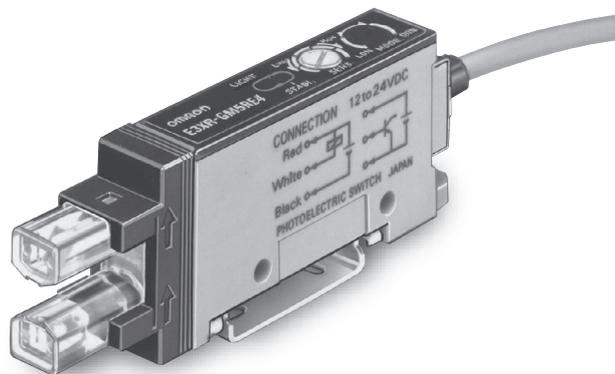


Detect Register Marks for Packaging.



Ordering Information

Power supply voltage	Operation mode	Light source	Model
12 to 24 VDC	Light-ON Dark-ON (selectable)	Red LED	E3XR-GM5RE4
		Green LED	E3XR-GM5GE4

Note: Models with PNP output are also available.

Ratings and Specifications

Item	Sensing method Model	Through-beam (grooved models)	
		E3XR-GM5RE4	E3XR-GM5GE4
Light source (wavelength)		Red LED (660 nm)	Green LED (565 nm)
Power supply voltage		12 to 24 VDC \pm 10%, ripple (p-p): 10% max.	
Current consumption		40 mA max.	
Sensing distance		Groove width of 5 mm	
Sensing object		Marks on transparent sheets (2 x 3 mm min.)	
Response time		Operate or reset: 0.5 ms max.	Operate or reset: 1 ms max.
Control output		Output transistor: NPN Output current: 1.5 to 4 mA, Load current: 80 mA max. (residual voltage: 1 V max.)	
Ambient illumination (receiver side)	Incandescent lamp	3,000 lx max.	
	Sunlight	10,000 lx max.	
Ambient temperature range		Operating: -25 to 55°C , Storage: -25 to 70°C	
Ambient humidity range		Operating: 35% to 85%, Storage: 35% to 95%	
Vibration resistance (destruction)		10 to 55 Hz, 1.5-mm double amplitude for 2 h each in X, Y, and Z directions	
Shock resistance (destruction)		500 m/s ² 3 times each in X, Y, and Z directions	
Dielectric strength		500 VAC, 50/60 Hz for 1 min between current-carrying parts and case	
Degree of protection		IEC IP65	
Indicators		Light indicator (red), stability indicator (green)	
Material	Case	PBT (polybutylene terephthalate)	
	Lens	Acrylics	

Safety Precautions

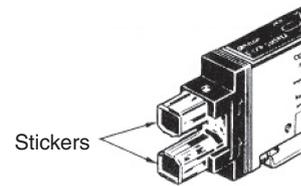
⚠ WARNING

This product is not designed or rated for ensuring safety of persons.
Do not use it for such purposes.



Precautions for Correct Use

- Do not use the product in atmospheres or environments that exceed product ratings.
- Light may be received if there is a reflective object at the tip of the lens. If this occurs, attached the supplied black stickers to the lens tips (E3XR-GM5□E4).

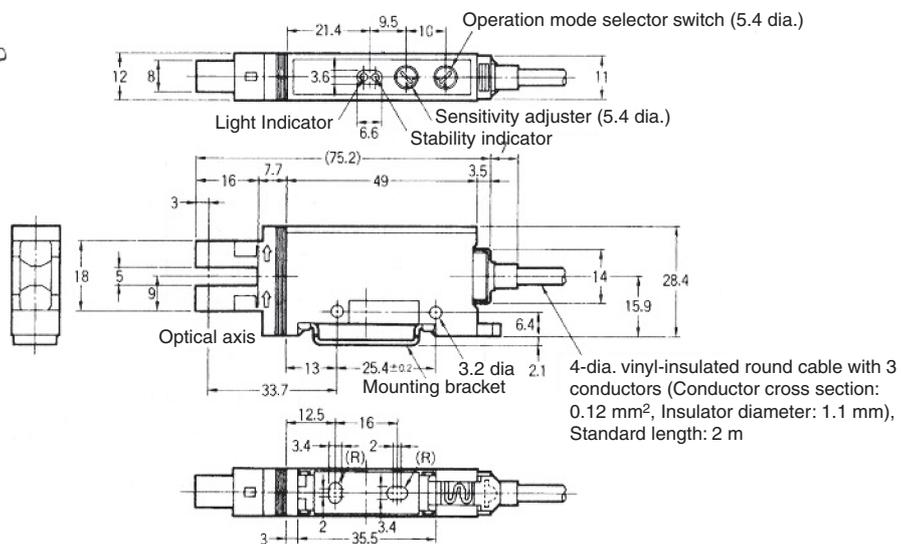
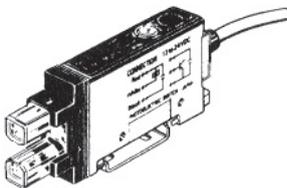


(Unit: mm)

Dimensions

Unless otherwise specified, the tolerance class IT16 is used for dimensions in this data sheet.

E3XR-GM



In the interest of product improvement, specifications are subject to change without notice.

Read and Understand This Catalog

Please read and understand this catalog before purchasing the products. Please consult your OMRON representative if you have any questions or comments.

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- Systems, machines, and equipment that could present a risk to life or property.

Please know and observe all prohibitions of use applicable to the products.

NEVER USE THE PRODUCTS FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO ADDRESS THE RISKS, AND THAT THE OMRON PRODUCTS ARE PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.

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Disclaimers

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Dimensions and weights are nominal and are not to be used for manufacturing purposes, even when tolerances are shown.

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2008.9

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