

7551-7552

Position limit switch



Cross position limit switches designed for controlling the movement of overhead travelling cranes, hoists and complex machine tools. The choice of materials and technical solutions adopted enable use in harsh operating conditions.

FEATURES

- Designed to guarantee excellent performance in the most challenging operating conditions.
- Rods with 4 maintained positions every 90°.
- 4 fixing holes.
- Positive opening NC contacts for safety functions.
- Mechanical life of switches: 1 million operations.
- Operation frequency: 3600 operations/hour max.
- IP protection degree: 7551-7552 are classified IP66 with specific cable clamp M20.
- Extreme temperature resistance: -40°C to +70°C.
- It features die-cast aluminum alloy enclosure, with bushings made of sinterized material and head made of zama to resist any violent impact, chemical aggression and rust and reduce the need for routine maintenance operation on the head.
- All materials and components used are wear resistant and guarantee protection of the unit against water and dust.

OPTIONS

- 4 snap action switches with 1NO+1NC change-over contacts or slow action switches with 1NC contact.
- 3 outputs for cable clamps to reduce installation time and make wiring easier.

CERTIFICATIONS

- CE marking and EAC certification.



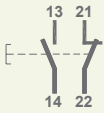
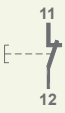
CERTIFICATIONS

Conformity to Community Directives	2014/35/UE Low Voltage Directive
	2006/42/CE Machinery Directive
Conformity to CE Standards	EN 60204-1 Safety of machinery - Electrical equipment of machines
	EN 60947-1 Low-voltage switchgear and controlgear
	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	CE EAC

GENERAL TECHNICAL SPECIFICATIONS

Ambient temperature	Storage -40°C/+70°C
	Operational -40°C/+70°C
IP protection degree	IP66 max. with dedicated cable clamp M20
Insulation category	Class I
Operation frequency	3600 operations/hour max
Cable entry	Cable clamp M20

TECHNICAL SPECIFICATIONS OF THE MICROSWITCHES

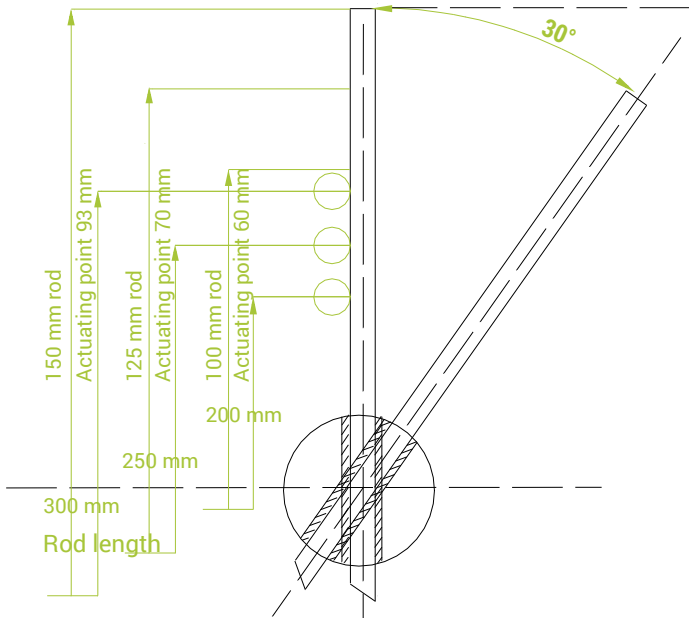
Code	PRSL0036XX	PRSL0037XX
Utilisation category		AC 15
Rated operational current		3 A
Rated operational voltage		250 Vac
Rated thermal current		10 A
Rated insulation voltage		300 Vac
Mechanical life		1x10 ⁶ operations
Connections		Screw-type terminal
Wires		1x2.5 mm ² , 2x1.5 mm ² (UL - (c)UL: use 60°C or 75°C copper (CU) conductor and wire 16-18 AWG)
Tightening torque		0.8 Nm
Microswitch type	Double break, snap action	Double break, slow action
Contacts	1NO+1NC (All NC contacts are of the positive opening operation type )	1NC (All NC contacts are of the positive opening operation type )
Scheme		
Markings and homologations		CE cULus EAC

MAXIMUM ACTUATING DIMENSIONS

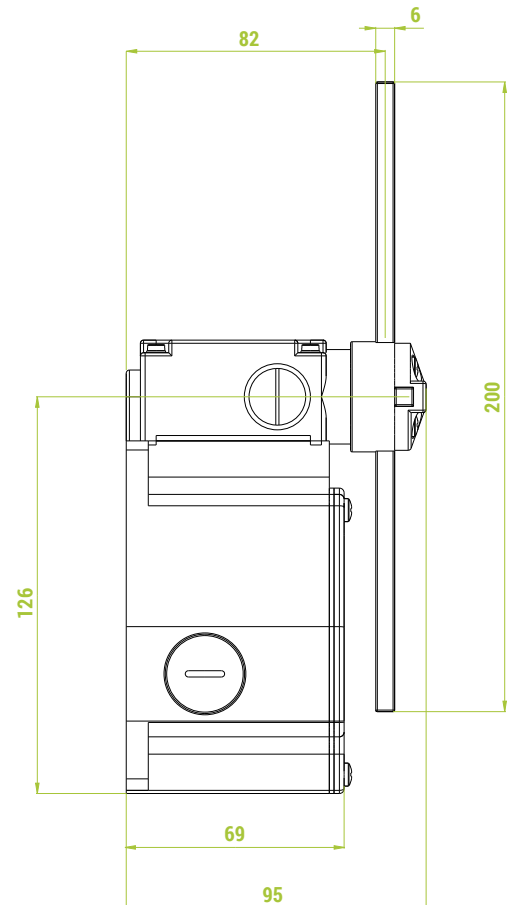
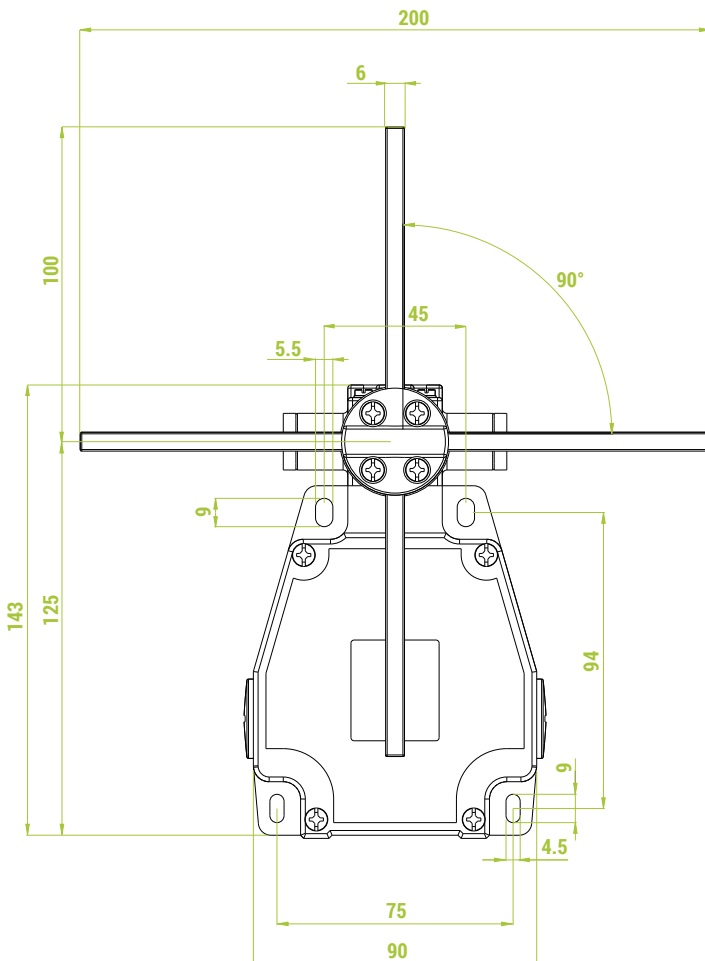
Rods with 4 maintained positions

- Pre-travel angle for rotation contact operation: 49°
- Maximum rotation angle for each maintained position: 90°
- Average angle for the mechanical tripping: 48°
- Maintained positions each: 90°

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. **IMPORTANT:** the maximum impact speed is 1.35 m/s, referring to the ideal impact points showed in the drawing.



OVERALL DIMENSIONS (mm)



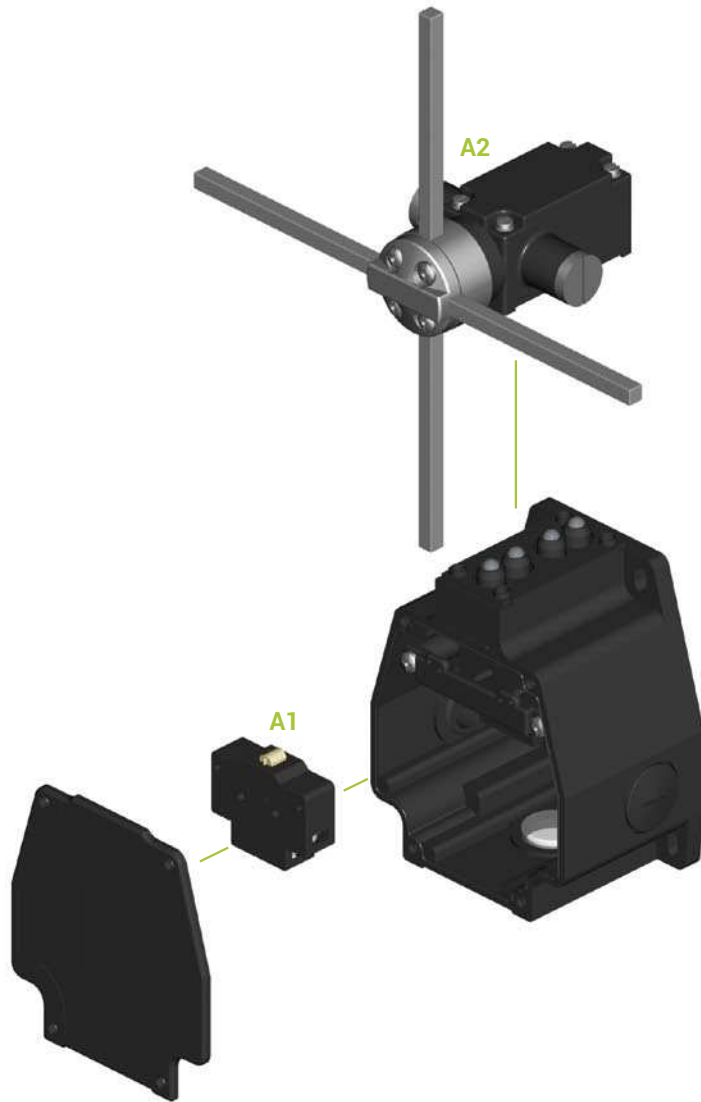
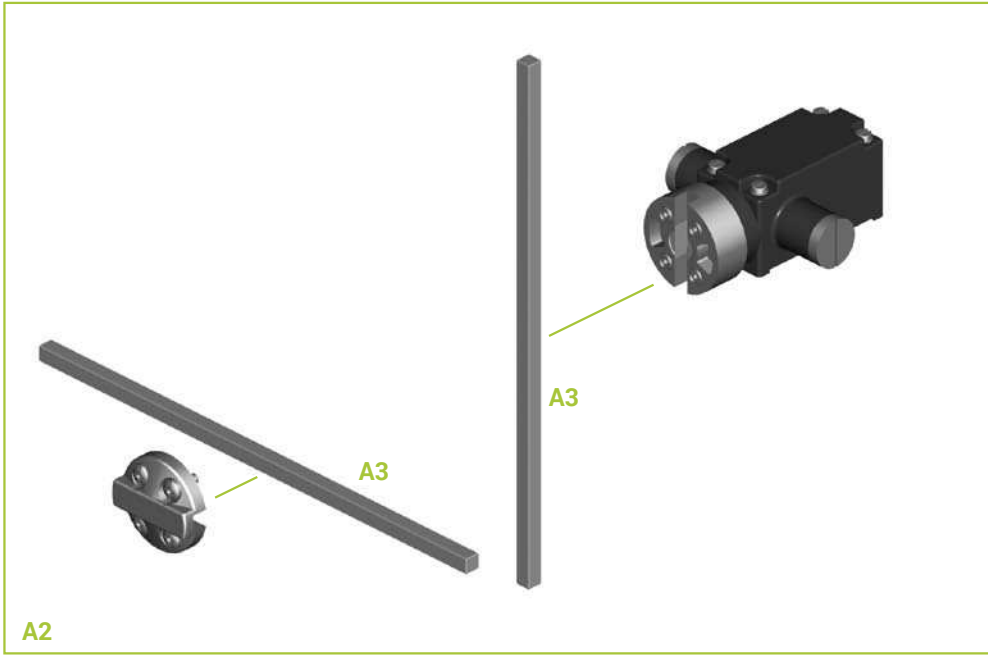
LIMIT SWITCHES

The limit switches are equipped with 1NO+1NC snap action switches PRSL0036XX



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

No. of switches PRSL0036XX	Actuating travel	Rod length	Code												
4	<table border="1"> <tr> <td>180°</td> <td>0°</td> <td>70°</td> <td>180°</td> </tr> <tr> <td>1-2</td> <td colspan="3">[Bar chart showing switch states]</td> </tr> <tr> <td>3-4</td> <td colspan="3">[Bar chart showing switch states]</td> </tr> </table>	180°	0°	70°	180°	1-2	[Bar chart showing switch states]			3-4	[Bar chart showing switch states]			200 mm	PF26755100
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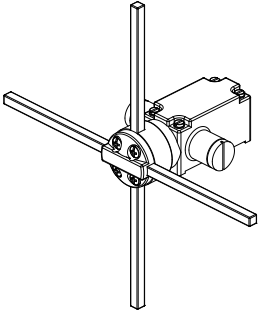

The descriptions of all the components can be found in the following charts: "Switches" and Accessories".

COMPONENTS

Switches

Ref.	Drawing	Description	Scheme	Code
A1		1NO+1NC snap action switch		PRSL0036XX
		1NC slow action switch		PRSL0037XX

Accessories

Ref.	Drawing	Description	Code
A2		Head for 7551	PF267551TE
		Head for 7552	PF267552TE
A3		Rod 6x6x200 mm	PRT03006PE