

Model DWS / DWM Door Monitoring Sensor



□Model List

Door monitoring sensor body

Magnetic code1	DWS-1
Magnetic code2	DWS-2

Door monitoring sensor detection target

Magnetic code1	DWM-1
Magnetic code2	DWM-2

Application

- By detecting the opening and closing of the door, such as a food factory to prevent fraud and theft.
- Open and close monitoring of the entrance door, such as drawers and safe.
- Opening and closing and fault monitoring of the automatic door.
- Monitoring of rack door open/close in the data center
- Monitoring of door open/close on the slot machine

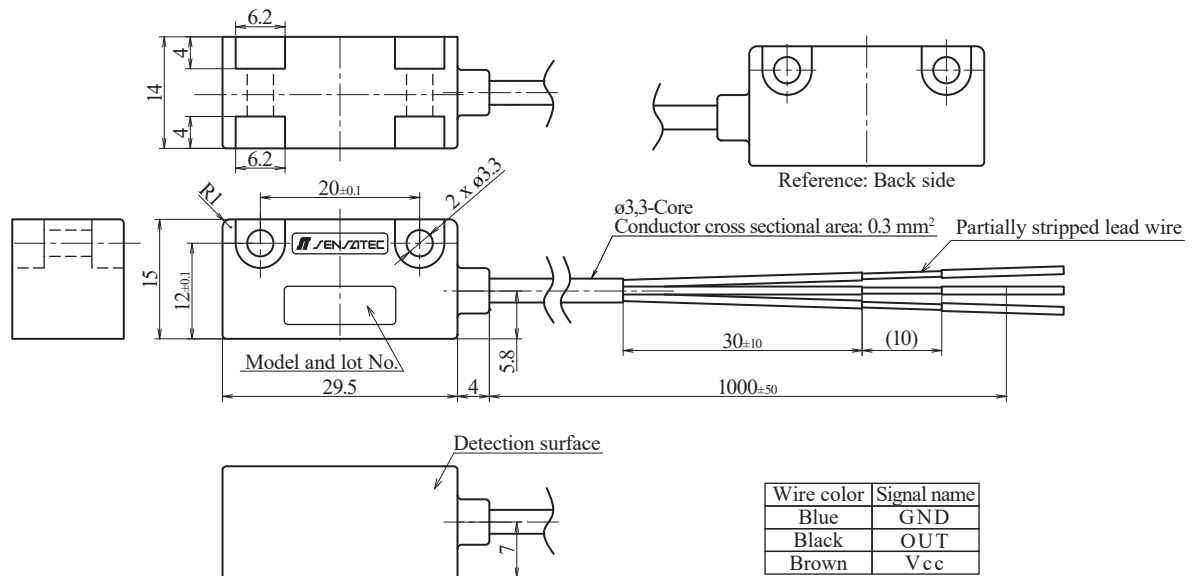
Characteristics

- Small type for an easy installation even in shallow and narrow places.
- Molded type that can be used safely even in places where water may splash.
- In order to avoid malfunction in the commercially available magnet, it is equipped with many sensors.

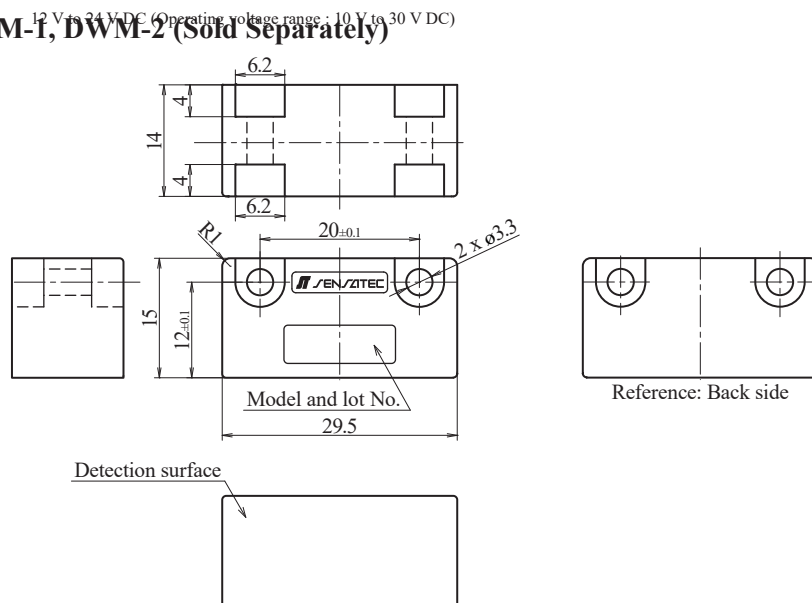
Rating / Performance

Model	DWS-1	DWS-2
Detection Surface	Front side detection	
Detection Distance	3.5 mm or more	
Set Distance	0 to 3 mm	
Standard Detection Target	DWM-1	DWM-2
Power Supply Voltage	12 V to 24 V DC (Operating voltage range : 10 V to 30 V DC)	
Power Consumption	10 mA DC or less	
Output	Nch MOSFET open drain 30 V DC 50 mA DC or less	
Output Residual Voltage	1 V DC or less (Load current 50 mA DC)	
Operation Configuration	Normally open, on output with specified magnetic code (Standard detection target)	
Response Time	200 ms or less	
Operating Temperature Range	-10 to 60 °C (-20 to 70 °C during storage)(Without dew condensation or freezing)	
Operating Humidity Range	95% RH or less (95% RH or less during storage)(Without dew condensation)	
Withstand Voltage	1 min at 1000 V AC (Between the live part and installation part)	
Insulation Resistance	100 MΩ or more measured with an ohmmeter at 500 V DC(Between the live part and installation part)	
Vibration Resistance	Durability: 2 hours in each X, Y, Z direction at 10 to 55 Hz and with peak-to-peak amplitude of 1.5 mm (At power off)	
Shock Resistance	Durability: 3 times at 500 m/s ² in each X, Y, Z direction (At power off)	
Circuit Protection	With protection diodes to protect the sensor from reverse connection to the power supply and output surges	
Protection Rating	IP67	
Case Material	ABS	
Cable	ø3, 3-core round cord of 0.3 mm ² and 1 m in length (Oil and heat resistant)	
Weight	Approx. 24 g (DWM : Approx. 9 g)	

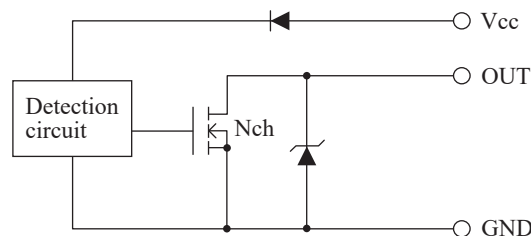
External Dimensions Diagram



Magnet : DWM-1, DWM-2 (Sold Separately)



Output Circuit



Usage Precautions

1. Always use a standard detector DWM-1 in the DWS-1, using the standard detector DWM-2 in the DWS-2.
 It does not operate a combination of DWM-1 to DWM-2 and DWS-2 to DWS-1.
 Please attach so as to be parallel to the DWS and DWM at the time of detection.
2. In 0.59N · m (6kgf · cm) or less of torque, installed in two of the M3 screw.
3. See Electromagnetic sensor general usage precautions for other precautions.