

HS1B/HS2B Interlock Switches

Interlock Switch

Model	Contact Configuration	Indicator	Part No.
HS1B	1NC-1NO 	—	HS1B-11R
		With	HS1B-114R-*
HS1B	2NC 	—	HS1B-02R
		With	HS1B-024R-*
HS2B	1NC-1NO 	—	HS2B-11NB
		With	HS2B-114NB-*

The contact configuration represents the status when the actuator is inserted.

- Special key wrench HS9Z-T1 is supplied with the HS1B interlock switch.
- Specify an indicator color code in place of * in the Part No.
G: green, R: red
- Actuator is not attached to the interlock switch and must be ordered separately.

Contact Ratings

Rated Insulation Voltage (Ui)		300V (between LED and ground: 60V)			
Rated Thermal Current (Ith)		10A			
Rated Voltage (Ue)		30V	125V	250V	
Rated Current (Ie) (Note)	AC	Resistive load (AC-12)	10A	10A	6A
		Inductive Load (AC-15)	10A	5A	3A
	DC	Resistive load (DC-12)	8A	2.2A	1.1A
		Inductive Load (DC-13)	4A	1.1A	0.6A

- Minimum applicable load (reference value): 3V AC/DC, 5 mA
(Applicable range is subject to the operating conditions and load.)

Specifications

Applicable Standards	ISO14119 EN1088 IEC60947-5-1 EN60947-5-1 (TÜV approved) GS-ET-15 (TÜV approved) UL508 (UL listed) CSA C22.2 No.14 (c-UL listed) IEC 60204-1/EN 60204-1 (applicable standards for use)
Applicable Directive	2006/95/EC (Low Voltage Directive) and 2006/42/EC (Machinery Directive)
Operating Temperature	-20 to 70°C (no freezing)
Relative Humidity	45 to 85% (no condensation)
Storage Temperature	-40 to +80°C (no freezing)
Pollution Degree	3
Impulse Withstand Voltage	4 kV
Insulation Resistance (500V DC megger)	Between live and dead metal parts: 100 MΩ minimum Between live metal part and ground: 100 MΩ minimum Between live metal parts: 100 MΩ minimum Between terminals of the same pole: 100 MΩ minimum
Electric Shock Protection	HS1B: Class I (IEC 61140) HS2B: Class II (IEC 61140)
Degree of Protection	IP67 (IEC 60529)
Shock Resistance	Damage limits: 1000 m/s ²
Vibration Resistance	Operating extremes: 10 to 55 Hz, amplitude 0.5 mm Damage limits: 30 Hz, amplitude 1.5 mm
Actuator Operating Speed	0.05 to 1.0 m/s
Direct Opening Travel	11 mm minimum
Direct Opening Force	HS1B, HS2B (without actuator retaining mechanism): 20N minimum HS2B (with actuator retaining mechanism): 36N minimum
Operating Frequency	900 operations per hour
Mechanical Life	1,000,000 operations minimum (GS-ET-15)
Electrical Life	100,000 operations minimum (operating frequency 900 operations per hour, load AC-12, 250V, 6A)
Conditional Short-circuit Current	100A (250V) (Use 250V/10A fast-blow fuse for short-circuit protection.)
Weight (approx.)	HS1B: 280g HS2B: 130g

Actuators, Special Key Wrench, and Plug

Actuator is not supplied with the interlock switch, and must be ordered separately.

Description	Part No.
Straight Actuator (mainly for sliding doors)	HS9Z-A1
Right-angle Actuator (mainly for hinged doors)	HS9Z-A2
Angle Adjustable Actuator (mainly for hinged doors)	HS9Z-A3
Special Key Wrench for HS1B	HS9Z-T1
Conduit Port Plug for HS2B	HS9Z-P1

Note: Ratings approved by safety agencies: A300: AC-15 3A/250V

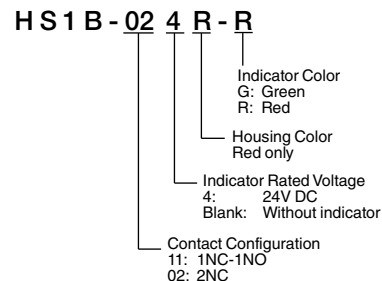
Indicator

Rated Voltage	24V DC
Rated Current	10 mA
Light Source	LED
Light Color	G (green), R (red)

- The lens cannot be replaced.

Part No. Development

HS1B



HS2B

