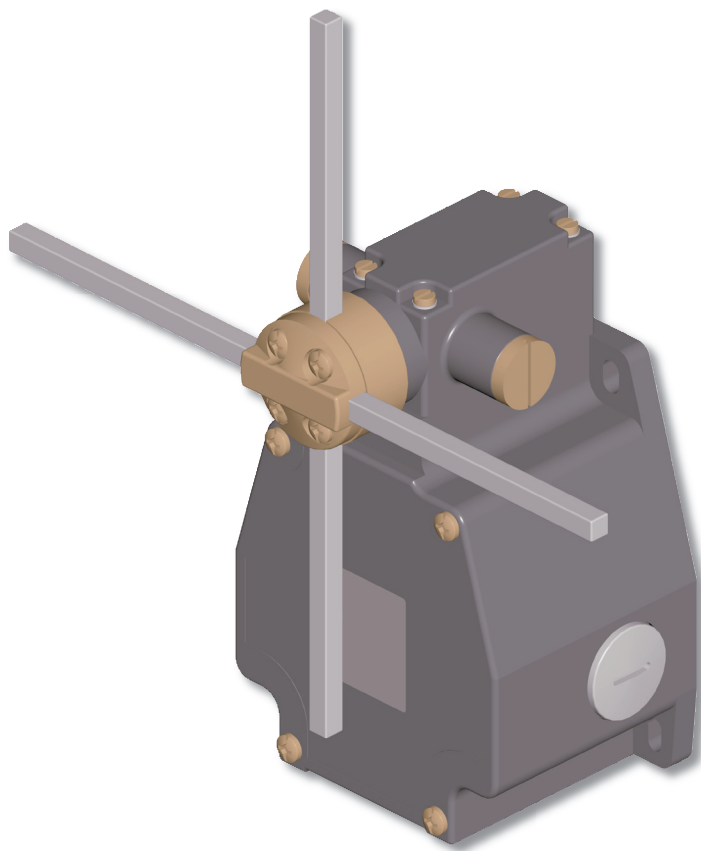


# 7551



7551 position limit switches are designed for the control of complex operating equipment. As they are control auxiliaries, they act on a power interface.

The choice of materials, technical solutions and ample size make these limit switches ideal for use in strongly aggressive environments where they are exposed to the most severe operating conditions, guaranteeing impeccable function at all times and for their entire life.

The enclosure is made of die-cast aluminum alloy and is resistant to any violent impact, chemical aggression and rust, while the bushings in sinterized material eliminate the need for any operations of routine maintenance of the header, since they are also made of impact-resistant zama.

7551 limit switches are equipped with 4 fastening holes and 3 outputs for wire clamps to reduce installation time and facilitate wiring operations.

# 7551 POSITION LIMIT SWITCH

## TECHNICAL SPECIFICATIONS

Conformity to Community Directives	73/23/CEE 93/68/CEE
Conformity to Standards	EN 60204-1 EN 60947-1 EN60947-5-1 EN 60529 IEC 536
Ambient temperature	Storage -40°C/+70°C Operational -25°C/+70°C
Protection degree	IP 65
Insulation category	Class I
Cable entry	Cable clamp M20
Operation frequency	3600 operations/hour max.
Markings and homologations	CE

## TECHNICAL SPECIFICATIONS OF THE SWITCHES

Utilisation category	AC 15
Rated operational current	3 A
Rated operational voltage	250 V
Rated thermal current	10 A
Rated insulation voltage	500 V~
Mechanical life	1x10 <sup>6</sup> operations
Terminal referencing	According to EN 50013
Connections	Screw-type terminals
Wires	1x2.5 mm <sup>2</sup> , 2x1.5 mm <sup>2</sup> (UL - (c)UL: use 60 or 75 °C copper (CU) conductor and wire size No. 16-18 AWG)
Tightening torque	0.8 Nm
Markings and homologations	CE - UL - (c)UL

## STANDARD LIMIT SWITCH CODES

CODE	ACTUATING TRAVEL
PF26755100	180° 0° 70° 180° 1-2 3-4
	180° 0° 160° 1-2 3-4
	180° 70° 0° 180° 1-2 3-4
	160° 0° 180° 1-2 3-4
PF26755200	70° 0° 90° 1-2 3-4
	70° 0° 90° 1-2 3-4
	90° 0° 70° 1-2 3-4
	90° 0° 70° 1-2 3-4

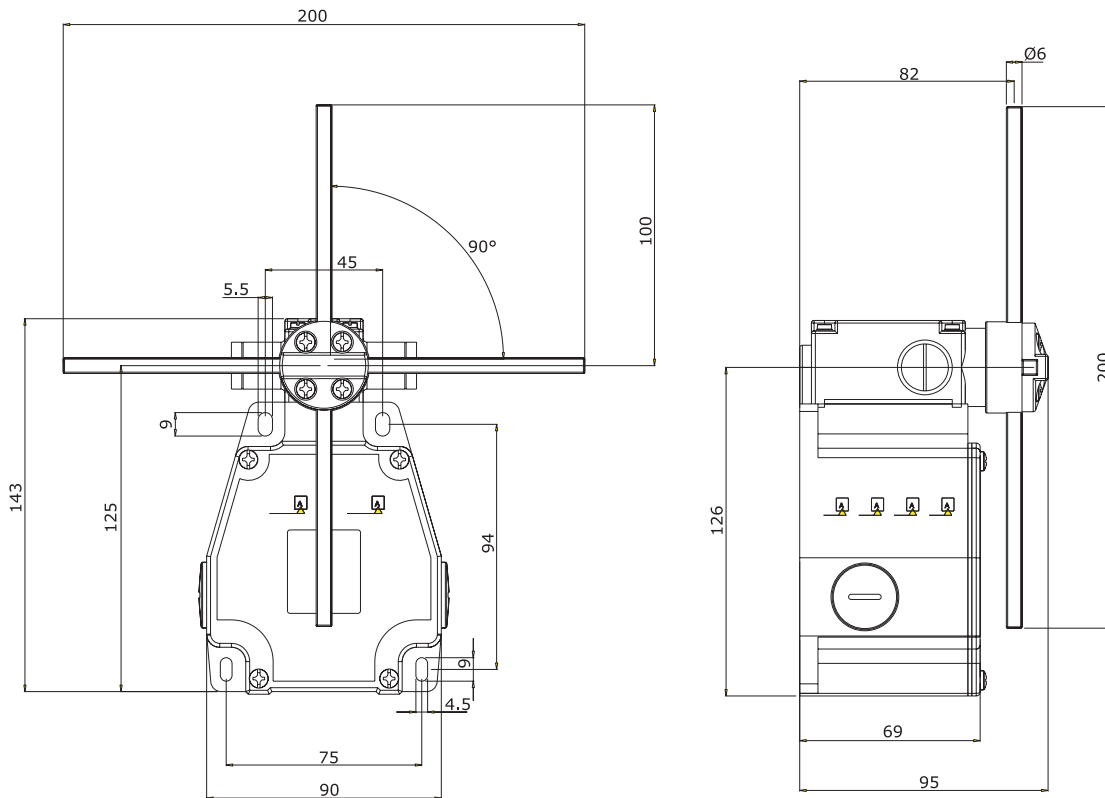
The limit switches are equipped with 1NO+1NC switches PRSL0036XX.



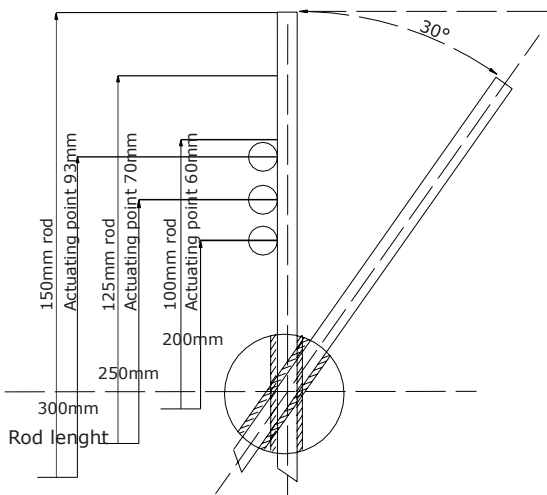
Toll Free: 1.888.822.2024  
 International: +1.519.822.2020  
 Fax: 1.519.822.2140  
 Email: info@ipandc.com  
 Web: www.ipandc.com

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## OVERALL DIMENSIONS



## MAXIMUM ACTUATING DIMENSIONS



### Rods with 4 maintained positions

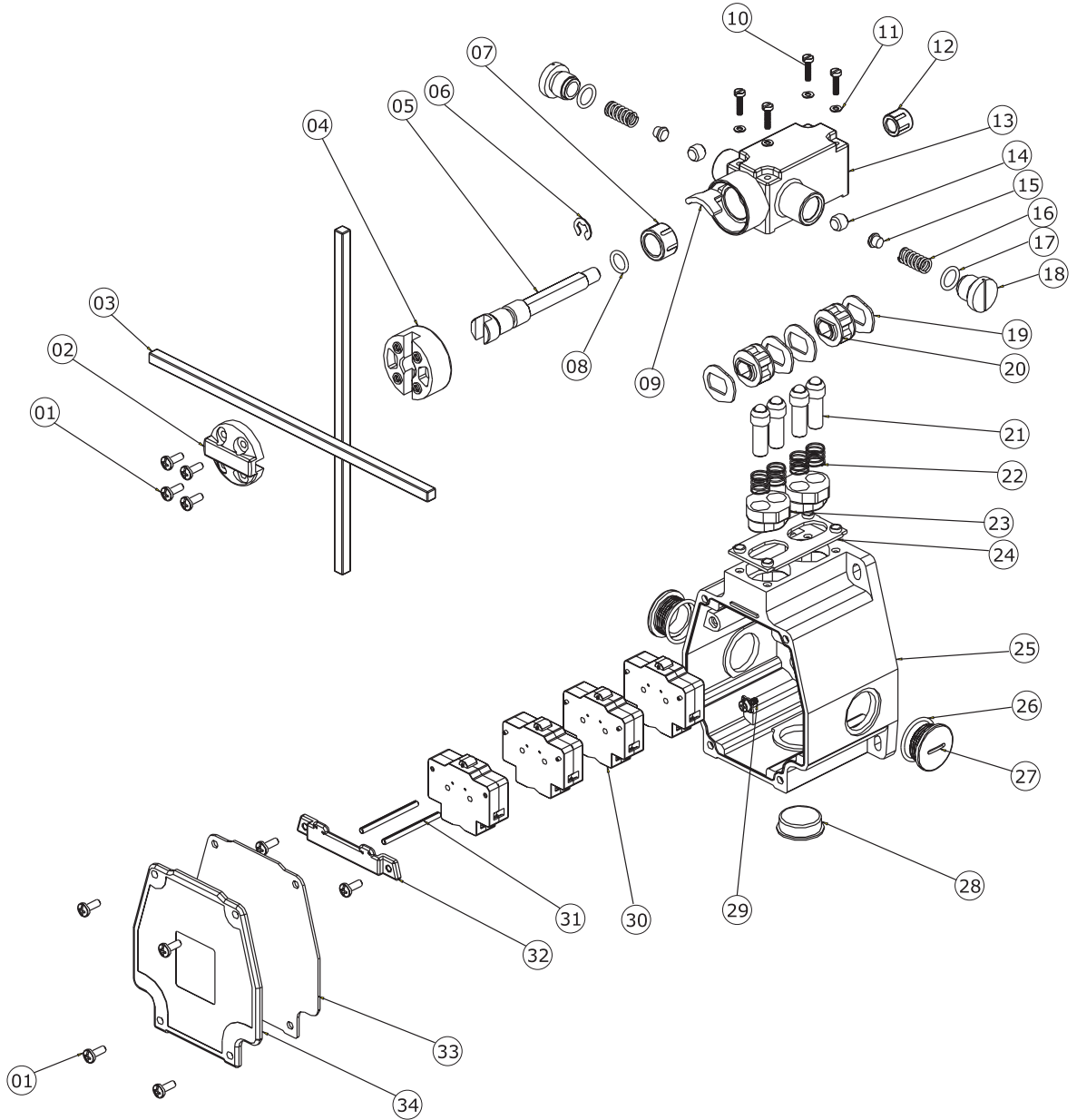
Pre-travel angle for rotation contact operation	49°
Maximum rotation angle for each maintained position	90°
Average angle for the mechanical tripping	48°
Maintained positions each	90°

**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.**

# 7551 POSITION LIMIT SWITCH

## DETAILED DRAWING



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## COMPONENTS

REFERENCE	CODE	DESCRIPTION
01	PRVI0176PE	Screw M4x10
02	PRFU2011PE	Cross support plate
03	PRTO3006PE	Rod 6x6x200 mm
04	PRFU2012PE	Cross support
05	PRTO2038PE	Shaft
06	PRVV999006	Elastic ring
07	PRCB1007PE	Large bush
08	PRGO980108	O-ring
09	PRSL7640PI	Stop sector
10	PRVI0070PE	Screw M3x12
11	PRRN0011PE	Washer
12	PRCB1002PE	Small bush
13	PRFU2017PE	Head
14	PRTO812487	Trip pin
15	PRSL9625PI	Pin pushing plug
16	PRMO962719	Spring
17	PRGO989037	O-ring
18	PRTO915515	Head plug
19	Ask for codes	Cam
20	PRSL7646PI	Four point cylinder for tripping
21	PRSL7645PI	Sphere holding piston
22	PRMO915529	Spring
23	PRSL9312PI	Piston holder support
24	PR989642	Head gasket
25	PRFU2016PE	Enclosure
26	PRGO980108	O-ring
27	PRPS0070PE	Threaded plug M20
28	PRSL000020	Plug
29	PRVI0162PE	Screw M3.5x7.5
30	PRSL0036XX	Snap action 1NO+1NC switch
31	PRVV984340	Elastic pin
32	PRSL9624PI	Bridge
33	PRGO989632	Cover gasket
34	PRFU2008PE	Cover

7551 POSITION LIMIT SWITCH



## USE AND MAINTENANCE INSTRUCTIONS

The 7551 limit switch is an electromechanical device for low voltage control circuits (EN 60947-1, EN 60947-5-1) for use as electric equipment on machines (EN 60204-1) in compliance with the essential requisites of the Low Voltage Directive 73/23/EEC and the Machine Directive 89/392/EEC.

The limit switch is designed for use in industrial environments with even very severe climatic conditions (working temperatures from -25°C to +70°C and is suitable for use in tropical environments). The equipment is not suitable for use in environments with a potentially explosive atmosphere, in the presence of corrosive agents or high percentage of sodium chloride (saline mist). Contact with oil, acids and solvents may damage the equipment. The limit switch is not suitable for use in environments with a potentially explosive atmosphere.

### Maintenance

Make sure the limit switch is securely fastened in place and the fasteners are tightened properly.

Make sure there are no infiltrations of water through the wire clamp(s) and that the rubber sleeve is intact and flexible.

Open the lid (34) and check that the gasket (33) is intact and flat in its housing.

Check that the switches (30) are properly wired and the terminals securely fastened; test the on/off mechanism by hand.

Make sure the head turns without forcing, that it is clean and moves without uncertainty between one position and the next; make sure the screws (01) on the head are properly tightened. If there is any difficulty in switching and positioning the head, replace the limit switch.

Check the conditions of the rods (03) and make sure they are positioned correctly: if the rods are not perfectly straight they should be replaced and repositioned carefully in accordance with the specifications.

**CAUTION: FOLLOW THE INSTRUCTIONS CAREFULLY WITH REGARD TO THE SPEED AND POSITION OF THE RODS INDICATED IN THE MAXIMUM DRIVE MEASUREMENTS. FAILURE TO FOLLOW THE SPECIFICATIONS INDICATED MAY JEOPARDIZE THE FUNCTION AND SAFETY OF THE SYSTEM.**

### Installation

First, position the limit switch so that the machine or one arm of it strikes the rod in the positions indicated in the maximum drive measurements.

Mark the fastening holes on the supporting wall and drill the holes.

After fastening, make sure the rod is perfectly vertical, that the rods (03) are securely fastened in the head (04) and that the points of impact are as verified previously.

Proceed with electric wiring taking care to tighten the terminals on the switches (30), after manually checking the on/off function.

Tighten the terminal screws with a torque of 0.8 Nm (insertability of wires into the terminals 1x2,5 mm<sup>2</sup> - 2x1,5mm<sup>2</sup>) (UL - (c)UL: use 60 or 75°C conductor and wire size No. 16-18 AWG, stranded or solid).

Close the lid (34) taking care to position the gasket (33) in its housing.

Tighten the wire clamp taking care to see that the rubber inside adheres to the sheathing on the wire.

Make sure the wires are not taut, twisted and/or forced into excessive curvatures.

The installation will be complete after checking once or twice that the machine is properly slowed and/or stopped by the limit switch installed.

Any change to parts of the limit switch will invalidate the rating plate data and identification of the device, and render the warranty null and void. In case of replacement of any part, use only original replacements.

TER is not liable for damages caused by improper use of the device and installation which is not made correctly.

