#### 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  $75 \times 25 \times 29 \,\mathrm{mm}$  (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**

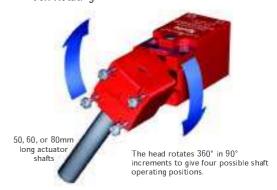
- · Ideal for small, light weight guards
- The smallest hinge interlock switch available,  $75 \times 25$ mm case
- Degree of operation can customized with adjustable cam
- Contacts, 2 N.C. or 1 N.C. & 1 N.O.
- Four possible shaft positions, easy to install

## **Specifications**

Standards	EN954-1, ISO13849-1, IEC/EN60204-1, NFPA79, EN1088, ISO14119, IEC/ EN60947-5-1, ANSI B11.19, AS4024.1			
Category	Cat. 1 Device per EN954-1 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 (Ue) (le) DC	AC 15 500V 250V 100V 1A 2A 5A 250V 0.5A 24V 2A			
Max Switched Current/ Voltage/Load	500V/500VA			
Thermal Current (Ith)	10A			
Minimum Current	5V 5mA DC			
Safety Contact Gap	>2mm (0.08in)			
Rtd. Insulation Voltage	(Ui) 500V			
Rtd. Impulse withstand Voltage	(Uimp) 2500V			
Auxiliary Contacts	1 N.O.			
Pollution Degree	3			
Shaft Rotation for Contact Operation	Maximum 11°; Minimum 3° (adjustable)			
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			

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

## Four Position Rotating Head



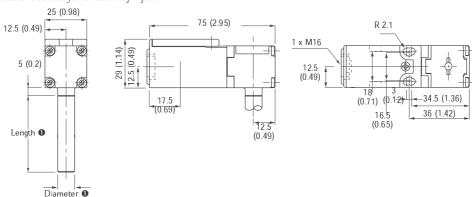


## **Product Selection**

		ввм/мвв	Actuator Shaft Dimensions mm (inches)	Catalogue Number			
Safety Contacts	Auxiliary Contacts			M16 Conduit	M16 Conduit/ 1/2in Adaptor	Quick Disconnect	
		80 x Ø10 (3.14 x 0.39)	440H-S34019	440H-S34023	440H-S34027		
2 N.C.	2 N.C. —	_	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	
		ВВМ	80 x Ø10 (3.14 x 0.39)	440H-S34021	440H-S34025	440H-S34029	
1 N.C. 1 N.C.	1 N.C.		60 x ∅8 (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			

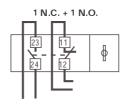
## Approximate Dimensions—mm (inches)

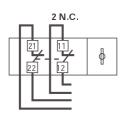
Dimensions are not intended to be used for installation purposes.



#### 1 See Product Selection for dimensions.

# **Typical Wiring Diagrams**





		1 N.C.	+ 1 N.O.	2 N.C.	
Connector Pinout		Terminal	Contact	Terminal	Contact
2 0 3 0	1	11	N.C.	11	N.C.
	3	12		12	
	2	23	N.O.	21	N.O.
	4	24	N.O.	22	N.C.

## **Contact Action**

☐ Contact Open ☐ Contact Closed Shaft rotation



