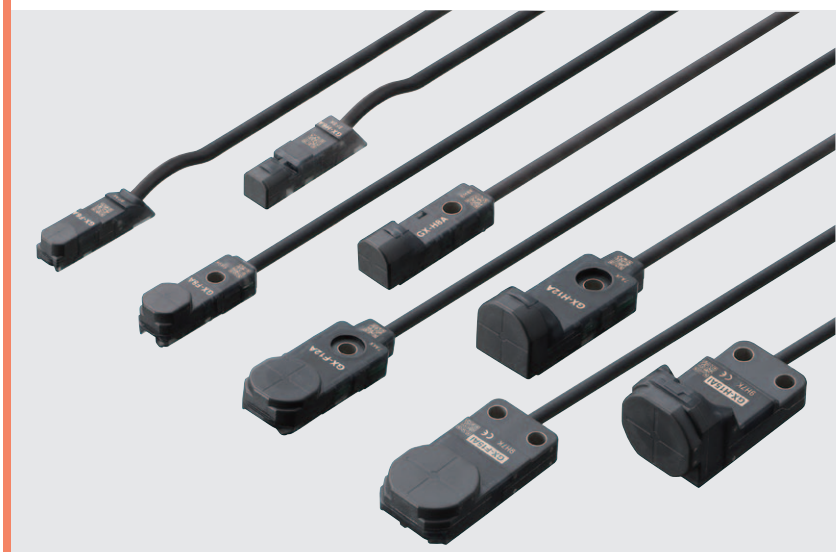
Rectangular-shaped Inductive Proximity Sensor Amplifier Built-in

GX-F/H SERIES

Related Information
■ General terms and conditions..... F-17
■ Glossary of terms..... P.1386~
■ Sensor selection guide ..... P.757~
■ General precautions P.1405



panasonic-electric-works.net/sunx

CE Conforming to EMC Directive

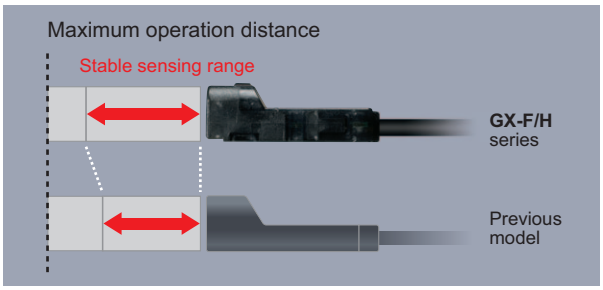
PNP output type available
IP68g Oil resistant
Different freq. type available

Industry No. 1* in stable sensing

* Based on research conducted by Panasonic Electric Works SUNX as of August 2010 among equivalent rectangular inductive sensors.

Can be installed with ample space

This sensor has the longest stable sensing range among the same level of rectangular inductive proximity sensors in the industry. It is easy to install the sensor.



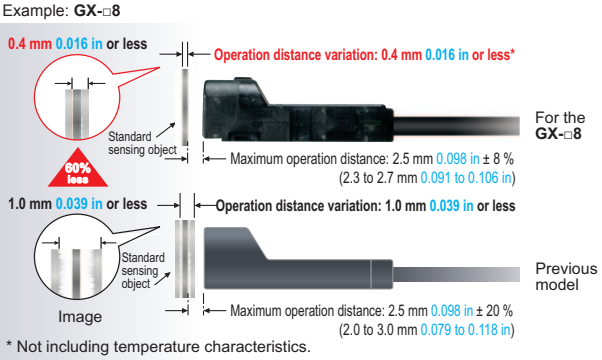
Type	Maximum operation distance	Stable sensing range	
		GX-F/H series	Previous model
GX-□6	1.6 mm 0.063 in	0 to 1.3 mm 0.051 in	0 to 1.2 mm 0.047 in
GX-□8	2.5 mm 0.098 in	0 to 2.1 mm 0.083 in	0 to 1.8 mm 0.709 in
GX-□12	4.0 mm 0.157 in	0 to 3.3 mm 0.130 in	0 to 3.0 mm 0.118 in
GX-□15	5.0 mm 0.197 in	0 to 4.2 mm 0.165 in	0 to 4.0 mm 0.157 in
Long sensing range	8.0 mm 0.315 in	0 to 6.7 mm 0.264 in	0 to 6.4 mm 0.252 in

* With standard sensing object

Variation at the maximum operation distance is within ±8 %

Thorough adjustment and control of sensing sensitivity greatly reduces individual sensor differences and variations.
The work of adjusting sensor positions when using multiple sensors and when sensors have been replaced is much easier.

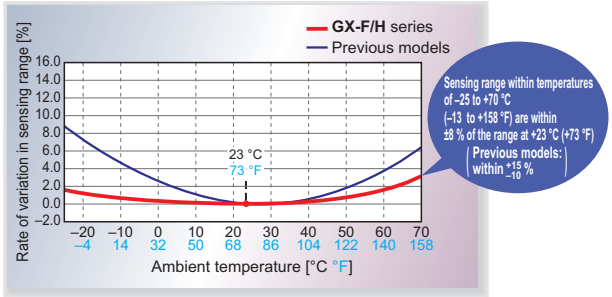
Example: **GX-□8**



* Not including temperature characteristics.

Temperature characteristics vary within ±8 %

Components such as the sensor coil and core and product design have been totally revised to provide excellent temperature characteristics.
Stable sensing can be obtained regardless of the time of day or the yearly season.



* Typical

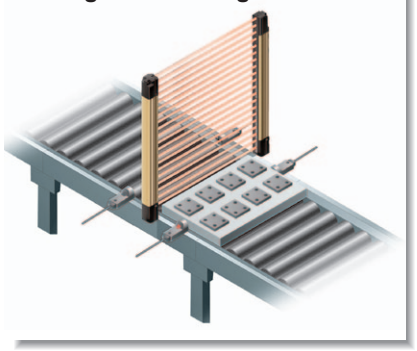
FIBER SENSORS
LASER SENSORS
PHOTOELECTRIC SENSORS
MICRO PHOTOELECTRIC SENSORS
AREA SENSORS
LIGHT CURTAINS
PRESSURE / FLOW SENSORS
INDUCTIVE PROXIMITY SENSORS
PARTICULAR USE SENSORS
SENSOR OPTIONS
SIMPLE WIRE-SAVING UNITS
WIRE-SAVING SYSTEMS
MEASUREMENT SENSORS
STATIC CONTROL DEVICES
ENDOSCOPE
LASER MARKERS
PLC / TERMINALS
HUMAN MACHINE INTERFACES
ENERGY CONSUMPTION VISUALIZATION COMPONENTS
FA COMPONENTS
MACHINE VISION SYSTEMS
UV CURING SYSTEMS

Selection Guide
Amplifier Built-in
Amplifier-separated

GX-F/H
GXL
GL
GX-U/GX-FU/GX-N
GX

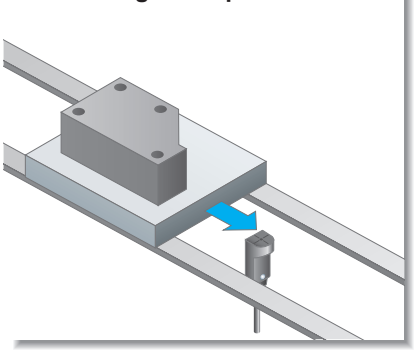
APPLICATIONS

Muting control of light curtains



Positioning processing equipment

Positioning metal pallets

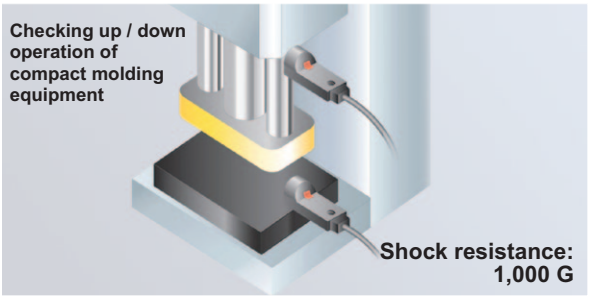


ENVIRONMENTAL RESISTANCE

10 times the durability! (Compared to previous models)

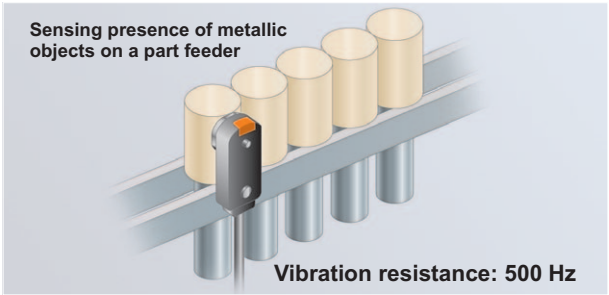
The new integrated construction method used provides shock resistance of 10,000 m/s² (approx. 1,000 G in X, Y and Z directions for three times each), and vibration resistance clears durability tests of between 10 and 500 Hz (3 mm 0.118 in amplitude in X, Y and Z directions for 2 hours each). In addition, resistance to impulse noise is approx. three times greater than for previous models.

Checking up / down operation of compact molding equipment



Shock resistance: 1,000 G

Sensing presence of metallic objects on a part feeder



Vibration resistance: 500 Hz

Highly resistant to water or oil! IP68g* protective construction

The new integrated construction method used improves environmental resistance performance.
The IP68g prevents damage to the sensor by stopping water and oil getting inside.

* For details, refer to the "**SPECIFICATIONS**".

FUNCTIONS

Indicators are easy to see over a wide field of view

A prism with a wide field of view has been developed. This has greatly improved the visibility of the operation indicators.

GX-H□

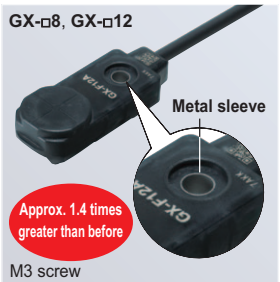
GX-F□

MOUNTING

Tightening strength increased with no damage! (excluding GX-□6)

A metal sleeve has been inserted.
It prevents the sensor from being damaged by tightening too much.

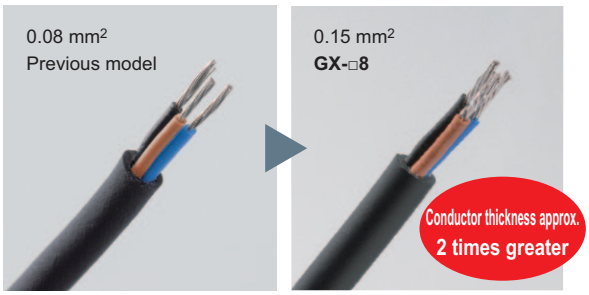
GX-□8, GX-□12



M3 screw
Tightening torque: 0.7 N · m or less

GX-□15

M3 screw
Tightening torque: 1 N · m or less

Conductor thickness doubled to make wiring much easier! (GX-□6/□8 only)

The conductor's thickness was doubled for the **GX-□6/□8**. This makes it easier to handle and perform crimping work on the cables. In addition, the tensile strength of the crimping area has become higher.