

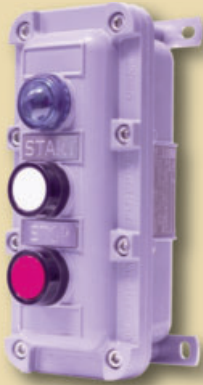
# LOCAL CONTROL STATIONS SERIES PB

series  
**PB**

Protection	Gas	Zone	1-2	II2G	Ex d IIC o IIB+H <sub>2</sub> T6÷T4 Gb
	Dusts		21-22	II2D	Ex tb IIIC T85°C÷T135°C Db

Degree of Protection	IP66
----------------------	------

Amb. Temp.	Standard Extended	-20°C	+40°C
		-50°C	+80°C



Enfits Threading	NPT ANSI B1.20
------------------	----------------

Material	Aluminum light alloy
----------	----------------------

Painting	External epoxy RAL 7000
----------	-------------------------

**Standards and Certificates**

**Directive 2014/34/EU (ATEX)**

**EN 60079-0 • EN 60079-1  
EN 60079-31**

**BVI 15 ATEX 0020**

**IEC 60079-0 • IEC 60079-1  
IEC 60079-31**

**IECEx EPS 14.0104**

- To be used either as Pushbutton or as Local Control Station.
- Fully configurable through a huge variety of COELBO elements.
- External screws in Stainless Steel AISI 304 (On request AISI 316L)

Options	- Push button protection in silicon rubber, colors: white, red, black.	- Full execution in stainless steel AISI 316L (including the external fittings)
	- Cable entries Isometric M25x1,5 (or M32x1,5 for PB 4 only) (M).	
	- Anticorrosion technology: ALUMINOX (see section A).	

## CONTACT ELEMENTS TECHNICAL DATA:

- Nominal current : 10 A
- Nominal Isolation Voltage : 660 V
- Nominal pulse Voltage : 6 kV
- Short circuit protection U<sub>e</sub><500 Vac : Cartridge Fuse 10 A
- Terminals ID : according to IEC/EN 60947-1
- Screw type joining terminals with captive clamp
- Max wires section: : 2x2,5 mm<sup>2</sup>
- Self cleaning contacts : EN01(NC) EN10(NA)
- Working cycles: : 1800 operations / hr (max)

	AC15 - A600		
Voltage (V)	24	240	400
Current (A)	10	6	4
	DC13 - Q600		
Voltage (V)	24	125	250
Current (A)	2.8	0.55	0.27

## NOTES

Installation and maintenance instructions shall be carefully read

Local Control Station PB 1 and PB 2 only belong to gas group IIC while models PB 3 and PB 4 belong to group IIB+H<sub>2</sub>.

The combinations of the various elements on the local control stations shall be compatible with the dimensions and the characteristics of the selected elements.

The rated voltage of the signal lamps shall be at least 20% higher than the line voltage.

(\*) It is suggested the use of LED lamps only.

(\*) On request the control may be provided with a potentiometer.

## Electrical Data

### Manipulators

- Nominal AC Voltage : 400 V
- Nominal Current : 10 A

### Signalling Lamps

- Max Nominal AC Voltage : 260 V
- Suggested lamp type : LED

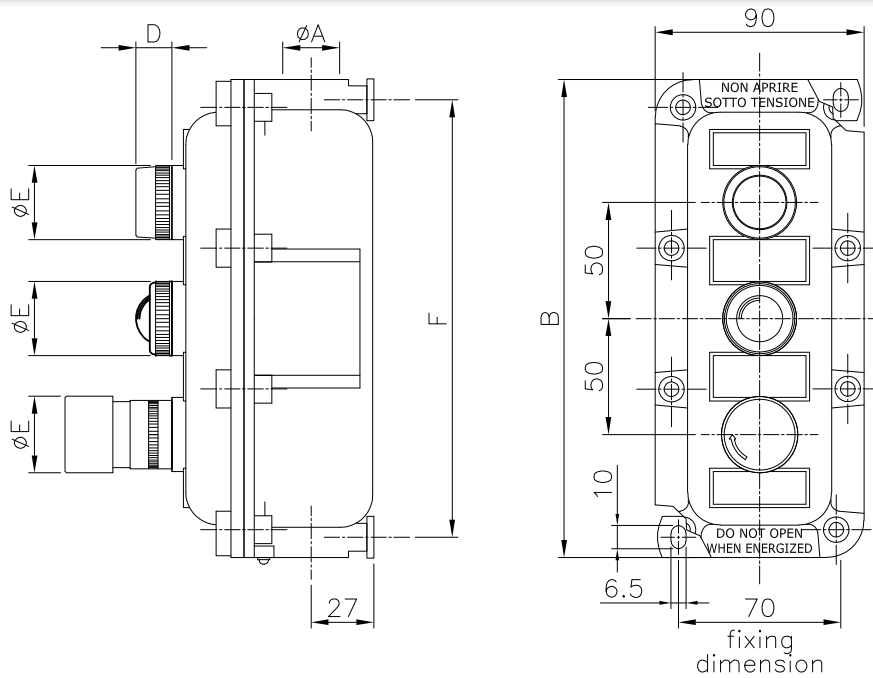
### Illuminated pushbuttons

- Max Voltage : 230 V AC/DC
- Max Power : 2 W

Command/signaling unit type	Temperature class		Max ambient temperature range
	Gas	Dust	
Halogen lamps (°)	T6	T85°C	-50°C÷+50°C
	T5	T100°C	-50°C÷+65°C
	T4	T135°C	-50°C÷+80°C
LED lamps (°)	T6	T85°C	-50°C÷+60°C
	T5	T100°C	-50°C÷+80°C
Only with command units	T6	T85°C	-50°C÷+80°C

# LOCAL CONTROL STATIONS

series  
**PB**



Enclosure	Elements	Cable Entries		B	C	F	Enclosure weight (g)
		ØA	n				
<b>PB1</b>	1	3/4" NPT	2	106	87	86	480
<b>PB2</b>	2	3/4" NPT	2	156	87	136	685
<b>PB3</b>	3	3/4" NPT	2	206	87	186	890
<b>PB4</b>	4	1" NPT	2	256	82	236	1520

Element	Symbol	Dimensions (mm)		Contacts	Weight (g)
		D	ØE		
START pushbutton	<b>1</b>	16	32	1NO	90
STOP pushbutton	<b>0</b>	16	32	1NC	90
Lighting START pushbutton	<b>1R-1B-1V-1G-1A</b>	16	32	1NO	130
Lighting STOP pushbutton	<b>0R-0B-0V-0G-0A</b>	16	32	1NC	130
Mushroom type push button with spring return	<b>5</b>	30	50	1NO+1NC	100
Key switch 1-2 poles (pos. 0-1)	<b>7/1-7/2</b>	60	30	-	400
Two position key changeover switch 1-2 poles (pos. 1-2)	<b>7/1D - 7/2D</b>	60	30	-	400
Three position key changeover switch 1-2 poles (pos. 1-0-2)	<b>7/1C - 7/2C</b>	60	30	-	400
Triangular Key switch 1-2 poles (pos. 0-1)	<b>9/1-9/2</b>	50	41	-	370
Two position triangular key changeover switch 1-2 poles (pos. 1-2)	<b>9/1D - 9/2D</b>	50	41	-	370
Three position triangular key changeover switch 1-2 poles (pos. 1-0-2)	<b>9/1C - 9/2C</b>	50	41	-	370
Mushroom type push button with locking	<b>8</b>	30	50	1NO+1NC	100
Mushroom type push button with rotary locking	<b>8R</b>	58	33	1NO+1NC	180
Mushroom type push button with locking and keylock	<b>8K</b>	58	33	1NO+1NC	180
Pilot light	<b>R-B-V-G-A</b>	16	32	-	130
Switch 1-2 poles (pos. 0-1)	<b>I1-I2</b>	22	32	-	300
Two way changeover switch 1-2 poles (pos. 1-2)	<b>D1-D2</b>	22	32	-	300
Three way changeover switch 1-2 poles (pos. 1-0-2)	<b>C1-C2</b>	22	32	-	300
Potentiometer control (single turn) (*)	<b>P</b>	16	15	-	-
Potentiometer control (multiturn) (*)	<b>PM</b>	18	35	-	-

### Example: PB 4 108RR

Order Coding

Type

**PB**

Enclosure Size

- 1** = 1 element
- 2** = 2 elements
- 3** = 3 elements
- 4** = 4 elements

Code of installed elements (max. 4)  
see table above

- 1** = START pushbutton
- 0** = STOP pushbutton
- 8R** = mushroom type pushbutton with rotary locking
- R** = RED pilot light

Threading

- = NPT (std.)
- M** = Metric

## JUNCTION BOXES SERIES PB - APPLICATIONS EXAMPLES

**PB 2 1LV8R**



JUNCTION BOXES  
WITH  
START PUSHBUTTON  
AND  
MUSHROOM TYPE PUSH BUTTON WITH SPRING RETURN

**PB 3 01V**



JUNCTION BOXES  
WITH  
RED STOP PUSHBUTTON  
WHITE START PUSHBUTTON  
AND  
PILOT LIGHT

## SPECIAL APPLICATIONS

**PB 1 8RP /D**



JUNCTION BOXES  
WITH  
MUSHROOM TYPE PUSH BUTTON  
AND  
PROTECTIVE ALUMINIUM GUARD WITH S.ST. DISC

**PB 1 8RGRD**



JUNCTION BOXES WITH  
MUSHROOM TYPE PUSH BUTTON  
AND  
PROTECTIVE PLASTIC GUARD WITH LOCKABLE BRACKET

# EMERGENCY PUSHBUTTONS with BREAKING GLASS

series  
**PB**

Protection	Gas	Zone	1-2	II2G	Ex d IIC T6÷T4 Gb
	Dusts	Zone	21-22	II2D	Ex tb IIIC T85°C÷T135°C Db

Degree of Protection	IP66
----------------------	------

Amb. Temp.	Standard	-20°C	+40°C
	Extended	-50°C	+80°C



Entries Threading	NPT ANSI B1.20
-------------------	----------------

Material	Aluminum light alloy
----------	----------------------

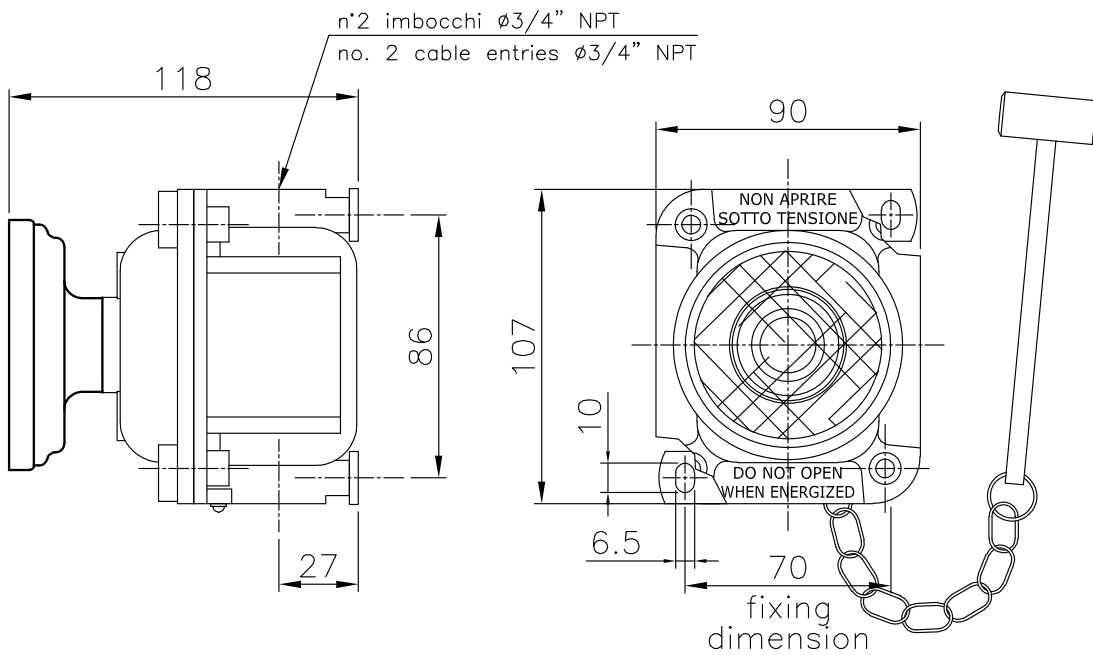
Painting	External epoxy RAL 3000
----------	-------------------------

Standards and Certificates		Directive 2014/34/EU (ATEX)
		EN 60079-0 • EN 60079-1 EN 60079-31
		BVI 15 ATEX 0020
		IEC 60079-0 • IEC 60079-1 IEC 60079-31 IECEx EPS 14.0104

- External screws in Stainless Steel AISI 304 (On request AISI 316L).
- External accessories (hammer, chain, glass holder ring) in Stainless Steel.
- Extremely lightweight: 1050 g only.

- Options**
- Two contacts NC or NO.
  - Isometric M25x1,5 (M) cable entries threading.
  - Presence of illuminated pushbutton (°).

- Full execution in AISI 316L (including the external fittings).



## NOTES

Installation and maintenance instructions shall be carefully read

The temperature class T6/T85°C considers an Ambient Temperature (A.T.) extended up to +50°C, class T5/T100°C with an A.T. extended up to +65°C and class T4/T135°C an A.T. extended up to +80°C. Using LED lamps, in case of using lighting signallers, the temperature class is T6/T85°C with an A.T. up to +60°C and T5/T100°C for an extended A.T. up to +80°C.

In presence of control units only the temperature class is T6/T85°C for an extended A.T. up to +80°C.

(°) It is suggested the use of LED lamps only.

## Electric Execution Identification

### PB1 E0

The breaking of the glass releases the button that automatically closes and / or opens a contact (1NO+1NC).

### PB1 E1

The breaking of the glass releases the button that shall be pressed to open and / or close a contact (1NO+1NC).

## Example: PB 1 E1

Order Coding

Type	Enclosure Size	Pushbutton operating code open/close	Threading
<b>PB</b>	<b>1</b> = 1 element	<b>E1</b> = pushbutton to press <b>E0</b> = pushbutton in releasing	<b>N</b> = NPT (std) <b>M</b> = Metric