



Sensing distance	Supply voltage	Output
 (Optical fiber series)	10 to 30 VDC	 80 mA, 100 mA

# Photoelectric Sensor

# E3S-X

## Fiber Optics Amplifier Unit with a Rugged Metal Housing

- Wide variety of fiber units allow detection in a limited space.
- Easy adjustment with LIGHT and STABILITY indicators.
- High-speed response time of 1 ms essential for sensing minute objects is provided.
- Mutual interference protective circuit allows side-by-side mounting of two fiber units.



## Ordering Information

### Amplifier Unit

Output	Model
NPN	E3S-X3CE4
PNP	E3S-X3CB4

### Optical Fiber Units

To order optical fiber units, refer to the *E32 Datasheet (E48-E1)*.

## Specifications

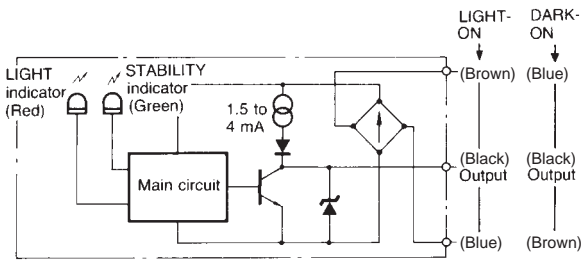
### ■ Ratings/Characteristics

<b>Power supply voltage</b>		12 VDC -10% to 24 VDC +10%; ripple (p-p): 10% max.
<b>Current consumption</b>		50 mA max.
<b>Control output</b>	<b>DC solid-state</b>	E4 (NPN): 80 mA max. B4 (PNP): 100 mA max.
	<b>Voltage output</b>	2.0 V max.
<b>Response time (ON, OFF)</b>		1 ms max.
<b>Sensitivity</b>		Adjustable
<b>Operation mode</b>		Wire-selectable (Refer to "Output Circuits")
<b>Indicators</b>		Light indicator (red), stability indicator (green)
<b>Mutual interference protection</b>		Provided
<b>Enclosure rating</b>		IEC144: IP66 NEMA: 1, 3, 4X, 12
<b>Housing material</b>		Metal
<b>Light source</b>		Infrared LED
<b>Ambient temperature</b>		Operating: -25 to 55 °C

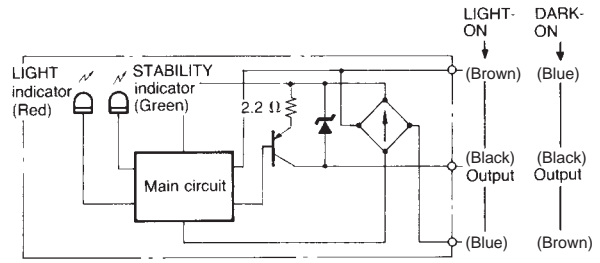
# Operation

## ■ Output Circuits

E3S-X3CE4 (NPN Output)

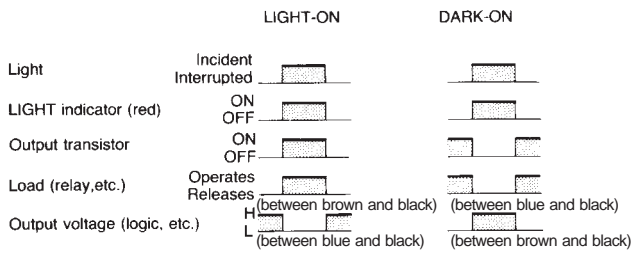


E3S-X3CB4 (PNP Output)

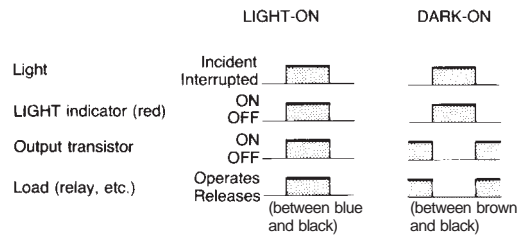


## ■ Timing Chart

E3S-X3CE4 (NPN Output)



E3S-X3CB4 (PNP Output)





**ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.**

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

Cat. No. E05-E1-8 **In the interest of product improvement, specifications are subject to change without notice.**

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