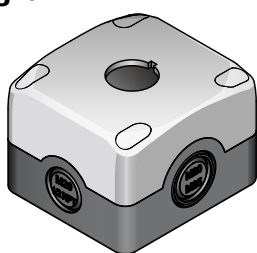
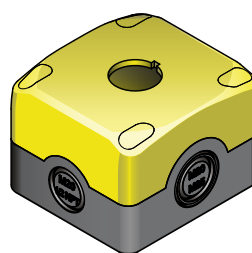


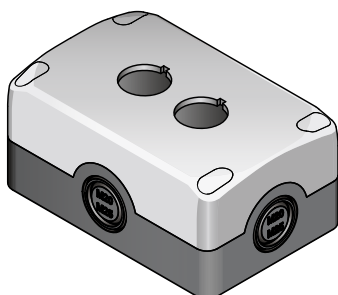
Selection diagram



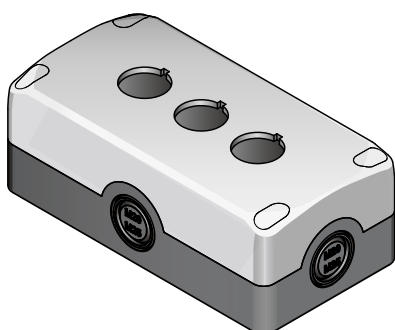
ES 31000
grey cover
1 hole, Ø 22 mm



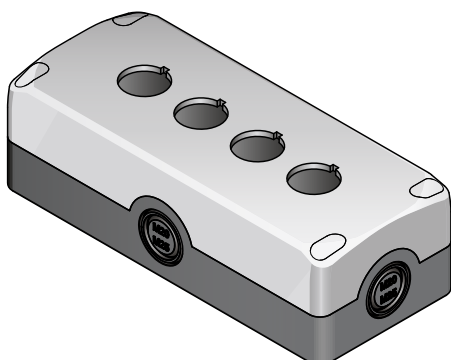
ES 31001
yellow cover
1 hole, Ø 22 mm



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 31001

Housing material		Configuration	
3	polycarbonate PC (standard)	000	black base, grey cover
		001	black base, yellow cover
		...	

Box dimensions	
1	72x80h56 mm
2	120x80h56 mm
3	153x80h56 mm
4	186x80h56 mm
6	252x80h56 mm

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



Main features

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

Markings and quality marks:


Approval GOST: POCC IT.AB24.B04512



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^a
IP69K according to DIN 40050^b

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 see page 3/98

Utilization requirements:

(a) with cable gland having equal or higher protection degree
(b) Protect the cables from direct high-pressure and high-temperature jets)

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 574, EN 60947-1, EN 60947-5-1, EN 60204-1, UL 508, CSA 22-2 N°14.

In conformity with requirements requested by:

Low Voltage Directive 2006/95/EC
Machinery Directive 2006/42/EC
Electromagnetic Compatibility 2004/108/EC.

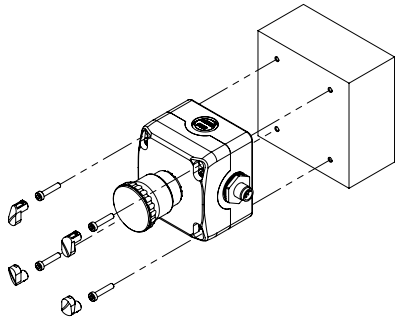
General characteristics

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.

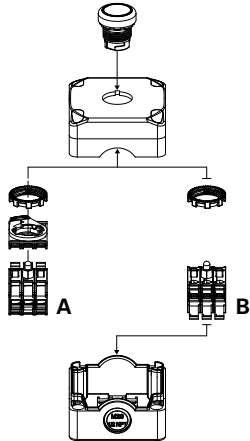


The wall-fitting screws and the box cover closing screws can be sealed by means of 4 caps (caps supplied with the box) which, besides improving the appearance of the box line, avoid any dirt being deposited inside the screw recesses and

make tampering more difficult.

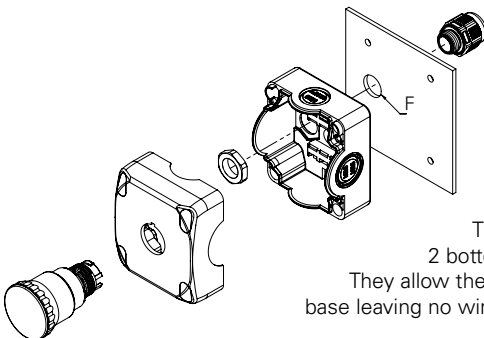
External fitting turns out to be particularly advantageous for prewired boxes, since the entire installation work becomes simpler; all that is needed is to fix the box and attach the connector which, thanks to the cable inlets available on the four sides of the box, can be positioned in the chosen direction.

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).

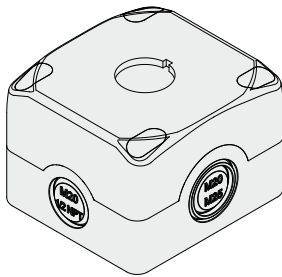
Wiring through the lower surface



cable gland	F
M16	Ø 25
M20	Ø 28

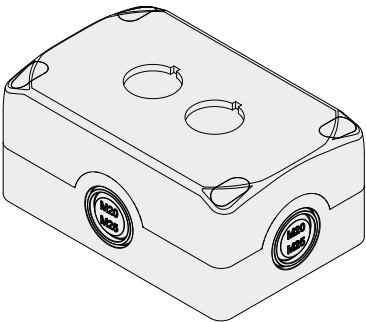
The enclosures have 2 bottom conduit entries. They allow the wiring through the base leaving no wiring cables on view.

Enclosures selection table



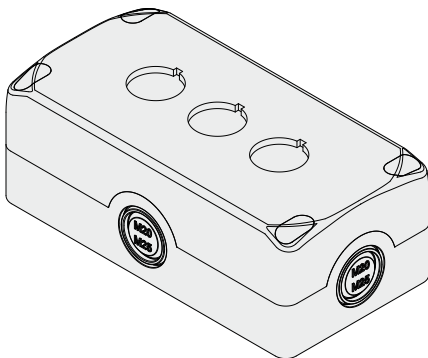
Cover colour	Article
 yellow RAL 1003	ES 31001
 grey RAL 7035	ES 31000

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



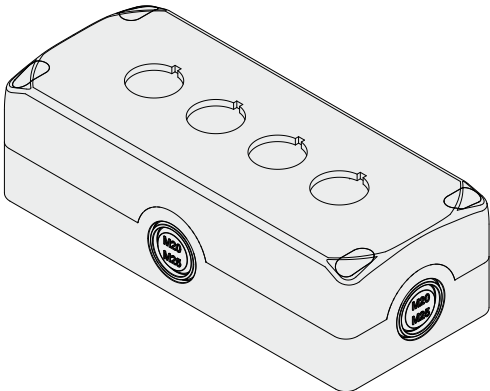
Cover colour	Article
 grey RAL 7035	ES 32000

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



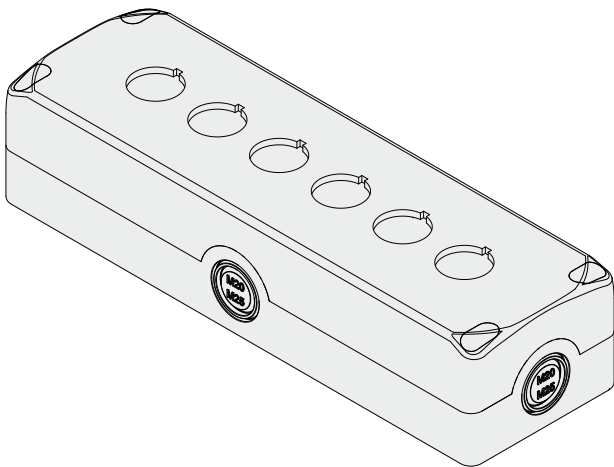
Cover colour	Article
 grey RAL 7035	ES 33000

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



Cover colour	Article
 grey RAL 7035	ES 34000

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

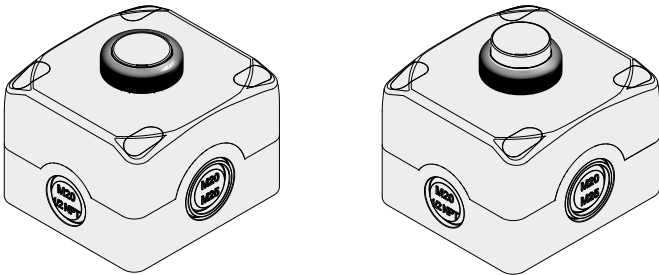


Cover colour	Article
 grey RAL 7035	ES 36000

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

Complete units with enclosures

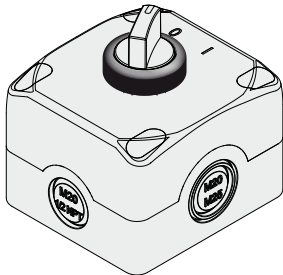


Box cover colour	Actuator colour and marking	Contacts			Flush pushbutton Black ring	Projecting pushbutton Black ring
		pos 2	pos 3	pos 1		
 grey RAL 7035	 green	-	1NO	-	ES AC31001 ES 31000 + E2 1PU2R421L2 + E2 CF10G2V1	-
 grey RAL 7035	 red	-	1NC 	-	ES AC31002 ES 31000 + E2 1PU2R321L1 + E2 CF01G2V1	ES AC31017 ES 31000 + E2 1PU2S321L1 + E2 CF01G2V1
 grey RAL 7035	 green	-	1NO	-	ES AC31015 ES 31000 + E2 1PU2R421GB1 + E2 CF10G2V1	-
 grey RAL 7035	 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

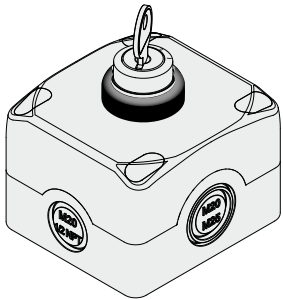


Box cover colour	Position	Contacts			Two positions black selector Black ring
		pos 2	pos 3	pos 1	
 grey RAL 7035		-	1NO	-	ES AC31019 ES 31002 + E2 1SE12AVA11AB + E2 CF10G2V1

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



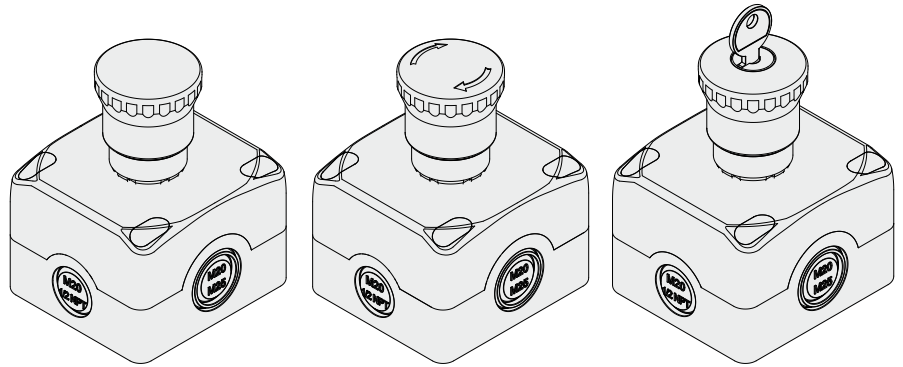
Box cover colour	Position	Contacts			Two positions key black selector Black ring
		pos 2	pos 3	pos 1	
 grey RAL 7035		-	1NO	-	ES AC31020 ES 31000 + E2 1SC2AVA11AE + E2 CF10G2V1

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 withdrawal position

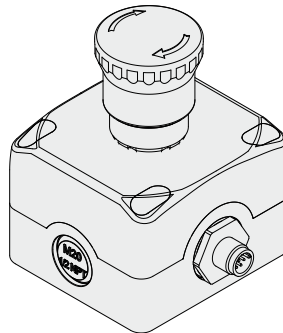
Complete units with enclosures



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			
		-	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
		-	1NC  SELF-MONITORED	-	ES AC31081 ES 31001 + E2 1PEPZ4531 + E2 CF01S2V1	ES AC31082 ES 31001 + E2 1PERZ4531 + E2 CF01S2V1	ES AC31083 ES 31001+ E2 1PEBZ4531 + E2 CF01S2V1
		1NC 	-	1NC 	-	ES AC31005 ES 31001 + E2 1PERZ4531 + E2 CF01G2V1 + E2 CF01G2V1	ES AC31023 ES 31001+ E2 1PEBZ4531 + E2 CF01G2V1 + E2 CF01G2V1
		1NC 	-	1NO	-	ES AC31006 ES 31001 + E2 1PERZ4531 + E2 CF01G2V1 + E2 CF10G2V1	ES AC31011 ES 31001+ E2 1PEBZ4531 + E2 CF01G2V1 + E2 CF10G2V1
		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.

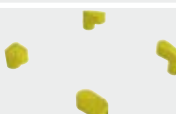


Box cover colour	Actuator colour and marking	Contacts			Turn to release emergency pushbutton Plastic wired M12 connector
		pos 2	pos 3	pos 1	
		-	1NC 	-	ES AC31025
		-	1NC  SELF-MONITORED	-	ES AC31084
		1NC 	-	1NC 	ES AC31026
		1NC 	-	1NO	ES AC31027
		1NC 	1NC 	1NO	ES AC31028

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
 VETS35RA1	4 spare caps for box covers ES series. Colour: yellow
 VETS39RA1	4 spare caps for box covers ES series. Colour: grey

Accessories

→ More ACCESSORIES at page 3/95

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



ES AC32012				
Description		Characteristics		Diagram
Pushbutton - 1NO E2 1PU2R221L9		Flush, spring-return, white		
Contacts 1x E2 CF10G2V1		pos 2 /	pos 3 1NO /	
Pushbutton - 1NO E2 1PU2R121L10		Flush, spring-return, black		
Contacts 1x E2 CF10G2V1		pos 2 /	pos 3 1NO /	

ES AC32010				
Description		Characteristics		Diagram
Pushbutton - 1NO E2 1PU2R421L35		Flush, spring-return, green		
Contacts 1x E2 CF10G2V1		pos 2 /	pos 3 1NO /	
Pushbutton - 1NC E2 1PU2S321L1		Projecting, spring-return, red		
Contacts 1x E2 CF01G2V1		pos 2 /	pos 3 1NC ⊖ /	

ES AC32011				
Description		Characteristics		Diagram
Pushbutton - 1NO E2 1PU2R421L51		Flush, spring-return, green		
Contacts 1x E2 CF10G2V1		pos 2 /	pos 3 1NO /	
Pushbutton - 1NC E2 1PU2S321L48		Projecting, spring-return, red		
Contacts 1x E2 CF01G2V1		pos 2 /	pos 3 1NC ⊖ /	

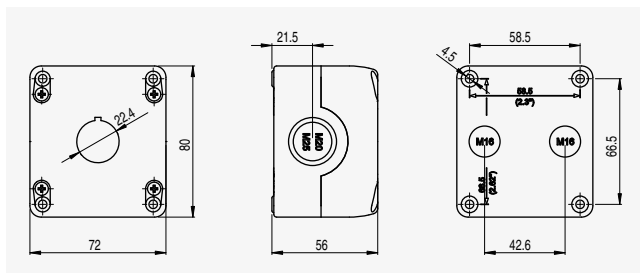
ES AC33017				
Description		Characteristics		Diagram
Pushbutton - 1NO E2 1PU2R221L9		Flush, spring-return, white		
Contacts 1x E2 CF10G2V1		pos 2 /	pos 3 1NO /	
Pushbutton - 1NC E2 1PU2S321L1		Projecting, spring-return, red		
Contacts 1x E2 CF01G2V1		pos 2 /	pos 3 1NC ⊖ /	
Pushbutton - 1NO E2 1PU2R121L10		Flush, spring-return, black		
Contacts 1x E2 CF10G2V1		pos 2 /	pos 3 1NO /	

ES AC33013				
Description		Characteristics		Diagram
Indicator light E2 1ILA310 + E2 LF1A3V1		Red indicator light 12 ... 30 Vac/dc		
Pushbutton - 1NO E2 1PU2R421L35		Flush, spring-return, green		
Contacts 1x E2 CF10G2V1		pos 2 /	pos 3 1NO /	
Pushbutton - 1NC E2 1PU2S321L1		Projecting, spring-return, red		
Contacts 1x E2 CF01G2V1		pos 2 /	pos 3 1NC ⊖ /	

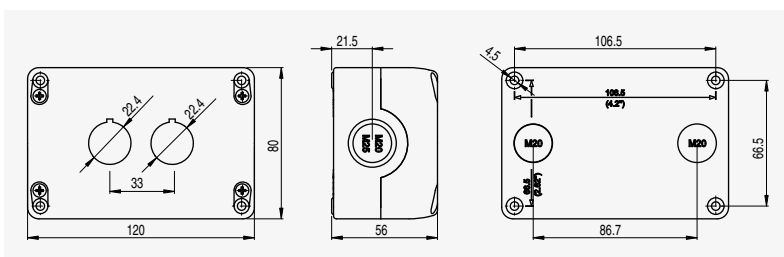
ES AC33016				
Description		Characteristics		Diagram
Pushbutton - 1NO E2 1PU2R421L35		Flush, spring-return, green		
Contacts 1x E2 CF10G2V1		pos 2 /	pos 3 1NO /	
Pushbutton - 1NC E2 1PU2S321L1		Projecting, spring-return, red		
Contacts 1x E2 CF01G2V1		pos 2 /	pos 3 1NC ⊖ /	
Pushbutton - 1NO E2 1PU2R421L36		Flush, spring-return, green		
Contacts 1x E2 CF10G2V1		pos 2 /	pos 3 1NO /	

Dimensions

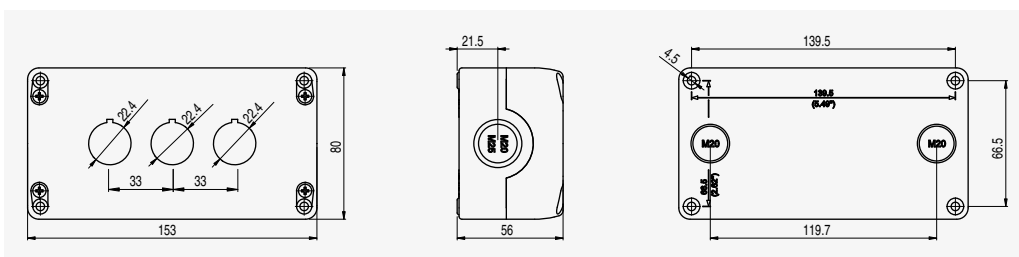
Enclosures (1 hole)



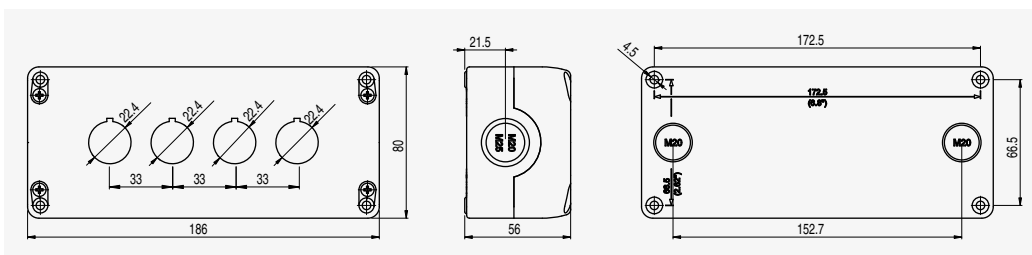
Enclosures (2 holes)



Enclosures (3 holes)



Enclosures (4 holes)



Enclosures (6 holes)

