

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

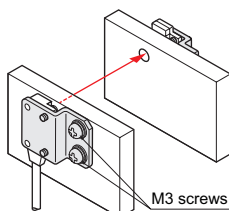
FA COMPONENTS

MACHINE VISION
SYSTEMSUV CURING
SYSTEMS**MOUNTING / SIZE****Mountable with M3 screws**

Non-corrosive stainless steel type mounting bracket is also available.

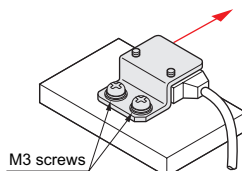
- **MS-EX10-1**
[Cold rolled carbon steel (SPCC)]

MS-EX10-11
[Stainless steel (SUS304)]
(mounting bracket for the front
sensing type)



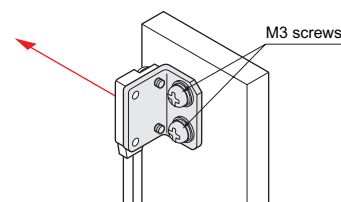
- **MS-EX10-2**
[Cold rolled carbon steel (SPCC)]

MS-EX10-12
[Stainless steel (SUS304)]
(mounting bracket for the side
sensing type)



- **MS-EX10-3**
[Cold rolled carbon steel (SPCC)]

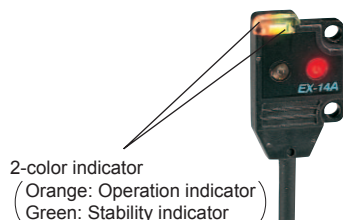
MS-EX10-13
[Stainless steel (SUS304)]
(L-shaped mounting bracket)

**Red beam makes beam alignment easy**

The red LED beam projected from the emitter helps you to align the sensor heads.

FUNCTIONS**Bright 2-color indicator**

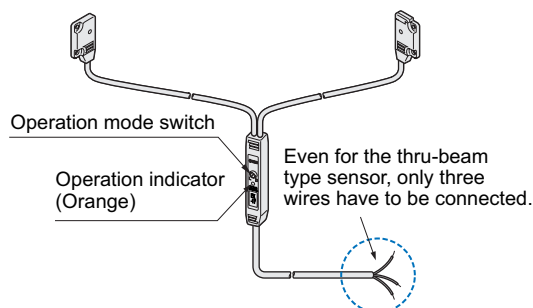
A convenient 2-color indicator has been incorporated in the miniature body.



2-color indicator
(Orange: Operation indicator)
(Green: Stability indicator)

VARIETIES**Operation mode switch****EX-15□/17□**

Thru-beam type sensor incorporated with an operation mode switch on the bifurcation is also available. It helps you to test the operability before start-up.

**OTHERS****Less resources used ***

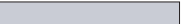
Based on environmental considerations, simplified packaging is used in order to reduce waste.

In addition, the bag is made from polyethylene which produces no toxic gases even when burned.

* Effective from production in October 2010.

Selection
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**

ORDER GUIDE

Type			Appearance	Sensing range	Model No. (Note 2)	Output operation	Output				
NPN output	Thru-beam	Front sensing		 150 mm 5.906 in	EX-11A	Light-ON	NPN open-collector transistor				
				 500 mm 19.685 in	EX-11B	Dark-ON					
				 1 m 3.281 ft	EX-13A	Light-ON					
					EX-13B	Dark-ON					
					EX-19A	Light-ON					
					EX-19B	Dark-ON					
		Side sensing			 150 mm 5.906 in	EX-15		Switchable either Light-ON or Dark-ON			
					 500 mm 19.685 in	EX-17					
					Convergent reflective (Diffused beam type)	Front sensing			 2 to 25 mm 0.079 to 0.984 in (Note 1) (Convergent point: 10 mm 0.394 in)	EX-11EA	Light-ON
										EX-11EB	Dark-ON
		EX-13EA	Light-ON								
		EX-13EB	Dark-ON								
	PNP output	Thru-beam	Front sensing		 150 mm 5.906 in	EX-11A-PN		Light-ON	PNP open-collector transistor		
						EX-11B-PN		Dark-ON			
 500 mm 19.685 in					EX-13A-PN	Light-ON					
					EX-13B-PN	Dark-ON					
 1 m 3.281 ft					EX-19A-PN	Light-ON					
					EX-19B-PN	Dark-ON					
Side sensing					 150 mm 5.906 in	EX-11EA-PN	Light-ON				
						EX-11EB-PN	Dark-ON				
					 500 mm 19.685 in	EX-13EA-PN	Light-ON				
						EX-13EB-PN	Dark-ON				
Convergent reflective (Diffused beam type)		Front sensing		 2 to 25 mm 0.079 to 0.984 in (Note 1) (Convergent point: 10 mm 0.394 in)	EX-14A-PN	Light-ON					
					EX-14B-PN	Dark-ON					

NOTE: Mounting bracket is not supplied with the sensor. Please select from the range of optional sensor mounting brackets (six types).

- Notes: 1) The sensor does not detect even a specular background if it is separated by 100 mm 3.937 in or more. (However, the background should be directly opposite. A spherical or curved background may be detected.)
 2) The model No. with "P" shown on the label affixed to the thru-beam type sensor is the emitter, "D" shown on the label is the receiver.
 (e.g.) Emitter of **EX-11A**: **EX-11P**, Receiver of **EX-11A**: **EX-11AD**

FIBER SENSORS

LASER SENSORS

PHOTO-ELECTRIC SENSORS

MICRO PHOTO-ELECTRIC SENSORS

AREA SENSORS

LIGHT CURTAINS

PRESSURE / FLOW SENSORS

INDUCTIVE PROXIMITY SENSORS

PARTICULAR USE SENSORS

SENSOR OPTIONS

SIMPLE WIRE-SAVING UNITS

WIRE-SAVING SYSTEMS

MEASURE-MENT 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