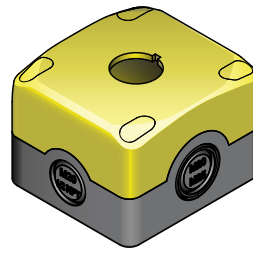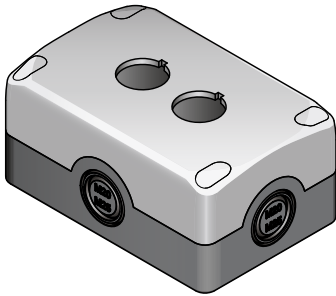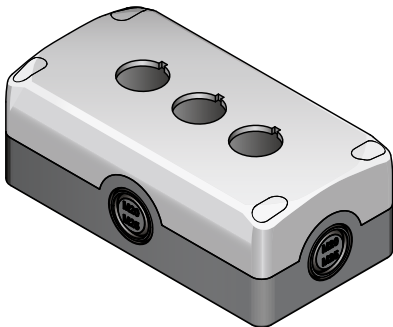## Selection diagram

ES 31000
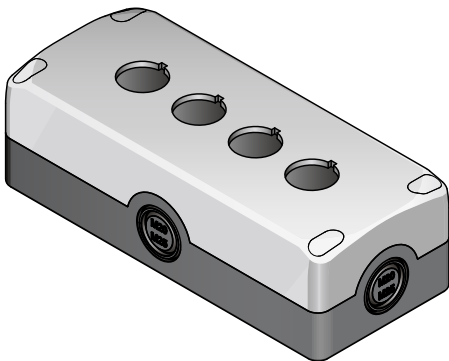grey cover
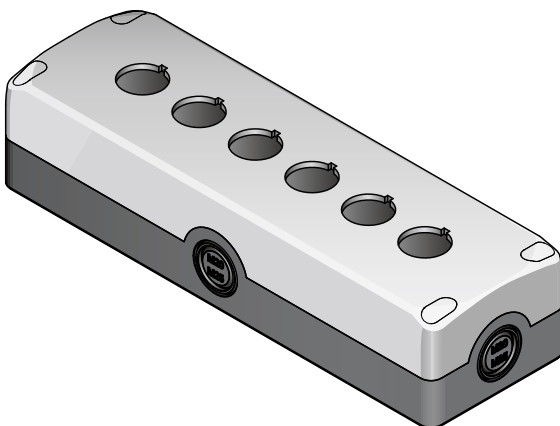1 hole, Ø 22 mm

ES 31001
yellow cover
1 hole, Ø 22 mm

ES 32000
grey cover
2 holes, Ø 22 mm

ES 33000
grey cover
3 holes, Ø 22 mm

ES 34000
grey cover
4 holes, Ø 22 mm

ES 36000
grey cover
6 holes, Ø 22 mm

Enclosure code structure

ES 3<u>1</u><u>001</u>

Housing material	
3	Polycarbonate (standard)

Box holes and dimensions	
1	72x80h56 mm 1 hole, Ø 22 mm
2	120x80h56 mm 2 holes, Ø 22 mm
3	153x80h56 mm 3 holes, Ø 22 mm
4	186x80h56 mm 4 holes, Ø 22 mm
6	252x80h56 mm 6 holes, Ø 22 mm

Configuration	
000	black base, grey cover
001	black base, yellow cover
...	....

Attention! The feasibility of a code number does not mean the effective availability of a product. Please contact our sales office.

Technical data

Housing

Material:	Shock-proof, self-extinguishing polymer with double insulation, UV resistant, fibreglass-reinforced material, high-impact resistance.
Screw material:	Stainless steel
Protection degree:	IP67 according to IEC 60529
	IP69K according to DIN 40050
Conduit entries:	1 hole housing:

• 2 upper and lower knock out conduit entries M20 - 1/2 NPT
• 2 lateral knock out conduit entries M20 - 1/2 NPT - M25
• 2 base knock out conduit entries M16

2-3-4-6 holes housings:
• 4 lateral knock out conduit entries M20 - 1/2 NPT - M25
• 2 base knock out conduit entries M20

Devices assembling:	Suit for assembling with control and signalling Ø 22 mm devices.
	Ø 22 mm hole according to EN 60947-5-1
Utilization requirements:	see page 3/74

Main features

● Protection degree IP67 and IP69K
● Stainless steel retained screws
● 4 lateral knock out conduit entries
● Supplied with screw caps

General data

Ambient temperature:	-40°C +80°C
Cover screws driving torque:	1 ... 1,4 Nm

In conformity with standards:
IEC 60947-1, IEC 60947-5-1, IEC 60204-1, EN 60947-1, EN 60947-5-1, EN 60204-1, UL 508, CSA 22-2 N°14.

Markings and quality marks:

CE

In conformity with requirements requested by:
Low Voltage Directive 2006/95/EC, Machinery Directive 2006/42/EC and Electromagnetic Compatibility 2004/108/EC.


General characteristics

Protection degree IP67 and IP69K

Designed to be employed also in severe environment conditions, Pizzato Elettrica enclosures have protection degree IP67 and IP69K, suitable for use in machineries subjected to intense washing with high pressure and high temperature water jets.

Fitting the EROUND boxes

The new EROUND line boxes by Pizzato Elettrica feature 4 additional holes in the cover, which make it possible to fit the boxes to a wall by inserting the screws through their external part, therefore without needing to open their cover to gain access to the holes.
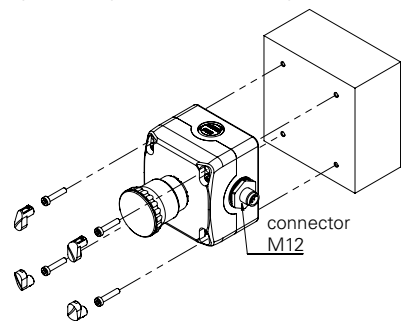
The wall-fitting screws and the box cover closing screws can be sealed by means of 4 caps (caps supplied with the box) which, besides improving the appearance of the box line, avoid any dirt being deposited inside the screw recesses and make tampering more difficult.


connector M12

External fitting turns out to be particularly advantageous for prewired boxes, since the entire installation work becomes simpler; all that is needed is to fix the box and attach the connector which, thanks to the cable inlets available on the four sides of the box, can be positioned in the chosen direction.

One housing, two solutions
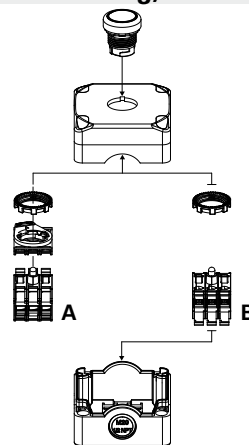
The same housing can have up to 3 contact/LED blocks with panel fixing(E2 CP, E2 LP) to be applied through the fixing adapter (A) or up to 3 contact/LED blocks with base fixing (E2 CF, E2 LF) to be fixed directly to the enclosure base (B).

A   B

Wiring through the lower surface

cablegland

nut   F

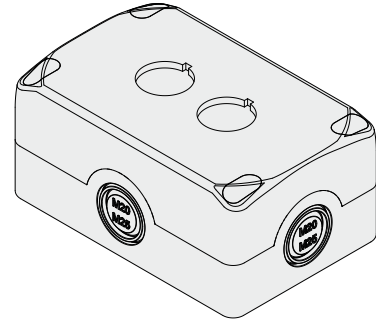| cablegland	F
M16	Ø 25
M25	Ø 28
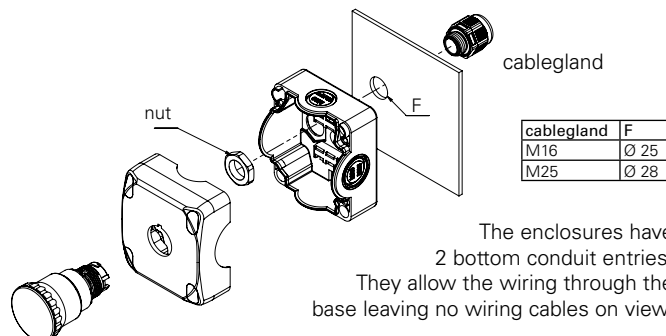
The enclosures have 2 bottom conduit entries. They allow the wiring through the base leaving no wiring cables on view.
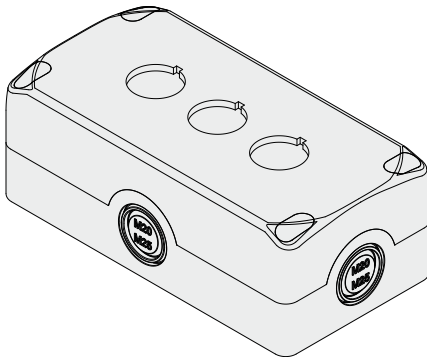
Enclosures selection table
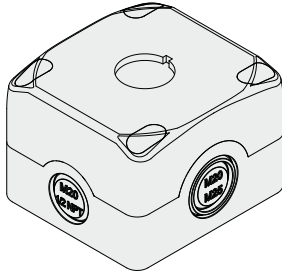
Cover colour	
yellow RAL 1023	ES 31001
grey RAL 7040	ES 31000

The standard colour of the base in above mentioned codes is BLACK RAL 9005.

Cover colour	
grey RAL 7040	ES 32000

The standard colour of the base in above mentioned codes is BLACK RAL 9005.

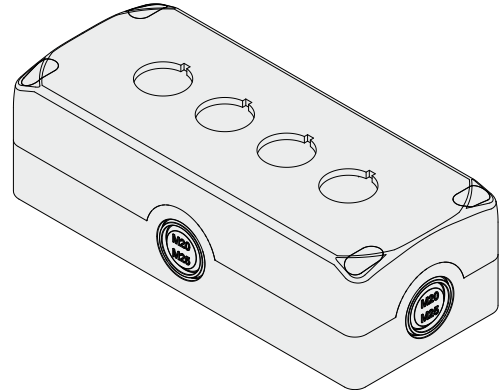| Cover colour	
grey RAL 7040	ES 33000

The standard colour of the base in above mentioned codes is BLACK RAL 9005.

Cover colour	
grey RAL 7040	ES 34000

The standard colour of the base in above mentioned codes is BLACK RAL 9005.
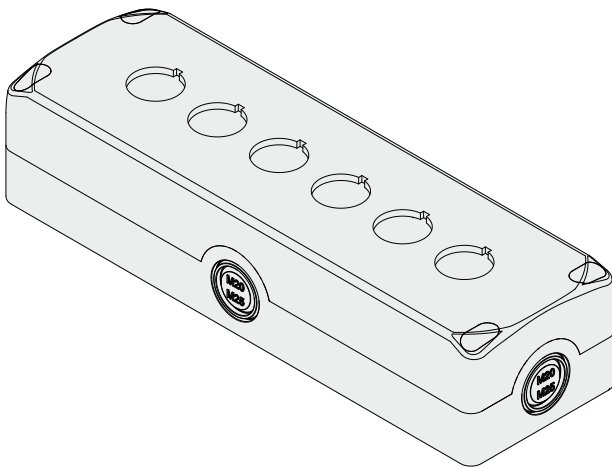
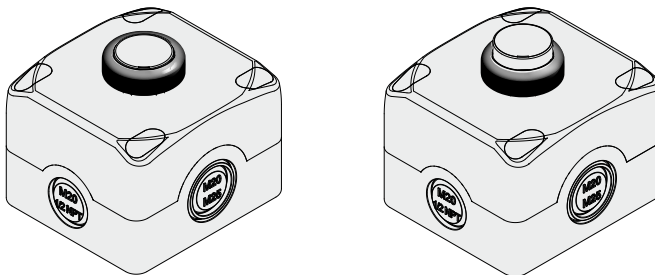| Cover colour	
grey RAL 7040	ES 36000

The standard colour of the base in above mentioned codes is BLACK RAL 9005.

Items with code on the **green** background are available in stock

All measures in the drawings are in mm

➜ 2D and 3D files available on **www.pizzato.it**

pizzato elettrica

Complete units with enclosures

Box cover colour	Actuator colour and marking	Contacts			Flush pushbutton Black ring	Projecting pushbutton Black ring
		pos 2	pos 3	pos 1		
grey RAL 7040	**I** green	-	1NO	-	**ES AC31001** ES 31000 + E2 1PU2R421L2 + E2 CF10G2V1	-
grey RAL 7040	**O** red	-	1NC ↻	-	**ES AC31002** ES 31000 + E2 1PU2R321L1 + E2 CF01G2V1	**ES AC31017** ES 31000 + E2 1PU2S321L1 + E2 CF01G2V1
grey RAL 7040	**START** green	-	1NO	-	**ES AC31015** ES 31000 + E2 1PU2R421GB1 + E2 CF10G2V1	-
grey RAL 7040	**STOP** red	-	1NC ↻	-	**ES AC31016** ES 31000 + E2 1PU2R321GB0 + E2 CF01G2V1	**ES AC31018** ES 31000 + E2 1PU2S321GB0 + E2 CF01G2V1

The standard colour of the base in above mentioned codes is **BLACK RAL 9005**.

➔ For contact blocks and pushbuttons characteristics see the relative chapters.
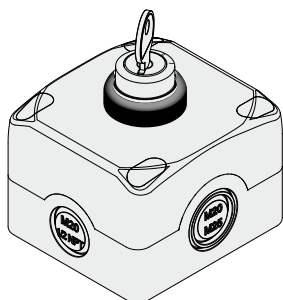
Complete units with enclosures
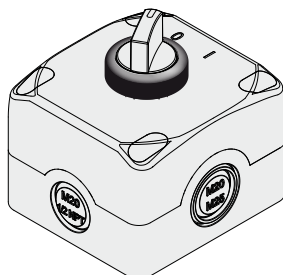
Box cover colour	Position	Contacts			Two positions black selector Black ring
		pos 2	pos 3	pos 1	
grey RAL 7040	╲	-	1NO	-	**ES AC31019** ES 31002 + E2 1SE12AVA11AB + E2 CF10G2V1

The standard colour of the base in above mentioned codes is **BLACK RAL 9005**.

➔ For contact blocks and LED holders characteristics see the relative chapters.

Complete units with enclosures

| Box cover colour	Position	Contacts			Two positions key black selector Black ring
		pos 2	pos 3	pos 1	
grey RAL 7040	⚲╲	-	1NO	-	**ES AC31020** ES 31000 + E2 1SC2AVA11AE + E2 CF10G2V1

The standard colour of the base in above mentioned codes is **BLACK RAL 9005**.

➔ For contact blocks and LED holders characteristics see the relative chapters.

Legend

╲	Stay-put
▷	Spring-return
⚲	Key extraction position

Complete units with enclosures
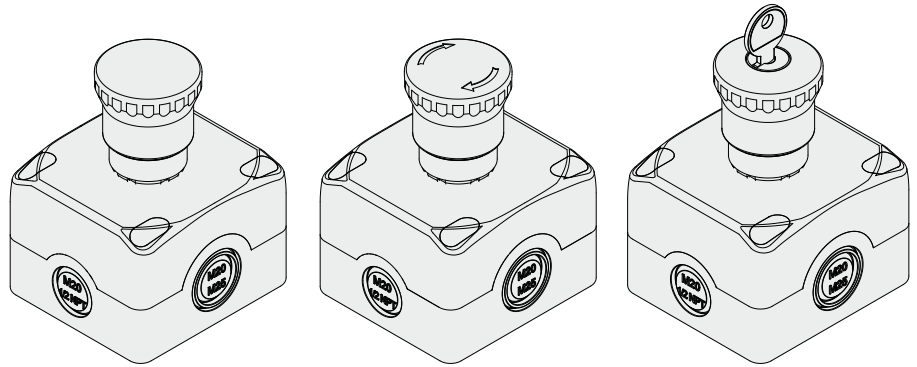
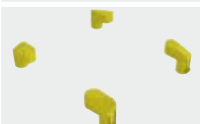| Box cover colour	Actuator colour and marking	Contacts			Push-pull emergency button	Turn to release emergency pushbutton	Key release emergency pushbutton
		pos 2	pos 3	pos 1			
🟨 yellow RAL 1023	🔴 red	-	1NC ⊕	-	**ES AC31004** ES 31001 + E2 1PEPZ4531 + E2 CF01G2V1	**ES AC31003** ES 31001 + E2 1PERZ4531 + E2 CF01G2V1	**ES AC31022** ES 31001 + E2 1PEBZ4531 + E2 CF01G2V1
🟨 yellow RAL 1023	🔴 red	1NC ⊕	-	1NC ⊕	-	**ES AC31005** ES 31001 + E2 1PERZ4531 + E2 CF01G2V1 + E2 CF01G2V1	**ES AC31023** ES 31001+ E2 1PEBZ4531 + E2 CF01G2V1 + E2 CF01G2V1
🟨 yellow RAL 1023	🔴 red	1NC ⊕	-	1NO	-	**ES AC31006** ES 31001 + E2 1PERZ4531 + E2 CF01G2V1 + E2 CF10G2V1	**ES AC31011** ES 31001+ E2 1PEBZ4531 + E2 CF01G2V1 + E2 CF10G2V1
🟨 yellow RAL 1023	🔴 red	1NC ⊕	1NC ⊕	1NO	-	**ES AC31021** ES 31001 + E2 1PERZ4531 + E2 CF01G2V1 + E2 CF01G2V1 + E2 CF10G2V1	**ES AC31024** ES 31001+ E2 1PEBZ4531 + E2 CF01G2V1 + E2 CF01G2V1 + E2 CF10G2V1

The standard colour of the base in above mentioned codes is BLACK RAL 9005.

➜ For contact blocks and emergency pushbuttons characteristics see the relative chapters.
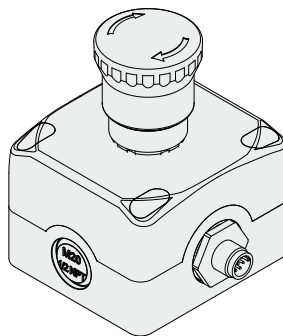
Box cover colour	Actuator colour and marking	Contacts			Turn to realease emergency pushbutton Plastic wired M12 connector
		pos 2	pos 3	pos 1	
🟨 yellow RAL 1023	🔴 red	-	1NC ⊕	-	ES AC31025
🟨 yellow RAL 1023	🔴 red	1NC ⊕	-	1NC ⊕	ES AC31026
🟨 yellow RAL 1023	🔴 red	1NC ⊕	-	1NO	ES AC31027
🟨 yellow RAL 1023	🔴 red	1NC ⊕	1NC ⊕	1NO	ES AC31028

The standard colour of the base in above mentioned codes is BLACK RAL 9005.

➜ For contact blocks and emergency pushbuttons characteristics see the relative chapters.

Spare caps

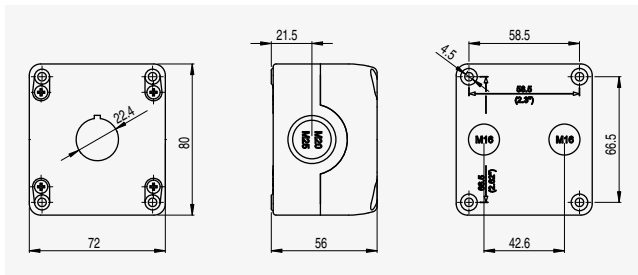|	Article	Description
	VE TS25RA1	4 spare caps for box covers ES series. Colour: yellow
	VE TS29RA1	4 spare caps for box covers ES series. Colour: grey

Accessories

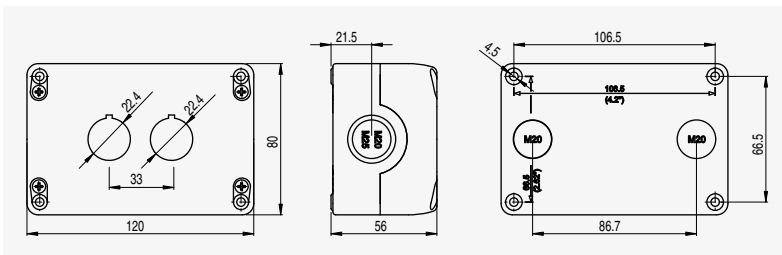➜ More ACCESSORIES at page 3/71.

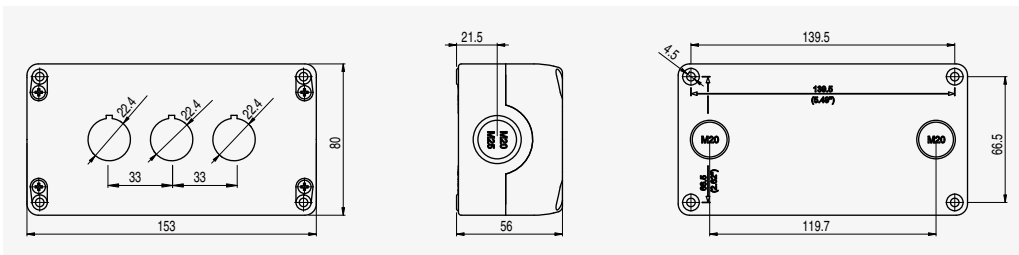Items with code on the **green** background are available in stock
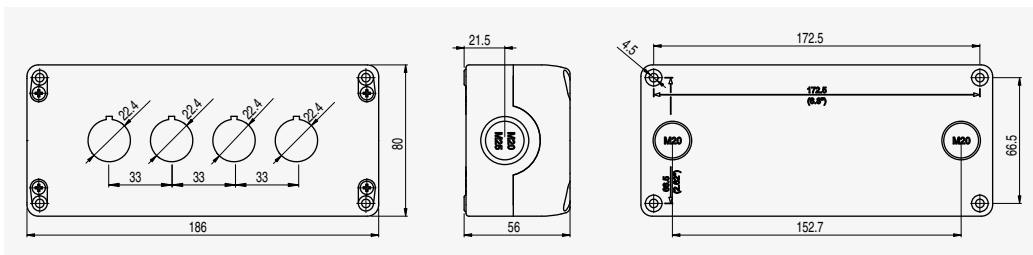
Dimensions

Enclosures (1 hole)

Enclosures (2 holes)

Enclosures (3 holes)

Enclosures (4 holes)

Enclosures (6 holes)

Notes