



- M18 cylindrical, twin-wired
- Readily replaceable with limit switch
- Polarization reflector for stable detection of mirror-like objects

- Greatly improved environmental resistance with water resistance of IP 66 is achieved by enhanced resin molding and enhanced robustness, etc.
- Permanently attached cable and connector styles available

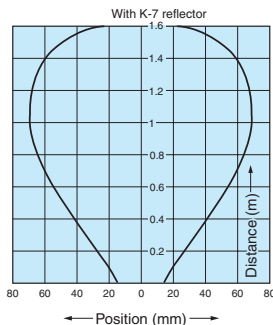
### Type

Type	Detecting distance	Model	Operation mode	Output mode
Polarization reflector type	1m	<b>CXM1RDTW</b>	Dark-ON / Light-ON	2-wire AC current output
Reflector type	2m	<b>CXM2DTW</b>		
Diffuse-reflector type	100mm	<b>CXS01TW</b>		

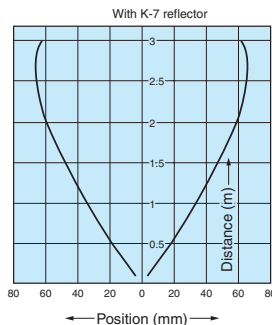
\*Connector types available for all models; "-J" added at the end of model No.

### Activation Area Characteristics (Typical Example)

CXM1RDTW (-J)

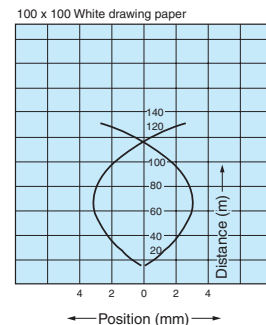


CXM2DTW (-J)



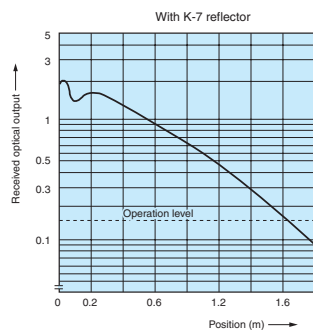
### Distance-Area Characteristics (Typical Example)

CXS01TW (-J)

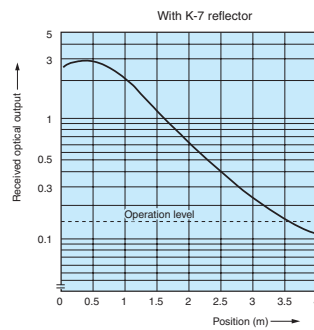


### Distance-output characteristics (Typical Example)

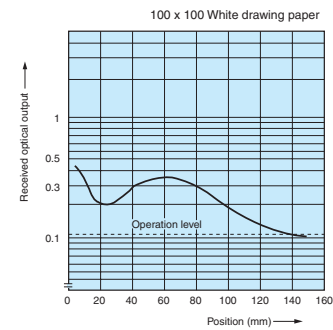
CXM1RDTW (-J)



CXM2DTW (-J)



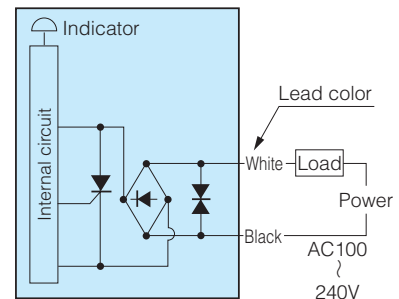
CXS01TW (-J)



## Rating/Performance/Specification

Model	Permanently attached cord type	CXM1RDTW	CXM2DTW	CXS01TW
	Connector type	CXM1RDTW-J	CXM2DTW-J	CXS01TW-J
Detection method		Polarization reflector type	Reflector type	Diffuse-reflector type
Detecting distance		1m *1	2m *1	100mm *2
Power supply		100-240V AC ±10% 50/ 60Hz		
Current consumption		1.5 max.		
Output mode		2-wire AC current output / Rating: 7-200 mA		
Operation mode		Dark-ON		Light-ON
Residual voltage (when activated)		10V		
Hysteresis		—		20% max
Response time		30ms max		
Operating angle		30°(Reflector)		
Light source (wavelength)		Red LED (700nm)	Infrared LED (900nm)	Infrared LED (910nm)
Indicator		Operation indicator: red LED		
Materia	Lens	Acrylic	Polycarbonate	Acrylic
	Case	Polycarbonate		
Wiring	Permanently attached cord type	Outer dimension: dia.4, 0.2 mm <sup>2</sup> x 2 cores, 2 m, black		
	Connector type	M12 x 1.0 4-pin		
Mass	Permanently attached cord type	75 g max.		
	Connector type	30 g max.		
Notes		Do not use reflectors other than K-7.		*2 With 50 x 50 mm white drawing paper (slit plate model CX-P) (optionally available)
		(*1) When used with K-7 reflector provided		For connector type (-J), cable with connector model CX-C4 is optionally available.

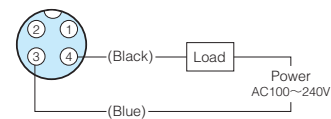
## Input/Output Circuit and Connection



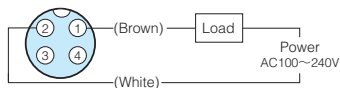
Be sure to connect power supply via a load.  
Direct output may damage the internal elements.

## Connector type

CXS01TW-J Diffuse-reflector type



CXM1RDTW-J Polarization reflector type  
CXM2DTW -J Reflector type



\*Colors in parentheses show colors of wires for use with the optional cable with connector (model: CX-C4).

## Environmental Specification

Ambient light	5,000 lx max.
Ambient temperature	-25 - +55 °C (non-freezing)
Ambient humidity	35-85%RH (non-condensing)
Protective structure	IP66
Vibration	10-55 Hz / 1.5 mm amplitude / 2 hours each in 3 directions
Dielectric withstanding	1,500 VAC for 1 minute Between entire power supply and case
Insulation resistance	500 VDC, 100 MΩ or higher Between entire power supply and case

## Dimensions (in mm)

<p>CXM1RDTW CXS01TW</p> <p>CAD</p>	<p>CXM1RDTW-J CXS01TW-J</p> <p>CAD</p>
<p>CXM2DTW</p> <p>CAD</p>	<p>CXM2DTW-J</p> <p>CAD</p>

For reflector model K-7, see P. 403