

# Limit switch for severe environments

→ 83589

- Corrosion-resistant construction with rugged plastic body and cable output
- Stainless steel plunger with very high protection to harsh environment
- IP66/IP67/IP69 protection
- Precise setting by threaded barrel - Very short differential travel
- High precision flexible leaf snap-action mechanism
- Operation without balance-point, even at extremely slow actuating speed
- High resistance to shock and vibration
- Very long mechanical life



## Main specifications

		Standard 83 589 0	Dual-current 83 589 8
<b>Function</b>	<b>Connections</b>		
I (changeover)	0.5 (cable, 0.5 m)	83 589 031	83 589 801
<b>Mechanical characteristics</b>			
Minimum operating force (N)		10	10
Minimum total travel force (N)		15	15
Minimum operating travel (mm)		2	2
Differential travel (mm)		0.1	0.1
Maximum total travel (mm)		4.5	4.5
Mechanical life (operations)		10 <sup>7</sup>	10 <sup>7</sup>
Operating temperature (°C)		-40 → +85	-40 → +85
Protection degree		IP66/IP67/IP69	IP66/IP67/IP69
Weight (g)		75	75

## General characteristics

Conformity to standards	IEC/ EN 60947-5-1
Protection against electric shock	IEC/EN 61140 class II
Protection to environment	Resistant to hydrocarbons, mud, salt mist (400 hours), heavy dust and icing

## Electrical characteristics

Electrical endurance	Standard : 8 A 250 VAC : 30.000 operations 200 mA 24 V DC relay load L / R = 3 ms 10 <sup>7</sup> operations Dual-current : 1 mA 4 VAC : 10 <sup>7</sup> operations 200 mA 24 V DC relay load L / R = 3 ms 5 x 10 <sup>6</sup> operations 5 A 250 VAC : 30.000 operations
Dual-current	This version is designed to operate equally well on low-current (1 mA 4 V minimum recommended) or medium-current (5A) circuits. However, a given product should only be used to switch one type of circuit during its working life.

## Connections

Cable	PVC Ø5 - 3 x 0.75 mm <sup>2</sup> Standard length 0.50 m
Mounting	Max. tightening torque 9 Nm

## Product adaptations



- Special cables, special lengths, full wiring with custom connector
- Longer plunger
- Plunger with ball for lateral approach from any direction
- Threadlocker precoated barrel for easy setting and efficient securing (no nuts)
- M16x2 barrel
- SPST-NC or SPST-NO versions
- Two-pole version with same outer dimensions

## Principles

### Function

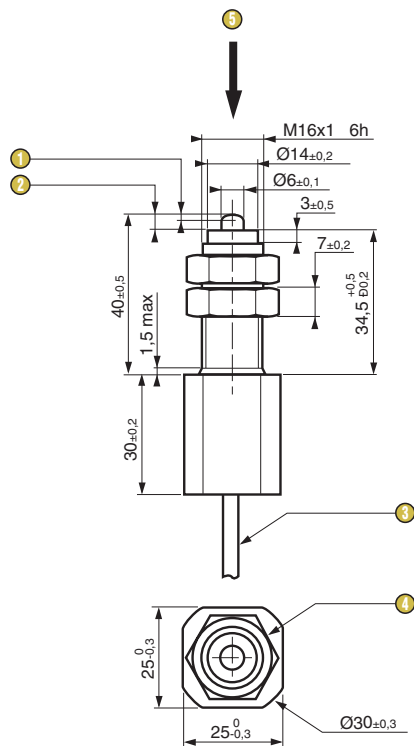
Single break two-way contact element (form C : changeover) with snap action.



- ① Black (common)
- ② Grey (NC)
- ④ Blue (NO)

## Dimensions

### → Product



- ① Operating travel
- ② Total travel
- ③ Cable Ø5 - 3 x 0.75 mm<sup>2</sup>  
Standard length 0.50 m
- ④ 21 across flats
- ⑤ Direction of operation

### Warning:

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