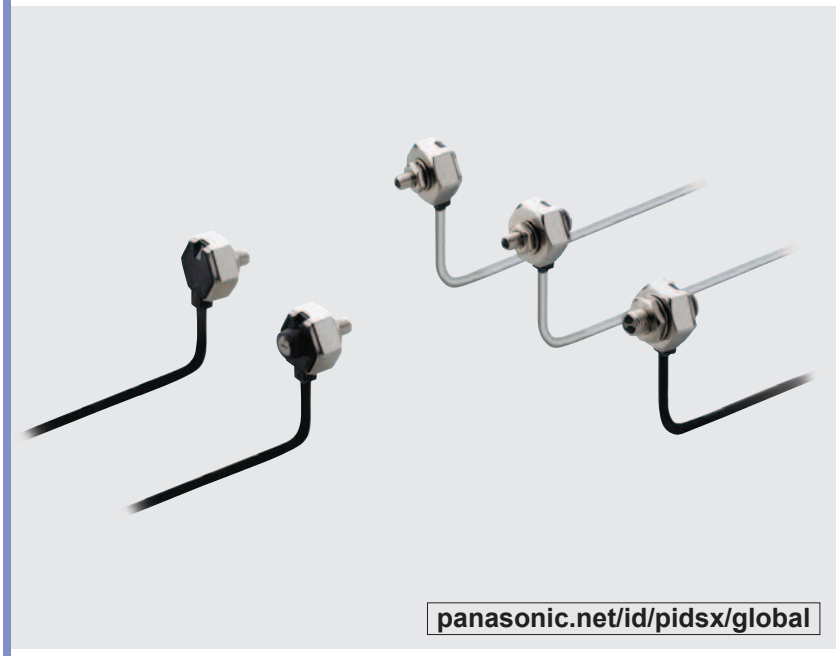
Threaded Miniature Photoelectric Sensor **Amplifier Built-in**

EX-30 SERIES Ver.2

Related Information
■ General terms and conditions..... F-7
■ Sensor selection guide..... P.271~
■ Glossary of terms..... P.1455~
■ General precautions ..... P.1458~



panasonic.net/id/pidsx/global

Conforming to EMC Directive

Recognition (Excluding **EX-33(-PN)**, 5 m cable length type)

PNP output type available

The next-generation new form series
A new alternative to fiber sensors

Simpler design

All you need to do is to make a ø4 mm ø0.157 in hole where you would like to stop or check the object (ø6 mm ø0.236 in hole for reflective type). Furthermore, the center of the sensing axis is the same as the center of the mounting hole, which makes it much easier to set the sensing position.

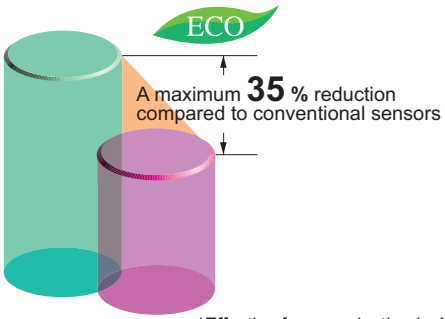
New design solves all weak points of fiber sensors

The **EX-30** series solves all of the difficulties associated with fiber sensors, such as:
- Difficulty finding a suitable place for the amplifier
- Fragility of the fiber
- Extra space needed because of difficulty in bending the fiber
- The nuisance of having to use a protective tube to prevent fiber breakage

BASIC PERFORMANCE

Electric power saving*

The **EX-30** series achieves reductions in power consumption of up to 65 %. These sensors contribute to environmental friendliness.



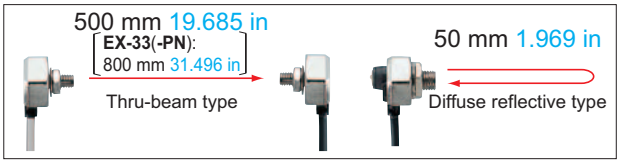
*Effective from production in April 2011.

High response speed of 0.5 ms

The same high response speed of 0.5 ms as fiber sensor amplifiers is provided, making these sensors ideal for sensing small objects, counting objects that are moving quickly and positioning items such as circuit boards.

Long sensing range

The **EX-30** series achieves long distance sensing [thru-beam type: 500 mm 19.685 in (**EX-33**(**-PN**): 800 mm 31.496 in), reflective type: 50 mm 1.969 in.]

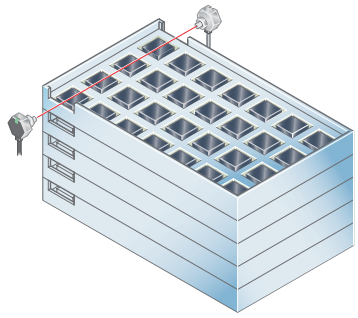


Globally usable

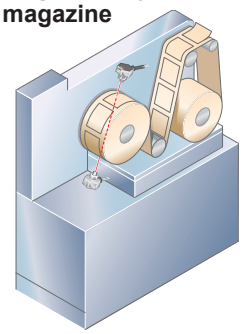
It conforms to the EMC Directive and obtains the UL Recognition. (excluding 5 m 16.405 ft cable length type) Moreover, PNP output type which is much in demand in Europe, is also available.

APPLICATIONS

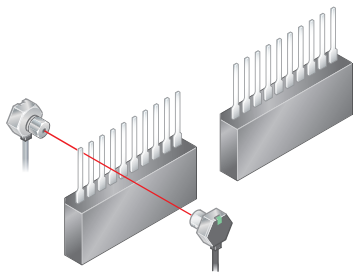
Detecting IC height



Detecting quantity of labels in label magazine



Checking IC pins (using slit masks)



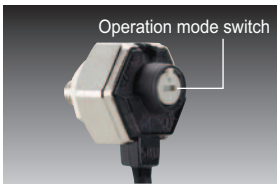
VARIETIES

New thru-beam types now feature operation mode switch and sensitivity adjuster! EX-33(-PN)

EX-33(-PN)

❶ Operation mode switch

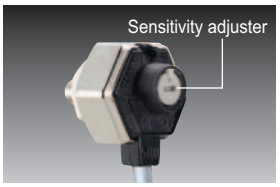
Switching between light-ON and dark-ON operating modes is possible with a single model.



Receiver

❷ Sensitivity adjuster

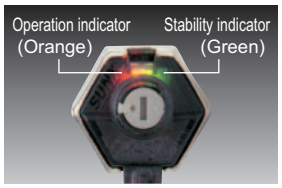
It is convenient when you need fine adjustment.



Emitter

❸ Bright 2-color indicator

A bright 2-color indicator has been incorporated in all types.

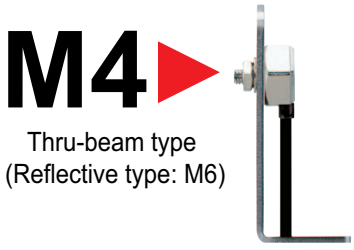


Receiver

MOUNTING / SIZE

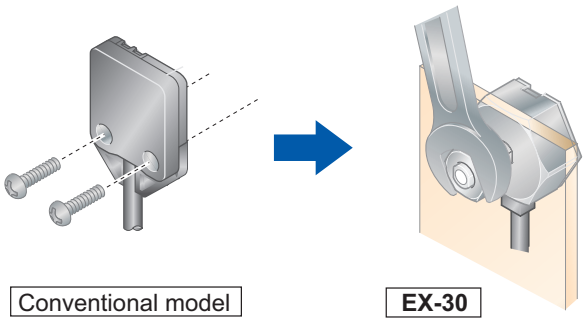
Can be installed in the same way as standard fibers

The **EX-30** series can be screwmounted (M4 for thru-beam type, M6 for reflective type) in the same way as standard fiber sensors. This means that they can be inserted into production lines in exactly the same way as conventional high-priced fiber sensors.

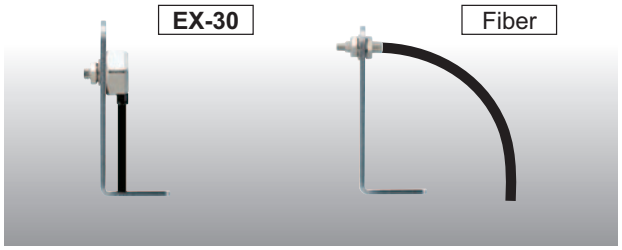


Single-point tightening cuts down on installation work by half

Conventional photoelectric sensors required four (for thru-beam type) or two (for reflective type) mounting holes and screws to be used. However, the **EX-30** series is installed with a single screw, thus cutting down on installation work by half.



Conventional model　　**EX-30**

Takes up very little space

Unlike conventional fibers, bending radius is not a problem, so that the sensor can be securely installed alongside conveyors.