IDEM Inch Hinge Safety Switches

Inch Hinge Series Housing

- Shaft hinge (Idem Inch Hinge) interlock operated
- M16, M20, 1/2" NPT threaded opening or M12 connection
- 16.5 mm- 18mm mounting profile (Inch-X); 16.5 mm- 22mm mounting profile (MK-1)
- 25mm plastic, 30mm stainless steel housings
- · Compact body
- Plastic and stainless steel housings
- 90 degree adjustable head
- Force guided NC contacts

See electrical specifications later in this section.

IDEM Inch Hinge Series

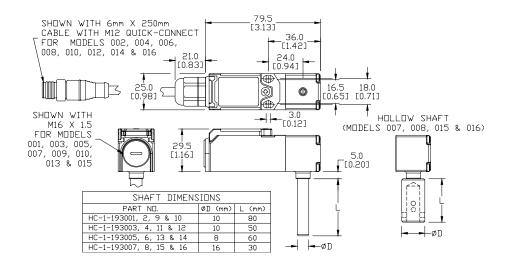


IDEM Inch Hinge Safety Switches									
Part Number	Price	Body Material	Head Material	Weight (lb)	Actuator Travel / Force for Positive Opening	Contact Configuration	Shaft Size	Connection	Dimensions
HC-1-193001	\$42.50	Plastic	316 stainless steel	0.29	7 degrees/0.5N	2 N.C. Slow action	Solid diameter 10mm x 80mm	1 x M16	Figure 1
HC-1-193002	\$72.00	Plastic	316 stainless steel	0.32	7 degrees/0.5N	2 N.C. Slow action	Solid diameter 10mm x 80mm	M12 Quick disconnect	Figure 1
HC-1-193007	\$44.50	Plastic	316 stainless steel	0.29	7 degrees/0.5N	2 N.C. Slow action	Hollow diameter 16mm x 30mm	1 x M16	Figure 1
HC-1-193008	\$74.00	Plastic	316 stainless steel	0.32	7 degrees/0.5N	2 N.C. Slow action	Hollow diameter 16mm x 30mm	M12 Quick disconnect	Figure 1

Dimensions

mm [in]

Figure 1 HC-1



IDEM Interlock Safety Switches Specifications



	Specifications							
	IDIS	INCH/MK1	нс	KM	KP/K-SS	K-15	GLx	
	Safety Classification and Reliability Data							
Switching Reliability (B10 _d)		2.5 x 106 operations at 100mA load					1.5 x 10 ⁶ operations at 100mA load	
ISO 13849-1			Up to PLe d	epending upon syster	m architecture			
EN 62061			Up to SIL3 d	epending upon syste	m architecture			
Safety Data - Annual Usage			8 cycles per	hour / 24 hours per o	lay / 365 days			
Agency Approvals		cULus (E258676), CE					cULus (E258676), CE, TUV	
Electrical and General Specifications								
Conductor Sizes		16-12 AWG (1.5 to 2.5 mm ²)						
Utilization Category	AC15, A300, 3A							
Thermal Current	10A							
Short Circuit Overload Protection	External 10A Fast Acting recommended							
Rated Insulation Voltage	600VAC 500VAC							
Contact Terminals	Stai	nless steel (Snap action	on plated brass); Max	conductor 1.5 m ² (ID	S), 2.5 m ² (KM, K/K-15	i); 1 N•m [0.74 lb•ft] to	rque	
Maximum Switching Current	2.5A @24 VDC 6A @ 120VAC, 3A @ 240VDC (720VA Break)							
Maximum Approach/Withdrawal Speed	600mm/s [23.6 in/s]					NA		
Enclosure Protection	IP67 (IP69K on all models with both stainless steel head and body)							
Operating Temperature	-25°C to 80°C [-13°F to 176°F]							
Vibration	IEC 68-2-6, 10Hz to 55Hz + 1Hz					10Hz to 500Hz 0.35 mm [0.014 in]		
Lid Screws/Torque	Plated brass 1 N•m [0.74 lb•ft]	Stainless steel T20 Torx 1 N•m [0.74 lb•ft]	Stainless steel 1 N•m [0.74 lb•ft]			Stainless steel T20 Torx 1.5 N•m [1.11 lb•ft]		
Recommended Mounting Screws/ Torque	M4 1.5 N•m [1.11 lb•ft]	M5 4N•m [2.95 lb•ft]		14 [1.11 lb•ft]		M5 4N•m [2.95 lb•ft]		
Head Screws/Torque	Stainless steel, except snap (plated brass) 1 N•m [0.74 lb•ft]	Stainless steel T20 Torx 1 N•m [0.74 lb•ft]	Stainless steel; 1 N•m [0.74 lb•ft]					

IDEM Interlock/Hinge Safety Travel Charts



Interlock Safety Switch Types

Slow-make/slow-break contacts:

A contact element in which the contact motion is dependent on the actuator speed.

Snap-action contact:

1 NO and 1 NC

Snap action contacts

2 NC

A contact element in which the contact motion is independent of the speed of the actuator. This feature ensures reliable electrical performance even in applications involving very slow moving actuators.

Contacts Configuration

1 NO and 2 NC

Slow-make/slow-break contacts

2 NO and 2 NC

3 NC

1 NO and 3 NC

Slow-make/slow-break contacts

1 NO and 1 NC Slow-make/slow-break contacts



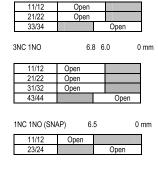
Slow-make/slow-break contacts

Slow-make/slow-break contacts

Travel Charts

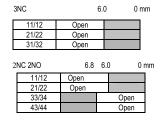


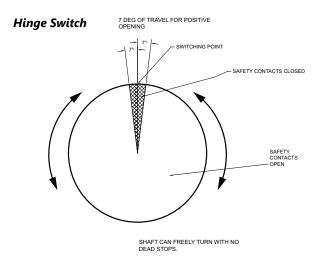
Interlock Switches 2NC 1NO



6.8 6.0

0 mm





User to ensure that by correct positioning of the shaft at installation causes the safety contacts to open such that no hazard exists to the operator when the door is opened a few degr

Safety Rope Switches

EX	1 NO/2 NC	1 NO/3 N.C.	2 NO/2 N.C.	
	11/12	11/12	11/12	
NC	21/22	21/22	21/22	
		31/32		
NO	33/34	43/44	33/44	
NO			43/44	

0 mm 3.5	mm	14.5 mm	17.0 m	nm
Latched off - Rope Slack	Tension Range (S Reset)	witch	Rope Pulled	
Open			Open	
Open			Open	
Open			Open	
	Open			
	Open			

Safety Products



Warning: Safety products sold by AutomationDirect are Safety components only. The purchaser/installer is solely responsible for the application of these components and ensuring all necessary steps have been taken to assure each application and use meets all performance and applicable safety requirements and/or local, national and/or international safety codes as required by the application. AutomationDirect cannot certify that our products, used solely or in conjunction with other AutomationDirect or other vendors' products, will assure safety for any application. Any person using or applying any products sold by AutomationDirect is responsible for learning the safety requirements for their individual application and applying them, and therefore assumes all risks, and accepts full and complete responsibility, for the selection and suitability of the product for their respective application.

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