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Sensors

Inductive Proximity Sensors >

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GX-F12A-P

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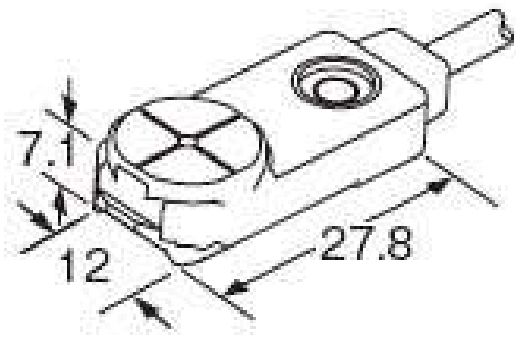
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GX-F12A-P | Rectangular-shaped Inductive Proximity Sensor GX-F/H



*Photo may vary from actual product.



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Product Number	GX-F12A-P
Number	GX-F12A-P
Product	Rectangular-shaped Inductive Proximity Sensor



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Details

PNP output

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As of April 26, 2025 (JST)
*Specifications and design of the products are subject to change without notice for the product improvement.

Spec Detail

Specifications and design of the products are subject to change without notice for the product improvement.

Item	Specifications
Product Number	GX-F12A-P
Part Number	GX-F12A-P
Products Name	Rectangular-shaped Inductive Proximity Sensor
Product details	PNP output
The price of the product	Please contact our office
Max. operation distance	4.0 mm 0.158 in plus or minus 8 % (Note) The maximum operation distance stands for the



Item		Specifications
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		sensing object.
Stable sensing range		0 to 3.3 mm 0 to 0.130 in (Note) 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.
Standard sensing object		Iron sheet 20 × 20 × t 1 mm 0.787 × 0.787 × t 0.039 in
Applicable regulations and certifications		CE Marking (EMC Directive, RoHS Directive), UKCA Marking (EMC Regulations, RoHS Regulations)
Hysteresis		20 % or less of operation distance(with standard sensing object)
Repeatability		Along sensing axis, perpendicular to sensing axis: 0.04 mm 0.002 in or less



Item		Specifications
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Current consumption		15 mA or less
Output		PNP open-collector transistor - Maximum source current: 100 mA - Applied voltage: 30 V DC or less(between output and +V) - Residual voltage: 2 V or less (at 100 mA source current)
Output:Output operation		Normally open
Output:Utilization category		DC-12 or DC-13
Max. response frequency		500 Hz
Operation indicator		Orange LED(lights up when the output is ON)
Protection		IP68 (IEC), IP68g (JEM) (Note) Panasonic Electric Works SUNX's IP68 test method 1. Immerse at 0 m below 0 °C +32 °F water surface and leave for 30 min. Then, immerse at 0 m below +70 °C +158 °F water surface and leave for 30 min. 2. Regard the heat shock test in 1 as one cycle and perform 20 cycles.



Item		Specifications
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		4. After tests 1 to 3, insulation resistance, voltage withstandability, current consumption, and sensing ranges must meet the standard values. (Note) If using the sensor in an environment where cutting oil droplets splatter, the sensor may be deteriorated due to added substances in the oil.
Ambient temperature		-25 to +70 °C -13 to +158 °F , Storage: -40 to +85 °C - 40 to +185 ※
Ambient humidity		45 to 85 % RH, Storage: 35 to 95 % RH
Voltage withstandability		1,000 V AC for one min. between all supply terminals connected together and enclosure
Insulation resistance		50 MΩ , or more, with 500 V DC megger between all supply terminals connected



Item		Specifications
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Vibration resistance		frequency, 3 mm 0.118 in double amplitude (Max. 20 G) in X, Y and Z directions for two hours each
Shock resistance		10,000 m/s ² acceleration (1,000 G approx.) in X, Y and Z directions three times each
Sensing range variation:Temperature characteristics		Over ambient temperature range -25 to +70 °C -13 to +158degrees Fahrenheit: Within plus or minus 8 % of sensing range at +23 °C +73 °F
Sensing range variation:Voltage characteristics		Within plus or minus 2 % for +10/-15 % fluctuation of the supply voltage
Material		Enclosure: PBT Indicator part: Polycarbonate / Polyester
Cable		0.15 mm ² 3-core oil, heat and cold resistant cabtyre cable, 1 m 3.281 ft long
Cable extension		Extension up to total 100 m 328.084 ft is possible with C...



Item		Specifications
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Recently checked product numbers

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- DP-102A | Dual Display Digital Pressure Sensor [For Gas] DP-100 >
- DP-102-E-P | Dual Display Digital Pressure Sensor [For Gas] DP-100 >
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Switches	Micro Photoelectric Sensors	Programmable Controllers / Motion Controller	Machine Vision System	
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