

Hinge Wing Safety Interlock Switches

SI-HG80 Series Safety Interlock Switches Encapsulated in a Load-Bearing Hinge



Features

- Safety switch is integrated and encapsulated into a load-bearing hinge, providing a high degree of protection from intentional defeat
- Identical in appearance to non-switching blank hinge (see page 7)
- Switch components concealed inside the hinge are protected from mechanical impact, providing superior performance to actuator-activated safety switches; rated IEC IP67
- Hinge operates to a full 180° range of motion; safety switching point (guard-closed position) is adjustable over the full 0–180° operating range
- Hinge can support an axial load of 750 N and more than 1,000 N in radial direction
- When properly interfaced or used with an appropriate controller, two SI-HG80D.. switches can achieve safety category 4, per ISO 13849 (EN 954-1)
- Robust zinc die-cast housing is corrosion resistant
- Typical applications include:
 - Hinged covers and guards to machines
 - Hinged doors and gates in safety fencing systems
 - Modular aluminum framing

Models


Model	QD Connection	Contact Configuration (Closed State)	Contact Configuration (Open State)	Switching Diagram
SI-HG80DQD	Inline QD Fitting			<p>Contacts: □ Open ■ Closed ▒ Transition</p>
SI-HG80DQDR	Right-Angle QD Fitting			

NOTE: Terminal #3 is non-safety



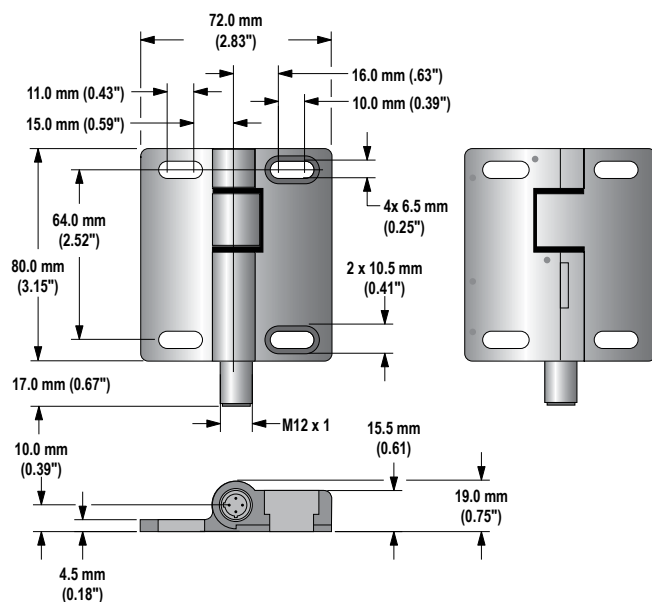
Hinge Switches – SI-HG80 Series

Specifications

Contact Rating	3A @ 250V ac max., 0.5 A @ 60V dc max. 2.5 kV max. transient tolerance NEMA A300 P300
European Rating	Utilization categories: AC15 and DC13 (IEC 90497-5-1) $U_i = 250V$ ac $I_{th} = 3A$
Minimum Switching Speed	20 operations per minute
Mechanical Life	1 million operations
Short Circuit Protection	6 amp Slow Blow, 10 amp Fast Blow. Recommended external fusing or overload protection.
Force Exerted by Guard per Switch	Axial: 750 N (165 lbf) max. Radial: 1000 N (220 lbf) max.
Operating Range	0° to 180°
Wire Connections	4-pin Micro-style quick-disconnect (QD) fitting. Cables are ordered separately; see page 7.
Construction	Zinc Die-cast (GD-Zn)
Environmental Rating	NEMA 4, IEC IP67
Operating Conditions	Temperature: -25° to +70° C (-13° to +158° F)
Weight	0.40 kg (0.88 lb)
Application Notes	To avoid excessive radial stress in applications containing large doors, the hinge switch should be mounted either in pairs of two, or in conjunction with a blank hinge (see page 7).
Certifications	

Dimensions

Model SI-HG80DQD



Model SI-HG80DQDR

