# Interlock Switches Hinge Switches Sprite



## Description

Developed from the highly successful Ensign, the Sprite offers the same safety related features in a more compact housing—only  $75 \times 25 \times 29$ mm (2.95 x 0.98 x 1.14in)—making it the smallest interlock currently available. The Sprite has been designed for smaller machines such as printing machines, copiers or domestic machinery which, until now, have been unable use standard safety interlocks due to space restrictions. Despite its diminutive size the Sprite includes the necessary safety related functions, such as forced guided contacts and a tamper resistant mechanism allowing machinery to be safeguarded in compliance with the machinery directive.

The Sprite's shaft is connected to the existing hinge pin and the degree of operation can be adjusted to suit the application via the adjustable cam in the switch head.

**Note:** After adjustment, the cam must be secured in position with the supplied cam locking pin to ensure optimal performance.

The Sprite is available with two N.C. or one N.O. and one N.C. safety contact in a watertight and dustproof IP67 housing.

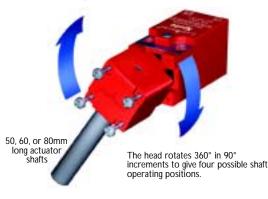
## Features

- Ideal for small, light weight guards
- The smallest hinge interlock switch available,  $75 \times 25$ mm case
- · Degree of operation can customized with adjustable cam
- Contacts, 2 N.C. or 1 N.C. & 1 N.O.
- Four possible shaft positions, easy to install

#### **Specifications** Standards EN954-1, ISO13849-1, IEC/EN60204-1, NFPA79, EN1088, ISO14119, IEC/ EN60947-5-1, ANSI B11.19, AS4024.1 Cat. 1 Device per EN954-1 Category Dual channel interlocks suitable for Cat. 3 or 4 systems Approvals CE marked for all applicable directives, cULus NRTL/C and TUV Safety Contacts 2 N.C. or 1 N.C. direct opening action Utilisation Cat AC 15 500V 250V 100V AC (Ue) (le) DC 1A 2A 5A 250V 0.5A 24V 2A Max Switched Current/ 500V/500VA Voltage/Load Thermal Current (Ith) 10A Minimum Current 5V 5mA DC >2mm (0.08in) Safety Contact Gap Rtd. Insulation Voltage (Ui) 500V (Uimp) 2500V Rtd. Impulse withstand Voltage 1 N.O. Auxiliary Contacts 3 Pollution Degree 0 Shaft Rotation for Contact Maximum 11°; Minimum 3° (adjustable) Operation Break Contact Min Force 8cNm (torque on shaft) Case Material UL approved glass filled polyester Actuator Material Stainless Steel Protection IP67 Conduit Entry 1 × M16 or quick-disconnect style **Operating Temperature** -20°C to +80°C (-4°F to 176°F) Fixing 2 x M4 Mounting Any position Mechanical Life 1,000,000 operations Electrical Life 1,000,000 operations Weight 80g (0.176lb) Colour Red

• Conductive pollution occurs, or dry, non conductive pollution occurs which becomes conductive due to condensation.

Four Position Rotating Head



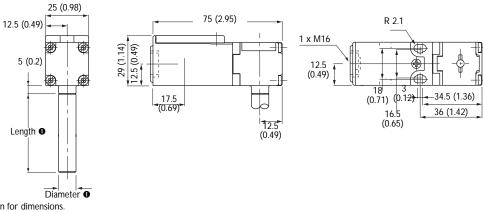


### **Product Selection**

Safety Contacts	Auxiliary Contacts	BBM/MBB	Actuator Shaft Dimensions mm (inches)	Catalogue Number			
				M16 Conduit	M16 Conduit/ 1/2in Adaptor	Quick Disconnect	
2 N.C.	_		80 x Ø10 (3.14 x 0.39)	440H-S34019	440H-S34023	440H-S34027	
			60 x Ø8 (2.36 x 0.31)	440H-S34020	440H-S34024	440H-S34028	
			50 x Ø10 (1.96 x 0.39)	440H-S34010	440H-S34017	440H-S34014	
	1 N.C.	BBM	80 x Ø10 (3.14 x 0.39)	440H-S34021	440H-S34025	440H-S34029	
1 N.C.			60 x Ø8 (2.36 x 0.31)	440H-S34022	440H-S34026	440H-S34030	
			50 x Ø10 (1.96 x 0.39)	440H-S34012	440H-S34018	440H-S34015	
Recommended standard cordset, 2m (6.5ft). See page 15-10 for additional lengths.						889D-F4AC-2	

# Approximate Dimensions-mm (inches)

Dimensions are not intended to be used for installation purposes.



• See Product Selection for dimensions.

# **Typical Wiring Diagrams**

1 N.C. + 1 N.O.	2 N.C.
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		1 N.C. + 1 N.O.		2 N.C.	
Connector Pin	out	Terminal	Contact	Terminal	Contact
	1	11	N.C.	11	N.C.
20	3	12		12	
3 4	2	23	N.O.	21	N.C.
	4	24		22	
Contact Action		1 N.C. + 1 N.O. (BBM)		2 N.C.	
Contact Open 🔳 Contact Closed		3°0°		<u>3° 0°</u>	







