

# GX-F/H SERIES

- Related Information
- General terms and conditions..... F-7
  - Sensor selection guide ..... P.803~
  - Glossary of terms..... P.1482~
  - General precautions ..... P.1485~



[panasonic.net/id/pidsx/global](http://panasonic.net/id/pidsx/global)

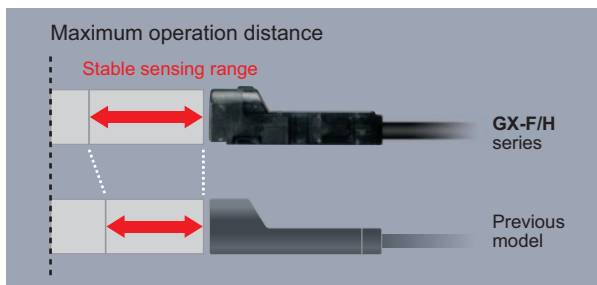


## Industry No. 1\* in stable sensing

\* Based on research conducted by Panasonic Industrial Devices SUNX as of November 2012 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.



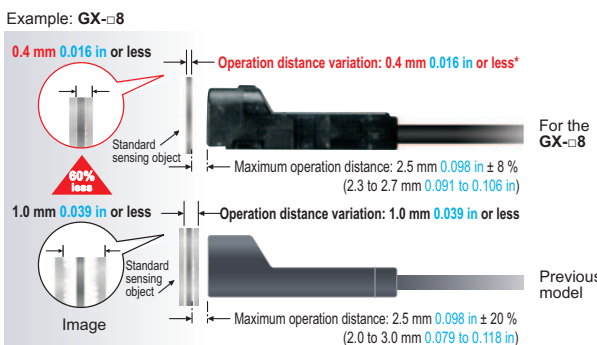
Type	Maximum operation distance	Stable sensing range	
		GX-F/H series	Previous model
GX-□6	1.6 mm 0.063 in	0 to 1.3 mm 0.051 in	0 to 1.2 mm 0.047 in
GX-□8	2.5 mm 0.098 in	0 to 2.1 mm 0.083 in	0 to 1.8 mm 0.709 in
GX-□12	4.0 mm 0.157 in	0 to 3.3 mm 0.130 in	0 to 3.0 mm 0.118 in
GX-□15	5.0 mm 0.197 in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

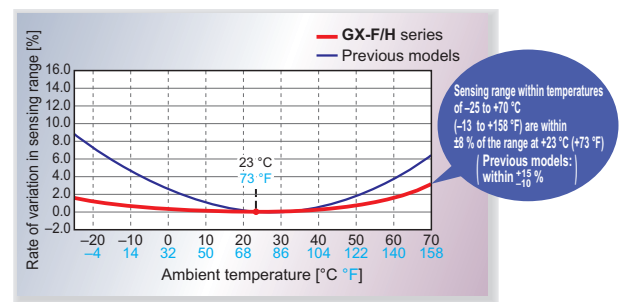
Thorough adjustment and control of sensing sensitivity greatly reduces individual sensor differences and variations.

The work of adjusting sensor positions when using multiple sensors and when sensors have been replaced is much easier.



### 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.

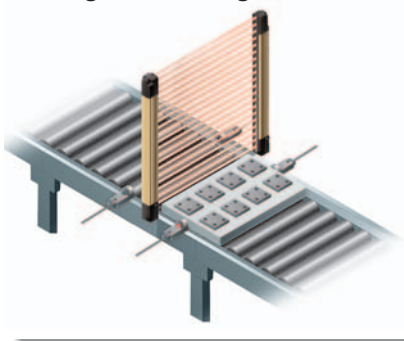


- FIBER SENSORS
- LASER SENSORS
- PHOTOELECTRIC SENSORS
- MICRO PHOTOELECTRIC SENSORS
- AREA SENSORS
- LIGHT CURTAINS / SAFETY COMPONENTS
- PRESSURE / FLOW SENSORS
- INDUCTIVE PROXIMITY SENSORS**
- PARTICULAR USE SENSORS
- SENSOR OPTIONS
- SIMPLE WIRE-SAVING UNITS
- WIRE-SAVING SYSTEMS
- MEASUREMENT SENSORS
- STATIC ELECTRICITY PREVENTION DEVICES
- LASER MARKERS
- PLC
- 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-M
- GX-U/GX-FU/GX-N
- GX

## APPLICATIONS

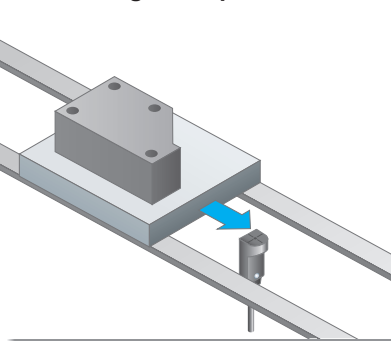
### Muting control of light curtains



### Positioning processing equipment



### Positioning metal pallets

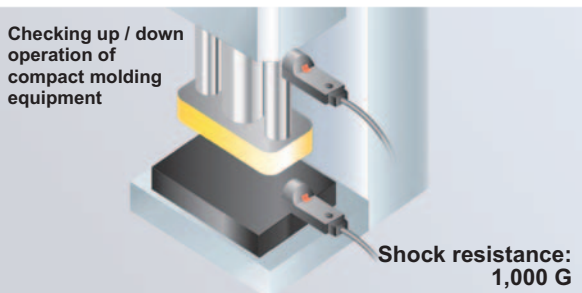


## ENVIRONMENTAL RESISTANCE

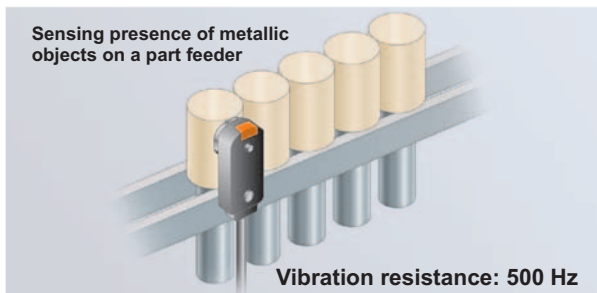
### 10 times the durability! (Compared to previous models)

The new integrated construction method used provides shock resistance of 10,000 m/s<sup>2</sup> (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



Sensing presence of metallic objects on a part feeder



### 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 (p.812~)".



## 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



GX-□15



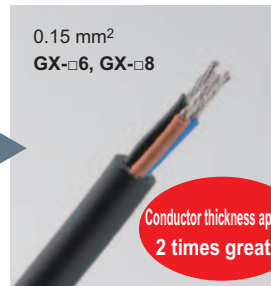
### Conductor thickness doubled to make wiring much easier! (GX-□6/□8 only)

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.

0.08 mm<sup>2</sup>  
Previous model



0.15 mm<sup>2</sup>  
GX-□6, GX-□8



FIBER SENSORS

LASER SENSORS

PHOTOELECTRIC SENSORS

MICRO PHOTOELECTRIC SENSORS

AREA SENSORS

LIGHT CURTAINS / SAFETY COMPONENTS

PRESSURE / FLOW SENSORS

INDUCTIVE PROXIMITY SENSORS

PARTICULAR USE SENSORS

SENSOR OPTIONS

SIMPLE WIRE-SAVING UNITS

WIRE-SAVING SYSTEMS

MEASUREMENT SENSORS

STATIC ELECTRICITY PREVENTION DEVICES

LASER MARKERS

PLC

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-M

GX-U/GX-FU/GX-N

GX