

7551-7552 ATEX

HAZARDOUS AREAS

Position limit switch



Cross position limit switch designed to control the movement of overhead travelling cranes, hoists and complex machine tools in area with potentially explosive atmospheres.

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 is classified IP 65.
- Extreme temperature resistance: -25°C to +60°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 to reduce the need for routine maintenance operations 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 contacts or slow action switches with 1NC contact.
- 3 outputs for cable glands to reduce installation time and make wiring easier.

CERTIFICATIONS

- CE marking.
- ATEX certification.

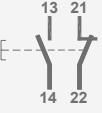
CERTIFICATIONS

Conformity to Community Directives	2014/35/UE Low Voltage Directive
	2006/42/CE Machinery Directive
	2014/34/UE Atex Directive
Conformity to EN IEC Standards	EN IEC 60204-1 Safety of machinery - Electrical equipment of machines
	EN IEC 60947-5-1 Low-voltage switchgear and controlgear - Control circuit devices and switching elements - Electromechanical control circuit devices
	EN IEC 60529 Degrees of protection provided by enclosures
	EN IEC 60079-31 Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'
	EN IEC 60079-0 Explosive atmospheres – Part 0: Equipment – General requirements
	EN IEC 60079-14 Explosive atmospheres – Part 14: Electrical installations design, selection and erection
Type of protection	II 3G Ex ec IIB T5 Gb
	II 3D Ex tc IIIB T100°C Dc
Markings and homologations	CE  IEC

GENERAL TECHNICAL SPECIFICATIONS

Ambient temperature	Storage -25°C/+60°C
	Operational -25°C/+60°C
IP protection degree	IP 65
Insulation category	Class I
Operation frequency	3600 operations/hour max
Cable entry	M20

TECHNICAL SPECIFICATIONS OF THE SWITCHES

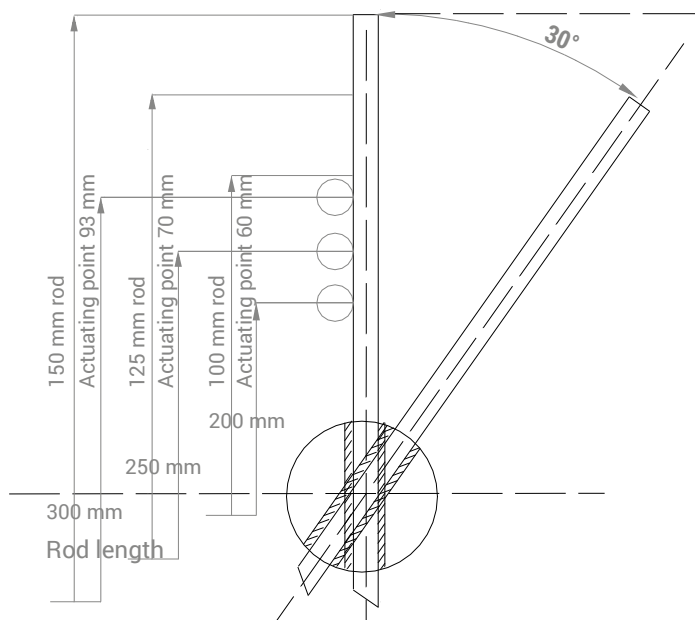
Code	PRSL0036XX	PRSL0037XX
Utilisation category	AC 15	
Rated operational current	3 A	
Rated operational voltage	250 Vac	
Rated thermal current	10 A	
Rated insulation voltage	300 Vac	
Mechanical life	1x10 ⁶ operations	
Connections	Screw-type terminals	
Wires	1x2.5 mm ² , 2x1.5 mm ² (UL - (c)UL: use 60°C or 75°C copper (CU) conductor and wire 16-18 AWG)	
Tightening torque	0.8 Nm	
Switch 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 	

MAXIMUM ACTUATING DIMENSIONS

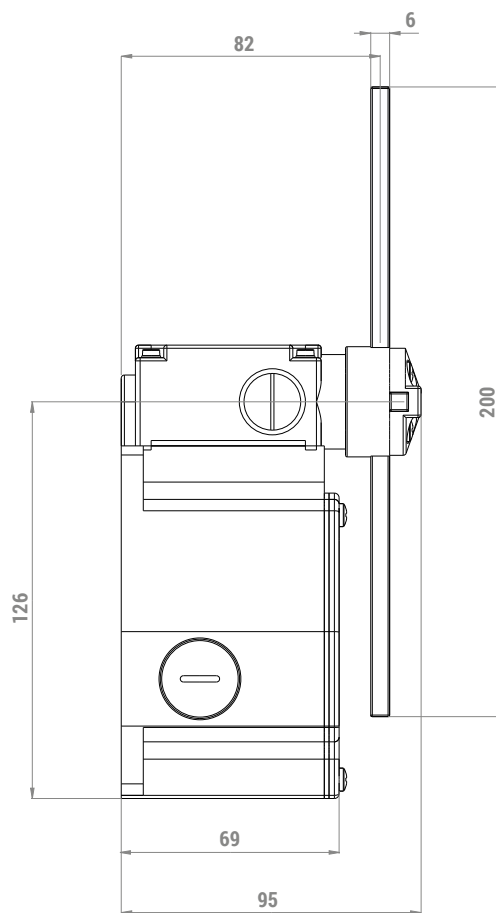
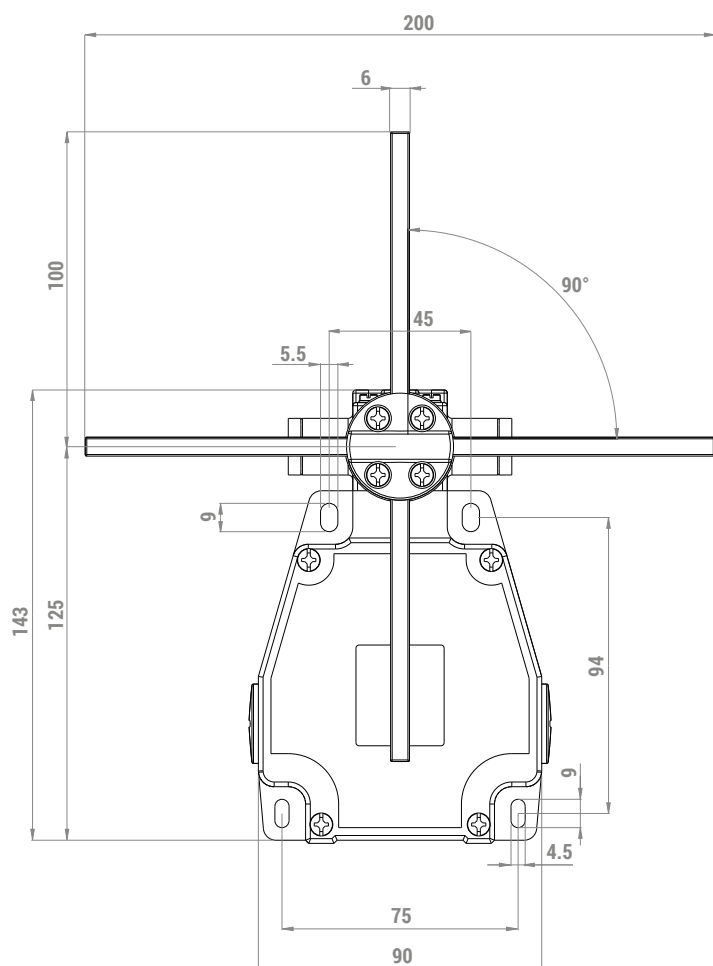
Rods with 4 maintained positions

- 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 every: 90°

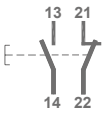
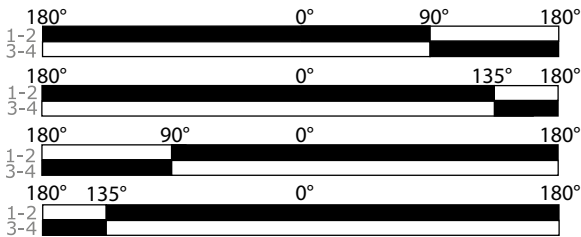
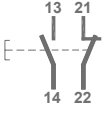
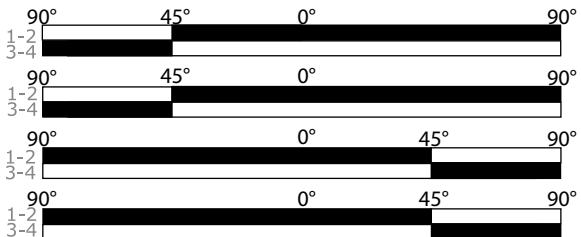
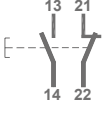
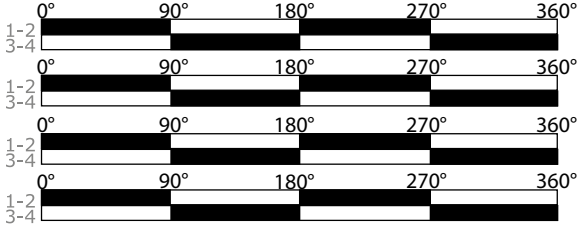
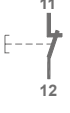
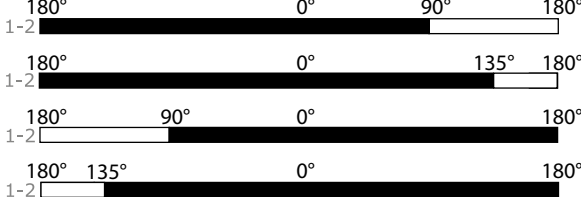
In order to ensure proper operations, the dimensions shall not be increased; anyhow, they can be decreased, taking into account that the closer the impact point is to the center of the head, the higher the impact and the mechanical wear of rod and shaft are. **IMPORTANT:** the maximum impact speed is 1.35 m/s, referring to the ideal impact points shown in the drawing.

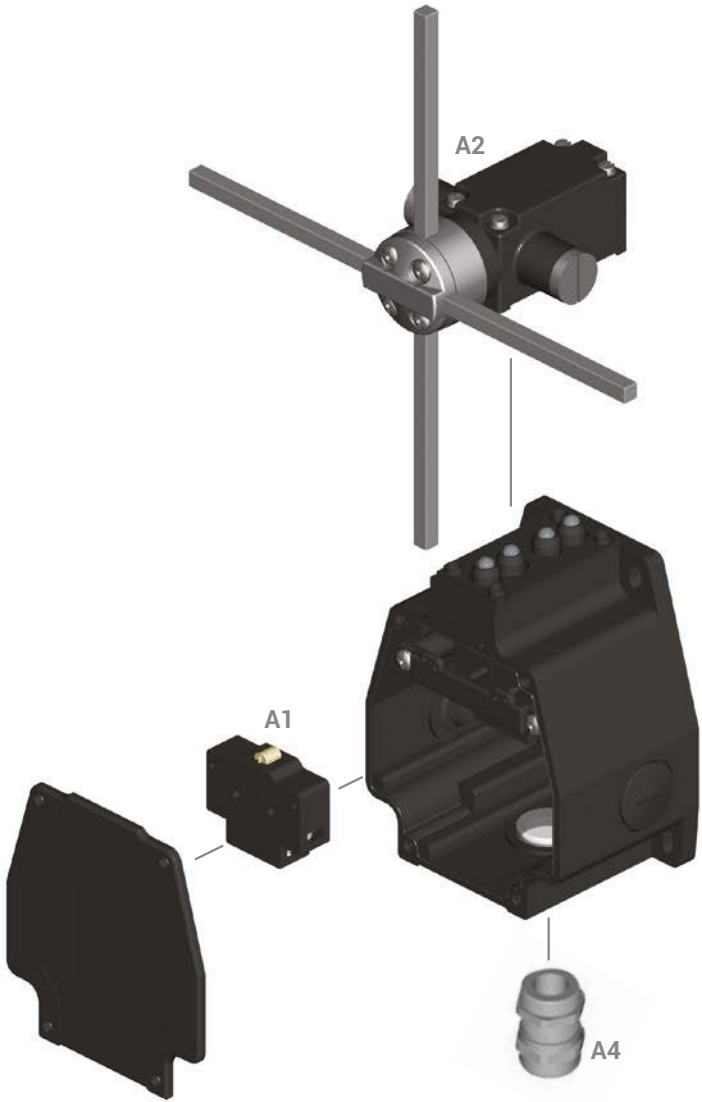
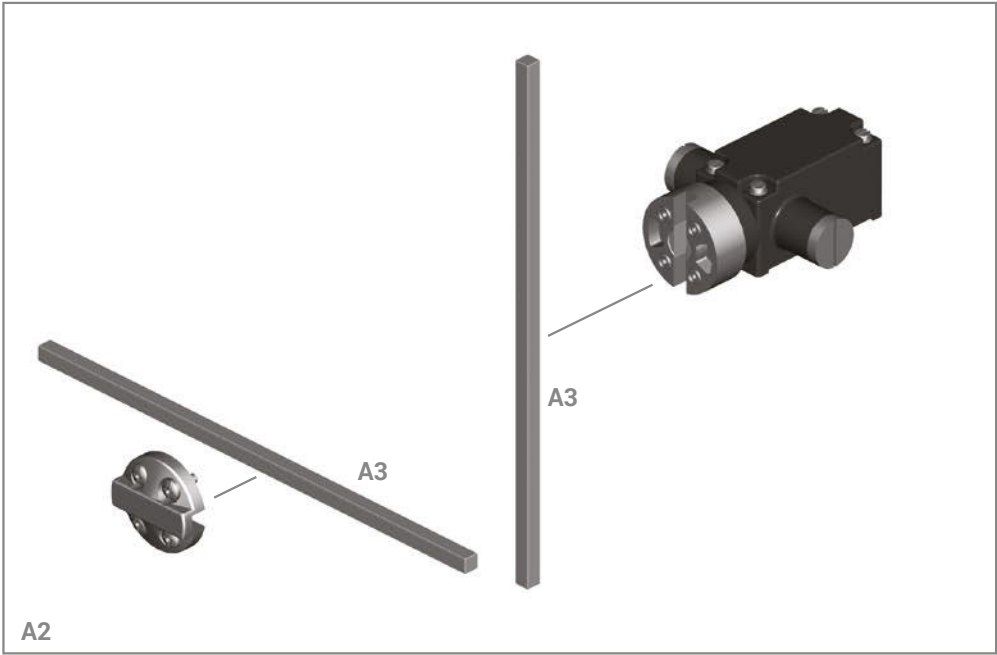


OVERALL DIMENSIONS (mm)



LIMIT SWITCHES

No. and type of switches	Actuating travel	Rod length	Code
4 switches PRSL0036XX 		200 mm	EX25755100
4 switches PRSL0036XX 		200 mm	EX25755200
4 switches PRSL0036XX 		200 mm	EX25755205
4 switches PRSL0037XX 		200 mm	EX25755124



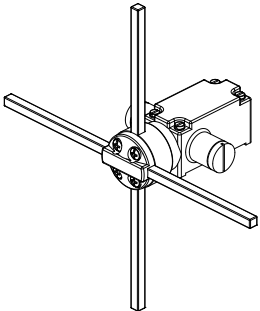
Refer to the following tables for descriptions of: "Switches" and "Accessories".

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 PF26755100	PF267551TE
		Head for PF26755200	PF267552TE
A3		Rod 6x6x200 mm	PRT03006PE
		Rod 6x6x300 mm	PRT03012PE
A4		Cable gland M20	PSM20P0150X09