



7551 7552

CROSS POSITION LIMIT SWITCHES

7551 and 7552 position limit switches are designed for the control of complex operating machinery. 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.

FEATURES

7551 and 7552 limit switches are equipped with 4 fastening holes and 3 outputs for cable clamps to reduce installation time and facilitate wiring operations.

MATERIALS

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 head, since they are also made of impact-resistant zama.



INDUSTRIAL
LIFTING



CONSTRUCTION
LIFTING



INDUSTRIAL
AUTOMATION


STANDARDS - MARKINGS - HOMOLOGATIONS

- Conformity to Community Directives:
 - 2006/95/CE: Low Voltage Directive
 - 2006/42/CE: Machinery Directive
- Conformity to 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**

GENERAL TECHNICAL SPECIFICATIONS

- Storage ambient temperature: -40°C/+70°C
- Operational ambient temperature: -40°C/+70°C
- Protection degree: IP66 max. with dedicated cable clamp M20
- Insulation category: Class I
- Cable entry: cable clamp M20
- Operation frequency: 3600 operations/hour max
- Markings and homologations: **CE EAC**

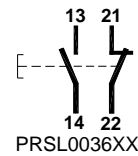
TECHNICAL SPECIFICATIONS OF THE MICROSWITCHES

- Utilisation category: AC 15
- Rated operational current: 3 A
- Rated operational voltage: 250 V
- Rated thermal current: 10 A
- Rated insulation voltage: 300 V~
- Mechanical life: 1x10⁶ operations
- Terminal referencing: according to EN 50013
- Connections: 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 Nm
- Markings and homologations: **CE** 

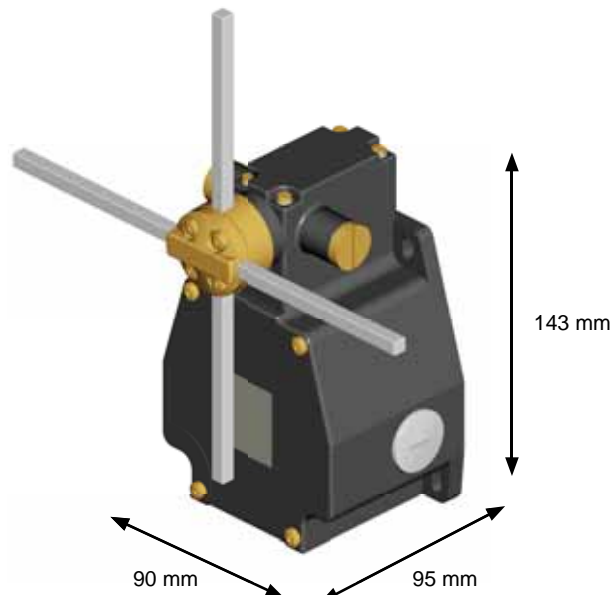
The snap action single switch PRSL0036XX has 1 NO + 1 NC change over contacts with 2 connecting terminals each.

All NC contacts are of the positive opening operation type.

The switches have the following reference for internal wiring.



OVERALL DIMENSIONS



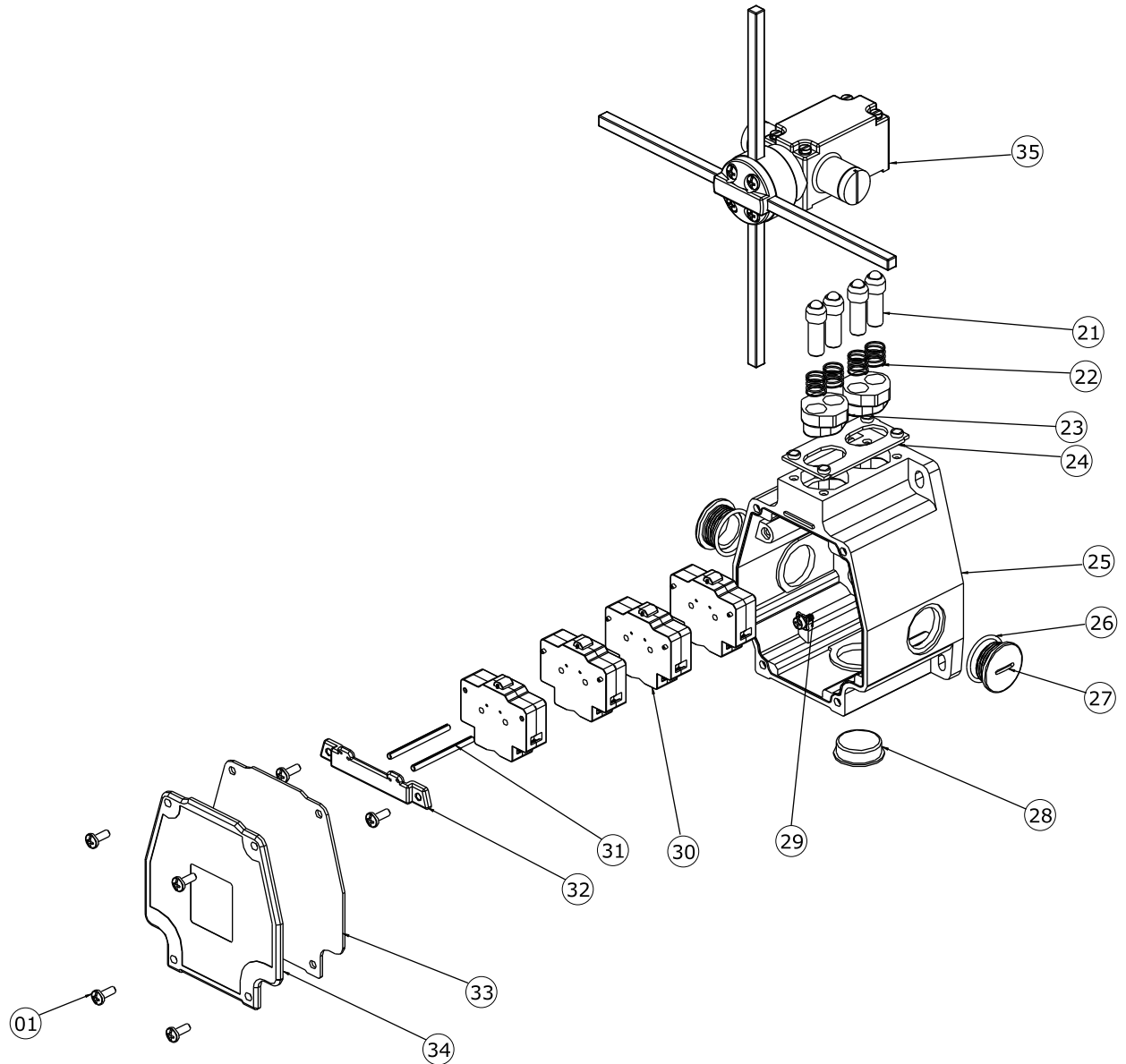
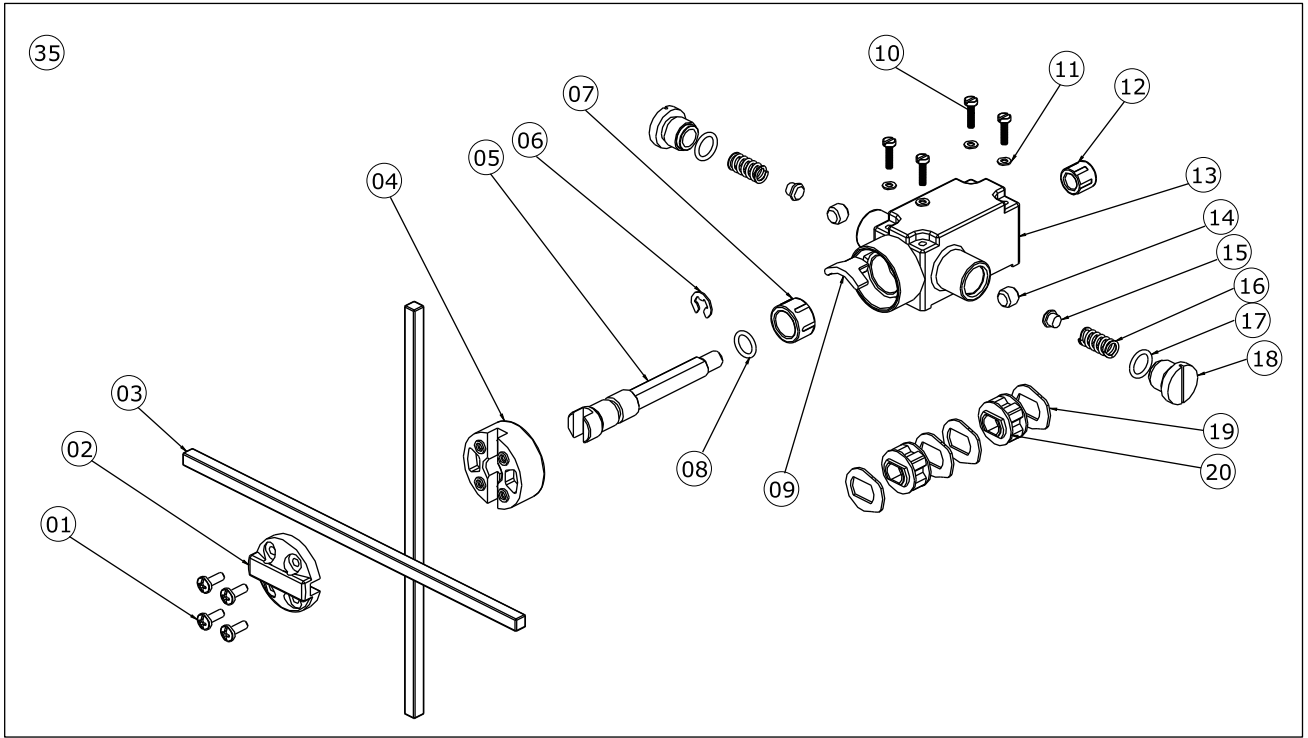
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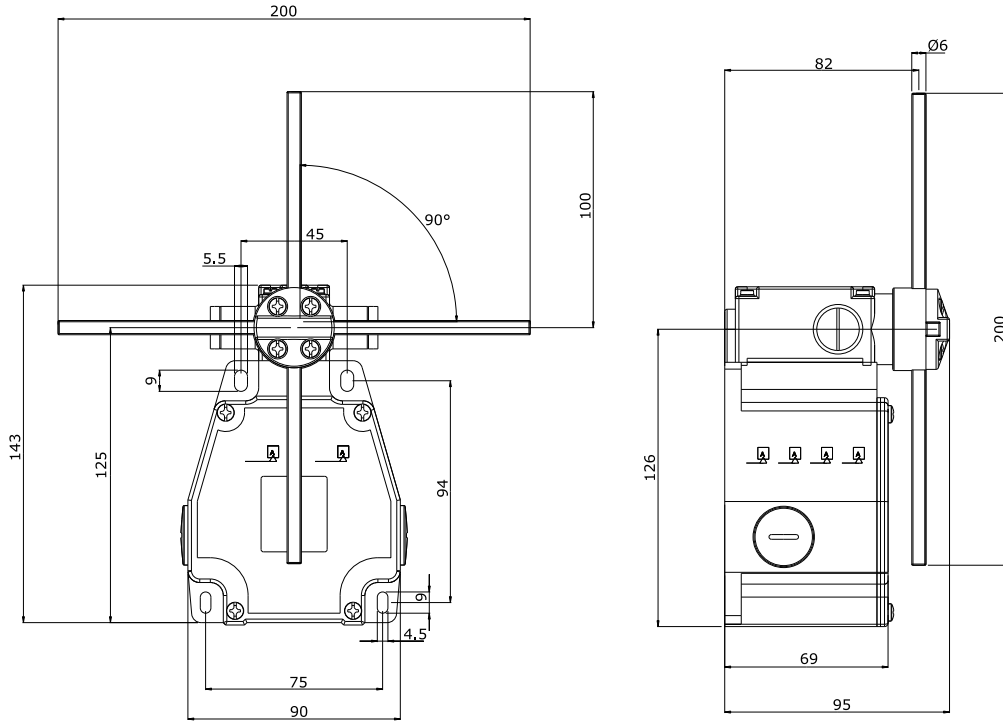
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OVERALL DIMENSIONS (MM)



STANDARD LIMIT SWITCHES

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



N° OF SWITCHES	ACTUATING TRAVEL	ROD LENGTH	CODE												
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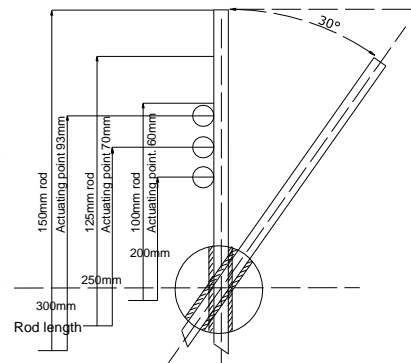
MAXIMUM ACTUATING DIMENSIONS

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.



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 2006/95/CE and the Machine Directive 2006/42/CE.

The limit switch is designed for use in industrial environments with even very severe climatic conditions (working temperatures from -40°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.

Mechanical test for workings to be carried out with activated micro switches.

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 mm² - 2x1,5mm²) (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.

* Please refer to the detailed drawing in the catalogue.

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