7551 EVO

Multiple position limit switch

Multiple position limit switch, also suitable to be used as a low resolution absolute encoder, 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 without mechanical interlock, suitable for multiple revolutions.
- Binary coding in 16 (standard) or 32 positions, one position every 90°.
- 4 fixing holes.
- 4 (standard) or 5 clean contacts, returning the information received in binary digital form, ready to be read by a PLC or by a dedicated control unit.
- Position resetting through a hardware signal.
- 1 contact available for use as a diagnostic line for error detection.
- The detected position is maintained even after an ON and OFF cycle.
- Mechanical life of switches: 1 million operations.
- Operation frequency: max. 3600 operations/hour.
- IP protection degree: 7551 Evo is classified IP66.
- Extreme temperature resistance: -25°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 head.
- All materials and components used are wear resistant and guarantee protection of the unit against water and dust.

CERTIFICATIONS

- CE marking.

INTERNAL VIEW

CERTIFICATIONS

Conformity to Community Directives	2014/30/UE Electromagnetic Compatibility (EMC) Directive
	2006/42/CE Machinery Directive
	2014/35/UE Low Voltage Directive (LVD)
Conformity to CE Standards	EN 60204-1 Safety of machinery - Electrical equipment of machines
	EN 60204-32 Safety of machinery - Electrical equipment of machines - Requirements for hoisting 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
	EN 61326-1 Electrical equipment for measurement, control and laboratory use - EMC requirements - General requirements
	EN 61326-2-3 Electrical equipment for measurement, control and laboratory use - EMC requirements - Particular requirements - Test configurations, operational conditions and performance criteria for transducers with integrated or remote signal conditioning
Markings and homologations	CE

GENERAL TECHNICAL SPECIFICATIONS

Ambient temperature	Storage -25°C/+70°C
	Operational -25°C/+70°C
IP protection degree	IP66 max. with specific cable gland M20
Insulation category	Class I
Operation frequency	Max. 3600 operations/hour
Connections	5 meter cable
	18 PIN connector Amphenol CU-18PMMP-LC7001

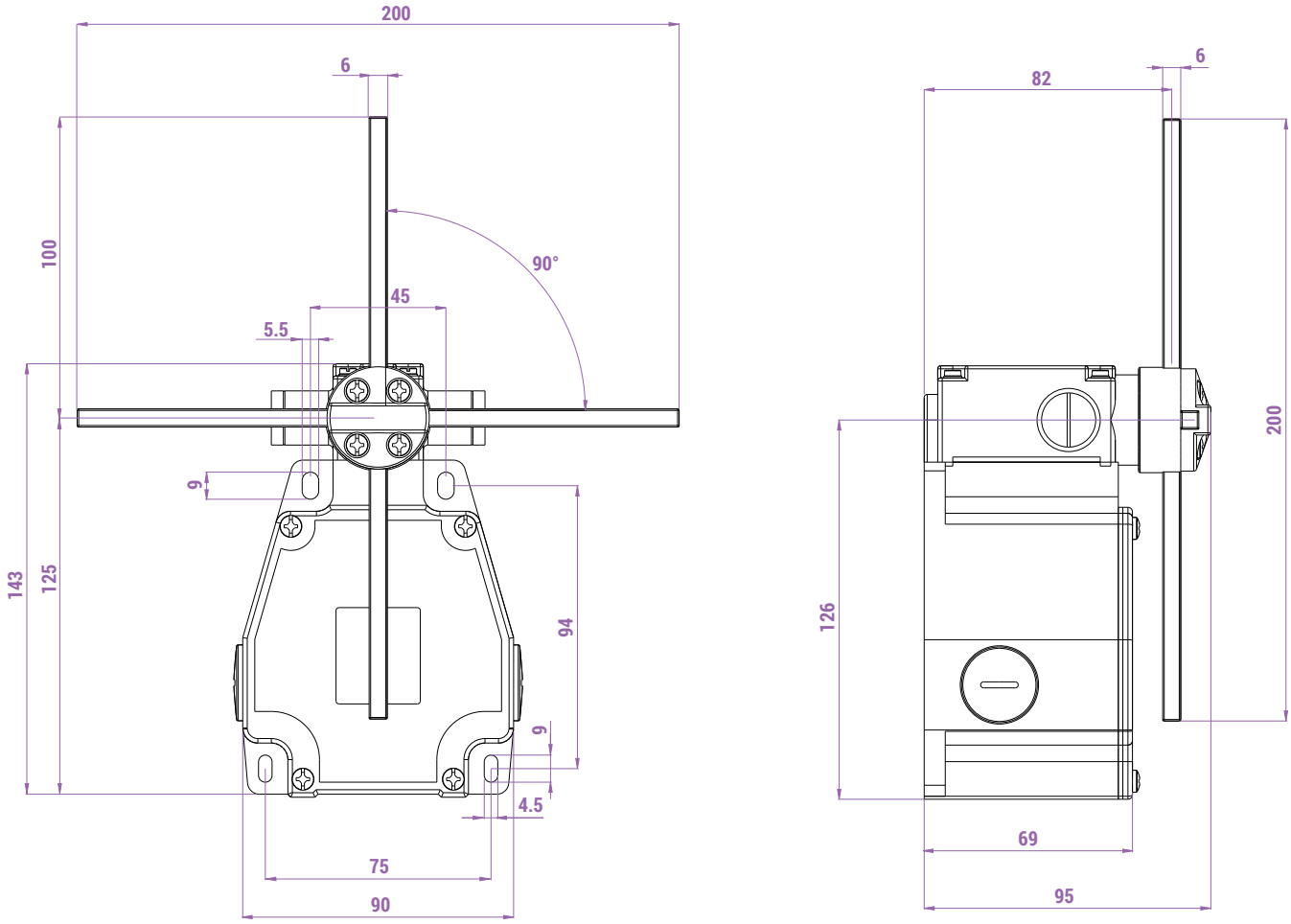
ELECTRICAL SPECIFICATIONS

Power supply	24 Vdc
Consumption	250 mA max

TECHNICAL SPECIFICATIONS OF THE RELAYS

Rated operational current	3 A
Rated operational voltage	30 Vdc, 125 Vac, 250 Vac
Rated insulation voltage	500 Vac
Mechanical life	$5x10^6$ operations
Markings and homologations	UL Recognized (File No. E41515)
	CSA certified (File No. LR31928)
	VDE Certified No. 40009467

OVERALL DIMENSIONS (mm)



BINARY CODE MAP

Relay 1	Relay 2	Relay 3	Relay 4	CW rotation	CCW rotation
Open	Open	Open	Open	Zero	Zero
Closed	Open	Open	Open	90	-1350
Open	Closed	Open	Open	180	-1260
Closed	Closed	Open	Open	270	-1170
Open	Open	Closed	Open	360	-1080
Closed	Open	Closed	Open	450	-990
Open	Closed	Closed	Open	540	-900
Closed	Closed	Closed	Open	630	-810
Open	Open	Open	Closed	720	-720
Closed	Open	Open	Closed	810	-630
Open	Closed	Open	Closed	900	-540
Closed	Closed	Open	Closed	990	-450
Open	Open	Closed	Closed	1080	-360
Closed	Open	Closed	Closed	1170	-270
Open	Closed	Closed	Closed	1260	-180
Closed	Closed	Closed	Closed	1350	-90

STANDARD LIMIT SWITCHES

Description	Code
Limit switch with 4 relays and cable (5 meters)	F75514NA1001
Limit switch with 4 relays and 18 PIN connector	F75514NA0001