

Cross position limit switches designed to control the movement of overhead travelling cranes, hoists and complex machine tools.

Tango has rods with maintained positions every 60°.

### **FEATURES**

- Modern design and overall dimensions studied to facilitate installation and maintenance operations.
- 4 fixing holes.
- Rods with 4 maintained positions every 60°.
- Mechanical life of switches: 1 million operations.
- Operation frequency: 3600 operations / hour max.
- IP protection degree: Tango is classified IP65.
- Extreme temperature resistance: -25°C to +70°C.
- Enclosure and head in thermoplastic material (nylon reinforced with fiberglass) and internal components in technopolymers to guarantee long life-cycle and constant performance.
- All materials and components used are wear resistant and guarantee protection of the unit against water and dust.

### OPTIONS

- Slow action switches with 1NC or 1NO contacts.
- Available with 2, 3 or 4 switches and different rod lengths.

### **CERTIFICATIONS**

• CE marking and EAC certification.

**UK Distributor** 



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### **CERTIFICATIONS**

| Conformity to Community Disactives | 2014/35/UE Low Voltage Directive   |  |
|------------------------------------|--|--|
| Conformity to Community Directives | 2006/42/CE Machinery Directive   |  |
|                                    | EN 60204-1 Safety of machinery - Electrical equipment of machines  |  |
|                                    | EN 60947-1 Low-voltage switchgear and controlgear  |  |
| Conformity to CE Standards         | EN 60947-5-1 Low-voltage switchgear and controlgear - Control circuit devices and switching elements - Electromechanical control circuit devices |  |
|                                    | EN 60529 Degrees of protection provided by enclosures  |  |
| Markings and homologations         | C € [A]  |  |

# **GENERAL TECHNICAL SPECIFICATIONS**

| Ambient temperature        | Storage -40°C/+70°C<br>Operational -25°C/+70°C |  |
|----------------------------|--|--|
| IP protection degree IP 65 |  |  |
| Insulation category        | Class II                                       |  |
| Operation frequency        | 3600 operations/hour max                       |  |
| Cable entry                | Cable clamp M20                                |  |

## **TECHNICAL SPECIFICATIONS OF THE SWITCHES**

| Code                       | PRSL1000PI  | PRSL1001PI                |  |
|----------------------------|---|---------------------------|--|
| Utilisation category       | AC 15   |                           |  |
| Rated operational current  | 3 A   |                           |  |
| Rated operational voltage  | 250 Vac   |                           |  |
| Rated thermal current      | 10 A  |                           |  |
| Rated insulation voltage   | 500 Vac   |                           |  |
| Mechanical life            | 1x10 <sup>6</sup> operations  |                           |  |
| Connections                | Screw-type terminals  |                           |  |
| Wires                      | 1x2.5 mm², 2x1.5 mm²<br>(UL - (c)UL: use 60°C or 75°C copper (CU) conductor and wire 16-18 AWG) |                           |  |
| Tightening torque          | 0.6 Nm  |                           |  |
| Microswitch type           | Double break, slow action   | Double break, slow action |  |
| Contacts                   | 1NO   | 1NC                       |  |
| Scheme                     | E   | E                         |  |
| Markings and homologations | C E c@us [A]  |                           |  |



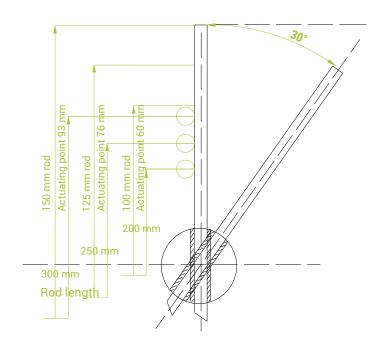
TANGO

### **MAXIMUM ACTUATING DIMENSIONS**

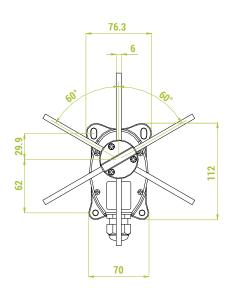
#### Rods with 4 maintained positions

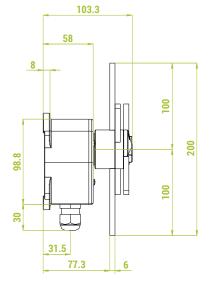
- Pre-travel angle for rotation contact operation: 34°
- Maximum rotation angle for each maintained position: 60°
- Average angle for the mechanical tripping: 30°
- Maintained positions each: 60°

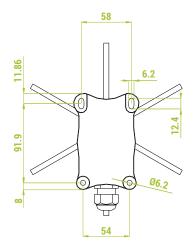
In order to ensure proper operations, the dimensions shall not be increased; anyhow, they can be decreased, taking into account that the closer the impact point is to the center of the head, the higher the impact and the mechanical wear of rod and shaft are.



### **OVERALL DIMENSIONS (mm)**







5

### **LIMIT SWITCHES**

The limit switches are equipped with 1NC slow action switches PRSL1001PI  $E^{11}$ 



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Refer to the following tables for descriptions of components: "Switches" and "Accessories".

### **COMPONENTS**

### **Switches**

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| Ref. | Drawing | Description | Scheme   | Code       |
|------|---------|-------------|--|------------|
| A2   |         | 1NO switch  | $\begin{bmatrix} 1 \\ 1 \\ 1 \\ 1 \end{bmatrix}$ | PRSL1000PI |
|      | La J    | 1NC switch  | 11<br>E  | PRSL1001PI |

### Accessories

| Ref. | Drawing | Description     | Code       |
|------|---------|-----------------|------------|
| A1   |         | Rod 6x6x200 mm  | PRTO3006PE |
|      |         | Rod 6x6x250 mm  | PRTO3011PE |
|      |         | Rod 6x6x300 mm  | PRTO3012PE |
| A3   | J)      | Cable clamp M20 | PRPS0064PE |

