

# EX-20 SERIES

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



CX-400

EX-30

EX-20

EX-10

EQ-20

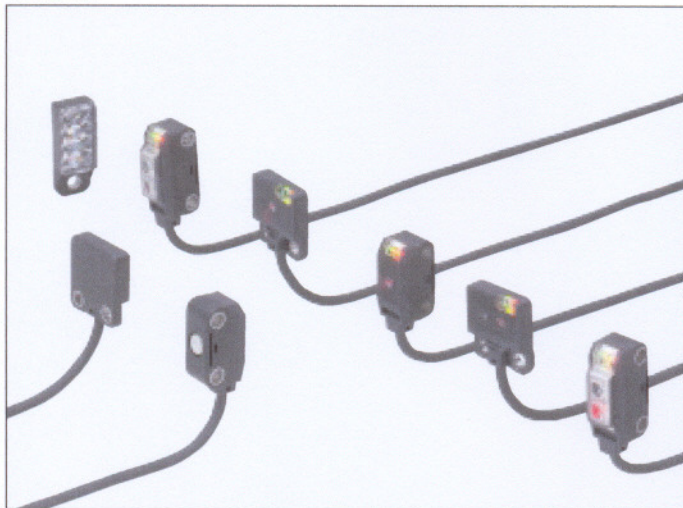
EQ-30

EX-40

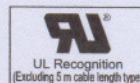
RX

RX-LS200

Amplifier Built-in

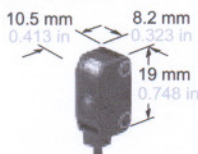


**Miniature-sized and still mountable with M3 screws**



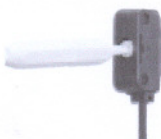
### Miniaturization by using single chip optical IC

The beam-receiving photodiode and the A/D conversion circuit have been fabricated on a single chip optical IC (full custom). Hence, in spite of its miniature size, it has a performance and reliability which is equal to or better than the conventional product.



### Incorporates a sensitivity adjuster even in this size

The sensor incorporates a sensitivity adjuster in spite of its miniature size. It is convenient when you need fine adjustment. Further, the receiver of the thru-beam, side sensing type sensor incorporates an operation mode switch which can change the output operation.



### Bright 2-color indicator

A bright 2-color indicator (orange, green LED) has been incorporated in all types.

### Long sensing range

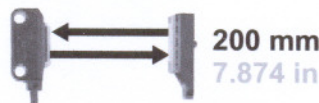
The EX-20 series achieves long distance sensing [thru-beam type: 2 m 6.562 ft, retro-reflective type: 200 mm 7.874 in (when using the attached reflector), diffuse reflective type: 160 mm 6.299 in], despite its miniature size.

Hence, it is usable even on a wide conveyor.

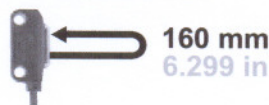
#### Thru-beam type



#### Retroreflective type

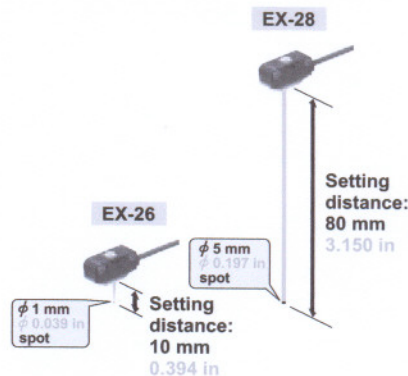


#### Diffuse reflective type



### Clear beam spot using red LED dot light source

The emission area of a dot light source is smaller than that of a conventional LED flat light source, and it is possible to design a high power, narrow beam. Since a red LED dot light source is used, the red beam spot is clear even at a far place, so that alignment and confirmation of sensing position is easy. Further, since the thru-beam type, too, incorporates a visible narrow beam, it can also reliably detect small parts, such as, chip components, lead frames, etc.



### Waterproof

The sensor can be hosed down because of its IP67 construction. Further, the sensor mounting bracket is also made of stainless steel.

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

### Globally usable

PNP output type, which is much in demand in Europe, is also available. Of course, it conforms to the EMC Directive and approved UL Recognition (excluding 5 m 16.404 ft cable length type).