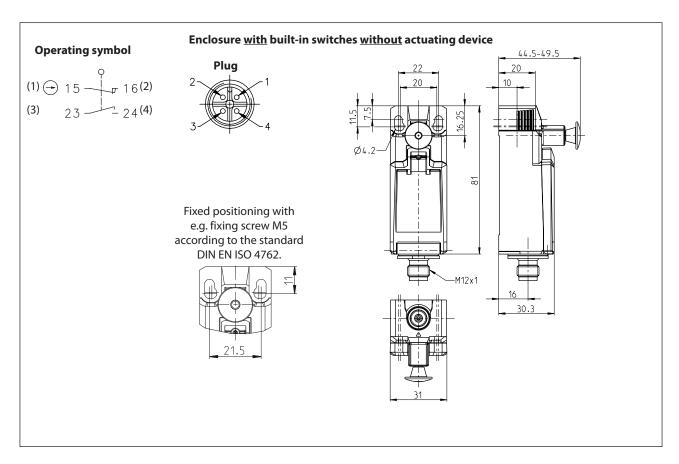


## **Plastic bodied limit switch**

Series 181-modular system

Description I81-UV1Z M12

Article number 6083000327



Electrical Data		
Rated insulation voltage	U <sub>i</sub>	250 V
Rated impulse withstand voltage	$U_{imp}$	2,5 kV
Rated operational voltage	$U_e$	240 V AC
Rated supply frequency AC		50 / 60 Hz
Overvoltage category		II acc. EN 60947-1 annex H table H1
Conv. thermal current	l <sub>the</sub>	4 A
Minimum current		1 mA
Utilization category		AC 15, U <sub>e</sub> /I <sub>e</sub> 240 V / 3 A
Direct opening action	$\odot$	acc. IEC/EN 60947-5-1, annex K; direct opening force: 24 N
Short-circuit protective device		Fuse 4 A gG
Rated conditional short-circuit curre	nt	400 A
Max. contact resistance		25 mOhm (unused)



Mechanical data		
Enclosure		Thermoplastic, glass fibre reinforced (UL 94-V0)
Cover		Thermoplastic, glass fibre reinforced (UL 94-V0)
Reset facility		pull blue RESET - button
Actuating force	$F_B$	$10 \text{ N} \le F_B \le 30 \text{ N}$
Operating temperature		-30 °C +75 °C
Storage temperature		-40 °C +80 °C
Protection type		IP66 / IP67 acc. EN 60529
Pollution degree (built-in switch)		3
Contact material		silver
Device Class (built-in switch)		Category E (MC3+CC2+SC1) acc. EN 60947-1 annex Q
Contact type		1 N.C. (Form Zb), 1 N.O.
Isolating distance		4 mm (2x2 mm)
Operating rate	V	$0.06 \text{ m/min} \le \text{V} \le 30 \text{ m/min}$
Bounce duration	ms	The value depends on the operating rate.
Switchover time	ms	The value depends on the operating rate.
Switching frequency		≤ 60 / min.
Mechanical life		1 x 10 <sup>5</sup> operating cycles
Mission time		≤20 years
Connection		Connector M12x1, A-coded
Conductor cross-sections		Solid or Litz wire with ferrules 0,34 mm <sup>2</sup> - 1,5 mm <sup>2</sup> ; AWG 22-16
Cable entrance		1 x M20 x1,5
Weight		≈ 0,06 kg
Installation position		operator definable

ID for safety engineering		
B10d N.C.	2 x 10 <sup>5</sup> cycles	
B10d N.O.	1 x 10 <sup>5</sup> cycles	

Standards	
	DIN EN 60947-5-1
	UL 508 / CSA C22.2 No.14
	DIN EN ISO 13849-1

EC Conformity	
	acc. to directive 2006/42/EC (Safety-of-Machinery-Directive)

Approvals	
	CCC (AC 15, U <sub>e</sub> /I <sub>e</sub> 240 V / 1,5 A; DC 13, U <sub>e</sub> /I <sub>e</sub> 24 V / 1,5 A)
	<sub>c</sub> CSA <sub>US</sub> B300, 240Vac 1.5A G.P., 24Vdc 1.5A R. Enclosure Type 4X

## **Technical Data**



## **Notes**

The degree of protection specified (IP code) applies only to a properly closed cover and the use of an equivalent connector. The connector and the cable (fix or flexible mounted) must at least be suitable for the described ambient air temperatures.

The connector must not be connected or disconnected when voltage is applied.

The mechanical life of the connector is 100 connection cycles.

The information on the switching travel can be found in the data sheets of the actuator, as these depend on the actuator used.

Approvals / properties applies only to the fully assembled device.