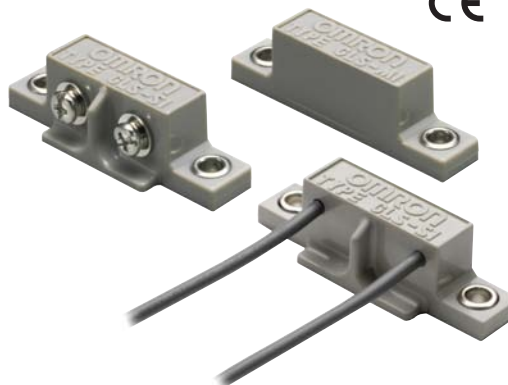



## Easy-to-use, Simple Magnetic Proximity Sensor

- Permanent magnetic used to operate the reed switch.
- Ideal for detecting opening and closing of doors.



 Be sure to read *Safety Precautions* on page 2.

For the most recent information on models that have been certified for safety standards, refer to your OMRON website.

## Ordering Information

### Terminal Block Model (Sensor)

Name	Model
Set	GLS-1
Sensor	GLS-S1
Magnet	GLS-M1

### Pre-wired Model (Sensor)

Name	Cable length	Model
Set	1 m	GLS-1L
Sensor		GLS-S1-L

Note: A magnet of the Pre-wired Model can not be purchased separately. The magnet specifications are different for Pre-wired Models and Terminal Block Models.

## Ratings and Specifications

Item	Model	GLS-1	GLS-1L
Sensing distance		15 mm *1	
Contact circuit		SPST-NO	
Switching capacity *2		Maximum operating voltage: 100 VDC Maximum operating current: 0.1 A DC Maximum switching capacity: 10 W (for both open and closed contacts)	
Contact dielectric strength		250 VDC for 1 min with a leakage current of 1 mA max.	
Response frequency		20 Hz max.	
Ambient temperature range		Operating/Storage: -20 to 60°C (with no icing or condensation)	
Ambient humidity range		Operating/storage: 35% to 85% (with no condensation)	
Contact resistance		150 mΩ max.	250 mW max. (including conductor resistance of lead wire)
Dielectric strength		1,000 VAC for 1 min between terminals and case	
Life expectancy		50,000,000 times min. with 0.1-A resistive load at 24 VDC	
Vibration resistance		Destruction: 10 to 55 Hz, 1.5-mm double amplitude for 2 hours each in X, Y, and Z directions	
Shock resistance		Destruction: 300 m/s <sup>2</sup> 3 times each in X, Y, and Z directions	
Degree of protection		IP40 (IEC)	IP62 (IEC)
Connection method		Terminal block	Pre-wired (standard cable length: 1 m)
Materials	Sensor	ABS	
	Magnet		

\*1. Notice that the actual distance is 15 mm min.

\*2. AC power cannot be used.

## Safety Precautions

Refer to *Warranty and Limitations of Liability*.

**⚠ WARNING**

This product is not designed or rated for ensuring safety of persons either directly or indirectly. Do not use it for such purposes.

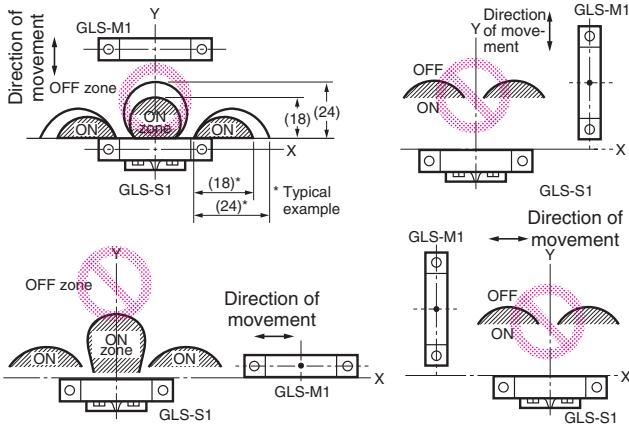


### Precautions for Correct Use

Do not use this product under ambient conditions that exceed the ratings.

● **Design**

**Sensing area**



- : Assumed direction of movement
- ⊗ : May turn ON/OFF multiple times during each pass

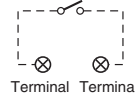
● **Mounting**

**Mounting**

The characteristics of the GLS will change if the GLS is mounted to ferrous materials, such as a steel plate.

● **Wiring**

**Internal Wiring Diagram**



● **Miscellaneous**

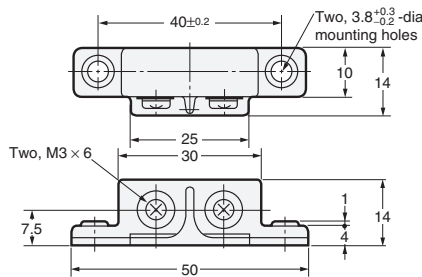
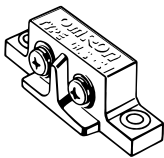
Do not impose excessive shock on the Sensor (e.g., dropping the Sensor from a height of 800 mm or more). Otherwise, the Sensor may malfunction (remain OFF).

Currents or voltage exceeding the switching capacity applied to the Sensor may also cause the Sensor to malfunction (remain ON).

## Dimensions

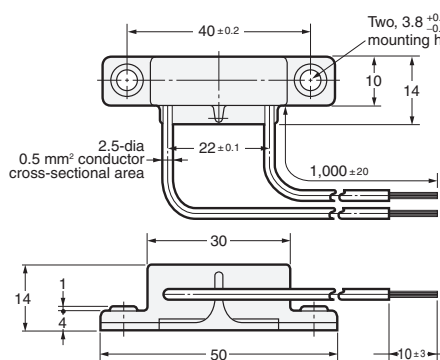
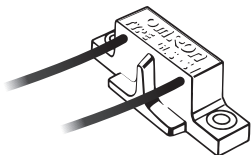
(Unit: mm)  
Tolerance class IT16 applies to dimensions in this data sheet unless otherwise specified.

**Sensor (terminal block)**  
**GLS-S1**

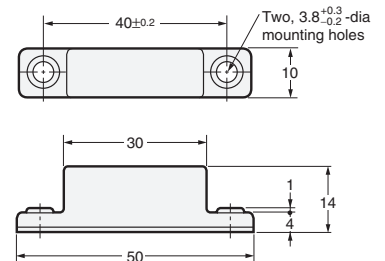
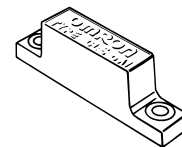


Note: Tighten each M3 screw of the terminal block to a torque of 0.59 N·m. max.

**Sensor (pre-wired)**  
**GLS-S1-L**



**Magnet**  
**GLS-M1**



Note: The shape of the magnet is the same for Pre-wired Models and Terminal Block Models, but the magnet specifications are different.

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