Panasonic

NEW

Amplifier Built-in

Ultra-minute Photoelectric Sensor

EX-Z SERIES

CE Conforming to EMC Directive

cULus Recognition

The World's No. 1 in Compactness

* Among photoelectric sensors with built-in amplifier, as of June 2015 (survey by our company)

(Actual size)

EX-Z SERIES

Ultra-minute Photoelectric Sensor **Amplifier Built-in**

The World's Smallest* Size

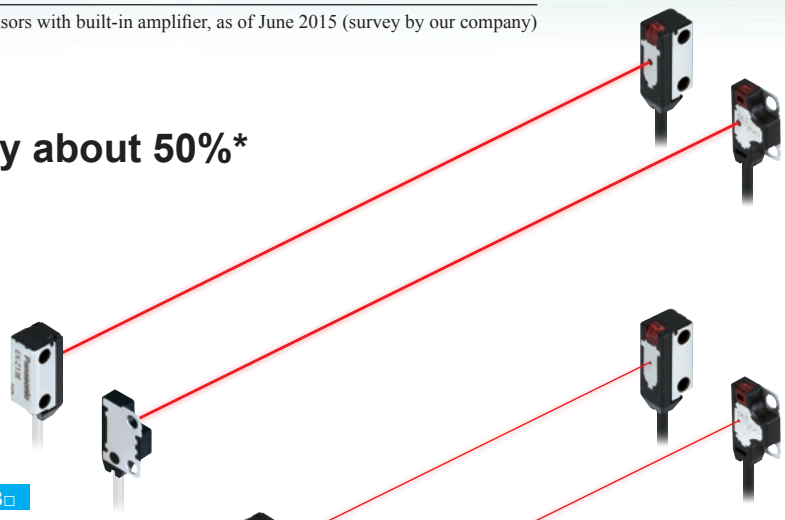
* Among photoelectric sensors with built-in amplifier, as of June 2015 (survey by our company)

Unit volume ratio reduced by about 50%*

*** As compared to EX-10 series**

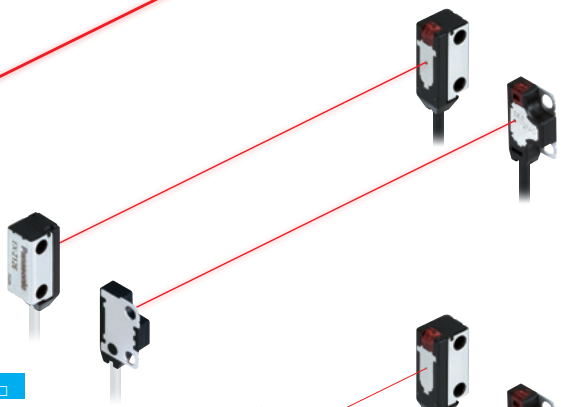
The world's thinnest* sensor dimension of 3 mm 0.118 in has been achieved by utilizing new semiconductor packaging technology that does not use wire bonding. The small unit size allows installation of sensors in a narrow space where only a conventional fiber sensor head could be installed before. The built-in amplifier also saves on installation space.

* Among photoelectric sensors with built-in amplifier, as of June 2015 (survey by our company)



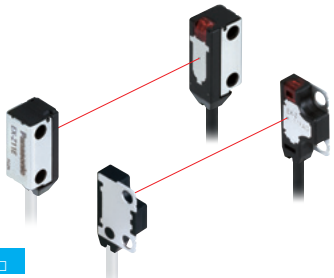
EX-Z13□

Sensing range: 500 mm 19.685 in
Repeatability: 0.05 mm 0.002 in or less
Minimum sensing object:
ø1.0 mm ø0.039 in opaque object



EX-Z12□

Sensing range: 200 mm 7.874 in
Repeatability: 0.03 mm 0.001 in or less
Minimum sensing object:
ø0.5 mm ø0.020 in opaque object



EX-Z11□

Sensing range: 50 mm 1.969 in
Repeatability: 0.02 mm 0.001 in or less
Minimum sensing object:
ø0.3 mm ø0.012 in opaque object

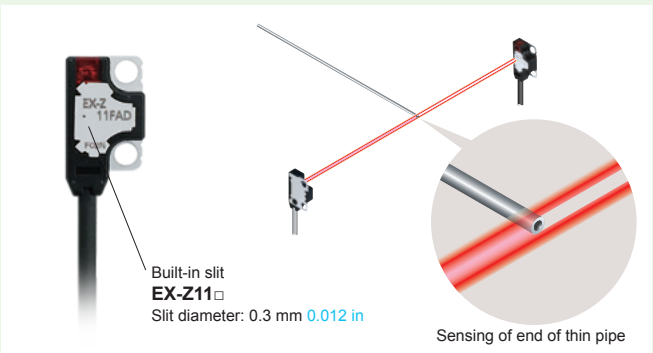
Front sensing type	Side sensing type
Approx. 50% smaller in volume ratio than EX-10	Approx. 35% smaller in volume ratio than EX-10
EX-Z1□F□	**EX-Z1□**
W8 × H14 × D3 mm	W5.5 × H15.9 × D6.5 mm
W0.315 × H0.551 × D0.118 in	W0.217 × H0.626 × D0.256 in

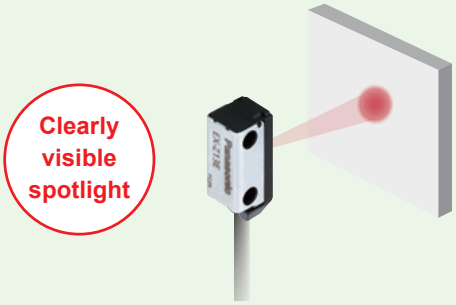
Small-object sensing capability

Capable of sensing an extremely small ø0.3 mm ø0.012 in object without slit EX-Z11□

A slit is provided on the front side of the main sensor body. The sensor can detect a ø0.3 mm ø0.012 in object (the smallest-object sensing capability in the industry*) without using an optional slit.

* Among photoelectric sensors with built-in amplifier, as of June 2015 (survey by our company)



Capability to sense a small ø1.0 mm ø0.039 in object over long distance EX-Z13□

The high-brightness 4-element red LED provides strong light emission stably over a long period of time. In spite of the extremely small size, both front sensing and side sensing units can sense a small ø1.0 mm ø0.039 in object from a long distance of 500 mm 19.685 in. Since the spotlight is clearly visible, the sensing position can be easily confirmed.