

EX-10 SERIES Ver.2

Related Information

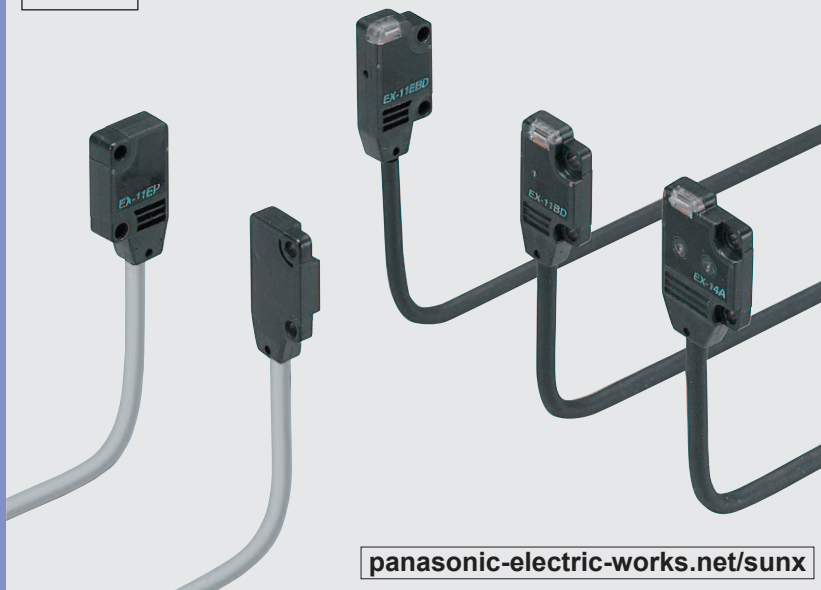
■ General terms and conditions..... F-17

■ Sensor selection guide..... P.283~

■ Glossary of terms / General precautions P.1359~ / P.1405

■ Korea's S-mark..... P.1410

Ver.2


panasonic-electric-works.net/sunx


Amplifier built-in extraordinarily small and slim size

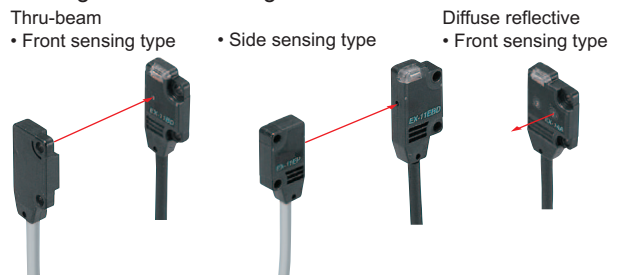
Smallest body, just 3.5 mm 0.138 in thick

It can be mounted in a very small space as its size is just W10 × H14.5 × D3.5 mm
 W0.394 × H0.571 × D0.138 in
 (thru-beam, front sensing type).



Flexible mounting

The diffuse reflective type sensor is front sensing and is so thin that it gives an impression of being just pasted on the mounting base. The thru-beam type is available as front sensing type, as well as, side sensing type, allowing flexible mounting.

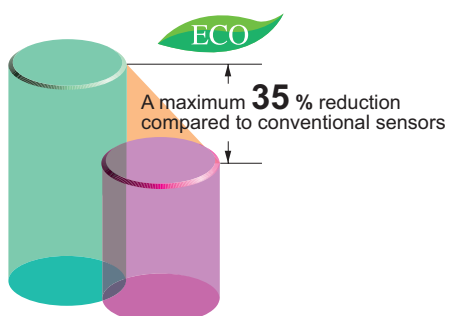


BASIC PERFORMANCE

Electric power saving *

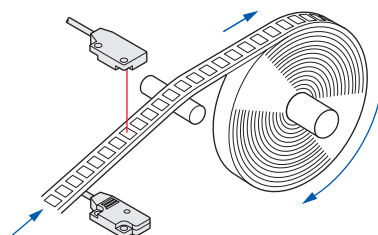
The EX-10 series achieves reductions in power consumption of up to 65 %. These sensors contribute to environmental friendliness.

* Effective from production in October 2010.



High-speed response time: 0.5 ms

The sensor is suitable for detecting small and high-speed traveling objects.

FIBER
SENSORSLASER
SENSORSPHOTOELECTRIC
SENSORSMICRO
PHOTOELECTRIC
SENSORSAREA
SENSORSLIGHT
CURTAINSPRESSURE /
FLOW
SENSORSINDUCTIVE
PROXIMITY
SENSORSPARTICULAR
USE SENSORSSENSOR
OPTIONSSIMPLE
WIRE-SAVING
UNITSWIRE-SAVING
SYSTEMSMEASUREMENT
SENSORSSTATIC CONTROL
DEVICES

ENDOSCOPE

LASER
MARKERSPLC /
TERMINALSHUMAN MACHINE
INTERFACESENERGY CONSUMPTION
VISUALIZATION
COMPONENTS

FA COMPONENTS

MACHINE VISION
SYSTEMSUV CURING
SYSTEMSSelection
GuideAmplifier
Built-inPower Supply
Built-inAmplifier-
separated

CX-400

EX-10

EX-20

EX-30

EX-40

CX-440

EQ-30

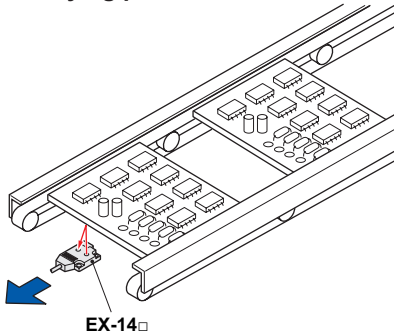
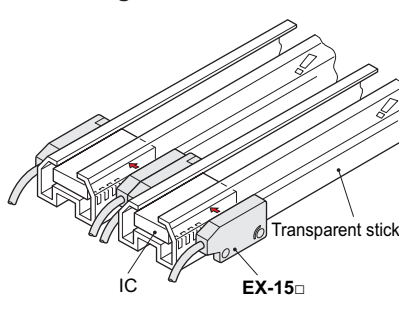
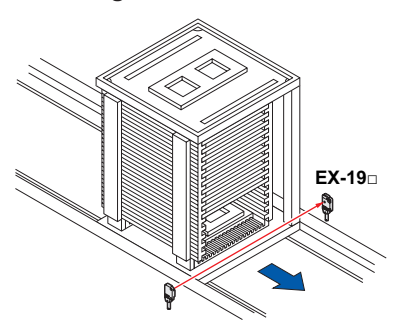
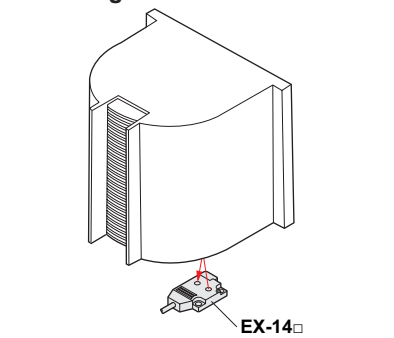
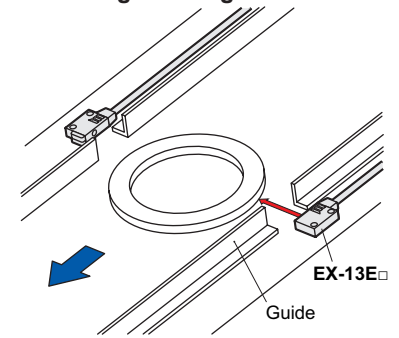
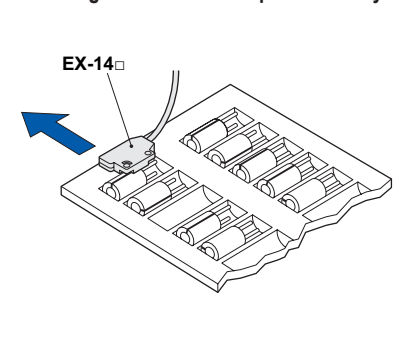
EQ-500

MQ-W

RX-LS200

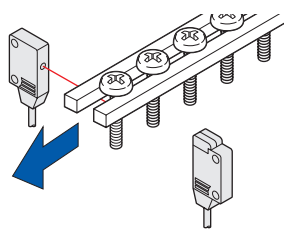
RX

RT-610

APPLICATIONS**Verifying position of PCBs****Detecting ICs****Detecting PCB rack****Detecting wafer cassette****Detecting thin ring****Checking for absence of capacitor in tray****BASIC PERFORMANCE**

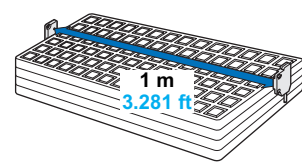
Minimum sensing object: $\varnothing 1 \text{ mm}$ $\varnothing 0.039 \text{ in}$ **EX-11(E)□, EX-15(E)□**

EX-11□, EX-11E□, EX-15 and **EX-15E** are incorporated with $\varnothing 1 \text{ mm}$ $\varnothing 0.039 \text{ in}$ slit masks so that $\varnothing 1 \text{ mm}$ $\varnothing 0.039 \text{ in}$, or more, object can be detected. Hence, they are suitable for precise positioning or small parts detection.

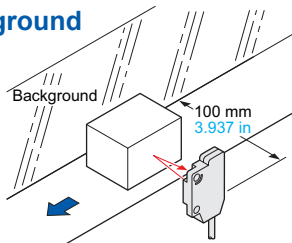


Long sensing range: **1 m** **3.281 ft** **EX-19□**

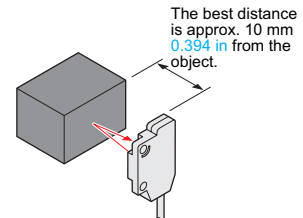
A sensing range of 1 m **3.281 ft** has been realized with a slim size of just 3.5 mm **0.138 in**. It can be used to detect even wide IC trays.

**Background suppression****Hardly affected by background**

Even a specular background separated by 100 mm **3.937 in**, or more, is not detected. (However, the background should be directly opposite. A spherical or curved background may be detected.)

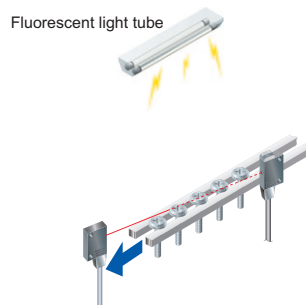
**Black object reliably detected**

It can reliably detect dark color objects since it is convergent reflective type.

**ENVIRONMENTAL RESISTANCE****Incorporated an inverter countermeasure circuit ***

The **EX-10** series become significantly stronger against inverter light and other extraneous light.

* Effective from production in October 2010.

**Waterproof IP67**

The sensor can be hosed down because of its IP67 construction and the non-corrosive stainless steel mounting bracket.

Note: However, take care that if it is exposed to water splashes during operation, it may detect a water drop itself.

Bending durability

Flexible cable type **EX-□-R** is available. It is most suitable for moving parts, such as robot arm, etc.

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

Power Supply Built-in

Amplifier-separated

CX-400**EX-10****EX-20****EX-30****EX-40****CX-440****EQ-30****EQ-500****MQ-W****RX-LS200****RX****RT-610**