Imp 1

Imp 2

Description

The Imp offers safety switch performance of bigger units in the most compact case available. Designed with two mounting hole options and a choice of actuator positions, the Imp will fit in most confined spaces.

Features

- Positive operation, forced disconnection of contacts
- Contacts 1 N.C. + 1 N.O.

Specifications

Safety Ratings				
Standards		EN 954-1, ISO 13849-1, IEC/EN 60204-1, NFPA 79, EN 1088, ISO 14119, IEC/ EN 60947-5-1, ANSI B11.19, AS 4024.1		
Safety Classification		Cat. 1 Device per EN954-1 Dual channel limit switch suitable for Cat. 3 or 4 systems		
Functional Safety Data ✶ **Note**: For up-to-date information, visit *http://www.ab.com/Safety/*		B10d: > 2 x 10^6 operations at min. load PFH_D: > 3 x10^{-7} MTTFd: > 385 years Dual channel limit switch may be suitable for performance levels Ple or Pld (according to ISO 13849-1:2006) and for use in SIL2 or SIL3 systems (according to IEC 62061) depending on application characteristics		
Certifications		CE Marked for all applicable directives and CSA NRTL/C		
Outputs				
Safety Contacts ❄		1 N.C. positive break		
Auxiliary Contacts		1 N.O.		
Thermal Current I_{lth}		10 A (Ith)		
Rated Insulation Voltage		(Ui) 500V		
Switching Current @ Voltage, Min.		25 mA @ 5V DC		
Utilization Category				
AC-15	(Ue)	500V	250V	100V
	(Ie)	1 A	2 A	5 A
DC	(Ue)	250V	24V	
	(Ie)	0.5 A	2 A	
Operating Characteristics				
Actuation Speed, Max.		160 mm (6.29 in.)/s		
Actuation Speed, Min.		100 mm (3.93 in.)/min		
Actuator Travel, Max.		5 mm (0.20 in.)		
Actuation Frequency, Max.		2 cycles/s		
Mechanical Life		10,000,000 operations		
Electrical Life		1,000,000 operations		
Mechanical Life		10,000,000 operations		
Environmental				
Enclosure Type Rating		IP30		
Operating Temperature [C (F)]		-25…80° (-13…176°)		
Pollution Degree		3		
Physical Characteristics				
Housing Material		UL Approved glass-filled PBT		
Actuator Material		Stainless steel		
Mounting		2 x M4 front or 2 x M3 top		
Vibration		10…55 Hz		
Shock		11 ms @ 30 g		
Conduit Entry		3x break-outs		
Color		Red		

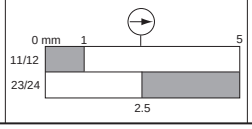
✶ Usable for ISO 13849-1:2006 and IEC 62061. Data other than B10d is based on:
- Usage rate of 1op/10 mins., 24 hrs/day, 360 days/year, representing 51840 operations per year
- Mission time/Proof test interval of 38 years

❄ The safety contacts are described as normally closed (N.C.) i.e., with the guard closed, actuator in place (where relevant) and the machine able to be started.

IEC Style Switches

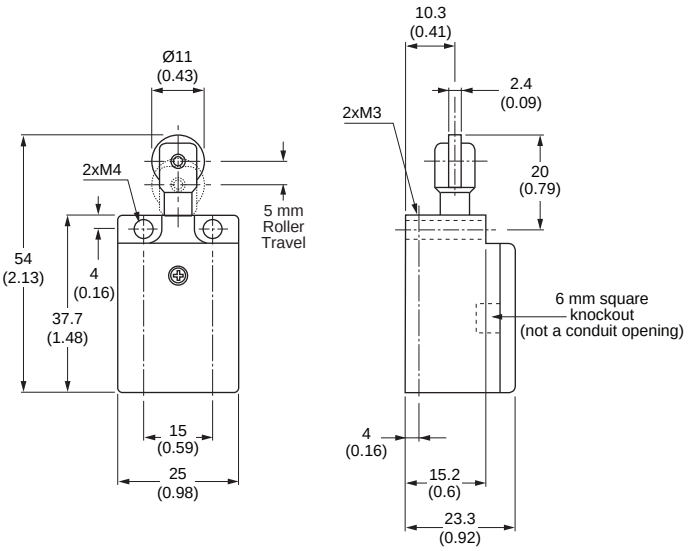
15 mm Plastic Body

Product Selection

Actuator Type	Contact		Contact Action □Open ■Closed ⊖ Positive Opening Point	Conduit	Type	Cat. No.
Top push roller	Slow break before make	1 N.C. & 1 N.O.		3 x breakouts	Imp 1 (roller parallel to switch front)	**440P-M18001**
Top push cross roller					Imp 2 (roller perpendicular to switch front)	**440P-M18002**

Approximate Dimensions [mm (in.)]

Dimensions are not intended to be used for installation purposes.



Wiring Diagrams