7551-7552

Position limit switch



Cross position limit switch designed to control 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 is classified IP 66 with specific cable gland 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 to reduce the need for routine maintenance operations on the
- 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.

CERTIFICATIONS

Conformity to Community Directives	2014/35/UE Low Voltage Directive	
	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	< €	

GENERAL TECHNICAL SPECIFICATIONS

Ambient temperature	Storage -40°C/+70°C Operational -40°C/+70°C		
IP protection degree	IP 66 max. with specific cable gland M20 (not supplied)		
Insulation category	Class I		
Operation frequency	3600 operations/hour max		
Cable entry	M20		

TECHNICAL SPECIFICATIONS OF THE SWITCHES

Code	PRSL0036XX	PRSL0037XX				
Utilisation category	AC	AC 15				
Rated operational current	3	3 A				
Rated operational voltage	250	250 Vac				
Rated thermal current	10	10 A				
Rated insulation voltage	300	300 Vac				
Mechanical life	1x10 ⁶ op	1x10 ⁶ operations				
Connections	Screw-type	Screw-type terminals				
Wires		1x2.5 mm², 2x1.5 mm² (UL - (c)UL: use 60°C or 75°C copper (CU) conductor and wire 16-18 AWG)				
Tightening torque	0.8	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	13 21 E	11 E7 12				
Markings and homologations	· · · · · · · · · · · · · · · · · · ·	(€ (Wus				

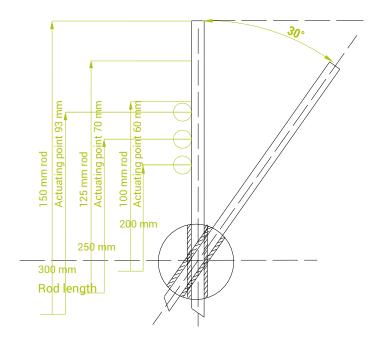


MAXIMUM ACTUATING DIMENSIONS

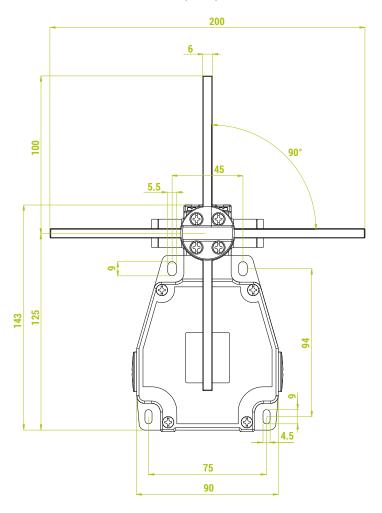
Rods with 4 maintained positions

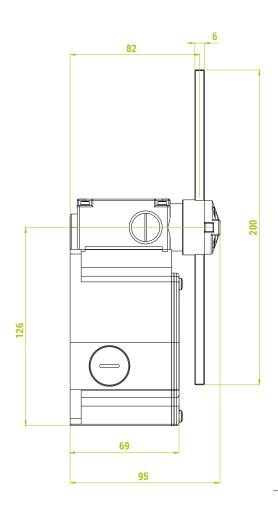
- Pre-travel angle for rotation contact operation: 49°
- Maximum rotation angle for each maintained position: 90°
- Average angle for the mechanical tripping: 48°
- Maintained positions every: 90°

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, refering to the ideal impact points shown in the drawing.



OVERALL DIMENSIONS (mm)

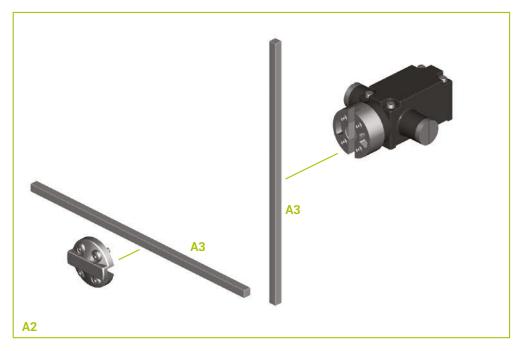


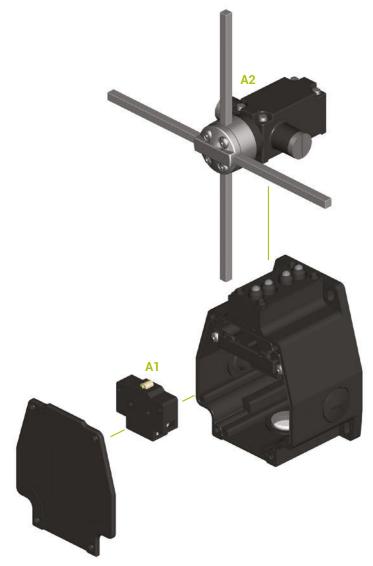


LIMIT SWITCHES

No. and type of switches	Actuating tra	avel				Rod length	Code
4 switches PRSL0036XX	180° 1-2 3-4		0°	90°	180°		
13 21 	1 80° 1-2		0°	13	5° 180°		
E \\	3-4 180° 1-2 3-4 180° 135°	90°	0°		180°	200 mm	PF26755100
14 22	180° 135° 1-2 3-4		0°		180°		
4 switches PRSL0036XX	90° 1-2 3-4	45°	0°		90°		
13 21	3-4 90° 1-2 3-4	45°	0°		90°		
14 22	90° 1-2 3-4		0°	45°	 90°	200 mm	PF26755200
14 22	3-4 90° 1-2 3-4		0°	45°	90°		
4 switches PRSL0036XX	0°	90°	180°	270°	360°		
13 21	1-2 3-4 0°	90°	180°	270°	360°		
E	1-2 3-4 0°	90°	180°	270°	360°	200 mm	PF26755205
14 22	1-2 3-4 0° 1-2 3-4	90°	180°	270°	360°		
4 switches							
PRSL0037XX	180° 1-2		0°	90°	180°		
11 _ L	180° 1-2		0°	13		200 mm	PF26755124
12	180° 1-2	90°	0°		180°		
	180° 135°	•	0°		180°		







COMPONENTS

Switches

Ref.	Drawing	Description	Scheme	Code
A1		1NO+1NC snap action switch	E\frac{13 \ 21}{14 \ 22}	PRSL0036XX
		1NC slow action switch	E	PRSL0037XX

Accessories

Ref.	Drawing	Description	Code
40		Head for PF26755100	PF267551TE
A2		Head for PF26755200	PF267552TE
A.O.		Rod 6x6x200 mm	PRTO3006PE
A3		Rod 6x6x300 mm	PRTO3012PE

