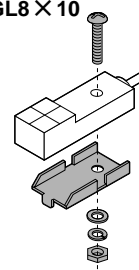


GL-8/8U

OPTION

Designation	Model No.
Sensor mounting bracket	MS-GL8 X 10

Sensor mounting bracket • MS-GL8 X 10



1 pc. each of M3 (length 12 mm 0.472 in) truss head screw, nut, spring washer and plain washer is attached.

NOTE: Sensor mounting bracket (MS-GL8 X 10) is available in units of ten.

SPECIFICATIONS

Item	Type	DC 3-wire type				DC 2-wire type			
		Front sensing		Top sensing		Front sensing		Top sensing	
		Model No.	GL-8F X 10	GL-8FB X 10	GL-8H X 10	GL-8HB X 10	GL-8FU X 10	GL-8FUB X 10	GL-8HU X 10
	Different frequency	GL-8FI X 10	GL-8FIB X 10	GL-8HI X 10	GL-8HIB X 10	GL-8FUI X 10	GL-8FUIB X 10	GL-8HUI X 10	GL-8HUIB X 10
Max. operation distance (Note 1)		2.5 mm 0.098 in ± 20 %							
Stable sensing range (Note 1)		0 to 1.8 mm 0 to 0.071 in							
Standard sensing object		Iron sheet 15 × 15 × t 1 mm 0.591 × 0.591 × t 0.039 in							
Hysteresis		20 % or less of operation distance							
Supply voltage		12 to 24 V DC ± 10 %							
Current consumption		15 mA or less				0.8 mA or less (Note 2)			
Output		NPN open-collector transistor • Maximum sink current: 100 mA (Note 3) • Applied voltage: 30 V DC or less (between output and 0 V) • Residual voltage: 1 V or less (at 100 mA sink current) 0.4 V or less (at 16 mA sink current)				Non-contact DC 2-wire type • Load current: 3 to 70 mA (Note 4) • Residual voltage: 3 V or less (Note 5)			
Utilization category		DC-12 or DC-13							
Output operation		Normally open	Normally closed	Normally open	Normally closed	Normally open	Normally closed	Normally open	Normally closed
Short-circuit protection		Incorporated							
Max. response frequency		1 kHz							
Operation indicator		Orange LED (lights up when the output is ON)							
Environmental resistance	Pollution degree	3 (Industrial environment)							
	Protection	IP67 (IEC)							
	Ambient temperature	- 25 to + 70 °C - 13 to + 158 °F, Storage: - 30 to + 80 °C - 22 to + 176 °F							
	Ambient humidity	35 to 95 % RH, Storage: 35 to 95 % RH							
	EMC	EN 50081-2, EN 50082-2, EN 60947-5-2							
	Voltage withstandability	1,000 V AC for one min. between all supply terminals connected together and enclosure							
	Insulation resistance	50 MΩ, or more, with 250 V DC megger between all supply terminals connected together and enclosure							
	Vibration resistance	10 to 55 Hz frequency, 1.5 mm 0.059 in amplitude in X, Y and Z directions for two hours each							
Shock resistance	1,000 m/s ² acceleration (100 G approx.) in X, Y and Z directions for three times each								
Sensing range variation	Temperature characteristics	Over ambient temperature range - 25 to + 70 °C - 13 to + 158 °F: within $\pm 15\%$ of sensing range at + 20 °C + 68 °F							
	Voltage characteristics	Within ± 2 % for ± 10 % fluctuation of the supply voltage							
Material		Enclosure: Polyallylate							
Cable		0.15 mm ² 3-core cabtyre cable, 1 m 3.281 ft long				0.15 mm ² 2-core cabtyre cable, 1 m 3.281 ft long			
Cable extension		Extension up to total 100 m 328.084 ft is possible with 0.3 mm ² , or more, cable.				Extension up to total 50 m 164.042 ft is possible with 0.3 mm ² , or more, cable.			
Weight		13 g approx.				12 g approx.			

- Notes: 1) The maximum operation distance stands for the maximum distance for which the sensor can detect the standard sensing object. The stable sensing range stands for the sensing range for which the sensor can stably detect the standard sensing object even if there is an ambient temperature drift and/or supply voltage fluctuation.
- 2) It is the leakage current when the output is in the OFF state.
- 3) When the ambient temperature is + 60 to + 70 °C + 140 to + 158 °F, the maximum sink current varies depending on the ambient humidity. Refer to 'I/O CIRCUIT AND WIRING DIAGRAMS' on p.707 for more details.
- 4) The maximum load current varies depending on the ambient temperature. Refer to 'I/O CIRCUIT AND WIRING DIAGRAMS' on p.707 for more details.
- 5) When the cable is extended, the residual voltage becomes larger according to the resistance of the cable.