

Model MGD-25M/25U Electromagnetic Sensor



MGD-25M

MGD-25U

Model List	Detection Surface
MGD-25M	Front side
MGD-25U	Upper side

Application

- Detection of magnetic
- Detection of the position of the multi-storey car park, etc.

Features

- Does not use any contact point, thus preventing poor contact problems and contact welding caused by wiring capacity.
- Separate output for the N pole and the S pole.
- The magnetism can be detected with a magnet or a magnet coil.
- Up to 27 addresses can be set with three sensors.

Rating / Performance

Model	MGD-25M	MGD-25U
Detection Surface	Front side detection	Upper side detection
Detection Sensitivity	Detection : 6.0 mT (60 G) or more (At the standard point), Reset : 0.5 mT (5 G) or less (At the standard point)	
Power Voltage	24 V DC \pm 10 %	
Power Consumption	30 mA DC or less	
Output	NPN transistor open collector 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 with magnetic field)	
Operation Display	Red LED (lit when On output with N pole), Green LED (Lit when On output with S pole)	
Response Frequency	500 Hz or more	
Temperature Range	-25 to 70 °C (-25 to 70 °C during storage)(Without dew condensation or freezing)	
Humidity Range	98% RH or less (98% RH or less during storage)(Without dew condensation)	
Breakdown Voltage	1 min at 1000 V AC 50/60 Hz (Between the live part and case)	
Insulation Resistance	50 M Ω or more measured with an ohmmeter at 500 V DC (Between live parts and the case)	
Vibration Resistance	Durability : 10 to 55 Hz, Double amplitude: 1.5 mm in X-, Y-, and Z-direction, each 2 hours (Device not powered)	
Shock Resistance	Durability : 3 times at 500 m/s ² (approx. 50 G) in each X, Y, Z direction (At power off)	
Ingress Protection	IP67	
Case Material	PBT reinforced with glass-fiber	
Cable	ϕ 6.6, 4-core round cord of 0.5 mm ² and 2 m in length (VCTF)	
Weight	Approx. 148 g	

Address Setting Example

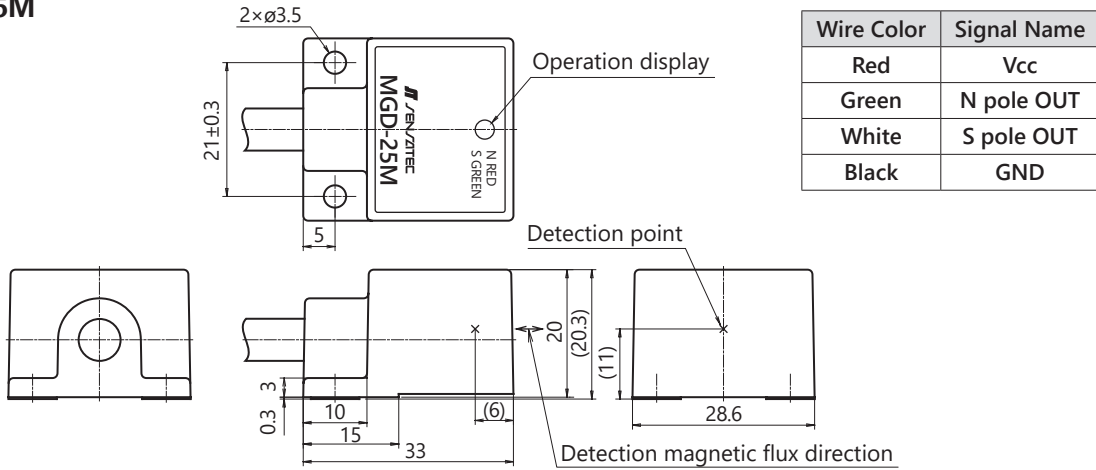
Address	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
S1	—	N	—	—	S	—	—	N	N	—	S	S	—	N	N	—	S	S	—	N	N	S	S	S	N	N	S
S2	—	—	N	—	—	S	—	N	—	N	S	—	S	S	—	N	N	—	S	N	S	N	S	N	S	N	S
S3	—	—	—	N	—	—	S	—	N	N	—	S	S	—	S	S	—	N	N	S	N	N	N	S	S	N	S

Reference Detection Distances

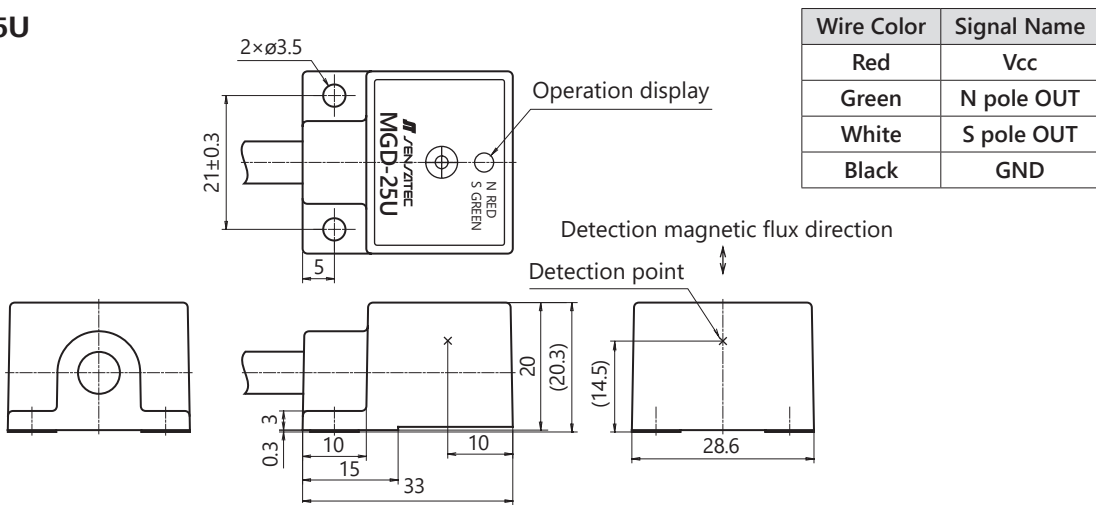
Model	Material	Detection Distance	Reset Distance
MG10-10-T	Neodymium	Approx. 22 mm	Approx. 25 mm
MG10-10-F	Ferrite	Approx. 12 mm	Approx. 14 mm

Dimensions

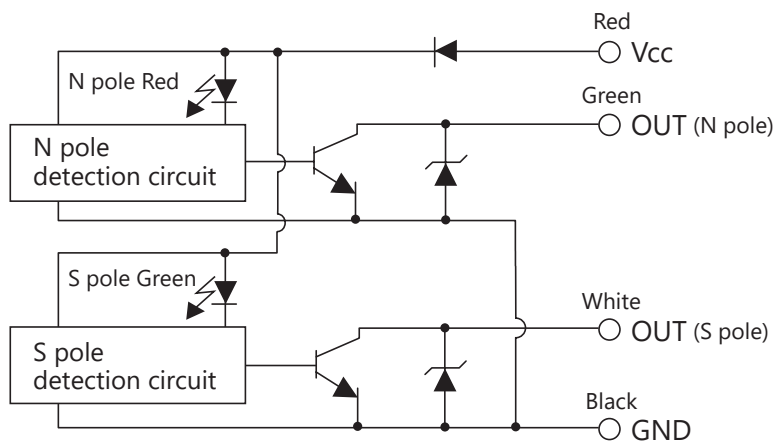
MGD-25M



MGD-25U



Output Circuit



*For other precautions, refer to "General Precautions" for electromagnetic sensors.