

Safety Interlock Switches

HP2008



Small Hinge-Operated Safety Interlock Switch

- Small size—allows the HP2008 hinge-operated switch to be used on smaller machines with space restrictions. Fits on 1 in. square tubing.
- NEMA 6 enclosure enables HP2008 with conduit entry to withstand water washdown cleaning.
- Rotatable head gives four possible actuator positions for versatile installation.
- Installation—the HP2008 offers both solid shaft and hollow shaft versions for maximum versatility.
- Long life—the HP2008 is designed to last a minimum of 4 million cycles.
- Safety switch conformity—the HP2008, with its force-guided contacts and tamper-resistant mechanism, conforms to the European safety standards indicated here.



Specifications

Electrical	All Models
Contact Configurations:	1 N/O + 1 N/C, 2 N/C
Safety Contacts:	1 N/C positive break, 2 N/C positive break
Switching Ability	AC: 230 V, 4 A; DC: 24 V, 4 A
Contact Material:	Silver alloy, gold flashed
Auxiliary Contacts:	1 N/O (HP2008-11 models only)
Minimum Switching Voltage:	12 V at 10 mA
Minimum Switching Current:	1 mA at 24 V
Mechanical	
Mounting:	Any position
Mounting Hardware:	2 x M4 screws (not supplied)
Break Contact Min Force:	0.1 Nm @ 20°C
Switching Principle:	Slow-action contact element
Max Actuation Frequency:	5000 cycles/hour
Case Material:	Glass-fibre reinforced thermoplastic
Actuator Shaft Material:	Stainless steel
Wiring Entry:	1 x M16
Weight:	74 g (2.6 oz.)
Color:	Black with red lid
Mechanical Life:	4 x 10 ⁶ minimum
Environmental	
Protection:	IP67 (NEMA 6)
Operating Temperature:	-20 to 80°C (-4 to 176°F)
Cleaning:	Water washdown
Compliance	
Standards:	EN1088, EN292, EN60947-5-1, EN60204-1
Approvals/Listings:	CE marked for all applicable directives, UL and C-UL

Specifications are subject to change without notice.

Note: The safety contacts of the Omron STI switches are described as normally closed (N/C)—i.e., with the guard closed, actuator in place, and the machine able to be started.



Conforms to EN1088, EN292, EN60947-5-1, EN60204-1
UL and C-UL listed

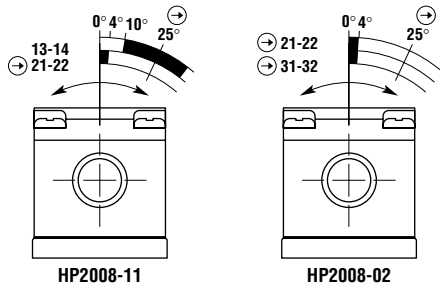
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Actual Size



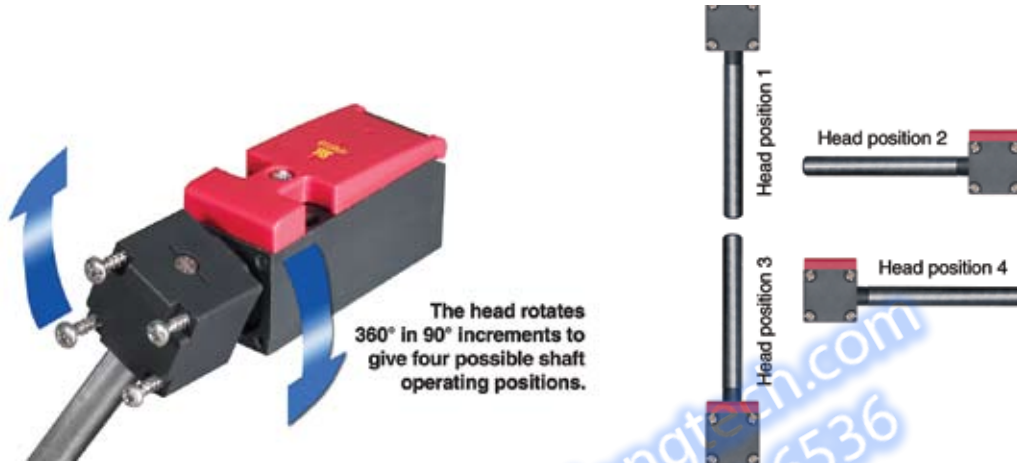
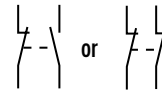
Operation

Switching Diagram



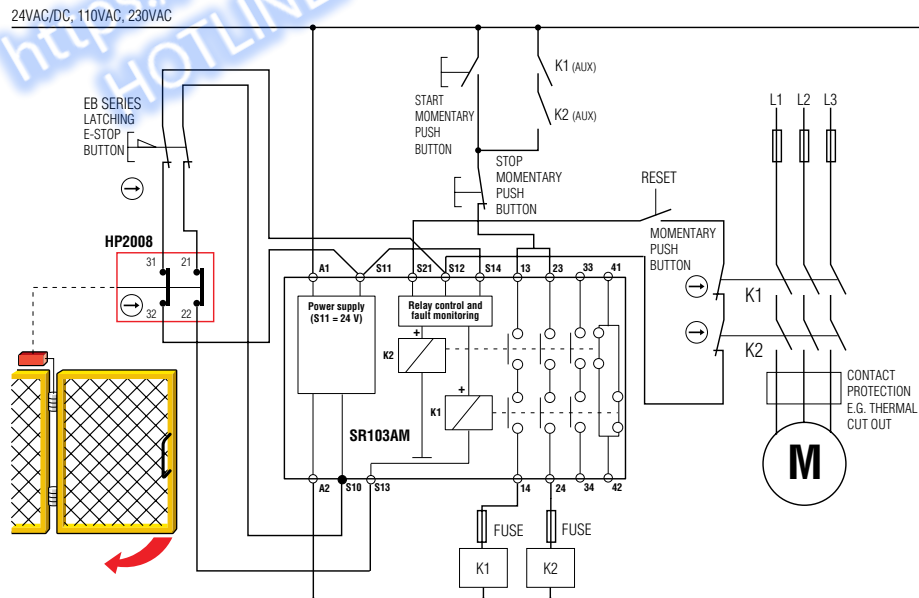
Note: Shaft must rotate 25 degrees in order to assure proper operation of the Force Guided Contacts in the event of contact weld or failure.

Contact Arrangement



Applications

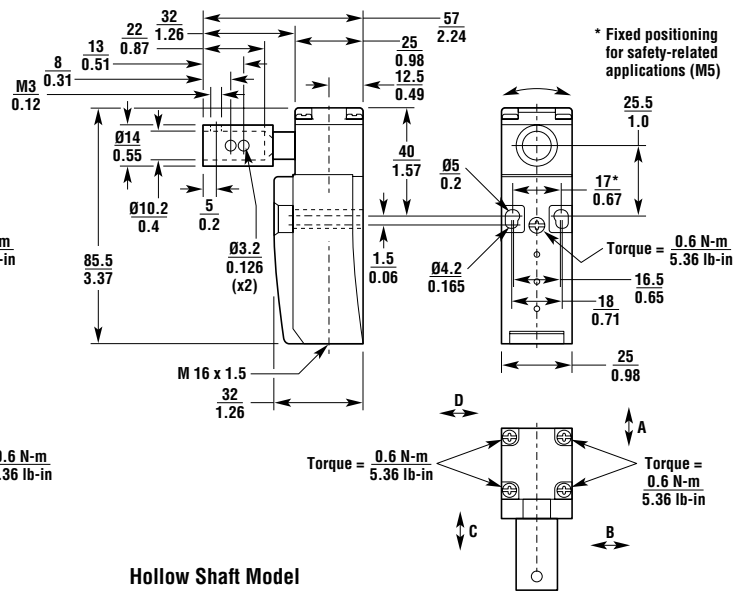
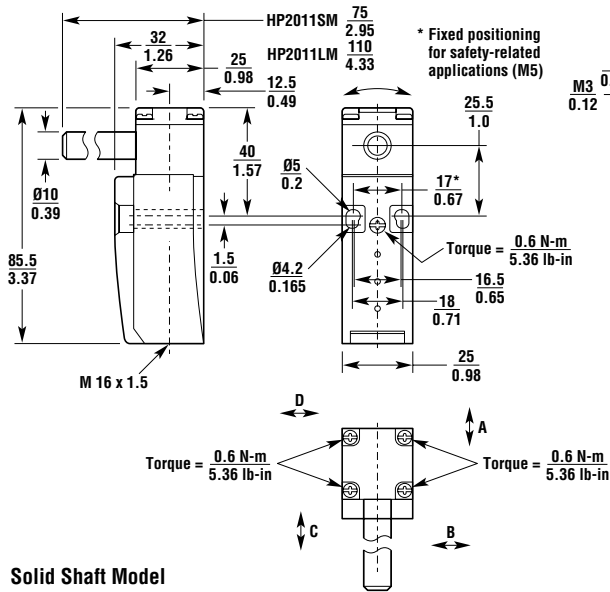
Typical applications are on small swinging guard doors, providing a tamper resistant switch free of misalignment problems.



For a full explanation of the circuit operating principle and fault detection, see "Common Circuit Examples" in The Safety Library Section of this catalog.

Dimensions

(mm/in.)



Ordering

Model	Contacts	Wiring Entry	Part No.
HP2008 75 mm SHAFT			
HP2008-11SM	1 N/C + 1 N/O	1 x M16 + NPT adapter	44542-0010
HP2008-02SM	2 N/C	1 x M16 + NPT adapter	44542-0020
HP2008 110 mm SHAFT			
HP2008-11LM	1 N/C + 1 N/O	1 x M16 + NPT adapter	44542-0110
HP2008-02LM	2 N/C	1 x M16 + NPT adapter	44542-0120
HP2008 HOLLOW SHAFT			
HP2008-11HM	1 N/C + 1 N/O	1 x M16 + NPT adapter	44542-0210
HP2008-02HM	2 N/C	1 x M16 + NPT adapter	44542-0220
SWITCH ONLY MODELS (no adapters included)			
HP2008 75 mm Shaft			
HP2008-11S	1 N/C + 1 N/O	1 x M16	44542-2010
HP2008-02S	2 N/C	1 x M16	44542-2020
HP2008 110 mm Shaft			
HP2008-11L	1 N/C + 1 N/O	1 x M16	44542-2110
HP2008-02L	2 N/C	1 x M16	44542-2120
HP2008 Hollow Shaft			
HP2008-11H	1 N/C + 1 N/O	1 x M16	44542-2210
HP2008-02H	2 N/C	1 x M16	44542-2220
Accessories			
SC12-M16A00 M16 to 1/2 in. adapter			44512-0300

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