



# GIOVENZANA

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**AUXILIARY CONTROLS • POTENTIOMETERS  
DOUBLE SOCKETS • FOOT SWITCHES**





**QUALITY  
AS A LIFE  
STYLE**



[www.giovenzana.com](http://www.giovenzana.com)

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|-----------|---------------------------------|
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**AUTOMATION TECHNOLOGIES**

**AUTOMATION**

The solutions offered by **Giovenzana** are the results of the detailed analysis of industrial electrical accessories requirements in conformity with all relevant international standards. The range includes:

- Cam switches Phoenix series from 12A to 200A;
- Switch disconnectors Regolus series from 32A to 160A;
- Auxiliary Controls Pegasus, Orion and NEMA series;
- Limit switches available in pre-wired and thermoplastic version;
- Foot switches and micro switches.

**QUALITY**

**Giovenzana**, leader in the elevator and lifting equipment field, has gained a prominent position in the automation sector with the launch of industrial control devices into the market. For many years, all commercial and industrial operations have been integrated within the **UNI EN ISO 9001:2008** quality system.

**CSQ certificate N 9105. GIOV.**

Quality system is the end users guarantee that all production stages are closely followed under strict control and adhere to the requirements set by the company both in terms of customer expectations and compliance to the relevant international standards as proved by the various certificates **Giovenzana** holds for its products.

By the **UNI EN ISO 14001:2004**, **Giovenzana** keeps up with new technologies in order to reduce raw materials consumption, energy and natural resources and to minimize waste and emissions. This reduces the environmental impact.

**The certification CSQ N 9191. GIBV.**

**COMPLIANCE**

All **Giovenzana** products are manufactured according to the most relevant Cee directives. **Giovenzana** certifies this compliance with a declaration of conformity.

**CERTIFICATIONS**

In order to reach its high quality level **Giovenzana's** products are tested by multiple third parties. In order to obtain the UL mark, **Giovenzana** submits their products to Underwriter Laboratories Inc., one of the most eminent independent certification companies in the World.

**CEE DIRECTIVES**

From January 1st, 1997 it is compulsory to CE mark all electromechanical products: this has been outlined by an important regulation: 2006/95/CE Low Voltage Directives.

**CE MARK**

European directives, applied to all national regulations, set the minimum requirements in term of safety of all electrical material sold within the EU.

Compliance to these requirements is certified by the manufacturer by the CE mark placed on the products.

**STANDARDS**

**Giovenzana's** products comply with both the European EN and the American UL standards. These regulations, such as CEI EN 60204-1 (CEI 44-5) with regards to the safety requirements of the electrical circuits on board industrial machinery, define the characteristics, performance and use of the products.

**EN EUROPEAN STANDARDS**

The EN European standards are originated from IEC International standards and are the result of the collaboration between CENELEC (European Committee for Electrotechnical Standardization) member countries.

These standards cover and eliminate existing national standards that may be contradictory and non-compliant.







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**AUXILIARY CONTROLS**  
**PEGASUS SERIES**

**AUXILIARY CONTROLS | PEGASUS SERIES**

**AUXILIARY CONTROLS | PEGASUS SERIES**

**PUSH BUTTONS Ø22 | WITH COLOUR CAP**

MOMENTARY

| TYPE              | COLOUR INDEX | CODE  | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|-------------------|--------------|-------|--------------|--------------------|-------|
| FLUSH PUSH BUTTON | ■            | PPRN1 | 30           | 10                 |       |
|                   | ■            | PPRN2 | 30           | 10                 |       |
|                   | ■            | PPRN3 | 30           | 10                 |       |
|                   | ■            | PPRN4 | 30           | 10                 |       |
|                   | ■            | PPRN5 | 30           | 10                 |       |
|                   | ■            | PPRN8 | 30           | 10                 |       |

| TYPE                 | COLOUR INDEX | CODE  | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|----------------------|--------------|-------|--------------|--------------------|-------|
| EXTENDED PUSH BUTTON | ■            | PPSN1 | 31           | 10                 |       |
|                      | ■            | PPSN2 | 31           | 10                 |       |
|                      | ■            | PPSN3 | 31           | 10                 |       |
|                      | ■            | PPSN4 | 31           | 10                 |       |
|                      | ■            | PPSN5 | 31           | 10                 |       |
|                      | ■            | PPSN8 | 31           | 10                 |       |

LATCHED

| TYPE              | COLOUR INDEX | CODE  | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|-------------------|--------------|-------|--------------|--------------------|-------|
| FLUSH PUSH BUTTON | ■            | PPPN1 | 32           | 10                 |       |
|                   | ■            | PPPN2 | 32           | 10                 |       |
|                   | ■            | PPPN3 | 32           | 10                 |       |
|                   | ■            | PPPN4 | 32           | 10                 |       |
|                   | ■            | PPPN5 | 32           | 10                 |       |
|                   | ■            | PPPN8 | 32           | 10                 |       |

| TYPE                  | COLOUR INDEX | CODE     | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|-----------------------|--------------|----------|--------------|--------------------|-------|
| MUSHROOM OPERATOR Ø40 | ■            | PPFN1S4N | 35           | 10                 |       |
|                       | ■            | PPFN2S4N | 35           | 10                 |       |
|                       | ■            | PPFN3S4N | 35           | 10                 |       |

**PUSH BUTTONS Ø22 | WITH LENS CAP**

MOMENTARY

| TYPE              | COLOUR INDEX | CODE  | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|-------------------|--------------|-------|--------------|--------------------|-------|
| FLUSH PUSH BUTTON | ■            | PPRL1 | 30           | 10                 |       |
|                   | ■            | PPRL2 | 30           | 10                 |       |
|                   | ■            | PPRL3 | 30           | 10                 |       |
|                   | ■            | PPRL4 | 30           | 10                 |       |
|                   | ■            | PPRL5 | 30           | 10                 |       |

| TYPE                 | COLOUR INDEX | CODE  | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|----------------------|--------------|-------|--------------|--------------------|-------|
| EXTENDED PUSH BUTTON | ■            | PPSL1 | 31           | 10                 |       |
|                      | ■            | PPSL2 | 31           | 10                 |       |
|                      | ■            | PPSL3 | 31           | 10                 |       |
|                      | ■            | PPSL4 | 31           | 10                 |       |
|                      | ■            | PPSL5 | 31           | 10                 |       |

LATCHED

| TYPE              | COLOUR INDEX | CODE  | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|-------------------|--------------|-------|--------------|--------------------|-------|
| FLUSH PUSH BUTTON | ■            | PPPL1 | 32           | 10                 |       |
|                   | ■            | PPPL2 | 32           | 10                 |       |
|                   | ■            | PPPL3 | 32           | 10                 |       |
|                   | ■            | PPPL4 | 32           | 10                 |       |
|                   | ■            | PPPL5 | 32           | 10                 |       |

IND. LIGHT


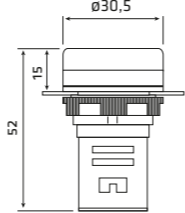
| TYPE     | COLOUR INDEX | CODE    | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|----------|--------------|---------|--------------|--------------------|-------|
| FLAT CAP | ■            | PLSL1NL | 30           | 10                 |       |
|          | ■            | PLSL2NL | 30           | 10                 |       |
|          | ■            | PLSL3NL | 30           | 10                 |       |
|          | ■            | PLSL4NL | 30           | 10                 |       |
|          | ■            | PLSL5NL | 30           | 10                 |       |



**AUXILIARY CONTROLS | PEGASUS SERIES**

**AUXILIARY CONTROLS | PEGASUS SERIES**

**LED PILOT LIGHT Ø22**

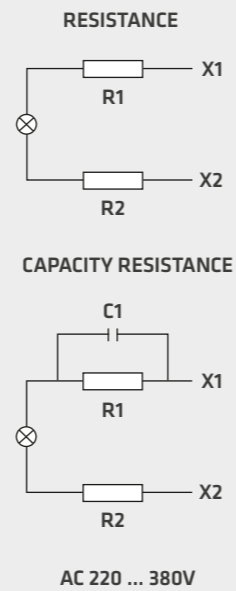
| DESCRIPTION  | POWER SUPPLY       | CODE               | WEIGHT gramm | MIN. PACK QUANTITY | SIZES   |
|--|--------------------|--------------------|--------------|--------------------|---|
| <br>SINGLE LED INDICATOR<br>X1 — ⊗ — X2 | AC/DC 6V <b>1</b>  | PLML <b>2</b> L6   | 15           | 10                 |  |
|  | AC/DC 12V <b>1</b> | PLML <b>2</b> L12  | 15           | 10                 |   |
|  | AC/DC 24V          | PLML <b>2</b> L24  | 15           | 10                 |   |
|  | AC/DC 48V          | PLML <b>2</b> L48  | 15           | 10                 |   |
|  | AC/DC 110V         | PLML <b>2</b> L110 | 15           | 10                 |   |
|  | AC 220V            | PLML <b>2</b> L220 | 15           | 10                 |   |
| AC 380V <b>1</b>   | PLML <b>2</b> L380 | 15                 | 10           |                    |   |

**COMPLY WITH RULES**



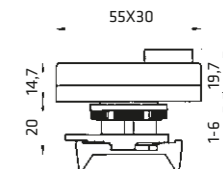

|                                      |                   |   |
|--------------------------------------|-------------------|---|
| Operational temperature              | °C                | -5 +40  |
| Operational umidity                  |                   | 45% ... 90%   |
| AC rated frequency                   | Hz                | 50/60   |
| Rated insulation voltage             | 1 min V           | 2500V   |
| Over voltage category                | EN60947.1         | III   |
| Pollution grade                      | EN60947.1         | 3   |
| Protection degree                    | EN60529           | IP65, IP2X terminals                                    |
| Connection:                          |                   |   |
| Terminal block caliber               |                   | A2  |
| Terminal screw                       |                   | M3,5  |
| Flexible and solid conductor section | min/max           | n. 1 1/2,5 mm <sup>2</sup> - n. 2 1/2,5 mm <sup>2</sup> |
| Rated operational voltage Ue         | AC/DC V           | 6, 12, 24, 48, 110                                      |
|                                      | AC V              | 220 - 380   |
| Rated operational voltage Ie         | mA                | ≤80 6,12V   |
|                                      | mA                | ≤20 24, 48, 110, 220, 380V                              |
| Electrical life                      | h                 | ≥30.000   |
| Brightness                           | cd/m <sup>2</sup> | 100   |
| Mounting                             | mm                | Ø22,5   |



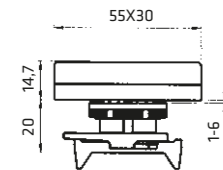

**EN60947-5-1 / GB14048.5**



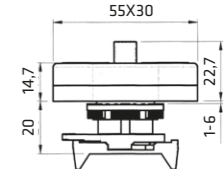
**DIAGRAM**





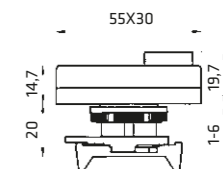

**MULTIFUNCTION PUSH BUTTONS Ø22 | NOT LIGHT**



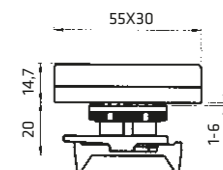

| TYPE  | COLOUR INDEX  | CODE | WEIGHT grams | MIN. PACK QUANTITY | SIZES   |
|---|---|------|--------------|--------------------|---|
| <br>DUAL PUSH BUTTON |  | PPDN | 38           | 10                 |  |
|   |  |      |              |                    |   |

| TYPE   | COLOUR INDEX  | CODE    | WEIGHT grams | MIN. PACK QUANTITY | SIZES   |
|--|---|---------|--------------|--------------------|---|
| <br>EXTENDED DUAL PUSH BUTTON |  | PPDNR   | 38           | 10                 |  |
|  |  | PPDNR.3 | 38           | 10                 |   |

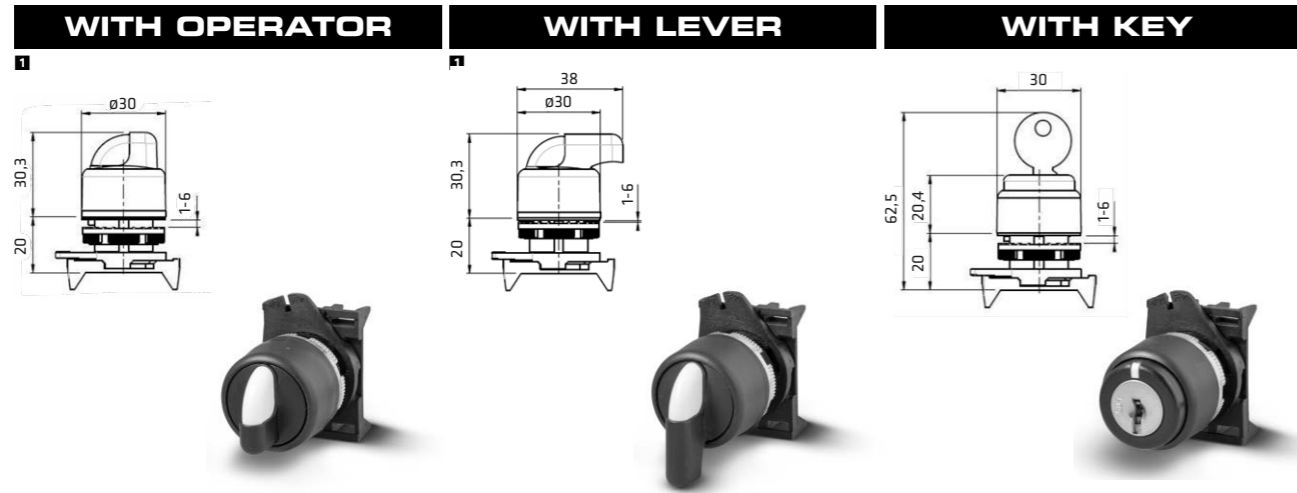
| TYPE  | COLOUR INDEX   | CODE | WEIGHT grams | MIN. PACK QUANTITY | SIZES  |
|---|--|------|--------------|--------------------|--|
| <br>MULTIFUNCTION PUSH BUTTON |  | PPMN | 40           | 10                 |  |

**MULTIFUNCTION PUSH BUTTONS Ø22 | LIGHT**

| TYPE  | COLOUR INDEX  | CODE   | WEIGHT grams | MIN. PACK QUANTITY | SIZES   |
|---|---|--------|--------------|--------------------|---|
| <br>DUAL PUSH BUTTON |  | PPDL   | 30           | 10                 |  |
|   |  | PPDL.1 | 30           | 10                 |   |

| TYPE   | COLOUR INDEX  | CODE    | WEIGHT grams | MIN. PACK QUANTITY | SIZES   |
|--|---|---------|--------------|--------------------|---|
| <br>EXTENDED DUAL PUSH BUTTON |  | PPDLR   | 30           | 10                 |  |
|  |  | PPDLR.3 | 30           | 10                 |   |

**ROTARY SWITCHES Ø22**

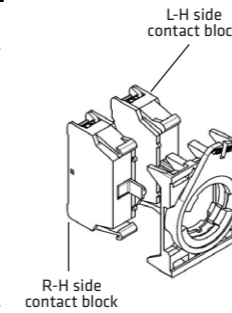


**JOYSTICK OPERATORS Ø22 | IP65**

**2 POSITIONS**

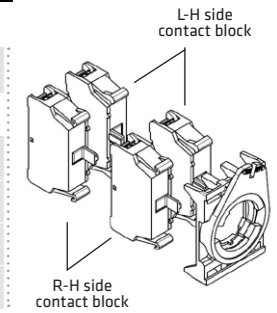
**Horizontal Vertical**

| CONTACT BLOCKS                | Horizontal |   |   | Vertical |   |   |
|-------------------------------|------------|---|---|----------|---|---|
|                               | 1          | 0 | 2 | 1        | 0 | 2 |
| Left-hand side contact block  | NO         | X | 0 | 0        | 0 | X |
| Right-hand side contact block | NO         | 0 | 0 | X        | 0 | 0 |
|                               | NC         | 0 | 0 | 0        | X | 0 |
|                               | NC         | X | 0 | 0        | 0 | X |



**4 POSITIONS**

|                               | 3 | 1 | 0 | 2 | 4 |
|-------------------------------|---|---|---|---|---|
| Left-hand side contact block  | X | 0 | 0 | 0 | 0 |
| Right-hand side contact block | 0 | 0 | 0 | 0 | X |
|                               | 0 | X | 0 | 0 | 0 |
|                               | 0 | 0 | 0 | X | 0 |



X Contact close  
0 Contact open

| POSITION | COLOUR INDEX | CODE    | COLOUR INDEX | CODE    | KEY REMOVAL |   |   | CODE     |
|----------|--------------|---------|--------------|---------|-------------|---|---|----------|
|          |              |         |              |         | L           | O | R |          |
| 90°      | ■            | PSMB1D0 | ■            | PSLB1D0 |             | * |   | PSCR8D0C |
|          | ■            | PSMB2D0 | ■            | PSLB2D0 |             |   |   |          |
|          | ■            | PSMB3D0 | ■            | PSLB3D0 |             |   | * | PSCR8D0E |
|          | ■            | PSMB4D0 | ■            | PSLB4D0 |             |   |   |          |
|          | ■            | PSMB5D0 | ■            | PSLB5D0 |             | * | * | PSCR8D0N |
| 45°      | ■            | PSMB8D0 | ■            | PSLB8D0 |             |   |   |          |
|          | ■            | PSMB1D2 | ■            | PSLB1D2 |             |   |   |          |
|          | ■            | PSMB2D2 | ■            | PSLB2D2 |             | * |   | PSCR8D2C |
|          | ■            | PSMB3D2 | ■            | PSLB3D2 |             |   |   |          |
|          | ■            | PSMB4D2 | ■            | PSLB4D2 |             |   |   |          |
| 45°      | ■            | PSMB5D2 | ■            | PSLB5D2 |             |   |   |          |
|          | ■            | PSMB8D2 | ■            | PSLB8D2 |             |   |   |          |
|          | ■            | PSMB1T0 | ■            | PSLB1T0 | *           | * |   | PSR8T0C  |
|          | ■            | PSMB2T0 | ■            | PSLB2T0 | *           |   | * | PSR8T0A  |
|          | ■            | PSMB3T0 | ■            | PSLB3T0 | *           | * | * | PSR8T0E  |
| 45°      | ■            | PSMB4T0 | ■            | PSLB4T0 | *           | * | * | PSR8T0G  |
|          | ■            | PSMB5T0 | ■            | PSLB5T0 | *           | * | * | PSR8T0H  |
|          | ■            | PSMB8T0 | ■            | PSLB8T0 | *           | * | * | PSR8T0K  |
|          | ■            | PSMB1T3 | ■            | PSLB1T3 |             |   |   |          |
|          | ■            | PSMB2T3 | ■            | PSLB2T3 |             |   |   |          |
| 45°      | ■            | PSMB3T3 | ■            | PSLB3T3 |             |   | * | PSCR8T3C |
|          | ■            | PSMB4T3 | ■            | PSLB4T3 |             |   |   |          |
|          | ■            | PSMB5T3 | ■            | PSLB5T3 |             |   |   |          |
|          | ■            | PSMB8T3 | ■            | PSLB8T3 |             |   |   |          |
|          | 45°          | ■       | PSMB1T2      | ■       | PSLB1T2     |   | * |          |
| ■        |              | PSMB2T2 | ■            | PSLB2T2 |             |   |   |          |
| ■        |              | PSMB3T2 | ■            | PSLB3T2 |             | * |   | PSCR8T2A |
| ■        |              | PSMB4T2 | ■            | PSLB4T2 |             |   |   |          |
| ■        |              | PSMB5T2 | ■            | PSLB5T2 |             | * | * | PSCR8T2H |
| 45°      | ■            | PSMB8T2 | ■            | PSLB8T2 |             |   |   |          |
|          | ■            | PSMB1T1 | ■            | PSLB1T1 |             | * |   | PSCR8T1C |
|          | ■            | PSMB2T1 | ■            | PSLB2T1 |             |   |   |          |
|          | ■            | PSMB3T1 | ■            | PSLB3T1 |             |   | * | PSCR8T1E |
|          | ■            | PSMB4T1 | ■            | PSLB4T1 |             |   |   |          |
| 45°      | ■            | PSMB5T1 | ■            | PSLB5T1 |             | * | * | PSCR8T1N |
|          | ■            | PSMB8T1 | ■            | PSLB8T1 |             |   |   |          |



| POSITION        | CODE    | WEIGHT   | MIN. PACK | SIZES |
|-----------------|---------|----------|-----------|-------|
| 1<br>0<br>2     | PMJN8T0 | 58 grams | 5         |       |
| 1<br>0<br>2     | PMJN8T3 |          |           |       |
| 1<br>3 0 4<br>2 | PMJN8Q0 |          |           |       |
| 1<br>3 0 4<br>2 | PMJN8Q4 |          |           |       |
| 1 0 2           | PMJN805 |          |           |       |
| 1 0 2           | PMJN80R |          |           |       |

| POSITION        | CODE     | WEIGHT   | MIN. PACK | SIZES |
|-----------------|----------|----------|-----------|-------|
| 1<br>0<br>2     | PMJN8T01 | 51 grams | 5         |       |
| 1<br>0<br>2     | PMJN8T31 |          |           |       |
| 1<br>3 0 4<br>2 | PMJN8Q01 |          |           |       |
| 1<br>3 0 4<br>2 | PMJN8Q41 |          |           |       |
| 1 0 2           | PMJN80S1 |          |           |       |
| 1 0 2           | PMJN80R1 |          |           |       |

1 For standard rotary switches suitable to operate a central contact, replace the letter "B" with the letter "C": PSMC  
2 For rotary switches with Left - Right operating angles replace the letters "DO" with "SD": PSMB1DO or PSCR8SDE

\* Key removable position

**AUXILIARY CONTROLS | PEGASUS SERIES**
**AUXILIARY CONTROLS | PEGASUS SERIES**
**EMERGENCY PUSH BUTTONS Ø22 | EN ISO 13850**

|  | TYPE   | COLOUR INDEX | CODE     | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|--|--|--------------|----------|--------------|--------------------|-------|
|  | MUSHROOM OPERATOR Ø30 TWIST TO RELEASE             | ■            | PPFN1R3N | 42           | 10                 |       |
|  | MUSHROOM OPERATOR WITH VISION Ø30 TWIST TO RELEASE | ■            | PPFN1R3S | 44           | 10                 |       |
|  | MUSHROOM OPERATOR Ø40 TWIST TO RELEASE             | ■            | PPFN1R4N | 44           | 10                 |       |
|  | MUSHROOM OPERATOR WITH VISION Ø40 TWIST TO RELEASE | ■            | PPFN1R4S | 46           | 10                 |       |
|  | MUSHROOM OPERATOR Ø60 TWIST TO RELEASE             | ■            | PPFN1R6N | 50           | 10                 |       |
|  | MUSHROOM OPERATOR WITH VISION Ø60 TWIST TO RELEASE | ■            | PPFN1R6S | 52           | 10                 |       |

**EMERGENCY PUSH BUTTONS Ø22 | EN ISO 13850**

|  | TYPE  | COLOUR INDEX | CODE                            | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|--|---|--------------|---------------------------------|--------------|--------------------|-------|
|  | MUSHROOM OPERATOR Ø40 WITH KEY RELEASE          | ■            | PPFN1C4NX<br>(not EN ISO 13850) | 76           | 10                 |       |
|  | MUSHROOM OPERATOR Ø40 PUSH-PULL                 | ■            | PPFN1P4N                        | 44           | 10                 |       |
|  | MUSHROOM OPERATOR Ø40 PUSH-PULL WITH VISION     | ■            | PPFN1P4S                        | 46           | 10                 |       |
|  | MUSHROOM OPERATOR Ø40 PUSH-PULL WITH COLOUR CAP | ■            | PPFN1P4C                        | 45           | 10                 |       |
|  | MUSHROOM OPERATOR Ø40 PUSH-PULL WITH LENS CAP   | ■            | PPFL1P4N                        | 45           | 10                 |       |

**TECHNICAL NOTES**


- ⚡ All operators comply with the relevant European standard.
- ⚡ EN ISO 13850: Machine safety - Emergency stop operators, functional characteristics - Design guidelines.
- ⚡ IEC/EN6097-5-1.
- ⚡ Comply with the standard IEC/EN60204-1: Machine safety - Machine electrical circuits - General guidelines.
- ⚡ The push buttons are designed with a load charge mechanism to ensure a reliable operation and stoppage, or blockage, in the activate position. The combination with positive switching NC ⚡ contacts and the presence of the "status" indicator on some models, guarantee a high degree of reliability and effectiveness.

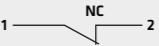

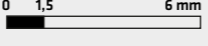
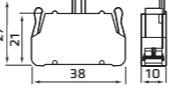
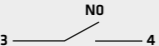

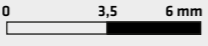


**AUXILIARY CONTROLS | PEGASUS SERIES**


**AUXILIARY CONTROLS | PEGASUS SERIES**

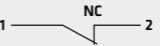

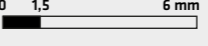
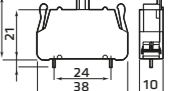
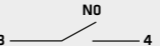

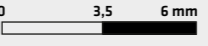
**CONTACT BLOCKS | SPRING LOADED TERMINALS**




| DESIGNATION   | FUNCTION  | CODE  | SIZES   |
|---|---|-------|---|
| <br>1 — NC — 2 |   | PCW01 |  |
| <br>3 — NO — 4 |   | PCW10 |   |


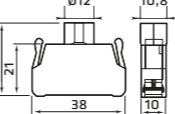
**CONTACT BLOCKS | WELDING TERMINALS**




| DESIGNATION   | FUNCTION  | CODE  | SIZES   |
|---|---|-------|---|
| <br>1 — NC — 2 |   | PSC01 |  |
| <br>3 — NO — 4 |   | PSC10 |   |


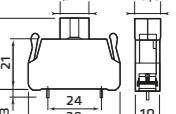
**LAMPHOLDER BA9s**




| DESIGNATION   | POWER SUPPLY  | CODE  | SIZES   |
|---|---|-------|---|
| X1 —  — X2 | BA9s Lamp socket<br>250V 2,4 W max<br>Bulb not included | PCWAD |  |


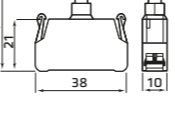
**LAMPHOLDER BA9s**




| DESIGNATION   | POWER SUPPLY  | CODE  | SIZES   |
|---|---|-------|---|
| X1 —  — X2 | BA9s Lamp socket<br>250V 2,4 W max<br>Bulb not included | PSCAD |  |


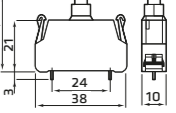
**LAMPHOLDER WITH BUILT-IN LED**

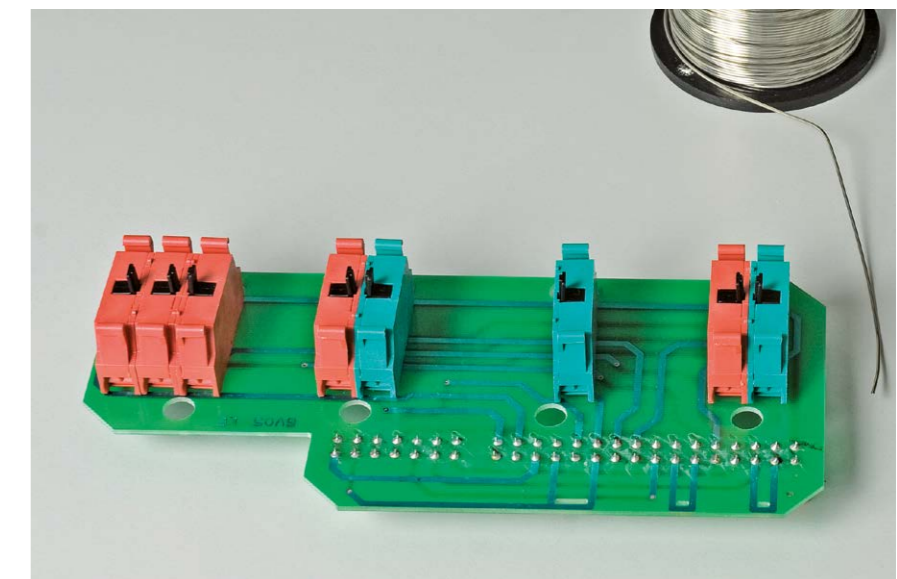
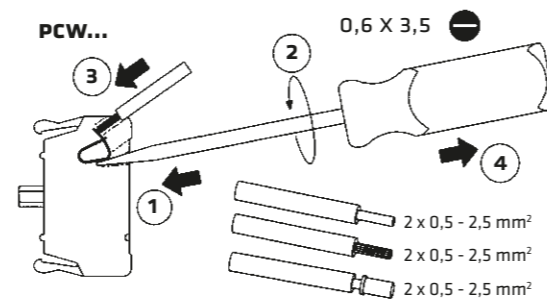
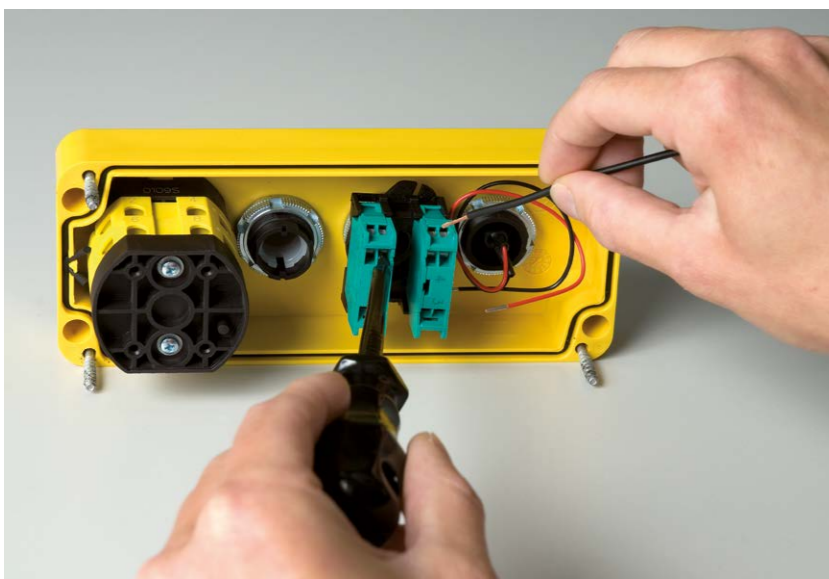


| DESIGNATION   | POWER SUPPLY | CODE     | SIZES   |
|---|--------------|----------|---|
| X1 —  — X2 | AC/DC 12V    | PCW5L12  |  |
|   | AC/DC 24V    | PCW5L24  |   |
|   | AC/DC 48V    | PCW5L48  |   |
|   | AC/DC 110V   | PCW5L110 |   |
|   | AC 220V      | PCW5L220 |   |

**LAMPHOLDER WITH BUILT-IN LED**




| DESIGNATION   | POWER SUPPLY | CODE     | SIZES   |
|---|--------------|----------|---|
| X1 —  — X2 | AC/DC 12V    | PSC5L12  |  |
|   | AC/DC 24V    | PSC5L24  |   |
|   | AC/DC 48V    | PSC5L48  |   |
|   | AC/DC 110V   | PSC5L110 |   |
|   | AC 220V      | PSC5L220 |   |



**AUXILIARY CONTROLS | PEGASUS SERIES**


**AUXILIARY CONTROLS | PEGASUS SERIES**

**CONTACT BLOCKS | SCREW TERMINALS**




| DESIGNATION | FUNCTION       | CODE     | SIZES |
|-------------|----------------|----------|-------|
| 1 — NC — 2  | <br>0 1,5 6 mm | PL004001 |       |
| 3 — NO — 4  | <br>0 3,5 6 mm | PL004002 |       |

**LAMPHOLDER BA9s**




| DESIGNATION | POWER SUPPLY  | CODE     | SIZES |
|-------------|---|----------|-------|
| X1 — ⊗ — X2 | BA9s Lamp socket<br>250V 2,4 W max<br>Bulb not included | PL004007 |       |

**LAMPHOLDER WITH BUILT-IN LED**




| DESIGNATION | POWER SUPPLY | CODE       | SIZES |
|-------------|--------------|------------|-------|
| X1 — ⊗ — X2 | AC/DC 12V    | PL0045L12  |       |
|             | AC/DC 24V    | PL0045L24  |       |
|             | AC/DC 48V    | PL0045L48  |       |
|             | AC/DC 110V   | PL0045L110 |       |
|             | AC 220V      | PL0045L220 |       |


**CONTROL STATION WITH MUSHROOM Ø90 | IP66**



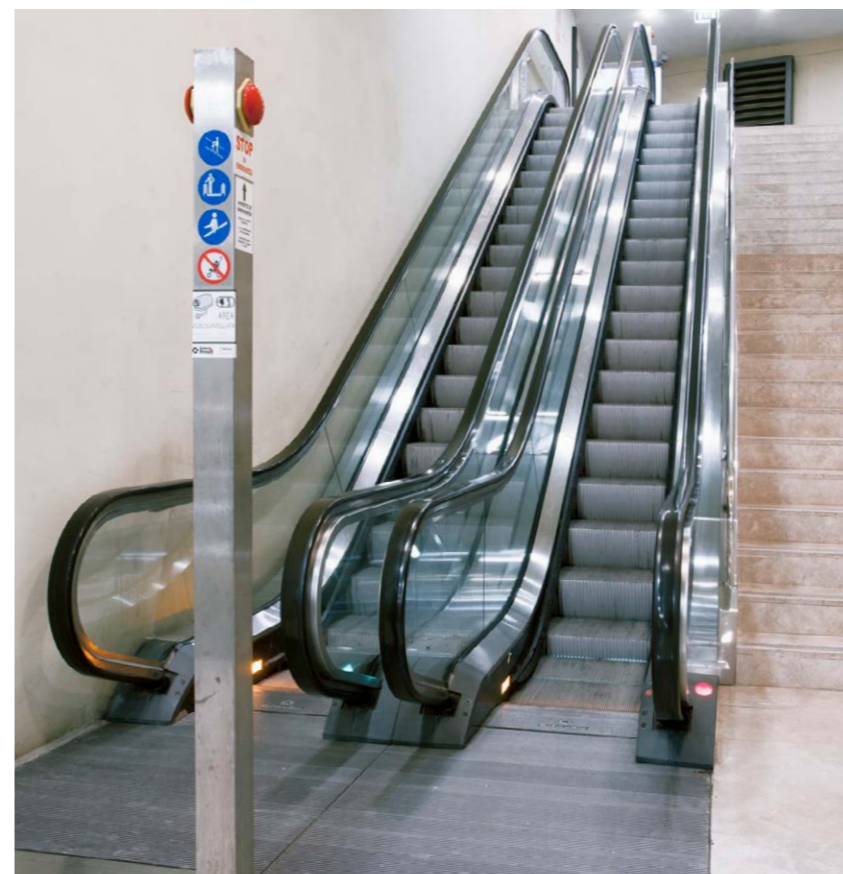
| TYPE                    | COLOUR INDEX | DESIGNATION | CODE     | SIZES |
|-------------------------|--------------|-------------|----------|-------|
| MUSHROOM HEAD MOMENTARY |              | 1 —  — 2    | PG1M9W01 |       |



| TYPE                    | COLOUR INDEX | DESIGNATION | CODE     | SIZES |
|-------------------------|--------------|-------------|----------|-------|
| MUSHROOM HEAD MOMENTARY |              | 3 —  — 4    | PG8M9W10 |       |



| TYPE                                   | COLOUR INDEX | DESIGNATION | CODE     | SIZES |
|--|--------------|-------------|----------|-------|
| MUSHROOM HEAD MOMENTARY FLUSH MOUNTING |              | 1 —  — 2    | PR1M9W01 |       |



**ELECTRICAL CHARACTERISTICS**

- ⊕ Protection EN60529 IP66.
- ⊕ Double insulated.
- ⊕ Number contact capacity: max 3 contact blocks.
- ⊕ Cable entry with 3 holes Pg 13,5/M20.
- ⊕ Ambient temperature:
  - operating: -25 +70°C
  - storage: -30 +70°C
- ⊕ Climate protection: IEC 68 2-3, 2-30.
- ⊕ Terminals referencing: EN50013.
- ⊕ Colors:
  - Red mushroom;
  - Yellow cover;
  - Black box.
  
  - Black mushroom;
  - Grey cover;
  - Black box.



**AUXILIARY CONTROLS | PEGASUS SERIES**
**AUXILIARY CONTROLS | PEGASUS SERIES**
**PUSH BUTTON STATIONS | IP65**

|  | TYPE                           | COLOUR | DESIGNATION | CODE    | WEIGHT grams | MIN. PACK | SIZES |
|--|--------------------------------|--------|-------------|---------|--------------|-----------|-------|
|  | FLUSH PUSH BUTTON NOT LATCHING | ■      |             | PQ01RN1 | 176          | 1         |       |
|  |                                | ■      |             | PQ01RN2 |              |           |       |

|  | TYPE                            | COLOUR | DESIGNATION | CODE    | WEIGHT grams | MIN. PACK | SIZES |
|--|---------------------------------|--------|-------------|---------|--------------|-----------|-------|
|  | EMERGENCY STOP Ø40 NOT LATCHING | ■      |             | PQ01M4N | 192          | 1         |       |

|  | TYPE                            | COLOUR | DESIGNATION | CODE    | WEIGHT grams | MIN. PACK | SIZES |
|--|---------------------------------|--------|-------------|---------|--------------|-----------|-------|
|  | EMERGENCY STOP Ø60 NOT LATCHING | ■      |             | PQ01M6N | 198          | 1         |       |

|  | TYPE                    | COLOUR | DESIGNATION | CODE  | WEIGHT grams | MIN. PACK | SIZES |
|--|-------------------------|--------|-------------|-------|--------------|-----------|-------|
|  | WITH NR. 2 PUSH BUTTONS | <br>   | <br>        | PQ02B | 264          | 1         |       |

|  | TYPE   | COLOUR | DESIGNATION | CODE  | WEIGHT grams | MIN. PACK | SIZES |
|--|--|--------|-------------|-------|--------------|-----------|-------|
|  | WITH NR. 1 PUSH BUTTONS AND NR. 1 EMERGENCY EN ISO 13850 | <br>   | <br>        | PQ02A | 264          | 1         |       |

|  | TYPE   | COLOUR   | DESIGNATION | CODE  | WEIGHT grams | MIN. PACK | SIZES |
|--|--|----------|-------------|-------|--------------|-----------|-------|
|  | WITH NR. 2 PUSH BUTTONS AND NR. 1 EMERGENCY EN ISO 13850 | <br><br> | <br><br>    | PQ03B | 362          | 1         |       |

**PUSH BUTTON STATIONS | EN ISO 13850 IP65**

|  | TYPE                                | COLOUR | DESIGNATION | CODE    | WEIGHT grams | MIN. PACK | SIZES |
|--|-------------------------------------|--------|-------------|---------|--------------|-----------|-------|
|  | EMERGENCY STOP Ø40 TWIST TO RELEASE | ■      |             | PQ01R4N | 190          | 1         |       |

|  | TYPE                         | COLOUR | DESIGNATION | CODE    | WEIGHT grams | MIN. PACK | SIZES |
|--|------------------------------|--------|-------------|---------|--------------|-----------|-------|
|  | EMERGENCY STOP Ø40 PUSH-PULL | ■      |             | PQ01P4N | 192          | 1         |       |

|  | TYPE   | COLOUR | DESIGNATION | CODE    | WEIGHT grams | MIN. PACK | SIZES |
|--|--|--------|-------------|---------|--------------|-----------|-------|
|  | EMERGENCY STOP PUSH BUTTON Ø40 PUSH-PULL WITH VISION | ■      |             | PQ01P4L | 190          | 1         |       |

|  | TYPE                         | COLOUR | DESIGNATION | CODE    | WEIGHT grams | MIN. PACK | SIZES |
|--|------------------------------|--------|-------------|---------|--------------|-----------|-------|
|  | EMERGENCY STOP Ø60 PUSH-PULL | ■      |             | PQ01P6N | 198          | 1         |       |

**TECHNICAL NOTES**

- All operators comply with the relevant European standard.
- EN ISO 13850: Machine safety - Emergency stop operators, functional characteristics - Design guidelines.
- IEC/EN6097-5-1.
- Comply with the standard IEC/EN60204-1: Machine safety - Machine electrical circuits - General guidelines.
- The push buttons are designed with a load charge mechanism to ensure a reliable operation and stoppage, or blockage, in the activate position. The combination with positive switching NC contacts and the presence of the "status" indicator on some models, guarantee a high degree of reliability and effectiveness.

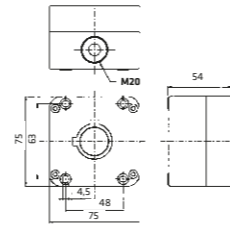
**AUXILIARY CONTROLS | PEGASUS SERIES**

**AUXILIARY CONTROLS | PEGASUS SERIES**

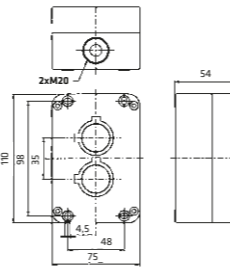
**PUSH BUTTON STATION ENCLOSURES | IP65**



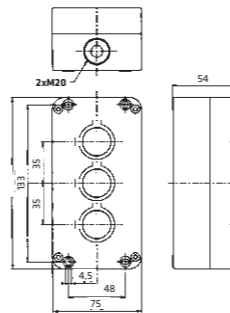
| TYPE              | COVER COLOUR | CODE    | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|-------------------|--------------|---------|--------------|--------------------|-------|
| 1 HOLES ENCLOSURE | ■            | PQ01K   | 134          | 1                  |       |
|                   | ■            | PQ01KGN |              |                    |       |



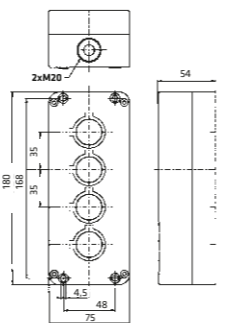
| TYPE              | COVER COLOUR | CODE    | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|-------------------|--------------|---------|--------------|--------------------|-------|
| 2 HOLES ENCLOSURE | ■            | PQ02K   | 174          | 1                  |       |
|                   | ■            | PQ02KGN |              |                    |       |



| TYPE              | COVER COLOUR | CODE    | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|-------------------|--------------|---------|--------------|--------------------|-------|
| 3 HOLES ENCLOSURE | ■            | PQ03K   | 214          | 1                  |       |
|                   | ■            | PQ03KGN |              |                    |       |



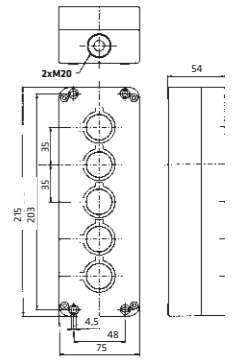
| TYPE              | COVER COLOUR | CODE    | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|-------------------|--------------|---------|--------------|--------------------|-------|
| 4 HOLES ENCLOSURE | ■            | PQ04K   | 256          | 1                  |       |
|                   | ■            | PQ04KGN |              |                    |       |



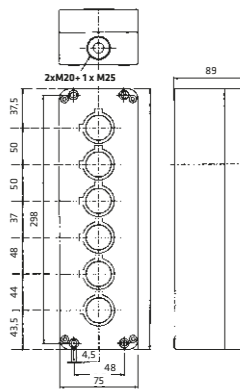
**PUSH BUTTON STATION ENCLOSURES | IP65**



| TYPE              | COVER COLOUR | CODE    | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|-------------------|--------------|---------|--------------|--------------------|-------|
| 5 HOLES ENCLOSURE | ■            | PQ05K   | 296          | 1                  |       |
|                   | ■            | PQ05KGN |              |                    |       |



| TYPE              | COVER COLOUR | CODE    | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|-------------------|--------------|---------|--------------|--------------------|-------|
| 3 HOLES ENCLOSURE | ■            | PQ06K   | 386          | 1                  |       |
|                   | ■            | PQ06KGN |              |                    |       |

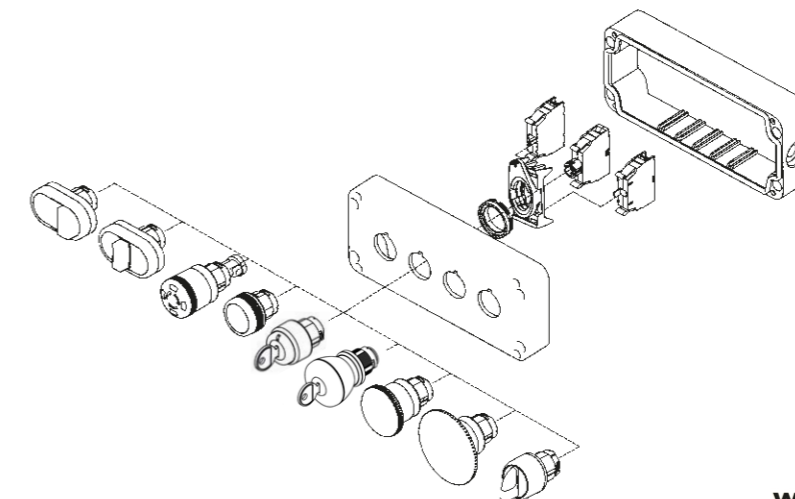


**CHARACTERISTICS**

- ABS self-extinguishing material.
- Self-extinguishing class V0 UL94.
- EN60529 IP65 protection grade.
- Double insulation □ .

- Colors: Black box; Yellow cover; Grey cover.
- Threaded cable entry with membrane conduit knock:
  - 1 hole box nr. 1 M16 + 1 M20 gland, from 2 to 5 holes nr. 2 M20 glands;
  - 6 holes nr. 1 M20 + 1 M25 glands

**ASSEMBLING**



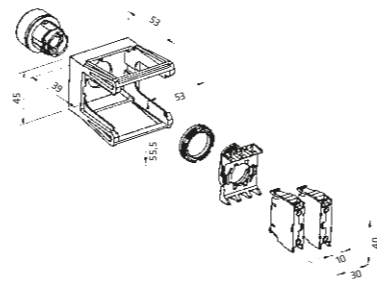


**ACCESSORIES**

**DIN RAIL MOUNTING ADAPTOR**



| DESCRIPTION   | CODE     |
|---|----------|
| DIN EN50022<br>RAIL MOUNTING<br>FOR 46 MM<br>STANDARDISED<br>GREY<br>ENCLOSURES | 11708351 |



**PROTECTION CAPS**

**FOR FLUSH BUTTON**

| DESCRIPTION | CODE |
|-------------|------|
| PEGASUS     | PCR  |



**FOR MULTIFUNCTIONAL SERIES**

| PEGASUS     | CODE |
|-------------|------|
| PPDN-PPDL   | PCD  |
| PPMN        | PCM  |
| PPDNR-PPDLR | PCN  |



**FOR EXTENDED PUSH BUTTON**

| DESCRIPTION | CODE |
|-------------|------|
| PEGASUS     | PCS  |



**CENTRAL CONTACT OPERATION**



| DESCRIPTION                         | CODE |
|-------------------------------------|------|
| FOR PUSH BUTTONS<br>STABLE-UNSTABLE | PAC  |

**KEY FIXING BULB EXTRACTOR**



| CODE |
|------|
| PCF  |

**STOPPER CLOSING HOLES Ø22,5**



| CODE  |
|-------|
| PTRN8 |

**CONTACTS SUPPORT**



| DESCRIPTION                         | CODE   | DESCRIPTION                              | CODE     |
|-------------------------------------|--------|--|----------|
| TO CONTACT ELEMENTS<br>PL, PCW, PSC | PPELN8 | TO FIVE CONTACT ELEMENTS<br>PL, PCW, PSC | PPELN8-5 |

**FASTON CONNECTORS AND FOR PCB**



| DESCRIPTION    | CODE     | DESCRIPTION | CODE     |
|----------------|----------|-------------|----------|
| FASTON 6,3x0,8 | 11708341 | PCB         | 11708235 |

TO SCREW CONTACTS PL

**OPERATOR CAPS Ø22**

**MOMENTARY AND LATCHED, FLUSH PUSH BUTTONS**

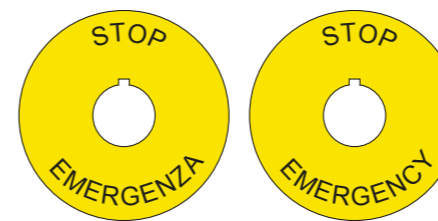


| SYMBOL | COLOUR | CODE        |
|--------|--------|-------------|
|        | ■      | PPRN2/I     |
|        | ■      | PPRN1/O     |
|        | ■      | PPRN2/II    |
|        | ■      | PPRN2/START |
|        | ■      | PPRN1/STOP  |

| SYMBOL | COLOUR | CODE      |
|--------|--------|-----------|
|        | ■      | PPRN2/ON  |
|        | ■      | PPRN1/OFF |
|        | ■      | PPRN5/F   |
|        | ■      | PPRN8/F   |

Available others symbols on request, also in different languages and colours.

**EMERGENCY STOP RING**



| DESCRIPTION   | TEXT             | CODE  |
|---|------------------|-------|
| Ø60 Made of Aluminium<br>Yellow background<br>Black letters.<br>Weight 3,5 gr.<br>Min. packing q.ty 10 pcs. | (BLANK)          | PTE   |
|   | STOP - EMERGENZA | PTE/I |
|   | EMERGENCY - STOP | PTE/A |
|   | NOT - AUS        | PTE/D |

Available others texts on request, also in different languages.

**LEGEND PLATE**



| CODE  |
|-------|
| PPTN8 |

**LABEL**



| TEXT          | CODE  |
|---------------|-------|
| (BLANK)       | PTA00 |
| MARCIA        | PTA01 |
| ARRESTO       | PTA02 |
| I O II        | PTA03 |
| O I           | PTA04 |
| CHIUDE        | PTA05 |
| APRE          | PTA06 |
| EMERGENZA     | PTA07 |
| MANUALE       | PTA08 |
| AUTOMATICO    | PTA09 |
| AVANTI        | PTA10 |
| INDIETRO      | PTA11 |
| EIN           | PTA12 |
| AUS           | PTA13 |
| STOP          | PTA14 |
| START         | PTA15 |
| RESET         | PTA16 |
| I → 0 ← II    | PTA17 |
| AUT 0 MAN     | PTA18 |
| INS - DISINS  | PTA26 |
| HAND OFF AUTO | PTA27 |
| FORW OFF REV  | PTA28 |
| ON OFF        | PTA29 |

**TECHNICAL DATA | ELECTRICAL CHARACTERISTICS**
**CONTACT BLOCKS**

| EC/EN 60947-5-1 CHARACTERISTICS        |    | P0004001-P0004002 |  | PCW01-PCW10 / PSC01-PSC10 |  |
|--|----|-------------------|--|---------------------------|--|
| Rated insulation voltage Ui            | V  | 690*              |  | 690*                      |  |
| Rated impulse withstand voltage Uimp   | kV | 4*                |  | 4*                        |  |
| Operating frequency                    | Hz | 50/60*            |  | 50/60*                    |  |
| Rated thermal current Ith              | A  | 16*               |  | 16*                       |  |
| Rated thermal current in enclosed Ithe | A  | 10*               |  | 10*                       |  |

| RATED OPERATING CURRENT Ie:                 |             | P0004001-P0004002                  |     | PCW01-PCW10 / PSC01-PSC10          |     |       |     |     |     |     |      |     |     |     |     |     |     |
|---|-------------|------------------------------------|-----|------------------------------------|-----|-------|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|
| AC15: Alternate current                     | V           | 24                                 | 60  | 110                                | 230 | 400   | 440 | 500 | 690 | 24  | 60   | 110 | 240 | 400 | 440 | 500 | 690 |
|   | A           | 16*                                | 12  | 8                                  | 6   | 4,5   | 3,5 | 1*  | 1   | 16* | 12   | 5   | 5*  | 4   | 4   | 4*  | 2*  |
| DC13: Direct current                        | V           | 24                                 | 48  | 60                                 | 110 | 220   | 24  | 48  | 60  | 110 | 250  |     |     |     |     |     |     |
|   | A           | 2*                                 | 1,2 | 0,85                               | 0,4 | 0,25* | 2   | 2*  | 1*  | 0,4 | 0,4* |     |     |     |     |     |     |
| Conditional short circuit withstand current | A           | 1000*                              |     | 1000*                              |     |       |     |     |     |     |      |     |     |     |     |     |     |
| Fuse rating gG                              | 500V        | 10A*                               |     | 10A*                               |     |       |     |     |     |     |      |     |     |     |     |     |     |
| Contact insulation resistance               | mΩ          | <25                                |     | <25                                |     |       |     |     |     |     |      |     |     |     |     |     |     |
| Switching mechanism                         |             | Slow break double gap contacts     |     | Slow break double gap contacts     |     |       |     |     |     |     |      |     |     |     |     |     |     |
| Contact duty                                |             | ☉ NC contact with positive opening |     | ☉ NC contact with positive opening |     |       |     |     |     |     |      |     |     |     |     |     |     |
| Minimum tripping force                      |             | 4N                                 |     | 4N                                 |     |       |     |     |     |     |      |     |     |     |     |     |     |
| Electrical life AC15                        | mil. cycles | 1A/1,5 - 2A/0,5 - 3A/0,25          |     | 1A/1,5 - 2A/0,5 - 3A/0,25          |     |       |     |     |     |     |      |     |     |     |     |     |     |

| UL 508 CHARACTERISTICS   |  | P0004001-P0004002          |  | PCW01-PCW10 / PSC01-PSC10  |  |
|--------------------------|--|----------------------------|--|----------------------------|--|
| General Use              |  | 10A-600V ac - 2,5A-125V dc |  | 10A-600V ac - 2,5A-125V dc |  |
| Heavy Duty (HD) category |  | A600-Q600                  |  | A600-Q600                  |  |

**LAMP HOLDER**

| EC/EN 60947-5-1 CHARACTERISTICS |   | BA9s                           |  | BUILT-IN LED                  |  |
|---------------------------------|---|--------------------------------|--|-------------------------------|--|
|                                 |   | DIRECT P0004007<br>PCWAD-PSCAD |  | LED P0004.L.<br>PCW.L.-PSC.L. |  |
| Rated insulation voltage Ui     | V | 690*                           |  | 400                           |  |
| Rated operating voltage Ue      | V | 400* 300 1                     |  | AC/DC 12-24                   |  |
|                                 | V | -                              |  | AC/DC 48                      |  |
|                                 | V | -                              |  | AC/DC 110                     |  |
|                                 | V | -                              |  | AC 220                        |  |
| Max rated power                 | W | 2,4* 2,5 1                     |  | -                             |  |
| Power supply                    |   | AC/DC                          |  | -                             |  |
| Lamp fixing system              |   | BA9s                           |  | -                             |  |

**TECHNICAL DATA | ELECTRICAL CHARACTERISTICS**

| STANDARD CONFORMITY  |   | UL - IMG - CCC - EAC - R.I.N.A  |  |
|--|---|---|--|
| Approvals  |   | IEC/EN60947-5-1, UL508  |  |
| Protection class   | EN 60529                                    | IP65: Buttons and switches, joysticks, single-lamp<br>IP66/IP67/IP69K: Mushroom emergency EN ISO 13850<br>IP40: Multi-function push buttons<br>IP66: Buttons with protection caps<br>Type 1<br>IP65: Control stations, enclosures<br>IP66: Mushroom, Push button Ø90<br>IP20: Contacts PCW, PL.<br>IP00: PSC. |  |
|  | Conforms to UL50<br>EN 60529                |   |  |
| Material Group   | EN60947-1                                   | II  |  |
| Pollution Grade  | EN60947-1                                   | 3   |  |
| Flammability   | UL94  | VO: live parts  |  |
| Ambient Temperature  | °C  | Operating: -25 +70<br>Storage: -30 +70  |  |
| Climate Protection   | IEC68 part 2-3<br>IEC68 part 2-30           | Hot damp<br>Unsettled Hot damp  |  |
| Terminals referecing   |   | EN50013   |  |
| <b>Terminals:</b>  |   |   |  |
| Terminal block caliber   |   | A2  |  |
| Terminal screw   |   | M3,5  |  |
| Tightening torque  |   | 1,2 Nm - EN60947-1 - 12 lb.in. UL508  |  |
| <b>Capacity:</b>   |   |   |  |
| Solid and flexible conductors  | n° 1 min/max mm²<br>n° 2 min/max mm²<br>AWG | 1/2,5 screw terminals, 0,5-2,5 spring loaded terminals<br>1/2,5 screw terminals, 0,5-2,5 spring loaded terminals<br>20-12 screw terminals, 20-12 spring loaded terminals  |  |
| <b>Mechanical life:</b>  |   |   |  |
| Mushroom operators and standard  |   | 3   |  |
| Push buttons with colour cap   | mil./operations                             |   |  |
| Standard push buttons with lens cap                                    |   | 1   |  |
| Latched push buttons with colour cap                                   |   | 1   |  |
| Standard rotary switches   |   | 1   |  |
| Rotary switches with lens, latched push button with lens cap, joystick |   | 0,5   |  |
| Emergency stop push buttons with release                               |   | 0,3   |  |







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**AUXILIARY CONTROLS**  
**ORION SERIES**



**PUSH BUTTONS Ø22 | WITH COLOUR CAP | IP65**

MOMENTARY

| TYPE              | COLOUR INDEX | CODE    | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|-------------------|--------------|---------|--------------|--------------------|-------|
| FLUSH PUSH BUTTON | ■            | PPRN1BL | 30           | 10                 |       |
|                   | ■            | PPRN2BL | 30           | 10                 |       |
|                   | ■            | PPRN3BL | 30           | 10                 |       |
|                   | ■            | PPRN4BL | 30           | 10                 |       |
|                   | ■            | PPRN5BL | 30           | 10                 |       |
|                   | ■            | PPRN8BL | 30           | 10                 |       |

| TYPE                 | COLOUR INDEX | CODE    | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|----------------------|--------------|---------|--------------|--------------------|-------|
| EXTENDED PUSH BUTTON | ■            | PPSN1BL | 31           | 10                 |       |
|                      | ■            | PPSN2BL | 31           | 10                 |       |
|                      | ■            | PPSN3BL | 31           | 10                 |       |
|                      | ■            | PPSN4BL | 31           | 10                 |       |
|                      | ■            | PPSN5BL | 31           | 10                 |       |
|                      | ■            | PPSN8BL | 31           | 10                 |       |

| TYPE         | COLOUR INDEX | CODE       | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|--------------|--------------|------------|--------------|--------------------|-------|
| MUSHROOM Ø40 | ■            | PPFN1M4NBL | 45           | 10                 |       |
|              | ■            | PPFN2M4NBL | 45           | 10                 |       |
|              | ■            | PPFN3M4NBL | 45           | 10                 |       |

**PUSH BUTTONS Ø22 | WITH LENS CAP | IP65**

MOMENTARY

| TYPE              | COLOUR INDEX | CODE    | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|-------------------|--------------|---------|--------------|--------------------|-------|
| FLUSH PUSH BUTTON | ■            | PPRL1BL | 30           | 10                 |       |
|                   | ■            | PPRL2BL | 30           | 10                 |       |
|                   | ■            | PPRL3BL | 30           | 10                 |       |
|                   | ■            | PPRL4BL | 30           | 10                 |       |
|                   | ■            | PPRL5BL | 30           | 10                 |       |

| TYPE                 | COLOUR INDEX | CODE    | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|----------------------|--------------|---------|--------------|--------------------|-------|
| EXTENDED PUSH BUTTON | ■            | PPSL1BL | 31           | 10                 |       |
|                      | ■            | PPSL2BL | 31           | 10                 |       |
|                      | ■            | PPSL3BL | 31           | 10                 |       |
|                      | ■            | PPSL4BL | 31           | 10                 |       |
|                      | ■            | PPSL5BL | 31           | 10                 |       |

| TYPE                  | COLOUR INDEX | CODE       | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|-----------------------|--------------|------------|--------------|--------------------|-------|
| MUSHROOM OPERATOR Ø40 | ■            | PPFL1M4NBL | 43           | 10                 |       |

IND. LIGHT

| TYPE     | COLOUR INDEX | CODE    | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|----------|--------------|---------|--------------|--------------------|-------|
| FLAT CAP | ■            | PLSL1NL | 30           | 10                 |       |
|          | ■            | PLSL2NL | 30           | 10                 |       |
|          | ■            | PLSL3NL | 30           | 10                 |       |
|          | ■            | PLSL4NL | 30           | 10                 |       |
|          | ■            | PLSL5NL | 30           | 10                 |       |

**MULTIFUNCTION PUSH BUTTONS Ø22 | NOT LIGHT | IP65**

| TYPE             | COLOUR INDEX | CODE   | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|------------------|--------------|--------|--------------|--------------------|-------|
| DUAL PUSH BUTTON | ■            | PPDNBL | 38           | 10                 |       |

| TYPE                      | COLOUR INDEX | CODE    | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|---------------------------|--------------|---------|--------------|--------------------|-------|
| EXTENDED DUAL PUSH BUTTON | ■            | PPDNSBL | 38           | 10                 |       |

| TYPE                      | COLOUR INDEX | CODE    | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|---------------------------|--------------|---------|--------------|--------------------|-------|
| MULTIFUNCTION PUSH BUTTON | ■            | PPMNSBL | 40           | 10                 |       |

**MULTIFUNCTION PUSH BUTTONS Ø22 | LIGHT | IP65**

| TYPE             | COLOUR INDEX | CODE     | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|------------------|--------------|----------|--------------|--------------------|-------|
| DUAL PUSH BUTTON | ■            | PPDLBL   | 38           | 10                 |       |
|                  | ■            | PPDLBL.1 | 38           | 10                 |       |

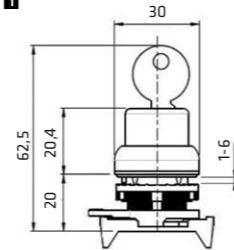
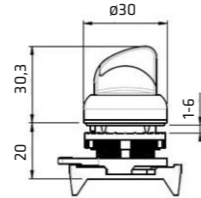
| TYPE                      | COLOUR INDEX | CODE    | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|---------------------------|--------------|---------|--------------|--------------------|-------|
| EXTENDED DUAL PUSH BUTTON | ■            | PPDLSBL | 38           | 10                 |       |

**ROTARY SWITCHES Ø22 | IP65**

**WITH OPERATOR**

**WITH LIGHT OPERATOR**

**WITH KEY**



| POSITION | COLOUR INDEX | CODE      | COLOUR INDEX | CODE      | KEY REMOVAL |   |   | CODE       |
|----------|--------------|-----------|--------------|-----------|-------------|---|---|------------|
|          |              |           |              |           | L           | O | R |            |
| <br>90°  | ■            | PSMB1D0BL | ■            | PSML1D0BL | *           | * |   | PSCR8D0CBL |
|          | ■            | PSMB2D0BL | ■            | PSML2D0BL |             |   | * | PSCR8D0EBL |
|          | ■            | PSMB3D0BL | ■            | PSML3D0BL |             |   | * | PSCR8D0NBL |
|          | ■            | PSMB4D0BL | ■            | PSML4D0BL |             |   |   |            |
|          | ■            | PSMB5D0BL | ■            | PSML5D0BL |             |   |   |            |
|          | ■            | PSMB8D0BL | ■            | PSML8D0BL |             |   |   |            |
| <br>45°  | ■            | PSMB1D1BL | ■            | PSML1D1BL | *           | * |   | PSCR8D1CBL |
|          | ■            | PSMB2D1BL | ■            | PSML2D1BL |             |   | * | PSCR8D1EBL |
|          | ■            | PSMB3D1BL | ■            | PSML3D1BL |             |   | * | PSCR8D1NBL |
|          | ■            | PSMB4D1BL | ■            | PSML4D1BL |             |   |   |            |
|          | ■            | PSMB5D1BL | ■            | PSML5D1BL |             |   |   |            |
|          | ■            | PSMB8D1BL | ■            | PSML8D1BL |             |   |   |            |
| <br>45°  | ■            | PSMB1D2BL | ■            | PSML1D2BL |             |   | * | PSCR8D2CBL |
|          | ■            | PSMB2D2BL | ■            | PSML2D2BL |             |   |   |            |
|          | ■            | PSMB3D2BL | ■            | PSML3D2BL |             |   |   |            |
|          | ■            | PSMB4D2BL | ■            | PSML4D2BL |             |   |   |            |
|          | ■            | PSMB5D2BL | ■            | PSML5D2BL |             |   |   |            |
|          | ■            | PSMB8D2BL | ■            | PSML8D2BL |             |   |   |            |
| <br>45°  | ■            | PSMB1T0BL | ■            | PSML1T0BL | *           | * | * | PSR8T0CBL  |
|          | ■            | PSMB2T0BL | ■            | PSML2T0BL |             |   | * | PSR8T0ABL  |
|          | ■            | PSMB3T0BL | ■            | PSML3T0BL | *           | * | * | PSR8T0EBL  |
|          | ■            | PSMB4T0BL | ■            | PSML4T0BL | *           | * | * | PSR8T0GBL  |
|          | ■            | PSMB5T0BL | ■            | PSML5T0BL | *           | * | * | PSR8T0HBL  |
|          | ■            | PSMB8T0BL | ■            | PSML8T0BL | *           | * | * | PSR8T0KBL  |
| <br>45°  | ■            | PSMB1T3BL | ■            | PSML1T3BL |             |   | * | PSCR8T3CBL |
|          | ■            | PSMB2T3BL | ■            | PSML2T3BL |             |   |   |            |
|          | ■            | PSMB3T3BL | ■            | PSML3T3BL |             |   |   |            |
|          | ■            | PSMB4T3BL | ■            | PSML4T3BL |             |   |   |            |
|          | ■            | PSMB5T3BL | ■            | PSML5T3BL |             |   |   |            |
|          | ■            | PSMB8T3BL | ■            | PSML8T3BL |             |   |   |            |
| <br>45°  | ■            | PSMB1T2BL | ■            | PSML1T2BL | *           | * |   | PSCR8T2CBL |
|          | ■            | PSMB2T2BL | ■            | PSML2T2BL |             |   | * | PSCR8T2ABL |
|          | ■            | PSMB3T2BL | ■            | PSML3T2BL |             |   | * | PSCR8T2HBL |
|          | ■            | PSMB4T2BL | ■            | PSML4T2BL |             |   |   |            |
|          | ■            | PSMB5T2BL | ■            | PSML5T2BL |             |   |   |            |
|          | ■            | PSMB8T2BL | ■            | PSML8T2BL |             |   |   |            |
| <br>45°  | ■            | PSMB1T1BL | ■            | PSML1T1BL | *           | * |   | PSCR8T1CBL |
|          | ■            | PSMB2T1BL | ■            | PSML2T1BL |             |   | * | PSCR8T1EBL |
|          | ■            | PSMB3T1BL | ■            | PSML3T1BL |             |   | * | PSCR8T1NBL |
|          | ■            | PSMB4T1BL | ■            | PSML4T1BL |             |   |   |            |
|          | ■            | PSMB5T1BL | ■            | PSML5T1BL |             |   |   |            |
|          | ■            | PSMB8T1BL | ■            | PSML8T1BL |             |   |   |            |

**OPERATOR CAPS Ø22 | IP65**

**MOMENTARY FLUSH PUSH BUTTONS**



| SYMBOL | COLOUR | CODE          | SYMBOL | COLOUR | CODE        |
|--------|--------|---------------|--------|--------|-------------|
|        | ■      | PPRN2BL/I     |        | ■      | PPRN2BL/ON  |
|        | ■      | PPRN1BL/O     |        | ■      | PPRN1BL/OFF |
|        | ■      | PPRN2BL/II    |        | ■      | PPRN5BL/F   |
|        | ■      | PPRN2BL/START |        | ■      | PPRN8BL/F   |
|        | ■      | PPRN1BL/STOP  |        |        |             |

Available others symbols on request, also in different languages and colours.

1 For standard rotary switches suitable to operate a central contact, replace the letter "B" with the letter "C": PSMB1C0BL or PSML1C0BL  
2 For rotary switches with Left - Right operating angles replace the letters "DO" with "SD": PSMB1SD0BL or PSCR8SD0BL

\* Key removable position



**AUXILIARY CONTROLS | ORION SERIES | GREY LINE**

**AUXILIARY CONTROLS | ORION SERIES | GREY LINE**

**PUSH BUTTONS Ø22 | WITH COLOUR CAP | IP67-IP69K**

MOMENTARY

| TYPE              | COLOUR INDEX | CODE    | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|-------------------|--------------|---------|--------------|--------------------|-------|
|                   |              |         |              |                    |       |
| FLUSH PUSH BUTTON | ■            | PPRN1GL | 30           | 10                 |       |
|                   | ■            | PPRN2GL | 30           | 10                 |       |
|                   | ■            | PPRN3GL | 30           | 10                 |       |
|                   | ■            | PPRN4GL | 30           | 10                 |       |
|                   | ■            | PPRN5GL | 30           | 10                 |       |
|                   | ■            | PPRN8GL | 30           | 10                 |       |

| TYPE                 | COLOUR INDEX | CODE    | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|----------------------|--------------|---------|--------------|--------------------|-------|
|                      |              |         |              |                    |       |
| EXTENDED PUSH BUTTON | ■            | PPSN1GL | 31           | 10                 |       |
|                      | ■            | PPSN2GL | 31           | 10                 |       |
|                      | ■            | PPSN3GL | 31           | 10                 |       |
|                      | ■            | PPSN4GL | 31           | 10                 |       |
|                      | ■            | PPSN5GL | 31           | 10                 |       |
|                      | ■            | PPSN8GL | 31           | 10                 |       |

| TYPE         | COLOUR INDEX | CODE       | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|--------------|--------------|------------|--------------|--------------------|-------|
|              |              |            |              |                    |       |
| MUSHROOM Ø40 | ■            | PPFN1M4NGL | 45           | 10                 |       |
|              | ■            | PPFN2M4NGL | 45           | 10                 |       |
|              | ■            | PPFN3M4NGL | 45           | 10                 |       |

**PUSH BUTTONS Ø22 | WITH LENS CAP | IP67-IP69K**

MOMENTARY

| TYPE              | COLOUR INDEX | CODE    | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|-------------------|--------------|---------|--------------|--------------------|-------|
|                   |              |         |              |                    |       |
| FLUSH PUSH BUTTON | ■            | PPRL1GL | 30           | 10                 |       |
|                   | ■            | PPRL2GL | 30           | 10                 |       |
|                   | ■            | PPRL3GL | 30           | 10                 |       |
|                   | ■            | PPRL4GL | 30           | 10                 |       |
|                   | ■            | PPRL5GL | 30           | 10                 |       |

| TYPE                 | COLOUR INDEX | CODE    | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|----------------------|--------------|---------|--------------|--------------------|-------|
|                      |              |         |              |                    |       |
| EXTENDED PUSH BUTTON | ■            | PPSL1GL | 31           | 10                 |       |
|                      | ■            | PPSL2GL | 31           | 10                 |       |
|                      | ■            | PPSL3GL | 31           | 10                 |       |
|                      | ■            | PPSL4GL | 31           | 10                 |       |
|                      | ■            | PPSL5GL | 31           | 10                 |       |

| TYPE                  | COLOUR INDEX | CODE       | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|-----------------------|--------------|------------|--------------|--------------------|-------|
|                       |              |            |              |                    |       |
| MUSHROOM OPERATOR Ø40 | ■            | PPFL1M4NGL | 43           | 10                 |       |

IND. LIGHT

| TYPE     | COLOUR INDEX | CODE    | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|----------|--------------|---------|--------------|--------------------|-------|
|          |              |         |              |                    |       |
| FLAT CAP | ■            | PLSL1NL | 30           | 10                 |       |
|          | ■            | PLSL2NL | 30           | 10                 |       |
|          | ■            | PLSL3NL | 30           | 10                 |       |
|          | ■            | PLSL4NL | 30           | 10                 |       |
|          | ■            | PLSL5NL | 30           | 10                 |       |

**MULTIFUNCTION PUSH BUTTONS Ø22 | NOT LIGHT | IP67-IP69K**

| TYPE             | COLOUR INDEX | CODE   | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|------------------|--------------|--------|--------------|--------------------|-------|
|                  |              |        |              |                    |       |
| DUAL PUSH BUTTON | ■            | PPDNGL | 38           | 10                 |       |

| TYPE                      | COLOUR INDEX | CODE    | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|---------------------------|--------------|---------|--------------|--------------------|-------|
|                           |              |         |              |                    |       |
| EXTENDED DUAL PUSH BUTTON | ■            | PPDNSGL | 38           | 10                 |       |

| TYPE                      | COLOUR INDEX | CODE    | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|---------------------------|--------------|---------|--------------|--------------------|-------|
|                           |              |         |              |                    |       |
| MULTIFUNCTION PUSH BUTTON | ■            | PPMNSGL | 40           | 10                 |       |

**MULTIFUNCTION PUSH BUTTONS Ø22 | LIGHT | IP67-IP69K**

| TYPE             | COLOUR INDEX | CODE     | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|------------------|--------------|----------|--------------|--------------------|-------|
|                  |              |          |              |                    |       |
| DUAL PUSH BUTTON | ■            | PPDLGL   | 38           | 10                 |       |
|                  | ■            | PPDLGL.1 | 38           | 10                 |       |

| TYPE                      | COLOUR INDEX | CODE    | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|---------------------------|--------------|---------|--------------|--------------------|-------|
|                           |              |         |              |                    |       |
| EXTENDED DUAL PUSH BUTTON | ■            | PPDLSGL | 38           | 10                 |       |

**ROTARY SWITCHES Ø22 | IP67-IP69K**

**WITH OPERATOR**

**WITH LIGHT OPERATOR**

**WITH KEY**



| POSITION | COLOUR INDEX | CODE      | COLOUR INDEX | CODE      | KEY REMOVAL |   |   | CODE       |
|----------|--------------|-----------|--------------|-----------|-------------|---|---|------------|
|          |              |           |              |           | L           | O | R |            |
| <br>90°  | ■            | PSMB1D0GL | ■            | PSML1D0GL |             | * |   | PSCR8D0CGL |
|          | ■            | PSMB2D0GL | ■            | PSML2D0GL |             |   | * | PSCR8D0EGL |
|          | ■            | PSMB3D0GL | ■            | PSML3D0GL |             |   | * | PSCR8D0NGL |
|          | ■            | PSMB4D0GL | ■            | PSML4D0GL |             |   | * |            |
|          | ■            | PSMB5D0GL | ■            | PSML5D0GL |             |   | * |            |
|          | ■            | PSMB8D0GL | ■            | PSML8D0GL |             |   | * |            |
| <br>45°  | ■            | PSMB1D1GL | ■            | PSML1D1GL |             | * |   | PSCR8D1CGL |
|          | ■            | PSMB2D1GL | ■            | PSML2D1GL |             |   | * | PSCR8D1EGL |
|          | ■            | PSMB3D1GL | ■            | PSML3D1GL |             |   | * | PSCR8D1NGL |
|          | ■            | PSMB4D1GL | ■            | PSML4D1GL |             |   | * |            |
|          | ■            | PSMB5D1GL | ■            | PSML5D1GL |             |   | * |            |
|          | ■            | PSMB8D1GL | ■            | PSML8D1GL |             |   | * |            |
| <br>45°  | ■            | PSMB1D2GL | ■            | PSML1D2GL |             |   | * | PSCR8D2CGL |
|          | ■            | PSMB2D2GL | ■            | PSML2D2GL |             |   | * |            |
|          | ■            | PSMB3D2GL | ■            | PSML3D2GL |             |   | * |            |
|          | ■            | PSMB4D2GL | ■            | PSML4D2GL |             |   | * |            |
|          | ■            | PSMB5D2GL | ■            | PSML5D2GL |             |   | * |            |
|          | ■            | PSMB8D2GL | ■            | PSML8D2GL |             |   | * |            |
| <br>45°  | ■            | PSMB1T0GL | ■            | PSML1T0GL | *           | * |   | PSR8T0CGL  |
|          | ■            | PSMB2T0GL | ■            | PSML2T0GL | *           | * | * | PSR8T0AGL  |
|          | ■            | PSMB3T0GL | ■            | PSML3T0GL | *           | * | * | PSR8T0EGL  |
|          | ■            | PSMB4T0GL | ■            | PSML4T0GL | *           | * | * | PSR8T0GGL  |
|          | ■            | PSMB5T0GL | ■            | PSML5T0GL | *           | * | * | PSR8T0HGL  |
|          | ■            | PSMB8T0GL | ■            | PSML8T0GL | *           | * | * | PSR8T0KGL  |
| <br>45°  | ■            | PSMB1T3GL | ■            | PSML1T3GL |             |   | * | PSCR8T3CGL |
|          | ■            | PSMB2T3GL | ■            | PSML2T3GL |             |   | * |            |
|          | ■            | PSMB3T3GL | ■            | PSML3T3GL |             |   | * |            |
|          | ■            | PSMB4T3GL | ■            | PSML4T3GL |             |   | * |            |
|          | ■            | PSMB5T3GL | ■            | PSML5T3GL |             |   | * |            |
|          | ■            | PSMB8T3GL | ■            | PSML8T3GL |             |   | * |            |
| <br>45°  | ■            | PSMB1T2GL | ■            | PSML1T2GL |             | * |   | PSCR8T2CGL |
|          | ■            | PSMB2T2GL | ■            | PSML2T2GL |             |   | * | PSCR8T2AGL |
|          | ■            | PSMB3T2GL | ■            | PSML3T2GL |             |   | * | PSCR8T2HGL |
|          | ■            | PSMB4T2GL | ■            | PSML4T2GL |             |   | * |            |
|          | ■            | PSMB5T2GL | ■            | PSML5T2GL |             |   | * |            |
|          | ■            | PSMB8T2GL | ■            | PSML8T2GL |             |   | * |            |
| <br>45°  | ■            | PSMB1T1GL | ■            | PSML1T1GL |             | * |   | PSCR8T1CGL |
|          | ■            | PSMB2T1GL | ■            | PSML2T1GL |             |   | * | PSCR8T1EGL |
|          | ■            | PSMB3T1GL | ■            | PSML3T1GL |             |   | * | PSCR8T1NGL |
|          | ■            | PSMB4T1GL | ■            | PSML4T1GL |             |   | * |            |
|          | ■            | PSMB5T1GL | ■            | PSML5T1GL |             |   | * |            |
|          | ■            | PSMB8T1GL | ■            | PSML8T1GL |             |   | * |            |

**OPERATOR CAPS Ø22 | IP67-IP69K**

**MOMENTARY FLUSH PUSH BUTTONS**



| SYMBOL | COLOUR | CODE          | SYMBOL | COLOUR | CODE        |
|--------|--------|---------------|--------|--------|-------------|
|        | ■      | PPRN2GL/I     |        | ■      | PPRN2GL/ON  |
|        | ■      | PPRN1GL/O     |        | ■      | PPRN1GL/OFF |
|        | ■      | PPRN2GL/II    |        | ■      | PPRN5GL/F   |
|        | ■      | PPRN2GL/START |        | ■      | PPRN8GL/F   |
|        | ■      | PPRN1GL/STOP  |        |        |             |

Available others symbols on request, also in different languages and colours.

1 For standard rotary switches suitable to operate a central contact, replace the letter "B" with the letter "C": PSMC  
2 For rotary switches with Left - Right operating angles replace the letters "DO" with "SD": PSMB1DO or PSCR8SDE

\* Key removable position

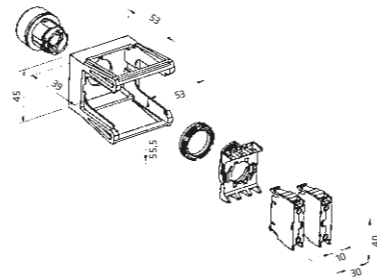


**ACCESSORIES | ORION SERIES**

**DIN RAIL MOUNTING ADAPTOR**



| DESCRIPTION   | CODE     |
|---|----------|
| DIN EN50022<br>RAIL MOUNTING<br>FOR 46 MM<br>STANDARDISED<br>GREY<br>ENCLOSURES | 11708351 |



**PROTECTION CAPS**

**FOR FLUSH BUTTON**

| DESCRIPTION | CODE  |
|-------------|-------|
| ORION       | PCRNL |



**FOR MULTIFUNCTIONAL SERIES**

| ORION           | CODE  |
|-----------------|-------|
| PPDNGL-PPDLGL   | PCDNL |
| PPMNGL          | PCMNL |
| PPDNRGL-PPDLRGL | PCNNL |



**FOR EXTENDED PUSH BUTTON**

| DESCRIPTION | CODE  |
|-------------|-------|
| ORION       | PCSNL |



**CENTRAL CONTACT OPERATION**



| DESCRIPTION                   | CODE     |
|-------------------------------|----------|
| FOR GL, BL, NEMA 4X<br>SERIES | 11708555 |

**KEY FIXING BULB EXTRACTOR**



| CODE |
|------|
| PCF  |

**STOPPER CLOSING HOLES Ø22,5**



| CODE  |
|-------|
| PTRN8 |

**CONTACTS SUPPORT**



| DESCRIPTION                            | CODE   | DESCRIPTION                                 | CODE     |
|--|--------|---|----------|
| TO CONTACT<br>ELEMENTS<br>PL, PCW, PSC | PPELN8 | TO FIVE CONTACT<br>ELEMENTS<br>PL, PCW, PSC | PPELN8-5 |

**FASTON CONNECTORS AND FOR PCB**

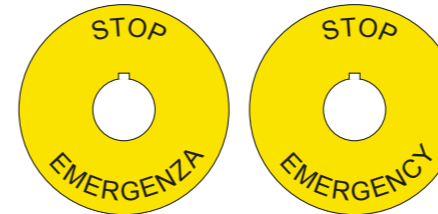


| DESCRIPTION    | CODE     | DESCRIPTION | CODE     |
|----------------|----------|-------------|----------|
| FASTON 6,3x0,8 | 11708341 | PCB         | 11708235 |

TO SCREW CONTACTS PL

**ACCESSORIES | ORION SERIES**

**EMERGENCY STOP RING**



| DESCRIPTION   | TEXT             | CODE  |
|---|------------------|-------|
| Ø60 Made of Aluminium<br>Yellow background<br>Black letters.<br>Weight 3,5 gr.<br>Min. packing q.ty 10 pcs. | (BLANK)          | PTE   |
|   | STOP - EMERGENZA | PTE/I |
|   | EMERGENCY - STOP | PTE/A |
|   | NOT - AUS        | PTE/D |

Available others texts on request, also in different languages.

**LEGEND PLATE**



| CODE  |
|-------|
| PPTN8 |

**LABEL**



| TEXT          | CODE  |
|---------------|-------|
| (BLANK)       | PTA00 |
| MARCIA        | PTA01 |
| ARRESTO       | PTA02 |
| I O II        | PTA03 |
| O I           | PTA04 |
| CHIUDE        | PTA05 |
| APRE          | PTA06 |
| EMERGENZA     | PTA07 |
| MANUALE       | PTA08 |
| AUTOMATICO    | PTA09 |
| AVANTI        | PTA10 |
| INDIETRO      | PTA11 |
| EIN           | PTA12 |
| AUS           | PTA13 |
| STOP          | PTA14 |
| START         | PTA15 |
| RESET         | PTA16 |
| I → 0 ← II    | PTA17 |
| AUT 0 MAN     | PTA18 |
| INS - DISINS  | PTA26 |
| HAND OFF AUTO | PTA27 |
| FORW OFF REV  | PTA28 |
| ON OFF        | PTA29 |

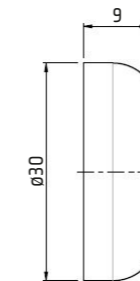
**SPECIAL FRAMES ON REQUEST**

• **SPECIAL FRAMES: NICKEL LINE**

The auxiliary controls of Grey Line of Orion Series can be supplied with seal in Nickel.

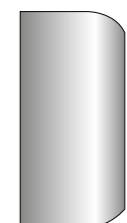
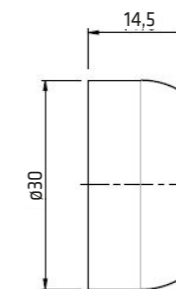
To order Nickel Execution replace the letters "GL" with "NL":

PPRN1GL (Grey Line) > PPRN1NL (Nickel Line)



• **SPECIAL FRAMES: SHROUDED Black Line / Grey Line**

The auxiliary controls of Orion Series are available also with shrouded seal.



Black Line Orion Series

Grey Line Orion Series

**AUXILIARY CONTROLS | ORION SERIES**

**AUXILIARY CONTROLS | ORION SERIES**

**TECHNICAL DATA | ELECTRICAL CHARACTERISTICS**

**CONTACT BLOCKS**

| EC/EN 60947-5-1 CHARACTERISTICS             |             | PL004001-PL004002                  | PCW01-PCW10 / PSC01-PSC10          |
|---|-------------|------------------------------------|------------------------------------|
| Rated insulation voltage Ui                 | V           | 690*                               | 690*                               |
| Rated impulse withstand voltage Uimp        | kV          | 4*                                 | 4*                                 |
| Operating frequency                         | Hz          | 50/60*                             | 50/60*                             |
| Rated thermal current Ith                   | A           | 16*                                | 16*                                |
| Rated thermal current in enclosed Ithe      | A           | 10*                                | 10*                                |
| RATED OPERATING CURRENT Ie:                 |             | PL004001-PL004002                  | PCW01-PCW10 / PSC01-PSC10          |
| AC15: Alternate current                     | V           | 24 60 110 230 400 440 500 690      | 24 60 110 240 400 440 500 690      |
|   | A           | 16* 12 8 6 4,5 3,5 1* 1            | 16* 12 5 5* 4 4 4* 2*              |
| DC13: Direct current                        | V           | 24 48 60 110 220                   | 24 48 60 110 250                   |
|   | A           | 2* 1,2 0,85 0,4 0,25*              | 2 2* 1* 0,4 0,4*                   |
| Conditional short circuit withstand current | A           | 1000*                              | 1000*                              |
| Fuse rating gG                              | 500V        | 10A*                               | 10A*                               |
| Contact insulation resistance               | mΩ          | <25                                | <25                                |
| Switching mechanism                         |             | Slow break double gap contacts     | Slow break double gap contacts     |
| Contact duty                                |             | ⊕ NC contact with positive opening | ⊕ NC contact with positive opening |
| Minimum tripping force                      |             | 4N                                 | 4N                                 |
| Electrical life AC15                        | mil. cycles | 1A/1,5 - 2A/0,5 - 3A/0,25          | 1A/1,5 - 2A/0,5 - 3A/0,25          |
| UL 508 CHARACTERISTICS                      |             | PL004001-PL004002                  | PCW01-PCW10 / PSC01-PSC10          |
| General Use                                 |             | 10A-600V ac - 2,5A-125V dc         | 10A-600V ac - 2,5A-125V dc         |
| Heavy Duty (HD) category                    |             | A600-Q600                          | A600-Q600                          |

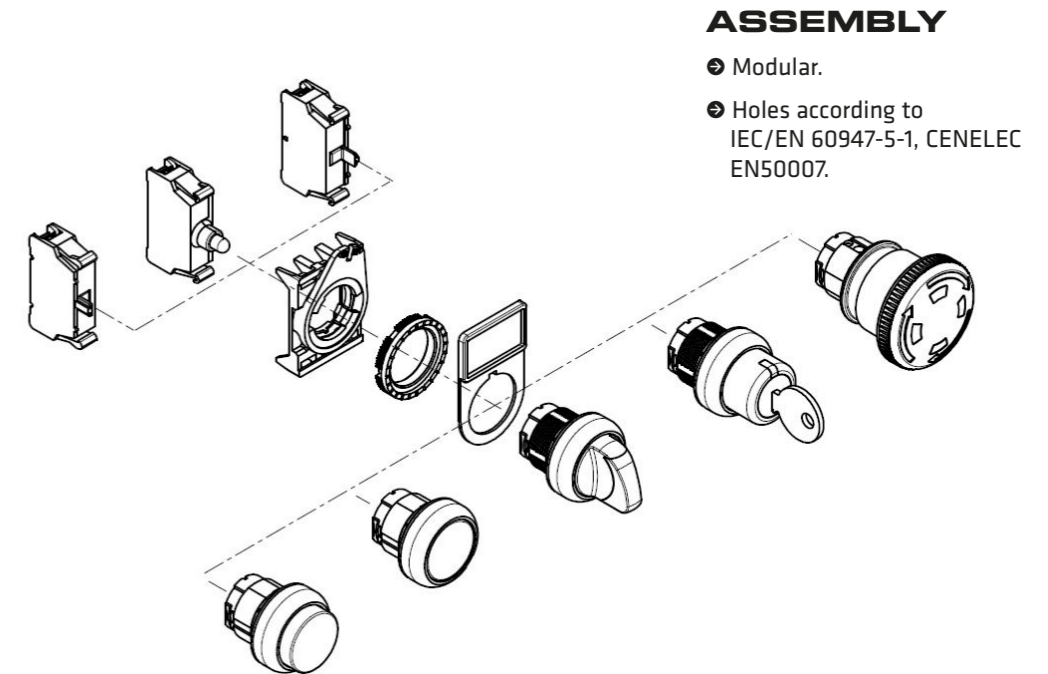
**LAMP HOLDER**

| EC/EN 60947-5-1 CHARACTERISTICS |   | BUILT-IN LED                  |
|---------------------------------|---|-------------------------------|
|                                 |   | LED PL004.L.<br>PCW.L.-PSC.L. |
| Rated insulation voltage Ui     | V | 400                           |
| Rated operating voltage Ue      | V | AC/DC 12-24                   |
|                                 | V | AC/DC 48                      |
|                                 | V | AC/DC 110                     |
|                                 | V | AC 220                        |
| Max rated power                 | W | -                             |
| Power supply                    |   | -                             |
| Lamp fixing system              |   | -                             |

**TECHNICAL DATA | ELECTRICAL CHARACTERISTICS**

| STANDARD CONFORMITY                      |   | UL - IMQ - R.I.N.A  |
|--|---|---|
| Approvals                                |   | IEC/EN60947-5-1, UL508  |
| Protection class                         | EN 60529 BLACK LINE<br>EN 60529 GREY LINE<br>Conforms to UL50 | IP65: Buttons and switches, Multifunction push button<br>IP66/IP67/IP69K: Buttons and switches, Multifunction push button |
| Material Group                           | EN60947-1   | Type 1  |
| Pollution Grade                          | EN60947-1   | II  |
| Flammability                             | UL94  | 3   |
| Ambient Temperature                      | °C  | VO: live parts  |
|  | °C  | Operating: -25 +70  |
| Climate Protection                       | IEC68 part 2-3<br>IEC68 part 2-30                             | Storage: -30 +70  |
| Hot damp                                 |   | Hot damp  |
| Unsettled Hot damp                       |   | Unsettled Hot damp  |
| Mechanical life:                         |   |   |
| Mushroom operators and standard          | mil./operations   | 3   |
| Push buttons with colour cap             |   |   |
| Standard push buttons with lens cap      |   | 1   |
| Standard rotary switches                 |   | 1   |
| Rotary switches with lens                |   | 0,5   |
| Emergency stop push buttons with release |   | 0,3   |

**ASSEMBLY INSTRUCTIONS**



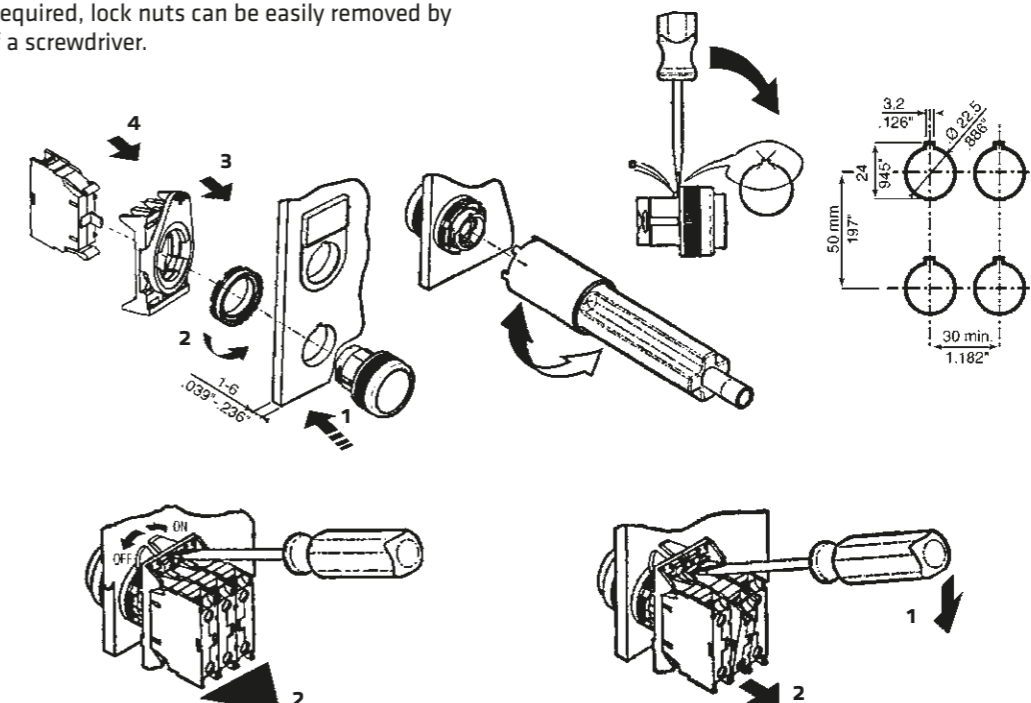
**ASSEMBLY**

- ⊕ Modular.
- ⊕ Holes according to IEC/EN 60947-5-1, CENELEC EN50007.

**CENELEC EN50007**

- ⊕ Panel thickness from 1 up to 6 mm.

- ⊕ If not required, lock nuts can be easily removed by means of a screwdriver.







**GIOVENZANA**  
INTERNATIONAL B.V.



**GIOVENZANA**  
INTERNATIONAL B.V.



**AUXILIARY CONTROLS**  
**NEMA SERIES**

**AUXILIARY CONTROLS | NEMA SERIES**

**AUXILIARY CONTROLS | NEMA SERIES**

**PUSH BUTTONS Ø22 | WITH COLOUR CAP | NEMA 4-4X**

MOMENTARY



| TYPE              | COLOUR INDEX | CODE      | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|-------------------|--------------|-----------|--------------|--------------------|-------|
| FLUSH PUSH BUTTON | ■            | PPRN1GL4X | 30           | 10                 |       |
|                   | ■            | PPRN2GL4X | 30           | 10                 |       |
|                   | ■            | PPRN3GL4X | 30           | 10                 |       |
|                   | ■            | PPRN4GL4X | 30           | 10                 |       |
|                   | ■            | PPRN5GL4X | 30           | 10                 |       |
|                   | ■            | PPRN8GL4X | 30           | 10                 |       |



| TYPE                 | COLOUR INDEX | CODE      | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|----------------------|--------------|-----------|--------------|--------------------|-------|
| EXTENDED PUSH BUTTON | ■            | PPSN1GL4X | 31           | 10                 |       |
|                      | ■            | PPSN2GL4X | 31           | 10                 |       |
|                      | ■            | PPSN3GL4X | 31           | 10                 |       |
|                      | ■            | PPSN4GL4X | 31           | 10                 |       |
|                      | ■            | PPSN5GL4X | 31           | 10                 |       |
|                      | ■            | PPSN8GL4X | 31           | 10                 |       |

**PUSH BUTTONS Ø22 | WITH LENS CAP**

MOMENTARY



| TYPE              | COLOUR INDEX | CODE      | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|-------------------|--------------|-----------|--------------|--------------------|-------|
| FLUSH PUSH BUTTON | ■            | PPRL1GL4X | 30           | 10                 |       |
|                   | ■            | PPRL2GL4X | 30           | 10                 |       |
|                   | ■            | PPRL3GL4X | 30           | 10                 |       |
|                   | ■            | PPRL4GL4X | 30           | 10                 |       |
|                   | ■            | PPRL5GL4X | 30           | 10                 |       |



| TYPE                 | COLOUR INDEX | CODE      | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|----------------------|--------------|-----------|--------------|--------------------|-------|
| EXTENDED PUSH BUTTON | ■            | PPSL1GL4X | 31           | 10                 |       |
|                      | ■            | PPSL2GL4X | 31           | 10                 |       |
|                      | ■            | PPSL3GL4X | 31           | 10                 |       |
|                      | ■            | PPSL4GL4X | 31           | 10                 |       |
|                      | ■            | PPSL5GL4X | 31           | 10                 |       |

**MULTIFUNCTION PUSH BUTTONS Ø22 | NOT LIGHT | NEMA 4-4X**



| TYPE             | COLOUR INDEX | CODE     | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|------------------|--------------|----------|--------------|--------------------|-------|
| DUAL PUSH BUTTON | ■            | PPDNGL4X | 38           | 10                 |       |



| TYPE                      | COLOUR INDEX | CODE      | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|---------------------------|--------------|-----------|--------------|--------------------|-------|
| EXTENDED DUAL PUSH BUTTON | ■            | PPDNSGL4X | 38           | 10                 |       |



| TYPE                      | COLOUR INDEX | CODE      | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|---------------------------|--------------|-----------|--------------|--------------------|-------|
| MULTIFUNCTION PUSH BUTTON | ■            | PPMNSGL4X | 40           | 10                 |       |

**MULTIFUNCTION PUSH BUTTONS Ø22 | LIGHT | NEMA 4-4X**



| TYPE             | COLOUR INDEX | CODE       | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|------------------|--------------|------------|--------------|--------------------|-------|
| DUAL PUSH BUTTON | ■            | PPDLGL4X   | 38           | 10                 |       |
|                  | ■            | PPDLGL4X.1 | 38           | 10                 |       |



| TYPE                      | COLOUR INDEX | CODE      | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|---------------------------|--------------|-----------|--------------|--------------------|-------|
| EXTENDED DUAL PUSH BUTTON | ■            | PPDLSGL4X | 38           | 10                 |       |



**AUXILIARY CONTROLS | NEMA SERIES**

**AUXILIARY CONTROLS | NEMA SERIES**

**EMERGENCY PUSH BUTTONS Ø22 | EN ISO 13850 | NEMA 4-4X**

|  | TYPE   | COLOUR INDEX | CODE       | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|--|--|--------------|------------|--------------|--------------------|-------|
|  | MUSHROOM OPERATOR Ø30 TWIST TO RELEASE             | ■            | PPFN1R3N4X | 42           | 10                 |       |
|  | MUSHROOM OPERATOR WITH VISION Ø30 TWIST TO RELEASE | ■            | PPFN1R3S4X | 44           | 10                 |       |

**EMERGENCY PUSH BUTTONS Ø22 | EN ISO 13850 | NEMA 4-4X**

|  | TYPE   | COLOUR INDEX | CODE                              | WEIGHT grams | MIN. PACK QUANTITY | SIZES |
|--|--|--------------|-----------------------------------|--------------|--------------------|-------|
|  | MUSHROOM OPERATOR Ø40 TWIST TO RELEASE             | ■            | PPFN1R4N4X                        | 44           | 10                 |       |
|  | MUSHROOM OPERATOR WITH VISION Ø40 TWIST TO RELEASE | ■            | PPFN1R4S4X                        | 46           | 10                 |       |
|  | MUSHROOM OPERATOR Ø40 WITH KEY RELEASE             | ■            | PPFN1C4NX4X<br>(not EN ISO 13850) | 76           | 10                 |       |
|  | MUSHROOM OPERATOR Ø40 PUSH-PULL                    | ■            | PPFN1P4N4X                        | 44           | 10                 |       |
|  | MUSHROOM OPERATOR Ø40 PUSH-PULL WITH VISION        | ■            | PPFN1P4S4X                        | 46           | 10                 |       |

**TECHNICAL NOTES**

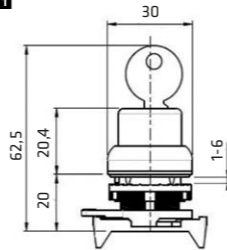
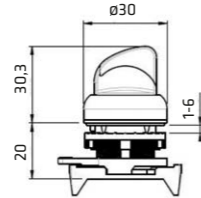
- All operators comply with the relevant European and American standard.
- EN ISO 13850: Machine safety - Emergency stop operators, functional characteristics - Design guidelines.
- IEC/EN6097-5-1.
- Comply with the standard IEC/EN60204-1: Machine safety - Machine electrical circuits - General guidelines.
- The push buttons are designed with a load charge mechanism to ensure a reliable operation and stoppage, or blockage, in the activate position. The combination with positive switching NC contacts and the presence of the "status" indicator on some models, guarantee a high degree of reliability and effectiveness.

**ROTARY SWITCHES Ø22 | NEMA 4-4X**

**WITH OPERATOR**

**WITH LIGHT OPERATOR**

**WITH KEY**



| POSITION | COLOUR INDEX | CODE        | COLOUR INDEX | CODE        | KEY REMOVAL |   |   | CODE          |
|----------|--------------|-------------|--------------|-------------|-------------|---|---|---------------|
|          |              |             |              |             | L           | O | R |               |
| <br>90°  | ■            | PSMB1D0GL4X | ■            | PSML1D0GL4X |             | * |   | PSCR8D0CGL4X  |
|          | ■            | PSMB2D0GL4X | ■            | PSML2D0GL4X |             | * |   | PSCR8D0EGL4X  |
|          | ■            | PSMB3D0GL4X | ■            | PSML3D0GL4X |             | * |   | PSCR8D0NGL4X  |
|          | ■            | PSMB4D0GL4X | ■            | PSML4D0GL4X |             | * |   |               |
|          | ■            | PSMB5D0GL4X | ■            | PSML5D0GL4X |             | * |   |               |
| <br>45°  | ■            | PSMB1D1GL4X | ■            | PSML1D1GL4X |             | * |   | PSCR8D1CGL4X  |
|          | ■            | PSMB2D1GL4X | ■            | PSML2D1GL4X |             | * |   | PSCR8D1EGL4X  |
|          | ■            | PSMB3D1GL4X | ■            | PSML3D1GL4X |             | * |   | PSCR8D1NGL4X  |
|          | ■            | PSMB4D1GL4X | ■            | PSML4D1GL4X |             | * |   |               |
|          | ■            | PSMB5D1GL4X | ■            | PSML5D1GL4X |             | * |   |               |
| <br>45°  | ■            | PSMB1D2GL4X | ■            | PSML1D2GL4X |             | * |   | PSCR8D2CGL4X  |
|          | ■            | PSMB2D2GL4X | ■            | PSML2D2GL4X |             | * |   |               |
|          | ■            | PSMB3D2GL4X | ■            | PSML3D2GL4X |             | * |   |               |
|          | ■            | PSMB4D2GL4X | ■            | PSML4D2GL4X |             | * |   |               |
|          | ■            | PSMB5D2GL4X | ■            | PSML5D2GL4X |             | * |   |               |
| <br>45°  | ■            | PSMB1T0GL4X | ■            | PSML1T0GL4X | *           | * |   | PSR8T0CGL4X   |
|          | ■            | PSMB2T0GL4X | ■            | PSML2T0GL4X | *           | * |   | PSR8T0AGL4X   |
|          | ■            | PSMB3T0GL4X | ■            | PSML3T0GL4X | *           | * |   | PSR8T0EGL4X   |
|          | ■            | PSMB4T0GL4X | ■            | PSML4T0GL4X | *           | * |   | PSR8T0HGL4X   |
|          | ■            | PSMB5T0GL4X | ■            | PSML5T0GL4X | *           | * |   | PSR8T0KGL4X   |
| <br>45°  | ■            | PSMB1T3GL4X | ■            | PSML1T3GL4X |             | * |   | PSCR8T3CGL4XL |
|          | ■            | PSMB2T3GL4X | ■            | PSML2T3GL4X |             | * |   |               |
|          | ■            | PSMB3T3GL4X | ■            | PSML3T3GL4X |             | * |   |               |
|          | ■            | PSMB4T3GL4X | ■            | PSML4T3GL4X |             | * |   |               |
|          | ■            | PSMB5T3GL4X | ■            | PSML5T3GL4X |             | * |   |               |
| <br>45°  | ■            | PSMB1T2GL4X | ■            | PSML1T2GL4X |             | * |   | PSCR8T2CGL4X  |
|          | ■            | PSMB2T2GL4X | ■            | PSML2T2GL4X |             | * |   | PSCR8T2AGL4X  |
|          | ■            | PSMB3T2GL4X | ■            | PSML3T2GL4X |             | * |   | PSCR8T2HGL4X  |
|          | ■            | PSMB4T2GL4X | ■            | PSML4T2GL4X |             | * |   |               |
|          | ■            | PSMB5T2GL4X | ■            | PSML5T2GL4X |             | * |   |               |
| <br>45°  | ■            | PSMB1T1GL4X | ■            | PSML1T1GL4X |             | * |   | PSCR8T1CGL4X  |
|          | ■            | PSMB2T1GL4X | ■            | PSML2T1GL4X |             | * |   | PSCR8T1EGL4X  |
|          | ■            | PSMB3T1GL4X | ■            | PSML3T1GL4X |             | * |   | PSCR8T1NGL4X  |
|          | ■            | PSMB4T1GL4X | ■            | PSML4T1GL4X |             | * |   |               |
|          | ■            | PSMB5T1GL4X | ■            | PSML5T1GL4X |             | * |   |               |

1 For standard rotary switches suitable to operate a central contact, replace the letter "B" with the letter "C": PSMB1C0GL4X or PSMB1C1GL4X  
2 For rotary switches with Left - Right operating angles replace the letters "DO" with "SD": PSMB1SD0GL4X or PSMB1SD1GL4X

\* Key removable position

**OPERATOR CAPS Ø22 | NEMA 4-4X**

**MOMENTARY FLUSH PUSH BUTTONS**



| SYMBOL | COLOUR | CODE            | SYMBOL | COLOUR | CODE          |
|--------|--------|-----------------|--------|--------|---------------|
|        | ■      | PPRN2GL4X/I     |        | ■      | PPRN2GL4X/ON  |
|        | ■      | PPRN1GL4X/O     |        | ■      | PPRN1GL4X/OFF |
|        | ■      | PPRN2GL4X/II    |        | ■      | PPRN5GL4X/F   |
|        | ■      | PPRN2GL4X/START |        | ■      | PPRN8GL4X/F   |
|        | ■      | PPRN1GL4X/STOP  |        |        |               |

Available others symbols on request, also in different languages and colours.



**ACCESSORIES | NEMA 4-4X**

**CENTRAL CONTACT OPERATION**



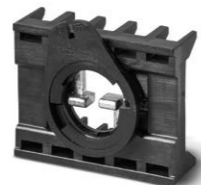
| DESCRIPTION    | CODE     |
|----------------|----------|
| NEMA 4X SERIES | 11708555 |

**KEY FIXING BULB EXTRACTOR**



| CODE |
|------|
| PCF  |

**CONTACTS SUPPORT**



| DESCRIPTION                      | CODE   | DESCRIPTION                           | CODE     |
|----------------------------------|--------|---------------------------------------|----------|
| TO CONTACT ELEMENTS PL, PCW, PSC | PPELN8 | TO FIVE CONTACT ELEMENTS PL, PCW, PSC | PPELN8-5 |

**FASTON CONNECTORS AND FOR PCB**



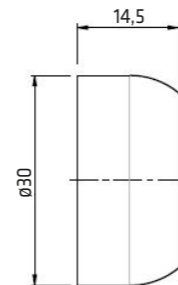
| DESCRIPTION    | CODE     | DESCRIPTION | CODE     |
|----------------|----------|-------------|----------|
| FASTON 6,3x0,8 | 11708341 | PCB         | 11708235 |

TO SCREW CONTACTS PL

**SPECIAL FRAMES ON REQUEST**

• **SPECIAL FRAMES: SHROUDED NEMA**

The auxiliary controls of NEMA Series are available also with shrouded seal.



NEMA Series

**TECHNICAL DATA | ELECTRICAL CHARACTERISTICS**

**CONTACT BLOCKS**

| EC/EN 60947-5-1 CHARACTERISTICS             |             | PL004001-PL004002                  | PCW01-PCW10 / PSC01-PSC10          |
|---|-------------|------------------------------------|------------------------------------|
| Rated insulation voltage Ui                 | V           | 690*                               | 690*                               |
| Rated impulse withstand voltage Uimp        | kV          | 4*                                 | 4*                                 |
| Operating frequency                         | Hz          | 50/60*                             | 50/60*                             |
| Rated thermal current Ith                   | A           | 16*                                | 16*                                |
| Rated thermal current in enclosed Ithe      | A           | 10*                                | 10*                                |
| <b>RATED OPERATING CURRENT Ie:</b>          |             |                                    |                                    |
| AC15: Alternate current                     | V           | 24 60 110 230 400 440 500 690      | 24 60 110 240 400 440 500 690      |
|   | A           | 16* 12 8 6 4,5 3,5 1* 1            | 16* 12 5 5* 4 4 4* 2*              |
| DC13: Direct current                        | V           | 24 48 60 110 220                   | 24 48 60 110 250                   |
|   | A           | 2* 1,2 0,85 0,4 0,25*              | 2 2* 1* 0,4 0,4*                   |
| Conditional short circuit withstand current | A           | 1000*                              | 1000*                              |
| Fuse rating gG                              | 500V        | 10A*                               | 10A*                               |
| Contact insulation resistance               | mΩ          | <25                                | <25                                |
| Switching mechanism                         |             | Slow break double gap contacts     | Slow break double gap contacts     |
| Contact duty                                |             | ⊕ NC contact with positive opening | ⊕ NC contact with positive opening |
| Minimum tripping force                      |             | 4N                                 | 4N                                 |
| Electrical life AC15                        | mil. cycles | 1A/1,5 - 2A/0,5 - 3A/0,25          | 1A/1,5 - 2A/0,5 - 3A/0,25          |
| <b>UL 508 CHARACTERISTICS</b>               |             |                                    |                                    |
| General Use                                 |             | 10A-600V ac - 2,5A-125V dc         | 10A-600V ac - 2,5A-125V dc         |
| Heavy Duty (HD) category                    |             | A600-Q600                          | A600-Q600                          |

**LAMP HOLDER**

| EC/EN 60947-5-1 CHARACTERISTICS |   | BUILT-IN LED |
|---------------------------------|---|--------------|
| Rated insulation voltage Ui     | V | 400          |
| Rated operating voltage Ue      | V | AC/DC 12-24  |
|                                 | V | AC/DC 48     |
|                                 | V | AC/DC 110    |
|                                 | V | AC 220       |
| Max rated power                 | W | -            |
| Power supply                    |   | -            |
| Lamp fixing system              |   | -            |

**TECHNICAL DATA | ELECTRICAL CHARACTERISTICS**

| STANDARD CONFORMITY                      | UL  |
|--|---|
| Approvals                                | UL508, CSA 22.2                                 |
| Protection class                         | Buttons and switches, Multifunction push button |
|  | Emergency push buttons EN ISO 13850             |
|  | Type 1-4-4X                                     |
| Material Group                           | II  |
| Pollution Grade                          | 3   |
| Ambient Temperature                      | Operating: -25 +70                              |
|  | Storage: -30 +70                                |
| Climate Protection                       | Hot damp  |
|  | Unsettled Hot damp                              |
| <b>Mechanical life:</b>                  |   |
| Push buttons with colour cap             | mil./operations                                 |
| Standard push buttons with lens cap      | 3   |
| Standard rotary switches                 | 1   |
| Rotary switches with lens                | 1   |
| Emergency stop push buttons with release | 0,5   |
|  | 0,3   |







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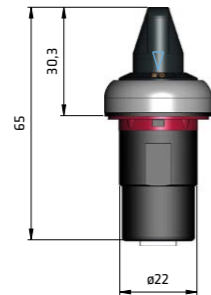
**POTENTIOMETERS &  
DOUBLE SOCKETS**



**POTENTIOMETERS**

- Full Potentiometer enclosed in a single block standard 22 mm diameter, plug & play, ready to be fixed on an electrical panel.
- The potentiometer is provided in different versions depending on the ohmic resistance required with a 3-poles terminal board with an easy push-in type spring-operated connection. This technology allows a very handy quick wiring procedure, since the wire just needs to be inserted into the appropriate hole in order to be secured and to establish the electrical connection.

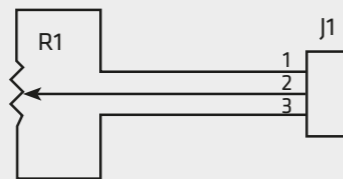
Marking



| BLACK LINE  | NICKEL LINE |
|-------------|-------------|
| PPPTNBL1K   | PPPTNNL1K   |
| PPPTNBL2K5  | PPPTNNL2K5  |
| PPPTNBL5K   | PPPTNNL5K   |
| PPPTNBL10K  | PPPTNNL10K  |
| PPPTNBL50K  | PPPTNNL50K  |
| PPPTNBL100K | PPPTNNL100K |
| PPPTNBL500K | PPPTNNL500K |

**TECHNICAL DATA**

|                                |   |
|--------------------------------|---|
| Protection class               | IP67 (IEC 60529)<br>IP69K (ISO 20653)                             |
| Ambient temperature            | -40°C +90°C   |
| Mechanical endurance           | 75000 operations cycles   |
| Resistance range               | Linear 1kΩ k to 0.5MΩ   |
| Tolerance                      | Linear: 10%   |
| Linearity (typical)            | ± 5 % independent   |
| End resistance                 | 4Ω maximum each end   |
| Power rating                   | 0.5 W at 70°C - 0 W at 120°C                                      |
| Effective rotation             | 270° ± 10° without rotary switch<br>240° ± 10° with rotary switch |
| Contact resistance variation   | 1,5% of total resistance - 3% of total resistance                 |
| Max continuous working voltage | 350 VAC across end terminals, but within power rating             |



|                     |   |
|---------------------|---|
| Ohmic resistance    | 001K 1000 Ω<br>02K5 2500 Ω<br>005K 5000 Ω<br>010K 10,000 Ω<br>050K 50,000 Ω<br>100K 100,000 Ω<br>500K 500,000 Ω |
| Standard reference  | IEC 60947-1, IEC 60947-5-1, IEC 60204-1, EN 60947-1, EN 60947-5-1, EN 60204-1                                   |
| Directive reference | Low voltage directive 2006/95/EC, Machinery directive 2006/42/EC and EMC directive 2004/108/EC.                 |

**DOUBLE SOCKETS**

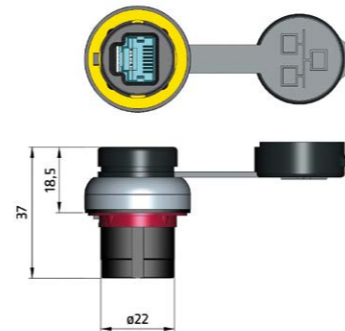
**RJ45 DOUBLE SOCKET**

- RJ45 connector in a standard 22 mm diameter block "plug & play".
- It makes possible to bring the Ethernet networks through an electrical panel without opening it.
- The protection rubber cap integrated remains joined to the device to avoid being lost and prevents any water or dirt from penetrating inside.



| BLACK LINE | NICKEL LINE |
|------------|-------------|
| PP2RJ45BL  | PP2RJ45NL   |

Marking



**TECHNICAL DATA**

|                     |   |
|---------------------|---|
| Connection          | RJ45  |
| Protection degree   | IP67 (IEC 60529)  |
| Ambient temperature | -25°C +75°C   |
| Standard reference  | IEC 60947-1, IEC 60947-5-1, IEC 60204-1, EN 60947-1, EN 60947-5-1, EN 60204-1                   |
| Directive reference | Low voltage directive 2006/95/EC, Machinery directive 2006/42/EC and EMC directive 2004/108/EC. |

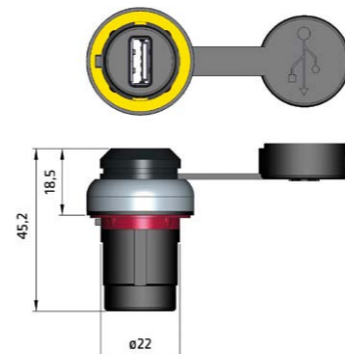
**USB 2.0 & 3.0 DOUBLE SOCKETS**

- USB socket in a standard 22 mm diameter block "plug & play".
- It makes possible to transfer data and electricity through an electrical panel without opening it.
- The protection rubber cap integrated remains joined to the device to avoid being lost and prevents any water or dirt from penetrating inside.



| BLACK LINE | NICKEL LINE |
|------------|-------------|
| PP2USB20BL | PP2USB20NL  |
| PP2USB30BL | PP2USB30NL  |

Marking



**TECHNICAL DATA**

|                     |   |
|---------------------|---|
| Connection          | USB 2.0 - USB 3.0   |
| Protection degree   | IP67 (IEC 60529)  |
| Ambient temperature | -25°C +75°C   |
| Standard reference  | IEC 60947-1, IEC 60947-5-1, IEC 60204-1, EN 60947-1, EN 60947-5-1, EN 60204-1                   |
| Directive reference | Low voltage directive 2006/95/EC, Machinery directive 2006/42/EC and EMC directive 2004/108/EC. |

**USB 2.0**

The USB 2.0 socket takes advantage of the standard data transfer speed. It's the most frequently used on the market and furthermore this option offers the best value for money.

**USB 3.0**

The USB 3.0 is the latest generation of data transfer on the market. This solution offers the maximum data transfer speed and the socket is backward compatible with previous USB connectors.





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**FOOT SWITCHES**  
**SINGLE & DOUBLE**





Single or double foot switches thermoplastic type with the EN ISO 13850 emergency stop option.  
Available with electric or pneumatic controls.

IP65

**SAFETY FOOT SWITCHES**

**Application**

The safety foot switches are used as control switches of machines and plants when the operator must have his hands free to perform other functions.

**Design and mode of operation**

The safety foot switches in thermoplastic material are equipped with a shield to protect against accidental and unintentional actuation due to tool drop or unwanted trampling. In addition they are equipped with non-slip rubber feet and mechanical lock mounted in the pedal to prevent it from operating in the case the foot has not been fully positioned above the pedal.

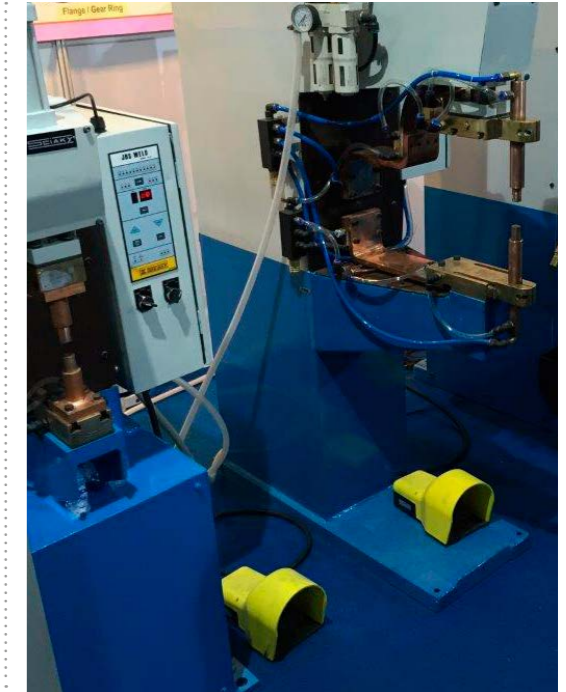
The version without blocking and without foot protection cap is preferred when the main function is to stop the machine.

The electric foot switches can be equipped with a mushroom button as an emergency to interrupt the circuit even in the case of a actuated pedal. The electric contact exchange occurs when the pedal is completely lowered. The protection degree for single foot switches is IP65, while for double and with emergency mushroom is IP54. All foot switches are compliant with the Machinery Directive and are CE-marked.



**GENERAL CHARACTERISTICS**

|   |             |  |     |      |     |      |     |     |     |
|---|-------------|--|-----|------|-----|------|-----|-----|-----|
| Comply with                               |             | IEC/EN60947-5-1                          |     |      |     |      |     |     |     |
| Rated insulation voltage $U_i$            | V           | 690 (pollution class 3)                  |     |      |     |      |     |     |     |
| Rated impulse withstand voltage $U_{imp}$ | kV          | 4  |     |      |     |      |     |     |     |
| Operating frequency                       | Hz          | 50/60                                    |     |      |     |      |     |     |     |
| Rated thermal current $I_{th}$            | A           | 10                                       |     |      |     |      |     |     |     |
| Rated operating current $I_e$ :           |             |  |     |      |     |      |     |     |     |
| AC-15 alternate current                   | V           | 24                                       | 60  | 120  | 240 | 400  | 440 | 500 | 690 |
|   | A           | 16                                       | 12  | 8    | 6   | 4,5  | 3,5 | 1   | 1   |
| DC-13 continuous current                  | V           | 24                                       | 48  | 60   | 110 | 220  |     |     |     |
|   | A           | 2  | 1,2 | 0,85 | 0,4 | 0,25 |     |     |     |
| Conditional short circuit withstand       |             | 1000A - 10A-500V class gG fuses          |     |      |     |      |     |     |     |
| Contact impedance                         | m $\Omega$  | $\leq 25$                                |     |      |     |      |     |     |     |
| Contact type                              |             | Slow break double gap contacts           |     |      |     |      |     |     |     |
| Positive opening                          |             | NC contact with positive opening         |     |      |     |      |     |     |     |
| Electric shock protection                 | IEC 536     | Class II                                 |     |      |     |      |     |     |     |
| Protection rating                         | IEC 529     | IP65                                     |     |      |     |      |     |     |     |
| Ambient temperature                       | $^{\circ}C$ | Operating: -25 +70                       |     |      |     |      |     |     |     |
|   | $^{\circ}C$ | Storage: -30 +70                         |     |      |     |      |     |     |     |
| Cable entry                               |             | pre-broken hole 16,5 - M20 (with safety) |     |      |     |      |     |     |     |



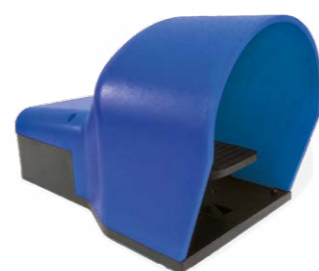
| PRODUCT | DESCRIPTION   | CONTACTS              | CODE    | MIN. PACK | WEIGHT |
|---------|---|-----------------------|---------|-----------|--------|
|         | <b>Foot switch</b><br>with trigger mechanism requiring positive action to allow pedal operation.<br><br>Colour:<br>PANTONE 102C | Slow break            |         | Quantity  | grams  |
|         |   | 1NO                   | IP7007  | 1         | 1.400  |
|         |   | 2NO                   | IP7008  | 1         | 1.400  |
|         |   | 1NO+1NC               | IP7007I | 1         | 1.400  |
|         |   | 1NO                   | IP7009  | 1         | 1.400  |
|         |   | Two speeds<br>1NO+1NO | IP7015  | 1         | 1.400  |

This product is also available in different colors:

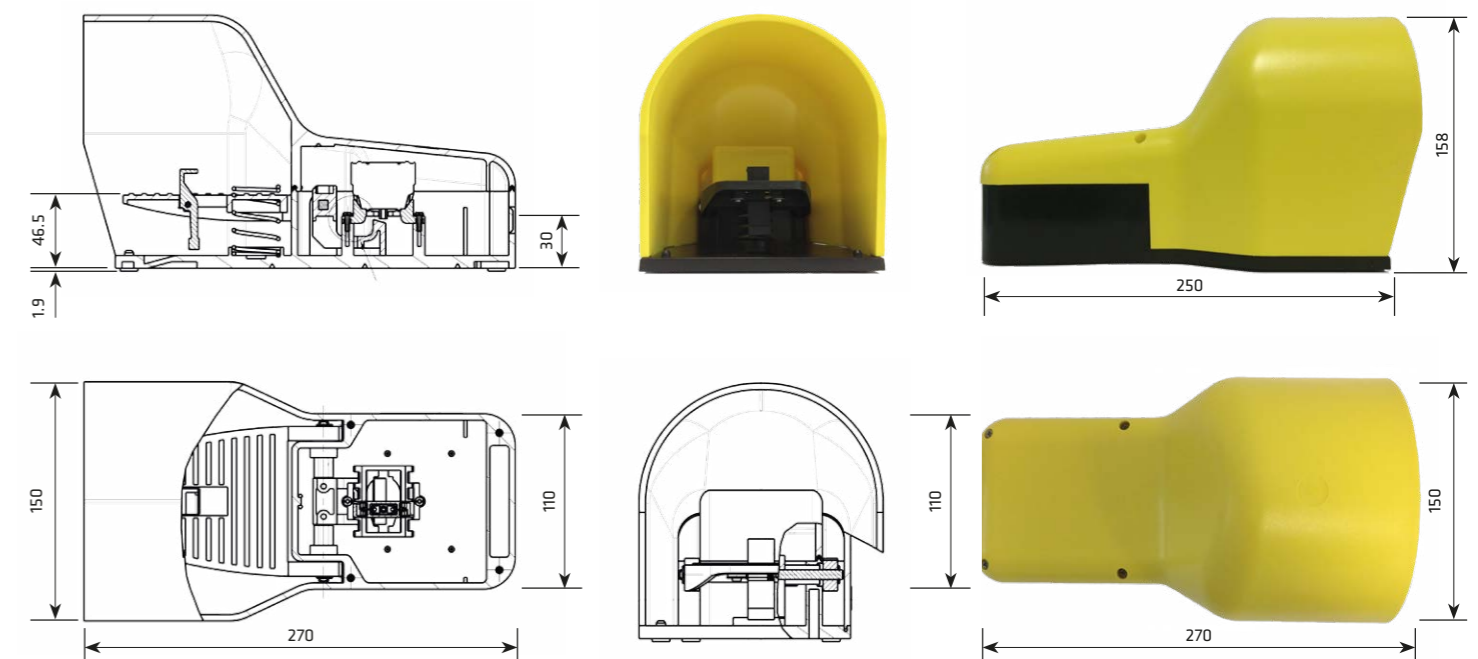
Colour:  
 RAL 7035



Colour:  
 RAL 5010



**DIMENSIONAL DRAWINGS**







**FOOT SWITCHES SERIES | SINGLE FOOT SWITCHES SERIES**

**FOOT SWITCHES SERIES | SINGLE FOOT SWITCHES SERIES**

Single foot switches thermoplastic material.  
Available with electric or pneumatic controls.

IP65 □

**SINGLE FOOT SWITCHES**

**GENERAL CHARACTERISTICS**

**Application**

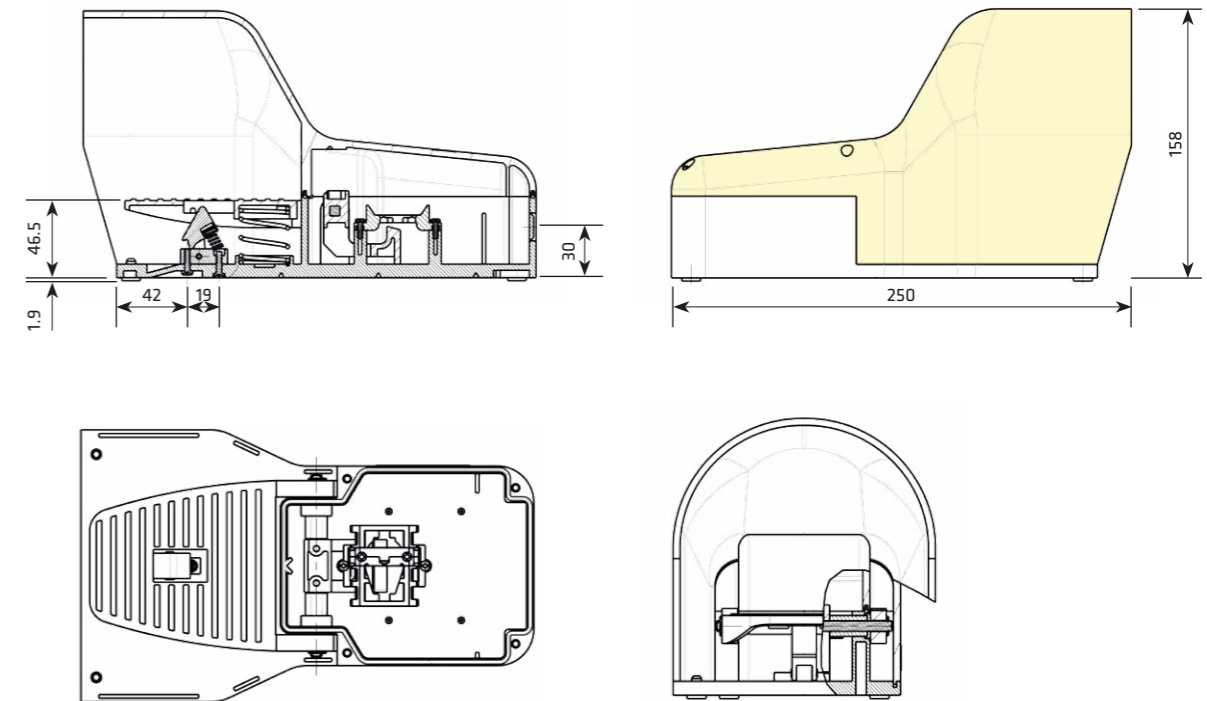
The foot switches are used to start and stop operations and production processes on machinery and plants, where manual operation is impossible. Different foot switches versions are available depending on the ambient conditions and the mechanical behaviour. Applications include use on packaging machines, storage and transport technology as well as on textile machines.

**Configurations**

- Electrical version with NO contacts, single, double speed and with NC contacts with positive opening.
- Pneumatic version with 5 and 2 ways valves.
- With hooking device to keep the pedal lowered and the contact activated until the release is made by the front of the foot.
- The shaft with knob or handle on the tubular is available in the version with an emergency mushroom to carry the foot switch comfortably.

|                                      |                |  |
|--------------------------------------|----------------|--|
| Comply with                          |                | IEC/EN60947-5-1                          |
| Rated insulation voltage Ui          | <b>V</b>       | 690 (pollution class 3)                  |
| Rated impulse withstand voltage Uimp | <b>kV</b>      | 4  |
| Operating frequency                  | <b>Hz</b>      | 50/60                                    |
| Rated thermal current Ith            | <b>A</b>       | 10                                       |
| Rated operating current Ie:          |                |  |
| AC-15 alternate current              | <b>V</b>       | 24 60 120 240 400 440 500 690            |
|                                      | <b>A</b>       | 16 12 8 6 4,5 3,5 1 1                    |
| DC-13 continuous current             | <b>V</b>       | 24 48 60 110 220                         |
|                                      | <b>A</b>       | 2 1,2 0,85 0,4 0,25                      |
| Conditional short circuit withstand  |                | 1000A - 10A-500V class gG fuses          |
| Contact impedance                    | <b>m Ω</b>     | ≤25                                      |
| Contact type                         |                | Slow break double gap contacts           |
| Positive opening                     |                | NC contact with positive opening         |
| Electric shock protection            | <b>IEC 536</b> | Class II                                 |
| Protection rating                    | <b>IEC 529</b> | IP65                                     |
| Ambient temperature                  | <b>°C</b>      | Operating: -25 +70                       |
|                                      | <b>°C</b>      | Storage: -30 +70                         |
| Cable entry                          |                | pre-broken hole 16,5 - M20 (with safety) |

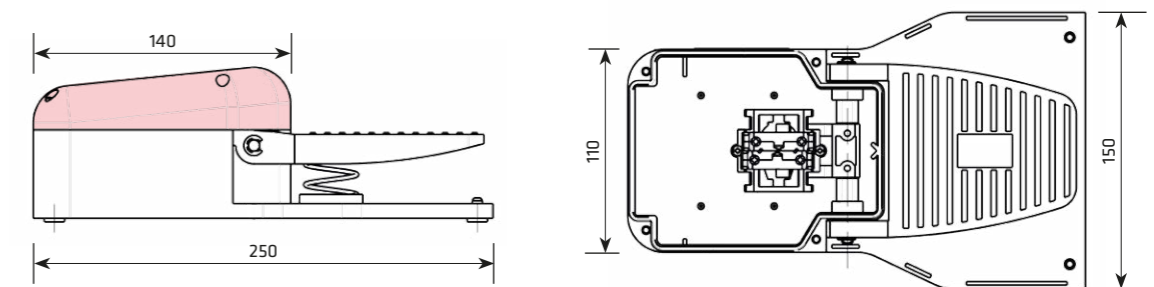
**DIMENSIONAL DRAWINGS**



| PRODUCT | DESCRIPTION   | CONTACTS   | CODE          | MIN. PACK | WEIGHT       |
|---------|---|------------|---------------|-----------|--------------|
|         | Foot switch with pedal latching device and without trigger mechanism. | Slow break |               | Quantity  | grams        |
|         |   | <b>1NO</b> | <b>IP7011</b> | <b>1</b>  | <b>1.400</b> |
|         | Colour:<br>■ PANTONE 102C   |            |               |           |              |

| PRODUCT | DESCRIPTION   | CONTACTS       | CODE           | MIN. PACK | WEIGHT       |
|---------|---|----------------|----------------|-----------|--------------|
|         | Foot switch without rest position trigger mechanism.                  | Slow break     |                | Quantity  | grams        |
|         |   | <b>1NO+1NC</b> | <b>IP7006I</b> | <b>1</b>  | <b>1.300</b> |
|         | Foot switch with pedal latching device and without trigger mechanism. | Slow break     |                | Quantity  | grams        |
|         |   | <b>1NO+1NC</b> | <b>IP7035</b>  | <b>1</b>  | <b>1.300</b> |
|         | Colour:<br>■ RAL 3020   |                |                |           |              |

**DIMENSIONAL DRAWINGS**





**FOOT SWITCHES SERIES | SINGLE FOOT SWITCHES SERIES**

**FOOT SWITCHES SERIES | SINGLE FOOT SWITCHES SERIES**

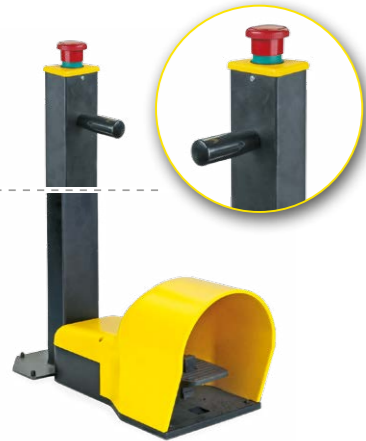
Single foot switches thermoplastic material.  
Available with electric or pneumatic controls.

IP54 □

**SINGLE FOOT SWITCHES**

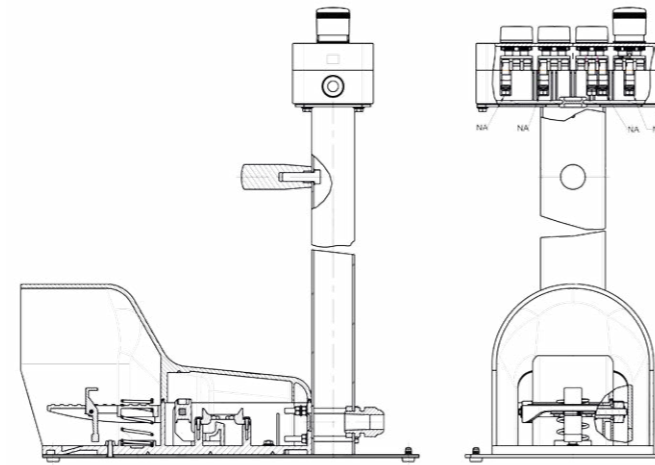
| DESCRIPTION   | CONTACTS                        | CODE            | MIN. PACK | WEIGHT       |
|---|---------------------------------|-----------------|-----------|--------------|
| <b>Foot switch</b><br>with trigger mechanism and<br>ENI ISO 13850 emergency stop. | Slow break                      |                 | Quantity  | grams        |
|   | <b>1NO</b>                      | <b>IP7007EM</b> | <b>1</b>  | <b>3.900</b> |
|   | <b>Two speeds<br/>1NO + 1NO</b> | <b>IP7015EM</b> | <b>1</b>  | <b>3.910</b> |

Colour:  
■ PANTONE 102C

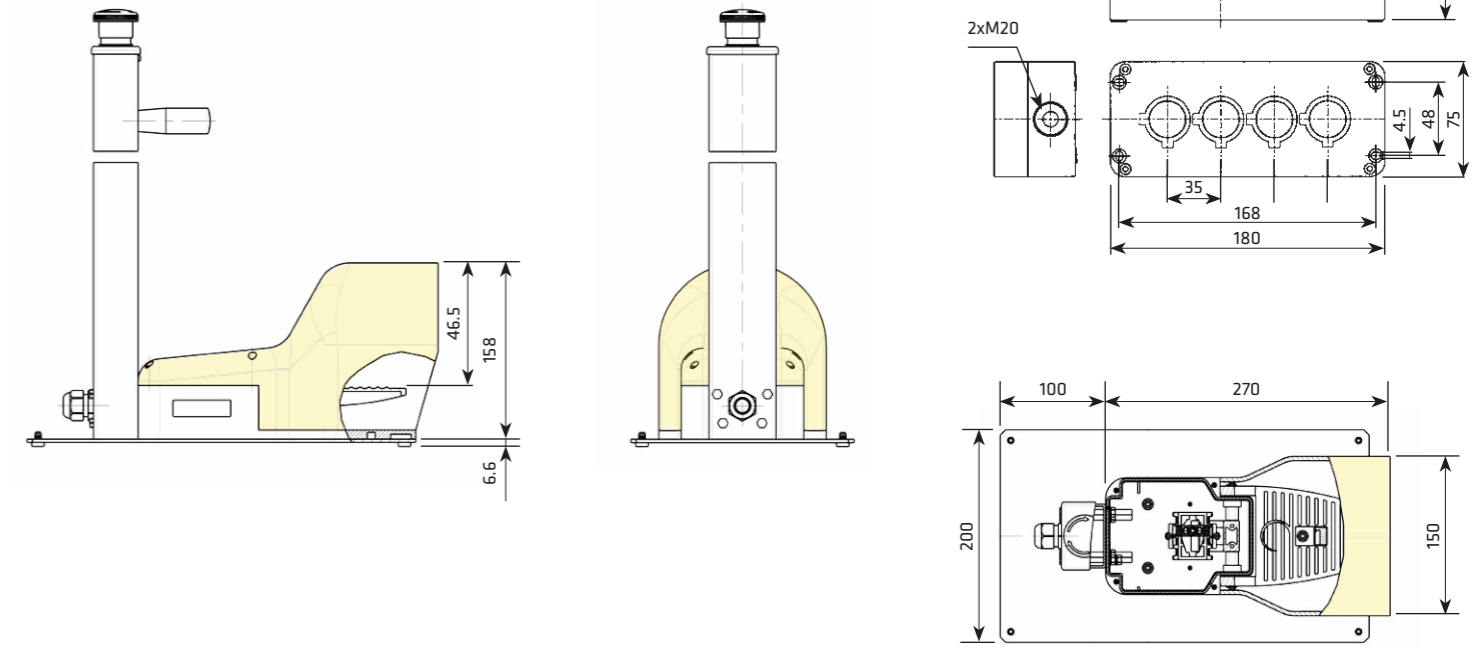


**ON REQUEST**

**IP7026** with PQ01 station 4 holes  
with EN ISO 13850 emergency stop.



**DIMENSIONAL DRAWINGS**



**PNEUMATIC SINGLE FOOT SWITCHES**

| DESCRIPTION  | CONTACTS                                | CODE          | MIN. PACK | WEIGHT       |
|--|---|---------------|-----------|--------------|
| <b>Foot switch</b><br>pneumatic with trigger<br>mechanism. | Slow break                              |               | Quantity  | grams        |
|  | <b>With 1/4"</b><br><b>5 ways valve</b> | <b>IP7023</b> | <b>1</b>  | <b>1.600</b> |

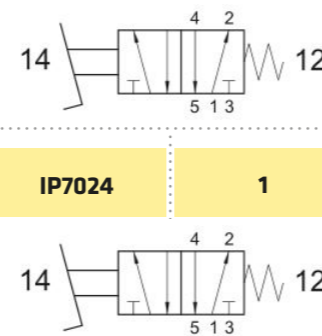
Colour:  
■ PANTONE 102C



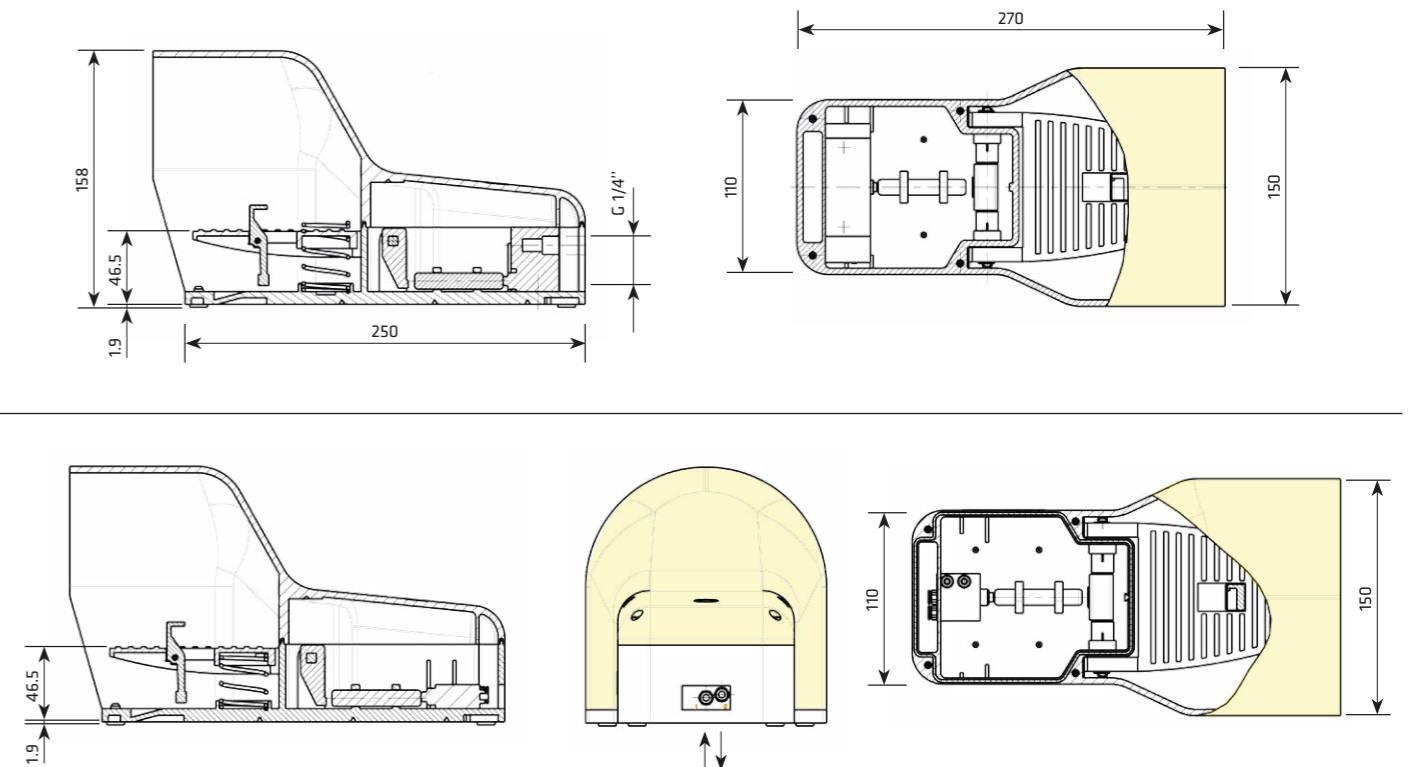
**Foot switch**  
Pneumatic with pedal latching  
device and without trigger  
mechanism.

Colour:  
■ PANTONE 102C

|   |               |          |              |
|---|---------------|----------|--------------|
| <b>With 1/4"</b><br><b>5 ways valve</b> | <b>IP7024</b> | <b>1</b> | <b>1.600</b> |
|---|---------------|----------|--------------|



**DIMENSIONAL DRAWINGS**



Working pressure 2:10 bar.



**FOOT SWITCHES SERIES | DOUBLE FOOT SWITCHES SERIES**

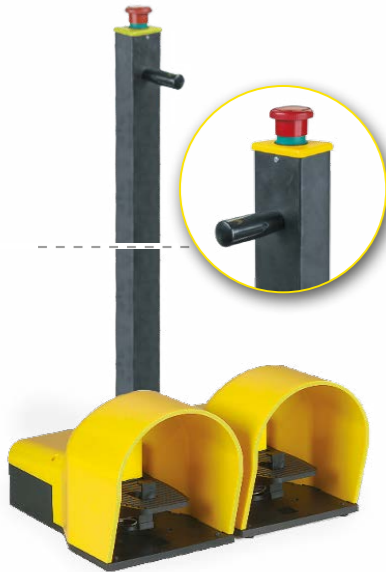
**FOOT SWITCHES SERIES | DOUBLE FOOT SWITCHES SERIES**

Double foot switches thermoplastic type with EN ISO 418 emergency stop option.

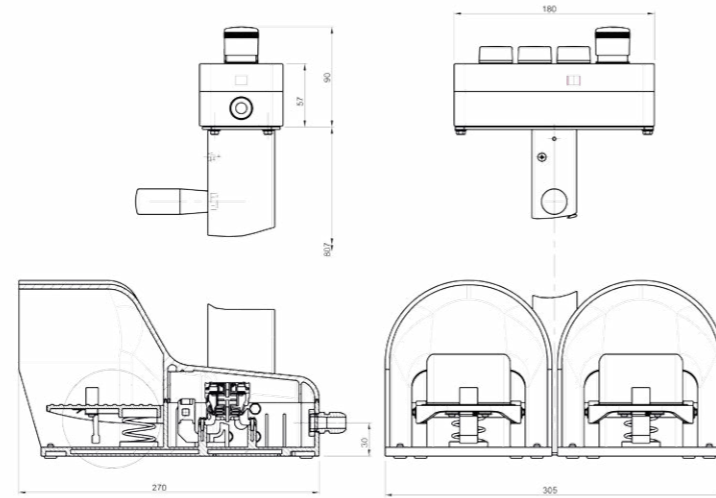
IP54

**DOUBLE FOOT SWITCHES WITH EN 418 EMERGENCY STOP**

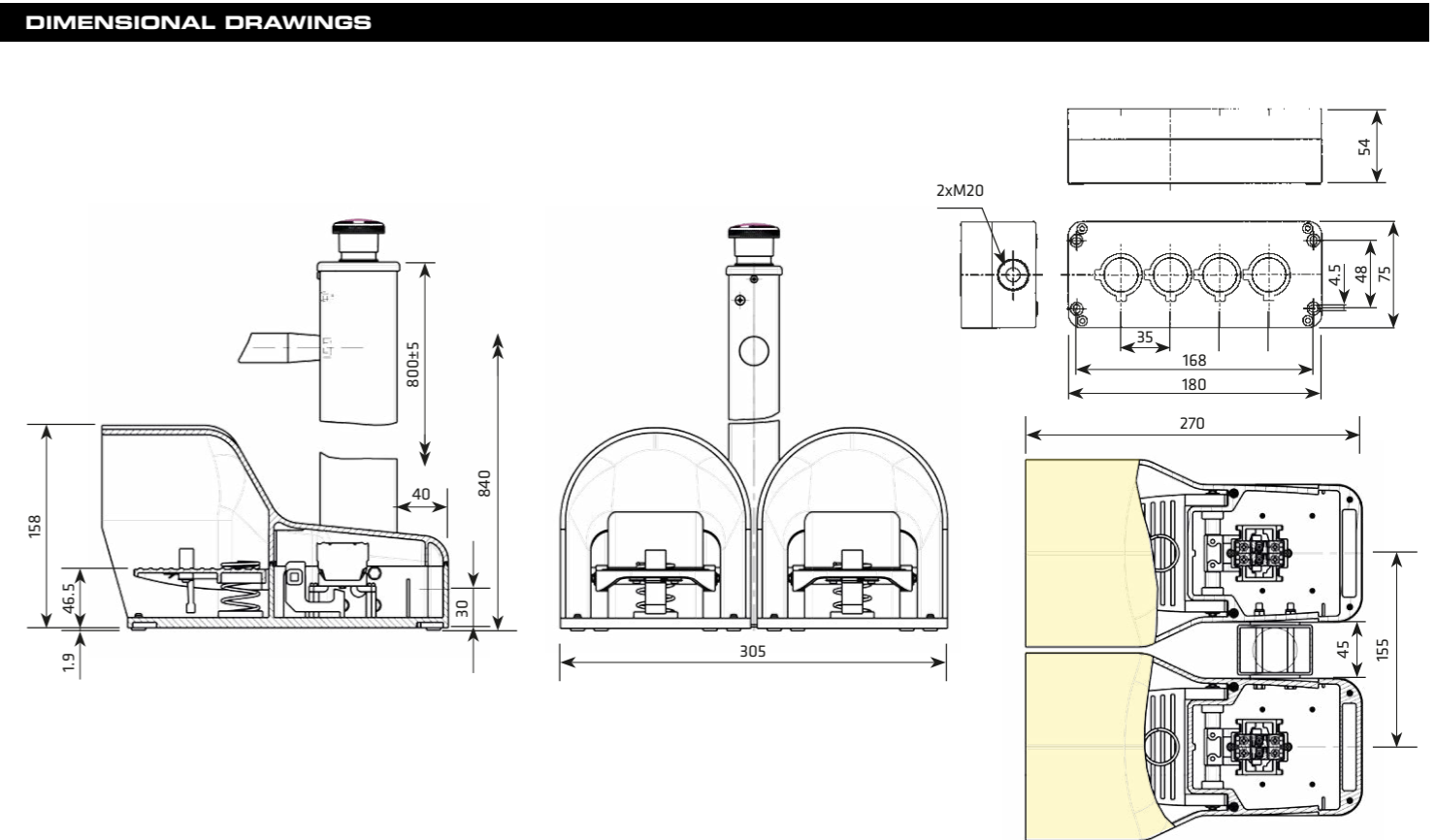
| DESCRIPTION   | CONTACTS   | CODE     | MIN. PACK | WEIGHT |
|---|------------|----------|-----------|--------|
| Foot switch with trigger mechanism requiring positive action to allow pedal operation.<br><br>Colour:<br>■ PANTONE 102C | Slow break |          | Quantity  | grams  |
|   | 1NO + 1NO  | IP7018EM | 1         | 5.300  |
|   | 2NO + 2NO  | IP7019EM | 1         | 5.300  |



ON REQUEST



Available double foot switch IP7027 with PQ04 station 4 holes with EN ISO 13850 emergency stop.

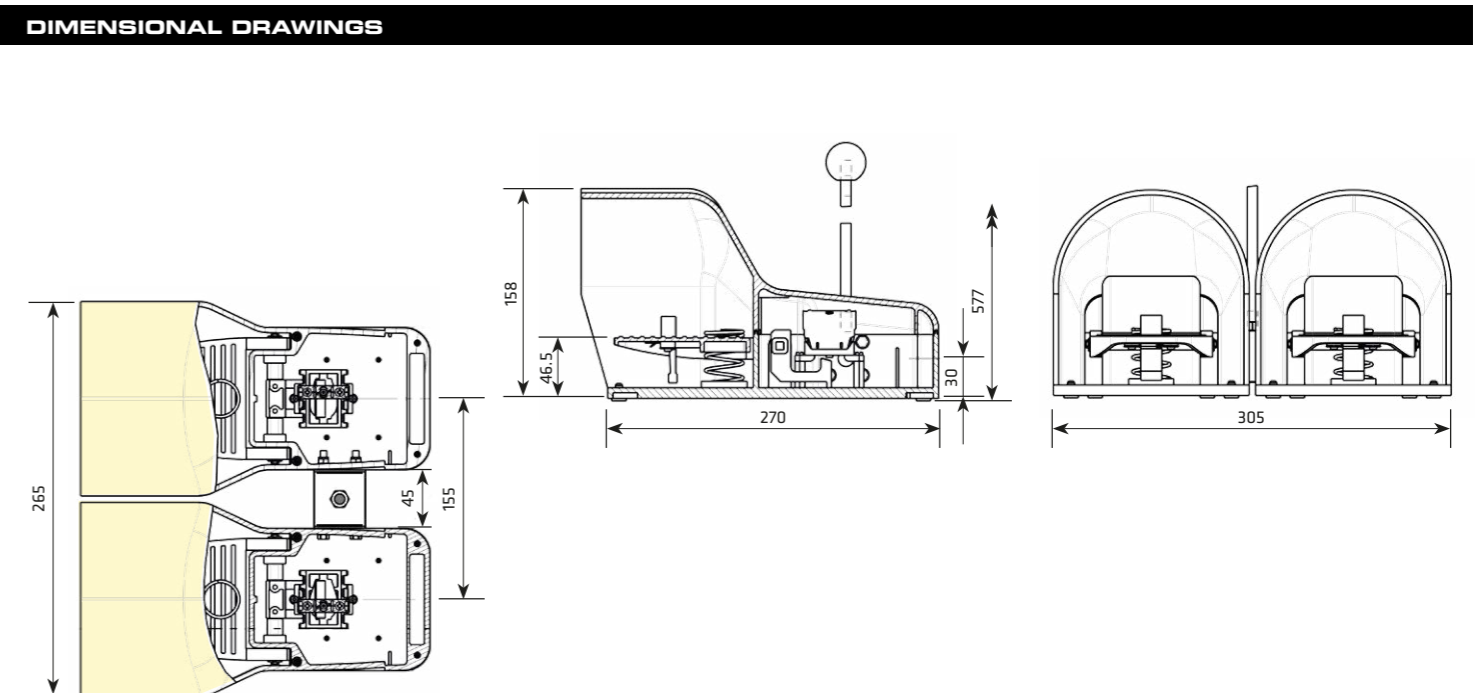


Double foot switches thermoplastic type with EN ISO 13850.

IP54

**DOUBLE FOOT SWITCHES**

| DESCRIPTION   | CONTACTS   | CODE   | MIN. PACK | WEIGHT |
|---|------------|--------|-----------|--------|
| Foot switch with trigger mechanism requiring positive action to allow pedal operation.<br><br>Colour:<br>■ PANTONE 102C | Slow break |        | Quantity  | grams  |
|   | 1NO + 1NO  | IP7018 | 1         | 3.100  |
|   | 2NO + 2NO  | IP7019 | 1         | 3.100  |











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CANADA  
UNITED STATES  
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MEXICO

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Giovenzana International B.V. to support the market and his different necessity has created this organization that is always in process to cover territory in five different hubs.

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