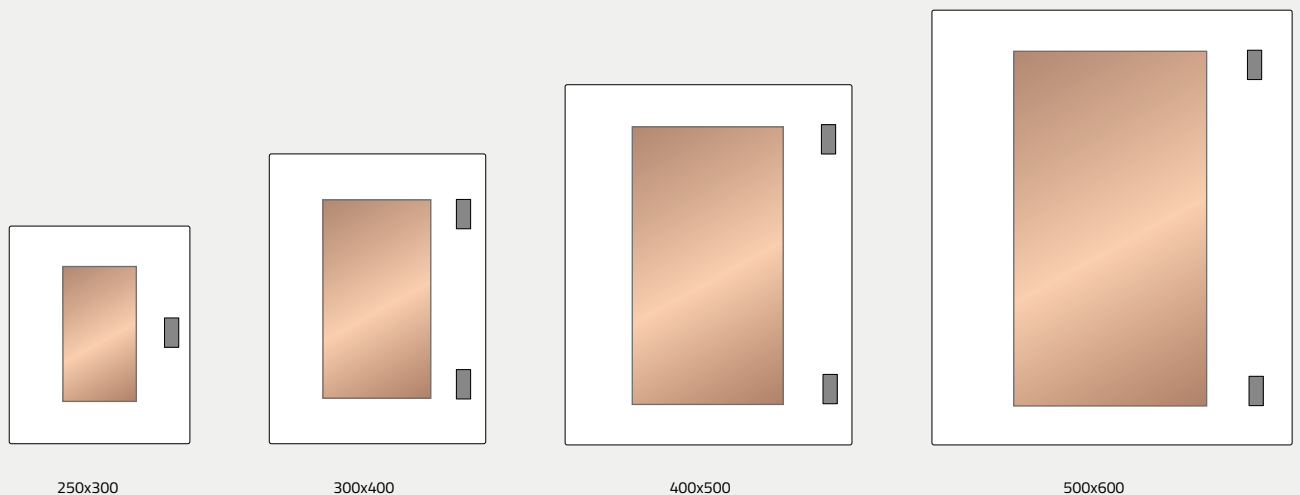
Contenitori in termoplastico - 11 formati - più di 160 modelli

Thermoplastic enclosures - 11 sizes - more than 160 types



Contenitori in Poliestere - 4 formati - 8 modelli

Polyester enclosures - 4 sizes - 8 types

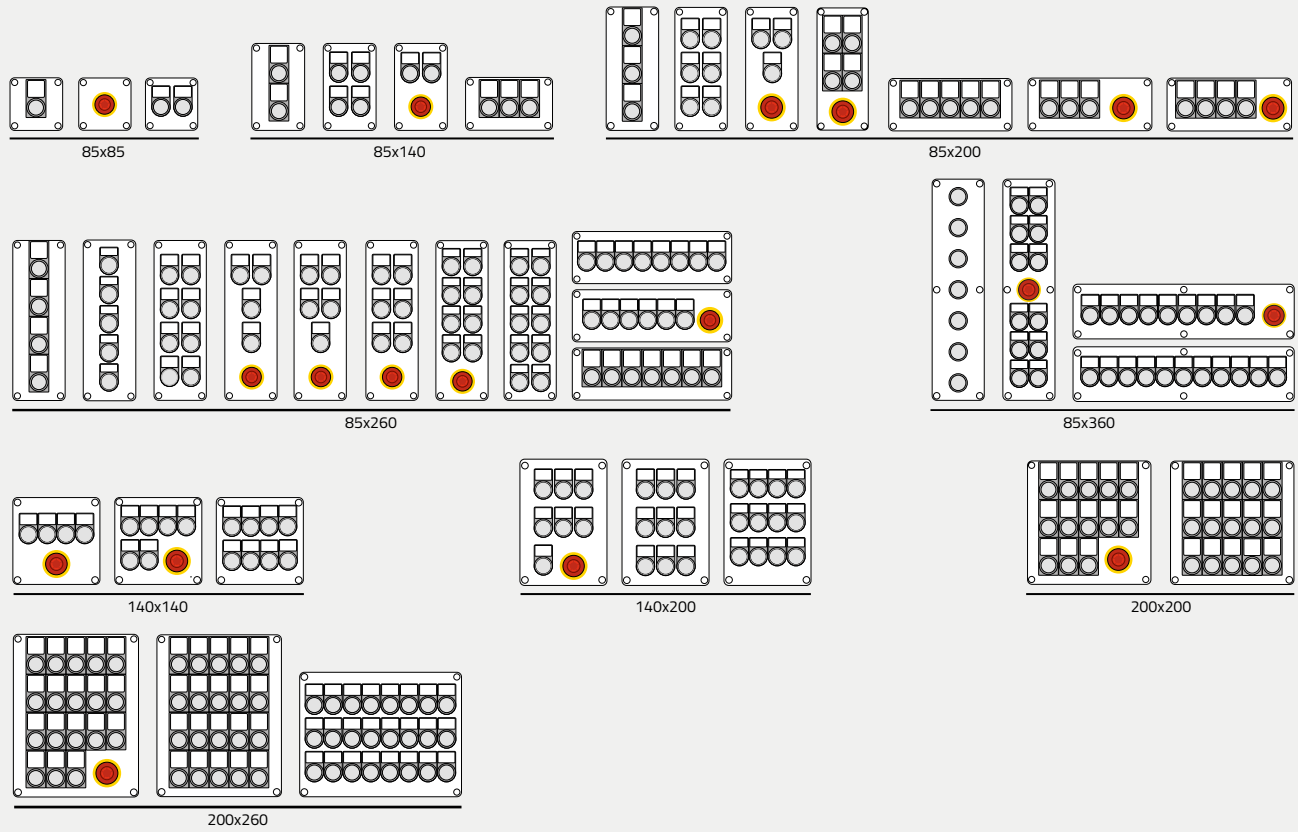


Panorama forature dei coperchi

Lid hole overview

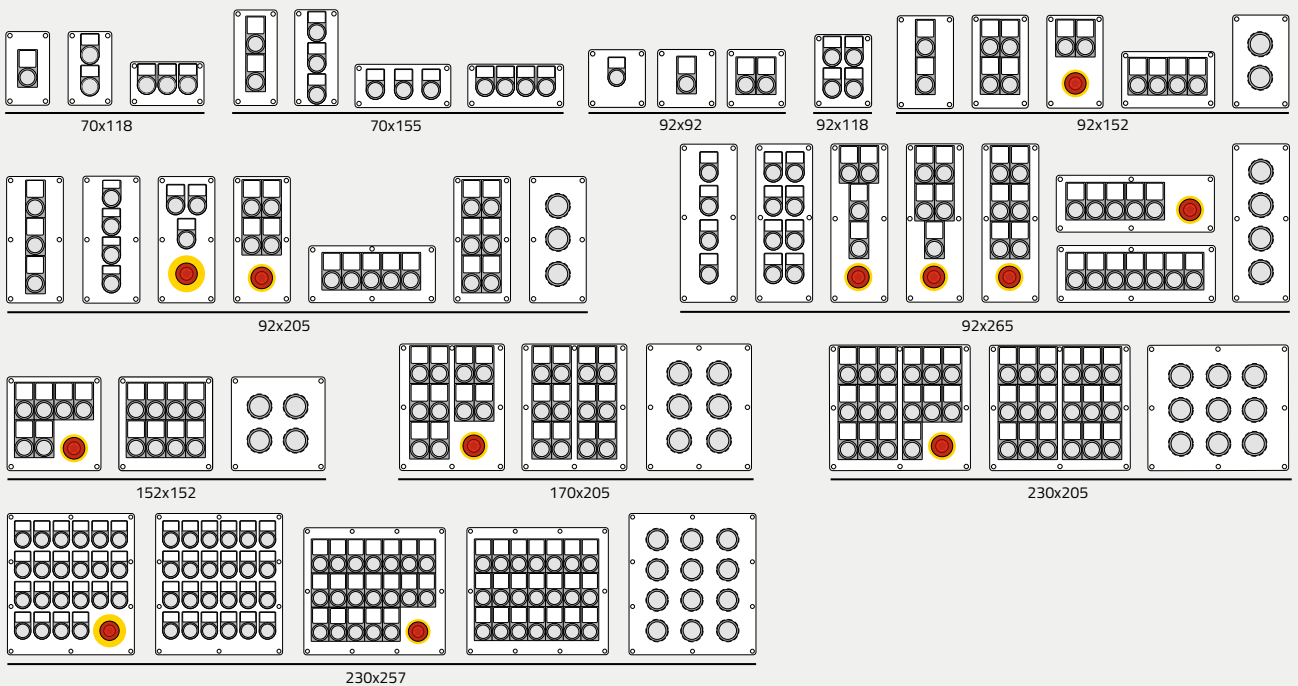
Scatole pulsantiere in alluminio M10

Aluminium push-button enclosures M10



Scatole pulsantiere in Alluminio M4

Aluminium push-button enclosures M4

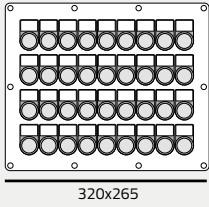


Panorama forature dei coperchi

Lid hole overview

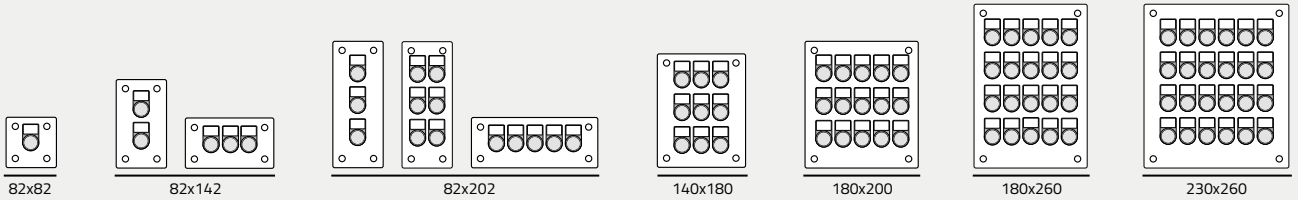
Scatole pulsantiere in alluminio M5

Aluminium push-button enclosures M5



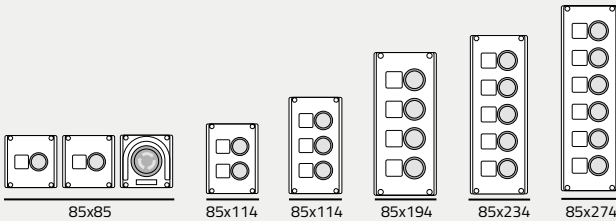
Scatole pulsantiere in Acciaio inox

Stainless steel push-button enclosures



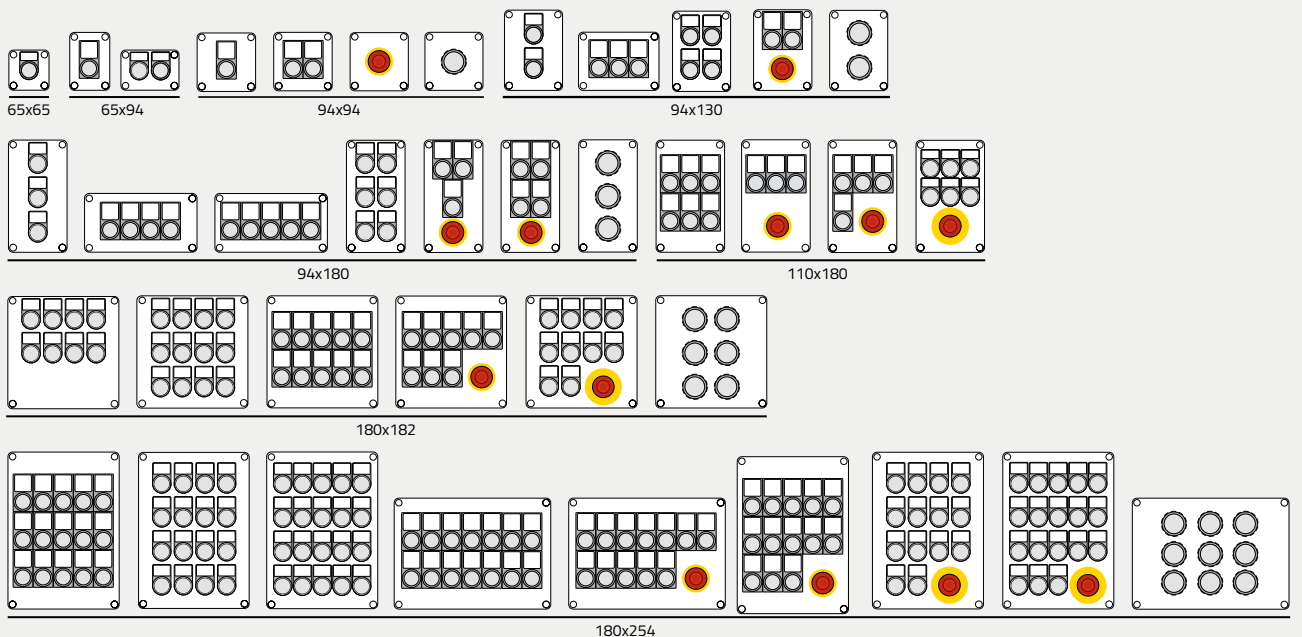
Scatole pulsantiere in termoplastico

Thermoplastic push-button enclosures



Scatole pulsantiere in termoplastico

Thermoplastic push-button enclosures



Criteria di scelta del prodotto Product selecting method

Nel momento in cui si va a scegliere il prodotto da utilizzare occorre considerare tutta una serie di criteri che vanno a definire la scelta finale. Per aiutare l'utilizzatore a formulare la scelta ideale, riportiamo qui di seguito una serie di dati fondamentali per esprimere un giudizio corretto.

When choosing the product, a series of criteria is to be considered in order to define the final selection. To help the customer in making the right choice herewith following we list a series of data necessary for a correct selection.

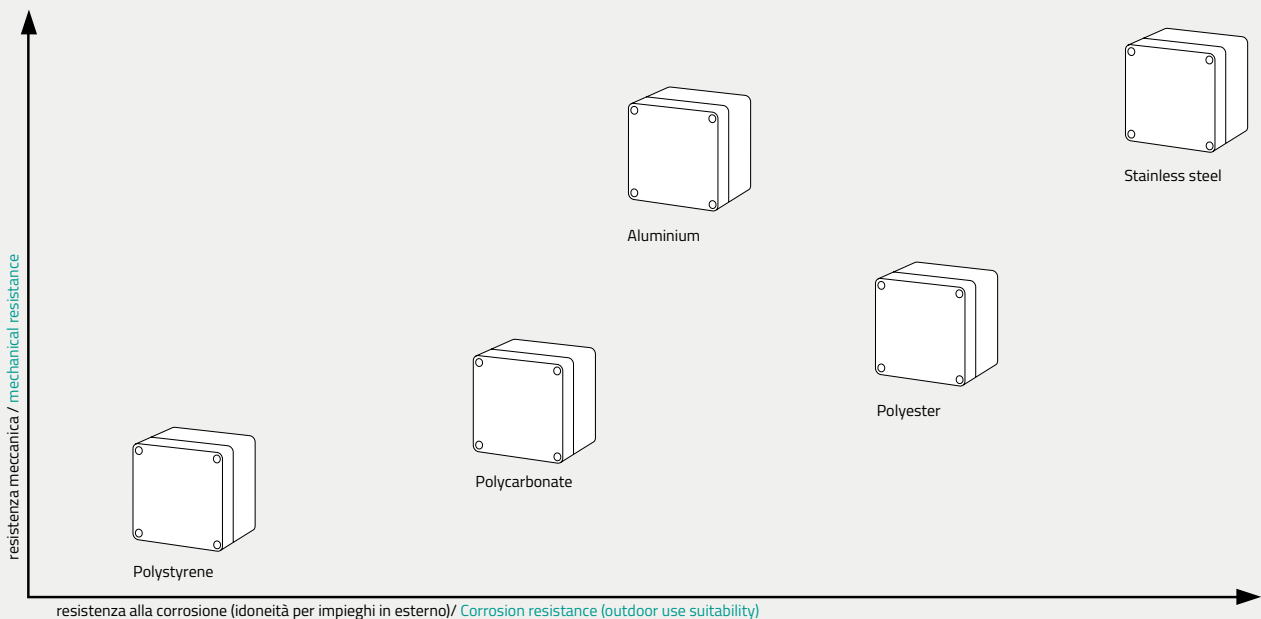


densità	DIN 53479	g/cm ³	2.65	1.2	1.06	1.8
resistenza all'urto	DIN 53453	ml/mm ²	150-300	65	60	80
resistenza	DIN 53453	ml/mm ²	90-200	20	10	4
resistenza alla trazione	DIN 53455	N/mm ²	180-300	65	43	45
allungamento a rottura	DIN 53455	%	60-90	90	20	20
modulo E (prova di flessione)	DIN 53457	N/mm ²	75.000	2.300	2.100	6.500
sollecitazione max di flessione	DIN53452	N/mm ²		95	90	100
infiammabilità	UL 94	Klasse		V2	HB	V0
resistenza lineare	DIN 53482	Ω x cm		10 ¹⁵	10 ¹³	3x10 ¹⁴
resistenza superficiale	DIN 53482	Ω		≥10 ¹⁵	2x10 ¹⁴	>0 ¹²
rigidità dielettrica	DIN53481	kV/mm		25-40	24	25-40
conducibilità termica(20°C)	DIN 52612	W/mK	120/160	0,21	0,18	0,25
conducibilità elettrica		m/Ωmm ²		15-22		

density	DIN 53479	g/cm ³	2.65	1.2	1.06	1.8
impact resistance	DIN 53453	ml/mm ²	150-300	65	60	80
resistance	DIN 53453	ml/mm ²	90-200	20	10	4
traction resistance	DIN 53455	N/mm ²	180-300	65	43	45
ultimate elongation	DIN 53455	%	60-90	90	20	20
E modulus (bending test)	DIN 53457	N/mm ²	75.000	2.300	2.100	6.500
max sollicitation of bending	DIN53452	N/mm ²		95	90	100
flammability	UL 94	Klasse		V2	HB	V0
linear resistance	DIN 53482	Ω x cm		10 ¹⁵	10 ¹³	3x10 ¹⁴
superficial resistance	DIN 53482	Ω		≥10 ¹⁵	2x10 ¹⁴	>0 ¹²
dielectric strength	DIN53481	kV/mm		25-40	24	25-40
thermal conductivity(20°C)	DIN 52612	W/mK	120/160	0,21	0,18	0,25
electric conductivity		m/Ωmm ²		15-22		

Nel grafico sottostante si ha una visione d'insieme delle possibilità di impiego dei vari materiali in funzione di sollecitazioni meccaniche e condizioni ambientali sfavorevoli.

The graph below shows a general overview of the materials that can be used depending on mechanical stresses and unfavourable environmental conditions.



Gradi di protezione Protection ratings

GRADI DI PROTEZIONE IP (IEC 529, EN 60529, CEI 70-1 ed. 11/92)

La tabella indica i gradi di protezione secondo le norme CEI 70-1 ed 11/92.

I gradi sono identificati dalla sigla IP seguita da due cifre alle quali possono essere aggiunte due lettere indicanti il grado di protezione contro le persone o altre caratteristiche. Esiste una variazione nell'applicazione dei gradi 7 e 8 relativi alla penetrazione dei liquidi, infatti non sempre questi gradi sottointendono l'idoneità anche per i gradi inferiori (che si ha invece dal grado IP x 4 verso i livelli inferiori). GRADI DI PROTEZIONE CONTRO GLI IMPATTI (PROVA EH)

Questa classificazione dimostra il livello accettabile di robustezza, nell'ambito della stima della sicurezza di un prodotto, ed è destinata principalmente alle prove su prodotti elettromeccanici.



1ª CIFRA penetrazione dei solidi

0	Non protetto	
1	Protetto contro corpi solidi di dimensioni superiori a 50mm di Ø	
2	Protetto contro corpi solidi di dimensioni superiori a 12mm di Ø	
3	Protetto contro corpi solidi di dimensioni superiori a 2,5mm di Ø	
4	Protetto contro corpi solidi di dimensioni superiori a 1mm di Ø	
5	Protetto contro la polvere	
6	Totalmente protetto contro la polvere	

LETTERA AGGIUNTIVA

Lettera opzionale che descrive la protezione delle persone. Utilizzate solamente se la protezione contro l'accesso a parti pericolose è superiore a quella indicata dalla prima cifra, o se indica solo la protezione contro l'accesso a parti pericolose e la prima cifra è sostituita da una X.

A	Protetto contro l'accesso contro il dorso della mano
B	Protetto contro l'accesso con dito
C	Protetto contro l'accesso con un attrezzo
D	Protetto contro l'accesso con un filo

2ª CIFRA penetrazione dei liquidi

0	Non protetto	
1	Protetto contro la caduta verticale di gocce d'acqua	
2	Protetto contro la caduta di gocce d'acqua con inclinazione massima di 15°	
3	Protetto contro la pioggia con inclinazione massima di 60°	
4	Protetto contro gli spruzzi d'acqua	
5	Protetto contro i getti d'acqua con lanci da tutte le direzioni	
6	Protetto contro le ondate	
7	Protetto contro gli effetti dell'immersione	
8	Protetto contro gli effetti dell'immersione prolungata	
9	Protetto contro i getti d'acqua ad alta pressione	

Protezione contro gli impatti meccanici esterni

Secondo CEI EN 50102: 1996-05; CEI EN 60068-2-7-5: 1998-09 standards

IK00	Non protetto	
IK01	Protetto contro l'energia d'urto 0,15 J	
IK03	Protetto contro l'energia d'urto 0,35 J	
IK05	Protetto contro l'energia d'urto 0,7 J	
IK06	Protetto contro l'energia d'urto 1 J	
IK07	Protetto contro l'energia d'urto 2 J	
IK08	Protetto contro l'energia d'urto 5 J	
IK09	Protetto contro l'energia d'urto 10 J	
IK10	Protetto contro l'energia d'urto 20 J	



Gradi di protezione Protection ratings

IP PROTECTION RATINGS (IEC 529, EN 60529, CEI 70-1 ed. 11/92)

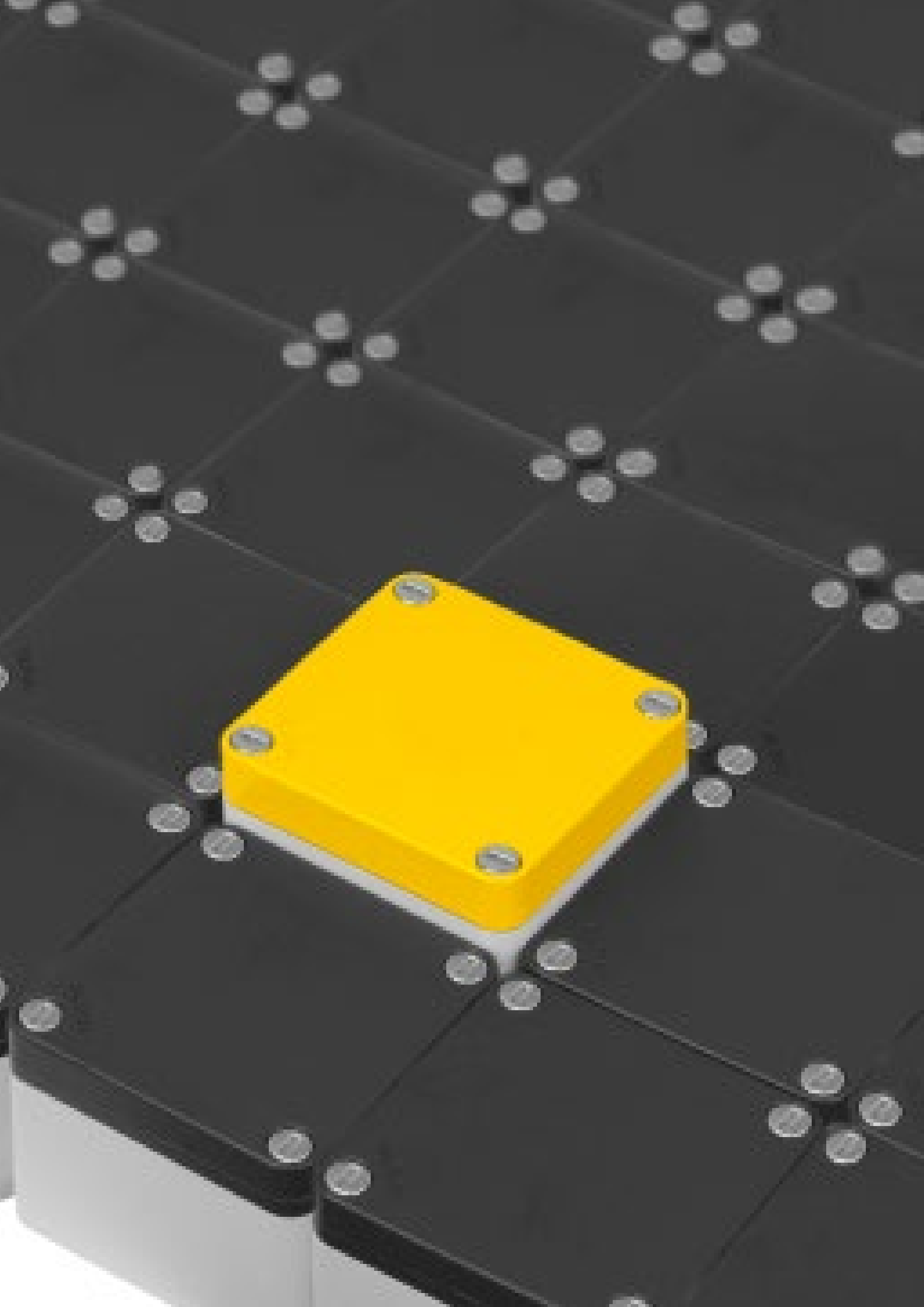
The table below shows Ingress protection ratings according to CEI-70-1 ed. 11/92 standards. The ratings are identified by the IP code followed by two digits to which two letters may be added indicating the protection rating against persons or other characteristics. There is a variation in application of rating 7 and 8 referring to penetration of liquids. These ratings do not always imply suitability also for lower ratings (which occurs from rating IP x4 rating towards lower levels). **IMPACT PROTECTION RATING(EH TEST)**

These ratings indicate the acceptable sturdiness according to the product safety evaluation a product and apply in particular to tests run on electromechanical products.



1 st DIGIT penetration of solids		2 nd DIGIT penetration of liquids		Protection against impacts <small>According to CEI EN 50102: edition 1996-05; CEI EN 60068-2-7-5: edition 1998-09 standards</small>	
0	Not protected	0	Not protected	IK00	Not protected
1	Protected against solid bodies with a diameter of more than 50 mmØ	1	Protected against vertically falling drops	IK01	Protected against impact energy 0,15 J
2	Protected against solid bodies with a diameter of more than 12mmØ	2	Protected against drops at an angle of up to 15° from the vertical	IK03	Protected against impact energy 0,35 J
3	Protected against solid bodies with a diameter of more than 2,5 mmØ	3	Protected against rain at angle of up to 60° from the vertical	IK05	Protected against impact energy 0,7 J
4	Protected against solid bodies with a diameter of more than 1 mm Ø	4	Protected against splashes of water	IK06	Protected against impact energy 1 J
5	Protected against dust	5	Protected against jets of water from any direction	IK07	Protected against impact energy 2 J
6	Totally protected against dust	6	Protected against waves	IK08	Protected against impact energy 5J
ADDITIONAL LETTER <small>Optional letter indicating the protection rating against persons. To be used only if the protection against access to hazardous parts is above those indicated by the first digit or if only protection against access to hazardous parts is indicated and the first digit is replaced by an X.</small>		7	Protected against the effects of immersion	IK09	Protected against impact energy 10 J
A	Protected against access with the back of the hand	8	Protected against the effects of long term immersion	IK10	Protected against impact energy 20 J
B	Protected against access with finger	9	Protected against high pressure jets of water		
C	Protected against access with tool				
D	Protected against access with a wire				





040

**SCATOLE E CASSETTE
PULSANTIERE IN METALLO**

**METAL PUSH-BUTTON
BOXES, ENCLOSURES**

Contenitori in alluminio

Aluminium enclosures

Caratteristiche tecniche

Materiale custodia	Fusione in lega di alluminio Al Si 11 CU 2
Serraggi	<p>Contenitori M10: chiusura coperchi viti M10, testa cilindrica cava cacciavite, lega pressofusa zincata</p> <p>Contenitori M4: chiusura coperchi viti M4 testa cilindrica impronta croce Phillips PH2, acciaio inox AISI 304</p> <p>Contenitori M5: chiusura coperchi viti M5 testa cilindrica esagono incassato, acciaio inox AISI 304 Versione con piastra viti M4 testa bombata esagono incassato, acciaio AISI 304</p> <p>Scatole di derivazione: chiusura coperchi viti M5, testa svasata impronta croce, acciaio AISI 304</p>
Guarnizioni	<p>Contenitori M10: gomma nitrilica stampata</p> <p>Contenitori M4/M5: gomma sughero</p> <p>Scatole di derivazione: gomma EPDM iniettata</p>
Colorazioni	<p>Contenitori M10/M5: coperchio: grigio RAL 7016 testurizzato scatola: grigio RAL 7035 testurizzato</p> <p>Contenitori M4: coperchio: grigio RAL 7035 scatola: grigio RAL 7035 testurizzato</p> <p>Scatole di derivazione: coperchio: grigio RAL 7040 goffrato scatola: grigio RAL 7040 goffrato</p>
Grado di protezione	IP66 - CEI EN 60529
Limiti di temperatura	-40° ÷ +100° C
Resistenza alla corrosione	La resistenza alla corrosione è influenzata dalla percentuale di rame contenuto nella lega di alluminio: a una minore percentuale di rame corrisponde una maggiore resistenza alla corrosione. I nostri contenitori sono prodotti con la lega Al Si 12, DIN 1725 e contiene lo 0,05 - 0,1% di rame, quindi molto resistenti alla corrosione.
Trattamenti di protezione	I nostri contenitori vengono trattati con sgrassatura e lavaggio con acqua ionizzata, cromatura a base di bagni galvanici di acido cromatico e verniciatura con vernici epossidiche poliuretatiche
Procedimenti di fusione	<p>PF- Pressofusione: dal formato 70x118 al 152x152(M4) e dal formato 85x85 al 200x260 (M10) - superficie piana, grado di tolleranza dimensionale ± 0,35 DIN 1688, parte 4, spessori medi 2 ÷ 2,5mm.</p> <p>FC- Fusione in conchiglia : dal formato 170x205 al 400x480 - superficie granulata leggermente ruvida , grado di tolleranza dimensionale ± 1,2 DIN 1688, parte 3, spessori medi 3,5 ÷ 4mm</p>

Caratteristiche meccaniche

	GD-AISi11CU2 pressofusione	GK-AISi11CU2 fus. conchiglia
Densità g/cm ²	2,65	2,65
Limite alla trazione N/mm ²	120-180	80-110
Res. alla trazione N/mm ²	200-280	180-240
Tensione di rottura %	1-3	6-12
Durezza Brinell HB	60-80	50-60
Modulo E 10 ⁻⁶ /K	20-23	20-23
Resistenza elettrica m /mm ²	17-23	17-27
Conducibilità termica W/mK	150-170	150-170
Resistenza al calore °C	300	300
Resistenza al freddo °C	-100	-100

Technical data

Housing material	Al Si 11 CU 2 aluminium alloy casting
Fasteners	<p>M10 enclosures: lid closing with M10 screws, slotted cheese head, zinc alloy die-casting</p> <p>M4 enclosures: lid closing with M4 screws, Phillips PH2 cross recessed pan head, AISI 304 stainless steel</p> <p>M5 enclosures: lid closing with M5 screws, hexagon socket head cap AISI 304 stainless steel Model with plate : M4 screws, hexagon socket button head, AISI 304 steel</p> <p>Junction boxes: lid closing with M5 screws, Cross recessed countersunk head, AISI 304 steel</p>
Gaskets	<p>M10 enclosures: nitrile rubber, molded</p> <p>M4/M5 enclosures: rubber cork</p> <p>Junction boxes: EPDM rubber, injection molded</p>
Colours	<p>M10/M5 enclosures: lid: RAL 7016 grey, textured finish enclosure : RAL 7035 grey, textured finish</p> <p>M4 enclosures: lid: RAL 7035 grey enclosure : RAL 7035 grey, textured finish</p> <p>Junction boxes: lid: RAL 7040 grey, embossed finish enclosure: RAL 7040 grey, embossed finish</p>
Protection degree	IP66 - CEI EN 60529
Temperature range	-40° ÷ +100° C
Corrosion resistance	The corrosion resistance is affected by the percentage of copper in the aluminium alloy : the less the copper percentage the higher its resistance to corrosion. Our enclosures are made of Al Si 12 alloy, DIN 1725 and contain 0.05 - 0.1% copper, thus extremely corrosion resistant.
Protective treatments	Our enclosures are degreased and washed with ionized water, chrome-plated in galvanic baths of chromic acid and painted with epoxy polyurethane paints
Metal casting methods	<p>PF- Die casting: from size 70x118 to 152x152 (M4) and from size 85x85 to 200x260 (M10) - flat surface, dimensional tolerance ± 0.35 DIN 1688, part 4, average thickness 2÷2.5 mm</p> <p>FC- Shell molding : from sizes 170x205 to 400x480 - coarse-grained surface, dimensional tolerance ±1.2 DIN 1688, part 3 , average thickness 3.5÷ 4 mm.</p>

Mechanical features

	GD-AISi11CU2 die casting	GK-AISi11CU2 shell molding
Density g/cm ²	2,65	2,65
Tensile strength N/mm ²	120-180	80-110
Ult.tensile strength N/mm ²	200-280	180-240
Breaking strength	1-3	6-12
Brinell hardness HB	60-80	50-60
E modulus 10 ⁻⁶ /K	20-23	20-23
Electrical resistivity m /mm ²	17-23	17-27
Thermal conductivity	150-170	150-170
Heat resistance	300	300
Cold resistance	-100	-100



Esecuzioni speciali

Special versions

CONTENITORE IN VERSIONE NEUTRA

Per la serie alluminio vi è la possibilità di fornire diversi formati nella versione grezza per permettere agli utilizzatori di autogestire la realizzazione del contenitore sia per speciali applicazioni con lavorazioni a disegno, sia per verniciature personalizzate per integrare esteticamente e tecnicamente la cassetta nel complessivo della macchina dove va inserita.

CONTENITORE IN VERSIONE LUCIDA

Questo speciale trattamento è realizzato tramite diverse fasi di lucidatura e pallinatura con sfere metalliche. Conferisce alla cassetta una superficie liscia e speculare, ideale per l' utilizzo in ambienti di produzione alimentare o farmaceutica, comunque in condizioni non corrosive per l'alluminio. In questa versione gli accessori di serie e le viti di serraggio sono in acciaio inox. Per richiedere questa versione è necessario inserire la lettera "B" al fondo del codice standard (solo per la serie alluminio M4 senza fori, per una esatta verifica della possibile realizzazione chiedere conferma alla nostra organizzazione di vendita).

RICAMBI

Sono fornibili parti di ricambio dei contenitori quali coperchi, guarnizioni, fondelli e viti (solo per la serie alluminio M4, per una esatta verifica della possibile realizzazione chiedere conferma alla nostra organizzazione di vendita).

VERNICIATURE SPECIALI

La nostra organizzazione commerciale può valutare richieste di contenitori con verniciature speciali, garantendo gli standard qualitativi di un normale prodotto di serie.

UNPAINTED ENCLOSURES

Aluminium enclosures are available unpainted in different sizes to allow the users to carry out machinings on their own for special applications or for customized paintings so that the enclosure can match aesthetically and technically the machine it will be fitted to.

MIRROR POLISHED ENCLOSURES

This special treatment includes various polishing and shot-blasting steps and provides the enclosure with a smooth reflective surface, ideal for the food or pharmaceutical manufacturing facilities, hence in non-corrosive conditions for the aluminium. For this model, the standard accessories and the clamping screws are made of stainless steel. To request this model, the letter "B" is to be indicated at the end of any standard code (for the aluminium M4 sizes with no holes only contact our Sales Department to check for feasibility).

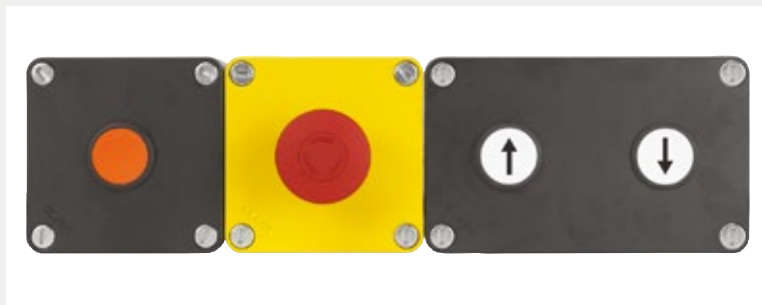
SPARE PARTS

Spare parts such as lids, gaskets, boxes and screws are available (for the aluminium M4 size only contact our Sales Department to check for feasibility).

SPECIAL PAINTINGS

Our Sales Department is able to assess requests for enclosures with special paintings, complying with the same high quality standards as a normal serial product.

Scatole in alluminio M10 Aluminium enclosures M10



Modularità

Modularity



Disponibili in due altezze

Available in two heights



Esempi di personalizzazione

Examples of customization



Fornibile senza verniciatura

Available unpainted



Personalizzabile in diversi colori

Customizable in different colours



Scatole in alluminio M10 Aluminium enclosures M10



Kit di guarnizione
imperdibilità viti

Set of captive screws



Lavorazioni personalizzate

Customized machinings



Kit di fissaggio con prigionieri

Fixing kit with studs



Kit di cerniere

Set of hinges



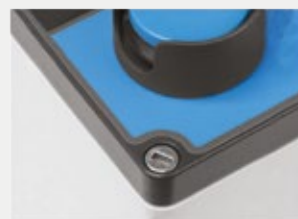
Viti di serraggio

Clamping screws



Kit di staffe di fissaggio

Set of mounting brackets



Etichetta personalizzata
plastificata

Customized legend plate,
plastic coated



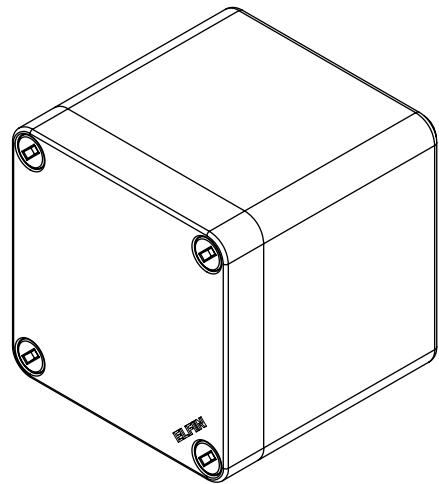
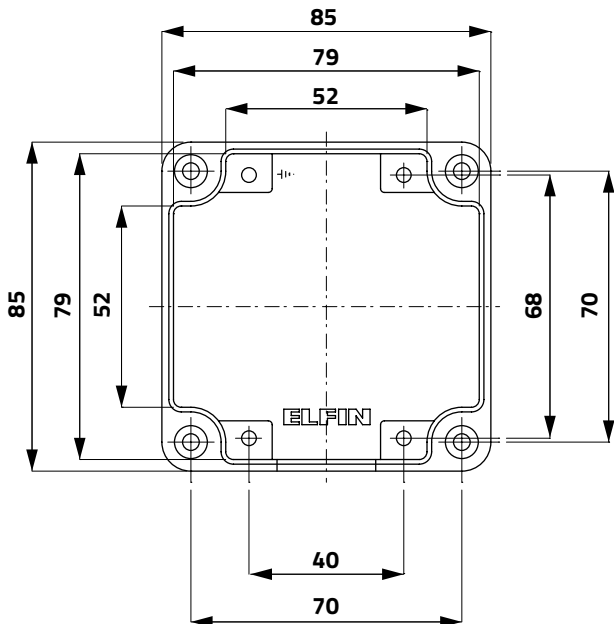
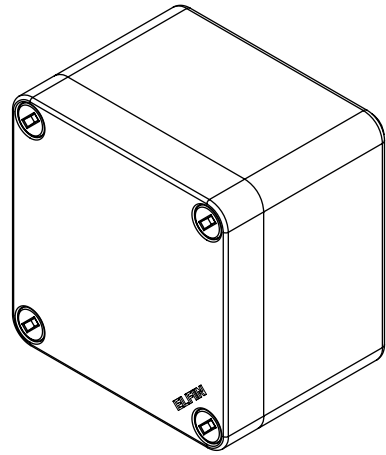
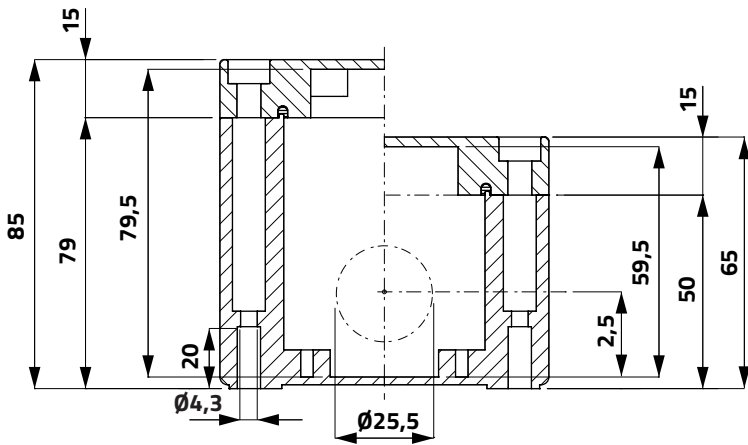
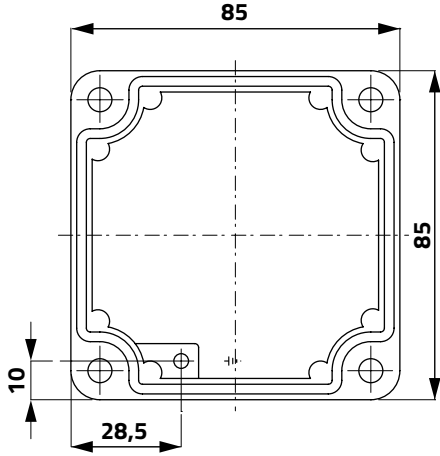
La guarnizione garantisce
protezione IP66

A sealing gasket assures
IP66 protection



Scatole in alluminio M10 85x85mm

Aluminium enclosures M10 85x85mm



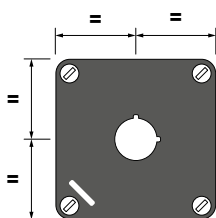
Scatole in alluminio M10 85x85mm Aluminium enclosures M10 85x85mm

h g cod



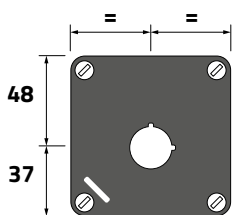
Coperchio senza fori / Undrilled lid

Senza entrata cavo / No cable entry	65	385	040C0808-6
Senza entrata cavo / No cable entry	85	445	040C0808-8
Con entrata cavo / With cable entry	65	381	040C0808-6E
Con entrata cavo / With cable entry	85	441	040C0808-8E
Grezza, cieca / Unpainted, no cable entry	65	385	040C0808-6N
Grezza, cieca / Unpainted, no cable entry	85	445	040C0808-8N



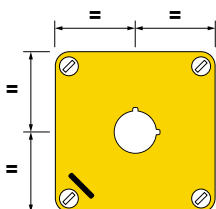
Coperchio con 1 foro Ø 22mm / 1-hole lid Ø 22mm

Senza entrata cavo / No cable entry	65	382	040C0808-6P1C
Senza entrata cavo / No cable entry	85	442	040C0808-8P1C
Con entrata cavo / With cable entry	65	378	040C0808-6EP1C
Con entrata cavo / With cable entry	85	438	040C0808-8EP1C



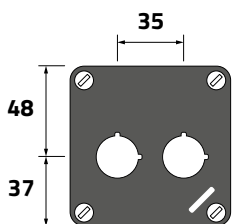
Coperchio con 1 foro Ø 22mm / 1-hole lid Ø 22mm

Senza entrata cavo / No cable entry	65	382	040C0808-6P1
Senza entrata cavo / No cable entry	85	442	040C0808-8P1
Con entrata cavo / With cable entry	65	378	040C0808-6EP1
Con entrata cavo / With cable entry	85	438	040C0808-8EP1



Coperchio giallo con 1 foro Ø 22mm / 1-hole yellow lid Ø 22mm

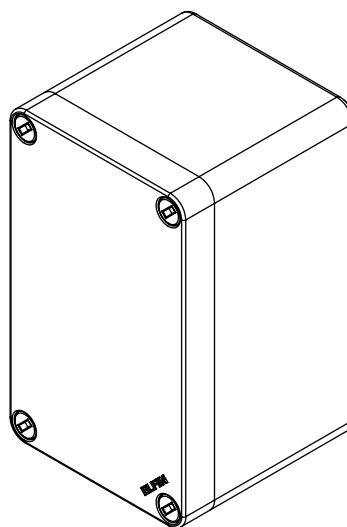
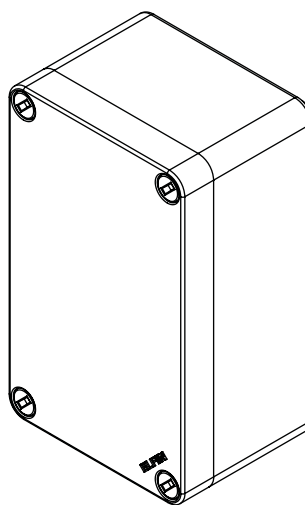
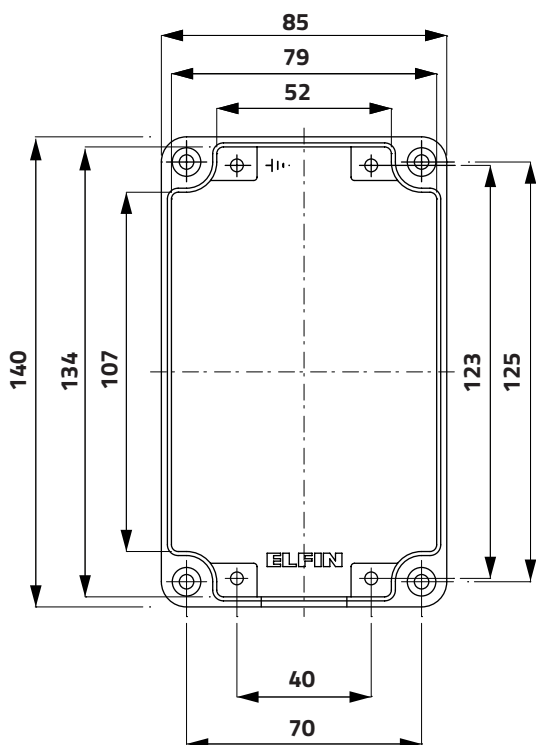
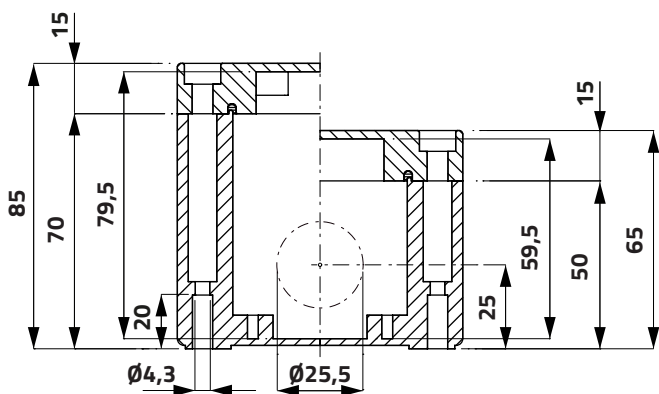
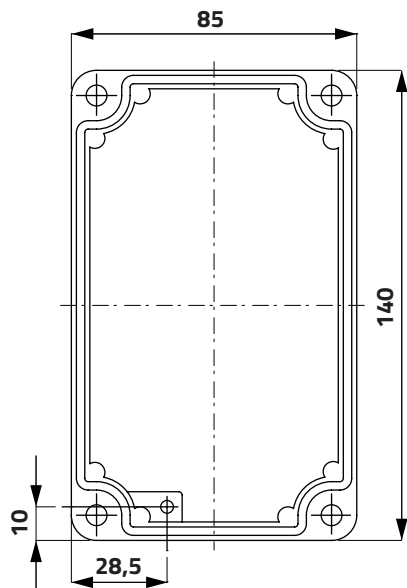
Senza entrata cavo / No cable entry	65	382	040C0808-6GP1
Senza entrata cavo / No cable entry	85	442	040C0808-8GP1
Con entrata cavo / With cable entry	65	378	040C0808-6EGP1
Con entrata cavo / With cable entry	85	438	040C0808-8EGP1



Coperchio con 2 fori Ø 22mm / 2-hole lid Ø 22mm

Senza entrata cavo / No cable entry	65	380	040C0808-6P2
Senza entrata cavo / No cable entry	85	440	040C0808-8P2
Con entrata cavo / With cable entry	65	376	040C0808-6EP2
Con entrata cavo / With cable entry	85	436	040C0808-8EP2

Scatole in alluminio M10 85x140mm Aluminum enclosures M10 85x140mm



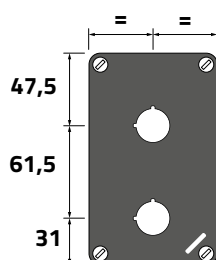
Scatole in alluminio M10 85x140mm Aluminium enclosures M10 85x140mm



h g cod

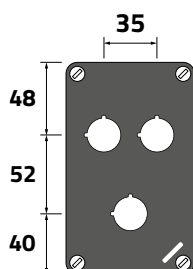
Coperchio senza fori / Undrilled lid

Senza entrata cavo / No cable entry	65	516	040C0814-6
Senza entrata cavo / No cable entry	85	624	040C0814-8
Con entrata cavo / With cable entry	65	512	040C0814-6E
Con entrata cavo / With cable entry	85	620	040C0814-8E
Grezza, cieca / Unpainted, no cable entry	65	516	040C0814-6N
Grezza, cieca / Unpainted, no cable entry	85	624	040C0814-8N



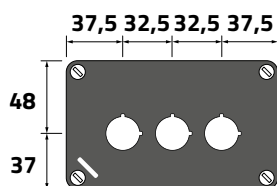
Coperchio con 2 fori Ø 22mm / 2-hole lid Ø 22mm

Senza entrata cavo / No cable entry	65	511	040C0814-6P2
Senza entrata cavo / No cable entry	85	619	040C0814-8P2
Con entrata cavo / With cable entry	65	517	040C0814-6EP2
Con entrata cavo / With cable entry	85	615	040C0814-8EP2



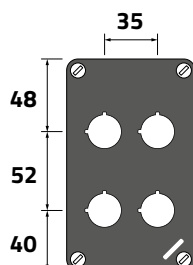
Coperchio con 3 fori Ø 22mm / 3-hole lid Ø 22mm

Senza entrata cavo / No cable entry	65	508	040C0814-6P3C
Senza entrata cavo / No cable entry	85	616	040C0814-8P3C
Con entrata cavo / With cable entry	65	504	040C0814-6EP3C
Con entrata cavo / With cable entry	85	612	040C0814-8EP3C



Coperchio con 3 fori Ø 22mm / 3-hole lid Ø 22mm

Senza entrata cavo / No cable entry	65	508	040C0814-6P3L
Senza entrata cavo / No cable entry	85	616	040C0814-8P3L
Con entrata cavo / With cable entry	65	504	040C0814-6EP3L
Con entrata cavo / With cable entry	85	612	040C0814-8EP3L

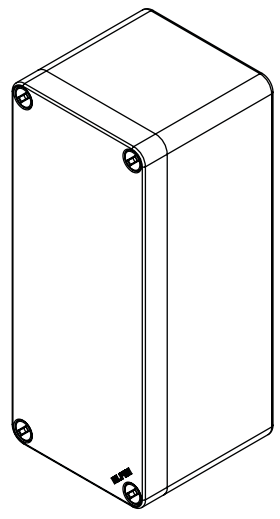
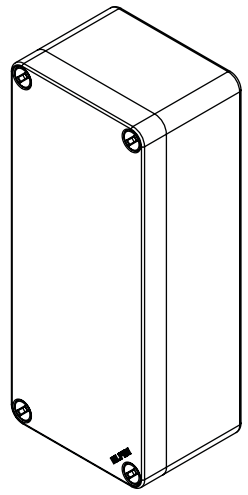
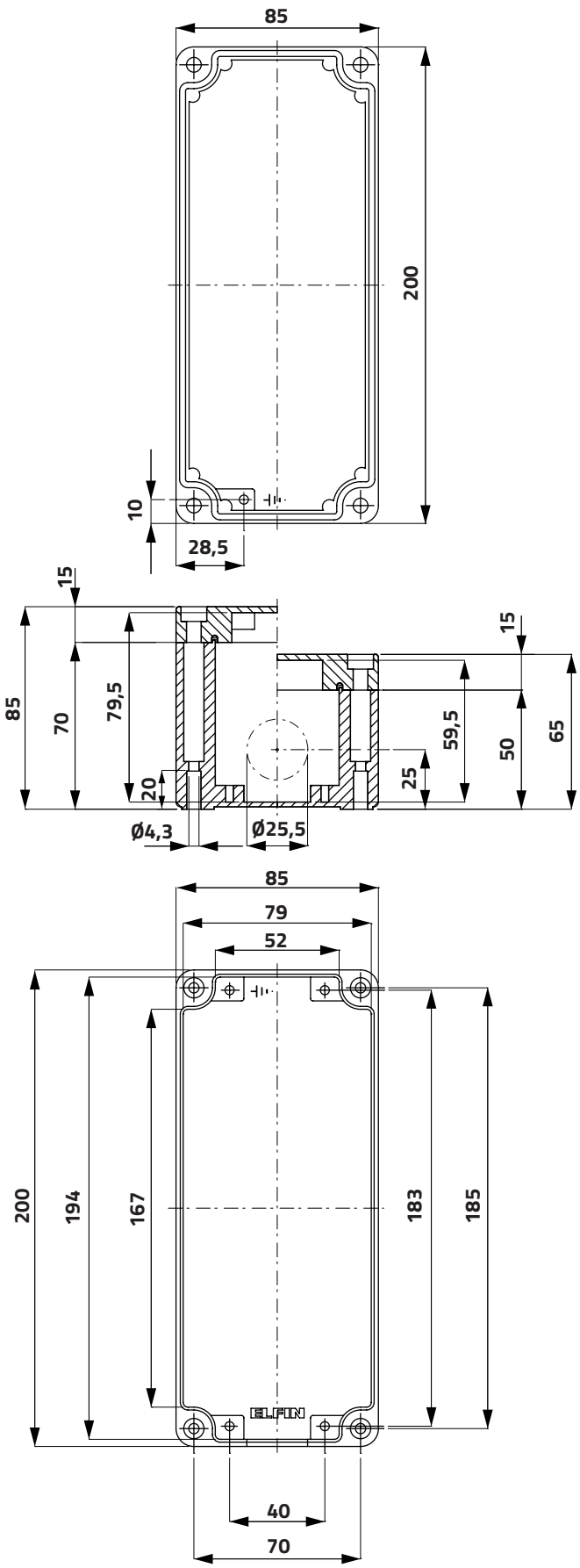


Coperchio con 4 fori Ø 22mm / 4-hole lid Ø 22mm

Senza entrata cavo / No cable entry	65	506	040C0814-6P4
Senza entrata cavo / No cable entry	85	614	040C0814-8P4
Con entrata cavo / With cable entry	65	502	040C0814-6EP4
Con entrata cavo / With cable entry	85	610	040C0814-8EP4

Scatole in alluminio M10 85x200mm

Aluminium enclosures M10 85x200mm



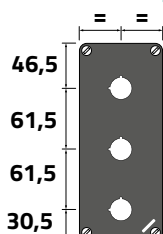
Scatole in alluminio M10 85x200mm Aluminium enclosures M10 85x200mm



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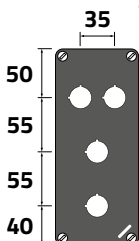
Coperchio senza fori / Undrilled lid

Senza entrata cavo / No cable entry	65	624	040C0820-6
Senza entrata cavo / No cable entry	85	771	040C0820-8
Con entrata cavo / With cable entry	65	620	040C0820-6E
Con entrata cavo / With cable entry	85	767	040C0820-8E
Grezza, cieca / Unpainted, no cable entry	65	624	040C0820-6N
Grezza, cieca / Unpainted, no cable entry	85	771	040C0820-8N



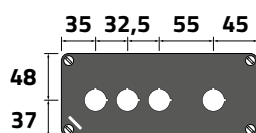
Coperchio con 3 fori Ø 22mm / 3-hole lid Ø 22mm

Senza entrata cavo / No cable entry	65	616	040C0820-6P3
Senza entrata cavo / No cable entry	85	763	040C0820-8P3
Con entrata cavo / With cable entry	65	612	040C0820-6EP3
Con entrata cavo / With cable entry	85	759	040C0820-8EP3



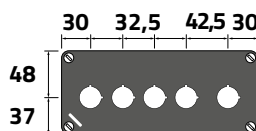
Coperchio con 4 fori Ø 22mm / 4-hole lid Ø 22mm

Senza entrata cavo / No cable entry	65	614	040C0820-6P4C
Senza entrata cavo / No cable entry	85	761	040C0820-8P4C
Con entrata cavo / With cable entry	65	610	040C0820-6EP4C
Con entrata cavo / With cable entry	85	657	040C0820-8EP4C



Coperchio con 4 fori Ø 22mm / 4-hole lid Ø 22mm

Senza entrata cavo / No cable entry	65	614	040C0820-6P4LC
Senza entrata cavo / No cable entry	85	761	040C0820-8P4LC
Con entrata cavo / With cable entry	65	610	040C0820-6EP4LC
Con entrata cavo / With cable entry	85	757	040C0820-8EP4LC

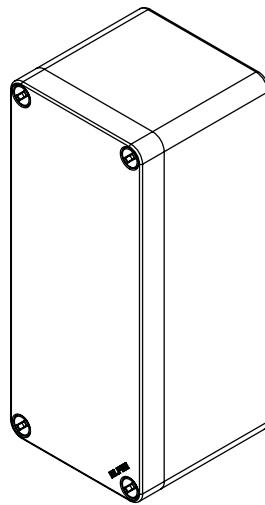
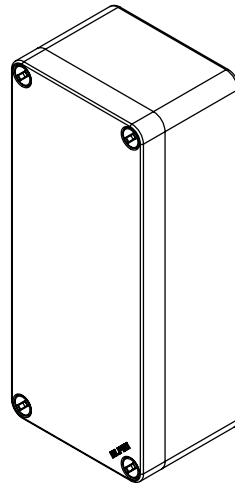
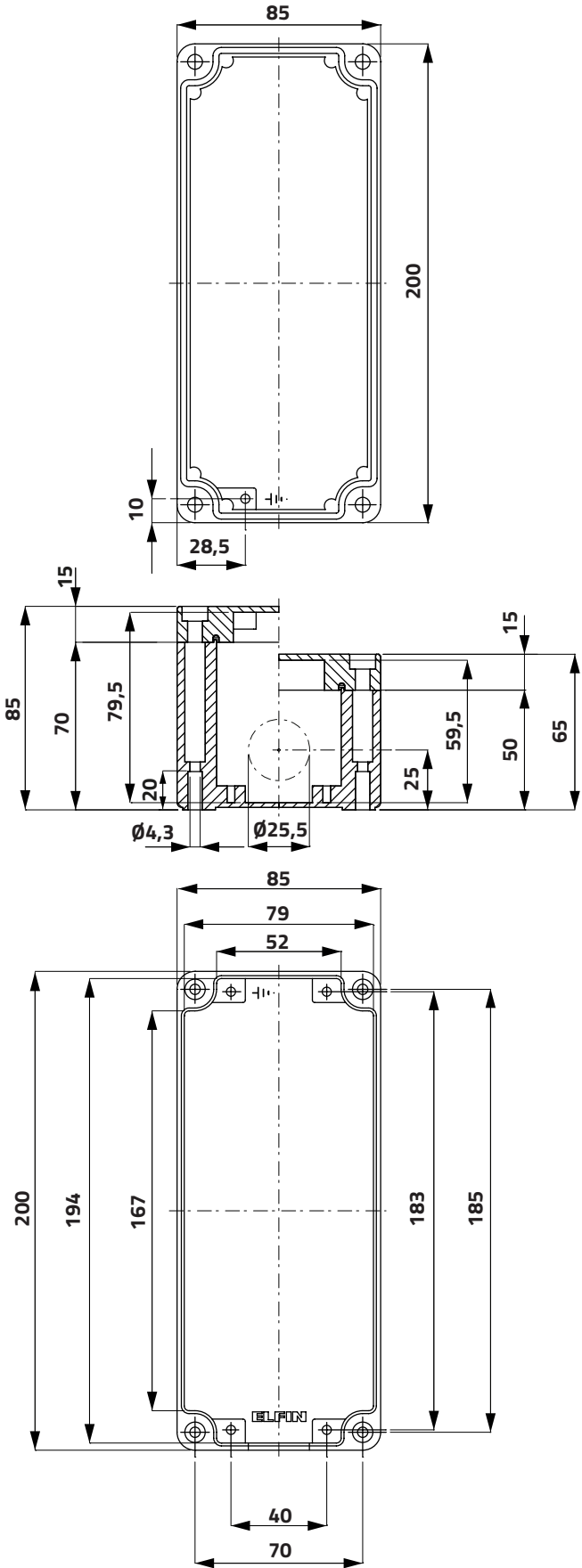


Coperchio con 5 fori Ø 22mm / 5-hole lid Ø 22mm

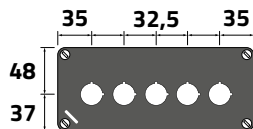
Senza entrata cavo / No cable entry	65	611	040C0820-6P5LC
Senza entrata cavo / No cable entry	85	758	040C0820-8P5LC
Con entrata cavo / With cable entry	65	607	040C0820-6EP5LC
Con entrata cavo / With cable entry	85	754	040C0820-8EP5LC

Scatole in alluminio M10 85x200mm

Aluminium enclosures M10 85x200mm



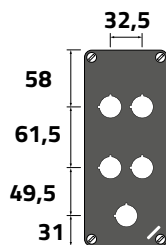
Scatole in alluminio M10 85x200mm Aluminium enclosures M10 85x200mm



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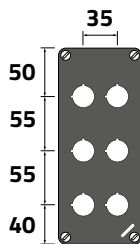
Coperchio con 5 fori Ø 22mm / 5-hole lid Ø 22mm

Senza entrata cavo / No cable entry	65	611	040C0820-6P5L
Senza entrata cavo / No cable entry	85	758	040C0820-8P5L
Con entrata cavo / With cable entry	65	607	040C0820-6EP5L
Con entrata cavo / With cable entry	85	754	040C0820-8EP5L



Coperchio con 5 fori Ø 22mm / 5-hole lid Ø 22mm

Senza entrata cavo / No cable entry	65	611	040C0820-6P5C
Senza entrata cavo / No cable entry	85	758	040C0820-8P5C
Con entrata cavo / With cable entry	65	607	040C0820-6EP5C
Con entrata cavo / With cable entry	85	754	040C0820-8EP5C

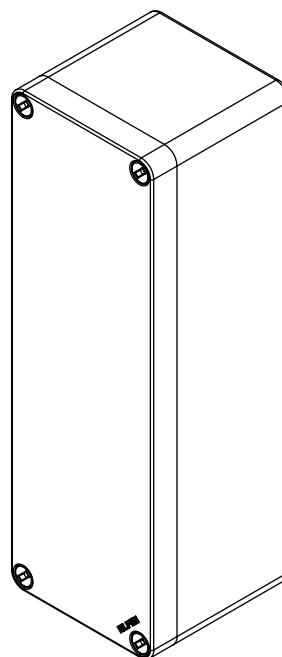
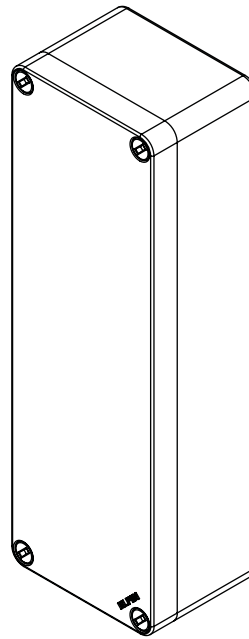
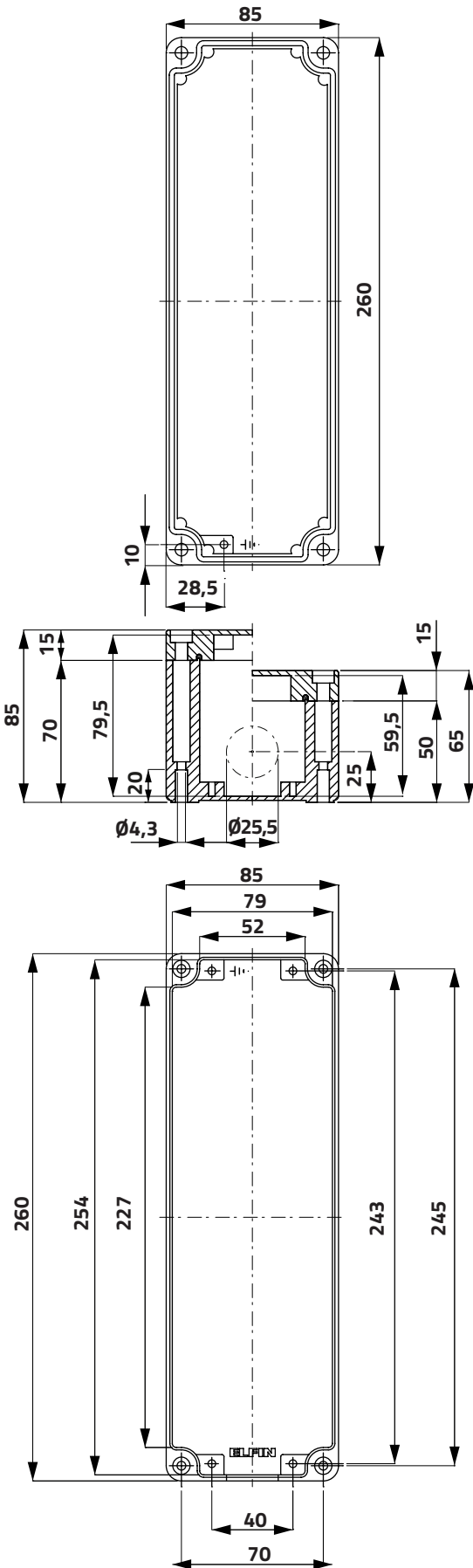


Coperchio con 6 fori Ø 22mm / 6-hole lid Ø 22mm

Senza entrata cavo / No cable entry	65	608	040C0820-6P6
Senza entrata cavo / No cable entry	85	755	040C0820-8P6
Con entrata cavo / With cable entry	65	604	040C0820-6EP6
Con entrata cavo / With cable entry	85	751	040C0820-8EP6

Scatole in alluminio M10 85x260mm

Aluminium enclosures M10 85x260mm



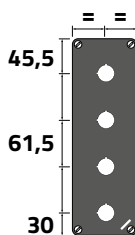
Scatole in alluminio M10 85x260mm Aluminium enclosures M10 85x260mm



h g cod

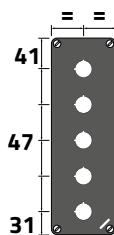
Coperchio senza fori / Undrilled lid

Senza entrata cavo / No cable entry	65	772	040C0826-6
Senza entrata cavo / No cable entry	85	917	040C0826-8
Con entrata cavo / With cable entry	65	768	040C0826-6E
Con entrata cavo / With cable entry	85	913	040C0826-8E
Grezza, cieca / Unpainted, no cable entry	65	772	040C0826-6N
Grezza, cieca / Unpainted, no cable entry	85	917	040C0826-8N



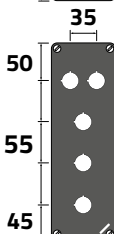
Coperchio con 4 fori Ø 22mm / 4-hole lid Ø 22mm

Senza entrata cavo / No cable entry	65	762	040C0826-6P4
Senza entrata cavo / No cable entry	85	907	040C0826-8P4
Con entrata cavo / With cable entry	65	758	040C0826-6EP4
Con entrata cavo / With cable entry	85	903	040C0826-8EP4



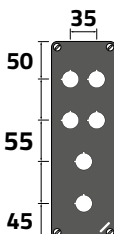
Coperchio con 5 fori Ø 22mm / 5-hole lid Ø 22mm

Senza entrata cavo / No cable entry	65	760	040C0826-6P5
Senza entrata cavo / No cable entry	85	905	040C0826-8P5
Con entrata cavo / With cable entry	65	756	040C0826-6EP5
Con entrata cavo / With cable entry	85	901	040C0826-8EP5



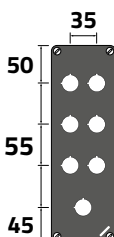
Coperchio con 5 fori Ø 22mm / 5-hole lid Ø 22mm

Senza entrata cavo / No cable entry	65	760	040C0826-6P5C
Senza entrata cavo / No cable entry	85	905	040C0826-8P5C
Con entrata cavo / With cable entry	65	756	040C0826-6EP5C
Con entrata cavo / With cable entry	85	901	040C0826-8EP5C



Coperchio con 6 fori Ø 22mm / 6-hole lid Ø 22mm

Senza entrata cavo / No cable entry	65	756	040C0826-6P6C
Senza entrata cavo / No cable entry	85	901	040C0826-8P6C
Con entrata cavo / With cable entry	65	901	040C0826-6EP6C
Con entrata cavo / With cable entry	85	901	040C0826-8EP6C

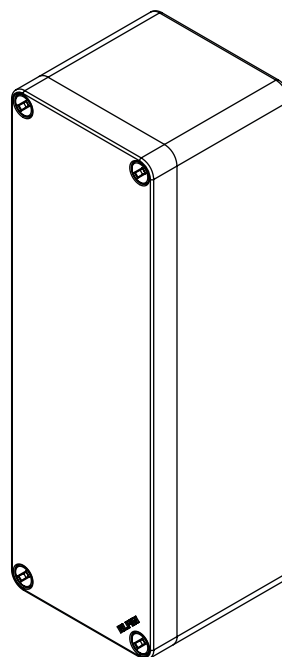
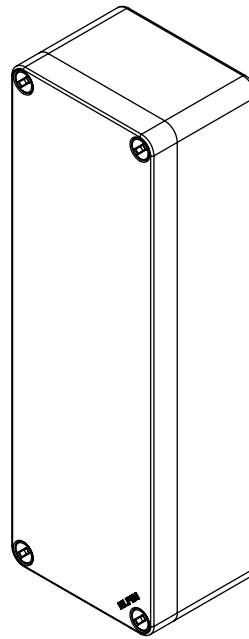
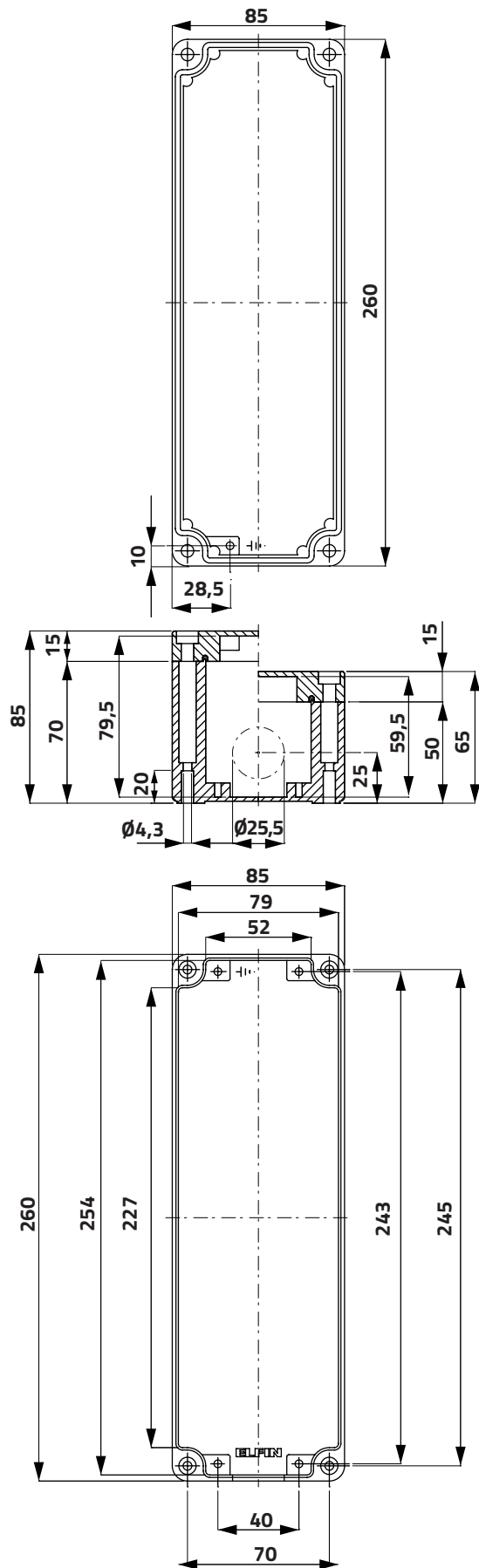


Coperchio con 7 fori Ø 22mm / 7-hole lid Ø 22mm

Senza entrata cavo / No cable entry	65	753	040C0826-6P7C
Senza entrata cavo / No cable entry	85	898	040C0826-8P7C
Con entrata cavo / With cable entry	65	769	040C0826-6EP7C
Con entrata cavo / With cable entry	85	894	040C0826-8EP7C

Scatole in alluminio M10 85x260mm

Aluminium enclosures M10 85x260mm

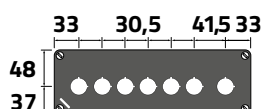


Scatole in alluminio M10 85x260mm Aluminium enclosures M10 85x260mm

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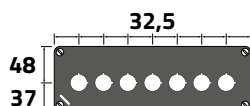
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cod



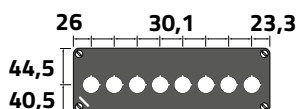
Coperchio con 7 fori Ø 22mm / 7-hole lid Ø 22mm

Senza entrata cavo / No cable entry	65	753	040C0826-6P7LC
Senza entrata cavo / No cable entry	85	898	040C0826-8P7LC
Con entrata cavo / With cable entry	65	749	040C0826-6EP7LC
Con entrata cavo / With cable entry	85	894	040C0826-8EP7LC



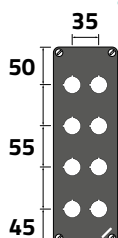
Coperchio con 7 fori Ø 22mm / 7-hole lid Ø 22mm

Senza entrata cavo / No cable entry	65	753	040C0826-6P7L
Senza entrata cavo / No cable entry	85	898	040C0826-8P7L
Con entrata cavo / With cable entry	65	749	040C0826-6EP7L
Con entrata cavo / With cable entry	85	894	040C0826-8EP7L



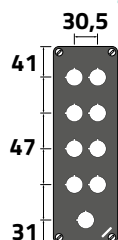
Coperchio con 8 fori Ø 22mm / 8-hole lid Ø 22mm

Senza entrata cavo / No cable entry	65	750	040C0826-6P8L
Senza entrata cavo / No cable entry	85	895	040C0826-8P8L
Con entrata cavo / With cable entry	65	746	040C0826-6EP8L
Con entrata cavo / With cable entry	85	891	040C0826-8EP8L



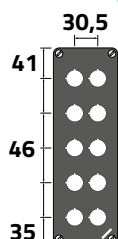
Coperchio con 8 fori Ø 22mm / 8-hole lid Ø 22mm

Senza entrata cavo / No cable entry	65	750	040C0826-6P8
Senza entrata cavo / No cable entry	85	895	040C0826-8P8
Con entrata cavo / With cable entry	65	746	040C0826-6EP8
Con entrata cavo / With cable entry	85	891	040C0826-8EP8



Coperchio con 9 fori Ø 22mm / 9-hole lid Ø 22mm

Senza entrata cavo / No cable entry	65	748	040C0826-6P9C
Senza entrata cavo / No cable entry	85	893	040C0826-8P9C
Con entrata cavo / With cable entry	65	744	040C0826-6EP9C
Con entrata cavo / With cable entry	85	889	040C0826-8EP9C

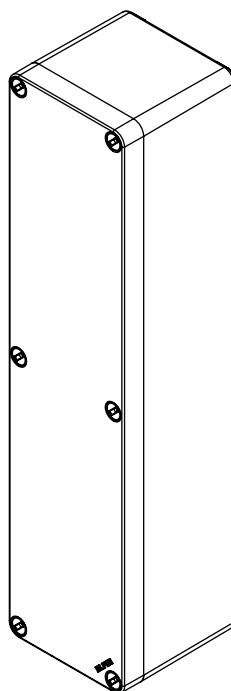
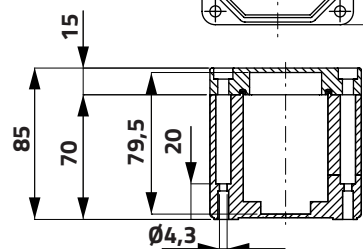
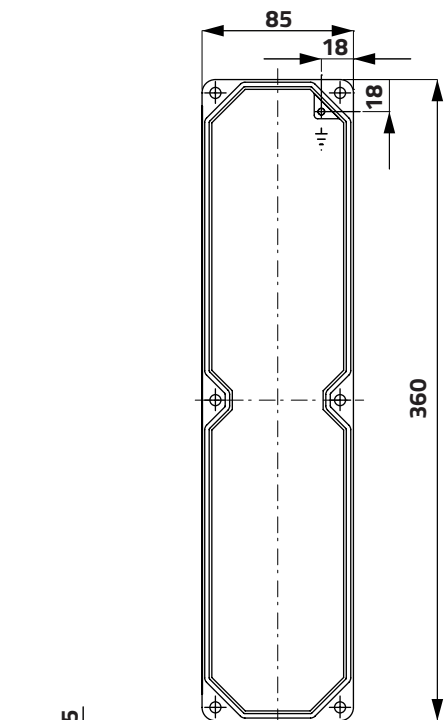


Coperchio con 10 fori Ø 22mm / 10-hole lid Ø 22mm

Senza entrata cavo / No cable entry	65	744	040C0826-6P10
Senza entrata cavo / No cable entry	85	889	040C0826-8P10
Con entrata cavo / With cable entry	65	740	040C0826-6EP10
Con entrata cavo / With cable entry	85	885	040C0826-8EP10

Scatole in alluminio M10 85x360mm

Aluminium enclosures M10 85x360mm



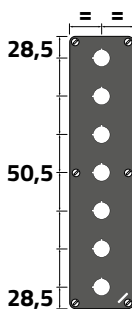
Scatole in alluminio M10 85x360mm Aluminium enclosures M10 85x360mm



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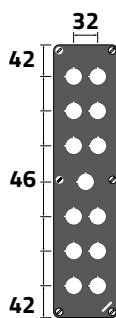
Coperchio senza fori / Undrilled lid

Senza entrata cavo / No cable entry	85	1280	040C0836-8
Grezza, cieca / Unpainted, no cable entry	85	1280	040C0836-8N



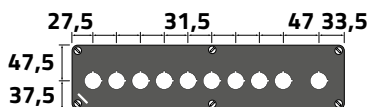
Coperchio con 7 fori Ø 22mm / 7-hole lid Ø 22mm

Senza entrata cavo / No cable entry	85	1269	040C0836-8P7
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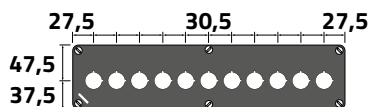
Coperchio con 13 fori Ø 22mm / 13-hole lid Ø 22mm

Senza entrata cavo / No cable entry	85	1243	040C0836-8P13
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Coperchio con 10 fori Ø 22mm / 10-hole lid Ø 22mm

Senza entrata cavo / No cable entry	85	1256	040C0836-8P10LC
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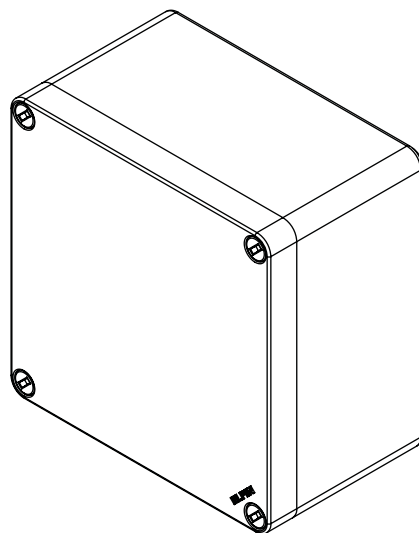
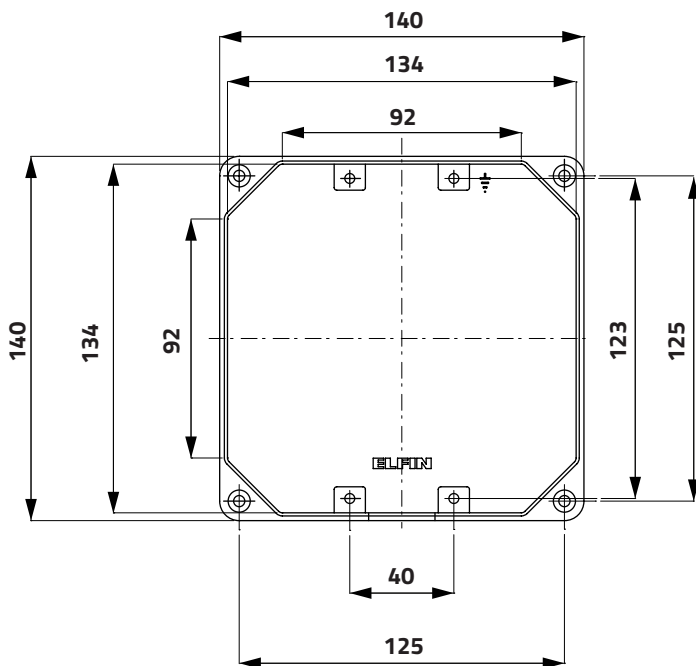
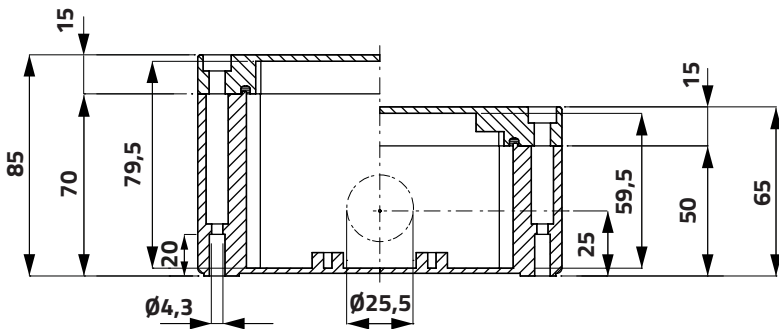
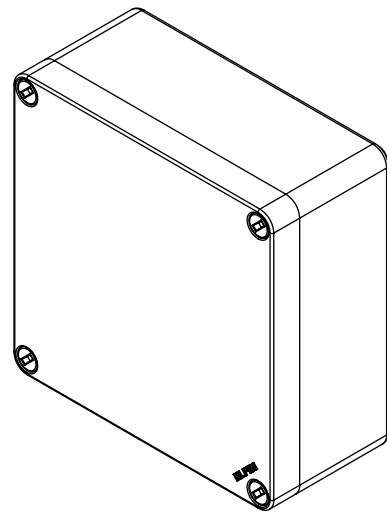
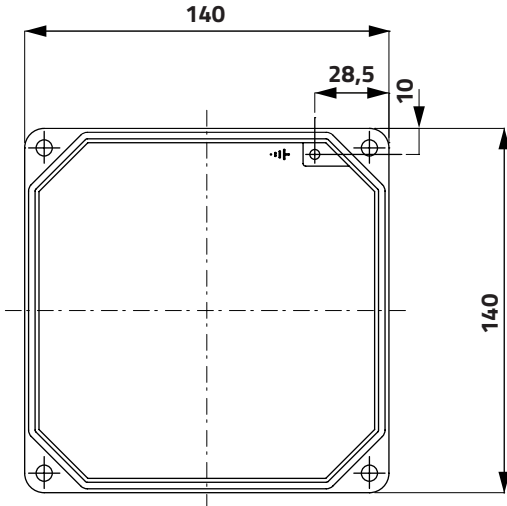


Coperchio con 11 fori Ø 22mm / 11-hole lid Ø 22mm

Senza entrata cavo / No cable entry	85	1252	040C0836-8P11L
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Scatole in alluminio M10 140x140mm

Aluminium enclosures M10 140x140mm



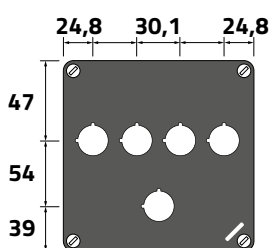
Scatole in alluminio M10 140x140mm Aluminium enclosures M10 140x140mm



h g cod

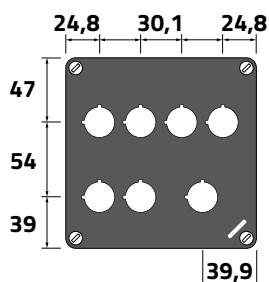
Coperchio senza fori / Undrilled lid

Senza entrata cavo / No cable entry	65	656	040C1414-6
Senza entrata cavo / No cable entry	85	780	040C1414-8
Con entrata cavo / With cable entry	65	652	040C1414-6E
Con entrata cavo / With cable entry	85	776	040C1414-8E
Grezza, cieca / Unpainted, no cable entry	65	656	040C1414-6N
Grezza, cieca / Unpainted, no cable entry	85	780	040C1414-8N



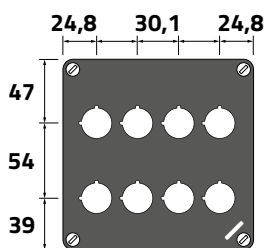
Coperchio con 5 fori Ø 22mm / 5-hole lid Ø 22mm

Senza entrata cavo / No cable entry	65	644	040C1414-6P5C
Senza entrata cavo / No cable entry	85	768	040C1414-8P5C
Con entrata cavo / With cable entry	65	640	040C1414-6EP5C
Con entrata cavo / With cable entry	85	764	040C1414-8EP5C



Coperchio con 7 fori Ø 22mm / 7-hole lid Ø 22mm

Senza entrata cavo / No cable entry	65	639	040C1414-6P7C
Senza entrata cavo / No cable entry	85	763	040C1414-8P7C
Con entrata cavo / With cable entry	65	635	040C1414-6EP7C
Con entrata cavo / With cable entry	85	759	040C1414-8EP7C

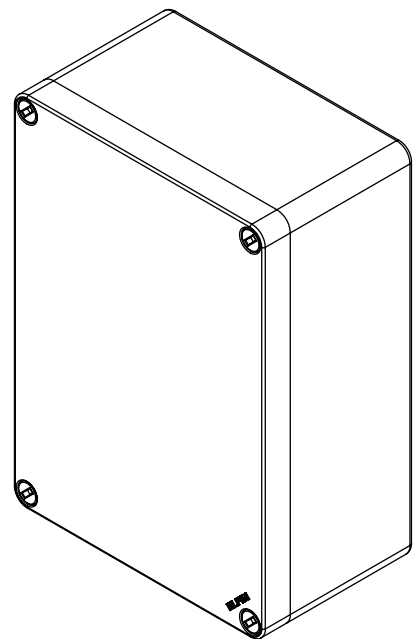
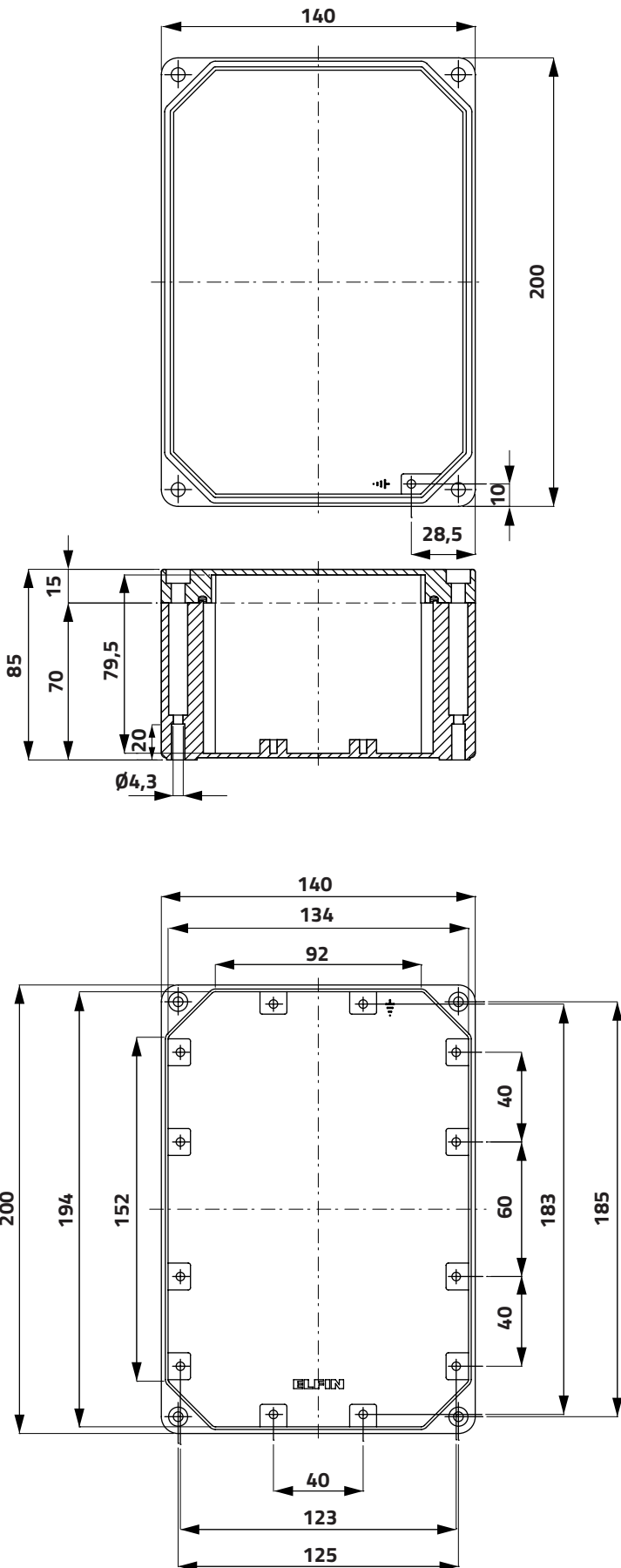


Coperchio con 8 fori Ø 22mm / 8-hole lid Ø 22mm

Senza entrata cavo / No cable entry	65	636	040C1414-6P8
Senza entrata cavo / No cable entry	85	760	040C1414-8P8
Con entrata cavo / With cable entry	65	632	040C1414-6EP8
Con entrata cavo / With cable entry	85	756	040C1414-8EP8

Scatole in alluminio M10 140x200mm

Aluminium enclosures M10 140x200mm



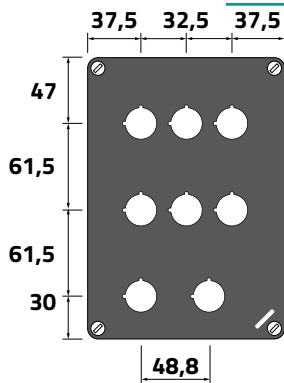
Scatole in alluminio M10 140x200mm Aluminium enclosures M10 140x200mm



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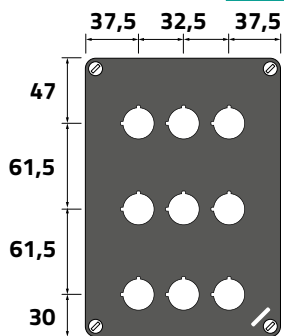
Coperchio senza fori / Undrilled lid

Senza entrata cavo / No cable entry	85	988	040C1420-8
Grezza, cieca / Unpainted, no cable entry	85	988	040C1420-8N



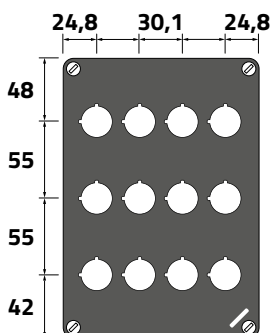
Coperchio con 8 fori Ø 22mm / 8-hole lid Ø 22mm

Senza entrata cavo / No cable entry	85	968	040C1420-8P8C
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Coperchio con 9 fori Ø 22mm / 9-hole lid Ø 22mm

Senza entrata cavo / No cable entry	85	966	040C1420-8P9
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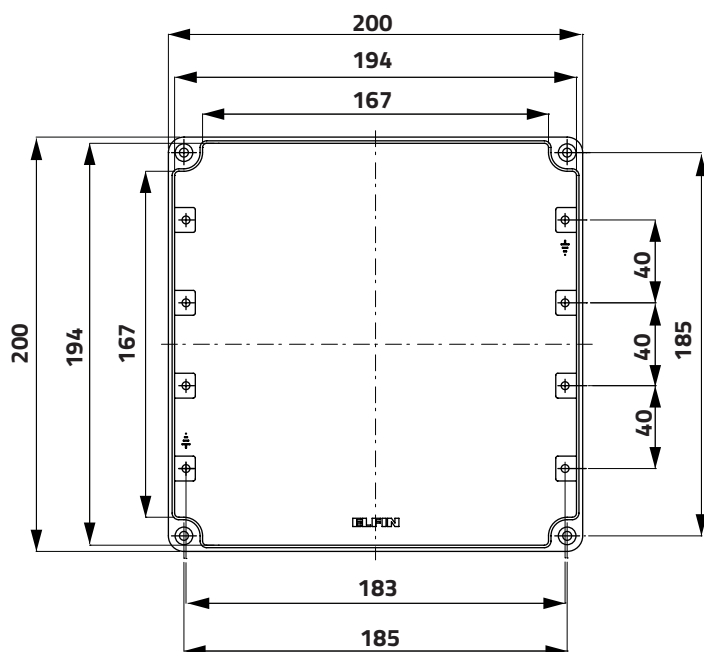
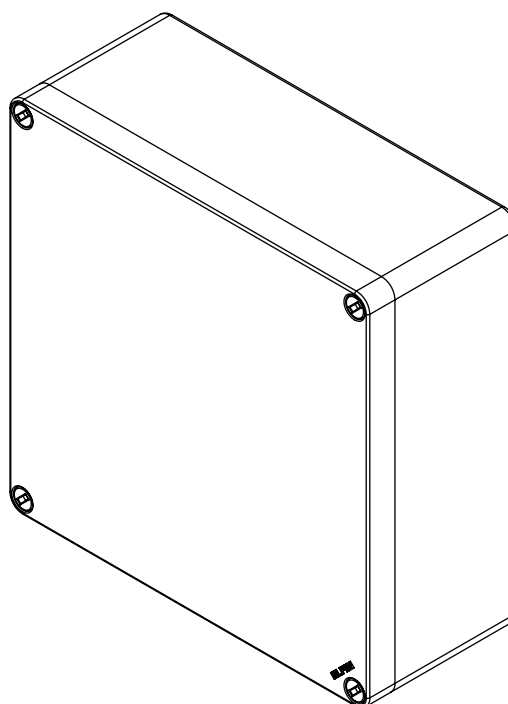
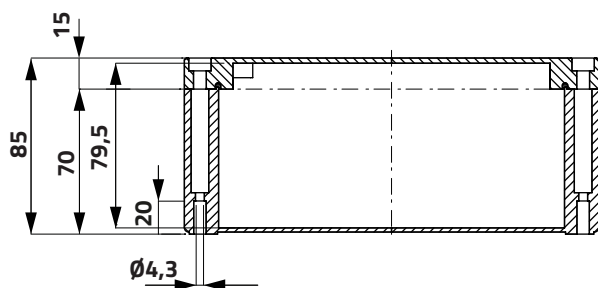
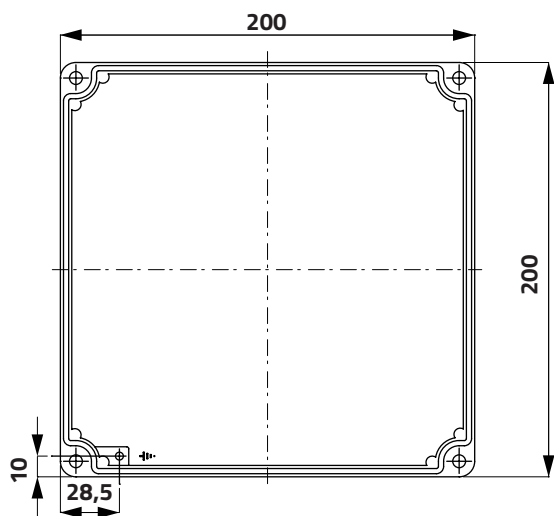


Coperchio con 12 fori Ø 22mm / 12-hole lid Ø 22mm

Senza entrata cavo / No cable entry	85	958	040C1420-8P12
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Scatole in alluminio M10 200x200mm

Aluminium enclosures M10 200x200mm



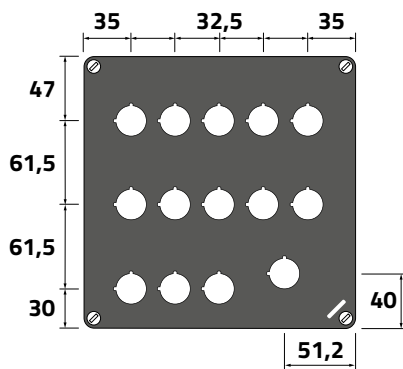
Scatole in alluminio M10 200x200mm Aluminium enclosures M10 200x200mm

h g cod



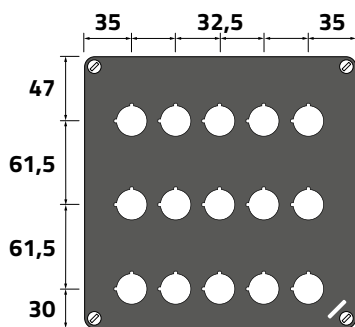
Coperchio senza fori / Undrilled lid

Senza entrata cavo / No cable entry	85	1359	040C2020-8
Grezza, cieca / Unpainted, no cable entry	85	1359	040C2020-8N



Coperchio con 14 fori Ø 22mm / 14-hole lid Ø 22mm

Senza entrata cavo / No cable entry	85	1319	040C2020-8P14C
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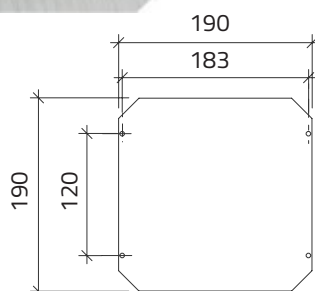
Coperchio con 15 fori Ø 22mm / 15-hole lid Ø 22mm

Senza entrata cavo / No cable entry	85	1316	040C2020-8P15
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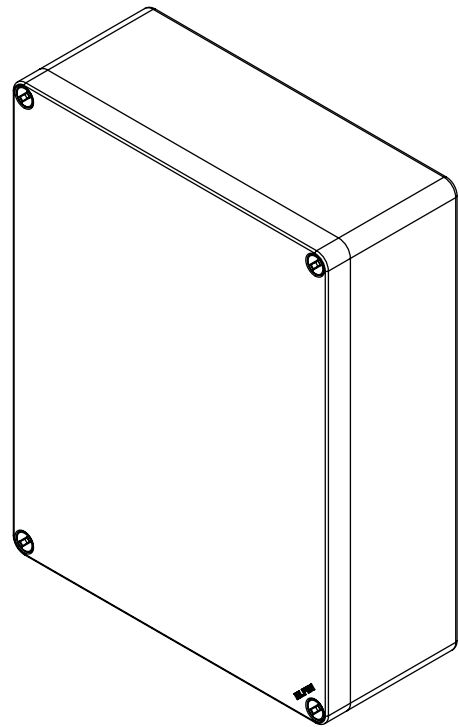
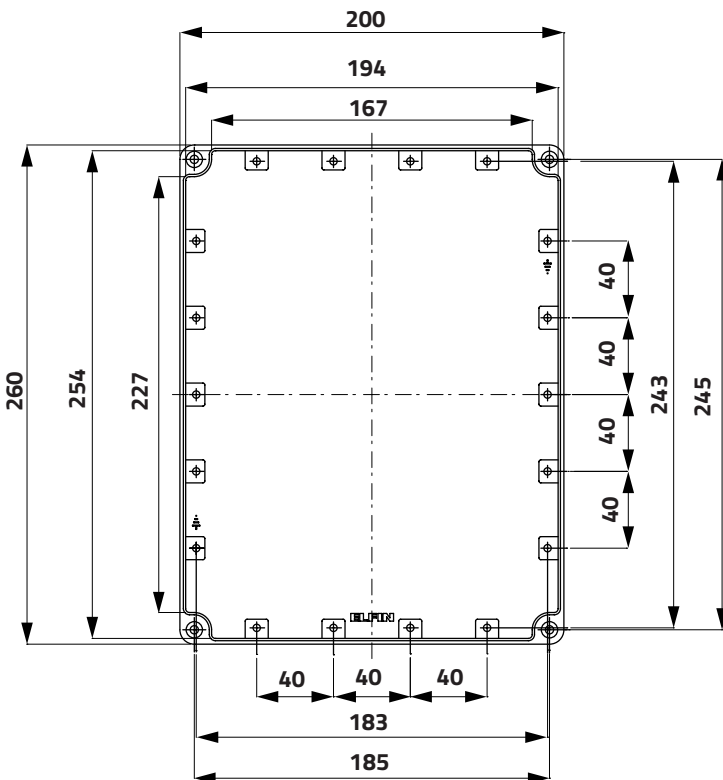
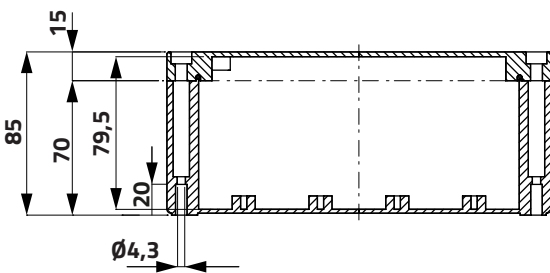
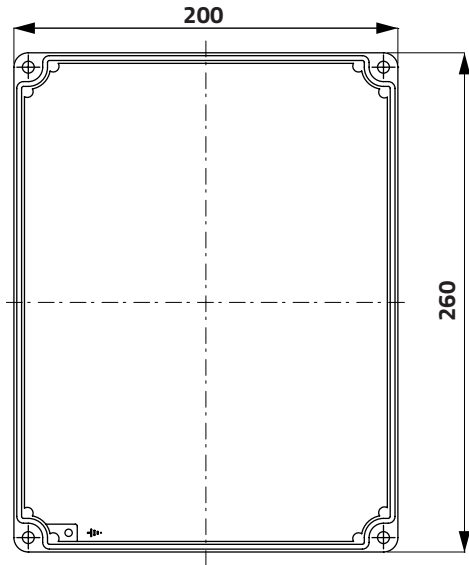
Piastra di fondo / Mounting plate

1,5	410	040P2020
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Scatole in alluminio M10 200x260mm

Aluminium enclosures M10 200x260mm



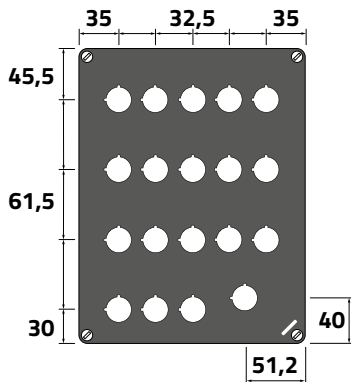
Scatole in alluminio M10 200x260mm Aluminium enclosures M10 200x260mm



h g cod

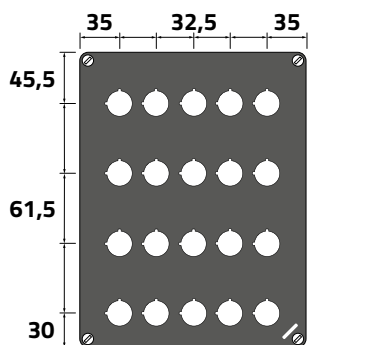
Coperchio senza fori / Undrilled lid

Senza entrata cavo / No cable entry	85	1608	040C2026-8
Grezza, cieca / Unpainted, no cable entry	85	1608	040C2026-8N



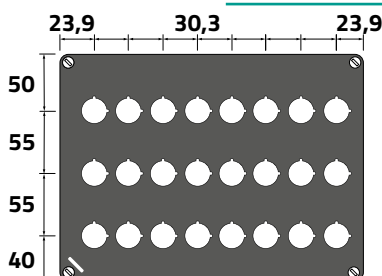
Coperchio con 19 fori Ø 22mm / 19-hole lid Ø 22mm

Senza entrata cavo / No cable entry	85	1554	040C2026-8P19C
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Coperchio con 20 fori Ø 22mm / 20-hole lid Ø 22mm

Senza entrata cavo / No cable entry	85	1552	040C2026-8P20
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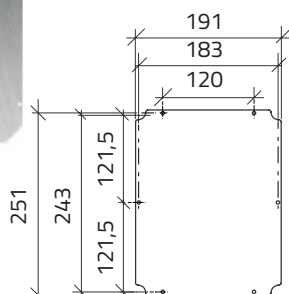
Coperchio con 24 fori Ø 22mm / 24-hole lid Ø 22mm

Senza entrata cavo / No cable entry	85	1540	040C2026-8P24
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Piastra di fondo / Mounting plate

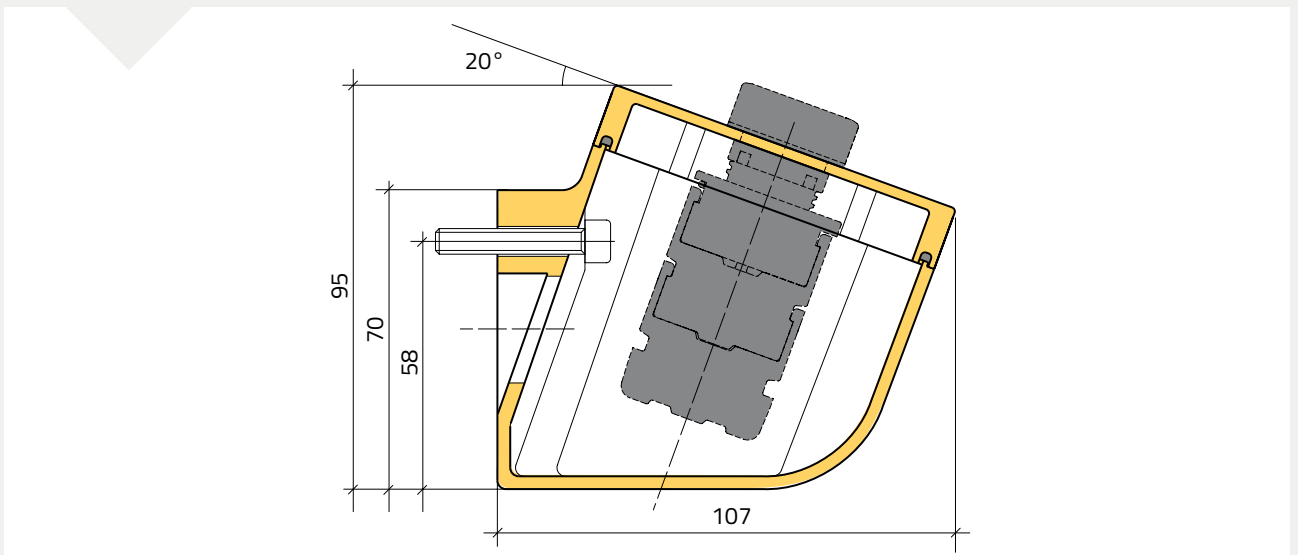
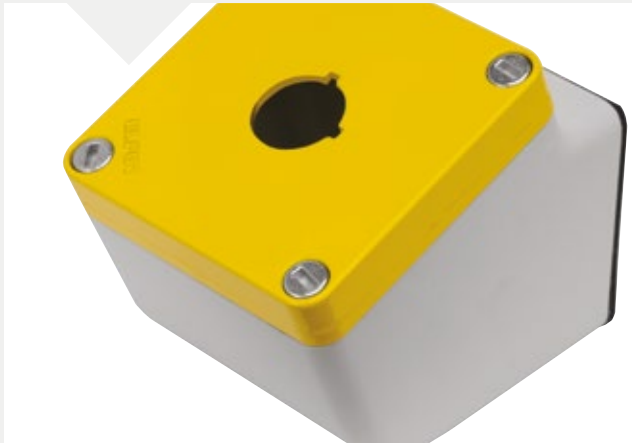
1,5	540	040P2026
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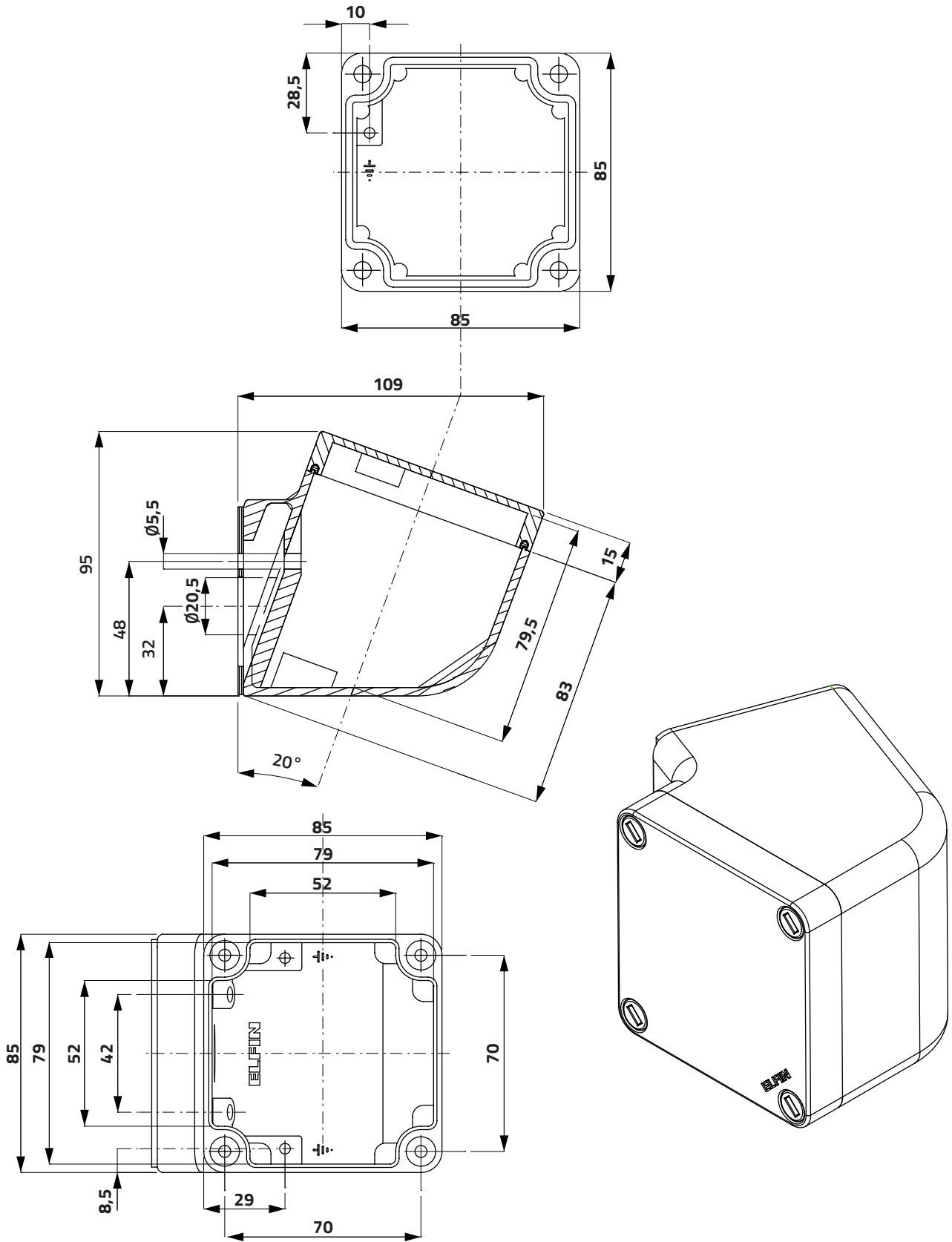
Scatole inclinate in alluminio M10 Sloped aluminium enclosures M10



Scatole inclinate in alluminio M10 Sloped aluminium enclosures M10



Scatole inclinate in alluminio M10 85x85mm Sloped aluminium enclosures M10 85x85mm



Scatole inclinate in alluminio M10 85x85mm Sloped aluminium enclosures M10 85x85mm

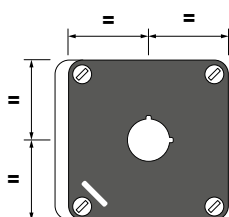


g

cod

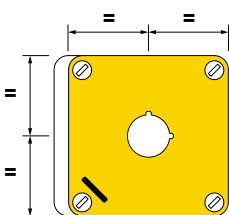
Coperchio senza fori / Undrilled lid

Con entrata cavo / With cable entry	545	040L0808-8E
Grezza, con entrata cavo / Unpainted, with cable entry	545	040L0808-8EN



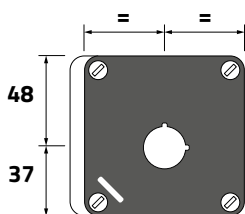
Coperchio con 1 foro Ø 22mm / 1-hole lid Ø 22mm

Con entrata cavo / With cable entry	542	040L0808-8EP1C
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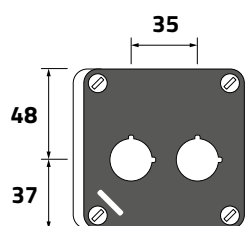
Coperchio giallo con 1 foro Ø 22mm / 1-hole yellow lid Ø 22mm

Con entrata cavo / With cable entry	542	040L0808-8EGP1
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Coperchio con 1 foro Ø 22mm / 1-hole lid Ø 22mm

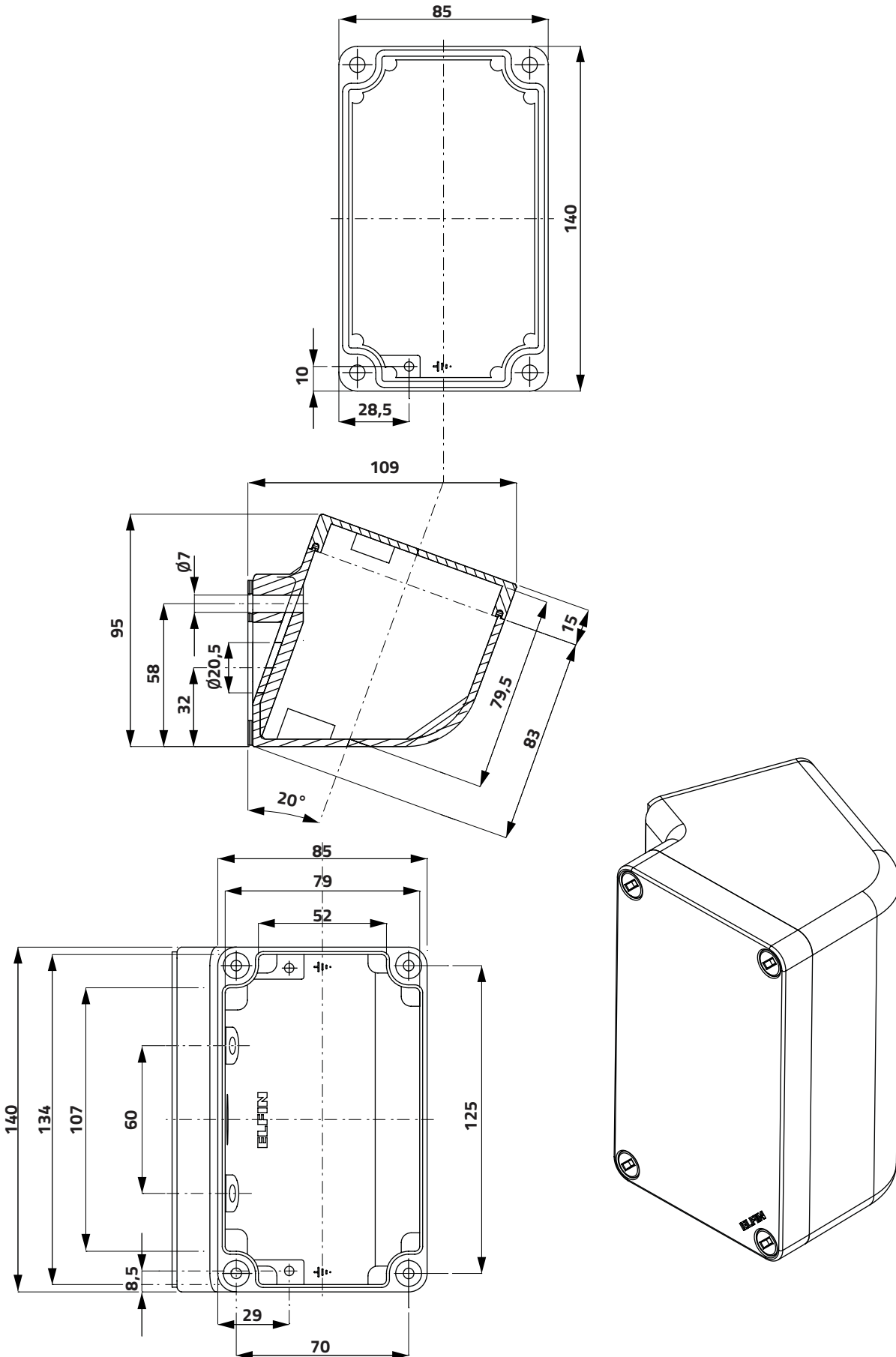
Con entrata cavo / With cable entry	542	040L0808-8EP1
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Coperchio con 2 fori Ø 22mm / 2-hole lid Ø 22mm

Con entrata cavo / With cable entry	539	040L0808-8EP2
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Scatole inclinate in alluminio M10 85x140mm Sloped aluminium enclosures M10 85x140mm



Scatole inclinate in alluminio M10 85x140mm Sloped aluminium enclosures M10 85x140mm

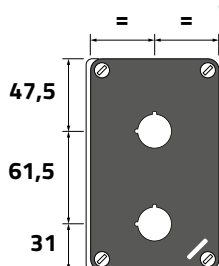


g

cod

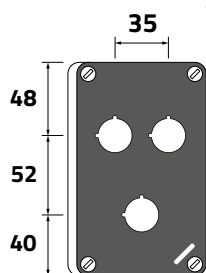
Coperchio senza fori / Undrilled lid

Con entrata cavo / With cable entry	750	040L0814-8E
Grezza, con entrata cavo / Unpainted, with cable entry	750	040L0814-8EN



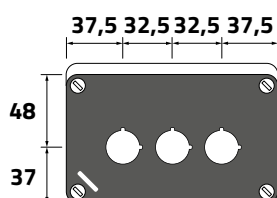
Coperchio con 2 fori Ø 22mm / 2-hole lid Ø 22mm

Con entrata cavo / With cable entry	745	040L0814-8EP2
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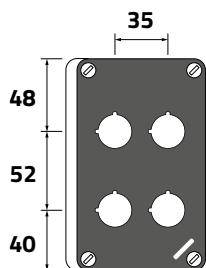
Coperchio con 3 fori Ø 22mm / 3-hole lid Ø 22mm

Con entrata cavo / With cable entry	743	040L0814-8EP3C
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Coperchio con 3 fori Ø 22mm / 3-hole lid Ø 22mm

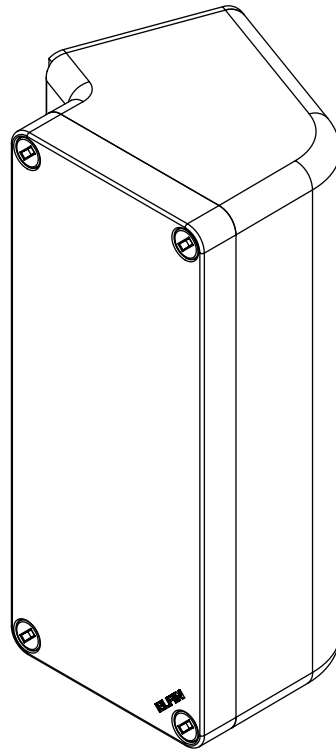
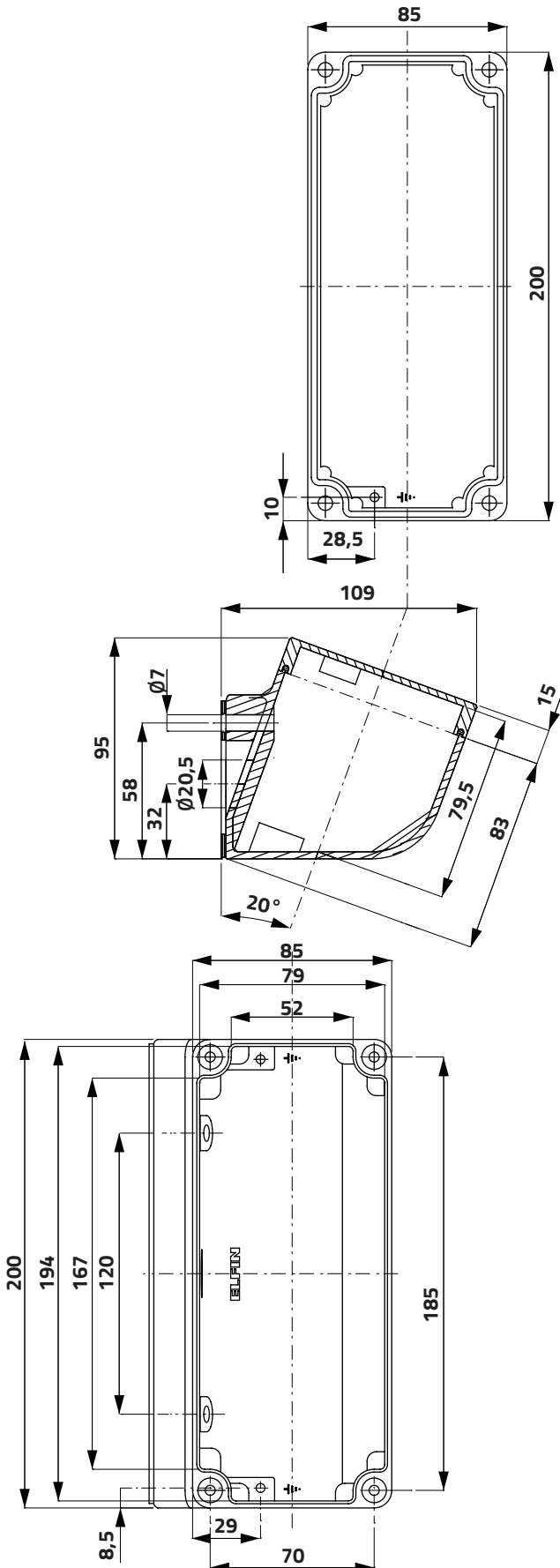
Con entrata cavo / With cable entry	743	040L0814-8EP3L
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Coperchio con 4 fori Ø 22mm / 4-hole lid Ø 22mm

Con entrata cavo / With cable entry	740	040L0814-8EP4
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Scatole inclinate in alluminio M10 85x200mm Sloped aluminium enclosures M10 85x200mm



Scatole inclinate in alluminio M10 85x200mm Sloped aluminium enclosures M10 85x200mm

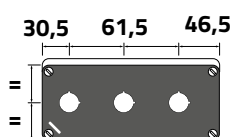


g

cod

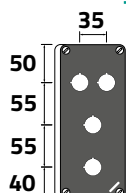
Coperchio senza fori / Undrilled lid

Con entrata cavo / With cable entry	980	040L0820-8E
Grezza, con entrata cavo / Unpainted, with cable entry	980	040L0820-8EN



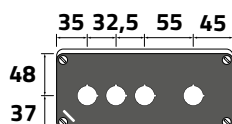
Coperchio con 3 fori Ø 22mm / 3-hole lid Ø 22mm

Con entrata cavo / With cable entry	973	040L0820-8EP3
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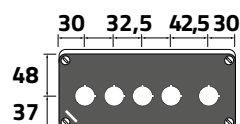
Coperchio con 4 fori Ø 22mm / 4-hole lid Ø 22mm

Con entrata cavo / With cable entry	970	040L0820-8EP4C
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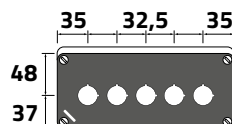
Coperchio con 4 fori Ø 22mm / 4-hole lid Ø 22mm

Con entrata cavo / With cable entry	970	040L0820-8EP4LC
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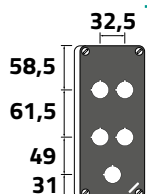
Coperchio con 5 fori Ø 22mm / 5-hole lid Ø 22mm

Con entrata cavo / With cable entry	968	040L0820-8EP5LC
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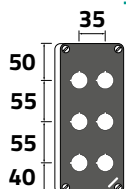
Coperchio con 5 fori Ø 22mm / 5-hole lid Ø 22mm

Con entrata cavo / With cable entry	968	040L0820-8EP5L
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Coperchio con 5 fori Ø 22mm / 5-hole lid Ø 22mm

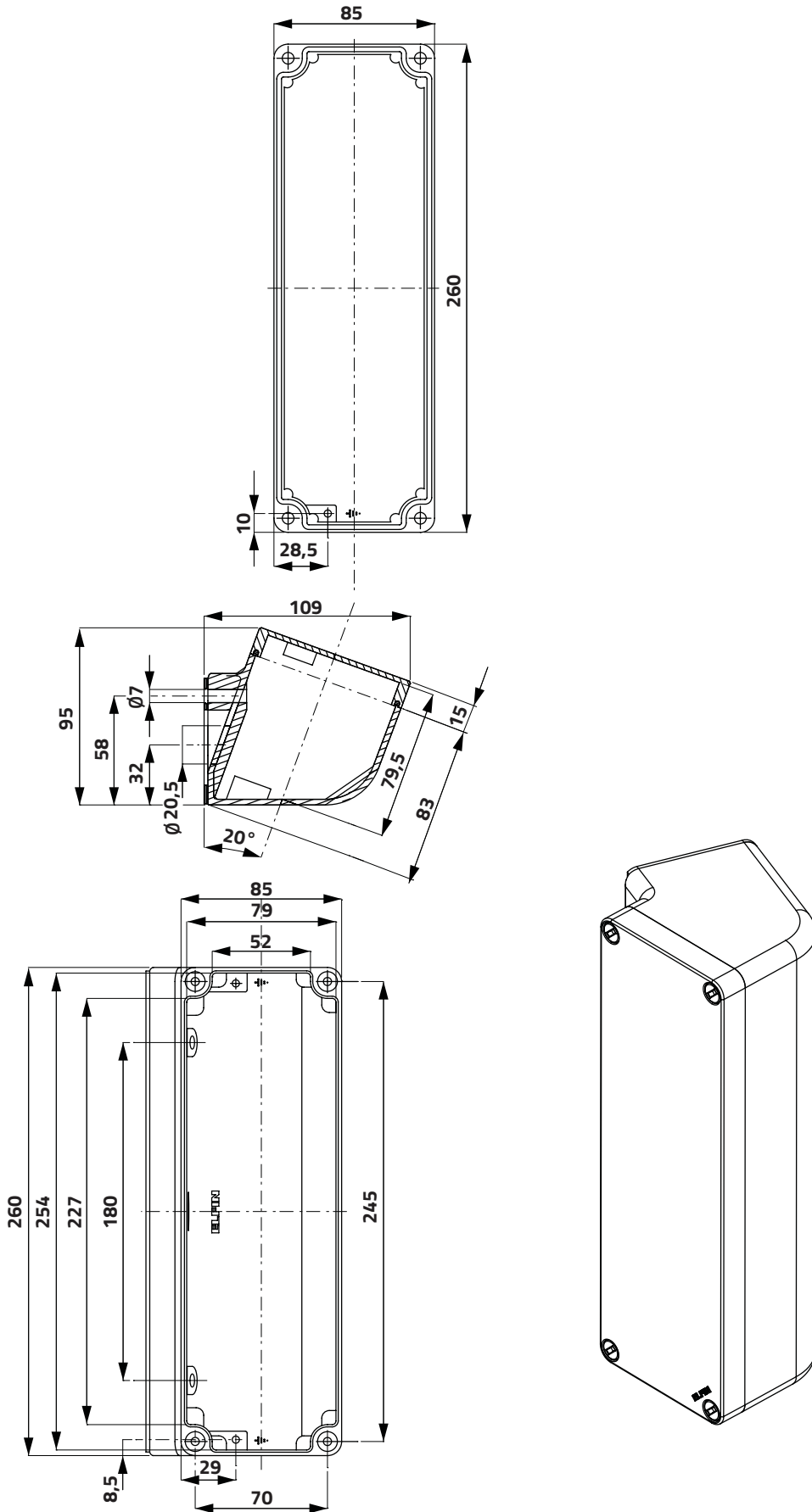
Con entrata cavo / With cable entry	968	040L0820-8EP5C
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Coperchio con 6 fori Ø 22mm / 6-hole lid Ø 22mm

Con entrata cavo / With cable entry	965	040L0820-8EP6
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Scatole inclinate in alluminio M10 85x260mm Sloped aluminium enclosures M10 85x260mm



Scatole inclinate in alluminio M10 85x260mm Sloped aluminium enclosures M10 85x260mm



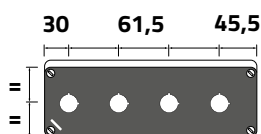
g

cod

Coperchio senza fori / Undrilled lid

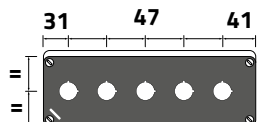
Con entrata cavo / With cable entry	1150	040L0826-8E
Grezza, con entrata cavo / Unpainted, with cable entry	1150	040L0826-8EN

Coperchio con 4 fori Ø 22mm / 4-hole lid Ø 22mm



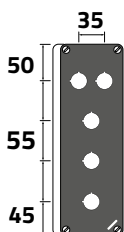
Con entrata cavo / With cable entry	1140	040L0826-8EP4
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Coperchio con 5 fori Ø 22mm / 5-hole lid Ø 22mm



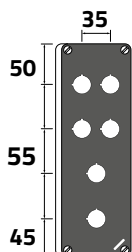
Con entrata cavo / With cable entry	1138	040L0826-8EP5
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Coperchio con 5 fori Ø 22mm / 5-hole lid Ø 22mm



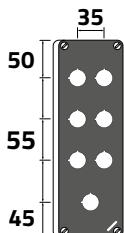
Con entrata cavo / With cable entry	1138	040L0826-8EP5C
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Coperchio con 6 fori Ø 22mm / 6-hole lid Ø 22mm



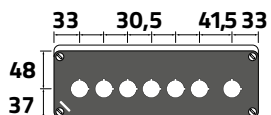
Con entrata cavo / With cable entry	1135	040L0826-8EP6C
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Coperchio con 7 fori Ø 22mm / 7-hole lid Ø 22mm



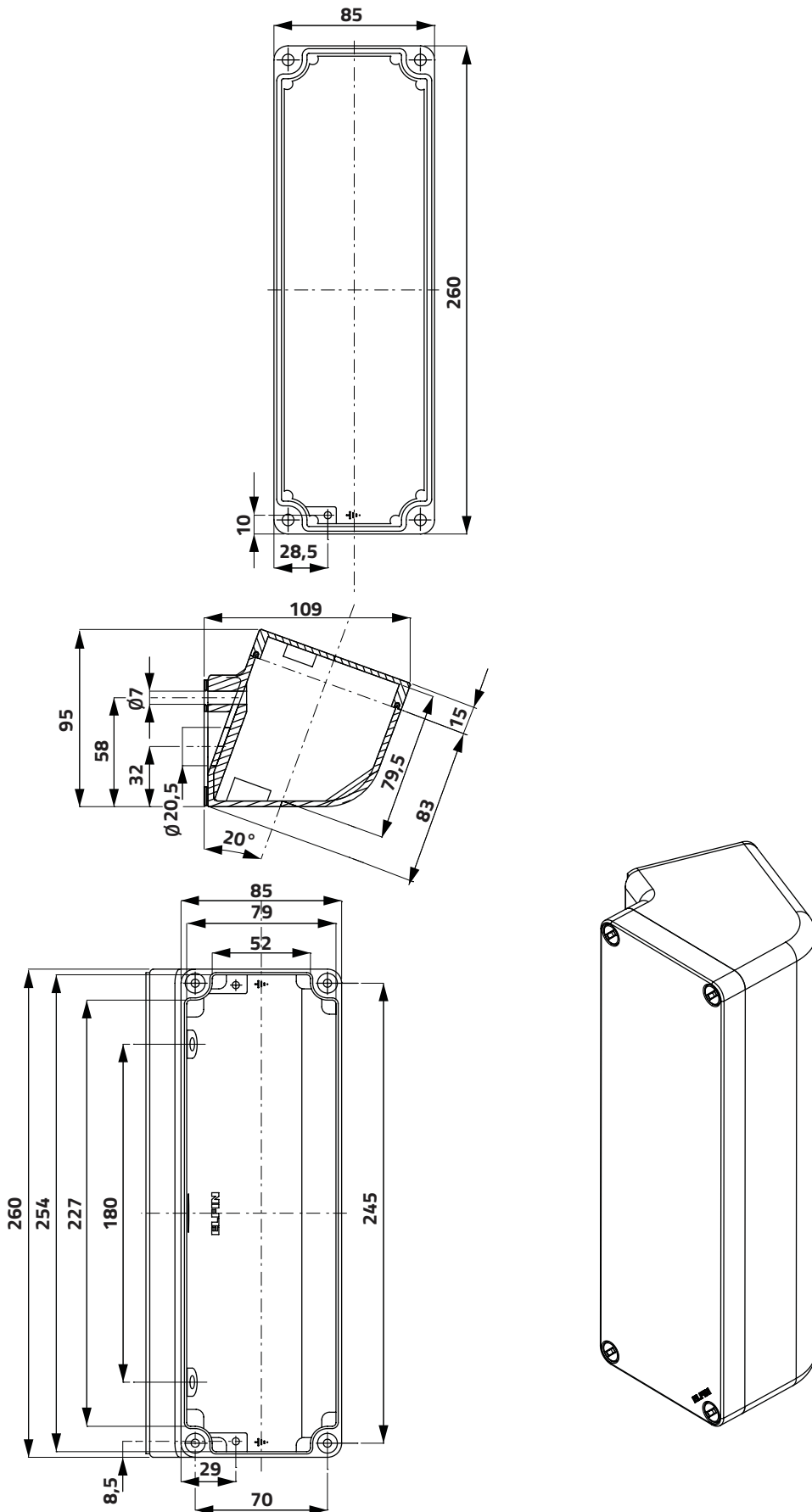
Con entrata cavo / With cable entry	1133	040L0826-8EP7C
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Coperchio con 7 fori Ø 22mm / 7-hole lid Ø 22mm

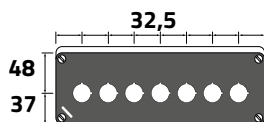


Con entrata cavo / With cable entry	1133	040L0826-8EP7LC
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Scatole inclinate in alluminio M10 85x260mm Sloped aluminium enclosures M10 85x260mm



Scatole inclinate alluminio in M10 85x260mm Sloped aluminium enclosures M10 85x260mm



Coperchio con 7 fori Ø 22mm / 7-hole lid Ø 22mm

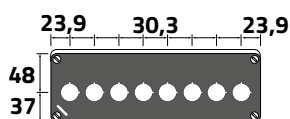
Con entrata cavo / With cable entry

g

1133

cod

040L0826-8EP7L

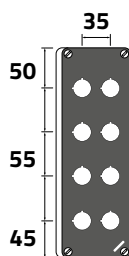


Coperchio con 8 fori Ø 22mm / 8-hole lid Ø 22mm

Con entrata cavo / With cable entry

1133

040L0826-8EP8L

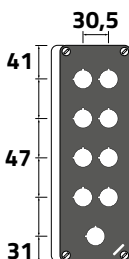


Coperchio con 8 fori Ø 22mm / 8-hole lid Ø 22mm

Con entrata cavo / With cable entry

1133

040L0826-8EP8

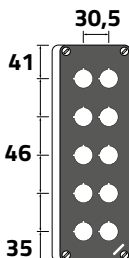


Coperchio con 9 fori Ø 22mm / 9-hole lid Ø 22mm

Con entrata cavo / With cable entry

1133

040L0826-8EP9C

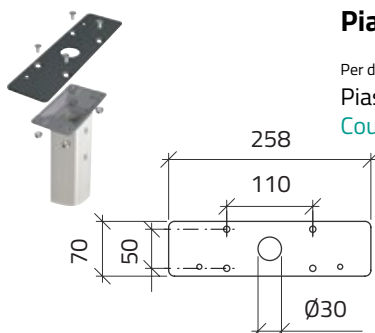


Coperchio con 10 fori Ø 22mm / 10-hole lid Ø 22mm

VeCon entrata cavo / With cable entry

968

040L0826-8EP10



Piastra / Plate

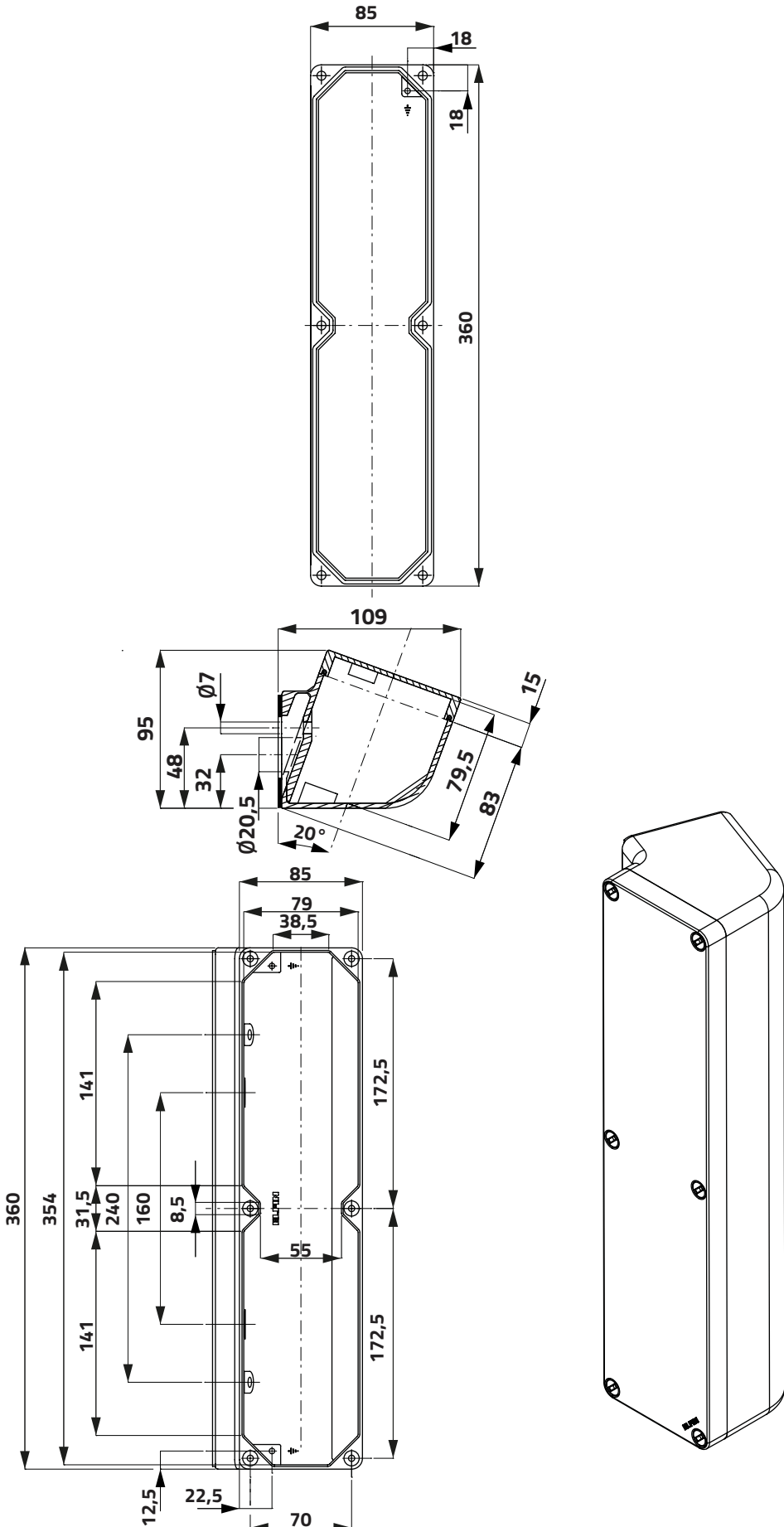
Per dettagli vedere sezione 060 / For details see section 060

Piastra accoppiamento per scatole inclinate
Coupling plate for sloped enclosures

450

060PAP

Scatole inclinate in alluminio M10 85x360mm Sloped aluminium enclosures M10 85x360mm



040



Scatole inclinate alluminio in M10 85x360mm Sloped aluminium enclosures M10 85x360mm

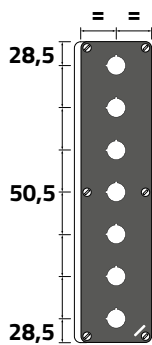


g

cod

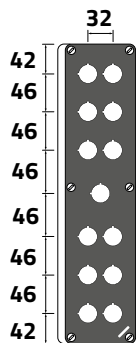
Coperchio senza fori / Undrilled lid

Con entrata cavo / With cable entry	1424	040L0836-8E
Grezza, con entrata cavo / Unpainted, with cable entry	1424	040L0836-8EN



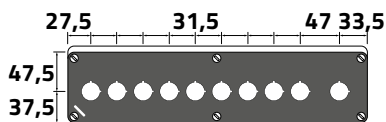
Coperchio con 7 fori Ø 22mm / 7-hole lid Ø 22mm

Con entrata cavo / With cable entry	1400	040L0836-8EP7
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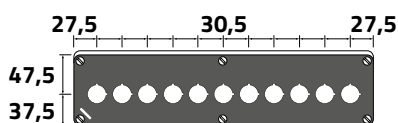
Coperchio con 13 fori Ø 22mm / 13-hole lid Ø 22mm

Con entrata cavo / With cable entry	1385	040L0836-8EP13
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Coperchio con 10 fori Ø 22mm / 10-hole lid Ø 22mm

Con entrata cavo / With cable entry	1394	040L0836-8EP10L
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Coperchio con 11 fori Ø 22mm / 11-hole lid Ø 22mm

Con entrata cavo / With cable entry	1391	040L0836-8EP11L
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Scatole in alluminio M4 Aluminium enclosures M4



Disponibile in quattro altezze

Available in four heights



Fornibile senza verniciatura

Available unpainted



Versione a lucidatura a specchio
per ambienti alimentare e farmaceutico

Mirror polished version
for food and pharmaceutical environments



Personalizzabile in diversi colori

Customizable in different colours



Scatole in alluminio M4 Aluminium enclosures M4



Viti di serraggio piastra
Clamping screws for plate



Viti di serraggio coperchio
Clamping screws for lid



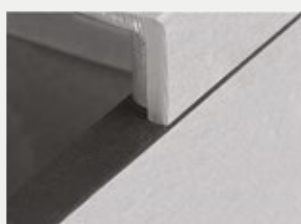
Lavorazioni personalizzate
Customized machinings



Kit di fissaggio con prigionieri
Fixing kit with studs



Etichetta personalizzata
plastificata
Customized plastic-coated
legend plate

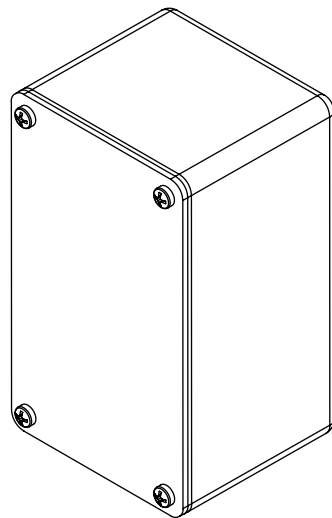
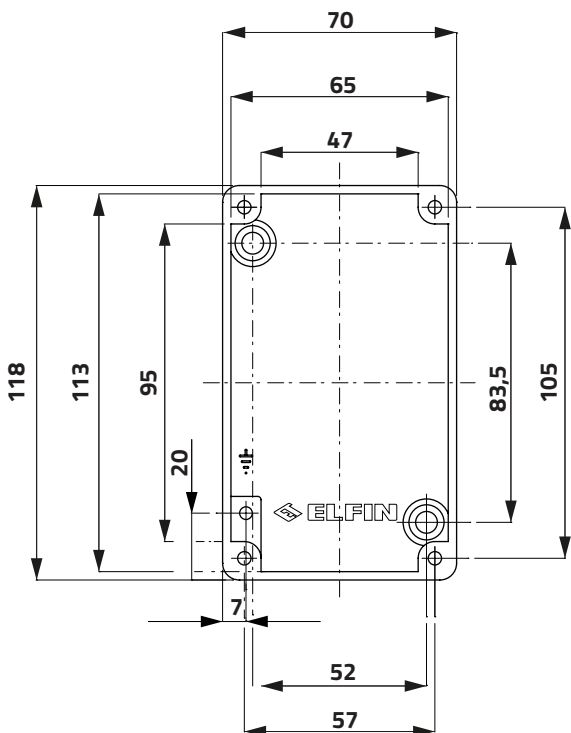
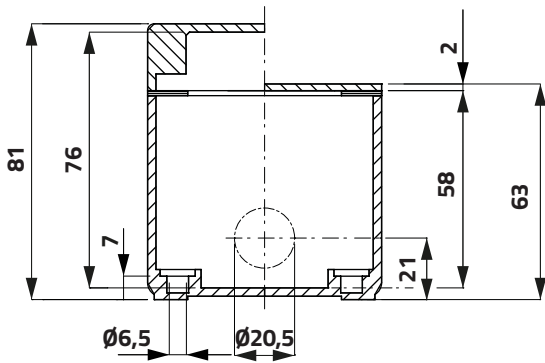
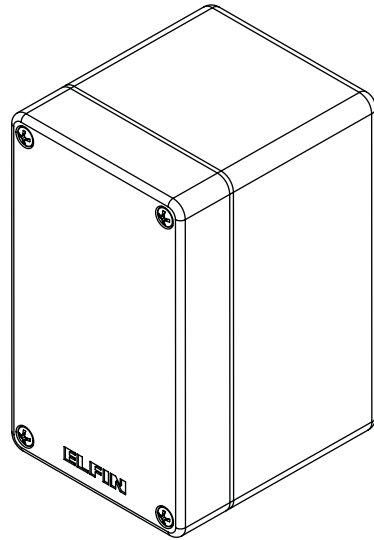
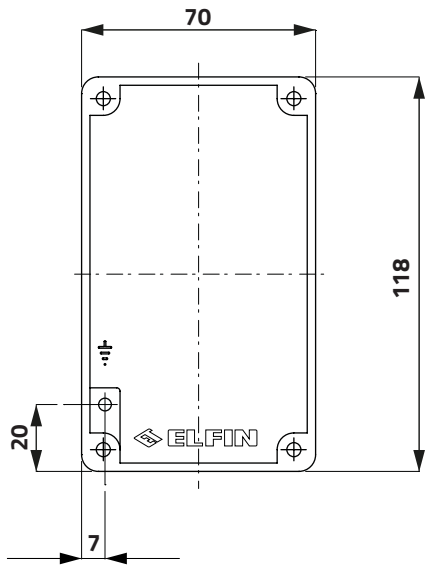


La guarnizione garantisce la
protezione IP66
A sealing gasket assures
IP66 protection



Kit di staffe di fissaggio
Set of mounting brackets

Scatole in alluminio M4 70x118mm Aluminium enclosures M4 70x118mm



Scatole in alluminio M4 70x118mm Aluminium enclosures M4 70x118mm



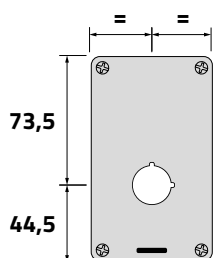
Coperchio senza fori / Undrilled lid

	h	g	cod
Senza entrata cavo / No cable entry	81	369	040C0711-8
Con entrata cavo / With cable entry	81	365	040C0711-8E
Grezza, cieca / Unpainted, no cable entry	81	369	040C0711-8N



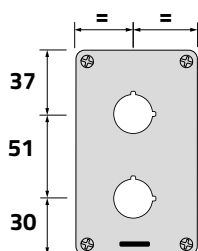
Piastra in alluminio senza fori / Undrilled aluminium plate

Senza entrata cavo / No cable entry	63	281	040C0711-6
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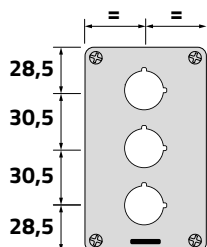
Coperchio con 1 foro Ø 22mm / 1-hole lid Ø 22mm

Senza entrata cavo / No cable entry	81	366	040C0711-8P1
Con entrata cavo / With cable entry	81	362	040C0711-8EP1



Coperchio con 2 fori Ø 22mm / 2-hole lid Ø 22mm

Senza entrata cavo / No cable entry	81	363	040C0711-8P2
Con entrata cavo / With cable entry	81	359	040C0711-8EP2

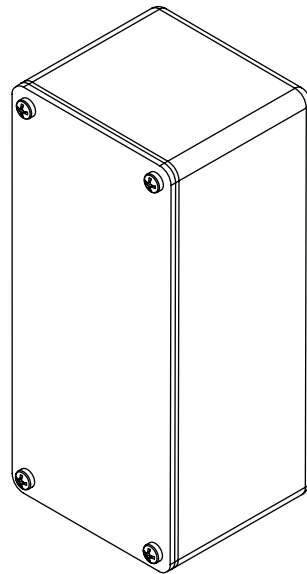
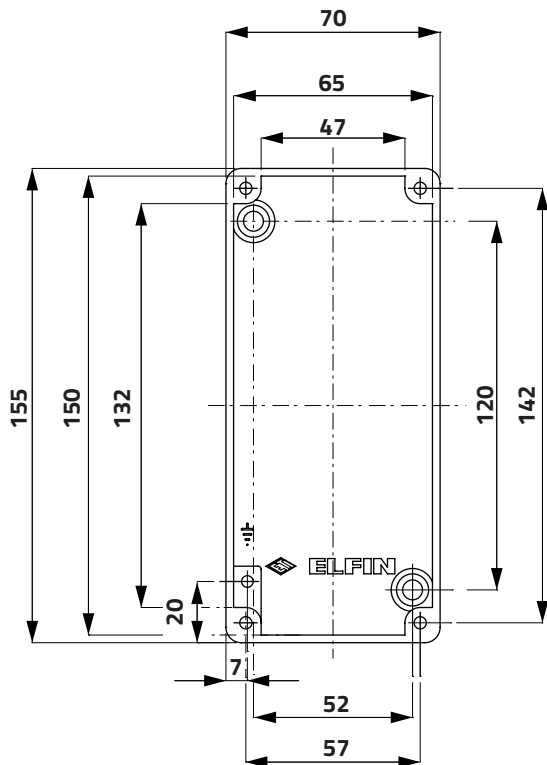
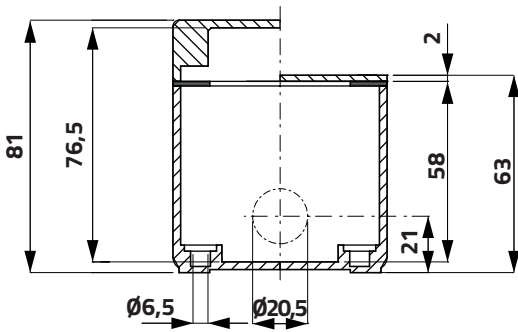
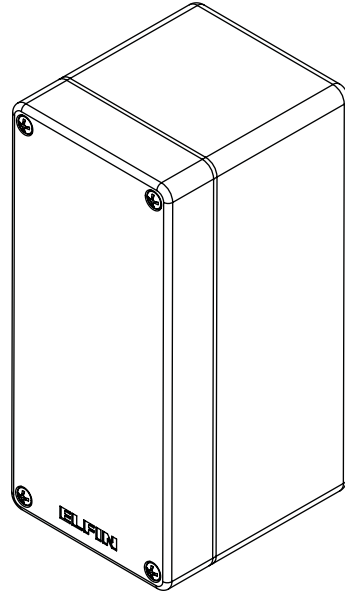
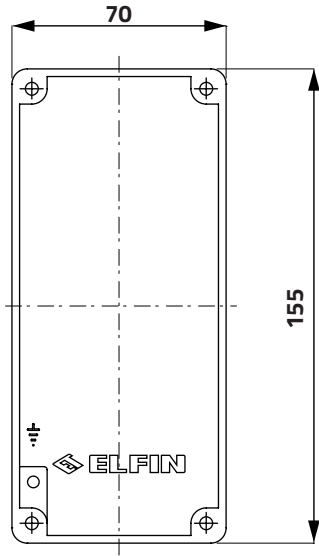


Coperchio con 3 fori Ø 22mm / 3-hole lid Ø 22mm

Senza entrata cavo / No cable entry	81	360	040C0711-8P3
Con entrata cavo / With cable entry	81	356	040C0711-8EP3

Scatole in alluminio M4 70x155mm

Aluminium enclosures M4 70x155mm



Scatole in alluminio M4 70x155mm Aluminium enclosures M4 70x155mm



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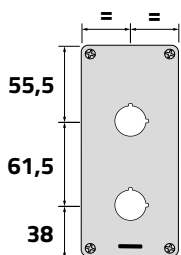
Coperchio senza fori / Undrilled lid

Senza entrata cavo / No cable entry	81	426	040C0715-8
Con entrata cavo / With cable entry	81	422	040C0715-8E
Grezza, cieca / Unpainted, no cable entry	81	426	040C0715-8N



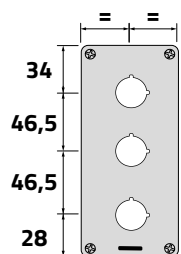
Piastra in alluminio senza fori / Undrilled aluminium plate

Senza entrata cavo / No cable entry	63	328	040C0715-6
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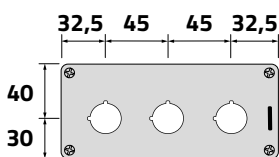
Coperchio con 2 fori Ø 22mm / 2-hole lid Ø 22mm

Senza entrata cavo / No cable entry	81	417	040C0715-8P2
Con entrata cavo / With cable entry	81	413	040C0715-8EP2



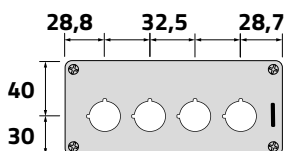
Coperchio con 3 fori Ø 22mm / 3-hole lid Ø 22mm

Senza entrata cavo / No cable entry	81	417	040C0715-8P3
Con entrata cavo / With cable entry	81	413	040C0715-8EP3



Coperchio con 3 fori Ø 22mm / 3-hole lid Ø 22mm

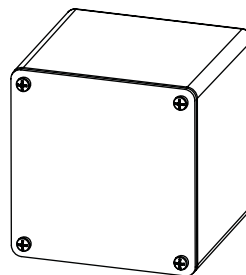
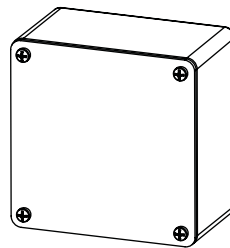
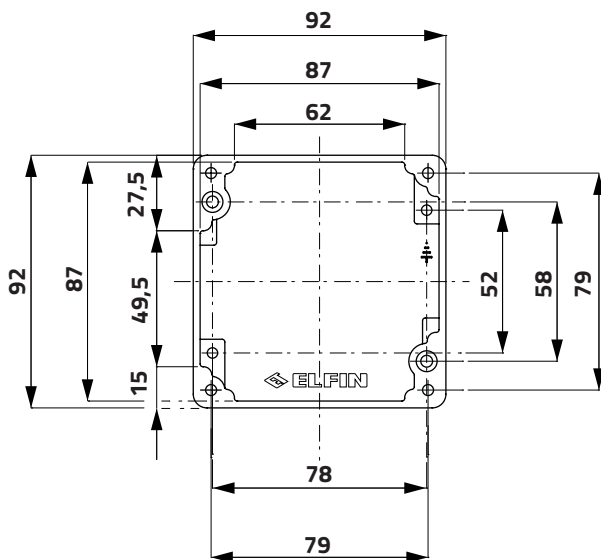
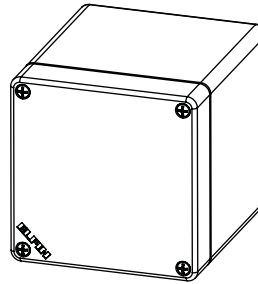
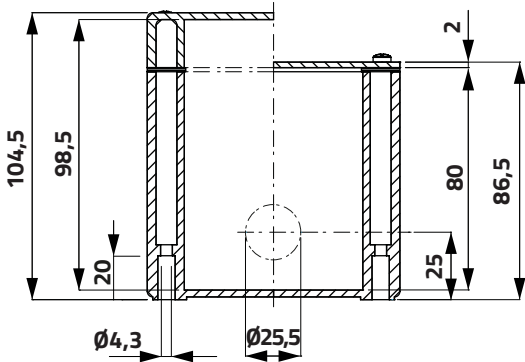
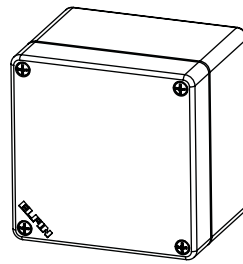
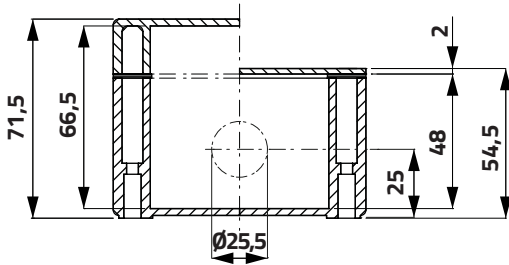
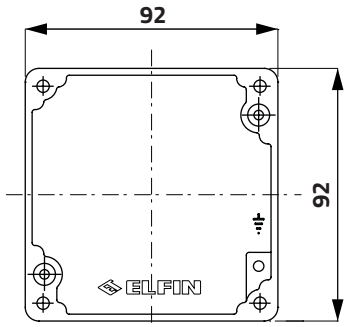
Senza entrata cavo / No cable entry	81	414	040C0715-8P3L
Con entrata cavo / With cable entry	81	410	040C0715-8EP3L



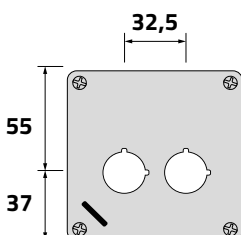
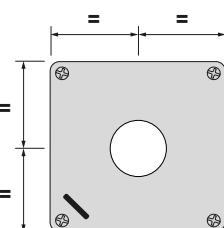
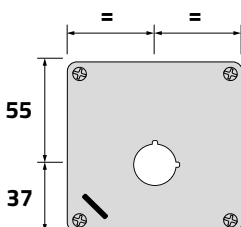
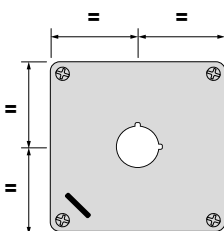
Coperchio con 4 fori Ø 22mm / 4-hole lid Ø 22mm

Senza entrata cavo / No cable entry	81	414	040C0715-8P4L
Con entrata cavo / With cable entry	81	410	040C0715-8EP4L

Scatole in alluminio M4 92x92mm Aluminium enclosures M4 92x92mm



Scatole in alluminio M4 92x92mm Aluminium enclosures M4 92x92mm



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Coperchio senza fori / Undrilled lid

Senza entrata cavo / No cable entry	71	302	040C0909-7
Senza entrata cavo / No cable entry	104	426	040C0909-1
Con entrata cavo / With cable entry	71	298	040C0909-7E
Con entrata cavo / With cable entry	104	422	040C0909-1E
Grezza, cieca / Unpainted, no cable entry	71	302	040C0909-7N
Grezza, cieca / Unpainted, no cable entry	104	426	040C0909-1N

Piastra in alluminio senza fori / Undrilled aluminium plate

Senza entrata cavo / No cable entry	54	328	040C0909-5
Senza entrata cavo / No cable entry	86	363	040C0909-8

Coperchio con 1 foro Ø 22mm / 1-hole lid Ø 22mm

Senza entrata cavo / No cable entry	71	299	040C0909-7P1C
Senza entrata cavo / No cable entry	104	423	040C0909-1P1C
Con entrata cavo / With cable entry	71	295	040C0909-7EP1C
Con entrata cavo / With cable entry	104	419	040C0909-1EP1C

Coperchio con 1 foro Ø 22mm / 1-hole lid Ø 22mm

Senza entrata cavo / No cable entry	71	299	040C0909-7P1
Senza entrata cavo / No cable entry	104	423	040C0909-1P1
Con entrata cavo / With cable entry	71	295	040C0909-7EP1
Con entrata cavo / With cable entry	104	419	040C0909-1EP1

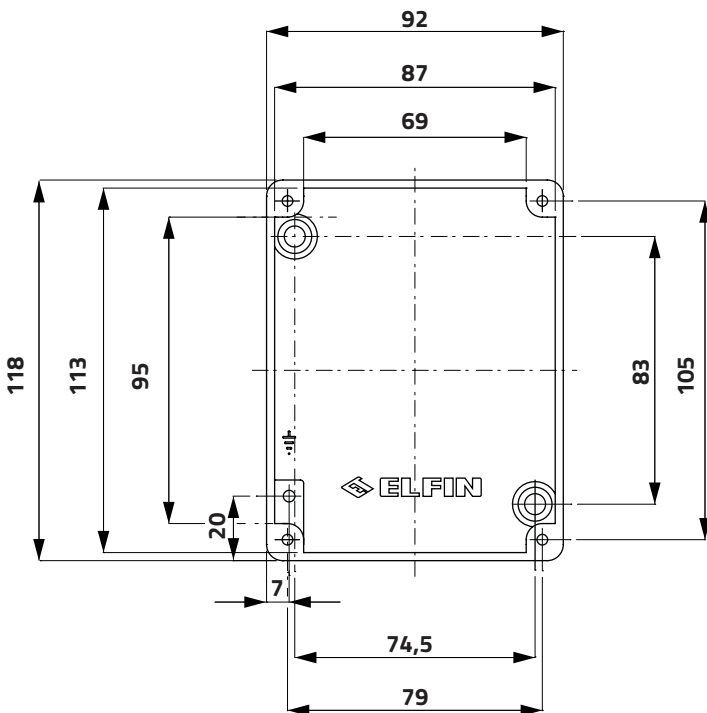
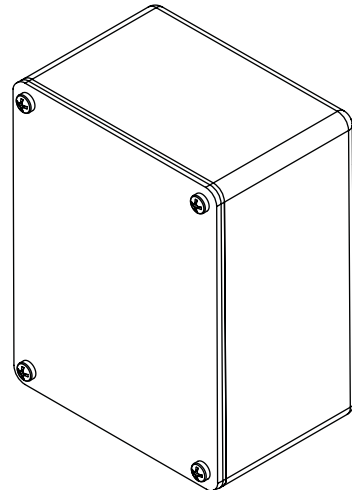
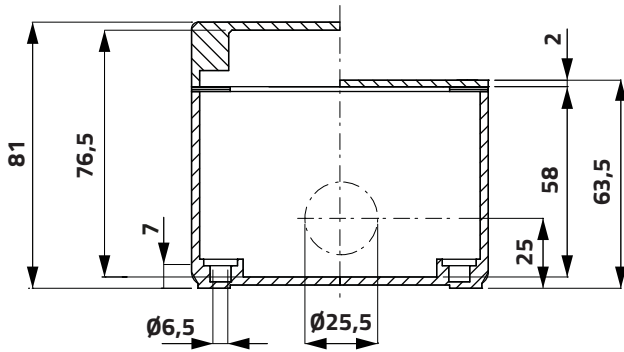
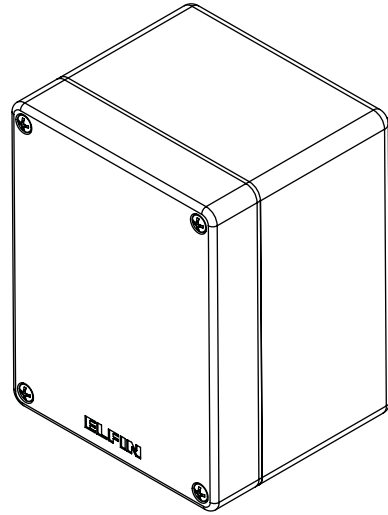
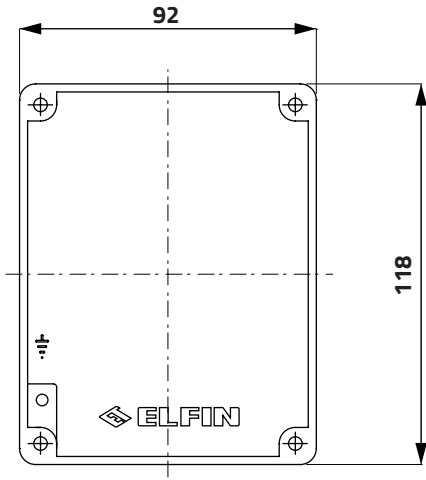
Coperchio con 1 foro Ø 30mm / 1-hole lid Ø 30mm

Senza entrata cavo / No cable entry	71	298	040C0909-7S1
Senza entrata cavo / No cable entry	104	422	040C0909-1S1
Con entrata cavo / With cable entry	71	294	040C0909-7ES1
Con entrata cavo / With cable entry	104	418	040C0909-1ES1

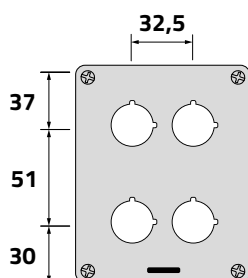
Coperchio con 2 fori Ø 22mm / 2-hole lid Ø 22mm

Senza entrata cavo / No cable entry	71	296	040C0909-7P2
Senza entrata cavo / No cable entry	104	420	040C0909-1P2
Con entrata cavo / With cable entry	71	292	040C0909-7EP2
Con entrata cavo / With cable entry	104	416	040C0909-1EP2

Scatole in alluminio M4 92x118mm Aluminium enclosures M4 92x118mm



Scatole in alluminio M4 92x118mm Aluminium enclosures M4 92x118mm



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Coperchio senza fori / Undrilled lid

Senza entrata cavo / No cable entry	81	404	040C0911-8
Con entrata cavo / With cable entry	81	400	040C0911-8E
Grezza, cieca / Unpainted, no cable entry	81	404	040C0911-8N

Piastra in alluminio senza fori / Undrilled aluminium plate

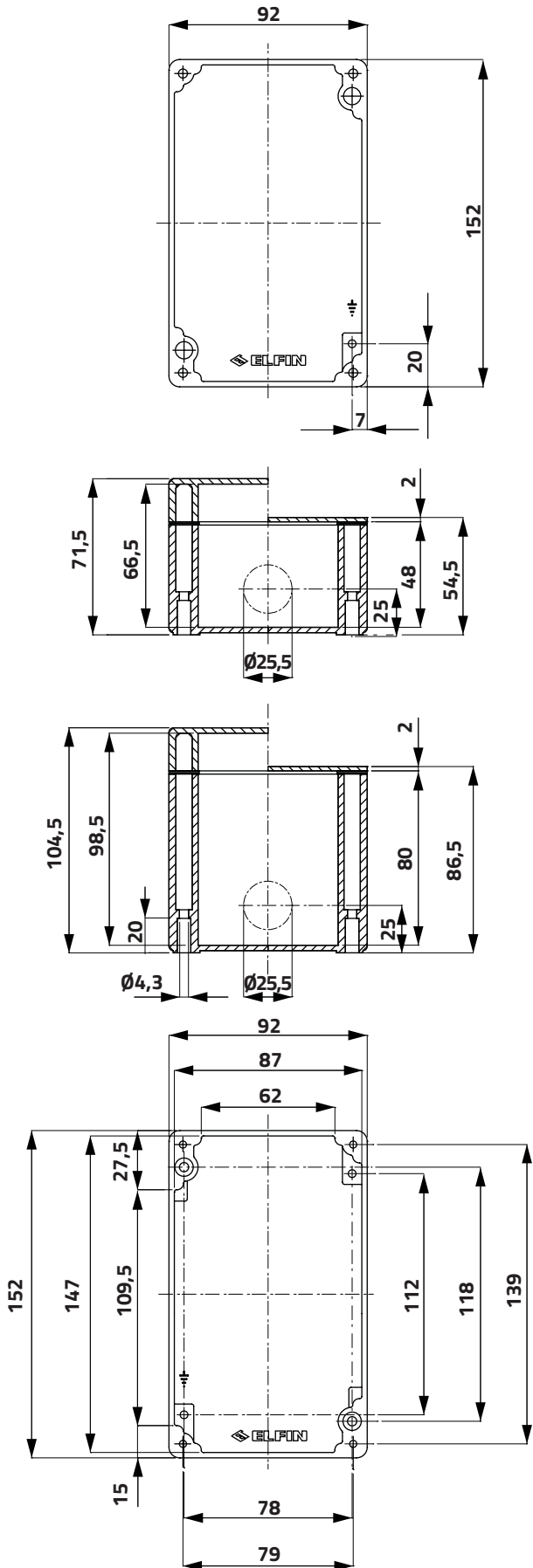
Senza entrata cavo / No cable entry	63	317	040C0911-6
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Coperchio con 4 fori Ø 22mm / 4-hole lid Ø 22mm

Senza entrata cavo / No cable entry	81	392	040C0911-8P4
Con entrata cavo / With cable entry	81	388	040C0911-8EP4

Scatole in alluminio M4 92x152mm

Aluminium enclosures M4 92x152mm



Scatole in alluminio M4 92x152mm

Aluminium enclosures M4 92x152mm

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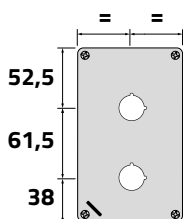
Coperchio senza fori / Undrilled lid

Senza entrata cavo / No cable entry	71	436	040C0915-7
Senza entrata cavo / No cable entry	104	564	040C0915-1
Con entrata cavo / With cable entry	71	432	040C0915-7E
Con entrata cavo / With cable entry	104	560	040C0915-1E
Grezza, cieca / Unpainted, no cable entry	71	436	040C0915-7N
Grezza, cieca / Unpainted, no cable entry	104	564	040C0915-1N



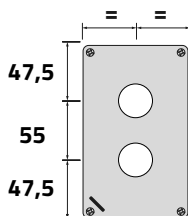
Piastra in alluminio senza fori / Undrilled aluminium plate

Senza entrata cavo / No cable entry	54	342	040C0915-5
Senza entrata cavo / No cable entry	86	468	040C0915-8



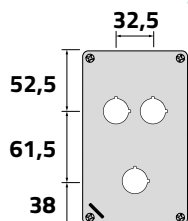
Coperchio con 2 fori Ø 22mm / 2-hole lid Ø 22mm

Senza entrata cavo / No cable entry	71	430	040C0915-7P2
Senza entrata cavo / No cable entry	104	558	040C0915-1P2
Con entrata cavo / With cable entry	71	426	040C0915-7EP2
Con entrata cavo / With cable entry	104	554	040C0915-1EP2



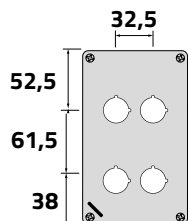
Coperchio con 2 fori Ø 30 / 2-hole lid Ø 30mm

Senza entrata cavo / No cable entry	71	428	040C0915-7S2
Senza entrata cavo / No cable entry	104	556	040C0915-1S2
Con entrata cavo / With cable entry	71	424	040C0915-7ES2
Con entrata cavo / With cable entry	104	552	040C0915-1ES2



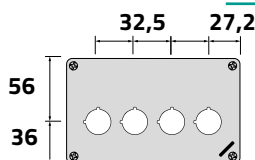
Coperchio con 3 fori Ø 22mm / 3-hole lid Ø 22 mm

Senza entrata cavo / No cable entry	71	424	040C0915-7P3C
Senza entrata cavo / No cable entry	104	552	040C0915-1P3C
Con entrata cavo / With cable entry	71	420	040C0915-7EP3C
Con entrata cavo / With cable entry	104	548	040C0915-1EP3C



Coperchio con 4 fori Ø 22mm / 4-hole lid Ø 22mm

Senza entrata cavo / No cable entry	71	424	040C0915-7P4
Senza entrata cavo / No cable entry	104	552	040C0915-1P4
Con entrata cavo / With cable entry	71	420	040C0915-7EP4
Con entrata cavo / With cable entry	104	548	040C0915-1EP4

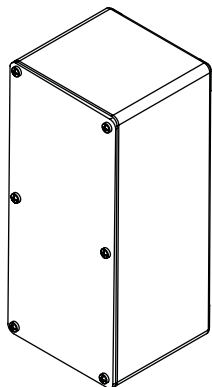
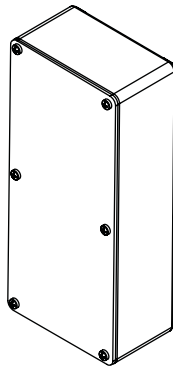
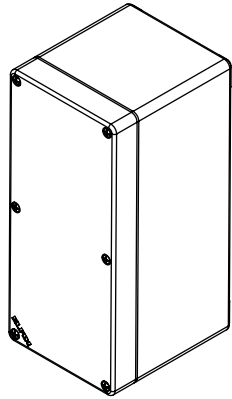
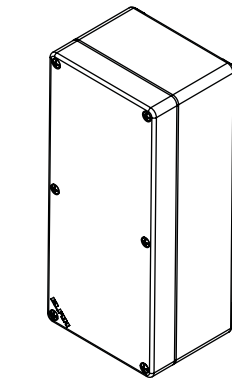
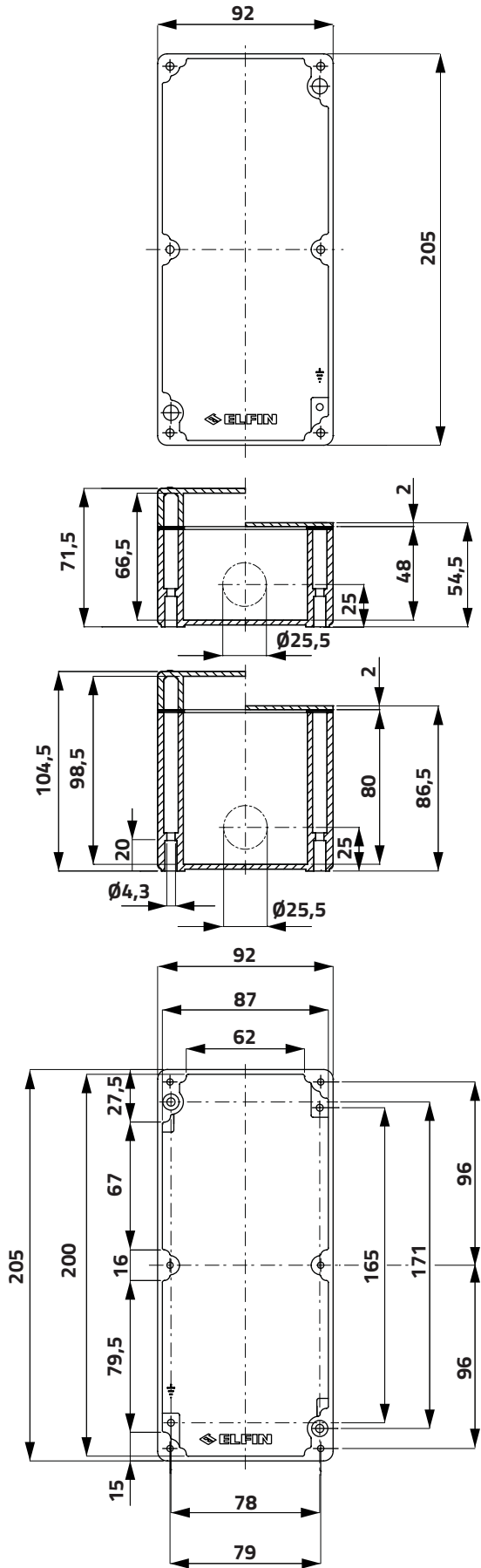


Coperchio con 4 fori Ø 22mm / 4-hole lid Ø 22mm

Senza entrata cavo / No cable entry	71	428	040C0915-7P4L
Senza entrata cavo / No cable entry	104	552	040C0915-1P4L
Con entrata cavo / With cable entry	71	420	040C0915-7EP4L
Con entrata cavo / With cable entry	104	548	040C0915-1EP4L

Scatole in alluminio M4 92x205mm

Aluminium enclosures M4 92x205mm



Scatole in alluminio M4 92x205mm

Aluminium enclosures M4 92x205mm



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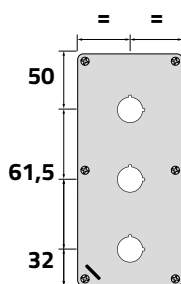
Coperchio senza fori / Undrilled lid

Senza entrata cavo / No cable entry	71	580	040C0920-7
Senza entrata cavo / No cable entry	104	762	040C0920-1
Con entrata cavo / With cable entry	71	576	040C0920-7E
Con entrata cavo / With cable entry	104	758	040C0920-1E
Grezza, cieca / Unpainted, no cable entry	71	580	040C0920-7N
Grezza, cieca / Unpainted, no cable entry	104	762	040C0920-1N



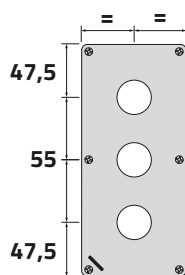
Piastra in alluminio senza fori / Undrilled aluminium plate

Senza entrata cavo / No cable entry	54	466	040C0920-5
Senza entrata cavo / No cable entry	86	638	040C0920-8



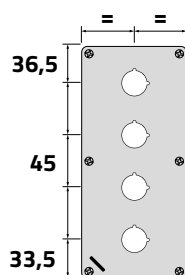
Coperchio con 3 fori Ø 22mm / 2-hole lid Ø 22mm

Senza entrata cavo / No cable entry	71	571	040C0920-7P3
Senza entrata cavo / No cable entry	104	753	040C0920-1P3
Con entrata cavo / With cable entry	71	567	040C0920-7EP3
Con entrata cavo / With cable entry	104	749	040C0920-1EP3



Coperchio con 3 fori Ø 30mm / 3-hole lid Ø 30mm

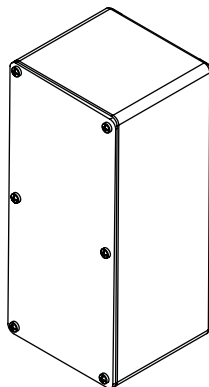
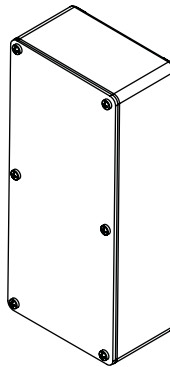
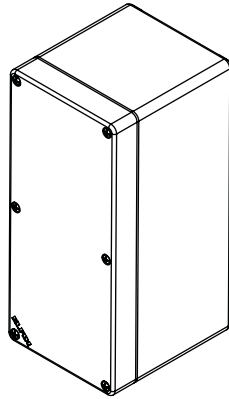
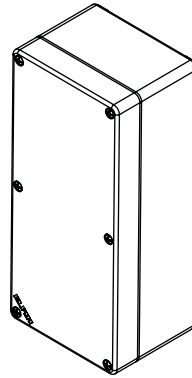
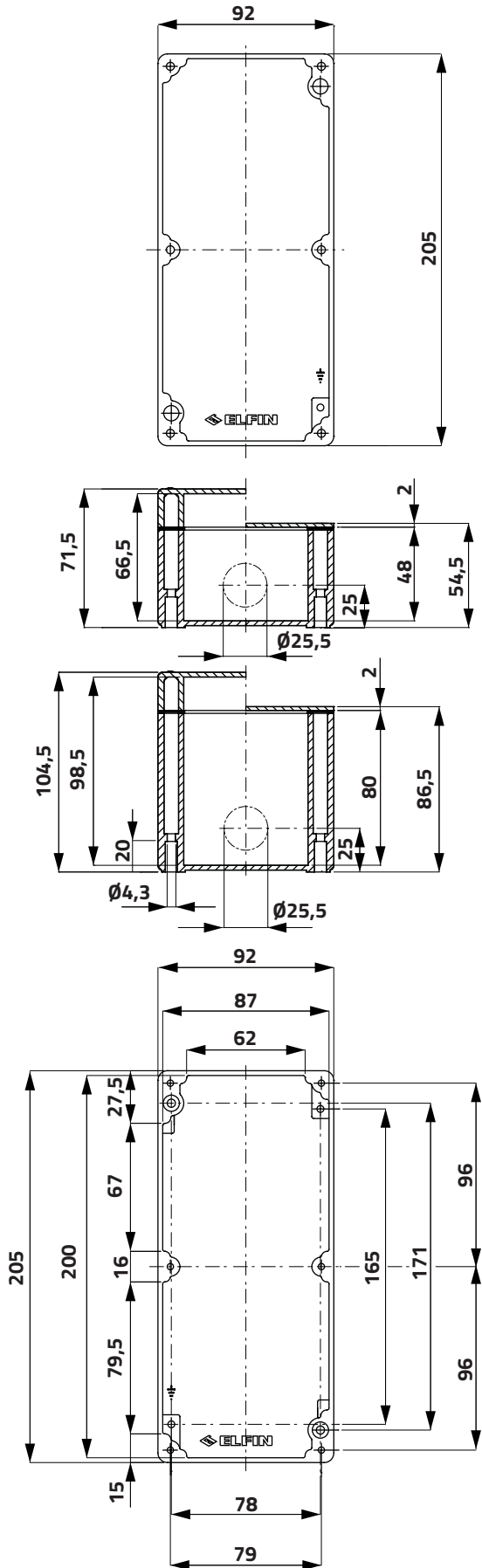
Senza entrata cavo / No cable entry	71	568	040C0920-7S3
Senza entrata cavo / No cable entry	104	750	040C0920-1S3
Con entrata cavo / With cable entry	71	564	040C0920-7ES3
Con entrata cavo / With cable entry	104	746	040C0920-1ES3



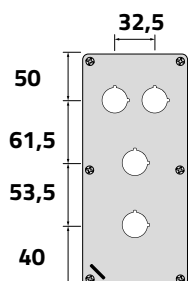
Coperchio con 4 fori Ø 22mm / 4-hole lid Ø 22mm

Senza entrata cavo / No cable entry	71	568	040C0920-7P4
Senza entrata cavo / No cable entry	104	750	040C0920-1P4
Con entrata cavo / With cable entry	71	564	040C0920-7EP4
Con entrata cavo / With cable entry	104	764	040C0920-1EP4

Scatole in alluminio M4 92x205mm Aluminium enclosures M4 92x205mm

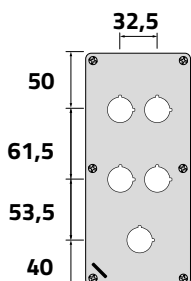


Scatole in alluminio M4 92x205mm Aluminium enclosures M4 92x205mm



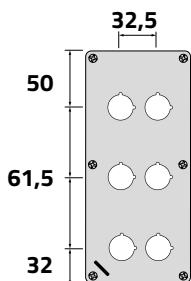
Coperchio con 4 fori Ø 22mm / 4-hole lid Ø 22mm

	h	g	cod
Senza entrata cavo / No cable entry	71	568	040C0920-7P4C
Senza entrata cavo / No cable entry	104	750	040C0920-1P4C
Con entrata cavo / With cable entry	71	564	040C0920-7EP4C
Con entrata cavo / With cable entry	104	764	040C0920-1EP4C



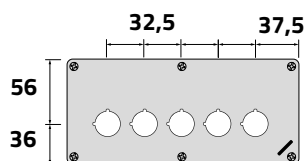
Coperchio con 5 fori Ø 22mm / 5-hole lid Ø 22mm

Senza entrata cavo / No cable entry	71	565	040C0920-7P5C
Senza entrata cavo / No cable entry	104	747	040C0920-1P5C
Con entrata cavo / With cable entry	71	561	040C0920-7EP5C
Con entrata cavo / With cable entry	104	743	040C0920-1EP5C



Coperchio con 6 fori Ø 22mm / 6-hole lid Ø 22mm

Senza entrata cavo / No cable entry	71	562	040C0920-7P6
Senza entrata cavo / No cable entry	104	744	040C0920-1P6
Con entrata cavo / With cable entry	71	558	040C0920-7EP6
Con entrata cavo / With cable entry	104	740	040C0920-1EP6

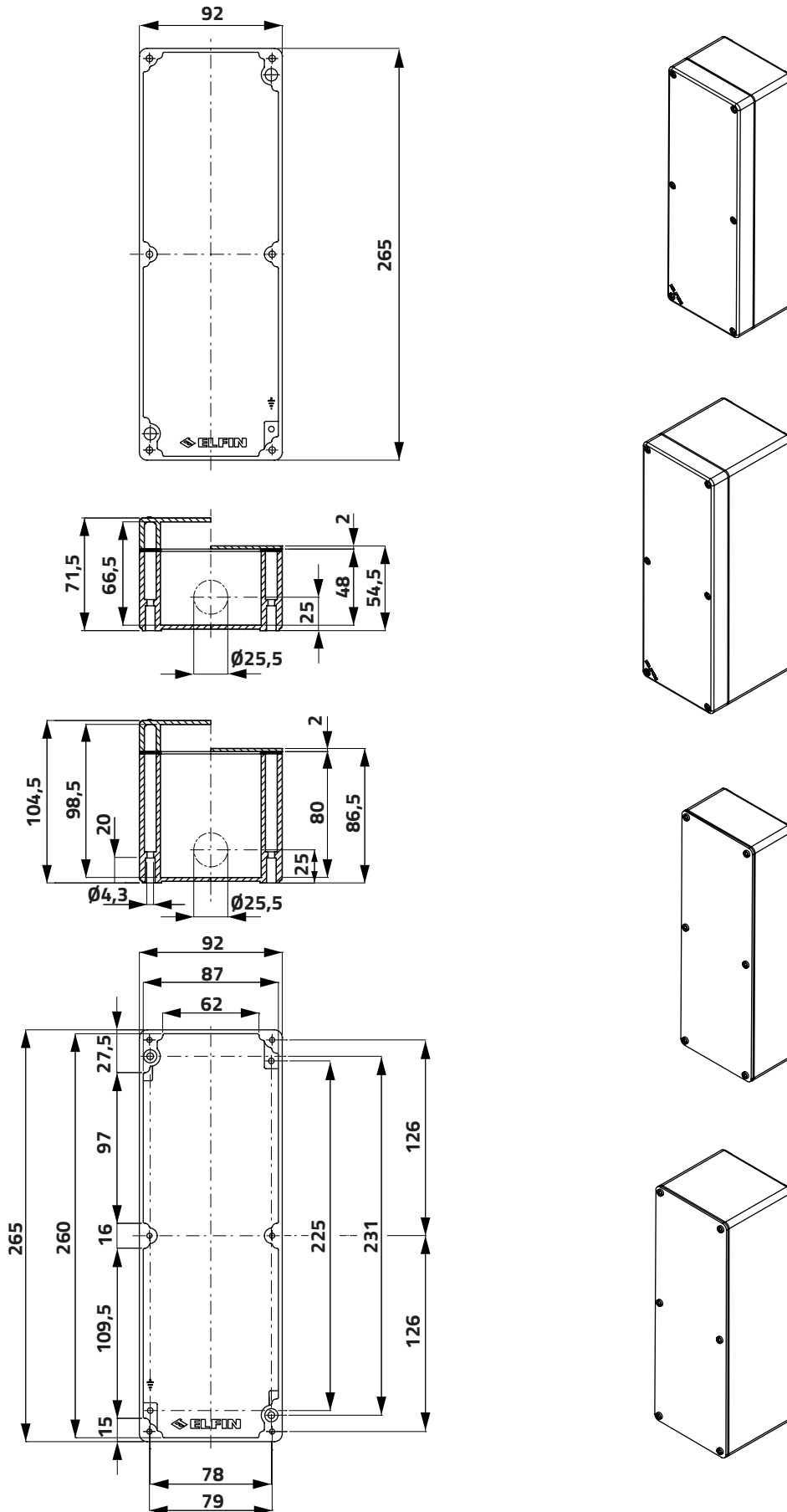


Coperchio con 5 fori Ø 22mm / 5-hole lid Ø 22mm

Senza entrata cavo / No cable entry	71	565	040C0920-7P5L
Senza entrata cavo / No cable entry	104	747	040C0920-1P5L
Con entrata cavo / With cable entry	71	561	040C0920-7EP5L
Con entrata cavo / With cable entry	104	743	040C0920-1EP5L

Scatole in alluminio M4 92x265mm

Aluminium enclosures M4 92x265mm



Scatole in alluminio M4 92x265mm

Aluminium enclosures M4 92x265mm



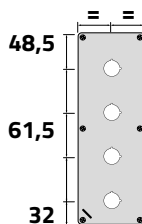
Coperchio senza fori / Undrilled lid

	h	g	cod
Senza entrata cavo / No cable entry	71	770	040C0926-7
Senza entrata cavo / No cable entry	104	1020	040C0926-1
Con entrata cavo / With cable entry	71	765	040C0926-7E
Con entrata cavo / With cable entry	104	1015	040C0926-1E
Grezza, cieca / Unpainted, no cable entry	71	770	040C0926-7N
Grezza, cieca / Unpainted, no cable entry	104	1020	040C0926-1N



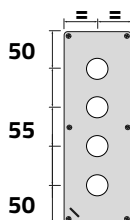
Piastra in alluminio senza fori / Undrilled aluminium plate

Senza entrata cavo / No cable entry	54	500	040C0926-5
Senza entrata cavo / No cable entry	86	750	040C0926-8



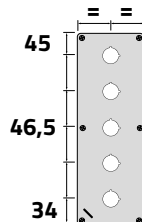
Coperchio con 4 fori Ø 22mm / 4-hole lid Ø 22mm

Senza entrata cavo / No cable entry	71	762	040C0926-7P4
Senza entrata cavo / No cable entry	104	1012	040C0926-1P4
Con entrata cavo / With cable entry	71	758	040C0926-7EP4
Con entrata cavo / With cable entry	104	1007	040C0926-1EP4



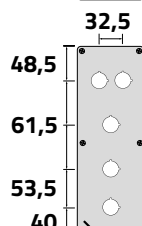
Coperchio con 4 fori Ø 30mm / 4-hole lid Ø 30mm

Senza entrata cavo / No cable entry	71	754	040C0926-7S4
Senza entrata cavo / No cable entry	104	1004	040C0926-1S4
Con entrata cavo / With cable entry	71	750	040C0926-7ES4
Con entrata cavo / With cable entry	104	1000	040C0926-1ES4



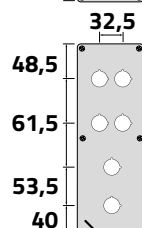
Coperchio con 5 fori Ø 22mm / 5-hole lid Ø 22mm

Senza entrata cavo / No cable entry	71	760	040C0926-7P5
Senza entrata cavo / No cable entry	104	1010	040C0926-1P5
Con entrata cavo / With cable entry	71	756	040C0926-7EP5
Con entrata cavo / With cable entry	104	1005	040C0926-1EP5



Coperchio con 5 fori Ø 22mm / 5-hole lid Ø 22mm

Senza entrata cavo / No cable entry	71	760	040C0926-7P5C
Senza entrata cavo / No cable entry	104	1010	040C0926-1P5C
Con entrata cavo / With cable entry	71	1010	040C0926-7EP5C
Con entrata cavo / With cable entry	104	1005	040C0926-1EP5C

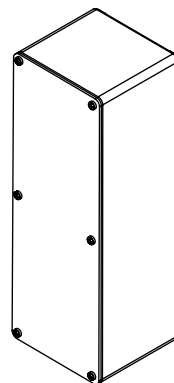
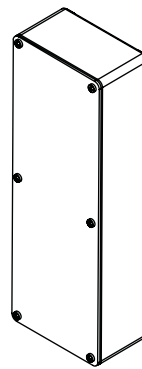
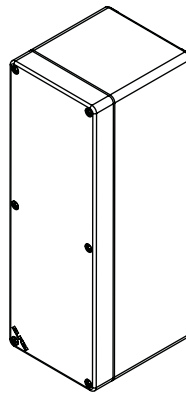
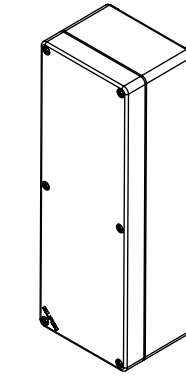
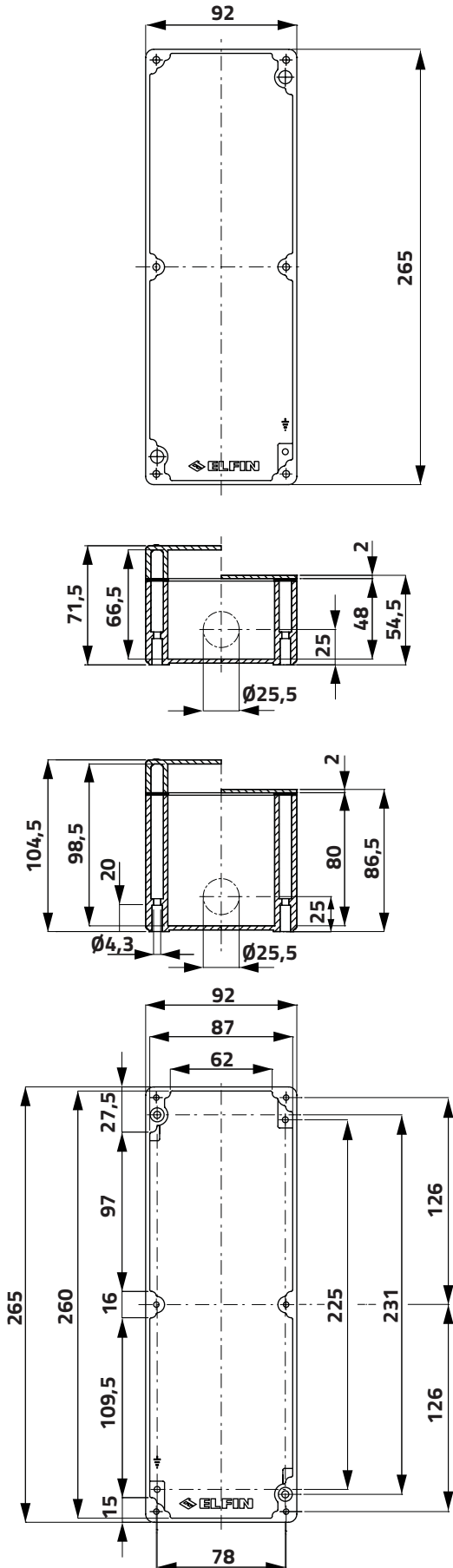


Coperchio con 6 fori Ø 22mm / 6-hole lid Ø 22mm

Senza entrata cavo / No cable entry	71	758	040C0926-7P6C
Senza entrata cavo / No cable entry	104	1006	040C0926-1P6C
Con entrata cavo / With cable entry	71	754	040C0926-7EP6C
Con entrata cavo / With cable entry	104	1003	040C0926-1EP6C

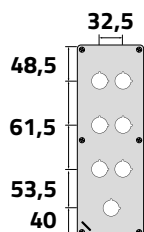
Scatole in alluminio M4 92x265mm

Aluminium enclosures M4 92x265mm



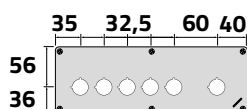
Scatole in alluminio M4 92x265mm Aluminium enclosures M4 92x265mm

h **g** **cod**



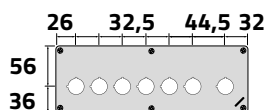
Coperchio con 7 fori Ø 22mm / 7-hole lid Ø 22mm

Senza entrata cavo / No cable entry	71	756	040C0926-7P7C
Senza entrata cavo / No cable entry	104	1005	040C0926-1P7C
Con entrata cavo / With cable entry	71	752	040C0926-7EP7C
Con entrata cavo / With cable entry	104	1001	040C0926-1EP7C



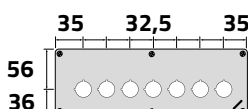
Coperchio con 6 fori Ø 22mm / 6-hole lid Ø 22mm

Senza entrata cavo / No cable entry	71	758	040C0926-7P6LC
Senza entrata cavo / No cable entry	104	1006	040C0926-1P6LC
Con entrata cavo / With cable entry	71	754	040C0926-7EP6LC
Con entrata cavo / With cable entry	104	1003	040C0926-1EP6LC



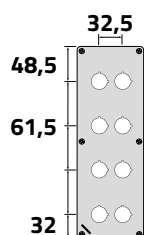
Coperchio con 7 fori Ø 22mm / 7-hole lid Ø 22mm

Senza entrata cavo / No cable entry	71	756	040C0926-7P7LC
Senza entrata cavo / No cable entry	104	1005	040C0926-1P7LC
Con entrata cavo / With cable entry	71	752	040C0926-7EP7LC
Con entrata cavo / With cable entry	104	1001	040C0926-1EP7LC



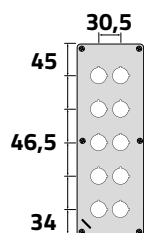
Coperchio con 7 fori Ø 22mm / 7-hole lid Ø 22mm

Senza entrata cavo / No cable entry	71	756	040C0926-7P7L
Senza entrata cavo / No cable entry	104	1005	040C0926-1P7L
Con entrata cavo / With cable entry	71	752	040C0926-7EP7L
Con entrata cavo / With cable entry	104	1000	040C0926-1EP7L



Coperchio con 8 fori Ø 22mm / 8-hole lid Ø 22mm

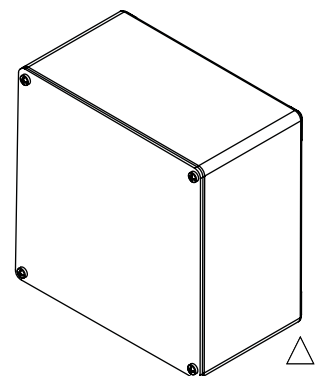
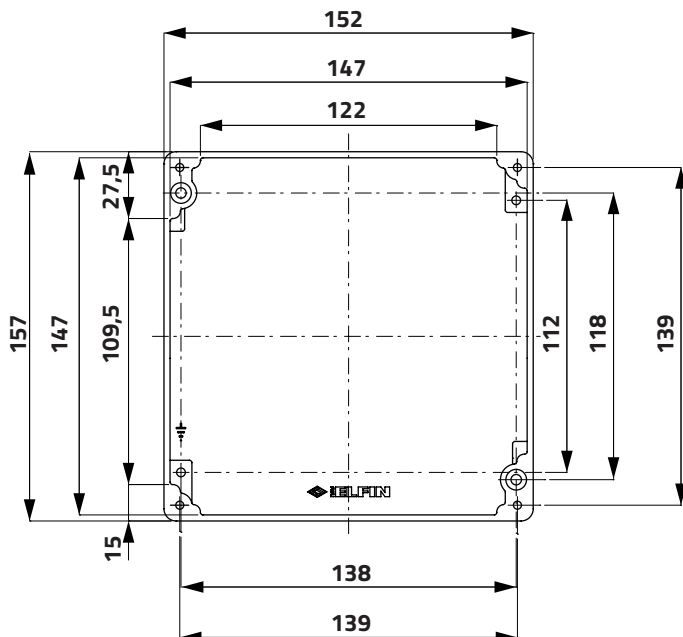
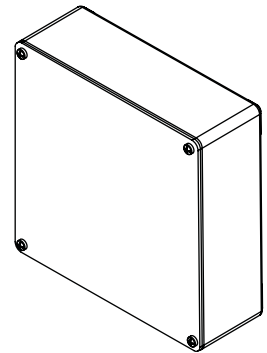
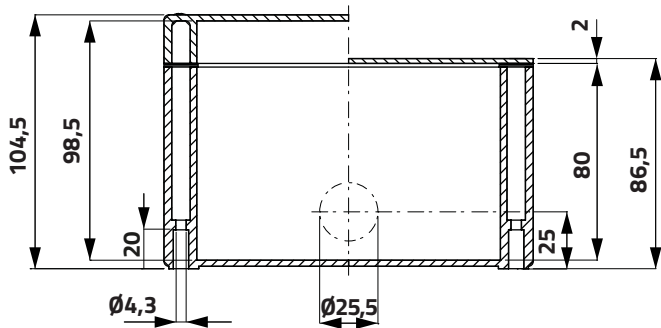
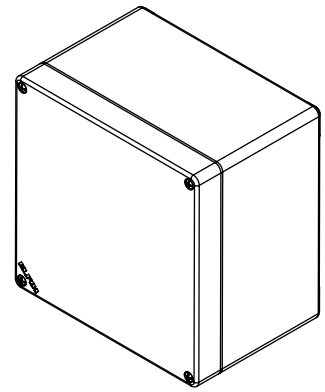
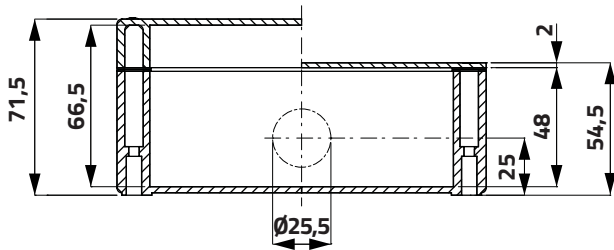
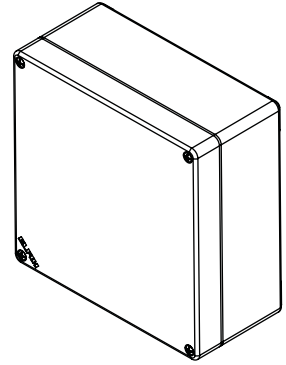
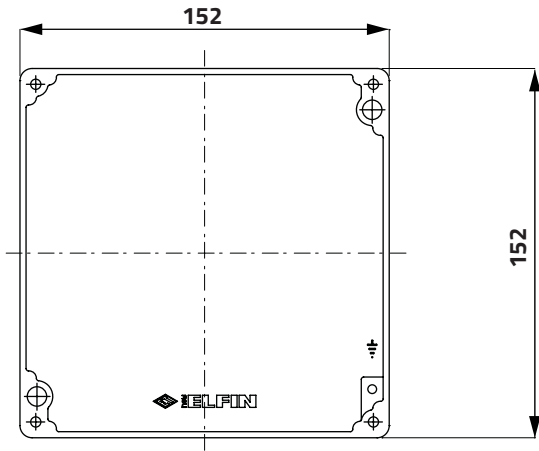
Senza entrata cavo / No cable entry	71	754	040C0926-7P8
Senza entrata cavo / No cable entry	104	1004	040C0926-1P8
Con entrata cavo / With cable entry	71	750	040C0926-7EP8
Con entrata cavo / With cable entry	104	1000	040C0926-1EP8



Coperchio con 10 fori Ø 22mm / 10-hole lid Ø 22mm

Senza entrata cavo / No cable entry	71	750	040C0926-7P10
Senza entrata cavo / No cable entry	104	1000	040C0926-1P10
Con entrata cavo / With cable entry	71	746	040C0926-7EP10
Con entrata cavo / With cable entry	104	995	040C0926-1EP10

Scatole in alluminio M4 152x152mm
Aluminium enclosures M4 152x152mm



Scatole in alluminio M4 152x152mm

Aluminium enclosures M4 152x152mm



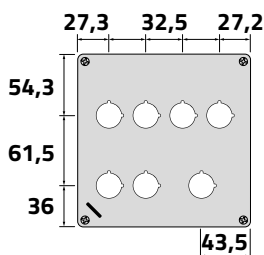
h g cod

Coperchio senza fori / Undrilled lid

Senza entrata cavo / No cable entry	71	594	040C1515-7
Senza entrata cavo / No cable entry	104	754	040C1515-1
Con entrata cavo / With cable entry	71	590	040C1515-7E
Con entrata cavo / With cable entry	104	750	040C1515-1E
Grezza, cieca / Unpainted, no cable entry	71	594	040C1515-7N
Grezza, cieca / Unpainted, no cable entry	104	754	040C1515-1N

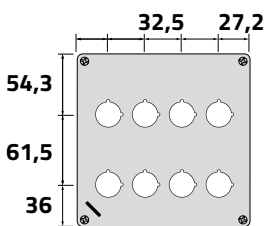
Piastra in alluminio senza fori / Undrilled aluminium plate

Senza entrata cavo / No cable entry	54	513	040C1515-5
Senza entrata cavo / No cable entry	86	690	040C1515-8



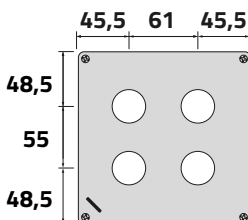
Coperchio con 7 fori Ø 22mm / 7-hole lid Ø 22mm

Senza entrata cavo / No cable entry	71	570	040C1515-7P7C
Senza entrata cavo / No cable entry	104	730	040C1515-1P7C
Con entrata cavo / With cable entry	71	566	040C1515-7EP7C
Con entrata cavo / With cable entry	104	726	040C1515-1EP7C



Coperchio con 8 fori Ø 22mm / 8-hole lid Ø 22mm

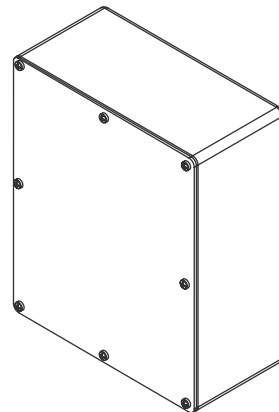
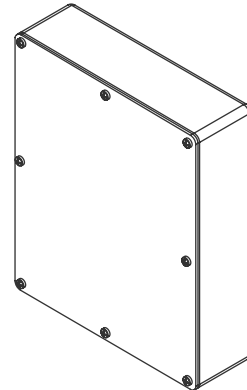
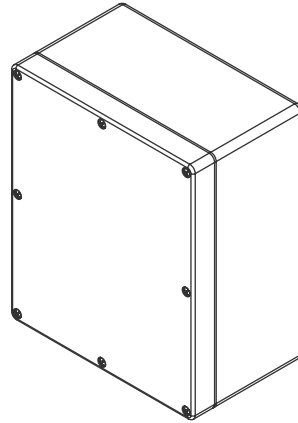
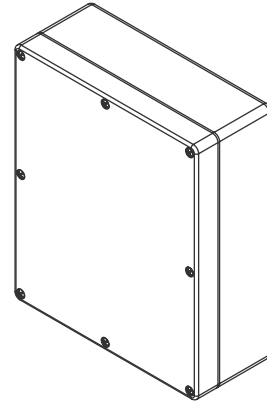
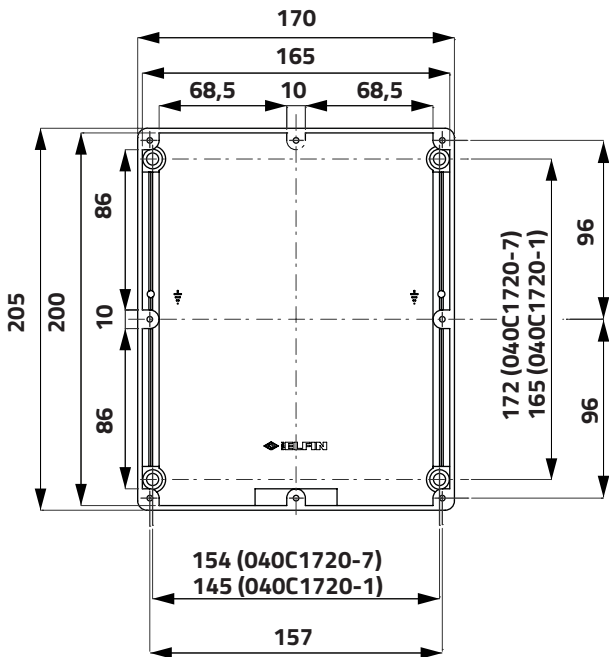
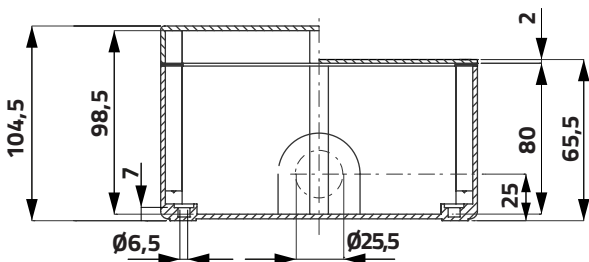
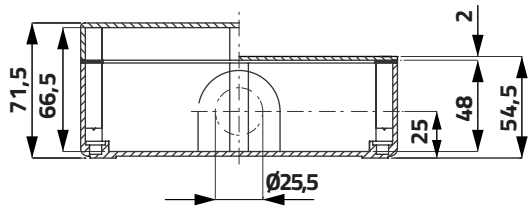
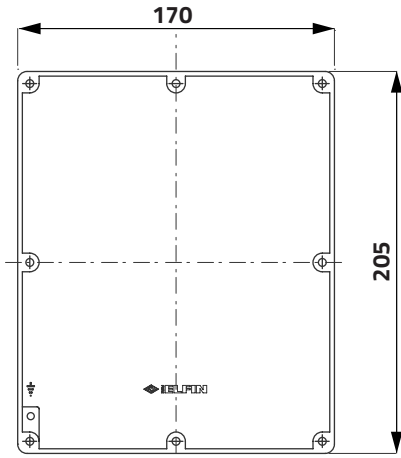
Senza entrata cavo / No cable entry	71	570	040C1515-7P8
Senza entrata cavo / No cable entry	104	730	040C1515-1P8
Con entrata cavo / With cable entry	71	566	040C1515-7EP8
Con entrata cavo / With cable entry	104	726	040C1515-1EP8



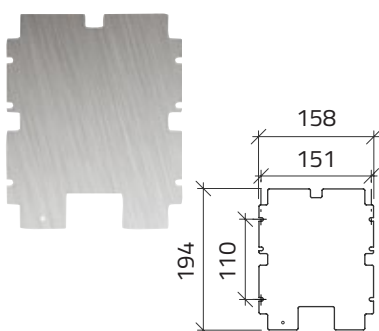
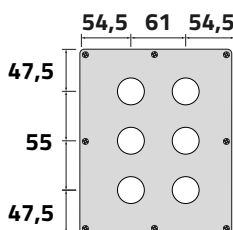
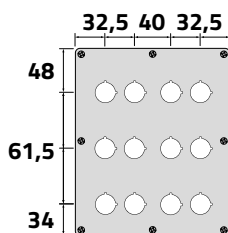
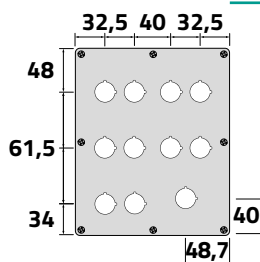
Coperchio con 4 fori Ø 30mm / 4-hole lid Ø 30mm

Senza entrata cavo / No cable entry	71	578	040C1515-7S4
Senza entrata cavo / No cable entry	104	738	040C1515-1S4
Con entrata cavo / With cable entry	71	574	040C1515-7ES4
Con entrata cavo / With cable entry	104	734	040C1515-1ES4

Scatole in alluminio M4 170x205mm
Aluminium enclosures M4 170x205mm



Scatole in alluminio M4 170x205mm Aluminium enclosures M4 170x205mm



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Coperchio senza fori / Undrilled lid

Senza entrata cavo / No cable entry	71	1276	040C1720-7
Senza entrata cavo / No cable entry	104	1736	040C1720-1
Con entrata cavo / With cable entry	71	1270	040C1720-7E
Con entrata cavo / With cable entry	104	1730	040C1720-1E
Grezza, cieca / Unpainted, no cable entry	71	1276	040C1720-7N
Grezza, cieca / Unpainted, no cable entry	104	1736	040C1720-1N

Piastra in alluminio senza fori / Undrilled aluminium plate

Senza entrata cavo / No cable entry	54	1126	040C1720-5
Senza entrata cavo / No cable entry	86	1416	040C1720-8

Coperchio con 11 fori Ø 22mm / 11-hole lid Ø 22mm

Senza entrata cavo / No cable entry	71	1240	040C1720-7P11C
Senza entrata cavo / No cable entry	104	1700	040C1720-1P11C
Con entrata cavo / With cable entry	71	1234	040C1720-7EP11C
Con entrata cavo / With cable entry	104	1694	040C1720-1EP11C

Coperchio con 12 fori Ø 22mm / 12-hole lid Ø 22mm

Senza entrata cavo / No cable entry	71	1240	040C1720-7P12
Senza entrata cavo / No cable entry	104	1700	040C1720-1P12
Con entrata cavo / With cable entry	71	1234	040C1720-7EP12
Con entrata cavo / With cable entry	104	1694	040C1720-1EP12

Coperchio con 6 fori Ø 30mm / 6-hole lid Ø 30mm

Senza entrata cavo / No cable entry	71	1234	040C1720-7S6
Senza entrata cavo / No cable entry	104	1694	040C1720-1S6
Con entrata cavo / With cable entry	71	1240	040C1720-7ES6
Con entrata cavo / With cable entry	104	1700	040C1720-1ES6

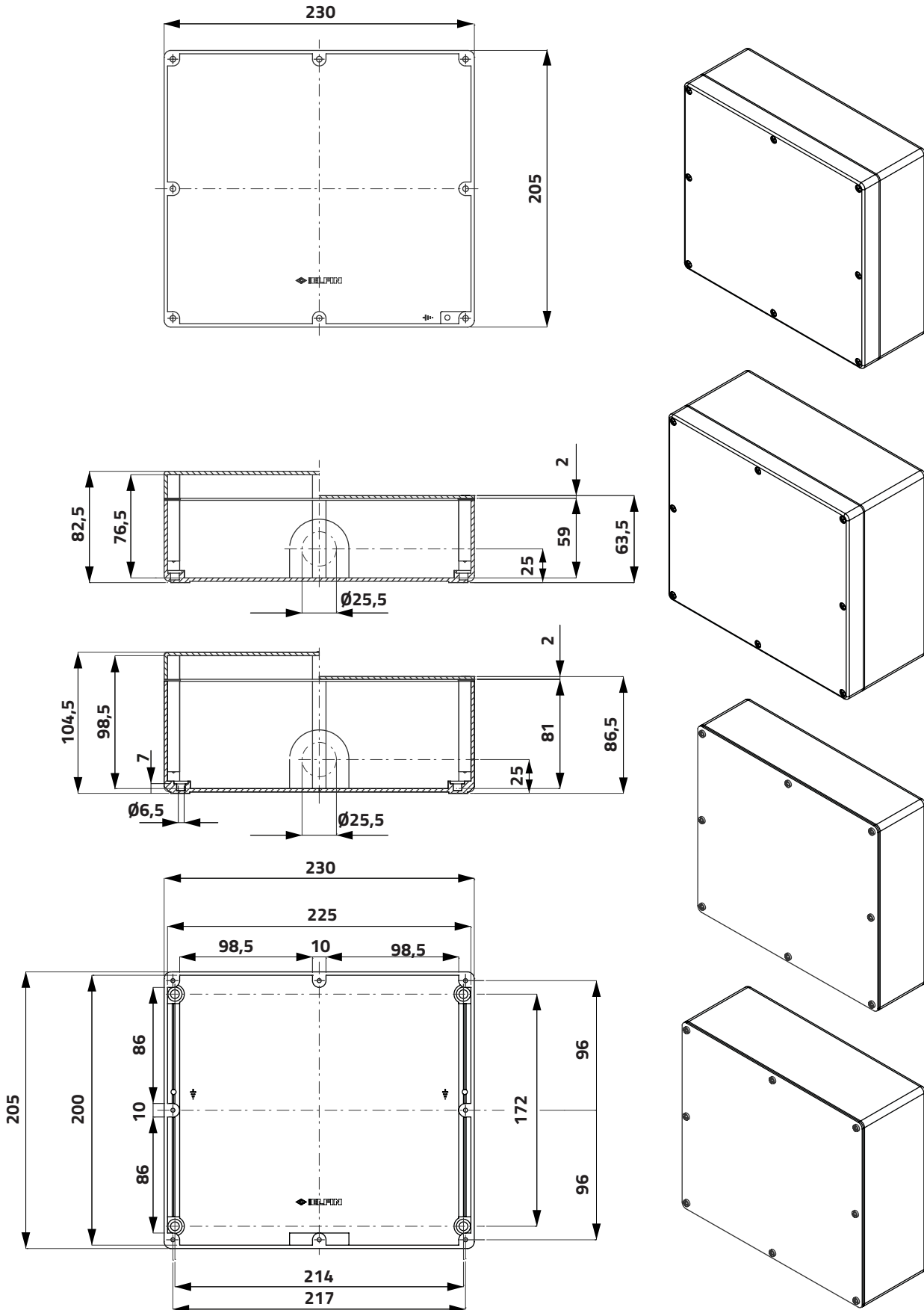
Piastra di fondo / Mounting plate

1,5	225	040P1720
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Scatole in alluminio M4 230x205

Aluminium enclosures M4 230x205mm



Scatole in alluminio M4 230x205 Aluminium enclosures M4 230x205mm



h g cod

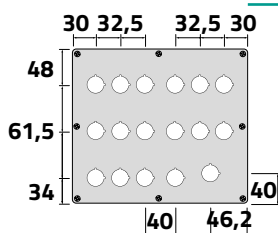
Coperchio senza fori / Undrilled lid

Senza entrata cavo / No cable entry	82	1626	040C2320-8
Senza entrata cavo / No cable entry	104	1900	040C2320-1
Con entrata cavo / With cable entry	82	1620	040C2320-8E
Con entrata cavo / With cable entry	104	1895	040C2320-1E
Grezza, cieca / Unpainted, no cable entry	82	1626	040C2320-8N
Grezza, cieca / Unpainted, no cable entry	104	1900	040C2320-1N



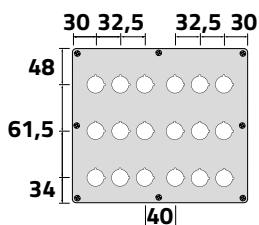
Piastra in alluminio senza fori / Undrilled aluminium plate

Senza entrata cavo / No cable entry	63	1396	040C2320-6
Senza entrata cavo / No cable entry	86	1676	040C2320-9



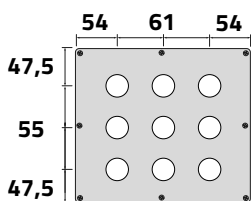
Coperchio con 17 fori Ø 22mm / 17-hole lid Ø 22mm

Senza entrata cavo / No cable entry	82	1572	040C2320-8P17C
Senza entrata cavo / No cable entry	104	1846	040C2320-1P17C
Con entrata cavo / With cable entry	82	1566	040C2320-8EP17C
Con entrata cavo / With cable entry	104	1841	040C2320-1EP17C



Coperchio con 18 fori Ø 22mm / 18-hole lid Ø 22mm

Senza entrata cavo / No cable entry	82	1572	040C2320-8P18
Senza entrata cavo / No cable entry	104	1846	040C2320-1P18
Con entrata cavo / With cable entry	82	1566	040C2320-8EP18
Con entrata cavo / With cable entry	104	1841	040C2320-1EP18



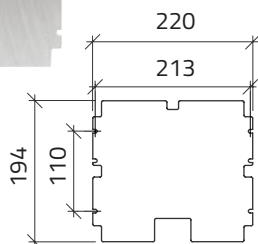
Coperchio con 9 fori Ø 30mm / 9-hole lid Ø 30mm

Senza entrata cavo / No cable entry	82	1572	040C2320-8S9
Senza entrata cavo / No cable entry	104	1846	040C2320-1S9
Con entrata cavo / With cable entry	82	1566	040C2320-8ES9
Con entrata cavo / With cable entry	104	1841	040C2320-1ES9



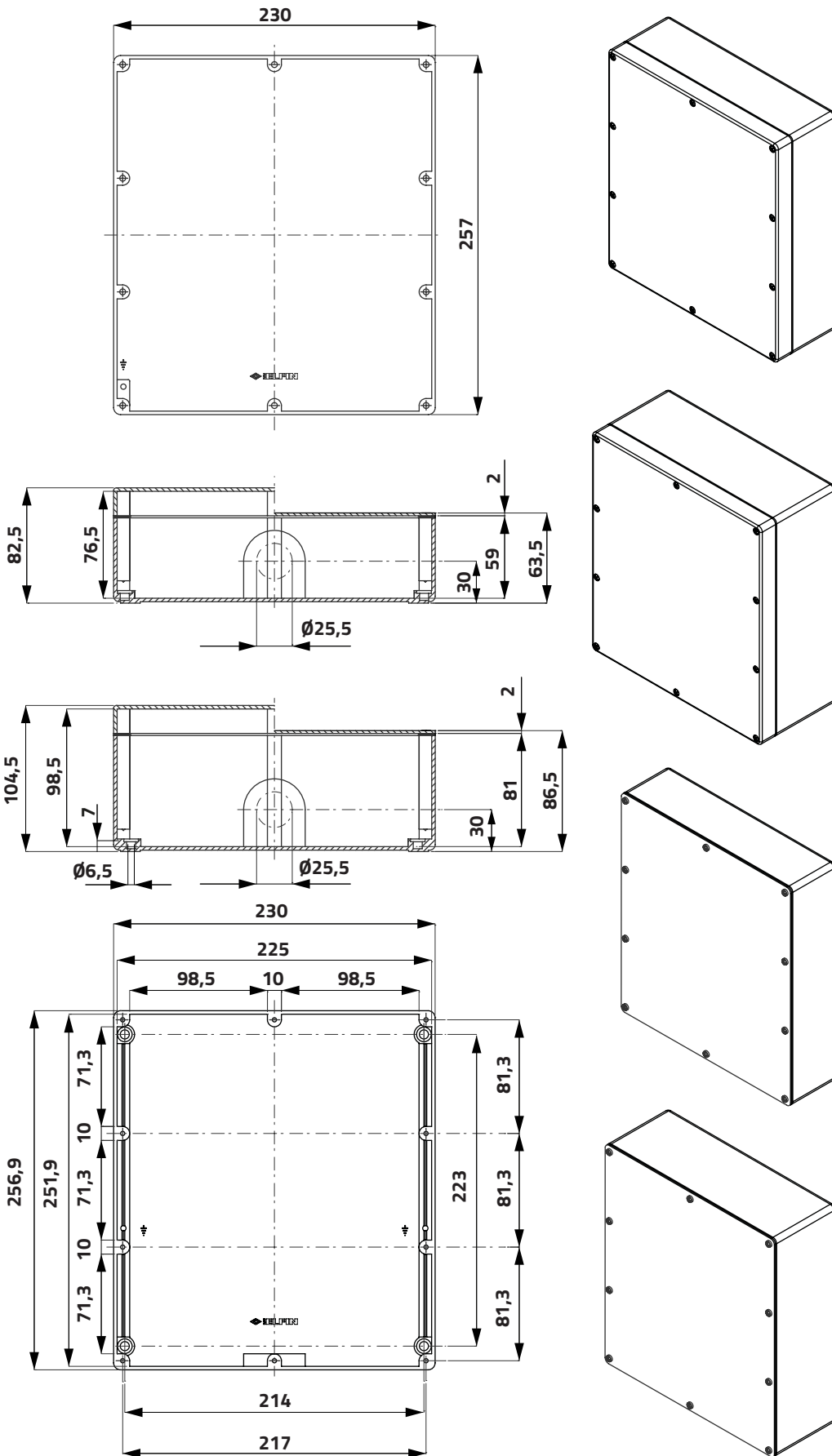
Piastra di fondo / Mounting plate

1,5	320	040P2320
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Scatole in alluminio M4 230x257mm

Aluminium enclosures M4 230x257mm



Scatole in alluminio M4 230x257mm

Aluminium enclosures M4 230x257mm



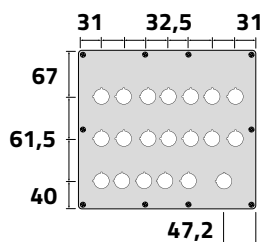
h g cod

Coperchio senza fori / Undrilled lid

Senza entrata cavo / No cable entry	82	1912	040C2325-8
Senza entrata cavo / No cable entry	104	2186	040C2325-1
Con entrata cavo / With cable entry	82	1906	040C2325-8E
Con entrata cavo / With cable entry	104	2180	040C2325-1E
Grezza, cieca / Unpainted, no cable entry	82	1912	040C2325-8N
Grezza, cieca / Unpainted, no cable entry	104	2186	040C2325-1N

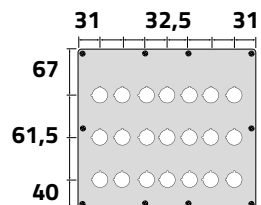
Piastra in alluminio senza fori / Undrilled aluminium plate

Senza entrata cavo / No cable entry	63	1696	040C2325-6
Senza entrata cavo / No cable entry	86	1957	040C2325-9



Coperchio con 20 fori Ø 22mm / 20-hole lid Ø 22mm

Senza entrata cavo / No cable entry	82	1840	040C2325-8P20C
Senza entrata cavo / No cable entry	104	2114	040C2325-1P20C

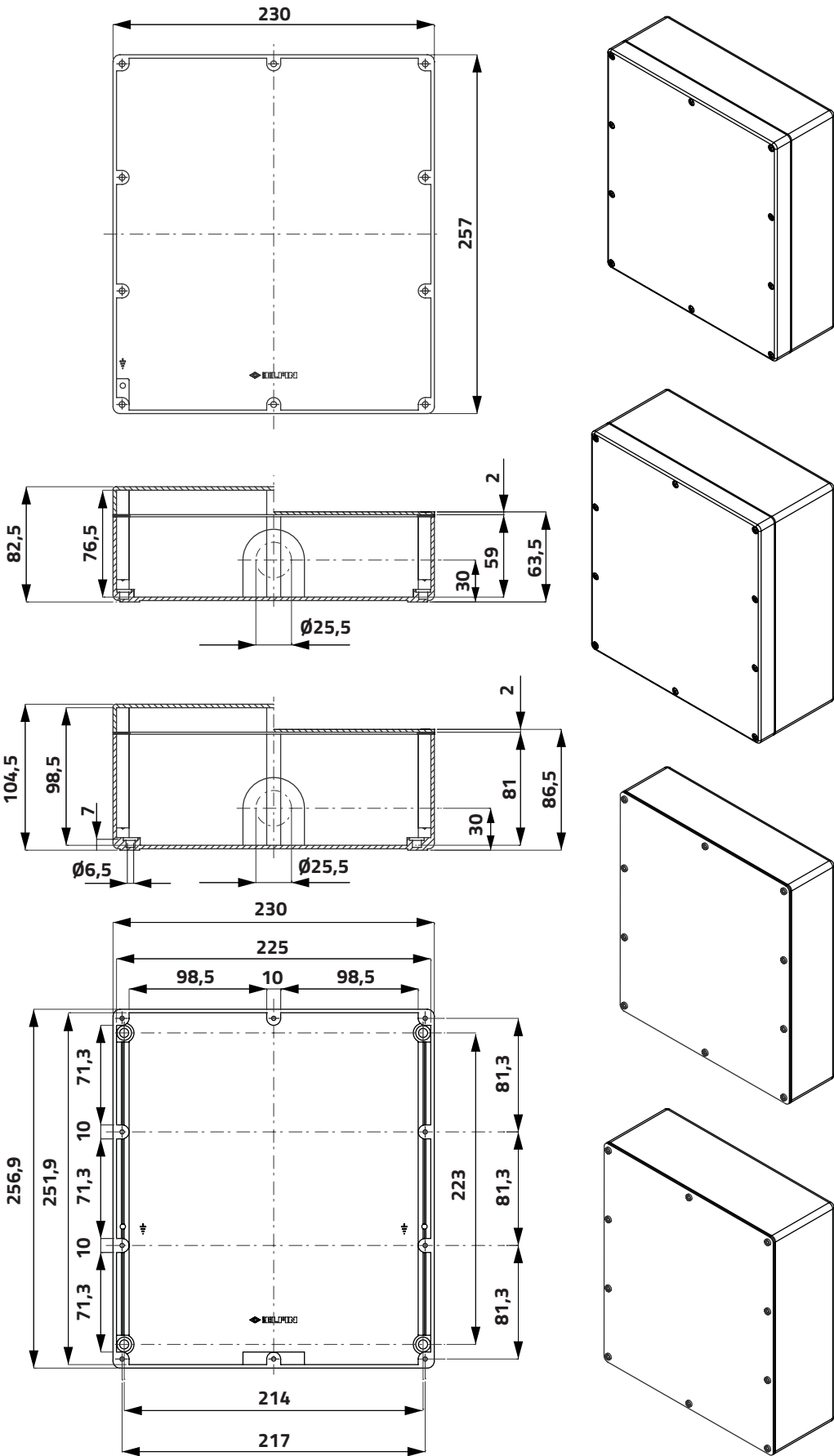


Coperchio con 21 fori Ø 22mm / 21-hole lid Ø 22 mm

Senza entrata cavo / No cable entry	82	1840	040C2325-8P21
Senza entrata cavo / No cable entry	104	2114	040C2325-1P21

Scatole in alluminio M4 230x257mm

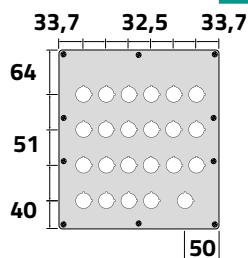
Aluminium enclosures M4 230x257mm



Scatole in alluminio M4 230x257mm

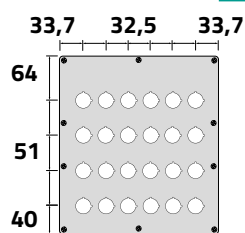
Aluminium enclosures M4 230x257mm

h g cod



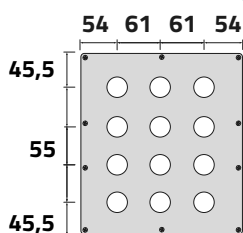
Coperchio con 23 fori Ø 22mm / 23-hole lid Ø 22mm

Senza entrata cavo / No cable entry	82	1840	040C2325-8P23C
Senza entrata cavo / No cable entry	104	2114	040C2325-1P23C
Con entrata cavo / With cable entry	82	1834	040C2325-8EP23C
Con entrata cavo / With cable entry	104	2108	040C2325-1EP23C



Coperchio con 24 fori Ø 22mm / 24-hole lid Ø 22mm

Senza entrata cavo / No cable entry	82	1840	040C2325-8P24
Senza entrata cavo / No cable entry	104	2114	040C2325-1P24
Con entrata cavo / With cable entry	82	1834	040C2325-8EP24
Con entrata cavo / With cable entry	104	2108	040C2325-1EP24



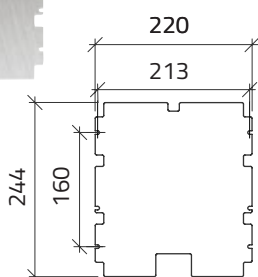
Coperchio con 12 fori Ø 30mm / 12-hole lid Ø 30mm

Senza entrata cavo / No cable entry	82	1840	040C2325-8S12
Senza entrata cavo / No cable entry	104	2114	040C2325-1S12
Con entrata cavo / With cable entry	82	1834	040C2325-8ES12
Con entrata cavo / With cable entry	104	2108	040C2325-1ES12



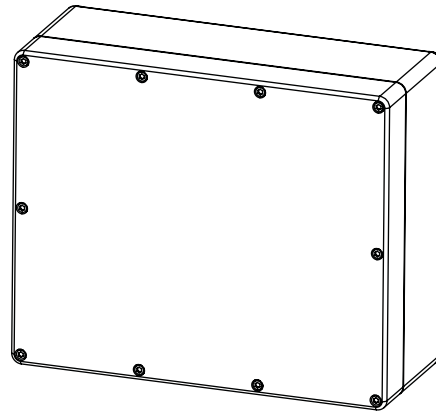
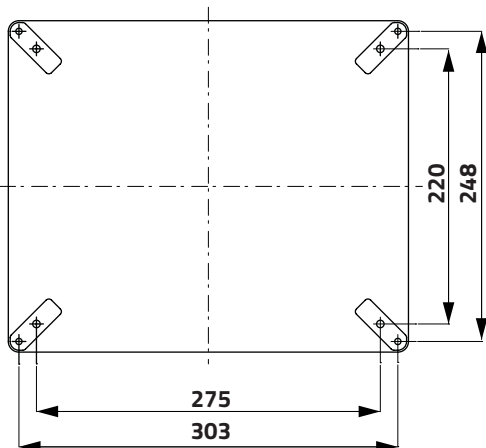
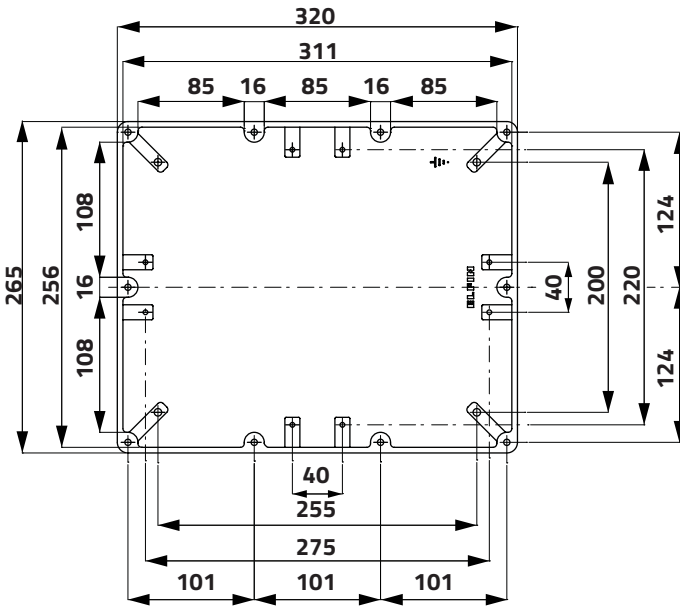
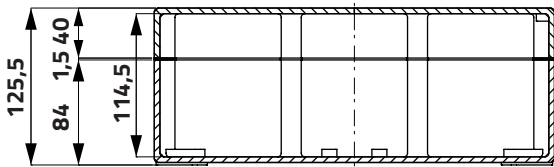
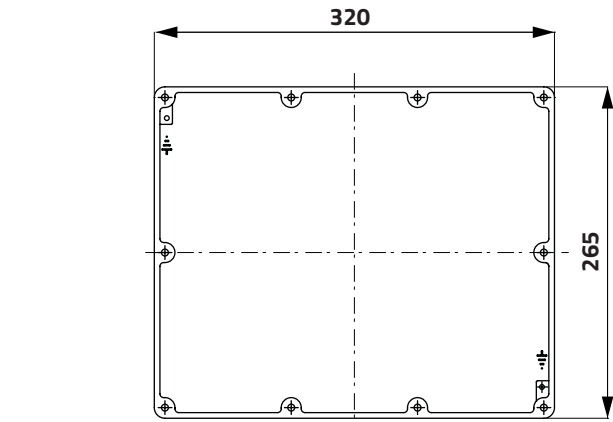
Piastra di fondo / Mounting plate

1,5	400	040P2325
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Scatole in alluminio M5 320x265mm

Aluminium enclosures M5 320x265mm

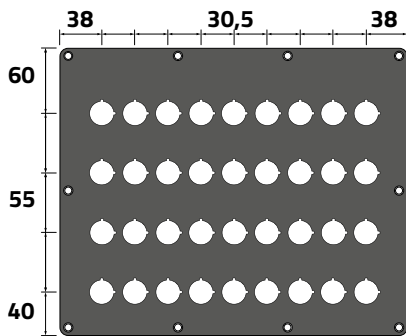


Scatole in alluminio M5 320x265mm Aluminium enclosures M5 320x265mm



Coperchio senza fori / Undrilled lid

	h	g	cod
Senza entrata cavo / No cable entry	125	4060	040C3226-12
Grezza, cieca / Unpainted, no cable entry	125	4060	040C3226-12N



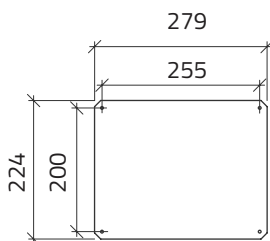
Coperchio con 36 fori Ø 22mm / 36-holes lid Ø 22mm

Senza entrata cavo / No cable entry	125	4028	040C3226-12P36
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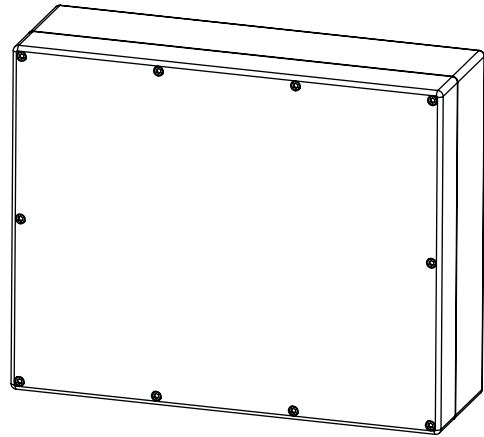
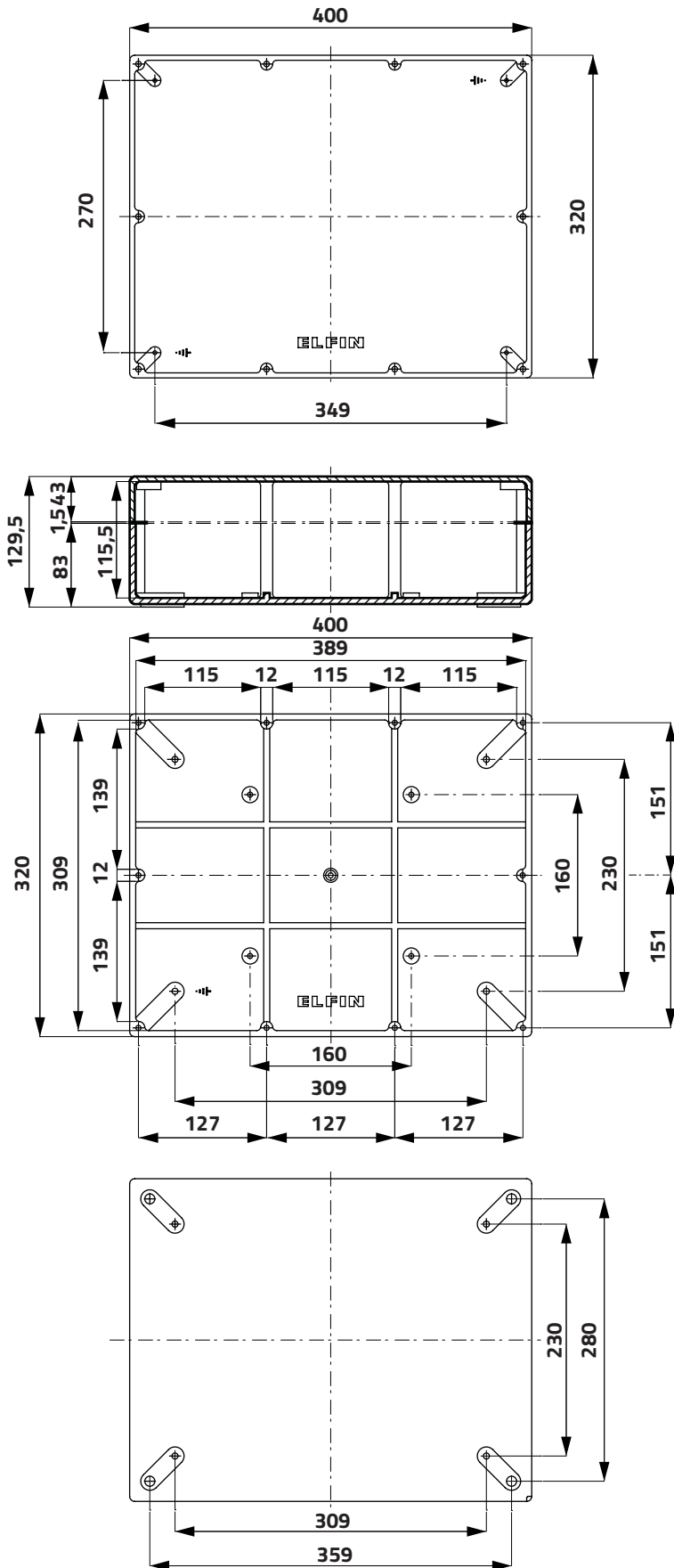


Piastra di fondo / Mounting plate

1,5	900	040P3226
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Scatole in alluminio M5 400x320mm Aluminium enclosures M5 400x320mm



Scatole in alluminio M5 400x320mm Aluminium enclosures M5 400x320mm



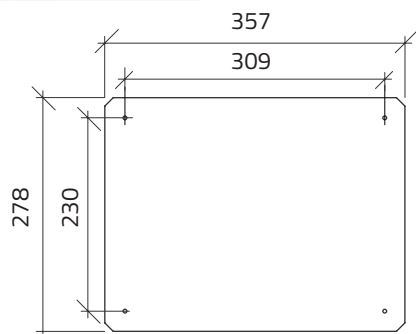
h g cod

Coperchio senza fori / Undrilled lid

Senza entrata cavo / No cable entry	130	5350	040C4032-13
Grezza, cieca / Unpainted, no cable entry	130	5350	040C4032-13N

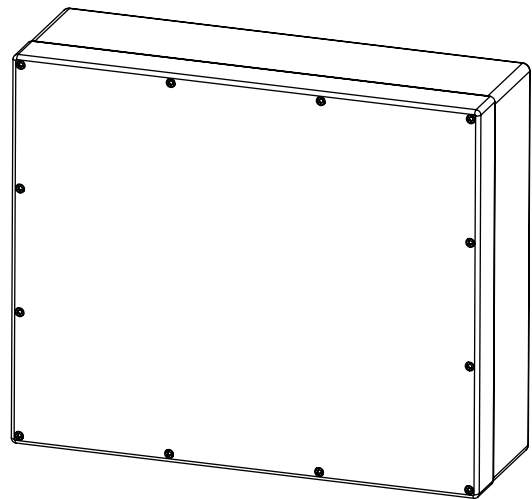
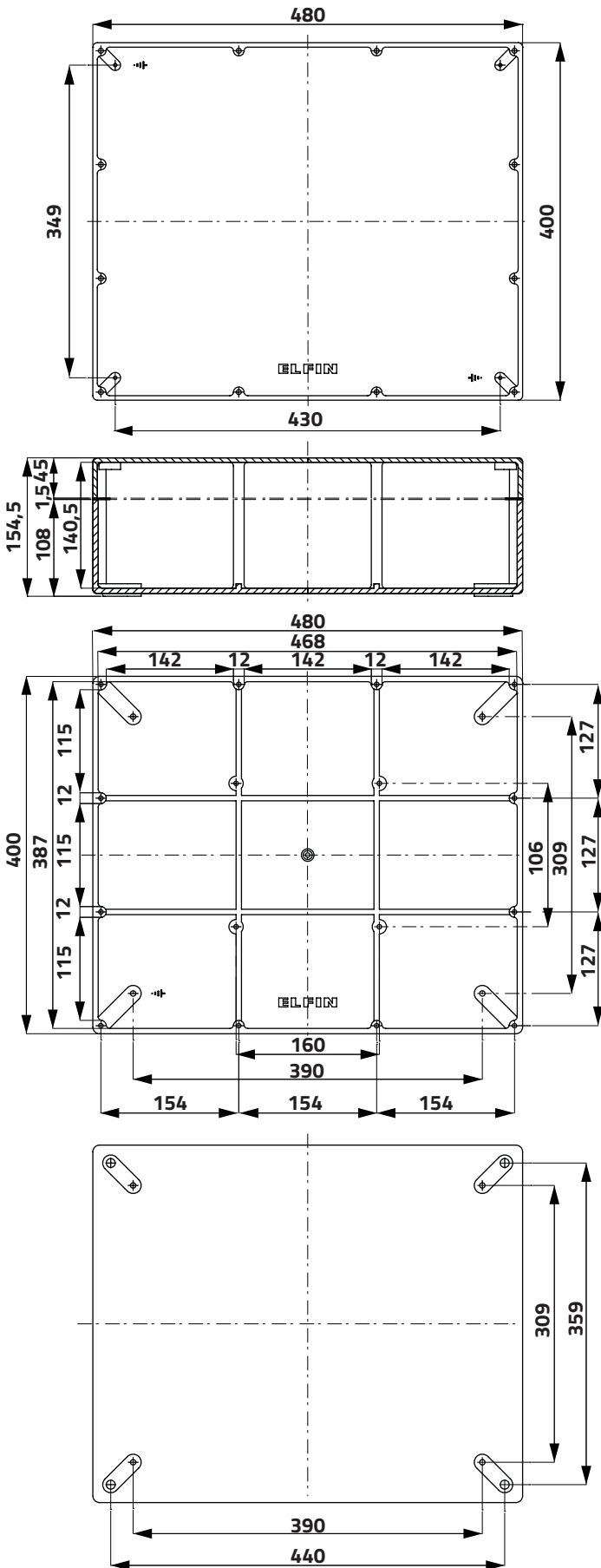


Piastra di fondo / Mounting plate	1,5	1206	040P4032
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Scatole in alluminio M5 480x400mm

Aluminium enclosures M5 480x400mm



Scatole in alluminio M5 480x400mm Aluminium enclosures M5 480x400mm



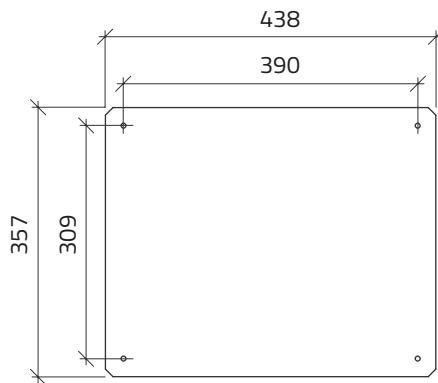
h g cod

Coperchio senza fori / Undrilled lid


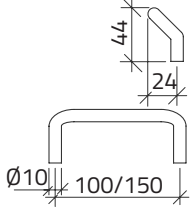
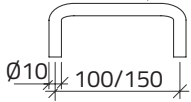

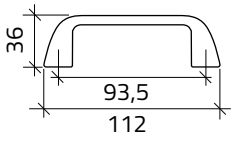
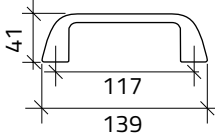

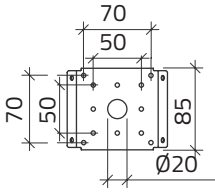

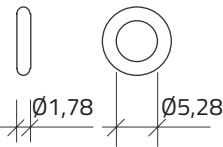

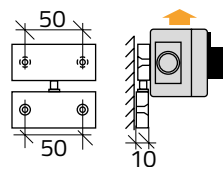

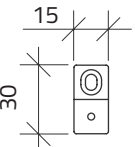
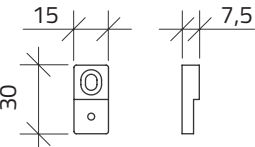

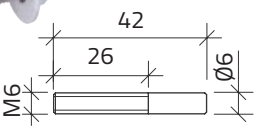
Senza entrata cavo / No cable entry	160	9000	040C4840-16
Grezza, cieca / Unpainted, no cable entry	160	9000	040C4840-16N



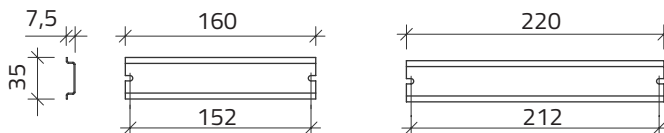
Piastra di fondo / Mounting plate	1,5	1900	040P4840
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Accessori Accessories

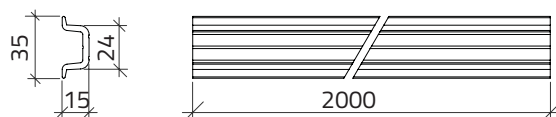
		g	cod
		112	040MM100
		135	040MM150
		42	080M112
		58	080M139
		180	040FT
		16	040KIV
		124	080SP
		28	010S10
		32	010S25
		26	010SFP

Accessori Accessories



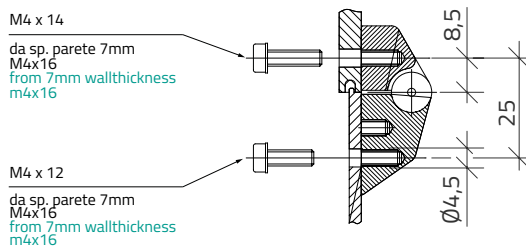
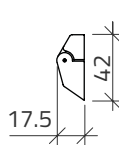
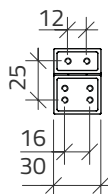
Guida / Rail Ø 35
Guida / Rail Ø 35

L	g	cod
160	52	040G3516
220	72	040G3522



Guida / PVC Rail Ø 35

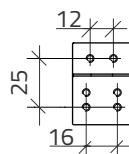
L	g	cod
2000	760	010GDP



Coppia di cerniere per scatole pulsantiere
Pair of hinges for push-button enclosures

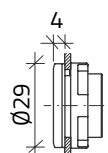
● Grigio / Grey

g	cod
57	040CF



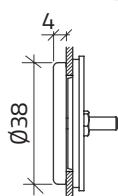
Usare maschera di foratura solo su scatola completamente montata
Drilling jig only on complete mounted enclosure

Tappi di chiusura / Hole plug



- RAL 7035 Ø22
- Nero / Black Ø22
- RAL 7016

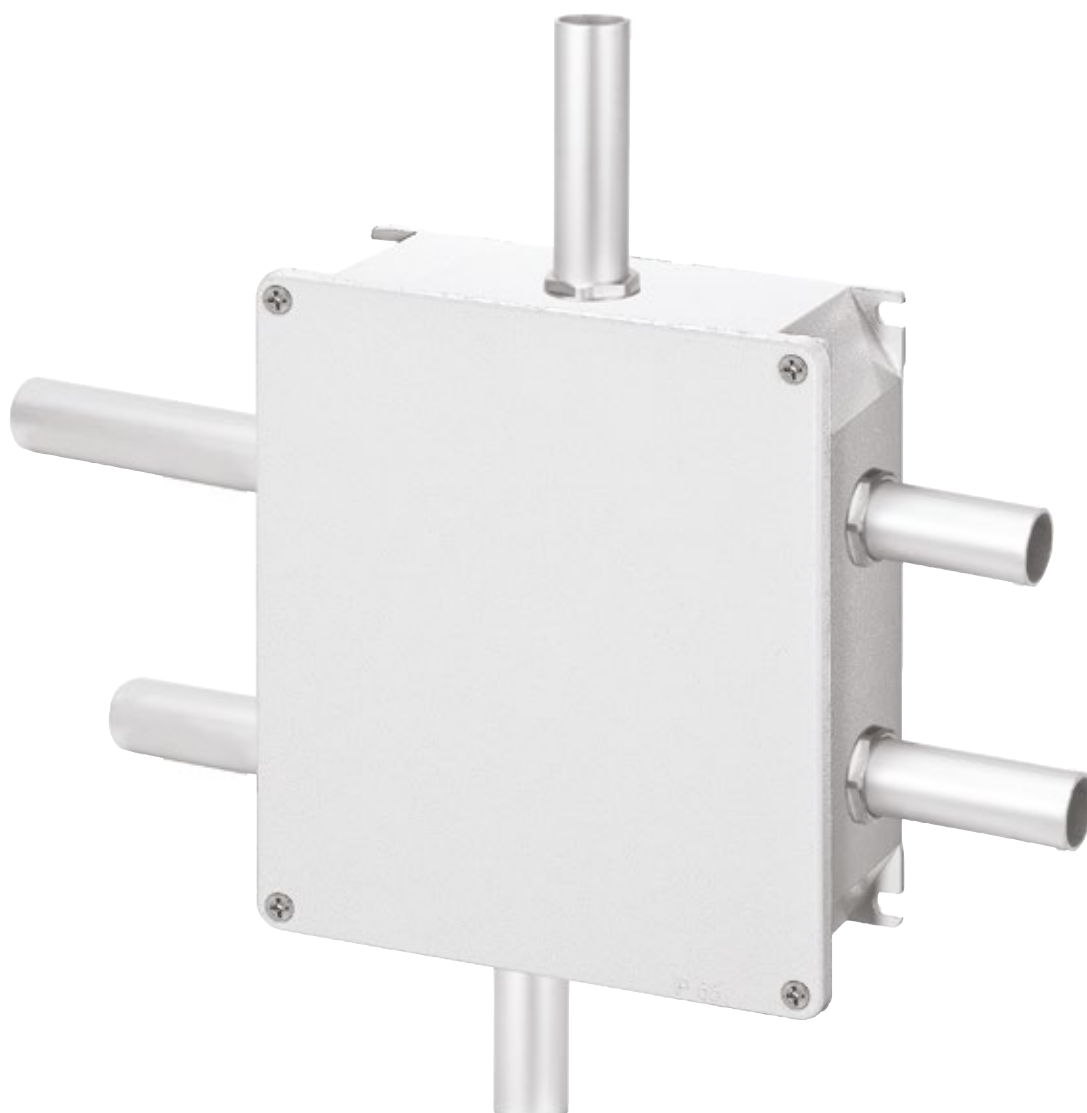
g	n	cod
5	10	020TTP
5	10	020TTPN
5	10	020TTPGR



Tappo Ø30 / Plug Ø30

g	cod
34	030CP

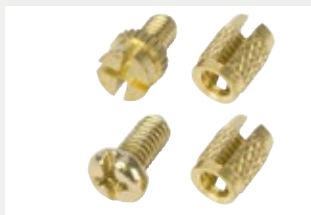
Scatole di derivazione in alluminio Aluminium junction boxes



Esempio di realizzazione

Example of execution

Scatole di derivazione in alluminio Aluminium junction boxes



Viti interne per messa a terra

Inner grounding screws



Facili da forare

Easy to drill



Viti di seraggio

Clamping screws

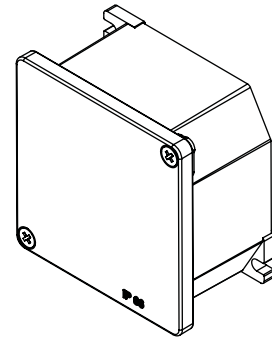
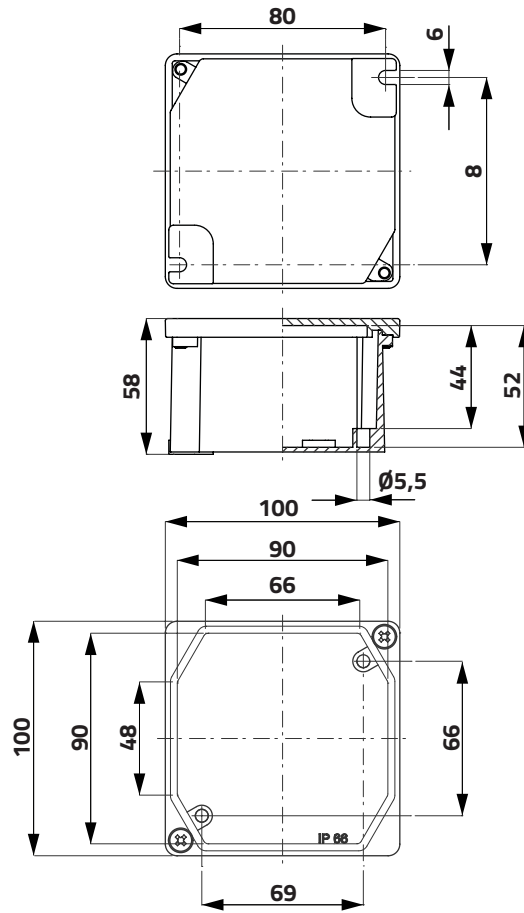


La guarnizione garantisce protezione IP66

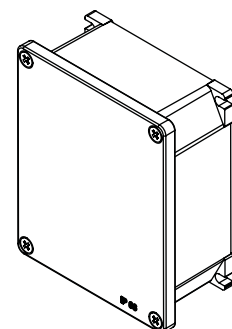
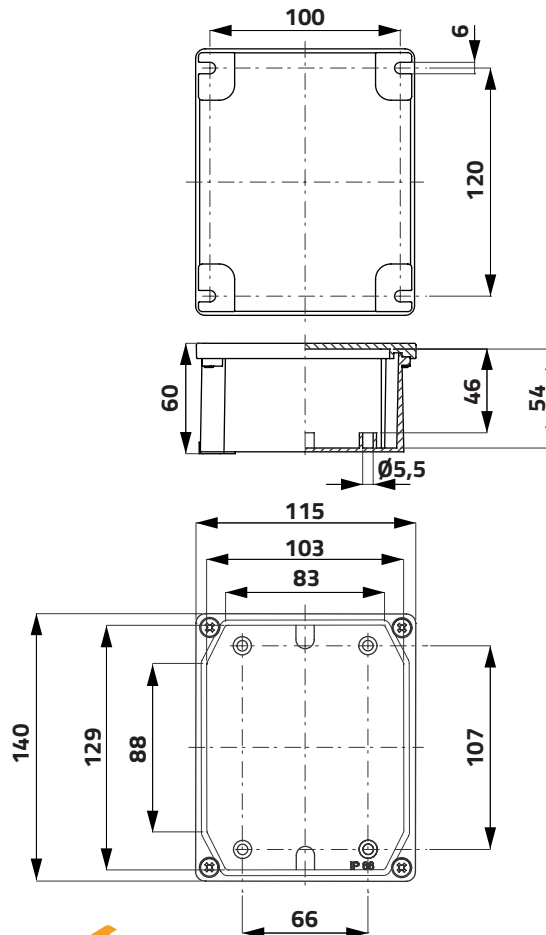
A sealing gasket assures IP66 protection

Scatole di derivazione in alluminio Aluminium junction boxes

100x100



115x140



Scatole di derivazione in alluminio Aluminium junction boxes



100x100

h

59

g

277

cod

040D1010-6

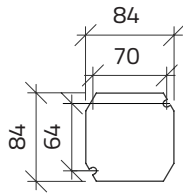


Piastra di fondo / Mounting plate

1,5

85

040P1010



115x140

h

60

g

412

cod

040D1214-6

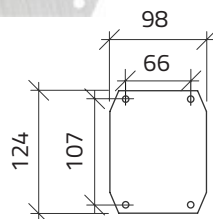


Piastra di fondo / Mounting plate

1,5

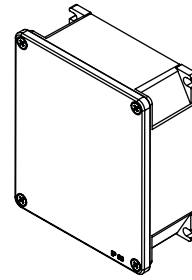
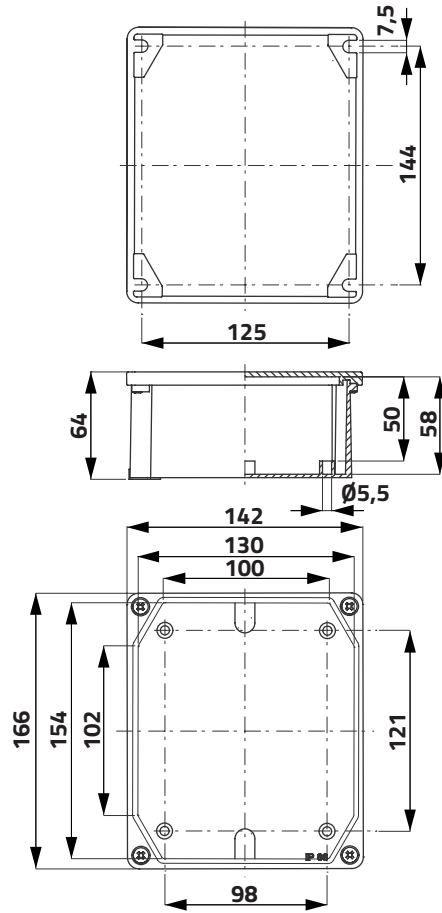
141

040P1214

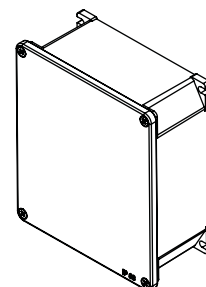
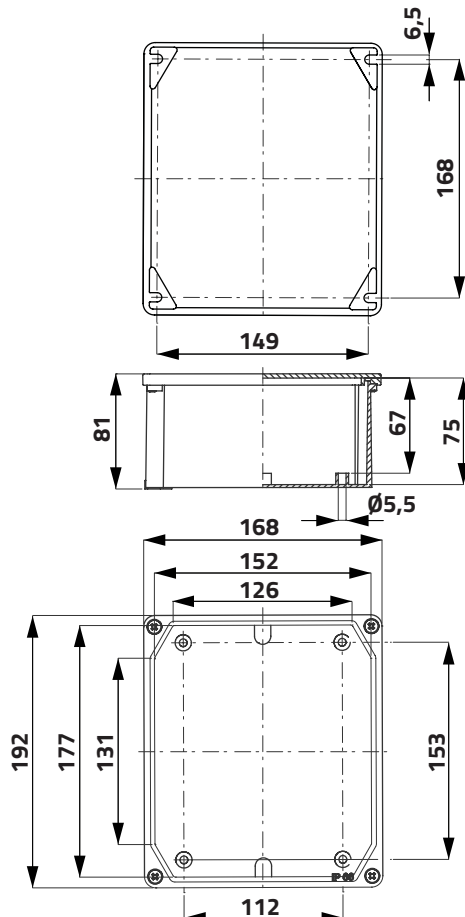


Scatole di derivazione in alluminio Aluminium junction boxes

142x166



168x192



Scatole di derivazione in alluminio Aluminium junction boxes



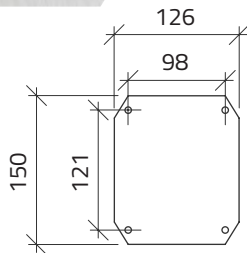
142x166

h **g** **cod**
64 560 **040D1416-6**



Piastra di fondo / Mounting plate

1,5 222 **040P1416**



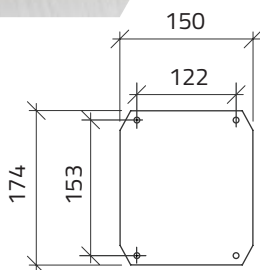
168x192

h **g** **cod**
80 773 **040D1719-8**



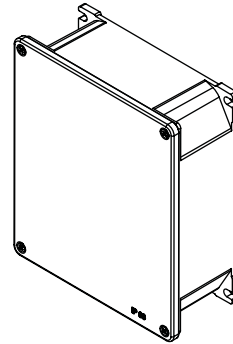
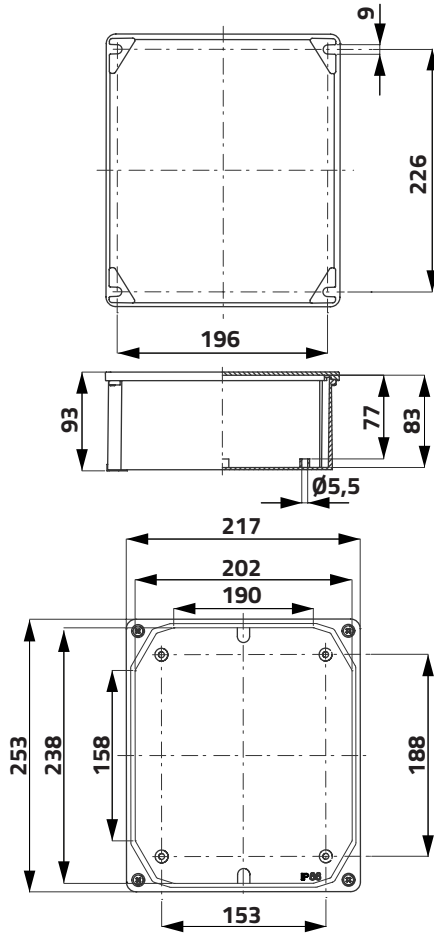
Piastra di fondo / Mounting plate

1,5 310 **040P1719**

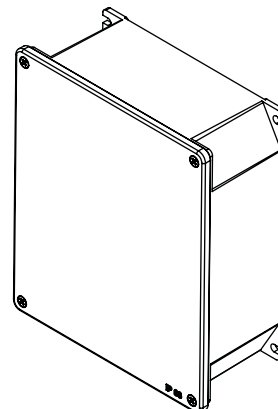
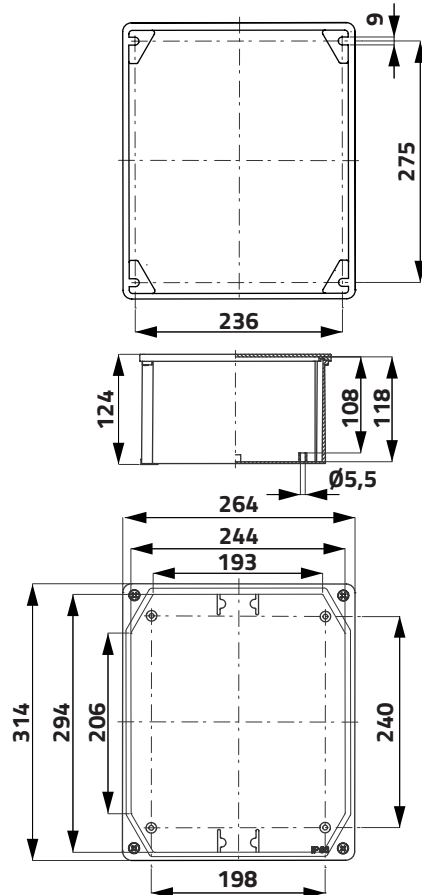


Scatole di derivazione in alluminio Aluminium junction boxes

217x253



264x324



Scatole di derivazione in alluminio Aluminium junction boxes



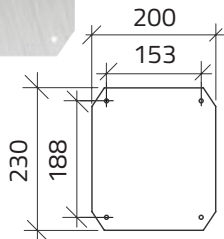
217x253

h	g	cod
93	1409	040D2225-9



Piastra di fondo / Mounting plate

1,5	538	040P2225
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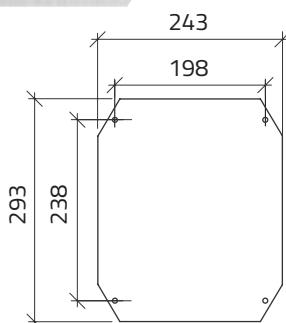
264x314

h	g	cod
122	2344	040D2631-12



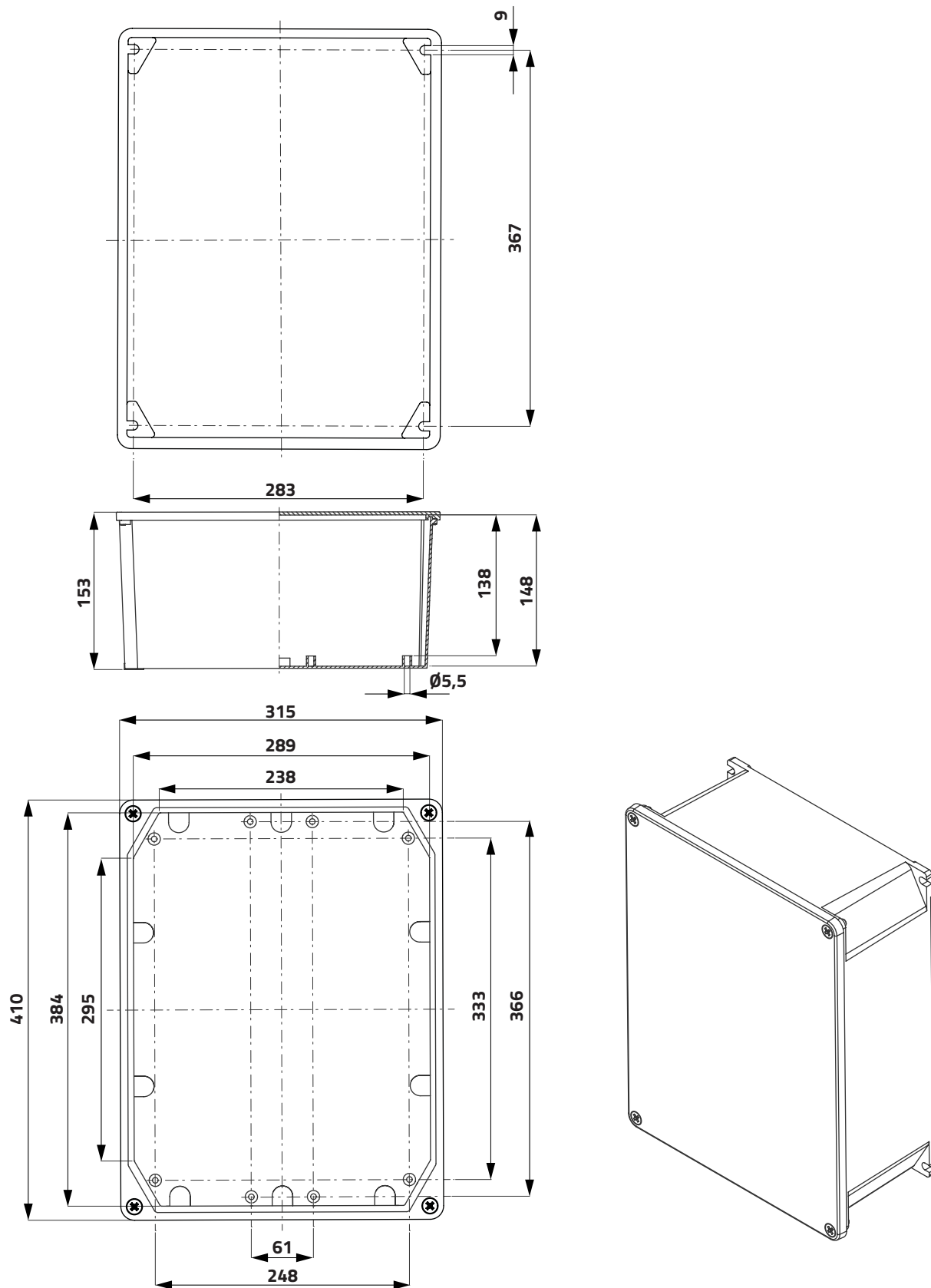
Piastra di fondo / Mounting plate

1,5	840	040P2631
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Scatole di derivazione in alluminio Aluminium junction boxes

040

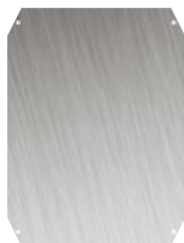


Scatole di derivazione in alluminio Aluminium junction boxes



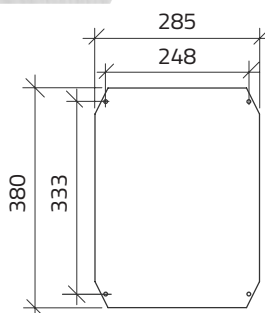
315x410

h **g** **cod**
153 3792 **040D3141-15**

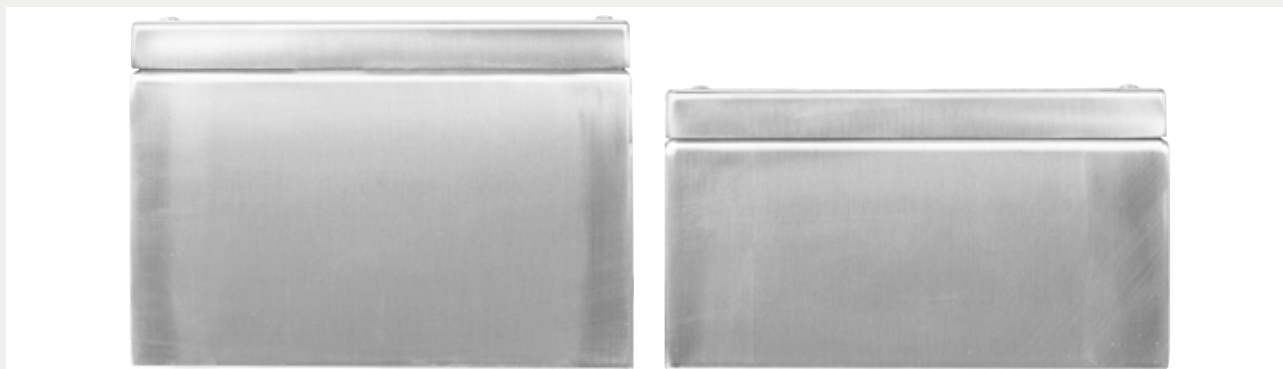


Piastra di fondo / Mounting plate

1,5 1315 **040P3141**



Scatole acciaio inox Stainless steel enclosures



Disponibile in due altezze

Available in two heights



Coperchio basso formati da 82x82 a 82x202

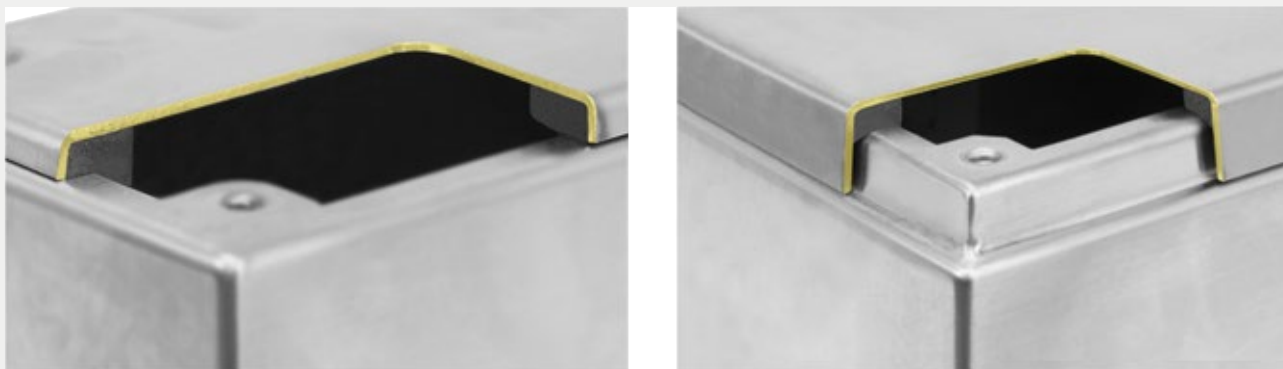
Low lid for sizes from 82x82 to 82x202



Coperchio alto formati da 140x180 a 230x260

High lid for sizes from 140x180 a 230x260

Scatole acciaio inox Stainless steel enclosures



La guarnizione garantisce protezione IP66

A sealing gasket assures IP66 protection



Viti di seraggio
Clamping screws



Scatola coperchio basso
Enclosure with low lid



Scatola coperchio alto
Enclosure with high lid



Kit di staffe di fissaggio
Set of mounting brackets

Resistenza dei contenitori alla corrosione

Resistance of enclosures to corrosion

- Assenza di corrosione in condizioni ottimali di impiego a contatto con le sostanze considerate
- Possibilità di corrosione a contatto con le sostanze considerate
- Corrosione a contatto con le sostanze considerate
- Dati non reperiti

Dati provenienti da:
Corrosion Guide - E. Rabald
 Elsevier, Amsterdam, London, New York 1968
Corrosion Data Survey - 4a ed.
 G. A. Nelson Nace, Houston 1967
Corrosion Data Survey - 5a ed.
 N. E. Hammer Nace, Houston 1967

austenitici al Cr-Ni-Mo del tipo 316				austenitici al Cr-Ni-Mo del tipo 316				austenitici al Cr-Ni-Mo del tipo 316					
austenitici al Cr-Ni del tipo 302-304-305				austenitici al Cr-Ni del tipo 302-304-305				austenitici al Cr-Ni del tipo 302-304-305					
ferritici al Cr del tipo 430				ferritici al Cr del tipo 430				ferritici al Cr del tipo 430					
martensitici al Cr del tipo 410				martensitici al Cr del tipo 410				martensitici al Cr del tipo 410					
acetilene (commerciale)	●	●	●	●	●	●	●	●	●	●	●	●	●
aceto	●	●	●	●	●	●	●	●	●	●	●	●	●
aceto (vapori)	●	●	●	●	●	●	●	●	●	●	●	●	●
acetone 100% a 100C	●	●	●	●	●	●	●	●	●	●	●	●	●
acido acetico fino a 20%	●	●	●	●	●	●	●	●	●	●	●	●	●
acido borico 5%	●	●	●	●	●	●	●	●	●	●	●	●	●
acido butirrico 5%	●	●	●	●	●	●	●	●	●	●	●	●	●
acido cianidrico 100%	●	●	●	●	●	●	●	●	●	●	●	●	●
acido citrico 5%	●	●	●	●	●	●	●	●	●	●	●	●	●
acido cloridrico (tutte le concentrazioni)	●	●	●	●	●	●	●	●	●	●	●	●	●
acido cromatico 5%	●	●	●	●	●	●	●	●	●	●	●	●	●
acido fluoridrico (tutte le concentrazioni)	●	●	●	●	●	●	●	●	●	●	●	●	●
acido fosforico 5%	●	●	●	●	●	●	●	●	●	●	●	●	●
acido lattico 5%	●	●	●	●	●	●	●	●	●	●	●	●	●
acido linoleico 100% fino a 100C	●	●	●	●	●	●	●	●	●	●	●	●	●
acido malico 10-40% fino a 50C	●	●	●	●	●	●	●	●	●	●	●	●	●
acido muriatico (commerciale)	●	●	●	●	●	●	●	●	●	●	●	●	●
acido nitrico fino a 10% a 80C	●	●	●	●	●	●	●	●	●	●	●	●	●
acido oleico 100%	●	●	●	●	●	●	●	●	●	●	●	●	●
acido ossalico 5%	●	●	●	●	●	●	●	●	●	●	●	●	●
acido picrico (tutte le concentrazioni)	●	●	●	●	●	●	●	●	●	●	●	●	●
acido solfidrico 100% umido (idrogeno solforato)	●	●	●	●	●	●	●	●	●	●	●	●	●
acido solforico 5% bollente	●	●	●	●	●	●	●	●	●	●	●	●	●
acido solforico fumante (oleum) 50C	●	●	●	●	●	●	●	●	●	●	●	●	●
acido solforoso 100%	●	●	●	●	●	●	●	●	●	●	●	●	●
acido stearico 100% fino a 100C	●	●	●	●	●	●	●	●	●	●	●	●	●
acido tartarico 10% a 100C	●	●	●	●	●	●	●	●	●	●	●	●	●
acqua dolce	●	●	●	●	●	●	●	●	●	●	●	●	●
acqua ossigenata 10-30%	●	●	●	●	●	●	●	●	●	●	●	●	●
acqua ragia	●	●	●	●	●	●	●	●	●	●	●	●	●
alcool etilico (tutte le concentrazioni)	●	●	●	●	●	●	●	●	●	●	●	●	●
alcool metilico 100%	●	●	●	●	●	●	●	●	●	●	●	●	●
alluminio fuso	●	●	●	●	●	●	●	●	●	●	●	●	●
ammoniaca 100% (secca)	●	●	●	●	●	●	●	●	●	●	●	●	●
anidride acetica 100%	●	●	●	●	●	●	●	●	●	●	●	●	●
anidride carbonica 100% (secca)	●	●	●	●	●	●	●	●	●	●	●	●	●
anidride solforosa 90%	●	●	●	●	●	●	●	●	●	●	●	●	●
anilina 100%	●	●	●	●	●	●	●	●	●	●	●	●	●
bagni di concia	●	●	●	●	●	●	●	●	●	●	●	●	●
bagni di cromatura	●	●	●	●	●	●	●	●	●	●	●	●	●
bagni di fissaggio fotografico	●	●	●	●	●	●	●	●	●	●	●	●	●
bagni di sviluppo fotografico	●	●	●	●	●	●	●	●	●	●	●	●	●
benzina	●	●	●	●	●	●	●	●	●	●	●	●	●
benzolo a freddo e a caldo	●	●	●	●	●	●	●	●	●	●	●	●	●
bicarbonato di sodio (tutte le concentrazioni)	●	●	●	●	●	●	●	●	●	●	●	●	●
birra	●	●	●	●	●	●	●	●	●	●	●	●	●
bisolfato di sodio 15% a 85C	●	●	●	●	●	●	●	●	●	●	●	●	●
bisolfuro di carbonio 100%	●	●	●	●	●	●	●	●	●	●	●	●	●
borace 5% caldo	●	●	●	●	●	●	●	●	●	●	●	●	●
butano	●	●	●	●	●	●	●	●	●	●	●	●	●
caffè bollente	●	●	●	●	●	●	●	●	●	●	●	●	●
candeggina saturata	●	●	●	●	●	●	●	●	●	●	●	●	●
canfora	●	●	●	●	●	●	●	●	●	●	●	●	●
carbonato di sodio 5% fino a 65C	●	●	●	●	●	●	●	●	●	●	●	●	●
citrato di sodio a freddo e a caldo	●	●	●	●	●	●	●	●	●	●	●	●	●
clorofornio 100%	●	●	●	●	●	●	●	●	●	●	●	●	●
cloruro di ammonio 1%	●	●	●	●	●	●	●	●	●	●	●	●	●
cloruro ferrico 5-50%	●	●	●	●	●	●	●	●	●	●	●	●	●
cloruro ferroso 10-20%	●	●	●	●	●	●	●	●	●	●	●	●	●
cloruro di magnesio fino a 20%	●	●	●	●	●	●	●	●	●	●	●	●	●
cloruro di mercurico 10%	●	●	●	●	●	●	●	●	●	●	●	●	●
cloruro di nichel 10-30%	●	●	●	●	●	●	●	●	●	●	●	●	●
cloruro di potassio 1-5%	●	●	●	●	●	●	●	●	●	●	●	●	●
cloruro di sodio 5% (non agitato)	●	●	●	●	●	●	●	●	●	●	●	●	●
cloruro di zinco 10%	●	●	●	●	●	●	●	●	●	●	●	●	●
cloruro di zolfo 100%	●	●	●	●	●	●	●	●	●	●	●	●	●
a temperatura di ebollizione	●	●	●	●	●	●	●	●	●	●	●	●	●
coca cola (sciroppo puro)	●	●	●	●	●	●	●	●	●	●	●	●	●
etere 100%	●	●	●	●	●	●	●	●	●	●	●	●	●
formaldeide 100%	●	●	●	●	●	●	●	●	●	●	●	●	●
fosfato d'ammonio 10%	●	●	●	●	●	●	●	●	●	●	●	●	●
fosfato di sodio (a tutte le concentrazioni)	●	●	●	●	●	●	●	●	●	●	●	●	●
furfurolo 100%	●	●	●	●	●	●	●	●	●	●	●	●	●
a temperatura di ebollizione	●	●	●	●	●	●	●	●	●	●	●	●	●
gas di cloro umido	●	●	●	●	●	●	●	●	●	●	●	●	●
gas di cokeria	●	●	●	●	●	●	●	●	●	●	●	●	●
gelatina	●	●	●	●	●	●	●	●	●	●	●	●	●
glicerina a tutte le concentrazioni	●	●	●	●	●	●	●	●	●	●	●	●	●
glicole etilico 100%	●	●	●	●	●	●	●	●	●	●	●	●	●
glucosio	●	●	●	●	●	●	●	●	●	●	●	●	●
gomma lacca	●	●	●	●	●	●	●	●	●	●	●	●	●
idrossido d'ammonio fino al 40%	●	●	●	●	●	●	●	●	●	●	●	●	●
idrossido di calcio (fino a 10% fino a 100C)	●	●	●	●	●	●	●	●	●	●	●	●	●
idrossido di magnesio (10% fino a 100C)	●	●	●	●	●	●	●	●	●	●	●	●	●
idrossido di potassio fino a 50%	●	●	●	●	●	●	●	●	●	●	●	●	●
idrossido di sodio fino a 20%	●	●	●	●	●	●	●	●	●	●	●	●	●
ipoclorito di calcio 100%	●	●	●	●	●	●	●	●	●	●	●	●	●
ipoclorito di sodio 100%	●	●	●	●	●	●	●	●	●	●	●	●	●
latte (fresco o acido)	●	●	●	●	●	●	●	●	●	●	●	●	●
lievito	●	●	●	●	●	●	●	●	●	●	●	●	●
maionese	●	●	●	●	●	●	●	●	●	●	●	●	●
melassa	●	●	●	●	●	●	●	●	●	●	●	●	●
mostarda	●	●	●	●	●	●	●	●	●	●	●	●	●
nitrato d'ammonio 10-50%	●	●	●	●	●	●	●	●	●	●	●	●	●
nitrato di sodio 10-40%	●	●	●	●	●	●	●	●	●	●	●	●	●
oli minerali a caldo e a freddo	●	●	●	●	●	●	●	●	●	●	●	●	●
oli vegetali a caldo e a freddo	●	●	●	●	●	●	●	●	●	●	●	●	●
paraffina a caldo e a freddo	●	●	●	●	●	●	●	●	●	●	●	●	●
perborato di sodio (10% fino a 100C)	●	●	●	●	●	●	●	●	●	●	●	●	●
perossido di idrogeno 10%	●	●	●	●	●	●	●	●	●	●	●	●	●
perossido di sodio (10% fino a 100C)	●	●	●	●	●	●	●	●	●	●	●	●	●
piombo fuso	●	●	●	●	●	●	●	●	●	●	●	●	●
propano	●	●	●	●	●	●	●	●	●	●	●	●	●
sapone	●	●	●	●	●	●	●	●	●	●	●	●	●
sciroppo di zucchero	●	●	●	●	●	●	●	●	●	●	●	●	●
a tutte le concentrazioni	●	●	●	●	●	●	●	●	●	●	●	●	●
siero di latte	●	●	●	●	●	●	●	●	●	●	●	●	●
silicato di sodio (fino a 100% fino a 100C)	●	●	●	●	●	●	●	●	●	●	●	●	●
solfato d'alluminio 10%	●	●	●	●	●	●	●	●	●	●	●	●	●
solfato di ammonio 10%	●	●	●	●	●	●	●	●	●	●	●	●	●
solfato ferrico 10%	●	●	●	●	●	●	●	●	●	●	●	●	●
solfato ferroso 10-40%	●	●	●	●	●	●	●	●	●	●	●	●	●
solfato di magnesio 10-40%	●	●	●	●	●	●	●	●	●	●	●	●	●
solfato di nichel 30%	●	●	●	●	●	●	●	●	●	●	●	●	●
solfato di potassio (10% fino a 100C)	●	●	●	●	●	●	●	●	●	●	●	●	●
solfato di rame 10%	●	●	●	●	●	●	●	●	●	●	●	●	●
solfato di sodio 10%	●	●	●	●	●	●	●	●	●	●	●	●	●
solfato di zinco 10%	●	●	●	●	●	●	●	●	●	●	●	●	●
solfuro di sodio 10%	●	●	●	●	●	●	●	●	●	●	●	●	●
succhi di arancia concentrati	●	●	●	●	●	●	●	●	●	●	●	●	●
succhi di limone concentrati	●	●	●	●									

Resistenza dei contenitori alla corrosione

Resistance of enclosures to corrosion

Data taken from:
Corrosion Guide - E. Rabald Elsevier, Amsterdam, London, New York 1968
Corrosion Data Survey - 4a ed. G. A. Nelson Nace, Houston 1967
Corrosion Data Survey - 5a ed. N. E. Hammer Nace, Houston 1967

- No corrosion in optimal conditions of use in contact with the substances considered
- Possibility of corrosion when in contact with the substances considered
- Corrosion when in contact with the substances considered
- Data not available

Substance	316 type austenitic Cr-Ni-Mo steel	302-304-305 type austenitic Cr-Ni	430 type ferritic Cr steel	410 type martensitic Cr steel
acetylene (commercial)	●	●	●	●
vinegar	●	●	●	●
vinegar (vapours)	●	●	●	●
acetone 100% at 100°C	●	●	●	●
acetic acid up to 20%	●	●	●	●
boric acid 5%	●	●	●	●
butyric acid 5%	●	●	●	●
hydrocyanic acid 100%	●	●	●	●
citric acid 5%	●	●	●	●
hydrochloric acid (all concentrations)	●	●	●	●
chromic acid 5%	●	●	●	●
hydrofluoric acid (all concentrations)	●	●	●	●
phosphoric acid 5%	●	●	●	●
lactic acid 5%	●	●	●	●
linoleic acid 100% up to 100°C	●	●	●	●
malic acid 10-40% up to 50°C	●	●	●	●
muriatic acid (commercial)	●	●	●	●
nitric acid up to 10% at 80°C	●	●	●	●
oleic acid 100%	●	●	●	●
oxalic acid 5%	●	●	●	●
picric acid (all concentrations)	●	●	●	●
wet sulphuric acid 100% (hydrogen sulphide)	●	●	●	●
boiling sulphuric acid 5%	●	●	●	●
fuming sulphuric acid (oleum) 50°C	●	●	●	●
sulphurous acid 100%	●	●	●	●
stearic acid 100% up to 100°C	●	●	●	●
tartaric acid 10% at 100°C	●	●	●	●
soft water	●	●	●	●
hydrogen dioxide 10-30%	●	●	●	●
white spirit	●	●	●	●
ethyl alcohol (all concentrations)	●	●	●	●
methyl alcohol 100%	●	●	●	●
melted aluminium	●	●	●	●
ammonia 100% (dry)	●	●	●	●
acetic anhydride 100%	●	●	●	●
carbon dioxide 100% (dry)	●	●	●	●
sulphur dioxide 90%	●	●	●	●
aniline 100%	●	●	●	●
tanning bath	●	●	●	●
chromium plating bath	●	●	●	●
fixing bath	●	●	●	●
developer bath	●	●	●	●
gasoline	●	●	●	●
cold and hot benzol	●	●	●	●
sodium bicarbonate (all concentrations)	●	●	●	●
beer	●	●	●	●
sodium disulphate 15% at 85°C	●	●	●	●
carbon bisulphide 100%	●	●	●	●
hot borax 5%	●	●	●	●
butane	●	●	●	●
boiling coffee	●	●	●	●
saturated chlorine water	●	●	●	●
camphor	●	●	●	●
sodium carbonate 5% up to 65°C	●	●	●	●
hot and cold sodium citrate	●	●	●	●
chloroform 100%	●	●	●	●
ammonium chloride 1%	●	●	●	●
ferric chloride 5-50%	●	●	●	●
ferrous chloride 10-20%	●	●	●	●
magnesium chloride up to 20%	●	●	●	●
mercury chloride 10%	●	●	●	●
nickel chloride 10-30%	●	●	●	●
potassium chloride 1-5%	●	●	●	●
sodium chloride 5% (not agitated)	●	●	●	●
zinc chloride	●	●	●	●
sulphur chloride 100%	●	●	●	●
at boiling temperature	●	●	●	●
coca cola (pure syrup)	●	●	●	●
ether 100%	●	●	●	●
formaldehyde 100%	●	●	●	●
ammonium phosphate 10%	●	●	●	●
sodium phosphate	●	●	●	●
at all concentrations	●	●	●	●
furfural 100%	●	●	●	●
at boiling temperature	●	●	●	●
wet chloride gas	●	●	●	●
coke-oven gas	●	●	●	●
gelatine	●	●	●	●
glycerol at all concentrations	●	●	●	●
ethyl glycol 100%	●	●	●	●
glucose	●	●	●	●
shellac	●	●	●	●
ammonium hydroxide up to 40%	●	●	●	●
calcium hydroxide up to 10% up to 100°C	●	●	●	●
magnesium hydroxide 10% up to 100°C	●	●	●	●
potassium hydroxide up to 50%	●	●	●	●
sodium hydroxide up to 20%	●	●	●	●
calcium hypochlorite 100%	●	●	●	●
sodium hypochlorite 100%	●	●	●	●
milk (fresh or acid)	●	●	●	●
yeast	●	●	●	●
mayonnaise	●	●	●	●
molasses	●	●	●	●
mustard	●	●	●	●
ammonium nitrate 10-50%	●	●	●	●
sodium nitrate 10-40%	●	●	●	●
hot and cold mineral oil	●	●	●	●
hot and cold vegetable oil	●	●	●	●
hot and cold paraffin	●	●	●	●
sodium perborate 10% up to 100°C	●	●	●	●
hydrogen peroxide 10%	●	●	●	●
sodium peroxide 10% up to 100°C	●	●	●	●
melted lead	●	●	●	●
propane	●	●	●	●
soap	●	●	●	●
sugar syrup	●	●	●	●
at all concentration	●	●	●	●
whey	●	●	●	●
sodium silicate up to 100% up to 100°C	●	●	●	●
aluminium sulphate 10%	●	●	●	●
ammonium sulphate 10%	●	●	●	●
ferric sulphate 10%	●	●	●	●
ferrous sulphate 10-40%	●	●	●	●
magnesium sulphate 10-40%	●	●	●	●
nickel sulphate 30%	●	●	●	●
potassium sulphate 10% up to 100°C	●	●	●	●
copper sulphate 10%	●	●	●	●
sodium sulphate 10%	●	●	●	●
zinc sulphate 10%	●	●	●	●
sodium sulphide 10%	●	●	●	●
concentrated orange juice	●	●	●	●
concentrated lemon juice	●	●	●	●
carbon tetrachloride 10%	●	●	●	●
sodium thiosulphate 10-60% up to 100°C	●	●	●	●
toluol	●	●	●	●
trichloroethylene 100% up to 100°C	●	●	●	●
paints	●	●	●	●
wine	●	●	●	●
whisky	●	●	●	●
melted zinc	●	●	●	●
melted sulphur	●	●	●	●

Caratteristiche tecniche

Technical data

UN BREVE CENNO STORICO

Gli acciai inossidabili sono dei materiali entrati nella produzione industriale relativamente da poco tempo. Gli esperti fanno risalire al primo ventennio del novecento la loro prima comparsa in nuove applicazioni. Infatti alla fine del 1912 il metallurgista Pasel della Krupp, depositò in Germania due brevetti (che furono poi rilasciati nel 1918 con i numeri 304 126 e 304 159) in cui si parla di **acciai inossidabili austenitici** contenenti 18 parti di cromo e 8 parti di nichel. La prima colata industriale di acciaio mertensitico al solo cromo avvenne nel 1913 in Gran Bretagna; il prodotto di questa prima colata, che conteneva circa il 13% di cromo, servì a costruire lame di coltelli. Le prime applicazioni, oltre alla coltelleria già menzionata, avvennero nei motori a combustione interna durante la prima guerra mondiale, mentre la diffusione in tutti i settori d'impiego iniziò dopo gli anni 20 e lo sviluppo continua ancora oggi in settori avanzati e particolarmente "esigenti", come in quello della produzione petrolchimica, alimentare, farmaceutico, zootecnico ecc.

A SHORT HISTORICAL BACKGROUND

The use of stainless steel in industrial production is fairly recent. The experts date the first appearance in new applications back to the first twenty years of the twentieth century. At the end of 1912, the metallurgist Pasel of Krupp filed two patents in Germany (which were then issued in 1918 with the numbers 304 126 and 304 159) which mention **austenitic stainless steels** containing 18 parts of chromium and 8 parts of nickel. Mertensitic steel with chromium was cast for the first time in Great Britain in 1913; the product of this first casting, which contained around 13% chromium, was used to manufacture knife blades. Apart from cutlery as mentioned above, it was first used for the internal combustion engines during the First World War and after the twenties it began to be employed on a large-scale basis in all fields of applications. It continues to be used today in the more advanced and particularly "demanding" fields of applications, such as the petrochemical, food and pharmaceutical industries, for animal husbandry, etc.

1913

LA PRIMA COLATA
INDUSTRIALE
FIRST
INDUSTRIAL CASTING

RESISTENZA ALLA CORROSIONE

G

Gli acciai inossidabili sono delle **leghe a base di ferro, di cromo, carbonio** e di altri elementi quali nichel, molibdeno, manganese, silicio, titanio ecc., che li rendono **particolarmente resistenti ad alcuni tipi di corrosione**. La norma EN 10088 definisce acciai inossidabili quelle leghe ferrose che contengono cromo in ragione di almeno il 10,5%. La caratteristica di buona resistenza è dovuta alla proprietà di queste leghe di passivarsi in un ambiente sufficientemente ossidante (per esempio l'aria) tramite la formazione di una particolare **pellicola superficiale di ossigeno assorbito**. Quando è in queste condizioni l'acciaio inossidabile è allo stato "**passivo**".

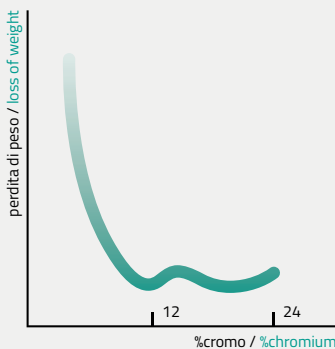
La pellicola passiva si riforma quando viene lacerata, naturalmente se l'ambiente è sufficientemente ossidante e se l'ossigeno può pervenire a contatto della lega. Essa protegge il materiale sottostante dall'attacco corrosivo.

RESISTANCE TO CORROSION

S

Stainless steels are **alloys based on iron, chromium, carbon** and other elements such as nickel, molybdenum, silicon, titanium, etc. that make them **particularly resistant to certain types of corrosion**. The EN 10088 specification defines stainless steels as ferrous alloys containing at least 10.5% chromium. Their good corrosion resistance is due to the properties of these alloys to passivate in a sufficiently oxidising environment (for example air), thus forming a **particular surface film of adsorbed oxygen**. When in these conditions, stainless steel is in a "**passive**" state.

The passive film forms again when it is torn provided that obviously if the environment is sufficiently oxidising and the oxygen can come into contact with the alloy. It protects the underlying material against corrosive attack.



La curva mostra come la percentuale di cromo in lega determini il minimo della perdita di peso in ambiente corrosivo.

The curve shows how the percentage of chromium in the alloy determines the minimum weight loss in a corrosive environment.

Caratteristiche tecniche

Technical data

Da un punto di vista logico verrebbe fatto d'osservare che questi materiali dovrebbero essere denominati **"ossidabilissimi"** piuttosto che **"inossidabili"**, proprio in funzione del loro meccanismo di protezione contro la corrosione. L'aggettivo inossidabile è riferito all'acciaio soltanto negli anni '20 formando la dizione **"acciaio inossidabile"** oggi in uso. Anche altre lingue neolatine, ad esempio la francese con *inoxydable* e la spagnola con *inoxidable*, designano con il significato di **"non corrodibile"** questo tipo di materiale. Altre lingue d'origine non latine, essenzialmente pragmatiche e meno fantasiose, utilizzano altri termini per definire questo materiale. Il tedesco lo definisce **"rostfrei"** (libero da ruggine) oppure **"nichtrostender"** (non corrodibile), lo svedese **"rostfritt"** (libero da ruggine) e l'inglese **"stainless"** (senza macchia).



The Italian word "inossidabile" means literally "inoxidable". Logically, it could be said that these materials should be called **"highly oxydable"** rather than **"inoxidable"** because of their protection mechanism against corrosion. This adjective was used to refer to the steel only in the twenties forming the designation used today. The other Romance languages, for example French with *inoxydable* and Spanish with *inoxidable*, call this type of material **"not liable to corrosion"**. Other non-Romance languages, more pragmatic and less imaginative, use other terms to define this material. In German it is called **"rostfrei"** (free of rust) or **"nichtrostender"** (not liable to corrosion), in Swedish **"rostfritt"** (free of rust) and in English **"stainless"**.



GUIDA AD UN CORRETTO UTILIZZO DEI CONTENITORI IN ACCIAIO INOX

La New Elfin fornisce tutti i Contenitori in acciaio inox rivestiti di un film plastico adesivo, originariamente applicato in fase di laminazione, per proteggere il materiale in tutti i cicli di lavorazione¹ necessari per costruire i contenitori. Questo strato protettivo continua la sua funzione protettiva presso la clientela sia nel primo immagazzinamento² che per le lavorazioni di allestimento. È però indispensabile che, a completamento del lavoro, la pellicola venga rimossa per attivare, al contatto con l'aria, il **processo di passivazione** che rende l'acciaio resistente alla corrosione. È quindi evidente che questa operazione deve essere compiuta prima di inserire i contenitori nell'ambiente di lavoro o comunque corrosivo.

È INDISPENSABILE
CHE LA PELLICOLA
VENGA RIMOSSA

THE FILM MUST
BE REMOVED

1
Stoccaggio, taglio laser, piegatura,
saldatura, montaggio ecc.

2
Non riporre su scaffalature con piani in metallo
arrugginito o corrosi, si raccomandano piani
in legno o rivestiti con carta oleata.

GUIDE TO CORRECT USE OF STAINLESS STEEL ENCLOSURES

New Elfin supplies all stainless steel enclosures coated with an adhesive plastic film applied originally during the metal rolling operation to protect the material in all phases of the enclosure construction process¹. This protective layer continues to perform its protective function at customer's site during both initial storage² and set-up processes. When all processes are over, the film must, however, be removed to get the passivation process started naturally thanks to the steel exposure to air, thus making the steel corrosion resistance. Obviously, this operation must be carried out before introducing the enclosures in the working or corrosive environments.

1
Storing, laser cutting, bending,
welding, assembly, etc.

2
Do not store on shelves with rusted or corrosive
metal surfaces; shelves made of wood or coated
with oiled paper are recommended.



Caratteristiche tecniche

Technical data

CLASSIFICAZIONE DEGLI ACCIAI INOSSIDABILI

Conoscere il metodo di classificazione internazionale adottato dall' AISI è necessario per fare riferimento alle sigle che troveremo nel prosieguo del catalogo.

-Acciai austenitici al cromo-manganese-nichel sono designati da un numero di tre cifre iniziante con la cifra 2, come ad esempio 2xx, dove la seconda coppia di cifre (qui indicate genericamente con xx) non ha nessun riferimento all' analisi del materiale, ma semplicemente serve a distinguere un tipo da un altro.

-Acciai austenitici al cromo-nichel sono designati da un numero di tre cifre iniziante con la cifra 3, come ad esempio 3xx, dove la seconda coppia di cifre (qui indicata genericamente con xx) non ha nessun riferimento all' analisi del materiale, ma semplicemente serve a distinguere un tipo da un altro.

-Acciai ferritici e martensitici al solo cromo sono designati da un numero di tre cifre iniziante con la cifra 4, come ad esempio 4xx, dove la seconda coppia di cifre (qui indicata genericamente con xx) non ha nessun riferimento all' analisi del materiale, ma semplicemente serve a distinguere un tipo da un altro.

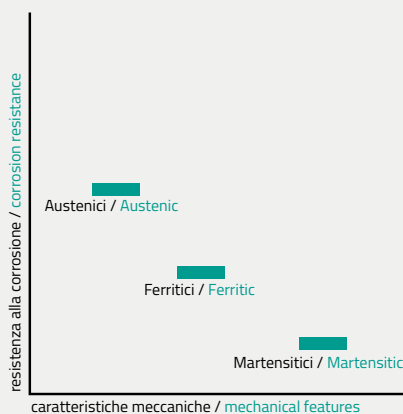
CLASSIFICATION OF STAINLESS STEEL

Knowing the international classification method used by AISI is advisable to refer to the codes indicated on the following pages of the catalogue

-Chromium-manganese-nickel austenitic steels are identified by a 3-digit number starting with 2, such as 2xx, where the second set of digits (generally indicated with xx) makes no reference to the analysis of the material but is used simply to distinguish one type from another.

-Chromium-nickel austenitic steels are identified by a 3-digit number starting with 3, such as 3xx, where the second set of digits (generally indicated with xx) makes no reference to the analysis of the material but is used simply to distinguish one type from another.

-Ferritic and martensitic chromium-only steels are identified by a 3-digit number starting with 4, such as 4xx, where the second set of digits (generally indicated with xx) makes no reference to the analysis of the material but is simply used to distinguish one type from another.



Il diagramma illustra il comportamento degli acciai, ed evidenzia come sia inversamente proporzionale il rapporto tra le caratteristiche di resistenza alla corrosione e quelle meccaniche tra le classi degli austenitici e dei martensitici. La New Elfin ha realizzato i suoi contenitori utilizzando un acciaio austenitico AISI 316 conferendo al prodotto elevate caratteristiche di resistenza alla corrosione e grazie ad un attento progetto costruttivo, ha mantenuto alte caratteristiche meccaniche.

The diagram shows the behaviour of the steels and highlights how the relationship between the corrosion resistance and mechanical features is in inverse proportion between the classes of austenitic and martensitic steels. New Elfin has produced its enclosures using an AISI 316 austenitic steel, endowing the product with high-level corrosion resistance features and has maintained high level mechanical features through an attentive construction project.

Caratteristiche tecniche

Technical data

Caratteristiche tecniche

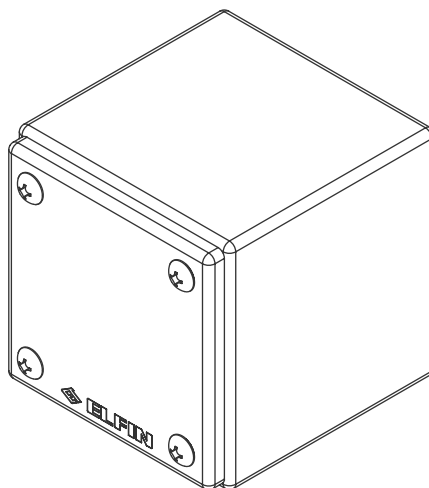
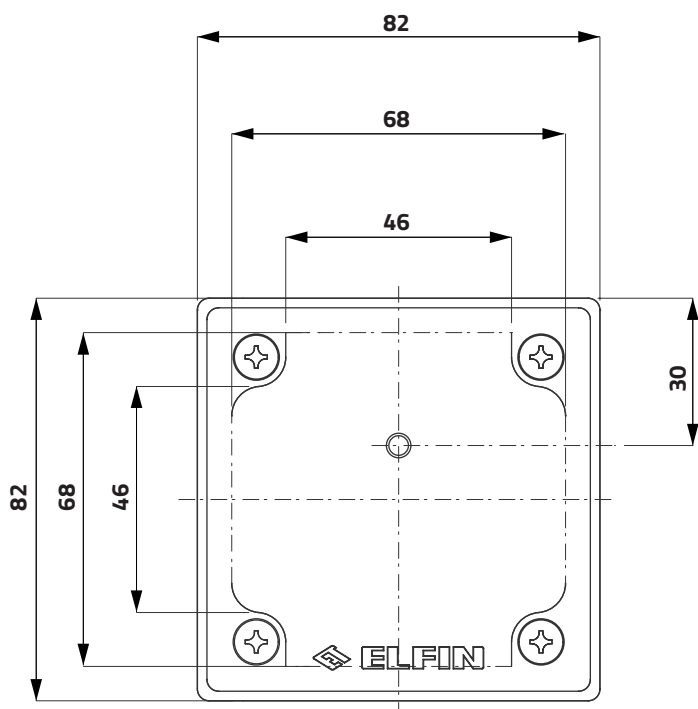
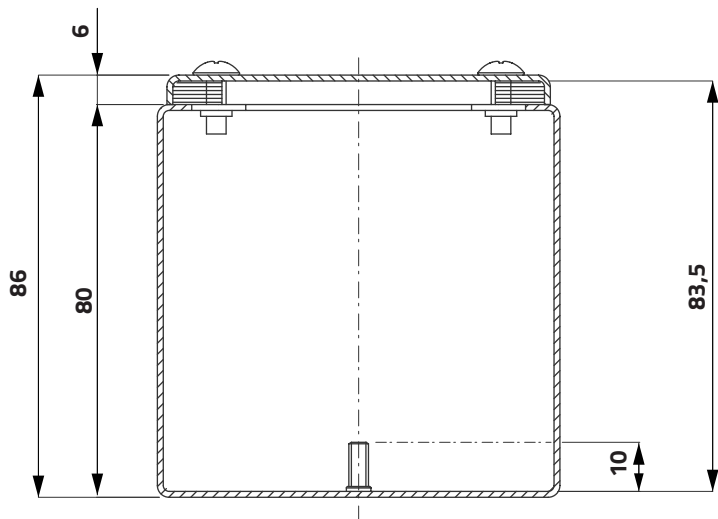
Materiale contenitori	Acciaio inox AISI 316
Materiale piastre di fondo	Acciaio zincato
Serraggi	Chiusura coperchio con viti TSB SMA imperdibili; morsetto di messa a terra inserto filettato 5ma su coperchio e fondo scatola, dado non fornito; dai formati 140 x 180 n.4 inserti per fissaggio piastre di fondo.
Guarnizione	Gomma neoprenica espansa a cellule chiuse, antiolio e autoestingente, realizzata in un unico pezzo privo di giunzioni.
Finitura	Scatole e coperchi satinati tipo Scotch-Brite privi di saldature a vista
Grado di protezione	IP66-CEI EN 60529
Limiti di temperatura	-40° ÷ + 100°C

Technical data

Material, enclosures	AISI 316 stainless steel
Material, mounting plates	Zinc-plated steel
Fasteners	Lid closing with TSB M5 captive screws; M5 threaded grounding stud on enclosure lid and bottom, nut not provided. From sizes 140x180 no. 4 studs for mounting plate fastening.
Gasket	Closed cell, neoprene foam rubber, oil-resistant, self extinguishing, seamless, moulded in one piece.
Surface finish	Scotch-Brite satin finish enclosures and lids without weld in sights.
Protection degree	IP66-CEI EN 60529
Temperature range	-40° ÷ + 100°C

Scatole acciaio inox 82x82

Stainless steel enclosures 82x82



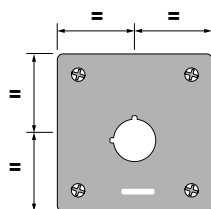
Scatole acciaio inox 82x82 Stainless steel enclosures 82x82



h g cod

Coperchio senza fori / Undrilled lid

Senza entrata cavo / No cable entry 85 360 040X0808-8



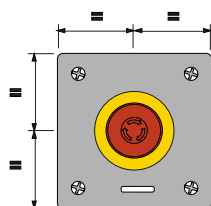
Coperchio con 1 foro Ø 22mm / 1-hole lid Ø 22mm

Senza entrata cavo / No cable entry 85 357 040X0808-8P1



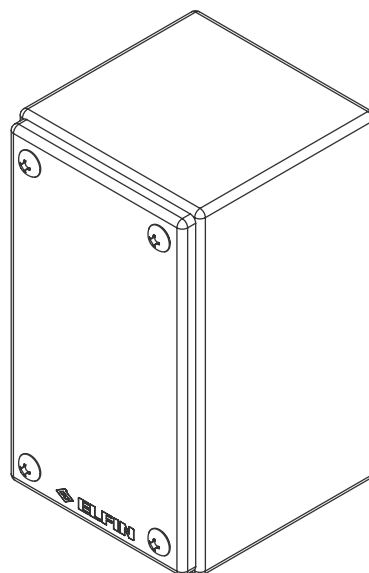
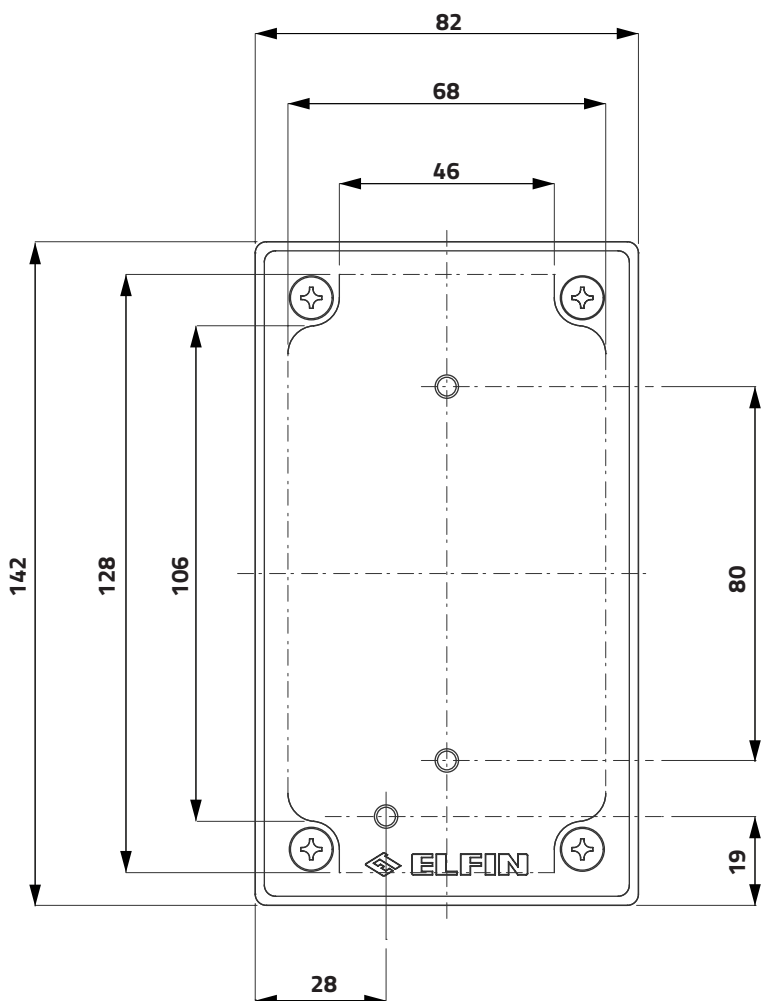
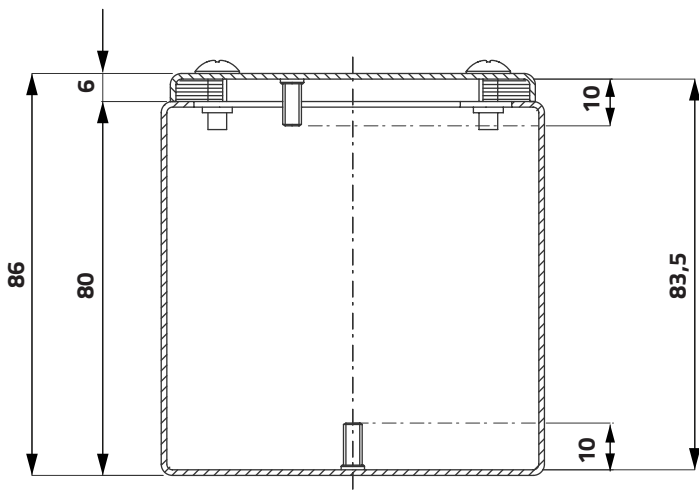
Coperchio con operatore Ø 22mm Lid with operator Ø 22mm

Pulsante fungo rosso, sgancio rotazione Ø40
Red mushroom push-button, twist release 85 483 040X0808-8GA



Scatole acciaio inox 82x142

Stainless steel enclosures 82x142



Scatole acciaio inox 82x142

Stainless steel enclosures 82x142



h **g** **cod**

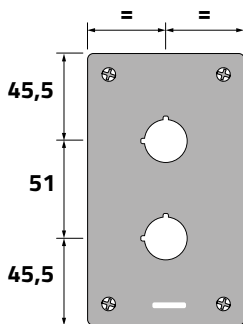
Coperchio senza fori / Undrilled lid

Senza entrata cavo / No cable entry

86

536

040X0814-8



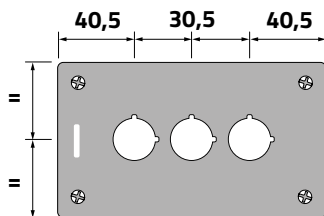
Coperchio con 2 fori Ø 22mm / 2-hole lid Ø 22mm

Senza entrata cavo / No cable entry

86

530

040X0814-8P2



Coperchio con 3 fori Ø 22mm / 3-hole lid Ø 22mm

Senza entrata cavo / No cable entry

86

527

040X0814-8P3

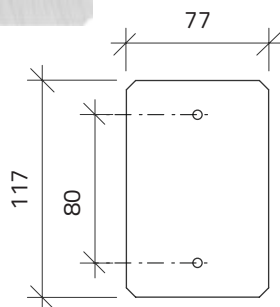


Piastra di fondo / Mounting plate

1,5

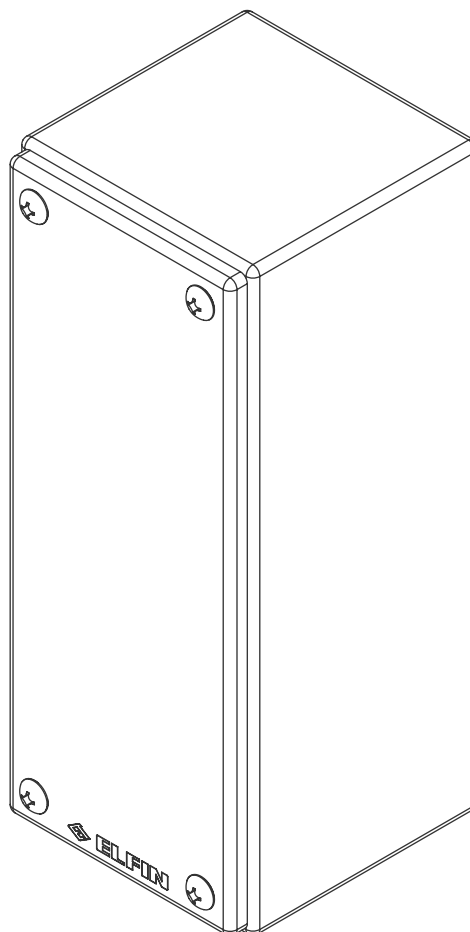
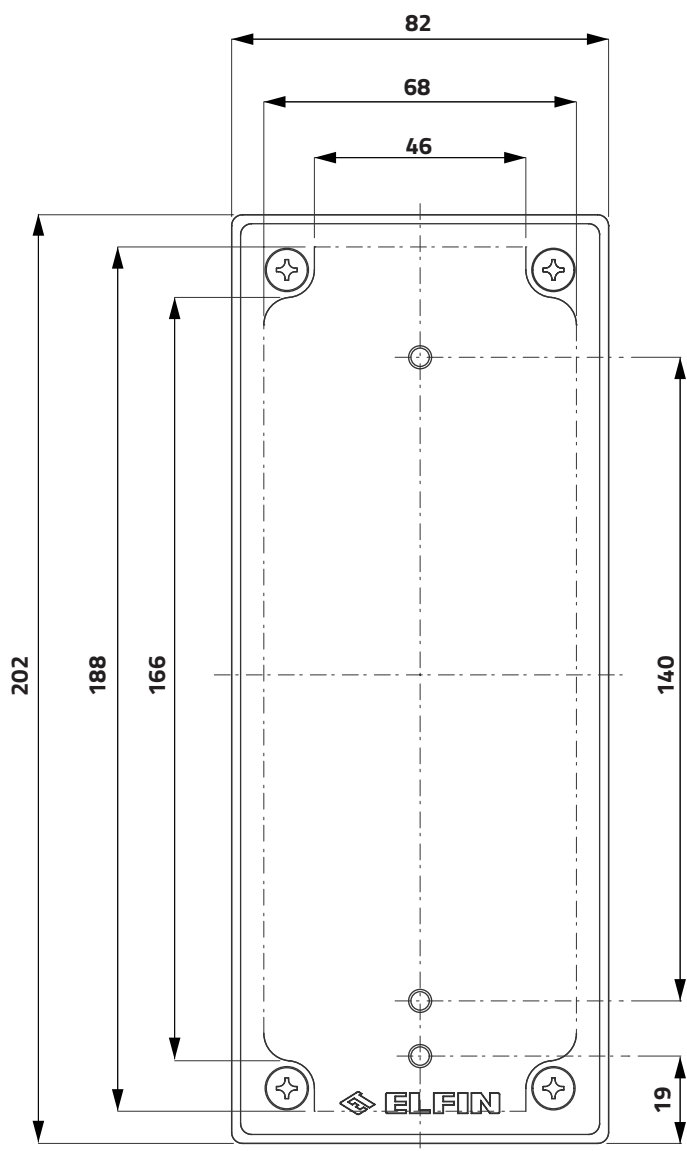
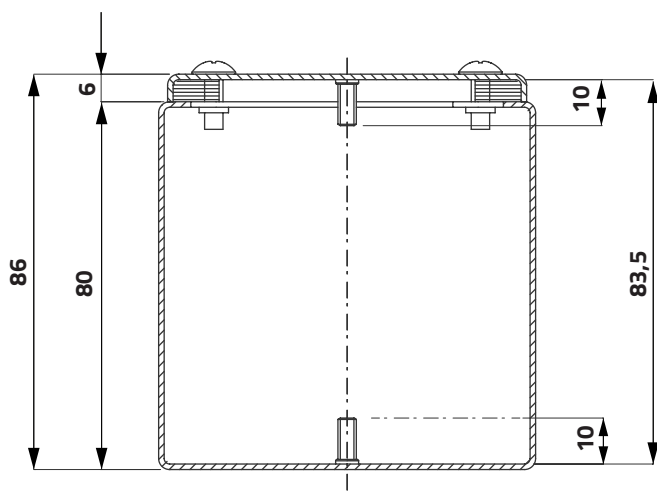
74

040P0814



Scatole acciaio inox 82x202

Stainless steel enclosures 82x202



Scatole acciaio 82x202

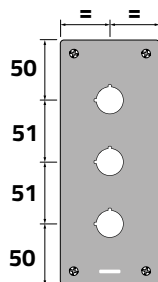
Stainless steel enclosures 82x202



h g cod

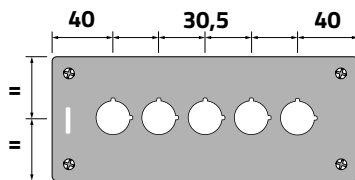
Coperchio senza fori / Undrilled lid

Senza entrata cavo / No cable entry 86 826 **040X0820-8**



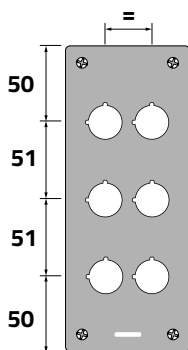
Coperchio con 3 fori Ø 22mm / 3-hole lid Ø 22mm

Senza entrata cavo / No cable entry 86 817 **040X0820-8P3**



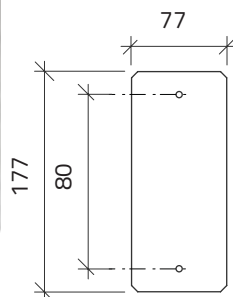
Coperchio con 5 fori Ø 22mm / 5-hole lid Ø 22mm

Senza entrata cavo / No cable entry 86 811 **040X0820-8P5L**



Coperchio con 6 fori Ø 22mm / 6-hole lid Ø 22mm

Senza entrata cavo / No cable entry 86 808 **040X0820-8P6**



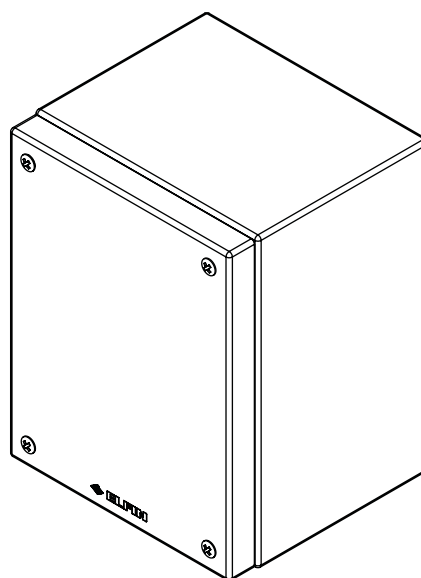
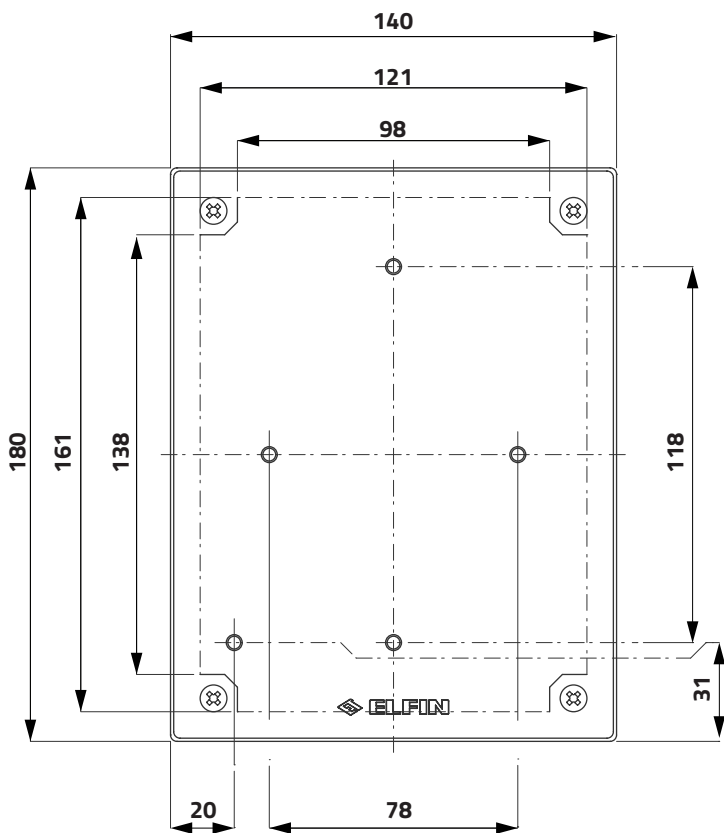
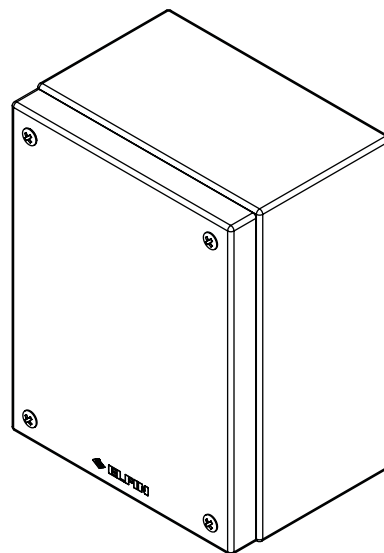
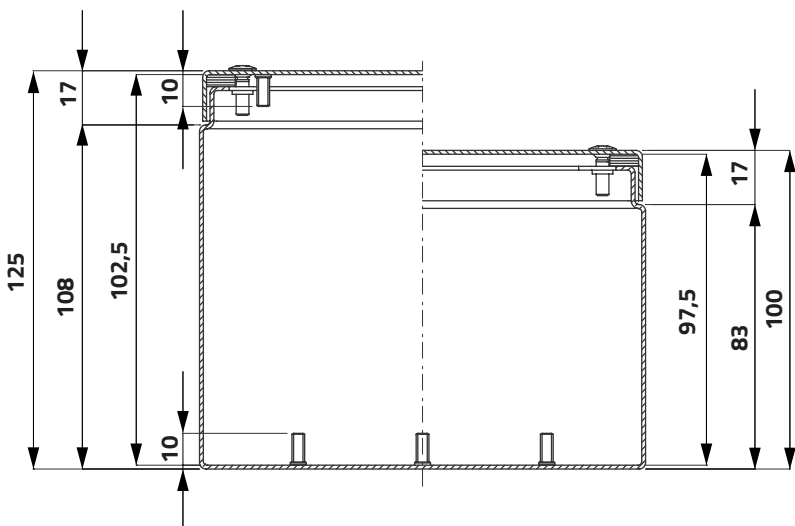
Piastra di fondo / Mounting plate

1,5 109 **040P0820**



Scatole acciaio inox 140x180

Stainless steel enclosures 140x180



Scatole acciaio inox 140x180

Stainless steel enclosures 140x180

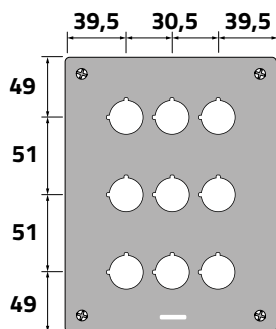


Coperchio senza fori / Undrilled lid

Senza entrata cavo / No cable entry
Senza entrata cavo / No cable entry

h g cod

100	1190	040X1418-1
125	1338	040X1418-12



Coperchio con 9 fori Ø 22mm / 9-hole lid Ø 22mm

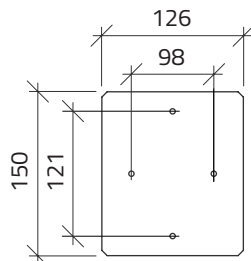
Senza entrata cavo / No cable entry

100	1123	040X1418-1P9
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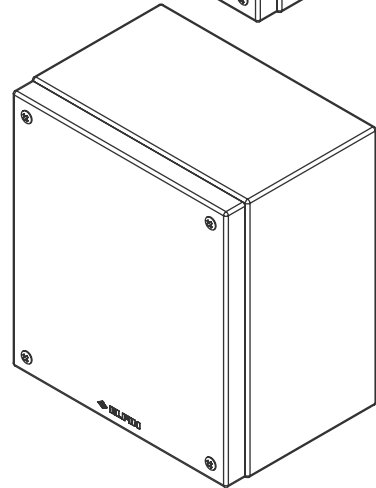
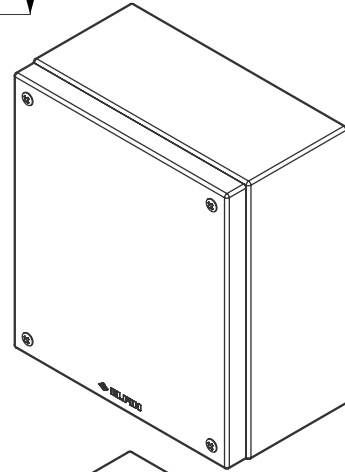
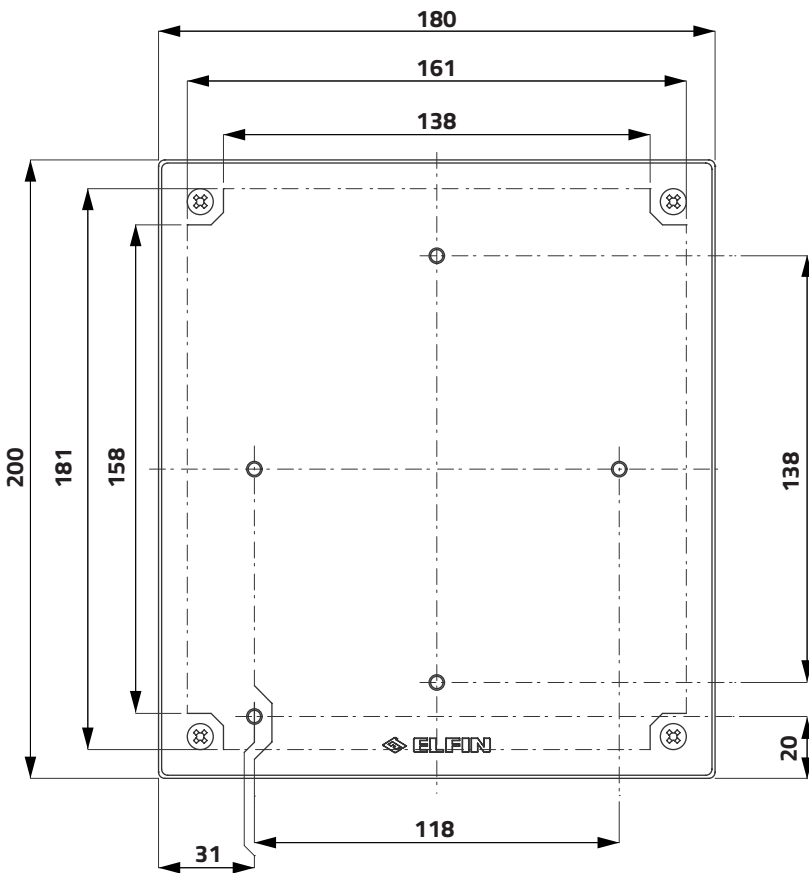
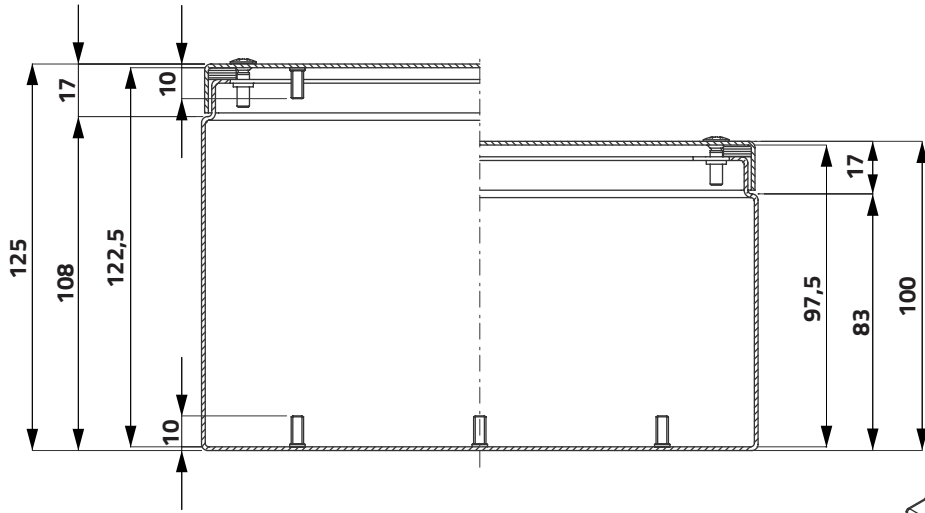
Piastra di fondo / Mounting plate

1,5	162	040P1418
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Scatole acciaio inox 180x200

Stainless steel enclosures 180x200



Scatole acciaio inox 180x200

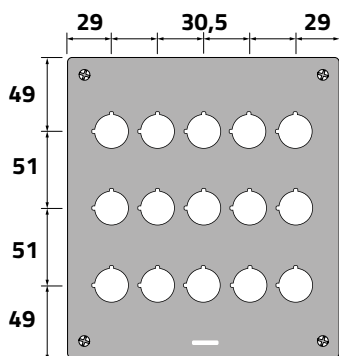
Stainless steel enclosures 180x 200



h g cod

Coperchio senza fori / Undrilled lid

Senza entrata cavo / No cable entry	100	1530	040X1820-1
Senza entrata cavo / No cable entry	125	1645	040X1820-12



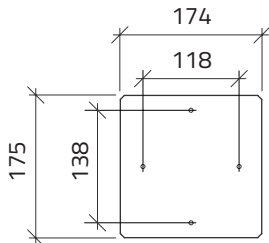
Coperchio con 15 fori Ø 22mm / 15-hole lid Ø 22mm

Senza entrata cavo / No cable entry	100	1480	040X1820-1P15
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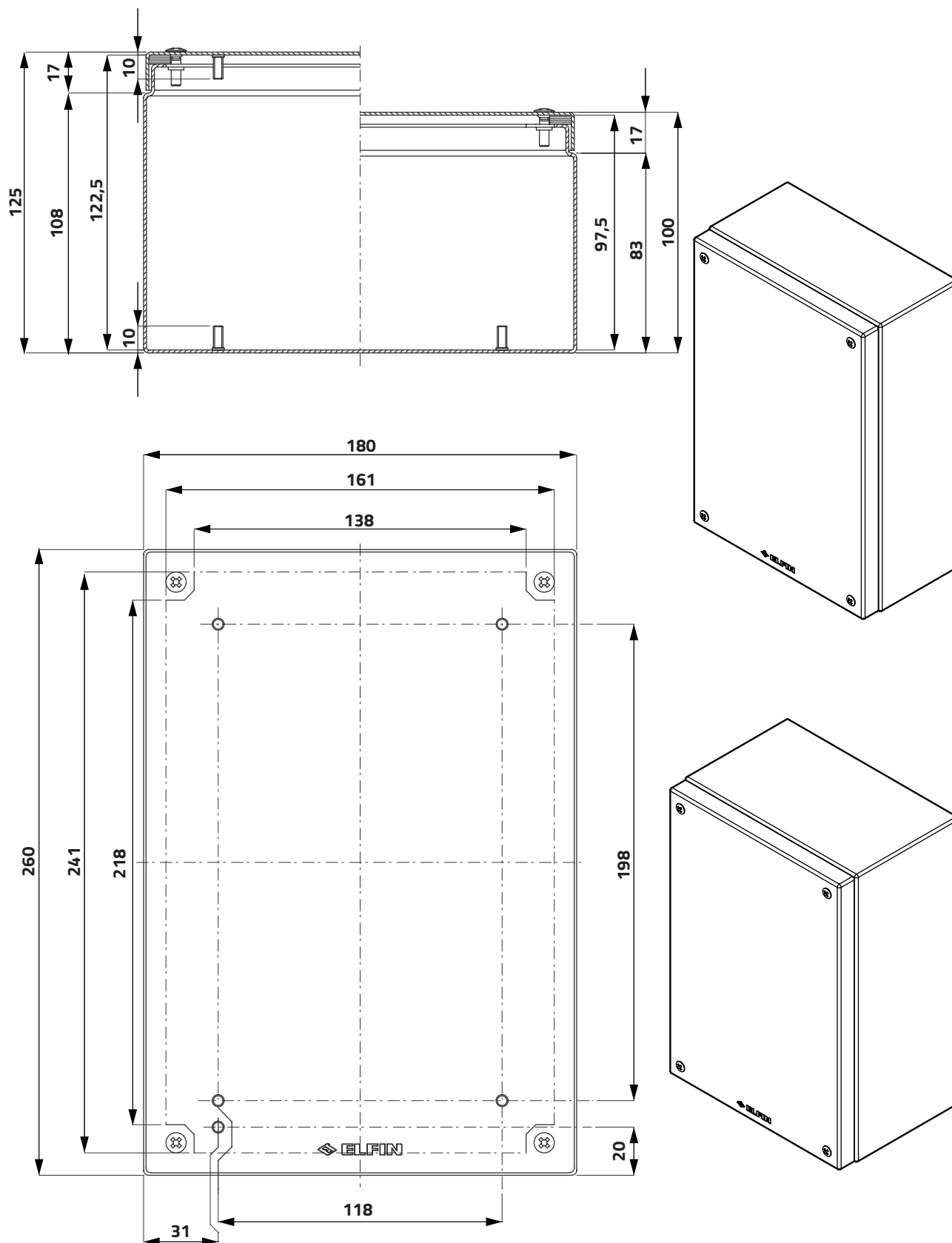
Piastra di fondo / Mounting plate

	1,5	235	040P1820
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Scatole acciaio inox 180x260

Stainless steel 180x260



Scatole acciaio inox 180x260

Stainless steel enclosures 180x260

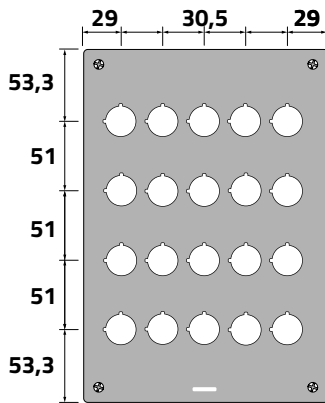


Coperchio senza fori / Undrilled lid

Senza entrata cavo / No cable entry
Senza entrata cavo / No cable entry

h g cod

100	1900	040X1826-1
125	2000	040X1826-12



Coperchio con 20 fori Ø 22mm / 20-hole lid Ø 22mm

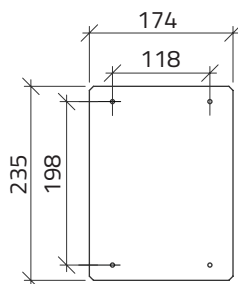
Senza entrata cavo / No cable entry

100	1820	040X1826-1P20
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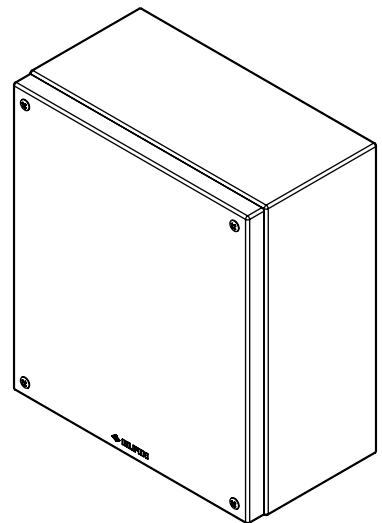
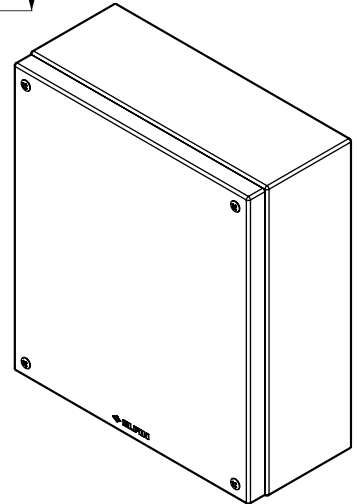
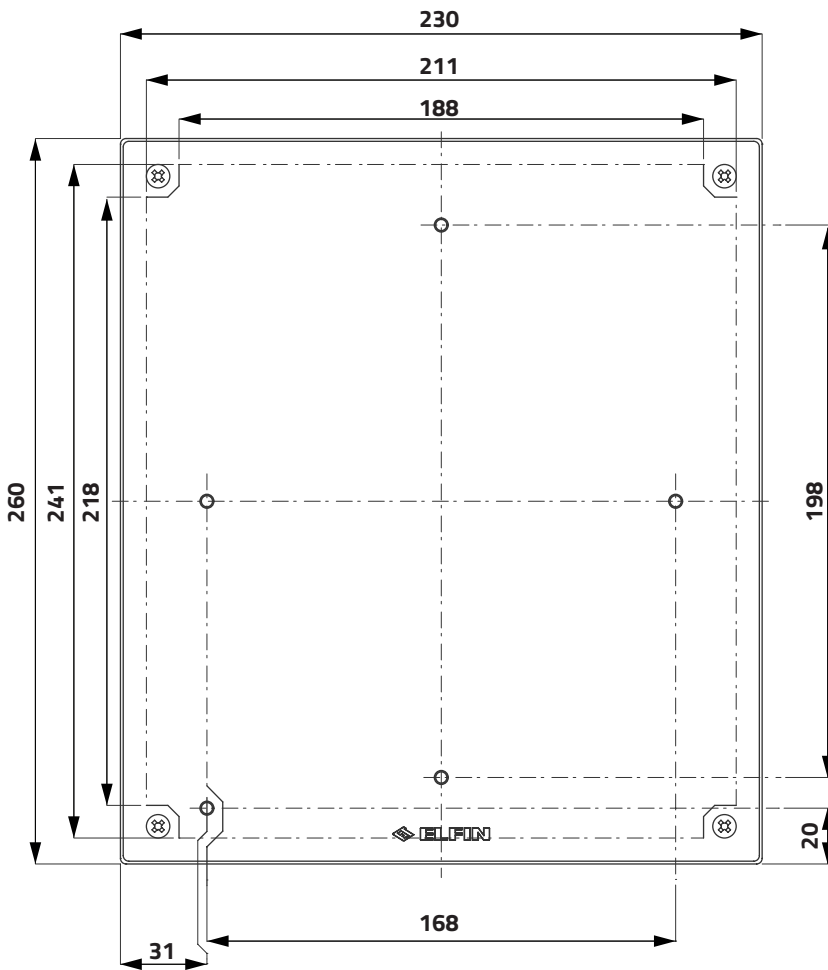
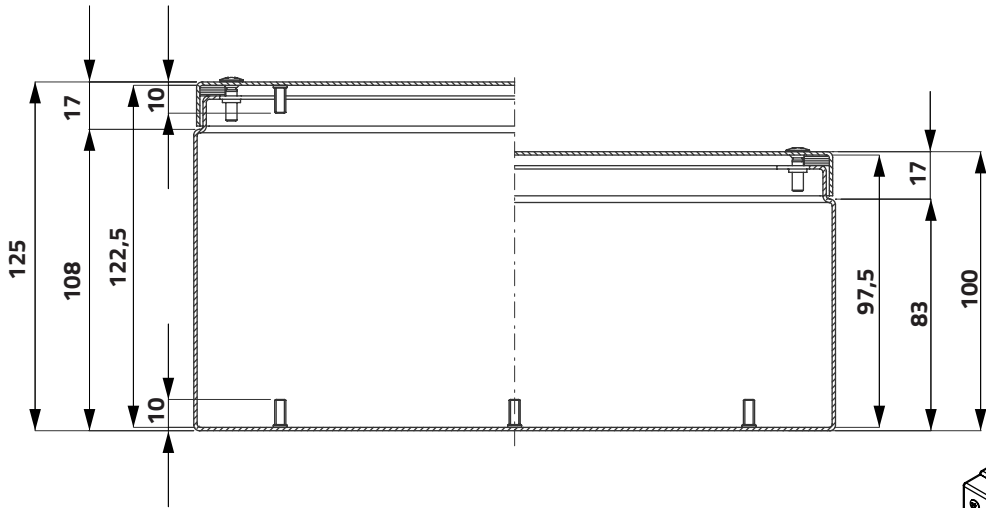
Piastra di fondo / Mounting plate

1,5	318	040P1826
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Scatole acciaio inox 230x260

Stainless steel enclosures 230x260



Scatole acciaio inox 230x260

Stainless steel enclosures 230x260

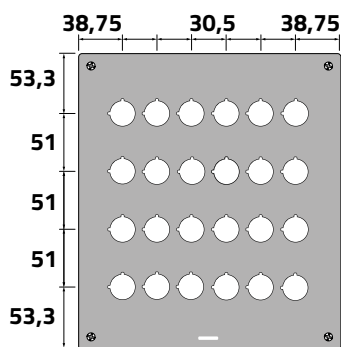


Coperchio senza fori / Undrilled lid

Senza entrata cavo / No cable entry
 Senza entrata cavo / No cable entry

h g cod

100	2250	040X2326-1
125	2495	040X2326-12



Coperchio con 24 fori Ø 22mm / 24-hole lid Ø 22mm

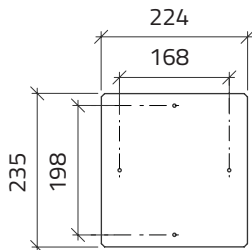
Senza entrata cavo / No cable entry

100	2160	040X2326-1P24
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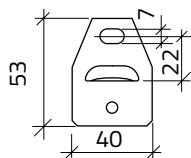


Piastra di fondo / Mounting plate

1,5	410	040P2326
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Accessori Accessories



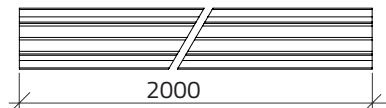
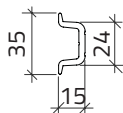
Coppie staffe acciaio inox Couple of stainless steel brackets

per montaggio a parete / for wall-mounting

g **cod**

48

040XSP



Guida / PVC Rail Ø 35

L **g** **cod**

2000

760

010GDP





080

**SCATOLE E CASSETTE
PULSANTIERE IN TERMOPLASTICO**

**THERMOPLASTIC PUSH-BUTTON
BOXES, ENCLOSURES**



Caratteristiche tecniche

Technical data

Il primo criterio di valutazione, quando si opera una scelta sui contenitori da utilizzare, è sicuramente la dimensione; ma successivamente è opportuno analizzare i comportamenti dei contenitori alle condizioni ambientali in cui devono operare; in sostanza i gradi di protezione e le caratteristiche del materiale.

In questo capitolo sono descritte le caratteristiche dei materiali utilizzati nella produzione dei contenitori serie 080 in modo da ricercare la qualità del prodotto e facilitare la scelta finale dell' utilizzatore in funzione della qualità richiesta.



When choosing the enclosure to be used, the first aspect to consider is surely the size. However, subsequently it is advisable to analyse how the enclosures behave in the environmental conditions in which they are required to operate, i.e. protection ratings and features of the material. This chapter describes the features of the materials used to produce the enclosures of the 080 series in order to facilitate the user's final choice according to the required quality.



Caratteristiche tecniche : Materiali

Contenitore	Polycarbonato con fibra di vetro	Grigio RAL 7035
Coperchio giallo	Polycarbonato	Giallo RAL 1004
Coperchio trasparente	Polycarbonato	Fumè
Guarnizione	Poliuretano	Stampato
Viti	Poliammide	Nero
Cerniere	Polycarbonato con fibra di vetro	Grigio RAL 7035
Manopole	Poliammide	Grigio RAL 7035
Maniglie	Poliammide	Verde RAL 6010
Pressacavi	Poliammide	Grigio RAL 7035
Staffe	Poliammide con fibre di vetro	Grigio RAL 7035
Piastra superiore	Alluminio	Anodizzato
Piastre	Acciaio	Zincato
Guide	Acciaio	Zincato
Grado di protezione	IP66- CEI EN 60529	
Limiti di temperatura	Polycarbonato -35 °C ÷ +80 °C	
	Polistirene -25 °C ÷ +40 °C	
Omologazioni	Polycarbonato : UL type 4X e 12X (versione con coperchio trasparente solo 12X)	

Technical features : Materials

Enclosure	Glass fiber reinforced polycarbonate	RAL 7035 Grey
Yellow lid	Polycarbonate	RAL 100 yellow
Transparent lid	Polycarbonate	Smokey grey
Gasket	Polyurethane	Moulded
Screws	Polyamides	Black
Hinges	Glass fiber reinforced polycarbonate	RAL 7035 Grey
Knobs	Polyamide	RAL 7035 Grey
Handles	Polyamide	RAL 6010 Green
Cable glands	Polyamide	RAL 7035 Grey
Brackets	Glass fiber reinforced polyamide	RAL 7035 Grey
Upper plate	Aluminium	Anodised
Plates	Steel	Zinc-plated
Rails	Steel	Zinc-plated
Protection degree	IP66- CEI EN 60529	
Temperature range	Polycarbonate -35 °C ÷ +80 °C	
	Polystyrene -25 °C ÷ +40 °C	
Approvals	Polycarbonate : UL type 4X and 12X (models with transparent lid 12X only)	



Caratteristiche tecniche

Technical data

■ TERMOPLASTICO POLICARBONATO

Il policarbonato, per le sue qualità fisico-meccaniche, è il materiale ideale per la costruzione di contenitori e scatole in termoplastico.

Le caratteristiche fondamentali sono:

- Alta resistenza alle temperature
- Eccellenti proprietà isolanti anche in presenza di umidità
- Autoestinguento
- Alta resistenza agli shock grazie anche all' uso di fibre di vetro
- Forte resistenza agli agenti chimici
- Possibilità di realizzare prodotti con ottime finiture
- Esecuzione dei coperchi in versione trasparente
- Stabilità ai raggi ultravioletti (nei climi tropicali si sconsiglia l'uso dei coperchi trasparenti)
- Facilità di lavorazioni meccaniche (tranciature, forature, ecc.)
- Possibilità di verniciature, incollatura o saldatura

■ IL POLIURETANO

Fattore determinante per garantire la qualità di un contenitore è la scelta della guarnizione. Il tipo di materiale e la sua collocazione determinano l'ermeticità e la durata nel tempo del prodotto. I contenitori serie 080 utilizzano una guarnizione in poliuretano che, per la sua natura, è il materiale ideale per la protezione di un contenitore.

Le caratteristiche fondamentali sono:

- Residuo di compressione quasi nullo
- Il materiale si stampa direttamente nella scanalatura dei coperchi garantendo così immobilità e continuità
- Alta resistenza alle temperature (da -50°C a + 130°C)
- Alta resistenza agli agenti atmosferici

■ THERMOPLASTIC POLYCARBONATE

Its physical-mechanical properties make the polycarbonate the ideal material for the construction of thermoplastic enclosures and boxes.

Its main features are as follows:

- High resistance to temperatures
- Excellent insulating properties also in the presence of moisture
- Self-extinguishing
- High resistance to shocks thanks to the use of glass fiber
- Strong resistance to chemical agents
- Possibility of manufacturing products with excellent finishing
- Possibility of making transparent lids
- Stability to ultraviolet radiation (use of transparent lids is not recommended in tropical climates)
- Ease of machining operations (shearing, drilling, etc.)
- Possibility of painting, glueing or welding

■ POLYURETHANE

The choice of gasket type is a major factors in guaranteeing the enclosure quality. Product sealing and life are closely tied to the type of material used and its position.

The enclosures of the 080 series are equipped with a polyurethane gasket, which is by nature the ideal material to protect an enclosure.

Its main features are as follows:

- Almost null residual compression
- The material is moulded directly in the groove of the lids, thus guaranteeing immobility and continuity
- High resistance to temperatures (from -50°C to + 130°C)
- High resistance to atmospheric agents

Caratteristiche tecniche

Technical data

Caratteristiche dei materiali impiegati nella costruzione dei contenitori serie 080

Nelle tabelle seguenti sono indicate le caratteristiche di resistenza dei materiali impiegati nella produzione della serie 080. Nella valutazione di questi dati è opportuno tenere conto della concentrazione degli agenti chimici e della temperatura. In caso di miscele di prodotti chimici agenti sull' involucro è consigliabile effettuare un esame attento per valutare la resistenza effettiva.

Resistenza chimica dei termoplastici

	Poliamide	Polycarbonato	Poliuretano
acetone	●	●	●
acido formico		30%	●
ben zina	●	●	●
butano		●	●
butanolo		●	●
cloruro di calcio		●	●
olio diesel	●	●	●
acido acetico		10%	●
formaldeide			●
frigerio 113		●	●
succo di frutta	●	●	●
glicerina	●	●	●
olio combustibile	●	●	●
olio idraulico	●	●	●
cloruro di potassio	●	●	●
olio di lino	●	●	●
cloruro di etilene	●	●	●
acido lattico		10%	10%
olio minerale	●	●	●
olio per motori	●	●	●
carbonato di sodio		●	●
cloruro di sodio	●	●	10%
acido nitrico	●	10%	●
acido cloridrico	●	20%	●
lubrificante	●	●	●
acido solforico		50%	●
acqua saponata	●	●	●
detergente	●	●	●
acqua (dolce e salata)	●	●	●
acido tartarico	●	10%	●
solfato di zinco		●	●
acido citrico		10%	10%

Caratteristiche tecniche dei termoplastici

Norma ASTM-D, unità	Polycarbonato	Poliamide
MECCANICHE		
res. a trazione a rottura 23 °C	77	60 638Mpa
res. a trazione a rottura 70 °C	41	48 638Mpa
allung. allo snervamento/a rottura 23 °C	30/300	7/115 638%
modulo a flessione 23 °C	1210	2170 790Mpa
limite resist. a fatica, 10 ⁶ cicli, 23 °C	21	7 671Mpa
res. all'urto Izod con intaglio 23 °C	112	850 256J/m
res. all'urto Izod con intaglio -40 °C	27	106 256J/m
TERMICHE		
punto di fusione	255	220 2133C
coeff. dilataz. termica lineare -40°+29°C	7	6,7 696 10 ⁻⁵ mc
temp. di distorsione 1,8MPa	90	135 638C
temp. di distorsione 0,5MPa	235	140 638C
otemp. max di funz. continuo (UL)	100	125 C
ELETTRICHE		
resistività trasv. 23C, 0,2% acqua	10 ¹¹	10 ¹⁴ 257Ωm
resistività di superficie		10 ¹⁵ 257Ω
costante dielettrica 10 ² -10 ⁶ Hz	8-4,6	2,9 150
fattore di perdita dielettrica 10 ⁶ Hz	0,1	0,011 150
rigidità diel. nel breve periodo(2,3mm)	17	15 149MM/m
resistenza all'arco	10	4955
FISCHE		
densità	1,14	1,2 792g/cm
assorb. d'acqua 24h saturaz.23 °C	1,2	0,16 570%
durezza Rockwell M	M59	M74 785
durezza Rockwell R (Shore D)	R108	R120 785
coeff. d'attrito/senza lubrificante	0,4	0,45
infiammabilità	V2	V1 UL

Caratteristiche fisiche delle guarnizioni

Unità	Poliuretano
stabilità alla temperatura	-50 +130 C
resistenza	0,4 MPa
tensione di rottura	110 %
durezza	12 Shore A
peso specifico	0,33 g/cm ³
residuo di compressione	5 %

- Resistente a tutte le concentrazioni
- Resistente a certe concentrazioni
- Non resistente
- % Resistente con concentrazione % max
- Dati non reperiti



Caratteristiche tecniche

Technical data

Features of the material used to manufacture the 080 series

The resistance characteristics of the materials used to produce the 080 series are given in the tables below. When assessing these data, it is advisable to take into account the concentration of chemical agents and temperatures. If the casing is liable to be affected by a mix of chemicals, it is advisable to make a careful examination when assessing the effective resistance.

Chemical resistance of thermoplastics

	Polyammides	Polycarbonate	Polyurethane
acetone	●	●	●
formic acid		30%	●
gasoline	●	●	●
butane		●	●
butyl alcohol			●
calcium chloride		●	●
diesel oil	●	●	●
acetic acid		10%	●
formaldehyde			●
frigerio 113		●	●
fruit juice	●	●	●
glycerol	●	●	●
fuel oil	●	●	●
hydraulic oil	●	●	●
potassium chloride	●	●	●
linseed oil	●	●	●
ethylene chloride	●	●	●
lactic acid		10%	10%
mineral oil	●	●	●
engine oil	●	●	●
sodium carbonate		●	●
sodium chloride	●	●	10%
nitric acid	●	10%	●
hydrochloric acid	●	20%	●
lubricant	●	●	●
sulphuric acid		50%	●
soapy water	●	●	●
detergent	●	●	●
water (soft and salty)	●	●	●
tartaric acid	●	10%	●
zinc sulfate		●	●
citric acid		10%	10%

Technical features of thermoplastic

ASTM-D standard, unit	Polycarbonato	Polyammides	
MECHANICAL			
ultimate tensile strenght at 23 °C	77	60	638Mpa
ultimate tensile strenght at 70 °C	41	48	638Mpa
yield elongation ultimate 23 °C	30/300	7/115	638%
bending modulus at 23 °C	1210	2170	790Mpa
fatigue strenght limit, 10 ⁶ cycles, 23 °C	21	7	671Mpa
Izod impact res. with shearing at 23 °C	112	850	256J/m
Izod impact res. with shearing at 40 °C	27	106	256J/m
THERMAL			
melting point	255	220	2133C
coeff. of linear thermal exp. -40+29°C	7	6,7	696 10 ⁻⁶ /°c
distortion temperature at 1,8MPa	90	135	638C
distortion temperature at 0,5MPa	235	140	638C
max. continuous operative temperat. (UL)	100	125	C
ELECTRIC			
transverse resistivity 23 °C, 0,2% water	10 ¹¹	10 ¹⁴	2570m
surface resistivity		10 ¹⁵	2570
dielectric constant 10 ² -10 ⁶ Hz	8-4,6	2,9	150
dielectric loss factor 10 ⁶ Hz	0,1	0,011	150
diel. strenght over a short period(2,3mm)	17	15	149MV/m
arc resistance	10		495S
PHYSICAL			
density	1,14	1,2	792g/cm
water absorption, 24h saturation at 23 °C	1,2	0,16	570%
Rockwell M hardness	M59	M74	785
Rockwell R hardness(Shore D)	R108	R120	785
friction coeff./without lubricant	0,4	0,45	
flash point	V2	V1	UL

Physical properties of gaskets

Unit	Polyurethane
temperatura stability	-50 +130 C
resistance	0,4 MPa
ultimate strenght	110 %
hardness	12 Shore A
specific weight	0,33 g/cm ³
residual compression	5 %

- Resistant to all concentrations
- Resistant to certain concentrations
- Not resistant
- % Resistant to concentrations up to max %
- NO indication





MONO

Scatole in termoplastico 84x84mm

Termhoplastic enclosures 84x84mm

SERIE MONO / SERIES MONO



Pulsante d'emergenza con o senza scatola
Emergency push-button with or without enclosure



Pulsante o selettore con o senza scatola
Push-button or knob selector switch with or without enclosure



Supporto operatore per installazione ad incasso
Wall-mounting support for push-button



Inserimento pressacavo
Cable gland insertion



Installazione ad incasso
Wall-mounting installation

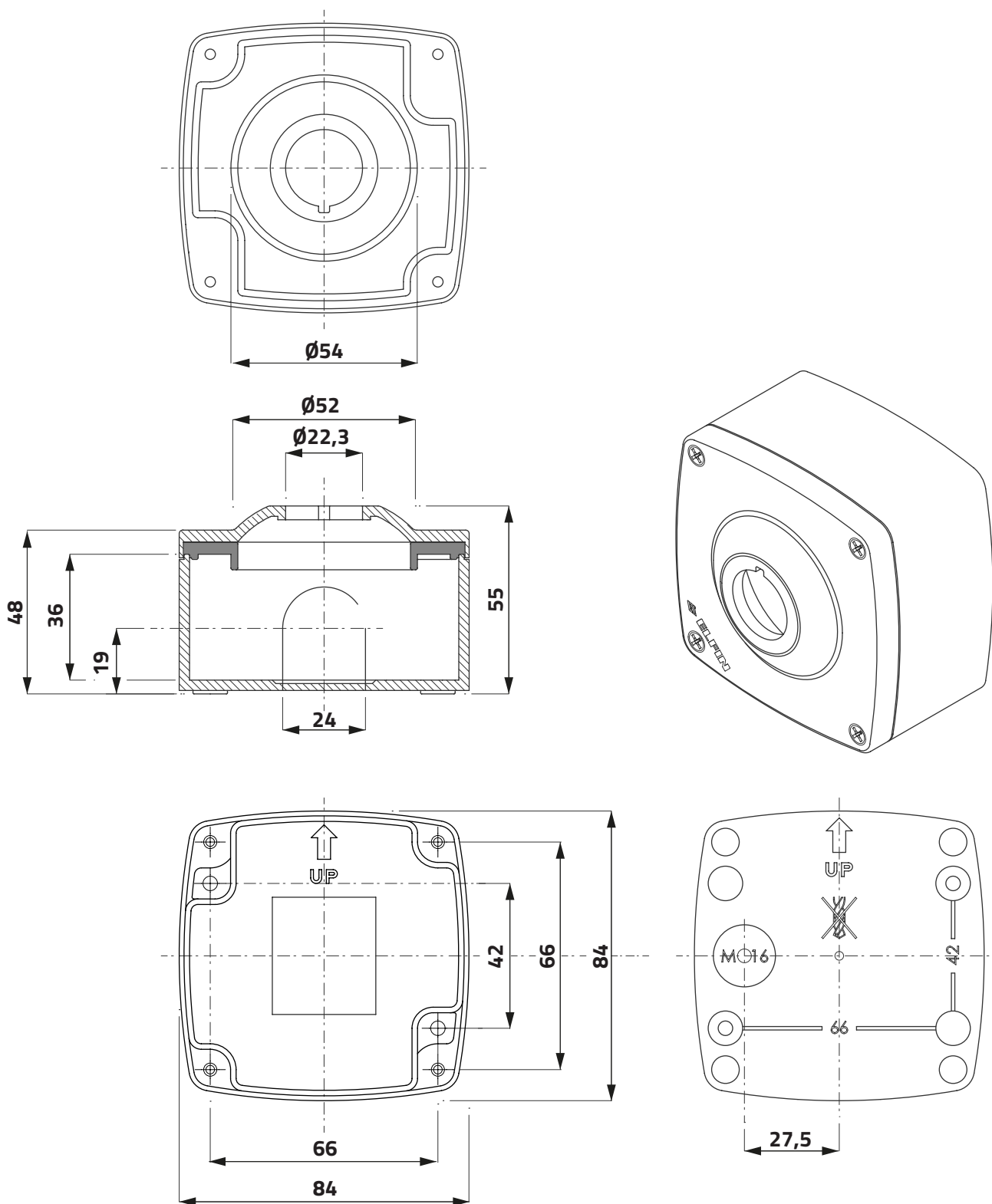


Installazione con scatola
Installation with enclosure

Scatole in termoplastico 84x84mm

Wall-mounting support for pushbutton 84x84mm

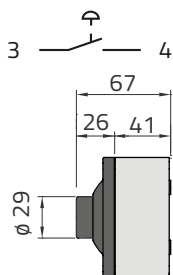
SERIE MONO / SERIES MONO



Scatole in termoplastico 84x84mm Thermoplastic enclosures 84x84mm

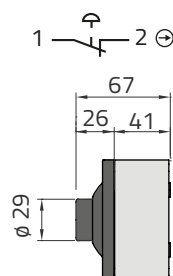
SERIE MONO / SERIES MONO

h g cod



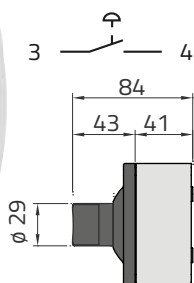
Pulsante con guardia verde Ø 22mm con scatola
Green guarded push-button Ø 22mm with enclosure

67 142 **080F0808-5PV**



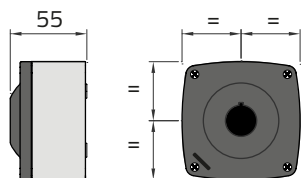
Pulsante con guardia rosso con scatola
Red guarded push-button Ø 22mm with enclosure

67 142 **080F0808-5PR**



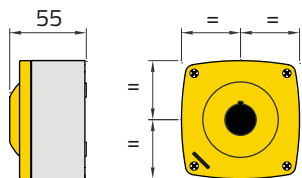
Selettore a manopola 2 posizioni nero con scatola
Black knob selector switches 2 position with enclosure

84 150 **080F0808-5SM**



Coperchio con 1 foro Ø 22mm / 1-hole lid Ø 22mm

55 125 **080F0808-5P1**

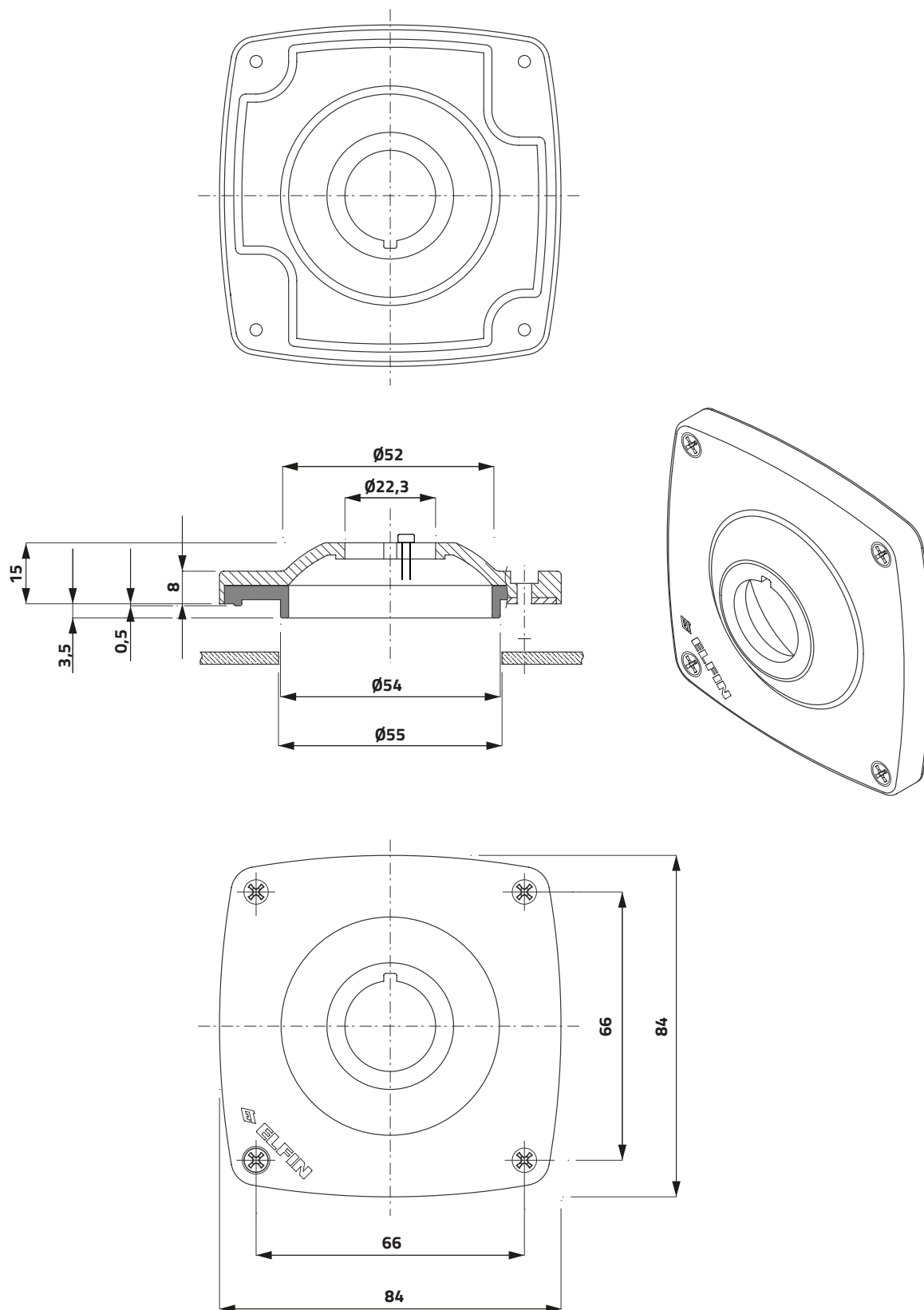


Coperchio giallo con 1 foro Ø 22mm / 1-hole yellow lid Ø 22mm

55 125 **080F0808-5GP1**

Supporto per installazione ad incasso 84x84mm Thermoplastic enclosures 84x4mm

SERIE MONO / SERIES MONO

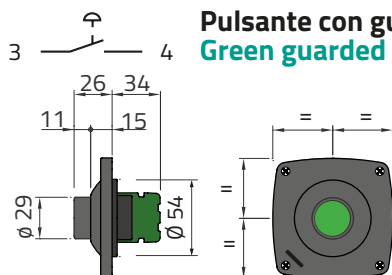


Supporto per installazione ad incasso 84x84mm Wall-mounting support for pushbutton 84x84mm

SERIE MONO / SERIES MONO

g

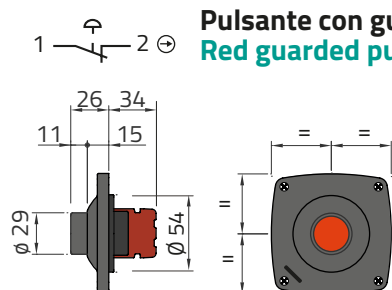
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Pulsante con guardia verde Ø 22mm ad incasso
Green guarded push-button Ø 22mm wall-mounting

72

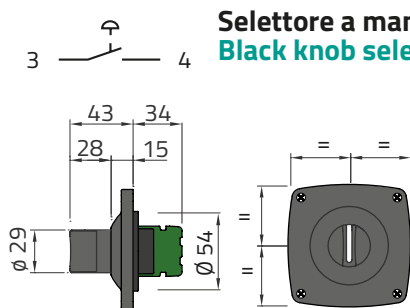
080F0808-PV



Pulsante con guardia rosso ad incasso
Red guarded push-button Ø 22mm wall-mounting

72

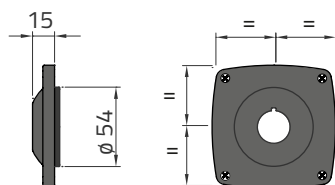
080F0808-PR



Selettore a manopola 2 posizioni nero ad incasso
Black knob selector switches 2 position wall-mounting

80

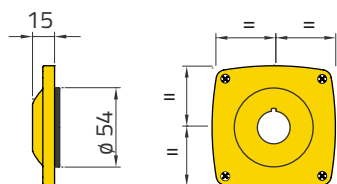
080F0808-SM



Coperchio con 1 foro Ø 22mm / 1-hole lid Ø 22mm

46

080F0808-P1



Coperchio giallo con 1 foro Ø 22mm / 1-hole yellow lid Ø 22mm

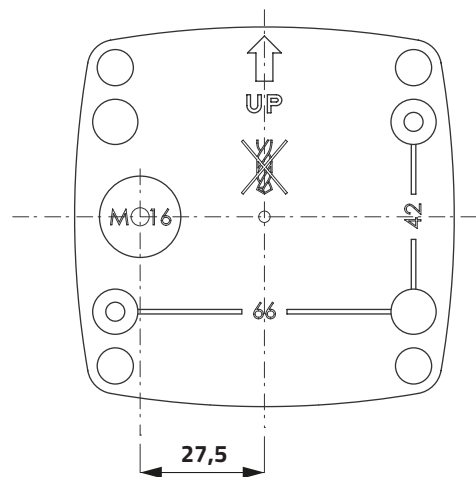
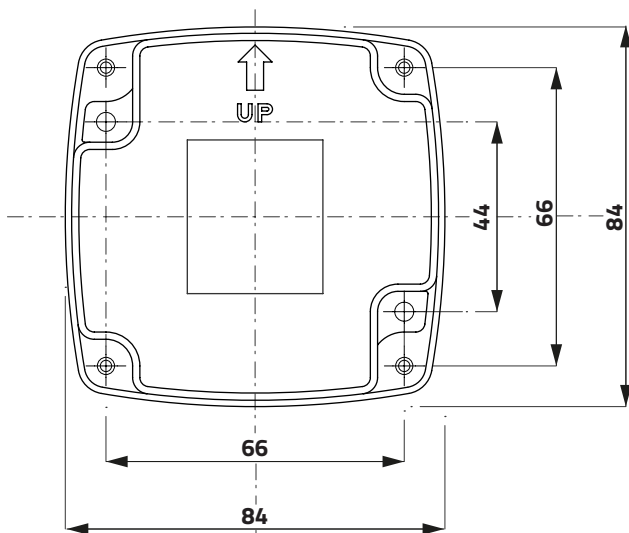
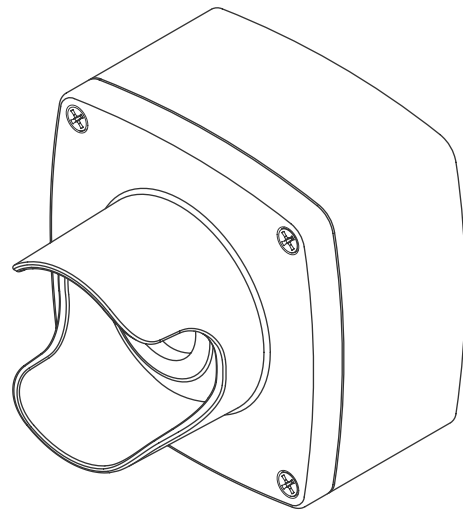
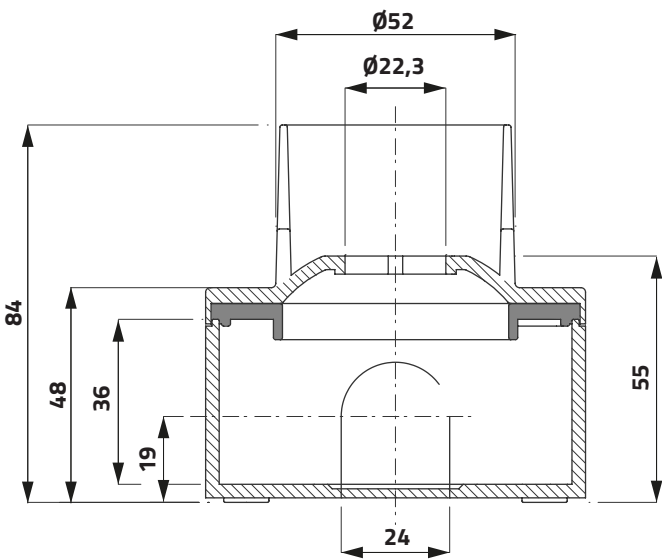
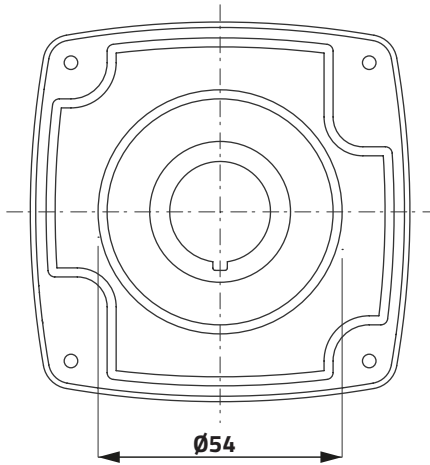
46

080F0808-GP1

Pulsante di emergenza con scatola 84x84mm

Emergency stop push-button with enclosure 84x84mm

SERIE MONO / SERIES MONO

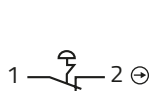


Pulsante di emergenza con scatola 84x84mm

Emergency stop push-button with enclosure 84x84mm

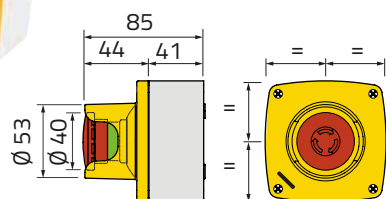
SERIE MONO / SERIES MONO

h g cod



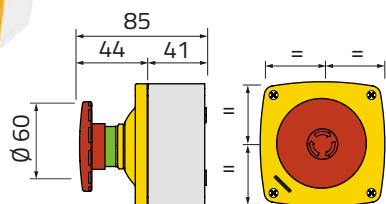
Pulsante rosso a fungo Ø40 con scatola
Red mushroom push-button Ø40 with enclosure

sgancio rotazione / twist release 85 165 080F0808-8GF4AP



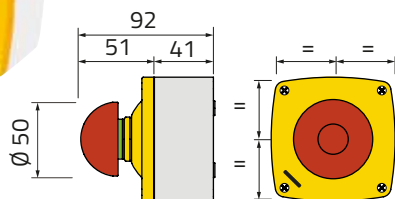
Pulsante rosso a fungo Ø60 con scatola
Red mushroom push-button Ø60 with enclosure

sgancio rotazione / twist release 85 166 080F0808-5GFFA



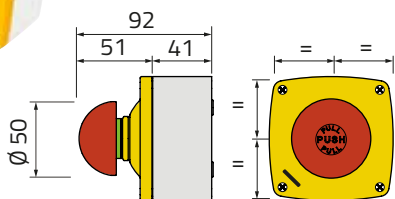
Pulsante rosso a fungo sferico Ø50 con scatola
Red palm push-button Ø50 with enclosure

momentaneo / momentary 92 145 080F0808-5GF5M



Pulsante rosso a fungo sferico Ø50 con scatola
Red palm push-button Ø50 with enclosure

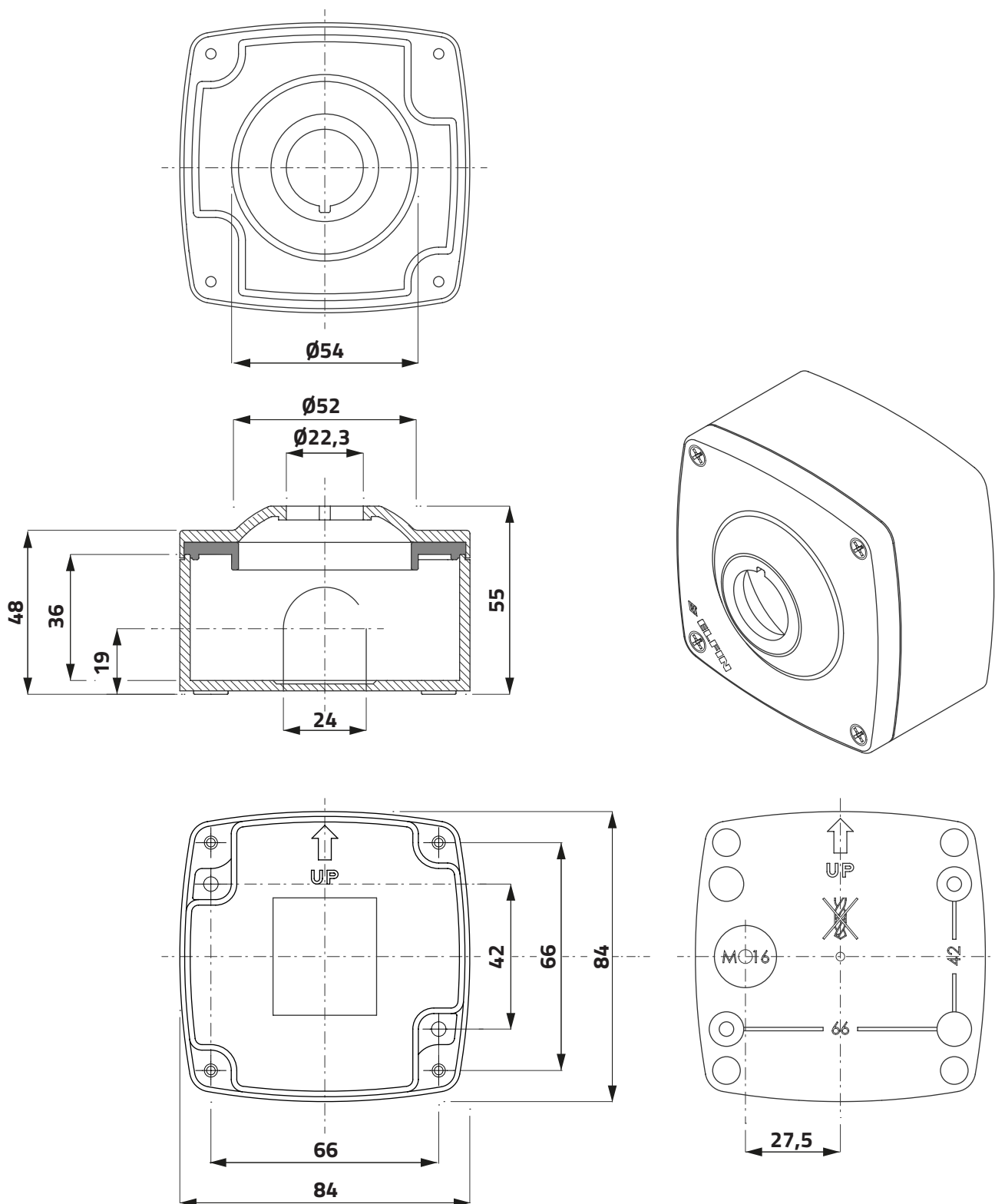
sgancio trazione / pull release 92 145 080F0808-5GF5T



Pulsante di emergenza con scatola 84x84mm

Emergency stop push-button with enclosure 84x84mm

SERIE MONO / SERIES MONO

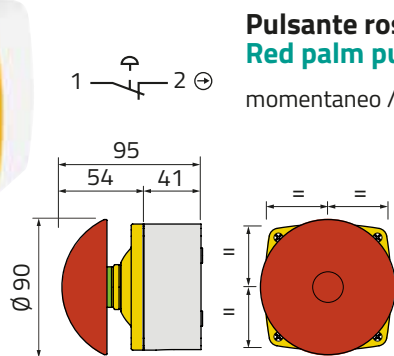


Pulsante di emergenza con scatola 84x84mm

Emergency stop push-button with enclosure 84x84mm

SERIE MONO / SERIES MONO

h g cod

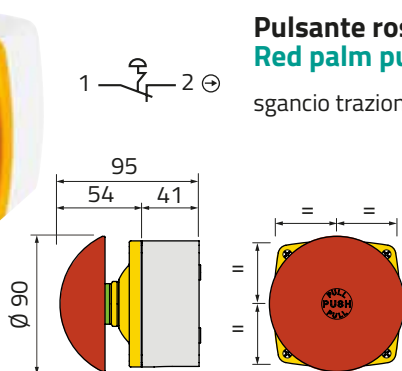


Pulsante rosso a fungo sferico Ø90 con scatola
Red palm push-button Ø90 with enclosure

momentaneo / momentary

95 183

080F0808-5GF9M

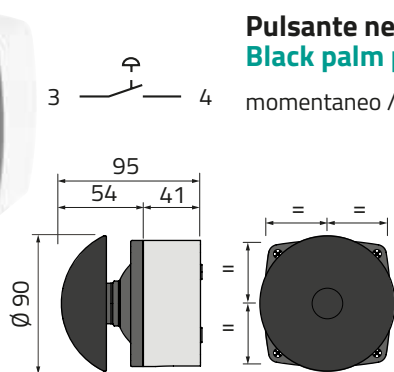


Pulsante rosso a fungo sferico Ø90 con scatola
Red palm push-button Ø90 with enclosure

sgancio trazione / pull release

95 183

080F0808-5GF9T



Pulsante nero a fungo sferico Ø90 con scatola
Black palm push-button Ø90 with enclosure

momentaneo / momentary

95 183

080F0808-5F9M



Pulsante nero a fungo sferico Ø90 con scatola
Black palm push-button Ø90 with enclosure

sgancio trazione / pull release

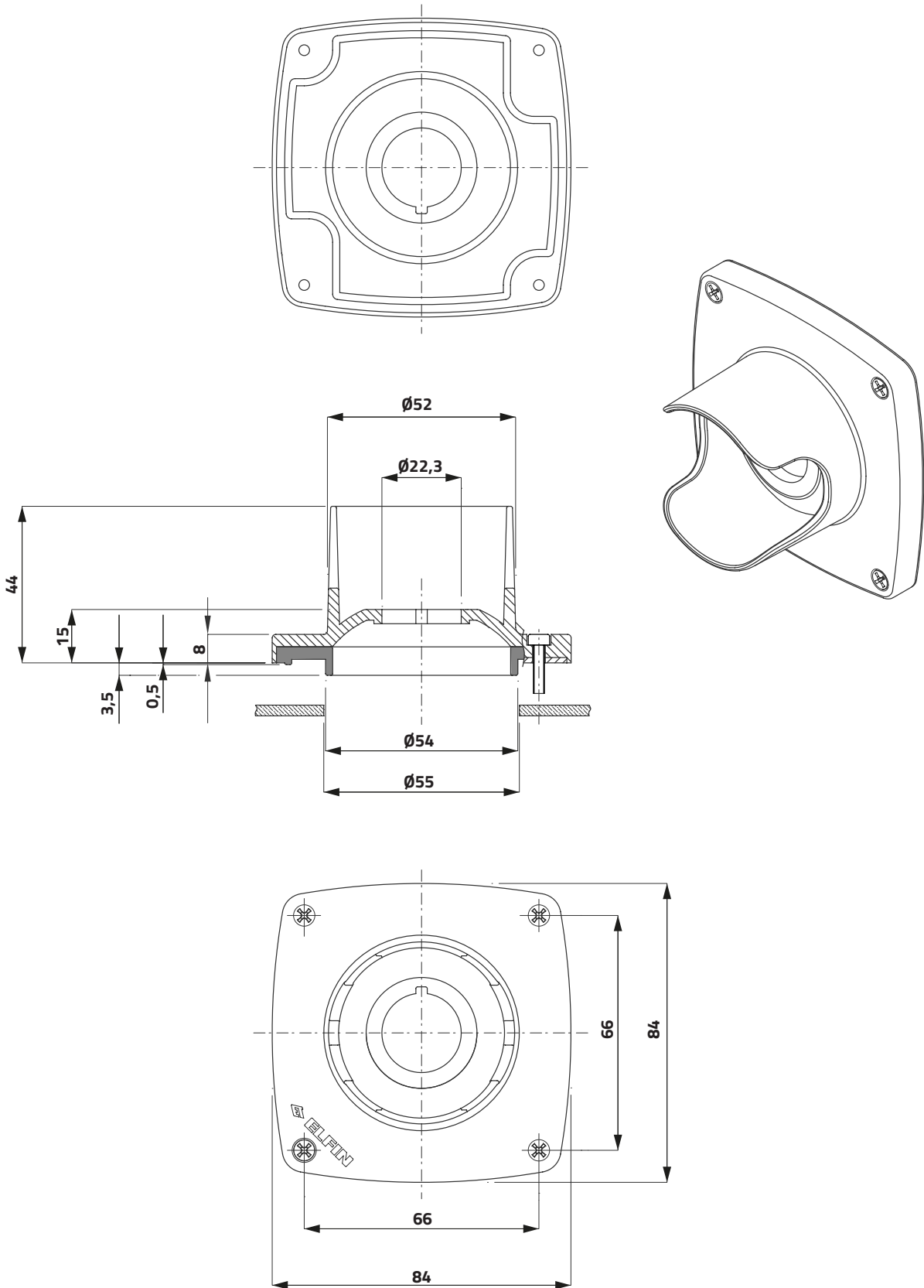
95 183

080F0808-5F9T

Pulsante di emergenza ad incasso 84x84mm

Wall-mounting emergency stop push-button 84x84mm

SERIE MONO / SERIES MONO



Pulsante di emergenza ad incasso 84x84mm

Wall-mounting emergency stop push-button 84x84mm

SERIE MONO / SERIES MONO

g

cod

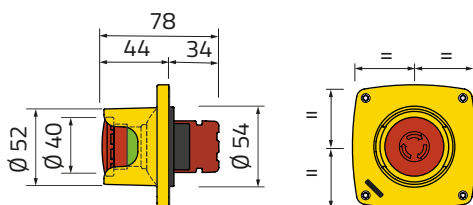


Pulsante rosso a fungo Ø40 ad incasso
Red push-button Ø40 wall-mounting

sgancio trazione / pull release

84

080F0808-GF4AP

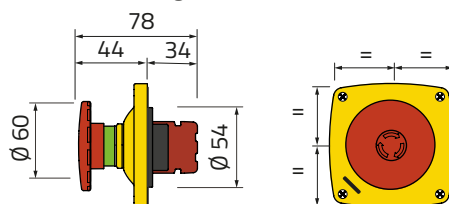


Pulsante rosso a fungo Ø60 ad incasso
Red mushroom push-button Ø60 wall-mounting

sgancio rotazione / twist release

84

080F0808-GFFA

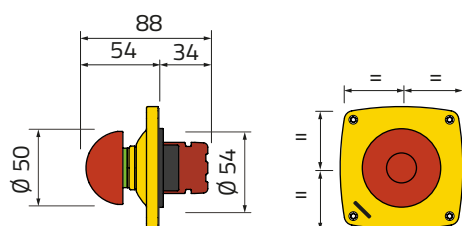


Pulsante rosso a fungo sferico Ø50 ad incasso
Red palm push-button Ø50 wall-mounting

momentaneo / momentary

84

080F0808-GF5M

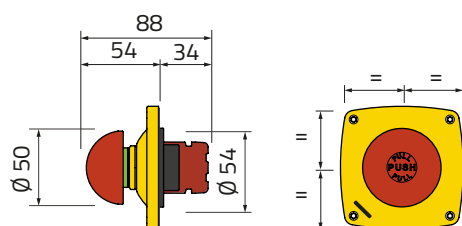


Pulsante rosso a fungo sferico Ø50 ad incasso
Red palm push-button Ø50 wall-mounting

sgancio trazione / pull release

84

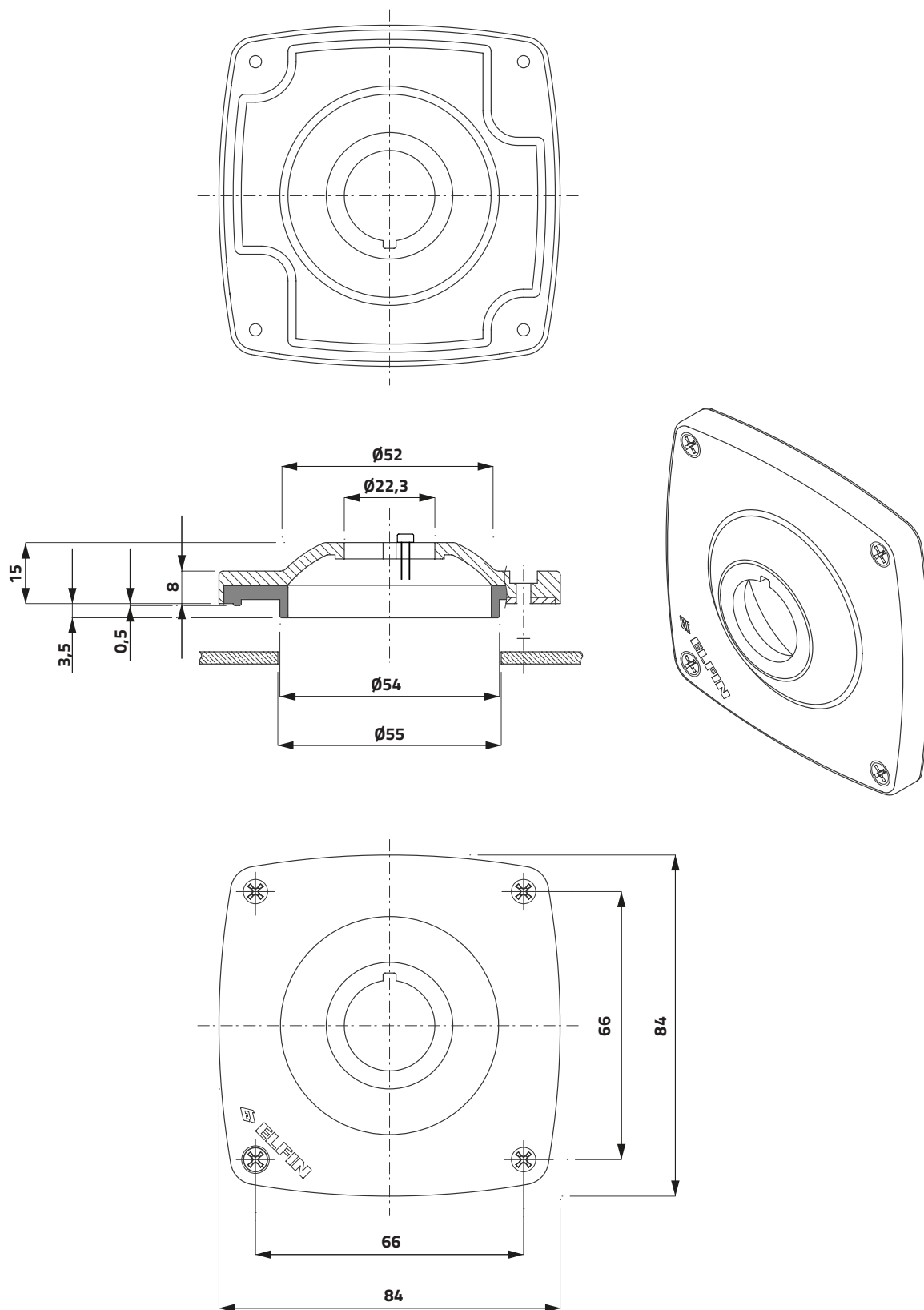
080F0808-GF5T



Pulsante di emergenza ad incasso 84x84mm

Wall-mounting emergency stop push-button 84x84mm

SERIE MONO / SERIES MONO



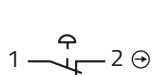
Pulsante di emergenza ad incasso 84x84mm

Wall-mounting emergency stop push-button 84x84mm

SERIE MONO / SERIES MONO

g

cod

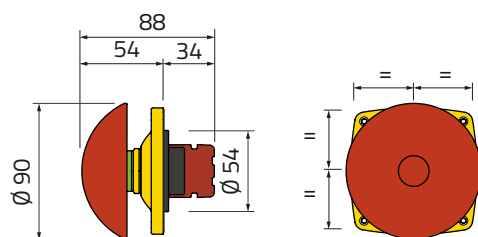


Pulsante rosso a fungo sferico Ø90 ad incasso
Red palm push-button Ø90 wall-mounting

momentaneo / momentary

102

080F0808-GF9M

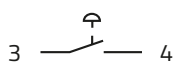
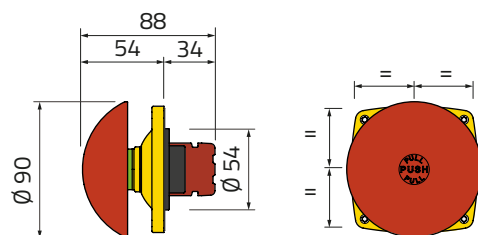


Pulsante rosso a fungo sferico Ø90 ad incasso
Red palm push-button Ø90 wall-mounting

sgancio trazione / pull release

102

080F0808-GF9T

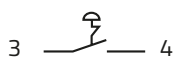
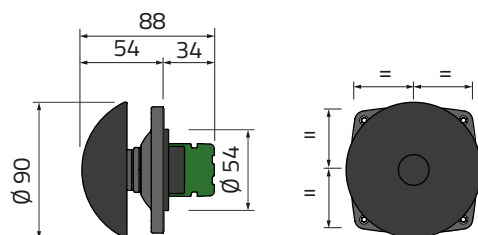


Pulsante nero a fungo sferico Ø90 ad incasso
Black palm push-button Ø90 wall-mounting

momentaneo / momentary

102

080F0808-F9M

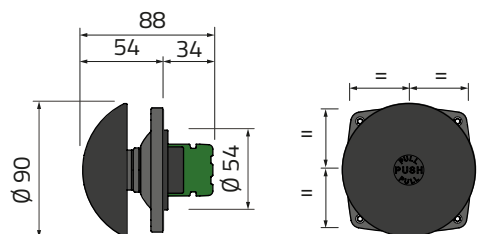


Pulsante nero a fungo sferico Ø90 ad incasso
Black palm push-button Ø90 wall-mounting

sgancio trazione / pull release

102

080F0808-F9T





ERGO

Scatole pulsantiere ergonomiche Ergonomic push-button enclosures

SERIE ERGO / SERIES ERGO

INNOVATIVA E RIVOLUZIONARIA

La serie Ergo rivoluziona il concetto di pulsantiera grazie ad un avanzato studio ergonomico che ne esalta la praticità di utilizzo.

LA FORMA

L'innovativa e sinuosa forma permette all'utilizzatore una presa agevole e sicura, in modo che l'attuazione dei comandi, sia comoda e priva di sollecitazioni eccessive al polso e alla mano.

PRATICITÀ DI UTILIZZO

Adatta per azionamenti ripetuti: Il maggior comfort raggiunto durante l'utilizzo, soprattutto negli azionamenti ripetuti frequentemente, riduce la possibilità di patologia alla mano, rendendo obsoleta la consueta forma di prisma a base rettangolare.

BREVETTO PER MODELLO DI UTILITÀ

Una nuova forma di prodotto industriale che dà al prodotto stesso una particolare efficacia, comodità di applicazione e di impiego. I modelli di utilità sono tutelati da una specifica forma di brevetto.

CARATTERISTICHE

Disponibile in due colorazioni	Grigio RAL 7016 / Grigio RAL 7035 Giallo RAL 1003 / Grigio RAL 7035
Disponibili in diverse dimensioni	90x90 90x160 90x225 90x290
Forma sinuosa	Impugnatura ergonomica
Disponibile in diverse forature	1 foro 2 fori 4 fori 6 fori 8 fori

ACCESSORI

Pulsanti comando e segnalazione Ø 22
Accessoriabile con etichette adesive:
Il coperchio è dotato di apposito basso rilievo dedicato ad accogliere un'ampia scelta di targhette indicatrici adesive, realizzabili anche in forma personalizzata

INNOVATIVE AND REVOLUTIONARY

Series ERGO revolutionises the concept of push-button box thanks to an advanced study of ergonomics, which maximises its usability.

THE SHAPE

The innovative and sinuous shape allows to an easy and safe grip, making the operation of the control comfortable and free of excessive stress to the wrist and hand.

CONVENIENCE OF USE

Recommended for repeated operations. The high level of comfort achieved during use, especially in frequently repeated operations, reduces the possibility of hand pathologies, making the usual rectangular-based box obsolete.

UTILITY MODEL PATENT

A new shape for a commonly used industrial equipment that gives the product a particular efficacy, convenience of application and use. Utility models are protected by a specific form of patent.

FEATURES

Available in two colors	Grey RAL 7016 / Grey RAL 7035 Yellow RAL 1003 / Grey RAL 7035
Available in different dimensions	90x90 90x160 90x225 90x290
Sinuous shape	Ergonomic grip
Available in different perforations	1 hole 2 holes 4 holes 6 holes 8 holes

ACCESSORIES

Command and Signalling SM2 Ø 22
Can be accessorized with labels
The lid has a special low relief dedicated to accommodate adhesive indicator plates, selectable among a wide range of standard labels, or completely customizable.

Scatole pulsantiere ergonomiche Ergonomic push-button enclosures

SERIE ERGO / SERIES ERGO



Adozione di una colorazione armonizzata tra coperchio e scatola con due marcate tonalità di grigio. A complemento viene offerta anche una versione con coperchio giallo per realizzare una possibile postazione di emergenza.

Adoption of a harmonized coloring between the lid and the box with two marked shades of grey, a version with yellow lid is also available for the eventual realization of an emergency situation.

Scatole pulsantiere ergonomiche

Ergonomic push-button enclosures

SERIE ERGO / SERIES ERGO

Caratteristiche tecniche

Omologazioni	CE
Conformità agli standard	IEC-60529, UL508A, UL50, UL50E, CSA C22.2 No.14-13
Limiti di temperatura	-25° ÷ +70° C
Grado di protezione	IP66 - IP69K (IEC-EN60529 - DIN40050)
Protezione contro gli urti	IK07 (IEC-EN62262)
Protezione contro gli agenti atmosferici-uv	Buona
Processo di produzione	Stampaggio ad iniezione
Guarnizione	Elastomero termoplastico TPE
Materiale viti	Acciaio inox AISI 304
Tipo viti	Torx T15 testa scanalata
Coppia di serraggio	0.8 ÷ 1.2Nm (7.1 ÷ 10.6 Lb-in)
Categoria di sovratensione	Classe II (IEC-EN61140)
Senza metalli pesanti	si
PVC-free	si
Silicon-free	si
Halogen-free	si
Comportamento alla combustione	HB (UL94)
Comportamento alla combustione	650° (EN-IEC 60695-2-11)
Involucro	PC + C/V
Fitted for outdoor application	si
Operatori	Da 1 fino a 8 Ø 22
Periodo di garanzia	18 mesi

Technical data

Approvals	CE
Compliance with standards	IEC-60529, UL508A, UL50, UL50E, CSA C22.2 No.14-13
Operating temperatures	-25° ÷ +70° C
Protection degree	IP66 - IP69K (IEC-EN60529 - DIN40050)
Protection against impact	IK07 (IEC-EN62262)
Protection against uv-agents	Good
Manufacturing process	Injection moulding
Gasket material	TPE thermoplastic elastomer
Screw material	Stainless steel AISI 304
Screw type	Torx T15 slotted head type
Tightening torque	0.8 ÷ 1.2Nm (7.1 ÷ 10.6 Lb-in)
Overvoltage category	Class II (IEC-EN61140)
Heavy metal-free	yes
PVC-free	yes
Silicon-free	yes
Halogen-free	yes
Combustion behaviour	HB (UL94)
Combustion behaviour	650° (EN-IEC 60695-2-11)
Casing	PC + C/V
Fitted for outdoor application	yes
Operators	From 1 to 8 Ø22
Warranty period	18 months

Scatole pulsantiere ergonomiche Ergonomic push-button enclosures

SERIE ERGO / SERIES ERGO



Forma ergonomica, senza soluzione di continuità,
guarnizione perimetrale

Ergonomic shape, seamless, perimeter gasket



Brevetto per modello di utilità

Utility model patent



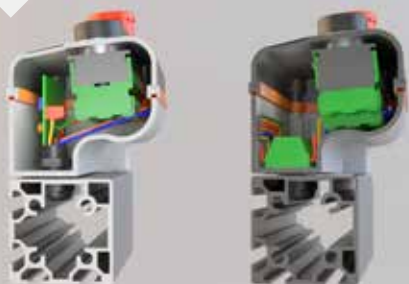
Prevenzione contro l'infiammazione del tunnel carpale

Prevention of carpal tunnel syndrome



Possibilità di applicazione etichette

Possible application of labels



Possibilità di inserire supporti
per il cablaggio o schede elettroniche

Possible installation of supports for wiring
or electronic boards



Indicata per azionamenti ripetuti

Recommended for repeated operations

SCATOLE PULSANTIERE IN TERMOPLASTICO

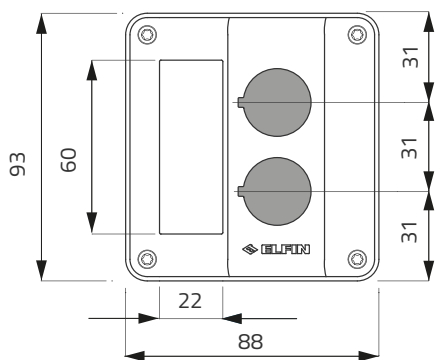
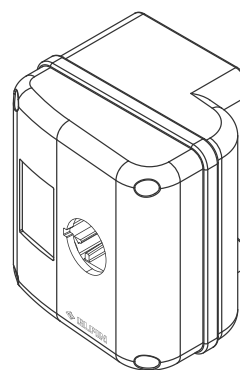
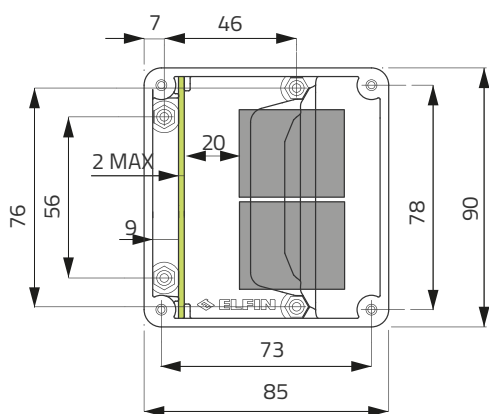
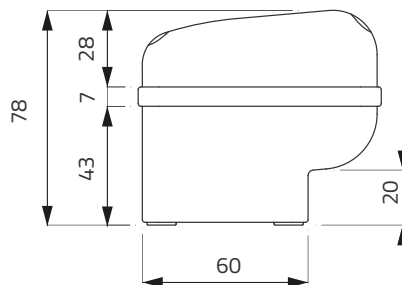
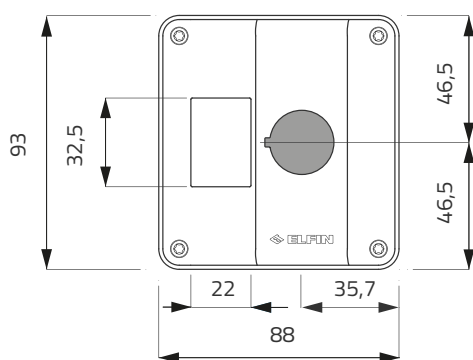
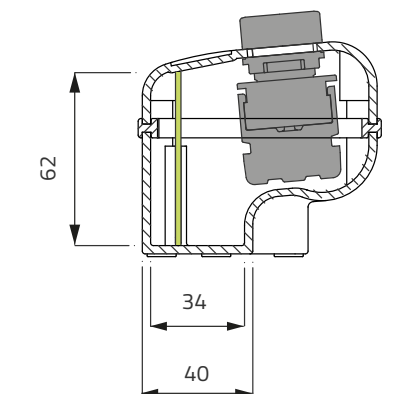
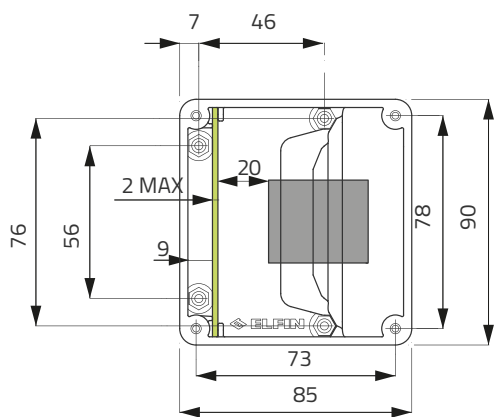
Scatole pulsantiere ergonomiche Ergonomic push-button enclosures

SERIE ERGO / SERIES ERGO



Scatole pulsantiere ergonomiche Ergonomic push-button enclosures

SERIE ERGO / SERIES ERGO



Scatole pulsantiere ergonomiche Ergonomic push-button enclosures

SERIE ERGO / SERIES ERGO

Senza operatore / Without operator



h g cod

Coperchio con 1 foro Ø 22mm / 1-hole lid Ø 22mm

Termoplastica, antiurto

Thermoplastic, shock absorbing	90	130	080E90-P1
Certificazione UL / UL Certification	90	130	080EU90-P1



Coperchio giallo con 1 foro Ø 22mm / 1-hole yellow lid Ø 22mm

Termoplastica, antiurto

Thermoplastic, shock absorbing	90	130	080E90-GP1
Certificazione UL / UL Certification	90	130	080EU90-GP1



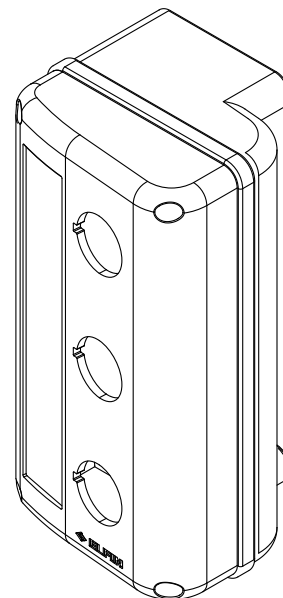
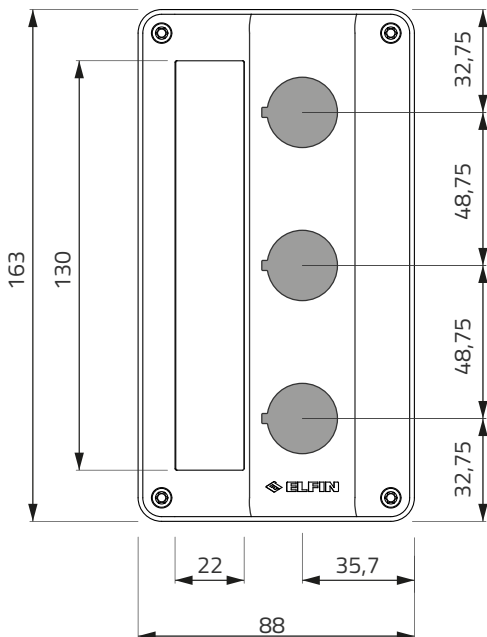
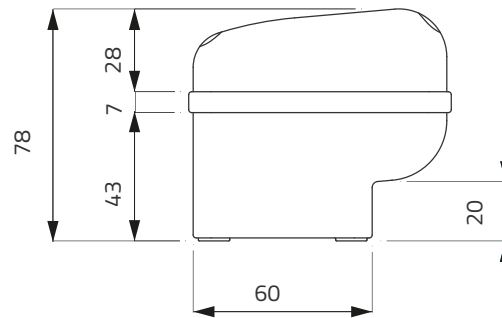
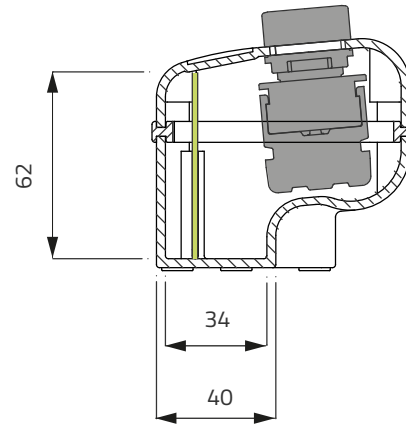
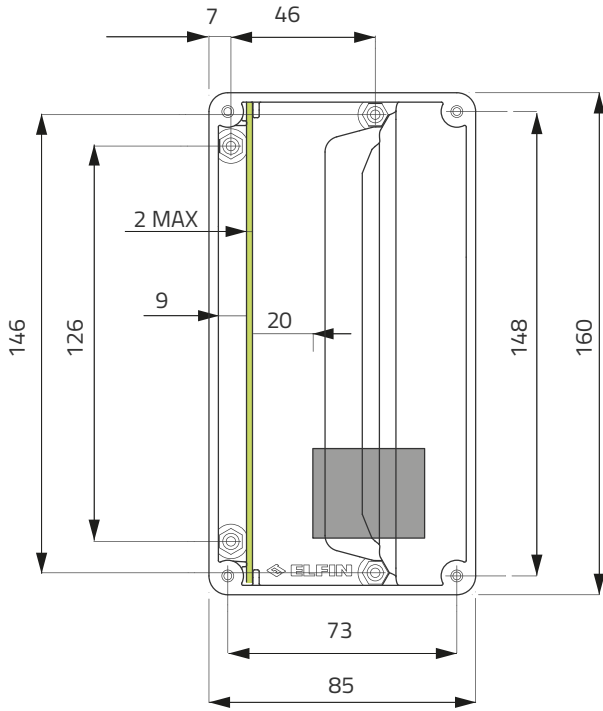
Coperchio con 2 fori Ø 22mm / 2-holes lid Ø 22mm

Termoplastica, antiurto

Thermoplastic, shock absorbing	90	130	080E90-P2
Certificazione UL / UL Certification	90	130	080EU90-P2

Scatole pulsantiere ergonomiche Ergonomic push-button enclosures

SERIE ERGO / SERIES ERGO



Scatole pulsantiere ergonomiche Ergonomic push-button enclosures

SERIE ERGO / SERIES ERGO



Senza operatore / Without operator

h

g

cod

Coperchio con 3 fori Ø 22mm / 3-holes lid Ø 22mm

Termoplastica, antiurto

Thermoplastic, shock absorbing

90 182

080E160-P3

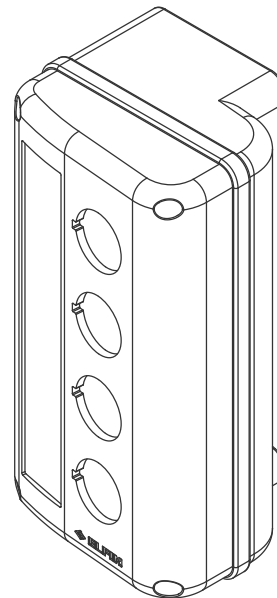
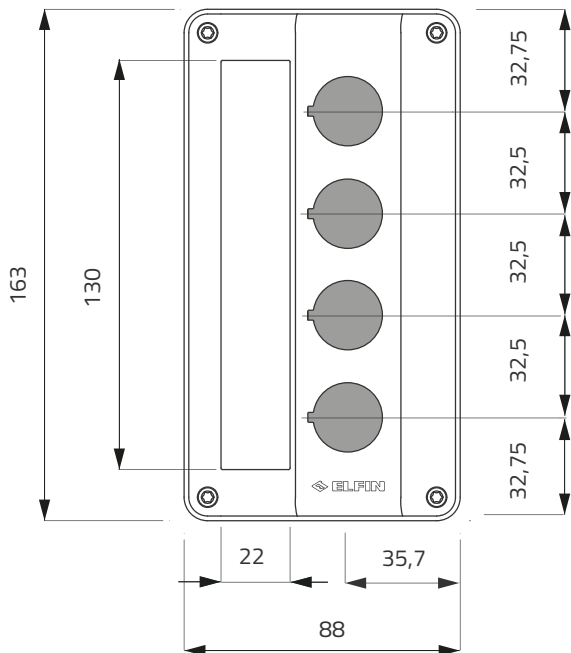
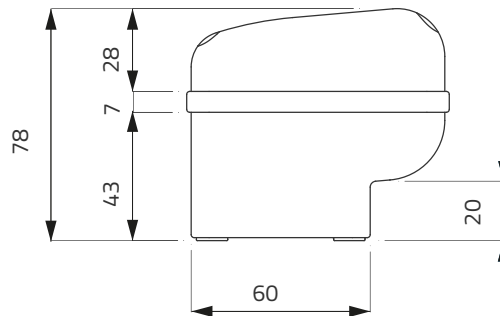
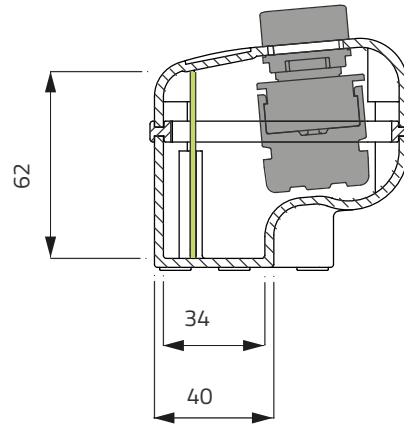
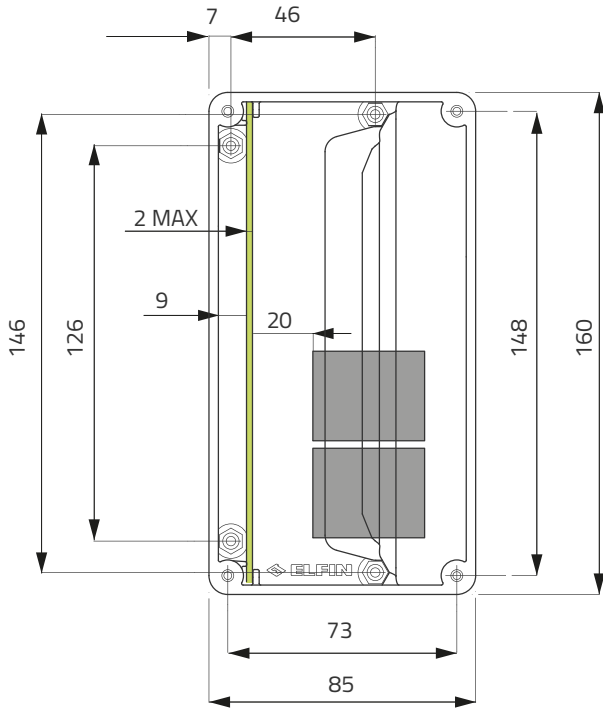
Certificazione UL / UL Certification

90 182

080EU160-P3

Scatole pulsantiere ergonomiche Ergonomic push-button enclosures

SERIE ERGO / SERIES ERGO



Scatole pulsantiere ergonomiche Ergonomic push-button enclosures

SERIE ERGO / SERIES ERGO



Senza operatore / Without operator

h

g

cod

Coperchio con 4 fori Ø 22mm / 4-holes lid Ø 22mm

Termoplastica, antiurto

Thermoplastic, shock absorbing

Certificazione UL / UL Certification

90

182

080E160-P4

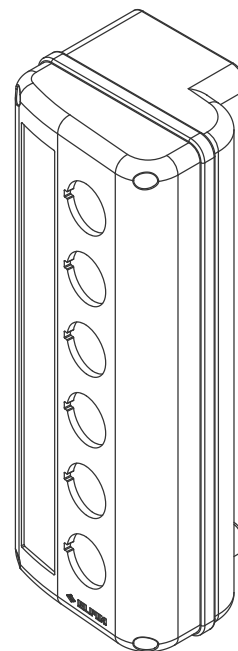
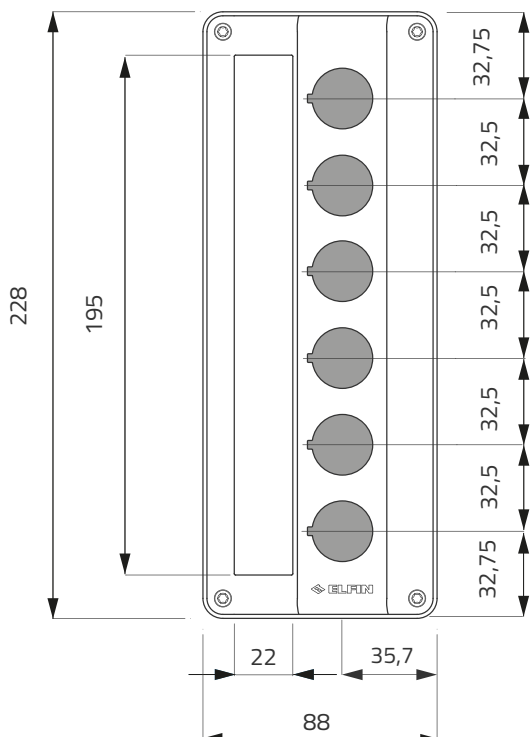
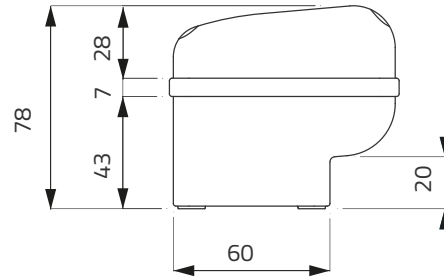
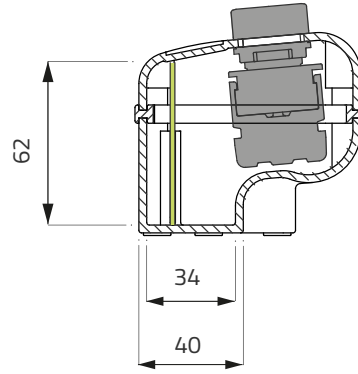
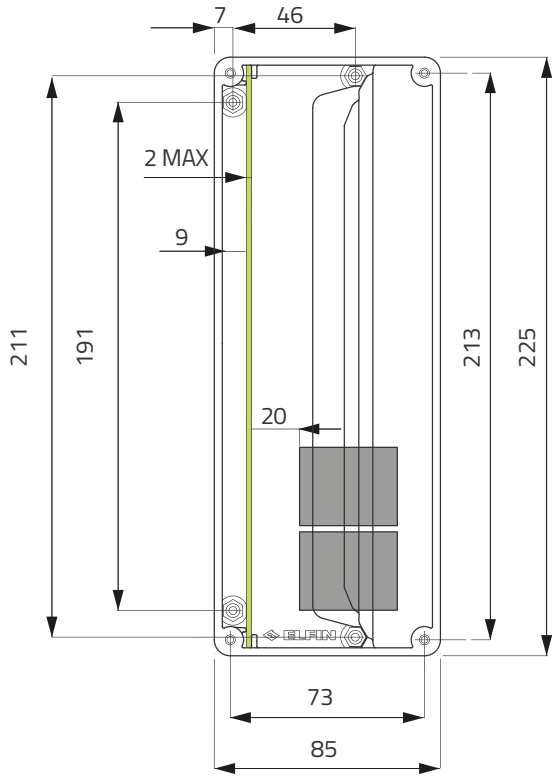
90

182

080EU160-P4

Scatole pulsantiere ergonomiche Ergonomic push-button enclosures

SERIE ERGO / SERIES ERGO



Scatole pulsantiere ergonomiche Ergonomic push-button enclosures

SERIE ERGO / SERIES ERGO



Senza operatore / Without operator

h

g

cod

Coperchio con 6 fori Ø 22mm / 6-holes lid Ø 22mm

Termoplastica, antiurto

Thermoplastic, shock absorbing

Certificazione UL / UL Certification

90

225

080E225-P6

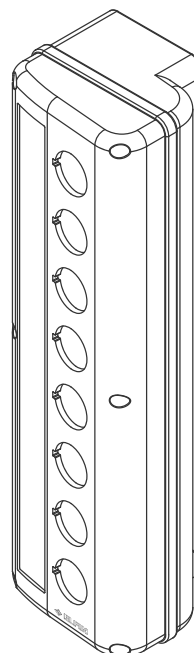
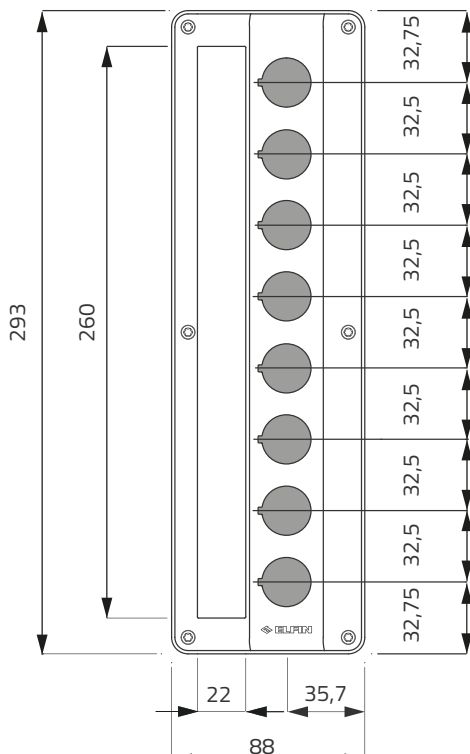
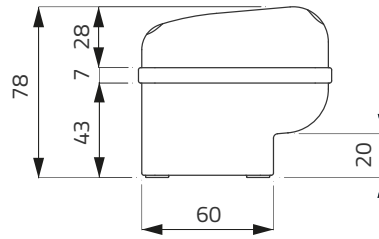
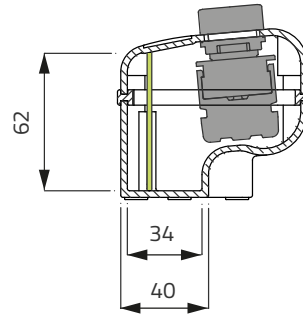
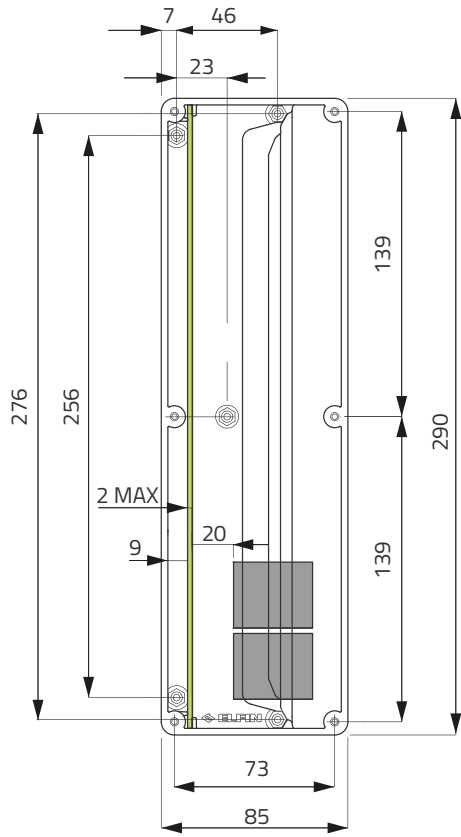
90

225

080EU225-P6

Scatole pulsantiere ergonomiche Ergonomic push-button enclosures

SERIE ERGO / SERIES ERGO



Scatole pulsantiere ergonomiche Ergonomic push-button enclosures

SERIE ERGO / SERIES ERGO

Senza operatore / Without operator



h g cod

Coperchio con 8 fori Ø 22mm / 8-holes lid Ø 22mm

Termoplastica, antiurto

Thermoplastic, shock absorbing

Certificazione UL / UL Certification

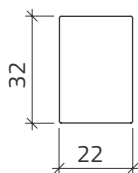
90 290

080E290-P8

90 290

080EU290-P8

Targhette adesive 22x32 mm / Adhesive labels 22x32 mm



cod

Senza testo / Blank

Quantità per confezione n° 10 / Pack quantity n° 10

● Nero / Black

● Giallo / Yellow

080ET32N

080ET32G



Simbolo / Symbol

Quantità per confezione n° 10 / Pack quantity n° 10



080E33T



080E41T



080E42T



080E43T



080E44T



080E45T



080E46T



080E47T



080E48T



080E67T



080E68T



080E72T



080E76T



080E78T



080E144T



SMOOTH

SCATOLE PULSANTIERE IN TERMOPLASTICO

Scatole pulsantiere in ABS ABS push-button enclosures

SERIE SMOOTH / SERIES SMOOTH



Scatole pulsantiere in ABS ABS push-button enclosures


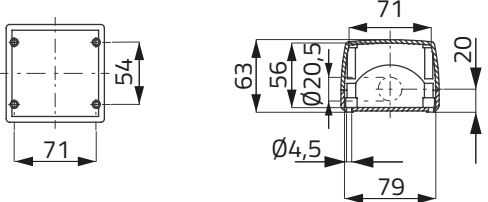

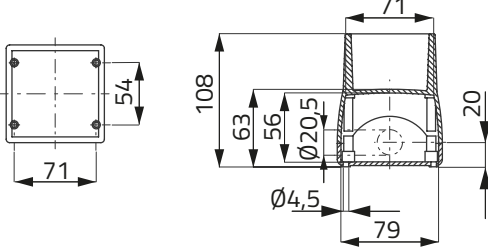

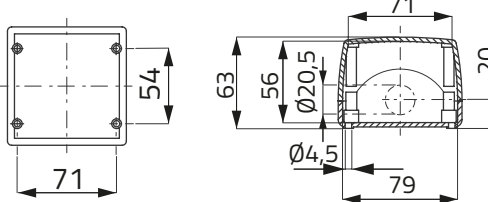

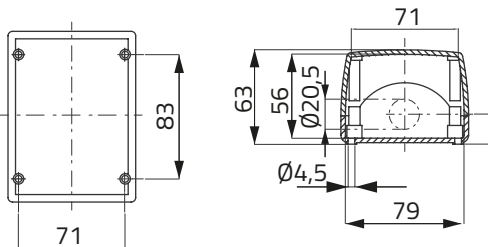
SERIE SMOOTH / SERIES SMOOTH

Caratteristiche tecniche

Materiale scatola	ABS RAL 7035
Materiale coperchio	ABS RAL 7016, giallo
Guarnizione	Gomma silicone
Viti	Acciaio
Grado di protezione	IP65 - EN/IEC 60529
Temperatura d'impiego	-25° +50°

Technical data

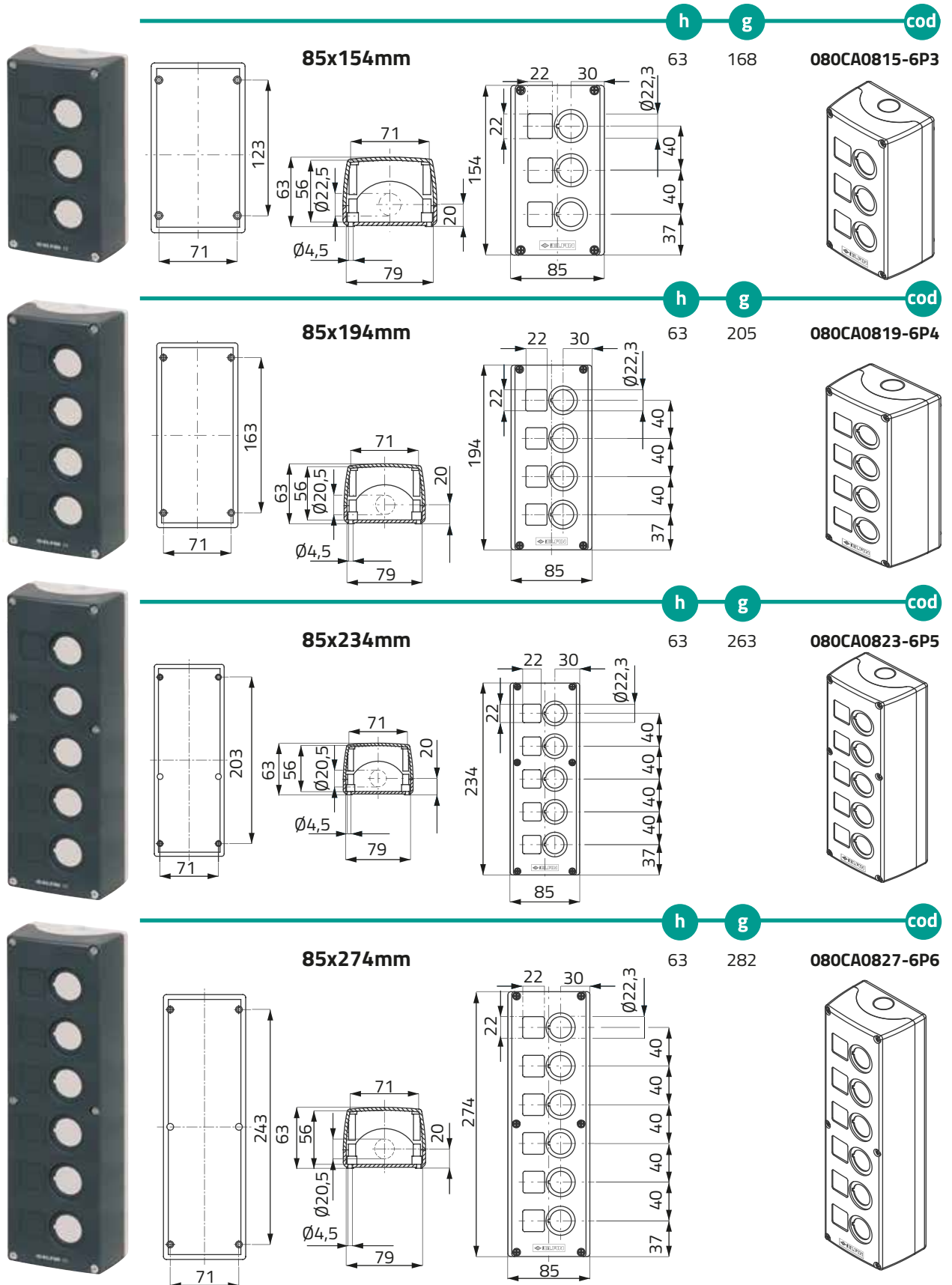
Material, enclosures	ABS RAL 7035
Material, lid	ABS RAL 7016, yellow
Gasket	Silicone rubber
Screw	Steel
Protection	IP65 - EN/IEC 60529
Operating temperature	-25° +50°

		h	g	cod
	85x85mm	63	112	080CA0808-6GP1
				
	85x85mm	63	140	080CA0808-6GP1E
				
	85x85mm	63	112	080CA0808-6P1
				
	85x114mm	63	136	080CA0811-6P2
				



Scatole pulsantiere in ABS ABS push-button enclosures

SERIE SMOOTH / SERIES SMOOTH

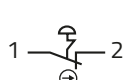


Scatole pulsantiere complete in ABS 85x85mm ABS assembled push-button enclosures 85x85mm

SERIE SMOOTH / SERIES SMOOTH

g

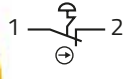
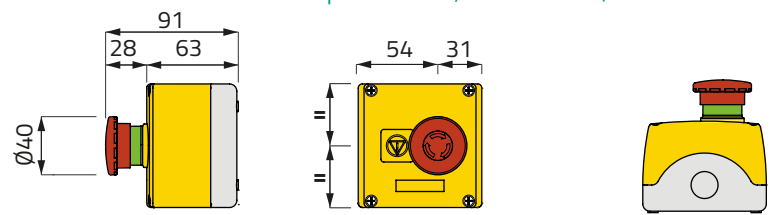
cod



Coperchio con operatore Ø 22mm / Lid with operator Ø 22mm

Pulsante fungo rosso sgancio a rotazione Ø40
Red mushroom push-button, twist release Ø40

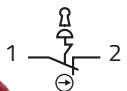
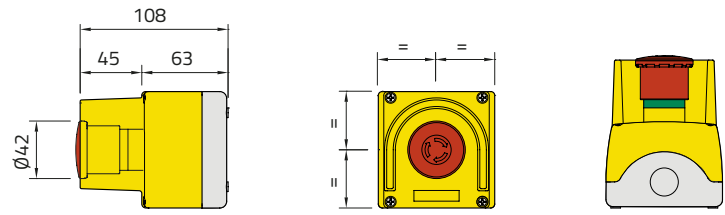
165 080CA0808-6GA



Coperchio con operatore Ø 22mm / Lid with operator Ø 22mm

Pulsante fungo rosso sgancio a rotazione Ø42
Red mushroom push-button, twist release Ø42

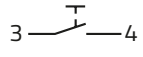
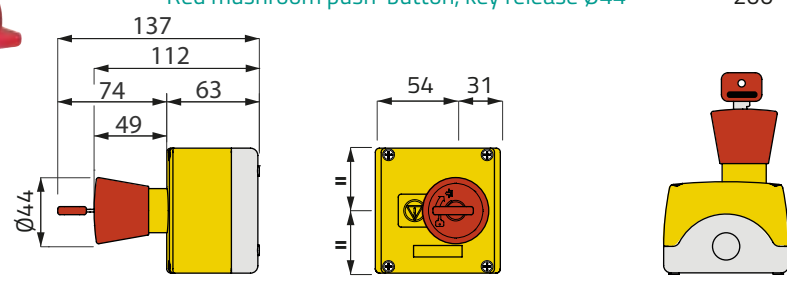
230 080CA0808-6GEAS



Coperchio con operatore Ø 22mm / Lid with operator Ø 22mm

Pulsante fungo rosso sgancio chiave Ø44
Red mushroom push-button, key release Ø44

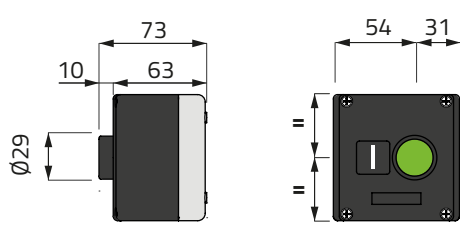
200 080CA0808-6GFC



Coperchio con operatore Ø 22mm / Lid with operator Ø 22mm

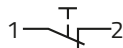
Pulsante guardia verde, blocco contatto 1NO
Green guarded push-button, 1NO contact block

150 080CA0808-6PV



Scatole in pulsantiere complete in ABS 85x85mm ABS assembled push-button enclosures 85x85mm

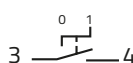
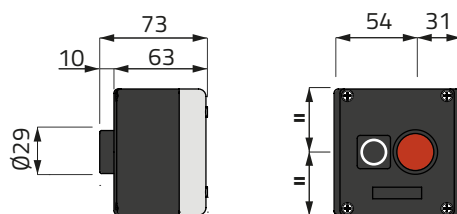
SERIE SMOOTH / SERIES SMOOTH



Coperchio con operatore Ø 22mm / Lid with operator Ø 22mm

Pulsante guardia rosso
blocco contatto 1NC
Red guarded push-button
1NC contact block

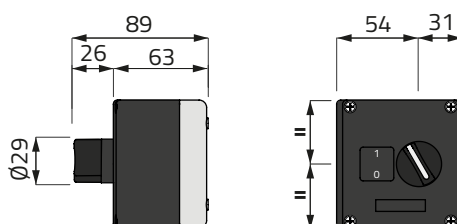
150 **080CA0808-6PR**



Coperchio con operatore Ø 22mm / Lid with operator Ø 22mm

Selettore a manopola 2 posizioni
blocco contatto 1NO
2 position knob selector switch
1NO contact block

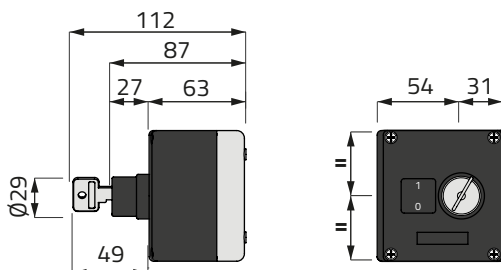
157 **080CA0808-6SMA**



Coperchio con operatore Ø 22mm / Lid with operator Ø 22mm

Selettore a chiave 2 posizioni
blocco contatto 1NO
2 position key selector switch
1NO contact block

197 **080CA0808-6SCA**



Targhette indicatrici adesive 22X22 Indication labels 22X22



g cod
0,2 **020144T22**



0,2 **02042T22**

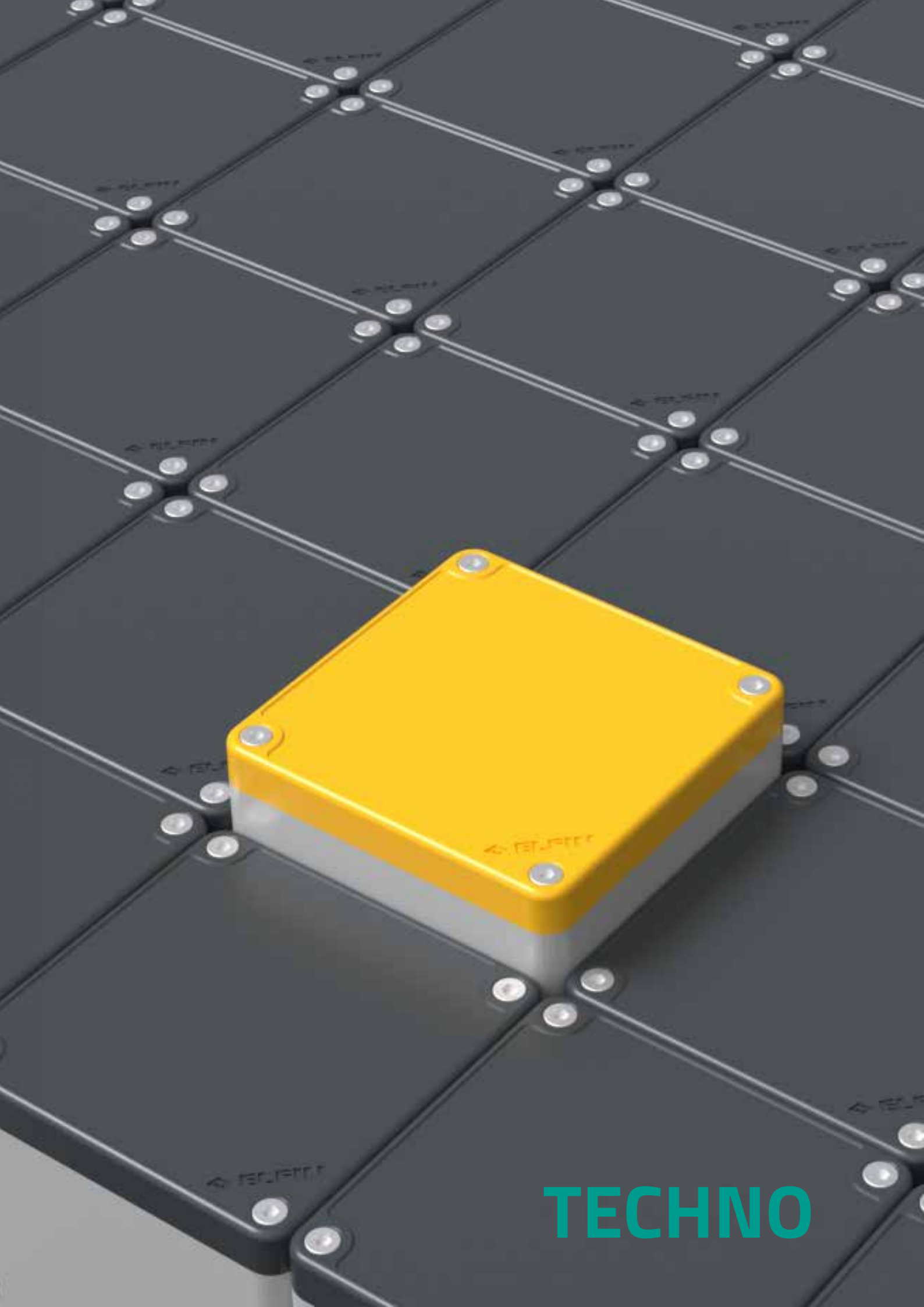


g cod
0,2 **02046T22**



0,2 **02043T22**





TECHNO

Scatole in termoplastico

Thermoplastic enclosures

SERIE TECHNO / SERIES TECHNO

■ TERMOPLASTICO

Le cassette termoplastiche della gamma Techno sono state concepite per assolvere con professionalità alla gran parte delle richieste del mondo dell'automazione industriale. La ricerca effettuata sui materiali adottati, quali tecnopolimeri poliammidici con rinforzo di fibre di vetro, permette l'utilizzo dei contenitori anche in ambienti con condizioni estreme e gravose.

■ VITI DI SERRAGGIO

Le viti di serraggio, in acciaio inox, sono normalizzate UNI, con filettatura metrica a testa cilindrica con esagono incassato e vengono trattenute dalla guarnizione perimetrale che ne garantisce l'imperdibilità.

■ TENUTA ERMETICA

I contenitori sono dotati di guarnizioni, stampate in termo-gomma, una tecnologia che presenta molteplici vantaggi quali:

- Eliminazione dell'effetto memoria di forma storica
- Assenza di punti di giunzione
- Realizzazione in un unico pezzo, facilmente sostituibile in caso di usura.

L'accoppiamento tra coperchio e scatola è stato progettato con la soluzione meccanica maschio-femmina, che garantisce la tenuta ermetica ed evita la chiusura degli elementi in caso di interferenza di componenti interni o cablaggi.

■ SPESSORE

L'elevato spessore delle pareti, oltre a conferire robustezza a tutte le scatole, permette di installare accessori di collegamento quali connettori e pressacavi direttamente dopo la realizzazione della relativa filettatura.

■ SOSTEGNI

Sul fondo di ogni contenitore sono presenti specifici sostegni per fissare altri accessori quali piastra di fondo o guida di aggancio normalizzata.

■ THERMOPLASTIC

The Techno range of thermoplastic enclosures has been designed to professionally meet the majority of demands within the industrial automation sector. The materials used, such as polyamide-based engineering polymers reinforced with glass fibers, have been selected to allow usage even in harsh and extreme environments.

■ TIGHTENING SCREWS

The fastening screws, made of stainless steel, comply with UNI standards. They feature a cylindrical head with recessed hex socket and metric threading. They are retained by the perimeter gasket, ensuring they are captive and cannot be lost.

■ HERMETIC SEAL

The enclosures are equipped with gaskets molded from thermo-rubber, a technology that offers several advantages:

- Elimination of item shape-memory effects
- Absence of junction points
- Manufactured in a single piece, easily replaceable in case of wear.

The coupling between lid and box is designed with a male-female mechanical joint, which ensures airtight sealing and prevents improper closure due to interference from internal components or wiring.

■ THICKNESS

The high thickness of the walls, in addition to giving strength to all the boxes, allows the installation of connection accessories such as connectors and cable glands directly after the creation of the relative thread.

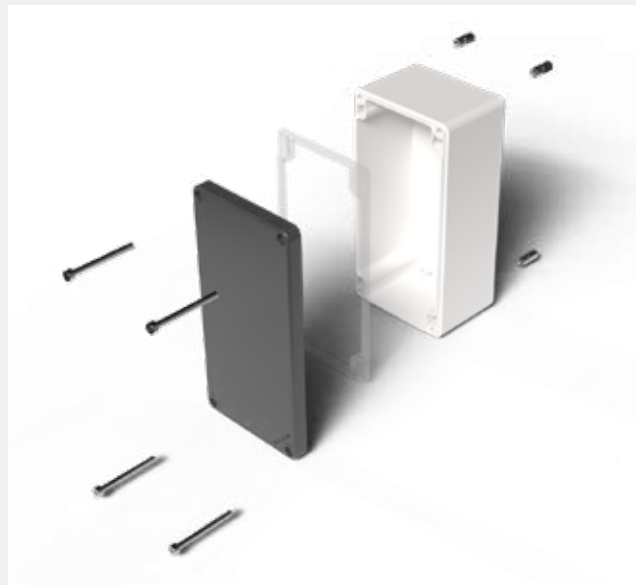
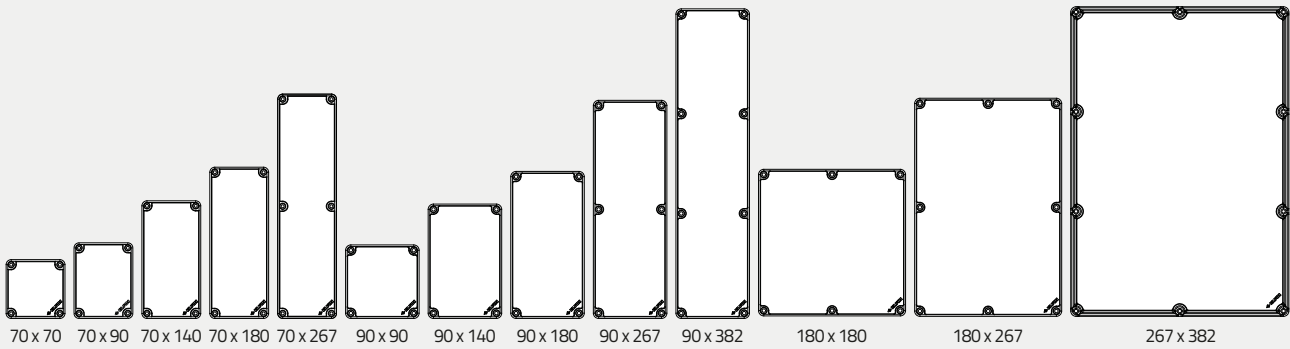
■ SUPPORTS

On the bottom of each container there are specific supports to fix other accessories such as the bottom plate or standardized hooking guide.

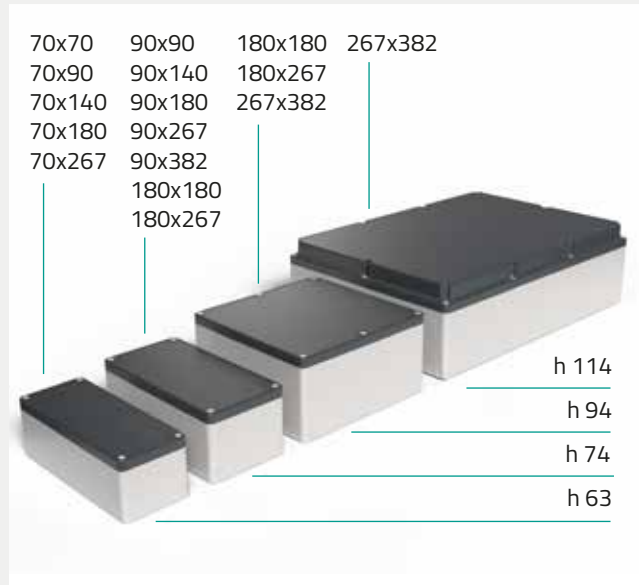
Scatole in termoplastico Thermoplastic enclosures

SERIE TECHNO / SERIES TECHNO

Contentitori in termoplastico - 13 formati Thermoplastic enclosures - 13 sizes



Esploso
Exploded view



Disponibili in quattro altezze
Available in four heights



Scatole in termoplastico Thermoplastic enclosures

SERIE TECHNO / SERIES TECHNO

Caratteristiche principali Main features

Le cassette termoplastiche, ampiamente utilizzate nelle applicazioni elettriche industriali, sono un tipo di involucro protettivo realizzato con materiali termoplastici. Questi materiali sono noti per la loro capacità di essere durevoli e versatili, garantendo sicurezza e funzionalità in vari ambienti industriali. Di seguito alcune delle peculiarità della nuova Serie Techno:

Thermoplastic enclosures, widely used in industrial electrical applications, are a type of protective casing made of thermoplastic materials. These materials are known for their ability to be durable and versatile, ensuring safety and functionality in various industrial environments. Here are some of the features of the new Techno Series:



Guarnizione a tenuta ermetica

la soluzione maschio-femmina garantisce la chiusura perfetta.

Hermetic seal
the male-female solution guarantees the perfect seal.



Materiale e spessore delle pareti insieme garantiscono leggerezza, robustezza e isolamento.

Material and thickness of the walls together guarantee lightness, strength and insulation.



Guarnizione O-ring

a garantire la tenuta stagna in caso di ingresso cavi posteriore.

O-ring gasket
Ensures watertight sealing in case of rear cable entry.



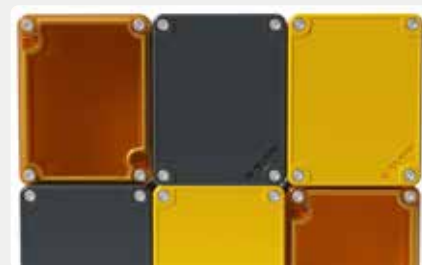
Resistenza ad ambienti gravosi grazie alla tenuta stagna e ai materiali performanti.

Resistance to harsh environments thanks to watertightness and high-performance materials.



Resistenza alla temperatura impiegabilità in contesti industriali a temperature estreme.

Temperature Resistance usability in industrial contexts at extreme temperatures.



Codifica del colore

per facilitarne l'identificazione e rispondere agli standard di sicurezza.

Color coding
for easy identification and safety standards.



Totamente personalizzabile

Compatibile con tutta la vasta gamma di ausiliari di comando.

Fully customizable
Compatible with the entire wide range of control auxiliaries.



Adesione migliorata etichetta

sede di contenimento in bassorilievo superficie ruvida e porosa.

Improved label adhesion
low relief containment seat rough and porous surface.



Grafica personalizzabile

utile a diversificare le funzioni tramite colori, pittogrammi, scritte, loghi.

Customizable graphics
useful for diversifying functions through colors, pictograms, writings, logos.

Scatole in termoplastico

Thermoplastic enclosures

SERIE TECHNO / SERIES TECHNO

Fissaggio tradizionale

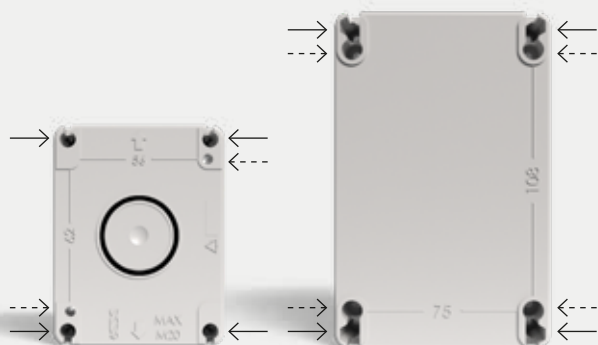
Sul retro della scatola sono indicati gli interassi per eseguire il montaggio a parete.

I fori previsti per il fissaggio a parete sono facilmente individuabili sul retro del fondello.

Traditional mounting system

The distances between the centres for wall mounting are indicated on the rear of the box.

The holes for wall mounting are easily identifiable on the back of the caseback.



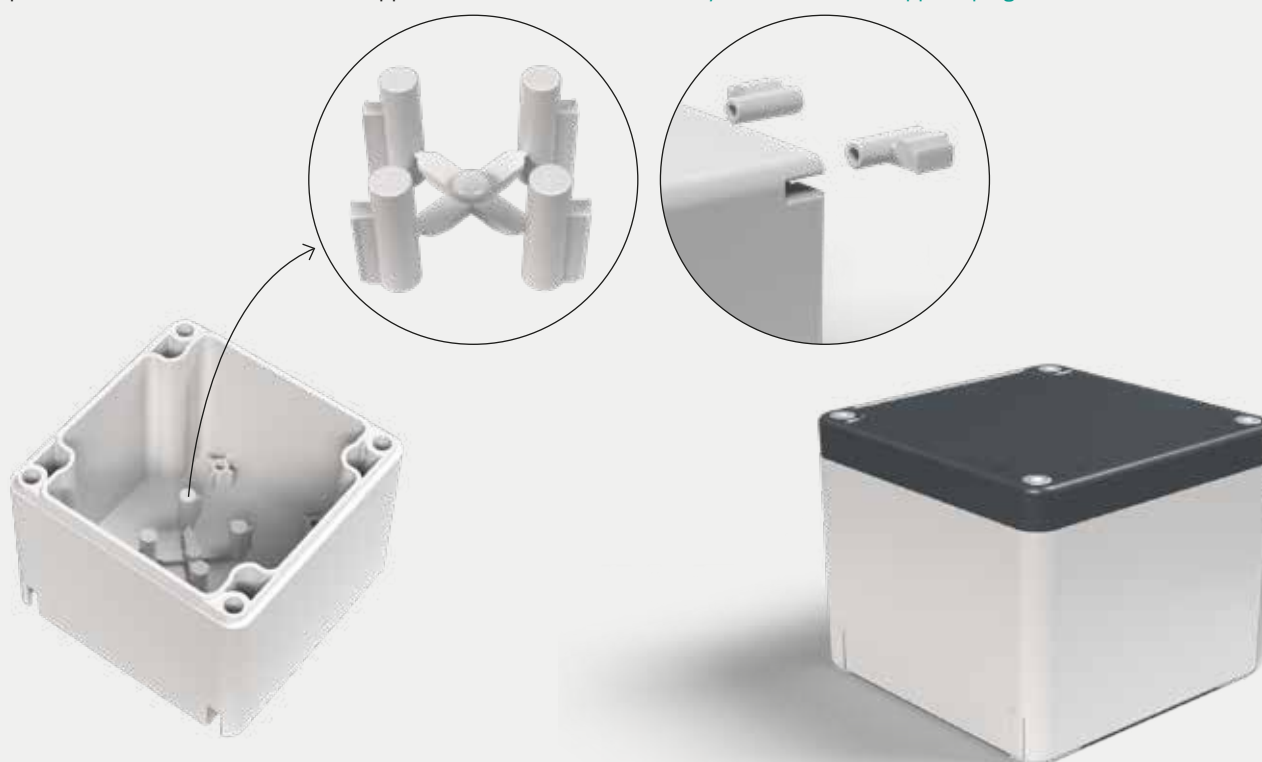
Legenda

Legend

- Fori per il fissaggio a parete
Holes for wall fixing
- Predisposizioni per il montaggio di accessori
Accessory mounting provisions

Quando la predisposizione per accessori non viene utilizzata, può essere facilmente chiusa con i tappi forniti.

When accessory mounting provisions are not used, they can be easily closed with the supplied plugs.



Scatole in termoplastico Thermoplastic enclosures

SERIE TECHNO / SERIES TECHNO

Modularità e componibilità

L'intera linea Techno è resa modulare dall'accessorio di congiunzione che permette l'installazione di più moduli in serie.

Modularity and composability

The entire Techno series is made modular thanks to the coupling accessory, which allows the installation of multiple modules in series.



Accessorio di congiunzione
per il fissaggio di più moduli
Connection accessory
for fixing multiple modules



Scatole in termoplastico

Thermoplastic enclosures

SERIE TECHNO / SERIES TECHNO

Fissaggio tramite accessori brevettati

Per consentire l'installazione della scatola chiusa, senza quindi rischiare di comprometterne il cablaggio interno, abbiamo progettato e brevettato una vasta gamma di accessori che rispondono ad esigenze differenti e consentono metodi di fissaggio alternativi.

Mounting system using patented accessories

To allow the installation of the enclosure while closed—thus avoiding the risk of damaging the internal wiring—we have designed and patented a wide range of accessories that meet different needs and enable alternative mounting methods.

Serie 70
70 Series



Serie 90
90 Series



Scatole in termoplastico Thermoplastic enclosures

SERIE TECHNO / SERIES TECHNO



Staffe di fissaggio
per una tenuta sicura

Mounting brackets
for a sturdy hold



Staffe magnetiche
mobile e a ingombro ridotto

Magnetic brackets
movable & space-saving



Staffe da incasso
per minimizzare l'ingombro totale

Wall-mounting brackets
for minimize overall dimensions



Staffe di fissaggio pensile
viti su profilo metallico

Ring mounting brackets
screw on metal profile



Staffe di fissaggio pensile
fascetta su tubo

Ring mounting brackets
strap system on tube



Staffe di fissaggio pensile
gancio su parete

Ring mounting brackets
hook on wall



Staffe Tandem
modularità ed ergonomia

Tandem brackets
modularity and ergonomoy



Staffe inclinate 70°
per una migliore ergonomia

70° Sloped brackets
for greater ergonomoy



Staffe inclinate 90°
per montaggio laterale o inferiore

90° Sloped brackets
for side/underslung mounting

Scatole in termoplastico

Thermoplastic enclosures

SERIE TECHNO / SERIES TECHNO

Tenuta ermetica e resistenza agli urti

La progettazione delle scatole garantisce la tenuta stagna e agli urti, secondo le vigenti normative. Le cassette in termoplastico della Serie Techno hanno ottenuto le certificazioni di resistenza IP66 e IP67; sono quindi totalmente protette contro la polvere, protette contro le ondate e gli effetti dell'immersione. Inoltre hanno ottenuto la certificazione UL 7465 di resistenza agli urti.



Hermetic seal and impact resistance

The design of the boxes ensures watertightness and shock resistance, according to current regulations. The thermoplastic boxes of the Techno Series have obtained IP66 and IP67 resistance certifications; they are therefore completely dust-tight, resistant to powerful water jets and protected from the effects of immersion. They have also obtained UL 7465 certification for shock resistance.

Caratteristiche tecniche

Omologazioni	CE / UL / CSA
Conformità agli standard	IEC-EN62208, UL508
Limiti di temperatura	-35° + 80°C
Grado di protezione	IP66 - IP67
Protezione contro gli urti	IK08 (IEC-EN62262)
Materiale scatola	PA Poliammide rinforzato fibra di vetro
Materiale guarnizione	Elastomero termoplastico TPE
Categoria di sovratensione	Classe II (IEC-EN61140)
Materiale viti	Acciaio inox AISI 304
Tipologia viti	SERIE 70 - 5X24 inox TORX T15 UNI SERIE 90 - M04X45
Materiale inserti	PRESENTI SOLO NELLA SERIE 90 - Ottone / Acciaio Inox
Tipologia inserti	PRESENTI SOLO NELLA SERIE 90 - M4X18
Coppia di serraggio	0,8 ÷ 1,2Nm (7,1÷10,6 Lb-in)
Senza metalli pesanti	si
PVC-free	si
Silicon-free	si
Halogen-free	si
Comportamento alla combustione 3.00 mm	5VA (UL94)
Comportamento alla combustione 0.75 mm	V0 (UL94)
Comportamento alla combustione	960° (EN-IEC 60695-2-12)
Fitted for outdoor application	si

Technical data

Approvals	CE / UL / CSA
Compliance with standards	IEC-EN62208, UL508
Operating temperatures	-35° + 80°C
Protection degree	IP66 - IP67
Protection against impact	IK08 (IEC-EN62262)
Enclosure material	PA Fiber glass reinforced polyamide
Gasket material	TPE Thermoplastic elastometer
Protection against electric shock	Class II (IEC-EN61140)
Screw material	Stainless steel AISI 304
Screw type	70 SERIES - 5X24 inox TORX T15 UNI 90 SERIES - M04X45
Screw inserts material	ONLY FOR 90 SERIES - Brass / Stainless Steel
Screw inserts type	ONLY FOR 90 SERIES - M4X18
Tightening torque	1 ÷ 1.5Nm (8.85-13.3 Lb-in)
Heavy metal-free	yes
PVC-free	yes
Silicon-free	yes
Halogen-free	yes
Combustion behaviour 3.00 mm	5VA (UL94)
Combustion behaviour 0.75 mm	V0 (UL94)
Combustion behaviour	960° (IEC-EN60695-2-12)
Fitted for outdoor application	yes

Legenda Solo per Omologazione UL

Legend UL Approval Only



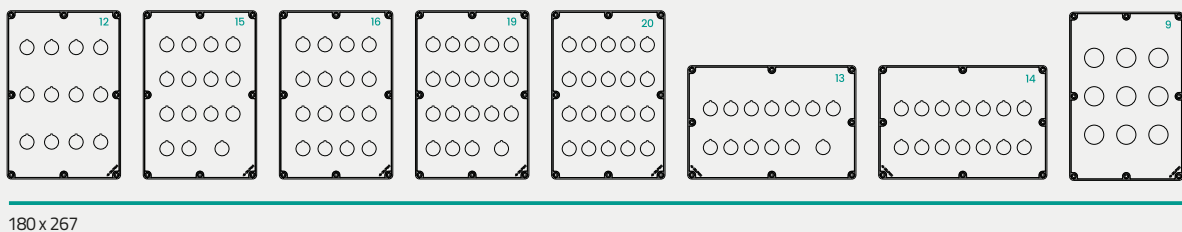
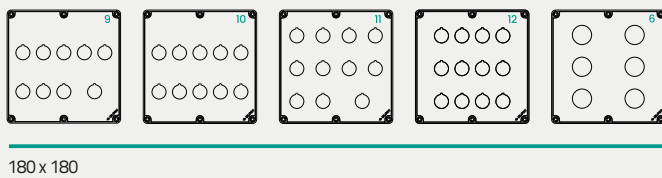
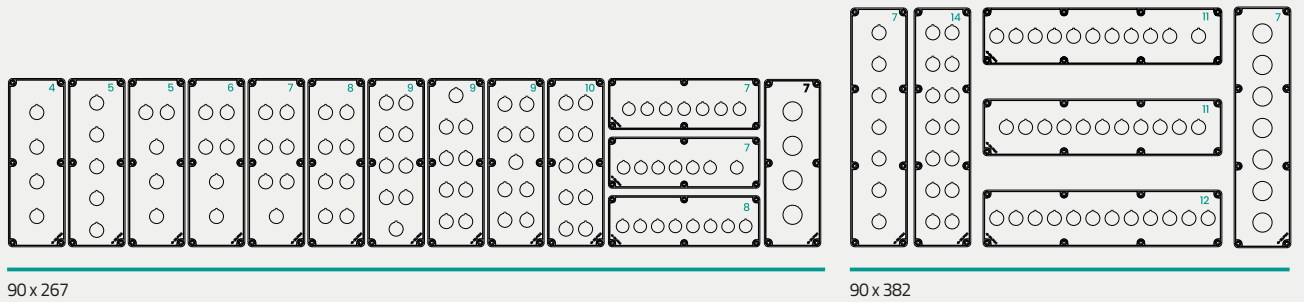
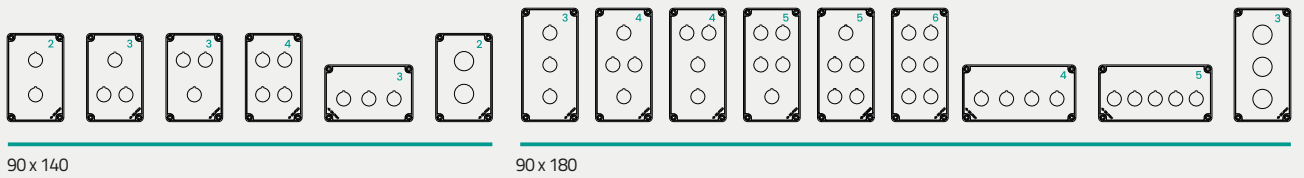
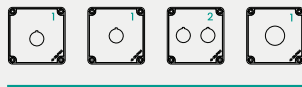
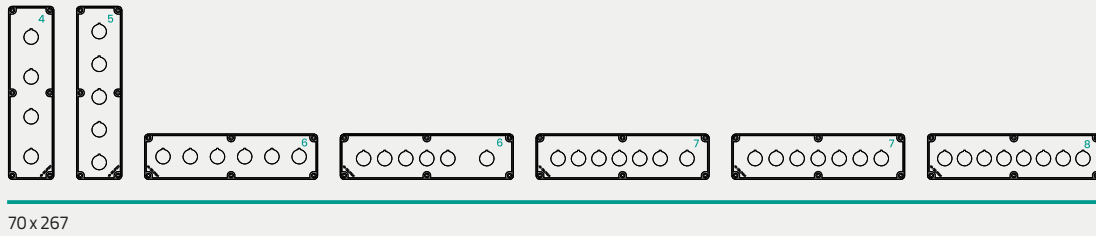
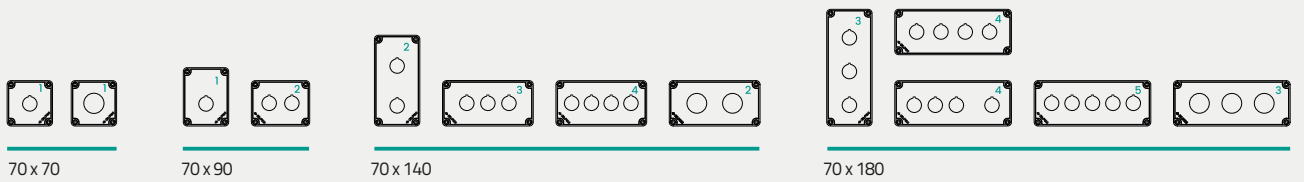
Scatole in termoplastico

Thermoplastic enclosures

SERIE TECHNO / SERIES TECHNO

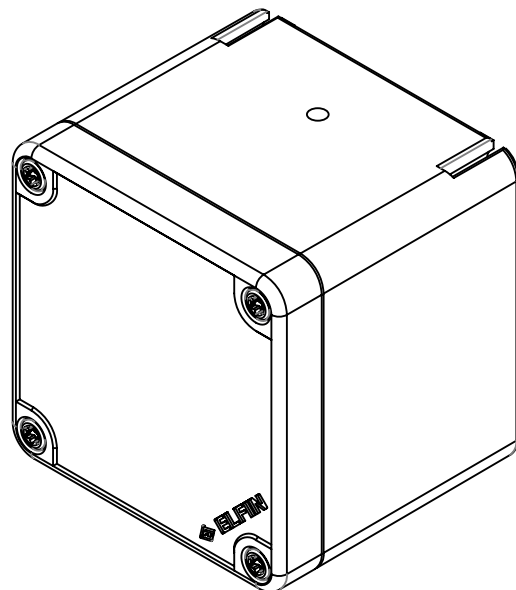
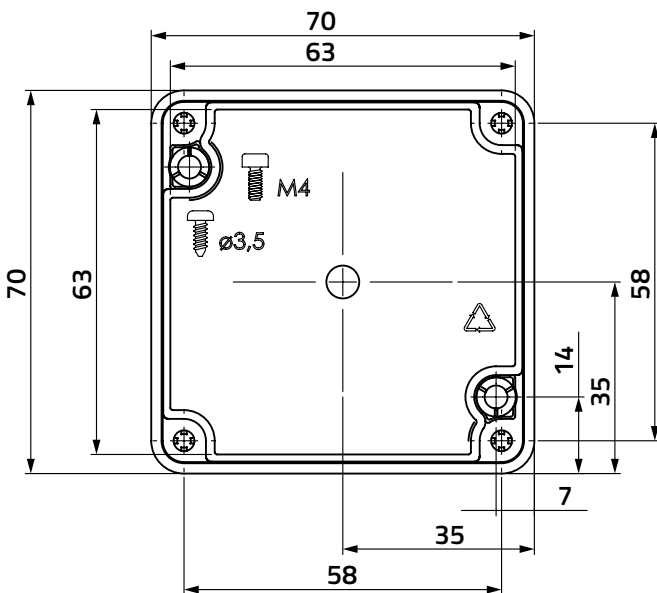
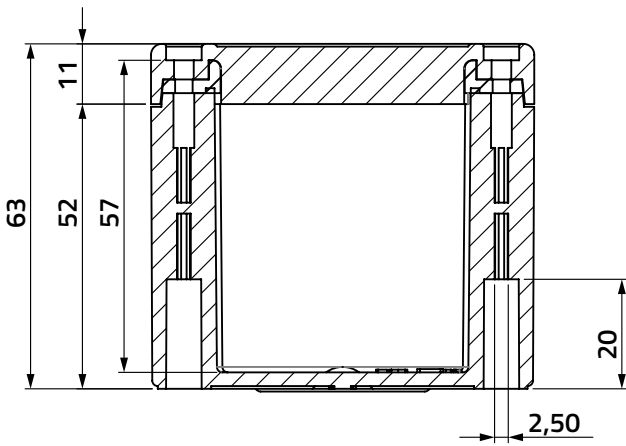
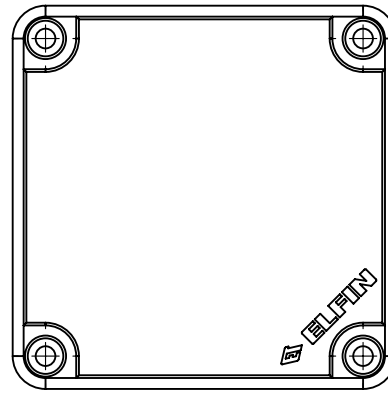
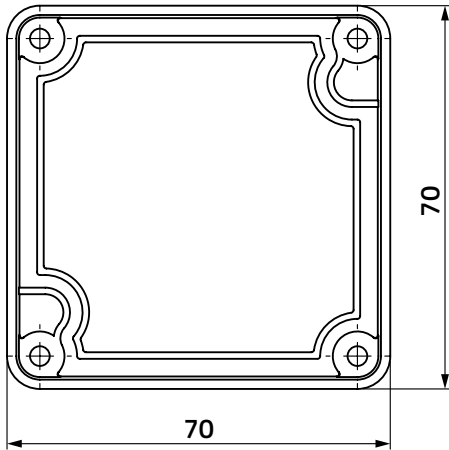
Panorama delle forature dei coperchi

Lid hole overview



Scatole in termoplastico 70X70 mm Thermoplastic enclosures 70x70 mm

SERIE TECHNO / SERIES TECHNO



Scatole in termoplastico 70x70 mm Thermoplastic enclosures 70x70 mm

SERIE TECHNO / SERIES TECHNO

h g cod



Coperchio senza fori / Undrilled lid

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

	63	080T0707-6
Certificazione UL / UL Certification	63	080TU0707-6



Coperchio giallo senza fori / Undrilled yellow lid

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

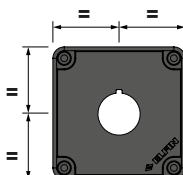
	63	080T0707-6G
Certificazione UL / UL Certification	63	080TU0707-6G



Coperchio trasparente senza fori / Transparent undrilled lid

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

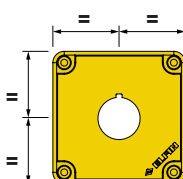
	63	080T0707-6T
Certificazione UL / UL Certification	63	080TU0707-6T



Coperchio con 1 foro Ø 22mm / 1-hole lid Ø 22mm

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

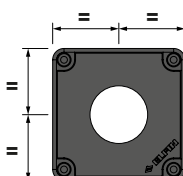
	63	080T0707-6P1
Certificazione UL / UL Certification	63	080TU0707-6P1



Coperchio giallo con 1 foro Ø 22mm / 1-hole yellow lid Ø 22mm

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

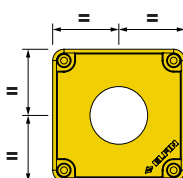
	63	080T0707-6GP1
Certificazione UL / UL Certification	63	080TU0707-6GP1



Coperchio con 1 foro Ø 30mm / 1-hole lid Ø 30mm

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

	63	080T0707-6S1
Certificazione UL / UL Certification	63	080TU0707-6S1



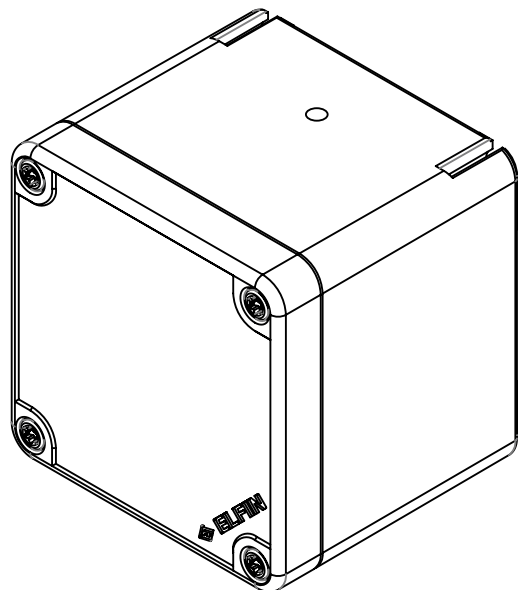
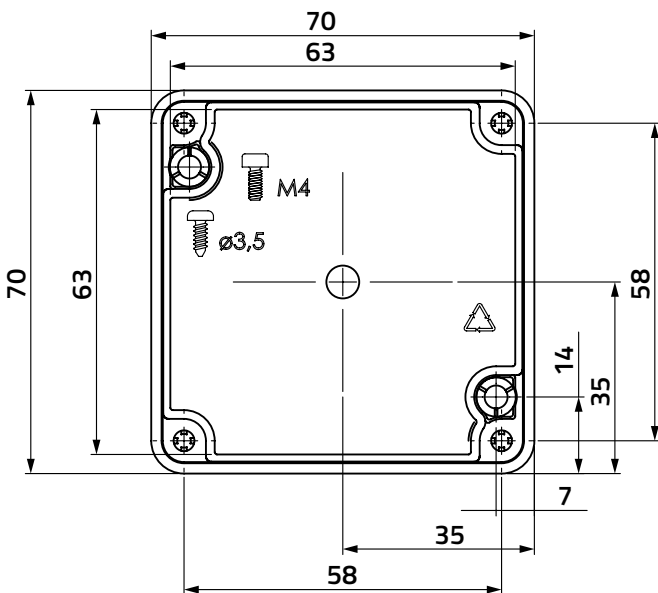
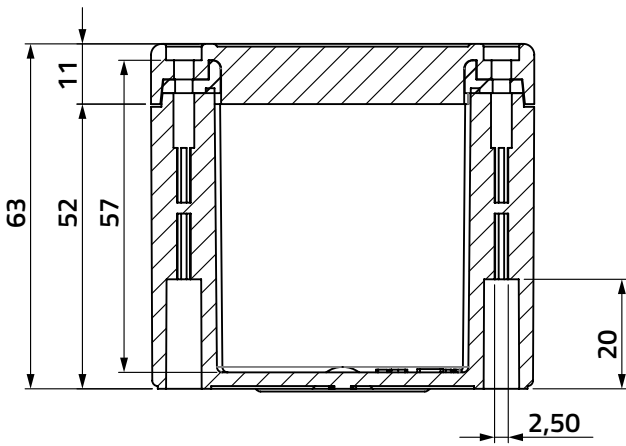
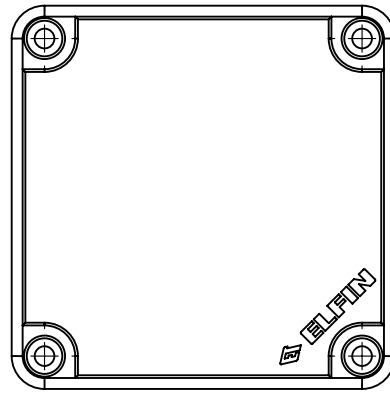
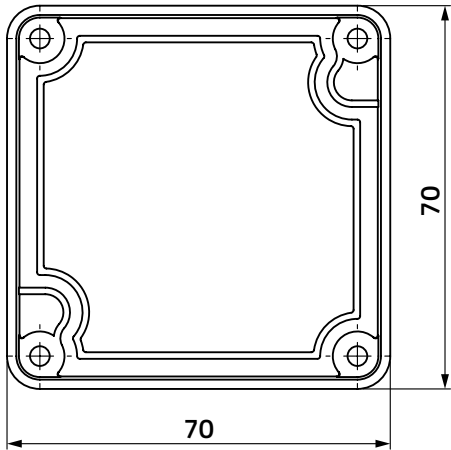
Coperchio giallo con 1 foro Ø 30mm / 1-hole yellow lid Ø 30mm

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

	63	080T0707-6GS1
Certificazione UL / UL Certification	63	080TU0707-6GS1

Scatole in termoplastico 70X70 mm Thermoplastic enclosures 70x70 mm

SERIE TECHNO / SERIES TECHNO



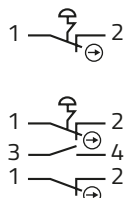
Scatole in termoplastico 70x70 mm Thermoplastic enclosures 70x70 mm

SERIE TECHNO / SERIES TECHNO

h

g

cod



Coperchio con pulsante emergenza Ø32 Lid with emergency push-button Ø32

sgancio rotazione / twist release

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

1NC

Certificazione UL / UL Certification

080T0707-6GA01

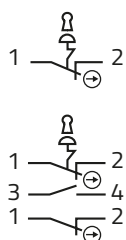
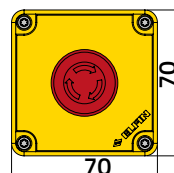
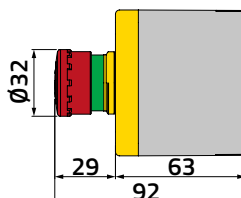
080TU0707-6GA01

1NO + 2 NC

Certificazione UL / UL Certification

080T0707-6GA12

080TU0707-6GA12



Coperchio con pulsante emergenza Ø44 Lid with emergency push-button Ø44

sgancio a chiave / key release

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

1NC

Certificazione UL / UL Certification

080T0707-6GC01

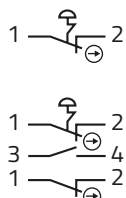
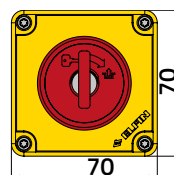
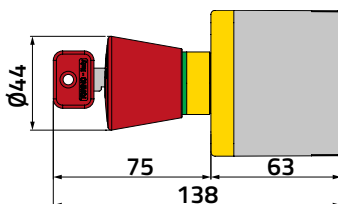
080TU0707-6GC01

1NO + 2 NC

Certificazione UL / UL Certification

080T0707-6GC12

080TU0707-6GC12



Coperchio con pulsante emergenza Ø40 Lid with emergency push-button Ø40

sgancio rotazione / twist release

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

1NC

Certificazione UL / UL Certification

080T0707-6GF01

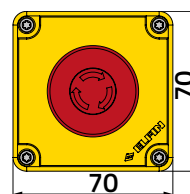
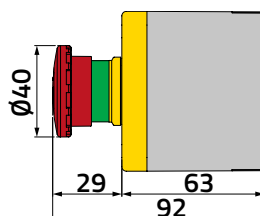
080TU0707-6GF01

1NO + 2 NC

Certificazione UL / UL Certification

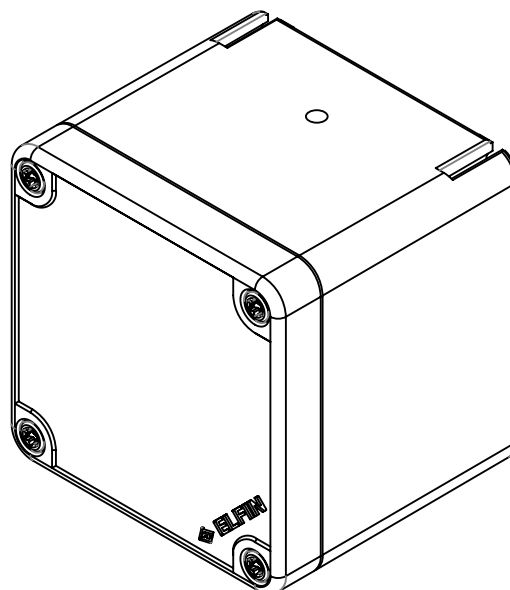
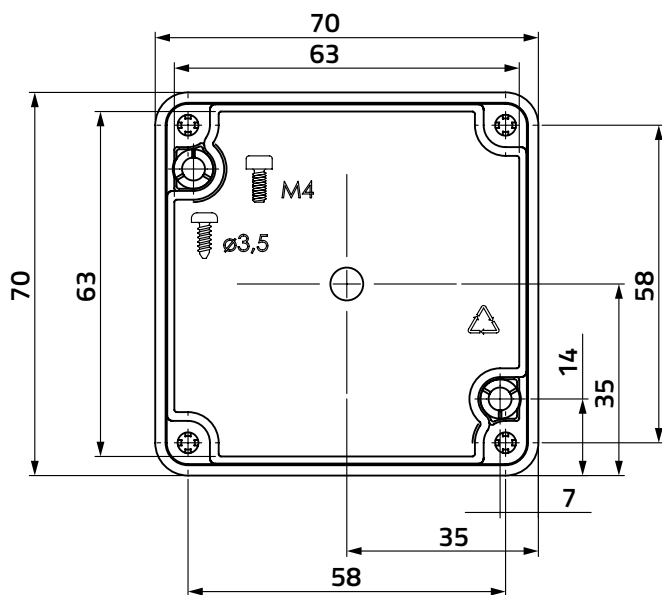
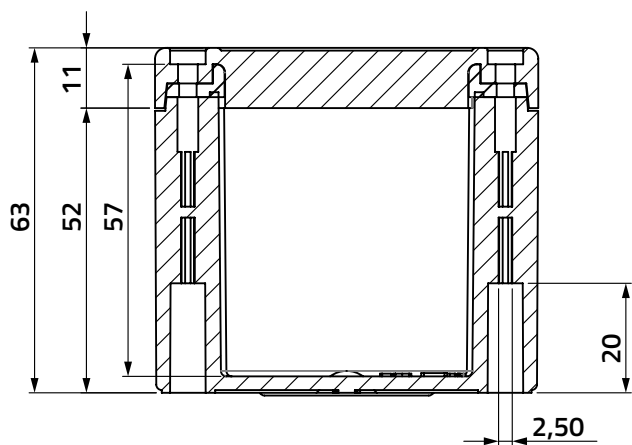
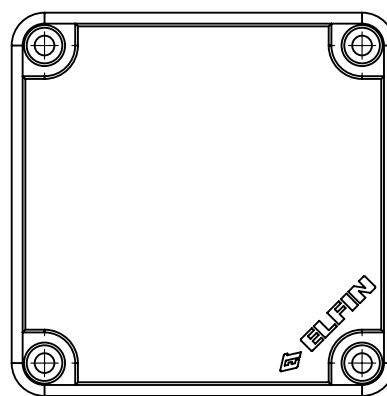
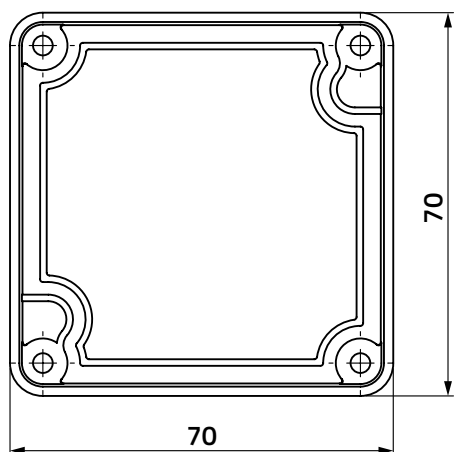
080T0707-6GF12

080TU0707-6GF12



Scatole in termoplastico 70X70 mm Thermoplastic enclosures 70x70 mm

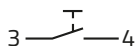
SERIE TECHNO / SERIES TECHNO



Scatole in termoplastico 70x70 mm Thermoplastic enclosures 70x70 mm

SERIE TECHNO / SERIES TECHNO

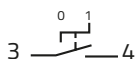
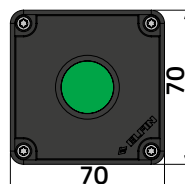
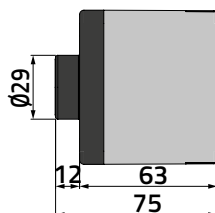
h g cod



Coperchio con pulsante con guardia Lid with guarded push-button

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

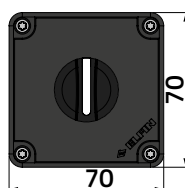
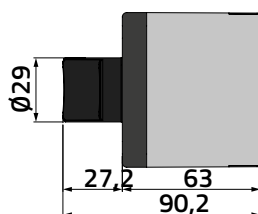
● Nero / Black	080T0707-6PN
Certificazione UL / UL Certification	080TU0707-6PN
● Verde / Green	080T0707-6PV
Certificazione UL / UL Certification	080TU0707-6PV
● Rosso / Red	080T0707-6PR
Certificazione UL / UL Certification	080TU0707-6PR



Coperchio con selettore manopola 2 posizioni Lid with 2-position knob selector switch

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

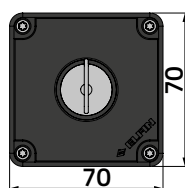
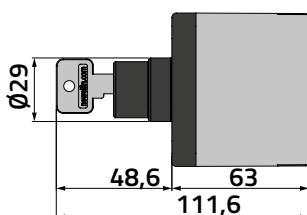
	080T0707-6SM
Certificazione UL / UL Certification	080TU0707-6SM



Coperchio con selettore a chiave 2 posizioni Lid with 2-position key selector switch

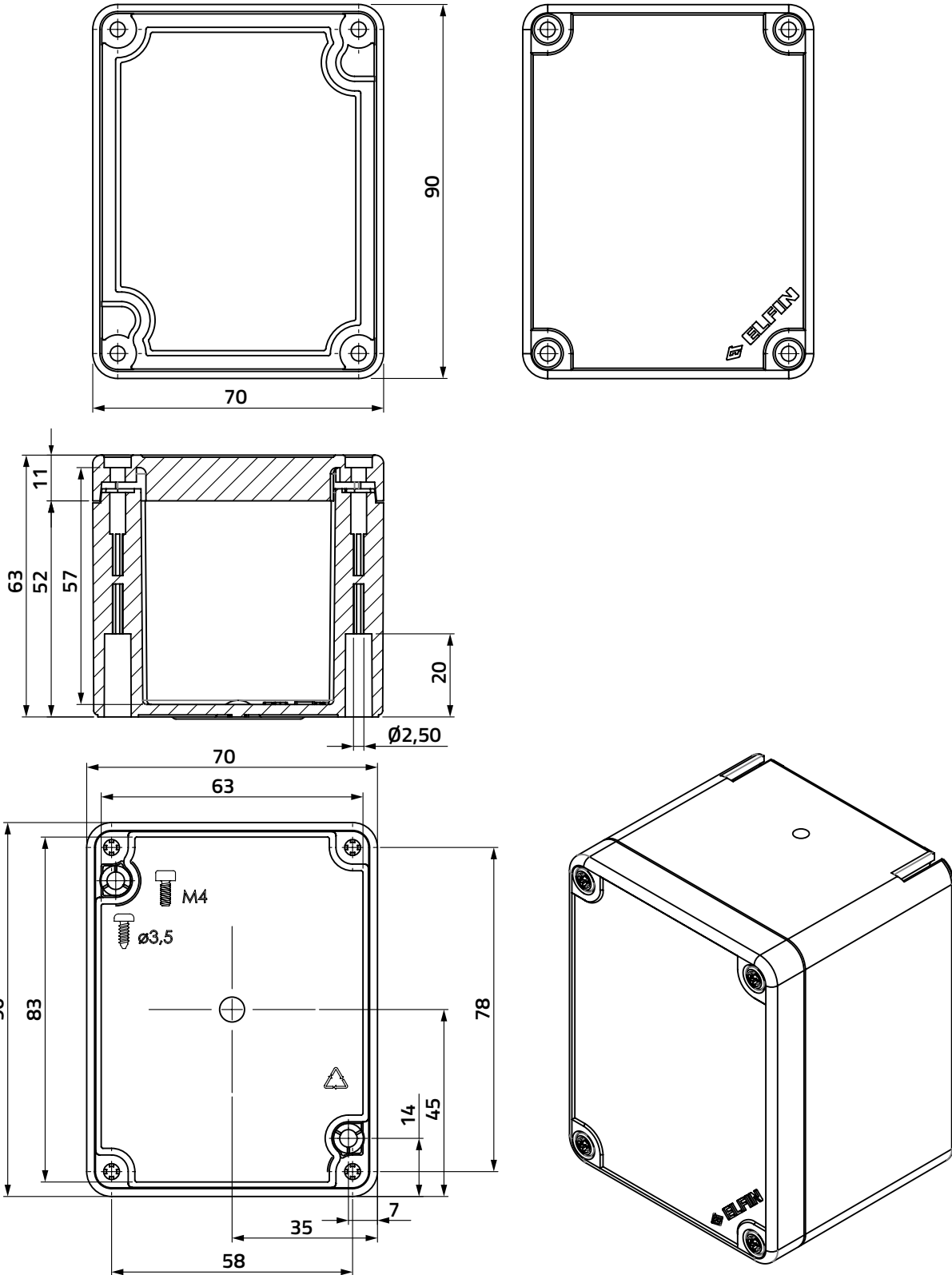
Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

	080T0707-6SC
Certificazione UL / UL Certification	080TU0707-6SC



Scatole in termoplastico 70x90 mm Thermoplastic enclosures 70x90 mm

SERIE TECHNO / SERIES TECHNO



Scatole in termoplastico 70x90 mm Thermoplastic enclosures 70x90 mm

SERIE TECHNO / SERIES TECHNO

h g cod



Coperchio senza fori / Undrilled lid

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

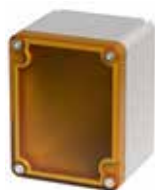
	63	080T0709-6
Certificazione UL / UL Certification	63	080TU0709-6



Coperchio giallo senza fori / Undrilled yellow lid

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

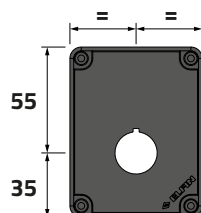
	63	080T0709-6G
Certificazione UL / UL Certification	63	080TU0709-6G



Coperchio trasparente senza fori / Transparent undrilled lid

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

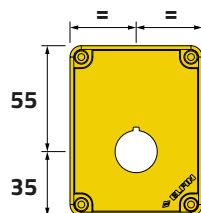
	63	080T0709-6T
Certificazione UL / UL Certification	63	080TU0709-6T



Coperchio con 1 foro Ø 22mm / 1-hole lid Ø 22mm

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

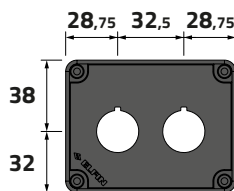
	63	080T0709-6P1
Certificazione UL / UL Certification	63	080TU0709-6P1



Coperchio giallo con 1 foro Ø 22mm / 1-hole yellow lid Ø 22mm

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

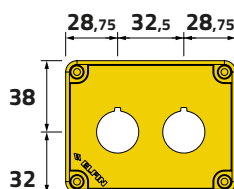
	63	080T0709-6GP1
Certificazione UL / UL Certification	63	080TU0709-6GP1



Coperchio con 2 fori Ø 22mm / 2-hole lid Ø 22mm

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

	63	080T0709-6P2L
Certificazione UL / UL Certification	63	080TU0709-6P2L



Coperchio giallo con 2 fori Ø 22mm / 2-hole yellow lid Ø 22mm

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

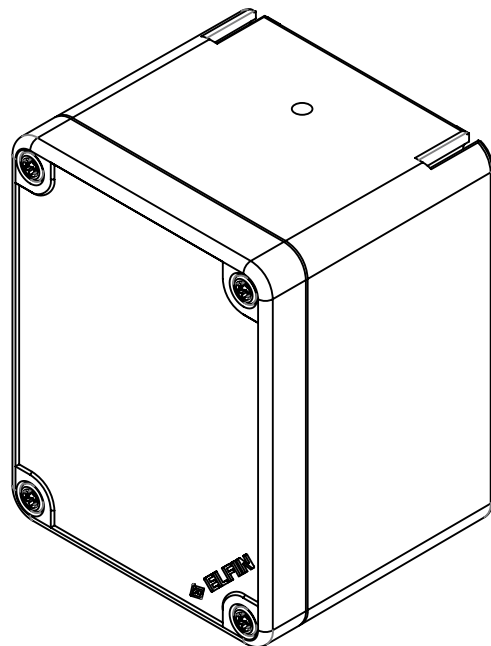
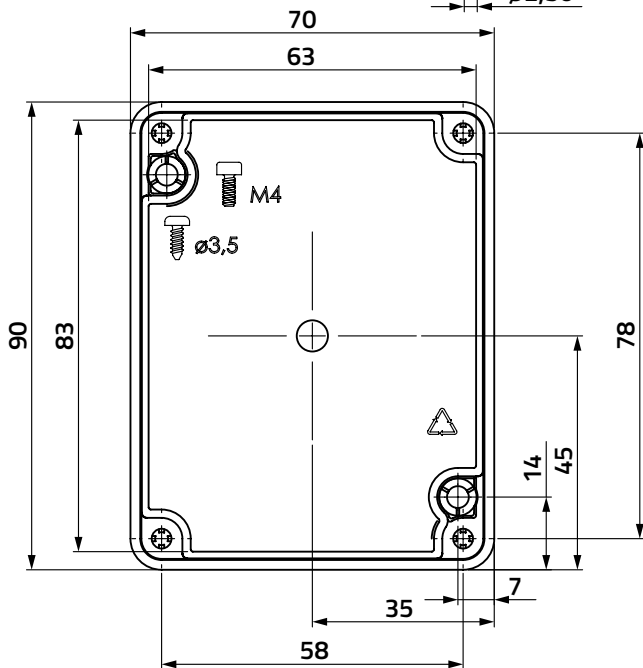
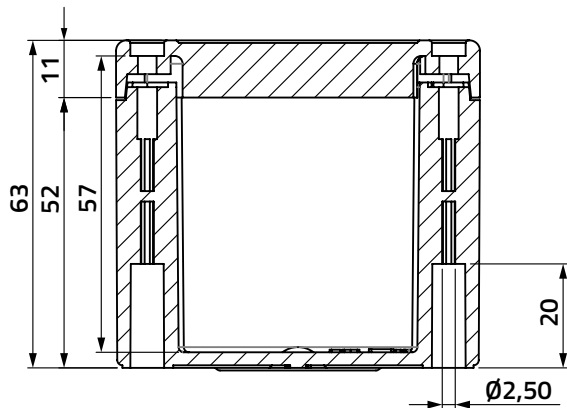
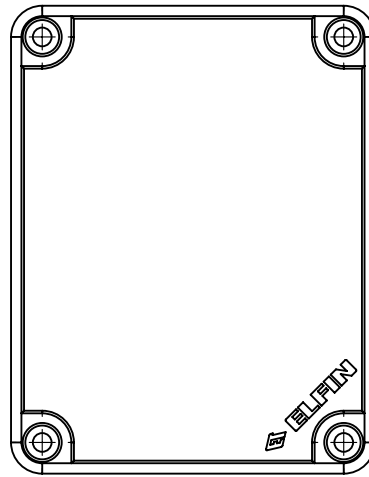
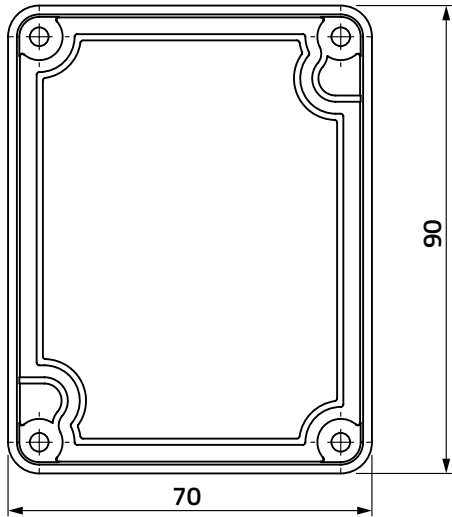
	63	080T0709-6GP2L
Certificazione UL / UL Certification	63	080TU0709-6GP2L



Scatole in termoplastico 70x90 mm Thermoplastic enclosures 70x90 mm

SERIE TECHNO / SERIES TECHNO

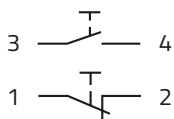
080



Scatole in termoplastico 70x90 mm Thermoplastic enclosures 70x90 mm

SERIE TECHNO / SERIES TECHNO

h g cod

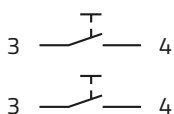
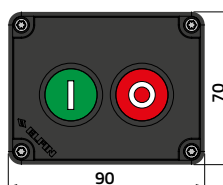
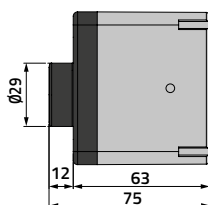


Coperchio con due operatori Lid with 2 operators

Pulsanti con guardia, simboli I-O / Guarded push-button, I-O symbols

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

Certificazione UL / UL Certification 63 63 080T0709-610 080TU0709-610

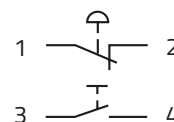
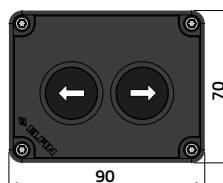
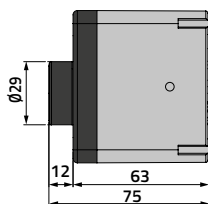


Coperchio con due operatori Lid with 2 operators

Pulsanti con guardia, simboli frecce / Guarded push-button, arrow symbols

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

Certificazione UL / UL Certification 63 63 080T0709-6S47 080TU0709-6S47



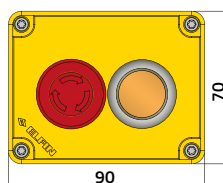
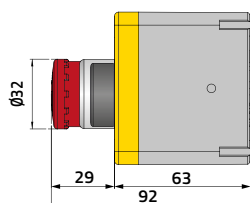
Coperchio con due operatori Lid with 2 operators

Pulsanti emergenza Ø32, sgancio rotazione / Emergency stop push-button Ø32, twist release

Pulsante con guardia e cappuccio gomma / Guarded push-button with rubber cap

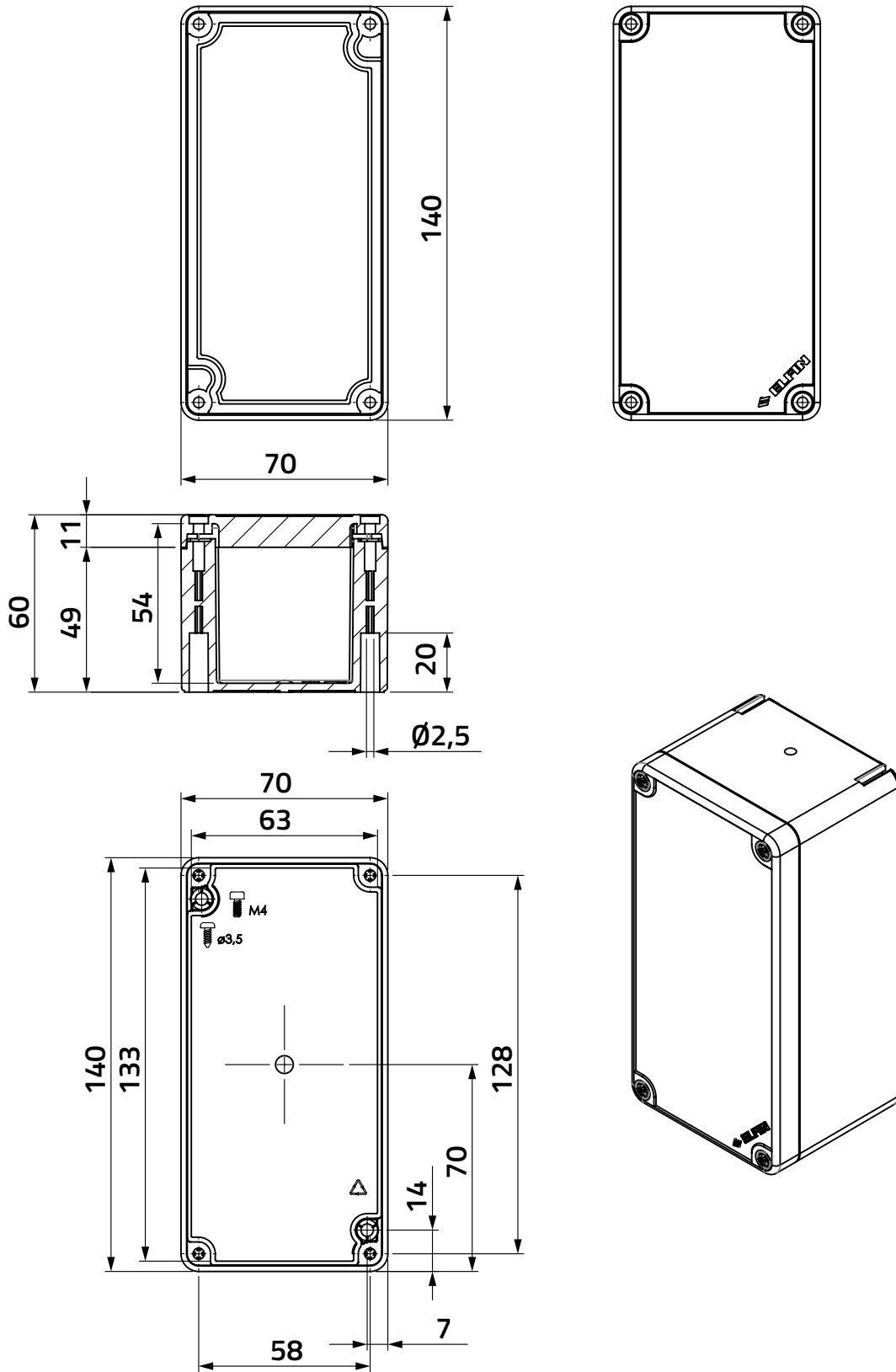
Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

Certificazione UL / UL Certification 63 63 080T0709-6PE 080TU0709-6PE



Scatole in termoplastico 70x140 mm Thermoplastic enclosures 70x140 mm

SERIE TECHNO / SERIES TECHNO



Scatole in termoplastico 70x140 mm Thermoplastic enclosures 70x140 mm

SERIE TECHNO / SERIES TECHNO

h g cod



Coperchio senza fori / Undrilled lid

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

	63	080T0714-6
Certificazione UL / UL Certification	63	080TU0714-6



Coperchio giallo senza fori / Undrilled yellow lid

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

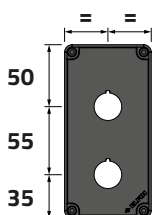
	63	080T0714-6G
Certificazione UL / UL Certification	63	080TU0714-6G



Coperchio trasparente senza fori / Transparent undrilled lid

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

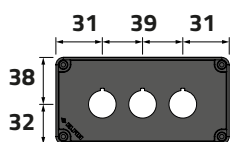
	63	080T0714-6T
Certificazione UL / UL Certification	63	080TU0714-6T



Coperchio con 2 fori Ø 22mm / 2-hole lid Ø 22mm

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

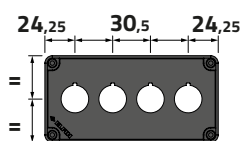
	63	080T0714-6P2
Certificazione UL / UL Certification	63	080TU0714-6P2



Coperchio con 3 fori Ø 22mm / 3-hole lid Ø 22mm

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

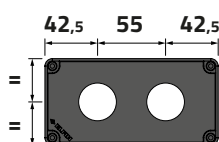
	63	080T0714-6P3L
Certificazione UL / UL Certification	63	080TU0714-6P3L



Coperchio con 4 fori Ø 22mm / 4-hole lid Ø 22mm

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

	63	080T0714-6P4L
Certificazione UL / UL Certification	63	080TU0714-6P4L



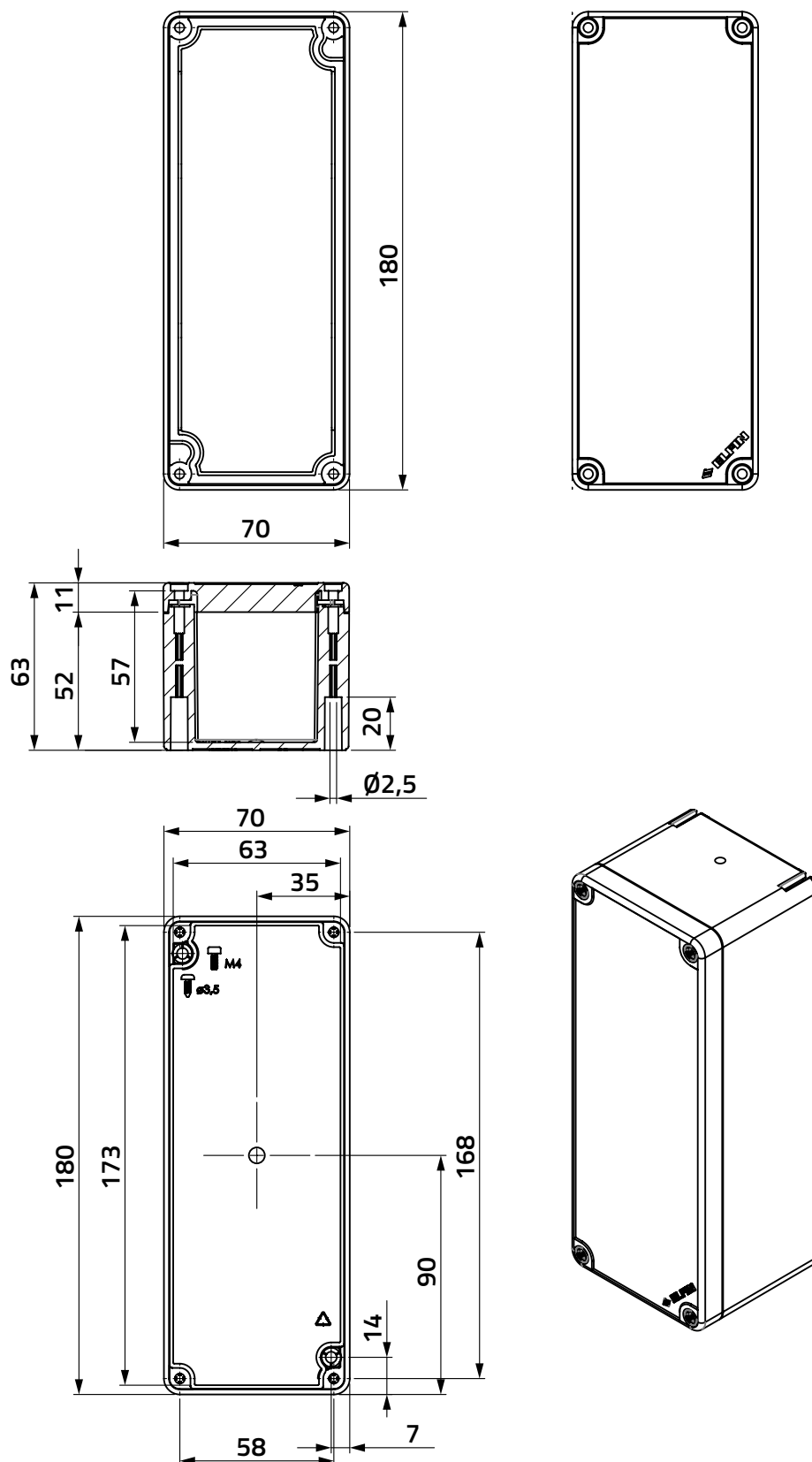
Coperchio con 2 fori Ø 30mm / 2-hole lid Ø 30mm

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

	63	080T0714-6S2
Certificazione UL / UL Certification	63	080TU0714-6S2

Scatole in termoplastico 70x180 mm Thermoplastic enclosures 70x180 mm

SERIE TECHNO / SERIES TECHNO



Scatole in termoplastico 70x180 mm Thermoplastic enclosures 70x180 mm

SERIE TECHNO / SERIES TECHNO

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Coperchio senza fori / Undrilled lid

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

	63	080T0718-6
Certificazione UL / UL Certification	63	080TU0718-6



Coperchio giallo senza fori / Undrilled yellow lid

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

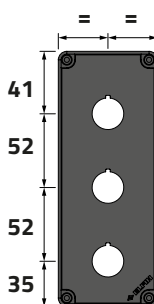
	63	080T0718-6G
Certificazione UL / UL Certification	63	080TU0718-6G



Coperchio trasparente senza fori / Transparent undrilled lid

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

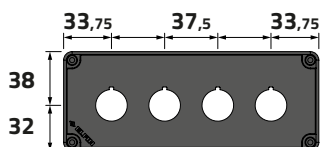
	63	080T0718-6T
Certificazione UL / UL Certification	63	080TU0718-6T



Coperchio con 3 fori Ø 22mm / 3-hole lid Ø 22mm

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

	63	080T0718-6P3
Certificazione UL / UL Certification	63	080TU0718-6P3



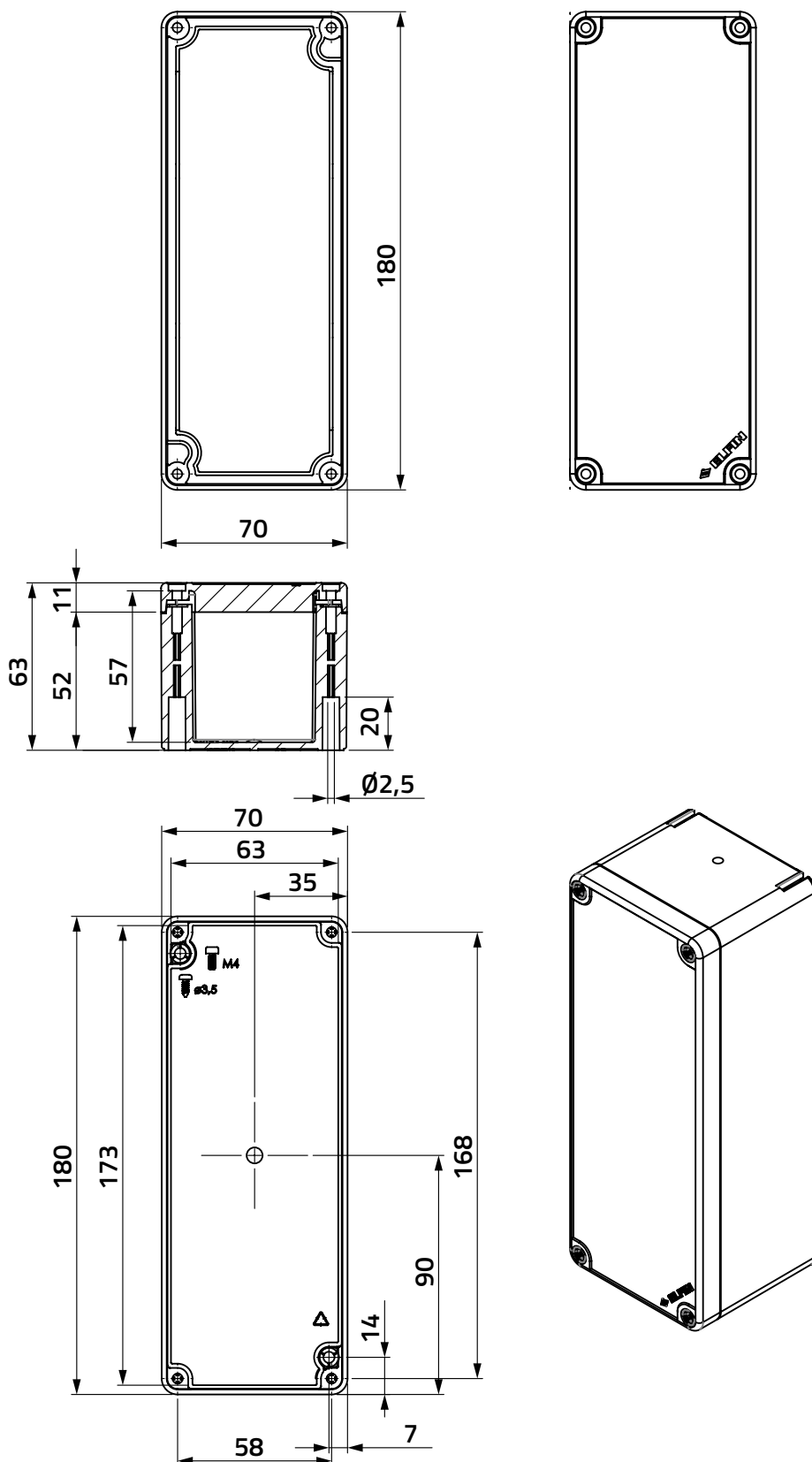
Coperchio con 4 fori Ø 22mm / 4-hole lid Ø 22mm

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

	63	080T0718-6P4L
Certificazione UL / UL Certification	63	080TU0718-6P4L

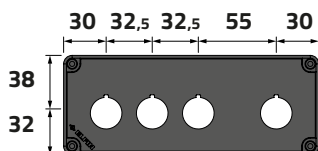
Scatole in termoplastico 70x180 mm Thermoplastic enclosures 70x180 mm

SERIE TECHNO / SERIES TECHNO



Scatole in termoplastico 70x180 mm Thermoplastic enclosures 70x180 mm

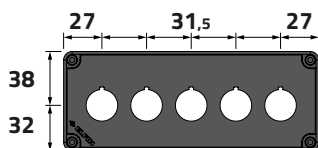
SERIE TECHNO / SERIES TECHNO



Coperchio con 4 fori Ø 22mm / 4-hole lid Ø 22mm

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

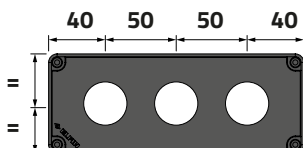
	63	080T0718-6P4LC
Certificazione UL / UL Certification	63	080TU0718-6P4LC



Coperchio con 5 fori Ø 22mm / 5-hole lid Ø 22mm

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

	63	080T0718-6P5L
Certificazione UL / UL Certification	63	080TU0718-6P5L



Coperchio con 3 fori Ø 30mm / 3-hole lid Ø 30mm

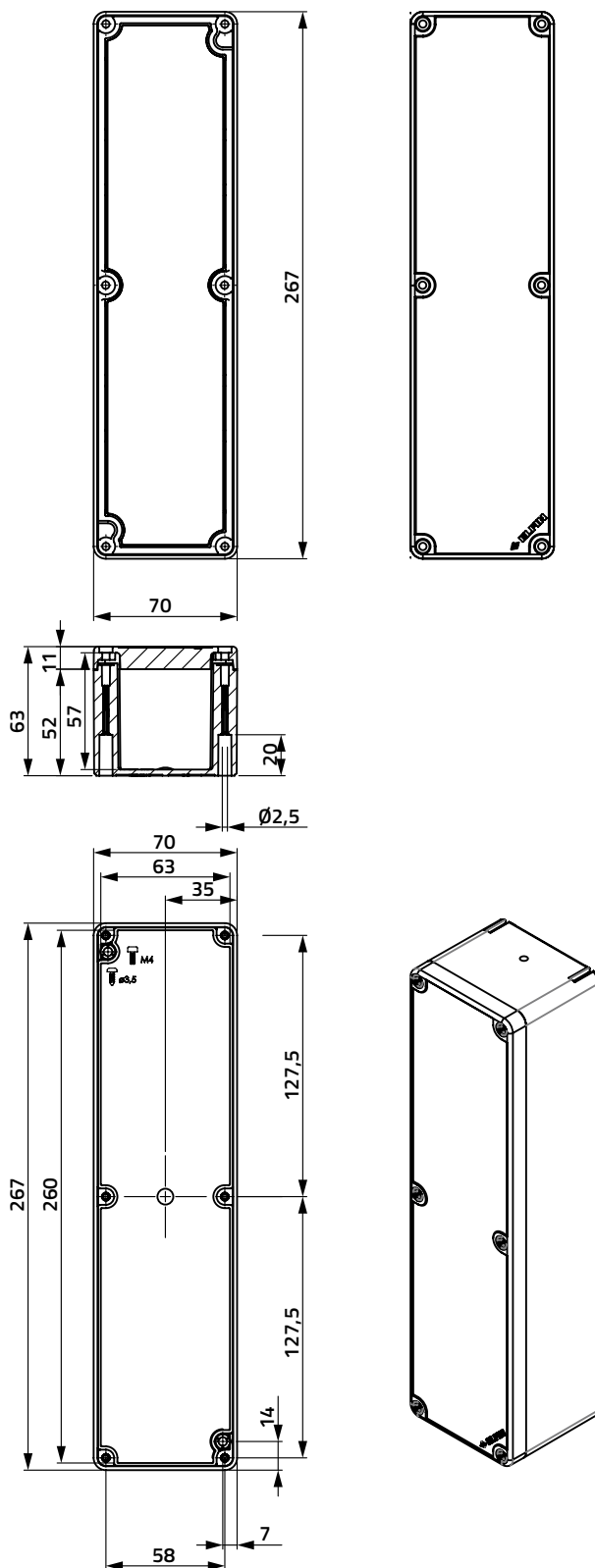
Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

	63	080T0718-6S3
Certificazione UL / UL Certification	63	080TU0718-6S3

h g cod

Scatole in termoplastico 70x267 mm Thermoplastic enclosures 70x267 mm

SERIE TECHNO / SERIES TECHNO



Scatole in termoplastico 70x267 mm Thermoplastic enclosures 70x267 mm

SERIE TECHNO / SERIES TECHNO

h g cod



Coperchio senza fori / Undrilled lid

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

	63	080T0727-6
Certificazione UL / UL Certification	63	080TU0727-6



Coperchio giallo senza fori / Undrilled yellow lid

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

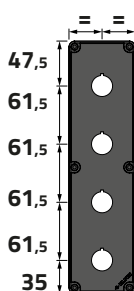
	63	080T0727-6G
Certificazione UL / UL Certification	63	080TU0727-6G



Coperchio trasparente senza fori / Transparent undrilled lid

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

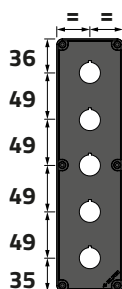
	63	080T0727-6T
Certificazione UL / UL Certification	63	080TU0727-6T



Coperchio con 4 fori Ø 22mm / 4-hole lid Ø 22mm

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

	63	080T0727-6P4
Certificazione UL / UL Certification	63	080TU0727-6P4



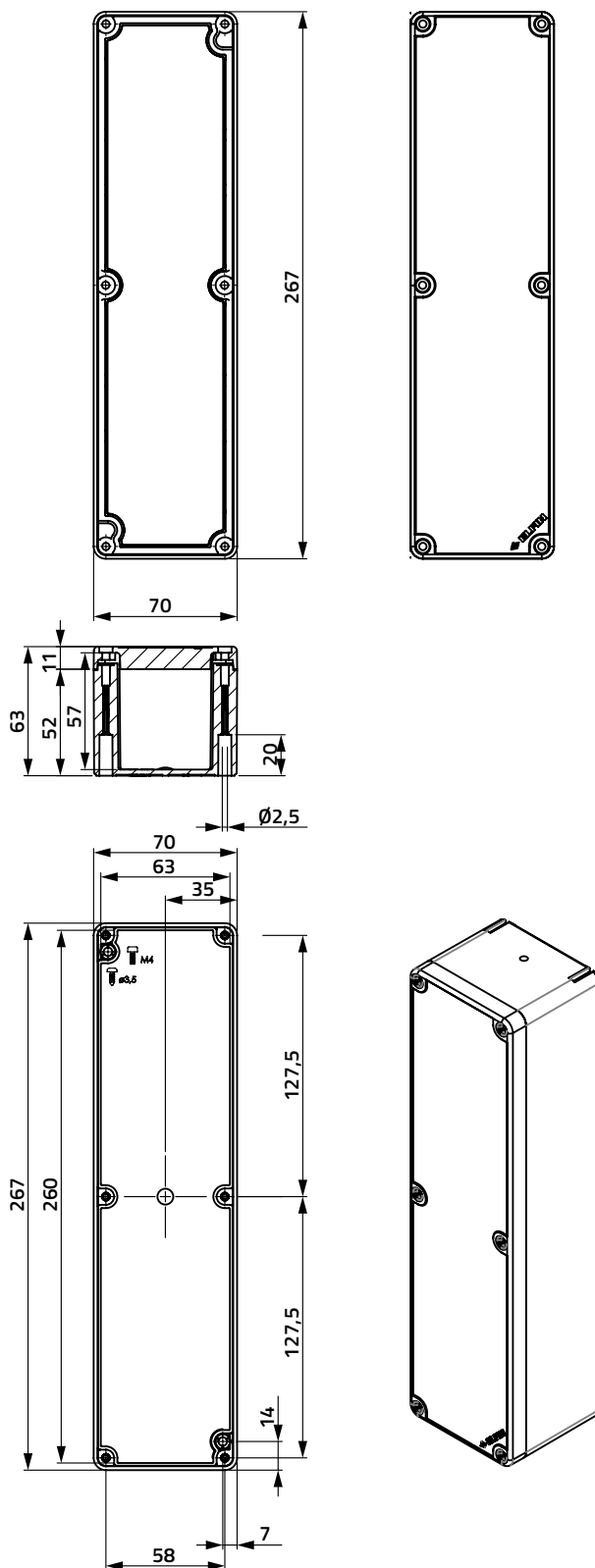
Coperchio con 5 fori Ø 22mm / 5-hole lid Ø 22mm

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

	63	080T0727-6P5
Certificazione UL / UL Certification	63	080TU0727-6P5

Scatole in termoplastico 70x267 mm Thermoplastic enclosures 70x267 mm

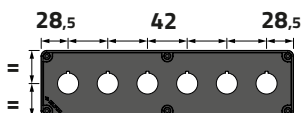
SERIE TECHNO / SERIES TECHNO



Scatole in termoplastico 70x267 mm Thermoplastic enclosures 70x267 mm

SERIE TECHNO / SERIES TECHNO

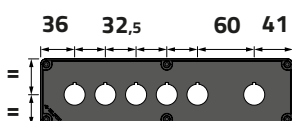
h g cod



Coperchio con 6 fori Ø 22mm / 6-hole lid Ø 22mm

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

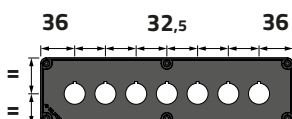
	63	080T0727-6P6L
Certificazione UL / UL Certification	63	080TU0727-6P6L



Coperchio con 6 fori Ø 22mm / 6-hole lid Ø 22mm

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

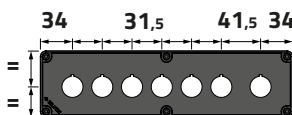
	63	080T0727-6P6LC
Certificazione UL / UL Certification	63	080TU0727-6P6LC



Coperchio con 7 fori Ø 22mm / 7-hole lid Ø 22mm

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

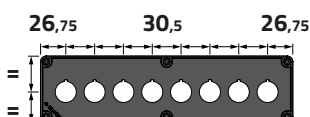
	63	080T0727-6P7L
Certificazione UL / UL Certification	63	080TU0727-6P7L



Coperchio con 7 fori Ø 22mm / 7-hole lid Ø 22mm

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

	63	080T0727-6P7LC
Certificazione UL / UL Certification	63	080TU0727-6P7LC



Coperchio con 8 fori Ø 22mm / 8-hole lid Ø 22mm

Poliammide rinforzato in fibra di vetro / Glass fibre reinforced polyamide

	63	080T0727-6P8L
Certificazione UL / UL Certification	63	080TU0727-6P8L

Scatole in termoplastico 70 mm Thermoplastic enclosures 70 mm

SERIE TECHNO / SERIES TECHNO

Accessori / Accessories

g

cod

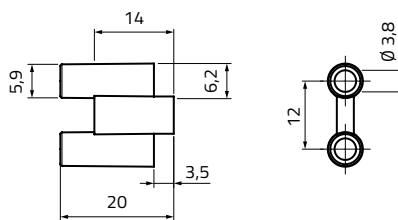


Sistema accoppiamento Techno 70 mm Techno 70 mm coupling system

Progettazione secondo criteri UL-CSA
Designed according to UL-CSA criteria

080TSA70

080TUSA70

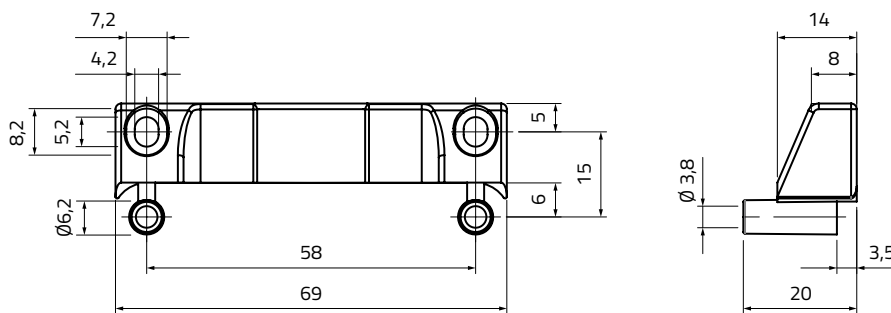


Sistema fissaggio Techno 70 mm Techno 70 mm mounting system

Progettazione secondo criteri UL-CSA
Designed according to UL-CSA criteria

080TSF70

080TUSF70



Scatole in termoplastico 70 mm Thermoplastic enclosures 70 mm

SERIE TECHNO / SERIES TECHNO

Accessori / Accessories

g

cod

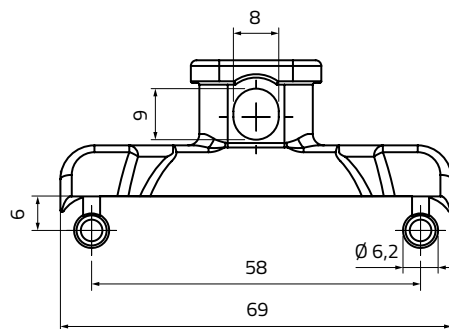


Sistema fissaggio ad anello Techno 70 mm Techno 70 mm ring-mounting system

Progettazione secondo criteri UL-CSA
Designed according to UL-CSA criteria

080TSFA70

080TUSFA70



Sistema fissaggio magnetico Techno 70 mm Techno 70 mm magnetic mounting system

Progettazione secondo criteri UL-CSA
Designed according to UL-CSA criteria

080TSFM70

080TUSFM70

Scatole in termoplastico 70 mm Thermoplastic enclosures 70 mm

SERIE TECHNO / SERIES TECHNO

Accessori / Accessories

g

cod



Sistema inclinato Techno 70 mm Techno 70 mm sloped mounting system

Progettazione secondo criteri UL-CSA
Designed according to UL-CSA criteria

080TSI70

080TUSI70



Sistema fissaggio inclinato a 90° Techno 70 mm Techno 70 mm 90° sloped mounting system

Progettazione secondo criteri UL-CSA
Designed according to UL-CSA criteria

080TSF070

080TUSF070

Scatole in termoplastico 70 mm Thermoplastic enclosures 70 mm

SERIE TECHNO / SERIES TECHNO

Accessori / Accessories

g

cod



Sistema fissaggio ad incasso Techno 70 mm Techno 70 mm wall-mounting system

Progettazione secondo criteri UL-CSA
Designed according to UL-CSA criteria

080TSFF70

080TUSFF70



Sistema fissaggio tandem Techno 70 mm Techno 70 mm tandem mounting system

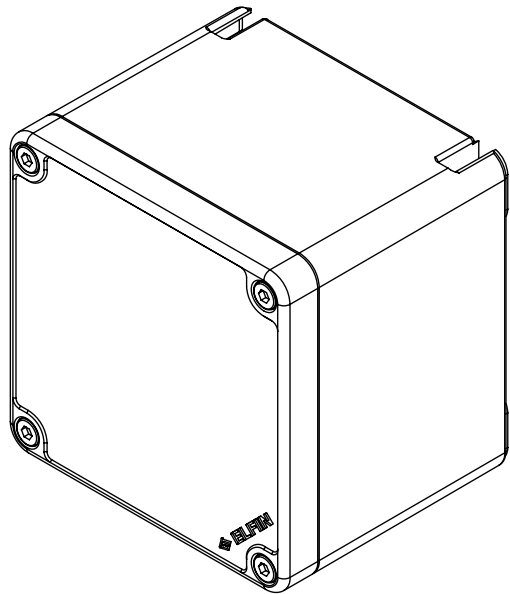
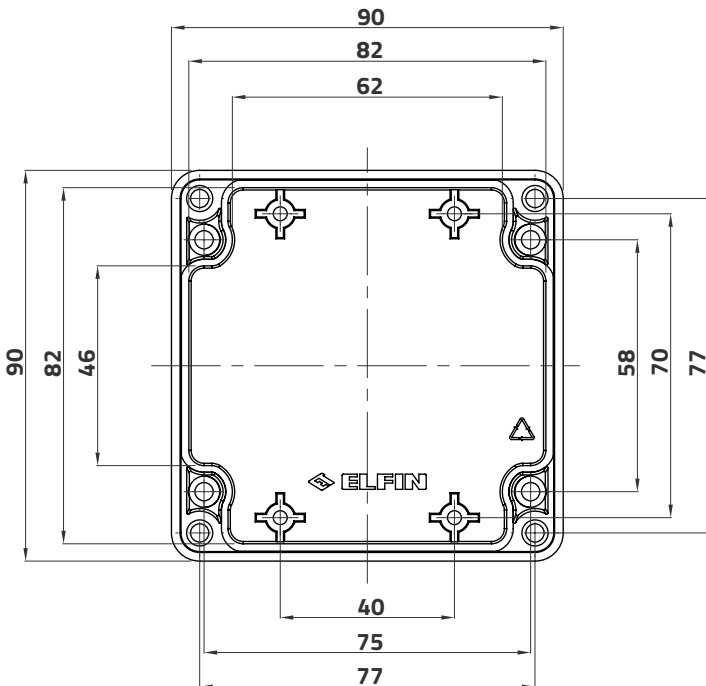
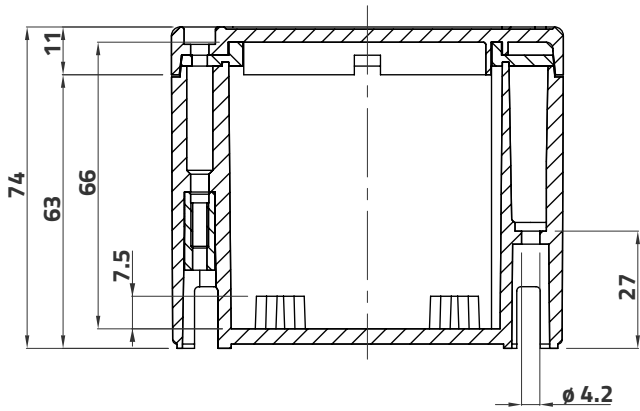
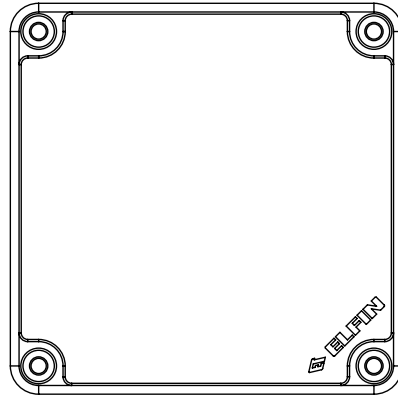
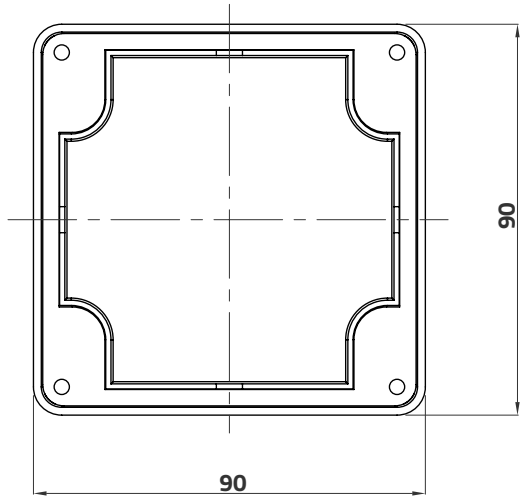
Progettazione secondo criteri UL-CSA
Designed according to UL-CSA criteria

080TSFT70

080TUSFT70

Scatole in termoplastico 90x90mm Thermoplastic enclosures 90x90mm

SERIES TECHNO / SERIES TECHNO



Scatole in termoplastico 90x90mm Thermoplastic enclosures 90x90mm

SERIE TECHNO / SERIES TECHNO

h g cod



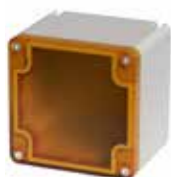
Coperchio senza fori / Undrilled lid

PA + fibra di vetro / PA + Glass fibre	74	080T0909-7
Certificazione UL / UL Certification	74	080TU0909-7



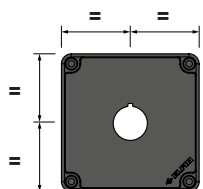
Coperchio giallo senza fori / Undrilled yellow lid

PA + fibra di vetro / PA + Glass fibre	74	080T0909-7G
Certificazione UL / UL Certification	74	080TU0909-7G



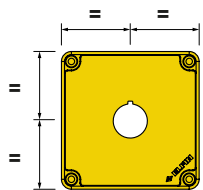
Coperchio trasparente senza fori / Transparent Undrilled lid

PA + fibra di vetro / PA + Glass fibre	74	080T0909-7T
Certificazione UL / UL Certification	74	080TU0909-7T



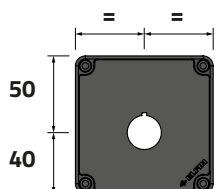
Coperchio con 1 foro Ø 22mm / 1-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre	74	080T0909-7P1C
Certificazione UL / UL Certification	74	080TU0909-7P1C



Coperchio giallo con 1 foro Ø 22mm / 1-hole yellow lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre	74	080T0909-7GP1C
Certificazione UL / UL Certification	74	080TU0909-7GP1C

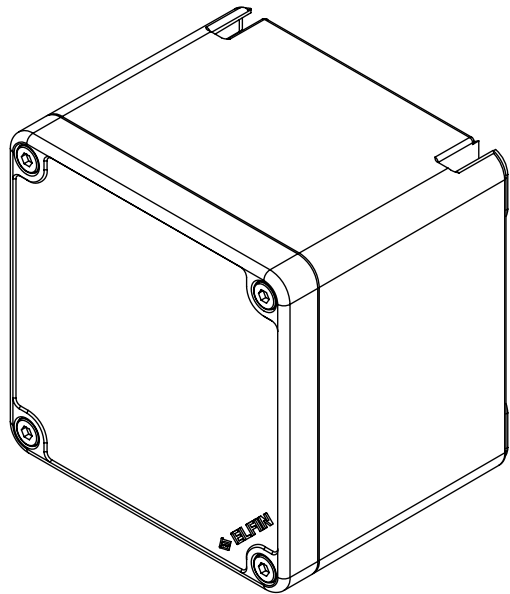
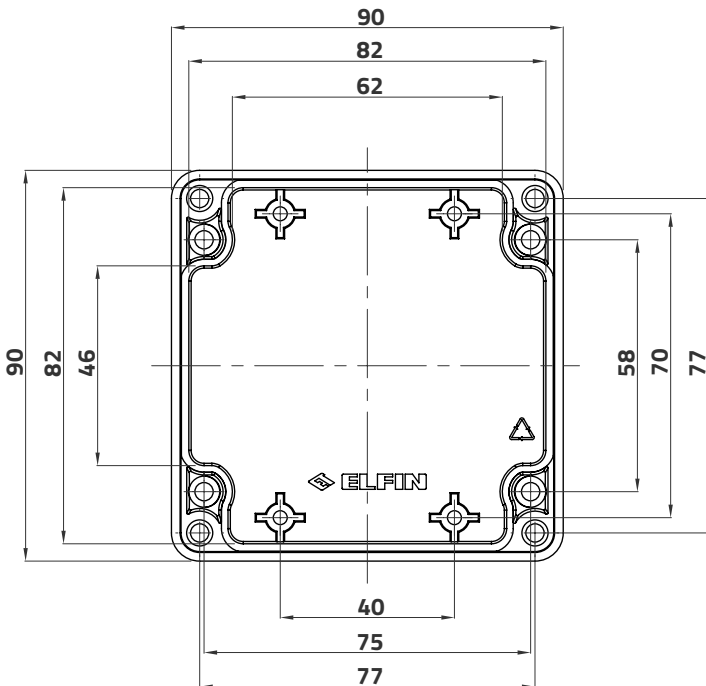
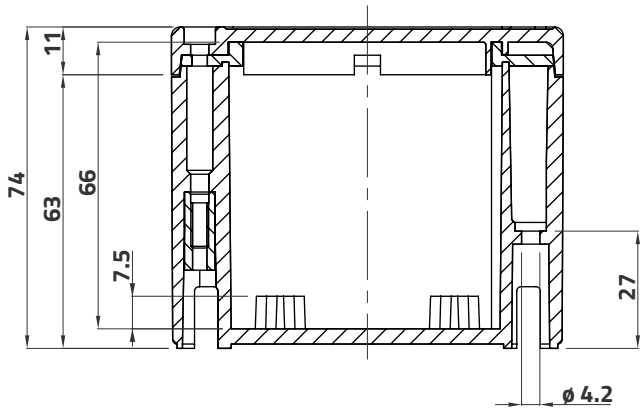
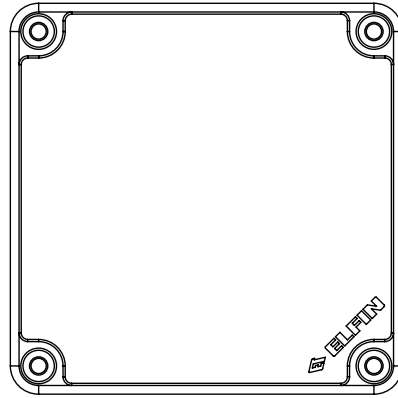
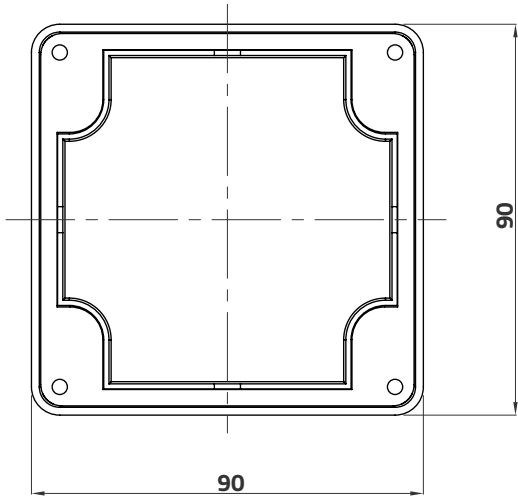


Coperchio con 1 foro Ø 22mm / 1-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre	74	080T0909-7P1
Certificazione UL / UL Certification	74	080TU0909-7P1

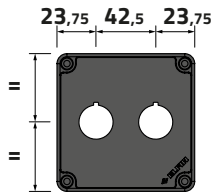
Scatole in termoplastico 90x90mm Thermoplastic enclosures 90x90mm

SERIES TECHNO / SERIES TECHNO



Scatole in termoplastico 90x90mm Thermoplastic enclosures 90x90mm

SERIE TECHNO / SERIES TECHNO



Coperchio con 2 fori \varnothing 22mm / 2-hole lid \varnothing 22mm

PA + fibra di vetro / PA + Glass fibre

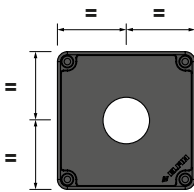
74

080T0909-7P2

Certificazione UL / UL Certification

74

080TU0909-7P2



Coperchio con 1 foro \varnothing 30 mm / 1-hole lid \varnothing 30 mm

PA + fibra di vetro / PA + Glass fibre

74

080T0909-7S1

Certificazione UL / UL Certification

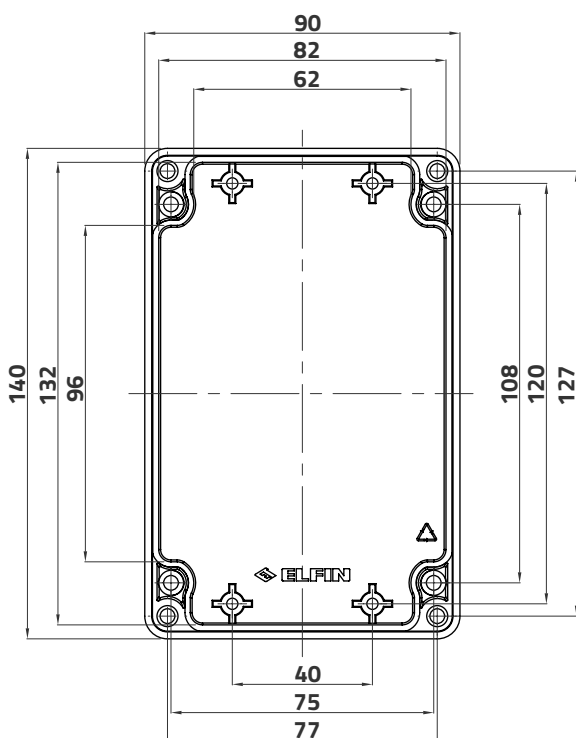
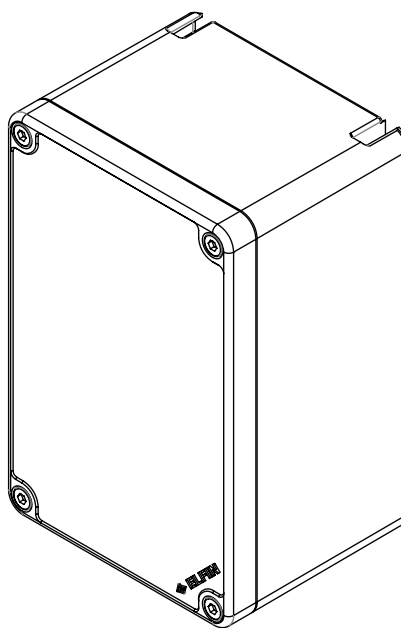
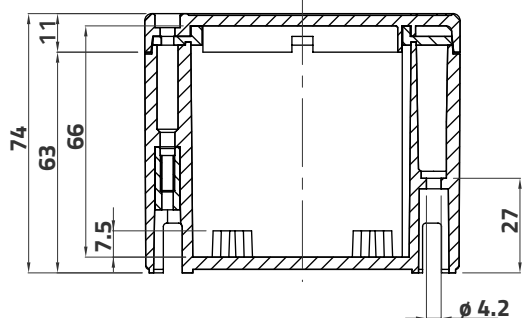
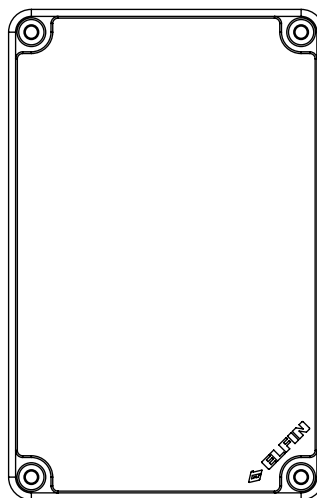
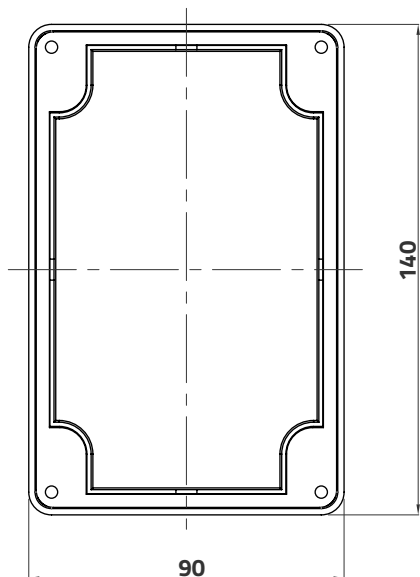
74

080TU0909-7S1

Scatole in termoplastico 90x140mm

Thermoplastic enclosures 90x140mm

SERIES TECHNO/ SERIES TECHNO



Scatole in termoplastico 90x140mm Thermoplastic enclosures 90x140mm

SERIE TECHNO / SERIES TECHNO

h g cod



Coperchio senza fori / Undrilled lid

PA + fibra di vetro / PA + Glass fibre	74	080T0914-7
Certificazione UL / UL Certification	74	080TU0914-7



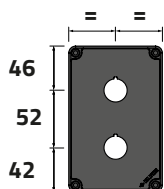
Coperchio giallo senza fori / Undrilled yellow lid

PA + fibra di vetro / PA + Glass fibre	74	080T0914-7G
Certificazione UL / UL Certification	74	080TU0914-7G



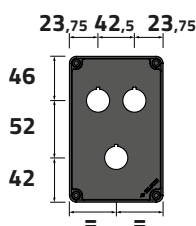
Coperchio trasparente senza fori / Transparent Undrilled lid

PA + fibra di vetro / PA + Glass fibre	74	080T0914-7T
Certificazione UL / UL Certification	74	080TU0914-7T



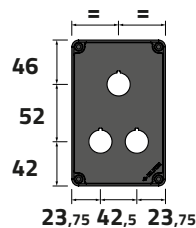
Coperchio con 2 fori Ø 22mm / 2-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre	74	080T0914-7P2
Certificazione UL / UL Certification	74	080TU0914-7P2



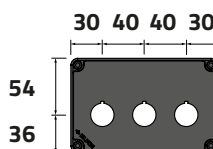
Coperchio con 3 fori Ø 22mm / 3-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre	74	080T0914-7P3C
Certificazione UL / UL Certification	74	080TU0914-7P3C



Coperchio con 3 fori Ø 22mm / 3-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre	74	080T0914-7P3
Certificazione UL / UL Certification	74	080TU0914-7P3



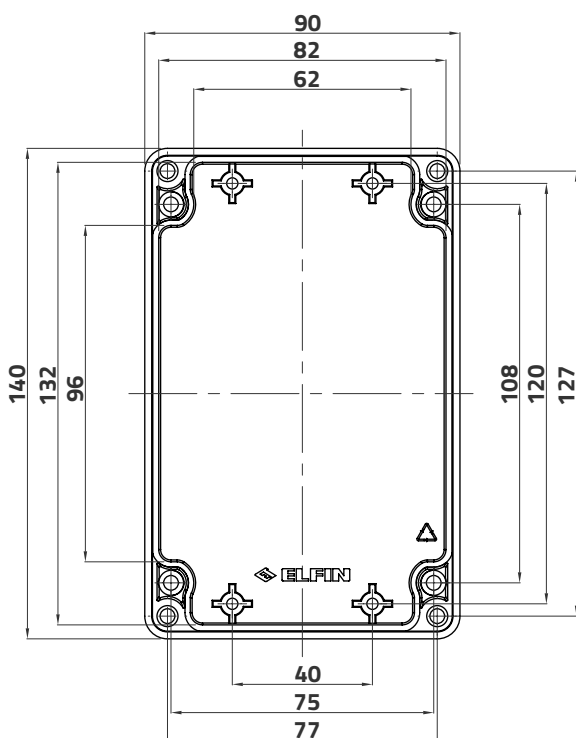
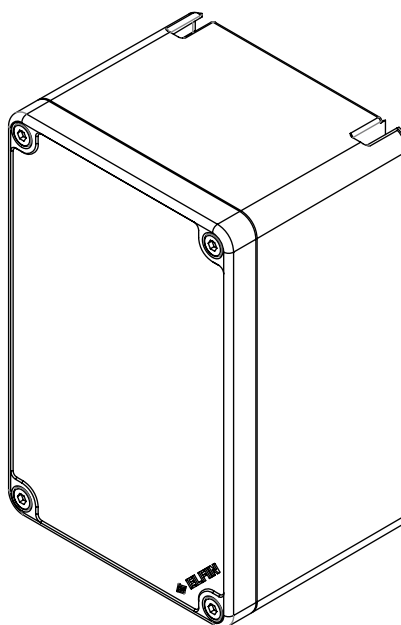
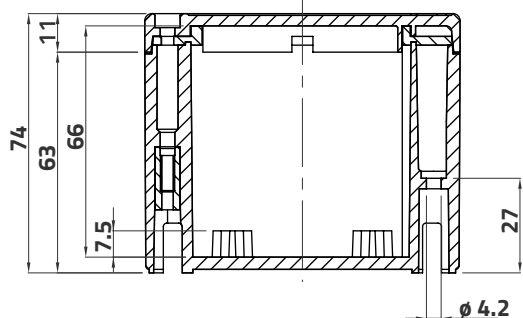
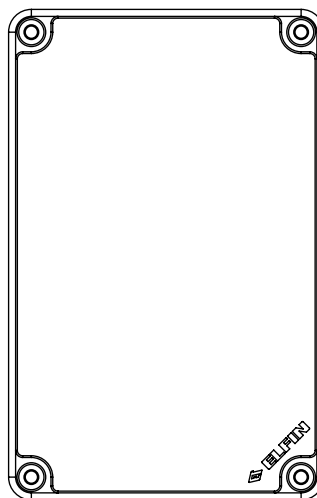
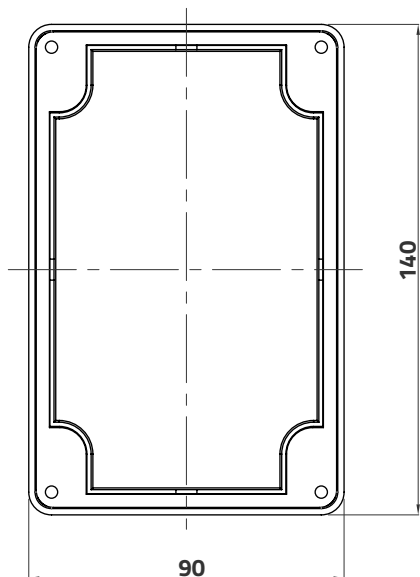
Coperchio con 3 fori Ø 22mm / 3-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre	74	080T0914-7P3L
Certificazione UL / UL Certification	74	080TU0914-7P3L



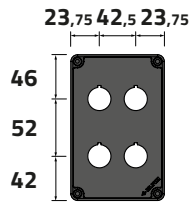
Scatole in termoplastico 90x140mm Thermoplastic enclosures 90x140mm

SERIES TECHNO/ SERIES TECHNO



Scatole in termoplastico 90x140mm Thermoplastic enclosures 90x140mm

SERIE TECHNO / SERIES TECHNO



Coperchio con 4 fori Ø 22mm / 4-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre

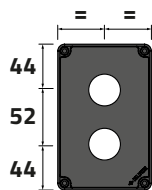
74

080T0914-7P4

Certificazione UL / UL Certification

74

080TU0914-7P4



Coperchio con 2 fori Ø 30 mm / 2-hole lid Ø 30 mm

PA + fibra di vetro / PA + Glass fibre

74

080T0914-7S2

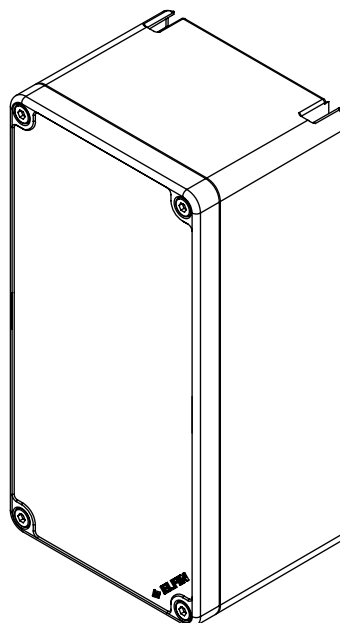
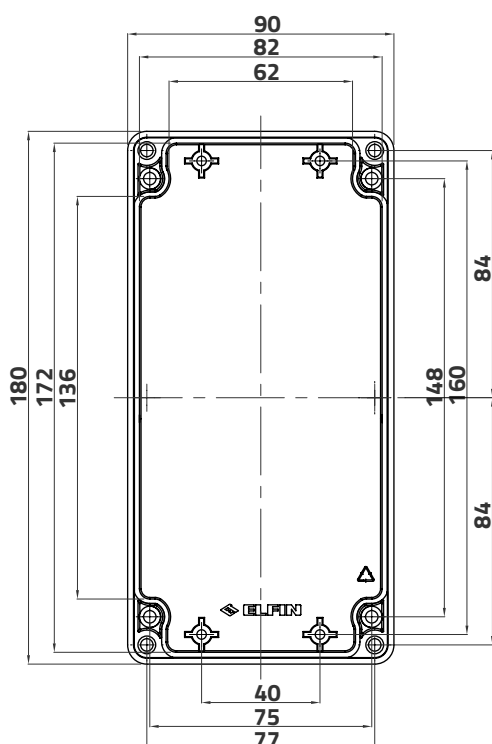
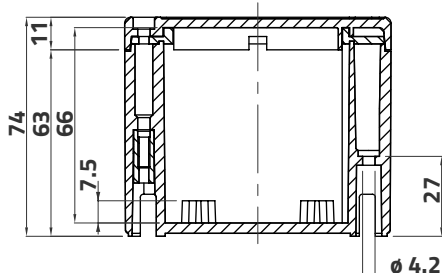
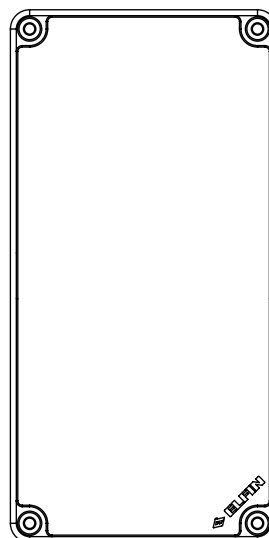
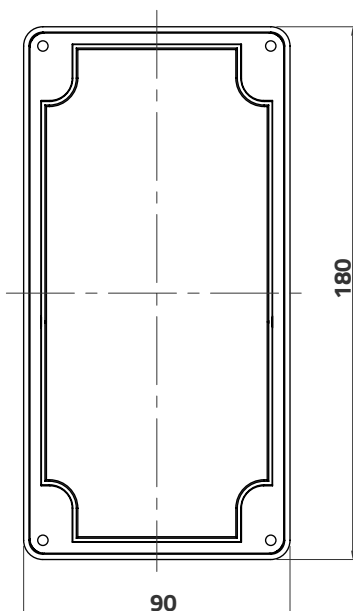
Certificazione UL / UL Certification

74

080TU0914-7S2

Scatole in termoplastico 90x180mm Thermoplastic enclosures 90x180mm

SERIES TECHNO / SERIES TECHNO



Scatole in termoplastico 90x180mm Thermoplastic enclosures 90x180mm

SERIE TECHNO / SERIES TECHNO

h g cod



Coperchio senza fori / Undrilled lid

PA + fibra di vetro / PA + Glass fibre	74	080T0918-7
Certificazione UL / UL Certification	74	080TU0918-7



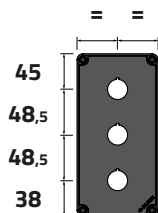
Coperchio giallo senza fori / Undrilled yellow lid

PA + fibra di vetro / PA + Glass fibre	74	080T0914-7G
Certificazione UL / UL Certification	74	080TU0914-7G



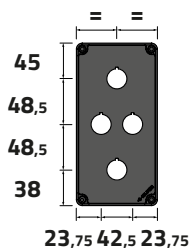
Coperchio trasparente senza fori / Transparent Undrilled lid

PA + fibra di vetro / PA + Glass fibre	74	080T0918-7T
Certificazione UL / UL Certification	74	080TU0918-7T



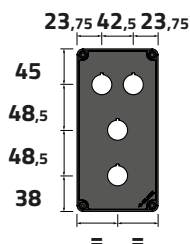
Coperchio con 3 fori Ø 22mm / 3-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre	74	080T0918-7P3
Certificazione UL / UL Certification	74	080TU0918-7P3



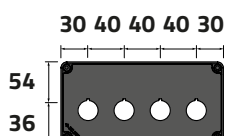
Coperchio con 4 fori Ø 22mm / 4-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre	74	080T0918-7P4
Certificazione UL / UL Certification	74	080TU0918-7P4



Coperchio con 4 fori Ø 22mm / 4-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre	74	080T0918-7P4C
Certificazione UL / UL Certification	74	080TU0918-7P4C



Coperchio con 4 fori Ø 22mm / 4-hole lid Ø 22mm

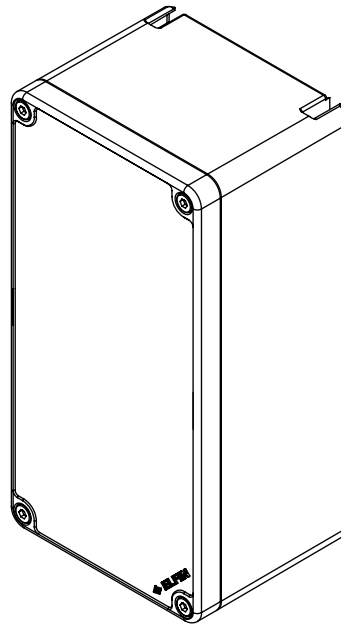
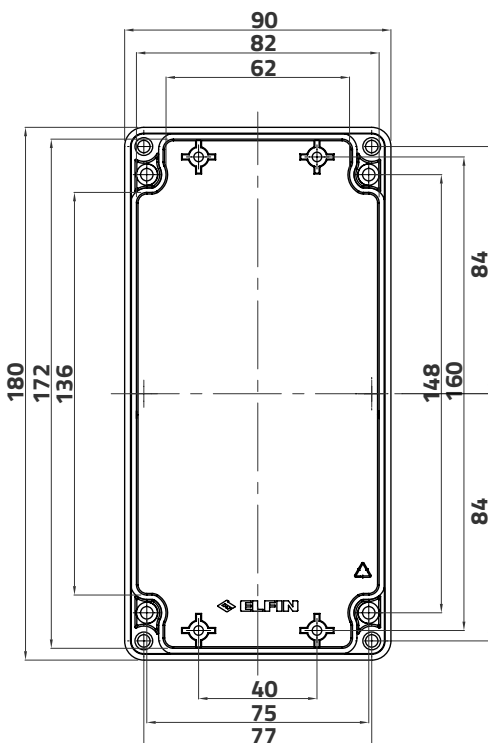
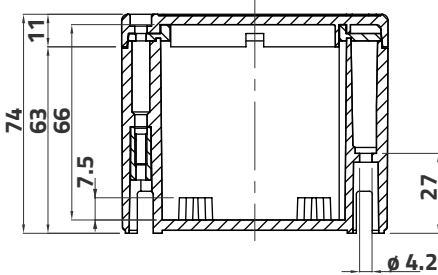
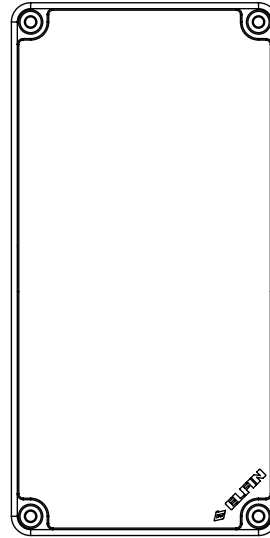
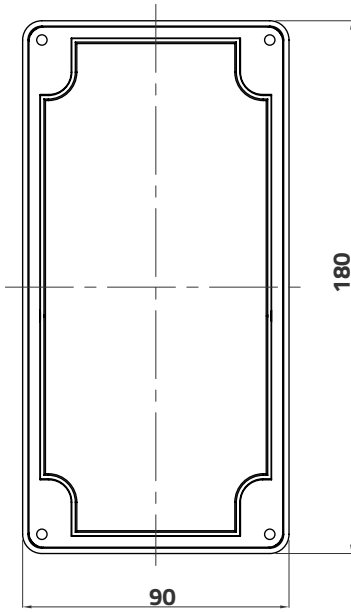
PA + fibra di vetro / PA + Glass fibre	74	080T0918-7P4L
Certificazione UL / UL Certification	74	080TU0918-7P4L



Scatole in termoplastico 90x180mm

Thermoplastic enclosures 90x180mm

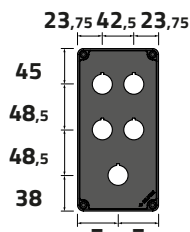
SERIES TECHNO / SERIES TECHNO



Scatole in termoplastico 90x180mm Thermoplastic enclosures 90x180mm

SERIE TECHNO / SERIES TECHNO

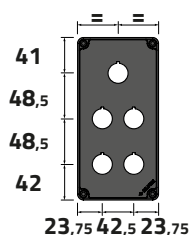
h g cod



Coperchio con 5 fori Ø 22mm / 5-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre

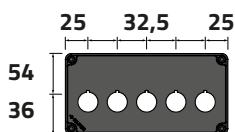
	74	080T0918-7P5C
Certificazione UL / UL Certification	74	080TU0918-7P5C



Coperchio con 5 fori Ø 22mm / 5-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre

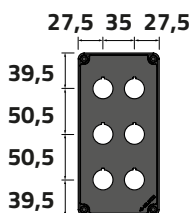
	74	080T0918-7P5
Certificazione UL / UL Certification	74	080TU0918-7P5



Coperchio con 5 fori Ø 22mm / 5-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre

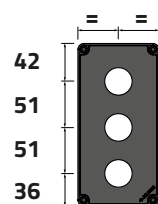
	74	080T0918-7P5L
Certificazione UL / UL Certification	74	080TU0918-7P5L



Coperchio con 6 fori Ø 22mm / 6-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre

	74	080T0918-7P6
Certificazione UL / UL Certification	74	080TU0918-7P6



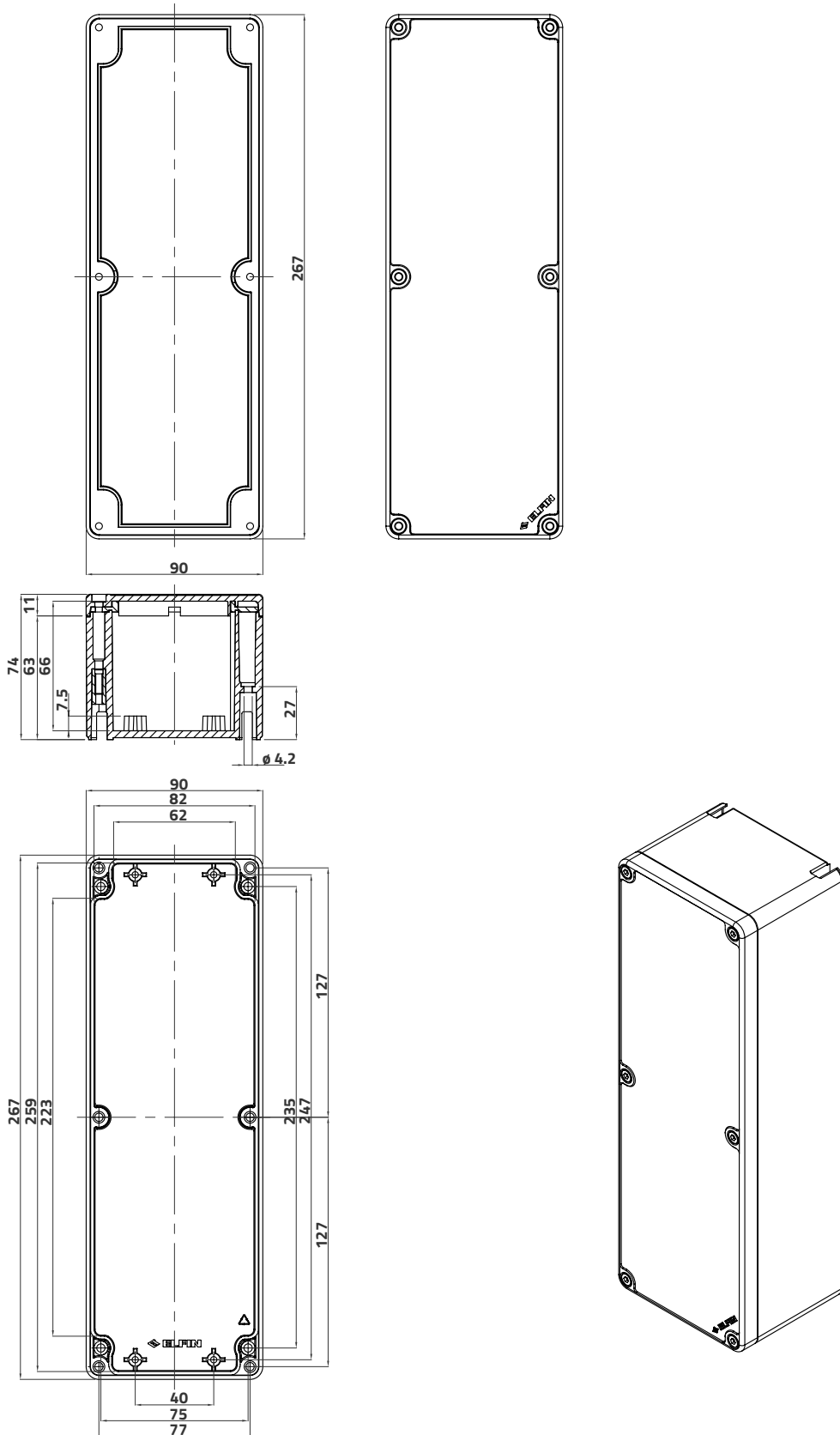
Coperchio con 3 fori Ø 30mm / 3-hole lid Ø 30mm

PA + fibra di vetro / PA + Glass fibre

	74	080T0918-7S3
Certificazione UL / UL Certification	74	080TU0918-7S3

Scatole in termoplastico 90x267mm Thermoplastic enclosures 90x267mm

SERIE TECHNO / SERIES TECHNO



Scatole in termoplastico 90x267mm Thermoplastic enclosures 90x267mm

SERIE TECHNO / SERIES TECHNO

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Coperchio senza fori / Undrilled lid

PA + fibra di vetro / PA + Glass fibre	74	080T0927-7
Certificazione UL / UL Certification	74	080TU0927-7



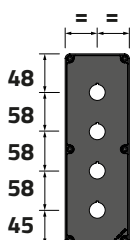
Coperchio giallo senza fori / Undrilled yellow lid

PA + fibra di vetro / PA + Glass fibre	74	080T0927-7G
Certificazione UL / UL Certification	74	080TU0927-7G



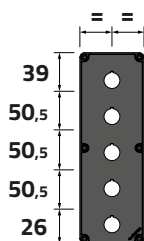
Coperchio trasparente senza fori / Transparent Undrilled lid

PA + fibra di vetro / PA + Glass fibre	74	080T0927-7T
Certificazione UL / UL Certification	74	080TU0927-7T



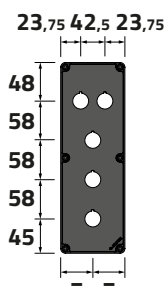
Coperchio con 4 fori Ø 22mm / 4-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre	74	080T0927-7P4
Certificazione UL / UL Certification	74	080TU0927-7P4



Coperchio con 5 fori Ø 22mm / 5-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre	74	080T0927-7P5
Certificazione UL / UL Certification	74	080TU0927-7P5

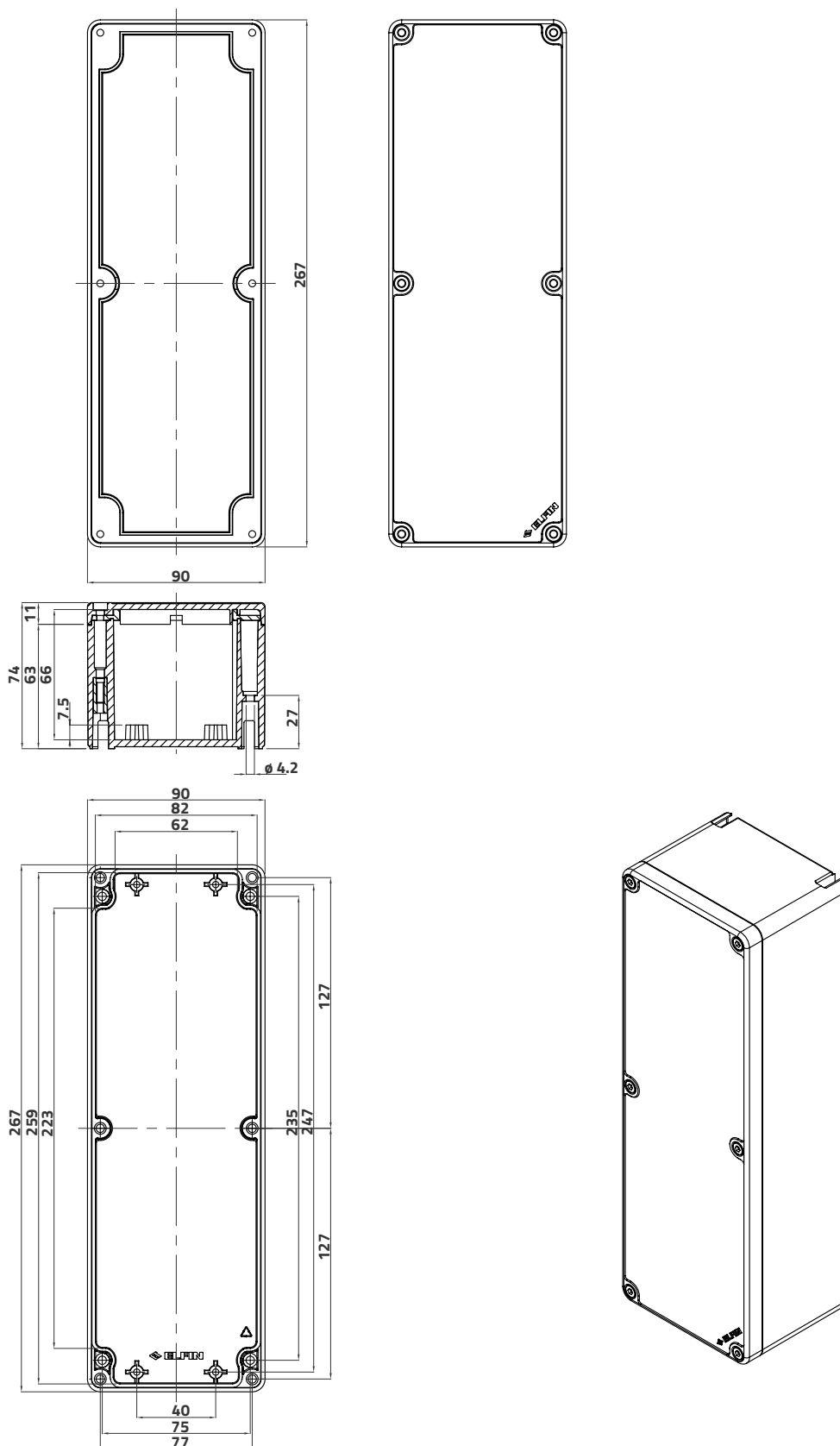


Coperchio con 5 fori Ø 22mm / 5-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre	74	080T0927-7P5C
Certificazione UL / UL Certification	74	080TU0927-7P5C

Scatole in termoplastico 90x267mm Thermoplastic enclosures 90x267mm

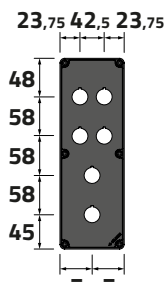
SERIE TECHNO / SERIES TECHNO



Scatole in termoplastico 90x267mm Thermoplastic enclosures 90x267mm

SERIE TECHNO / SERIES TECHNO

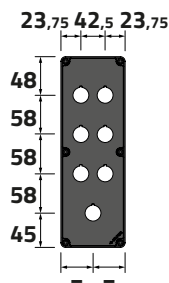
h g cod



Coperchio con 6 fori Ø 22mm / 6-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre

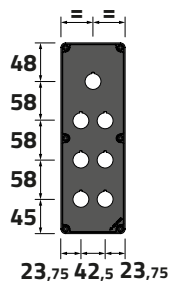
	74	080T0927-7P6C
Certificazione UL / UL Certification	74	080TU0927-7P6C



Coperchio con 7 fori Ø 22mm / 7-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre

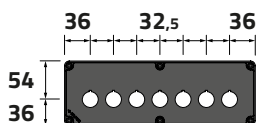
	74	080T0927-7P7C
Certificazione UL / UL Certification	74	080TU0927-7P7C



Coperchio con 7 fori Ø 22mm / 7-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre

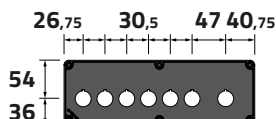
	74	080T0927-7P7
Certificazione UL / UL Certification	74	080TU0927-7P7



Coperchio con 7 fori Ø 22mm / 7-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre

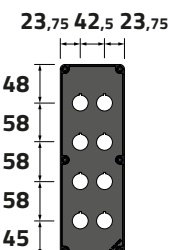
	74	080T0927-7P7L
Certificazione UL / UL Certification	74	080TU0927-7P7L



Coperchio con 7 fori Ø 22mm / 7-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre

	74	080T0927-7P7LC
Certificazione UL / UL Certification	74	080TU0927-7P7LC



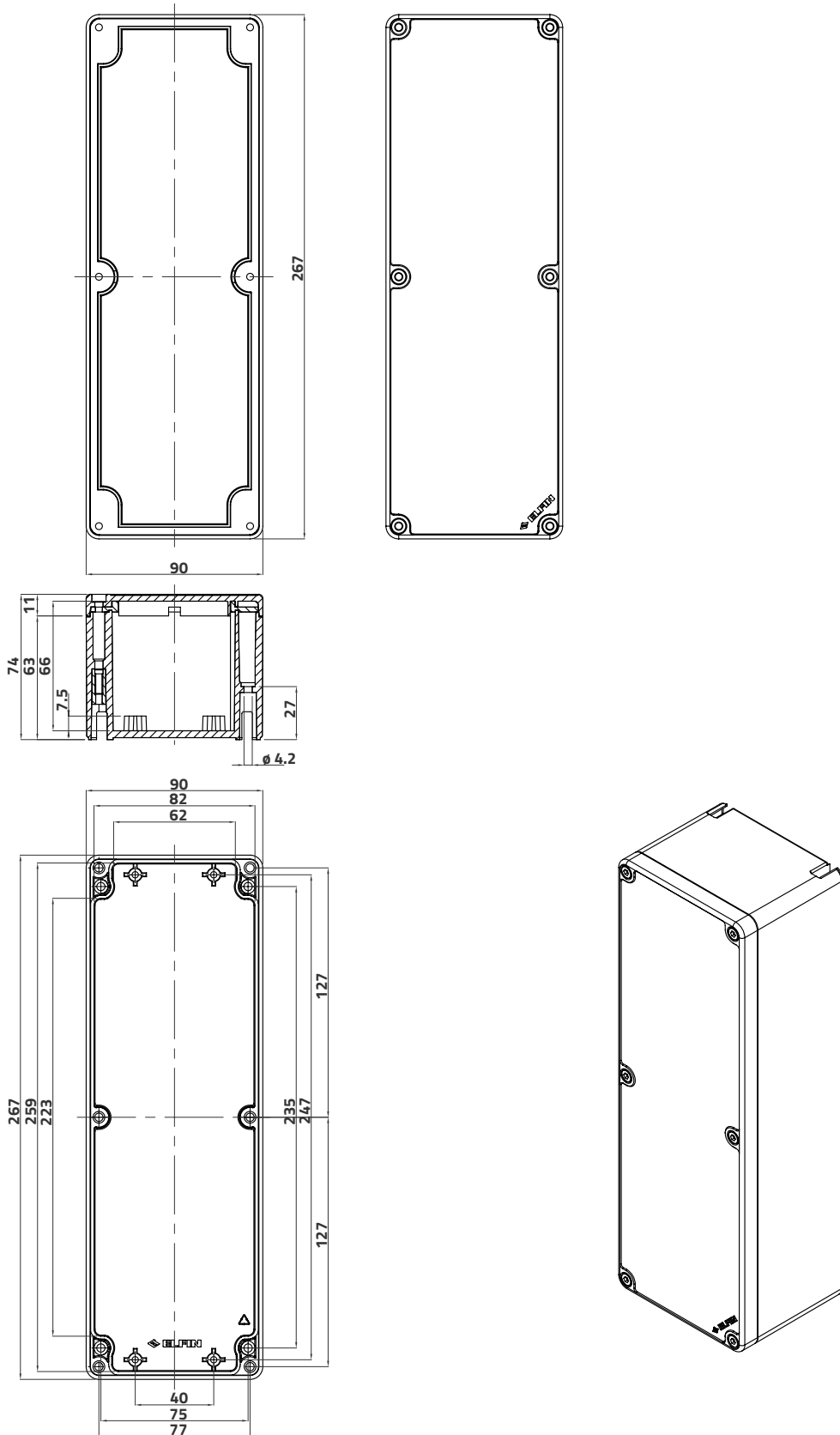
Coperchio con 8 fori Ø 22mm / 8-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre

	74	080T0927-7P8
Certificazione UL / UL Certification	74	080TU0927-7P8

Scatole in termoplastico 90x267mm Thermoplastic enclosures 90x267mm

SERIE TECHNO / SERIES TECHNO



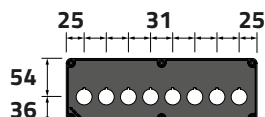
Scatole in termoplastico 90x267mm Thermoplastic enclosures 90x267mm

SERIE TECHNO / SERIES TECHNO

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Coperchio con 8 fori Ø 22mm / 8-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre

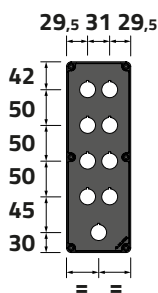
74

080T0927-7P8L

Certificazione UL / UL Certification

74

080TU0927-7P8L



Coperchio con 9 fori Ø 22mm / 9-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre

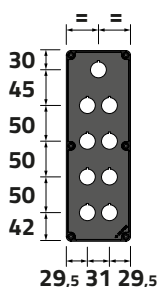
74

080T0927-7P9C

Certificazione UL / UL Certification

74

080TU0927-7P9C



Coperchio con 9 fori Ø 22mm / 9-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre

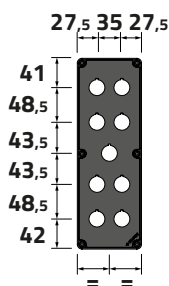
74

080T0927-7P9

Certificazione UL / UL Certification

74

080TU0927-7P9



Coperchio con 9 fori Ø 22mm / 9-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre

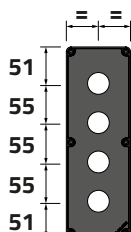
74

080T0927-7P9M

Certificazione UL / UL Certification

74

080TU0927-7P9M



Coperchio con 4 fori Ø 30mm / 4-hole lid Ø 30mm

PA + fibra di vetro / PA + Glass fibre

74

080T0927-7S4

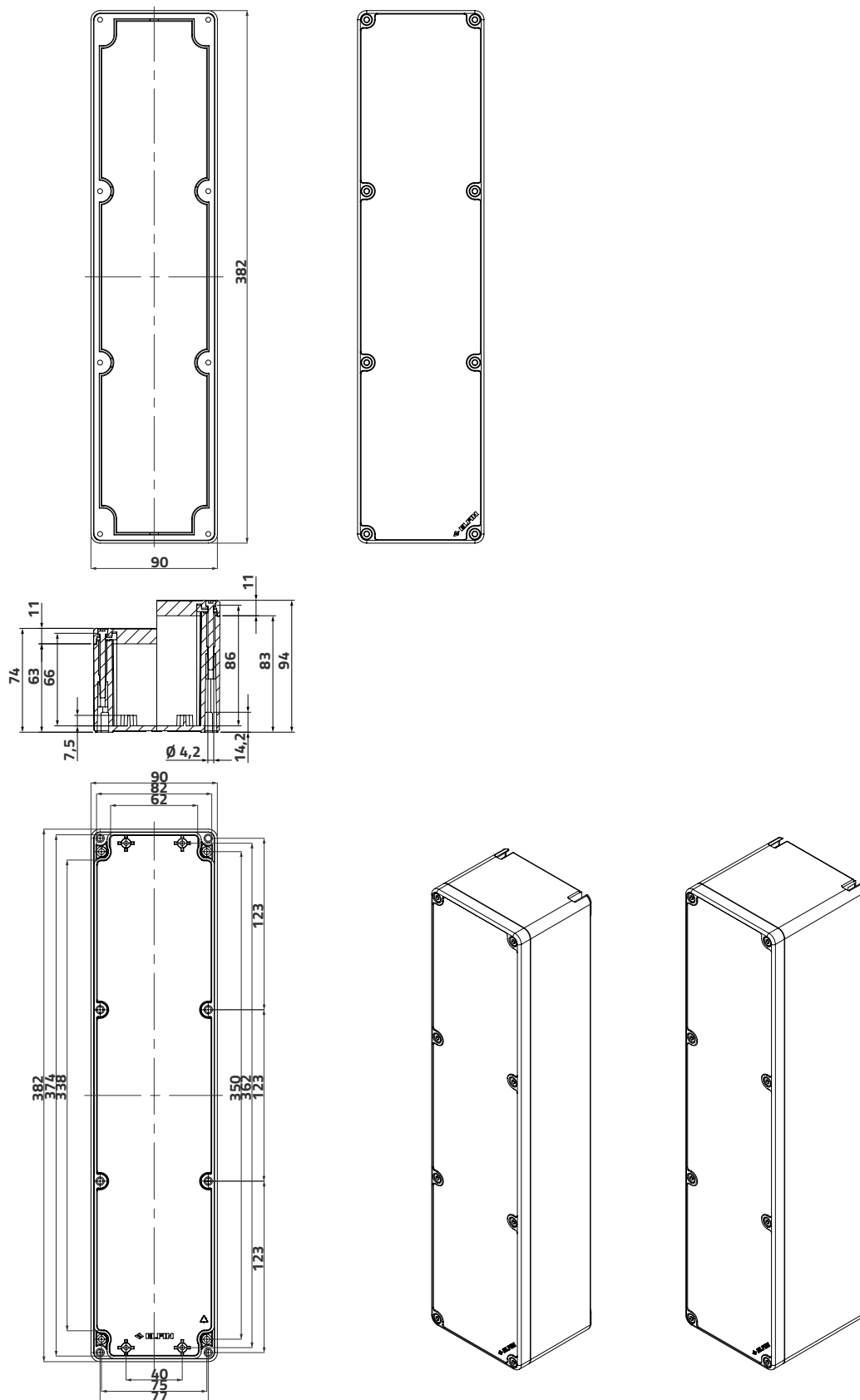
Certificazione UL / UL Certification

74

080TU0927-7S4

Scatole in termoplastico 90x379mm Thermoplastic enclosures 90x379mm

SERIE TECHNO / SERIES TECHNO



Scatole in termoplastico 90x382mm Thermoplastic enclosures 90x382mm

SERIE TECHNO / SERIES TECHNO

h g cod



Coperchio senza fori / Undrilled lid

PA + fibra di vetro / PA + Glass fibre	74	080T0938-7
Certificazione UL / UL Certification	74	080TU0938-7



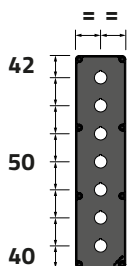
Coperchio giallo senza fori / Yellow undrilled lid

PA + fibra di vetro / PA + Glass fibre	74	080T0938-7G
Certificazione UL / UL Certification	74	080TU0938-7G



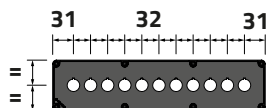
Coperchio trasparente senza fori / Transparent undrilled lid

PA + fibra di vetro / PA + Glass fibre	74	080T0938-7T
Certificazione UL / UL Certification	74	080TU0938-7T



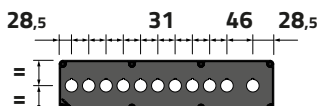
Coperchio con 7 fori Ø 22mm / 7-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre	74	080T0938-7P7
Certificazione UL / UL Certification	74	080TU0938-7P7



Coperchio con 11 fori Ø 22mm / 11-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre	74	080T0938-7P11L
Certificazione UL / UL Certification	74	080TU0938-7P11L



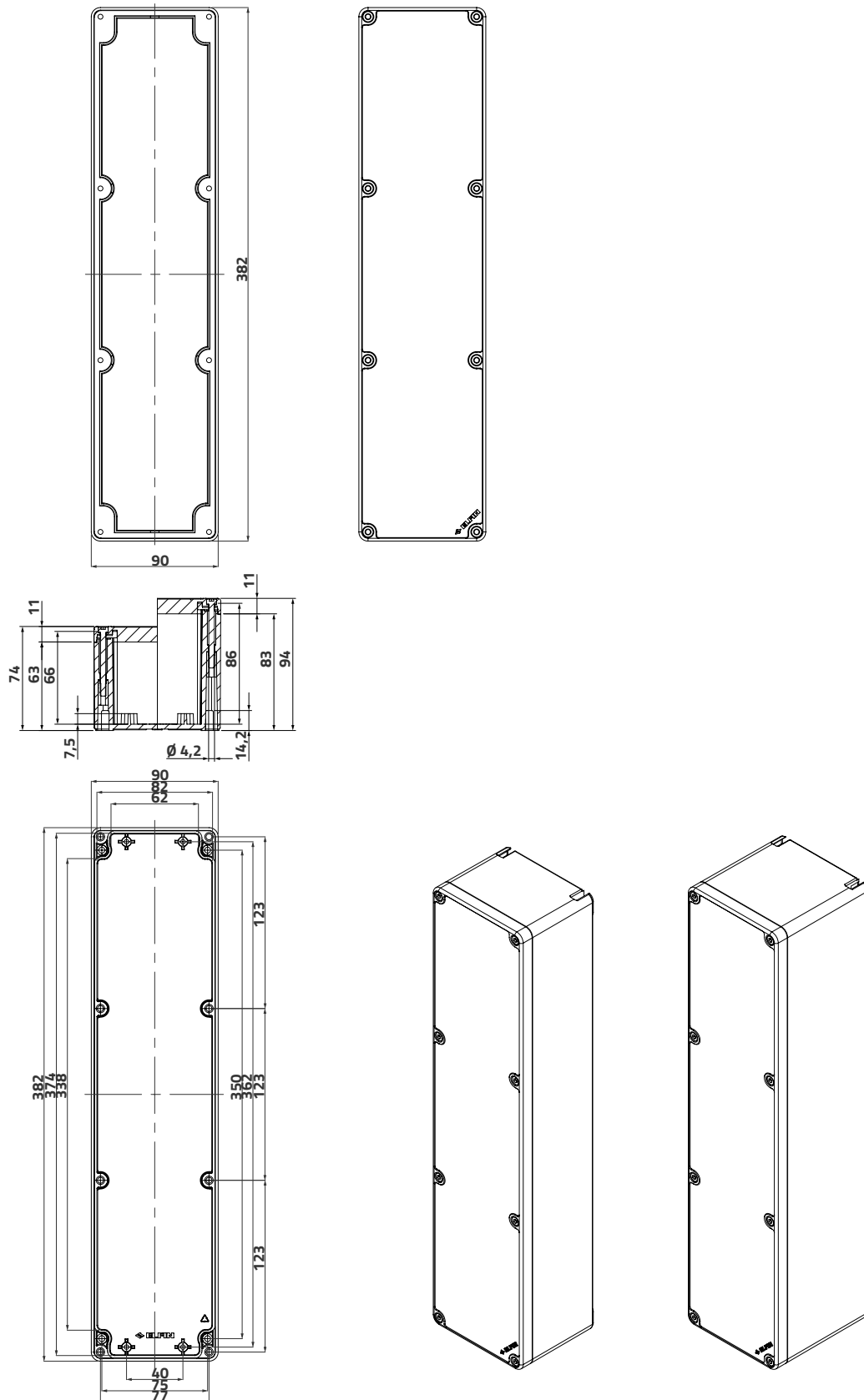
Coperchio con 11 fori Ø 22mm / 11-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre	74	080T0938-7P11C
Certificazione UL / UL Certification	74	080TU0938-7P11C

Scatole in termoplastico 90x379mm

Thermoplastic enclosures 90x379mm

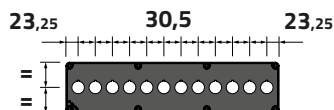
SERIE TECHNO / SERIES TECHNO



Scatole in termoplastico 90x382mm Thermoplastic enclosures 90x382mm

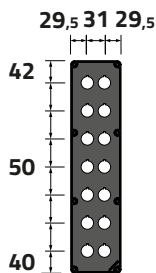
SERIE TECHNO / SERIES TECHNO

h g cod



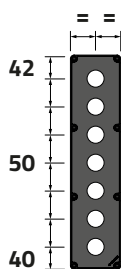
Coperchio con 12 fori Ø 22mm / 12-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre	74	080T0938-7P12L
Certificazione UL / UL Certification	74	080TU0938-7P12L



Coperchio con 14 fori Ø 22mm / 14-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre	74	080T0938-7P14
Certificazione UL / UL Certification	74	080TU0938-7P14

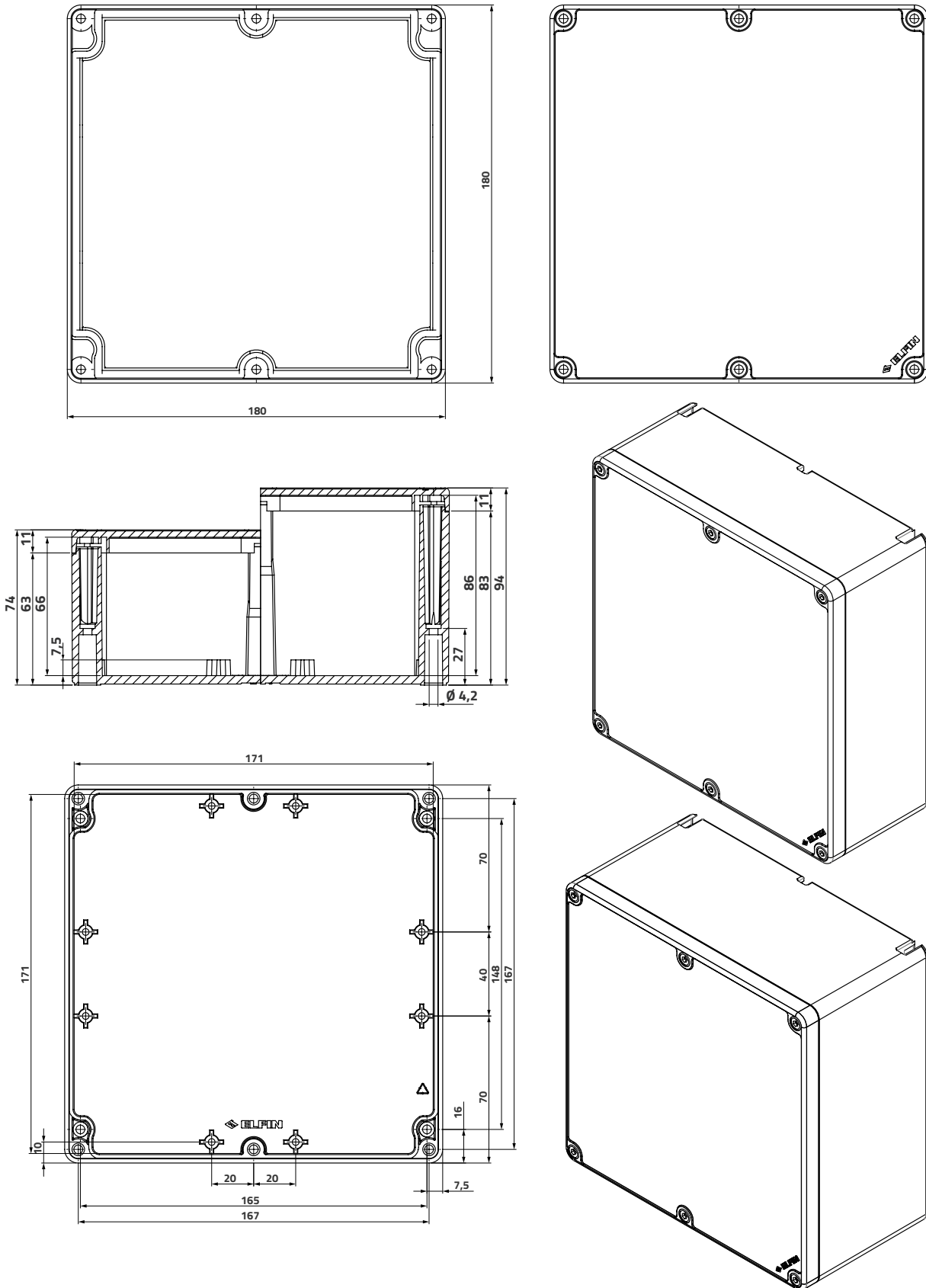


Coperchio con 7 fori Ø 30mm / 7-hole lid Ø 30mm

PA + fibra di vetro / PA + Glass fibre	74	080T0938-7S7
Certificazione UL / UL Certification	74	080TU0938-7S7

Scatole in termoplastico 180x180mm Thermoplastic enclosures 180x180mm

SERIE TECHNO / SERIES TECHNO



Scatole in termoplastico 180x180mm Thermoplastic enclosures 180x180mm

SERIE TECHNO / SERIES TECHNO

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Coperchio senza fori / Undrilled lid

PA + fibra di vetro / PA + Glass fibre	74	080T1818-7
Certificazione UL / UL Certification	74	080TU1818-7
	94	080T1818-9
Certificazione UL / UL Certification	94	080TU1818-9



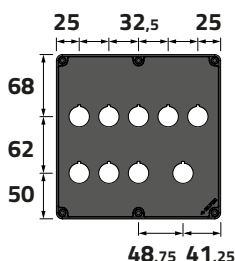
Coperchio giallo senza fori / Undrilled yellow lid

PA + fibra di vetro / PA + Glass fibre	74	080T1818-7G
Certificazione UL / UL Certification	74	080TU1818-7G
	94	080T1818-9G
Certificazione UL / UL Certification	94	080TU1818-9G



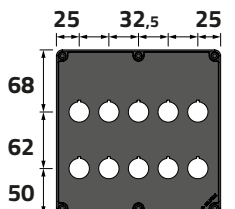
Coperchio trasparente senza fori / Transparent Undrilled lid

PA + fibra di vetro / PA + Glass fibre	74	080T1818-7T
Certificazione UL / UL Certification	74	080TU1818-7T
	94	080T1818-9T
Certificazione UL / UL Certification	94	080TU1818-9T



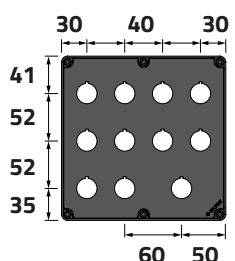
Coperchio con 9 fori Ø 22mm / 9-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre	74	080T1818-7P9C
Certificazione UL / UL Certification	74	080TU1818-7P9C
	94	080T1818-9P9C
Certificazione UL / UL Certification	94	080TU1818-9P9C



Coperchio con 10 fori Ø 22mm / 10-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre	74	080T1818-7P10
Certificazione UL / UL Certification	74	080TU1818-7P10
	94	080T1818-9P10
Certificazione UL / UL Certification	94	080TU1818-9P10

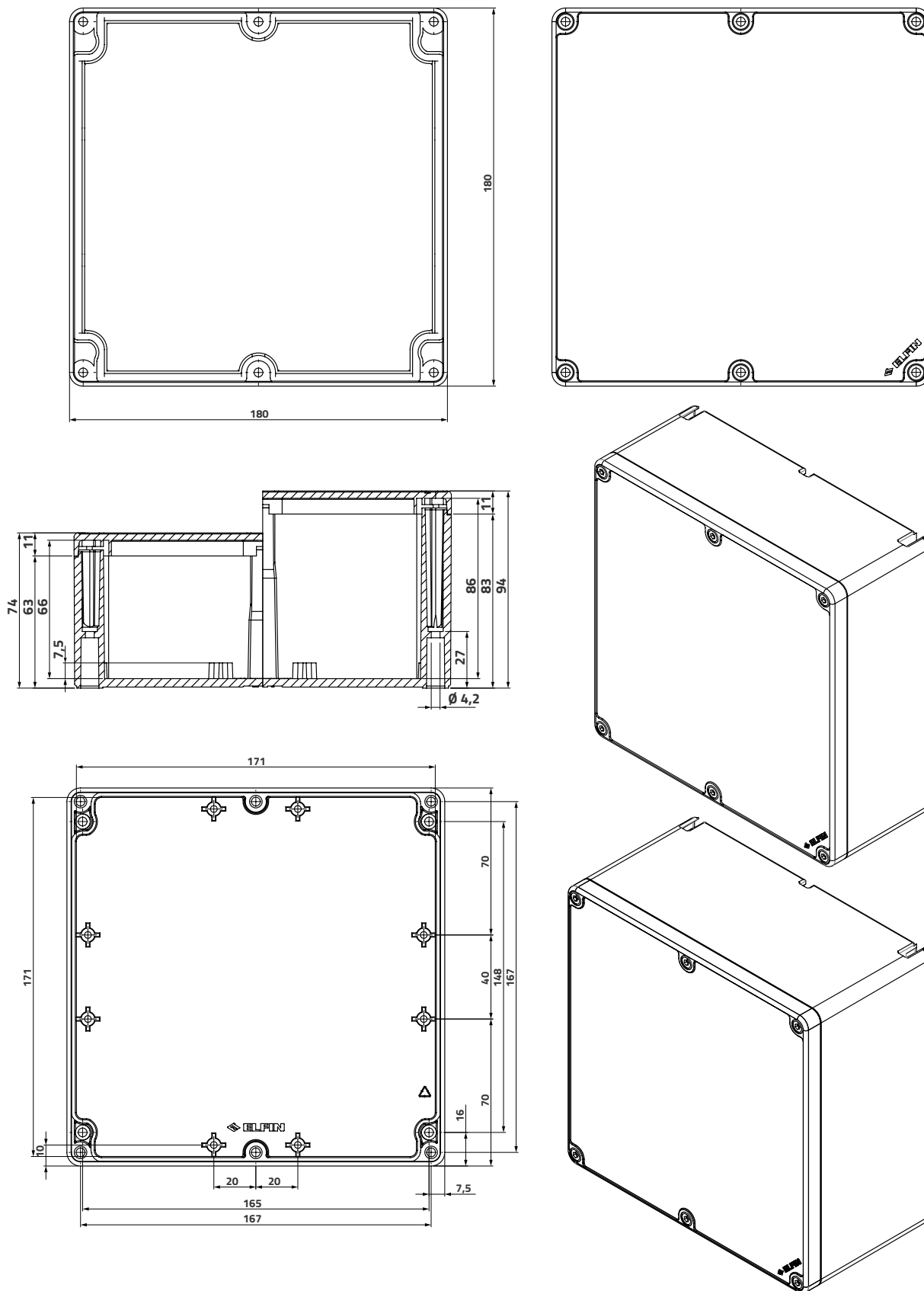


Coperchio con 11 fori Ø 22mm / 11-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre	74	080T1818-7P11C
Certificazione UL / UL Certification	74	080TU1818-7P11C
	94	080T1818-9P11C
Certificazione UL / UL Certification	94	080TU1818-9P11C

Scatole in termoplastico 180x180mm Thermoplastic enclosures 180x180mm

SERIE TECHNO / SERIES TECHNO



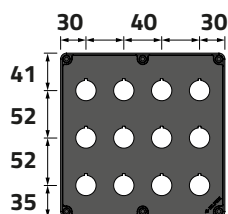
Scatole in termoplastico 180x180mm Thermoplastic enclosures 180x180mm

SERIE TECHNO / SERIES TECHNO

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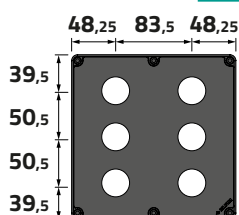
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Coperchio con 12 fori Ø 22mm / 12-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre

	74	080T1818-7P12
Certificazione UL / UL Certification	74	080TU1818-7P12
	94	080T1818-9P12
Certificazione UL / UL Certification	94	080TU1818-9P12



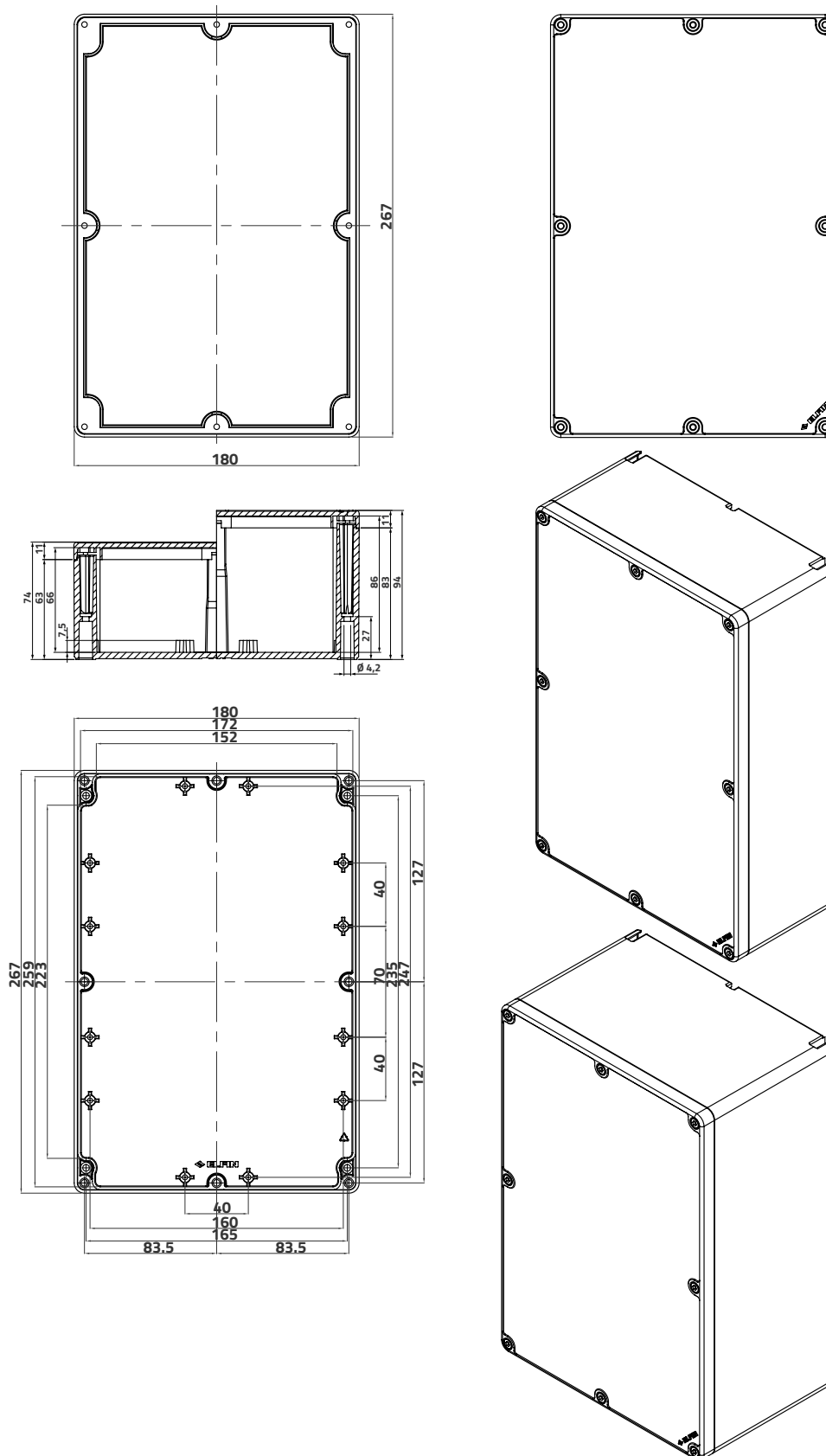
Coperchio con 6 fori Ø 30mm / 6-hole lid Ø 30mm

PA + fibra di vetro / PA + Glass fibre

	74	080T1818-7S6
Certificazione UL / UL Certification	74	080TU1818-7S6
	94	080T1818-9S6
Certificazione UL / UL Certification	94	080TU1818-9S6

Scatole in termoplastico 180x267mm Thermoplastic enclosures 180x267mm

SERIE TECHNO / SERIES TECHNO



Scatole in termoplastico 180x267mm Thermoplastic enclosures 180x267mm

SERIE TECHNO / SERIES TECHNO

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Coperchio senza fori / Undrilled lid

PA + fibra di vetro / PA + Glass fibre	74	080T1827-7
Certificazione UL / UL Certification	74	080TU1827-7
	94	080T1827-9
Certificazione UL / UL Certification	94	080TU1827-9



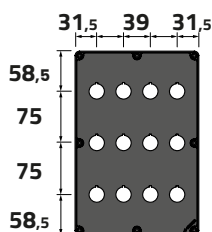
Coperchio giallo senza fori / Undrilled yellow lid

PA + fibra di vetro / PA + Glass fibre	74	080T1827-7G
Certificazione UL / UL Certification	74	080TU1827-7G
	94	080T1827-9G
Certificazione UL / UL Certification	94	080TU1827-9G



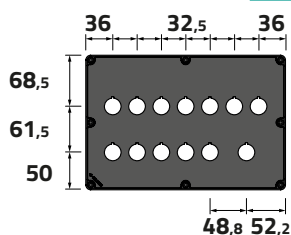
Coperchio trasparente senza fori / Transparent Undrilled lid

PA + fibra di vetro / PA + Glass fibre	74	080T1827-7T
Certificazione UL / UL Certification	74	080TU1827-7T
	94	080T1827-9T
Certificazione UL / UL Certification	94	080TU1827-9T



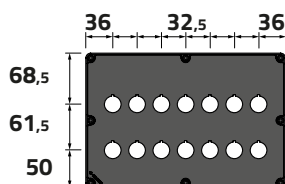
Coperchio con 12 fori Ø 22mm / 12-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre	74	080T1827-7P12
Certificazione UL / UL Certification	74	080TU1827-7P12
	94	080T1827-9P12
Certificazione UL / UL Certification	94	080TU1827-9P12



Coperchio con 13 fori Ø 22mm / 13-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre	74	080T1827-7P13C
Certificazione UL / UL Certification	74	080TU1827-7P13C
	94	080T1827-9P13C
Certificazione UL / UL Certification	94	080TU1827-9P13C

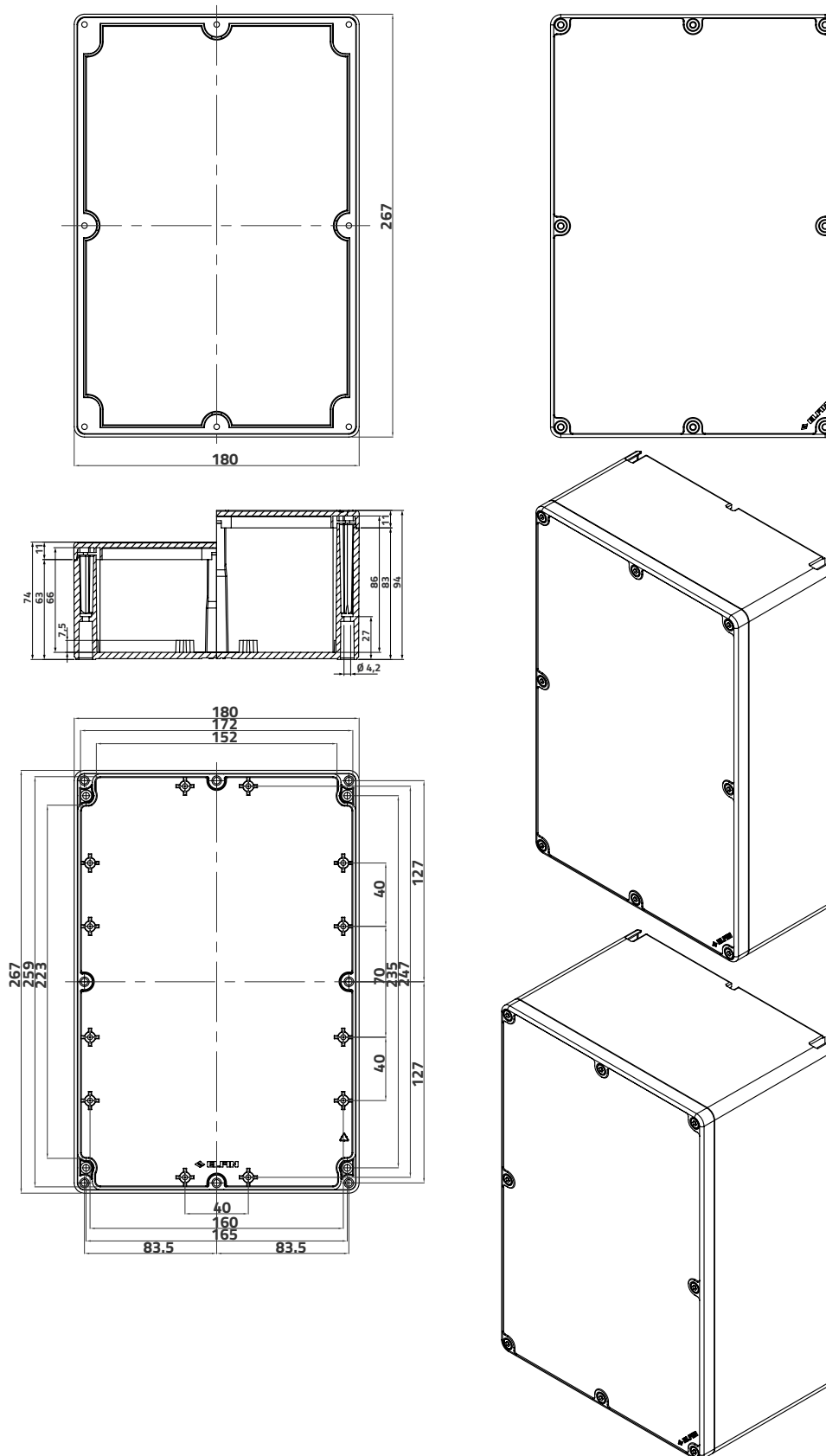


Coperchio con 14 fori Ø 22mm / 14-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre	74	080T1827-7P14
Certificazione UL / UL Certification	74	080TU1827-7P14
	94	080T1827-9P14
Certificazione UL / UL Certification	94	080TU1827-9P14

Scatole in termoplastico 180x267mm Thermoplastic enclosures 180x267mm

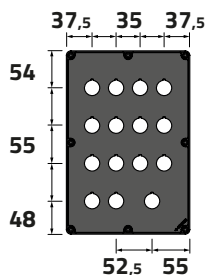
SERIE TECHNO / SERIES TECHNO



Scatole in termoplastico 180x267mm Thermoplastic enclosures 180x267mm

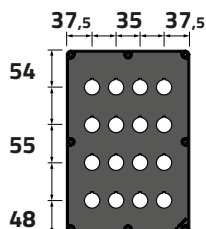
SERIE TECHNO / SERIES TECHNO

h g cod



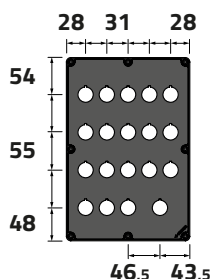
Coperchio con 15 fori Ø 22mm / 15-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre	74	080T1827-7P15C
Certificazione UL / UL Certification	74	080TU1827-7P15C
	94	080T1827-9P15C
Certificazione UL / UL Certification	94	080TU1827-9P15C



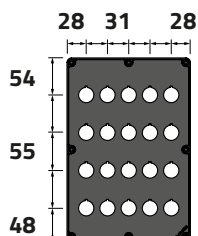
Coperchio con 16 fori Ø 22mm / 16-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre	74	080T1827-7P16
Certificazione UL / UL Certification	74	080TU1827-7P16
	94	080T1827-9P16
Certificazione UL / UL Certification	94	080TU1827-9P16



Coperchio con 19 fori Ø 22mm / 19-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre	74	080T1827-7P19C
Certificazione UL / UL Certification	74	080TU1827-7P19C
	94	080T1827-9P19C
Certificazione UL / UL Certification	94	080TU1827-9P19C

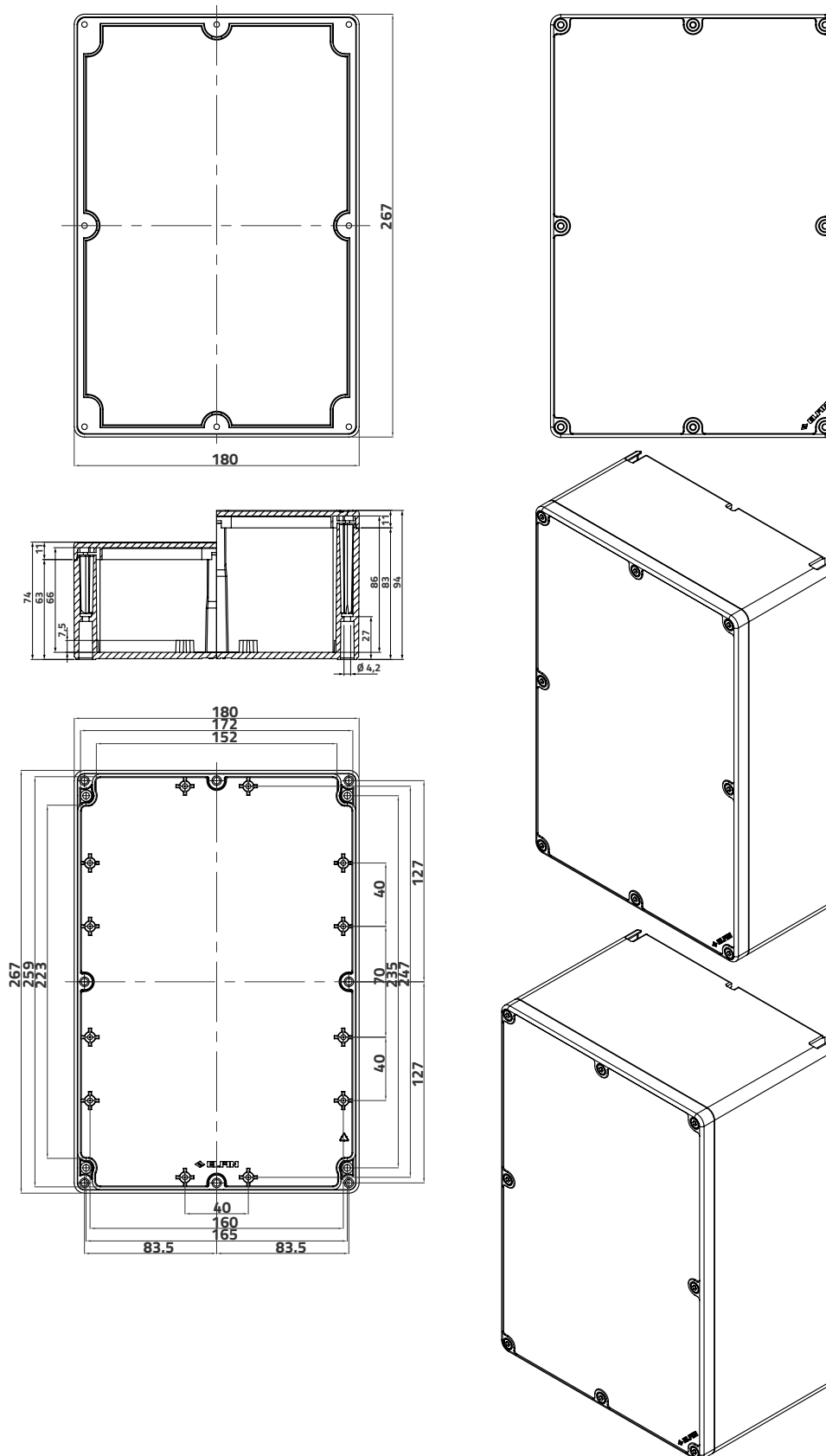


Coperchio con 20 fori Ø 22mm / 20-hole lid Ø 22mm

PA + fibra di vetro / PA + Glass fibre	74	080T1827-7P20
Certificazione UL / UL Certification	74	080TU1827-7P20
	94	080T1827-9P20
Certificazione UL / UL Certification	94	080TU1827-9P20

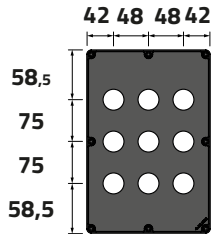
Scatole in termoplastico 180x267mm Thermoplastic enclosures 180x267mm

SERIE TECHNO / SERIES TECHNO



Scatole in termoplastico 180x267mm Thermoplastic enclosures 180x267mm

SERIE TECHNO / SERIES TECHNO



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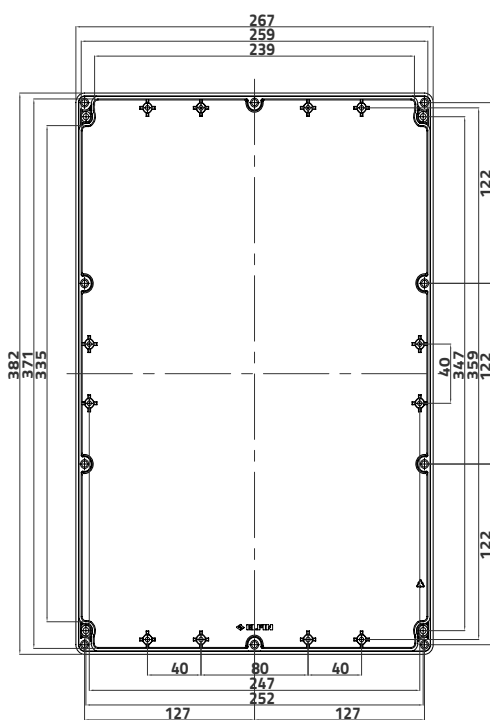
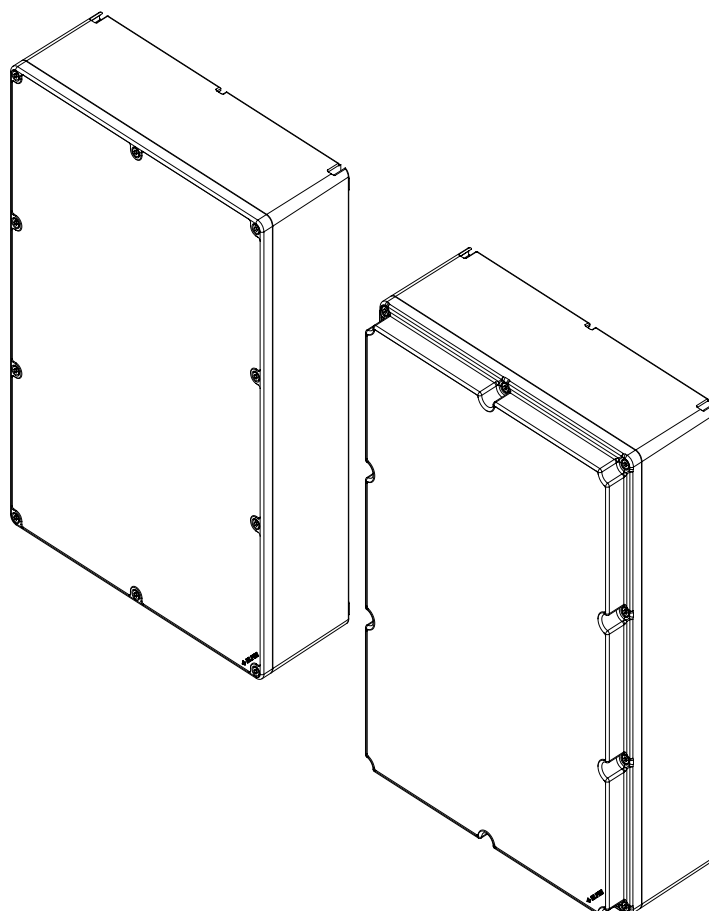
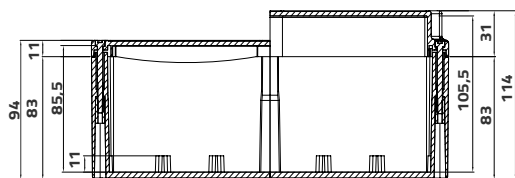
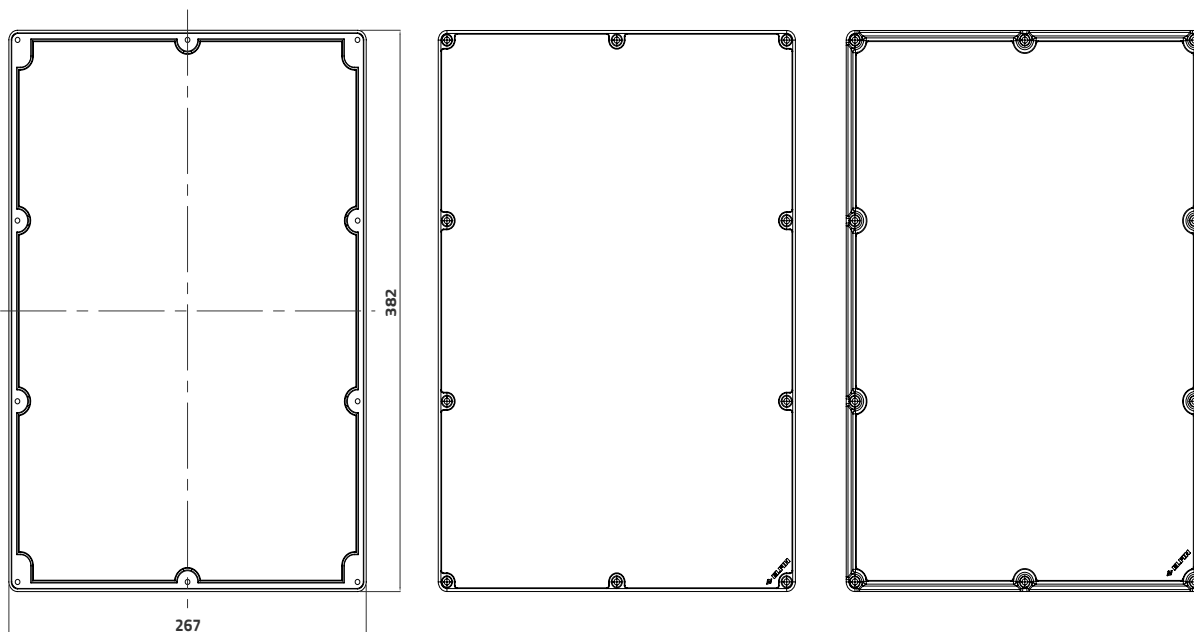
Coperchio con 9 fori Ø 30mm / 9-hole lid Ø 30mm

PA + fibra di vetro / PA + Glass fibre

	74	080T1827-7S9
Certificazione UL / UL Certification	74	080TU1827-7S9
	94	080T1827-9S9
Certificazione UL / UL Certification	94	080TU1827-9S9

Scatole in termoplastico 267x382mm Thermoplastic enclosures 267x382mm

SERIE TECHNO / SERIES TECHNO



Scatole in termoplastico 267x382mm Thermoplastic enclosures 276x382mm

SERIE TECHNO / SERIES TECHNO



Coperchio senza fori / Undrilled lid

PA + fibra di vetro / PA + Glass fibre

94

080T2738-9

Certificazione UL / UL Certification

94

080TU2738-9



Coperchio senza fori / Undrilled lid

PA + fibra di vetro / PA + Glass fibre

114

080T2738-11

Certificazione UL / UL Certification

114

080TU2738-11

Scatole in termoplastico 90 mm Thermoplastic enclosures 90 mm

SERIE TECHNO / SERIES TECHNO

Accessori / Accessories

g

cod

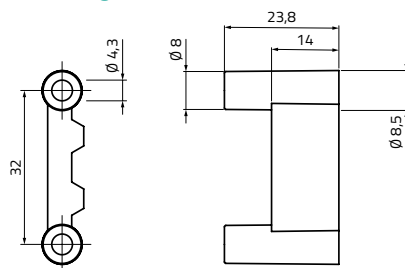


Sistema accoppiamento Techno 90 mm Techno 90 mm coupling system

Progettazione secondo criteri UL-CSA
Designed according to UL-CSA criteria

080TSA90

080TUSA90

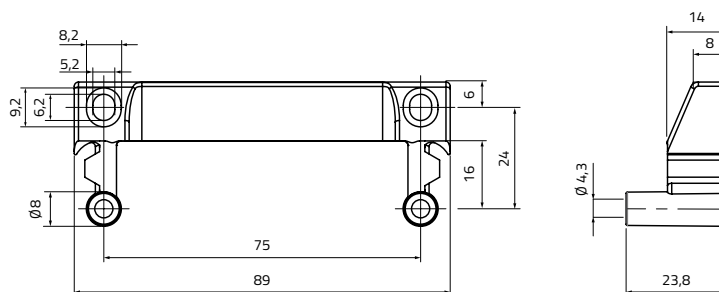


Sistema fissaggio Techno 90 mm Techno 90 mm mounting system

Progettazione secondo criteri UL-CSA
Designed according to UL-CSA criteria

080TSF90

080TUSF90

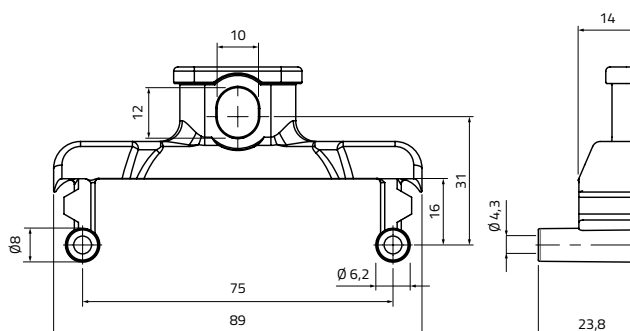


Sistema fissaggio ad anello Techno 90 mm Techno 90 mm ring-mounting system

Progettazione secondo criteri UL-CSA
Designed according to UL-CSA criteria

080TSFA90

080TUSFA90



Scatole in termoplastico 90 mm Thermoplastic enclosures 90 mm

SERIE TECHNO / SERIES TECHNO

Accessori / Accessories

g

cod



Sistema fissaggio magnetico Techno 90 mm Techno 90 mm magnetic mounting system

Progettazione secondo criteri UL-CSA
Designed according to UL-CSA criteria

080TSFM90

080TUSFM90



Sistema fissaggio incasso Techno 90 mm Techno 90 mm wall-mounting system

Certificazione UL / UL Certification

080TSFF90

080TUSFF90



Sistema fissaggio tandem Techno 90 mm Techno 90 mm tandem mounting system

Progettazione secondo criteri UL-CSA
Designed according to UL-CSA criteria

080TSFT90

080TUSFT90

Scatole in termoplastico 90 mm Thermoplastic enclosures 90 mm

SERIE TECHNO / SERIES TECHNO

Accessori / Accessories

g

cod

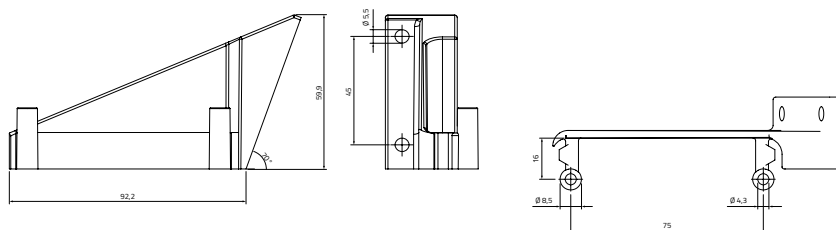


Sistema fissaggio inclinato Techno 90 mm Techno 90 mm sloped-mounting system

Progettazione secondo criteri UL-CSA
Designed according to UL-CSA criteria

080TSFI90

080TUSFI90



Sistema fissaggio inclinato a 90° Techno 90 mm Techno 90 mm 90° sloped mounting system

Progettazione secondo criteri UL-CSA
Designed according to UL-CSA criteria

080TSF090

080TUSF090

Scatole in termoplastico 90 mm Thermoplastic enclosures 90 mm

SERIE TECHNO / SERIES TECHNO

Accessori / Accessories

g

cod

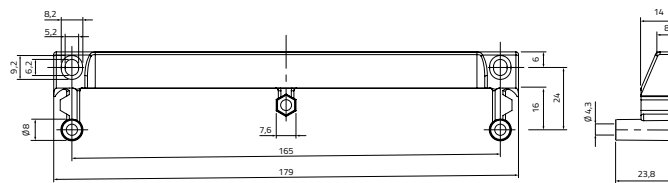


Sistema fissaggio Techno 180 mm Techno 180 mm mounting system

Progettazione secondo criteri UL-CSA
Designed according to UL-CSA criteria

080TSF180

080TUSF180

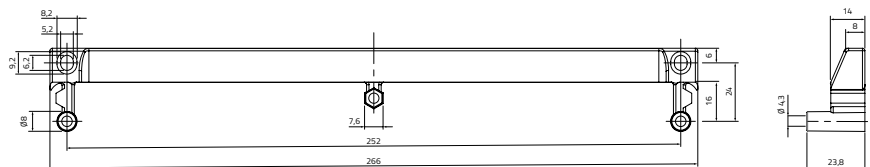


Sistema fissaggio Techno 267 mm Techno 267 mm mounting system

Progettazione secondo criteri UL-CSA
Designed according to UL-CSA criteria

080TSF267

080TUSF267





CUBE

Termoplastico PRINCIPI COSTRUTTIVI APPLICATI

Thermoplastic APPLIED CONSTRUCTION PRINCIPLES

SERIE CUBE / SERIES CUBE



■ AVVITAMENTO MANUALE

Le manopole, fornite per l'avvitamento manuale, si incastrano sulla testa delle viti e sono la soluzione ideale per contenitori che devono essere aperti facilmente e comodamente.

■ GRADO DI PROTEZIONE IP66

La guarnizione in poliuretano espanso posta tra il coperchio e la scatola assicura un grado di protezione IP66.

■ FORI DI FISSAGGIO

I fori di fissaggio sono situati in cave in asse con le viti del coperchio e quindi esterne alla zona protetta dalla guarnizione; non possono essere manomessi dopo la chiusura del contenitore. Sulla parte esterna del fondo della contenitore sono stampigliate chiaramente le dimensioni di fissaggio per una corretta installazione. Sul fondo della scatola sono predisposti dei fori per fissaggio, alternativi agli altri sistemi; una volta serrate le viti, gli alloggiamenti delle stesse possono essere coperti con appositi tappi.

■ CERNIERE

Sono disponibili due versioni di cerniere, in funzione delle dimensioni del contenitore. La foratura per il montaggio è facilitata grazie ad una maschera che si incastra fermamente nel lato da forare e che viene fornita in dotazione alla confezione della cerniera.

■ FISSAGGIO A MURO

Il fissaggio a muro è possibile grazie all'adozione di apposite staffe in termoplastico di facile montaggio, o con staffe in metallo con uso di viti. Le zanche possono ruotare di 90° in modo da facilitare l'installazione.

■ PIASTRE O GUIDE DIN

Il fondo del contenitore è predisposto per l'inserimento di piastre o guide DIN per l'installazione di morsettiere ed altri componenti, e in alcuni modelli è possibile l'installazione di una piastra superiore per montaggio di apparecchi. Il fissaggio è realizzato con inserti in ottone.

■ TERMOPLASTICO

Le caratteristiche del materiale termoplastico, senza alogeni e quindi nessuna emissione di gas pericolosi, e l'elevato spessore delle pareti garantiscono l'utilizzo anche in casi dove il contenitore è sottoposto a situazioni esterne gravose. Classe di isolamento \square

■ MANUAL TIGHTENING

The knobs we provide for the manual tightening fit into the screw head and are the ideal solution for the enclosures requiring an easy, trouble-free opening.

■ IP66 - PROTECTION DEGREE

The polyurethane foam gasket placed between the lid and the enclosure assures a IP66 protection degree.

■ FASTENING HOLES

The mounting holes are located in hollows in line with the screws of the lid, therefore outside the area protected by the gasket. They cannot be tampered once the enclosure has been closed. On the outside of the enclosure bottom are clearly stamped the mounting dimensions for a correct assembly. Mounting holes for alternative systems are provided at the enclosure bottom. Once the screws have been tightened up, their housings can be covered with specific plugs.

■ HINGES

Two types of hinges are available depending on the dimensions of the enclosure. Drilling for assembly is facilitated by a template, which firmly fits into the side to be drilled, and is provided with the hinge kit.

■ WALL-MOUNTING

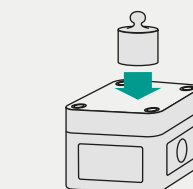
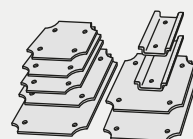
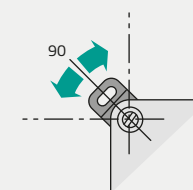
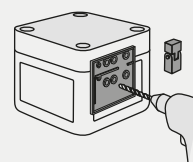
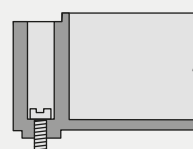
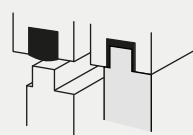
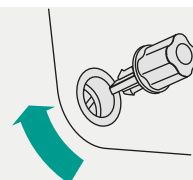
Wall-mounting through purpose-designed easy-mount thermoplastic brackets, or trough metal mounting brackets and screws. The mounting brackets can rotate by 90° for an easy installation.

■ PLATES OR DIN RAILS

The bottom of the enclosure is pre-arranged to receive plates or DIN rails for installation of terminal boards and other components, and some models can receive an upper plate for equipment assembly. Fastening is made through brass inserts.

■ THERMOPLASTIC

The features of the thermoplastic material, without halogens, thus without any emissions of hazardous gases, and the remarkable wall thickness guarantee the use of enclosure even in case they are installed in particularly harsh environments. Insulation class \square



Scatole in termoplastico Thermoplastic enclosures

SERIES CUBE / SERIES CUBE



Coperchio disponibile in tre tipologie di colore :
RAL7035, giallo e trasparente

Lid available in three colours :
RAL7035, yellow and transparent



Disponibile in 4 profondità

Available in four depth

Scatole in termoplastico Thermoplastic enclosures

SERIE CUBE / SERIES CUBE



Sistema di fissaggio a parete
Wall-mounting system



Viti di serraggio
Clampings screws



Piastra di fondo
Mounting plate



Piastra superiore
Upper plate



Staffe di fissaggio
Mounting brackets



La guarnizione garantisce IP66
A gasket assures IP66 protection



Cerniera piccola
Cerniera grande
Small hinge
Big hinge



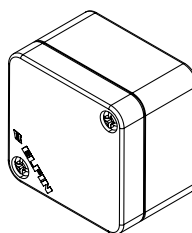
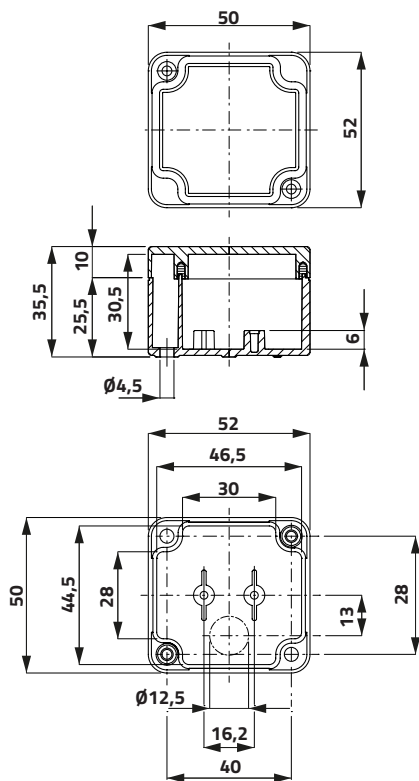
Manopola
Knob



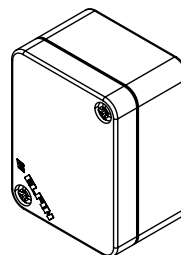
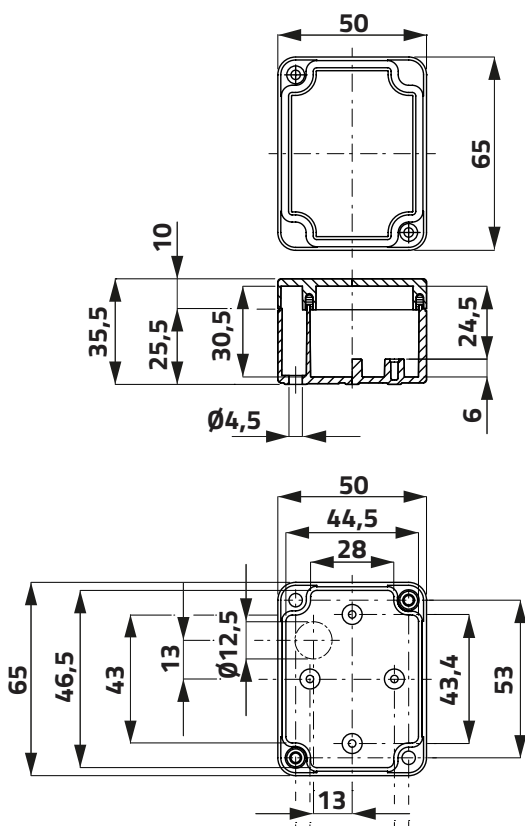
Scatole in termoplastico Thermoplastic enclosures

SERIES CUBE / SERIES CUBE

50x52mm



65x50mm



Scatole in termoplastico Thermoplastic enclosures

SERIE CUBE / SERIES CUBE



50x52mm

Policarbonato / Polycarbonate

h

g

cod

35,5

40

080C0505-3



65x50mm

Policarbonato / Polycarbonate

h

g

cod

35,5

50

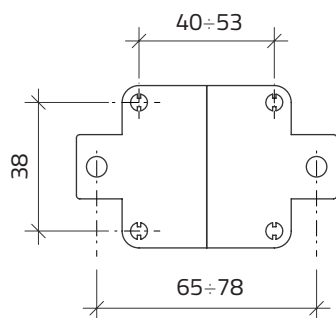
080C0605-3



Piastra di fissaggio a parete regolabile
Adjustable wall-mounting plate

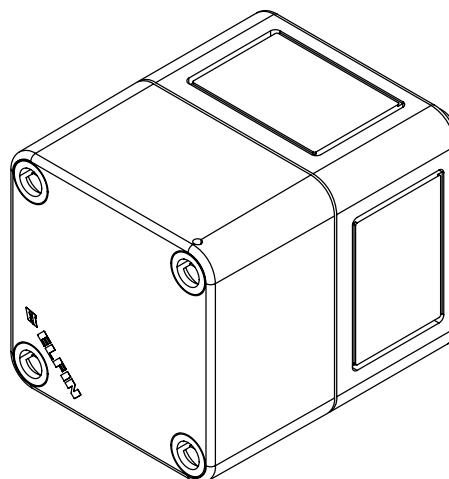
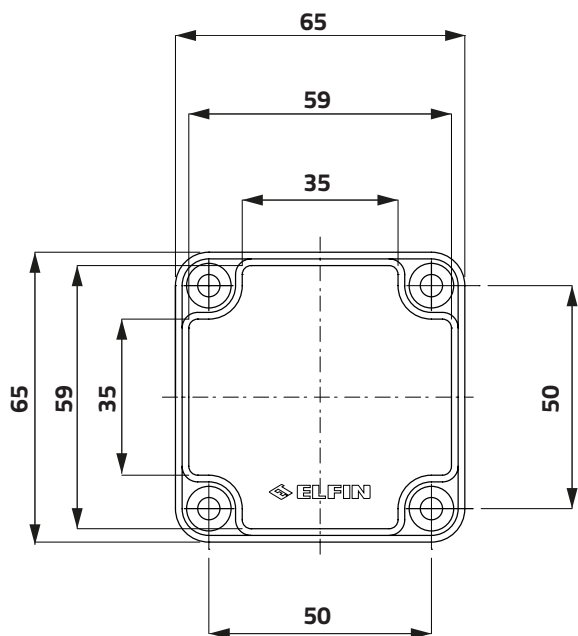
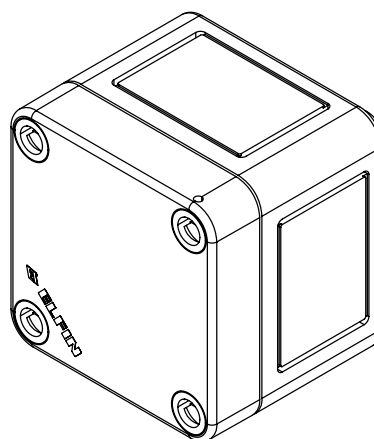
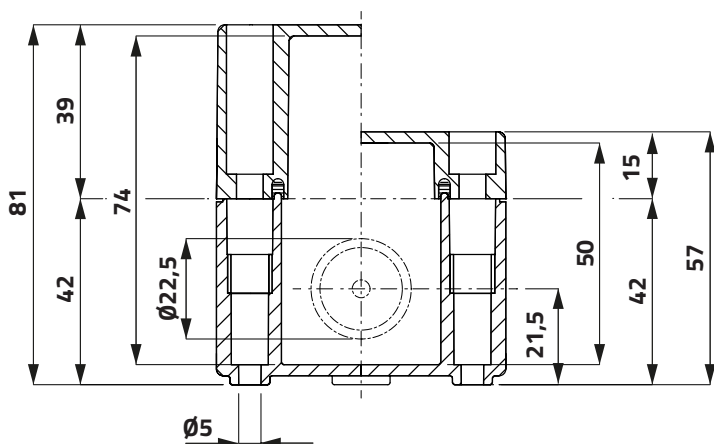
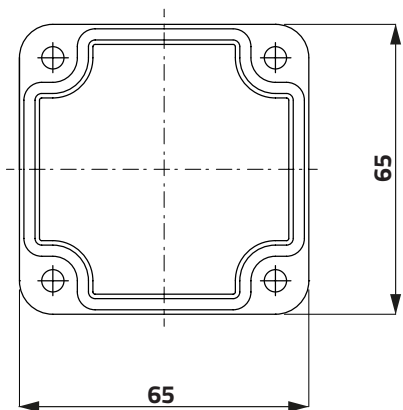
8

080S5065



Scatole in termoplastico 65x65mm Thermoplastic enclosures 65x65mm

SERIES CUBE / SERIES CUBE



Scatole in termoplastico 65x65mm Thermoplastic enclosures 65x65mm

SERIE CUBE / SERIES CUBE



h g cod

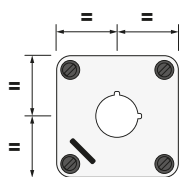
Coperchio senza fori / Undrilled lid

Polistirene / Polystyrene	57	76	080CS0606-5
Polistirene / Polystyrene	81	110	080CS0606-8
Policarbonato/ Polycarbonate	57	90	080C0606-5
Policarbonato/ Polycarbonate	81	130	080C0606-8



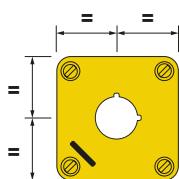
Coperchio trasparente senza fori / Transparent Undrilled lid

Policarbonato/ Polycarbonate	57	85	080C0606-5T
Policarbonato/ Polycarbonate	81	125	080C0606-8T



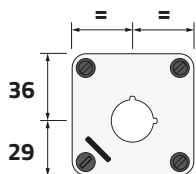
Coperchio con 1 foro Ø 22mm / 1-hole lid Ø 22mm

Polistirene / Polystyrene	57	72	080CS0606-5P1C
Polistirene / Polystyrene	81	106	080CS0606-8P1C
Policarbonato/ Polycarbonate	57	85	080C0606-5P1C
Policarbonato/ Polycarbonate	81	125	080C0606-8P1C



Coperchio giallo con 1 foro Ø 22mm / 1-hole yellow lid Ø 22mm

Polistirene / Polystyrene	57	72	080CS0606-5GP1
Polistirene / Polystyrene	81	106	080CS0606-8GP1
Policarbonato/ Polycarbonate	57	85	080C0606-5GP1
Policarbonato/ Polycarbonate	81	125	080C0606-8GP1

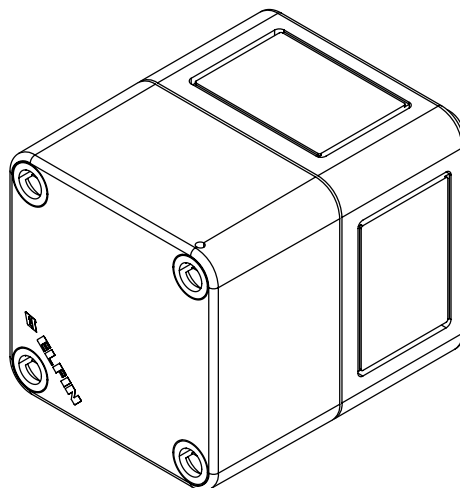
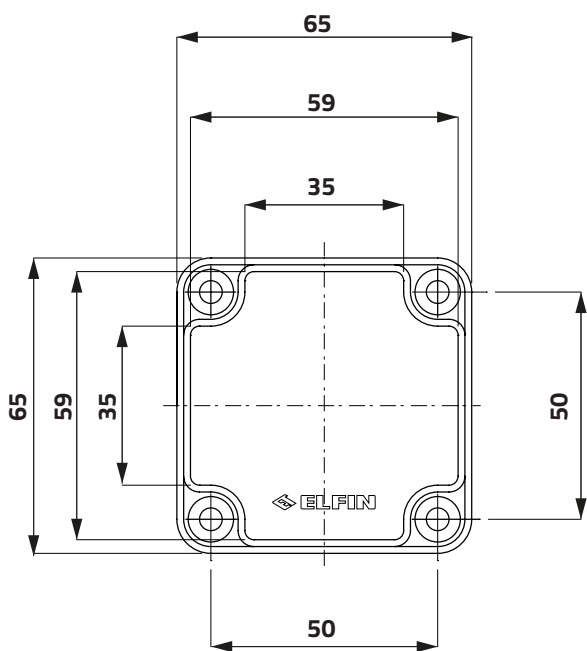
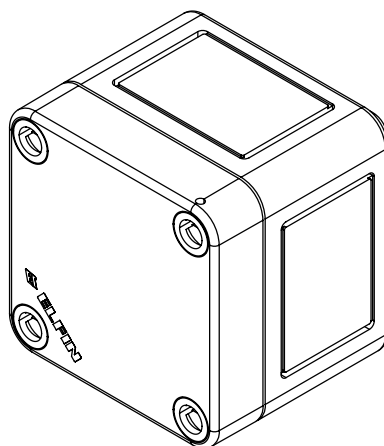
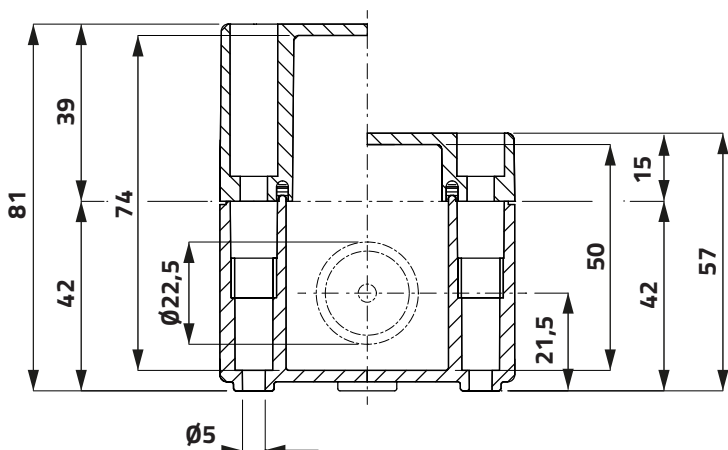
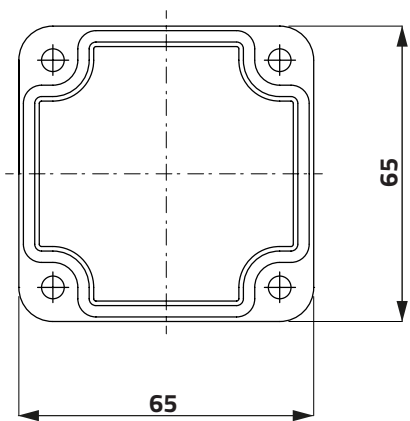


Coperchio con 1 foro Ø 22mm / 1-hole lid Ø 22mm

Polistirene / Polystyrene	57	72	080CS0606-5P1
Polistirene / Polystyrene	81	106	080CS0606-8P1
Policarbonato/ Polycarbonate	57	85	080C0606-5P1
Policarbonato/ Polycarbonate	81	125	080C0606-8P1

Scatole pulsantiere complete 65x65mm Assembled push-button enclosures 65x65mm

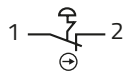
SERIES CUBE / SERIES CUBE



Scatole pulsantiere complete 65x65mm Assembled push-button enclosures 65x65mm

SERIE CUBE / SERIES CUBE

h g cod



Coperchio con pulsante a fungo rosso Ø32 Lid with red mushroom push-button Ø32

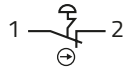
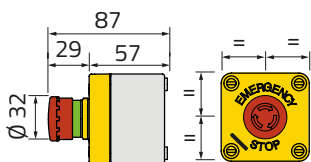
sgancio rotazione / twist release

Polycarbonato / Polycarbonate

87

145

080C0606-5GA



Coperchio con pulsante a fungo rosso Ø40 Lid with red mushroom push-button Ø40

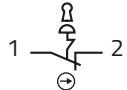
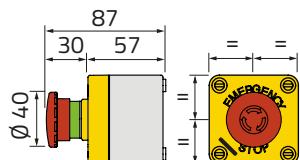
sgancio rotazione / twist release

Polycarbonato / Polycarbonate

87

150

080C0606-5GFA



Coperchio con pulsante a fungo rosso Ø44 Lid with red mushroom push-button Ø44

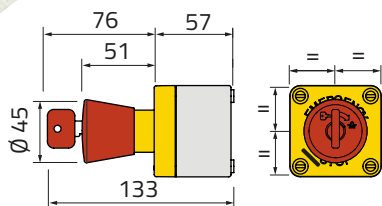
sgancio con chiave / key release

Polycarbonato / Polycarbonate

133

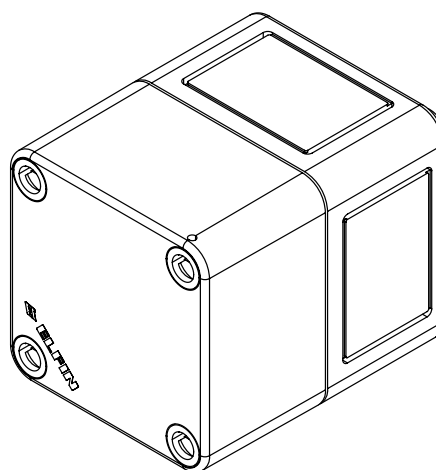
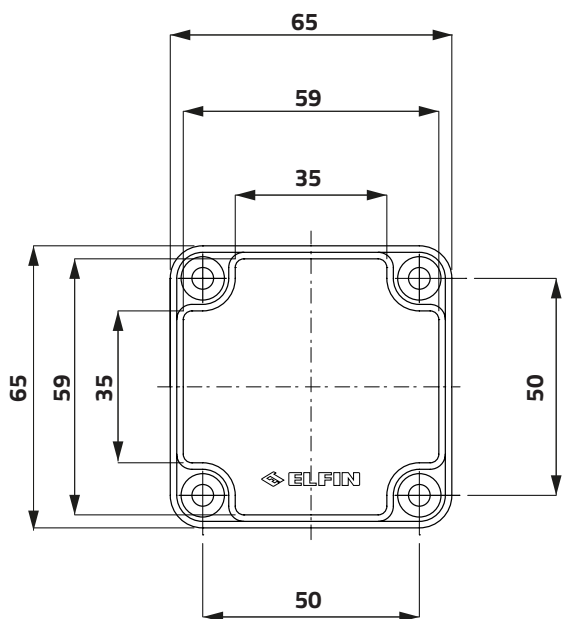
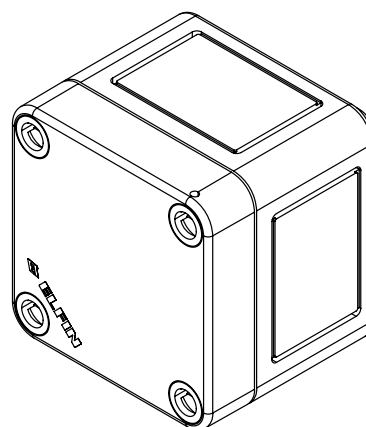
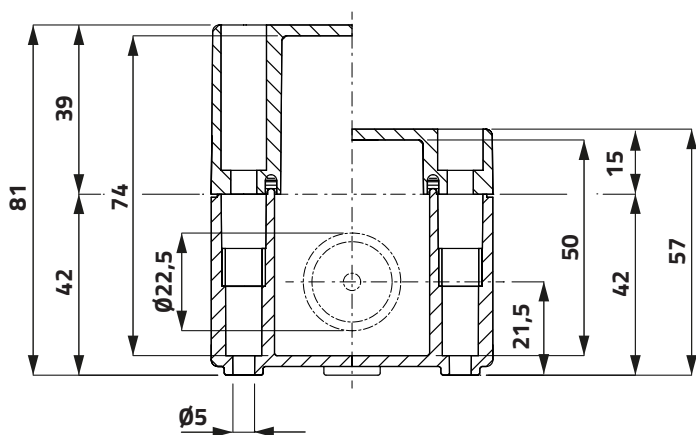
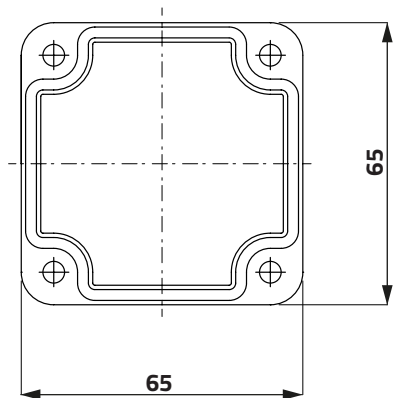
190

080C0606-5GFC



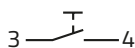
Scatole pulsantiere complete 65x65mm Assembled push-button enclosures 65x65mm

SERIES CUBE / SERIES CUBE



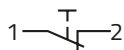
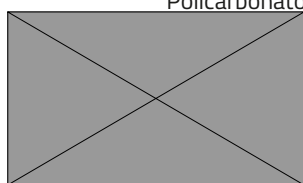
Scatole pulsantiere complete 65x65mm Assembled push-button enclosures 65x65mm

SERIE CUBE / SERIES CUBE



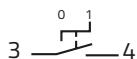
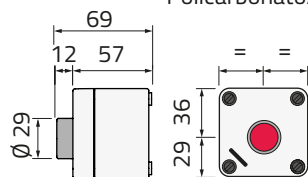
Coperchio con pulsante guardia verde Lid with green guarded push-button

Polistirene / Polystyrene	69	117	080CS0606-5PV
Policarbonato/ Polycarbonate	69	130	080C0606-5PV



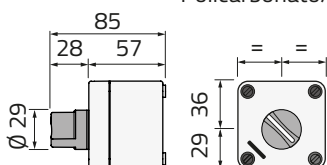
Coperchio con pulsante guardia rosso Lid with red guarded push-button

Polistirene / Polystyrene	69	171	080CS0606-5PR
Policarbonato/ Polycarbonate	69	130	080C0606-5PR



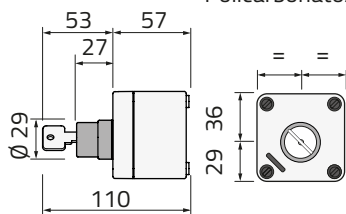
Coperchio con selettore a manopola nera 2 posizioni Lid with 2-position black selector switch

Polistirene / Polystyrene	85	122	080CS0606-5SM
Policarbonato/ Polycarbonate	85	135	080C0606-5SM



Coperchio con selettore a chiave 2 posizioni Lid with 2-position key selector switch

Polistirene / Polystyrene		110	181	080CS0606-5SC
Policarbonato/ Polycarbonate		110	194	080C0606-5SC

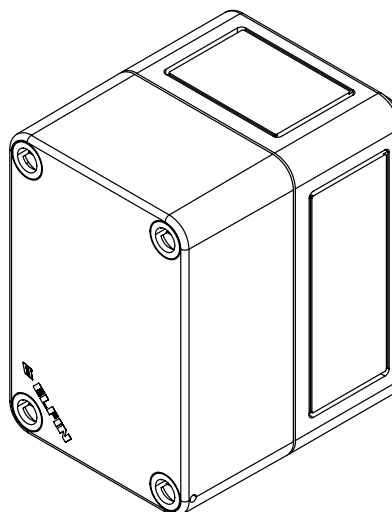
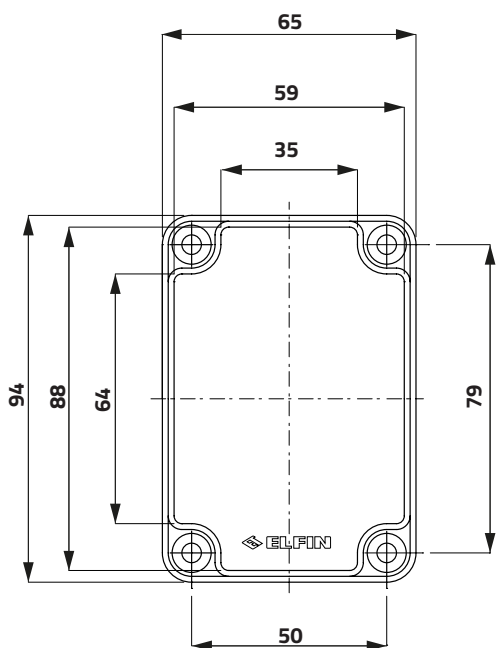
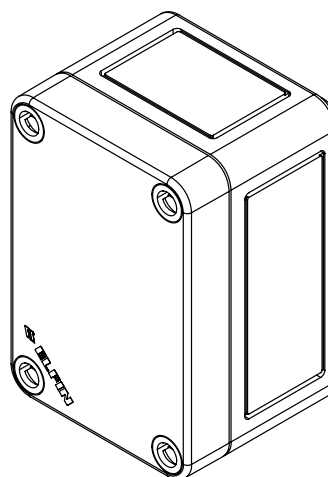
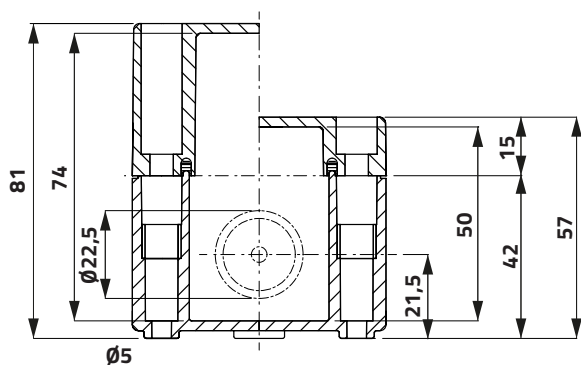
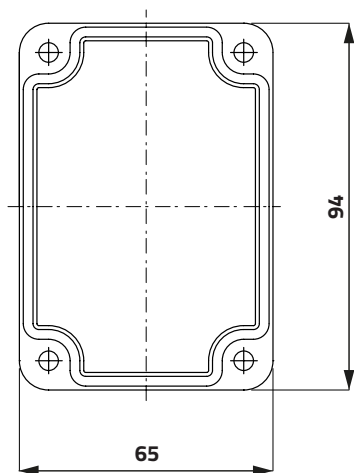


h g cod

k h g cod

Scatole in termoplastico 65x94mm Thermoplastic enclosures 65x94mm

SERIES CUBE / SERIES CUBE



Scatole in termoplastico 65x94mm Thermoplastic enclosures 65x94mm

SERIE CUBE / SERIES CUBE

h g cod



Coperchio senza fori / Undrilled lid

Polistirene / Polystyrene	57	96	080CS0609-5
Polistirene / Polystyrene	81	135	080CS0609-8
Policarbonato/ Polycarbonate	57	115	080C0609-5
Policarbonato/ Polycarbonate	81	160	080C0609-8



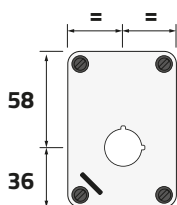
Coperchio trasparente senza fori / Transparent Undrilled lid

Policarbonato/ Polycarbonate	57	110	080C0609-5T
Policarbonato/ Polycarbonate	81	110	080C0609-8T



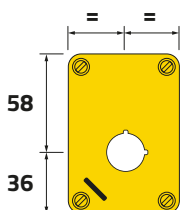
Coperchio giallo senza fori / Undrilled yellow lid

Polistirene / Polystyrene	57	96	080CS0609-5G
Polistirene / Polystyrene	81	135	080CS0609-8G
Policarbonato/ Polycarbonate	57	115	080C0609-5G
Policarbonato/ Polycarbonate	81	160	080C0609-8G



Coperchio con 1 foro Ø 22mm / 1-hole lid Ø 22mm

Polistirene / Polystyrene	57	92	080CS0609-5P1
Polistirene / Polystyrene	81	131	080CS0609-8P1
Policarbonato/ Polycarbonate	57	110	080C0609-5P1
Policarbonato/ Polycarbonate	81	155	080C0609-8P1

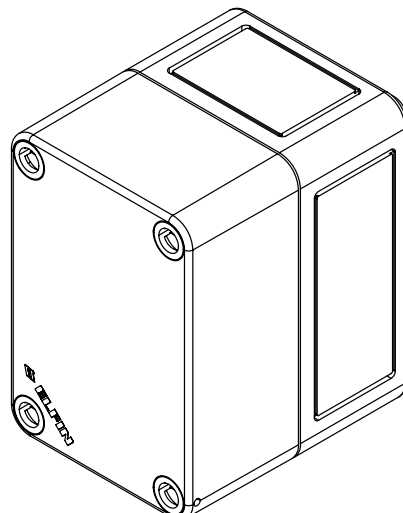
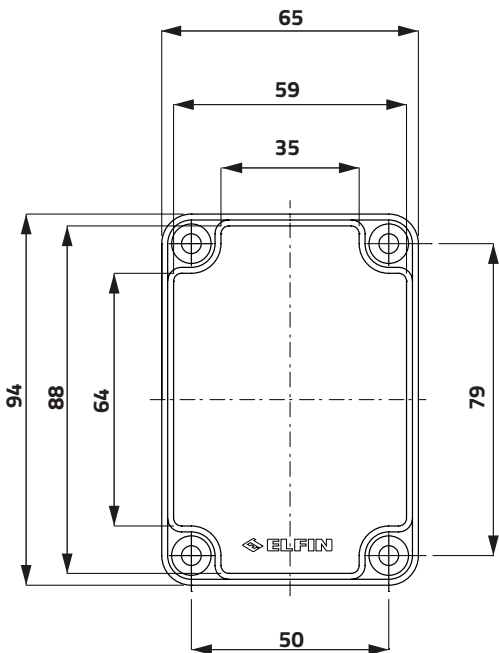
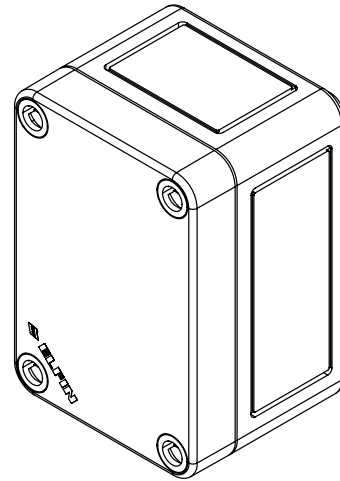
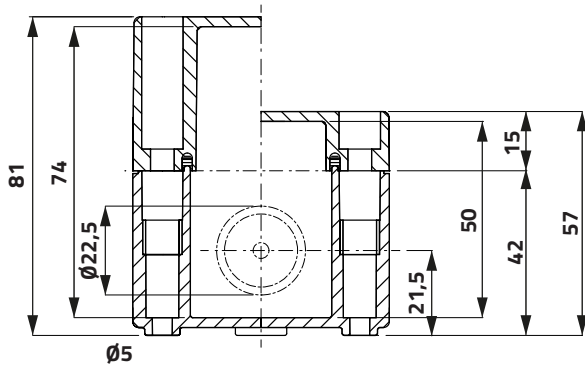
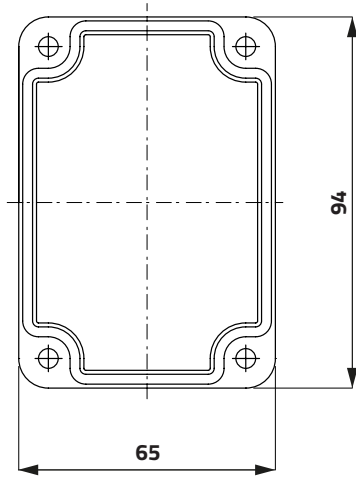


Coperchio giallo con 1 foro Ø 22mm / 1-hole yellow lid Ø 22mm

Polistirene / Polystyrene	57	92	080CS0609-5GP1
Polistirene / Polystyrene	81	131	080CS0609-8GP1
Policarbonato/ Polycarbonate	57	110	080C0609-5GP1
Policarbonato/ Polycarbonate	81	155	080C0609-8GP1

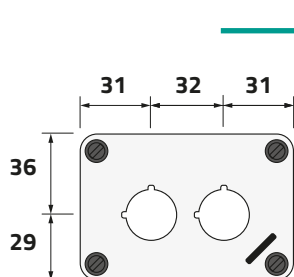
Scatole in termoplastico 65x94mm Thermoplastic enclosures 65x94mm

SERIES CUBE / SERIES CUBE



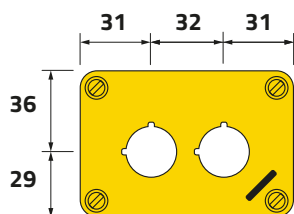
Scatole in termoplastico 65x94mm Thermoplastic enclosures 65x94mm

SERIE CUBE / SERIES CUBE



Coperchio con 2 fori Ø 22mm / 2 hole lid Ø 22mm

	h	g	cod
Polistirene / Polystyrene	57	92	080CS0609-5P2
Polistirene / Polystyrene	81	131	080CS0609-8P2
Policarbonato/ Polycarbonate	57	110	080C0609-5P2
Policarbonato/ Polycarbonate	81	155	080C0609-8P2



Coperchio giallo con 2 fori Ø 22mm / 2-hole yellow lid Ø 22mm

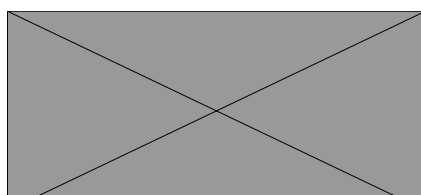
Polistirene / Polystyrene	57	92	080CS0609-5GP2
Polistirene / Polystyrene	81	131	080CS0609-8GP2
Policarbonato/ Polycarbonate	57	110	080C0609-5GP2
Policarbonato/ Polycarbonate	81	155	080C0609-8GP2



Guida / Rail

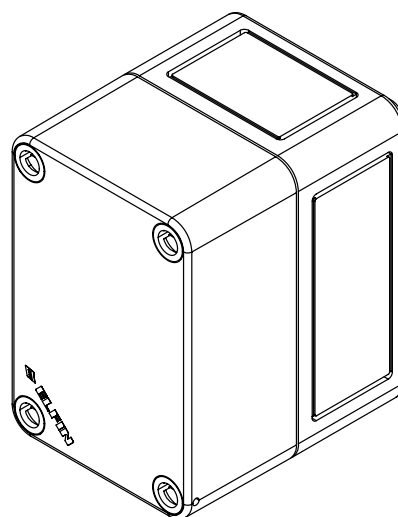
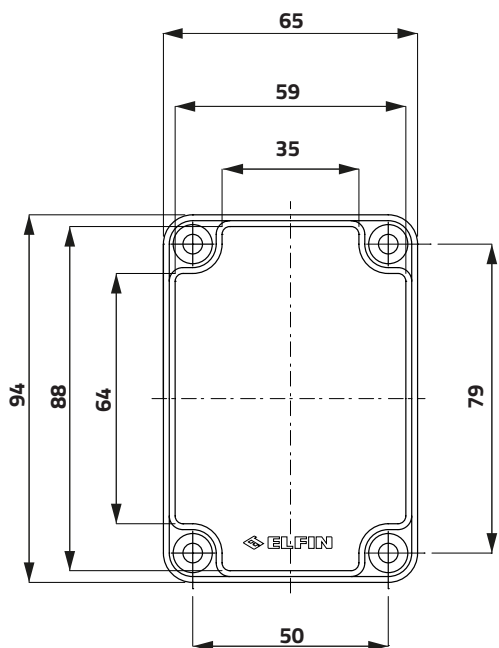
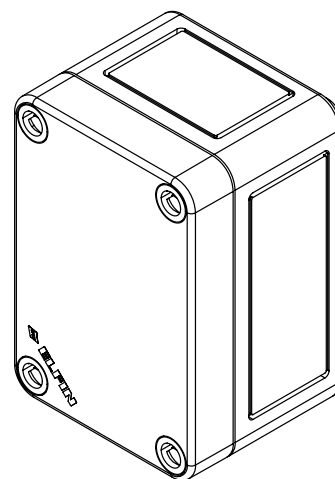
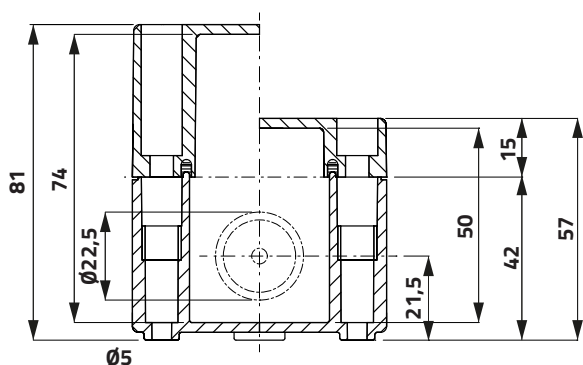
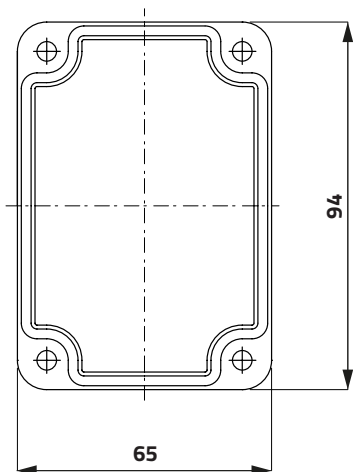
30

080G3508



Scatole pulsantiere complete 65x94mm Assembled push-button enclosures 65x94mm

SERIES CUBE / SERIES CUBE



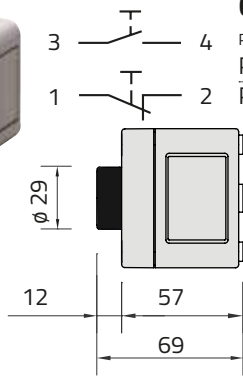
Scatole in termoplastico complete 65x94mm Assembled push-button enclosures 65x94mm

SERIE CUBE / SERIES CUBE

h

g

cod



Coperchio con due operatori / Lid with two operators

Pulsanti con guardia, I/O / Guarded push-button, I/O

Polistirene / Polystyrene

69

172

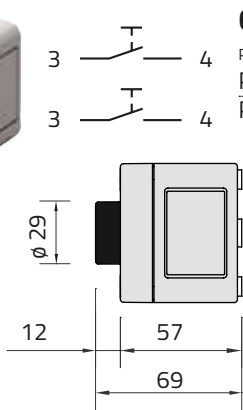
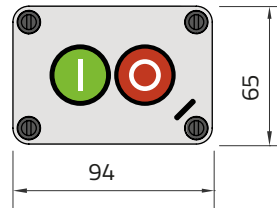
080CS0609-510

Policarbonato / Polycarbonate

69

190

080C0609-510



Coperchio con due operatori / Lid with two operators

Pulsanti con guardia, frecce / Guarded push-button, arrows

Polistirene / Polystyrene

69

172

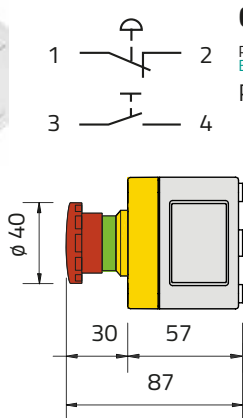
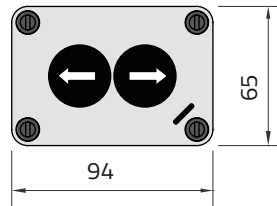
080CS0609-5S47

Policarbonato / Polycarbonate

69

190

080C0609-5S47



Coperchio con due operatori / Lid with two operators

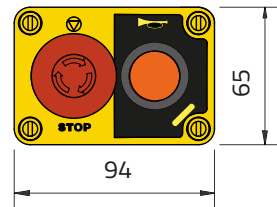
Pulsante emergenza $\varnothing 40$, sgancio rotazione e pulsante con cappuccio in gomma
Emergency push-button $\varnothing 40$, twist release and push-button with rubber cap

Polistirene / Polystyrene

87

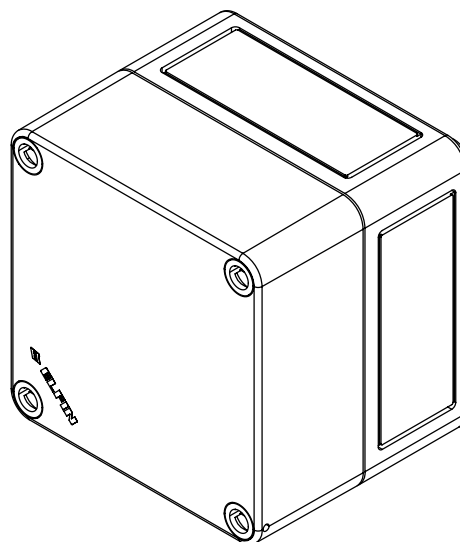
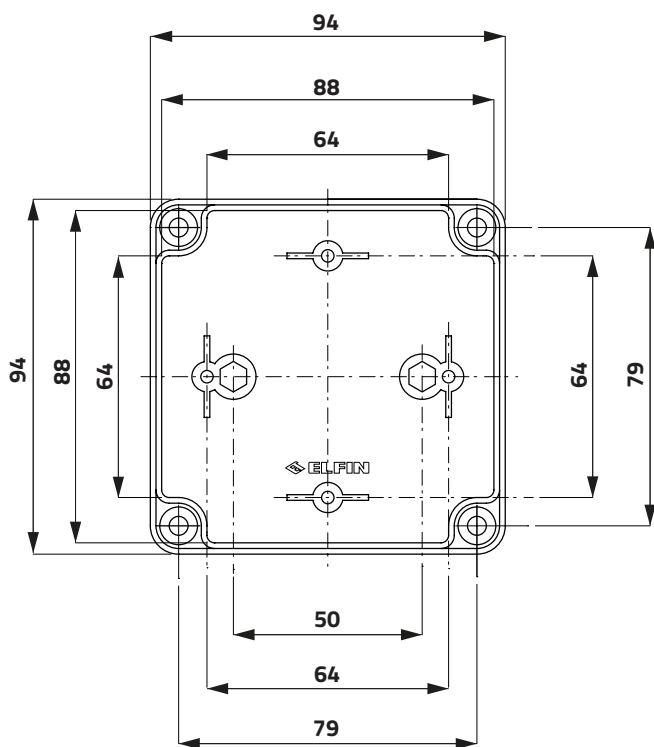
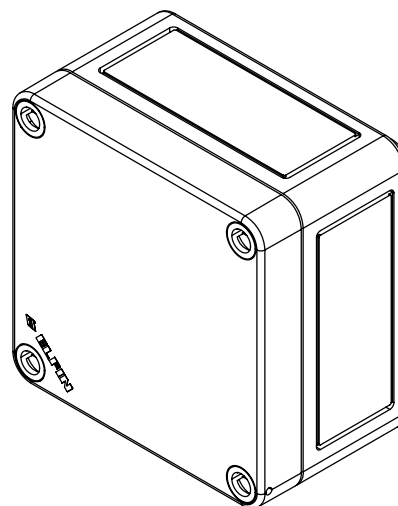
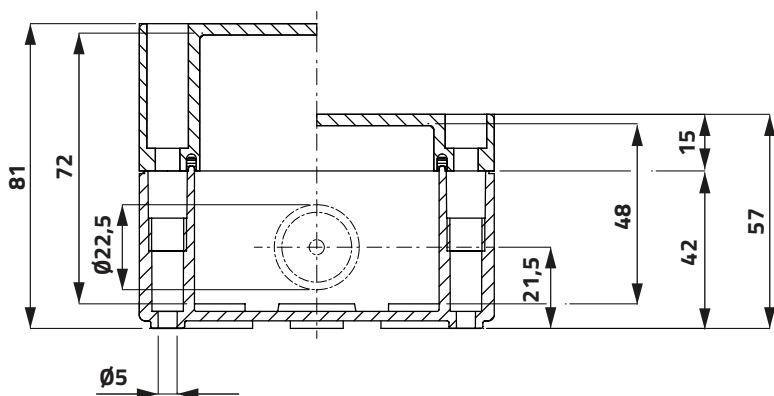
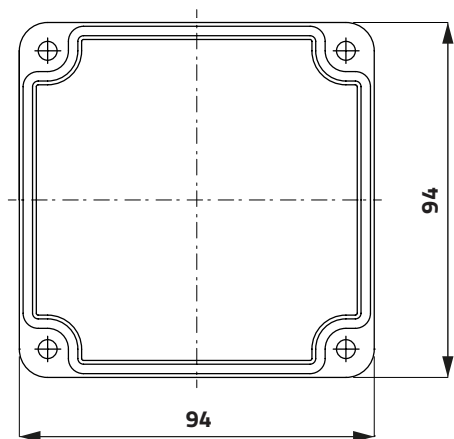
172

080CS0609-5PE



Scatole in termoplastico 94x94mm Thermoplastic enclosures 94x94mm

SERIES CUBE / SERIES CUBE



Scatole in termoplastico 94x94mm Thermoplastic enclosures 94x94mm

SERIE CUBE / SERIES CUBE



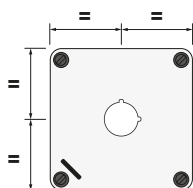
Coperchio senza fori / Undrilled lid

	h	g	cod
Polistirene / Polystyrene	57	123	080CS0909-5
Polistirene / Polystyrene	81	172	080CS0909-8
Policarbonato/ Polycarbonate	57	147	080C0909-5
Policarbonato/ Polycarbonate	81	204	080C0909-8



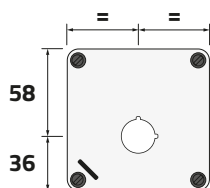
Coperchio trasparente senza fori / Transparent Undrilled lid

Policarbonato/ Polycarbonate	57	142	080C0909-5T
Policarbonato/ Polycarbonate	81	196	080C0909-8T



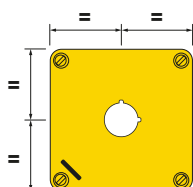
Coperchio con 1 foro Ø 22mm / 1-hole lid Ø 22mm

Polistirene / Polystyrene	57	121	080CS0909-5P1C
Polistirene / Polystyrene	81	170	080CS0909-8P1C
Policarbonato/ Polycarbonate	57	145	080C0909-5P1C
Policarbonato/ Polycarbonate	81	202	080C0909-8P1C



Coperchio con 1 foro Ø 22mm / 1-hole lid Ø 22mm

Polistirene / Polystyrene	57	121	080CS0909-5P1
Polistirene / Polystyrene	81	170	080CS0909-8P1
Policarbonato/ Polycarbonate	57	145	080C0909-5P1
Policarbonato/ Polycarbonate	81	202	080C0909-8P1

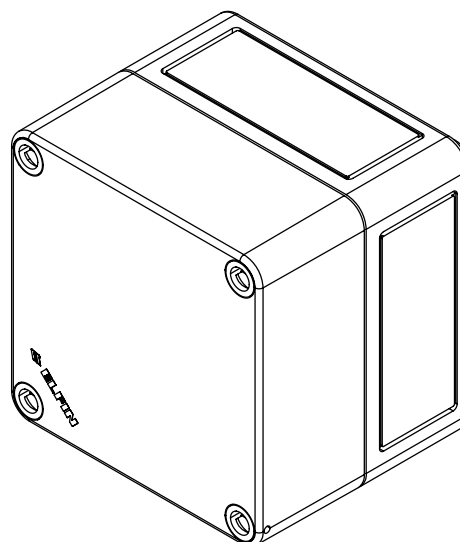
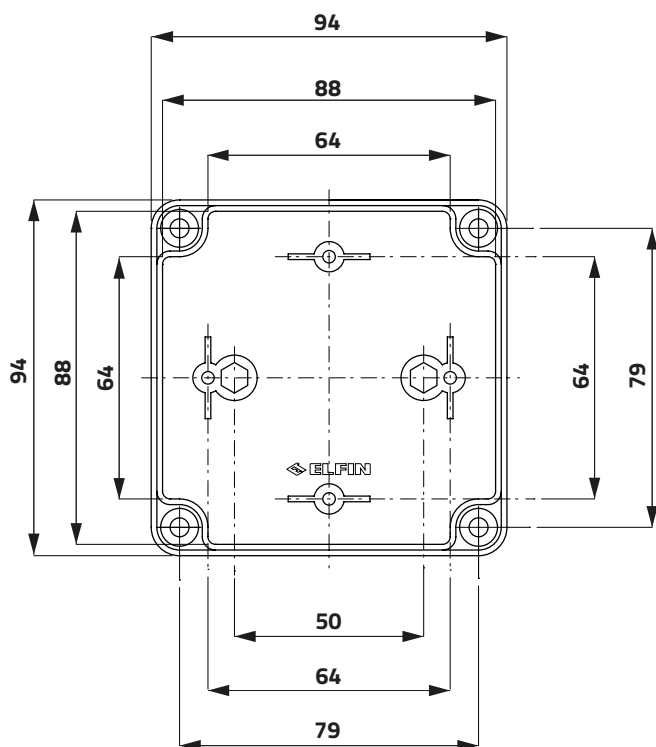
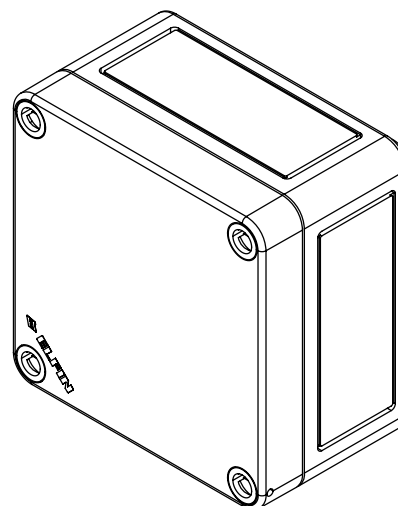
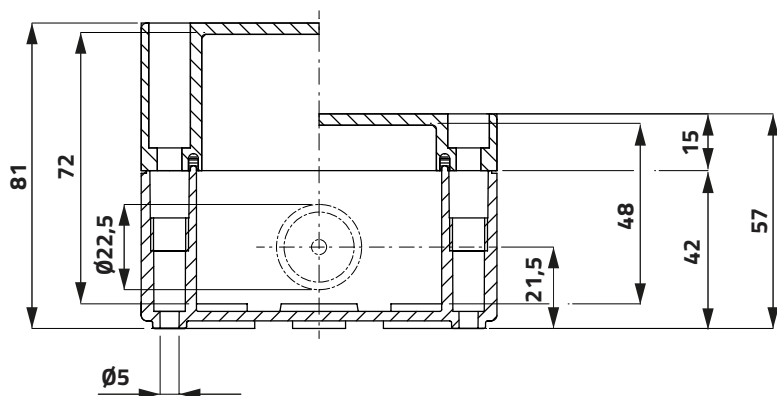
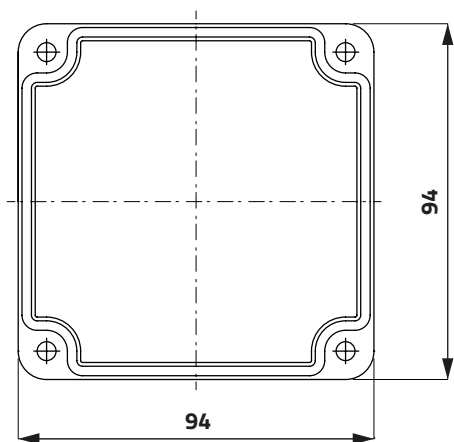


Coperchio giallo con 1 foro Ø 22mm / 1-hole yellow lid Ø 22mm

Polistirene / Polystyrene	57	121	080CS0909-5GP1
Polistirene / Polystyrene	81	170	080CS0909-8GP1
Policarbonato/ Polycarbonate	57	145	080C0909-5GP1
Policarbonato/ Polycarbonate	81	202	080C0909-8GP1

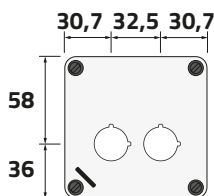
Scatole in termoplastico 94x94mm Thermoplastic enclosures 94x94mm

SERIES CUBE / SERIES CUBE



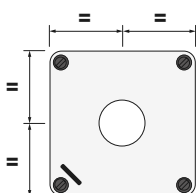
Scatole in termoplastico 94x94mm Thermoplastic enclosures 94x94mm

SERIE CUBE / SERIES CUBE



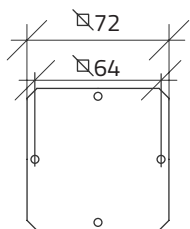
Coperchio con 2 fori Ø 22mm / 2-hole lid Ø 22mm

	h	g	cod
Polistirene / Polystyrene	57	119	080CS0909-5P2
Polistirene / Polystyrene	81	168	080CS0909-8P2
Polycarbonato / Polycarbonate	57	143	080C0909-5P2
Polycarbonato / Polycarbonate	81	200	080C0909-8P2



Coperchio con 1 foro Ø 30mm / 1-hole lid Ø 30mm

Polistirene / Polystyrene	81	168	080CS0909-8S1
Polycarbonato / Polycarbonate	81	200	080C0909-8S1



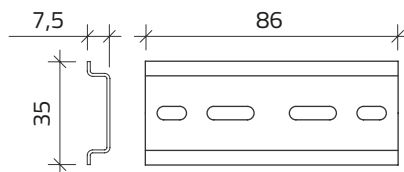
Accessori adattabili / Adaptable accessories

Piastra di fondo / Mounting plate	1	100	080P0909
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Guida / Rail

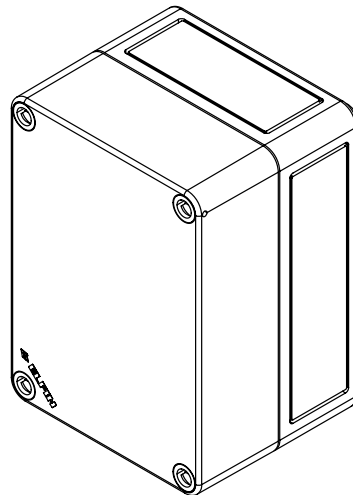
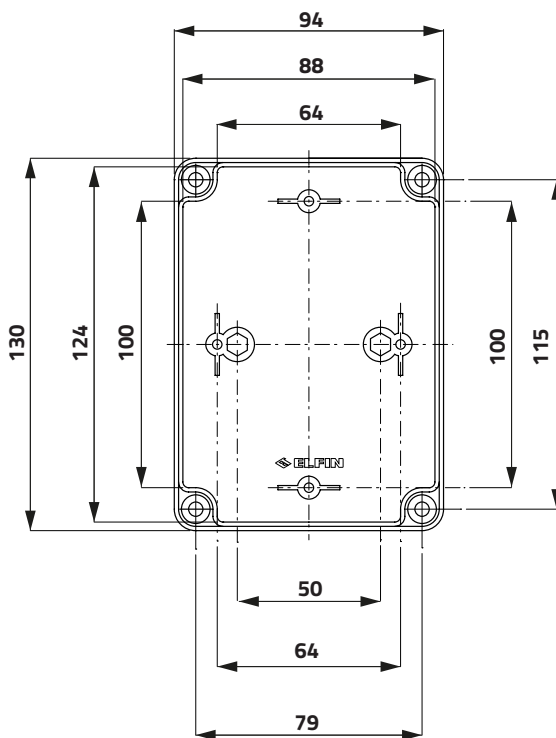
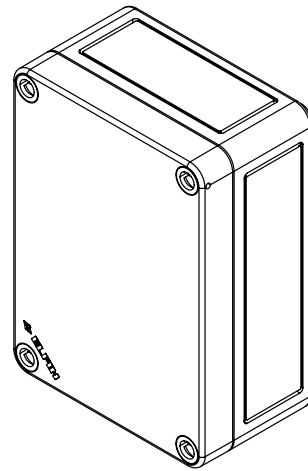
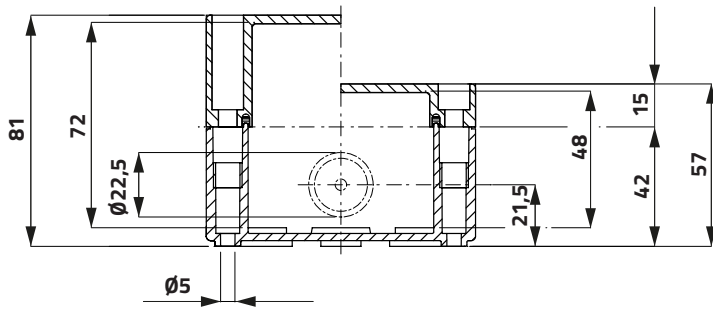
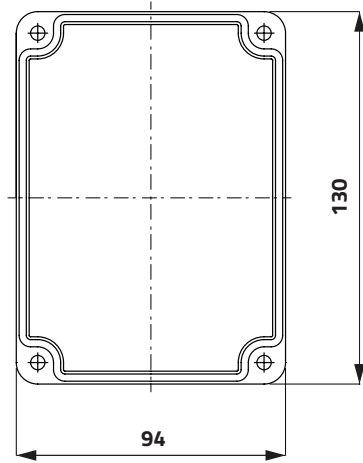
30

080G3508



Scatole in termoplastico 94x130mm Thermoplastic enclosures 94x130mm

SERIES CUBE / SERIES CUBE



Scatole in termoplastico 94x130mm Thermoplastic enclosures 94x130mm

SERIE CUBE / SERIES CUBE

h g cod



Coperchio senza fori / Undrilled lid

Polistirene / Polystyrene	57	152	080CS0913-5
Polistirene / Polystyrene	81	213	080CS0913-8
Policarbonato/ Polycarbonate	57	181	080C0913-5
Policarbonato/ Polycarbonate	81	254	080C0913-8



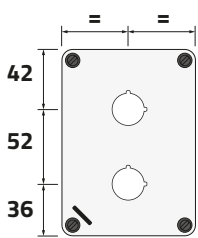
Coperchio giallo senza fori / Undrilled yellow lid

Polistirene / Polystyrene	57	152	080CS0913-5G
Polistirene / Polystyrene	81	213	080CS0913-8G
Policarbonato/ Polycarbonate	57	181	080C0913-5G
Policarbonato/ Polycarbonate	81	254	080C0913-8G



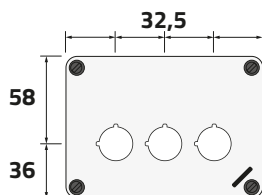
Coperchio trasparente senza fori / Transparent Undrilled lid

Policarbonato/ Polycarbonate	57	166	080C0913-5T
Policarbonato/ Polycarbonate	81	240	080C0913-8T



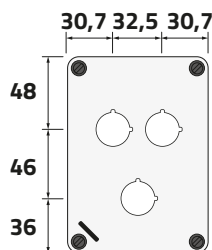
Coperchio con 2 fori Ø 22mm / 2-hole lid Ø 22mm

Polistirene / Polystyrene	57	149	080CS0913-5P2
Polistirene / Polystyrene	81	210	080CS0913-8P2
Policarbonato/ Polycarbonate	57	177	080C0913-5P2
Policarbonato/ Polycarbonate	81	250	080C0913-8P2



Coperchio con 3 fori Ø 22mm / 3-hole lid Ø 22mm

Polistirene / Polystyrene	57	147	080CS0913-5P3L
Polistirene / Polystyrene	81	208	080CS0913-8P3L
Policarbonato/ Polycarbonate	57	175	080C0913-5P3L
Policarbonato/ Polycarbonate	81	248	080C0913-8P3L



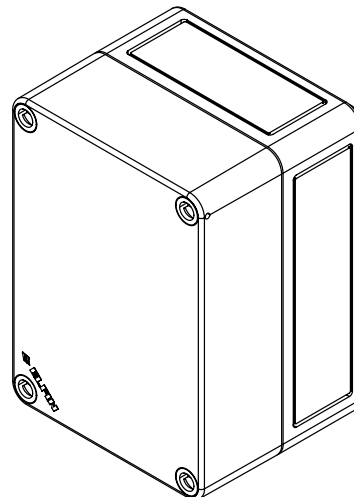
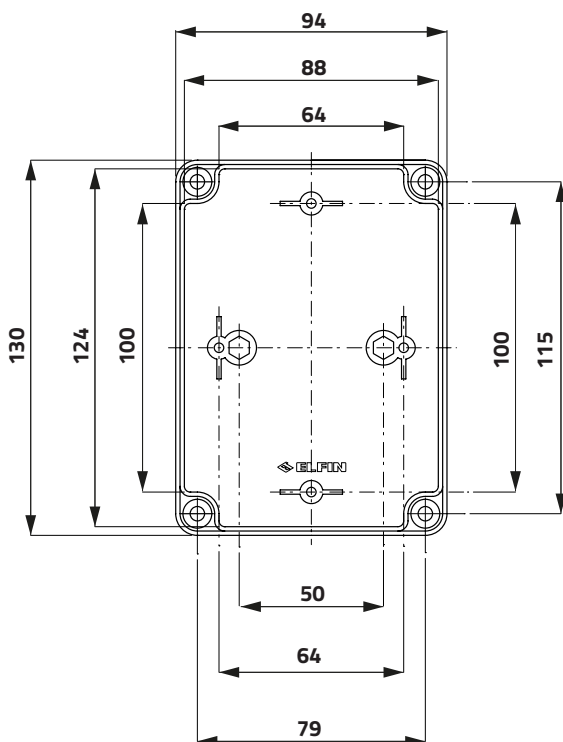
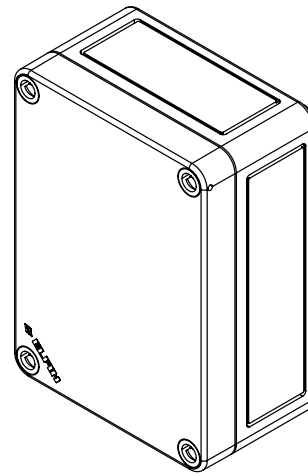
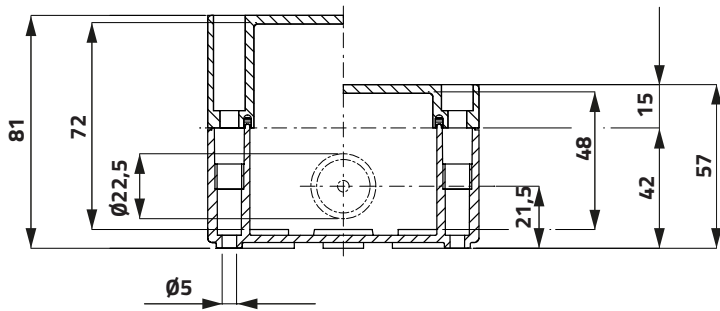
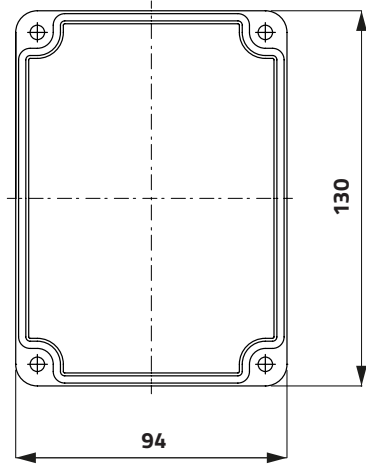
Coperchio con 3 fori Ø 22mm / 3-hole lid Ø 22mm

Polistirene / Polystyrene	57	147	080CS0913-5P3C
Polistirene / Polystyrene	81	208	080CS0913-8P3C
Policarbonato/ Polycarbonate	57	175	080C0913-5P3C
Policarbonato/ Polycarbonate	81	248	080C0913-8P3C



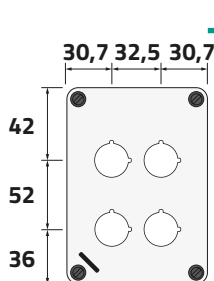
Scatole in termoplastico 94x130mm Thermoplastic enclosures 94x130mm

SERIES CUBE / SERIES CUBE



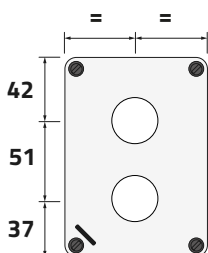
Scatole in termoplastico 94x130mm Thermoplastic enclosures 94x130mm

SERIE CUBE / SERIES CUBE



Coperchio con 4 fori Ø 22mm / 4-hole lid Ø 22mm

	h	g	cod
Polistirene / Polystyrene	57	145	080CS0913-5P4
Polistirene / Polystyrene	81	206	080CS0913-8P4
Policarbonato/ Polycarbonate	57	173	080C0913-5P4
Policarbonato/ Polycarbonate	81	246	080C0913-8P4



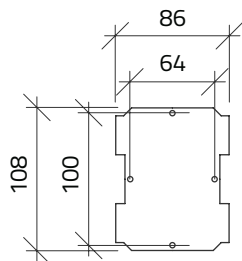
Coperchio con 2 fori Ø 30mm / 2-hole lid Ø 30mm

Polistirene / Polystyrene	81	206	080CS0913-8S2
Policarbonato/ Polycarbonate	81	246	080C0913-8S2



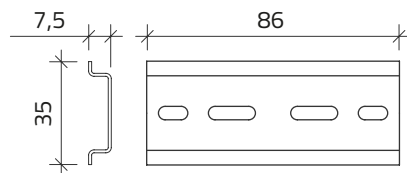
Piastra di fondo / Mounting plate

1	148	080P0913
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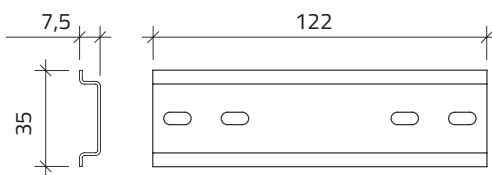
Guida / Rail

30	080G3508
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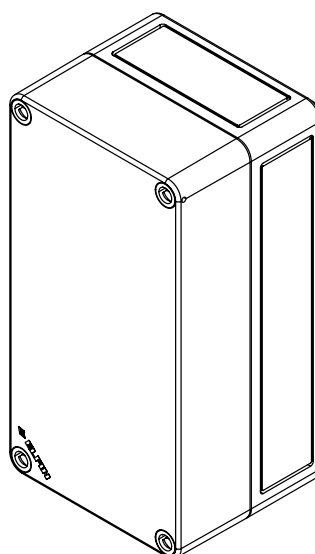
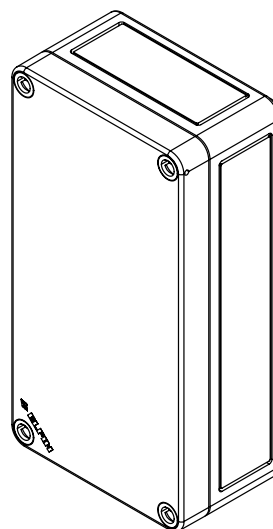
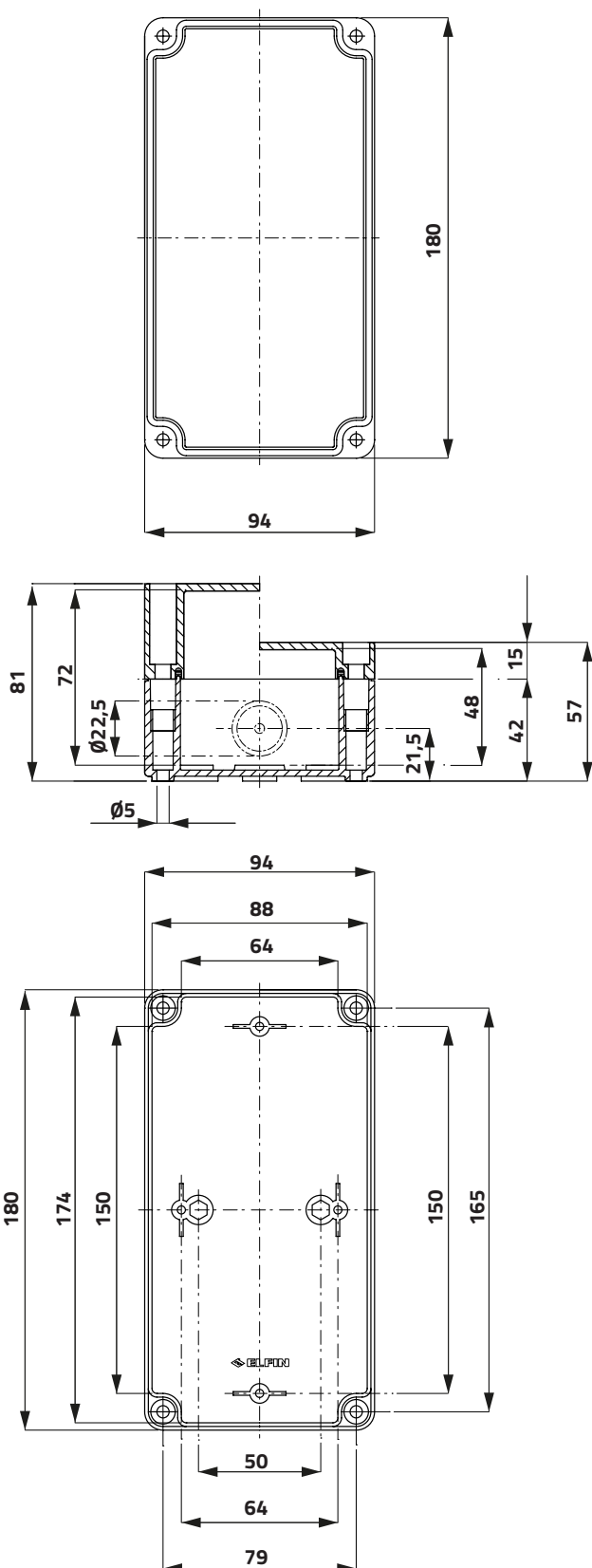
Guida / Rail

42	080G3512
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Scatole in termoplastico 94x180mm Thermoplastic enclosures 94x180mm

SERIES CUBE / SERIES CUBE



Scatole in termoplastico 94x180mm Thermoplastic enclosures 94x180mm

SERIE CUBE / SERIES CUBE

h g cod



Coperchio senza fori / Undrilled lid

Polistirene / Polystyrene	57	201	080CS0918-5
Polistirene / Polystyrene	81	263	080CS0918-8
Policarbonato/ Polycarbonate	57	241	080C0918-5
Policarbonato/ Polycarbonate	81	314	080C0918-8



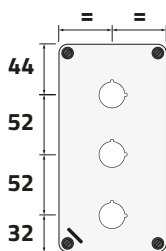
Coperchio giallo senza fori / Undrilled yellow lid

Polistirene / Polystyrene	57	201	080CS0918-5G
Polistirene / Polystyrene	81	263	080CS0918-8G
Policarbonato/ Polycarbonate	57	241	080C0918-5G
Policarbonato/ Polycarbonate	81	314	080C0918-8G



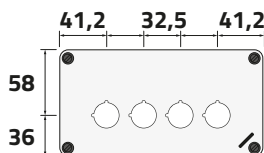
Coperchio trasparente senza fori / Transparent Undrilled lid

Policarbonato/ Polycarbonate	57	228	080C0918-5T
Policarbonato/ Polycarbonate	81	300	080C0918-8T



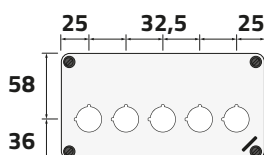
Coperchio con 3 fori Ø 22mm / 3-hole lid Ø 22mm

Polistirene / Polystyrene	57	197	080CS0918-5P3
Polistirene / Polystyrene	81	259	080CS0918-8P3
Policarbonato/ Polycarbonate	57	235	080C0918-5P3
Policarbonato/ Polycarbonate	81	308	080C0918-8P3



Coperchio con 4 fori Ø 22mm / 4-hole lid Ø 22mm

Polistirene / Polystyrene	57	195	080CS0918-5P4L
Polistirene / Polystyrene	81	257	080CS0918-8P4L
Policarbonato/ Polycarbonate	57	233	080C0918-5P4L
Policarbonato/ Polycarbonate	81	306	080C0918-8P4L

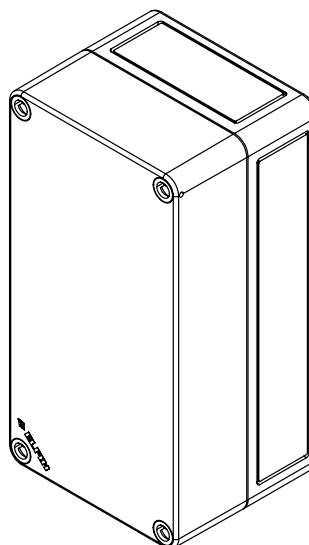
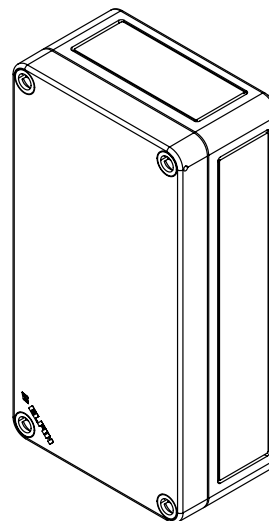
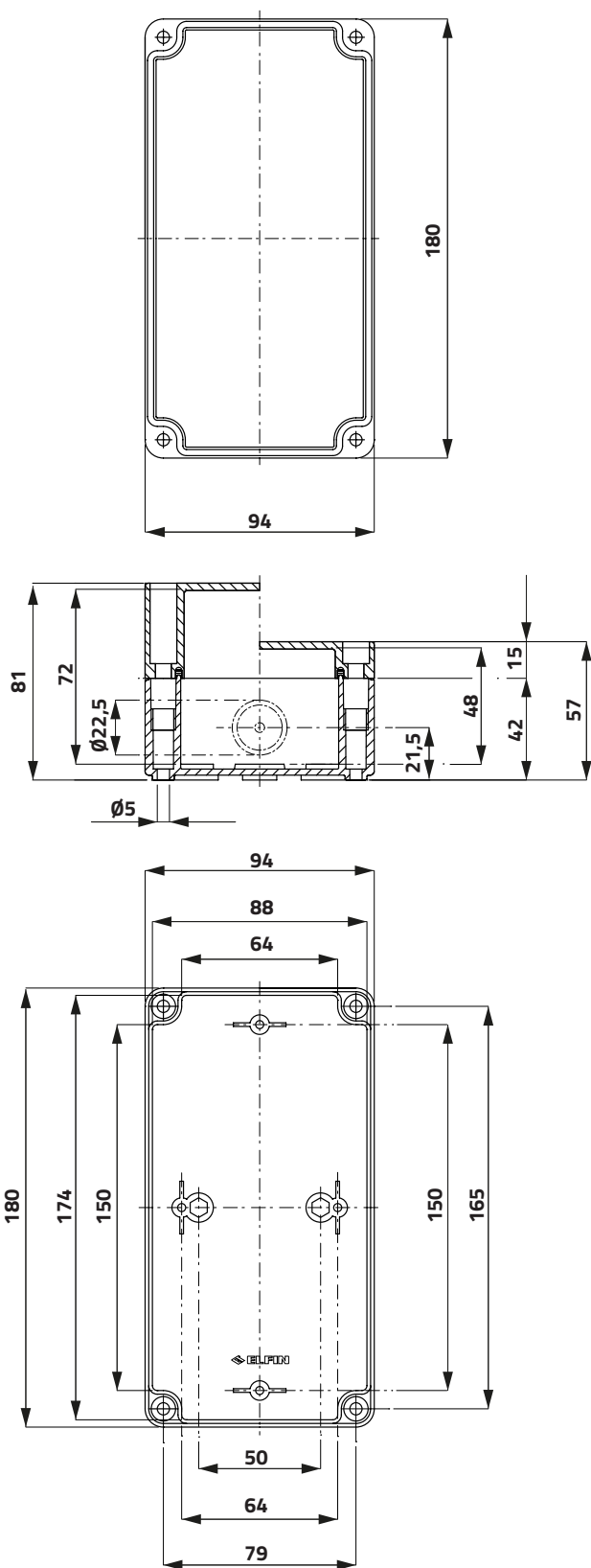


Coperchio con 5 fori Ø 22mm / 5-hole lid Ø 22mm

Polistirene / Polystyrene	57	193	080CS0918-5P5L
Polistirene / Polystyrene	81	255	080CS0918-8P5L
Policarbonato/ Polycarbonate	57	231	080C0918-5P5L
Policarbonato/ Polycarbonate	81	304	080C0918-8P5L

Scatole in termoplastico 94x180mm Thermoplastic enclosures 94x180mm

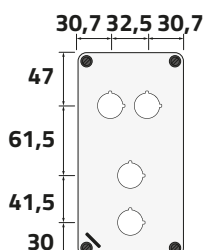
SERIES CUBE / SERIES CUBE



Scatole in termoplastico 94x180mm Thermoplastic enclosures 94x180mm

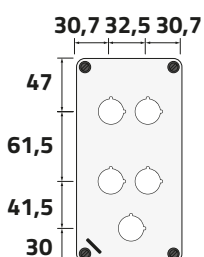
SERIE CUBE / SERIES CUBE

h g cod



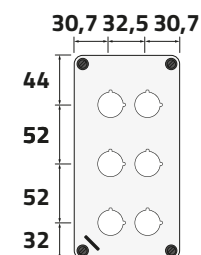
Coperchio con 4 fori Ø 22mm / 4-hole lid Ø 22mm

Polistirene / Polystyrene	57	193	080CS0918-5P4C
Polistirene / Polystyrene	81	255	080CS0918-8P4C
Policarbonato/ Polycarbonate	57	231	080C0918-5P4C
Policarbonato/ Polycarbonate	81	304	080C0918-8P4C



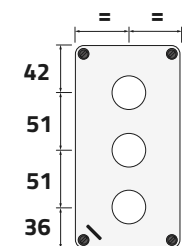
Coperchio con 5 fori Ø 22mm / 5-hole lid Ø 22mm

Polistirene / Polystyrene	57	193	080CS0918-5P5C
Polistirene / Polystyrene	81	255	080CS0918-8P5C
Policarbonato/ Polycarbonate	57	231	080C0918-5P5C
Policarbonato/ Polycarbonate	81	304	080C0918-8P5C



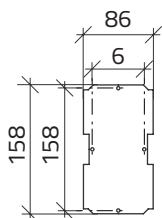
Coperchio con 6 fori Ø 22mm / 6-hole lid Ø 22mm

Polistirene / Polystyrene	57	191	080CS0918-5P6
Polistirene / Polystyrene	81	253	080CS0918-8P6
Policarbonato/ Polycarbonate	57	229	080C0918-5P6
Policarbonato/ Polycarbonate	81	302	080C0918-8P6



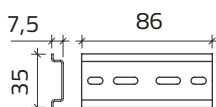
Coperchio con 3 fori Ø 30mm / 3-hole lid Ø 30mm

Polistirene / Polystyrene	81	308	080CS0918-8S3
Policarbonato/ Polycarbonate	81	308	080C0918-8S3



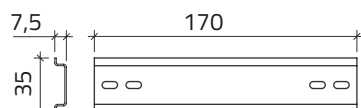
Piastra di fondo / Mounting plate

1	210	080P0918
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Guida / Rail

30	080G3508
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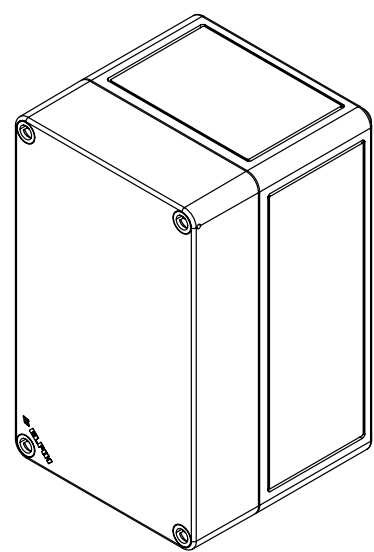
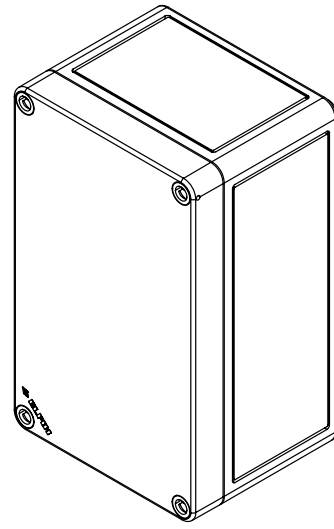
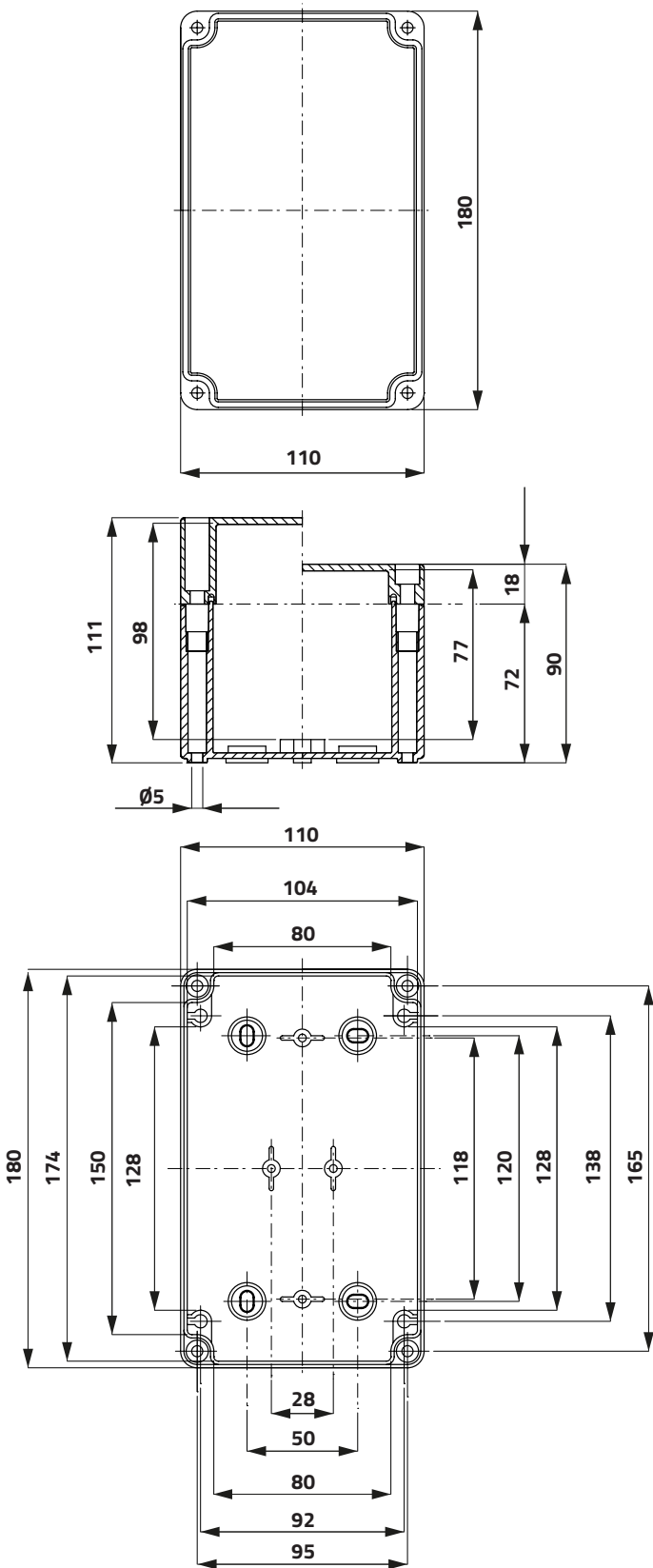
Guida / Rail

59	080G3517
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Scatole in termoplastico 110x180mm Thermoplastic enclosures 110x180mm

SERIES CUBE / SERIES CUBE



Scatole in termoplastico 110x180mm Thermoplastic enclosures 110x180mm

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h g cod



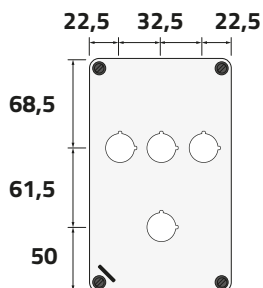
Coperchio senza fori / Undrilled lid

Polistirene / Polystyrene	90	380	080CS1118-9
Polistirene / Polystyrene	111	360	080CS1118-11
Policarbonato/ Polycarbonate	90	380	080C1118-9
Policarbonato/ Polycarbonate	111	430	080C1118-11



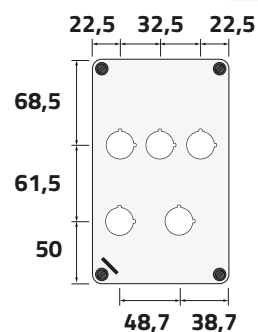
Coperchio trasparente senza fori / Transparent Undrilled lid

Policarbonato/ Polycarbonate	90	374	080C1118-9T
Policarbonato/ Polycarbonate	111	426	080C1118-11T



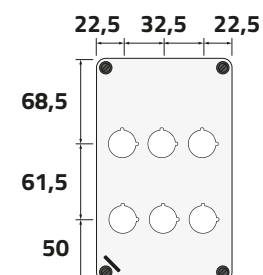
Coperchio con 4 fori Ø 22mm / 4-hole lid Ø 22mm

Polistirene / Polystyrene	90	314	080CS1118-9P4C
Policarbonato/ Polycarbonate	90	376	080C1118-9P4C



Coperchio con 5 fori Ø 22mm / 5-hole lid Ø 22mm

Polistirene / Polystyrene	90	314	080CS1118-9P5C
Policarbonato/ Polycarbonate	90	376	080C1118-9P5C



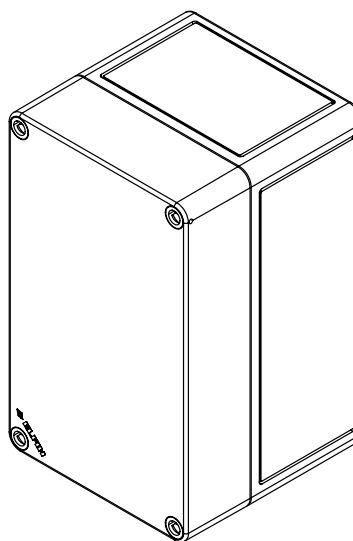
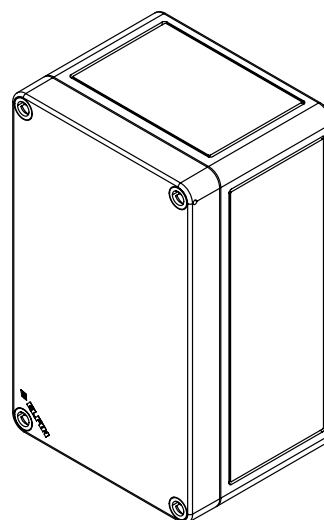
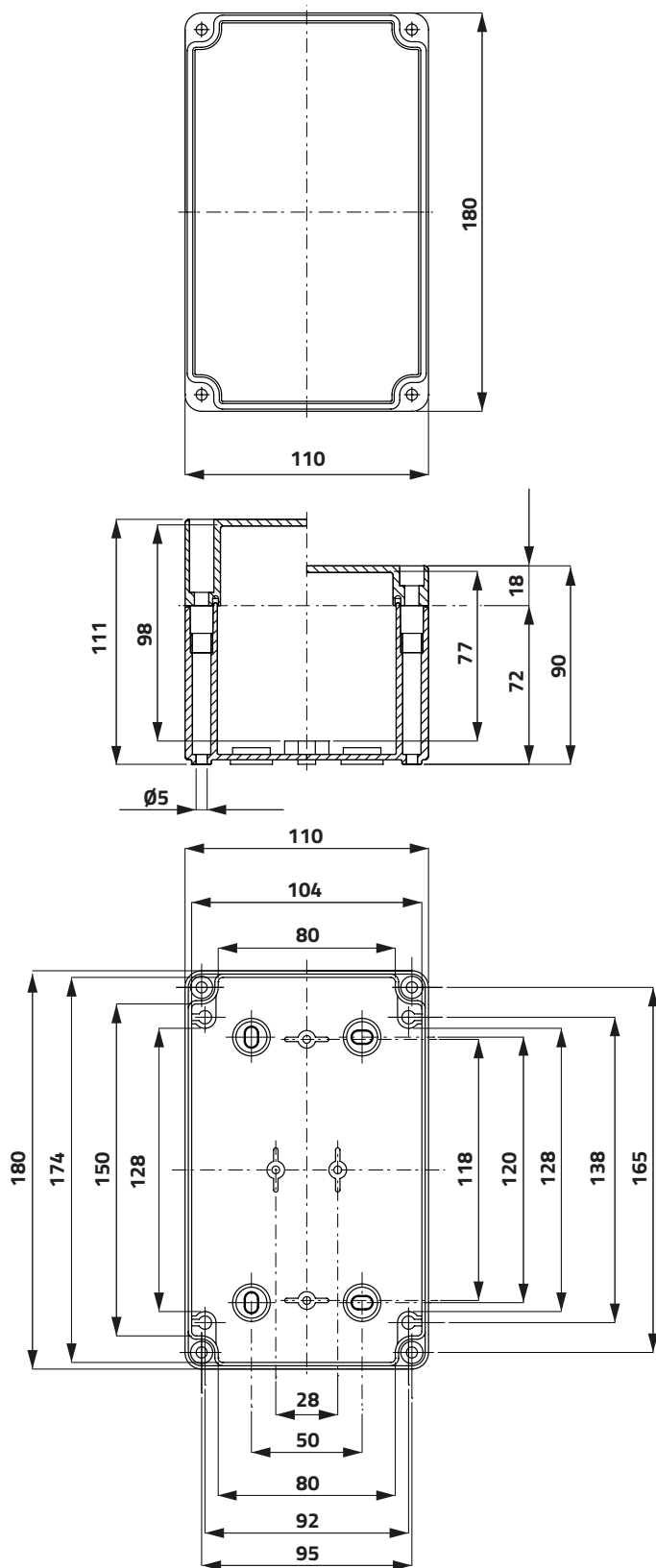
Coperchio con 6 fori Ø 22mm / 6-hole lid Ø 22mm

Polistirene / Polystyrene	90	314	080CS1118-9P6
Policarbonato/ Polycarbonate	90	376	080C1118-9P6



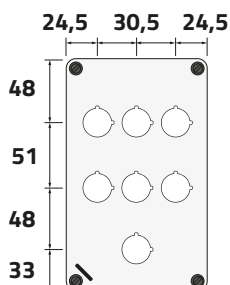
Scatole in termoplastico 110x180mm Thermoplastic enclosures 110x180mm

SERIES CUBE / SERIES CUBE



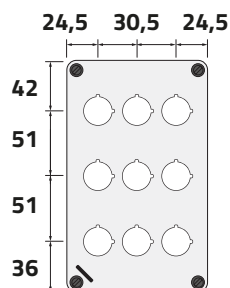
Scatole in termoplastico 110x180mm Thermoplastic enclosures 110x180mm

SERIE CUBE / SERIES CUBE



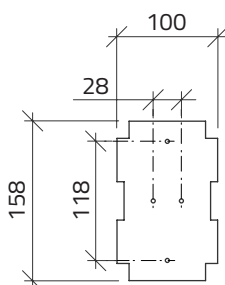
Coperchio con 7 fori Ø 22mm / 7-hole lid Ø 22mm

	h	g	cod
Polistirene / Polystyrene	90	314	080CS1118-9P7C
Policarbonato/ Polycarbonate	90	376	080C1118-9P7C



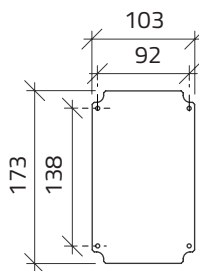
Coperchio con 9 fori Ø 22mm / 9-hole lid Ø 22mm

Polistirene / Polystyrene	90	314	080CS1118-9P9
Policarbonato/ Polycarbonate	90	376	080C1118-9P9



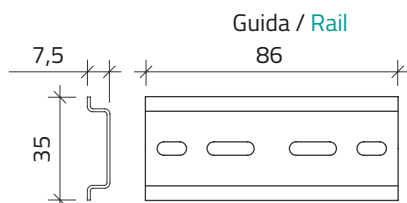
Piastra di fondo / Mounting plate

1	270	080P1118
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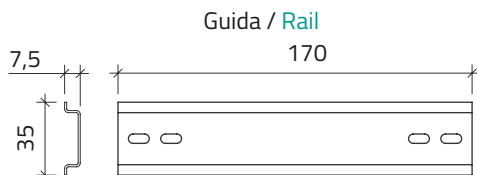
Piastra superiore / Upper plate

2	285	080PS1118
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Guida / Rail

85	080G3508
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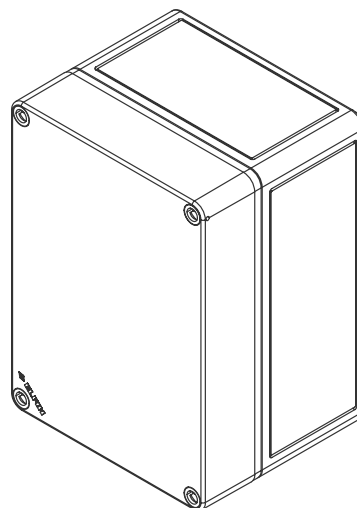
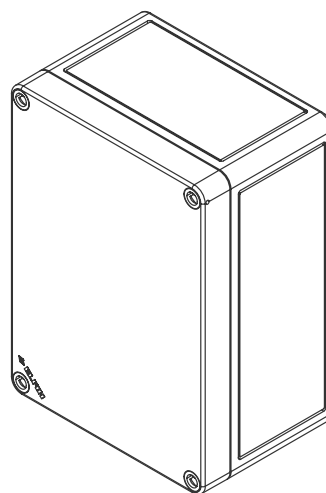
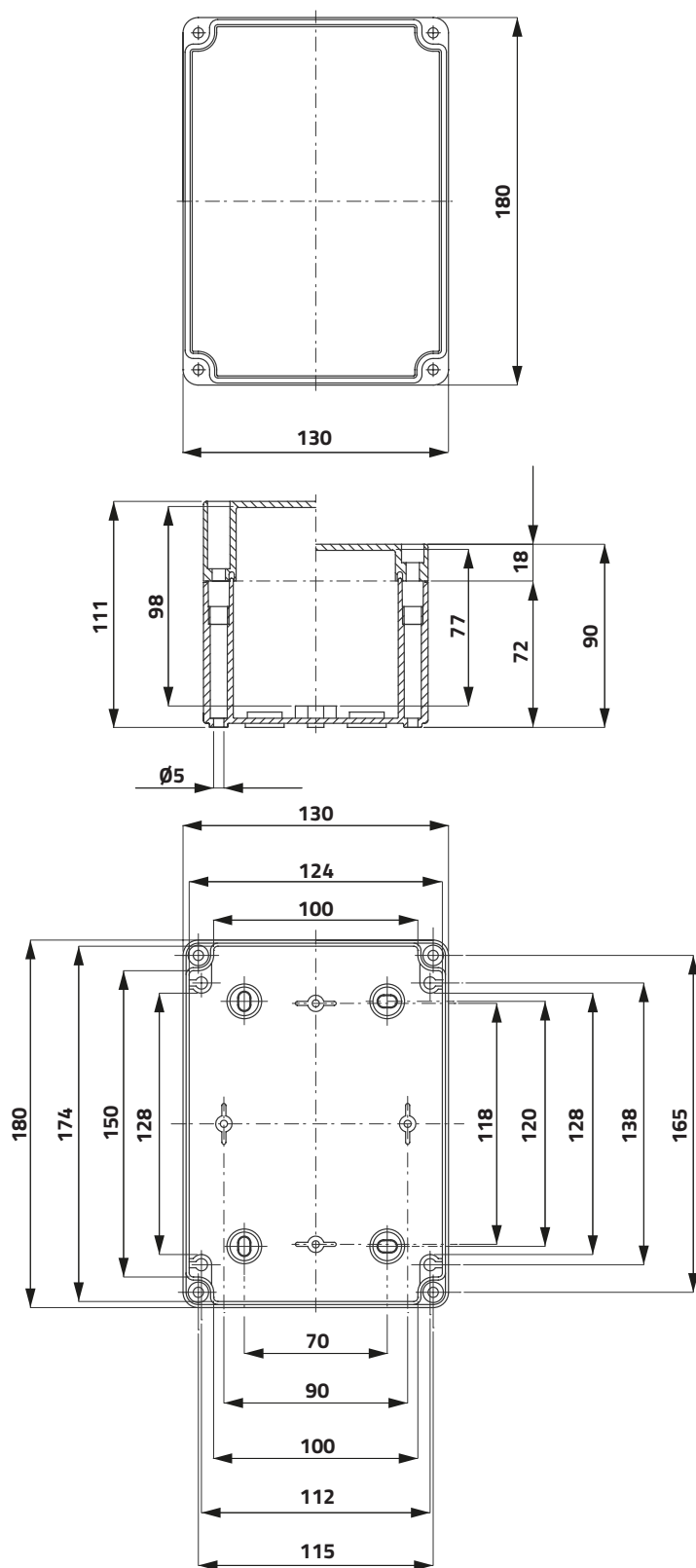
Guida / Rail

59	080G3517
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Scatole in termoplastico 130x180mm Thermoplastic enclosures 130x180mm

SERIES CUBE / SERIES CUBE



Scatole in termoplastico 130x180mm Thermoplastic enclosures 130x180mm

SERIE CUBE / SERIES CUBE



h g cod

Coperchio senza fori / Undrilled lid

Polistirene / Polystyrene	90	380	080CS1318-9
Polistirene / Polystyrene	111	360	080CS1318-11
Policarbonato/ Polycarbonate	90	380	080C1318-9
Policarbonato/ Polycarbonate	111	430	080C1318-11

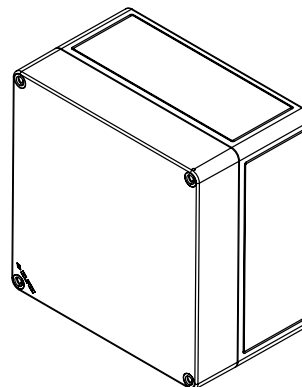
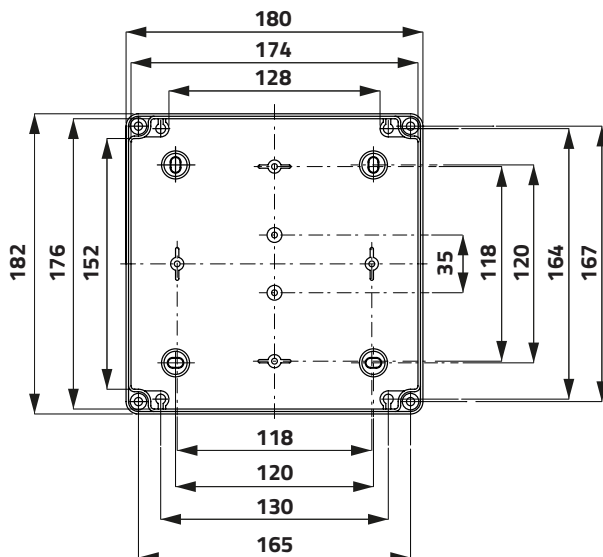
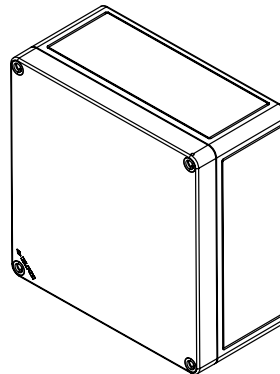
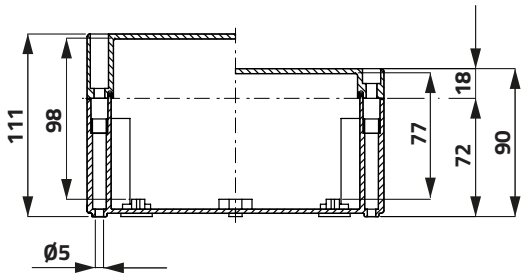
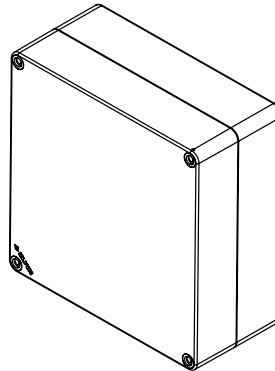
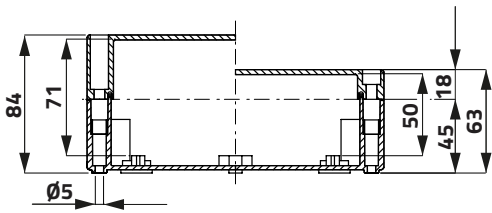
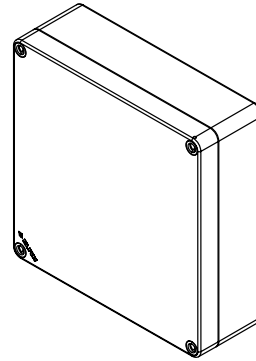
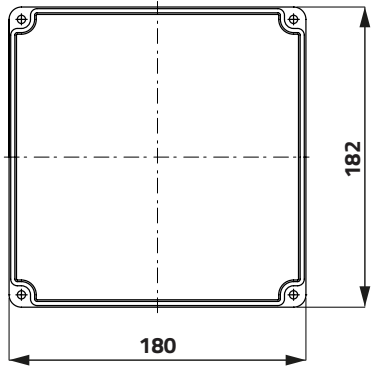


Coperchio trasparente senza fori / Transparent Undrilled lid

Policarbonato/ Polycarbonate	90	374	080C1318-9T
Policarbonato/ Polycarbonate	111	426	080C1318-11T

Scatole in termoplastico 180x182mm Thermoplastic enclosures 180x182mm

SERIES CUBE / SERIES CUBE



Scatole in termoplastico 180x182mm Thermoplastic enclosures 180x182mm

SERIE CUBE / SERIES CUBE



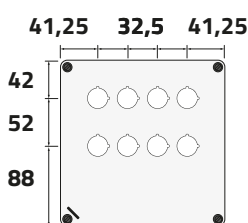
Coperchio senza fori / Undrilled lid

	h	g	cod
Polycarbonato/ Polycarbonate	63	480	080C1818-6
Polycarbonato/ Polycarbonate	84	550	080C1818-8
Polycarbonato/ Polycarbonate	90	545	080C1818-9
Polycarbonato/ Polycarbonate	111	600	080C1818-11



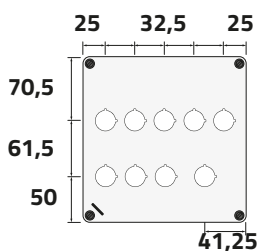
Coperchio trasparente senza fori / Transparent Undrilled lid

Polycarbonato/ Polycarbonate	63	465	080C1818-6T
Polycarbonato/ Polycarbonate	84	520	080C1818-8T
Polycarbonato/ Polycarbonate	90	530	080C1818-9T
Polycarbonato/ Polycarbonate	111	569	080C1818-11T



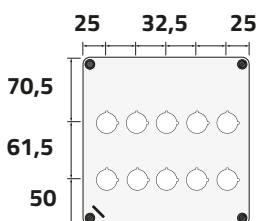
Coperchio con 8 fori Ø 22mm / 8-hole lid Ø 22mm

Polycarbonato/ Polycarbonate	90	520	080C1818-9PB
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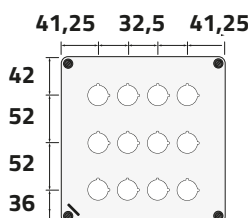
Coperchio con 9 fori Ø 22mm / 9-hole lid Ø 22mm

Polycarbonato/ Polycarbonate	90	515	080C1818-9P9C
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Coperchio con 10 fori Ø 22mm / 10-hole lid Ø 22mm

Polycarbonato/ Polycarbonate	90	515	080C1818-9P10
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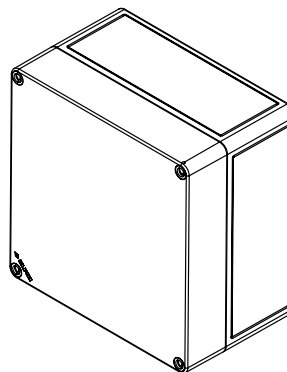
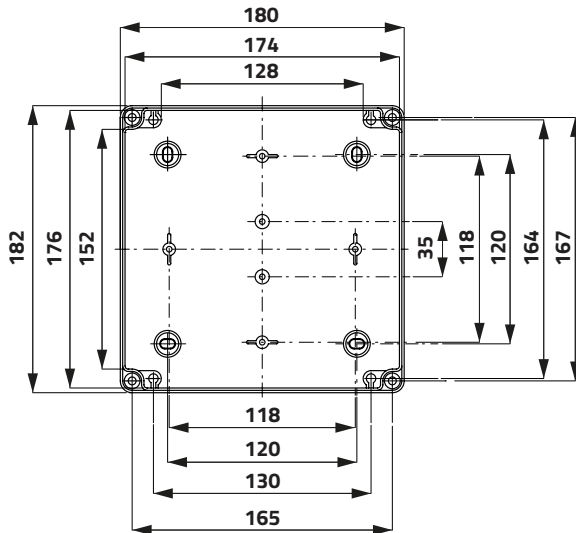
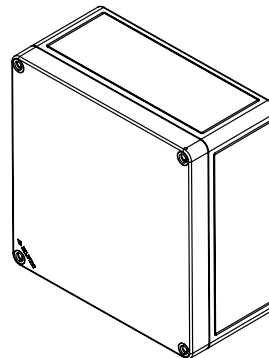
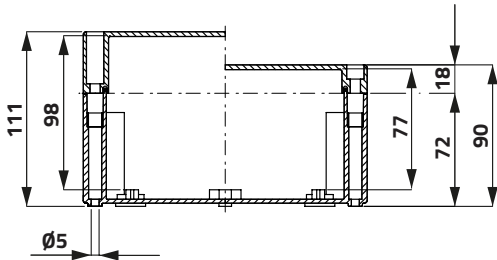
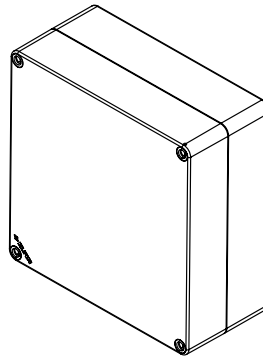
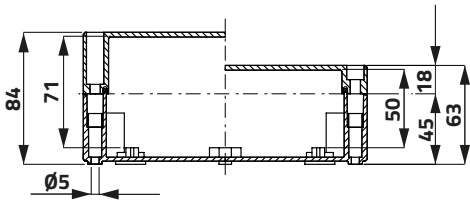
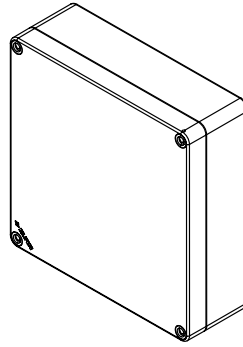
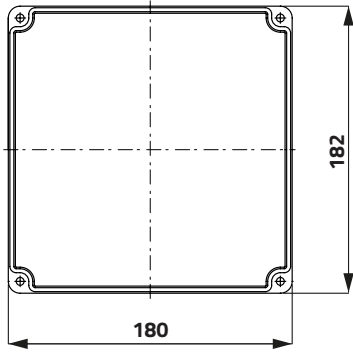


Coperchio con 12 fori Ø 22mm / 12-hole lid Ø 22mm

Polycarbonato/ Polycarbonate	90	515	080C1818-9P12
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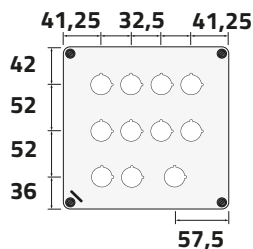
Scatole in termoplastico 180x182mm Thermoplastic enclosures 180x182mm

SERIES CUBE / SERIES CUBE



Scatole in termoplastico 180x182mm Thermoplastic enclosures 180x182mm

SERIE CUBE / SERIES CUBE



Coperchio con 11 fori Ø 22mm / 11-hole lid Ø 22mm

Polycarbonato/ Polycarbonate

90

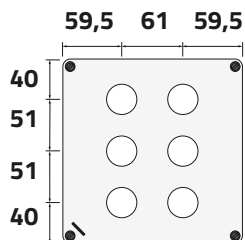
515

080C1818-9P11C

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cod



Coperchio con 6 fori Ø 30mm / 6-hole lid Ø 30mm

Polycarbonato/ Polycarbonate

90

515

080C1818-9S6

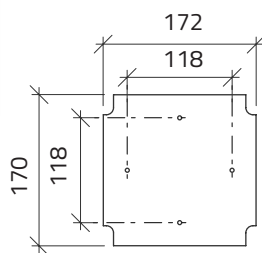


Piastra di fondo / Mounting plate

1,5

425

080P1818

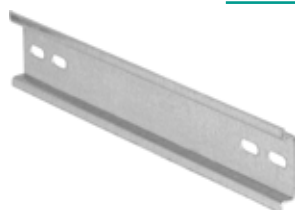
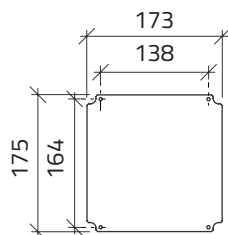


Piastra superiore / Upper plate

2

185

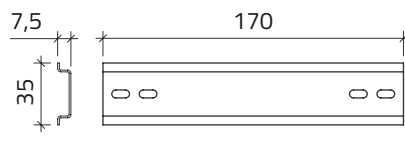
080PS1818



Guida / Rail

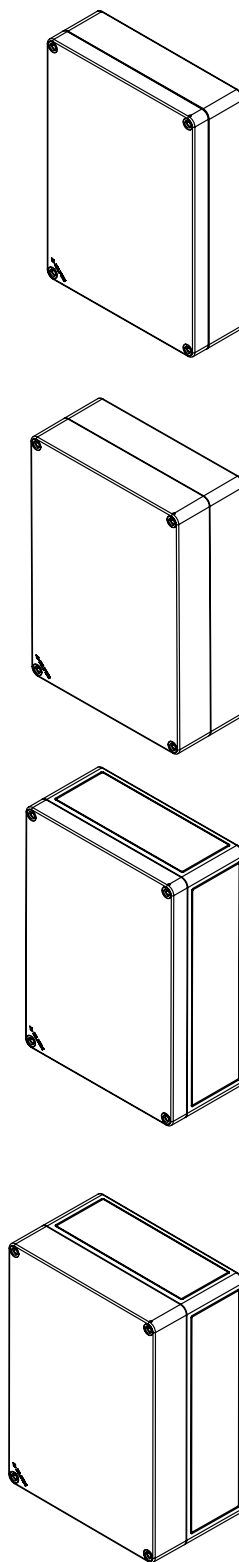
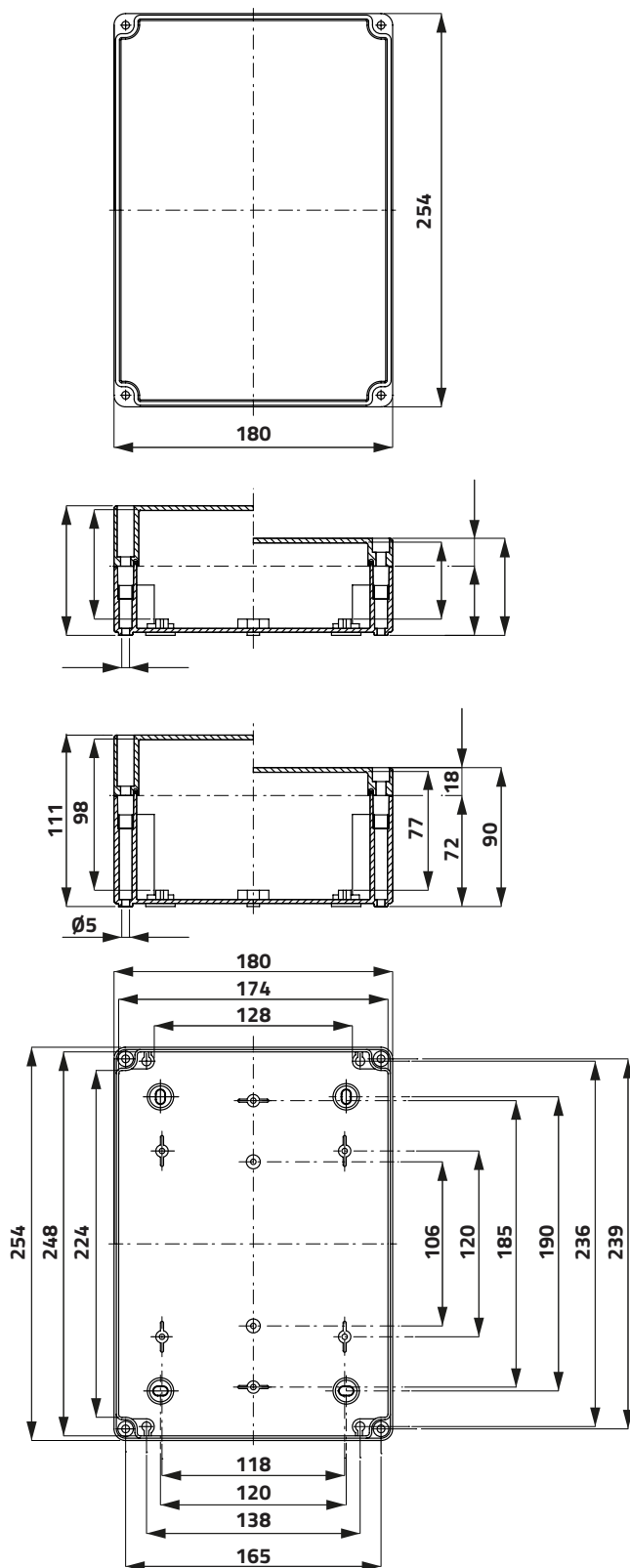
59

080G3517



Scatole in termoplastico 180x254mm Thermoplastic enclosures 180x254mm

SERIES CUBE / SERIES CUBE



Scatole in termoplastico 180x254mm Thermoplastic enclosures 180x254mm

SERIE CUBE / SERIES CUBE



h **g** **cod**

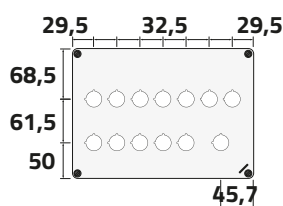
Coperchio senza fori / Undrilled lid

Polistirene / Polystyrene	90	595	080CS1825-9
Polistirene / Polystyrene	111	694	080CS1825-11
Polycarbonato/ Polycarbonate	63	615	080C1825-6
Polycarbonato/ Polycarbonate	84	670	080C1825-8
Polycarbonato/ Polycarbonate	90	720	080C1825-9
Polycarbonato/ Polycarbonate	111	775	080C1825-11



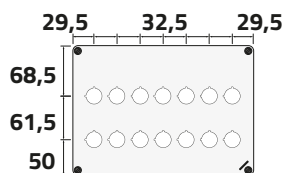
Coperchio trasparente senza fori / Transparent Undrilled lid

Polycarbonato/ Polycarbonate	63	590	080C1825-6T
Polycarbonato/ Polycarbonate	84	640	080C1825-8T
Polycarbonato/ Polycarbonate	90	695	080C1825-9T
Polycarbonato/ Polycarbonate	111	745	080C1825-11T



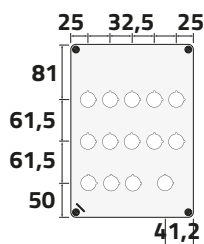
Coperchio con 13 fori Ø 22mm / 13-hole lid Ø 22mm

Polycarbonato/ Polycarbonate	90	694	080C1825-9P13C
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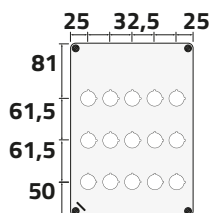
Coperchio con 14 fori Ø 22mm / 14-hole lid Ø 22mm

Polycarbonato/ Polycarbonate	90	694	080C1825-9P14
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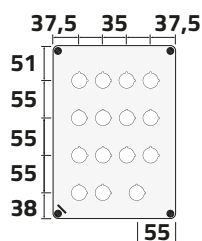
Coperchio con 14 fori Ø 22mm / 14-hole lid Ø 22mm

Polycarbonato/ Polycarbonate	90	694	080C1825-9P14C
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Coperchio con 15 fori Ø 22mm / 15-hole lid Ø 22mm

Polycarbonato/ Polycarbonate	90	694	080C1825-9P15
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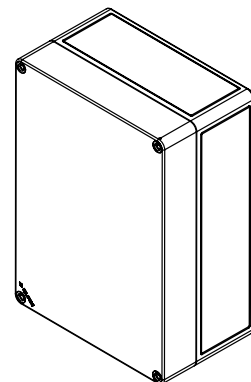
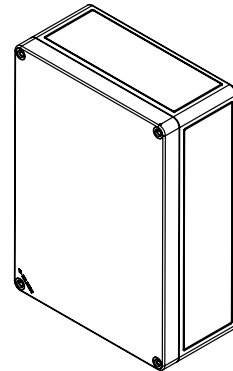
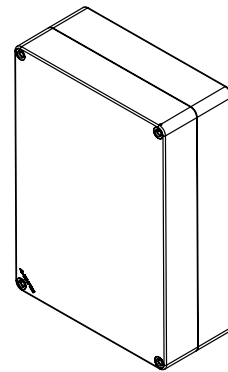
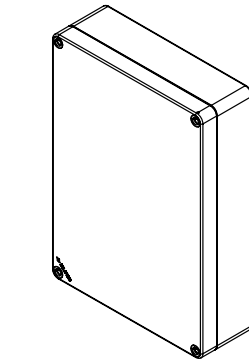
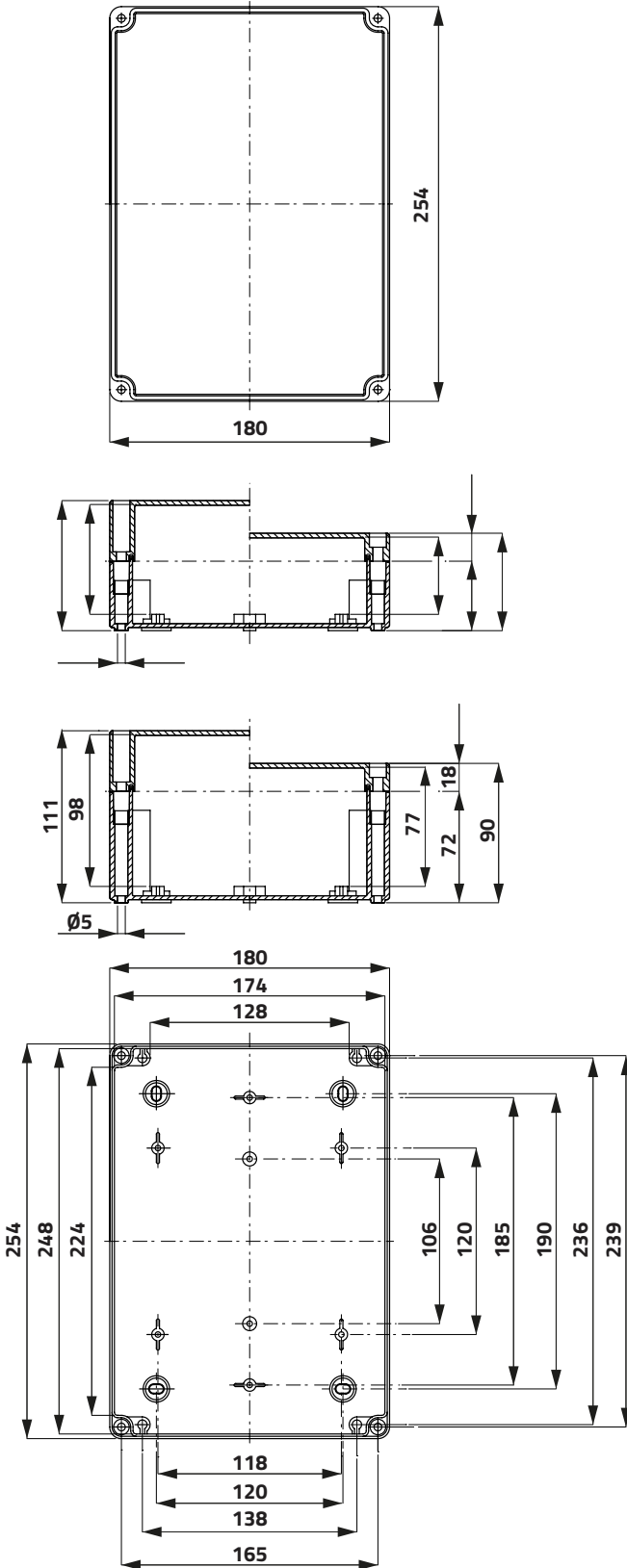
Coperchio con 15 fori Ø 22mm / 15-hole lid Ø 22mm

Polycarbonato/ Polycarbonate	90	694	080C1825-9P15C
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Scatole in termoplastico 180x254mm Thermoplastic enclosures 180x254mm

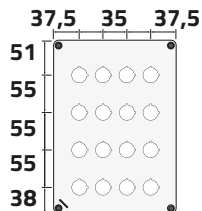
SERIES CUBE / SERIES CUBE



Scatole in termoplastico 180x254mm Thermoplastic enclosures 180x254mm

SERIE CUBE / SERIES CUBE

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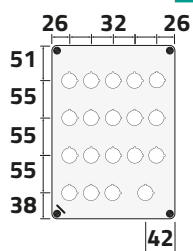
Coperchio con 16 fori Ø 22mm / 16-hole lid Ø 22mm

Polycarbonato/ Polycarbonate

90

694

080C1825-9P16



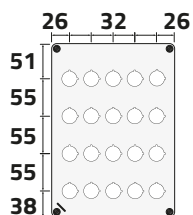
Coperchio con 19 fori Ø 22mm / 19-hole lid Ø 22mm

Polycarbonato/ Polycarbonate

90

686

080C1825-9P19C



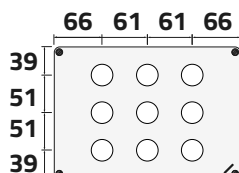
Coperchio con 20 fori Ø 22mm / 20-hole lid Ø 22mm

Polycarbonato/ Polycarbonate

90

686

080C1825-9P20



Coperchio con 9 fori Ø 30mm / 9-hole lid Ø 30mm

Polycarbonato/ Polycarbonate

90

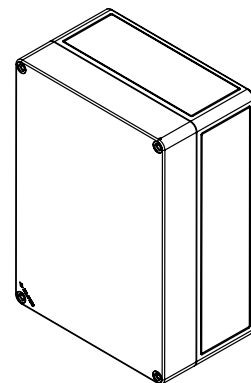
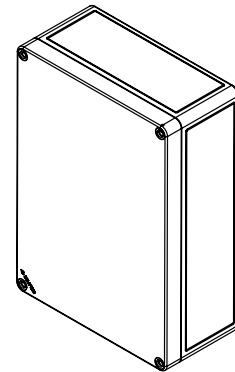
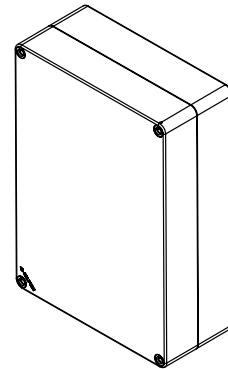
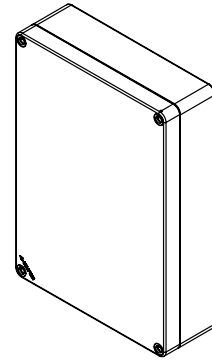
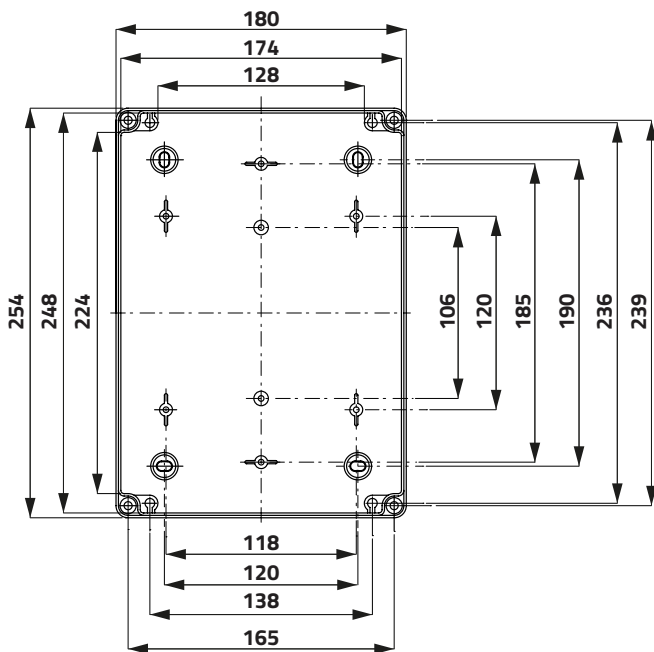
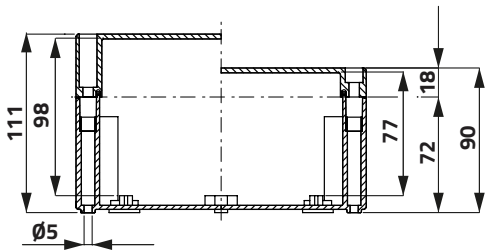
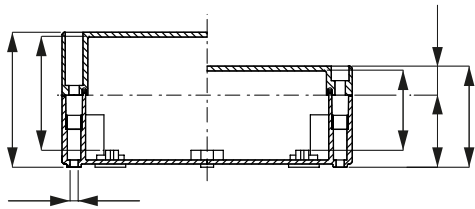
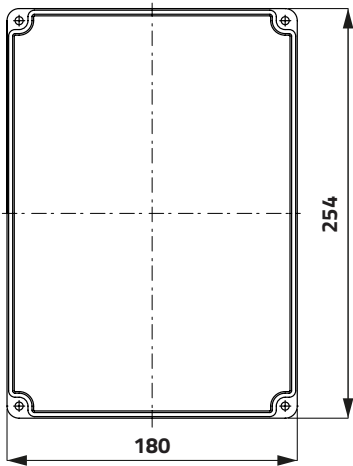
691

080C1825-9S9

Scatole in termoplastico 180x254mm

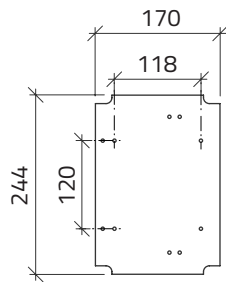
Thermoplastic enclosures 180x254mm

SERIES CUBE / SERIES CUBE



Scatole in termoplastico 180x254mm Thermoplastic enclosures 180x254mm

SERIE CUBE / SERIES CUBE



Piastra di fondo / Mounting plate

h

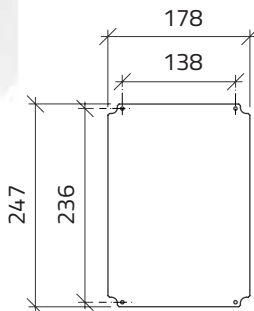
1,5

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613

cod

080P1825

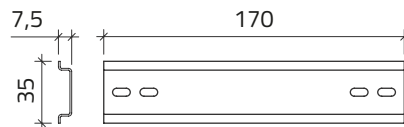


Piastra superiore / Upper plate

2

185

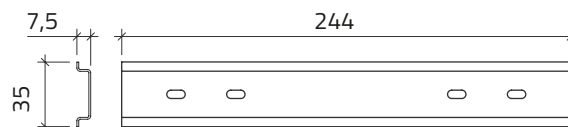
080PS1825



Guida / Rail

59

080G3517



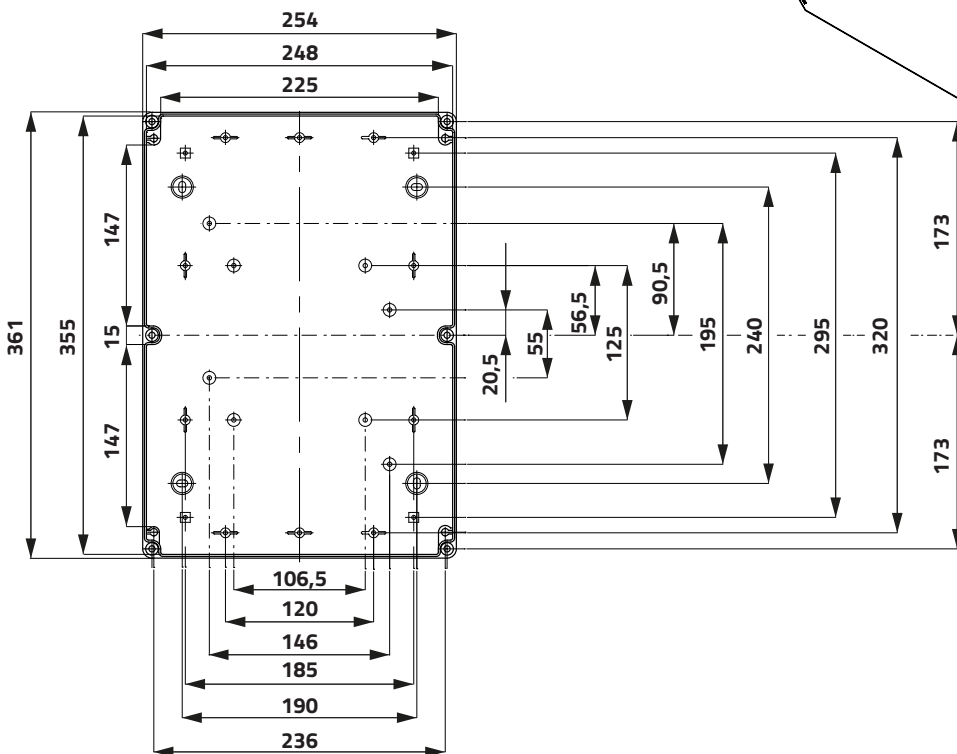
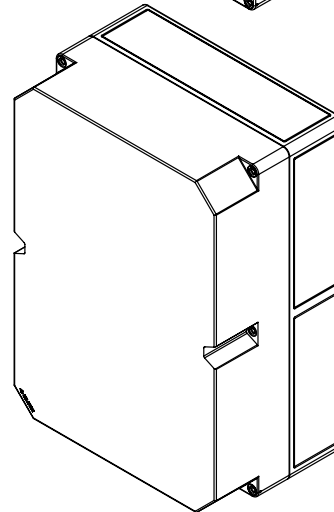
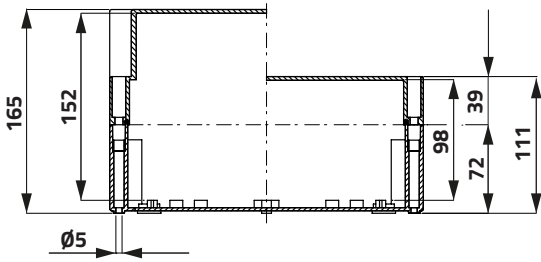
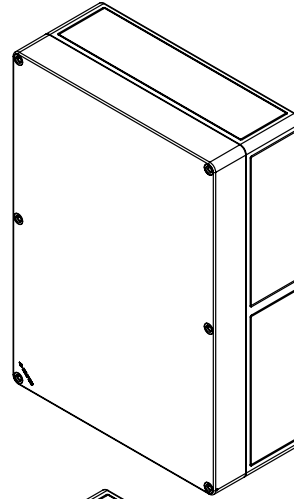
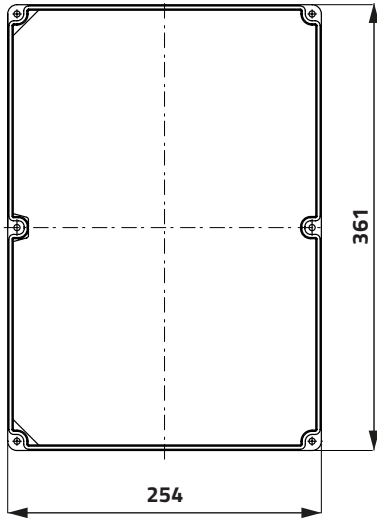
Guida / Rail

77

080G3522

Scatole in termoplastico 254x361mm Thermoplastic enclosures 254x361mm

SERIES CUBE / SERIES CUBE



Scatole in termoplastico 254x361mm Thermoplastic enclosures 254x361mm

SERIE CUBE / SERIES CUBE



Coperchio senza fori / Undrilled lid

	h	g	cod
Polistirene / Polystyrene	111	1140	080CS2536-11
Polistirene / Polystyrene	165	1140	080CS2536-16
Policarbonato/ Polycarbonate	111	1390	080C2536-11
Policarbonato/ Polycarbonate	165	1720	080C2536-16



Coperchio trasparente senza fori / Transparent Undrilled lid

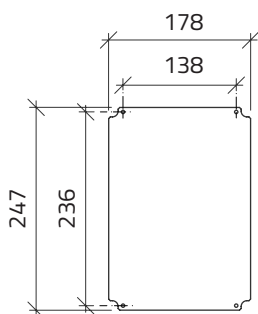
Policarbonato/ Polycarbonate	111	1330	080C2536-11T
Policarbonato/ Polycarbonate	165	1640	080C2536-16T



Piastra di fondo / Mounting plate

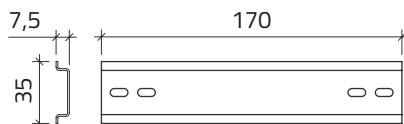
1,5	613	080P1825
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(Utilizzare 2 piastre 080P1825 / No. 2 plates 080P1825 are to be fitted)



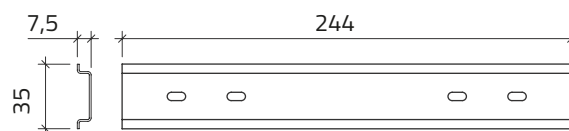
Guida / Rail

59	080G3517
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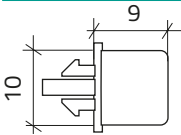

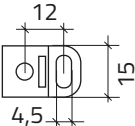

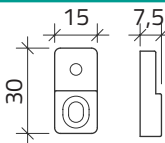

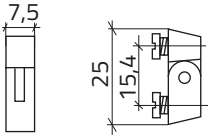

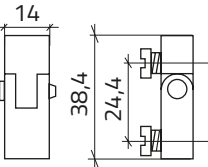

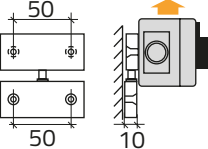

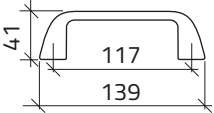

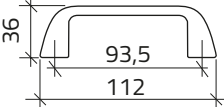

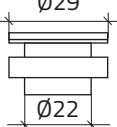

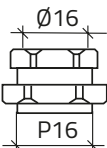


Guida / Rail

77	080G3522
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Accessori Accessories

		g	n	cod
				
	Manopola / Knob	1	10	080M
				
	Kit staffe (4x) / Brackets kit (4x)	1		080S
				
	Kit staffe (2x) / Brackets kit (2x)	30		010S10
				
	Coppia di cerniere per scatole fino a 94x180 Pair of small hinges for enclosures up to 94x180 <small>Con maschera di foratura / With drilling templete</small>	7		080CP
				
	Coppia di cerniere per scatole da 110x180 Pair of big hinges for enclosures from 110x180 <small>Con maschera di foratura / With drilling templete</small>	27		080CG
				
	Kit di fissaggio a parete per contenitori removibili Wall-mounting kit for removable enclosures	124		080SP
				
	Maniglia in plastica / Plastic handle	58		080M139
				
	Maniglia in plastica / Plastic handle	42		080M112
				
	Tappo di chiusura RAL7035 RAL7035 hole plug	5	10	020TTP
	Tappo di chiusura nero / Black hole plug	5	10	020TTPN
				
	Manicotto di giunzione / Coupling kit	7		080MPG16

Accessori Accessories

		g	n	cod
				
	Vite nera / Black screw	1,5	4	080VB
				
	Vite gialla / Yellow screw	1,5	4	080VBG
				
	Vite nera / Black screw	3	4	080VA
				
	Vite gialla / Yellow screw	3	4	080VAG

Accessori Accessories

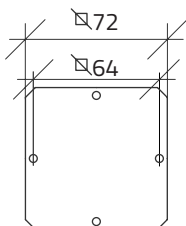
h **g** **cod**



Piastra di fondo / Mounting plate

1 100

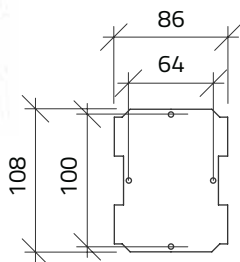
080P0909



Piastra di fondo / Mounting plate

1 148

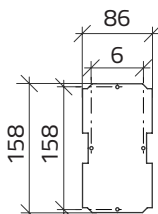
080P0913



Piastra di fondo / Mounting plate

1 210

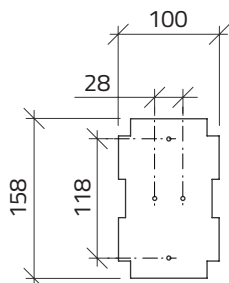
080P0918



Piastra di fondo / Mounting plate

1 270

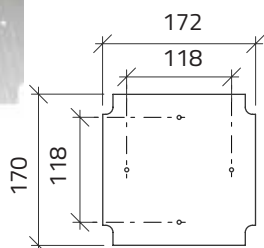
080P1118



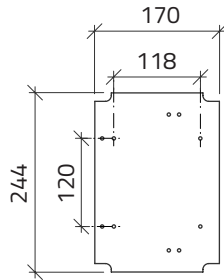
Piastra di fondo / Mounting plate

1,5 425

080P1818

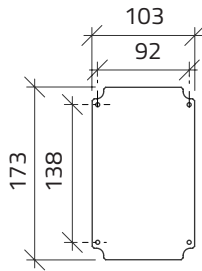


Accessori Accessories



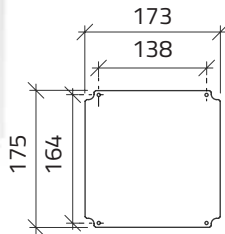
Piastra di fondo / Mounting plate

h	g	cod
1,5	613	080P1825



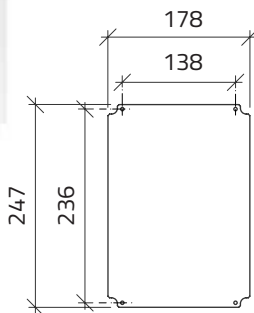
Piastra superiore / Upper plate

2	285	080PS1118
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Piastra superiore / Upper plate

2	130	080PS1818
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Piastra superiore / Upper plate

2	185	080PS1825
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REMOTE

Pulsantiera pensili remote

Pendant push-button stations, remote control

INVOLUCRO

Design compatto ed ergonomico per una presa comoda e sicura con risalti antiscivolo. Realizzato in materiale antiurto. L'involucro viene ulteriormente protetto dalla guarnizione lungo tutto il perimetro laterale, per una elevata resistenza all'impatto.

Disponibilità di due colorazioni giallo/grigio - grigio/grigio. L'involucro garantisce un grado di protezione - IP67 - IP69K. L'entrata del cavo è assicurata da pressacavo tipo M20 flessibile Ø6 ÷ 14 mm posto sul coperchio. La reversibilità del coperchio permette di posizionare l'entrata cavo sia dall'alto, sia dal basso. Il trattenimento del cavo è garantito nel tempo da un efficace sistema serracavo presente all'interno della pulsantiera in grado di accogliere un'ampia serie di sezioni cavo. Modalità "appesa" tramite robusto anello in acciaio inox. Modalità su supporto contenitore di design evoluto e protettivo.

LAYOUT DI FORATURA

Ampia possibilità di foratura per il fissaggio di operatori di comando (pulsanti, selettori, lampade spia) con quote di interasse diverse, mirate all'ottimizzazione dello spazio utile. Il numero massimo di operatori utilizzabili è 7. Layout di foratura personalizzabili da 1 a 7 fori D.22,5 mm

OPERATORI UTILIZZABILI

Tutta la gamma di operatori, normali e luminosi, O20 SM2 (D.22mm) può essere montata sulla pulsantiera remota. Il grado di tenuta degli operatori IP66 - IP69K può essere aumentato fino a IP67 con l'impiego di cappucci in gomma trasparente. Selettori a manopola normali, oppure luminosi a pomello, possono essere utilizzati con un fissaggio che evidenzia l'indice in orizzontale. Il numero massimo di contatti elettrici utilizzabile sui pulsanti e sui selettori è 2. Ampia scelta di simboli e pittogrammi da utilizzare sui pulsanti sia normali che luminosi e sulle lampade spia.

ETICHETTE ADESIVE

Ampia gamma di etichette indicatrici adesive e personalizzabili. Sono disponibili per applicazione laterale (inclinata) e per applicazione frontale, personalizzabile con il brand del cliente.

PULSANTIERE PERSONALIZZATE

Effettuabile fornitura completa di pulsantiera montate e cablate con cavo spiralato e connessioni elaborate secondo specifica del cliente.

CASING

Compact and ergonomic design. Non-slip grip, comfortable to hold. Made of impact-resistant material, the casing is protected by a gasket running all along its perimeter. It guarantees a protection rating of IP67, IP69K. Available in two different colour combinations yellow/grey or grey/dark grey.

The cable entry is secured by a cable gland, M20 flexible type, Ø6 ÷ 14 mm, placed on the lid.

The cable entry can be positioned both at the top and at the bottom thanks to the reversibility of the lid.

An internal cable-retention system ensures the long-lasting fixing of cables of variable dimension.

'Hanging' mode via strong stainless steel eyelet.

"Wall-housing" mode with a support of advanced and embracing design.

DRILLING LAYOUT

Wide possibility of drilling, with different interaxes for fastening control operators, aimed at optimising the useful space.

Up to 7 operators can be installed for use.

Drilling layouts customizable from 1 to 7 D.22,5mm holes.

AVAILABLE OPERATORS

The Remote push-button station can be assembled with all normal and illuminated operators from O20 SM2(D.22mm).

The use of transparent rubber caps increases the protection degree of operators from IP66 - IP69K to IP67 .

Non-illuminated and illuminated knob selector switches can be used in a position which highlights the horizontal index.

2 is the maximum number of electrical contacts - applicable on each operator - for push-buttons and knob selector switches.

Wide choice of symbols and pictograms for non-illuminated and illuminated push-buttons and for pilot lights.

LABELS

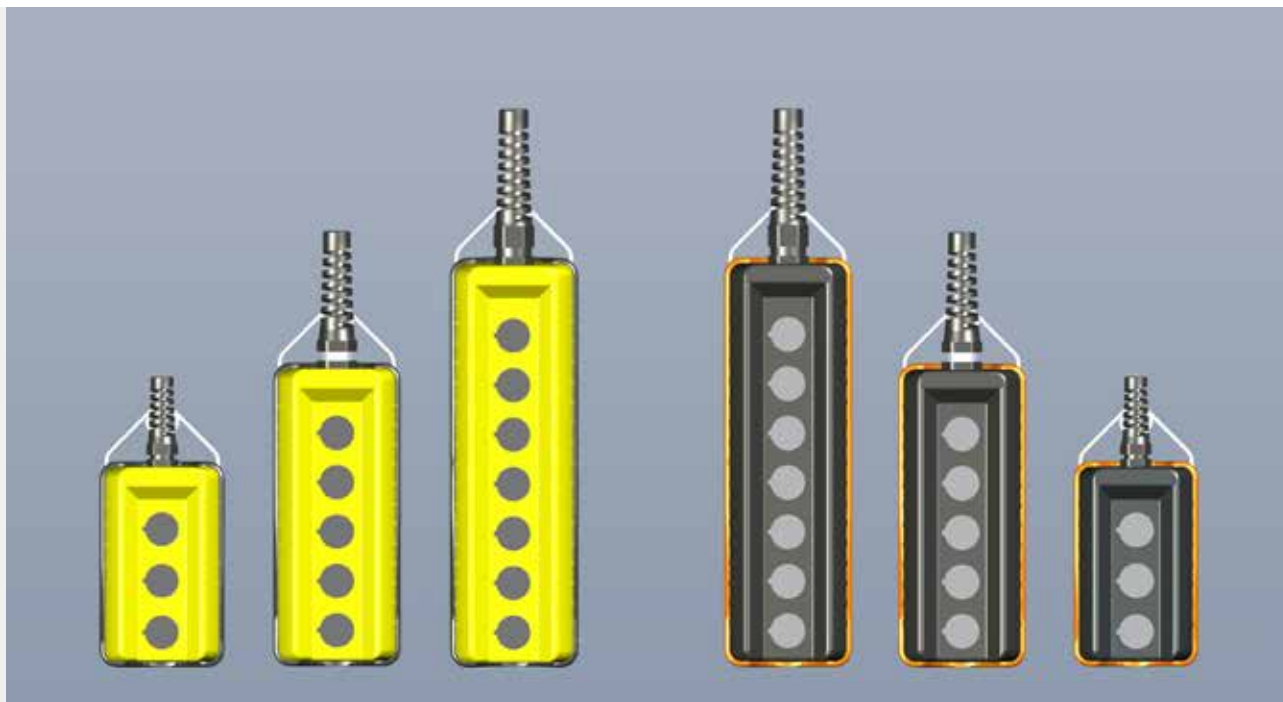
Large range of adhesive and customizable labels. They are available for side application (inclined) and front application. Customizable with the customer's brand.

CUSTOMIZABLE PUSH-BUTTON STATIONS

Enclosures available as complete equipment, supplied with push-buttons and spiral cable mounted and wired. Wiring made according to customer's specification.

Pulsantiere pensili remote Pendant push-button stations, remote control

SERIES REMOTE / SERIES REMOTE



Molteplici layout di foratura per una completa libertà di utilizzo e applicazione
Multiple drilling layouts for complete freedom of use and application



Applicazione con supporto
Holder application



Applicazione con flancia in acciaio
Application with steel flannel

SCATOLE IN TERMOPLASTICO

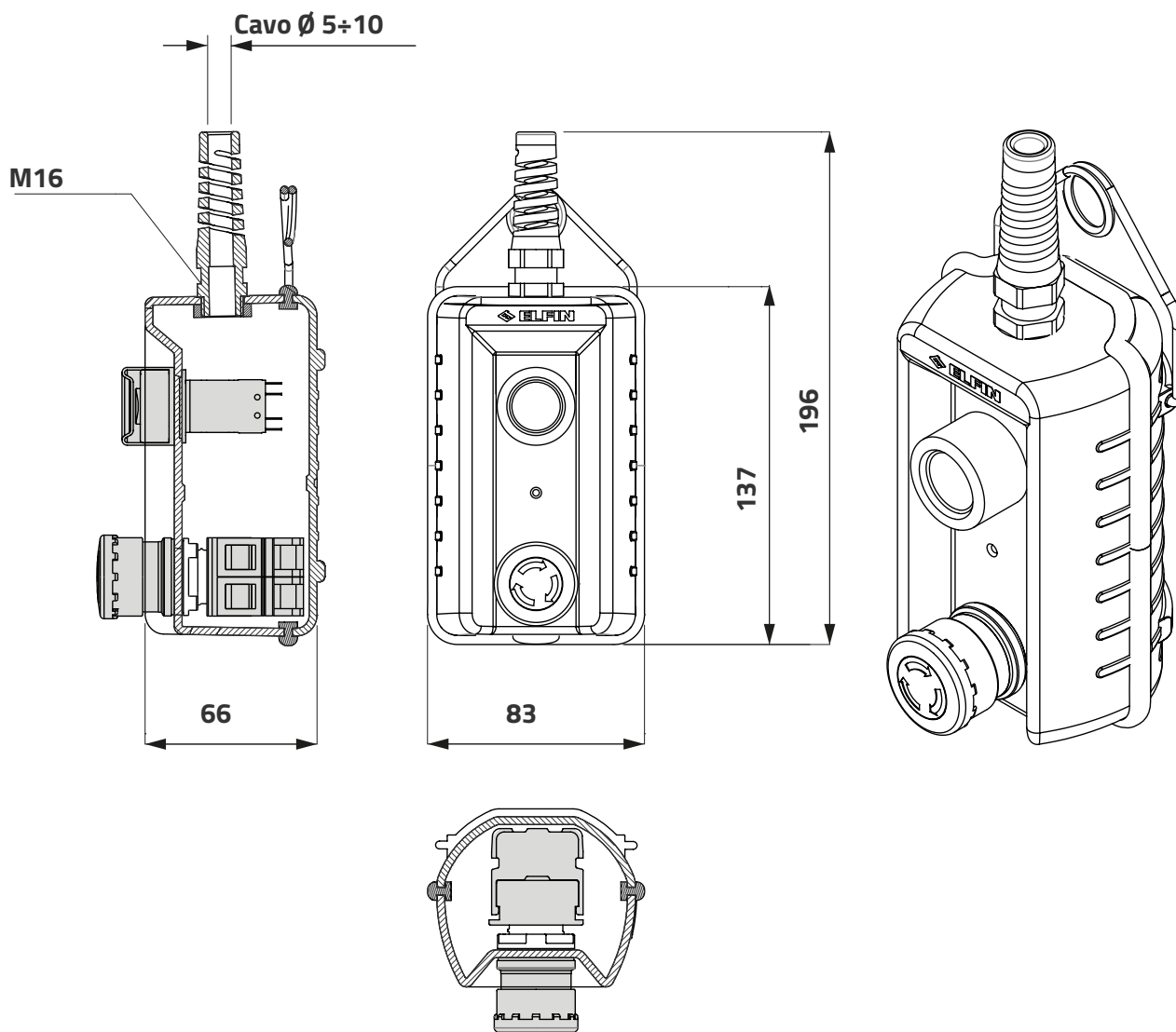
Pulsantiere pensili remote Pendant push-button stations, remote control

SERIE REMOTE / SERIES REMOTE



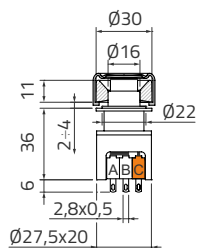
Pulsantiere pensili remote Pendant push-button stations, remote control

SERIE REMOTE / SERIES REMOTE



Pulsantiera pensili remote Pendant push-button stations, remote control

SERIE REMOTE / SERIES REMOTE



Pulsantiera pensile remota con pulsante di abilitazione a 3 posizioni Pendant push-button stations remote control with 3-position enabling switch

Microinterruttori con terminali faston 2,8 x 0,5

Microswitches with faston terminals 2.8 x 0.5

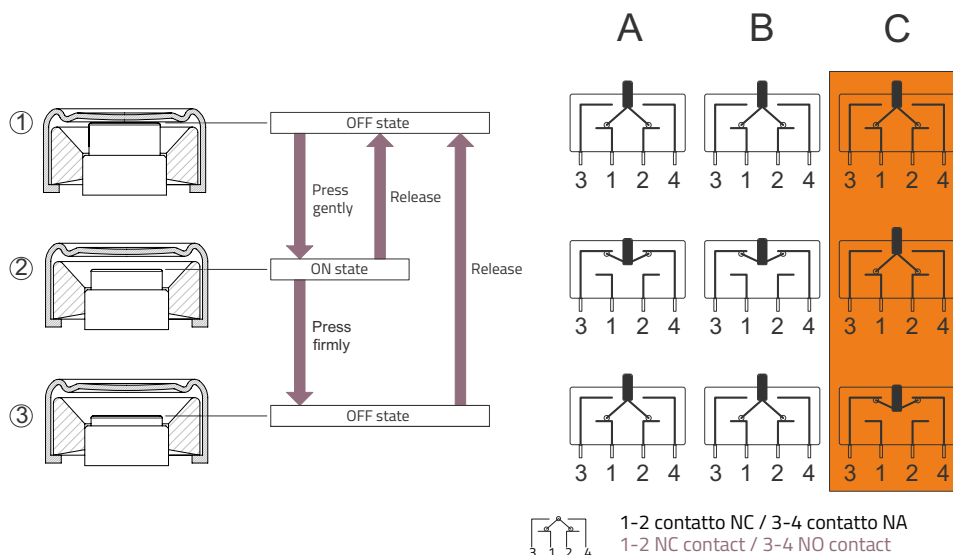
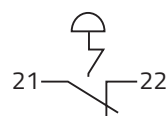
3 NO + 3 NC

g

cod

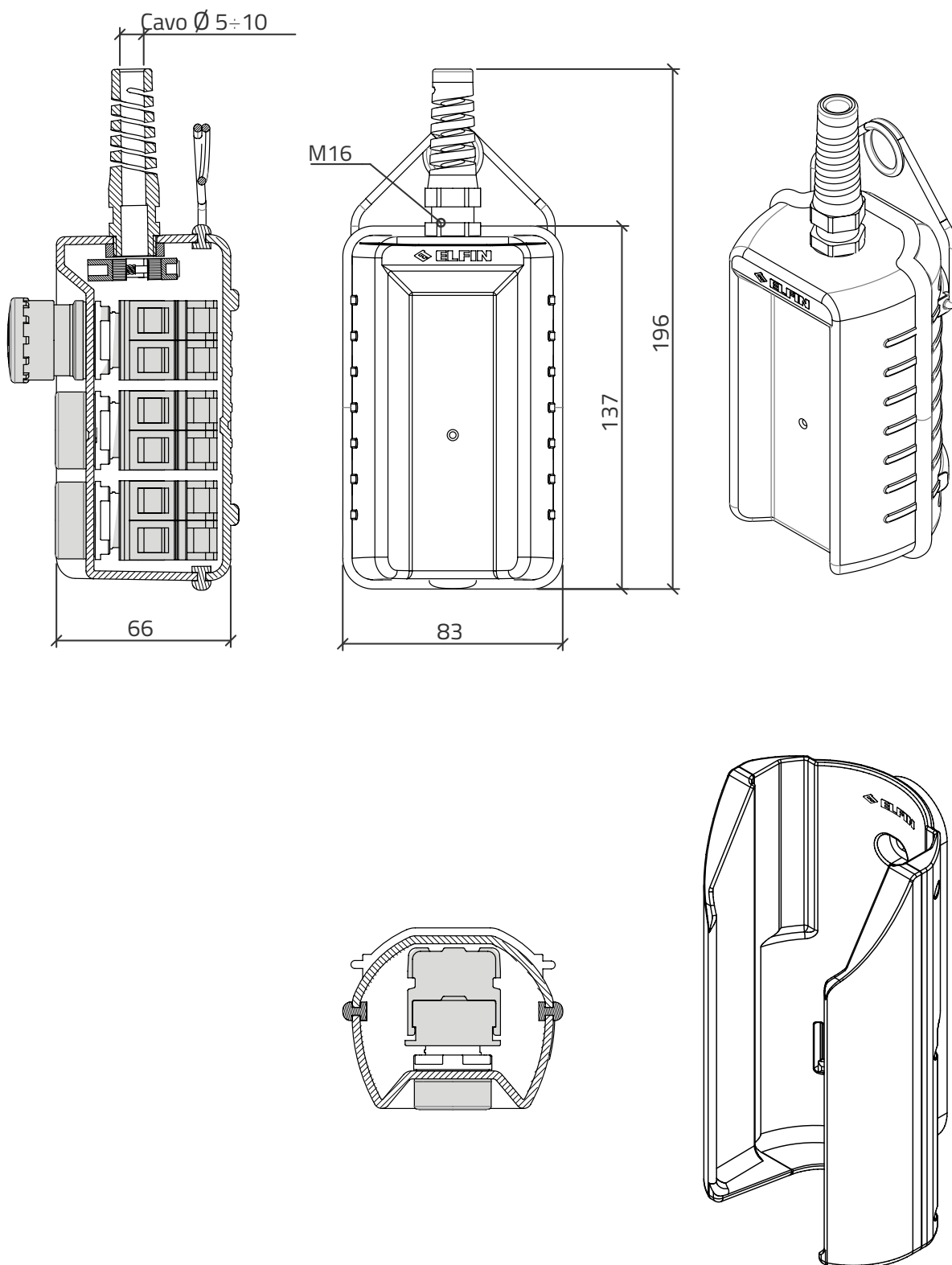
130

080R140GP3P33F



Pulsantiere pensili remote Pendant push-button stations, remote control

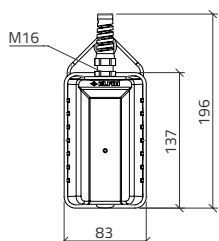
SERIES REMOTE / SERIES REMOTE



Pulsantiere pensili remote Pendant push-button stations, remote control

SERIES REMOTE / SERIES REMOTE

Senza operatore 140mm / Without operator 140mm

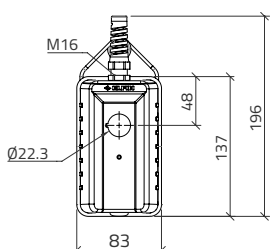


Coperchio senza fori / Undrilled lid

Termoplastica, antiurto
Thermoplastic, shock absorbing

g **cod**

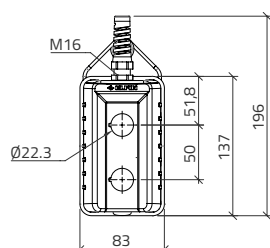
160 **080R140**



Coperchio con 1 foro Ø 22mm / 1-hole lid Ø 22mm

Termoplastica, antiurto
Thermoplastic, shock absorbing
Certificazione UL / UL Certification

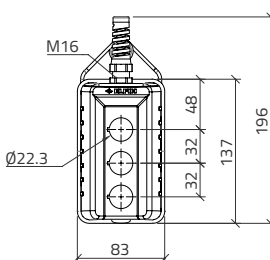
160 **080R140-P1**
160 **080RU140-P1**



Coperchio con 2 fori Ø 22mm / 2-holes lid Ø 22mm

Termoplastica, antiurto
Thermoplastic, shock absorbing
Certificazione UL / UL Certification

160 **080R140-P2**
160 **080RU140-P2**

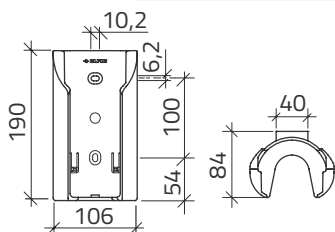


Coperchio con 3 fori Ø 22mm / 3-holes lid Ø 22mm

Termoplastica, antiurto
Thermoplastic, shock absorbing
Certificazione UL / UL Certification

160 **080R140-P3**
160 **080RU140-P3**

Accessori / Accessories



Supporto a parete / Wall bracket

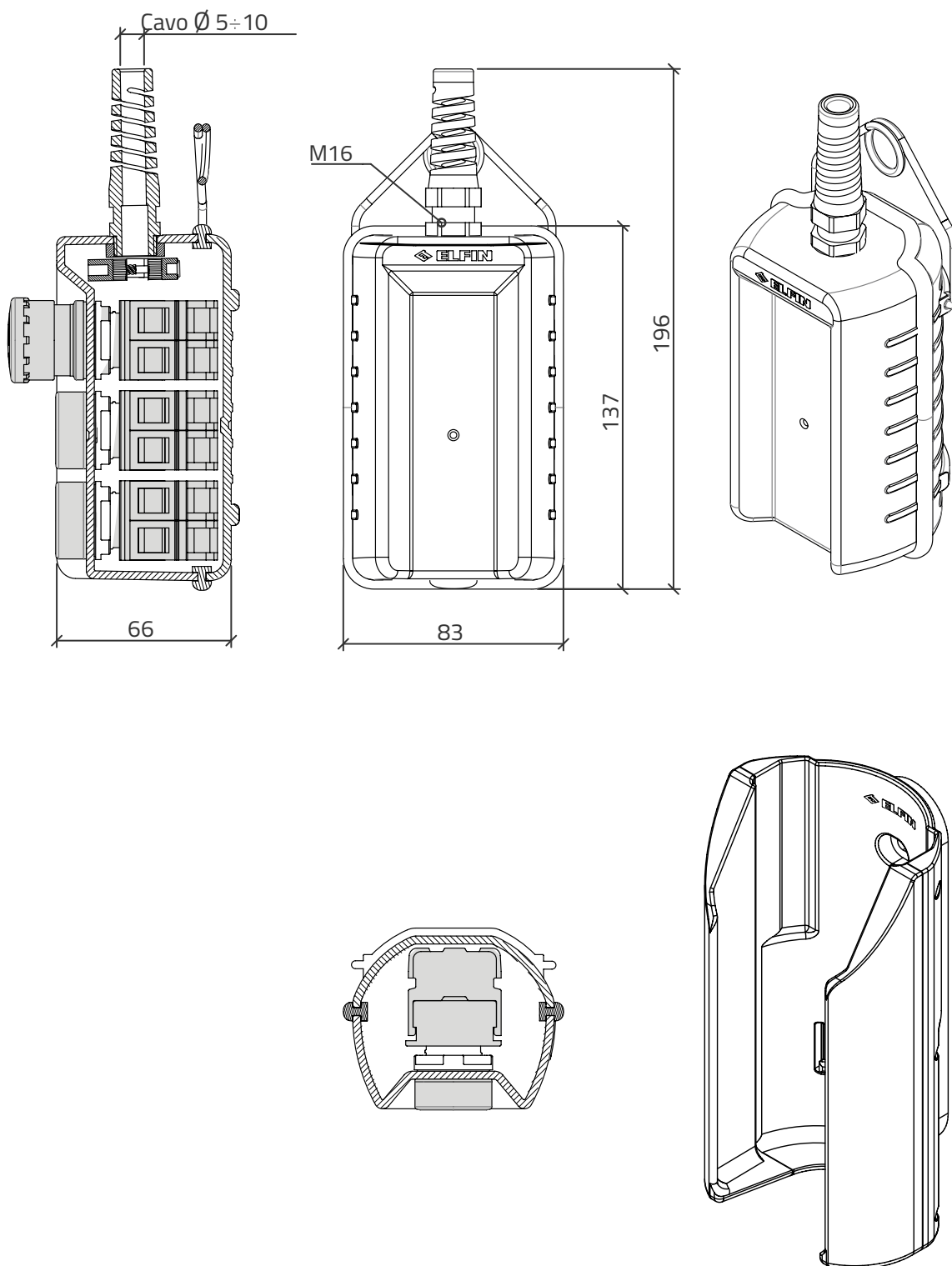
Termoplastica, antiurto
Thermoplastic, shock absorbing
Certificazione UL / UL Certification

g **cod**

170 **080RSPR**
170 **080RUSPR**

Pulsantiere pensili remote Pendant push-button stations, remote control

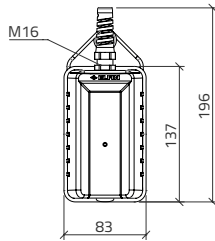
SERIES REMOTE / SERIES REMOTE



Pulsantiere pensili remote Pendant push-button stations, remote control

SERIE REMOTE / SERIES REMOTE

Senza operatore 140mm / Without operator 140mm

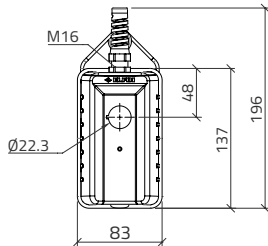


Coperchio giallo senza fori / Undrilled yellow lid

Termoplastica, antiurto
Thermoplastic, shock absorbing

160

08OR140-G



Coperchio giallo con 1 foro Ø 22mm / 1-hole yellow lid Ø 22mm

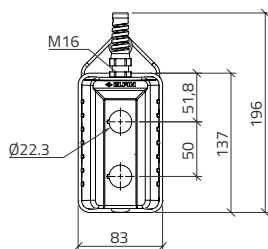
Termoplastica, antiurto
Thermoplastic, shock absorbing
Certificazione UL / UL Certification

160

08OR140-GP1

160

08ORU140-GP1



Coperchio giallo con 2 fori Ø 22mm / 2-holes yellow lid Ø 22mm

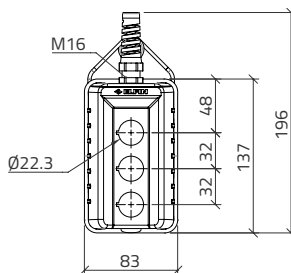
Termoplastica, antiurto
Thermoplastic, shock absorbing
Certificazione UL / UL Certification

160

08OR140-GP2

160

08ORU140-GP2



Coperchio giallo con 3 fori Ø 22mm / 3-holes yellow lid Ø 22mm

Termoplastica, antiurto
Thermoplastic, shock absorbing
Certificazione UL / UL Certification

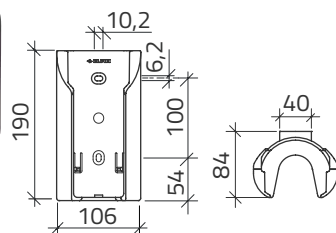
160

08OR140-GP3

160

08ORU140-GP3

Accessori / Accessories



Supporto a parete / Wall bracket

Termoplastica, antiurto
Thermoplastic, shock absorbing
Certificazione UL / UL Certification

170

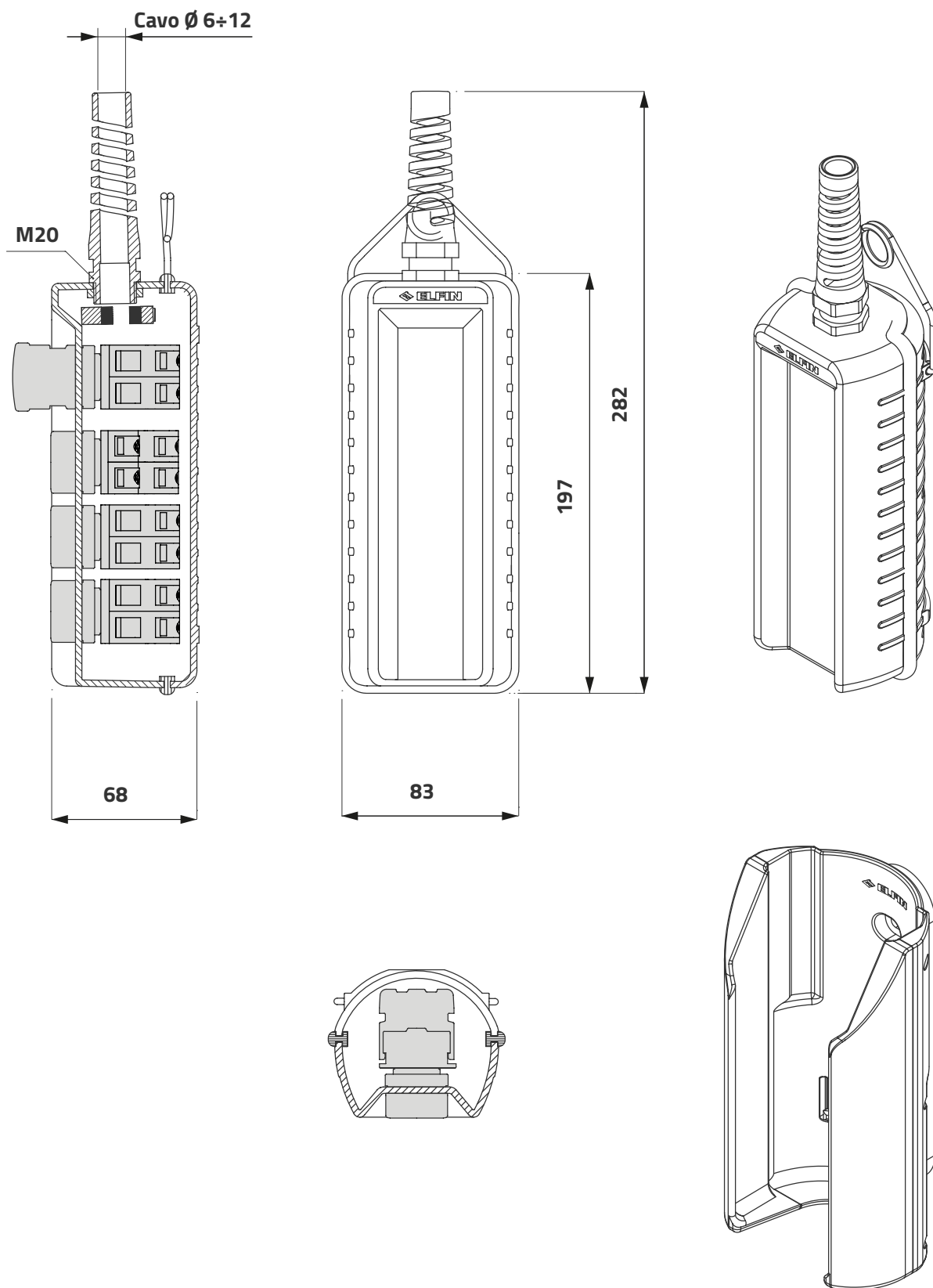
08ORSRPG

170

08ORUSRPG

Pulsantiere pensili remote Pendant push-button stations, remote control

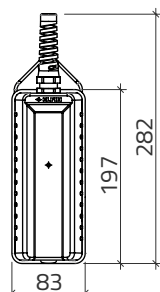
SERIES REMOTE / SERIES REMOTE



Pulsantiere pensili remote Pendant push-button stations, remote control

SERIE REMOTE / SERIES REMOTE

Senza operatore 200mm / Without operator 200mm



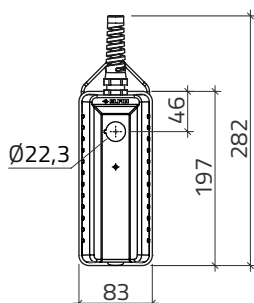
Coperchio senza fori / Undrilled lid

Termoplastica, antiurto
Thermoplastic, shock absorbing

g cod

220

080R200



Coperchio con 1 foro Ø 22mm / 1-hole lid Ø 22mm

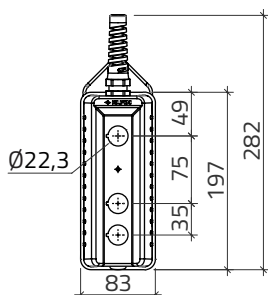
Termoplastica, antiurto
Thermoplastic, shock absorbing
Certificazione UL / UL Certification

220

080R200-P1

220

080RU200-P1



Coperchio con 3 fori Ø 22mm / 3-holes lid Ø 22mm

Termoplastica, antiurto
Thermoplastic, shock absorbing
Certificazione UL / UL Certification

220

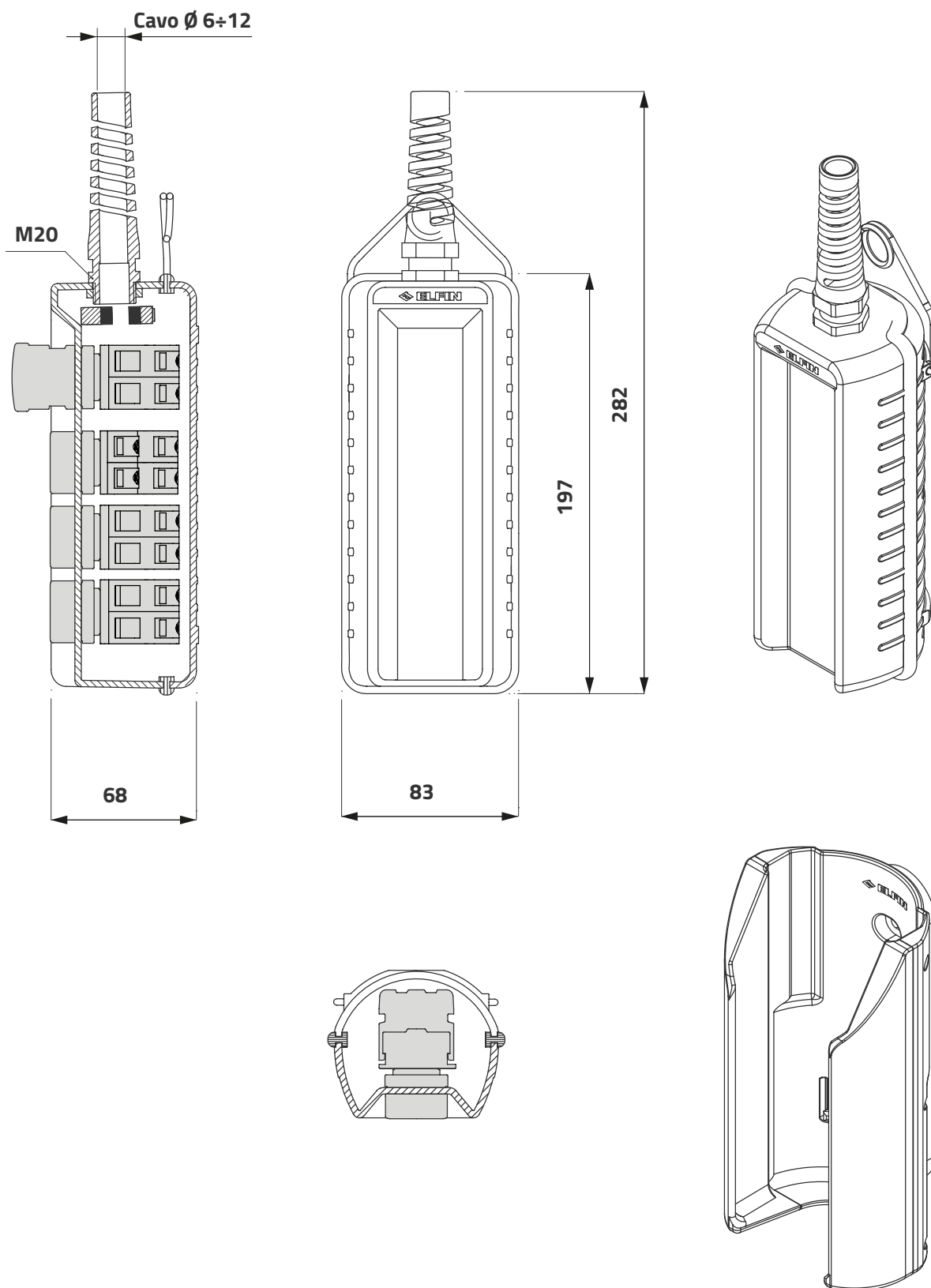
080R200-P3C

220

080RU200-P3C

Pulsantiere pensili remote Pendant push-button stations, remote control

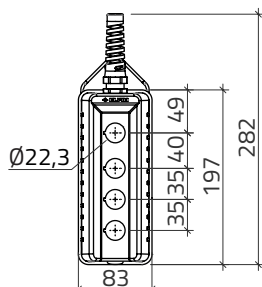
SERIES REMOTE / SERIES REMOTE



Pulsantiere pensili remote Pendant push-button stations, remote control

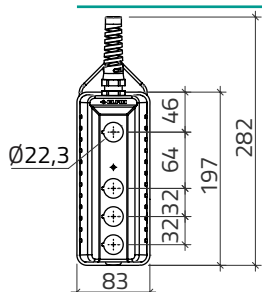
SERIE REMOTE / SERIES REMOTE

Senza operatore 200mm / Without operator 200mm



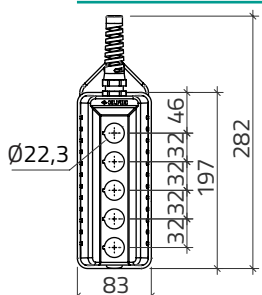
Coperchio con 4 fori Ø 22mm / 4-holes lid Ø 22mm

	g	cod
Termoplastica, antiurto Thermoplastic, shock absorbing	220	080R200-P4
Certificazione UL / UL Certification	220	080RU200-P4



Coperchio con 4 fori Ø 22mm / 4-holes lid Ø 22mm

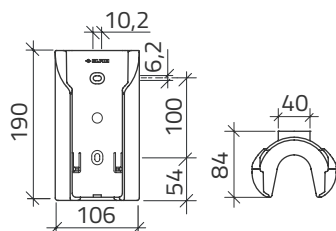
Termoplastica, antiurto Thermoplastic, shock absorbing	220	080R200-P4C
Certificazione UL / UL Certification	220	080RU200-P4C



Coperchio con 5 fori Ø 22mm / 5-holes lid Ø 22mm

Termoplastica, antiurto Thermoplastic, shock absorbing	220	080R200-P5
Certificazione UL / UL Certification	220	080RU200-P5

Accessori / Accessories

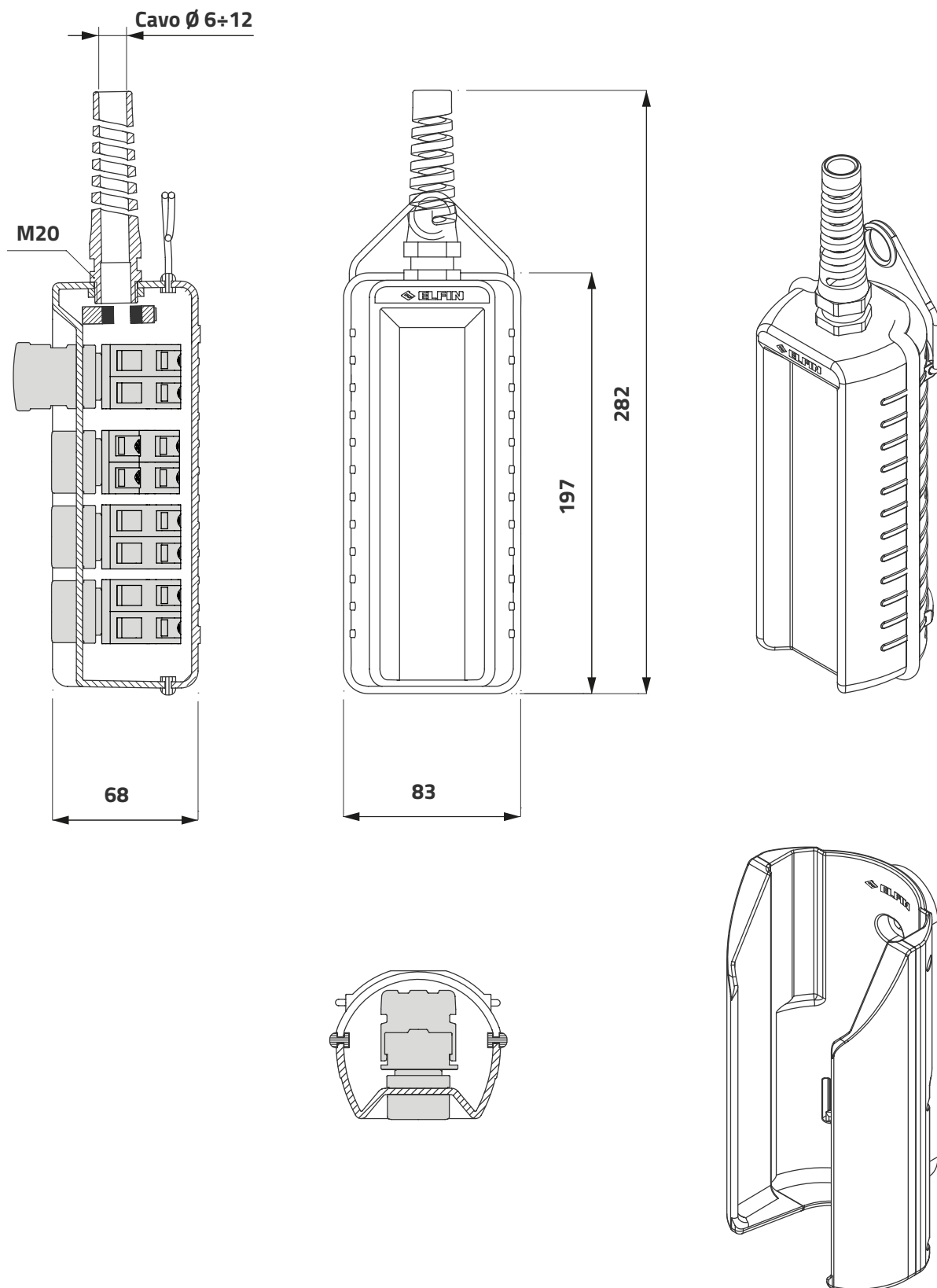


Supporto a parete / Wall bracket

	g	cod
Termoplastica, antiurto Thermoplastic, shock absorbing	170	080RUSPR
Certificazione UL / UL Certification	170	080RUSPR

Pulsantiere pensili remote Pendant push-button stations, remote control

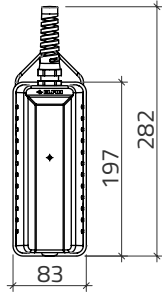
SERIES REMOTE / SERIES REMOTE



Pulsantiere pensili remote Pendant push-button stations, remote control

SERIE REMOTE / SERIES REMOTE

Senza operatore 200mm / Without operator 200mm



Coperchio giallo senza fori / Undrilled yellow lid

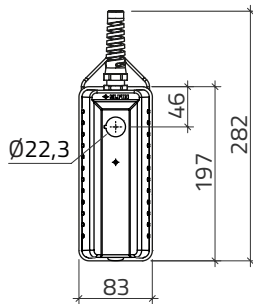
Termoplastica, antiurto
Thermoplastic, shock absorbing

g

220

cod

080R200-G



Coperchio giallo con 1 foro Ø 22mm / 1-hole yellow lid Ø 22mm

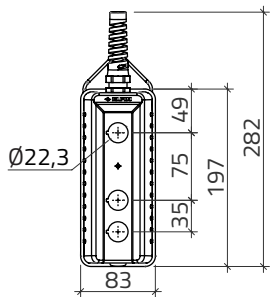
Termoplastica, antiurto
Thermoplastic, shock absorbing
Certificazione UL / UL Certification

220

080R200-GP1

220

080RU200-GP1



Coperchio giallo con 3 fori Ø 22mm / 3-holes yellow lid Ø 22mm

Termoplastica, antiurto
Thermoplastic, shock absorbing
Certificazione UL / UL Certification

220

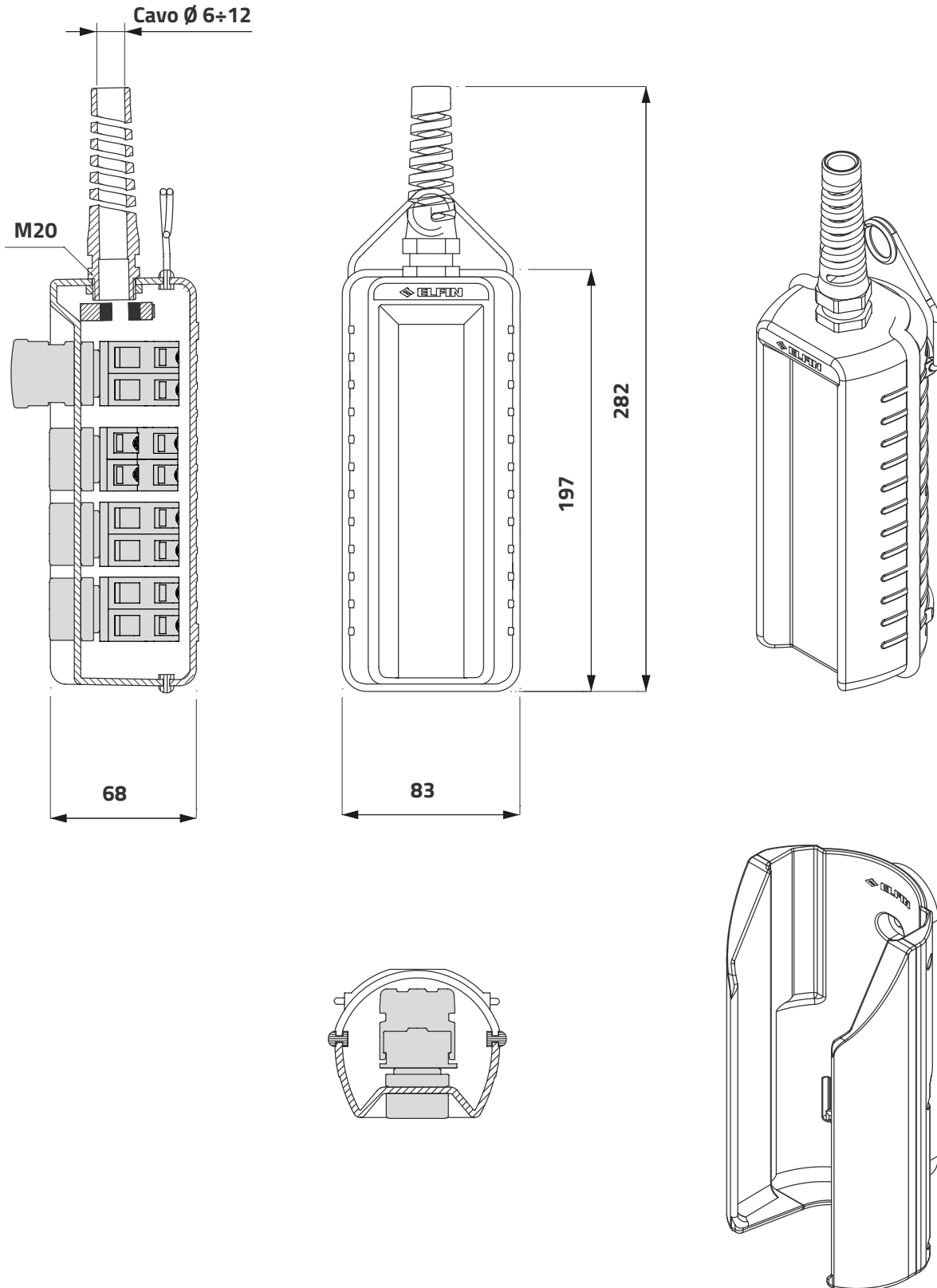
080R200-GP3C

220

080RU200-GP3C

Pulsantiere pensili remote Pendant push-button stations, remote control

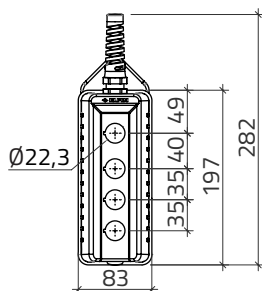
SERIES REMOTE / SERIES REMOTE



Pulsantiere pensili remote Pendant push-button stations, remote control

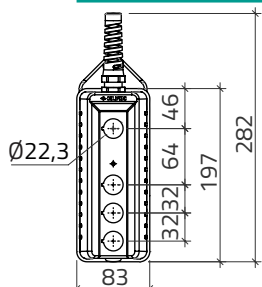
SERIE REMOTE / SERIES REMOTE

Senza operatore 200mm / Without operator 200mm



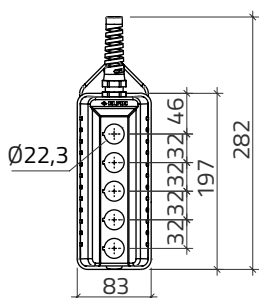
Coperchio giallo con 4 fori Ø 22mm / 4-holes yellow lid Ø 22mm

Termoplastica, antiurto	220	080R200-GP4
Thermoplastic, shock absorbing	220	080RU200-GP4
Certificazione UL / UL Certification	220	080RU200-GP4



Coperchio giallo con 4 fori Ø 22mm / 4-holes yellow lid Ø 22mm

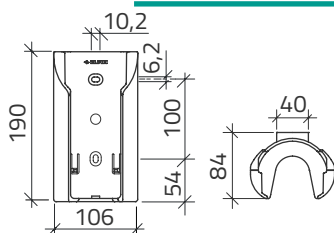
Termoplastica, antiurto	220	080R200-GP4C
Thermoplastic, shock absorbing	220	080RU200-GP4C
Certificazione UL / UL Certification	220	080RU200-GP4C



Coperchio giallo con 5 fori Ø 22mm / 5-holes yellow lid Ø 22mm

Termoplastica, antiurto	220	080R200-GP5
Thermoplastic, shock absorbing	220	080RU200-GP5
Certificazione UL / UL Certification	220	080RU200-GP5

Accessori / Accessories



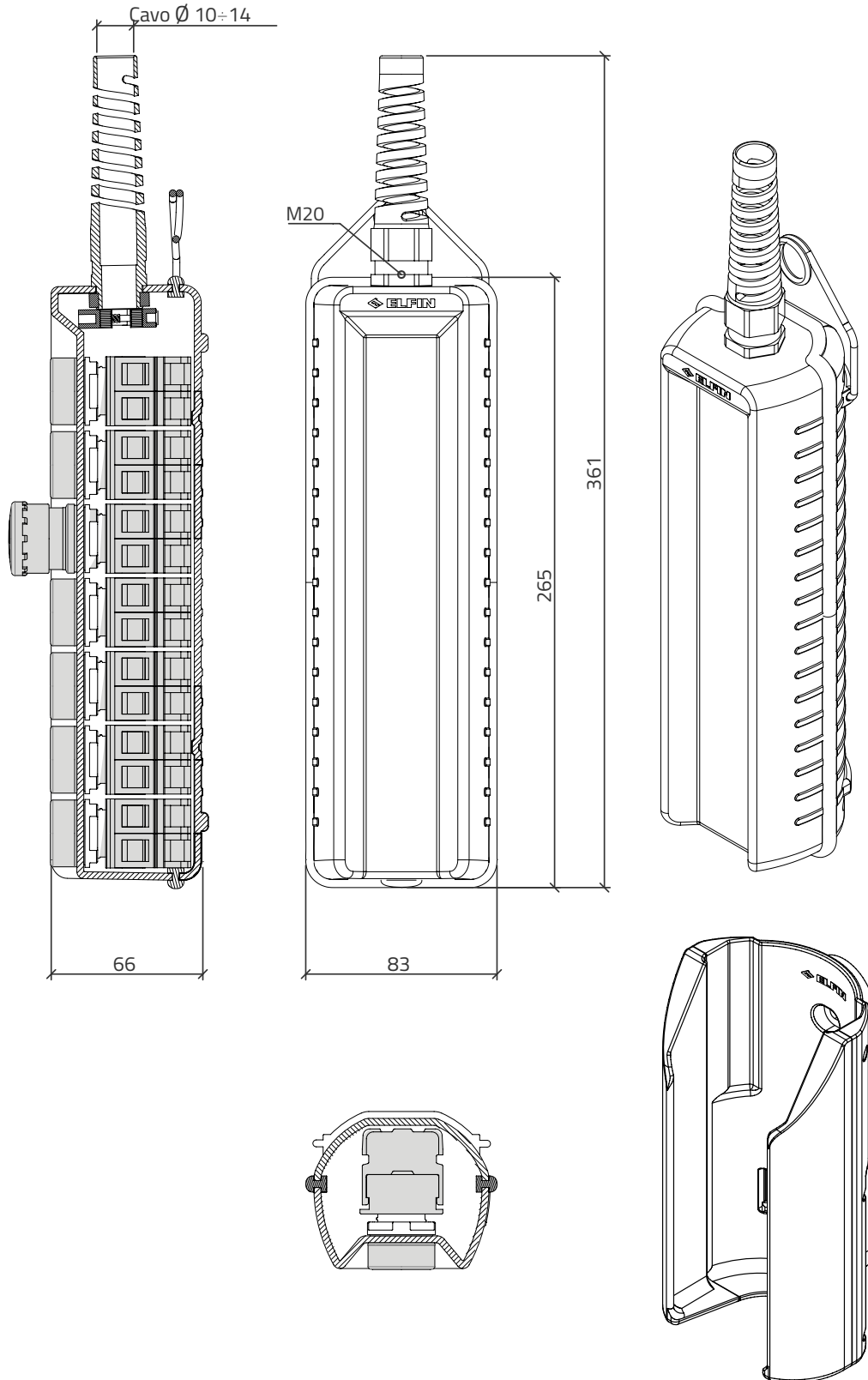
Supporto a parete / Wall bracket

Termoplastica, antiurto	170	080RSPRG
Thermoplastic, shock absorbing	170	080RUSPRG
Certificazione UL / UL Certification	170	080RUSPRG

Pulsantiere pensili remote

Pendant push-button stations, remote control

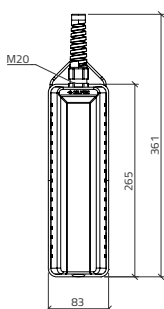
SERIES REMOTE / SERIES REMOTE



Pulsantiere pensili remote Pendant push-button stations, remote control

SERIE REMOTE / SERIES REMOTE

Senza operatore 265mm / Without operator 265mm



Coperchio senza fori / Undrilled lid

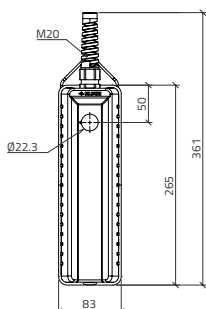
Termoplastica, antiurto
Thermoplastic, shock absorbing

g

cod

300

080R265



Coperchio con 1 foro Ø 22mm / 1-hole lid Ø 22mm

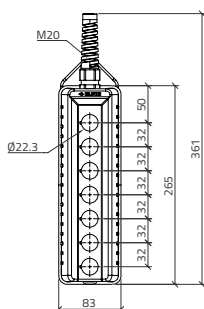
Termoplastica, antiurto
Thermoplastic, shock absorbing
Certificazione UL / UL Certification

300

080R265-P1

300

080RU265-P1



Coperchio con 7 fori Ø 22mm / 7-holes lid Ø 22mm

Termoplastica, antiurto
Thermoplastic, shock absorbing
Certificazione UL / UL Certification

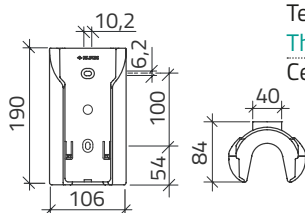
300

080R265-P7

300

080RU265-P7

Accessori / Accessories



Supporto a parete / Wall bracket

Termoplastica, antiurto
Thermoplastic, shock absorbing
Certificazione UL / UL Certification

g

cod

170

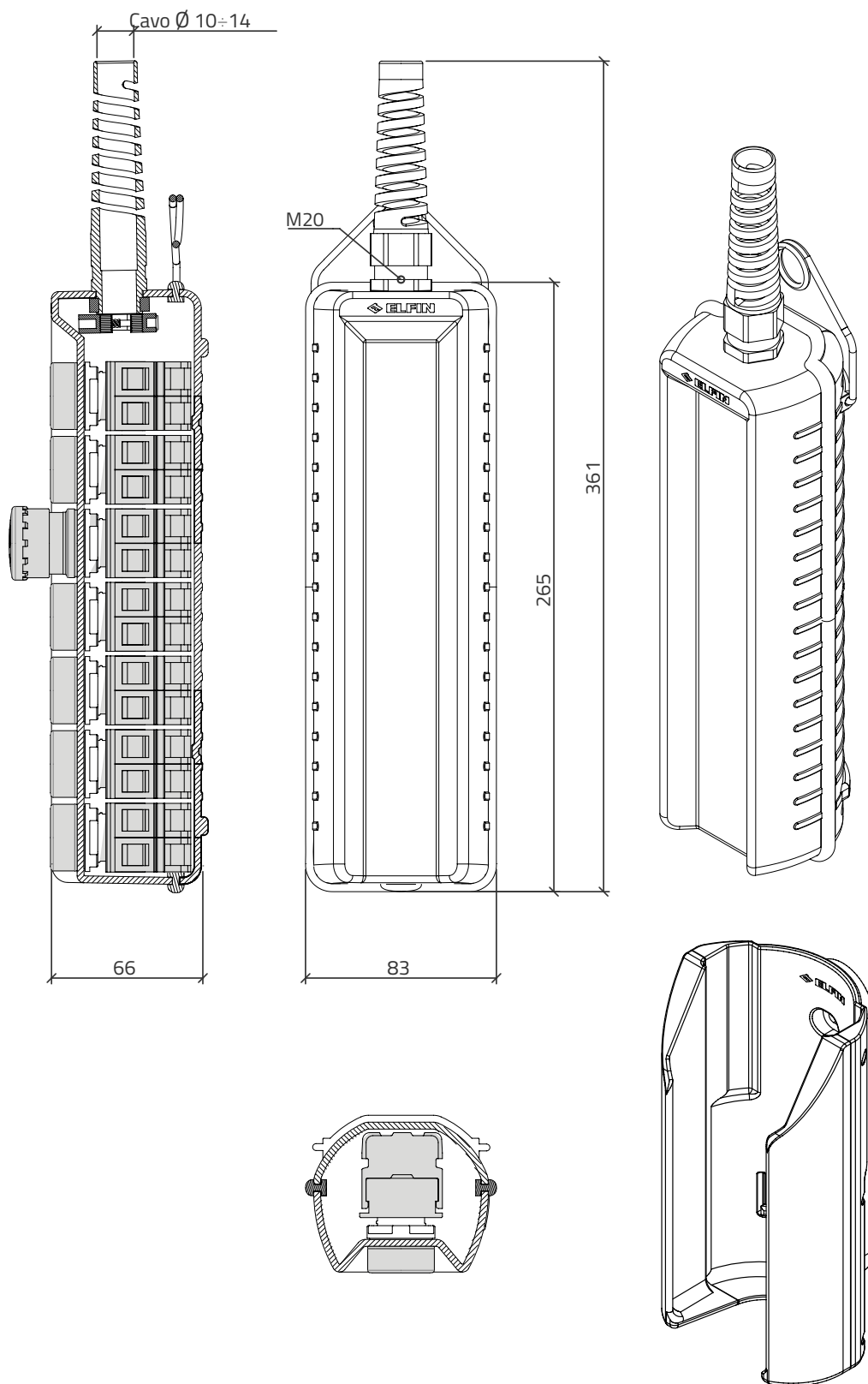
080RSPR

170

080RUSPR

Pulsantiere pensili remote Pendant push-button stations, remote control

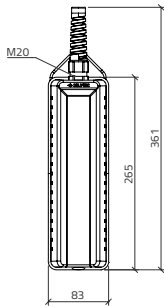
SERIE REMOTE / SERIES REMOTE



Pulsantiere pensili remote Pendant push-button stations, remote control

SERIE REMOTE / SERIES REMOTE

Senza operatore 265mm / Without operator 265mm

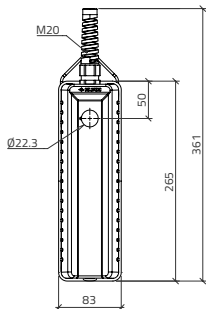


Coperchio giallo senza fori / Undrilled yellow lid

Termoplastica, antiurto
Thermoplastic, shock absorbing

g **cod**

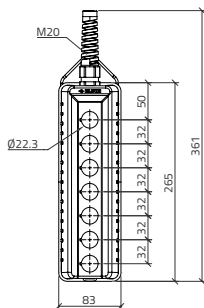
300 **080R265-G**



Coperchio giallo con 1 foro Ø 22mm / 1-hole yellow lid Ø 22mm

Termoplastica, antiurto
Thermoplastic, shock absorbing
Certificazione UL / UL Certification

300 **080R265-GP1**
300 **080RU265-GP1**

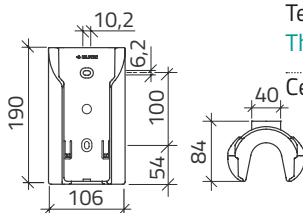


Coperchio giallo con 7 fori Ø 22mm / 7-holes yellow lid Ø 22mm

Termoplastica, antiurto
Thermoplastic, shock absorbing
Certificazione UL / UL Certification

300 **080R265-GP7**
300 **080RU265-GP7**

Accessori / Accessories



Supporto a parete giallo / Yellow wall bracket

Termoplastica, antiurto
Thermoplastic, shock absorbing
Certificazione UL / UL Certification

g **cod**

170 **080RSPRG**
300 **080RU265-P1**

ELFIN
080
03040-20
www.elfin.it



SCATOLE IN TERMOPLASTICO

Quadri in poliestere Polyester enclosures

SERIES Q / SERIES Q



Caratteristiche tecniche

Materiale quadro	Poliestere con fibre di vetro	Grigio RAL 7035
Materiale chiusure	Poliammide con fibre di vetro	Nero RAL 9005
Materiale cerniere	Fusione in lega di alluminio	
Resistenza alla fiamma	Autoestinguente V0	
Grado di protezione	IP65 CEI EN 60529	
Protezione agli agenti atmosferici	Basso assorbimento di acqua	
Limiti di temperatura	Resistente agli agenti chimici corrosivi	
Protezione contro gli impatti	-30°C + 120°C	
		IK 09 EN 50102

Technical data

Material, enclosure	Glass fiber reinforced polyester	RAL 7035 Grey
Material, locks	Glass fiber reinforced polyamide	RAL 9005 Black
Material, hinges	Aluminum alloy casting	
Fire strength	Self-extinguishing V0	
Protection degree	IP65 CEI EN 60529	
Protection against atmospherical agents	Low water absorption	
Temperature range	Resistant to chemical and corrosion agents	
Protection against impact	-30°C + 120°C	
		IK 09 EN 50102



Principi costruttivi quadri poliestere Construction principles of polyester enclosures

SERIES Q / SERIES Q



Formato 250X300, una chiusura ad aletta

Size 250X300 , one wing lock



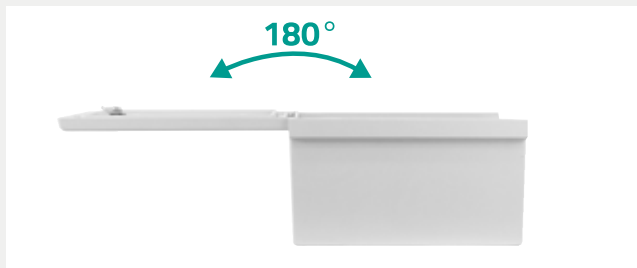
Da formato 300X400, due chiusure ad aletta

From size 300X400, two wing locks



Versione porta con finestra

Door with window



Apertura a 180°

180° opening

Istruzioni di montaggio / Mounting instructions



Inserire gli inserti metallici nelle apposite sedi laterali

Find the metal insert into the suitable lateral housings



Applicare le guide con le viti negli inserti metallici

Fasten the rails using screws into the metal inserts



Applicare le staffe alla piastra di fondo utilizzando i bulloni, le rondelle e i dadi

Fasten the brackets to the mounting plate using bolts, washer and nuts



Inserire la piastra con le staffe montate e regolarle sulle guide con le viti e i dadi

Fit the mounting plate provided with the brackets and adjust it on the rails using screws and nuts

SCATOLE IN TERMOPLASTICO

Principi costruttivi quadri poliestere Construction principles of polyester enclosures

SERIE Q / SERIES Q



La guarnizione garantisce protezione IP65

A sealing gasket assures IP65 protection



Chiave di chiusura

Locking key



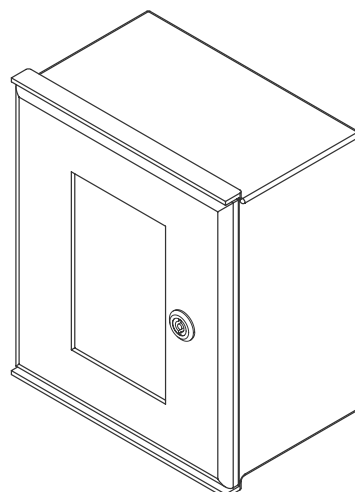
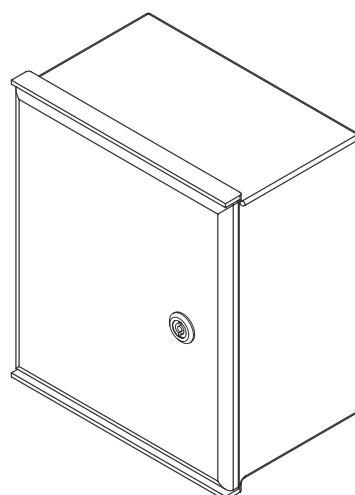
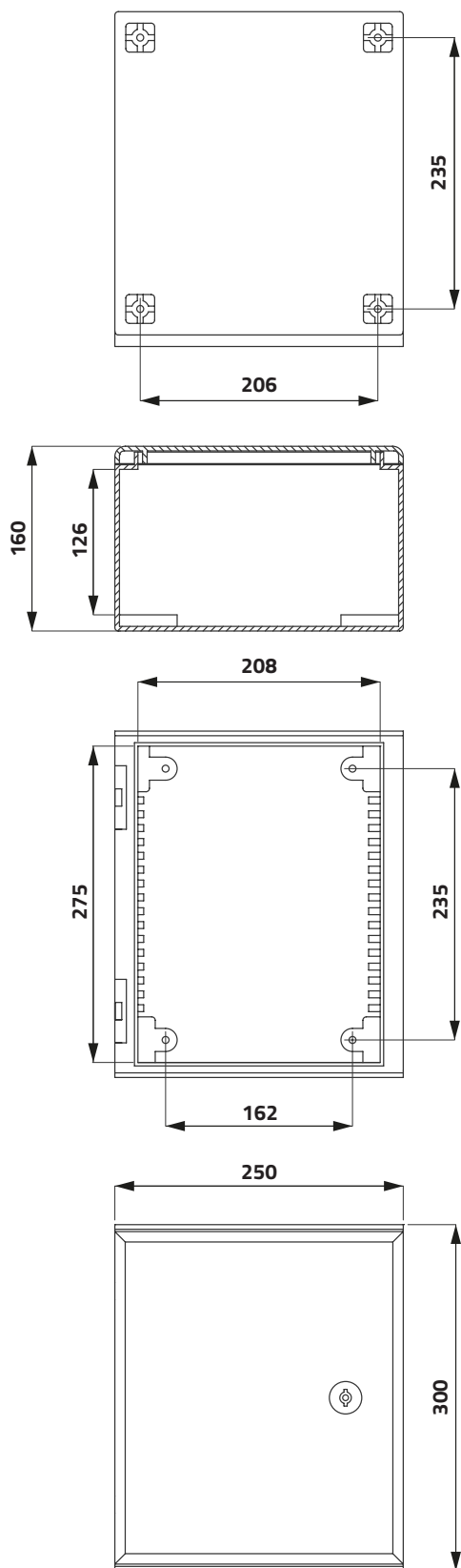
Kit di staffe di fissaggio

Set of mounting brackets



Quadri in poliestere 250x300mm Polyester enclosures 250x300mm

SERIES Q / SERIES Q



SCATOLE IN TERMOPLASTICO

Quadri in poliestere 250x300mm Polyester enclosures 250x300mm

SERIE Q / SERIES Q



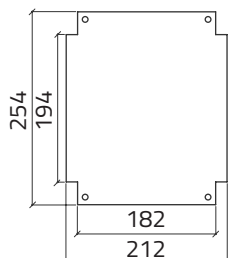
Porta piena / Plain door

h 160 **g** 3600 **cod** 080Q2530-16



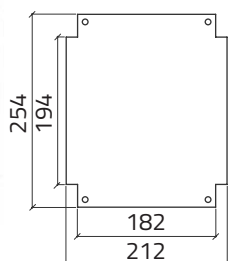
Porta con finestra
Door with window

160 3500 080Q2530-16F



Piastra di fondo plastica
Plastic mounting plate

2,8 1800 080PP2530



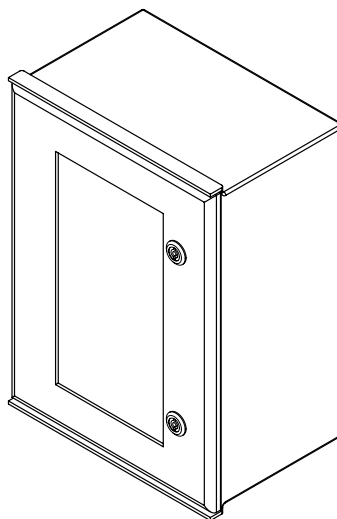
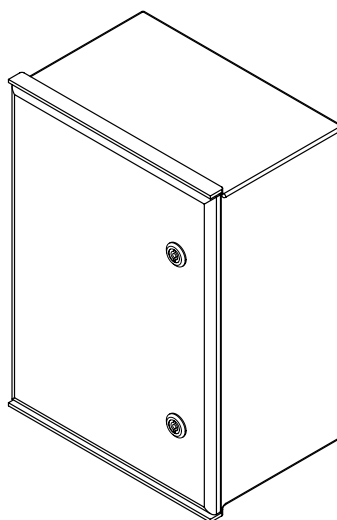
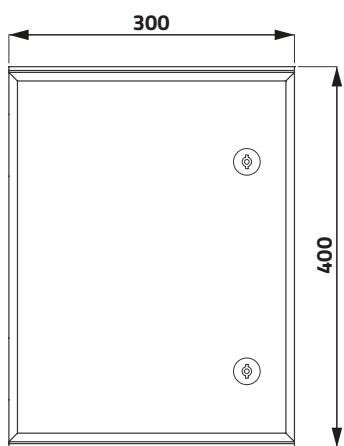
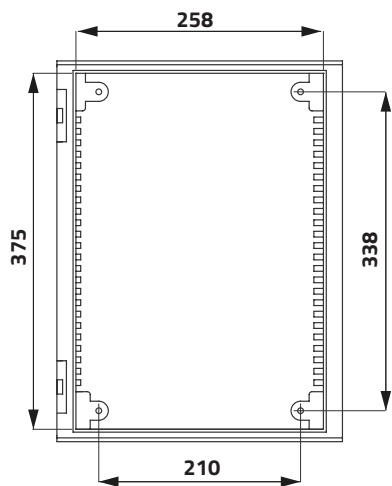
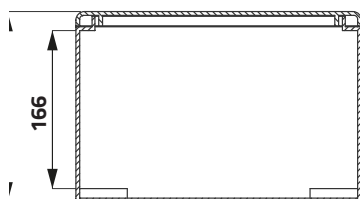
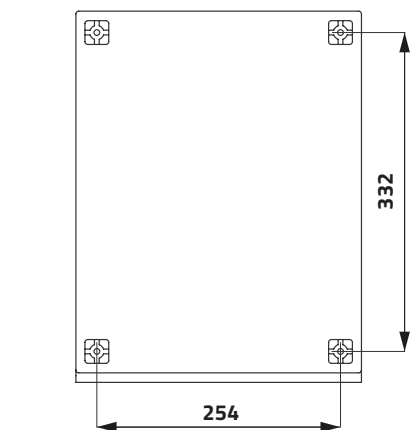
Piastra di fondo metallo
Metal mounting plate

2 1200 080PM2530



Quadri in poliestere 300x400mm Polyester enclosures 300x400mm

SERIES Q / SERIES Q



Quadri in poliestere 300x400mm Polyester enclosures 300x400mm

SERIE Q / SERIES Q



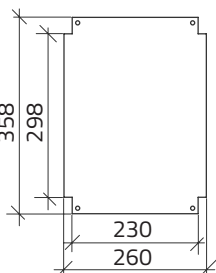
Porta piena / Plain door

h	g	cod
200	4900	080Q3040-20



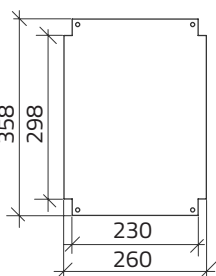
**Porta con finestra
Door with window**

200	4700	080Q3040-20F
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**Piastra di fondo plastica
Plastic mounting plate**

2,8	2700	080PP3040
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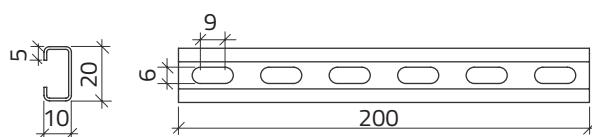
**Piastra di fondo metallo
Metal mounting plate**

2	3200	080PM3040
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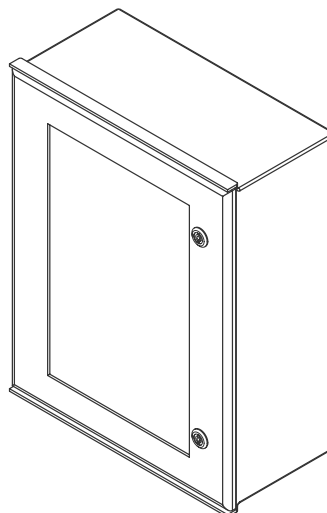
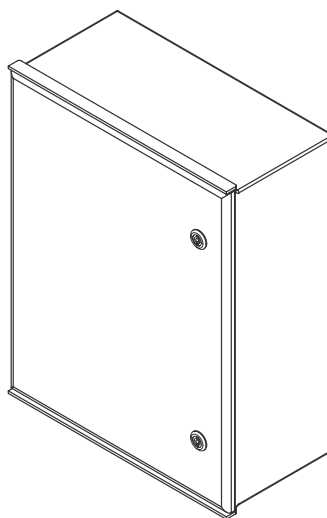
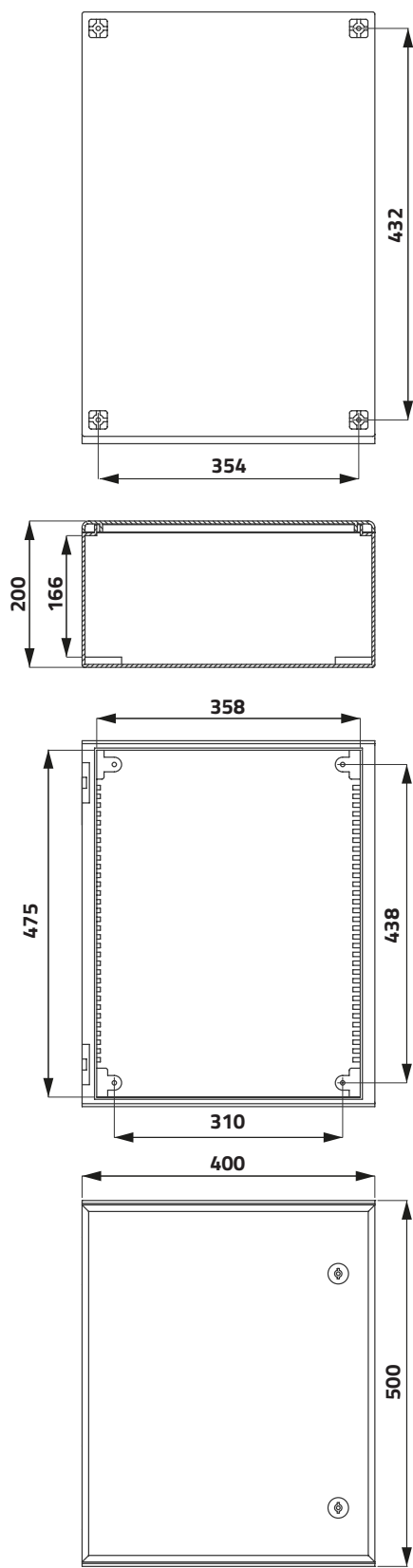
**Guida perforata di regolazione
Adjustable perforated rail**

380	080GR200
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Quadri in poliestere 400x500mm Polyester enclosures 400x500mm

SERIES Q / SERIES Q



Quadri in poliestere 400x500mm Polyester enclosures 400x500mm

SERIE Q / SERIES Q



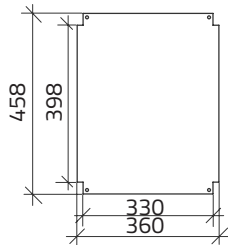
Porta piena / Plain door

h	g	cod
200	6300	080Q4050-20



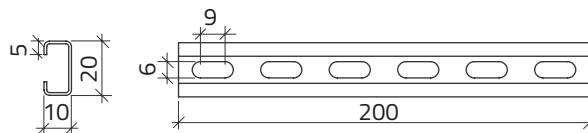
**Porta con finestra
Door with window**

200	6100	080Q4050-20F
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**Piastra di fondo plastica
Plastic mounting plate**

2,8	3600	080PP4050
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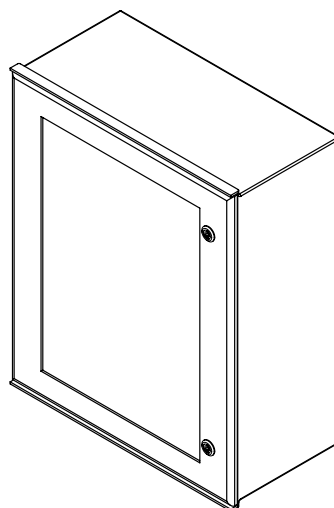
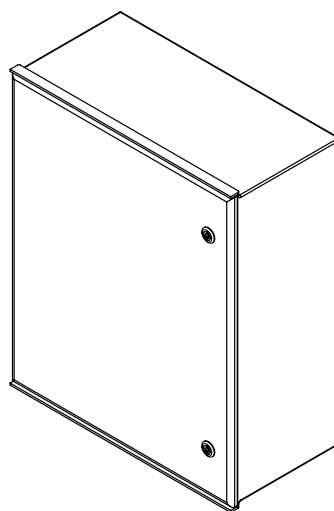
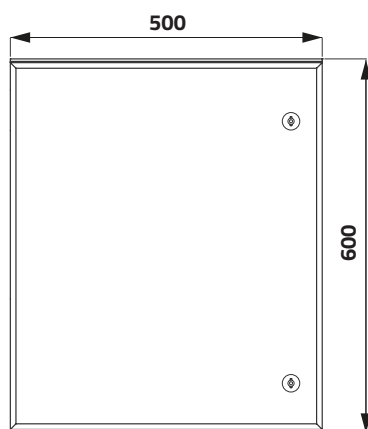
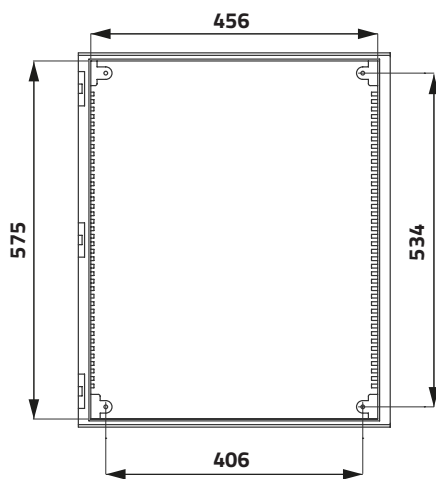
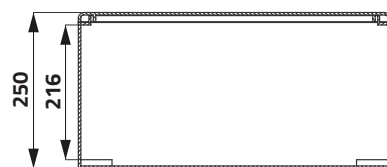
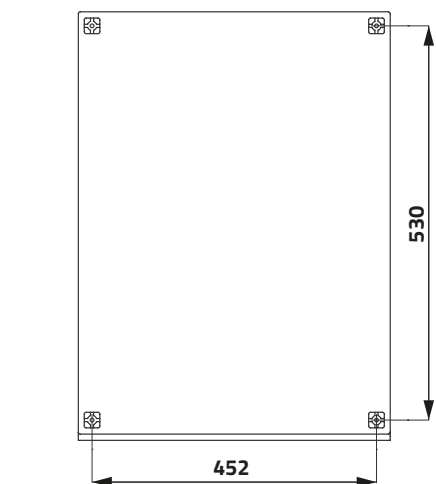


**Guida perforata di regolazione
Adjustable perforated rail**

380	080GR200
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Quadri in poliestere 500x600mm Polyester enclosures 500x600mm

SERIES Q / SERIES Q



Quadri in poliestere 500x600mm Polyester enclosures 500x600mm

SERIE Q / SERIES Q



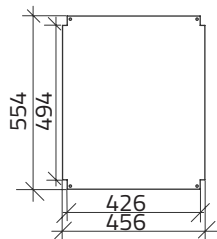
Porta piena / Plain door

h	g	cod
250	7900	080Q5060-25



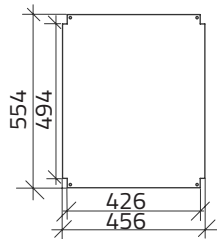
**Porta con finestra
Door with window**

250	7700	080Q5060-25F
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**Piastra di fondo plastica
Plastic mounting plate**

2,8	4700	080PP5060
-----	------	-----------



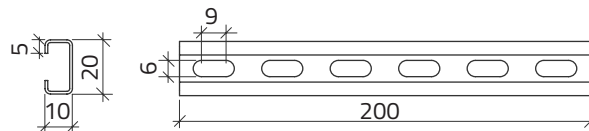
**Piastra di fondo metallo
Metal mounting plate**

2	5300	080PM5060
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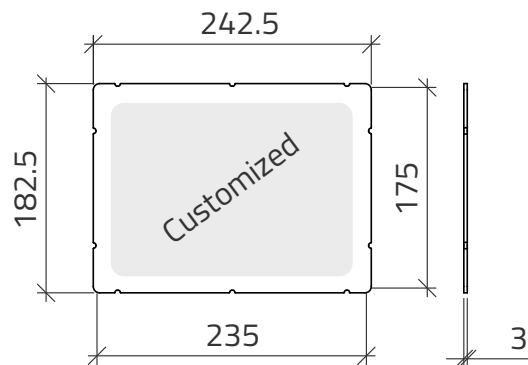
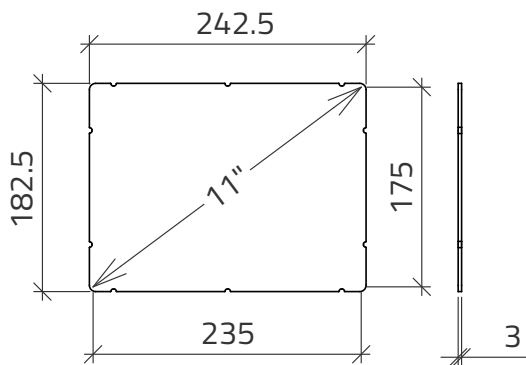
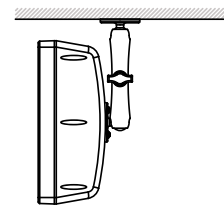
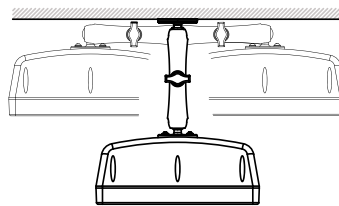
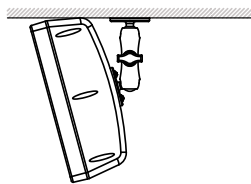
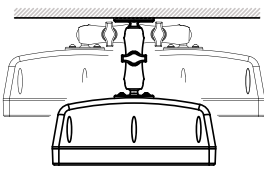
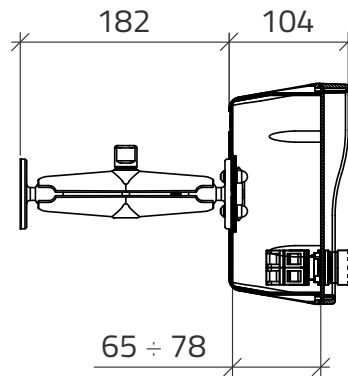
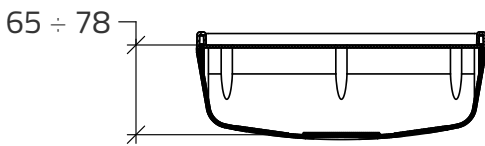
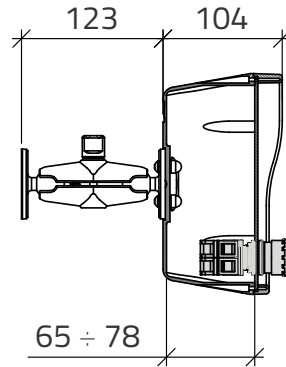
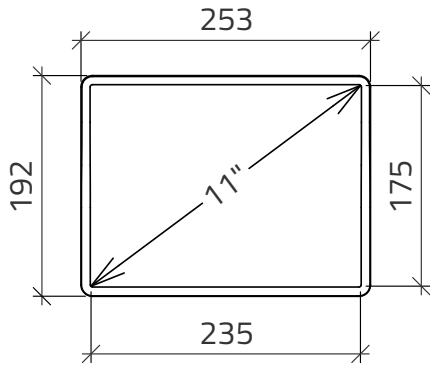
**Guida perforata di regolazione
Adjustable perforated rail**

380	080GR250
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Pulsantiera Display Personalizzabile

Customizable monitor and push-button enclosure



Pulsantiera Display Monitor and push-button enclosure



Pulsantiera neutra Neutral push-button panel

Con supporto L 125mm / With support L 125mm
Con supporto L 185mm / With support L 185mm

g

cod

850

080V2621-12

980

080V2621-18



Pulsantiera senza piastra Push-button panel without plate

Con supporto L 125mm / With support L 125mm
Con supporto L 185mm / With support L 185mm

g

cod

700

080V2621-12SP

830

080V2621-18SP



Piastra frontale neutra / Neutral front plate

g

cod

156

080VPFN



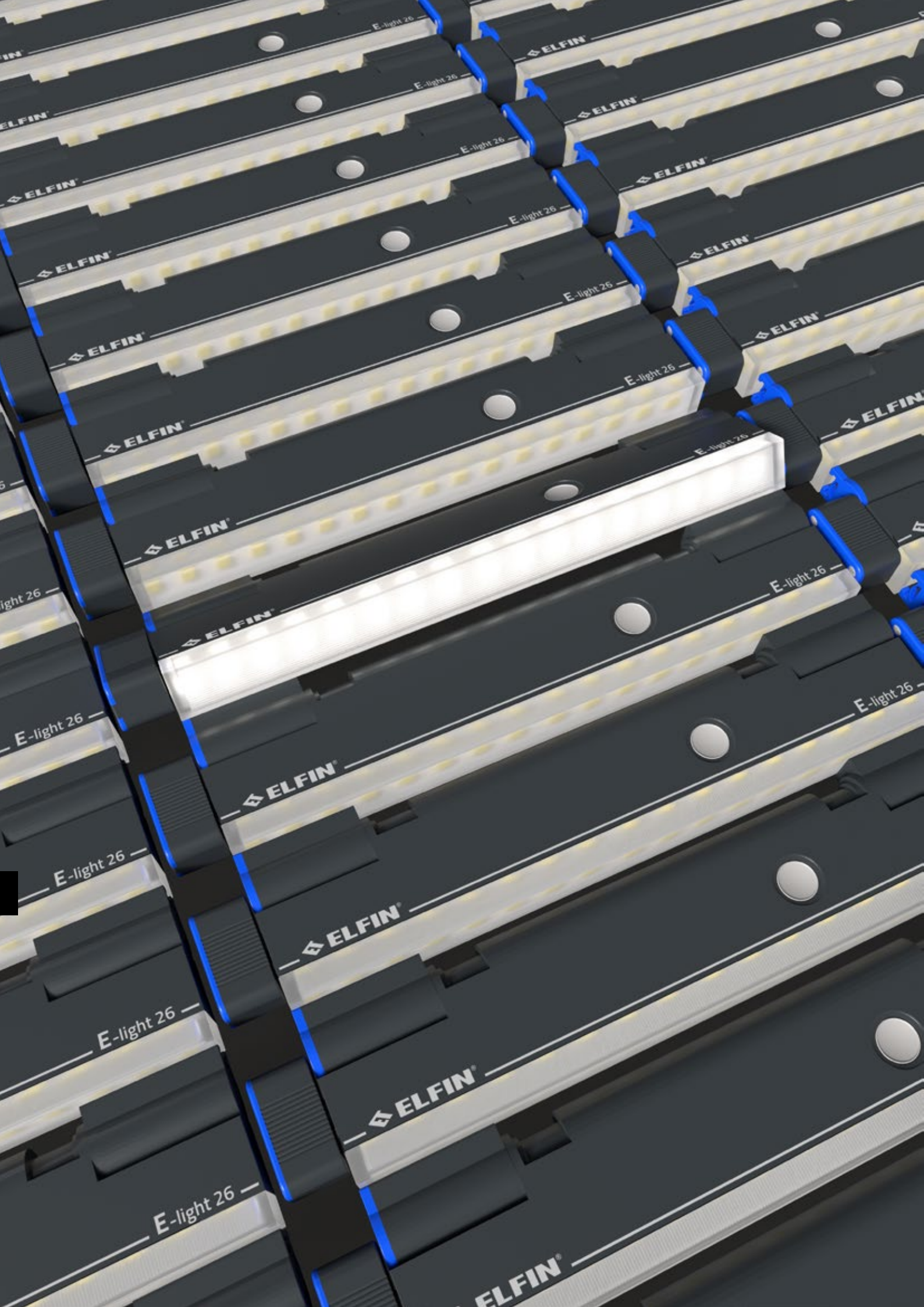
Piastra personalizzabile / Customizable plate

g

cod

156

080VPFP-DXX

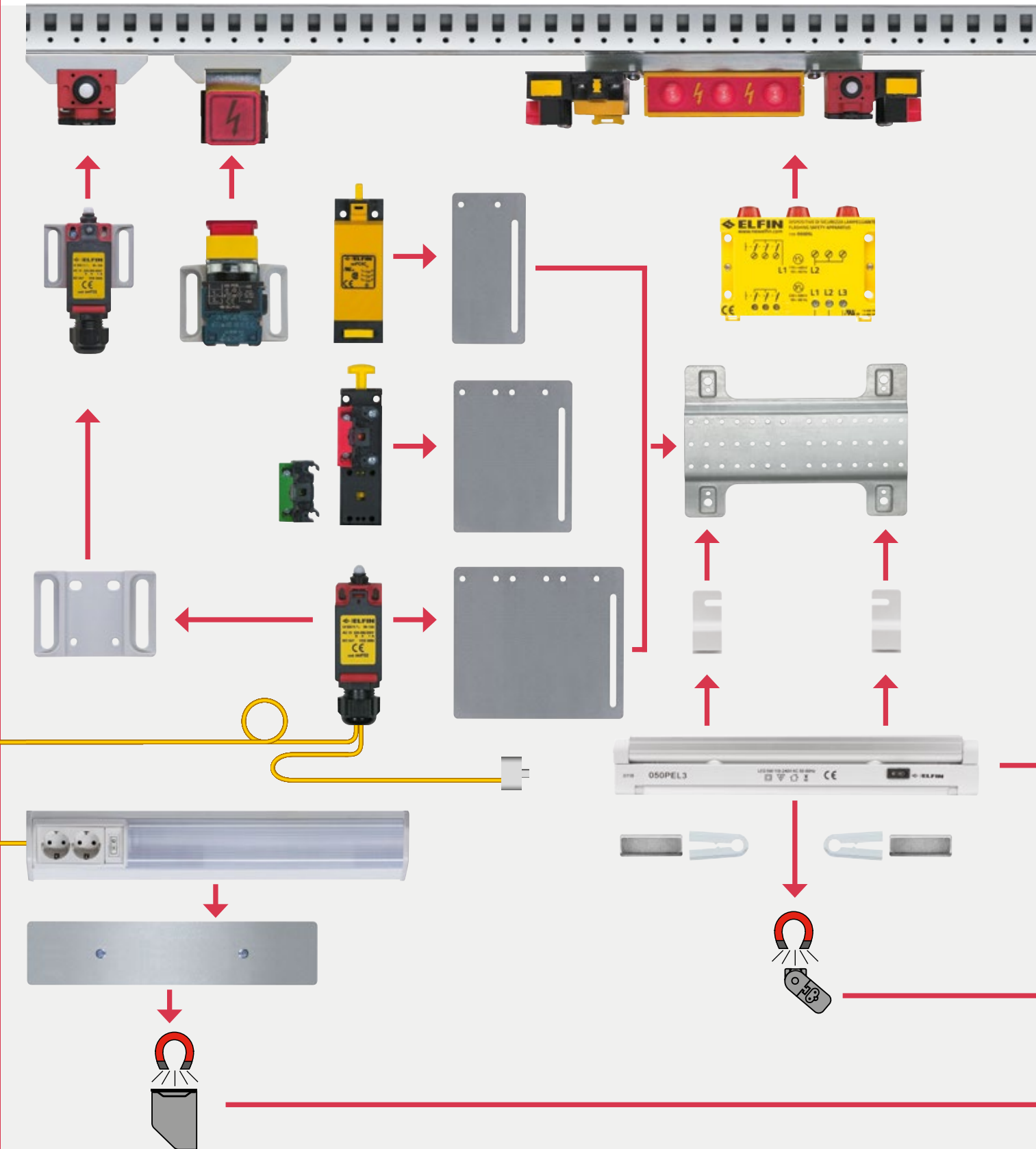


050

**SEGNALAZIONE ED
ILLUMINAZIONE
DEI QUADRI ELETTRICI**

**CONTROL CABINET
SIGNALLING AND LIGHTING**

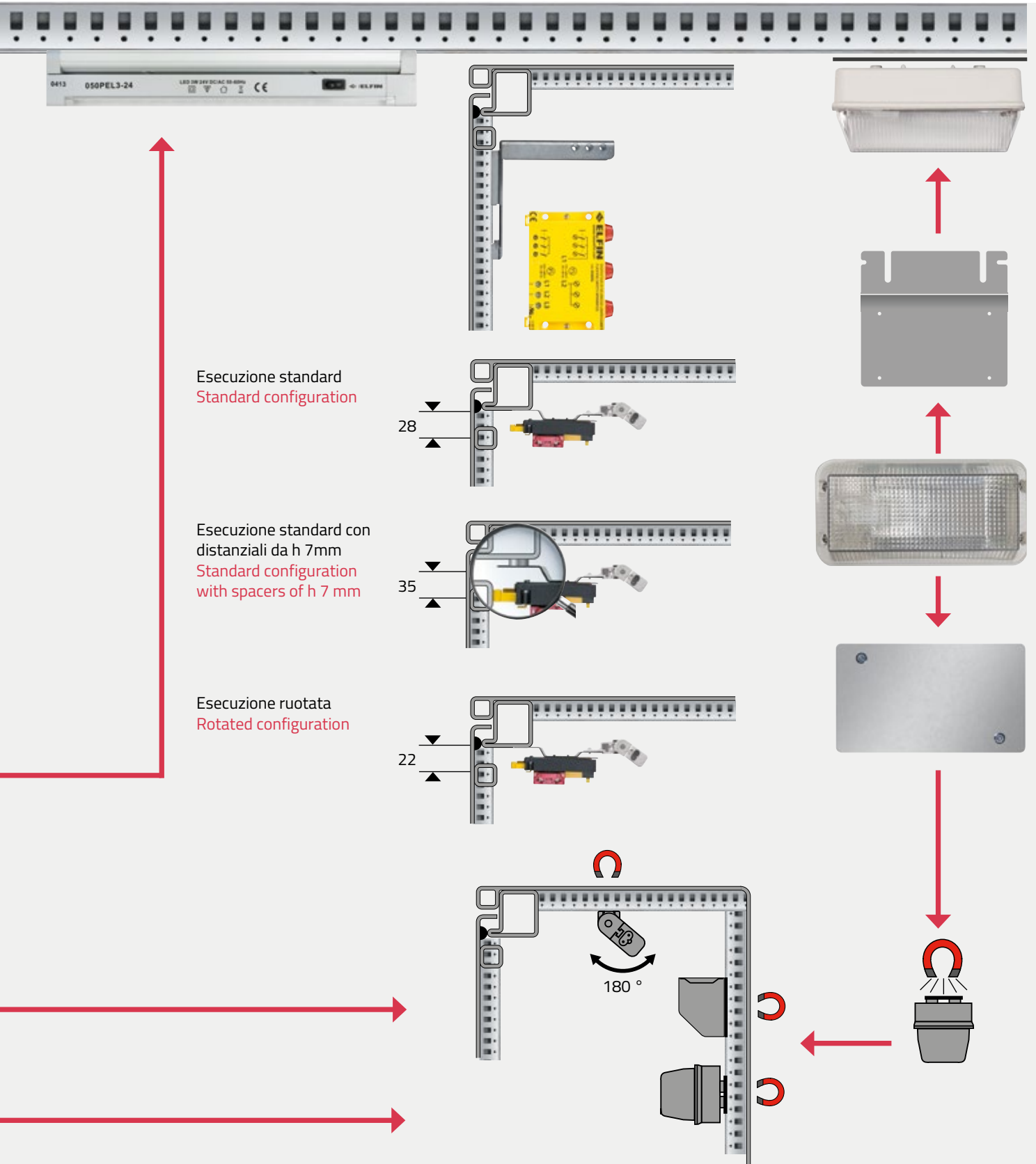
Layout componibilità Application layout



050



Layout componibilità Application layout



Illuminazione quadri elettrici Control cabinet lighting



Fissaggio tramite viti

Fixing by screws



Fissaggio magnetico

Magnetic fixing



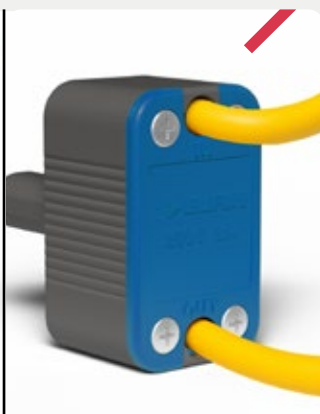
Colorazione indicativa del voltaggio secondo norma
CEI EN 6039-1-CEI 23-12/1

Voltage-indicative color coding as per
CEI EN 60309-1-CEI 23-12/1



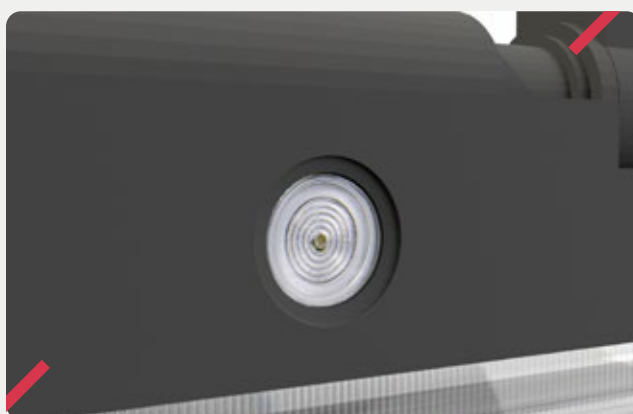
Connessione di una singola
lampada

Wiring of a single lamp



Cablaggio in serie
(max. 5 lampade)

Wiring in series (max. 5 lamps)



Pulsante touch capacitivo
con reset a interruzione alimentazione

Capacitive touch button with power-off reset



Illuminazione sulla lunghezza totale

Illumination across the full length

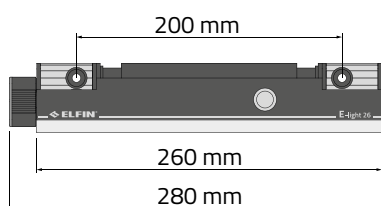
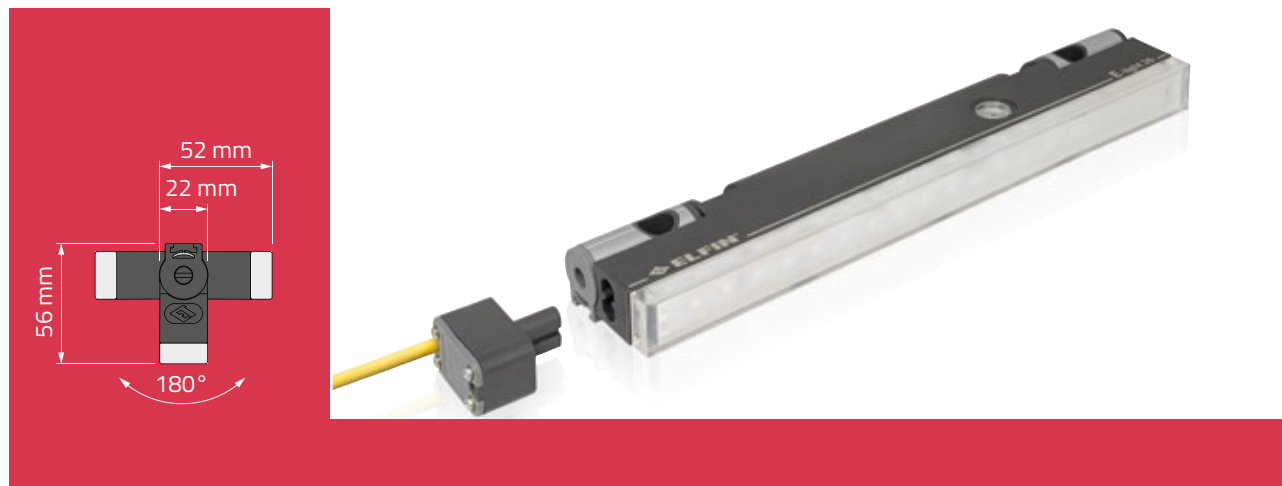


Led ad alta efficienza per riduzione consumi

High-efficiency LEDs for reduced power consumption

Illuminazione quadri elettrici

Control cabinet lighting



Nuove plafoniere lineari a led E-light 26 New linear led lamps E-light26

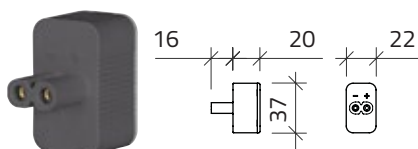
	g	Lm	W	cod
Connettore 050C7V2 incluso / 050C7V2 connector included				
● 24V DC / AC 50 ÷ 60 Hz	250	900	7	050LQL26-24
● 110 ÷ 240V AC 50 ÷ 60 Hz	250	900	6,5	050LQL26

Connettore 050C7V2 incluso / 050C7V2 connector included Certificazione UL Recognized / UL Recognized Certification				
● 24V DC / AC 50 ÷ 60 Hz	250	900	7	050LQL26-24UL
● 110 ÷ 240V AC 50 ÷ 60 Hz	250	900	6,5	050LQL26-UL



Accessori / Accessories

	g	cod
Kit per fissaggio magnetico / Magnetic mounting kit	14	050KFM



Connettore bipolare femmina Two-pole female connector	14	050C7V2
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Illuminazione quadri elettrici

Control cabinet lighting

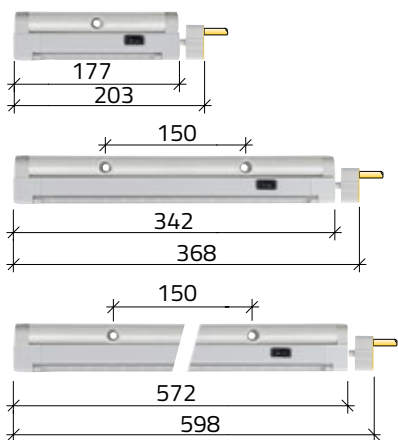


Plafoniere lineari a led

Linear led lamps

g Lm W cod

Connettore 050C7V2 incluso / 050C7V2 connector included



24V DC / AC 50 ÷ 60 Hz	170	200	2,5	050PEL1C-24
110 ÷ 240V AC 50 ÷ 60 Hz	170	200	2,5	050PEL1C
24V DC / AC 50 ÷ 60 Hz	340	600	5	050PEL3C-24
110 ÷ 240V AC 50 ÷ 60 Hz	340	600	5	050PEL3C
24V DC / AC 50 ÷ 60 Hz	520	950	8,5	050PEL5C-24
110 ÷ 240V AC 50 ÷ 60 Hz	520	950	8,5	050PEL5C

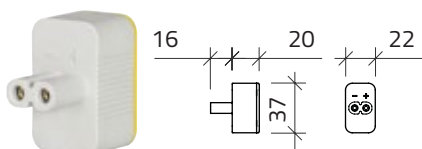
Accessori / Accessories

g cod



Kit per fissaggio magnetico / Magnetic mounting kit

14 **050KFM**



Connettore bipolare femmina
Two-pole female connector

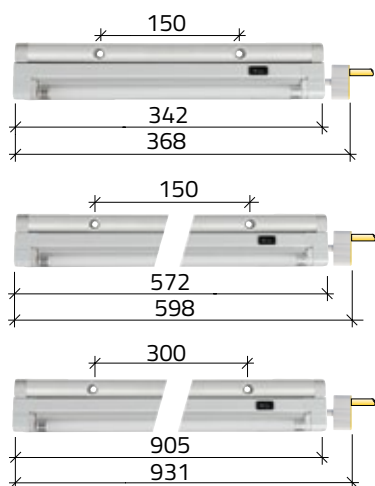
14 **050C7V2**

Illuminazione quadri elettrici

Control cabinet lighting

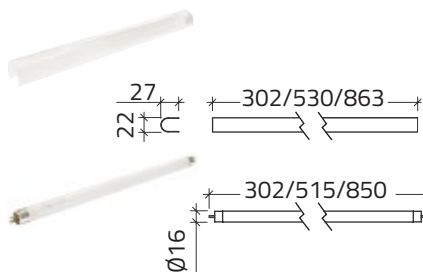


Plafoniere lineari fluorescenti Linear fluorescent lamps



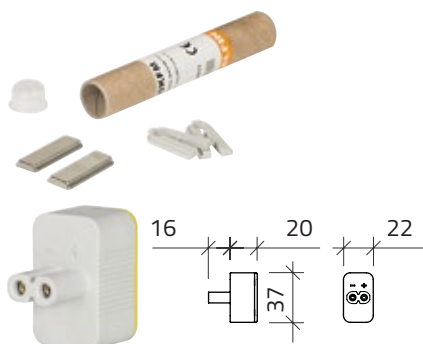
	g	Lm	W	cod
Connettore 050C7V2 incluso / 050C7V2 connector included				
110 ÷ 130V AC 50 ÷ 60 Hz Omologazione INTERTEK - ETL per il mercato Nordamericano (USA - CND) INTERTEK - ETL approval for North American market (USA - CND)	380	350	8	050PE86C
220 ÷ 240V AC 50 ÷ 60 Hz	380	350	8	050PE8C
220 ÷ 240V AC 50 ÷ 60 Hz	560	650	13	050PE13C

Ricambi / Spare parts



	g	cod
Diffusori per plafoniere fluorescenti / Diffusers for linear fluorescent lamps		
050PE86C, 050PE8C	26	050DE8
050PE136C, 050PE13C	48	050DE13
Neon per plafoniere fluorescenti / Neon for linear fluorescent lamps		
050PE86C, 050PE8C	32	050TNE8
050PE136C, 050PE13C	50	050TNE13

Accessori / Accessories



	g	cod
Kit per fissaggio magnetico / Magnetic mounting kit	14	050KFM
Connettore bipolare femmina / Two-pole female connector	14	050C7V2

Illuminazione quadri elettrici

Control cabinet lighting

Caratteristiche tecniche Plafoniere lineari a LED E-light 26

Modelli	Omologazioni
050LQL26	CE
050LQL26-24	CE
050LQL26-UL	CE, UL Registered
050LQL26-24UL	CE, UL Registered

Temperatura di esercizio	-40°C - +70°C
Tensione di isolamento	Ui 300V
Colore	Involucro RAL 7016 - Diffusore trasparente
Protezione elettrica	Classe II (doppio isolamento) EN 61140
Temperatura colore	4000°K
Durata elettrica	50.000 h
Grado di protezione	IP40 - EN 60529
Protezione agli impatti	IK06 - EN 62262
Direzione luce	Orientabile su 180°
Interruttore ON / OFF	Incluso, sensore capacitivo
Connettore alimentazione	050C7V2 incluso, idoneo per collegamento singolo e per collegamento in sequenza (max n° 5 plafoniere)
Possibilità di fissaggio	A vite (includere) idoneità al passo metrico 25mm Magnetico con Kit aggiuntivo 050KFM
Possibilità di accensione	Tramite fincorsa di posizione sulla porta - 050F025
Omologazioni	Vedi sopra
Conformità alle direttive	2014/35/UE direttiva bassa tensione 2014/30/UE direttiva compatibilità elettromagnetica 2011/65/UE direttiva RoHS
Rispondenza standard LVD	EN 60598-1, EN 60598-2-1
Rispondenza standard EMC	EN 55015, EN 61000-3-2, EN 61000-3-3, EN 61547

Caratteristiche tecniche Plafoniere lineari a LED

Versioni / Models	Tens di esercizio / Rated oper. voltage	Potenza / Power	Luminosità / Brightness	Dimensioni / Dimensions
050PEL1C	110-240VAC 50/60Hz	2,5W	200 Lumen	170x55x22mm
050PEL3C	110-240VAC 50/60Hz	6W	600 Lumen	342x55x22mm
050PEL5C	110-240VAC 50/60Hz	10W	950 Lumen	572x55x22mm
050PEL1C-24	24V DC-AC 50/60Hz	2,5W	200 Lumen	170x55x22mm
050PEL3C-24	24V DC-AC 50/60Hz	6W	600 Lumen	342x55x22mm
050PEL5C-24	24V DC-AC 50/60Hz	10W	950 Lumen	572x55x22mm

Temperatura di esercizio	-40°C - +70°C
Tensione di isolamento	Ui 300V AC
Materiale corpo e diffusore	PC - Policarbonato (senza alogeni)
Colore	Involucro RAL 7035 - Diffusore trasparente
Protezione elettrica	Classe II (doppio isolamento) EN 61140
Temperatura colore	6000°K
Durata elettrica	50.000 h
Grado di protezione	IP30 - EN 60529
Protezione agli impatti	IK06 - EN 62262
Direzione luce	Orientabile su 180°
Interruttore ON / OFF	Incluso
Connettore alimentazione	050C7V2 incluso, idoneo per collegamento singolo e per collegamento in sequenza (max n° 5 plafoniere)
Possibilità di fissaggio	A vite (includere) idoneità al passo metrico 25mm Magnetico con Kit aggiuntivo 050KFM
Possibilità di accensione	Tramite fincorsa di posizione sulla porta - 050F025
Omologazioni	CE
Conformità alle direttive	2014/35/UE direttiva bassa tensione 2014/30/UE direttiva compatibilità elettromagnetica 2011/65/UE direttiva RoHS
Rispondenza alle norme	EN 60598-1, EN 60598-2-1, EN 61547, EN 61347-1, EN 61347-2-13, EN 55015, EN 61000-3-2, EN 61000-3-3, EN 62471

Technical data Linear LED lamps E-light 26

Models	Approvals
050LQL26	CE
050LQL26-24	CE
050LQL26-UL	CE, UL Registered
050LQL26-24UL	CE, UL Registered

Operating temperature	-40°C - +70°C
Rated insulation voltage	Ui 300V
Colour	Housing RAL 7016 - Diffuser clear
Overvoltage category	Class II (double insulation) EN 61140
Colour temperature	4000°K
Electrical life	50.000 h
Protection degree	IP40 - EN 60529
Protection against impact	IK06 - EN 62262
Light distribution	180° adjustable
Switch ON / OFF	Included, capacitive touch sensor
Power supply connector	050C7V2 included, suitable for wiring the single lamp, or sequential (max n° 5 lamps)
Installation possibilities	With screws (included) suitable for metric bore pitch 25mm - Magnetic with additional Kit 050KFM
Light-up possibility	Through door limit switch - 050F025
Approvals	See above
Compliance with directives	2014/35/UE low voltage directive 2014/30/UE EMC directive 2011/65/UE RoHS directive
LVD standards compliance	EN 60598-1, EN 60598-2-1
EMC standards compliance	EN 55015, EN 61000-3-2, EN 61000-3-3, EN 61547

Technical data Linear LED lamps

Versioni / Models	Tens di esercizio / Rated oper. voltage	Potenza / Power	Luminosità / Brightness	Dimensioni / Dimensions
050PEL1C	110-240VAC 50/60Hz	2,5W	200 Lumen	170x55x22mm
050PEL3C	110-240VAC 50/60Hz	6W	600 Lumen	342x55x22mm
050PEL5C	110-240VAC 50/60Hz	10W	950 Lumen	572x55x22mm
050PEL1C-24	24V DC-AC 50/60Hz	2,5W	200 Lumen	170x55x22mm
050PEL3C-24	24V DC-AC 50/60Hz	6W	600 Lumen	342x55x22mm
050PEL5C-24	24V DC-AC 50/60Hz	10W	950 Lumen	572x55x22mm

Operating temperature	-40°C - +70°C
Rated insulation voltage	Ui 300V AC
Housing, diffuser material	PC - Polycarbonate (halogen free)
Colour	Housing RAL 7035 - Diffuser clear
Overvoltage category	Class II (double insulation) EN 61140
Colour temperature	6000°K
Electrical life	50.000 h
Protection degree	IP30 - EN 60529
Protection against impact	IK06 - EN 62262
Light distribution	180° adjustable
Switch ON / OFF	Included
Power supply connector	050C7V2 included, suitable for wiring the single lamp, or sequential (max n° 5 lamps)
Installation possibilities	With screws (included) suitable for metric bore pitch 25mm - Magnetic with additional Kit 050KFM
Light-up possibility	Through door limit switch - 050F025
Approvals	CE
Compliance with directives	2014/35/UE low voltage directive 2014/30/UE EMC directive 2011/65/UE RoHS directive
Standard compliance	EN 60598-1, EN 60598-2-1, EN 61547, EN 61347-1, EN 61347-2-13, EN 55015, EN 61000-3-2, EN 61000-3-3, EN 62471



Illuminazione quadri elettrici

Control cabinet lighting

Caratteristiche tecniche

Plafoniere lineari fluorescenti

Technical data

Linear fluorescent lamps

Versioni / Models	Tens di esercizio / Rated oper. voltage	Potenza / Power	Luminosità / Brightness	Dimensioni / Dimensions
050PE8C	220-240VAC 50/60Hz	8W	350 Lumen	342x55x22mm
050PE13C	220-240VAC 50/60Hz	13W	650 Lumen	572x55x22mm
050PE86C	110-130VAC 50/60Hz	8W	350 Lumen	342x55x22mm


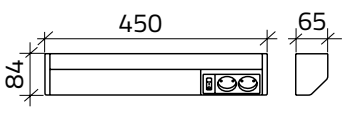

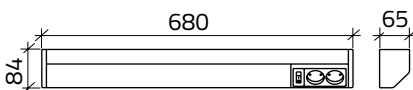
Temperatura di esercizio	-10°C± +50°C
Tensione di isolamento	Ui 300V AC
Materiale corpo e diffusore	PC - Policarbonato (senza alogeni)
Colore	Involucro RAL 7035 -Diffusore trasparente
Protezione elettrica	Classe II (doppio isolamento) EN 61140
Temperatura colore	6400°K
Durata elettrica	Tubo fluorescente 8.000 h
Grado di protezione	IP30 - EN 60529
Protezione agli impatti	IK03 - EN 62262
Direzione luce	Orientabile su 180°
Interruttore ON / OFF	Incluso
Connettore alimentazione	050C7V2 incluso, idoneo per collegamento singolo e per collegamento in sequenza (max n° 5 plafoniere)
Possibilità di fissaggio	A vite (include) idoneità al passo metrico 25mm Magnetico con Kit aggiuntivo 050KFM
Possibilità di accensione	Tramite finecorsa di posizione sulla porta - 050SF025
Omologazioni	CE, INTERTEK ETL (USA-CND)
Conformità alle direttive	2014/35/UE direttiva bassa tensione 2014/30/UE direttiva compatibilità elettromagnetica 2011/65/UE direttiva RoHS
Rispondenza alle norme	EN 60598-1, EN 60598-2-1, EN 61547, EN 61347-1, EN 61347-2-13, EN 55015, EN 61000-3-2, EN 61000-3-3, EN 60400, EN 60320-1, EN 6030-2-2 EN 60799

Operating temperature	-10°C± +50°C
Rated insulation voltage	Ui 300V AC
Housing, diffuser material	PC - Polycarbonate (halogen free)
Colour	Housing RAL 7035 -Diffuser clear
Overvoltage category	Class II (double insulation) EN 61140
Colour temperature	6400°K
Electrical life	Fluorescent tube 8.000 h
Protection degree	IP30 - EN 60529
Protection against impact	IK03 - EN 62262
Light distribution	180° adjustable
Switch ON / OFF	Included
Power supply connector	050C7V2 included, suitable for wiring a simple lamp, or sequential (max n° 5 lamps)
Installation possibilities	With screws (included) suitable for metric bore pitch 25mm - Magnetic with additional Kit 050KFM
Light-up possibility	Through door limit switch - 050SF025
Approvals	CE, INTERTEK ETL (USA-CND)
Compliance with directives	2014/35/UE low voltage directive 2014/30/UE EMC directive 2011/65/UE RoHS directive
Standard compliance	EN 60598-1, EN 60598-2-1, EN 61547, EN 61347-1, EN 61347-2-13, EN 55015, EN 61000-3-2, EN 61000-3-3, EN 60400, EN 60320-1, EN 6030-2-2 EN 60799


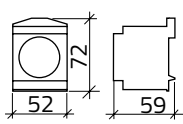

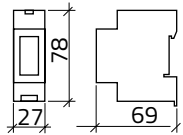
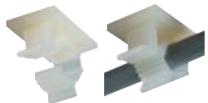
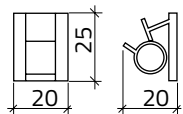
Illuminazione quadri elettrici

Control cabinet lighting

Plafoniere lineari fluorescenti con prese VDE Fluorescent linear lamps with VDE sockets

		g	W	cod
 	220/240 50-60 Hz	650	8	050PPE8
 	220/240 50-60 Hz	750	13	050PPE13

Accessori Accessories

		g	cod
 	Presse VDE / VDE Socket 250V AC - 16A	68	050PVDE
 	Presse CEI / CEI Socket 250V AC - 10/16A	55	050PCEI
 	Clip per bloccaggio cavo / Cable clamp Grazie a una comoda leva è possibile liberare il cavo per un eventuale uso manuale della lampada The cable can be released for the hand-held use of the lamp using a handy lever.	2	050CLIP

Illuminazione quadri elettrici

Control cabinet lighting



Fincorsa alimentazione plafoniera Limit switches for lamp supply

Fincorsa 2NC su staffa e pressacavo
Limit switch 2NC on bracket with cable gland

g

cod

140

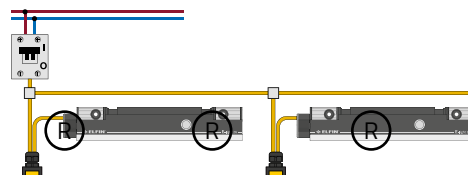
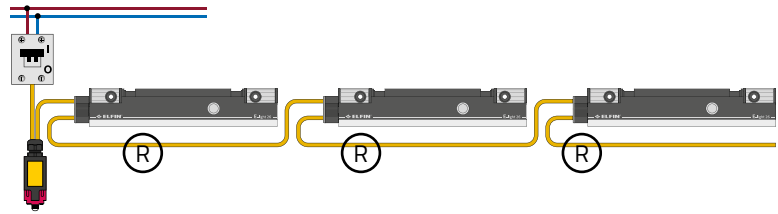
050F02S

Fincorsa 2NC su staffa e pressacavo con cablaggio
Limit switch 2NC on bracket
with cable gland and wiring

150

050F02SC

Esempi di installazione Mounting examples



Max 5 unità / Max 5 sequential units

SEGNALAZIONE E ILLUMINAZIONE DEI QUADRI ELETTRICI

Segnalazione quadri elettrici Control cabinet signalling



UN SISTEMA FLESSIBILE E MODULABILE
A FLEXIBLE MODULAR SYSTEM

Segnalazione quadri elettrici

Control cabinet signalling

La realizzazione di un prodotto ad alto contenuto tecnologico non può fare solamente affidamento alla creatività progettuale o all'ottimizzazione dei costi, ma, se vuole entrare in una logica di mercato evoluto, deve rispettare alcune fondamentali richieste di una società sempre più sofisticata:

- attento adempimento della legislazione vigente;
- ottimizzazione dei processi produttivi e logistici;
- rispetto ambientale e risparmio energetico.

New Elfin, che opera da anni nel settore dei componenti per l'automazione, ha progettato e costruito un nuovo sistema modulare per l'illuminazione e la segnalazione di sicurezza di apparecchiature elettriche. La progettazione di questo nuovo sistema di sicurezza è partita da una attenta lettura delle recenti disposizioni europee; dalla direttiva macchine 89/392 CEE e successive integrazioni, recepita dal D.P.R. 24 - 7 - 96 n° 459, dalle legislazioni vigenti D.P.R. 547/55, D. Lgs 626/94, D. Lgs 242/96, che evidenziano alcuni parametri fondamentali da rispettare. Qui di seguito tenteremo di indicare i principali obiettivi da raggiungere.



A high tech product cannot be created simply by relying on inspired design or optimisation of costs but must meet certain basic requirements of an ever more sophisticated and demanding society if it is to secure a place on a highly developed market:

- unswerving compliance with current legislation;
- optimisation of production and logistic processes;
- low environmental impact and energy saving.

Drawing on its long-term experience in the automation components sector, New Elfin has designed and constructed a new modular system for lighting and safety signalling of electric equipment.

This new safety system has been designed paying particular attention to recent European regulations taken from Machinery Directive 89/392/EEC and subsequent amendments, enacted by Presidential Decree No. 459 of July 24 1996, from current legislation Presidential Decree 547/55, Decree Law 626/94, Decree Law 242/96 which specify certain important parameters that must be complied with. Below, we will try to establish the main objectives to be achieved.



■ VOLONTARIETA' ALLE NORME

La conformità alle norme non è obbligatoria, bensì volontaria, ciò non di meno chi segue le indicazioni e le prescrizioni normative gode di una presunzione di conformità ai requisiti essenziali di sicurezza, garantendo al prodotto i requisiti necessari per soddisfare le richieste di un mercato moderno. Nel caso dei dispositivi di illuminazione e segnalazione di sicurezza è utile ricordare che si opera nell'ambito delle barriere di sicurezza passiva che, al contrario di quelle attive, hanno il compito di interpretare, segnalare, monitorare e prevenire eventuali situazioni di pericolo.

■ VOLUNTARY COMPLIANCE WITH REGULATIONS

Compliance with regulations is not mandatory but voluntary. Nonetheless, it is assumed that whoever follows the indications and normative prescriptions complies with essential safety requirements, guaranteeing that the product has the necessary prerequisites to measure up to the demands of a modern market. In the case of safety lighting and signalling devices, it is worth remembering that passive safety barriers are used which, as opposed to active safety barriers, must be able to interpret, highlight, monitor and prevent hazardous situations.

Segnalazione quadri elettrici

Control cabinet signalling

TIPI DI BARRIERE / TYPES OF BARRIERS

barriera di inaccessibilità barrier restricting access	carter, ripari mobili, armadi, distanziamento covers, movable guards, segregation cabinets
barriera di contenimento containment barrier	serbatoio, tubazione, condotto a tenuta tank, pipe, sealed duct
barriera di limitazione danno damage restriction barrier	comando di arresto d'emergenza emergency stop control
barriera di riduzione della dose dose reduction barrier	aspiratori gas e fumi, protettori, auricolari, insonorizzazione gas and fume extractors, ear protectors, sound-proofing
barriera comportamentale behaviour type barrier	informazione e formazione del personale information and personnel training
barriera di avviso warning barrier	segnaletica di sicurezza safety signalling
barriera di allarme alarm barrier	sistemi automatici di allarme e preallarme automatic alarm and pre-alarm systems
barriera preventiva preventive barrier	procedure di manutenzione preventiva e/o su condizione preventive and/or on condition type maintenance procedures

APPLICAZIONI / APPLICATIONS

INTERFACCIA UOMO - MACCHINA

Ogni operatore umano, nel momento in cui la macchina è destinata ad essere utilizzata anche da lui, ha l'esigenza ed il diritto di trovarsi nelle migliori condizioni, ad esempio, interfacce trasparenti (vale a dire interpretabili facilmente ed inequivocabilmente), istruzioni esaurienti per ogni operazione (messa a punto, conduzione, manutenzione, pulizia, ecc.), principi ergonomici (buona luminosità, comfort, comandi e meccanismi accessibili, ecc.). Con il termine generico di operatore la Direttiva Macchine e le Norme Tecniche identificano un insieme di persone con differenti livelli di cultura, preparazione e modo di approcciarsi alla macchina¹.

MAN- MACHINE INTERFACE

At the moment in which he prepares to use the machine, the operator needs and has the right to be in the best conditions which implies, for example, transparent interfaces (i.e. easy to understand and unambiguous), complete instructions for each operation (setting, operation, maintenance, cleaning, etc.), compliance with human engineering principles (good lighting, comfort, accessible controls and mechanisms, etc.). The Machinery Directive and Technical Regulations establish that the general term "operator" means a set of people with different levels of culture, knowledge and method of approaching the machine¹.



Segnalazione quadri elettrici

Control cabinet signalling

■ FATTORI DI RISCHIO - PRECAUZIONI SUPPLEMENTARI

Ogni costruttore certifica il raggiungimento di tutti i livelli di sicurezza a progetto finito, cioè quando la macchina è pronta per la vendita, dopo un attento assemblaggio e un collaudo severo. Occorre ricordare, però che durante queste fasi, per motivi contingenti di industrializzazione, non tutti i dispositivi di sicurezza sono operativi, esponendo gli operatori a imprevedibili fattori di rischio.

■ FACTOR OF RISK - ADDITIONAL PRECAUTIONS

Each manufacturer certifies that all levels of safety have been achieved at the end of the project, i.e. when the machine is ready to be sold after attentive assembly and searching inspection. It must be remembered however that, for unavoidable reasons of industrialisation, not all the safety devices are working in these phases and the operators are therefore exposed to unforeseeable factors of risk.

■ FATTORI DI RISCHIO ESPOSIZIONE AL PERICOLO

L'esposizione al pericolo è in funzione del tempo durante il quale una persona rimane appunto esposta alla possibilità di un coinvolgimento da parte della fonte di pericolo, oppure è in funzione della frequenza con cui la persona accede alla zona pericolosa della macchina. In ogni caso, esiste una motivazione in ragione della quale l'esposizione si verifica. Questa motivazione può dipendere dal metodo di lavorazione della macchina, oppure dalla necessità d'effettuare interventi di messa a punto e manutenzione.

■ FACTOR OF RISK EXPOSURE TO HAZARD

Exposure to hazard depends on the time during which a person remains exposed to the possibility of being involved in a source of hazard or according to the frequency with which the person accesses the machine danger zone. In each case, there is a reason why this exposure occurs which may depend on the method of operation of the machine or on the need for setting and maintenance.

TIPI DI BARRIERE TYPES OF BARRIERS

necessità di messa a punto
setting requirements

necessità di produzione (carico/ scarico)
production requirements

necessità di manutenzione (riparazione)
maintenance requirements (repair)

necessità di pulizia
cleaning requirements

eventi accidentali
accidental events

Manomissibilità dei dispositivi di sicurezza The possibility of tampering with safety devices

Su ogni macchina esiste anche il rischio che i dispositivi di sicurezza possano venire manomessi o addirittura asportati. Nel panorama delle ragioni nessuna "scusabile", emergono difetti di progettazione o di costruzione della macchina. Errori nella scelta della macchina (non adatta a svolgere le lavorazioni per le quali era stata acquistata, adattamenti impropri da parte dell'utente, abitudini sconsiderate invalse fra gli operatori e gravi dimenticanze in fase manutentiva.



On any machine, there is also the risk that the safety devices may be defeated or even removed. The reasons for these actions (none of which can be excused) include machine design and construction defects; errors in selection the machine (not suitable for the processes for which it has been acquired); improper adptations by the user; bas habits that are ingrained in operators and serious shortcomings in the maintenance phase



MOTIVAZIONI CHE PORTANO ALLA MANOMISSIONE DEI DISPOSITIVI DI SICUREZZA / REASONS WHY SAFETY DEVICES ARE TAMPERED WITH ADDITIONAL PRECAUTION IN EMERGENCIES

interferenza marcata fra i dispositivi di sicurezza e lo svolgimento del normale ciclo produttivo
evident interference between safety devices and running of the normal production cycle

guasti frequenti sui dispositivi di sicurezza che producono indisponibilità o difficoltà di impiego della macchina
frequent failure of safety devices that results in unavailability or difficulty in using the machine

difficoltà di messa a punto della macchina per impossibilità di accesso alle parti mobili
difficulty in setting the machine due to inaccessibility of mobile parts

impiego della macchina difforme da quello previsto dal costruttore
use of the machine other than that intended by the manufacturer

modifiche apportate sulla macchina che ne hanno reso impossibile l' impiego con dispositivi di sicurezza attivi
modifications to the machine that have made it impossible to use this with the ssafety devices working

comportamento sconsiderato degli operatori addetti alla macchina
irresponsible behaviour of the machine operator

mancato ripristino dei dispositivi di sicurezza dopo un intervento manutentivo che ne ha richiesto l' esclusione o l' asportazione
failure to reset the safety devices after maintenance operations involving bypassing or removal of these



Manomissibilità dei dispositivi di sicurezza

The possibility of tampering with safety devices

L'installazione del dispositivo di sicurezza lampeggiante permette di prevenire eventuali incidenti avvertendo, con il lampeggiamento, l'operatore della presenza di tensione nell'impianto elettrico. I dispositivi lampeggianti DSL vengono installati in posizione estremamente visibile all'apertura delle ante del quadro elettrico, collegati direttamente a valle dell'interruttore principale. Il lampeggiare delle tre lampade rosse mette in evidenza la condizione di pericolo per la presenza di tensione. I dispositivi DSL sono idonei al collegamento sia a linee trifasi con o senza neutro, che a linee monofasi. La realizzazione a tre lampade rosse lampeggianti e la simbologia a saetta gialla su fondo rosso rendono il messaggio evidente e comprensibile al di là delle barriere linguistiche o culturali.



Installation of the Flashing Safety Devices makes it possible to prevent accidents by alerting the operator, with the flashing, that the electrical system is live. DSL flashing safety devices are installed in a position where they are immediately visible on opening the door of the cabinet and are connected directly downstream of the main circuit breaker. Flashing of the three red light highlights the power on hazard condition. The DSL devices are suitable for connection to three-phase lines with or without neutral and to single-phase lines. Use of three red flashing lights and the yellow lightning symbol on a red background ensure that the message is conveyed immediately and is readily understood, thus overcoming possible linguistic or cultural barriers.



Manomissibilità dei dispositivi di sicurezza

The possibility of tampering with safety devices

Agevolazioni manutentive in termini di :

- **accessibilità alle** parte interne
- **facilità di movimentazione in base alle capacità umane**
- **scelta adeguata dei posti di lavoro**
- **a limitazione del numero degli utensili e delle attrezzature speciali**
- **facilità di sorveglianza**

Facilitate maintenance as regards :

- **accessibility to inside parts**
- **ease of movement according to human capacity**
- **appropriate selection of working position**
- **restriction of the number of tools and of special equipment**
- **ease of supervision**

Isolamento delle fonti di energia e dissipazione dell' energia immagazzinata :

- **isolando la macchina da qualsiasi fonte d' energia o da altri servizi; l' isolamento deve essere visibile (interruzione visibile delle continuità dell'alimentazione di energia) o garantito attraverso il controllo della posizione dell' organo di comando dell' apparecchio d' isolamento e deve essere chiaro quali zone della macchina sono state isolate**
- **bloccando se necessario (su grandi macchine o impianti), gli apparecchi d'isolamento nella posizione di circuito "isolato"**
- **adottando misure per garantire, a valle dei punti d'isolamento, quali l'assenza di energia cinetica e l'assenza di energia potenziale**
 - **verificando il risultato delle misure mediante un sistema sicuro di lavoro**

Isolation of energy sources and dissipation of energy stored :

- **isolating the machine from all sources of energy and from other services; the isolation must be visible (visible interruption of continuity of energy supply) or guaranteed through control of the position of the control device of the isolator with clear indication of which areas of the machine have been isolated**
- **locking if necessary (e.g. on large machines or installations, isolators in the circuits "isolated" position)**
- **taking steps to guarantee, downstream of the isolation point absence of potential energy , absence of kinetic energy**
- **checking the effects of the measures applied through a safe working procedure**

Adozioni di accorgimenti che rendano sicura la movimentazione della macchina e delle sue parti pesanti quali:

- **organi normalizzati di sollevamento con brache, ganci, golfari o fori filettati per il fissaggio di tali organi**
- **organi che consentono la presa automatica per mezzo di un gancio di sollevamento , quando il punto d' aggancio non è accessibile da terra**
- **sedi di forcolamento per le macchine che devono essere trasportate con un carrello a forche**
- **indicazioni sulla macchina , o su alcune delle sue parti che possono essere rimosse, del valore della loro massa espresso in chilogrammi**
- **apparecchi di sollevamento ed attrezzi integrati nella macchina**

Application of measures that ensure safe handling of the machine and of heavy parts of this such as :

- **use of standard attachments for lifting gear with slings, hooks, eyebolts or threaded holes for fastening of these attachments**
- **lifting gear that permits automatic attachment using a lifting hook when the attachment point is not accesible form the ground**
- **fork insertion compartments for machines that must be transported using fork-lift trucks**
- **indication on the machine or on some of its parts that cannot be removed of their weight in kilograms**
- **lifting gear and equipment integrated in the machine**

Accorgimenti destinati a rendere sicuro l' accesso per la messa a punto e la manutenzione (piattaforme scale antiscivolo, corrimani, ecc.)

Measures intended to guarantee safe access for setting and maintenance (platforms- non-slip ladders, handrails, etc.)

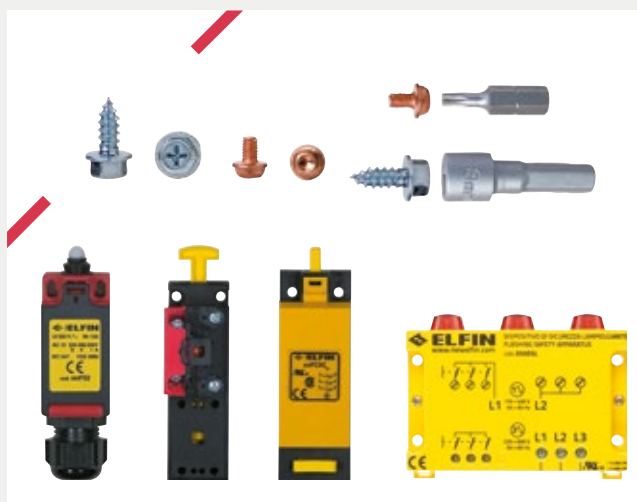
Sistemi di auto diagnosi o comunque di assistenza per l' individuazione dei guasti e del pericolo
Self-test systems or assistance in locating faults and hazards

Misure atte a garantire la stabilità statica e dinamica della macchina
Measures intended to guarantee static and dynamic stability of the machine

Dispositivi di sicurezza lampeggianti Flashing safety devices

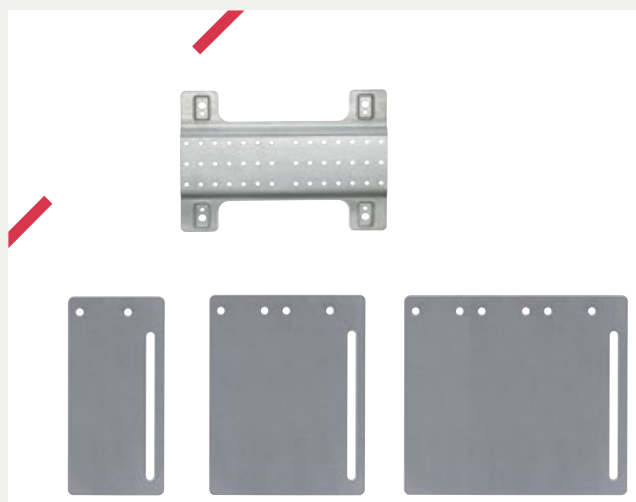
FACILITÀ DI MONTAGGIO

Tutti i prodotti adottano sistemi di fissaggio rapido. L'installazione degli apparecchi e delle plafoniere sui quadri elettrici, è realizzabile tramite speciali viti Ø 5,5 mm autoformanti. L'applicazione delle plafoniere sugli apparecchi è possibile tramite viti automaschianti M4. Le viti sono state realizzate con speciali teste che permettono una facile avvvitatura in posizioni di montaggio difficoltose. Sia gli apparecchi che le staffe accessorie vengono forniti con viti incluse.

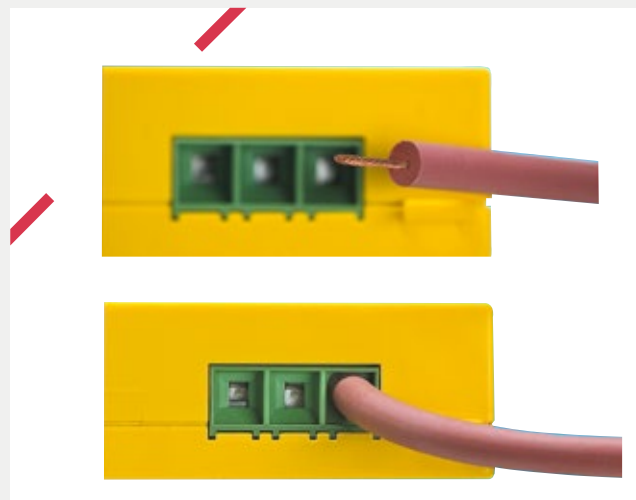
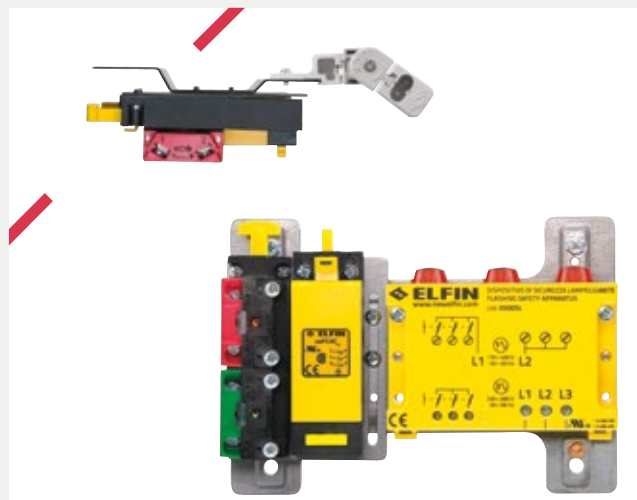


EASY MOUNTING

All products adopt a fasteners system for a fast mounting. The installation of devices and ceiling lights on electric panels is possible thanks to special self-drilling screws Ø5,5mm. The application of ceiling lights on devices is possible through self-drilling M4 screws. All the screws were made with special heads that permit an easy screwing in difficult mounting positions. Devices and brackets are supplied with screws included.



easy mounting



Dispositivi di sicurezza lampeggianti Flashing safety devices



Dispositivo di sicurezza cablato Safety device, wired

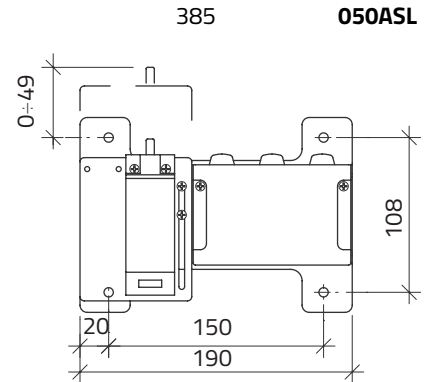
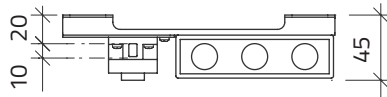
g

cod

Fincorsa tripolare cablato al lampeggiante. Si inserisce solo quando le porte dell'armadio sono aperte
Three-pole limit switch wired to the flashing device. It is on only when the cabinet doors are open

- ⊕ 220÷690 V. 50÷60 Hz Tensione di alimentazione / Power Supply
- ⊖ 110÷400 V. 50÷60 Hz Tensione di alimentazione / Power Supply

Configurazione con fincorsa
Configuration with limit switch



Dispositivi di sicurezza con fincorsa interblocco, cablati Safety devices with interlock limit switch, wired

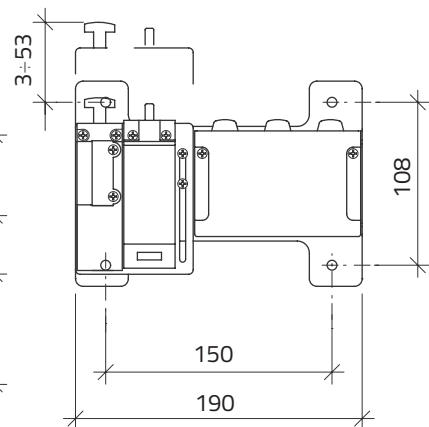
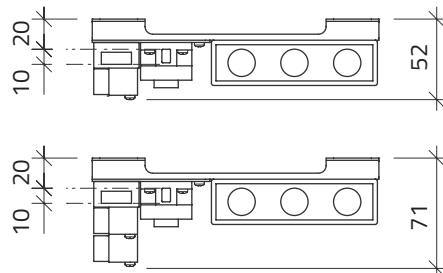
g

cod

Normalmente utilizzati per l'inserzione dell'illuminazione e per lo spegnimento di ventole o condizionatori.
Normally used to switch lighting on and fans or conditioners off

- ⊕ 220÷690 V. 50÷60 Hz Tensione di alimentazione / Power Supply
- ⊖ 110÷400 V. 50÷60 Hz Tensione di alimentazione / Power Supply

Interblocco con 1NC / Interlock with 1NC	535	050ASLFI01
Interblocco con 1NO / Interlock with 1NO	535	050ASLFI10
Interblocco con 1NC+2NC / Interlock with 1NC+2NC	535	050ASLFI03
Interblocco con 1NO+2NC / Interlock with 1NO+2NC	535	050ASLFI12



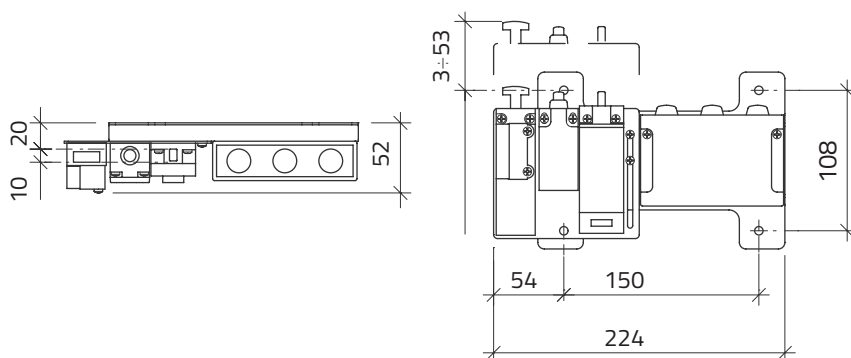
Dispositivi di sicurezza lampeggianti Flashing safety devices

Dispositivi di sicurezza con finecorsa e micro, cablati Safety devices with limit switch and microswitch, wired

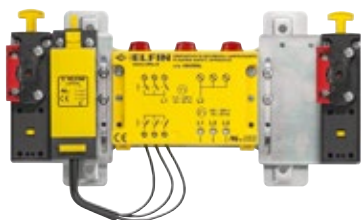


- Ⓜ 3 220÷690 V. 50÷60 Hz Tensione di alimentazione / Power Supply
- Ⓜ 1 110÷400 V. 50÷60 Hz Tensione di alimentazione / Power Supply

Interblocco con 1NC / Interlock with 1NC	730	050AS01FC
Interblocco con 1NO / Interlock with 1NO	730	050AS10FC

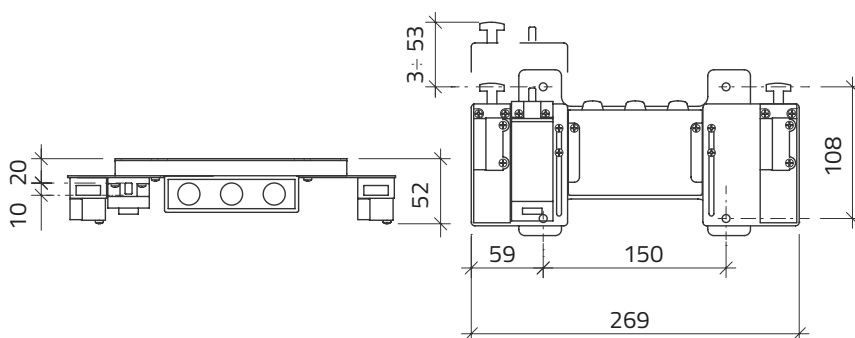


Dispositivo di sicurezza con finecorsa interblocco, cablato Safety device with interlock limit switch, wired



- Ⓜ 3 220÷690 V. 50÷60 Hz Tensione di alimentazione / Power Supply
- Ⓜ 1 110÷400 V. 50÷60 Hz Tensione di alimentazione / Power Supply

Per due porte / For two doors	730	050ASL2PFI01
Interblocco con 1NC / Interlock with 1NC	730	050ASL2PFI10



Dispositivi di sicurezza lampeggianti Flashing safety devices



Dispositivo di sicurezza cablato Safety device, wired

g

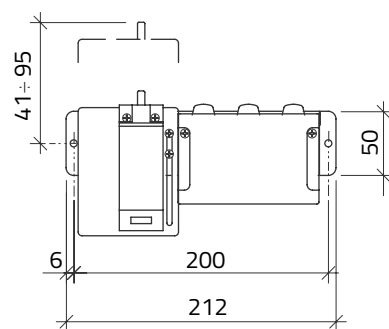
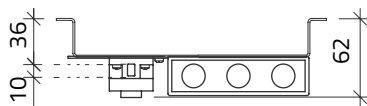
cod

Configurazione con finecorsa / Configuration with limit switch
Finecorsa tripolare cablato al lampeggiante. Determina l'inserimento solo quando le porte dell'armadio sono aperte
Three-pole limit switch wired to the flashing device. It is on only when the cabinet doors are open.

- ⊕ 220÷690 V. 50÷60 Hz Tensione di alimentazione / Power Supply
- ⊖ 110÷400 V. 50÷60 Hz Tensione di alimentazione / Power Supply

430

050ASL3



Dispositivi di sicurezza con finecorsa interblocco, cablati Safety devices with limit switch and microswitch, wired

g

cod

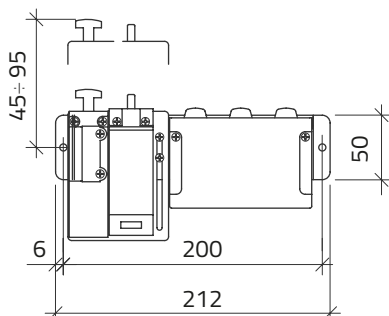
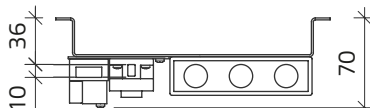
- ⊕ 220÷690 V. 50÷60 Hz Tensione di alimentazione / Power Supply
Interblocco con 1NC / Interlock with 1NC
- ⊖ 110÷400 V. 50÷60 Hz Tensione di alimentazione / Power Supply
Interblocco con 1NO / Interlock with 1NO

490

050ASL3FI01

490

050ASL3FI10



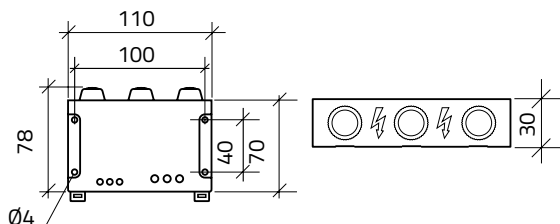
Dispositivi di sicurezza lampeggianti Flashing safety devices



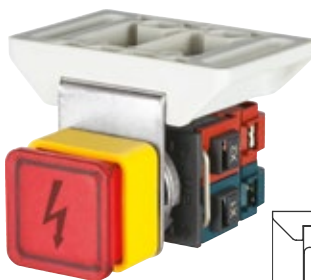
Dispositivo di sicurezza lampeggiante Flashing safety device

- 220÷690 V, 50÷60 Hz Tensione di alimentazione / Power Supply
- DC*/AC 110÷400V 50÷60 Hz non polarizzato / not polarized

g	cod
90	050DSL

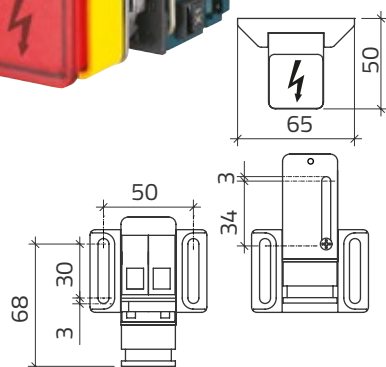


Dispositivi di sicurezza monofase lampeggianti Single-phase flashing safety devices



Alimentazione diretta 24V con led lampeggiante rosso 24V direct power supply with flashing red led

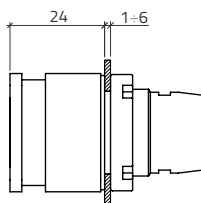
1NO + 1 NC	167	050ASPLD11
1NC	167	050ASPLD01
1NO	167	050ASPLD10



Dispositivo di sicurezza monofase senza led Single-phase safety device without led

1NO + 1 NC	167	050ASPD11
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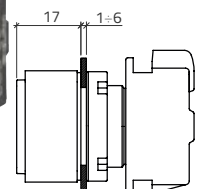
Pulsante di sicurezza luminoso Illuminated safety push-button



Per altri tipi di operatori e portalampade, vedi sezione 020
For other types of operators and lampholders, see section 020.

g	cod
25	020PQAFLRKS72

Unità luminosa di sicurezza Illuminated safety unit



Alimentazione diretta, 400V AC/DC 2W max, lampadina LED BA9S non inclusa
Direct supply, 400V AC/DC 2W max, BA9S LED lamp not included

g	cod
38	050ULSQ9

Dispositivi di sicurezza lampeggianti Flashing safety devices

Caratteristiche tecniche

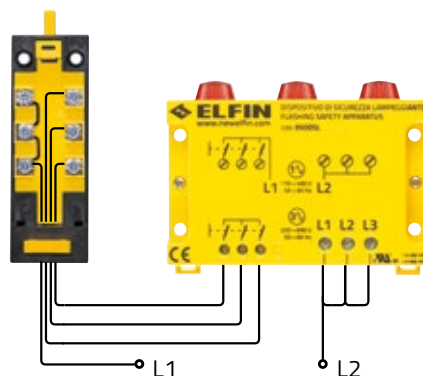
Rispondenza alle norme	IEC 947-5-1, CEI 7.45 VDE - UTE - BSI CENELEC, EN 60947.5.1
Omologazioni	(USA - CANADA)
Protezioni climatiche	In esecuzione normale T.C. tutti i climi
Limiti di temperatura	Funzionamento -25C° ÷ +65C° Stoccaggio -35C° ÷ +70C°
Protezione alla scossa elettrica	Classe II doppio isolamento secondo IEC 536
Tensione nominale di isolamento	Ui 690 A.C.
Grado di inquinamento	Classe 3 secondo DIN VDE 0110
Morsetti	Fase L1 - L2- L3 ↻ Coppia max 1Nm Ø vite a taglio 5mm max 1 conduttore / 4mm ² / 10AWG Ausiliari ↻ Coppia max 0,5Nm Ø vite a taglio 3,5mm max 1 conduttore / 2,5mm ² / 12AWG Grado di protezione morsetti IP20 secondo IEC 529
Conformità alle direttive emc/rohs	EN 50014-1, EN 50082-2, EN 55022, EN 61000-4-2÷11, EN 61000-6-2÷31. Immunità alle ESD. Immunità di BURST. Direttive: EMC EC 2004/108 - RoHS EC 2002/95
Assorbimento max	10mA

Technical data

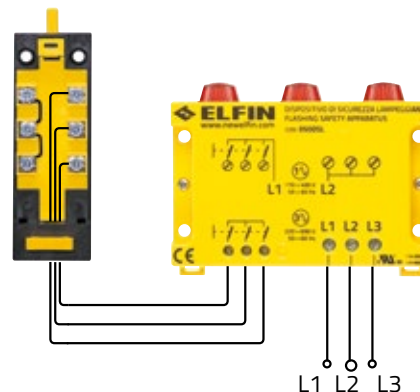
Conforming to standards	IEC 947-5-1, CEI 7.45 VDE - UTE - BSI CENELEC, EN 60947.5.1
Approvals	(USA - CANADA)
Protective treatment	Standard version: "TC"
Ambient temperature	Operation -25C° ÷ +65C° Storage -35C° ÷ +70C°
Ambient temperature protection	Class II double insulation conforming to IEC 536
Rated insulation voltage	Ui 690 A.C.
Level of pollution	Class 3 conforming to DIN VDE 0110
Terminals	Phase L1 - L2- L3 ↻ Torque max 1Nm Ø vite a taglio 5mm max 1 conductor / 4mm ² / 10AWG Aux ↻ Torque max 0,5Nm Ø vite a taglio 3,5mm max 1 conductor / 2,5mm ² / 12AWG Protection degree IP20 conforming to IEC 529
Compliance with emc/rohs directives	EN 50014-1, EN 50082-2, EN 55022, EN 61000-4-2÷11, EN 61000-6-2÷31. Immunity to ESD. Immunity to BURSTS. Directives: EMC EC 2004/108 - RoHS EC 2002/95
Max consumption	10mA

Collegamenti / Connections

1~ Monofase / Single-phase



3~ Trifase / Three-phase



Dispositivi di sicurezza lampeggianti Flashing safety devices

■ FINE CORSA INTERBLOCCO PER CIRCUITI AUSILIARI E DI SERVIZIO

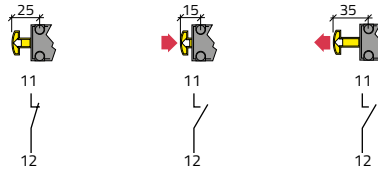
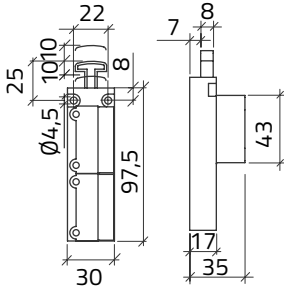
Il fincorsa interblocco è un dispositivo che viene azionato direttamente da ogni porta dell'armadio elettrico. Di norma vengono collegati sul primo elemento di contatto (unico su cui può intervenire il dispositivo d' interblocco) i circuiti ausiliari degli apparecchi di manovra. I restanti contatti montati posteriormente vengono utilizzati per i circuiti di servizio, quali ad esempio : accensione luce armadio, inserimento ventole, condizionatore, segnalatori acustici, colonnine luminose. A porte aperte può essere commutato manualmente mediante una comoda ancoretta, contrassegnata da una freccia , realizzando svariate funzioni (per combinazioni diverse, acquistare elementi di contatto separati). Il ripristino delle condizioni normali avviene ad ogni chiusura della porta dell'armadio

■ INTERLOCK LIMIT SWITCHES FOR AUXILIARY AND SERVICE CIRCUITS

This device is activated directly by each door of the cabinet. The auxiliary circuits of the switchgear are usually connected on the first contact element (the only one on which the interlock device can act). The remaining contacts mounted to the rear are used for the service circuits such as, for example : switching on off the cabinet light, activation of fans, conditioner, audible signals, beacons. With the doors open, it can be activated manually using a handy button marked by an arrow, performing various functions (for different combinations, purchase separate contact elements). Normal conditions are reset each time the door of the cabinet is closed

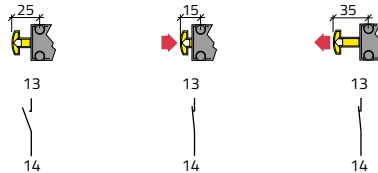
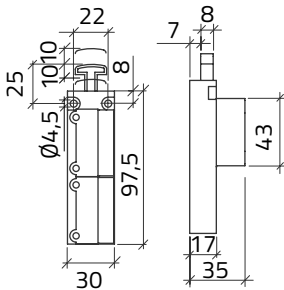
Dispositivi di sicurezza lampeggianti Flashing safety devices

Finecorsa interblocco Interlock limit switches

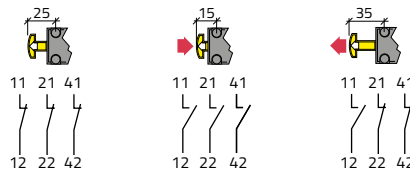
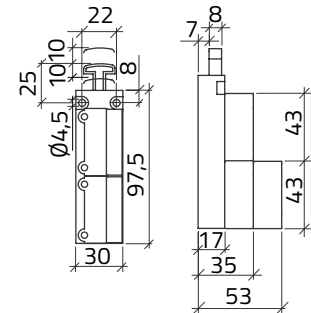


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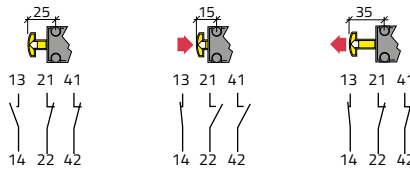
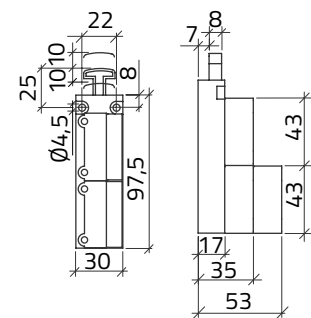
57 **050FI01**



57 **050FI10**



103 **050FI03**

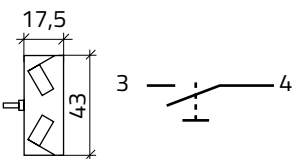


103 **050FI12**

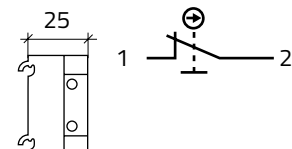
g **n** **cod**

Contatti con protezione / Contact block with protections

per finecorsa interblocco / for interlock limit switches



1NO 23 2 **030FAP**



1NC 23 2 **030FCP**



Dispositivi di sicurezza lampeggianti

Flashing safety devices

Caratteristiche tecniche

Finecorsa interblocco

Rispondenza alle norme	IEC 947-5-1 VDE 0660 -UTE- BSI CENELEC														
Omologazioni	CSA(CANADA)-UL(USA)														
Grado protezione morsetti	IP2X secondo IEC 529														
Momento torcente morsetti	⌚1,5 Nm, vite M4 serrafilo autosollevante imperdibile ≥3 mm² ≤2x2,5 mm²														
Tensione nominale d'isolamento Ui	690 V secondo IEC 947-5-1														
Corrente nominale termico Ith	10A														
Potenze nominali d'impiego	Secondo IEC 947-5-1 CatAC15 <table border="1"> <thead> <tr> <th>Ue V</th> <th>Ie A</th> </tr> </thead> <tbody> <tr><td>60</td><td>10</td></tr> <tr><td>110</td><td>6</td></tr> <tr><td>220</td><td>3</td></tr> <tr><td>380</td><td>2</td></tr> <tr><td>500</td><td>1,5</td></tr> <tr><td>600</td><td>1,2</td></tr> </tbody> </table>	Ue V	Ie A	60	10	110	6	220	3	380	2	500	1,5	600	1,2
Ue V	Ie A														
60	10														
110	6														
220	3														
380	2														
500	1,5														
600	1,2														
Funzionamento contatti	Azionamento lento con NC azione positiva ⌚ velocità di azionamento 0,05 - 2m/sec														
Configurazione contatti	MAX n°6 contatti 3 anteriori 3 posteriori														
Durata	Meccanica 1.0x10 ⁶ manovre Elettrica 5.0x10 ⁵ manovre														

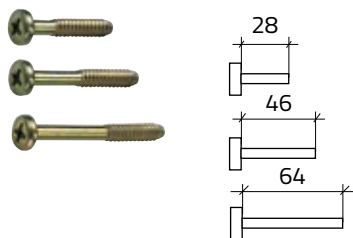
Technical data

Interlock limit switches

Conforming to standards	IEC 947-5-1 VDE 0660 - UTE - BSI CENELEC														
Approvals	CSA(CANADA)-UL(USA)														
Terminal degree of protection	IP 2X conforming to IEC 529														
Terminal torque	⌚1,5Nm, screw M4 self-lifting captive cable clamp ≥3mm² ≤2x2,5 mm²														
Rated unsulation voltage Ui	690 V conforming to IEC 947-5-1														
Rated thermal current Ith	10A														
Rated operational power	Conforming to IEC 947-5-1 CatAC15 <table border="1"> <thead> <tr> <th>Ue V</th> <th>Ie A</th> </tr> </thead> <tbody> <tr><td>60</td><td>10</td></tr> <tr><td>110</td><td>6</td></tr> <tr><td>220</td><td>3</td></tr> <tr><td>380</td><td>2</td></tr> <tr><td>500</td><td>1,5</td></tr> <tr><td>600</td><td>1,2</td></tr> </tbody> </table>	Ue V	Ie A	60	10	110	6	220	3	380	2	500	1,5	600	1,2
Ue V	Ie A														
60	10														
110	6														
220	3														
380	2														
500	1,5														
600	1,2														
Contact operation	Slow break with positive action on NC contact ⌚														
Contact configuration	Operating speed 0,05 - 2 m/sec MAX n°6 contact 3 front 3 rear														
Durability	Mechanical 1.0x10 ⁶ operations Electrical 5.0x10 ⁵ operations														

Viti di fissaggio elementi di contatto

Fixing screws for contact blocks



Montaggio di : / Mounting of :

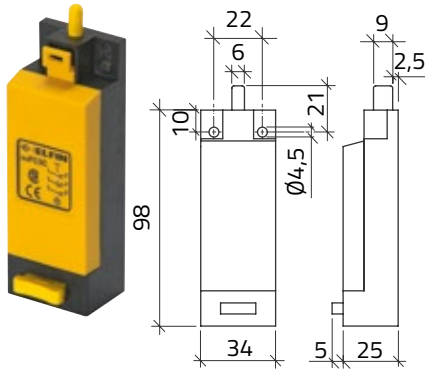
	g	n	cod
1 elemento / 1 contact block	2	10	030V28
2 elementi sovrapposti/ 2 overlapped contact blocks	3	10	030V46
3 elementi sovrapposti/3 overlapped contact blocks	4	10	030V64

Dispositivi di sicurezza lampeggianti Flashing safety devices

Finecorsa tripolari Three-pole limit switches

g

cod



Corsa e commutazioni / Contact travel and switching points

Configuration	Switching points	Contact travel (0-6)	Weight (g)	Code
3NC	1-2 3-4 5-6	[Diagram: 6 segments, all red]	62	050FC3C
2NC + 1NO	1-2 3-4 5-6	[Diagram: 6 segments, 1-4 red, 5-6 white]	62	050FC2C
1NC+2NO	1-2 3-4 5-6	[Diagram: 6 segments, 1-2 white, 3-4 red, 5-6 white]	62	050FC1C
3NO	1-2 3-4 5-6	[Diagram: 6 segments, all white]	62	050FC0C

Caratteristiche tecniche Finecorsa tripolari

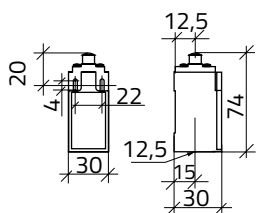
Rispondenza alle norme	IEC 947-5-1												
Omologazioni	CSA(CANADA)-UL(USA) solo versione 050FC3C												
Grado protezione morsetti	IP40 secondo IEC 529												
Momento torcente morsetti	↻max 0,5Nm,vite/screw M3,5,serrafillo autosollevante, testa combinata DIN 7962 31x0,05mm ² , ±2x2,5mm ²												
Tensione nominale d'isolamento Ui	690 V												
Corrente nominale termico Ith	10A												
Potenze nominali d'impiego	Secondo IEC 947-5-1 CatAC15												
	<table border="1"> <thead> <tr> <th>Ue V</th> <th>Ie A</th> </tr> </thead> <tbody> <tr><td>110</td><td>6</td></tr> <tr><td>220</td><td>3</td></tr> <tr><td>380</td><td>2</td></tr> <tr><td>500</td><td>1,5</td></tr> <tr><td>600</td><td>1,2</td></tr> </tbody> </table>	Ue V	Ie A	110	6	220	3	380	2	500	1,5	600	1,2
Ue V	Ie A												
110	6												
220	3												
380	2												
500	1,5												
600	1,2												
Funzionamento contatti	Azionamento lento autopulenti a strisciamento NC azione positiva ⤴												

Technical data Three-pole limit switches

Conforming to standards	IEC 947-5-1												
Approvals	CSA(CANADA)-UL(USA) version 050FC3C only												
Terminal degree of protection	IP40 conforming to IEC 529												
Terminal torque	↻max 0,5Nm,screw M3,5,self-lifting captive cable clamp,combined head DIN 7962 31x0,05mm ² , ±2x2,5mm ²												
Rated insulation voltage Ui	690 V												
Rated thermal current Ith	10A												
Rated operational power	Conforming to IEC 947-5-1 CatAC15												
	<table border="1"> <thead> <tr> <th>Ue V</th> <th>Ie A</th> </tr> </thead> <tbody> <tr><td>110</td><td>6</td></tr> <tr><td>220</td><td>3</td></tr> <tr><td>380</td><td>2</td></tr> <tr><td>500</td><td>1,5</td></tr> <tr><td>600</td><td>1,2</td></tr> </tbody> </table>	Ue V	Ie A	110	6	220	3	380	2	500	1,5	600	1,2
Ue V	Ie A												
110	6												
220	3												
380	2												
500	1,5												
600	1,2												
Contact operation	Slow break, self-cleaning sliding activation NC positive action ⤴												



Dispositivi di sicurezza lampeggianti Flashing safety devices



Fincorsa bipolari Two-pole limit switches

1NC+1NO fincorsa/limit switch	60	050F11
2NC fincorsa/limit switch	60	050F02
2NO fincorsa/limit switch	60	050F20

g

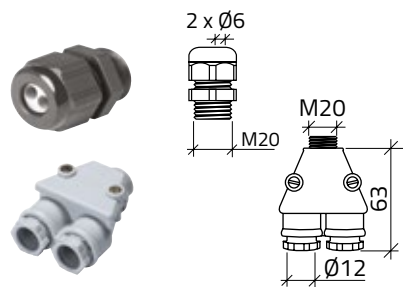
cod

Caratteristiche tecniche Fincorsa bipolare

Rispondenza alle norme	EN 50047	
Omologazioni	Nr. E224315 (UL-CSA)	
Grado protezione morsetti	IP65 secondo IEC 529	
Temperatura di utilizzo	-10÷+80°C	
Tensione nominale d'isolamento Ui	Ui 690 V secondo IEC 947-5-1	
Corrente nominale termica	Ith:10A	
Potenze nominali d'impiego	Secondo IEC 947-5-1 / UL508	
	AC15-A600	DC13-Q300
	UE V Ie A	UE V Ie A
	24 10	24 2,5
	110 6	110 0,6
	220 3	230 0,3
	400 1,5	
	600 1,2	
Funzionamento contatti	Azionamento lento con NC azione positiva	
	velocità di azionamento 0,05÷2m/sec	
Durata	Meccanica 1.0x10 ⁷ manovre	
	Elettrica 5.0 x 10 ⁵ manovre	

Technical data Two-pole limit switches

Conforming to standards	EN 50047	
Approvals	Nr. E224315 (UL-CSA)	
Terminal degree of protection	IP65 conforming to IEC 529	
Operating temperature	-10 ÷ +80 °C	
Rated unsulation voltage Ui	Ui 690V according to IEC947-5-1	
Rated thermal current	Ith: 10A	
Rated operational power	According to IEC 947-5-1 / UL 508	
	AC15-A600	DC13-Q300
	UE V Ie A	UE V Ie A
	24 10	24 2,5
	110 6	110 0,6
	220 3	230 0,3
	400 1,5	
	600 1,2	
Contact operation	Slow break with positive action on NC contact	
	Operating speed 0,05÷2m/sec	
Durability	Mechanical 1.0x10 ⁷ operations	
	Electrical 5.0 x 10 ⁵ operation	



Pressacavi /Cable glands

Pressacavo 2 ingressi / 2-hole cable gland

g

cod

10

0102P20

Pressacavo 2 vie / Double cable entry gland

45

010N2M20

Accessori Accessories

g

cod

matassa cavo mt 100 - norme CEI 20-22 II - tensione 300-500V cavo bipolare FROR NPI 2x0,75mm²
cable bundle mt 100 - standards CEI 20-22 II-voltage 300-500V- two-pole cable FROR NPI 2x0,75mm²

● Giallo / Yellow

4300

050CB075G

● Arancione / Orange

4300

050CB075A

matassa cavo mt 100 - norme CEI 20-22 II - tensione 300-500V cavo bipolare con terra FROR NPI 2x1,5mm²-1x1,5mm²
cable bundle mt 100 - standards CEI 20-22 II-voltage 300-500V- two-pole cable with earth FROR NPI 2x15mm²-1x15mm²

● Arancione / Orange

4300

050CBG1A

matassa cavo mt 100 - norme CEI 20-22 II - tensione 300-500V cavo bipolare FROR NPI 3x1,5mm²
cable bundle mt 100 - standards CEI 20-22 II-voltage 300-500V- two-pole cable FROR NPI 3x15mm²

● Arancione / Orange

4300

050CCT1A

matassa cavo unipolare 1x1mm² - L 25 m - guaina ad alto isolamento
single-pole cable bundle 1x1mm² - L 25 m - high-insulating silicone sheat

● Rosso / Red

1470

050CS1R

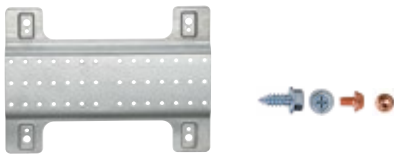


Accessori Accessories

Staffe Brackets

g

cod

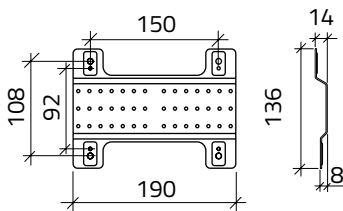


L'utilizzo di questi componenti, unitamente ai componenti ed accessori elencati nei precedenti capitoli, permette di configurare l'apparecchio secondo le proprie esigenze.

Viti di fissaggio incluse.

The use of these components together with the devices and the accessories listed on the previous page makes it possible to configure the devices according to specific requirements.

Fixing screws included



Staffa di fissaggio reversibile / Reversible mounting bracket

Passo / pitch DIN 50

230

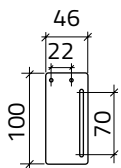
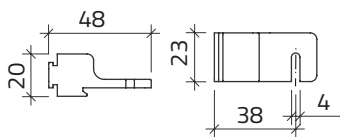
050S030



Kit di fissaggio lampade 050PE / 050PEL / Mounting kit for lamps

20

050KFL



Staffa di fissaggio regolabile per 1 elemento

Adjustable mounting bracket for 1 component

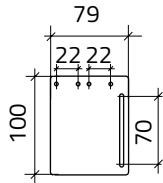
48

050S031

Accessori Accessories

Staffe Brackets

g n cod



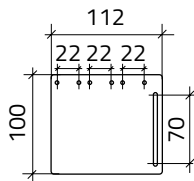
Staffa di fissaggio reversibile / Reversible mounting bracket

Staffa di fissaggio regolabile per 2 elementi

Adjustable mounting bracket for 2 components

86

050S032

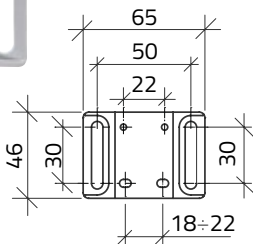


Staffa di fissaggio regolabile per 3 elementi

Adjustable mounting bracket for 3 components

125

050S033



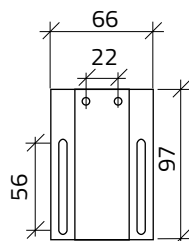
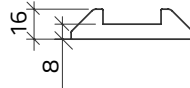
Staffa di fissaggio regolabile in termoplastico

Thermoplastic adjustable mounting bracket

23

2

050S003

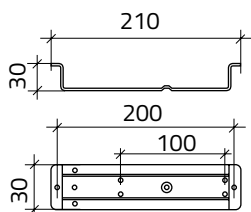


Staffa di fissaggio regolabile

Adjustable mounting bracket

23

050S003M



Staffa di fissaggio H 30 / Mounting bracket H30

150

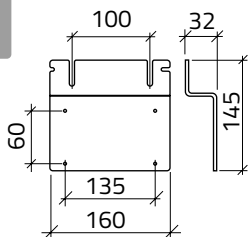
050S001

Accessori Accessories

Staffe Brackets

g

cod

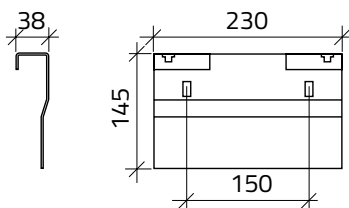


Staffa di fissaggio regolabile
Adjustable mounting bracket

670

050S017

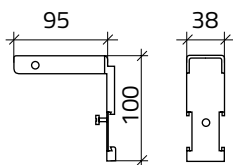
per plafoniera 050PL60
for luminaires 050PL60



Staffa adattatrice / Adaptor bracket

708

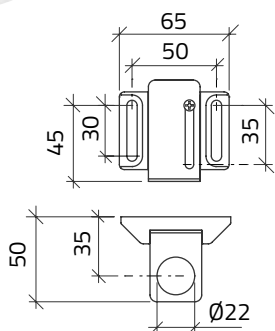
050SA005



Staffa guida omega / Omega rail bracket
DIN 35mm

128

050S013



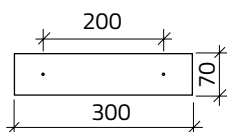
Staffa per operatori / Bracket for operators

104

050S015

Accessori Accessories

Staffe Brackets



Piastra magnetica / **Magnetic plate**

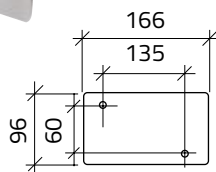
per plafoniere tipo 050PPE8-050PPE13
for luminaire type 050PPE8-050PPE13

g

314

cod

050S019



Piastra magnetica / **Magnetic plate**

per plafoniera 050PL60
for bulkhead lamp 050PL60

235

050S020

Climatizzazione quadri elettrici

Control cabinet climatisation

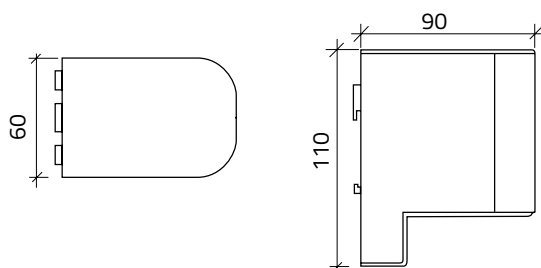
Riscaldatore anticondensa Anti-condensation heater



Potenza termica / Heating capacity 50W
Corrente accensione max / Max inrush current 2,5 A
Temperatura aria in uscita / Air outlet temperature +86°C

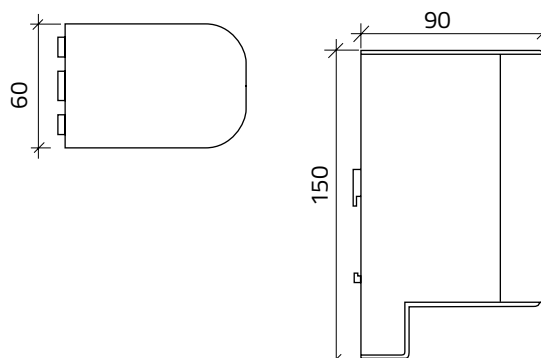
g cod

290 050RA50



Potenza termica / Heating capacity 150W
Corrente accensione max / Max inrush current 8 A
Temperatura aria in uscita / Air outlet temperature +145°C

440 050RA150



Caratteristiche tecniche Riscaldatore anticondensa

Tensione normale	120-250V AC/DC
Elemento termico	Conduttore a freddo (PTC) autoregolante
Temperatura della superficie	<+80°C
Connessione	4 morsetti 2,5mm ² coppia max di serraggio 0,8Nm
Fissaggio	Barra DIN 35 mm EN 50022
Alloggiamento	Plastica UL94 V-0 nera
Posizione di montaggio	Verticale
Limiti di temperatura	-45°/+70°C Funzionamento e stoccaggio
Grado di protezione	IP20
Classe di protezione	il Doppio isolamento
Norme	VDE

Technical data Anti-condensation heater

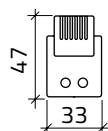
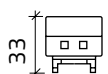
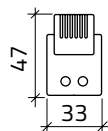
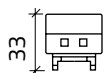
Power supply voltage	120-250V CA/DC
Heating element	PTC resistor self regulating
Surface temperature	<+80°C
Connection	4 terminals 2,5 mm ² max clamping torque 0,8 Nm
Mounting	35 mm DIN rail EN 50022
Housing	Plastic according UL94 V-0 black
Fitting position	Vertical
Temperature limits	-45°/+70°C functioning and stocking
Protection degree	IP20
Protection class	Double insulated
Standards	VDE

Climatizzazione quadri elettrici

Control cabinet climatisation

Termostati ad impostazione fissa

Fixed temperature thermostats



Contatto di apertura NC / **Contact breaker NC** +15°C
 Temperatura spegnimento / **Switch off temperature** +5°

g **cod**

23 **050TNC5**

Contatto di apertura NC / **Contact breaker NC** +25°C
 Temperatura spegnimento / **Switch off temperature** +15°

23 **050TNC15**

Contatto di chiusura NO / **Contact maker NO** +35°C
 Temperatura accensione / **Switch on temperature** +25°

23 **050TN035**

Contatto di chiusura NO / **Contact maker NO** +50°C
 Temperatura accensione / **Switch on temperature** +40°

23 **050TN050**

Contatto di chiusura NO / **Contact maker NO** +60°C
 Temperatura accensione / **Switch on temperature** +50°

23 **050TN060**

Caratteristiche tecniche

Termostati ad impostazione fissa

Sonda	A termostato
Tipo di contatto	A scatto
Resistenza di contatto	<20 m Ω
Durata utile	>100.000 cicli
Potere di apertura Max	240 VAC 5 (1,6) A DC 30W
Corrente di accensione Max	AC 10 A
Emc	Secondo EN 55014-1-2, EN 61000-3-2 EN61000-3-3
Connessione	2 morsetti 2,5 mm ² , coppia max di serraggio 0,8 Nm
Fissaggio	Barra DIN 35 mm EN 50022
Alloggiamento	Plastica UL94 V-0 grigio luminoso
Posizione di montaggio	Qualsiasi
Limiti di temperatura	-20°C ÷ +80°C funzionamento -45°C ÷ +80°C stoccaggio
Grado di protezione	IP20
Norme	VDE

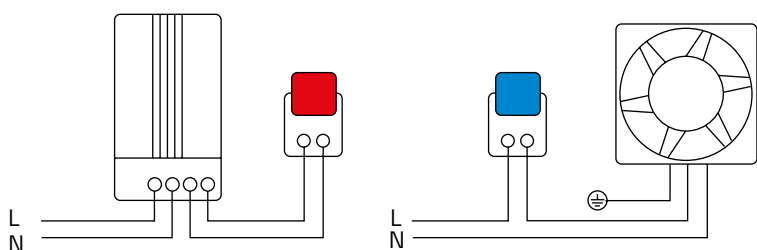
Technical data

Control cabinet climatisation

Sensor element	Thermostat
Contact type	Snap-Action
Contact resistance	<20 m Ω
Service life	>100.000 cycles
Max switching capacity	240 VAC 5 (1,6) A DC 30W
Max inrush current	AC10 A
EMC	In according to EN 55014-1-2, EN61000-3-2 EN 61000-3-3
Connection	2 terminals 2,5 mm ² , max clamping torque 0,8 Nm
Mounting	35 mm DIN rail EN 50022
Housing	Plastic according to UL94 V-0 light grey
Mounting position	Anyone
Temperature limits	-20°C ÷ +80°C functioning -45°C ÷ +80°C stocking
Protection degree	IP20
Standards	VDE

Esempi d' installazione

Mounting examples



Colonne luminose componibili Modular signal towers

La gamma delle colonne luminose della serie "050" costituiscono una pratica soluzione per la segnalazione e comunicazione di apparecchiature in ambienti ampi e rumorosi, con la possibilità di sistemare la segnalazione in posizione ben visibile e coerente all'informazione, grazie ad una disponibilità di sei colorazioni diverse.

La composizione della colonna è realizzabile grazie ad una modularità di montaggio garantita da un aggancio a baionetta. La fonte luminosa è realizzata tramite una funzionale lampada BA15D a led luce bianca in due tipi di alimentazione che illuminano in maniera intera (completa) il modulo grazie ad una esclusiva pigmentazione del termoplastico.

The line of signal tower from the "050" line is a practical solution for machinery signaling and communication purposes in large and loud areas, with the possibility of application in clearly visible locations. Thanks to the six different colors, the information will remain coherent to the purpose.

The signal tower assembly is possible thanks to the modular system that applies a bayonet joint for latching. The brightness is made by a functional BA15D white led lamp that light the full module thanks to our unique thermoplastic pigmentation formula.



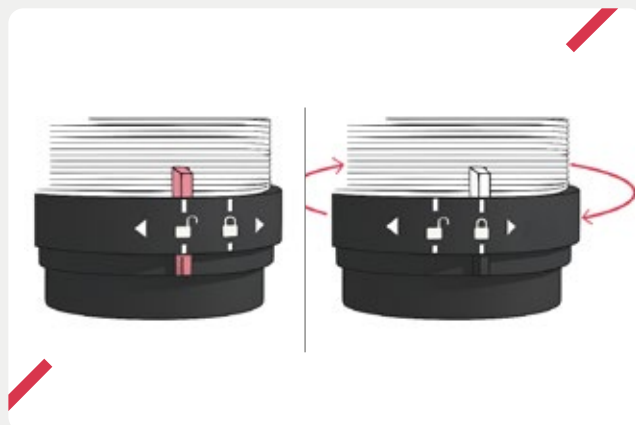
Colonne luminose componibili

Modular signal towers



Base di alimentazione per massimo 5 moduli luminosi con una linea comune

Supply base for up to 5 modules with common line



Sistema aggancio dei Moduli luminosi

Light Module Mounting System



Montaggio standard

Standard mounting



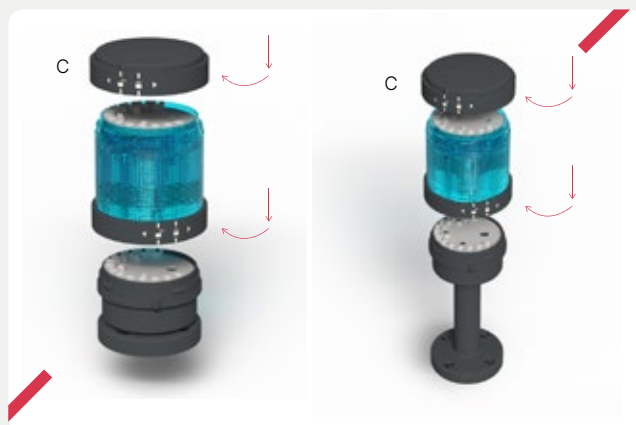
Montaggio con accessori di prolunga

Mounting with extension accessories



Riavvitamento coperchio base di alimentazione

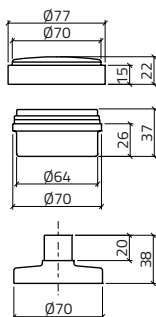
Screw cover on the supply base



Connettere fino a 5 moduli luminosi

Connect up to 5 light modules

Colonne luminose componibili Modular signal towers

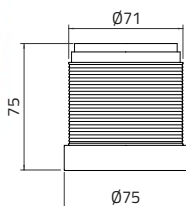


Modulo di connessione / Connection module

Completo di base, connettore e coperchio
Provided with base, connector and cover

g **cod**

126 **050TLBA**



Moduli luminosi / Light modules

Con lampadina led 24V integrata / With 24V led light

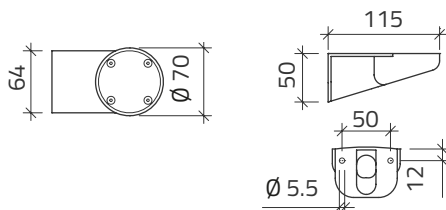
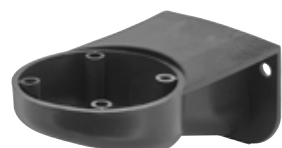
g **cod**

● Rosso / Red	130	050TMLR24
● Verde / Green	130	050TMLV24
● Giallo / Yellow	130	050TMLG24
● Arancione / Orange	130	050TMLA24
● Blu / Blue	130	050TMLBL24
○ Incolore / Clear	130	050TMLI24

Con lampadina led 24V integrata / With 24V led light

● Rosso / Red	130	050TMLR240
● Verde / Green	130	050TMLV240
● Giallo / Yellow	130	050TMLG240
● Arancione / Orange	130	050TMLA240
● Blu / Blue	130	050TMLBL240
○ Incolore / Clear	130	050TMLI240

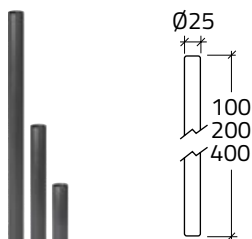
Mensola per fissaggio a parete Wall mounting bracket



g **cod**

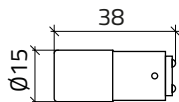
● RAL 7016 **63** **050MFP**

Colonne luminose componibili Modular signal towers



Tubi di prolunga / Extension poles

	g	cod
Elemento da 100mm / Pole 100 mm	30	050TP100GR
Elemento da 200mm / Pole 200 mm	60	050TP200GR
Elemento da 400mm / Pole 400 mm	120	050TP400GR



Lampadine led BA15D / BA15D led lamps

	g	cod
24V AC-DC ○ Bianco / White	2	010BA15DLB24
230V AC-DC ○ Bianco / White	2	010BA15DLB220

Caratteristiche tecniche Led BA 15D

Tensione di alimentazione	Max 250 V 50-60 Hz - 130V CC
Lampadina BA 15D	Max 10W
Grado protezione	IP44
Classe d'isolamento	II
Autoestinguenza	V0
Temperature di funzionamento	-25° ÷ + 60° C

Technical data Led BA 15D

Power supply voltage	Max 250 V 50-60 Hz - 130V CC
Bulb BA 15D	Max 10W
Protection degree	IP44
Insulation class	II
self extinguishing class	V0
Temperature range	-25° ÷ + 60° C



060

**DISPOSITIVI DI COMANDO
DI SICUREZZA**

SAFETY CONTROL DEVICES



Pulsanti a palmo

Palm switches

G

Gli azionatori a palmo, per il comando e controllo di circuiti elettrici alimentati sia in CC che in CA, sono progettati per **utilizzi energici o d'urgenza**.

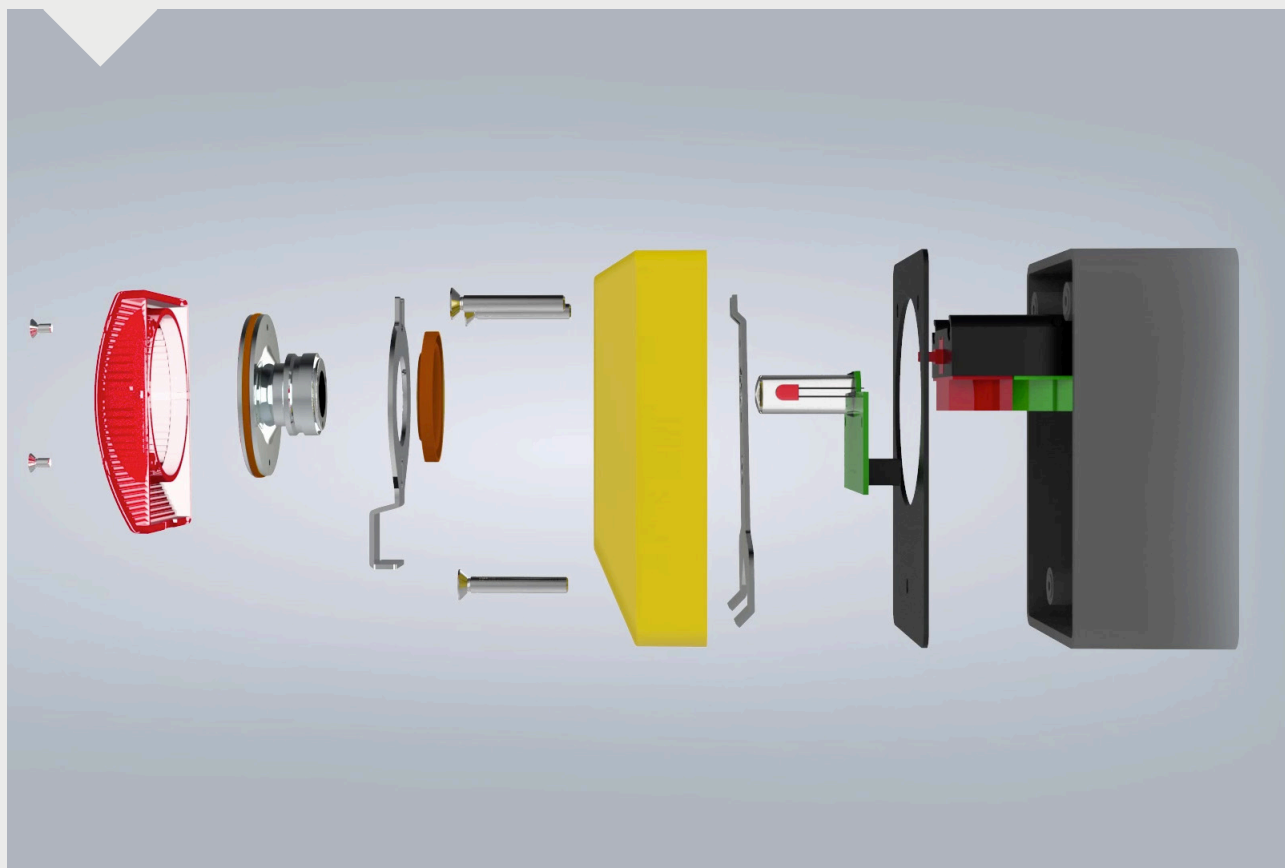
Il **design particolarmente accurato ed ergonomico** ne permette l'utilizzo anche avendo guanti da lavoro oppure con altre parti del corpo quali: gomito, spalla, ginocchio, piede. Inoltre la **linearità senza soluzione di continuità** evita che vi si possano impigliare indumenti, capelli, o elementi estranei. Realizzati in **resina termoplastica antiurto**, con componenti metallici in acciaio inox, possono essere installati in ambienti con atmosfera particolarmente umida o corrosiva e dove sussiste il pericolo di scariche elettrostatiche. Disponibile in due varianti: con tasto bombato o a fungo avvolgente, luminoso o no, con funzionamento momentaneo o ad aggancio. La **versione luminosa** ha svariate esecuzioni: tasto a luce continua, tasto e scatola a luce continua, tasto ad aggancio a luce continua e lampeggiante, tasto trasparente con illuminazione a due colori. Infine la grande superficie dei tasti consente di stampare complesse informazioni.

P

Palm switches for the command and control of both DC and AC circuits are designed for **energetic or emergency use**.

The particularly **careful and ergonomic design** allows them to be pushed even when wearing work gloves or using other parts of the body such as elbow, shoulder, knee and foot. Moreover its **dome shape** prevents clothing, hair or other elements from being caught up. Made from **shockproof thermoplastic resin**, with stainless steel parts, they can be installed in particularly damp or corrosive atmospheric environments where there is the risk of electrostatic discharge.

They are available in two models: with dome or mushroom buttons, normal or illuminated, momentary or latching. The **illuminated models** can have a steady light button, a steady light button and enclosure, latching button with steady and flashing light, clear button with two-colour light. Furthermore the big button surface allows complex symbols to be printed on.



Pulsanti a palmo Palm switches



Meccanicamente resistente
Strong and hard



Adatto ad alte temperature
Heat resistant



Adatto a basse temperature
Cold resistant

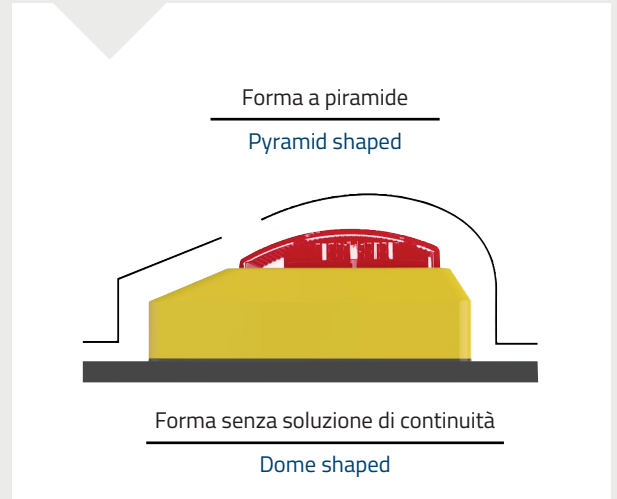
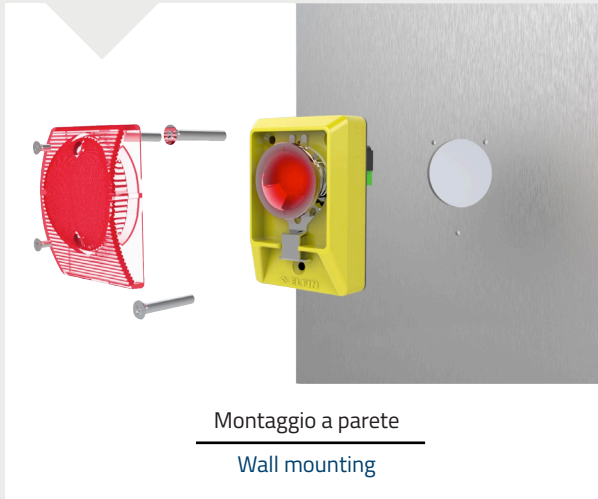


Resistente agli shock
Shock resistant



Ampia gamma di utilizzo
Wide range of use

Pulsanti a palmo Palm switches



Pulsanti di emergenza a palmo momentanei normali

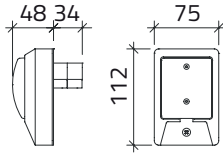
Momentary normal emergency stop palm switches

Pulsanti di emergenza momentanei normali

Normal momentary emergency stop push-buttons

g

cod

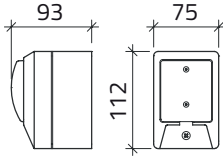
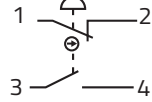


Tasto bombato senza custodia / Dome button without enclosure

● Rosso / Red

284

060APTR

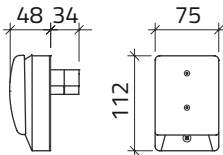
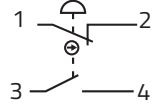


Tasto bombato con custodia / Dome button with enclosure

● Rosso / Red

366

060APTRC

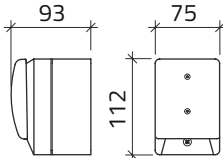
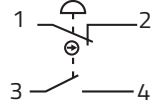


Tasto a fungo senza custodia / Mushroom button without enclosure

● Rosso / Red

284

060APFR

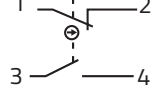


Tasto a fungo con custodia / Mushroom button with enclosure

● Rosso / Red

366

060APFRC



Pulsanti di emergenza a palmo ad aggancio normali

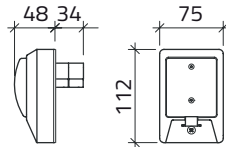
Latching normal emergency stop palm switches

Pulsanti di emergenza ad aggancio

Latching emergency stop push-buttons

g

cod

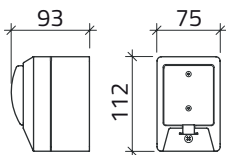
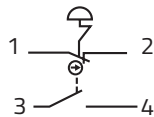


Tasto bombato senza custodia / Dome button without enclosure

● Rosso / Red

305

060APATR

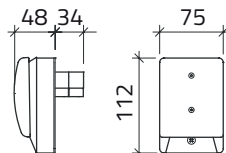
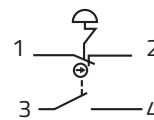


Tasto bombato con custodia / Dome button with enclosure

● Rosso / Red

387

060APATRC

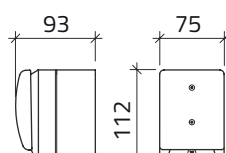
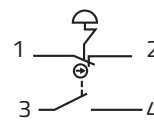


Tasto a fungo senza custodia / Mushroom button without enclosure

● Rosso / Red

305

060APAFR

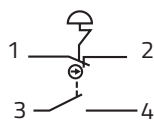


Tasto a fungo con custodia / Mushroom button with enclosure

● Rosso / Red

387

060APAFRC

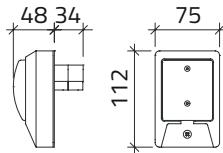


Pulsanti di emergenza a palmo momentanei luminosi Momentary illuminated emergency stop palm switches

Pulsanti di emergenza a palmo luminosi Illuminated emergency stop palm switches

g

cod

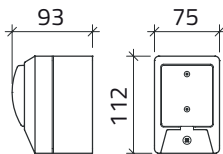
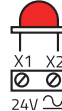
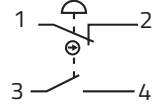


Tasto bombato senza custodia / Dome button without enclosure

● Rosso / Red

291

060APTLR

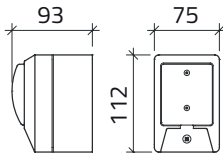
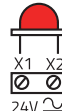
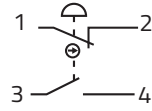


Tasto bombato con custodia / Dome button with enclosure

● Rosso / Red

373

060APTLRC

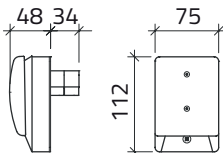
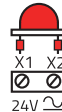
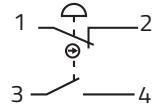


Tasto bombato con custodia luminosa Dome button with illuminated enclosure

● Rosso / Red

373

060APTLRCL

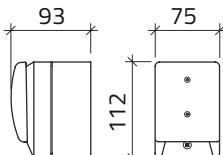
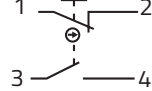


Tasto a fungo senza custodia Mushroom button without enclosure

● Rosso / Red

291

060APFLR

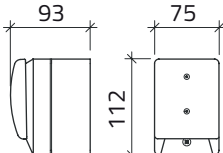
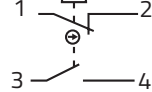


Tasto a fungo con custodia / Mushroom button with enclosure

● Rosso / Red

373

060APFLRC

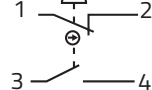


Tasto a fungo con custodia luminosa Mushroom button with illuminated enclosure

● Rosso / Red

373

060APFLRCL

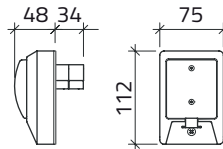


Pulsanti di emergenza a palmo ad aggancio luminosi Illuminated latching emergency stop palm switches

Pulsanti di emergenza a palmo ad aggancio luminosi Illuminated latching emergency stop palm switches

g

cod

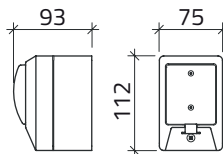
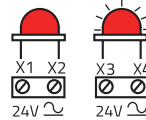
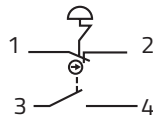


Tasto bombato senza custodia / Dome button without enclosure

● Rosso / Red

312

060APATLR

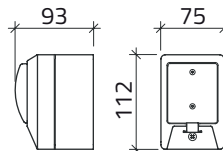
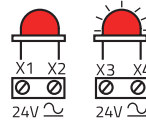
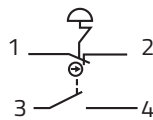


Tasto bombato con custodia / Dome button with enclosure

● Rosso / Red

394

060APATLRC

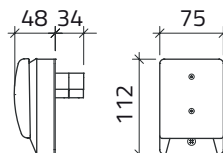
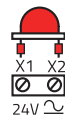
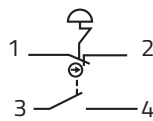


Tasto bombato con custodia luminosa Dome button with illuminated enclosure

● Rosso / Red

394

060APATRLCL

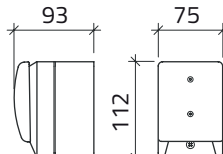
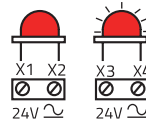
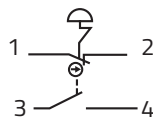


Tasto a fungo senza custodia / Mushroom button without enclosure

● Rosso / Red

312

060APAFRL

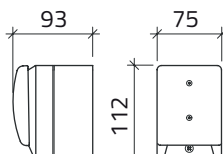
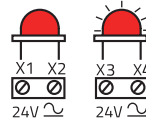
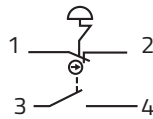


Tasto a fungo con custodia / Mushroom button with enclosure

● Rosso / Red

394

060APAFRLC

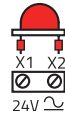
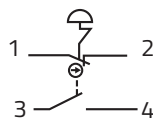


Tasto a fungo con custodia luminosa Mushroom button with illuminated enclosure

● Rosso / Red

394

060APAFRLCL



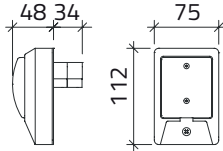
Pulsanti a palmo normali

Normal palm switches

Pulsanti normali Normal push-buttons

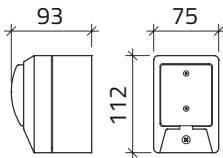
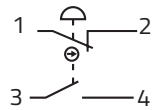
g

cod



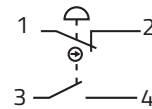
Tasto bombato senza custodia / Dome button without enclosure

● Nero / Black	284	060APTN
● Verde / Green	284	060APT V
● Giallo / Yellow	284	060APT G
● Blu / Blue	284	060APTBL



Tasto bombato con custodia / Dome button with enclosure

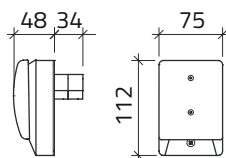
● Nero / Black	366	060APTNC
● Verde / Green	366	060APTVC
● Giallo / Yellow	366	060APTGC
● Blu / Blue	366	060APTBLC



Pulsanti a palmo normali Normal palm switches

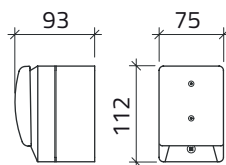
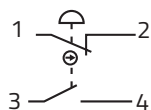
Pulsanti normali Normal push-buttons

g **cod**



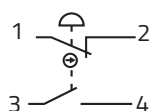
Tasto a fungo senza custodia / Mushroom button without enclosure

● Nero / Black	284	060APFN
● Verde / Green	284	060APFV
● Giallo / Yellow	284	060APFG
● Blu / Blue	284	060APFBL



Tasto a fungo con custodia / Mushroom button with enclosure

● Nero / Black	366	060APFNC
● Verde / Green	366	060APFVC
● Giallo / Yellow	366	060APFGC
● Blu / Blue	366	060APFBLC

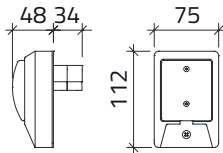


Pulsanti a palmo luminosi Illuminated palm switches

Pulsanti a palmo luminosi Illuminated palm switches

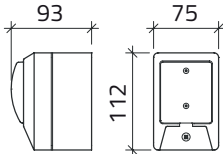
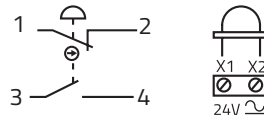
g

cod



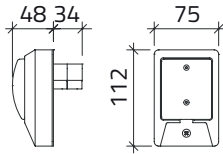
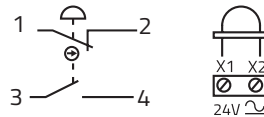
Tasto bombato senza custodia / Dome button without enclosure

● Verde / Green	291	060APTLV
● Giallo / Yellow	291	060APTLG
● Blu / Blue	291	060APTLBL
○ Bianco / White	291	060APTLB



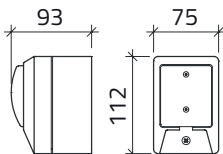
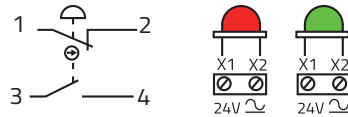
Tasto bombato con custodia / Dome button with enclosure

● Verde / Green	373	060APTLVC
● Giallo / Yellow	373	060APTLGC
● Blu / Blue	373	060APTLBLC
○ Bianco / White	373	060APTLBC



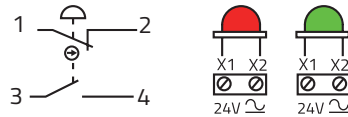
Tasto bombato senza custodia / Dome button without enclosure

● Rosso-verde / Red-green	291	060APTLRV
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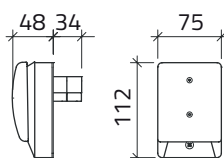
Tasto bombato con custodia / Dome button with enclosure

● Rosso-verde / Red-green	373	060APTLRV
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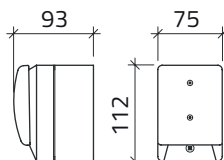
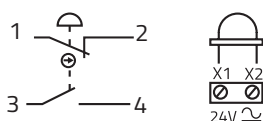
Pulsanti a palmo luminosi Illuminated palm switches

Pulsanti a palmo luminosi Illuminated palm switches



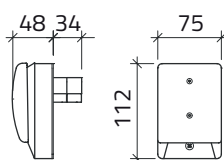
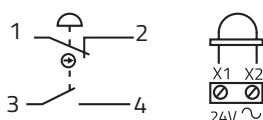
Tasto a fungo senza custodia / Mushroom button without enclosure

● Verde / Green	291	060APFLV
● Giallo / Yellow	291	060APFLG
● Blu / Blue	291	060APFLBL
○ Bianco / White	291	060APFLB



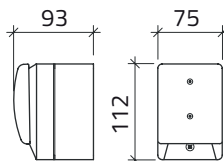
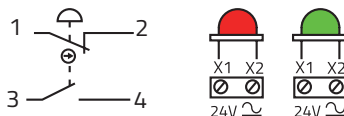
Tasto a fungo con custodia / Mushroom button with enclosure

● Verde / Green	373	060APFLVC
● Giallo / Yellow	373	060APFLGC
● Blu / Blue	373	060APFLBLC
○ Bianco / White	373	060APFLBC



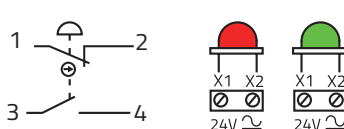
Tasto a fungo senza custodia / Mushroom button without enclosure

● Rosso-verde / Red-green	291	060APFLRV
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Tasto a fungo con custodia / Mushroom button with enclosure

● Rosso-verde / Red-green	373	060APFLRVC
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Suffissi per stampa simboli su tasti Suffixes for printing symbols on buttons

Far seguire al codice del prodotto il suffisso del simbolo desiderato
Item code is to be followed by the suffix of the required symbol



cod

S48



cod

S153



S148



S144



S55



S154



S152



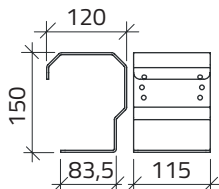
S159

Accessori

Accessories

Elemento di protezione per pulsante a palmo

Protective shroud for palm switch

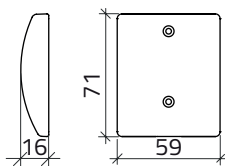


Acciaio / Steel

g	cod
1,130	060SEP

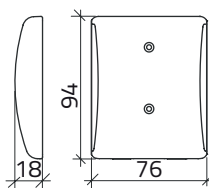
Tasti per pulsanti a palmo normale

Buttons for normal palm switches



Tasto bombato / Dome button

● Nero / Black	25	060TBN
● Rosso / Red	25	060TBR
● Verde / Green	25	060TBV
● Giallo / Yellow	25	060TBG
● Blu / Blue	25	060TBL

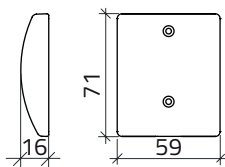


Tasto a fungo / Mushroom button

● Nero / Black	36	060TFN
● Rosso / Red	36	060TFR
● Verde / Green	36	060TFV
● Giallo / Yellow	36	060TFG
● Blu / Blue	36	060TFBL

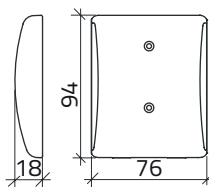
Tasti per pulsante a palmo luminosi

Buttons for illuminated palm switches



Tasto bombato / Dome button

● Rosso / Red	25	060TBLR
● Verde / Green	25	060TBLV
● Giallo / Yellow	25	060TBLG
● Blu / Blue	25	060TBLBL
○ Bianco / White	25	060TBLB
○ Trasparente / Clear	25	060TBLI

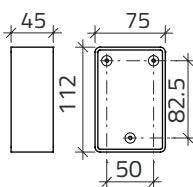


Tasto a fungo / Mushroom button

● Rosso / Red	36	060TFLR
● Verde / Green	36	060TFLV
● Giallo / Yellow	36	060TFLG
● Blu / Blue	36	060TFLBL
○ Bianco / White	36	060TFLB
○ Trasparente / Clear	36	060TFLI

Custodia per azionatore a palmo

Palm switch enclosures



Custodia non luminosa / Not illuminated enclosure

● Grigio / Grey	115	060SGR
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Custodia luminosa / Illuminated enclosure

● Rosso / Red	115	060SRT
---------------	-----	--------

Pulsanti a palmo

Palm switches

Caratteristiche tecniche

Rispondenza alle norme	EN-IEC60947-1, EN-IEC60947-5-1 UNI EN 13850, UNI EN ISO 12100 EN-IEC60947-5-5 UNI CEI EN 45545/2, CEI EN 61373																														
Omologazioni	CE, (UL, CSA solo elementi di contatto 030FA-030FAA / 030FC-030FCF)																														
Limiti di temperatura	Funzionamento $\geq -30^{\circ}\text{C}$ e $\leq +120^{\circ}\text{C}$ Stoccaggio $\geq -40^{\circ}\text{C}$ e $\leq +125^{\circ}\text{C}$																														
Grado di protezione	IP66-IP69K (EN-IEC60529-DIN40050)																														
Protezione contro gli impatti	IK08 (EN-IEC62262)																														
Materiale custodia	PA Poliammide V0																														
Materiale guarnizione	Gomma-sughero																														
Materiale viti custodia	Acciaio inox AISI 304																														
Coppia di serraggio	Viti custodia 1 = 2,5 Nm (8,8 ÷ 22,1 Lb-in) Viti terminali 0,8 = 1,2 Nm (7,1 ÷ 10,6 Lb-in)																														
Durata meccanica	3 milioni di manovre																														
Elementi di contatto	NO-NC inclusi apertura positiva del contatto NC secondo EN, IEC 60947-5-1																														
Funzionamento contatti	Azionamento lento con autopulitura e strisciamento delle pastiglie																														
Materiale contatti	Pastiglie in Ag 1000 / 1000																														
Tensione nominale di isolamento	690 V secondo : EN-IEC 60947-1																														
Corrente nominale termica	Ith 10A																														
Categorie nominali di impiego	AC15-DC13 secondo EN-IEC60947-5-1 A600 - P300 secondo UL508																														
	<table border="1"> <thead> <tr> <th colspan="3">AC</th> </tr> <tr> <th>Ue V</th> <th></th> <th>Ie A</th> </tr> </thead> <tbody> <tr> <td>24</td> <td></td> <td>10</td> </tr> <tr> <td>110</td> <td></td> <td>6</td> </tr> <tr> <td>230</td> <td></td> <td>3</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th colspan="3">DC</th> </tr> <tr> <th>Ue V</th> <th></th> <th>Ie A</th> </tr> </thead> <tbody> <tr> <td>24</td> <td></td> <td>5</td> </tr> <tr> <td>110</td> <td></td> <td>1,1</td> </tr> <tr> <td>230</td> <td></td> <td>0,55</td> </tr> </tbody> </table>	AC			Ue V		Ie A	24		10	110		6	230		3	DC			Ue V		Ie A	24		5	110		1,1	230		0,55
AC																															
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DC																															
Ue V		Ie A																													
24		5																													
110		1,1																													
230		0,55																													

Versioni luminose Led incluso con alimentazione 24AC-DC

Technical data

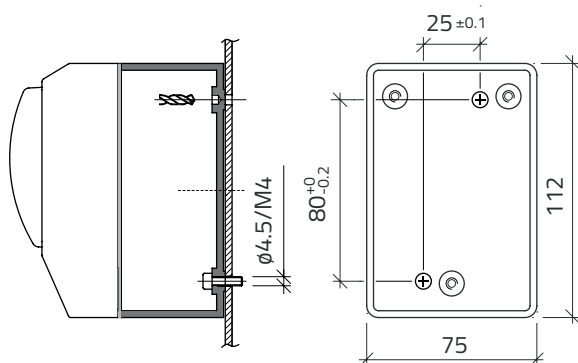
Compliance with Standards	EN-IEC60947-1, EN-IEC60947-5-1 UNI EN 13850, UNI EN ISO 12100 EN-IEC60947-5-5 UNI CEI EN 45545/2, CEI EN 61373																														
Approvals	CE, (UL, CSA only for contacts blocks 030FA-030FAA / 030FC-030FCF)																														
Temperature ranges	Working $\geq -30^{\circ}\text{C}$ e $\leq +120^{\circ}\text{C}$ Storage $\geq -40^{\circ}\text{C}$ e $\leq +125^{\circ}\text{C}$																														
Protection degree	IP66-IP69K (EN-IEC60529-DIN40050)																														
Protection against impact	IK08 (EN-IEC62262)																														
Housing material	PA Polyamide V0																														
Gasket material	Cork-rubber																														
Screws material	Stainless steel AISI 304																														
Tightening torque	Cover screws 1 = 2,5 Nm (8,8 ÷ 22,1 Lb-in) Terminal screws 0,8 = 1,2 Nm (7,1 ÷ 10,6 Lb-in)																														
Mechanical durability	3 millions operation																														
Contacts blocks	NO-NC included positive opening on NC contact according to EN, IEC 60947-5-1																														
Contact actuation	Slow action with self cleaning by pads creeping																														
Contacts material	Pads in Ag 1000 / 1000																														
Rated insulation voltage	690 V according to : EN-IEC60947-1																														
Rated thermal current	Ith 10A																														
Electrical ratings	AC15-DC13 according to EN-IEC60947-5-1 A600 - P300 according to UL508																														
	<table border="1"> <thead> <tr> <th colspan="3">AC</th> </tr> <tr> <th>Ue V</th> <th></th> <th>Ie A</th> </tr> </thead> <tbody> <tr> <td>24</td> <td></td> <td>10</td> </tr> <tr> <td>110</td> <td></td> <td>6</td> </tr> <tr> <td>230</td> <td></td> <td>3</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th colspan="3">DC</th> </tr> <tr> <th>Ue V</th> <th></th> <th>Ie A</th> </tr> </thead> <tbody> <tr> <td>24</td> <td></td> <td>5</td> </tr> <tr> <td>110</td> <td></td> <td>1,1</td> </tr> <tr> <td>230</td> <td></td> <td>0,55</td> </tr> </tbody> </table>	AC			Ue V		Ie A	24		10	110		6	230		3	DC			Ue V		Ie A	24		5	110		1,1	230		0,55
AC																															
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DC																															
Ue V		Ie A																													
24		5																													
110		1,1																													
230		0,55																													

Illuminated models Led 24AC-DC included

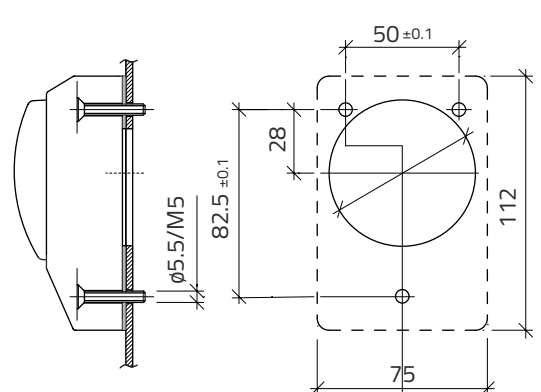
Dima di foratura

Drilling template

Con custodia
With case



A incasso
Wall mount





REMOTO LOCAL



1

2

3

4

Pulsantiera mobile

Hand-held push-button control unit

PULSANTIERA MOBILE

La pulsantiera mobile è stata progettata per rispondere alle necessità di avere la portabilità di alcuni comandi elettrici manuali, garantendo l'interfaccia uomo macchina, anche in situazioni dove occorre posizionarsi in zone specifiche. La forma particolare è stata appositamente progettata per un ottimo connubio tra ergonomia, facilità di impugnatura e spazio a disposizione per i comandi manuali elettromeccanici. Dotata di piastra frontale in alluminio anodizzato, facilmente lavorabile, la pulsantiera si rende adattabile a innumerevoli configurazioni e consente il contenimento di piccoli display, touch screen e altri dispositivi ausiliari di comando e controllo. La piastra è trattenuta da viti in acciaio inox, garantendo a tutta la pulsantiera un elevato grado di resistenza sia alla corrosione sia alla tenuta ai liquidi (IP66). Il corpo della pulsantiera è realizzato in materiale plastico antiurto particolarmente resistente in caso di caduta accidentale (IK07). Essa è inoltre dotata di aletta perimetrale disegnata per coprire e proteggere gli operatori di comando da azionamenti involontari a seguito di cadute dell'apparecchiatura. L'articolo è disponibile in due colorazioni: giallo RAL 1003 oppure grigio RAL 7016. Un'ampia gamma di accessori dedicati completano l'apparecchiatura, quali staffa magnetica, staffa per fissaggio a muro, staffa raccolta cavo e cinghia a tracolla.

MODULAR SYSTEM FOR PUSH-BUTTON

The hand-held push-button control unit has been designed to have some manual electrical commands within operator's reach, thus granting a man-machine interface, even when it is required to work in particular positions.

Its special shape is the result of a perfect combination design of ergonomics, easy grip and available space for the manual electromechanical commands.

Provided with a front easy-to-drill anodized aluminium plate, the enclosure is suitable for multiple configurations and can house small display panels, touch screens and other auxiliary command and control devices.

The plate is fastened using stainless steel screws, thus granting high resistance to both corrosion and liquid entrance (IP66).

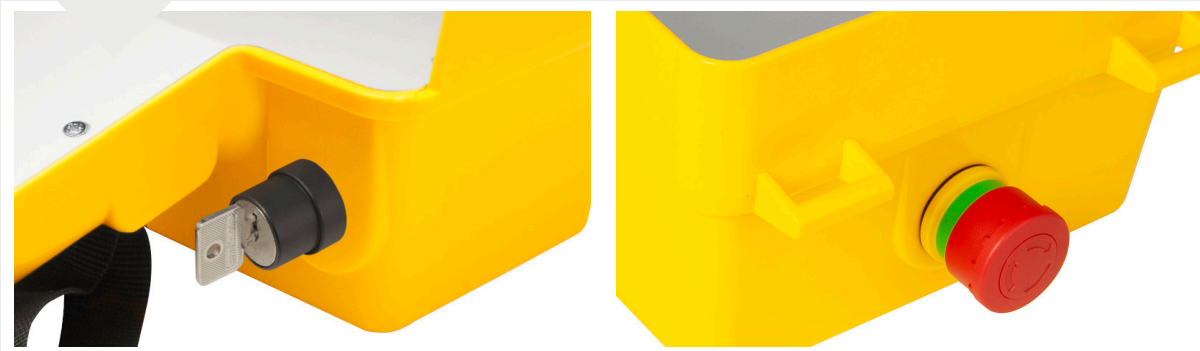
The enclosure of the control unit is made of high impact resistant plastic (IK07) and is provided with a shaped border around its perimeter, which has been designed to protect the operators from their accidental operation in case of control unit drop.

It is available in two colours: yellow RAL 1003 or dark grey RAL 7016.

A wide range of accessories, like magnetic mounting plate, wall-mounting bracket, cable bracket and shoulder belt, are available to complete the control unit.



Pulsantiera mobile Hand-held push-button control unit



La pulsantiera è dotata di agevoli superfici per l'installazione di operatori.
The control unit has wide surfaces where the operators can be easily housed.



L'impugnatura può accogliere nei lati destro o sinistro un pulsante di abilitazione a tre posizioni.

The right or the left side of the grip can house a three-position enabling push-button.



La pulsantiera è dotata di un pratico cinghiolo che garantisce un sicuro utilizzo.

The control unit is equipped with a useful strap assuring a safe operation.



L'introduzione del cavo di alimentazione è favorito da un pratico pressacavo che protegge eventuali torsioni, mentre un robusto serracavo evita sfilacciamenti.

The power cable can be easily fitted thanks to a spiral cable gland, which protects from a possible twisting, and a strong wire clamp avoids cable fraying.

Pulsantiera mobile Hand-held push-button control unit



La parte superiore della pulsantiera adotta ancoraggi per l'accessorio a tracolla.

The upper side of the control unit is provided with openings to fit the shoulder belt.



Pratici accessori completano la gamma: supporto a parete con gancio avvolgicavo e piastra magnetica.

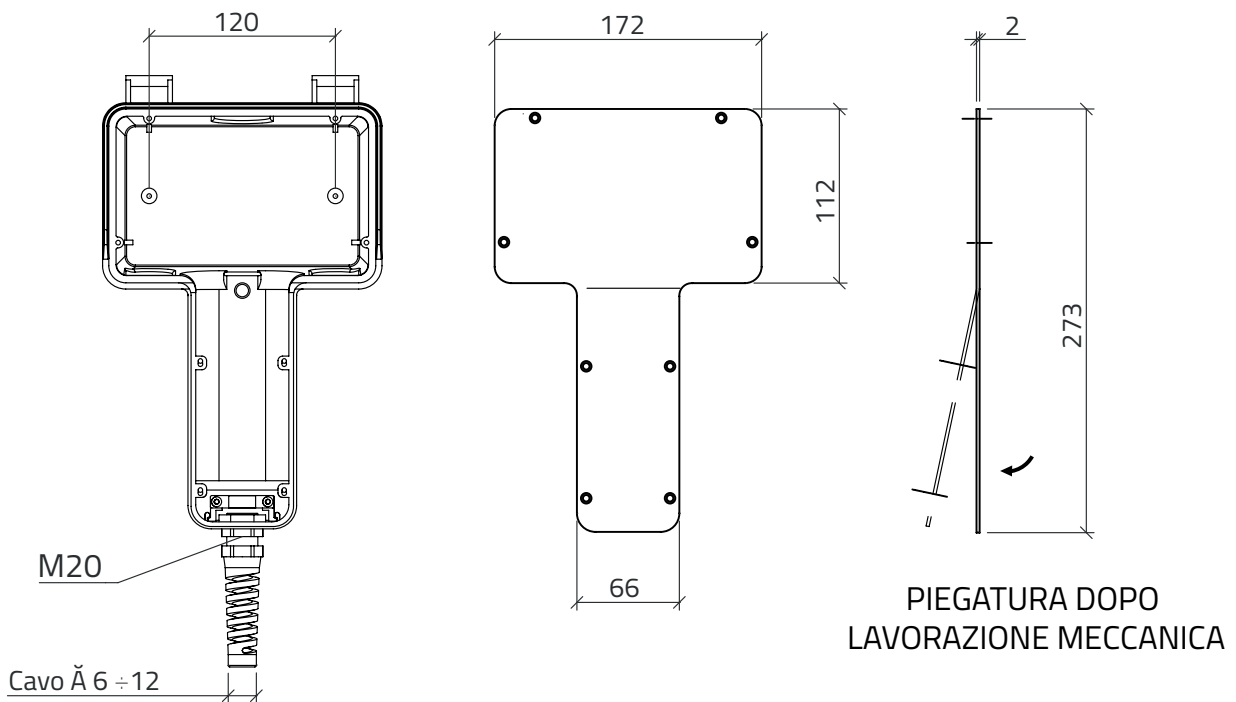
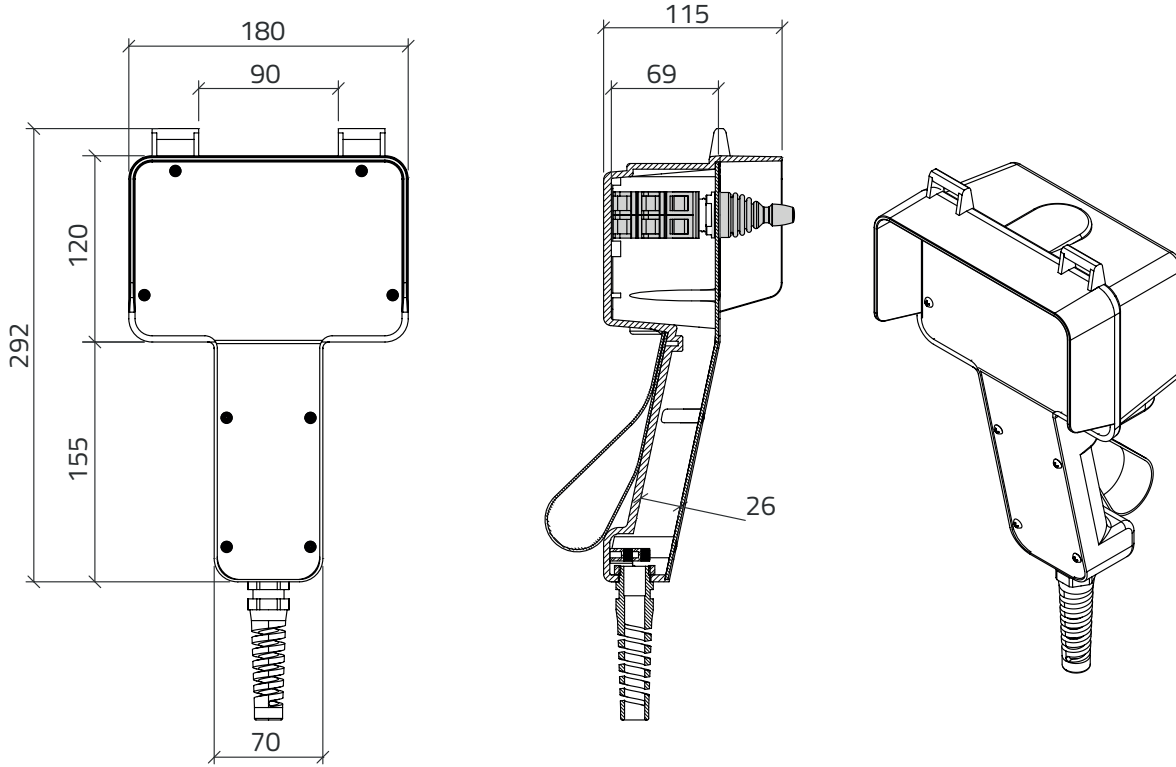
Useful accessories, like wall-mounting bracket, cable bracket and magnetic mounting plate complete the range.



Tutta la struttura del contenitore è studiata per realizzare organizzate configurazioni di layout con diversi componenti elettromeccanici.

The whole enclosure structure is so designed to get layout configurations with different electromechanical components.

Pulsantiera mobile Hand-held push-button control unit



Pulsantiera mobile Hand-held push-button control unit

Scatola pulsantiera in resina termoplastica Push-button enclosure made of thermoplastic resin



Completa di piastra in alluminio, senza forature.
Provided with aluminium undrilled plate.

● Giallo / Yellow

g

cod

680

060PMG



Completa di piastra in alluminio, senza forature.
Provided with aluminium undrilled plate.

● Grigio / Grey

680

060PMGR

Per richieste speciali contattare la nostra organizzazione commerciale.
For special requirements get in touch with our commercial department.

Pulsantiera mobile

Hand-held push-button control unit



Staffa fissaggio parete / Wall-mounting bracket

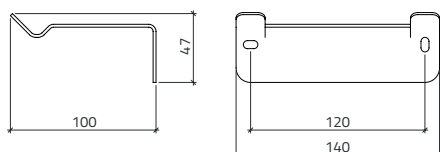
Acciaio / Steel

g

cod

465

060SFP



Staffa fissaggio cavo / Cable bracket

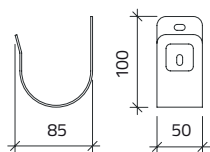
Acciaio / Steel

g

cod

165

060SFC



Staffa fissaggio magnetica / Magnetic mounting plate

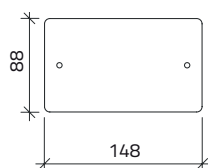
Acciaio / Steel

g

cod

200

060PFM



Piastra non forata (ricambio) / Undrilled plate (spare part)

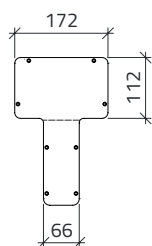
Alluminio anodizzato / Anodised aluminium

g

cod

160

060PPM



Pulsantiera mobile

Hand-held push-button control unit



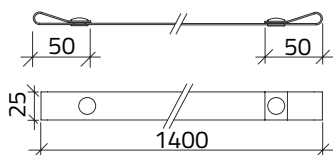
Cinghia tracolla / Shoulder belt
25x1400 mm

g

cod

90

010CT25



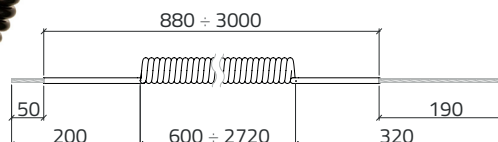
g

cod

Cavo Spiraleto / Spiral cable
12x0,5 mm²

700

010CSN12X05-3



Caratteristiche tecniche

Certificazioni	CE
Rispondenza alle norme	IEC-EN60529
Rispondenza alle norme	IEC-EN60947-1, IEC-EN60947-5-1
Temperature di operatività	-25° ÷ +65°C
Grado di protezione	IP66 - IP69K (IEC-EN60529 - DIN40050)
Protezione contro gli impatti	IK07 (IEC-EN62262)
Resistenza agli urti	50g (durata: 11ms) EN-IEC 60068-2-27
Materiale custodia	Polimero termoplastico ad alto impatto
Processo di fabbricazione	Stampaggio ad iniezione
Materiale guarnizione	Schiuma EPDM + adesivo
Materiale viti custodia	Acciaio inossidabile AISI 304
Piastra frontale	Alluminio anodizzato - Spessore 2mm
Coppia di serraggio	1 ÷ 2,5Nm (8.8-22.1 Lb-in)
Entrata cavo	M20x1,5
Categoria di sovratensione	Classe I (IEC-EN61140)
Maniglia con fori sinistro/destro	Per Q16P3Pxxx pulsanti di abilitazione a 3 posizioni
Periodo di garanzia	18 mesi

Technical data

Approvals	CE
Compliance with standards	IEC-EN60529
Compliance with standards	IEC-EN60947-1, IEC-EN60947-5-1
Operating temperatures	-25° ÷ +65°C
Protection degree	IP66 - IP69K (IEC-EN60529 - DIN40050)
Protection against impact	IK07 (IEC-EN62262)
Shock resistance	50g duration=11ms (EN-IEC 60068-2-27)
Housing material	High impact grade thermoplastic polymer
Manufacturing process	Injection moulding
Gasket material	EPDM Foam + adhesive
Screw material	Stainless steel AISI 304
Front plate	Anodized aluminium - Thickness 2mm
Tightening torque	1 ÷ 2,5Nm (8.8-22.1 Lb-in)
Cable entry	M20x1,5
Overvoltage category	Class I (IEC-EN61140)
Handle with left / right knockouts	For Q16P3Pxxx 3 position enabling safety switch
Warranty period	18 months



Dispositivi di comando a due mani

Two-hand control devices

DEFINIZIONE DI COMANDO A DUE MANI (UNI EN ISO 12100)

3.28.4

Comando a due mani: comando ad azione mantenuta che richiede almeno l'azionamento simultaneo dei due comandi manuali (attuatori) per avviare e mantenere il funzionamento della macchina o degli elementi di quest'ultima, assicurando così protezione alla persona che li aziona.

CLASSIFICAZIONE DEI COMANDI A DUE MANI (CEI EN 60204.1 PUNTO 9.2.6.2)

9.2.6.2

Comandi a due mani: esistono tre tipi di comandi a due mani, la cui selezione dipende dalla valutazione dei rischi. Essi devono avere le caratteristiche seguenti:

TIPO 1: questo tipo richiede:

- la fornitura di due dispositivi di comando dell'attivazione che necessitano l'uso contemporaneo delle due mani;
- l'attivazione continua durante le situazioni pericolose;
- l'interruzione dell'attivazione della macchina al rilascio di uno qualsiasi dei dispositivi di comando dell'attivazione, se le condizioni rimangono pericolose.

TIPO 2: comando di tipo 1 che richiede il rilascio di entrambi i dispositivi di comando dell'attivazione, prima che il funzionamento della macchina possa ripartire.

TIPO 3: comando di tipo 2 che richiede un'attivazione contemporanea dei dispositivi di comando dell'attivazione come segue:

- deve essere necessario fare funzionare i dispositivi di comando dell'attivazione entro un determinato tempo limite minore o uguale a 0,5 s (Appendice B);
- quando viene superato il tempo limite, entrambi i dispositivi di comando dell'attivazione devono essere rilasciati prima che possa essere iniziata una nuova operazione.

DEFINITION OF TWO HAND CONTROL (UNI EN ISO 12100)

3.28.4

Two hand control: maintained action control which requires at least the simultaneous activation of the two manual controls (actuators) to start up and continue running the machine and its elements, thus ensuring that operators are protected.

CLASSIFICATION OF TWO HAND CONTROLS (CEI EN 60204.1 ITEM 9.2.6.2)

9.2.6.2

Two hand controls: there are three types of two hand control, the selection of which depends on risk assessment. They must have the following features:

TYPE 1: this type must have:

- the supply of two activation control devices which require the simultaneous use of both hands;
- constant activation during dangerous situations;
- machine cut-off when any activation control is released, if conditions continue to be dangerous.

TYPE 2: type 1 control which requires the release of both activation control devices for the machine to start running again.

TYPE 3: type 2 control which requires the simultaneous activation of the activation control devices as follows:

- it must be possible to engage the activation control devices within a set time equal to or less than 0.5 seconds (Appendix B);
- when the time limit is up, both activation control devices must be released before a new operation can begin.



Pulsantiera a due mani

Two-hand control device

■ SISTEMA MODULARE PER PULSANTIERE

Il sistema modulare per pulsantiera di comando, che la New Elfin ha realizzato pensando alle esigenze del mercato e del tuo lavoro trova impiego nel settore dell'automazione industriale, è dotato di una serie di componenti che permettono di configurare svariate strutture ottimizzate per essere integrate con le macchine utensili con cui dovranno interagire come presse, piegatrici, saldatrici laser ecc.

■ COLORAZIONE

La scelta delle colorazioni in toni di grigio e dell'alluminio satinato permettono l'armonizzazione estetica con gli apparati di destinazione; la colorazione in toni neutri evita un eccessivo impatto cromatico che può andare anche a discapito della concentrazione degli operatori alle macchine.

■ DIMENSIONI E FORMA

Nel progettare il nuovo comando a due mani è stata valutata la necessità di installazione in spazi ridotti e quindi ne è nato un prodotto con dimensioni 380 x 90 x 90 mm e con un notevole volume interno. La forma ergonomica del nuovo comando a due mani conferisce un notevole comfort durante l'utilizzo; la dimensione della sezione di appoggio del palmo permette una contrapposizione tra il pollice e le altre dita facilitando l'azionamento dei pulsanti.

■ SISTEMA MODULARE PER PULSANTIERE

L'estrema modularità del sistema permette di configurare anche soluzioni a braccio di sostegno dove è possibile applicare diversi componenti specifici. La forma particolare dei giunti garantisce solidità e rigidità alla struttura.

■ KIT DI RUOTE

Il kit di ruote risolve razionalmente il problema della mobilità senza compromettere la solidità di appoggio della base.

■ KIT DI CONNESSIONE

Il kit di connessione risolve efficacemente tutti i problemi di cablaggio tra i numerosi possibili componenti.

■ MODULAR SYSTEM FOR P/B PANELS

The modular system for push-button panels, specifically designed by New Elfin to meet specific market and working needs is provided with several components allowing the user to configure multiple structures to be integrated in machine, tools, like presses, folding machines, laser welding machines, etc.

■ COLORATION

The range of colours available, from grey to satin aluminium, enhance the aesthetic integration with existing equipment, while the use of neutral shades reduces the chromatic impact that could distract machine operators during work.

■ DIMENSIONS AND SHAPE

The new two-hand control, device designed to be installed in small areas, has dimensions of 380 x 90 x 90 mm and very large internal volume. Its ergonomic shape enhances comfort during use, while the size of the palm resting area enables operators to easily grasp the buttons between the thumb and fingers.

■ MODULAR SYSTEM FOR P/B PANELS

The versatility and modularity of the system can also be fitted with a support arm, which can be used to hold a wide range of specific components. The truncated conical shape of the joints confers solidity and rigidity to the frame.

■ CASTOR KIT

The castor kit offers a rational solution to the problem of mobility without affecting the overall stability of the base.

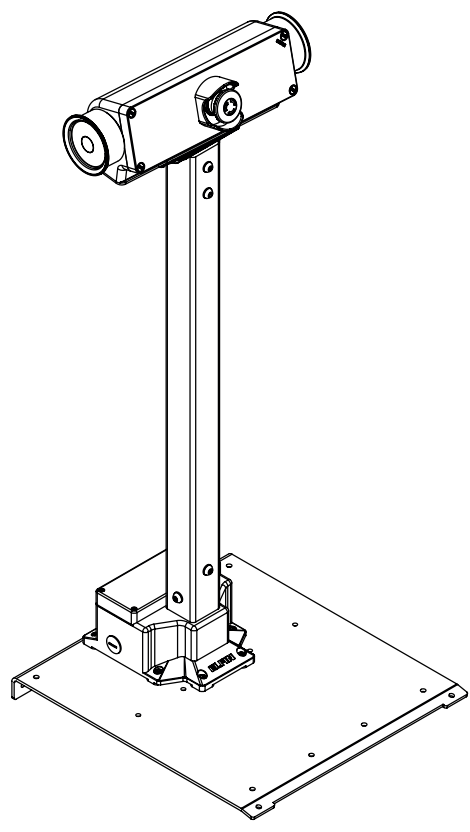
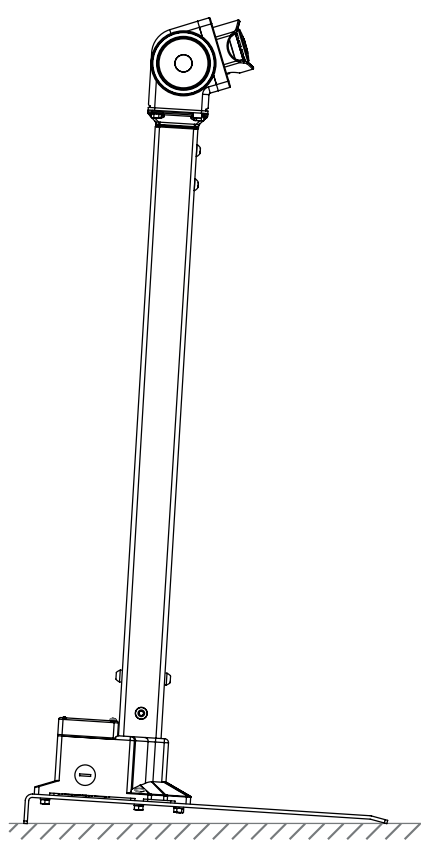
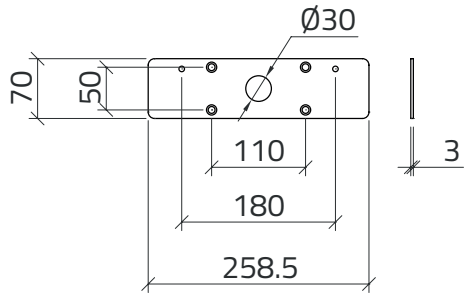
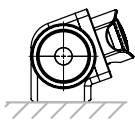
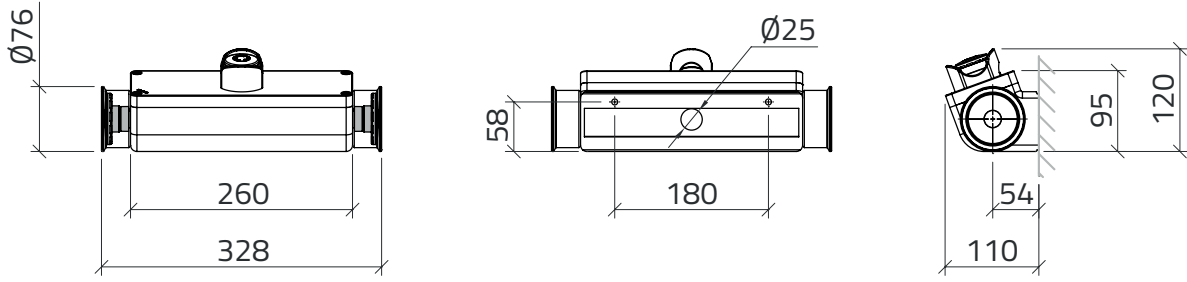
■ CONNECTION KIT

The connection kit allows to easily wire up all the components installed on the base.

Pulsantiera a due mani Two-hand control device



Dispositivi di comando a due mani Two-hand control devices

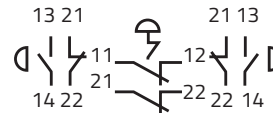


Dispositivi di comando a due mani Two-hand control devices

Pulsantiera a due mani inclinata in alluminio Sloped aluminium two-hand control panel



- RAL 7016
- RAL 2011



g	cod
1461	060CL2MA
1461	060CL2MAA

Accessori Accessories



Piastra accoppiamento pulsantiera inclinata
Coupling plate for sloped panel

g	cod
450	060PAP



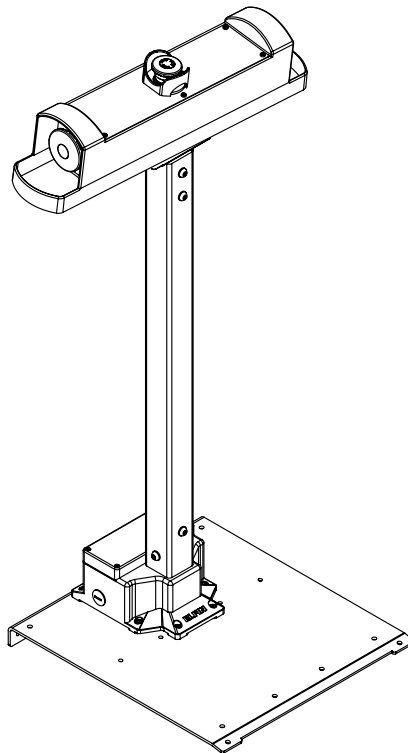
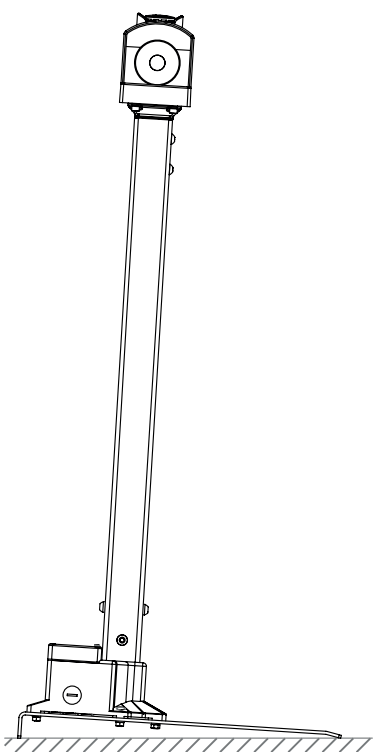
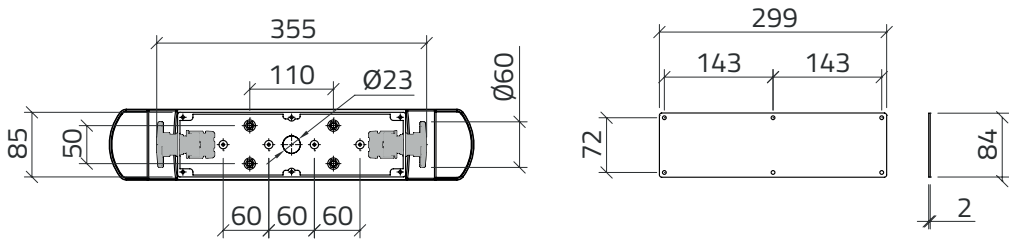
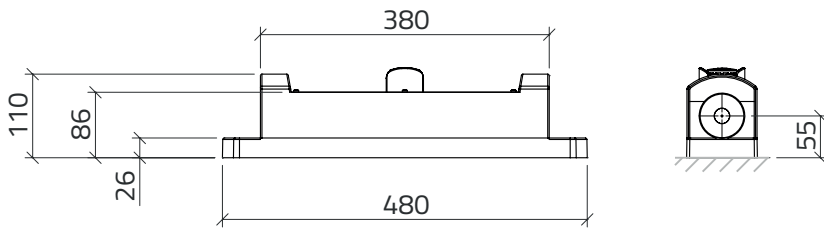
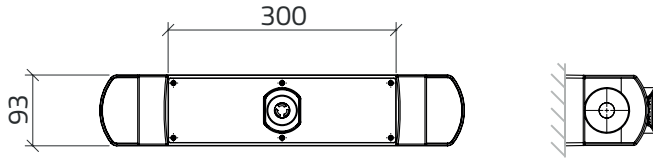
Stativo componibile ortogonale
Orthogonal modular stand

7040	060SCO
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Stativo componibile ortogonale con base di derivazione
Orthogonal modular stand with junction base

7500	060SCDO
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Dispositivi di comando a due mani Two-hand control devices

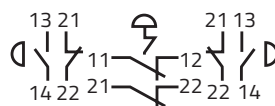


Dispositivi di comando a due mani Two-hand control devices

Pulsantiera a due mani console in alluminio Aluminium console two-hand control panel



- RAL 7016
- RAL 2011



g	cod
2050	060C2MA
2050	060C2MAA

Pulsantiera a due mani console da completare Console two-hand control panel to be completed



Pulsantiera con pulsanti
Control panel with push-buttons

- RAL 7016
- RAL 2011



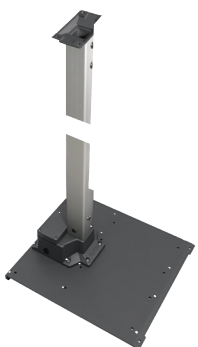
g	cod
1730	060C2MGRP
1730	060C2MAP

Accessori Accessories



Piastra di ricambio / Spare plate

g	cod
150	060PC



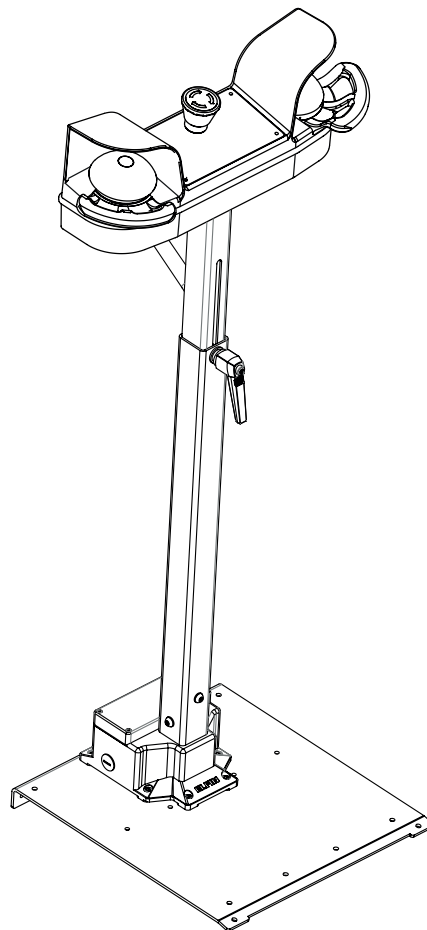
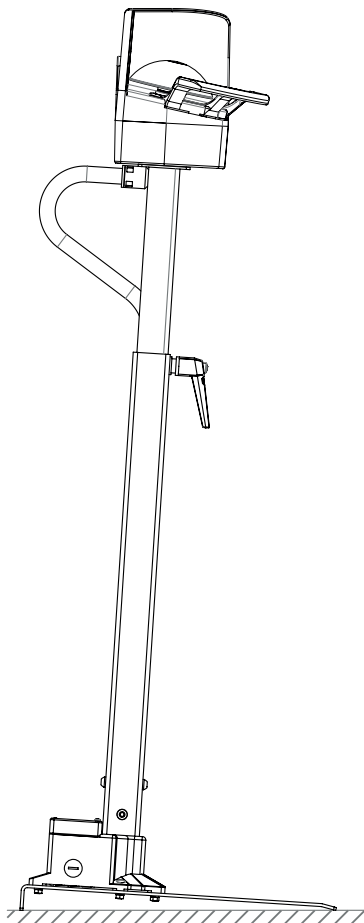
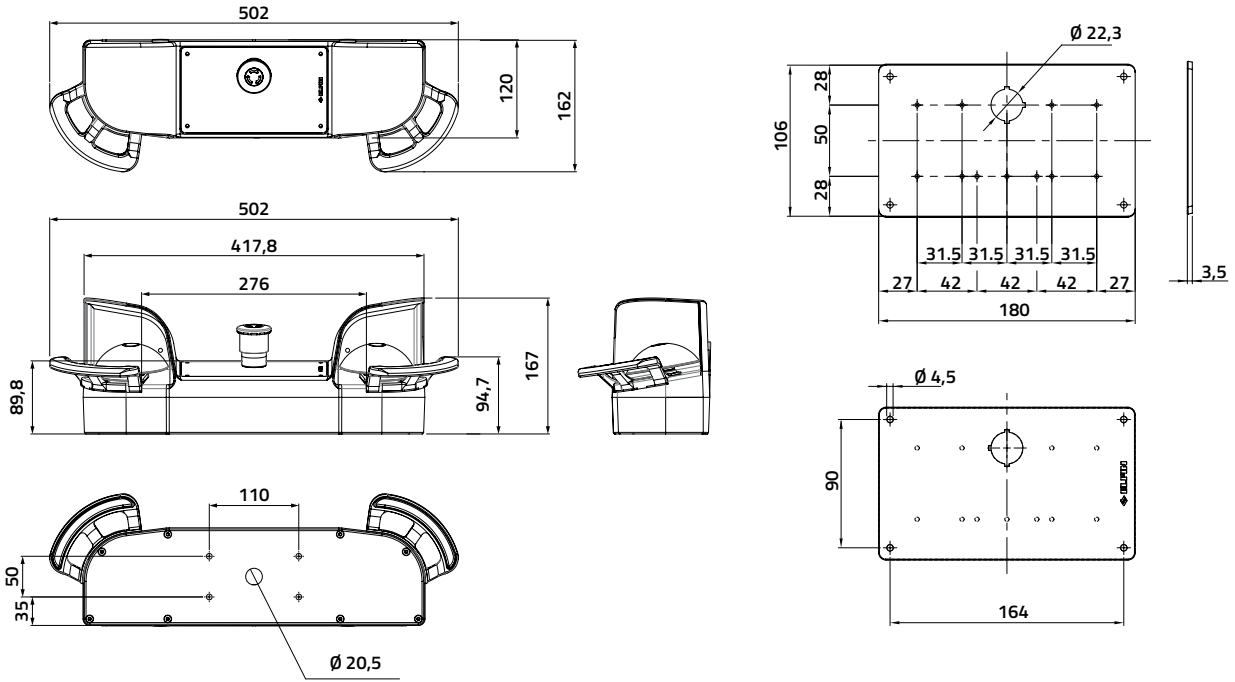
Stativo componibile ortogonale
Orthogonal modular stand

7040	060SCO
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Stativo componibile ortogonale con base di derivazione
Orthogonal modular stand with junction base

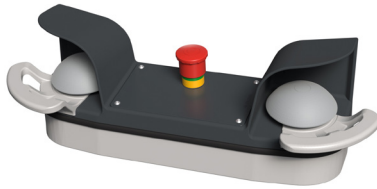
7500	060SCDO
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Dispositivi di comando a due mani Two-hand control devices



Dispositivi di comando a due mani Two-hand control devices

Pulsantiera a due mani protetta in alluminio Aluminium two-hand control panel protected



Per personalizzazioni con altri operatori ed elementi di contatto vedi sezione "020 Comando e segnalazione SM2 Ø22".
For customization with other operators or contact blocks, refer to section 020 "Command and signaling SM2 Ø22".

● RAL 7016

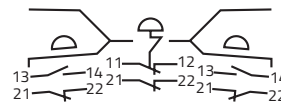
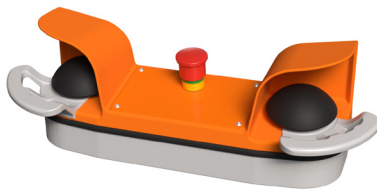
2980

060P2MEAGR

● RAL 2011

2980

060P2MEAA



Accessori Accessories



Stativo telescopico
Telescopic Stand

● RAL 7016

11040

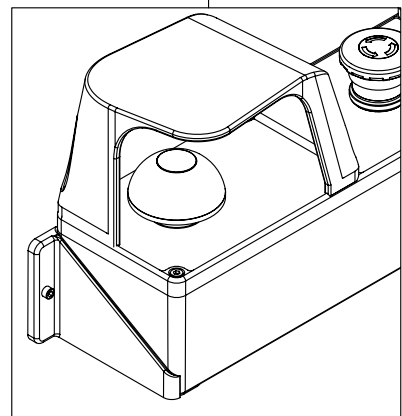
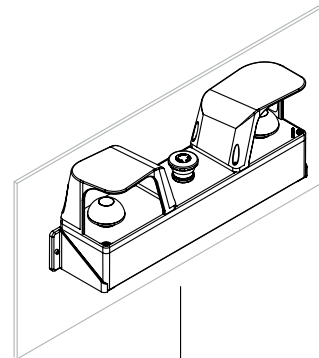
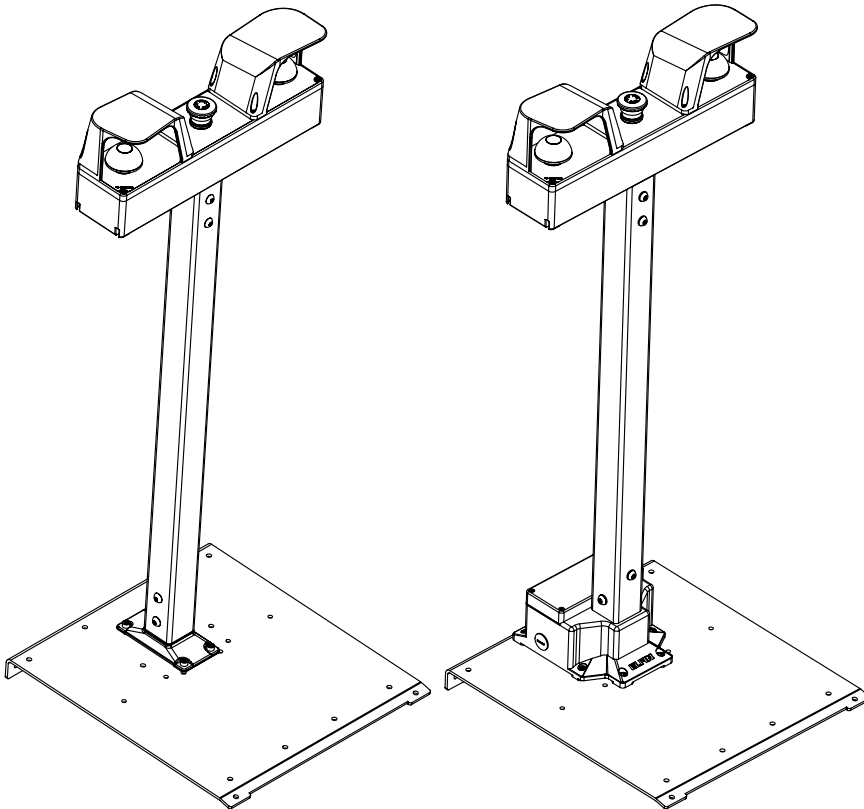
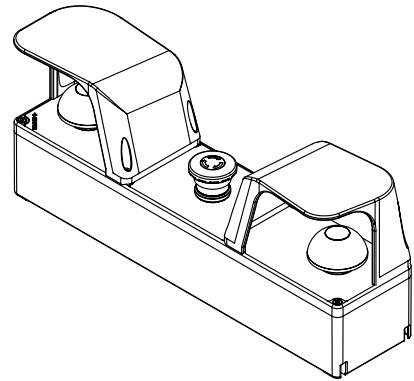
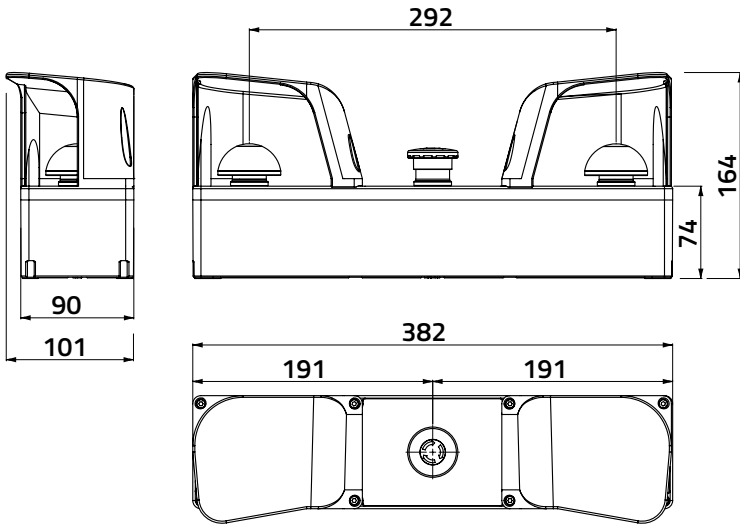
060STP2M

● RAL 2011

11040


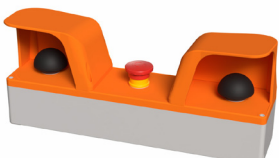
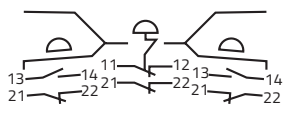
060STP2MA

Dispositivi di comando a due mani Two-hand control devices

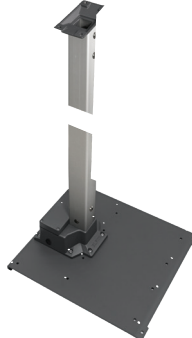

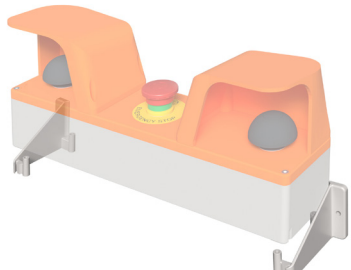


Dispositivi di comando a due mani Two-hand control devices

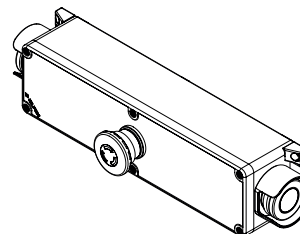
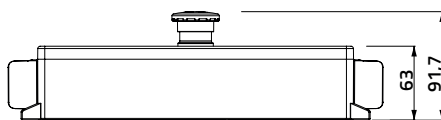
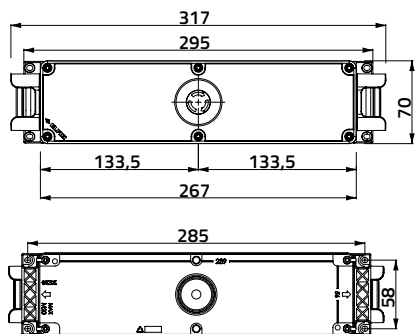
Pulsantiera a due mani protetta in Termoplastico Thermoplastic two-hand control panel protected

	g	cod
 <p>Involucro linea Techno 90 Techno 90 line enclosure</p> <p>● RAL 7016</p>	1195	060PT2MAGR
 <p>● RAL 2011</p>	1195	060PT2MAA
		

Accessori Accessories

	g	cod
 <p>Stativo componibile ortogonale Orthogonal modular stand</p>	7040	060SCO
<p>Stativo componibile ortogonale con base di derivazione Orthogonal modular stand with junction base</p>	7500	060SCDO
 <p>Sistema fissaggio inclinato a 90° Techno 90 mm Techno 90 mm 90° sloped mounting system</p> <p>Conforme UL / UL Compliant</p>		080TSF090 080TUSF090
		

Dispositivi di comando a due mani Two-hand control devices



Dispositivi di comando a due mani Two-hand control devices

Pulsantiera a due mani in Termoplastico Thermoplastic two-hand control panel

g

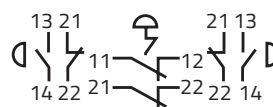
cod



Involucro linea Techno 70
Techno 70 line enclosure

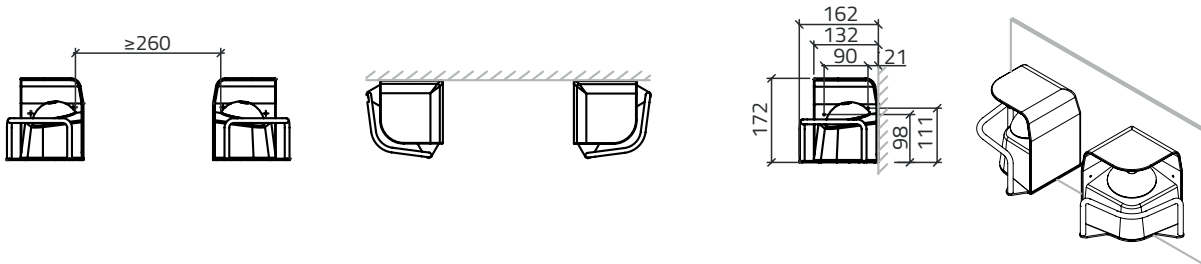
● RAL 7016

060CT2MAGR

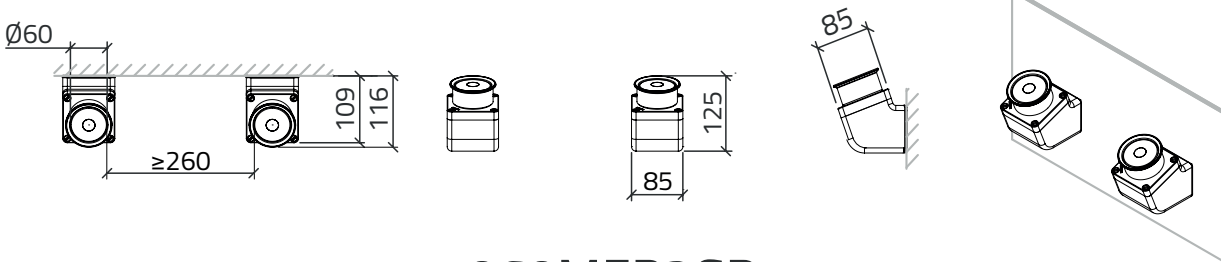


Dispositivi di comando a due mani Two-hand control devices

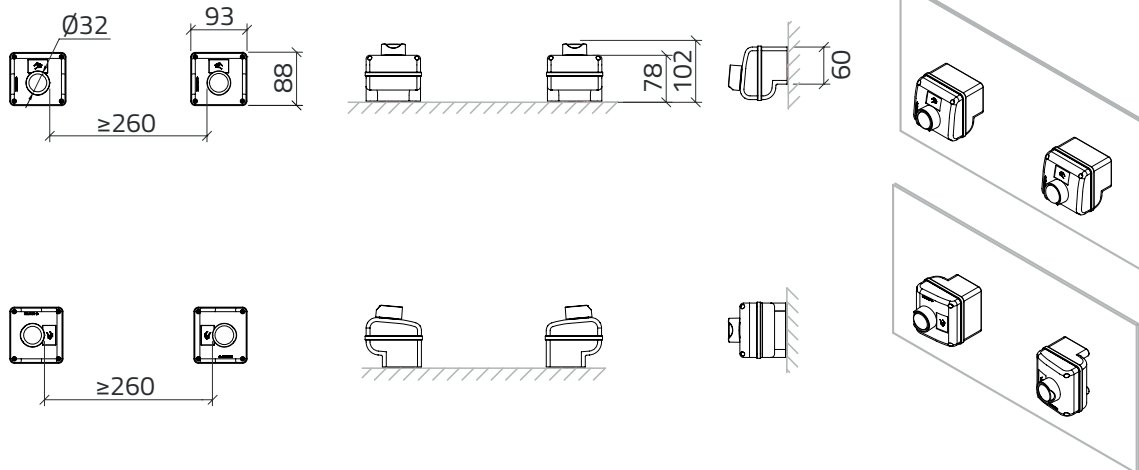
060MPP2GR



060MLP2GR



060MEP2GR



060MTP2GR



Dispositivi di comando a due mani Two-hand control devices

Moduli singoli in alluminio Single aluminium modules

g **cod**



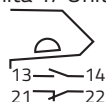
Moduli singoli protetti per comando a due mani Protected single modules for two-hand control

● Grigio / Gray

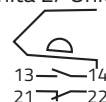
3200

060MPP2GR

Unità 1/ Unit 1



Unità 2/ Unit 2



g **cod**



Moduli singoli inclinati per comando a due mani Sloped single modules for two-hand control

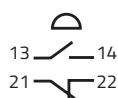
Involucro inclinato in alluminio - 2 unità
Sloped aluminium enclosures - 2 units

● Grigio / Gray

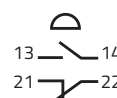
1300

060MLP2GR

Unità 1/ Unit 1



Unità 2/ Unit 2



g **cod**

Moduli singoli in termoplastico Single thermoplastic modules



Moduli singoli per comando a due mani Single modules for two-hand control

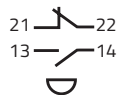
Involucro ergonomico in termoplastico - 2 unità
Ergonomic thermoplastic enclosures - 2 units

● Grigio / Gray

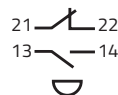
400

060MEP2GR

Unità 1/ Unit 1



Unità 2/ Unit 2



g **cod**



Moduli singoli per comando a due mani Single modules for two-hand control

Involucro linea Techno 70 - 2 unità
Techno 70 line enclosures - 2 units

● Grigio / Gray

060MTP2GR

Dispositivi di comando a due mani Two-hand control devices

Stativi componibili per comando bimanuale Modular stands for two-hand control panel

g

cod

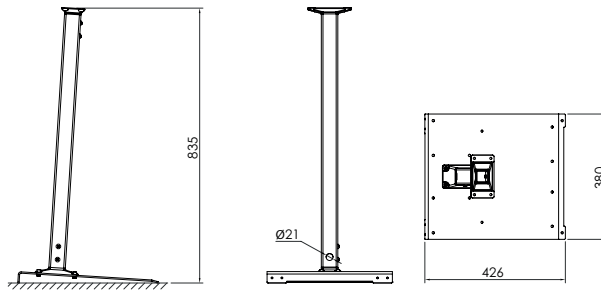
Per articoli 060CL2M_, 060C2M_
For item code 060CL2M_, 060C2M_



Stativo componibile ortogonale
Orthogonal modular stand

7039

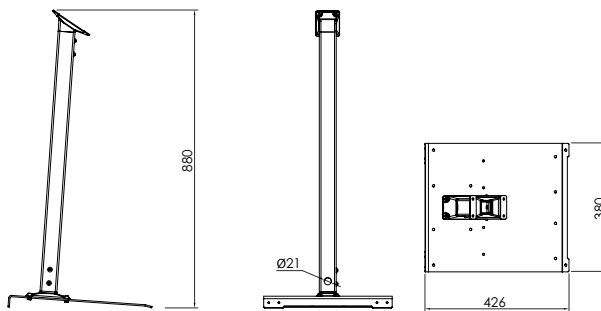
060SCO



Stativo componibile inclinato
Sloped modular stand

7110

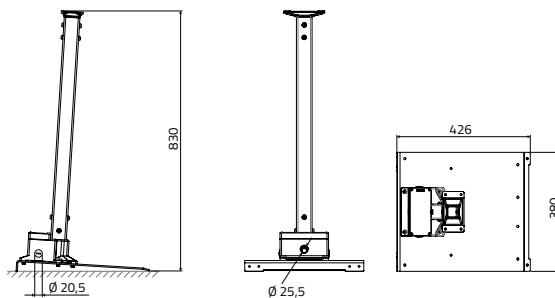
060SCI



Stativo componibile ortogonale con base di derivazione
Orthogonal modular stand with junction base

7500

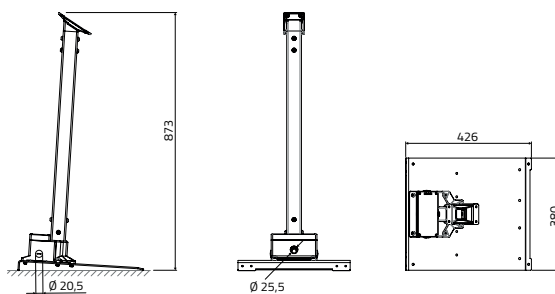
060SCDO



Stativo componibile inclinato con base di derivazione
Sloped modular stand with junction base

7500

060SCDI



Dispositivi di comando a due mani Two-hand control devices

Stativi telescopici per comando bimanuale Telescopic stands for two-hand control panel



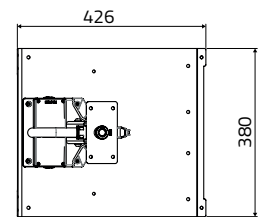
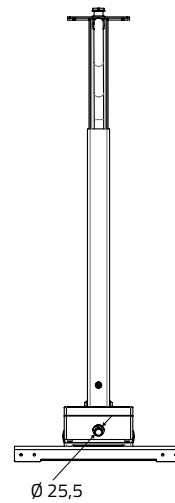
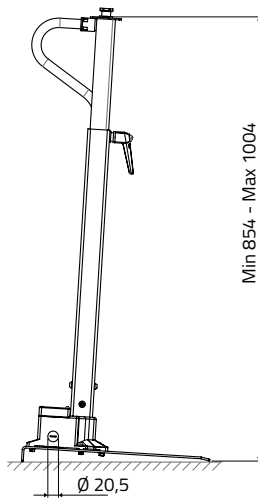
Per articoli 060P2M_
For item code 060P2M_

- RAL 7016
- RAL 2011

g **cod**

11040
11040

060STP2M
060STP2MA



Ruote Wheels

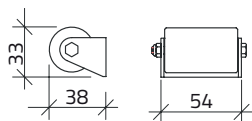


Kit di ruote per piastra base colonna
Castor kit for column base plate

g **cod**

200

060KR



Dispositivi di comando a due mani Two-hand control devices

Piastre Plates



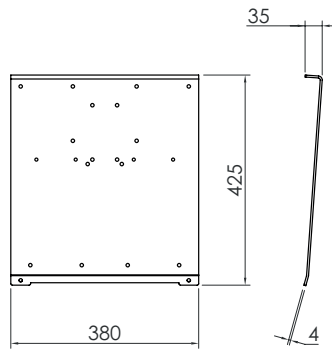
Piastra base stativo / Column base plate

g

5650

cod

060BS



Giunti Joints



Ortagonale / Orthogonal
Inclinato / Oblique

g

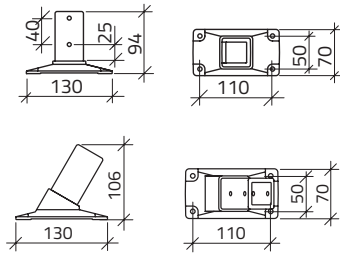
327

410

cod

060GCO

060GCI



Colonne Columns



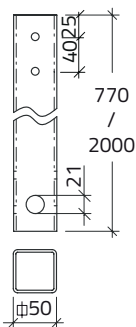
Lunghezza / Length mm 770

g

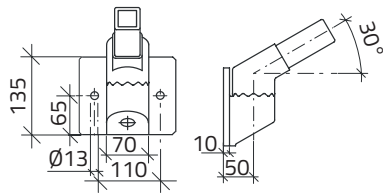
1185

cod

060CB



Dispositivi di comando a due mani Two-hand control devices



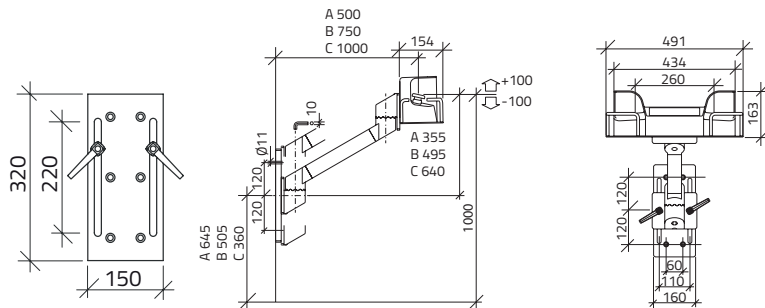
Supporto per braccio / Arm support

g

1800

cod

060SB



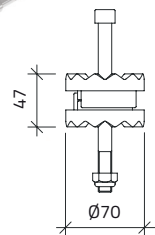
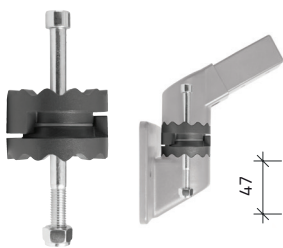
Piastra di regolazione/ Adjustment plate

g

2420

cod

060PRBO



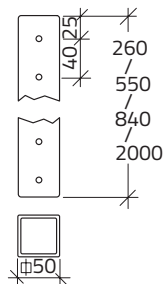
**Snodo per braccio
Articulated joint for arm**

g

530

cod

060SRBO



Bracci / Arms

Lunghezza / Length mm 260	360	060B2
Lunghezza / Length mm 550	780	060B5
Lunghezza / Length mm 840	1160	060B8
Lunghezza / Length mm 2000		
senza fori / undrilled	2790	060C2000

g

cod

Modulo di contemporaneità

Simultaneous action controller

CARATTERISTICHE PRINCIPALI

- **Controllo a due mani:** 060MCP2M monitora il funzionamento sicuro delle console di controllo a due mani di tipo IIIC.
- **Conformità alla Direttiva Macchine:** Categoria 4, PL e secondo EN ISO 13849-1
- **Uscite di sicurezza:** Relè di sicurezza a guida forzata elettromeccanici con uscite ausiliarie 2NO + 1NC
- **Cablaggio flessibile:** Il modulo è dotato di morsetti a vite rimovibili per un facile cablaggio e manutenzione del prodotto; le morsettiere sono codificate in modo da evitare errori di collegamento
- **Diagnostica:** Indicazioni a LED per alimentazione, stato degli ingressi di sicurezza e stato delle uscite di sicurezza
- **Compatto:** 1 modulo DIN, L x A x P: 17,5 x 110,8 x 121,1mm
- **Approvazioni:** TÜV. CE, cULus

FUNZIONI PRINCIPALI

- Monitoraggio del funzionamento sicuro delle console di comando a due mani (Tipo IIIC secondo EN ISO 13851), utilizzato in applicazioni che richiedono all'operatore di supervisionare in sicurezza il funzionamento della macchina
- Funzionamento a doppio canale di sicurezza delle console di comando a due mani
- Controllo di 2 uscite di sicurezza NA con relè di sicurezza elettromeccanici
- Diagnostica del circuito di sicurezza tramite indicazioni a LED per alimentazione, stato degli ingressi di sicurezza e stato delle uscite di sicurezza
- 1 uscita ausiliaria NC utilizzabile per l'indicazione remota di stato

COMPATIBILITÀ E CONFORMITÀ

- **Direttiva bassa tensione 2014/35/UE EN 60947-5-1.** Apparecchiature e quadri di comando in bassa tensione - Dispositivi ed elementi di commutazione circuito di controllo
- **Direttiva EMC 2014/30/UE EN 60947-5-1.** Apparecchiature e quadri di comando in bassa tensione - Dispositivi ed elementi di commutazione circuito di controllo
- **Direttiva macchine 2006/42/CE. Esame di tipo CE certificato TÜV Cert. no. 44 205 15058307 EN ISO 13849-1** Sicurezza delle macchine - parti dei sistemi di controllo legate alla sicurezza- Principi generali di progettazione. **EN 60204-1** Sicurezza delle macchine - Equipaggiamento elettrico delle macchine - Requisiti generali Comando a due mani di tipo III **EN ISO 13851.** Sicurezza delle macchine - Dispositivi di comando a due mani Principi per la progettazione e la selezione. **EN 61326-3-1.** Apparecchiature elettriche per misurazione, controllo e uso in laboratorio. Requisiti EMC. Requisiti di immunità per i sistemi di sicurezza e per le apparecchiature destinate a svolgere funzioni di sicurezza (sicurezza funzionale)

MAIN FEATURES

- **Two-hand control:** 060MCP2M monitors the safe operation of Type IIIC two-hand control consoles
- **Machinery Directive compliance:** Cat. 4, PL e in accordance with EN ISO 13849-1
- **Safety outputs:** Electromechanical forcibly guided safety relays with 2NO+1NC aux outputs
- **Flexible wiring:** The module is equipped with detachable screw terminals for easy wiring and product maintenance; the terminal blocks are coded so to avoid wiring mistakes
- **Diagnostic:** LED indications for power supply, state of the safety inputs and state of the safety outputs
- **Compact:** 1-DIN, W x H x D: 17,5 x 110,8 x 121,1mm
- **Approval:** by TÜV. CE, cULus

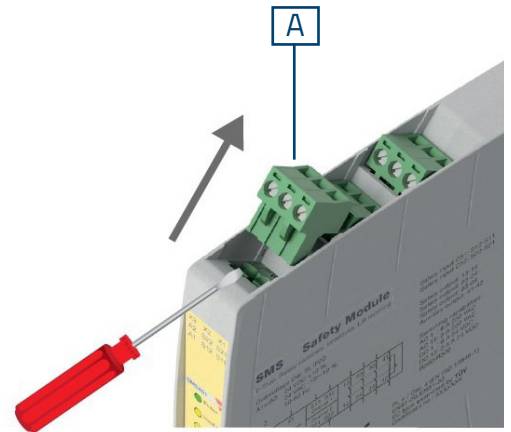
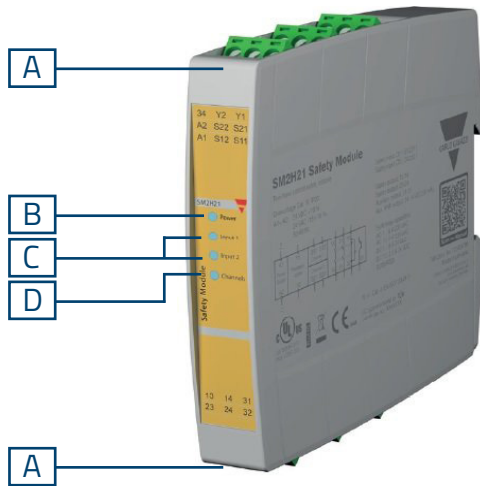
MAIN FUNCTIONS

- Monitoring of the safe operation of two-hand control consoles (Type IIIC as per EN ISO 13851), used in applications requiring the operator to supervise safely the operation of the machinery
- Double safety channels operation of two-hand control consoles
- Control of 2 NO safety outputs with electromechanical safety relays
- Diagnostic of the safety circuit through on-board LED indications for power supply, status of safety channels and status of safety outputs
- 1 NC auxiliary output that can be used for external status indication

COMPATIBILITY AND CONFORMITY

- **Low Voltage Directive 2014/35/UE EN 60947-5-1.** Low-voltage switchgear and controlgear - Control circuit devices and switching elements.
- **EMC Directive 2014/30/UE EN 60947-5-1.** Low-voltage switchgear and controlgear - Control circuit devices and switching elements.
- **Machinery Directive 2006/42/EC EC type examined by TÜV Cert. no. 44 205 15058307 EN ISO 13849-1** Safety of machinery - safety related parts of control systems General principles for design **EN 60204-1** Safety of machinery - Electrical equipment of machines - General requirements. Two-hand control type III **EN ISO 13851** Safety of machinery - Two-hand control devices - Principles for design and selection **EN 61326-3-1** Electrical equipment for measurement, control and laboratory use. EMC requirements. Immunity requirements for safety-related systems and for equipment intended to perform safety-related functions (functional safety)

Modulo di contemporaneità Simultaneous action controller



Elemento	Componente	Funzione
A	Morsettiere rimovibili	Alimentazione, segnale di feedback, ingressi e uscite di sicurezza
B	LED	Stato dell'alimentazione
C	LED	Stato degli ingressi di sicurezza
D	LED	Stato delle uscite di sicurezza

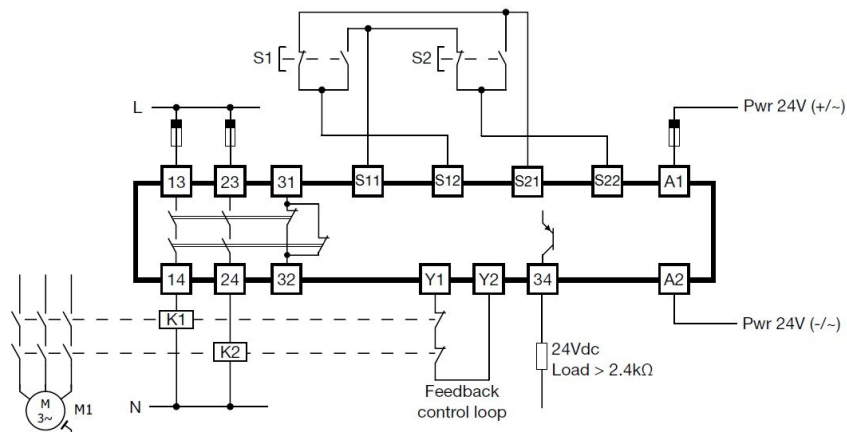
Element	Component	Function
A	Pluggable terminal blocks	Power supply, feedback signal safety inputs and outputs
B	LED	Power supply status
C	LED	Safety inputs status
D	LED	Safety outputs status

Schema di collegamento

Terminale	Funzione
A1	alimentazione 24 Vdc (+)/Vac(-)
A2	alimentazione 24 Vdc (-)/Vac(-)
S11-S12	ingresso canale 1 NA
S21-S22	ingresso canale 2 NA input
Y1-Y2	ingresso di feedback NC
10-14	uscita sicura NA
23-24	uscita sicura NA
31-32	uscita ausiliaria NC
34	uscita ausiliaria PNP

Connection diagram

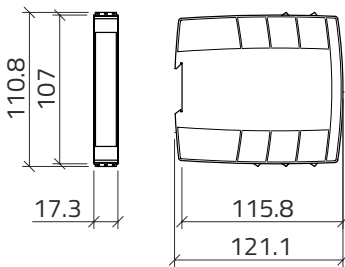
Terminal	Function
A1	power supply 24 Vdc (+)/Vac(-)
A2	power supply 24 Vdc (-)/Vac(-)
S11-S12	channel 1 NO input
S21-S22	channel 2 NO input
Y1-Y2	NC feedback input
10-14	NO safety output
23-24	NO safety output
31-32	NC auxiliary output
34	PNP auxiliary output



Modulo di contemporaneità Simultaneous action controller

g

cod



Modulo di contemporaneità / Simultaneous action controller

Modulo / Controller

239

060MCP2M

Il modulo di sicurezza 060MCP2M è progettato per applicazioni fino alla Categoria 4, Livello di prestazione PL e in conformità con la Direttiva macchine EN ISO 13849-1 per monitorare e controllare in sicurezza il funzionamento delle console di controllo a due mani (Tipo III C secondo UNI EN ISO 13851). Il dispositivo abilita le uscite di controllo di sicurezza solo se i due pulsanti della console sono attivati dall'operatore contemporaneamente o con un intervallo massimo di 500 ms l'uno dall'altro.

The 060MCP2M safety module is designed in Category 4, Performance Level e in accordance with the Machine Directive EN ISO 13849-1 to monitor and control safely the operation of two-hand control consoles (Type III C according to UNI EN ISO 13851). The device enables the safety control outputs only if the two buttons of the console are activated by the operator simultaneously or with a max interval of 500 ms from each other.

Caratteristiche tecniche

Materiale	PA-GF, autoestinguente: UL 94 V-0
Montaggio	Montaggio su guida DIN (secondo EN 50022)
Alimentazione	24VCC ± 10%; 24VCA -15%/+10%, 50-60 Hz, Classe 2 Categoria di sovratensione III Protezione da corto circuito a mezzo PTC Tensione nominale di isolamento 4 kV
Numero di canali di ingresso	2
Ingressi	S11-S12 e S21-S22
Resistenza linea circuito ingressi	Max. 30 kΩ (eq. 2500m 1,5mm2 Cu)
Corrente di ingresso	Tipica 30 mA
Numero di uscite sicure NA	2
Numero di uscite ausiliarie NC	1
Numero di uscite ausiliarie	PNP 1; PNP, 24 VCC, carico resistivo esterno min 2.4 kΩ
Tipo di uscita	NA e NC Contatti liberi da tensione, relè con contatti a guida forzata
Corrente Max	Per ciascuna uscita @ 60°C (140°F) temperatura di funzionamento: CA 1: 250V / 6A / 2000 VA - CA 15: 230V / 3A CC 1: 24V / 6A - CC 13: 24V / 2.5A / 0.1 Hz UL508, pilot duty: B300 / R300
Corrente Max quadratica	Spazio tra i moduli ≥ 100mm: 72A2 @40°C (104°F) temperatura ambiente Moduli montati affiancati: 26A2 @25°C (77°F) temperatura ambiente Fare riferimento alle curve di declassamento nel manuale di istruzioni
Durata meccanica	> 107 operazioni
Durata elettrica	AC1 (360 commutazioni/h) - 105 operazioni
ISO 13849-1 Categoria di sicurezza	Cat. 4
ISO 13849-1	Livello di prestazione PL e
MTTFD [a]	422,1
PFHD [1/h]	1,35 E-10
DCavg	99%
β	5,00 E-02
βD	2,00 E-02
Grado di protezione	IP40 sul frontale della custodia, IP20 sui terminali. Il dispositivo deve essere installato in un quadro elettrico con almeno un grado di protezione pari a IP54
Grado di inquinamento	2
Temperatura di funzionamento	-25 + +60°C (-13 + 140°F), UL: +40°C (104°F)
Temperatura di immagazzinamento	-30 + +70°C (-22 + 158°F)
Umidità ambiente	R.H. ≤95% in assenza di condensa

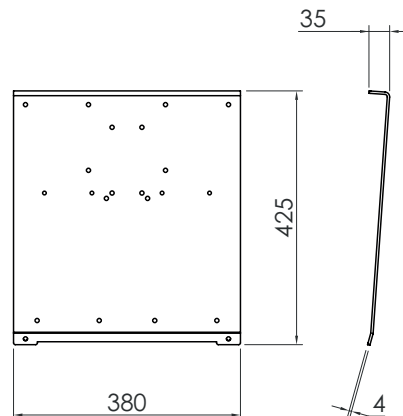
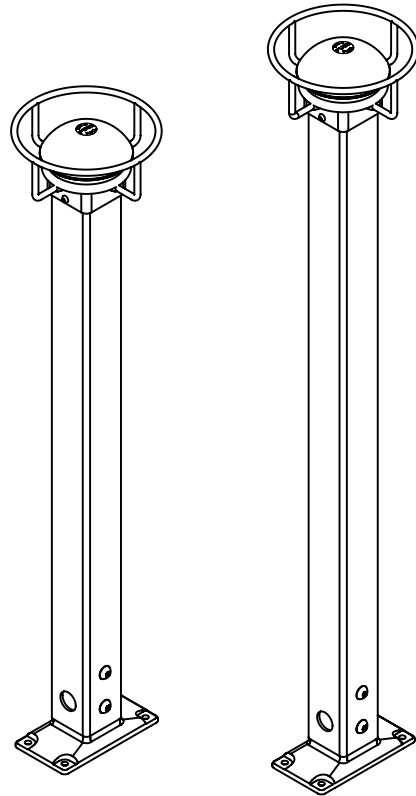
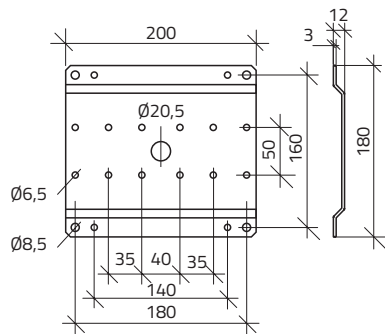
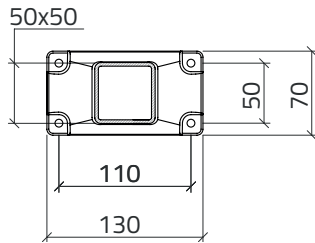
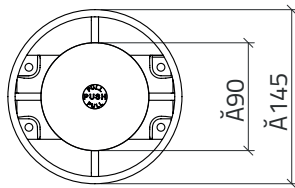
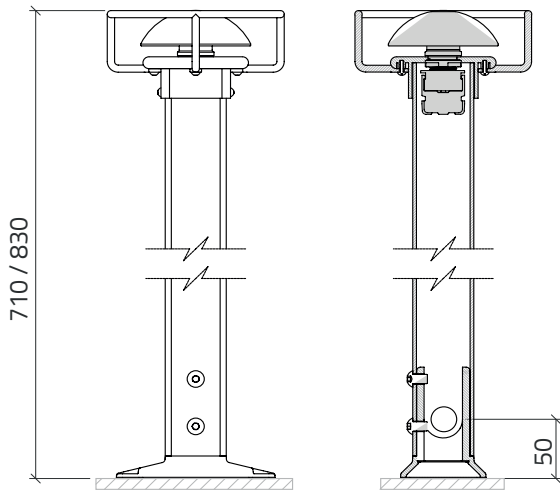
Technical data

Material	PA-GF, self-extinguishing: UL 94 V-0
Assembly	DIN rail mounting (according to EN 50022)
Power supply	24Vdc ± 10%; 24Vac -15%/+10%, 50-60 Hz, Class 2 Overvoltage category III Short circuit protection internal PTC Rated insulation voltage 4 kV
Number of safety channels	2
Safety inputs	S11-S12 e S21-S22
Loop resistance	Max. 30 kΩ (eq. 2500m 1,5mm2 Cu)
Input current	Tipica 30 mA
NO safety outputs	2
NC auxiliary output	1
PNP auxiliary output	1; PNP collector, 24 Vdc, min external resistive load 2.4 kΩ
NO and NC outputs type	Voltage free contact output, relays with forcibly guided contacts
Max current rating	single output @ 60°C (140°F) operating temperature: AC 1: 250V / 6A / 2000 VA - AC 15: 230V / 3A DC 1: 24V / 6A - DC 13: 24V / 2.5A / 0.1 Hz UL508, pilot duty: B300 / R300
Max quadratic current	Spacing between modules ≥ 100mm: 72A2 @40°C (104°F) ambient temperature Modules mounted stacked: 26A2 @25°C (77°F) ambient temperature Please refer to the derating curves in installation manual
Mechanical life	> 107 operations
Electrical life	AC1 (360 s/h) - 105 operations
ISO 13849-1 Safety Category	Cat. 4
ISO 13849-1	Livello di prestazione PL e
MTTFD [a]	422,1
PFHD [1/h]	1,35 E-10
DCavg	99%
β	5,00 E-02
βD	2,00 E-02
Protection grade	IP40 on frontal part of the housing, IP20 on the terminals. The device has to be installed in a cabinet with protection degree of IP54.
Pollution degree	2
Operating temperature	-25 + +60°C (-13 + 140°F), UL: +40°C (104°F)
Storage temperature	-30 + +70°C (-22 + 158°F)
Ambient humidity range	R.H. ≤95% non condensing





Pulpito di emergenza Emergency stand



Pulpito di emergenza Emergency stand



Pulpito pulsante di emergenza Emergency push-button stand

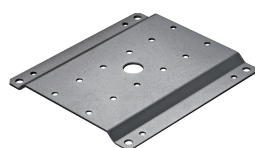
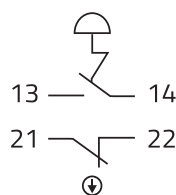
Lunghezza / Length mm 710
Lunghezza / Length mm 830

g

cod

1535
1815

060PES7
060PES8



Piastra / Plate

Piastra base colonna / Column base plate

g

cod

836

060PAC



Piastre / Plates

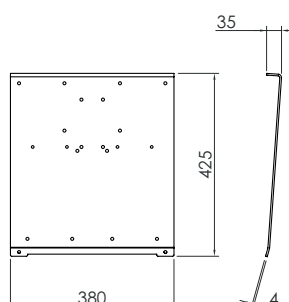
Piastra base colonna / Column base plate

g

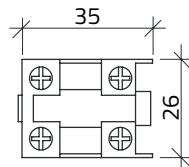
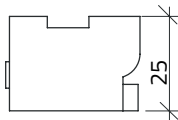
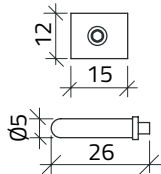
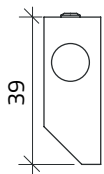
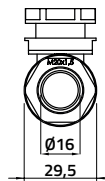
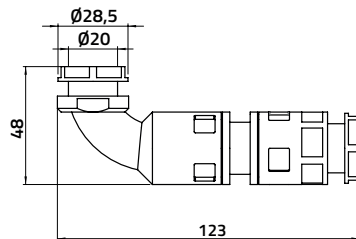
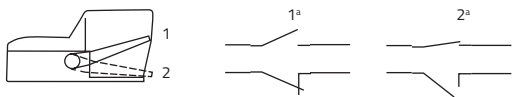
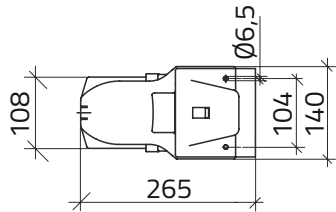
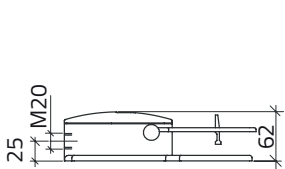
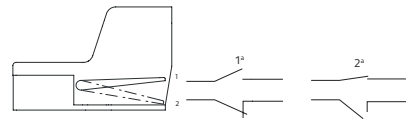
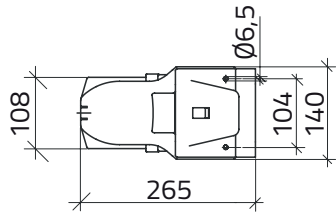
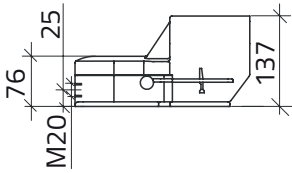
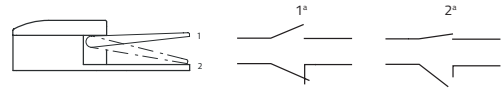
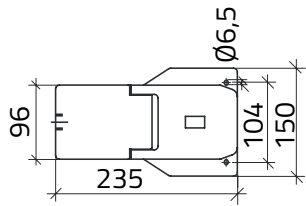
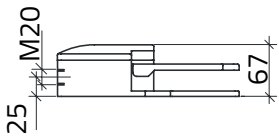
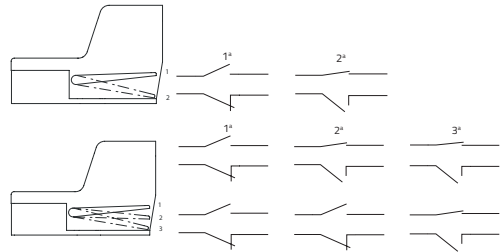
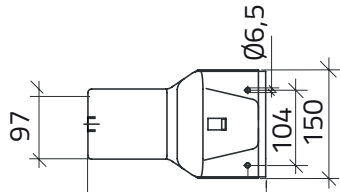
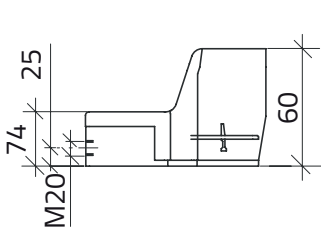
cod

5650

060BS



Interruttori a pedale Foot switches

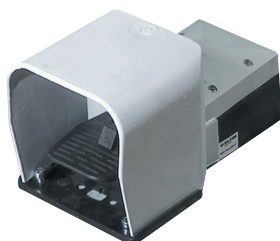


Interruttori a pedale

Foot switches

Interruttori a pedale in termoplastico

Thermoplastic foot switches



2 posizioni (1 microinterruttore) con leva di sicurezza
2 positions (1 microswitch) with safety lever

● Grigio / Grey

g

cod

900

060PPLT11

3 posizioni (2 micro interruttori)
3 positions (2 microswitches)

1000

060PP3PT22



Senza coperchio / Without cover

2 posizioni (1 microinterruttore)
2 positions (1 microswitch)

● Rosso/ Red

g

cod

632

060PT11

Interruttori a pedale in alluminio

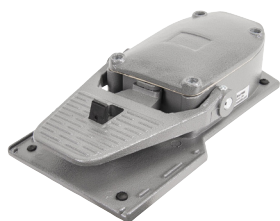
Aluminium foot switches



2 posizioni (1 microinterruttore) con leva di sicurezza
2 positions (1 microswitch) with safety lever

1700

060PPLA11



Senza coperchio / Without cover

2 posizioni (1 microinterruttore) con leva di sicurezza
2 positions (1 microswitch) with safety lever

1232

060PA11

Kit di connessione interruttori a pedale

Foot switch connection kit



g

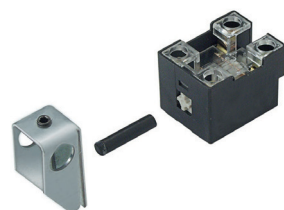
cod

50

060KCP

Accessori per comando a pedale

Foot switch accessories



g

cod

Kit 2° micro / Kit for 2nd microswitch

74

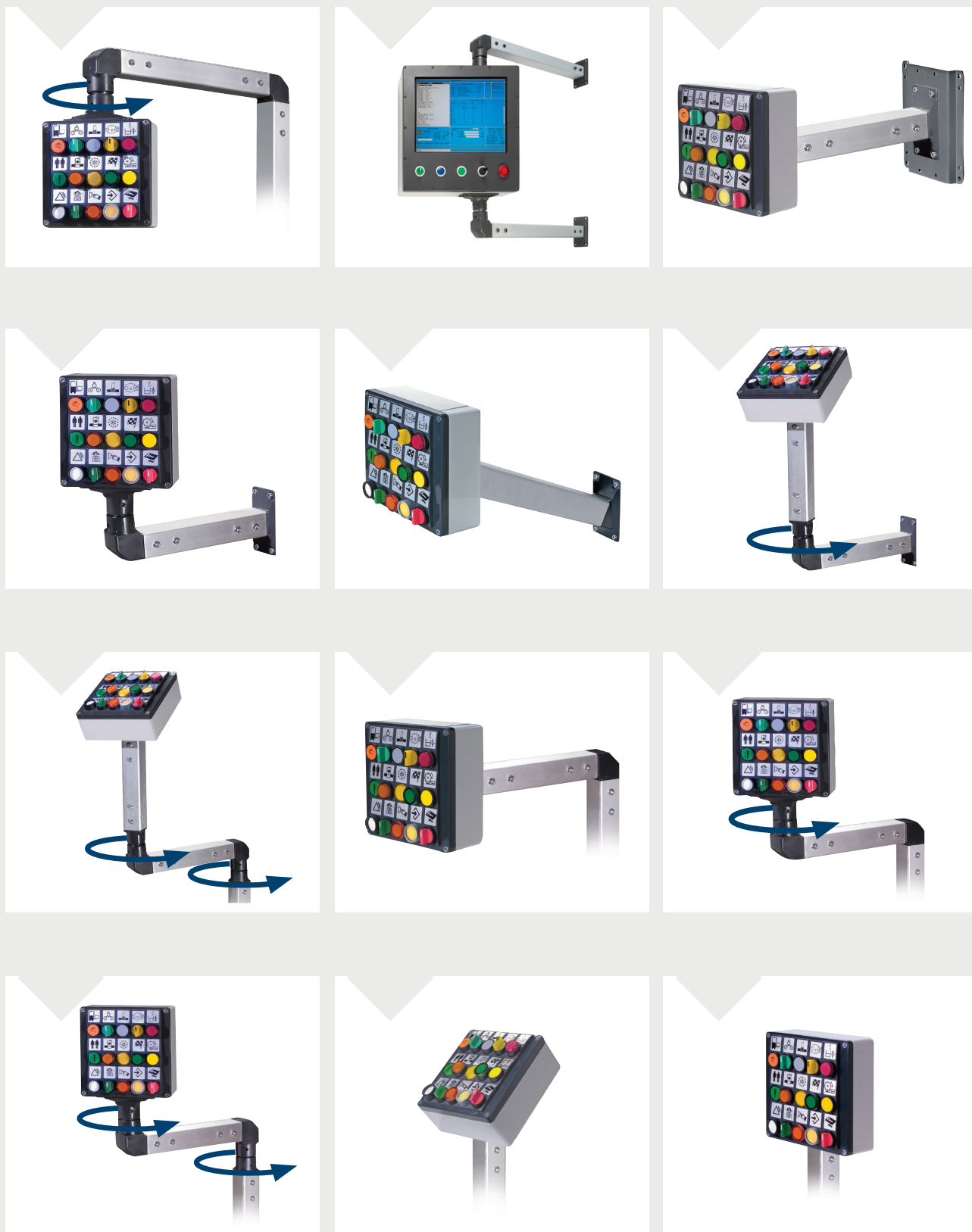
060KM11

Ricambio micro / Spare microswitch

22

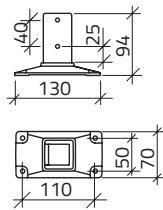
060M11

Sistema di sospensione modulare per automazione Modular suspension system for enclosures



Sistema di sospensione modulare per automazione Modular suspension system for enclosures

Giunti / Joints



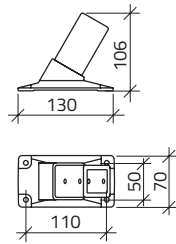
Ortagonale / Orthogonal

g

327

cod

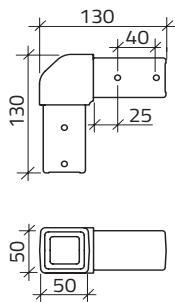
060GCO



Inclinato / Oblique

410

060GCI



Angolare 90° / Angle 90°

651

060GCA

Sistema di sospensione modulare per automazione Modular suspension system for enclosures

Giunti / Joints

g

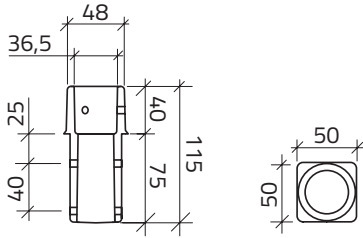
cod



Girevole assiale / Swivel, axial

324

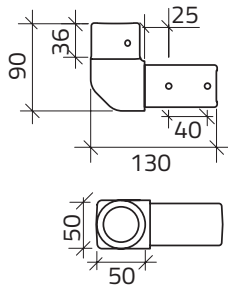
060GRD



Girevole 90° / Swivel 90°

521

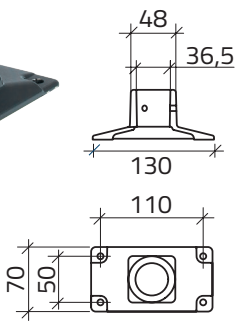
060GRA



Girevole / Swivel

243

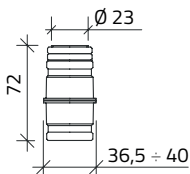
060GRO



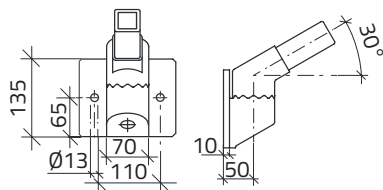
Bussola girevole interno foro Ø 23
Swivel bushing, bore Ø 23

310

060GSR



Sistema di sospensione modulare per automazione Modular suspension system for enclosures



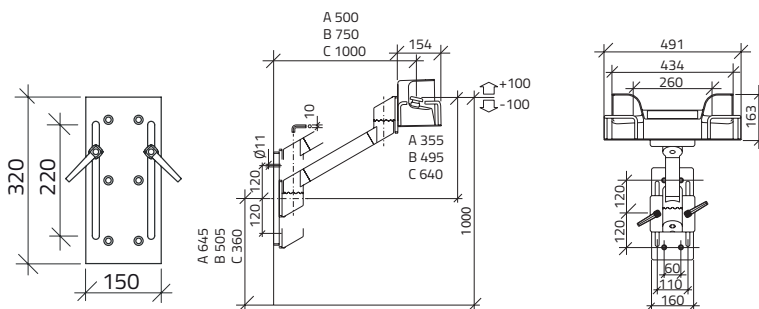
Supporto per braccio / Arm support

g

1800

cod

060SB



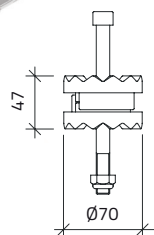
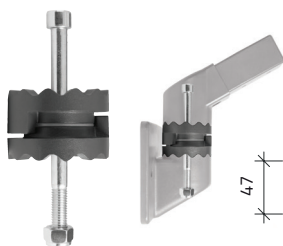
Piastra di regolazione/ Adjustment plate

g

2420

cod

060PRBO



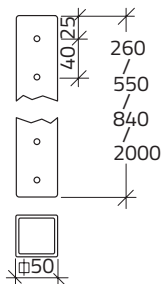
**Snodo per braccio
Articulated joint for arm**

g

530

cod

060SRBO



Bracci / Arms

Lunghezza / Length mm 260	360	060B2
Lunghezza / Length mm 550	780	060B5
Lunghezza / Length mm 840	1160	060B8
Lunghezza / Length mm 2000		
senza fori / undrilled	2790	060C2000

g

cod



Sistemi di sospensione 060S Suspension systems 060S

Sistemi di sospensione 060S

La gamma offre molteplici sistemi di sospensione e proiezione delle periferiche di comando, garantendo il loro posizionamento in perfetta ergonomia e sicurezza, personalizzando ogni configurazione sulla base delle proprie esigenze.

Le diverse linee a disposizione, che permettono applicazioni a diversi carichi statici, sono pensate per rispondere ad ogni possibile richiesta.

Modular suspension arm systems

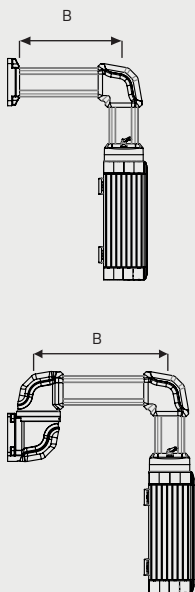
The range offers multiple suspension and support systems for control units, ensuring perfectly ergonomic and safe positioning while allowing full customization of each configuration according to specific requirements.

The different product lines, designed for applications with various static loads, are developed to meet every possible need.

Diagrammi di carico

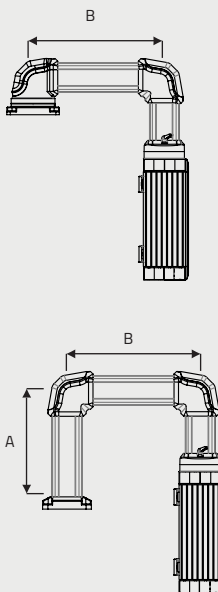
Linea 70 Range 70

1 Partenza verticale
Vertical outlet



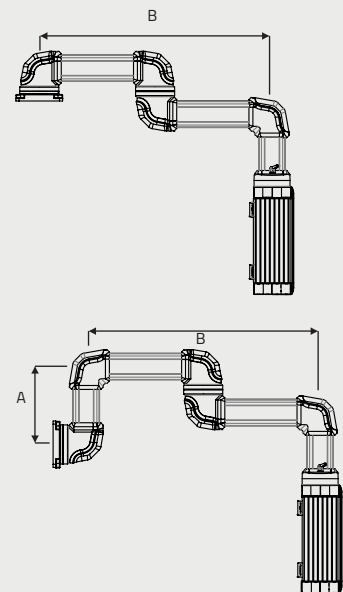
B max: 2000 mm

2 Partenza orizzontale
Horizontal outlet

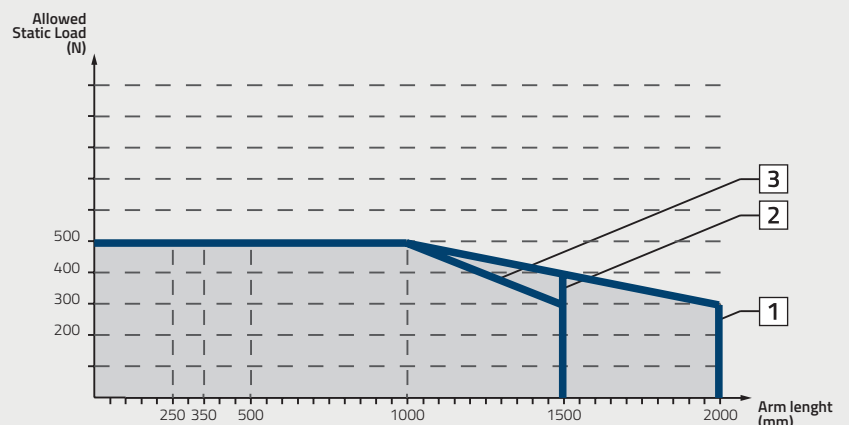


A max: 500 mm
B max: 1500 mm

3 Con utilizzo del giunto a snodo
Using the swivel joint



A max: 500 mm
B max: 1500 mm

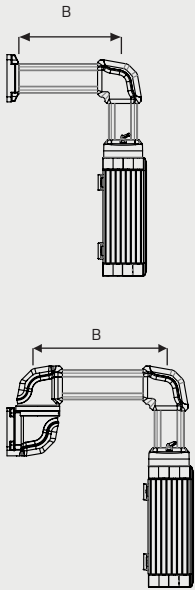


Sistemi di sospensione 060S Suspension systems 060S

■ Diagrammi di carico

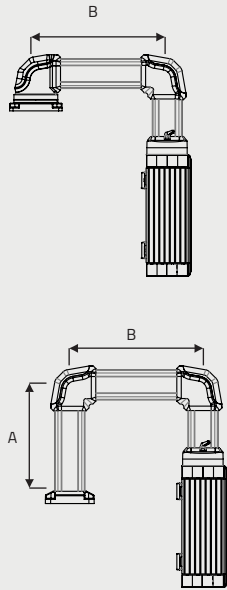
■ Load-bearing diagrams

1 Partenza verticale
Vertical outlet



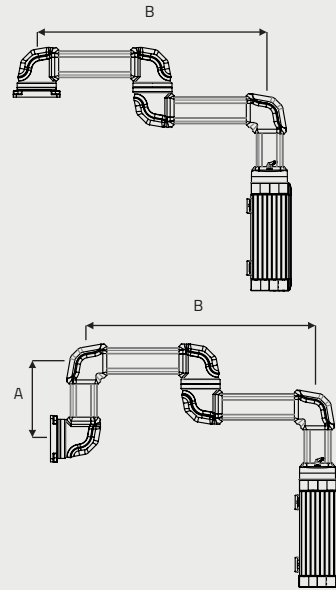
B max: 2500 mm

2 Partenza orizzontale
Horizontal outlet



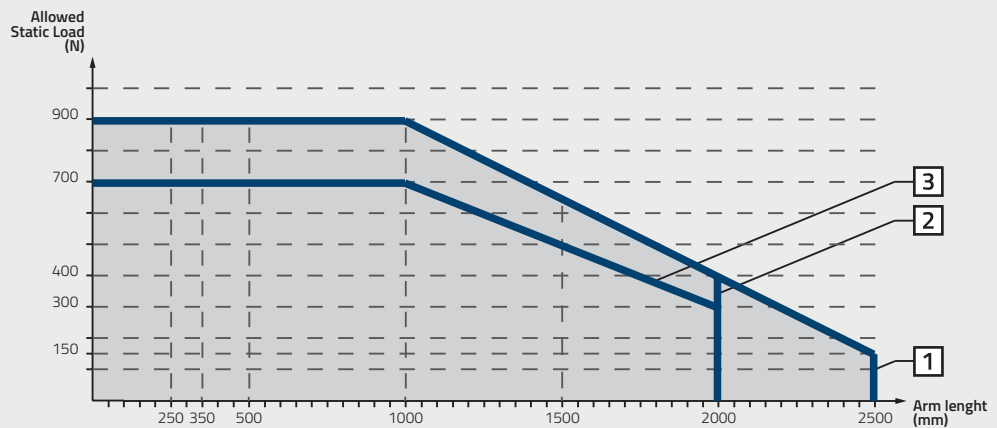
A max: 500 mm
B max: 2000 mm

3 Con utilizzo del giunto a snodo
Using the swivel joint

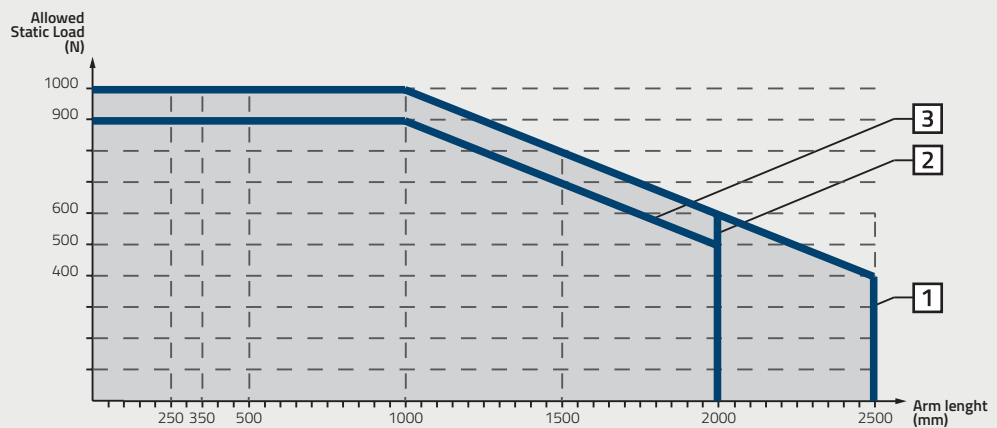


A max: 500 mm
B max: 2000 mm

Linea 85 Range 85



Linea 100 Range 100



Sistemi di sospensione 060S Suspension systems 060S

■ Quadri di comando in alluminio

I quadri di comando in alluminio sono proposti in 3 profondità e molteplici dimensioni.

Il pannello posteriore, incernierato, facilita le operazioni di installazione/cablaggio e successive ispezioni.

Su ordinazione sono disponibili modelli con profondità maggiori, ottenute mediante l'aggiunta di un profilo di estensione al corpo principale, o con pannello posteriore fisso.

Il pannello frontale è completamente personalizzabile. Realizzabile in materiale composito o alluminio, può essere lavorato per realizzazione forature, asolature, finestre per pc ad incasso, stampe digitali che lo completano con descrizioni funzioni, simboli e loghi aziendali, e operatori industriali.

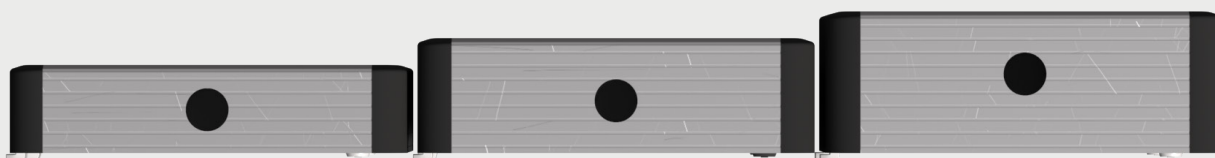
■ Aluminum control cabinets

The aluminum control cabinets are available in three depths and multiple sizes.

The hinged rear panel simplifies installation, wiring, and subsequent inspection operations.

Models with greater depths, achieved by adding an extension profile to the main body, or with a fixed rear panel, can be supplied on request.

The front panel is fully customizable. Made of composite material or aluminum, it can be machined to include holes, slots, and recessed PC windows, completed with digital prints featuring function descriptions, symbols, company logos, and industrial operators.



P= 100 mm

P= 130 mm

P= 160 mm



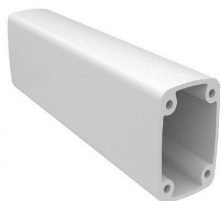
Pannello posteriore incernierato
Hinged rear panel



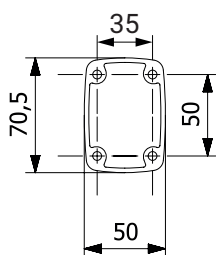
Pannello frontale personalizzabile
Customizable front panel

Sistemi di sospensione Linea 70 Suspension systems Line 70

Profilo di alluminio 50X70 / Aluminium profile 50x70



	mat	col	g	cod
Lunghezza / Length mm 250	Al	7035	600	060S070B0250
Lunghezza / Length mm 350	Al	7035	840	060S070B0350
Lunghezza / Length mm 500	Al	7035	1200	060S070B0500
Lunghezza / Length mm 750	Al	7035	1800	060S070B0750
Lunghezza / Length mm 1000	Al	7035	2400	060S070B1000
Lunghezza / Length mm 1500	Al	7035	3600	060S070B1500
Lunghezza / Length mm 2000	Al	7035	4800	060S070B2000

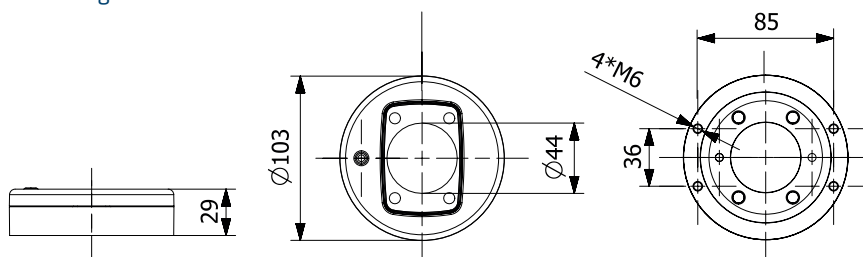


Flange / Flanges



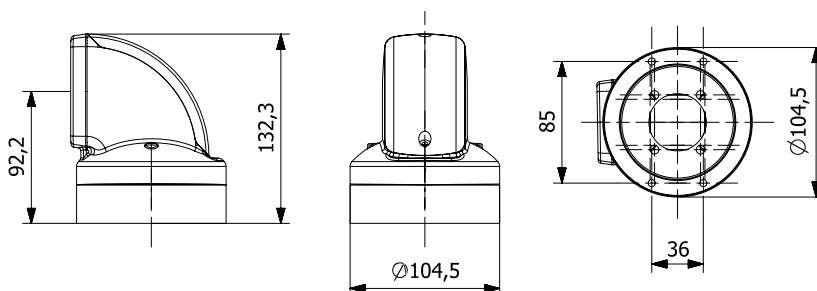
Flangia girevole/
Swivel flange

mat	col	g	cod
Al	7035	600	060S070F320



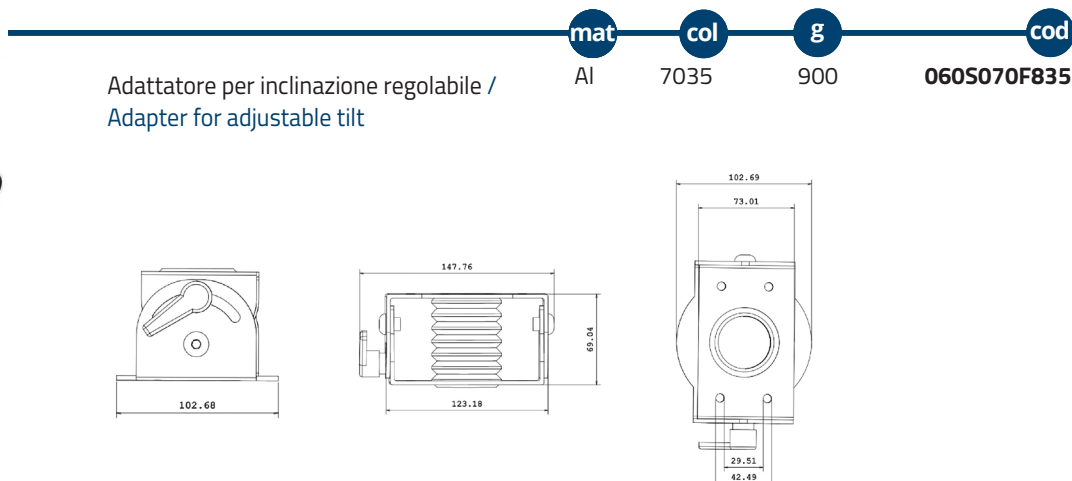
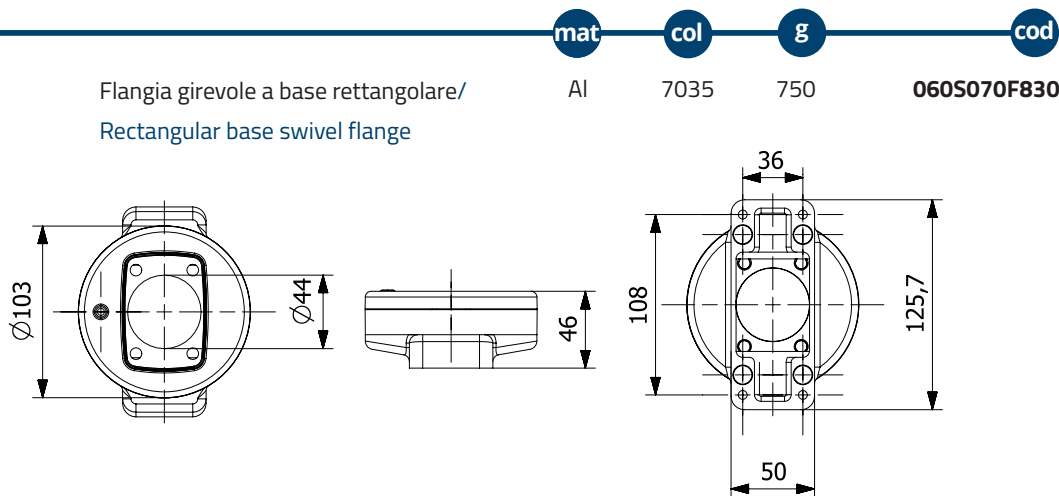
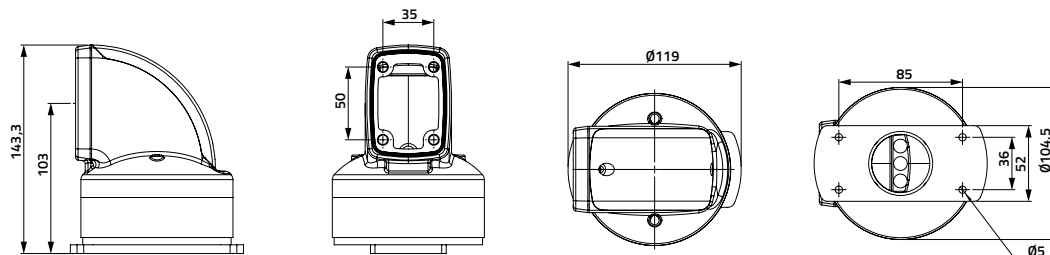
Flangia angolare 90° girevole/
Swivel 90° angular flange

mat	col	g	cod
Al	7035/16	1380	060S070F400



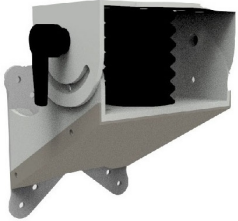
Sistemi di sospensione Linea 70 Suspension systems Line 70

Flange / Flanges



Sistemi di sospensione Linea 70 Suspension systems Line 70

Flange / Flanges

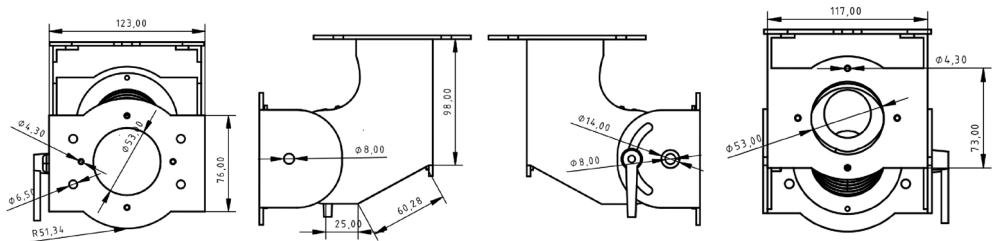


Adattatore inclinazione regolabile c/ vesa
Adapter for adjustable tilt w/ vesa

dim. 50 x 50

mat col g cod

Al 7035 1500 060S070F836



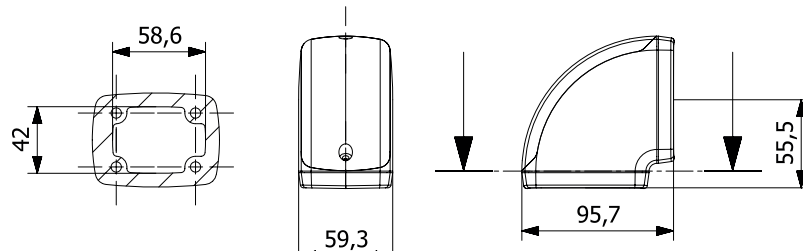
Giunti / Joints



Giunto angolare 90° /
90° angular joint

mat col g cod

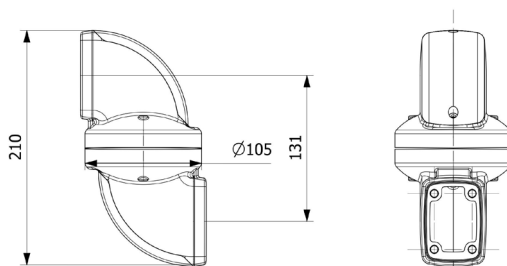
Al 7035/7016 400 060S070G420



mat col g cod

Al 7035/7016 1650 060S070G500

Giunto a snodo girevole /
Swivel joint



Sistemi di sospensione Linea 70 Suspension systems Line 70

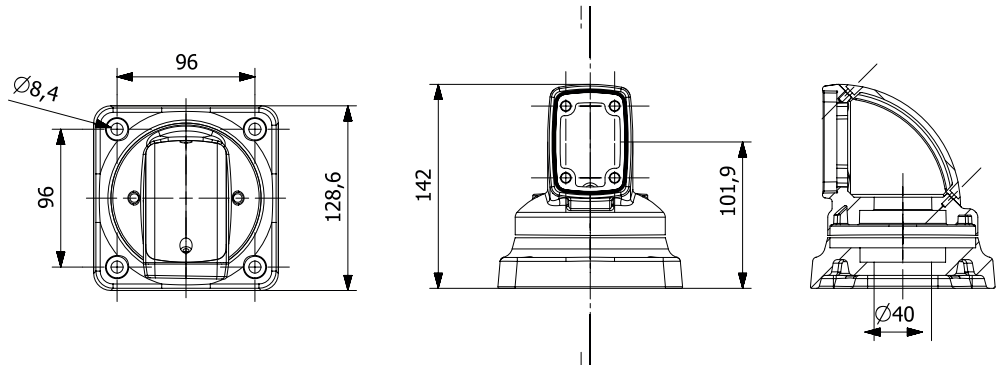
Montanti / Bases



Montante angolare 90° girevole /
Swivel 90° angular base

mat col g cod

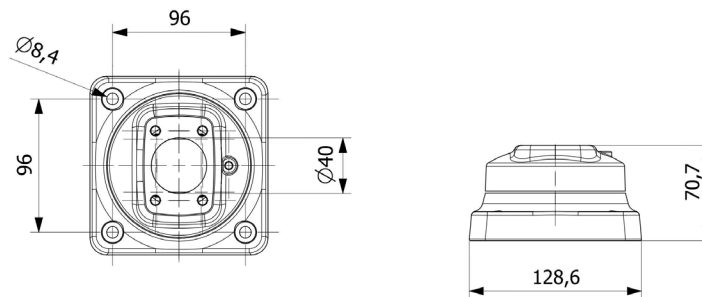
Al 7035/7016 1700 060S070M600



Montante girevole /
Swivel base

mat col g cod

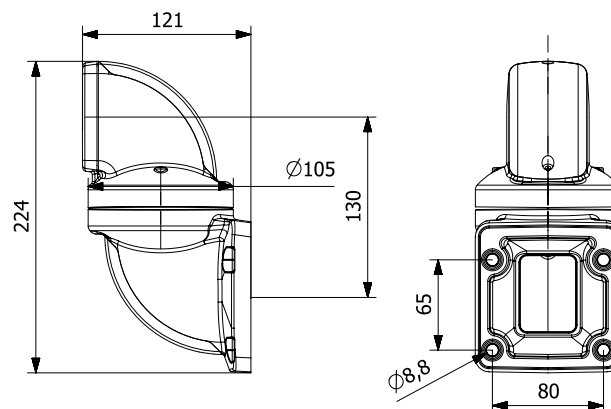
Al 7035 1600 060S070M610



Montante a parete a snodo girevole /
Wall-mount swivel base

mat col g cod

Al 7035/7016 1850 060S070M700



Sistemi di sospensione Linea 70 Suspension systems Line 70

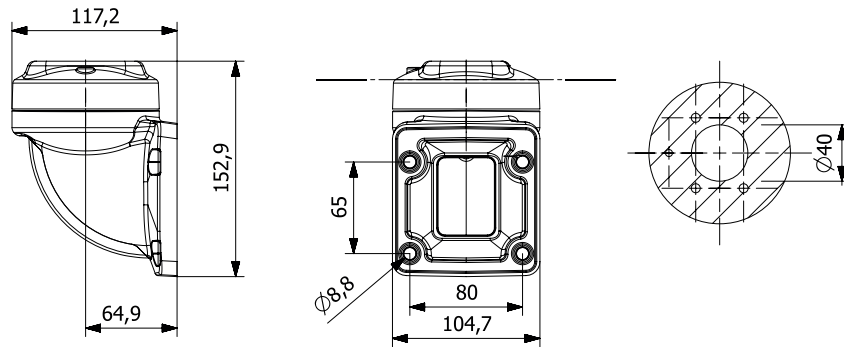
Montanti / Bases



Montante a parete angolare 90° girevole /
Wall-mount swivel 90° angular base

mat col g cod

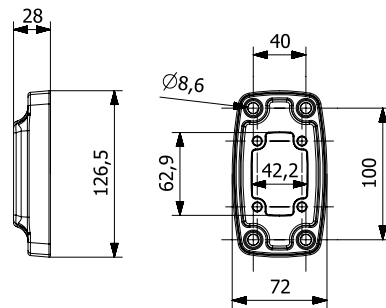
Al 7035/7016 1700 060S070M710



Montante fisso /
Fixed-mount base

mat col g cod

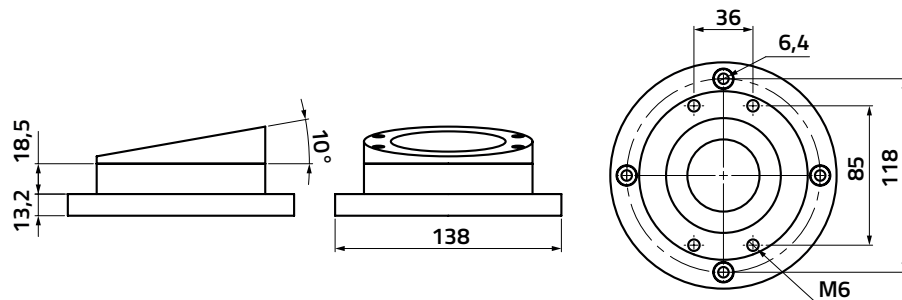
Al 7035 220 060S070M800



Montante diretto girevole inclinato 10° /
Base-mount swivel flange with 10° tilt

mat col g cod

Al 7035 1050 060S070M841



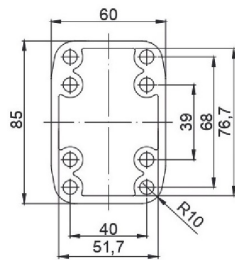
Sistemi di sospensione Linea 85 Suspension systems Line 85

Profilo di alluminio 60X85 / Aluminium profile 60x85



Lunghezza / Length mm 250
Lunghezza / Length mm 350
Lunghezza / Length mm 500
Lunghezza / Length mm 750
Lunghezza / Length mm 1000
Lunghezza / Length mm 1500
Lunghezza / Length mm 2000

mat	col	g	cod
Al	7035	1105	060S085B0250
Al	7035	1547	060S085B0350
Al	7035	2210	060S085B0500
Al	7035	3315	060S085B0750
Al	7035	4420	060S085B1000
Al	7035	5530	060S085B1500
Al	7035	8840	060S085B2000

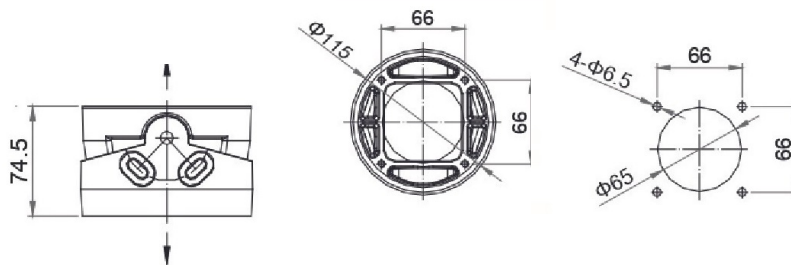


Flange / Flanges



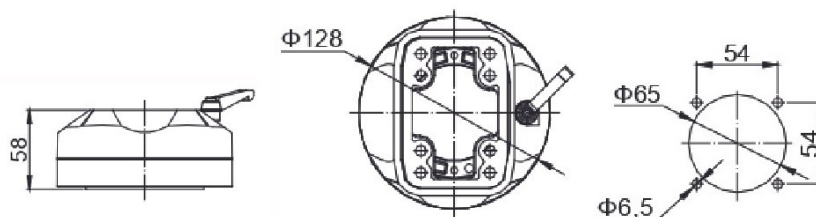
Adattatore per inclinazione regolabile $\pm 15^\circ$ /
Adapter for adjustable tilt $\pm 15^\circ$

mat	col	g	cod
Al	7035	1100	060S085F060



Flangia girevole /
Swivel flange

mat	col	g	cod
Al	7035	935	060S085F090



Sistemi di sospensione Linea 85 Suspension systems Line 85

Flange / Flanges



Flangia angolare 90° girevole/
Swivel 90° angular flange

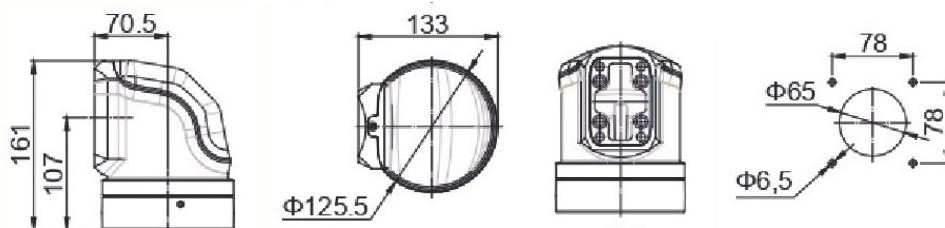
mat col g cod

Al

7035

2580

060S085F150



Adattatore per inclinazione 10°
Adapter for 10° tilt

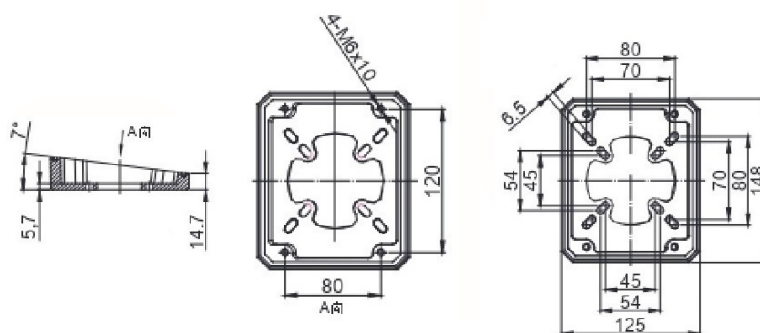
mat col g cod

Al

7035

460

060S085F165

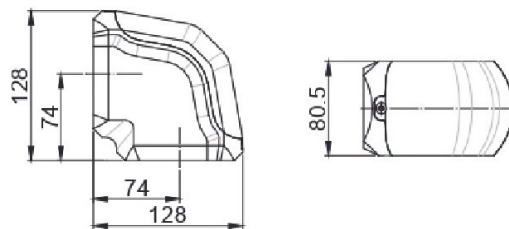


Sistemi di sospensione Linea 85 Suspension systems Line 85

Giunti / Joints



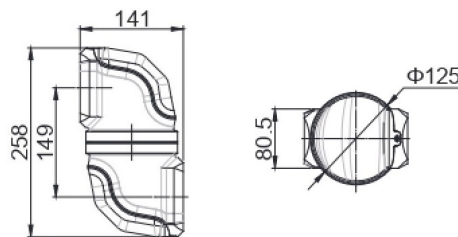
Giunto angolare 90° /
90° angular joint



mat	col	g	cod
Al	7035	923	060S085G100



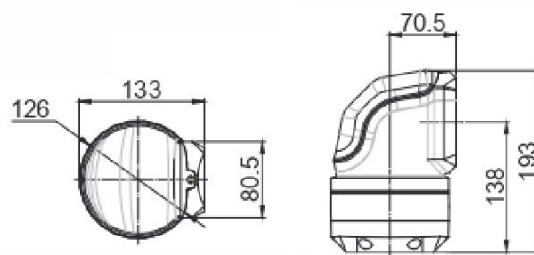
Giunto a snodo girevole /
Swivel joint



mat	col	g	cod
Al	7035	3230	060S085G130



Giunto angolare 90° girevole /
90° angular swivel joint



mat	col	g	cod
Al	7035	2700	060S085G190

Sistemi di sospensione Linea 85 Suspension systems Line 85

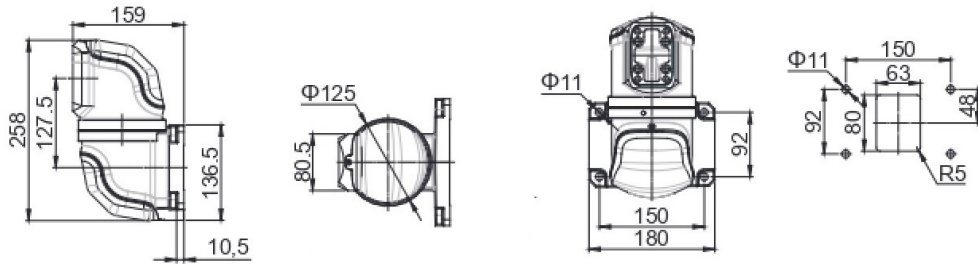
Montanti / Bases



Montante a parete a snodo girevole /
Wall-mount swivel base

mat col g cod

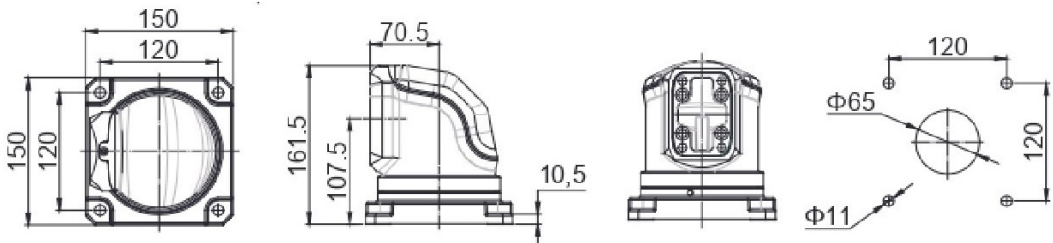
Al 7035 3600 060S085M110



Montante angolare 90° girevole/
Swivel 90° angular base

mat col g cod

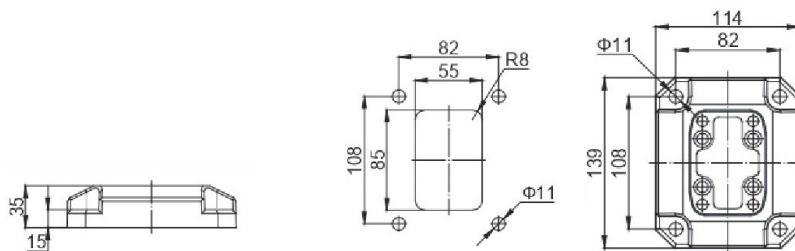
Al 7035 2600 060S085M120



Montante fisso /
Fixed-mount base

mat col g cod

Al 7035 758 060S085M140

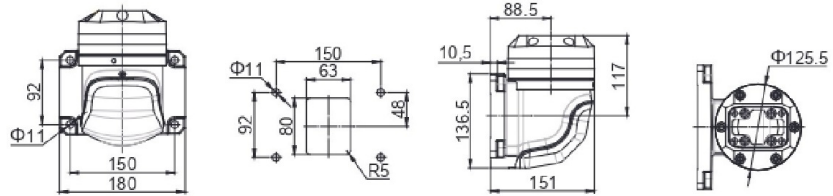


Sistemi di sospensione Linea 85 Suspension systems Line 85

Montanti / Bases



Montante a parete ang 90° girevole /
Wall-mount swivel 90° angular base



mat

col

g

cod

Al

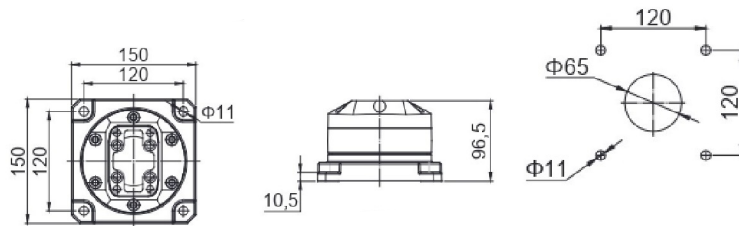
7035

3550

060S085M170



Montante girevole/
Swivel base



mat

col

g

cod

Al

7035

2900

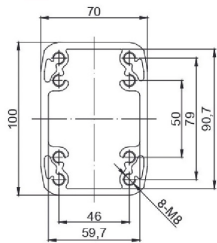
060S085M180

Sistemi di sospensione Linea 100 Suspension systems Line 100

Profilo di alluminio 70X100 / Aluminium profile 70x100

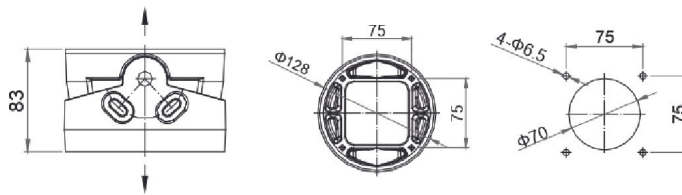


	mat	col	g	cod
Lunghezza / Length mm 250	Al	7035	1247	060S100B0250
Lunghezza / Length mm 350	Al	7035	1745	060S100B0350
Lunghezza / Length mm 500	Al	7035	2494	060S100B0500
Lunghezza / Length mm 750	Al	7035	3741	060S100B0750
Lunghezza / Length mm 1000	Al	7035	4988	060S100B1000
Lunghezza / Length mm 1500	Al	7035	7482	060S100B1500
Lunghezza / Length mm 2000	Al	7035	9976	060S100B2000

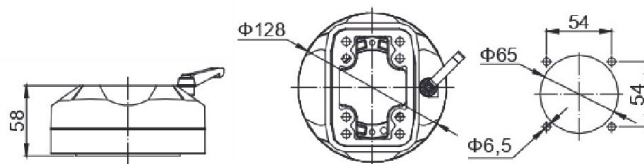


Flange / Flanges

	mat	col	g	cod
Adattatore per inclinazione regolabile $\pm 15^\circ$ / Adapter for adjustable tilt $\pm 15^\circ$	Al	7035	1800	060S100F060



	mat	col	g	cod
Flangia girevole Swivel flange	Al	7035	1033	060S100F090

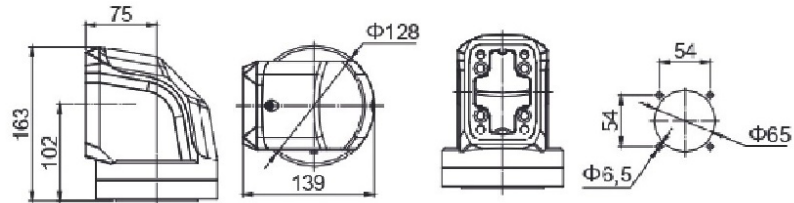


Sistemi di sospensione Linea 100 Suspension systems Line 100

Flange / Flanges



Flangia angolare 90° girevole /
Swivel 90° angular flange



mat

col

g

cod

Al

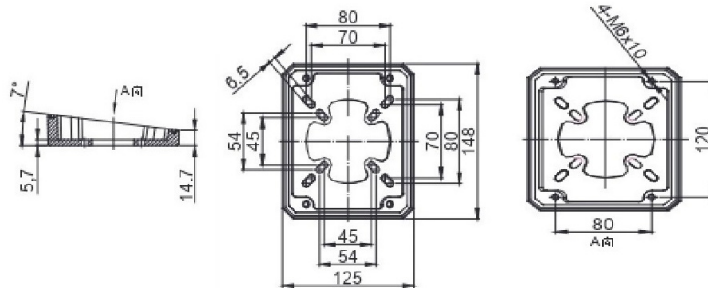
7035

1800

060S100F150



Adattatore per inclinazione 10°
Adapter for 10° tilt



mat

col

g

cod

Al

7035

400

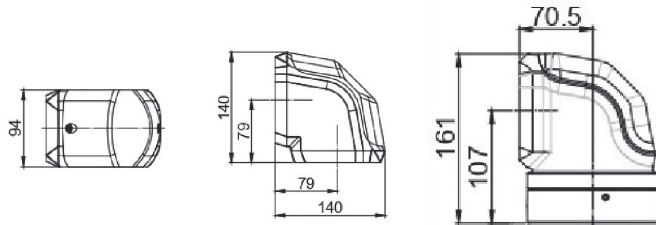
060S100F165

Sistemi di sospensione Linea 100 Suspension systems Line 100

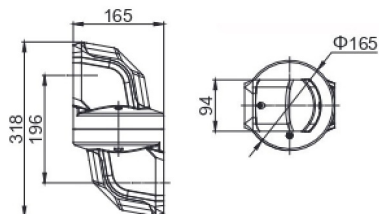
Giunti / Joints

	mat	col	g	cod
Giunto riduzione profilo 100-85 / Reducer joint profile 100-85	Al	7035	-	060S100G070

	mat	col	g	cod
Giunto angolare 90 ° / 90° angular joint	Al	7035	1330	060S100G100



	mat	col	g	cod
Giunto a snodo girevole / Swivel joint	Al	7035	5213	060S100G130



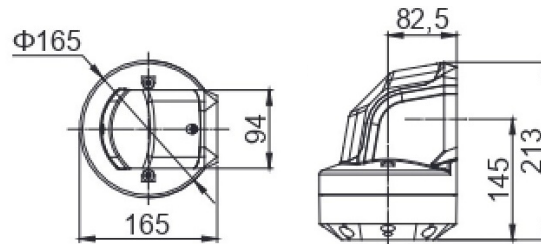
Sistemi di sospensione Linea 100 Suspension systems Line 100

Giunti / Joints



Giunto angolare 90° girevole /
90° angular swivel joint

mat Al col 7035 g 4200 cod 060S100G190

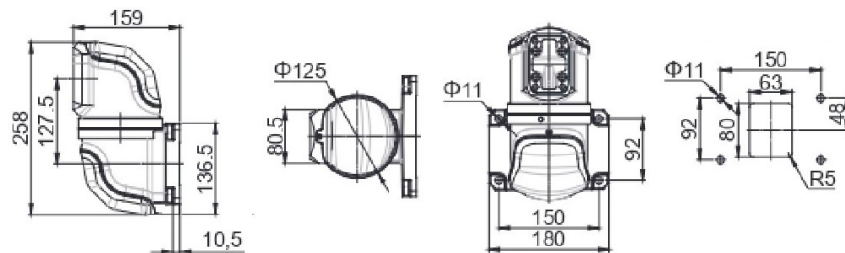


Montanti / Bases



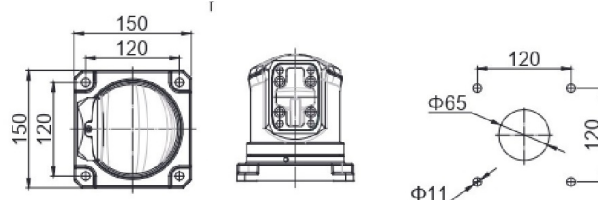
Montante a parete a snodo girevole /
Wall-mount swivel base

mat Al col 7035 g 5918 cod 060S100M110



Montante angolare 90° girevole /
Swivel 90° angular base

mat Al col 7035 g 5165 cod 060S100M120



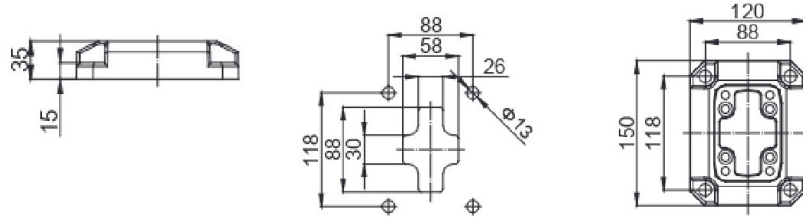
Sistemi di sospensione Linea 100 Suspension systems Line 100

Montanti / Bases



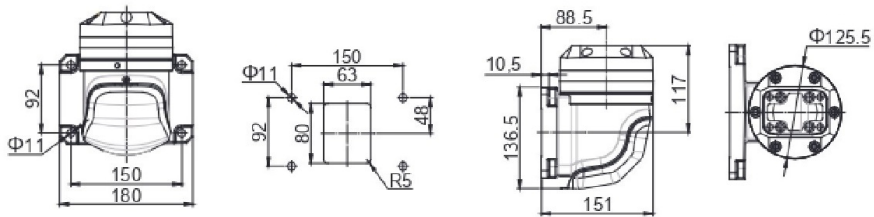
Montante fisso /
Fixed-mount base

mat	col	g	cod
Al	7035	600	060S100M140



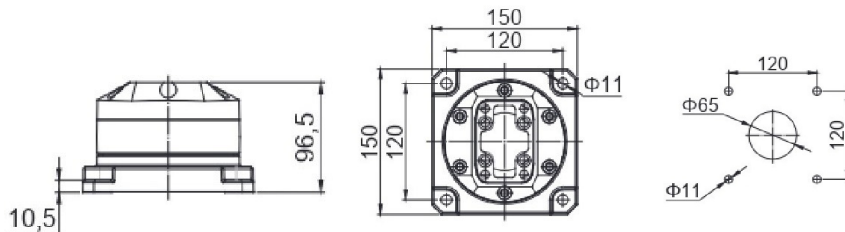
Montante angolare 90° girevole /
Swivel 90° angular base

mat	col	g	cod
Al	7035	5700	060S100M170



Montante girevole/
Swivel base

mat	col	g	cod
Al	7035	4700	060S100M180



Quadri di comando pensili Linea SC

Suspended control panels Line SC

Quadro Alluminio - Aluminium cabinet

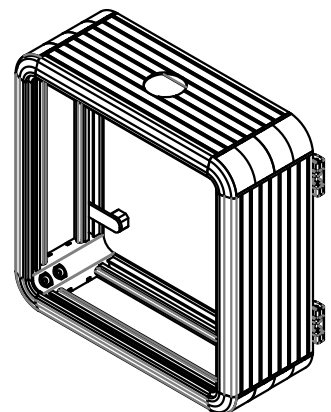
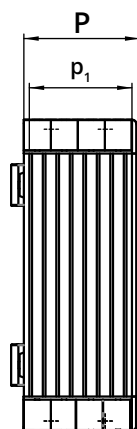
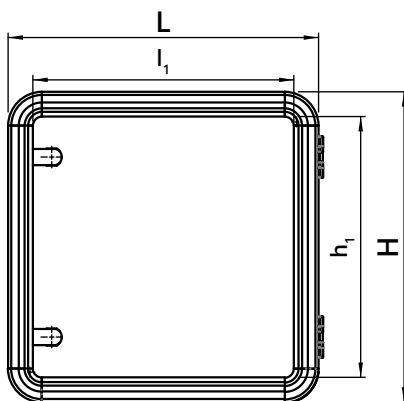


L
H
P
 l_1
 h_1
 p_1
cod

348	348	100	300	300	90	060SC3535-10
448	348	100	400	300	90	060SC4535-10
448	448	100	400	400	90	060SC4545-10
548	448	100	500	400	90	060SC5545-10
548	548	100	500	500	90	060SC5555-10
648	548	100	600	600	90	060SC6555-10
648	648	100	600	600	90	060SC6565-10

348	348	130	300	300	120	060SC3535-13
448	348	130	400	300	120	060SC4535-13
448	448	130	400	400	120	060SC4545-13
548	448	130	500	400	120	060SC5545-13
548	548	130	500	500	120	060SC5555-13
648	548	130	600	600	120	060SC6555-13
648	648	130	600	600	120	060SC6565-13

348	348	160	300	300	150	060SC3535-16
448	348	160	400	300	150	060SC4535-16
448	448	160	400	400	150	060SC4545-16
548	448	160	500	400	150	060SC5545-16
548	548	160	500	500	150	060SC5555-16
648	548	160	600	600	150	060SC6555-16
648	648	160	600	600	150	060SC6565-16



Quadri di comando pensili Linea SC Suspended control panels Line SC

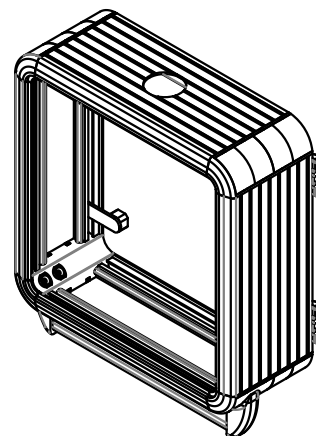
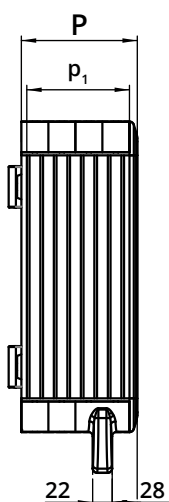
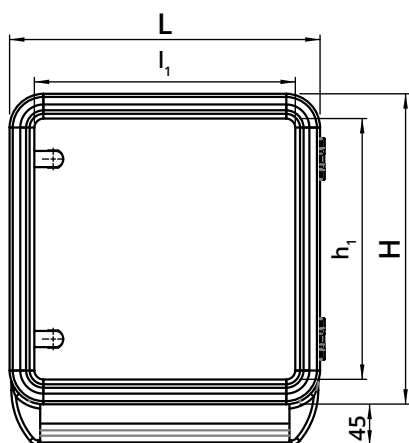
Quadro Alluminio con maniglia inferiore - Aluminium cabinet with low handle



348	348	100	300	300	90	060SC3535-10M1
448	348	100	400	300	90	060SC4535-10M1
448	448	100	400	400	90	060SC4545-10M1
548	448	100	500	400	90	060SC5545-10M1
548	548	100	500	500	90	060SC5555-10M1
648	548	100	600	600	90	060SC6555-10M1
648	648	100	600	600	90	060SC6565-10M1

348	348	130	300	300	120	060SC3535-13M1
448	348	130	400	300	120	060SC4535-13M1
448	448	130	400	400	120	060SC4545-13M1
548	448	130	500	400	120	060SC5545-13M1
548	548	130	500	500	120	060SC5555-13M1
648	548	130	600	600	120	060SC6555-13M1
648	648	130	600	600	120	060SC6565-13M1

348	348	160	300	300	150	060SC3535-16M1
448	348	160	400	300	150	060SC4535-16M1
448	448	160	400	400	150	060SC4545-16M1
548	448	160	500	400	150	060SC5545-16M1
548	548	160	500	500	150	060SC5555-16M1
648	548	160	600	600	150	060SC6555-16M1
648	648	160	600	600	150	060SC6565-16M1



Quadri di comando pensili Linea SC Suspended control panels Line SC

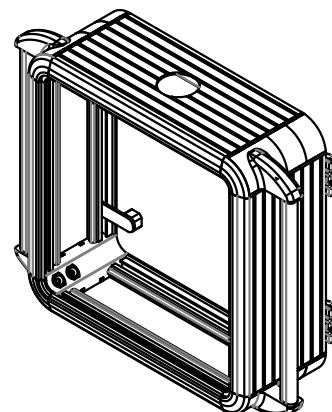
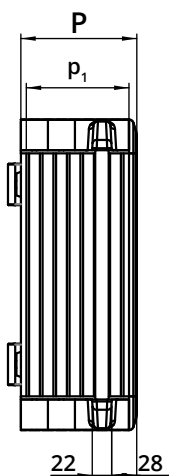
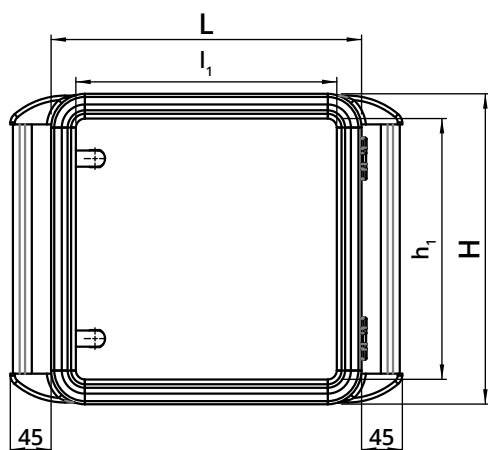
Quadro Alluminio con maniglie laterali - Aluminium cabinet with side handles



348	348	100	300	300	90	060SC3535-10M2
448	348	100	400	300	90	060SC4535-10M2
448	448	100	400	400	90	060SC4545-10M2
548	448	100	500	400	90	060SC5545-10M2
548	548	100	500	500	90	060SC5555-10M2
648	548	100	600	600	90	060SC6555-10M2
648	648	100	600	600	90	060SC6565-10M2

348	348	130	300	300	120	060SC3535-13M2
448	348	130	400	300	120	060SC4535-13M2
448	448	130	400	400	120	060SC4545-13M2
548	448	130	500	400	120	060SC5545-13M2
548	548	130	500	500	120	060SC5555-13M2
648	548	130	600	600	120	060SC6555-13M2
648	648	130	600	600	120	060SC6565-13M2

348	348	160	300	300	150	060SC3535-16M2
448	348	160	400	300	150	060SC4535-16M2
448	448	160	400	400	150	060SC4545-16M2
548	448	160	500	400	150	060SC5545-16M2
548	548	160	500	500	150	060SC5555-16M2
648	548	160	600	600	150	060SC6555-16M2
648	648	160	600	600	150	060SC6565-16M2



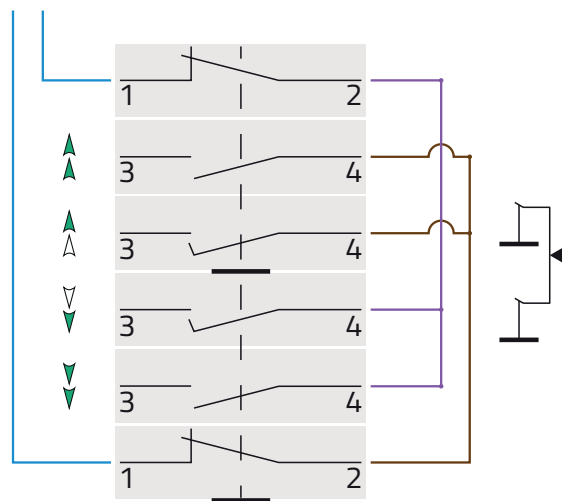
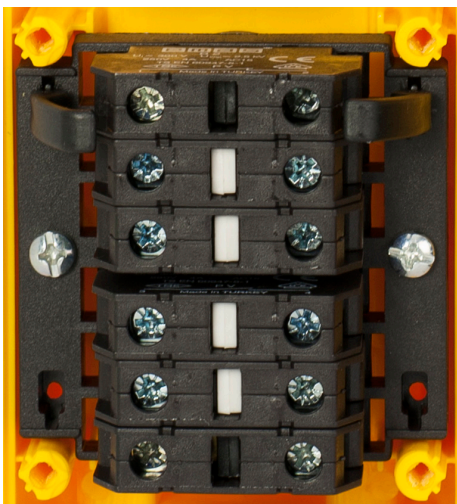
Pulsantiera mobile Hand-held push-button control unit



Fornibili operatori ad una o due velocità
Operators available at one or two speed



Manicotto antitorsione e serracavo antistrappo
Anti-torsion sleeve and tear-proof cable clamp



Coppia di operatori interbloccati meccanicamente ed elettricamente a due velocità
Couple of mechanically and electrically interlocked operators at two speeds

Pulsantiere pensili Pendant push-button stations

Con operatore / With operator

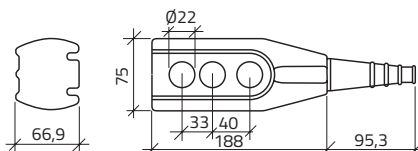
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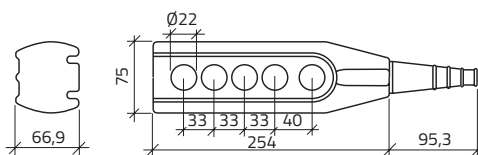
2 operatori + emergenza 1NC / 2 operators + emergency 1NC

Pulsanti a 1 velocità / 1 speed push-buttons	390	060PM2S1
Pulsanti a 2 velocità / 2 speed push-buttons	390	060PM2S2



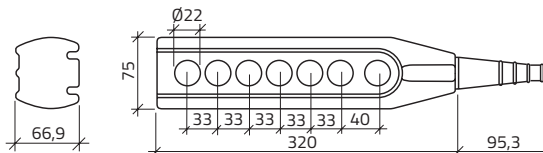
4 operatori + emergenza 1NC / 4 operators + emergency 1NC

Pulsanti a 1 velocità / 1 speed push-buttons	550	060PM4S1
Pulsanti a 2 velocità / 2 speed push-buttons	550	060PM4S2



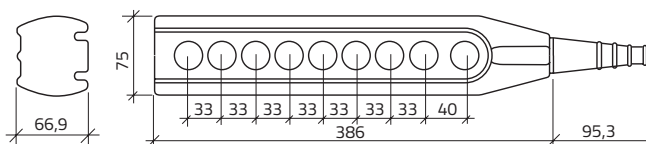
6 operatori + emergenza 1NC / 6 operators + emergency 1NC

Pulsanti a 1 velocità / 1 speed push-buttons	960	060PM6S1
Pulsanti a 2 velocità / 2 speed push-buttons	960	060PM6S2



8 operatori + emergenza 1NC / 8 operators + emergency 1NC

Pulsanti a 1 velocità / 1 speed push-buttons	1070	060PM8S1
Pulsanti a 2 velocità / 2 speed push-buttons	1070	060PM8S2



Caratteristiche tecniche / Technical data

Involucro ABS	Body ABS
Grado di protezione IP65	Degree of protection IP65
Temperatura di esercizio -5°C +125°C	Operating temperature -5°C +125°C

Caratteristiche pulsanti

Durata meccanica	5 x 10 ⁵ cicli di manovra
Durata elettrica	1 x 10 ⁵ cicli di manovra
Tensione nominale Ue	250v AC
Corrente nominale Ia	4 A
Potenze nominali di impiego in AC 15 secondo IEC947-5-1	1000 VA
Tensione di isolamento UI	300V Uimp 2,5 Kv

Push-button performance

Mechanical durability	5 x 10 ⁵ operations
Electrical durability	1 x 10 ⁵ operations
Rating operating voltage Ue	250v AC
Rating operating current Ia	4 A
Rated switching power according to IEC947-5-1	1000 VA
Insulation Voltage UI	300V Uimp 2,5 Kv





UL LISTED
14498

COMBINATION MOTOR CONTROLLER
 MANUAL SELF-PROTECTED COMBINATION MOTOR CONTROLLER
 SHORT CIRCUIT RATING: RMS, 8V/8 1000A 240V, 650A 480V/377V, 260A 600V/347V

UL LISTED
14498

MANUAL MOTOR CONTROLLER
 SUITABLE FOR TYP CONDUCTOR PROTECTED MOTOR CIRCUITS AND FALL-TO-REST INSTALLATION. 800V MAX. FUSE OR CIR BREAKER SHORT CIRCUIT CURRENT RATING: RMS, 8V/8 650A 480V, 260A 600V

V AC	115	200	250	480	575
3PH 1PH	-	-	-	-	-
1PH 1PH	-	-	-	-	-

WIRING RANGE
 18.5 IN. 1/4 IN TO 3 AWG
 18.5 IN. 1/4 IN TO 2 AWG

WARNING
 IF AN OVER-CURRENT OR A FAULT CURRENT INTERRUPTION OCCURS, CIRCUITS MUST BE CHECKED TO DETERMINE IF AN OVER-CURRENT OR THE INTERRUPTION OF A FAULT CONDITION EXISTS. THE CURRENT-CARRYING COMPONENTS SHOULD BE EXAMINED AND REPLACED IF DAMAGED. AND THE INTERNAL CURRENT SENSORS MUST BE REPLACED TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK. THE USER MUST FOLLOW THE INSTRUCTIONS FOR SELECTION OF OVERLOAD AND GROUND FAULT PROTECTION. AND GROUND FAULT PROTECTION MUST BE FOLLOWED TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK.

LS CONTACTOR 9A

10	15	20	25	30	35	40	45	50	60	70	80	90	100
10	15	20	25	30	35	40	45	50	60	70	80	90	100
10	15	20	25	30	35	40	45	50	60	70	80	90	100

CE **UL** **CCC**

UL LISTED
14498

CONTACTOR
 1000A 240V, 650A 480V/377V, 260A 600V/347V

WARNING
 IF AN OVER-CURRENT OR A FAULT CURRENT INTERRUPTION OCCURS, CIRCUITS MUST BE CHECKED TO DETERMINE IF AN OVER-CURRENT OR THE INTERRUPTION OF A FAULT CONDITION EXISTS. THE CURRENT-CARRYING COMPONENTS SHOULD BE EXAMINED AND REPLACED IF DAMAGED. AND THE INTERNAL CURRENT SENSORS MUST BE REPLACED TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK. THE USER MUST FOLLOW THE INSTRUCTIONS FOR SELECTION OF OVERLOAD AND GROUND FAULT PROTECTION. AND GROUND FAULT PROTECTION MUST BE FOLLOWED TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK.

ELFIN
 TERMINALS ONLY
 090MU-45

090

**CONTATTORI, RELÈ TERMICI,
MINI CONTATTORI,
INTERRUTTORI SALVAMOTORE**

**CONTACTORS, THERMAL O/L
RELAYS, MINICONTACTORS,
MANUAL MOTOR STARTERS**



Nuova linea di contattori

New line of contactors



L La NEW ELFIN propone una nuova linea di contattori caratterizzati da una estrema modularità. L'ampia gamma di accessori in comune alle differenti taglie di potenza permette di gestire il lavoro in modo più funzionale e ottimizzare i costi al contrario di quanto l'offerta del mercato può mantenere.

N NEW ELFIN proposes a new line of contactors, characterized by an exceptional modularity. The wide range of accessories in common among different power sizes, allow you to work in a more functional way optimizing costs and time.

SENZA UTENSILI

L'installazione dei contattori e la sostituzione della bobina sono estremamente semplici e non necessitano di **utensili** per il montaggio.

NO TOOLS

The contactors installation and the coils replacement are very easy operations and do not require special **tools**.

DIMENSIONI

Le **dimensioni** estremamente compatte dei contattori offrono una maggiore facilità di installazione anche in situazioni particolarmente difficili. L'installatore troverà quindi indubbi vantaggi sia in fase di progettazione che realizzazione.

DIMENSIONS

Thanks to the very compact **dimensions** of the contactors installation procedure is very easy, even in particularly difficult situations. The operator responsible for their installation will gain huge benefits during both design and implementation phases.

PESO

Contrariamente a quanto è richiesto ad altre tipologie di prodotti, per i contattori il **peso** è una qualità determinante. Infatti a maggior peso corrisponde una migliore efficienza e una garanzia di lunga operatività nel tempo.

WEIGHT

Unlike what is required by other types of products, **weight** is an important aspect for contactors, with greater weight corresponding to increased efficiency and long operational life.

PREZZO

A parità di serie i relè hanno un prezzo comune per favorire una più snella gestione degli acquisti. Una opportunità da non sottovalutare facendo riferimento in particolare al range di prezzi offerti attualmente dal mercato.

PRICE

Relays in series of the same level cost the same, in order to streamline the management of purchases. This is an opportunity to be taken into serious consideration, making particular reference to the price range currently offered by the market.

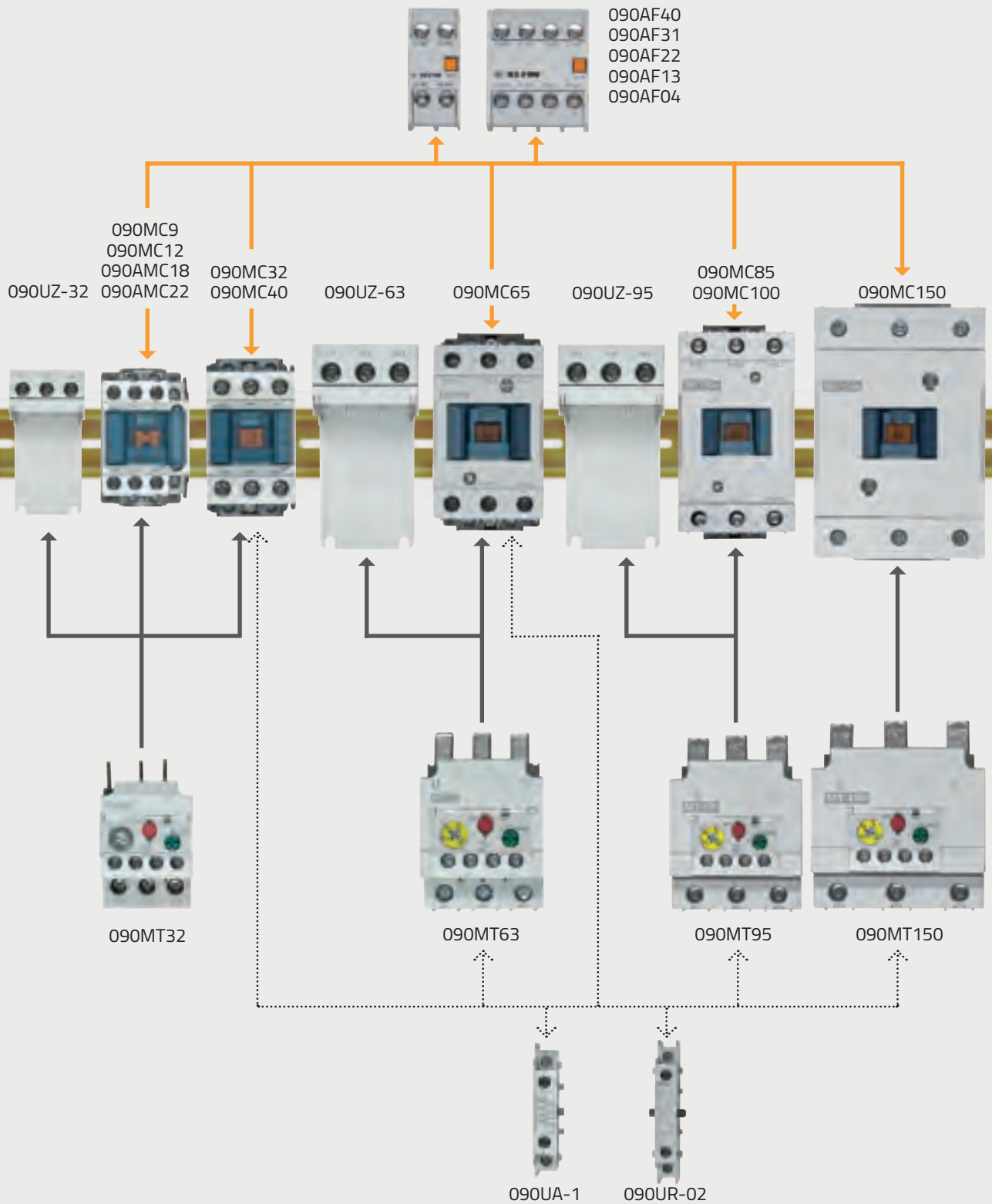
DURATA

La **durata** nel tempo è fondamentale per garantire un flusso di lavoro costante ed un'ottimizzazione dell'investimento: i contattori NEW ELFIN garantiscono una media di 25 milioni di cicli come vita meccanica e 2,5 milioni come vita elettrica, queste caratteristiche pongono i nostri contattori al top della produzione mondiale.

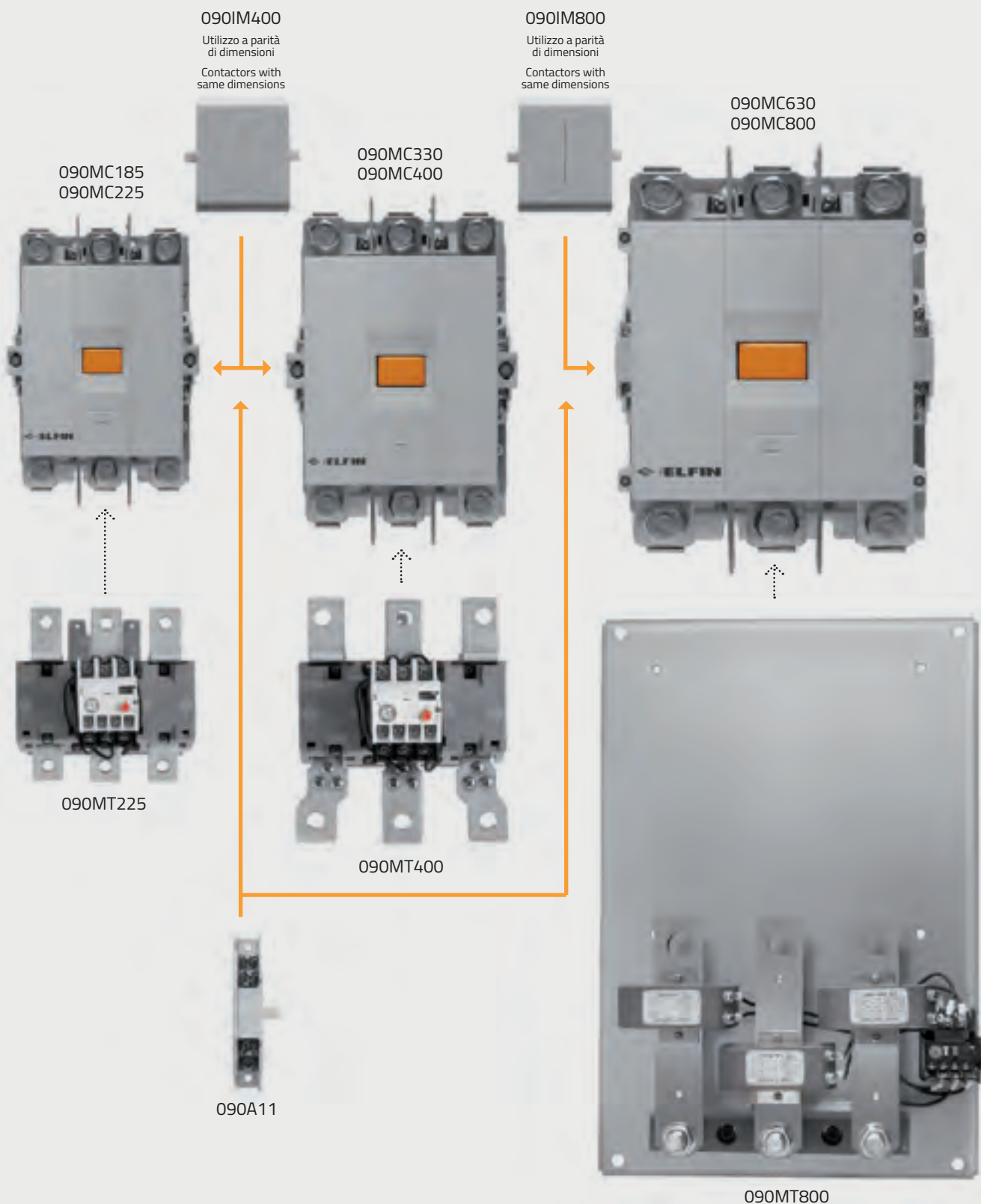
DURATION

Duration is fundamental in order to guarantee a constant work flow and optimise the investment: NEW ELFIN contactors guarantee an average of 25,000,000 cycles of mechanical life and 2,500,000 cycles of electrical life. These characteristics place our contactors at the top of the international production.

Layout Layout



Layout Layout



Introduzione

Introduction

La norma definisce il contattore come un dispositivo elettromeccanico di manovra, generalmente previsto per un numero elevato di manovre, avente una sola posizione di riposo, ad azionamento non manuale, in grado di stabilire, portare e interrompere correnti in condizioni normali del circuito, incluse le condizioni di sovraccarico e manovra. La forza per la chiusura dei contatti principali normalmente aperti o per l'apertura dei contatti normalmente chiusi è fornita da un elettromagnete. Nelle pagine a seguire trovate una serie di informazioni utili per ottimizzare la scelta del contattore necessario a risolvere il problema specifico di impiego.



The standard describes the contactor as an electromechanical manoeuvring device, generally designed for a high number of operations, with just one idle position which is non-manually activated, capable of making carrying and breaking currents under normal circuit conditions, including overloading and operating conditions. The force required to close the main contacts which are normally open or to open contacts which are normally closed is supplied by an electromagnet. On the following pages you will find a series of useful information for choosing the best contactor for your specific requirements



COME DIMENSIONARE UN CONTATTORE

Per effettuare il corretto dimensionamento di un contattore occorre tenere conto di alcuni fattori:

- categorie di utilizzazione che identificano la tipologia del carico
- della vita elettrica
- del numero di manovre / ora

HOW TO DIMENSION A CONTACTOR

In order to correctly dimension a contactor, several factors have to be considered:

- the categories of use which identify the type of load
- the electrical life
- the number of operations per hour

Categorie d'impiego

Utilization categories

La normativa stabilisce delle categorie di utilizzazione riferite ad impieghi ben precisi dei contattori. Tali categorie sono riportate nella tabella seguente.

The standard establishes several categories of use referred to precise uses of contactors. These categories are listed in the following table.

Contattori / Contactors		Contattori / Contactors		
CORRENTE ALTERNATA / ALTERNATING CURRENT	AC-1	Carichi non induttivi o debolmente induttivi, forni a resistenza Non inductive or slightly inductive loads, resistance furnaces	DC-1	Carichi non induttivi o debolmente induttivi, forni a resistenza Non inductive or slightly inductive loads, resistance furnaces
	AC-2	Motori ad anelli: avviamento, arresto Slip-ring motors: starting and switching off		
	AC-3	Motori a gabbia: avviamento, arresto del motore durante la marcia Squirrel cage motors: starting switching off motors during running	DC-3	Motori in derivazione: avviamento, frenatura in controcorrente, manovre a impulsi. Frenatura dinamica di motori in corrente continua Shunt-motors: starting - plugging - inching. Dynamic breaking of D.C. motors
	AC-4	Motori a gabbia: avviamento, frenatura in controcorrente, manovra a impulsi Squirrel cage motors: starting plugging - inching		
	AC-5a	Comando di lampade a scarica Switching of electric discharge lamp controls	DC-5	Motori in serie: avviamento, frenatura in controcorrente, manovre a impulsi. Frenatura dinamica di motori in corrente continua Series motors: starting - plugging - inching. Dynamic braking of D.C. motors
	AC-5b	Comando di lampade ad incandescenza Switching of incandescent lamps		
	AC-6a	Comando di trasformatori Switching of transformers		
	AC-6b	Comando di batterie di condensatori Switching of capacitors banks		
	Circuiti ausiliari / Switching elements			
	AC-12	Comando di carichi ohmici e semiconduttori con opto separazione Control of resistive loads and solid state loads with isolation by opto couples	DC-12	Comando di carichi ohmici e semiconduttori con opto separazione Control of resistive loads isolation by opto couples
AC-13	Comando di semiconduttori con trasformatore di separazione Control of solid state loads with transformer isolation	DC-13	Comando di elettromagneti Electromagnet control	
AC-14	Comando di piccoli carichi elettromagnetici (max 72 VA), quali bobine di piccoli conduttori o elettrovalvole Control of small electromagnetic loads (<72VA)	DC-14	Comando di carichi elettromagnetici con resistenza di risparmio sul circuito ausiliario Control of electromagnetic loads having economic resistors in circuit	
AC-15	Comando di carichi elettromagnetici (oltre 72VA) Control of electromagnetic loads (>72VA)			
		CORRENTE CONTINUA / DIRECT CURRENT		



Categorie d'impiego Utilization categories

Categoria
Category **Minimi (50 cicli)**
Minimum (50 cycles) **Ordinari (6000 cicli)**
Standard (6000 cycles)

	Inserzione / Making	Interruzione / Making	Inserzione / Making	Interruzione / Making
AC-1	1,5 x I _n	1,5 x I _n	1 x I _n	1 x I _n
AC-2	4 x I _n	4 x I _n	2 x I _n	2 x I _n
AC-3	10 x I _n	8 x I _n	2 x I _n	2 x I _n
AC-4	12 x I _n	10 x I _n	6 x I _n	6 x I _n
AC-5a	3 x I _n	3 x I _n	2 x I _n	2 x I _n
AC-5b	1,5	1,5 x I _n	1 x I _n	1 x I _n
AC-6a	-	-	-	-
AC-6b	-	-	-	-
DC-1	1,5 x I _n	1,5 x I _n	1 x I _n	1 x I _n
DC-3	4 x I _n	4 x I _n	2,5 x I _n	2,5 x I _n
DC-5	4 x I _n	4 x I _n	2,5 x I _n	2,5 x I _n



AC-1

Questa categoria prevede inserzione, mantenimento e disinserzione di una data corrente nominale. Quindi oltre al comando di carichi ohmici, questa categoria può essere utilizzata per carichi elettricamente equivalenti quali softstarters ed inverter (contattore di linea manovra a vuoto) e nella distribuzione di energia.

This category provides for make, maintenance and break of a given nominal current. Therefore, in addition to the control of resistive loads, this category can be used for electrically equivalent loads, such as softstarters and inverters (no-load operation for line contactor) and to distribute power.



AC-2

AC-3

I contattori classificati in AC-3 possono essere utilizzati per occasionali manovre a impulso e/o frenature in controcorrente per brevi periodi (max. 5 op./min. e minore di 10 op./in 10min).

AC-3 Contactors classified in AC-3 can be used for occasional inching operations and/or plugging for short periods of time (max. 5 op./min. and less than 10 op./in 10 min.).

AC-4

È la categoria più gravosa in assoluto, infatti il contattore risulta estremamente sollecitato perché oltre a inserire la corrente di spunto deve anche interromperla.

This is the most stressful category of all. The contactor undergoes tremendous stress as it is used both to make the initial current and to break it.

SEZIONI / SECTIONS

	AC-1			AC-2			AC-3			AC-4	
	(I _{th}) [A]	200-220V [kW] [A]	380-440V [kW] [A]	500-550V [kW] [A]	200-220V [kW] [A]	380-440V [kW] [A]	500-550V [kW] [A]	690V [kW] [A]	200-200V [kW] [A]	380-440V [kW] [A]	
9	20	2.5 11	4 9	4 7	2.5 11	4 9	4 7	4 5	1.5 8	2.2 6	
12	20	3.5 13	5.5 12	7.5 12	3.5 13	5.5 12	7.5 12	7.5 9	2.2 11	4 9	
18	25	4.5 18	7.5 18	7.5 13	4.5 18	7.5 18	7.5 13	7.5 9	3.7 18	4 9	
22	32	5.5 22	11 22	15 22	5.5 22	11 22	15 22	15 18	3.7 18	5.5 13	
32	50	7.5 32	15 32	18.5 28	7.5 32	15 32	18.5 28	18.5 20	4.5 20	7.5 17	
40	60	11 40	18.5 40	22 32	11 40	18.5 40	22 32	22 23	5.5 25	11 24	
50	80	15 55	22 50	30 43	15 55	22 50	30 43	30 28	7.5 35	15 32	
65	100	18.5 65	30 65	37 60	18.5 65	30 65	33 60	33 35	11 50	22 47	
75	110	22 75	37 75	45 64	22 75	37 75	37 64	37 42	13 55	25 52	
85	135	25 85	45 85	45 75	25 85	45 85	45 75	45 45	15 65	30 62	
100	150	30 105	55 105	55 85	30 105	55 105	55 85	55 65	19 80	37 75	
125	150	37 125	60 120	60 90	37 125	60 120	60 90	60 70	22 93	45 90	
150	200	45 150	75 150	90 140	45 150	75 150	90 140	90 100	30 125	55 110	
180	230	55 180	90 180	110 180	55 180	90 180	110 180	110 120	37 150	75 150	
220	260	75 220	132 220	132 200	75 250	132 250	132 200	132 150	45 180	90 180	
300	350	90 300	160 300	160 250	90 300	160 300	160 250	200 220	55 220	110 220	
400	420	125 400	220 400	225 350	125 400	220 400	225 350	250 300	75 300	150 300	
600	660	190 630	330 630	330 500	190 630	330 630	330 500	330 420	110 400	200 400	
800	800	220 800	440 800	500 720	220 800	440 800	500 720	500 630	160 630	300 630	



Categorie d'impiego

Utilization categories



COMANDO LAMPADE A FLUORESCENZA

Nelle lampade a fluorescenza non rifasate la corrente d'inserzione è circa due volte la corrente nominale del circuito con tempi di accensione fino a 10s. Il contattore va scelto con I_{nom} in AC 1 moltiplicata per un fattore pari a 1,3 o 1,4. Nelle lampade a fluorescenza rifasate la presenza del condensatore riduce il tempo di accensione a pochi secondi ma si ha una corrente d'inserzione pari a 20 volte la corrente nominale del circuito a causa della carica del condensatore: il contattore deve essere pertanto scelto con una I_{nom} in AC1 \leq a $20 \times I_{nom}$ del circuito. Se la lampada è dotata di alimentatore elettronico per l'accensione la corrente d'inserzione è pari a 10 volte la corrente nominale del circuito con tempi d'accensione intorno a qualche secondo. Il contattore va scelto con I_{nom} in AC 1 moltiplicata per un fattore pari a 1.2 o 1.3.

FLUORESCENT LAMP CONTROL

With fluorescent lamps where the power factor has not been corrected, the making current is about twice the nominal current of the circuit with starting times up to 10s. The contactor must be chosen with I_{nom} in AC 1, multiplied by a factor of 1.3 or 1.4. With fluorescent lamps where the power factor has been corrected the presence of the capacitors reduces the starting time to a few seconds but has a making current which is 20 times the nominal current of the circuit due to the charge of the capacitors. The contactor must be \leq than $20 \times I_{nom}$ circuit. If the lamp has an electronic feeder for starting up, the start current is 10 times the nominal current of the circuit with starting times of a few seconds. The contactor must be chosen with I_{nom} in AC 1, multiplied by a factor of 1.2 or 1.3.

		100V						200V													
Corrente nominale Nominal current		40		60		80		110		220		40		60		80		110		220	
Potenza / Power [W]		1		2		1		1		2		1		1		2		1		1	
N. di lampade / No. of lamp		1	2	1	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1
Start current (A)		0.95(1.2)	0.96(1)	0.92	1.17	1.55	2.5	2.7	0.29(0.6)	0.48(0.55)	0.46	0.58	0.78	1.3	1.38	2.5					
SEZIONI / SECTIONS	9	18(9)	11(10)	12	9	7	4	4	37(18)	22(20)	23	19	14	8	8	4					
	12	22(10)	13(11)	14	11	8	5	4	44(21)	27(23)	28	22	16	10	9	5					
	18	30(15)	18(16)	19	15	11	7	6	62(30)	37(32)	39	31	23	13	13	7					
	22	32(15)	19(17)	20	16	12	7	7	65(31)	39(34)	41	32	24	14	14	7					
	32	44(21)	27(23)	28	22	16	10	9	89(43)	54(47)	56	44	33	20	19	10					
	40	59(29)	36(31)	38	29	22	14	13	120(58)	72(63)	76	60	44	26	25	14					
	50	84(41)	52(45)	54	42	32	20	18	172(83)	104(90)	108	86	64	38	37	20					
	65	110(54)	67(59)	70	55	41	26	24	224(108)	135(118)	141	112	83	50	48	26					

COMANDO LAMPADE A VAPORI DI MERCURIO

Nelle lampade non rifasate la corrente d'inserzione è circa due volte la corrente nominale del circuito con tempi di accensione fino a 5min. Il contattore va scelto con I_{nom} in AC 1 pari alla corrente d'inserzione. Nelle lampade rifasate si ha una corrente d'inserzione pari a 20 volte la corrente nominale del circuito e i tempi di accensione ridotti. Il contattore va scelto con I_{nom} in AC 1 tenendo conto che il potere di chiusura deve essere \geq a $20 \times I_{nom}$ circuito.

MERCURY VOPOUR LAMP CONTROL

With lamps where the power factor has not been corrected, the making current is about twice the nominal current of the circuit with starting times up to 5 minutes. The contactor must be chosen with I_{nom} in AC 1, equal to the making current. With lamps where the power factor has been corrected, the start current is 20 times the nominal current of the circuit with reduced starting times. The contactor must be chosen with I_{nom} in AC 1 considering that the closing power must be \geq than $20 \times I_{nom}$ circuit.



Categorie d'impiego

Utilization categories

Corrente nominale Nominal current		100V Lampada con basso/alto cos 100V Lamp with low/high cos								200V Lampada con basso/alto cos 200V Lamp with low/high cos							
Potenza / Power [W]		40	100	200	250	300	400	700	1000	40	100	200	250	300	400	700	1000
Start current (A)		1.25	2.6	4.6	5.1	6.0	8.0	14.5	21	0.53	1.0	1.9	2.1	2.5	3.3	5.9	8.5
		(0.55)	(1.4)	(2.6)	(3.0)	(3.7)	(4.9)	(8.5)	(12)	(-)	(0.65)	(1.2)	(1.5)	(1.8)	(2.3)	(4.1)	(5.8)
SEZIONI / SECTIONS	9	8(20)	4(7)	2(4)	2(3)	1(2)	1(1)	-(-)	-(-)	20(-)	11(16)	5(9)	5(7)	4(6)	3(4)	1(2)	1(1)
	12	10(23)	5(9)	2(5)	2(4)	2(3)	1(1)	-(-)	-(-)	24(-)	13(20)	6(10)	6(8)	5(7)	3(5)	2(3)	1(2)
	18	14(32)	6(12)	3(6)	3(6)	3(4)	2(3)	1(2)	-(-)	33(-)	18(27)	9(15)	8(12)	7(10)	5(7)	3(3)	2(3)
	22	15(34)	7(13)	4(7)	3(6)	3(5)	2(3)	1(2)	-(-)	35(-)	19(29)	10(15)	9(12)	7(10)	5(8)	3(4)	2(3)
	32	20(47)	10(18)	5(10)	5(8)	4(7)	3(5)	1(3)	1(2)	49(-)	25(40)	13(21)	12(17)	10(14)	7(11)	4(6)	3(4)
	40	28(63)	13(25)	7(13)	6(11)	5(9)	4(7)	2(4)	1(2)	66(-)	35(53)	18(29)	16(23)	14(19)	10(15)	5(8)	4(6)
	50	40(90)	19(35)	10(19)	9(16)	8(13)	6(10)	3(5)	2(4)	94(-)	50(76)	26(41)	23(33)	20(27)	15(21)	8(12)	6(8)
65	52(118)	25(46)	14(25)	12(21)	10(17)	8(13)	4(7)	3(5)	122(-)	65(100)	34(54)	30(43)	26(36)	19(28)	11(15)	7(11)	



AC-5a

COMANDO LAMPADE A VAPORI DI SODIO

Sono lampade con tempi di accensione fino a 5 min. con una corrente d'inserzione pari a 1.7-2.2 volte la corrente nominale del circuito. Il contattore va scelto in AC 1 pari alla corrente d'inserzione. Es.:
Im circ. = 20A

I contattore = 20A * 2.2 = 44A
090C32 con 50A AC-1

SODIUM VOPOUR LAMP CONTROL

These are lamps with starting times f up to 5 min. with a start current of 1.7 - 2.2 times the nominal current of the circuit. The contactor must be chosen with inom. in AC 1, equal to the start current. Es.:
Im circ. = 20A

I contactor = 20A * 2.2 = 44A
090C32 with 50A AC-1



AC-5b

COMANDO LAMPADE AD INCANDESCENZA

Queste lampade hanno una corrente d'inserzione di circa 15 volte la corrente nominale del circuito che si annulla dopo pochi millisecondi. Il picco è dovuto al brusco passaggio del filamento da freddo con altissima resistenza a caldo con bassissima resistenza. Il contattore va scelto con Inom in AC 1 e tenendo conto che il potere d'interruzione deve essere ≥ alla corrente d'inserzione.

INCANDESCENT LAMP CONTROL

These lamps have a making current which is about 15 times the nominal current of the circuit and which is cancelled after a few milliseconds. The peak is due to the sharp passage of the filament from cold with very high resistance to hot with very low resistance. The contactor must be chosen with inom. in AC 1 and taking into account that the breaking capacity must be ≥ than the making current.

Corrente d'impiego Rated operational current [A]		100V (n. di lampade) 100V (n. lamps)								200V (n. di lampade) 200V (n. lamps)							
Potenza / Power [W]		100	150	200	250	300	500	1000	1500	100	150	200	250	300	500	1000	1500
SEZIONI / SECTIONS	9	11	7	5	4	3	2	1	-	22	14	11	8	7	4	2	1
	12	13	8	6	5	4	2	1	-	26	17	13	10	8	5	2	1
	18	18	12	9	7	6	3	1	1	36	24	18	14	12	7	3	2
	22	19	12	9	7	6	3	1	1	38	25	19	15	12	7	3	2
	32	26	17	13	10	8	5	2	1	52	34	26	20	17	10	5	3
	40	35	23	17	14	11	7	3	2	70	46	35	28	23	14	7	4
	50	50	33	25	20	15	10	5	3	100	66	50	40	33	20	10	6
65	65	42	32	26	19	13	6	4	130	85	65	52	42	26	13	8	

Categorie d'impiego

Utilization categories



AC-6a

COMANDO DI TRASFORMATORI

L'inserzione di trasformatori è contraddistinta da un picco d'inserzione che può arrivare fino a 30 x In dovuto ad un elevato assorbimento di correnti magnetizzanti. Ovviamente nel dimensionamento del contattore occorre che il potere d'interruzione sia \geq alla corrente d'inserzione. Questa tabella è applicabile quando la corrente d'inserzione è inferiore a 20 In circuito.

TRASFORMER CONTROL

The connection of transformers is distinguished by a start peak which can reach 30 x In. due to high absorption of magnetising current. Obviously when dimensioning the contactor it is necessary for the breaking capacity to be \geq than the making current.

Monofase Mono phase

Trifase Tri phase

SEZIONI / SECTIONS

	220V		440V		220V		440V	
	[kVA]	[A]	[kVA]	[A]	[kVA]	[A]	[kVA]	[A]
9	1	5	1.5	3	2	5	2.5	3
12	1.5	7.5	2	5	3	7.5	4	5
18	2	9	3	7	3.5	9	5	7
22	2.5	10	4	9.5	4	10	7.5	9.5
32	3	13	5	12	5	13	10	12
40	4	17	7.5	16	6.5	17	12	16
50	5	25	10	24	10	25	18	24
65	7	32	15	32	12	32	25	32
75	8	35	17	35	13	35	27	35
85	9	40	18	40	15	40	30	40
100	10	46	20	45	18	46	35	45
125	15	62	25	55	25	62	42	55
150	17	75	33	75	30	75	60	75
180	20	90	40	90	35	90	70	90
220	25	110	50	110	42	110	85	110
300	33	150	57	130	57	150	100	130
400	44	200	90	200	75	200	150	200
600	65	300	130	300	110	300	250	300
800	90	400	175	400	150	400	300	400



Categorie d'impiego

Utilization categories



AC-6b

COMANDO DI CONDENSATORI

L'utilizzo dei condensatori negli impianti di rifasamento è caratterizzato da picchi di corrente che il carico capacitivo impone alla rete all'atto dell'inserzione. Si possono comandare condensatori singoli o batterie. Nel caso di più di una batteria di condensatori i singoli gradini vengono inseriti in parallelo uno con l'altro, si ha così una sorgente addizionale di energia dovuta al trasferimento di energia della batteria sotto tensione a quella messa in servizio. Questo rappresenta un carico supplementare per il contattore. Occorre prevedere quindi l'utilizzo di induttanze e resistenze per aumentare il carico ammissibile al contattore. Le induttanze smorzano le sollecitazioni che nascono quando si inseriscono dei condensatori in parallelo ad altri già collegati in rete e carichi (inserimento a gradini). Le resistenze proteggono i contatti di potenza del contattore durante l'inserzione del condensatore garantendo la vita elettrica dei circuiti. I contattori per comando di condensatori hanno una vita elettrica inferiore a quelli per il comando dei motori a causa del maggior consumo dei contatti di potenza dovuto all'interruzione di corrente altamente sfasata con $\cos\phi$ tendenti a zero. Occorre quindi fare attenzione al picco di corrente durante l'inserzione.

CAPACITORS CONTROL

The use of capacitors in power factor correction systems is characterised by peaks of current which the capacitive charge imposes on the network when power is started. It is possible to control single capacitors or batteries of capacitors. In the case of more than one battery of capacitors to be connected separately, an additional source of power is created due to the transfer of power from the empowered battery to the one placed into service.

This represents a supplementary charge for the contactor, and it is therefore necessary to provide for the use of impedances and resistances to increase the contactor's admissible charge.

The impedances reduce the stress generated when condensers are connected parallel to others already connected to the network and charges (connected in steps). The resistances protect the contactor's power contacts during connection of the condenser, guaranteeing the electrical life of the circuits.

Comando condensatori
Capacitors control

Monofase Mono phase

Trifase Tri phase

SEZIONI / SECTIONS

	200-220V		400-440V		200-220V		400-440V		500-550V	
	[Kvar]	[A]	[Kvar]	[A]	[Kvar]	[A]	[Kvar]	[A]	[Kvar]	[A]
9	1,2	6	1,7	4,3	2	6	3	4,3	3	3,5
12	1,8	9	2,4	6	3	9	4	6	5	6
18	2,4	12	3,6	9	4	12	6	9	7	10
22	3	15	6	15	5	15	10	15	10	16
32	5	25	9,6	24	9	25	16	24	15	22
40	6,4	32	12	30	11	32	20	30	20	25
50	9	45	16	40	15	45	27	40	25	37
65	10	50	20	50	17	50	34	50	30	46
75	13	58	24	58	20	58	40	58	40	52
85	15	60	30	60	22	60	45	60	45	56
100					24	64	48	64		
125					29	76	58	76		
150					35	91	70	92		
180					42	109	84	110		
220					58	152	115	152		
300					69	182	139	182		
400					92	242	185	242		
600					145	382	291	382		
800					185	485	369	485		



Categorie d'impiego

Utilization categories



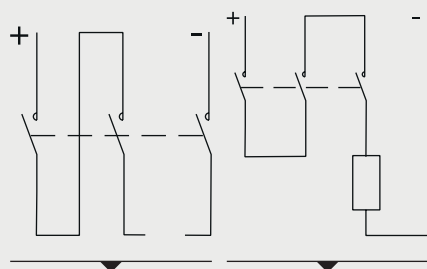
DC-1



DC-3
DC-5

SEZIONI / SECTIONS

	Poli in serie Poles in series	Corrente impiego Rated operational current Ie [A] DC-1	Corrente impiego Rated operational current Ie [A] DC-3 / DC-5						
			24V	48V	110V	220V			
9	2	10	10	6	3	8	4	2,5	0,8
9	3	10	10	8	8	8	6	4	2
12	2	12	12	10	7	12	6	4	1,2
12	3	12	12	12	12	12	10	8	4
18	2	18	18	13	8	12	6	4	1,2
18	3	18	18	18	18	12	10	8	4
22	2	20	20	15	10	20	15	8	2
22	3	20	20	20	20	20	20	15	8
32	2	25	25	25	12	25	20	10	3
32	3	25	25	25	22	25	25	20	10
40	2	35	35	25	12	35	20	10	3
40	3	35	35	35	30	35	30	20	10
50	2	50	40	35	15	45	25	15	3,5
50	3	50	50	50	40	50	35	30	12
65	2	50	40	35	15	45	25	15	3,5
65	3	65	65	65	50	50	35	30	12
75	2	75	65	50	20	65	40	20	5
75	3	75	75	75	55	80	60	50	20
85	2	80	65	50	20	65	40	20	5
85	3	80	80	80	60	80	60	50	20
100	2	100	100	80	50	100	60	40	30
100	3	100	100	100	80	100	90	80	50
125	2	120	100	80	50	120	60	40	30
125	3	120	120	100	80	120	90	80	50
150	2	150	150	150	150	150	130	120	80
150	3	80	80	80	60	80	60	50	20
180	2	180	180	150	150	180	150	120	80
180	3	180	180	180	180	180	180	150	100
220	2	220	180	150	150	220	150	120	80
220	3	220	220	220	220	220	220	150	100
300	2	300	240	200	200	300	200	150	90
300	3	300	300	300	300	300	280	200	150
400	2	400	240	200	200	400	200	150	90
400	3	400	400	400	300	400	280	200	150
600	2	630	630	630	630	630	630	630	630
600	3	630	630	630	630	630	630	630	630
800	2	800	800	800	800	800	800	630	630
800	3	800	800	800	800	800	630	630	630



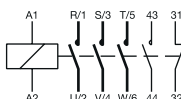
2 poli in serie
2 poles in series

3 poli in serie
3 poles in series



Sezioni 9-12-18-22

9-12-18-22 sections



Contattore / Contactor

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cod

Contatto ausiliario 1NO + 1NC integrato nel contattore / Auxiliary contact 1NO - 1NC integrated in the contactor

Sezione 9A / 9A Section

24V - 50/60 Hz Tensioni di comando / Coil voltage	0,34	090MC9B-24
230V - 50/60 Hz Tensioni di comando / Coil voltage	0,34	090MC9B-230
400V - 50/60 Hz Tensioni di comando / Coil voltage	0,34	090MC9B-400

Prestazioni secondo IEC-60947
Performance in accordance with IEC-60947

AC1			25A
AC3	200-240V	2,5 kW	11A
	380-440V	4 kW	9A
	500-550V	4 kW	7A
	690V	4 kW	6A

Prestazioni secondo UL/CSA
Performance in accordance with UL/CSA
Potenza nominale massima / Maximum nominal power

Ith		25A
Monofase / Mono-phase	115V	0,5 HP
	230V	1 HP
Trifase / Tri-phase	200V	2 HP
	230V	3 HP
	460V	5 HP
	575V	7,5 HP

Sezione 12A / 12A Section

24V - 50/60 Hz Tensioni di comando / Coil voltage	0,34	090MC12B-24
230V - 50/60 Hz Tensioni di comando / Coil voltage	0,34	090MC12B-230
400V - 50/60 Hz Tensioni di comando / Coil voltage	0,34	090MC12B-400

Prestazioni secondo IEC-60947
Performance in accordance with IEC-60947

AC1			25A
AC3	200-240V	3 kW	13A
	380-440V	5,5 kW	12A
	500-550V	7,5 kW	12A
	690V	7,5 kW	9A

Prestazioni secondo UL/CSA
Performance in accordance with UL/CSA
Potenza nominale massima / Maximum nominal power

Ith		25A
Monofase / Mono-phase	115V	0,75 HP
	230V	2 HP
Trifase / Tri-phase	200V	3 HP
	230V	5 HP
	460V	7,5 HP
	575V	10 HP

Sezione 18A / 18A Section

24V - 50/60 Hz Tensioni di comando / Coil voltage	0,34	090MC18B-24
230V - 50/60 Hz Tensioni di comando / Coil voltage	0,34	090MC18B-230
400V - 50/60 Hz Tensioni di comando / Coil voltage	0,34	090MC18B-400

Prestazioni secondo IEC-60947
Performance in accordance with IEC-60947

AC1			32A
AC3	200-240V	4,5 kW	18A
	380-440V	7,5 kW	18A
	500-550V	7,5 kW	13A
	690V	7,5 kW	9A

Prestazioni secondo UL/CSA
Performance in accordance with UL/CSA
Potenza nominale massima / Maximum nominal power

Ith		40A
Monofase / Mono-phase	115V	1 HP
	230V	3 HP
Trifase / Tri-phase	200V	5 HP
	230V	5 HP
	460V	10 HP
	575V	15 HP

Sezione 22A / 22A Section

24V - 50/60 Hz Tensioni di comando / Coil voltage	0,34	090MC22B-24
230V - 50/60 Hz Tensioni di comando / Coil voltage	0,34	090MC22B-230
400V - 50/60 Hz Tensioni di comando / Coil voltage	0,34	090MC22B-400

Prestazioni secondo IEC-60947
Performance in accordance with IEC-60947

AC1			40A
AC3	200-240V	5,5 kW	22A
	380-440V	11 kW	22A
	500-550V	15 kW	20A
	690V	15 kW	18A

Prestazioni secondo UL/CSA
Performance in accordance with UL/CSA
Potenza nominale massima / Maximum nominal power

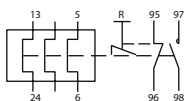
Ith		40A
Monofase / Mono-phase	115V	2 HP
	230V	3 HP
Trifase / Tri-phase	200V	7,5 HP
	230V	10 HP
	460V	15 HP
	575V	20 HP



Sezioni 9-12-18-22

9-12-18-22 sections

Relè termico differenziale / Thermal O/L relay



Classe d'intervento 10A / Trip class 10A

Sezioni 9A-12A-18A-22A / 9A-12A-18A-22A Sections

0.25 ÷ 0.4 Taratura (A) / Setting range (A)	0,17	090MT32-04
0.4 ÷ 0.63 Taratura (A) / Setting range (A)	0,17	090MT32-063
0.63 ÷ 1 Taratura (A) / Setting range (A)	0,17	090MT32-1
1 ÷ 1.6 Taratura (A) / Setting range (A)	0,17	090MT32-1V6
1.6 ÷ 2.5 Taratura (A) / Setting range (A)	0,17	090MT32-2V5
2.5 ÷ 4 Taratura (A) / Setting range (A)	0,17	090MT32-4
4 ÷ 6 Taratura (A) / Setting range (A)	0,17	090MT32-6
6 ÷ 9 Taratura (A) / Setting range (A)	0,17	090MT32-9
9 ÷ 13 Taratura (A) / Setting range (A)	0,17	090MT32-13
12 ÷ 18 Taratura (A) / Setting range (A)	0,17	090MT32-18

Sistema di montaggio separato Separate mounting system



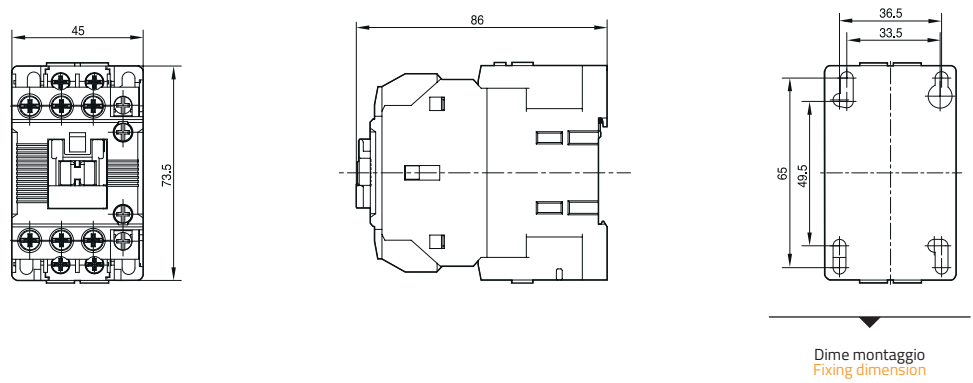
Adattatore montaggio barra DIN 35
Bar mounting adapter DIN 35

38 **090UZ-32**

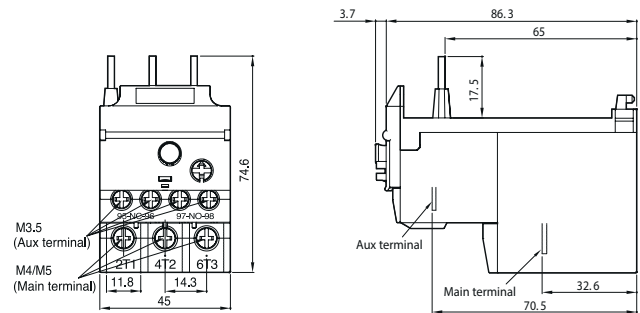
Sezioni 9-12-18-22

9-12-18-22 sections

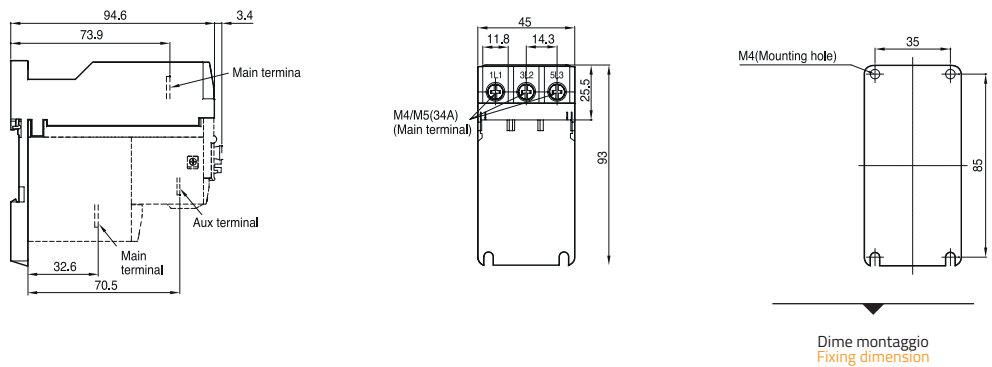
Contattore / Contactor



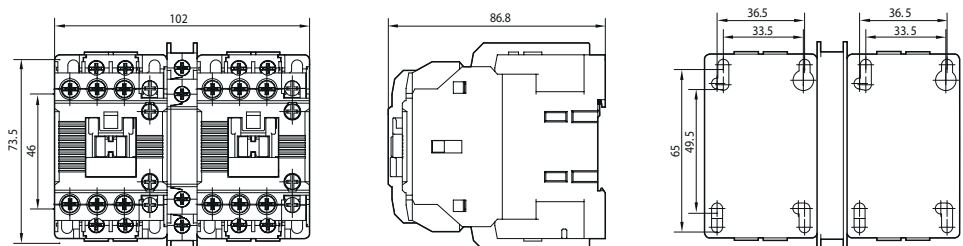
Relè termico differenziale / Thermal O/L relay



Sistema di montaggio separato / Separate mounting system



Interblocco meccanico (vedi accessori) / Mechanical interlock (see accessories)



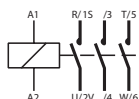
Sezioni 32 - 40

32 - 40 sections

Contattore / Contactor

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Classe d'intervento 10A / Trip class 10A

Sezione 32A / 32A Section

24V - 50/60 Hz Tensioni di comando / Coil voltage	0,55	090MC32A-24
230V - 50/60 Hz Tensioni di comando / Coil voltage	0,55	090MC32A-230
400V - 50/60 Hz Tensioni di comando / Coil voltage	0,55	090MC32A-400

Prestazioni secondo IEC-60947
Performance in accordance with IEC-60947

AC1			50A
AC3	200-240V	7,5 kW	32A
	380-440V	15 kW	32A
	500-550V	18,5 kW	28A
	690V	18,5 kW	20A

Prestazioni secondo UL/CSA
Performance in accordance with UL/CSA
Potenza nominale massima / Maximum nominal power

Ith		50A
Monofase / Mono-phase	115V	2 HP
	230V	3 HP
Trifase / Tri-phase	200V	7,5 HP
	230V	10 HP
	460V	20 HP
	575V	25 HP

Sezione 40A / 40A Section

24V - 50/60 Hz Tensioni di comando / Coil voltage	0,55	090MC40A-24
230V - 50/60 Hz Tensioni di comando / Coil voltage	0,55	090MC40A-230
400V - 50/60 Hz Tensioni di comando / Coil voltage	0,55	090MC40A-400

Prestazioni secondo IEC-60947
Performance in accordance with IEC-60947

AC1			60A
AC3	200-240V	11 kW	40A
	380-440V	18 kW	40A
	500-550V	22 kW	32A
	690V	22 kW	32A

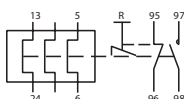
Prestazioni secondo UL/CSA
Performance in accordance with UL/CSA
Potenza nominale massima / Maximum nominal power

Ith		60A
Monofase / Mono-phase	115V	3 HP
	230V	27,5 HP
Trifase / Tri-phase	200V	15 HP
	230V	15 HP
	460V	30 HP
	575V	30 HP

Relè termico differenziale / Thermal O/L relay

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Classe d'intervento 10A / Trip class 10A

Sezioni 32A-40A / 32A-40A Sections

18 ÷ 25 Taratura (A) / Setting range (A)	0,17	090MT32-25
24 ÷ 32 Taratura (A) / Setting range (A)	0,17	090MT32-32
28 ÷ 40 Taratura (A) / Setting range (A)	0,17	090MT32-40

Sistema di montaggio separato

Separate mounting system

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Adattatore montaggio barra DIN 35
Bar mounting adapter DIN 35

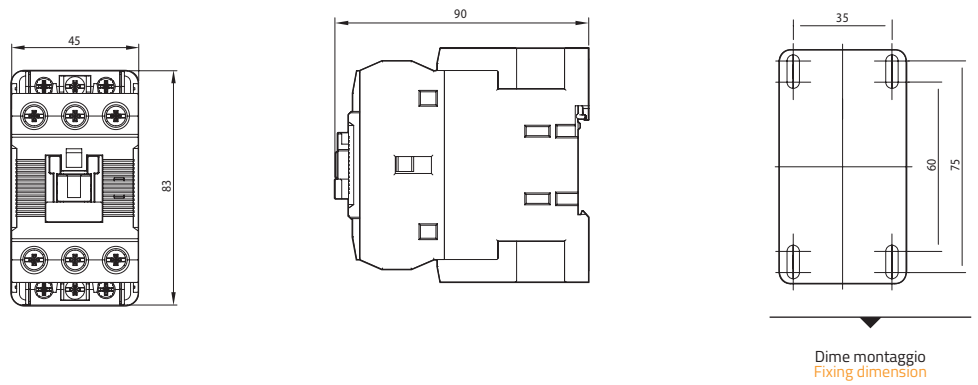
38

090UZ-32

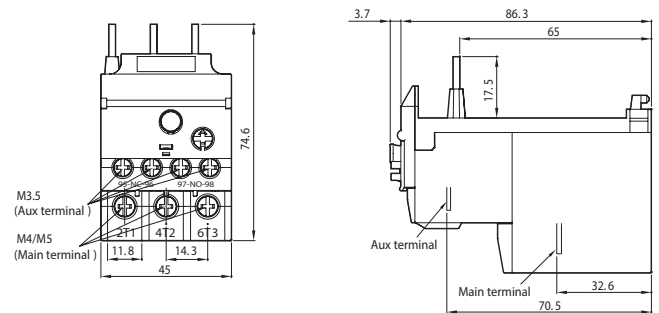
Sezioni 32 - 40

32 - 40 sections

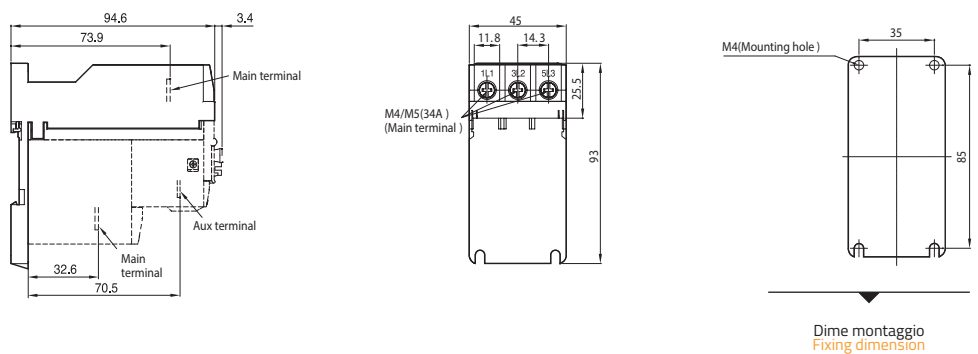
Contattore / Contactor



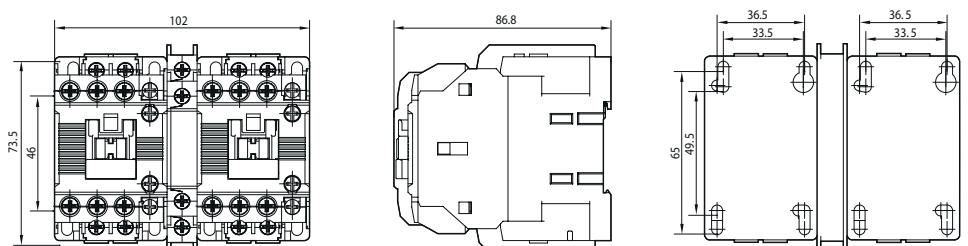
Relè termico differenziale / Thermal O/L relay



Sistema di montaggio separato / Separate mounting system



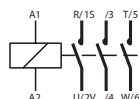
Interblocco meccanico (vedi accessori) / Mechanical interlock (see accessories)



Sezione 65

65 section

Contattore / Contactor



24V - 50/60 Hz Tensioni di comando / Coil voltage	1,05	090MC65A-24
230V - 50/60 Hz Tensioni di comando / Coil voltage	1,05	090MC65A-230
400V - 50/60 Hz Tensioni di comando / Coil voltage	1,05	090MC65A-400

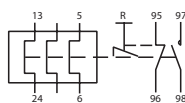
Prestazioni secondo IEC-60947
Performance in accordance with IEC-60947

AC1			100A
AC3	200-240V	18,5 kW	65A
	380-440V	30 kW	65A
	500-550V	33 kW	60A
	690V	33 kW	35A

Prestazioni secondo UL/CSA
Performance in accordance with UL/CSA
Potenza nominale massima / Maximum nominal power

Ith		100A
Monofase / Mono-phase	115V	5 HP
	230V	15 HP
Trifase / Tri-phase	200V	25 HP
	230V	30 HP
	460V	50 HP
	575V	60 HP

Relè termico differenziale / Thermal O/L relay



Classe d'intervento 20 / Trip class 20

34 ÷ 50 Taratura (A) / Setting range (A)	0,32	090MT63-50
45 ÷ 65 Taratura (A) / Setting range (A)	0,32	090MT63-65

Sistema di montaggio separato

Separate mounting system

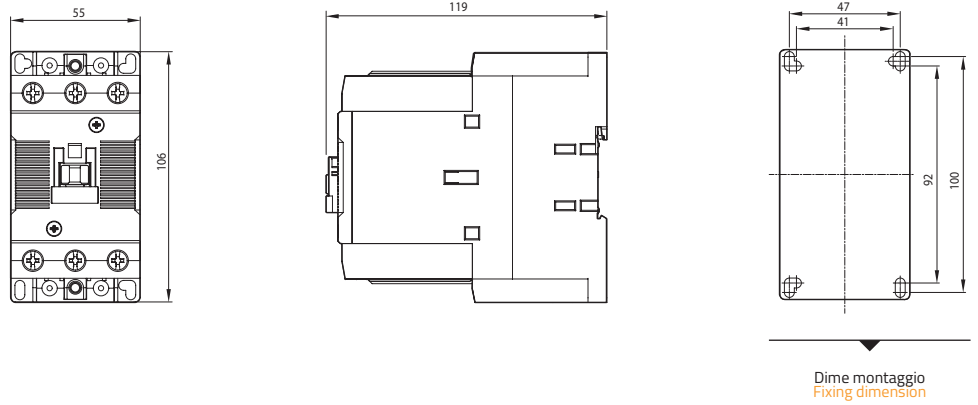


Adattatore montaggio barra DIN 35
Bar mounting adapter DIN 35

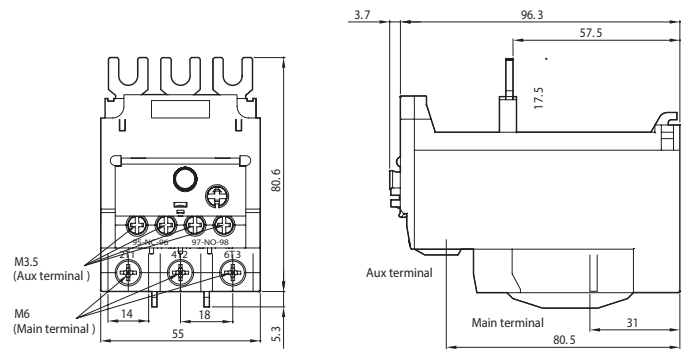
38	090UZ-65
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Sezione 65 65 section

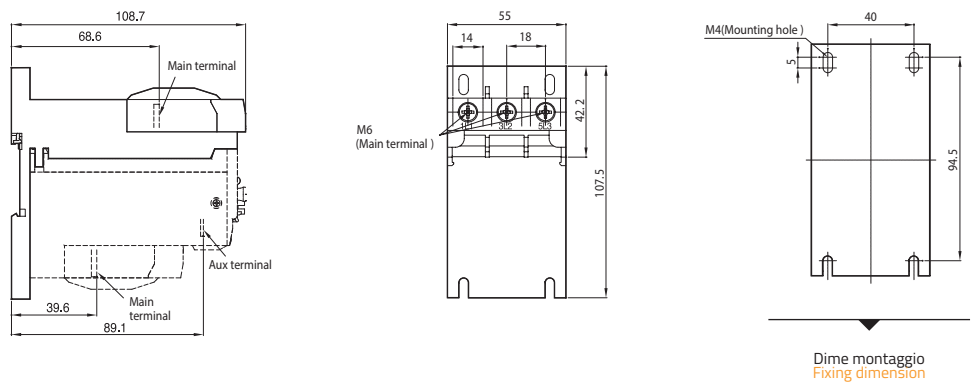
Contattore / Contactor



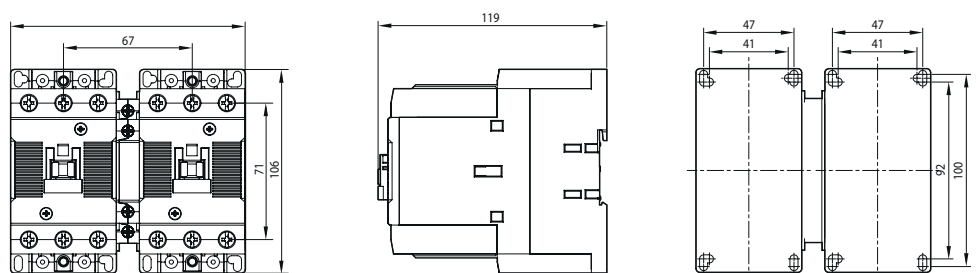
Relè termico differenziale / Thermal O/L relay



Sistema di montaggio separato / Separate mounting system

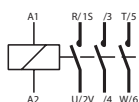


Interblocco meccanico (vedi accessori) / Mechanical interlock (see accessories)



Sezioni 85 - 100

85 - 100 sections



Contattore / Contactor

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Sezione 85A / 85A Section

24V - 50/60 Hz Tensioni di comando / Coil voltage	1,05	090MC85A-24
230V - 50/60 Hz Tensioni di comando / Coil voltage	1,05	090MC85A-230
400V - 50/60 Hz Tensioni di comando / Coil voltage	1,05	090MC85A-400

Prestazioni secondo IEC-60947 Performance in accordance with IEC-60947

AC1			135A
AC3	200-240V	11 kW	85A
	380-440V	18 kW	85A
	500-550V	22 kW	75A
	690V	22 kW	45A

Prestazioni secondo UL/CSA Performance in accordance with UL/CSA

Potenza nominale massima / Maximum nominal power

Ith		135A
Monofase / Mono-phase	115V	7,5 HP
	230V	15 HP
Trifase / Tri-phase	200V	40 HP
	230V	40 HP
	460V	60 HP
	575V	75 HP

Sezione 100A / 100A Section

24V - 50/60 Hz Tensioni di comando / Coil voltage	2,0	090MC100A-24
230V - 50/60 Hz Tensioni di comando / Coil voltage	2,0	090MC100A-230
400V - 50/60 Hz Tensioni di comando / Coil voltage	2,0	090MC100A-400

Prestazioni secondo IEC-60947 Performance in accordance with IEC-60947

AC1			160A
AC3	200-240V	30 kW	105A
	380-440V	55 kW	105A
	500-550V	55 kW	85A
	690V	45 kW	65A

Prestazioni secondo UL/CSA Performance in accordance with UL/CSA

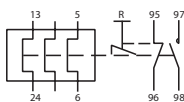
Potenza nominale massima / Maximum nominal power

Ith		160A
Monofase / Mono-phase	115V	10 HP
	230V	20 HP
Trifase / Tri-phase	200V	30 HP
	230V	40 HP
	460V	75 HP
	575V	75 HP

Relè termico differenziale / Thermal O/L relay

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Classe d'intervento 20 / Trip class 20

Sezioni 85A-100A / 85A-100A Sections

54 ÷ 75 Taratura (A) / Setting range (A)	0,50	090MT95-75
63 ÷ 85 Taratura (A) / Setting range (A)	0,50	090MT95-85
80 ÷ 100 Taratura (A) / Setting range (A)	0,50	090MT95-100

Sistema di montaggio separato Separate mounting system

g

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Adattatore montaggio barra DIN 35
Bar mounting adapter DIN 35

38

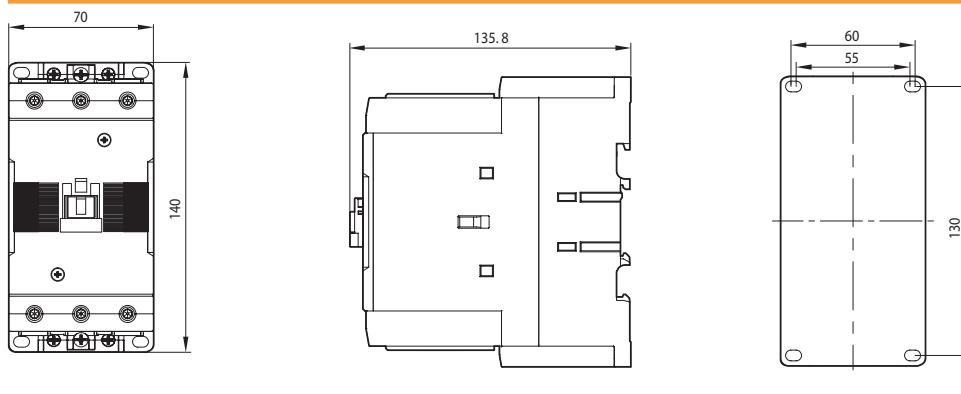
090UZ-95



Sezioni 85 - 100

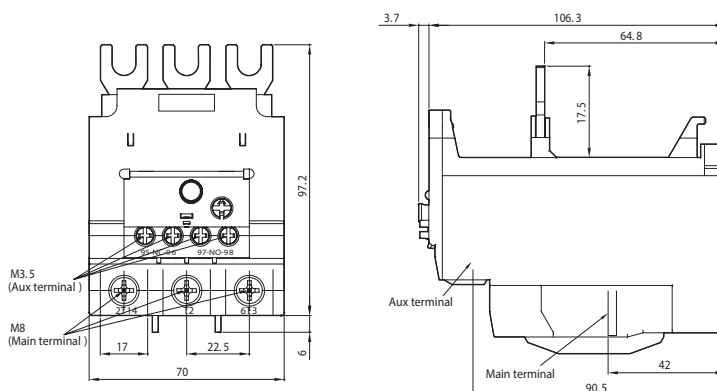
85 - 100 sections

Contattore / Contactor

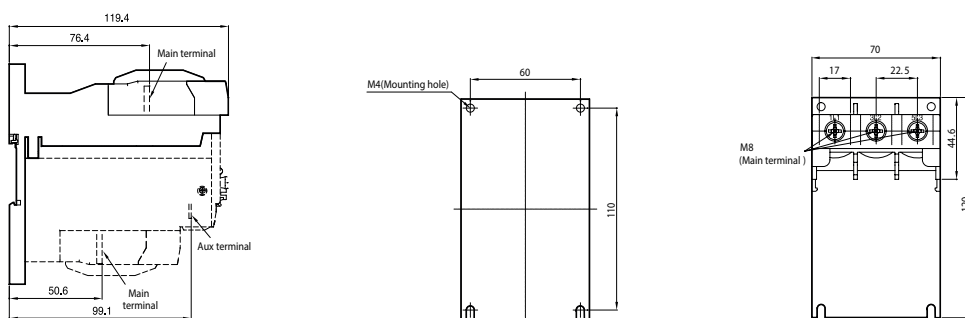


Dime montaggio
Fixing dimension

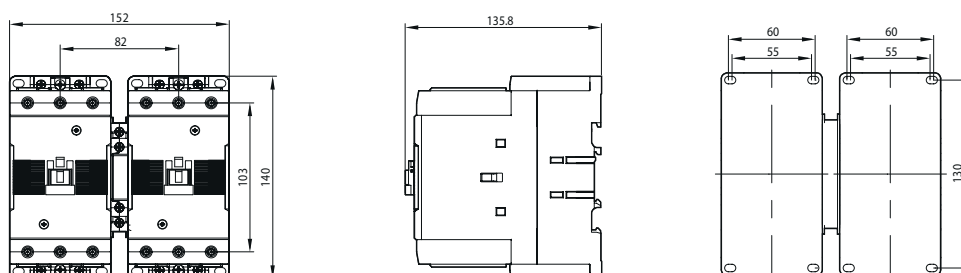
Relè termico differenziale / Thermal O/L relay



Sistema di montaggio separato / Separate mounting system



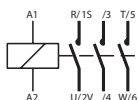
Interblocco meccanico (vedi accessori) / Mechanical interlock (see accessories)



Sezione 150

150 section

Contattore / Contactor



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24V - 50/60 Hz Tensioni di comando / Coil voltage	2,4	090MC150A-24
230V - 50/60 Hz Tensioni di comando / Coil voltage	2,4	090MC150A-100
400V - 50/60 Hz Tensioni di comando / Coil voltage	2,4	090MC150A-400

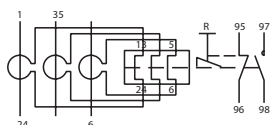
Prestazioni secondo IEC-60947
Performance in accordance with IEC-60947

AC1		210A
AC3	200-240V	45 kW
	380-440V	75 kW
	500-550V	70 kW
	690V	55 kW

Prestazioni secondo UL/CSA
Performance in accordance with UL/CSA
Potenza nominale massima / Maximum nominal power

Ith	160A
Monofase / Mono-phase	115V 15 HP 230V 25 HP
Trifase / Tri-phase	200V 40 HP 230V 50 HP 460V 100 HP 575V 75 HP

Relè termico differenziale / Thermal O/L relay



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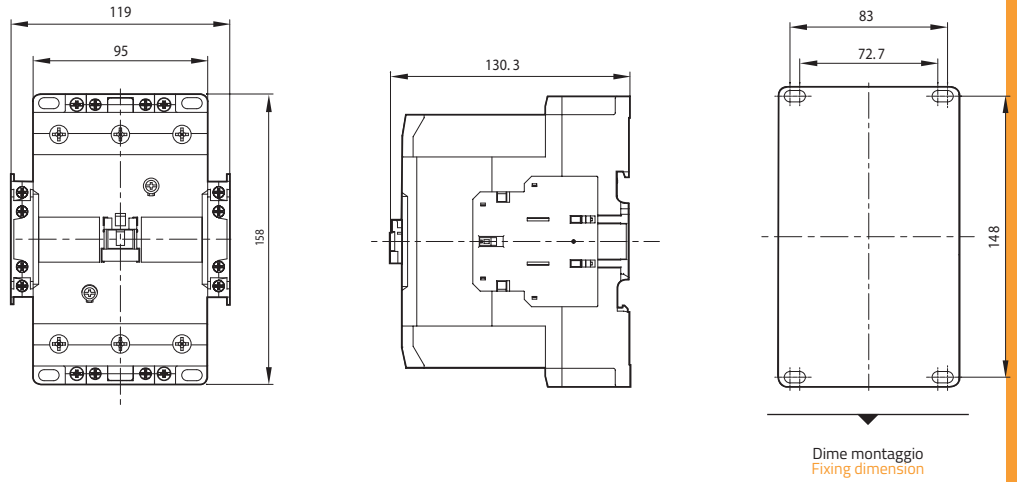
Classe d'intervento 20 / Trip class 20

65 ÷ 130 Taratura (A) / Setting range (A)	2,5	090MT150-130
110 ÷ 150 Taratura (A) / Setting range (A)	2,5	090MT150-150

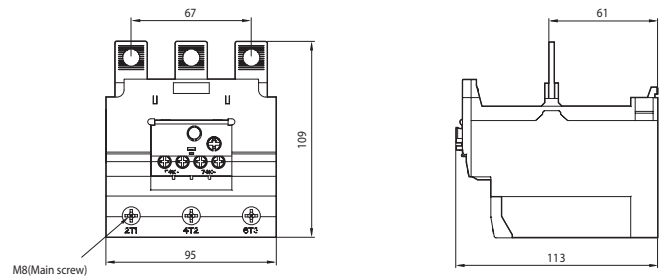


Sezione 150 150 section

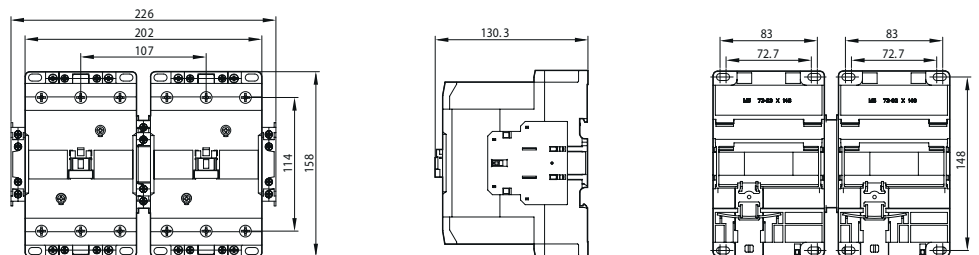
Contattore / Contactor



Relè termico differenziale / Thermal O/L relay



Interblocco meccanico (vedi accessori) / Mechanical interlock (see accessories)



Sezioni 185 - 225

185 - 225 sections

Contattore / Contactor



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Completo di n.2 090A11 / Complete with n. 2 090A11

Sezione 185A / 185A Section

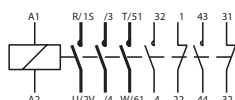
24V - 50/60 Hz 24VCC Tensioni di comando / Coil voltage	5,4	090MC185A-24
110-240V - 50/60 Hz Tensioni di comando / Coil voltage	5,4	090MC185A-240
400V - 50/60 Hz Tensioni di comando / Coil voltage	5,4	090MC185A-400

Prestazioni secondo IEC-60947
Performance in accordance with IEC-60947

AC1			230A
AC3	200-240V 380-440V 500-550V 690V	55 kW 90 kW 110 kW 110 kW	185A 185A 180A 180A

Prestazioni secondo UL/CSA
Performance in accordance with UL/CSA
Potenza nominale massima / Maximum nominal power

Ith		160A
Monofase / Mono-phase	115V 230V	15 HP 30 HP
Trifase / Tri-phase	200V 230V 460V 575V	60 HP 60 HP 125 HP 125 HP



Completo di n.2 090A11 / Complete with n. 2 090A11

Sezione 225A / 225A Section

24V - 50/60 Hz 24VCC Tensioni di comando / Coil voltage	5,4	090MC225A-24
110-240V - 50/60 Hz Tensioni di comando / Coil voltage	5,4	090MC225A-240
400V - 50/60 Hz Tensioni di comando / Coil voltage	5,4	090MC225A-400

Prestazioni secondo IEC-60947
Performance in accordance with IEC-60947

AC1			275A
AC3	200-240V 380-440V 500-550V 690V	75 kW 132 kW 132 kW 140 kW	225A 225A 200A 150A

Prestazioni secondo UL/CSA
Performance in accordance with UL/CSA
Potenza nominale massima / Maximum nominal power

Ith		210A
Monofase / Mono-phase	115V 230V	15 HP 25 HP
Trifase / Tri-phase	200V 230V 460V 575V	60 HP 75 HP 150 HP 150 HP

Relè termico differenziale / Thermal O/L relay

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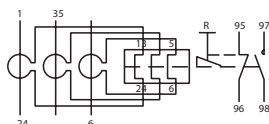
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Classe d'intervento 20 / Trip class 20

Sezioni 185A-225A / 185A-225A Sections

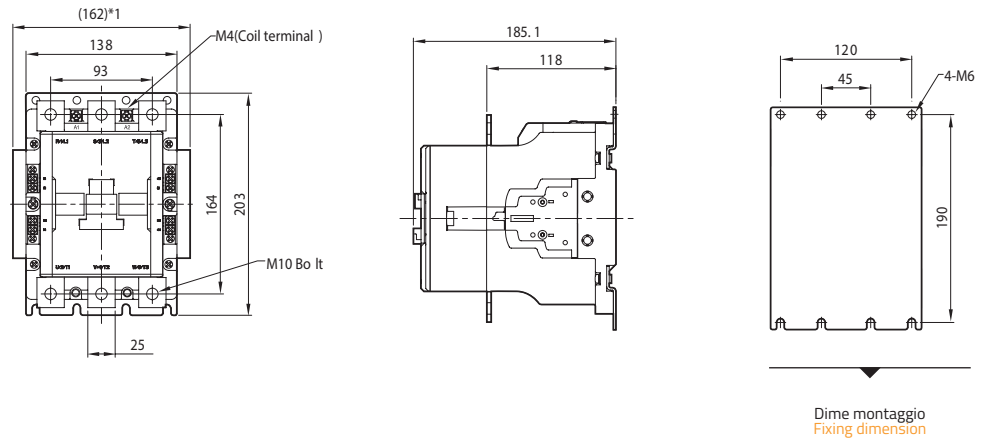
120 ÷ 185 Taratura (A) / Setting range (A)	2,6	090MT225-185
160 ÷ 240 Taratura (A) / Setting range (A)	2,6	090MT225-240



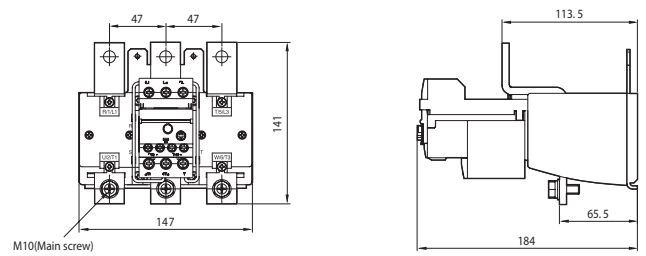
Sezioni 185 - 225

185 - 225 sections

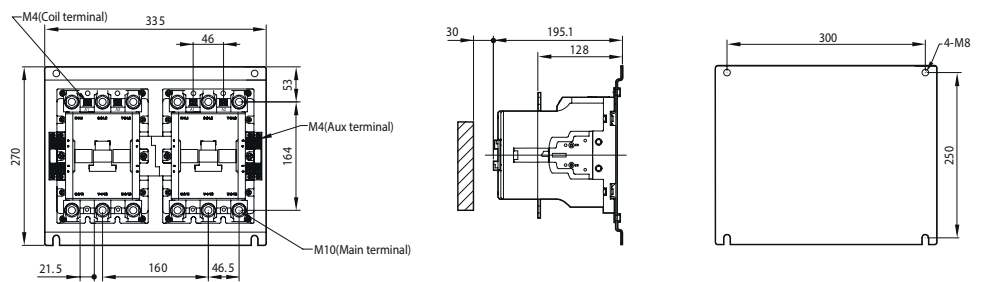
Contattore / Contactor



Relè termico differenziale / Thermal O/L relay



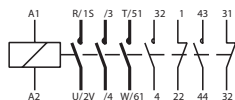
Interblocco meccanico (vedi accessori) / Mechanical interlock (see accessories)



Sezioni 330 - 400

330 - 400 sections

Contattore / Contactor



Completo di n.2 090A11 / Complete with n. 2 090A11
Sezione 330A / 330A Section

110 - 240V - AC/DC Tensioni di comando / Coil voltage	9,2	090MC330A-240
400V - 50/60 Hz Tensioni di comando / Coil voltage	9,2	090MC330A-400

Prestazioni secondo IEC-60947
 Performance in accordance with IEC-60947

AC1			350A
AC3	200-240V	90 kW	330A
	380-440V	160 kW	330A
	500-550V	160 kW	280A
	690V	200 kW	225A

Prestazioni secondo UL/CSA
 Performance in accordance with UL/CSA
 Potenza nominale massima / Maximum nominal power

Ith		30A
Trifase / Tri-phase	200V	100 HP
	230V	125 HP
	460V	250 HP
	575V	250 HP

Completo di n.2 090A11 / Complete with n. 2 090A11
Sezione 400A / 400A Section

110 - 240V - AC/DC Tensioni di comando / Coil voltage	9,2	090MC400A-240
400V - 50/60 Hz Tensioni di comando / Coil voltage	9,2	090MC400A-400

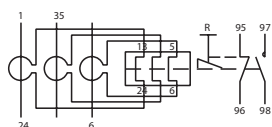
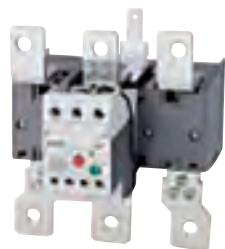
Prestazioni secondo IEC-60947
 Performance in accordance with IEC-60947

AC1			450A
AC3	200-240V	125 kW	400A
	380-440V	222 kW	400A
	500-550V	225 kW	350A
	690V	250 kW	300A

Prestazioni secondo UL/CSA
 Performance in accordance with UL/CSA
 Potenza nominale massima / Maximum nominal power

Ith		450A
Trifase / Tri-phase	200V	125 HP
	230V	150 HP
	460V	300 HP
	575V	300 HP

Relè termico differenziale / Thermal O/L relay



Classe d'intervento 20 / Trip class 20

Sezioni 330A-400A / 330A-400A Sections

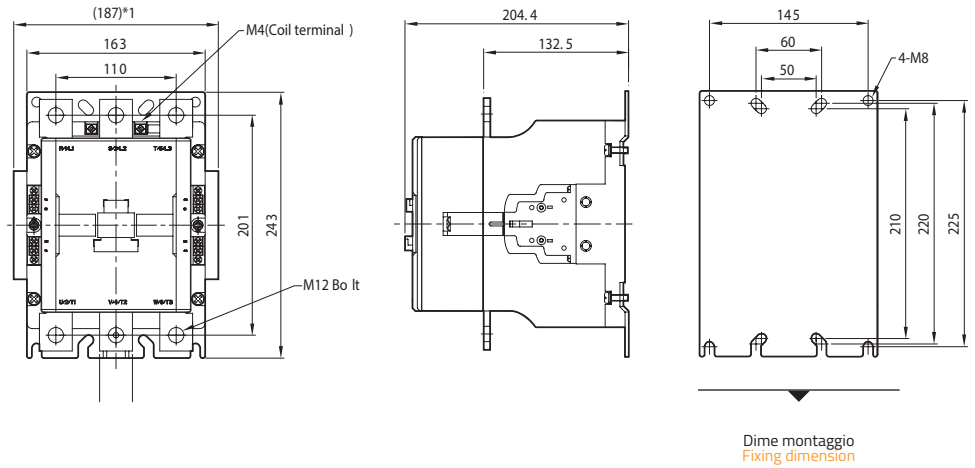
200 - 300 Taratura (A) / Setting range (A)	2,5	090MT400-330
260 - 400 Taratura (A) / Setting range (A)	2,5	090MT400-400



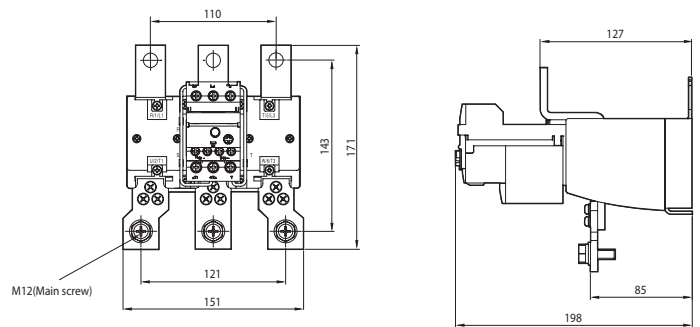
Sezioni 330 - 400

330 - 400 sections

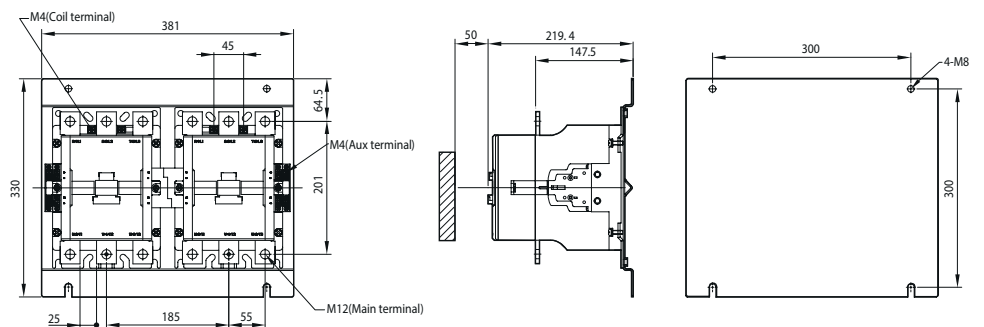
Contattore / Contactor



Relè termico differenziale / Thermal O/L relay



Interblocco meccanico (vedi accessori) / Mechanical interlock (see accessories)



Sezioni 630 - 800

630 - 800 sections

Contattore / Contactor

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cod



Completo di n.2 090A11 / Complete with n. 2 090A11

Sezion 630A / 630A Section

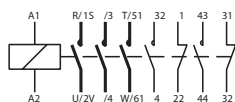
110-240V - AC/DC Tensioni di comando / Coil voltage	9,2	090MC630A-240
400V - 50/60 Hz Tensioni di comando / Coil voltage	9,2	090MC630A-400

Prestazioni secondo IEC-60947
Performance in accordance with IEC-60947

AC1			660A
AC3	200-240V 380-440V 500-550V 690V	190 kW 330 kW 330 kW 400 kW	630A 630A 500A 420A

Prestazioni secondo UL/CSA
Performance in accordance with UL/CSA
Potenza nominale massima / Maximum nominal power

Ith		660A
Trifase / Tri-phase	200V 230V 460V 575V	200 HP 250 HP 500 HP 500 HP



Completo di n.2 090A11 / Complete with n. 2 090A11

Sezione 800A / 800A Section

110-240V - AC/DC Tensioni di comando / Coil voltage	9,2	090MC800A-240
400V - 50/60 Hz Tensioni di comando / Coil voltage	9,2	090MC800A-400

Prestazioni secondo IEC-60947
Performance in accordance with IEC-60947

AC1			900A
AC3	200-240V 380-440V 500-550V 690V	220 kW 440 kW 500kW 500 kW	4800A 800A 500A 500A

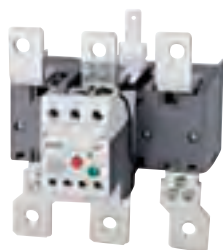
Prestazioni secondo UL/CSA
Performance in accordance with UL/CSA
Potenza nominale massima / Maximum nominal power

Ith		900A
Trifase / Tri-phase	200V 230V 460V 575V	200 HP 300 HP 600 HP 600 HP

Relè termico differenziale / Thermal O/L relay

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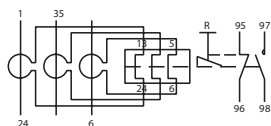
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Classe d'intervento 20 / Trip class 20

Sezioni 630A- 800A / 630A-800A Sections

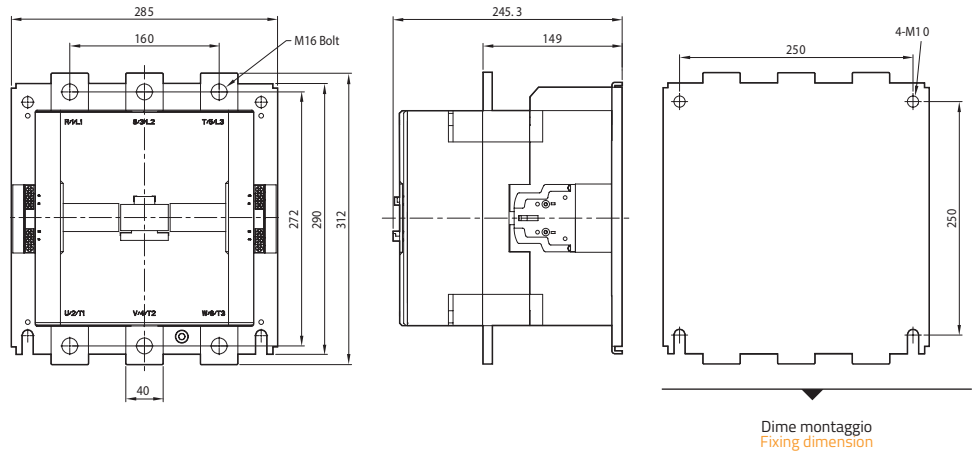
400 ÷ 630 Taratura (A) / Setting range (A)	11,5	090MT800-630
520 ÷ 800 Taratura (A) / Setting range (A)	11,5	090MT800-800



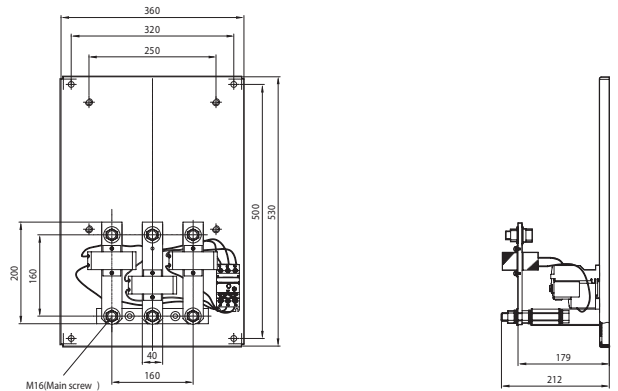
Sezioni 630 - 800

630 - 800 sections

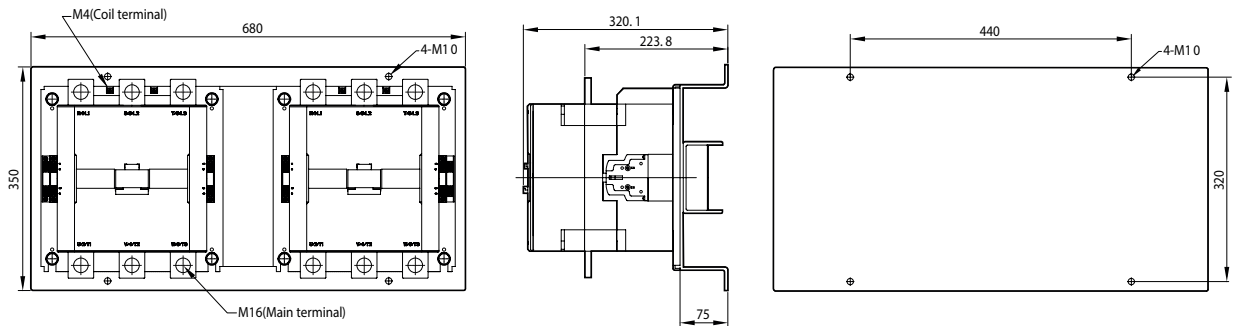
Contattore / Contactor



Relè termico differenziale / Thermal O/L relay



Interblocco meccanico (vedi accessori) / Mechanical interlock (see accessories)

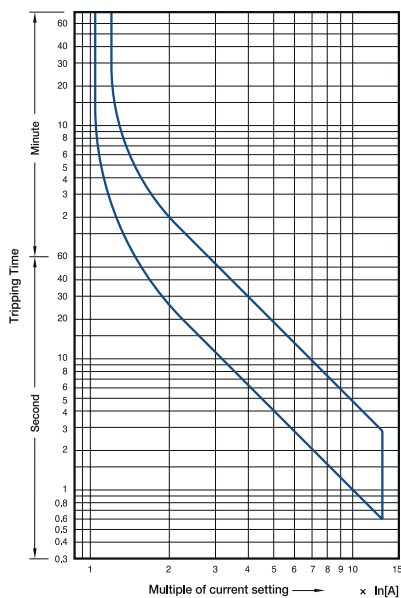


Curve caratteristiche relè Relay curve characteristics

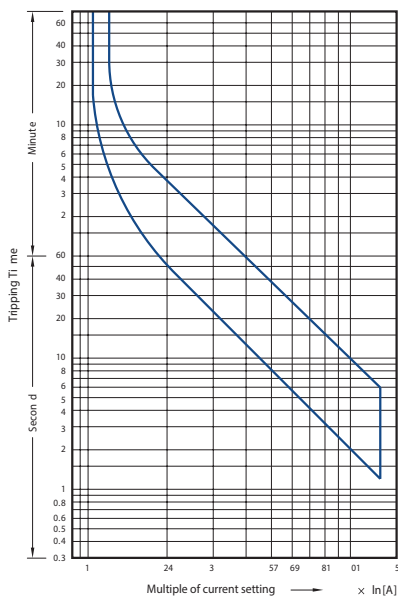
9-12-18-22-32-40

65

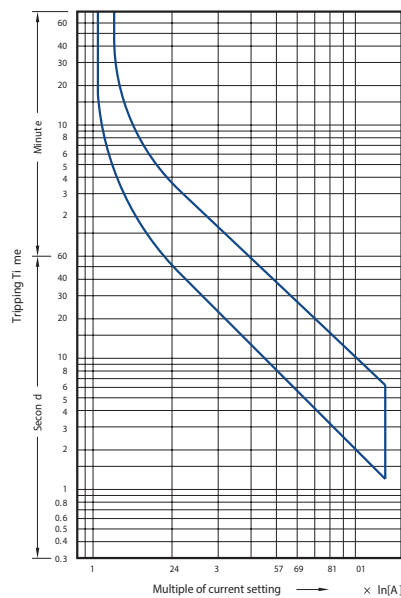
85-100



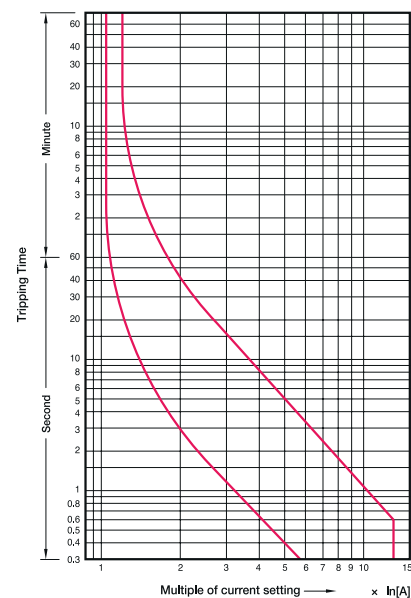
Avviamento a freddo
Cold starting



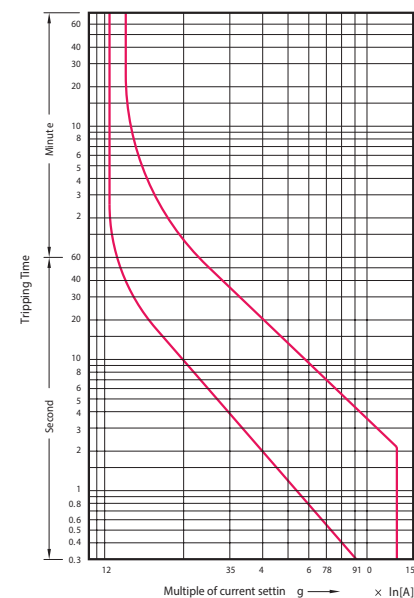
Avviamento a freddo
Cold starting



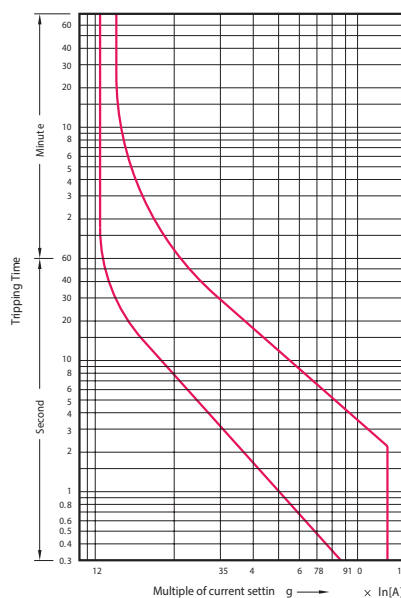
Avviamento a freddo
Cold starting



Avviamento a caldo
Hot starting



Avviamento a caldo
Hot starting



Avviamento a caldo
Hot starting

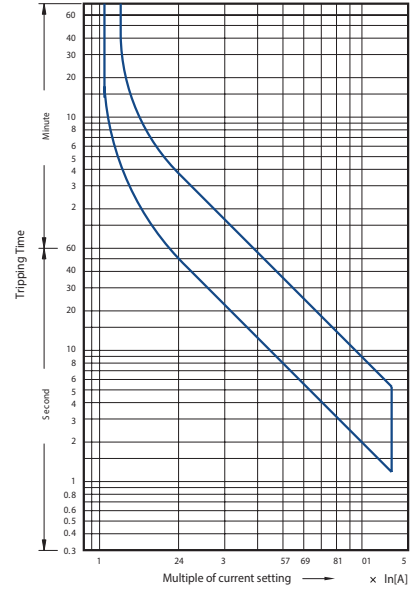
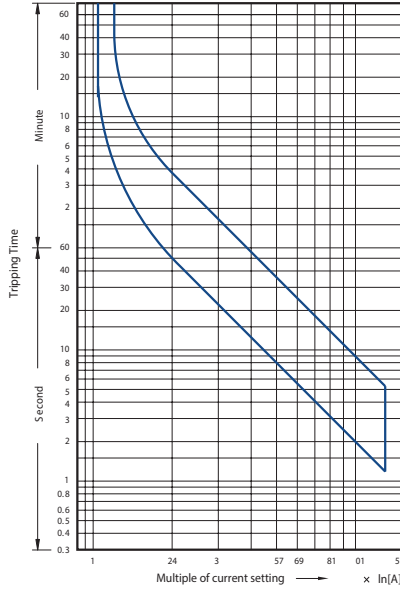
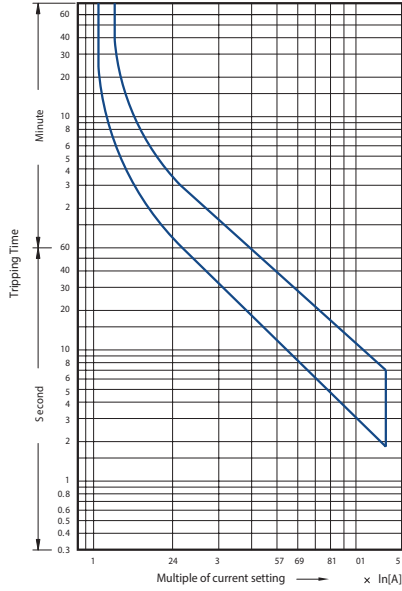


Curve caratteristiche relè Relay curve characteristics

150

185-225-330-400

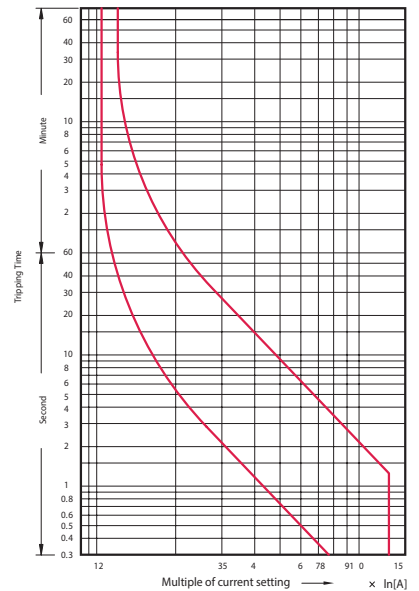
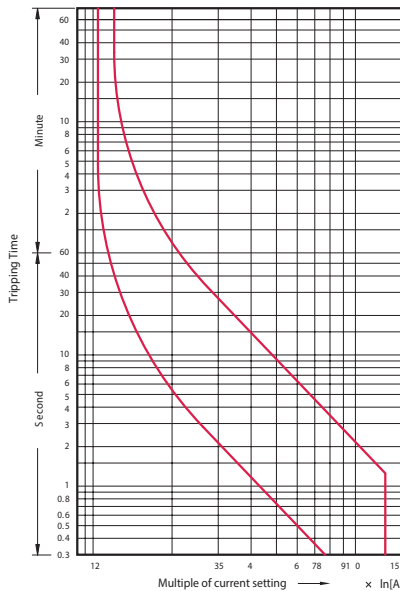
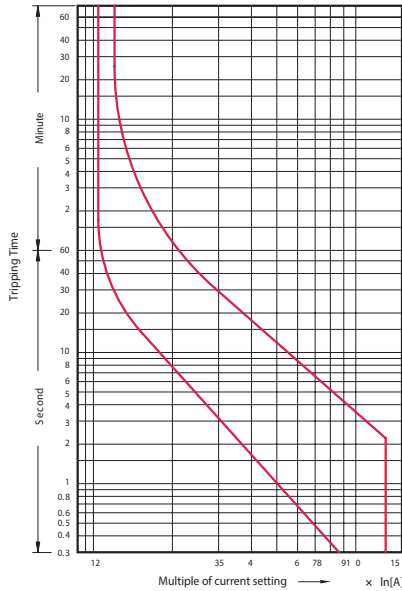
630-800



Avviamento a freddo
Cold starting

Avviamento a freddo
Cold starting

Avviamento a freddo
Cold starting



Avviamento a caldo
Hot starting

Avviamento a caldo
Hot starting

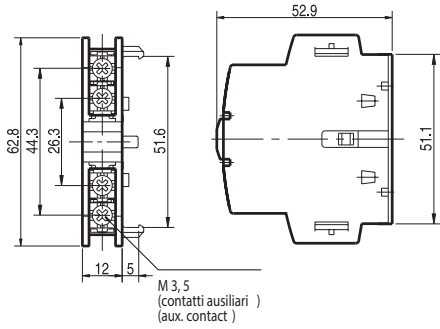
Avviamento a caldo
Hot starting

Contatti ausiliari Auxiliary contacts

Sezioni / Sections
9-12-18-22-32
40-65-85-100-150

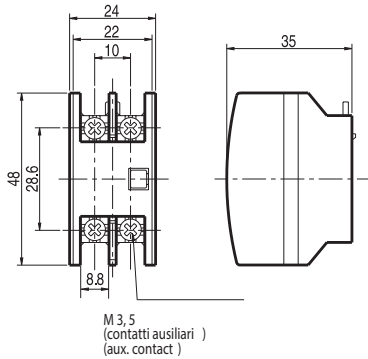
g

cod



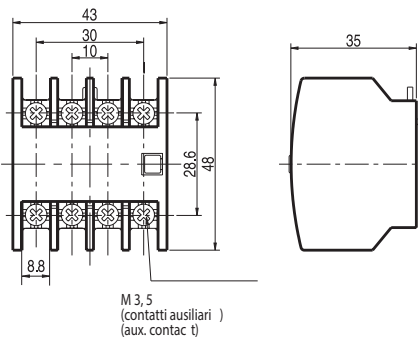
Montaggio laterale / Side mounting

1NO + 1NC	33	090UA-1
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Montaggio frontale / Top mounting

1NO + 1NC	28	090AF11
2NO	28	090AF20
2NC	28	090AF02



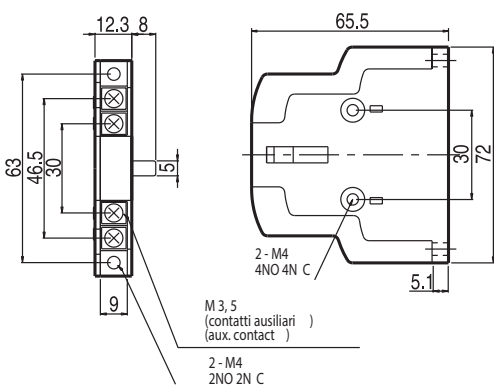
Montaggio frontale / Top mounting

4NO	50	090AF40
3NO + 1NC	50	090AF31
2NO + 2NC	50	090AF22
1NO + 2NC	50	090AF13
4NC	50	090AF04

Sezioni / Sections
185-225-330-400-630-800

g

cod



Montaggio laterale / Side mounting

1NO + 1NC	45	090A11
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Caratteristiche ausiliari

Auxiliary characteristics

Assorbimento Coil consumption [VA]

Limite tensione bobina Coil operating limit [V]

Tempo di funzionamento Operating time [ms]

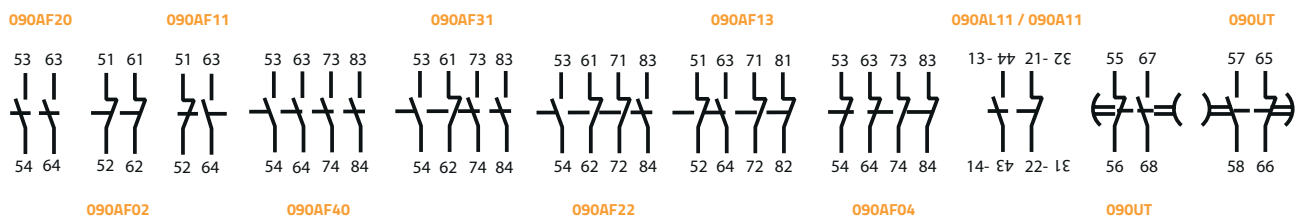
220V (50Hz)	Spunto Pick-up	Ritenuta Sealed	Dissipazione Dissipation [W]	Attrazione Pick-up	Rilascio Drop-out	Corrente bobina Coil current [mA]	Attrazione Pick-up	Rilascio Dropout
9-12-18-22	58	9	2	85÷110% Un	30÷60% Un	41	12÷22	4÷15
32-40	53	12	2	85÷110% Un	30÷60% Un	54	12÷22	4÷15
65	110	13	5	85÷110% Un	30÷60% Un	59	12÷22	4÷15
85-100	230	17	4,4	85÷110% Un	30÷60% Un	77	15÷30	10÷30
150	108	18	4,4	85÷110% Un	30÷60% Un	82	20÷40	60÷70
185-225	380	11,6	4,7	85÷110% Un	30÷60% Un	53	70	70
330-400	571	14	5	85÷110% Un	30÷60% Un	64	55	55
630-800	1000	29	7,8	85÷110% Un	30÷60% Un	132	75	75

Corrente nominale Nominal current

Vita elettrica [op x 10.000] Electrical life

lth	AC-15									N. manovre/ora Operation per hour	Vita meccanica Mechanical life	AC-15		DC-13	
	120V	240V	480V	600V	125V	250V	440V	600V	220V-440V			24-220V			
[A]	[A]	[A]	[A]	[A]	[A]	[A]	[A]	[A]	[A]	[man/ora]	[mil/cicli]	[mil/cicli]	[mil/cicli]		
090UA	10	6	3	1.5	1.2	1.1	0.55	0.31	0.2	1800	20	0.5	0.5		
090AF	16	6	3	1.5	1.2	1.1	0.55	0.31	0.2	1800	20	0.5	0.5		
090A	16	6	3	1.5	1.2	1.1	0.55	0.31	0.2	1800	20	0.5	0.5		
090UR	10	6	3	1.5	1.2	0.55	0.27	-	-	1800	20	0.5	0.5		

Numerazione contatti ausiliari Auxiliary contacts



Accessori Accessories



Kit teleinversione / Reversing kit

	g	cod
9 - 22	30	090UW-22
32 - 40	30	090UW-32
65	30	090UW-65
85 - 100	30	090UW-95



Filtro soppressore / Surge suppressor RC unit

	g	cod
24 - 48V AC/DC	150	090US-11
200 - 240V AC/DC	150	090US-13
360 - 440V AC/DC	150	090US-14



Interblocco meccanico / Mechanical interlock

	g	cod
Sezioni / Sections: 9-12-18-22-32-40-65-85-100-150		
2NC	30	090UR-02



Sezioni / Sections: 185-225-330-400		
	90	090IM400



Sezioni / Sections: 630-800		
	90	090IM800

Caratteristiche generali

General characteristics

Caratteristiche generali

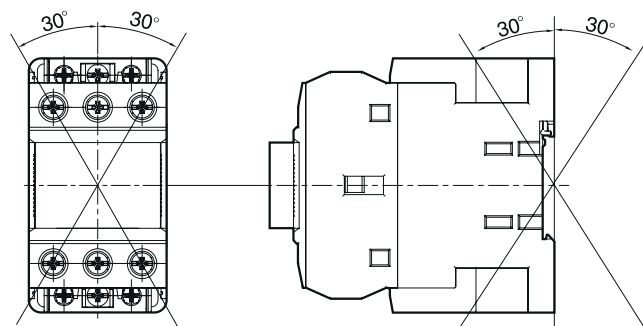
Rispondenza alle norme	IEC EN 60947-1, IEC EN 60947-4-1, UL500
Omologazioni	UL, CSA
Limiti di temperatura	Funzionamento $\geq -50^{\circ}\text{C} - +80^{\circ}\text{C}$
	Stoccaggio $\geq -5^{\circ}\text{C} - +60^{\circ}\text{C}$
Altitudine d'impiego	3.000 m
Grado di protezione	IP 20 (IEC EN 60529)
Durata meccanica [mil ciclo]	9 - 22A 15ML/32-100A 12ML/150-300
	5ML/400-800 2,5ML
Vita elettrica [mil ciclo]	9 - 22A 2,5ML/32-100A 2ML/150-300
	1ML/400-800 0,5ML
Numero di manovre ora in AC-3 [n° ciclo]	9-100A 1800 / 160-800A 1200
Resistenza agli shock	Aperto: 8g
	Chiuso: 10g
	(1/2 sinusoide = 11mS)
Resistenza alle vibrazioni	Aperto: 2g
	Chiuso: 4g
	5-300 (IEC 60-2-6)
Resistenza alla fiamma	VO (UL94)
	960° (IEC 695-2-1)
Numero poli	3
Tensione nominale d'isolamento UI contattori	690V
Tensione nominale ad impulso	UIMP 8 kV
Potere di chiusura massimo	10 X Ie in cat. AC-3
Potere di interruzione massimo	8 X Ie in cat. AC-3
Campo di funzionamento della bobina	-15% - +10% Uc
	(Tensione nominale comando)
Tensione nominale d'isolamento UI relè	690 V
Classe d'intervento relè secondo IEC-947-4-1	10A / 20
Contatti ausiliari relè	1NO + 1NC
Riarmo relè	Manuale o automatico selezionabile



General characteristics



Accordance to standards	IEC EN 60947-1, IEC EN 60947-4-1, UL500
Approvals	UL, CSA
Temperature limits	Funzionamento $\geq -50^{\circ}\text{C} - +80^{\circ}\text{C}$
	Stoccaggio $\geq -5^{\circ}\text{C} - +60^{\circ}\text{C}$
Usage altitudes	3.000 m
Protection degree	IP 20 (IEC EN 60529)
Mechanical durability [mil cycles]	9 - 22A 15ML/32-100A 12ML/150-300
	5ML/400-800 2,5ML
Electrical life [mil cycles]	9 - 22A 2,5ML/32-100A 2ML/150-300
	1ML/400-800 0,5ML
N. of operations per hour in AC-3 [n. cycles]	9-100A 1800 / 160-800A 1200
Shock resistance	Opened: 8g
	Closed: 10g
	(1/2 sine wave = 11mS)
Vibration resistance	Opened: 2g
	Closed: 4g
	5-300 (IEC 60-2-6)
Flame resistance	VO (UL94)
	960° (IEC 695-2-1)
Number of poles	3
Rated insulation voltage UI	690V
Rated impulse with stand voltage	UIMP 8 kV
Maximum making capacity	10 X Ie in cat. AC-3
Maximum breaking capacity	8 X Ie in cat. AC-3
Coil operating limits	-15% - +10% Uc
	(Rated voltage)
Rated insulation voltage UI relay	690 V
Relay tripping class with IEC-947-4-1	10A / 20
Relay auxiliary contacts	1NO + 1NC
Relay reset type	Manual or automatic reset



Posizione di funzionamento
Mounting position



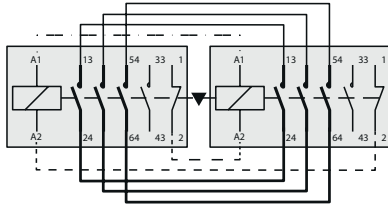
Caratteristiche generali

General characteristics

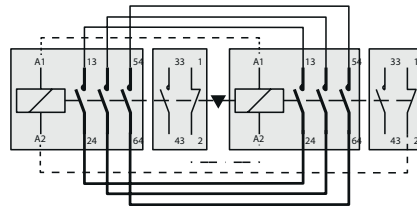
Schemi di collegamento interblocco meccanico

Mechanical interlock circuit diagram

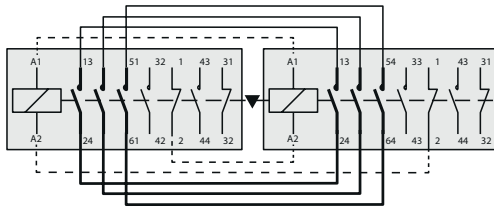
9-12-18-22



32-40-65-100-150



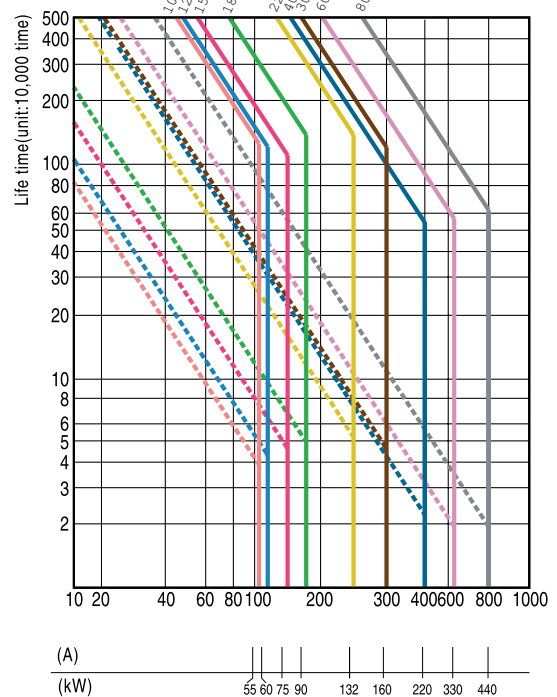
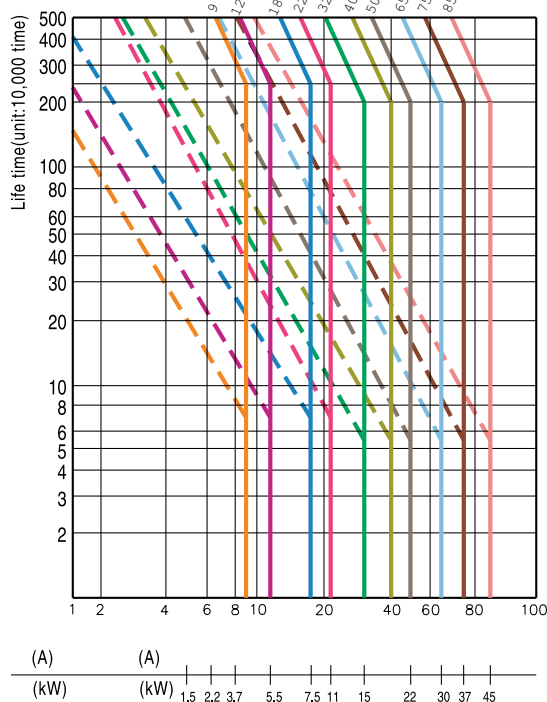
185-225-330-400-630-800



3Ø AC380-440V

3Ø AC380-440V

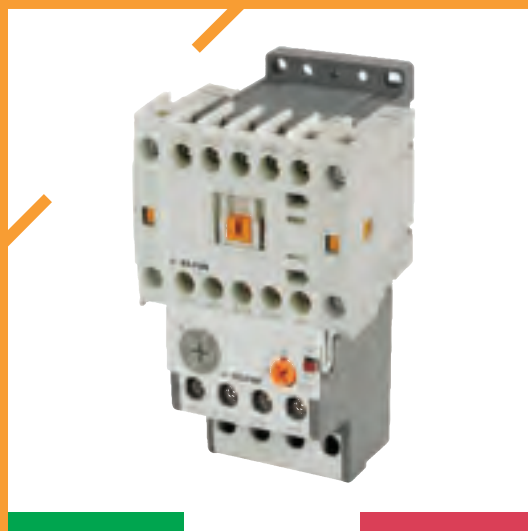
— AC-3
- - - AC-4



CONTATTORI, RELÈ TERMICI, MINI CONTATTORI, INTERRUTTORI SALVAMOTORE

Minicontattori

Minicontactors



Minicontattori

Minicontactors



TRIPOLARI DI BASE

I minicontattori New Elfin vengono forniti con tre contatti di potenza ed un contatto ausiliario normalmente aperto (NO).

QUATTRO TIPOLOGIE DI CONNESSIONE

I minicontattori sono disponibili con attacchi vite-serrafilo e pin a saldare per circuito stampato. Su richiesta sono disponibili cersioni con attacchi fast-on a cage-clamp.

VERSATILITÀ DI IMPIEGO

È possibile trasformare un minicontattore standard in un circuito stampato con apposito kit accessorio. La stessa operazione è possibile anche per il contatto ausiliario laterale. E' inoltre possibile montare sul minicontattore per circuito stampato tutti gli accessori della versione standard (contatti ausiliari laterali e frontali, temporizzatore, interblocco meccanico, filtro RC e relè termico.)

BOBINE DI ALIMENTAZIONE

Nella nuova gamma di minicontattori New Elfin è possibile gestire le bobine di alimentazione c.a. e c.c. come ricambio.

TECNOLOGIA INNOVATIVA

La traslazione dei contatti di potenza è verticale. Questa tecnologia permette di avere una distanza maggiore tra contatti fissi e mobili rispetto ad una soluzione standard orizzontale aumentando potere d'interruzione e vita elettrica.

GAMMA ESTESA

La gamma di minicontattori si estende fino a 16A 7.5Kw AC-3.

STANDARD THREE POLE

New Elfin minicontactors are supplied as standard with three main pole and an auxiliary contact normally open (NO).

FOUR TYPE OF CONNECTIONS

Minicontactors are available with various connections screw, solder pins, fast-on and cage clamps (on request).

VERSATILITY UTILIZATION

Customer can change a standard minicontactor into a solder pins version with a special kit. The same operation is possible for the side mounting auxiliary contact. Customer can fit on solder pin minicontactor all the accessories of standard version (auxiliary contacts, timer mechanical interlock, RC unit thermal O/L relay).

COILS

In our new range of minicontactors we can supply ac/dc coils as spare parts.

INNOVATIVE TECNOLOGY

The translation of main contacts is vertical. With this solutions minicontactors have a longer distance between fixed and moving contacts respect to a standard solution with horizontal translation. Making and breaking capacity and electrical life are longer than competitors.

WIDE RANGE

Our range of minicontactors arrive up to 16A 7.5Kw AC-3.

Lay-out serie xsmall

Xsmall series lay-out

090MAF40 090MAF04
 090MAF31 090MAF20
 090MAF22 090MAF11
 090MAF13 090MAF02

090PIN
 090PINDC

090MRC

090MTE

090M3C6
 090M3C9
 090M3C12
 090M3C16

090M3C6-DC
 090M3C9-DC
 090M3C12-DC
 090M3C16-DC

090DINXS

090PINAUS
 090PINAUSDC

090MAL10
 090MAL01

090MIM16

090MR16



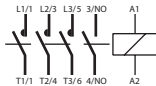
Sezioni 6-9-12-16

6-9-12-16 sections

Minicontattore / Minicontactor

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Sezione 6A / 6A Section

24V - 50/60 Hz Tensioni di comando / Coil voltage	0,17	090M3C6-24
48V - 50/60 Hz Tensioni di comando / Coil voltage	0,17	090M3C6-48
110V - 50/60 Hz Tensioni di comando / Coil voltage	0,17	090M3C6-110
230/240V - 50/60 Hz Tensioni di comando / Coil voltage	0,17	090M3C6-240
380/400V - 50/60 Hz Tensioni di comando / Coil voltage	0,17	090M3C6-400
12V DC Tensioni di comando / Coil voltage	0,23	090M3C6-12DC
24V DC Tensioni di comando / Coil voltage	0,23	090M3C6-24DC
48V DC Tensioni di comando / Coil voltage	0,23	090M3C6-48DC
110V DC Tensioni di comando / Coil voltage	0,23	090M3C6-110DC

Prestazioni secondo IEC-60947 Performance in accordance with IEC-60947

AC1			20A
AC3	200-240V	1,5 kW	7A
	380-440V	2,2 kW	6A
	500-550V	3 kW	5A
	690V	3 kW	4A
DC1 L/R<1ms	24V	1 polo in serie/1 pole in series 2 poli in serie/2 poles in series	9A 12A
	48V	1 polo in serie/1 pole in series 2 poli in serie/2 poles in series	8A 10A
	110V	1 polo in serie/1 pole in series 2 poli in serie/2 poles in series	3A 6A
DC3/DC5 L/R<10ms	24V	1 polo in serie/1 pole in series 2 poli in serie/2 poles in series	6A 7A
	48V	1 polo in serie/1 pole in series 2 poli in serie/2 poles in series	5A 7A
	110V	1 polo in serie/1 pole in series 2 poli in serie/2 poles in series	1A 3A

Prestazioni secondo UL/CSA Performance in accordance with UL/CSA Potenza nominale massima / Maximum nominal power

Ith		20A
Monofase / Mono-phase	115V	0,5 HP
	230V	1 HP
Trifase / Tri-phase	200V	1,5 HP
	230V	1,5 HP
	460V 575V	3 HP 3 HP

Sezione 9A / 9A Section

24V - 50/60 Hz Tensioni di comando / Coil voltage	0,17	090M3C9-24
48V - 50/60 Hz Tensioni di comando / Coil voltage	0,17	090M3C9-48
110V - 50/60 Hz Tensioni di comando / Coil voltage	0,17	090M3C9-110
230/240V - 50/60 Hz Tensioni di comando / Coil voltage	0,17	090M3C9-240
380/400V - 50/60 Hz Tensioni di comando / Coil voltage	0,17	090M3C9-400
12V DC Tensioni di comando / Coil voltage	0,23	090M3C9-12DC
24V DC Tensioni di comando / Coil voltage	0,23	090M3C9-24DC
48V DC Tensioni di comando / Coil voltage	0,23	090M3C9-48DC
110V DC Tensioni di comando / Coil voltage	0,23	090M3C9-110DC

Prestazioni secondo IEC-60947 Performance in accordance with IEC-60947

AC1			20A
AC3	200-240V	2,2 kW	9A
	380-440V	4 kW	9A
	500-550V	3,7 kW	6A
	690V	4 kW	5A
DC1 L/R<1ms	24V	1 polo in serie/1 pole in series 2 poli in serie/2 poles in series	10A 13A
	48V	1 polo in serie/1 pole in series 2 poli in serie/2 poles in series	10A 12A
	110V	1 polo in serie/1 pole in series 2 poli in serie/2 poles in series	3A 7A
DC3/DC5 L/R<10ms	24V	1 polo in serie/1 pole in series 2 poli in serie/2 poles in series	7A 9A
	48V	1 polo in serie/1 pole in series 2 poli in serie/2 poles in series	6A 8A
	110V	1 polo in serie/1 pole in series 2 poli in serie/2 poles in series	1A 4A

Prestazioni secondo UL/CSA Performance in accordance with UL/CSA Potenza nominale massima / Maximum nominal power

Ith		20A
Monofase / Mono-phase	115V	0,5 HP
	230V	1,5 HP
Trifase / Tri-phase	200V	3 HP
	230V	3 HP
	460V 575V	5 HP 5 HP



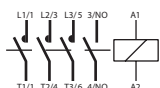
Sezioni 6-9-12-16

6-9-12-16 sections

Minicontattore / Minicontactor

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Sezione 12A / 12A Section

24V - 50/60 Hz Tensioni di comando / Coil voltage	0,17	090M3C12-24
48V - 50/60 Hz Tensioni di comando / Coil voltage	0,17	090M3C12-48
110V - 50/60 Hz Tensioni di comando / Coil voltage	0,17	090M3C12-110
230/240V - 50/60 Hz Tensioni di comando / Coil voltage	0,17	090M3C12-240
380/400V - 50/60 Hz Tensioni di comando / Coil voltage	0,17	090M3C12-400
12V DC Tensioni di comando / Coil voltage	0,23	090M3C12-12DC
24V DC Tensioni di comando / Coil voltage	0,23	090M3C12-24DC
48V DC Tensioni di comando / Coil voltage	0,23	090M3C12-48DC
110V DC Tensioni di comando / Coil voltage	0,23	090M3C12-110DC

Prestazioni secondo IEC-60947 Performance in accordance with IEC-60947

AC1		20A
AC3	200-240V	3 kW
	380-440V	5,5 kW
	500-550V	4 kW
	690V	4 kW
DC1 L/R<1ms	24V	1 polo in serie/1 pole in series 2 poli in serie/2 poles in series
	48V	1 polo in serie/1 pole in series 2 poli in serie/2 poles in series
	110V	1 polo in serie/1 pole in series 2 poli in serie/2 poles in series
DC3/DC5 L/R<10ms	24V	1 polo in serie/1 pole in series 2 poli in serie/2 poles in series
	48V	1 polo in serie/1 pole in series 2 poli in serie/2 poles in series
	110V	1 polo in serie/1 pole in series 2 poli in serie/2 poles in series

Prestazioni secondo UL/CSA Performance in accordance with UL/CSA Potenza nominale massima / Maximum nominal power

Ith		20A
Monofase / Mono-phase	115V	1 HP
	230V	3 HP
Trifase / Tri-phase	200V	3 HP
	230V	3 HP
	460V	7,5 HP
	575V	7,5 HP

Sezione 16A / 16A Section

24V - 50/60 Hz Tensioni di comando / Coil voltage	0,17	090M3C16-24
48V - 50/60 Hz Tensioni di comando / Coil voltage	0,17	090M3C16-48
110V - 50/60 Hz Tensioni di comando / Coil voltage	0,17	090M3C16-110
230/240V - 50/60 Hz Tensioni di comando / Coil voltage	0,17	090M3C16-240
380/400V - 50/60 Hz Tensioni di comando / Coil voltage	0,17	090M3C16-400
12V DC Tensioni di comando / Coil voltage	0,23	090M3C16-12DC
24V DC Tensioni di comando / Coil voltage	0,23	090M3C16-24DC
48V DC Tensioni di comando / Coil voltage	0,23	090M3C16-48DC
110V DC Tensioni di comando / Coil voltage	0,23	090M3C16-110DC

Prestazioni secondo IEC-60947 Performance in accordance with IEC-60947

AC1		20A
AC3	200-240V	4 kW
	380-440V	7,5 kW
	500-550V	5,5 kW
	690V	4 kW
DC1 L/R<1ms	24V	1 polo in serie/1 pole in series 2 poli in serie/2 poles in series
	48V	1 polo in serie/1 pole in series 2 poli in serie/2 poles in series
	110V	1 polo in serie/1 pole in series 2 poli in serie/2 poles in series
DC3/DC5 L/R<10ms	24V	1 polo in serie/1 pole in series 2 poli in serie/2 poles in series
	48V	1 polo in serie/1 pole in series 2 poli in serie/2 poles in series
	110V	1 polo in serie/1 pole in series 2 poli in serie/2 poles in series

Prestazioni secondo UL/CSA Performance in accordance with UL/CSA Potenza nominale massima / Maximum nominal power

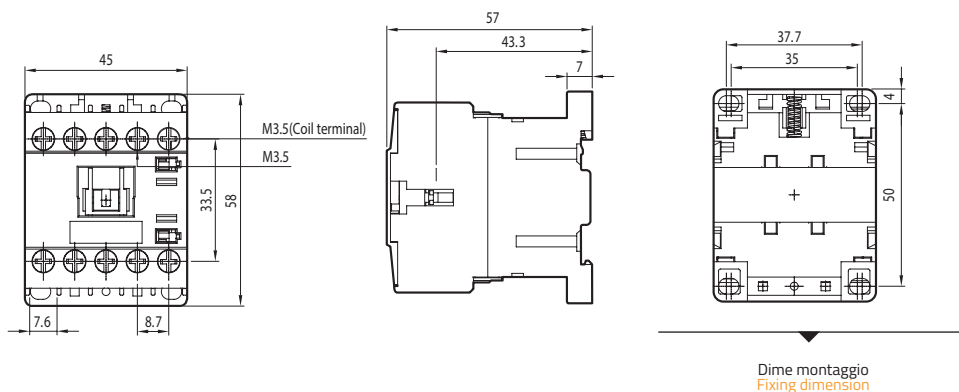
Ith		20A
Monofase / Mono-phase	115V	2 HP
	230V	3 HP
Trifase / Tri-phase	200V	4 HP
	230V	4 HP
	460V	8 HP
	575V	8 HP



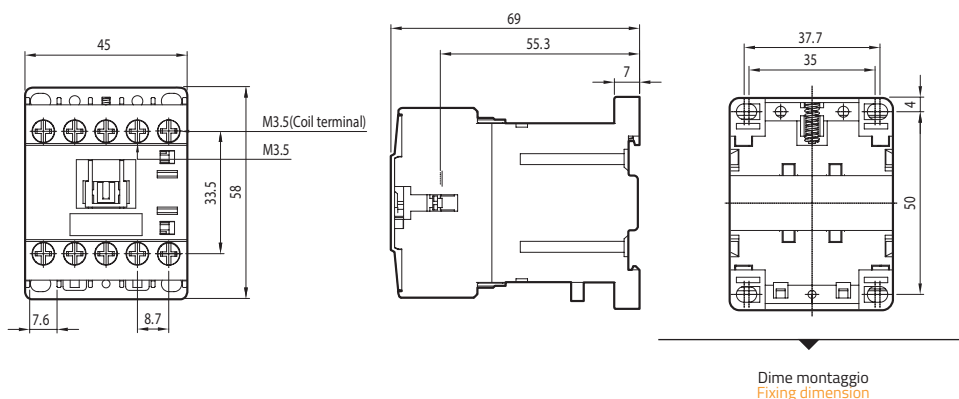
Sezioni 6-9-12-16

6-9-12-16 sections

Minicontattore C.A. / A.C. minicontactors



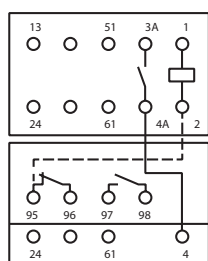
Minicontattore C.C. / D.C. minicontactors



Sezioni 6-9-12-16

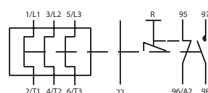
6-9-12-16 sections

Relè termico differenziale / Thermal O/L relay

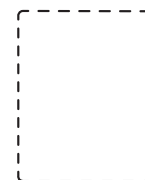
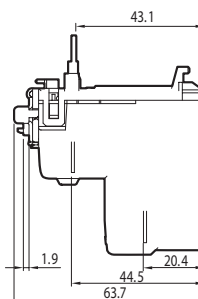
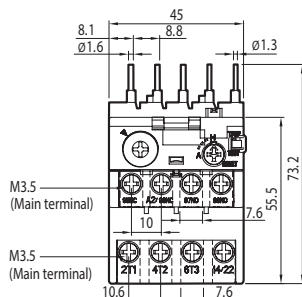


Schema per cablaggio diretto
contattore-relè
Direct mounting of T.O.R.
to minicontactor diagram
of prewiring

	g	cod
0,1 ÷ 0,16 Taratura (A) / Setting range (A)	0,1	09MR16-016
0,16 ÷ 0,25 Taratura (A) / Setting range (A)	0,1	09MR16-025
0,25 ÷ 0,4 Taratura (A) / Setting range (A)	0,1	09MR16-04
0,4 ÷ 0,65 Taratura (A) / Setting range (A)	0,1	09MR16-065
0,63 ÷ 1 Taratura (A) / Setting range (A)	0,1	09MR16-1
1 ÷ 1,6 Taratura (A) / Setting range (A)	0,1	09MR16-1V6
1,6 ÷ 2,5 Taratura (A) / Setting range (A)	0,1	09MR16-2V5
2,5 ÷ 4 Taratura (A) / Setting range (A)	0,1	09MR16-4
4 ÷ 6 Taratura (A) / Setting range (A)	0,1	09MR16-6
5 ÷ 8 Taratura (A) / Setting range (A)	0,1	09MR16-8
6 ÷ 9 Taratura (A) / Setting range (A)	0,1	09MR16-9
7 ÷ 10 Taratura (A) / Setting range (A)	0,1	090MR16-10
9 ÷ 13 Taratura (A) / Setting range (A)	0,1	090MR16-13
12 ÷ 16 Taratura (A) / Setting range (A)	0,1	09MR16-16

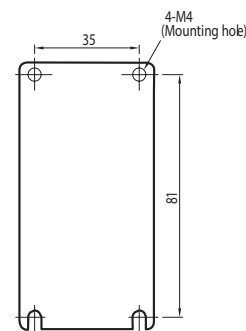
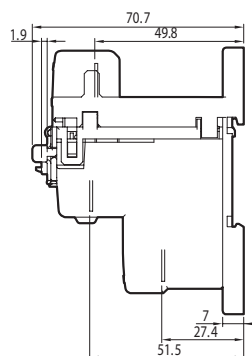
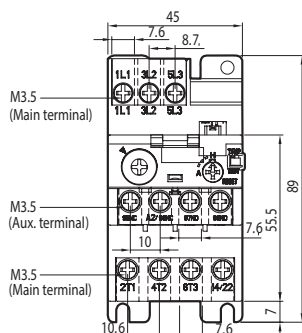


Minirelè / T.O.R.



Dime montaggio
Fixing dimension

Minirelè montaggio su accessorio separato T.O.R. with separate mounting adaptor



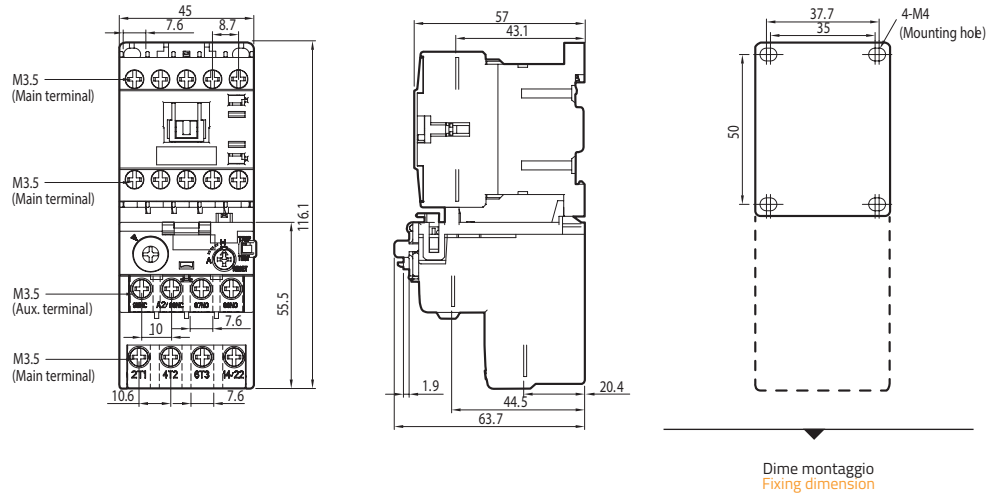
Dime montaggio
Fixing dimension



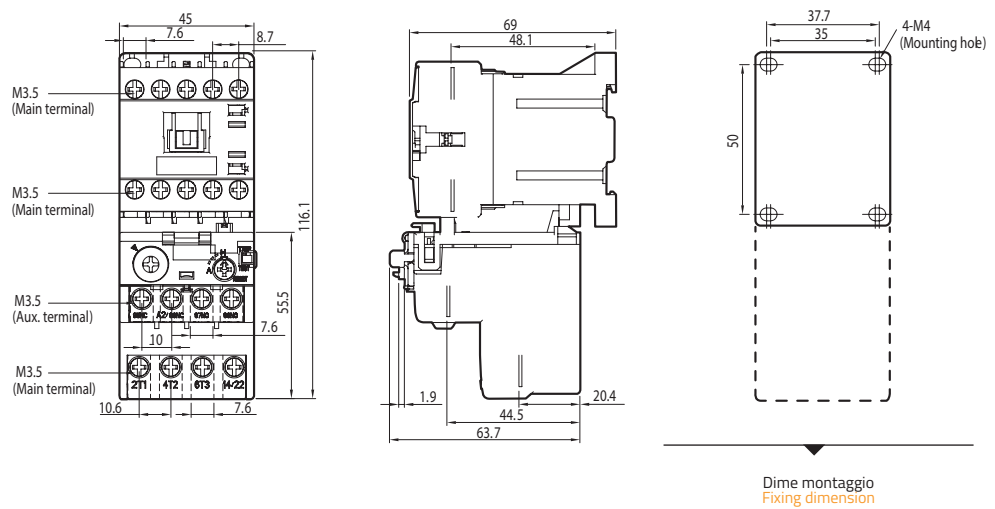
Sezioni 6-9-12-16

6-9-12-16 sections

Minirelè montaggio diretto su minicontattore C.A. T.O.R. direct mounting on A.C. minicontactor

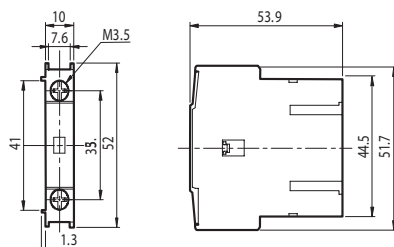


Minirelè montaggio diretto su minicontattore C.C. T.O.R. direct mounting on D.C. minicontactor



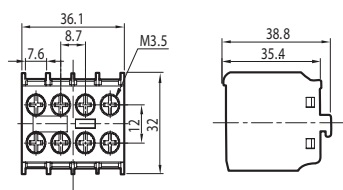
Contatti ausiliari Auxiliary contacts

Contatti ausiliari Auxiliary contacts



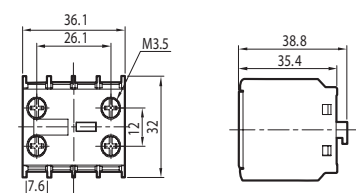
Montaggio laterale / Side mounting

	g	cod
1NO	20	090MAL10
1NC	20	090MAL01



Montaggio frontale / Top mounting

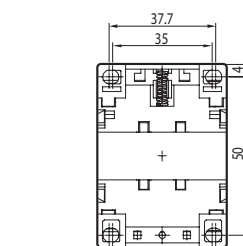
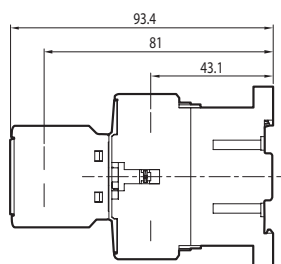
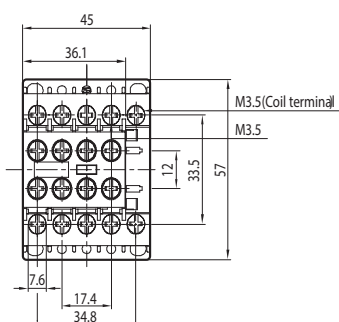
4NO	40	090MAF40
3NO + 1NC	40	090MAF31
2NO + 2NC	40	090MAF22
1NO + 3NC	40	090MAF13
4NC	40	090MAF04



Montaggio frontale / Top mounting

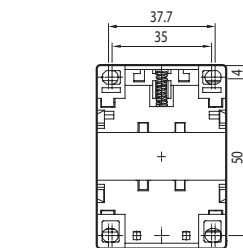
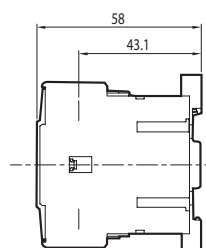
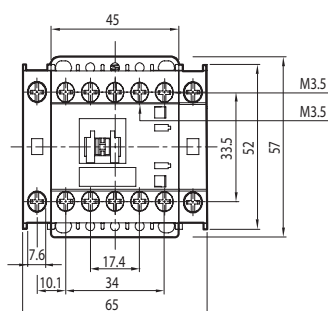
2NO	30	090MAF20
1NO + 1NC	30	090MAF11
2NC	30	090MAF02

Minicontattore con ausiliario frontale Minicontactor with top mounting contact



Dime montaggio
Fixing dimension

Minicontattore con ausiliario frontale Minicontactor with top mounting contact



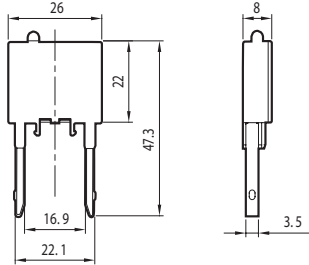
Dime montaggio
Fixing dimension

Accessori Accessories

Filtro soppressore Surge suppressor unit

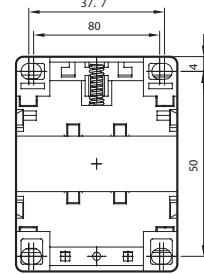
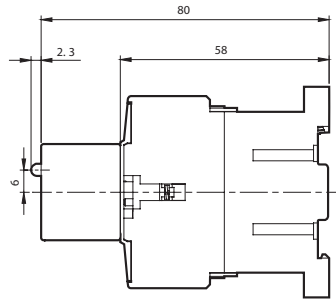
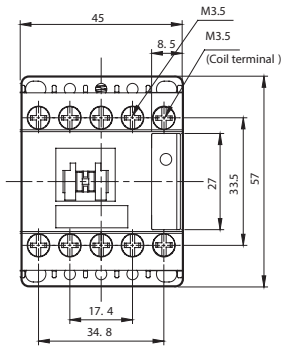
g

cod



24-48V CA	0,005	090MRC48
50-127V CA	0,005	090MRC110
200-240V CA	0,005	090MRC240
17-24V CC	0,005	090MRC24DC
36-72V CC	0,005	090MRC72DC

Minicontattore con filtro RC Minicontactor with surge suppressor unit



Dime montaggio
Fixing dimension

Accessori Accessories



Interblocco meccanico Mechanical interlock

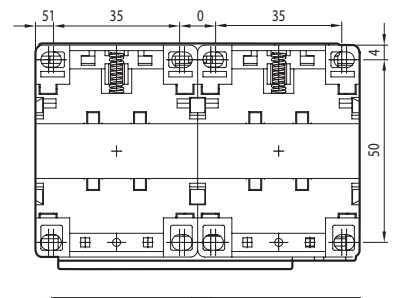
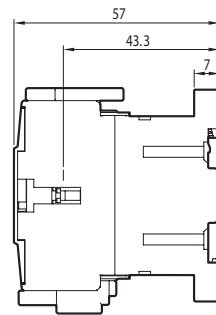
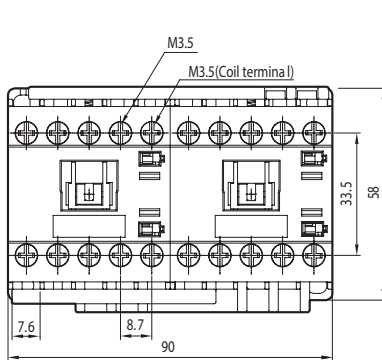
g **cod**

Interblocco meccanico
Mechanical interlock

0,005

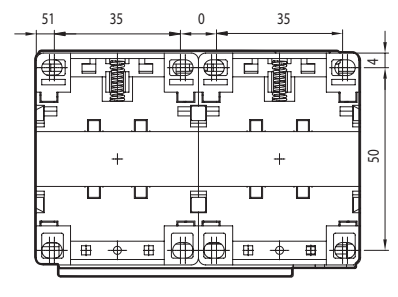
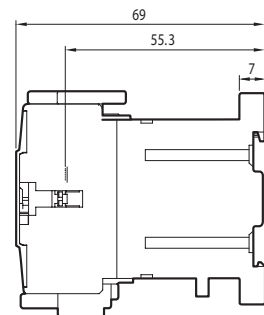
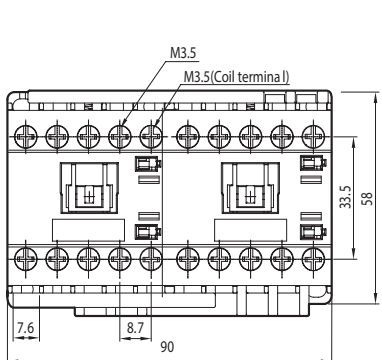
090MIM16

Minicontattori C.A. interbloccati A.C. minicontactors interlocked



Dime montaggio
Fixing dimension

Minicontattori C.C. interbloccati D.C. minicontactors interlocked

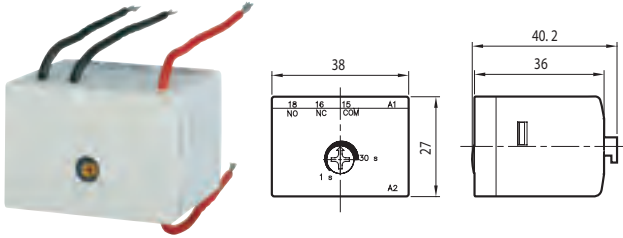


Dime montaggio
Fixing dimension

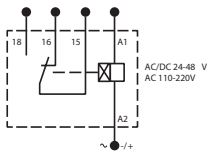
Accessori Accessories

Unità elettronica temporizzata Electric timer unit

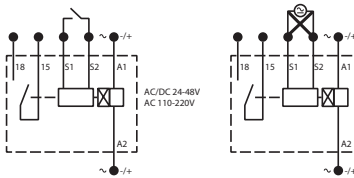
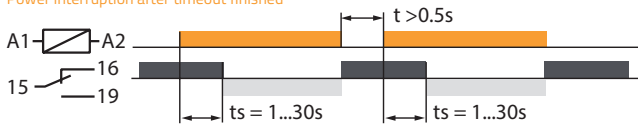
g **cod**



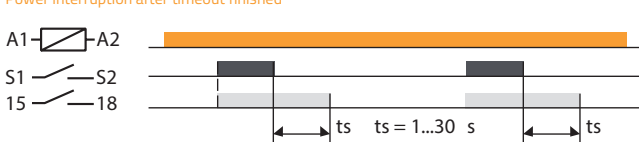
24-48V CA/CC delay ON 1-30 s	40	090MTEON48
100-220V CA/CC delay ON 1-30 s	40	090MTEON220
24-48V CA/CC delay OFF 1-30 s	40	090MTEOFF48
100-220V CA/CC delay OFF 1-30 s	40	090MTEOFF220



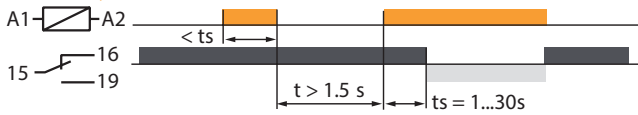
Interruzione alimentazione dopo il termine del tempo ts
Power interruption after timeout finished



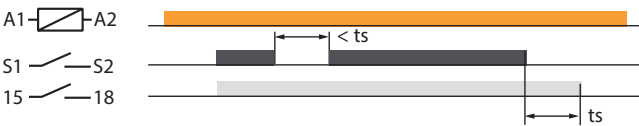
Interruzione alimentazione dopo il termine del tempo ts
Power interruption after timeout finished



Interruzione alimentazione prima del termine del tempo ts
Power interruption before timeout finished

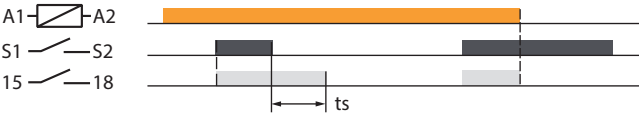


Apertura S1-S2 prima del termine del tempo ts
Turn on switch (S1-S2) before timeout finished

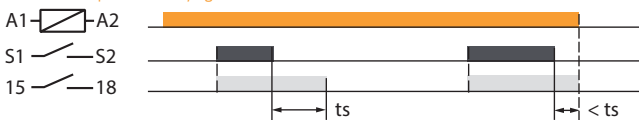


— Senza tensione / De-energized
— Sotto tensione / Energized

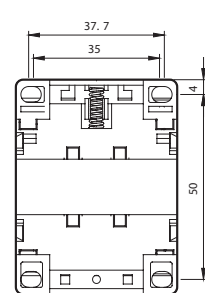
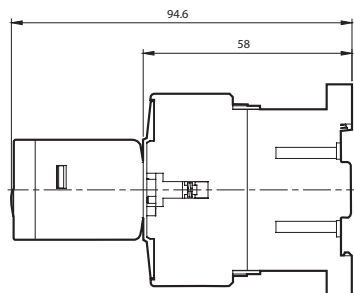
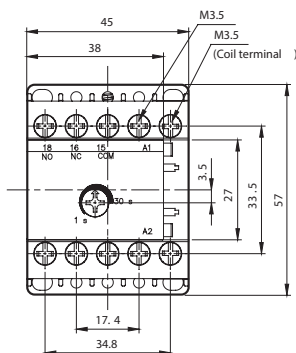
Interruzione alimentazione durante funzionamento timer
Power interruption operating timer



Interruzione alimentazione prima del termine del tempo ts
Power interruption on delaying



Minicontattore con temporizzatore elettronico Minicontactor with electric timer



Dime montaggio
Fixing dimension



Accessori e ricambi

Accessories and spare parts

Sistema di montaggio separato Separate mounting system



Adattatore montaggio barra DIN 35
Bar mounting adapter DIN 35

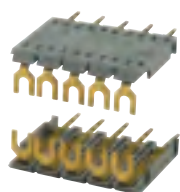
g

cod

0,3

090DINXS

Pettini / Solder pin terminal



Per contattori/ For contactors

Pettini corti A.C. / A.C. short
Pettini lunghi D.C. / D.C. long

g

cod

20

090PIN

20

090PINDC

Per contatti ausiliari / For auxiliary contacts



Pettini corti A.C. / A.C. short
Pettini lunghi D.C. / D.C. long

10

090PINAUS

10

090PINAUSDC

Bobine / Coils



24V - 50/60 Hz Tensioni di comando / Coil voltage

g

cod

0,07

090B16-24

48V - 50/60 Hz Tensioni di comando / Coil voltage

0,07

090B16-48

110V - 50/60 Hz Tensioni di comando / Coil voltage

0,07

090B16-110

230/240V - 50/60 Hz Tensioni di comando / Coil voltage

0,07

090B16-220

380/400V - 50/60 Hz Tensioni di comando / Coil voltage

0,07

090B16-380

12V CC Basso assorbimento / Low consumption

0,08

090B16-12DCL

24V CC Basso assorbimento / Low consumption

0,08

090B16-24DCL

48V CC Basso assorbimento / Low consumption

0,08

090B16-48DCL

110V CC Basso assorbimento / Low consumption

0,08

090B16-110DCL

Caratteristiche ausiliari Auxiliary characteristics

Assorbimento Coil consumption [VA]

Limite tensione bobina Coil operating limit [V]

Tempo di funzionamento Operating time [ms]

60Hz (50Hz)	Spunto Pick-up	Ritenuta Sealed	Dissipazione Dissipation [W]	Attrazione Pick-up	Rilascio Drop-out	Attrazione Pick-up	Rilascio Dropout
6-9-12-16	32	6	2	80÷110%	30÷40%	10÷20	4÷15
6-9-12-16	1.2	1.2	1.2	80÷125%	10÷30%	40÷50	35÷45

Caratteristiche elettriche ausiliari relè Auxiliary contact relays electrical characteristics

Ith

AC11/AC-15

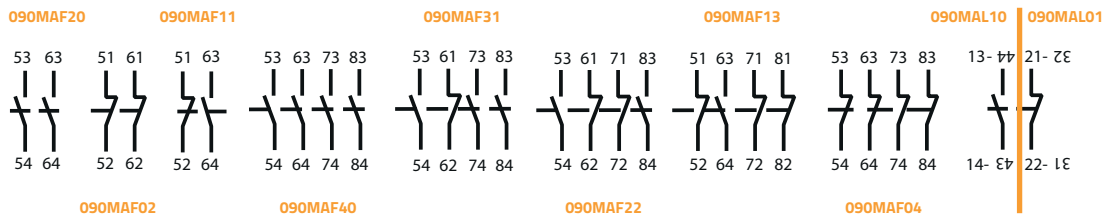
DC11/DC13

	AC1	110V	220V	550V	110V	220V
	[A]	[A]	[A]	[A]	[A]	[A]
090R16	16	0.3/2.5	0.3/2	0.3/1	0.28	0.14

Caratteristiche elettriche ausiliari Auxiliary contact electrical characteristics

	CORRENTE NOMINALE / NOMINAL CURRENT									N. manovre/ora Operation per hour	Vita meccanica Mechanical life	Vita elettrica [op x 10.000] Electrical life
	Ith	AC-15			DC-13							
	AC-1	120V	240V	480V	600V	125V	250V	440V	600V			
	[A]	[A]	[A]	[A]	[A]	[A]	[A]	[A]	[A]			
090MAF...	16	6	3	1.5	1.2	1.1	0.55	0.31	0.2	1800	1200	100
090MAL...	16	6	3	1.5	1.2	1.1	0.55	0.31	0.2	1800	1200	100

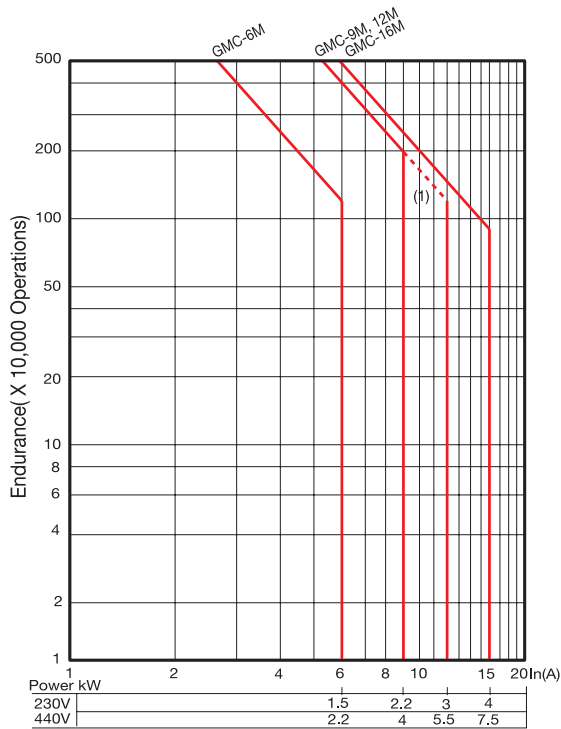
Numerazione contatti ausiliari Auxiliary contacts



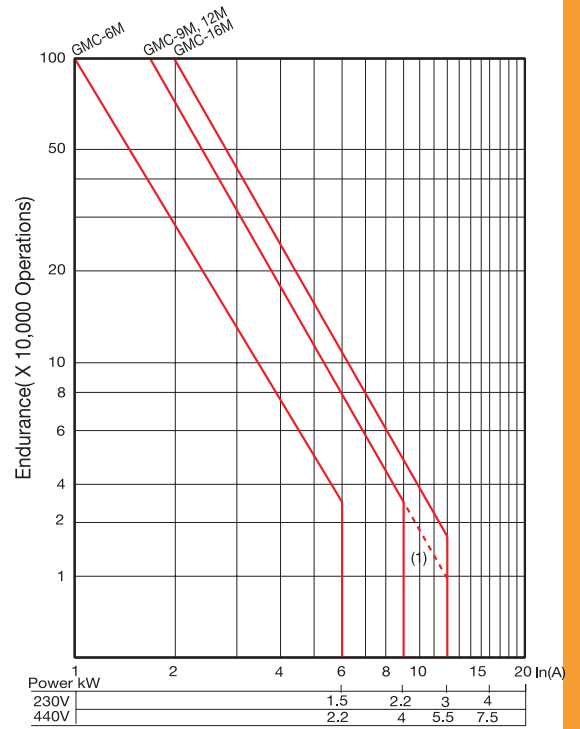
Caratteristiche generali General characteristics

Vita elettrica / Electrical life time

AC-3 UE 380-440V

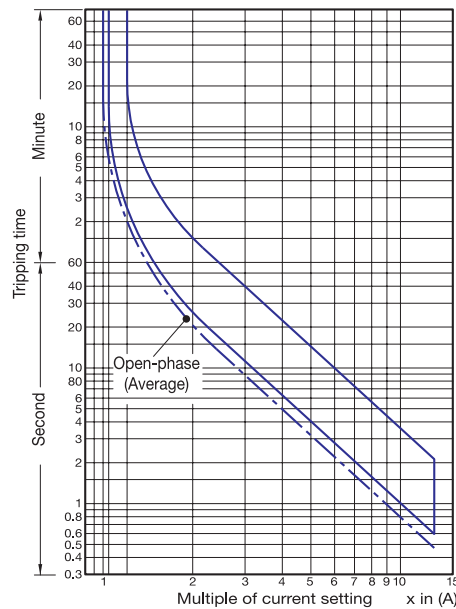


AC-4 UE 380-440V

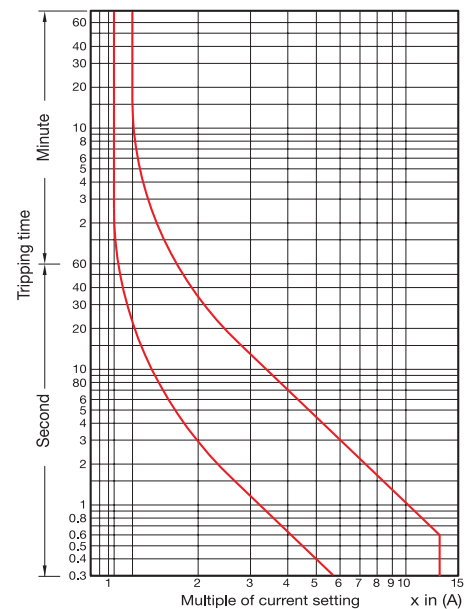


Curve caratteristiche relè / Relay curve characteristics

Avviamento a freddo / Cold start



Avviamento a caldo / Warm start



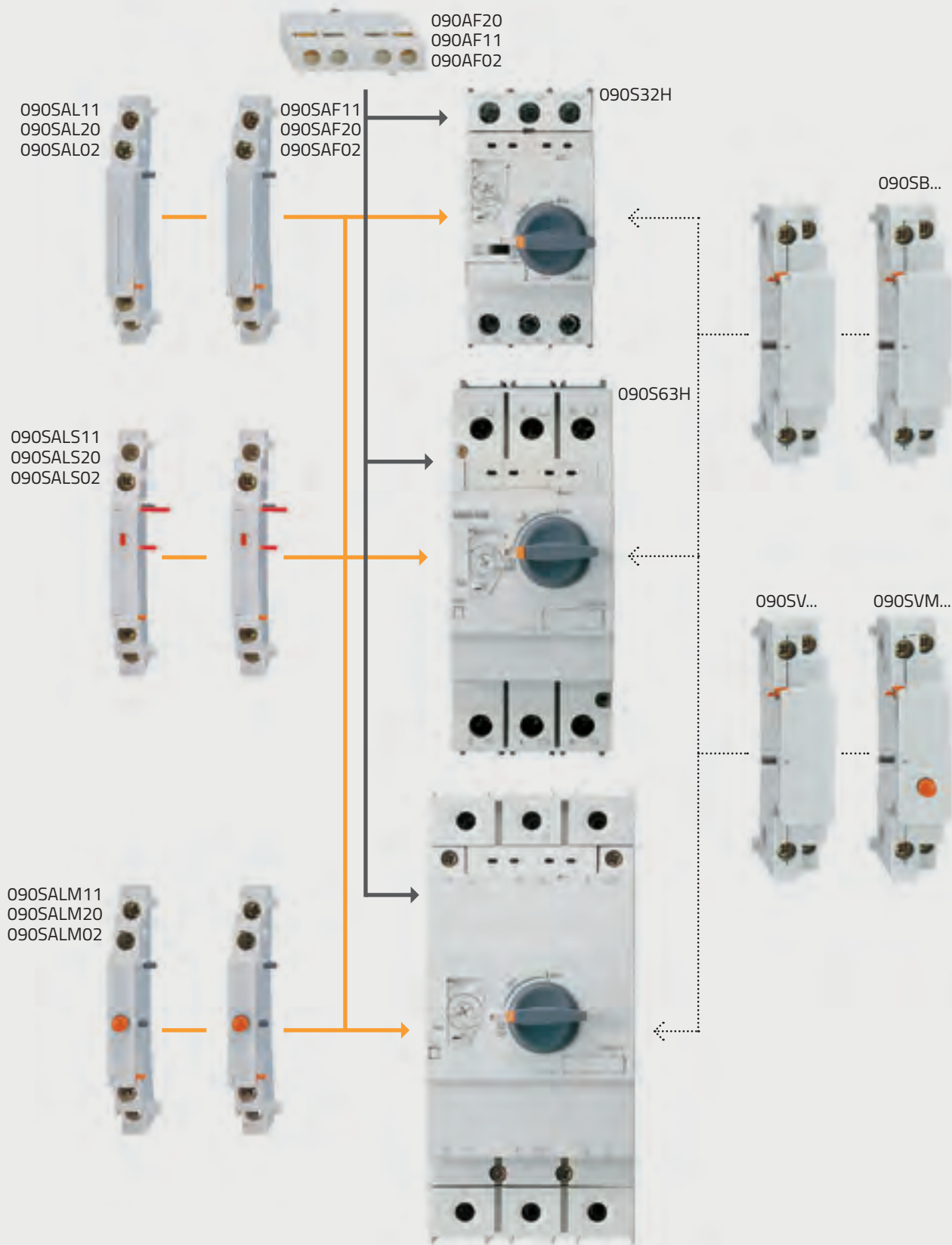
CONTATTORI, RELÈ TERMICI, MINI CONTATTORI, INTERRUTTORI SALVAMOTORE

Interruttori automatici Manual motor starters



Lay-out interruttori automatici

Manual motor starters lay-out



Caratteristiche generali

General characteristics

CARATTERISTICHE GENERALI

Intervento termico regolabile
Intervento magnetico 13X IE max
Classe d'intervento 10
Compensazione temperatura ambiente
Funzioni di protezione:
▪ mancanza fase
▪ corto circuito
▪ sovraccarico

GENERAL CHARACTERISTICS

Adjustable thermal release
Magnetic release 13X IE max
Trip class 10
Ambient temperature compensation
Protective functions:
▪ phase failure
▪ short circuit
▪ over load

Caratteristiche generali



General characteristics



Numero di poli	3
Tensione nominale (UE)	fino a 690V
Frequenza nominale	50/60 Hz
Tensione nominale di isolamento	Ui 690V / Uimp. 6kV
Categoria d'impiego	IEC 60947-2 (interruttore): CAT.A IEC 60947-4 (avviatore): AC3
Durata meccanica	S32H 100.000 oper. S63H - S100H 50.000 oper.
Durata elettrica	S32H 100.000 oper. S63H - S100H 25.000 oper.
Numero di manovre ora	25 oper. / hour
Compensazione temperatura	-20 ÷ +60 °C
Sgancio istantaneo per corto circuito	13 x Ie

Number of poles	3
Rated voltage (UE)	up to 690V
Rated frequency	50/60 Hz
Rated insulation voltage	Ui 690V / Uimp. 6kV
Utilization category	IEC 60947-2 (breaker): CAT.A IEC 60947-4 (motor starter): AC3
Mechanical endurance	S32H 100.000 oper. S63H - S100H 50.000 oper.
Electrical endurance	S32H 100.000 oper. S63H - S100H 25.000 oper.
Max operating frequency	25 oper. / hour
Temperature compensation	-20 ÷ +60 °C
Instantaneous short circuit release	13 x Ie



Caratteristiche generali

General characteristics

Type	Rated operational current range [A]	Thermal release adjustment range [A]	Magnetic release operating current [A]	Switching of 3 phase AC motors, AC-2, AC-3						400/415V	
				3-phase [kW] (50/60Hz)			3-phase[HP][60Hz]			Icu [kA]	Ics [kA]
				230V	400V	690V	230V	460V	575V		
	0.16	0.1..0.16	2.1	-	0.02	-	-	-	-	100	100
	0.25	0.16..0.25	3.3	0.03	0.06	-	-	-	-	100	100
	0.4	0.25..0.4	5.2	0.06	0.09	-	-	-	-	100	100
	0.63	0.4..0.63	8.2	0.09	0.12	0.25	-	-	-	100	100
	1	0.63..1.0	13	0.12	0.25	0.55	-	1/2	1/2	100	100
	1.6	1.0..1.6	20.8	0.25	0.55	1.1	1/3	3/4	1	100	100
	2.5	1.6..2.5	32.5	0.37	0.75	1.5	1/2	1½	1½	100	100
	4	2.5..4.0	52	0.75	1.5	3	1	2	3	100	100
	6	4..6	78	1.5	2.2	4	1½	5	5	100	100
	8	5..8	104	1.5	3	5.5	2	5	5	100	100
	10	6..10	130	3	4	7.5	3	7½	10	100	100
	13	9..13	169	3	5.5	11	3	7½	10	100	100
	17	11..17	221	4	7.5	11	5	10	15	50	38
	22	14..22	286	4	7.5	15	7½	15	20	50	38
	26	18..26	338	5.5	11	18.5	7½	15	20	50	38
	32	22..32	416	7.5	15	22	10	20	30	50	38
	40	28-40	520	7.5	18.5	30	15	30	40	40	30
	10	6-10	130	3	4	7.5	3	7½	10	100	100
	13	9-13	169	3	5.5	11	3	7½	10	100	100
	17	11-17	221	4	7.5	11	5	10	15	50	50
	22	14-22	286	4	7.5	15	7½	15	20	50	50
	26	18-26	338	5.5	11	18.5	10	20	25	50	50
	32	22-32	416	7.5	15	22	10	25	30	50	50
	40	28-40	520	7.5	18.5	30	15	30	40	50	50
	50	34-50	650	11	22	45	15	40	50	50	50
	63	45-63	819	15	30	55	20	50	60	50	50
	65	47-65	845	15	30	55	20	50	60	35	27
	17	11-17	221	4	7.5	11	5	10	15	100	100
	22	14-22	286	4	7.5	15	7½	15	20	100	50
	26	18-26	338	5.5	11	18.5	10	20	25	100	50
	32	22-32	416	7.5	15	22	10	25	30	100	50
	40	28-40	520	7.5	18.5	30	15	30	40	100	50
	50	34-50	650	11	22	45	15	40	50	100	50
	63	45-63	819	15	30	55	20	50	60	100	50
	75	55-75	975	22	37	63	25	60	75	75	50
	90	70-90	1170	30	45	75	30	75	100	75	50
	100	80-100	1300	30	45	90	40	75	100	75	50

SEZIONE 32 / 32 SECTION

SEZIONE 63 / 63 SECTION

SEZIONE 100 / 100 SECTION

Sezioni 32-63-100

32-63-100 sections

Interruttori automatici salvamotore Manual motor starters

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Sezione 32A / 32A Section

0,1-0,16 Taratura / Setting range [A] 100 KA	0,36	090S32H-016
0,16-0,25 Taratura / Setting range [A] 100 KA	0,36	090S32H-025
0,25-0,4 Taratura / Setting range [A] 100 KA	0,36	090S32H-04
0,4-0,63 Taratura / Setting range [A] 100 KA	0,36	090S32H-063
0,63-1 Taratura / Setting range [A] 100 KA	0,36	090S32H-01
1-1.6 Taratura / Setting range [A] 100 KA	0,36	090S32H-1V6
1,6-2,5 Taratura / Setting range [A] 100 KA	0,36	090S32H-2V5
2,5-4 Taratura / Setting range [A] 100 KA	0,36	090S32H-4
4-6 Taratura / Setting range [A] 100 KA	0,36	090S32H-6
5-8 Taratura / Setting range [A] 100 KA	0,36	090S32H-8
6-10 Taratura / Setting range [A] 100 KA	0,36	090S32H-10
9-13 Taratura / Setting range [A] 100 KA	0,36	090S32H-13
11-17 Taratura / Setting range [A] 100 KA	0,36	090S32H-17
14-22 Taratura / Setting range [A] 50 KA	0,36	090S32H-22
18-26 Taratura / Setting range [A] 50 KA	0,36	090S32H-26
22-32 Taratura / Setting range [A] 50 KA	0,36	090S32H-32

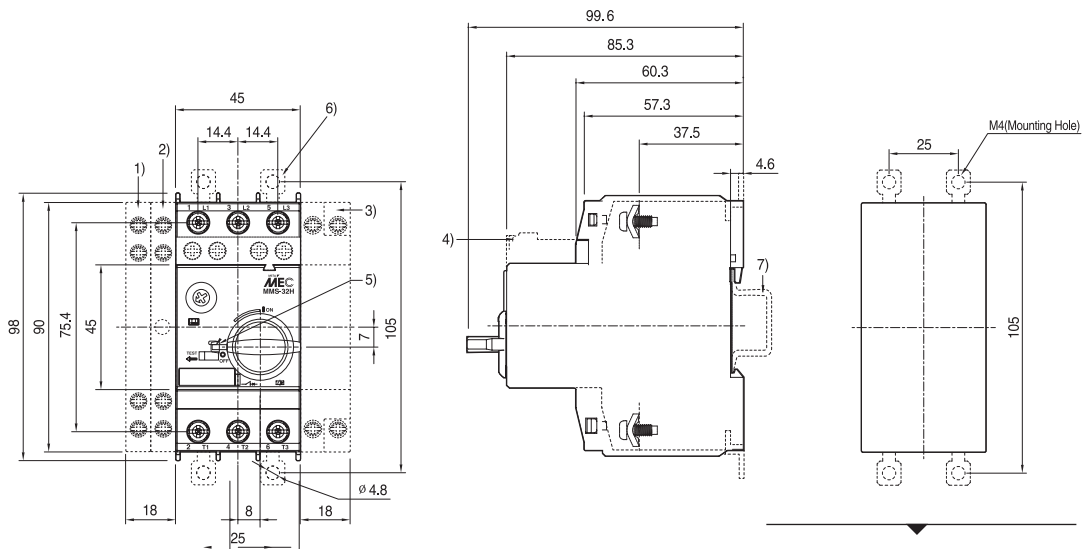
Sezione 63A / 63A Section

28-40 Taratura / Setting range [A] 50 KA	1,00	090S63H-40
34-50 Taratura / Setting range [A] 50 KA	1,00	090S63H-50
45-63 Taratura / Setting range [A] 50 KA	1,00	090S63H-63

Sezione 100A / 100A Section

55-75 Taratura / Setting range [A] 100 KA	2,20	090S100H-75
70-90 Taratura / Setting range [A] 100 KA	2,20	090S100H-90
80-100 Taratura / Setting range [A] 100 KA	2,20	090S100H-100

32H



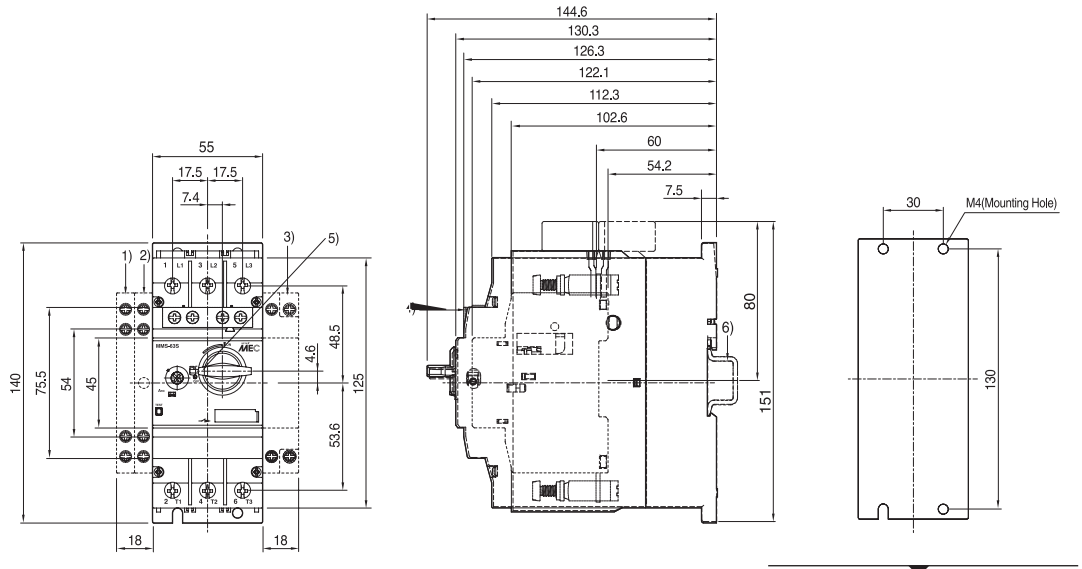
Dime montaggio
Fixing dimension



Sezioni 32-63-100

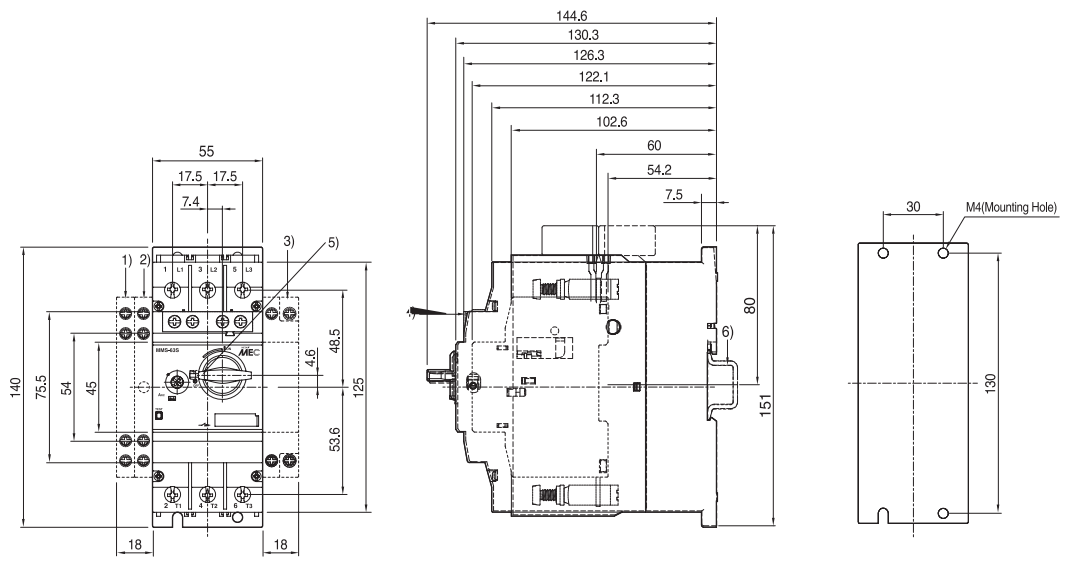
32-63-100 sections

63H



Dime montaggio
Fixing dimension

100H



Dime montaggio
Fixing dimension

Accessori Accessories



Sezioni 32A-63A-100A / 32A-63A-100A Sections

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cod

Contatto ausiliario frontale / Front mounting auxiliary contact

1NO+1NC	0,018	090SAF11
2NO	0,018	090SAF20
2NC	0,018	090SAF02

Contatto ausiliario laterale / Side mounting auxiliary contact

1NO+1NC Montaggio a sinistra / Side mounting on the left	0,030	090SAL11
2NO Montaggio a sinistra / Side mounting on the left	0,030	090SAL20
2NC Montaggio a sinistra / Side mounting on the left	0,030	090SAL02

Contatto ausiliario laterale di segnalazione d'intervento magnetico e/o termico / Side mounting auxiliary contact alarm contact (any trip)

1NO+1NC Montaggio a sinistra / Side mounting on the left	0,040	090SALS11
2NO / Side mounting on the left	0,040	090SALS20
2NC / Side mounting on the left	0,040	090SALS02

Contatto ausiliario laterale di segnalazione d'intervento magnetico / Side mounting alarm contact (magnetic trip)

1NO+1NC Montaggio a sinistra / Side mounting on the left	0,040	090SALM11
2NO Montaggio a sinistra / Side mounting on the left	0,040	090SALM20
2NC Montaggio a sinistra / Side mounting on the left	0,040	090SALM02

Accessori Accessories

Sezioni 32A-63A-100A / 32A-63A-100A Sections

g

cod



Bobina di sgancio a distanza / Shunt release

Montaggio a destra / Side mounting on the right

24V 50HZ / 28V 60 Hz	0,110	090SB24
110...127V 50HZ / 120V 60 Hz	0,110	090SB110
220...230V 50HZ / 240...260V 60 Hz	0,110	090SB230
240V 50HZ / 277V 60 Hz	0,110	090SB240
380...400V 50HZ / 440...480V 60 Hz	0,110	090SB400
415...440V 50HZ / 460...480V 60 Hz	0,110	090SB440



Bobina di minima tensione / Undervoltage release

Montaggio a destra / Side mounting on the right

24V 50HZ / 28V 60 Hz	0,110	090SV24
110...127V 50HZ / 120V 60 Hz	0,110	090SV110
220...230V 50HZ / 240...260V 60 Hz	0,110	090SV230
240V 50HZ / 277V 60 Hz	0,110	090SV240
380...400V 50HZ / 440...480V 60 Hz	0,110	090SV400
415...440V 50HZ / 460...480V 60 Hz	0,110	090SV440



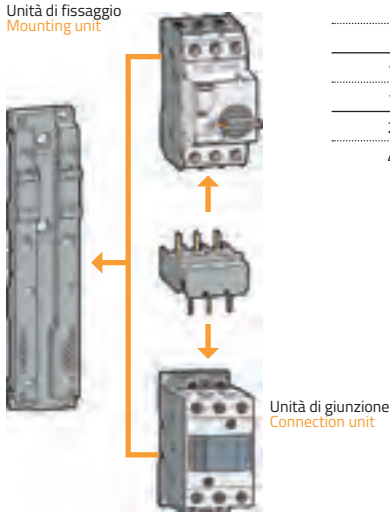
Bobina di minima tensione con contatti ausiliari anticipati 2NO / Undervoltage release with switch with 2NO advanced auxiliary contacts

Montaggio a destra / Side mounting on the right

Montaggio solo su interruttore con manopola rotativa / Mounting only rotary handle

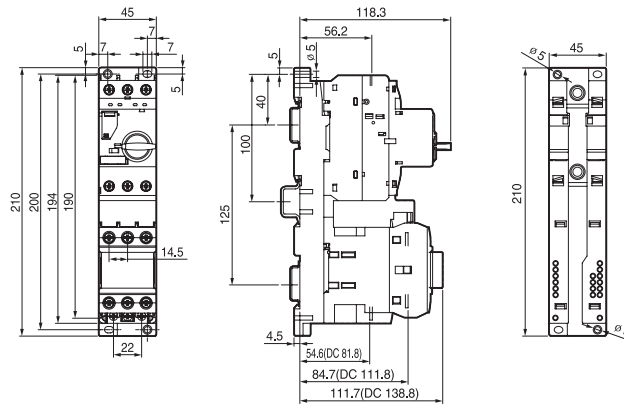
24V 50HZ / 28V 60 Hz	0,110	090SVA24
110...127V 50HZ / 120V 60 Hz	0,110	090SVA110
220...230V 50HZ / 240...260V 60 Hz	0,110	090SVA230
240V 50HZ / 277V 60 Hz	0,110	090SVA240
380...400V 50HZ / 440...480V 60 Hz	0,110	090SVA400
415...440V 50HZ / 460...480V 60 Hz	0,110	090SVA440

Combinazione di interruttore automatico e contattore Combination manual motor starters and contactors

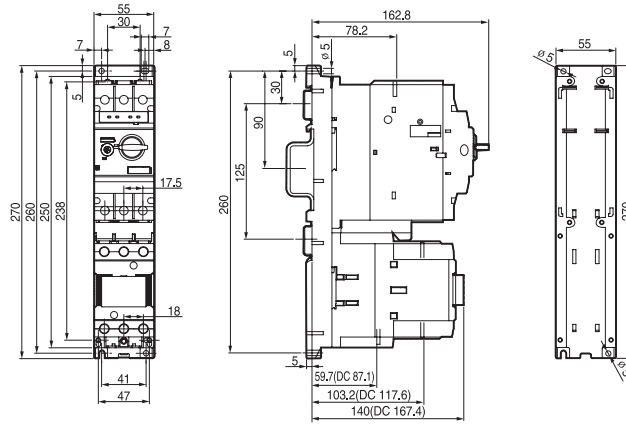


	Unità di congiunzione	Unità di fissaggio	Interruttore	Contattore
g				
1	090DA-16HA	090MU-45	090S32H	090M3C6-090M3C16
1	090DA-16HD	090MU-45	090S32H	090M3C6DC-090M3C16DC
1,2	090DA-22HA	090MU-45	090S32H	090MC9B-090MC22B
1,2	090DA-32HA	090MU-45	090S32H	090MC32A-090MC40A
2,3	090DA-63A	090MU-55	090S63H	090MC65A
4,6	090DA-95A	090MU-70	090S100H	090MC85A-090MC100A

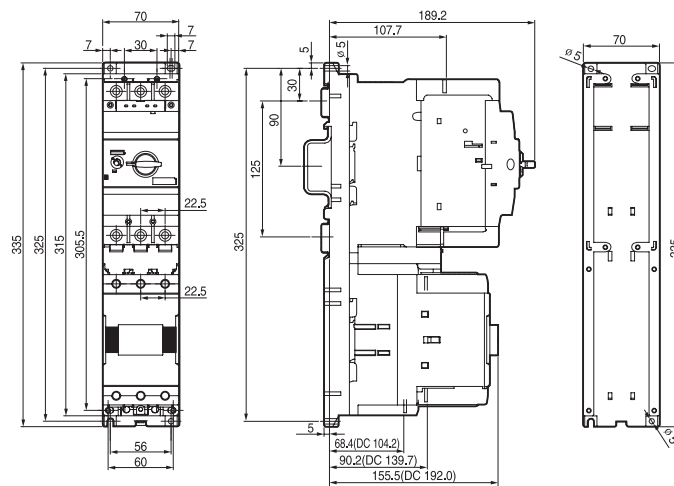
090S32H + 090MC40A



090S63H + 090MC65A



090S100H + 090MC100A



NOTE NOTES

A series of horizontal dotted lines for writing notes.



Legenda Legend

- g** peso in grammi / **weight in grams**
- n** quantità per confezione / **pack quantity**
- h** altezza / **height**
- cod** codice / **code**
- suf** suffisso / **suffix**
- c** cifratura / **key coding**
- k** estrazione chiave / **key extraction**

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Creation and page layout design in cooperation with BwithC Torino, Italy
Printed and bound by G. Canale & C. S.p.A.



