

Digital Fiber Sensor

FX-410 SERIES

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

Fibers

Fiber Amplifiers

FX-500

FX-100

FX-300

FX-410

FX-311

FX-301-F7/ FX-301-F

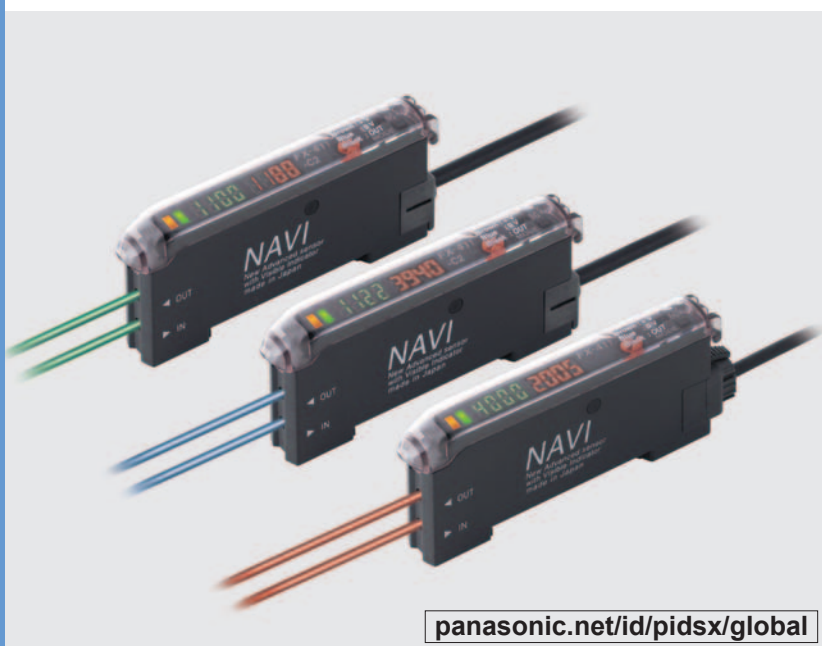
Related Information

■ General terms and conditions..... F-7

■ Glossary of terms / General precautions..... P.1455~ / P.1458~

■ Sensor selection guide P.3~

■ Korea's S-mark..... P.1506



Just “Look” and “Turn”, Simple, easy-to-use fiber sensor

Incident light intensity and threshold value are displayed simultaneously

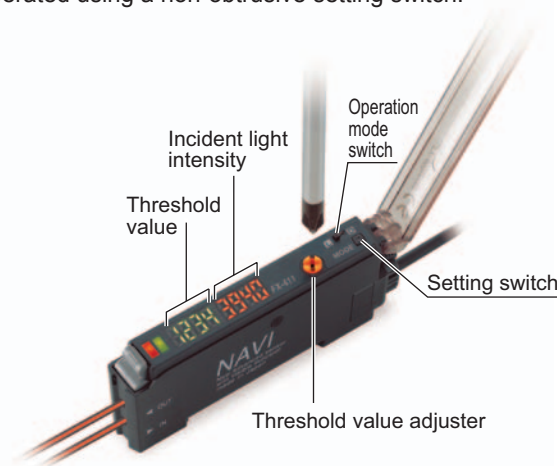
The incident light intensity and threshold value can be checked at the same time with no operations needed. In addition, no complex mode settings are needed when the values are adjusted.

Adjustment variations according to the individual have been eliminated

Accurate control of the adjuster threshold values by using numerical values is possible due to the digital display. This allows anybody to perform the same settings.

Easy-to-understand operating panel layout

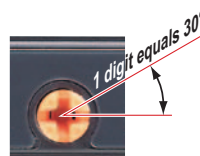
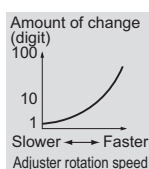
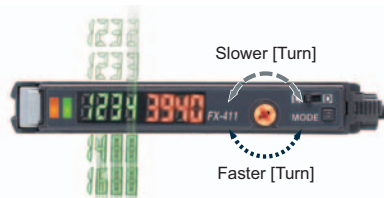
The threshold value adjuster and operation mode switch are large and easy to see, and they can be operated with the same sensitivity as general-purpose photoelectric sensors. Functions which are not commonly used can be operated using a non-obtrusive setting switch.



Threshold values can be changed smoothly

This sensor uses the R.S.S.* adjuster with a compact encoder inside. The sensitivity amount changes depending on the rotation speed of the adjuster, so that adjustment can be carried out speedily.

* Rotation Speed Sensitivity



Adjustment in units of 1 digit is also easy
No need for the fine changes in force required for photoelectric sensors.

Large endless adjuster**New concept**

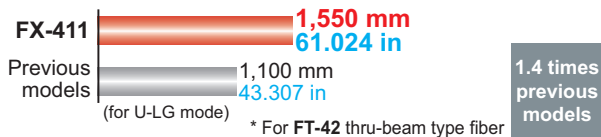
Standard screwdrivers can be used to turn the adjuster as well as precision screwdrivers. In addition, an “endless” mechanism is used which eliminates the possibility of any damage being caused by turning the adjuster too far.

**FX-412 can be turned by finger!****New concept**

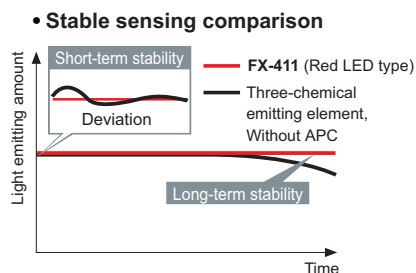
The adjuster can be turned directly by finger, without the need for a screwdriver.

**Beam power greatly increased to give strong performance under adverse environments****Red LED type**

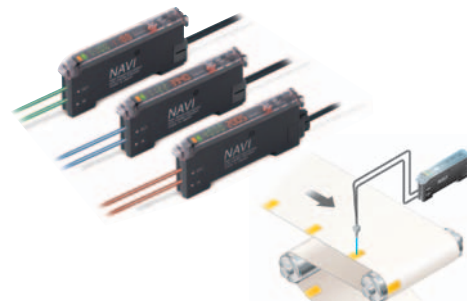
The beam power has been greatly increased. This means a longer sensing distance and less trouble from problems such as dust. These sensors have ample performance for workplace needs.

**Improved stability over both long and short terms****Red LED type**

The red LED type sensors have a “four-chemical emitting element” which maintains stability of light emissions for long-term operation. Furthermore, all models have an “APC (Auto Power Control) circuit” which improves stability at times such as when the power is turned on. These features improve overall stability compared to previous models.

**Three types are available, with red, blue and green light**

Different sensors can be selected to suit the application.



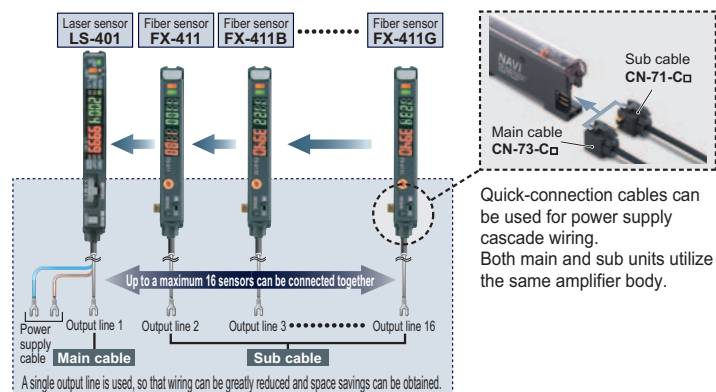
Color combinations that can be discerned during mark sensing

Mark color	White	Yellow	Orange	Red	Green	Blue	Black
Back-ground color							
White		•	•	•	•	•	•
Yellow	•		•	•	•	•	•
Orange	•	•		•	•	•	•
Red	•	•	•		•	•	•
Green	•	•	•	•		•	•
Blue	•	•	•	•	•		•
Black	•	•	•	•	•	•	

• Red LED type • Blue LED type • Green LED type

Excellent workability and ease of maintenance

The same quick-connection cable that is used for sensors such as the **FX-300** series of digital fiber sensors is used. This means that they can be used together with other types of sensors such as laser sensors, and the number of power supply cables can be reduced.



The sensors can be connected together with other sensors such as the **FX-300** series of digital fiber sensors and the **GA-311** of inductive proximity sensors. In addition, the **SC** series of sensor PLC connection units with MIL connector compatibility can also be used to further reduce the amount of wiring.

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****Fibers****Fiber Amplifiers****FX-500****FX-100****FX-300****FX-410****FX-311****FX-301-F7/ FX-301-F**