

## HS6B Series Sub-Miniature Interlock Switch

### HS6B

**Key features include:**

- Only 30mm x 15mm x 78mm
- Allows highest level of safety by having 3 contacts: dual load contacts + monitoring contact (ISO13849-1, EN954-1)
- Two key entrances provide flexibility for installation options
- Integral molded cable reduces wiring time
- IP67 (IEC60529) watertight sealing (contact is sealed, housing allows drainage)
- Direct Opening Action: Opening the door forces the contacts to disconnect even if the contacts are welded (IEC/EN60947-5-1)
- Keys comply with ISO14119 and EN1088



B1

Safety Products



GS-ET-15  
BG standard in Germany



Direct Opening

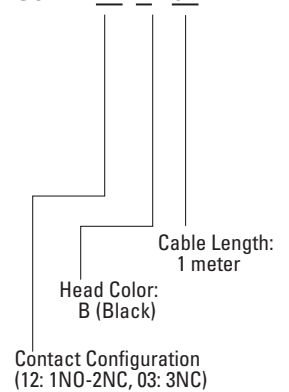


Double Insulation

Specifications	<b>Conforming to Standards</b>		EN1088, IEC60947-5-1, EN60947-5-1, GS-ET-15, IEC60664-1, IEC60204-1, EN60204-1				
	<b>Operating Temperature</b>		-25 to +70°C (no freezing)				
	<b>Storage Temperature</b>		-40 to +80°C (no freezing)				
	<b>Operating Humidity</b>		45 to 85% RH (no condensation)				
	<b>Storage Humidity</b>		95% RH maximum (no condensation)				
	<b>Altitude</b>		2,000m maximum				
	<b>Pollution Degree</b>		3				
	<b>Rated Insulation Voltage (Ui)</b>		300V				
	<b>Impulse Withstand Voltage (Uimp)</b>		4kv				
	<b>Insulation Resistance</b>		Between live & dead metal parts: 100MΩ maximum (at 500VDC mega) Between positive & negative live parts: 100MΩ minimum (at 500VDC mega)				
	<b>Electric Shock Protection Class</b>		Class II				
	<b>Degree of Protection</b>		IP67 (IEC60529)				
	<b>Vibration Resistance</b>	<b>Operating Extremes</b>	5 to 55 Hz, half amplitude 0.5 mm				
		<b>Damage Limits</b>	30Hz, half amplitude 1.5mm				
	<b>Contact Resistance</b>		300mΩ maximum				
	<b>Shock Resistance</b>	<b>Operating Extremes</b>	300m/s <sup>2</sup>				
		<b>Damage Limits</b>	1000m/s <sup>2</sup>				
	<b>Direct Opening Travel</b>		8 mm minimum				
	<b>Direct Opening Force</b>		60N minimum				
	<b>Thermal Current (Ith)</b>		2.5A				
	<b>Rated Operating Current (Ie)</b>		Rated operating voltage (Ue)		30V	125V	250V
			AC	Resistive load (AC12)	–	2.5A	1.5A
				Inductive load (AC15)	–	1.5A	0.75A
			DC	Resistive load (DC12)	2.5A (2A)	1.1A (0.4)A	0.55A (0.2A)
Inductive load (DC13)				2.3A (1A)	0.55A (0.22A)	0.27A (0.1A)	
<b>Maximum Actuation Frequency</b>		1200 operations/hour					
<b>Mechanical Life</b>		1,000,000 operations (at full rated load)					
<b>Recommended Actuation Speed</b>		0.05 to 1.0m/s					
<b>Wire Tensile Strength</b>		50N minimum					
<b>Electrical Life</b>		100,000 operations (at full rated load)					
<b>Conditional Short-Circuit Current</b>		50A 250V (IEC60947-5-1, IEC60269-1, -2)					
<b>Weight</b>		120g					

### Ordering Information

HS6B - 12 B 01



**Part Numbers**

**Part Numbers: Body**

Part Number	Contact Configuration	Cable Length
HS6B-12B01	2NC-1NO	1m
HS6B-03B01	3NC	

1. The keys are not included, must be ordered separately.
2. Longer cables can be obtained, contact IDEC for details.



**B1**

**Safety Products**

**Part Numbers: Keys**

Part Number	Shape
HS9Z-A61	Straight (Mainly for sliding doors)
HS9Z-A62	L-shaped (Mainly for hinged doors)
HS9Z-A65	adjustable key 90° angle
HS9Z-A66	adjustable key 180° angle

**Installation Notes**

**Recommended Screw Torque**

- Safety switch body installation (M4 screw): 1.0~1.5N-m
- Actuator installation (M4 screw): 1.0~1.5N-m

**Handling Cables**

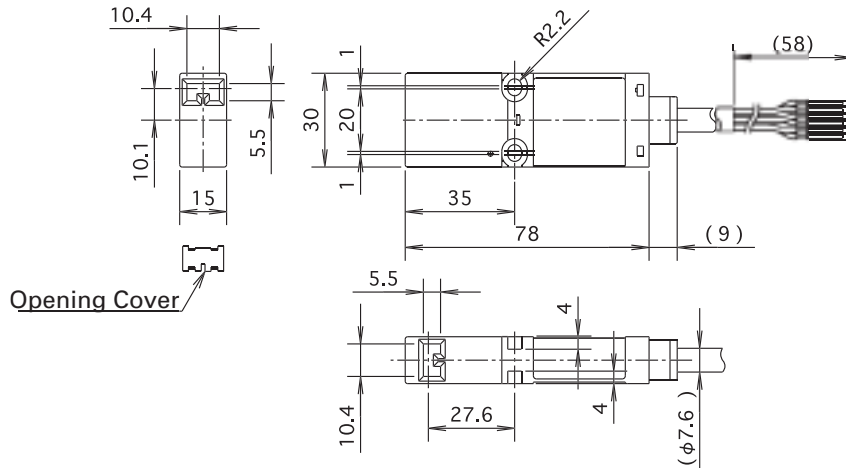
- Do not tighten or loosen the fastened cable conduit of the safety switch
- Minimum bend radius of installed cable: 40mm

**Wiring Designations**

Part Number	Color	Contact
HS6B-12 (2NC-1NO)	blue-blue/white	NC
	brown-brown/white	NC
	orange-orange/white	NO
HS6B-03 (3NC)	blue-blue/white	NC
	brown-brown/white	NC
	orange-orange/white	NC

## Dimensions

### HS6B

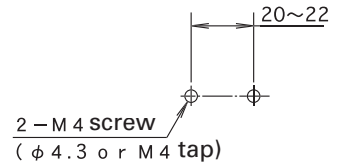


Opening Cover



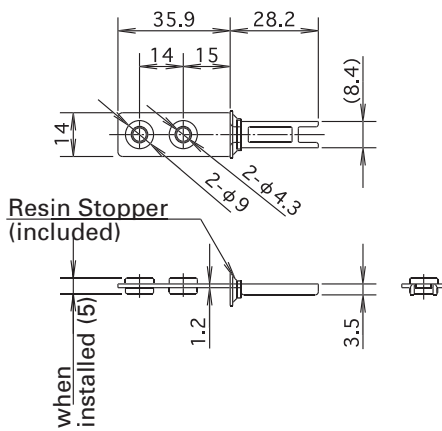
Cover the unused key opening with cover provided.

### Installation



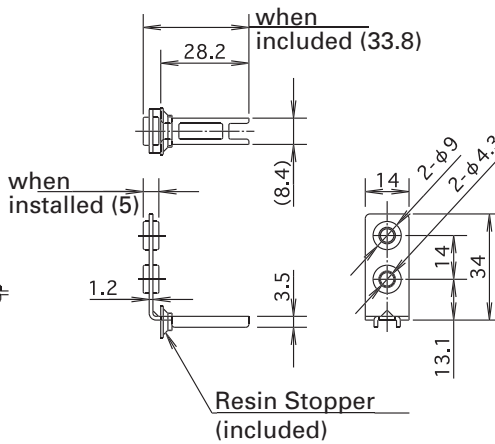
Can be installed either frontwards or backwards.

### HS6B - using straight key (HS9Z-A61)

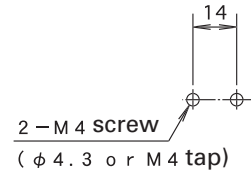


Remove resin stopper after key installation. It is only used for positioning.

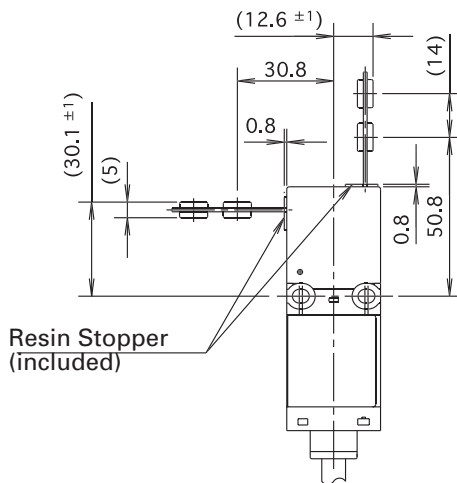
### HS6B - using the L-shaped key (HS9Z-A62)



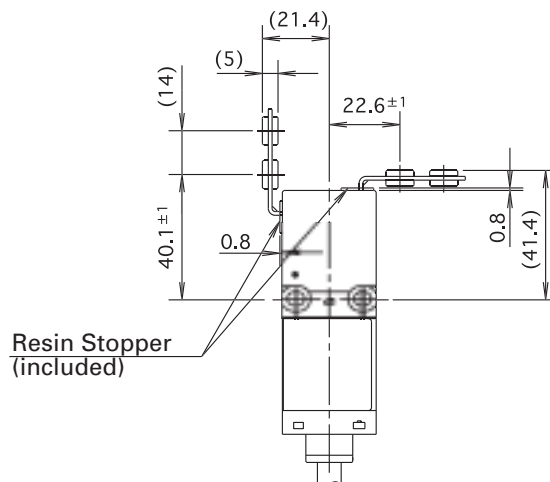
### Key Installation



### HS6B Standard Key Installation - straight key (HS9Z-A61)



### HS6B Standard Key Installation - L-shaped key (HS9Z-A62)



All dimensions in mm.