



## CX-441 | Compact Photoelectric Sensor CX-400 Ver.2



※Photo may vary from actual product.

RoHS  
compliant

Product Number	CX-441
Part Number	CX-441
Product	Compact Photoelectric Sensor
Details	Adjustable range reflective(Small spot)
Product name	Compact Photoelectric Sensor CX-400 Ver.2

### Spec Detail

As of December 11, 2023

Specifications and design of the products are subject to change without notice for the product improvement.

Item	Specifications
Product Number	CX-441
Part Number	CX-441
Regulatory compliance	EMC Directive, RoHS Directive
Adjustable range	20 to 50 mm 0.787 to 1.969 in (Note) The adjustable range stands for the maximum sensing range which can be set with the distance adjuster. The sensor can detect an object 2 mm 0.079 in [CX-444(-P): 15 mm 0.591 in, CX-442(-P): 20 mm 0.787 in], or more, away.
Sensing range(with white non-glossy paper)	2 to 50 mm 0.079 to 1.969 in
Hysteresis	2 % or less of operation distance(with white non-glossy paper)
Repeatability	Along sensing axis: 1 mm 0.039 in or less, Perpendicular to sensing axis: 0.2 mm 0.008 in or less (with white non-glossy paper)
Supply voltage	12 to 24 V DC plus or minus 10 % Ripple P-P 10 % or less
Current consumption	20 mA or less
Output	NPN open-collector transistor - Maximum sink current: 100 mA - Applied voltage: 30 V DC or less (between output and 0 V) - Residual voltage: 2 V or less (at 100 mA sink current), 1 V or less (at 16 mA sink current)
Output:Output operation	Switchable either Detection-ON or Detection-OFF
Output:Short-circuit protection	Incorporated
Response time	1 ms or less
Operation indicator	Orange LED (lights up when the output is ON)
Stability indicator	Green LED(lights up under stable operating condition)
Distance adjuster	5-turn mechanical adjuster
Sensing mode	BGS / FGS functions switchable with wiring of sensing mode selection input
Automatic Interference prevention function	Incorporated (Note) Note that detection may be unstable depending on the mounting conditions or the sensing object. In the state that this product is mounted, be sure to check the operation with the actual sensing object.
Protection	IP67 (IEC)
Ambient temperature	- 25 to +55°C -13 to +131°C °F (No dew condensation or icing allowed ), Storage: -30 to +70°C -22 to +158°C °F

Ambient humidity	35 to 85 % RH, Storage: 35 to 85 % RH
Ambient illuminance	Incandescent light: 3,000 lx or less at the light-receiving face
Voltage withstandability	1,000 V AC for one min. between all supply terminals connected together and enclosure
Insulation resistance	20 MOhm , or more, with 250 V DC megger between all supply terminals connected together and enclosure
Vibration resistance	10 to 500 Hz frequency, 3 mm 0.118 in amplitude in X, Y and Z directions for two hours each
Shock resistance	500 m/s <sup>2</sup> acceleration (50 G approx.) in X, Y and Z directions three times each
Emitting element (modulated)	Red LED
Emitting element (modulated):Peak emission wavelength	650 nm 0.026 mil
Spot diameter	Ø2 mm Ø0.079 in approx.(at 50 mm 1.969 in distance)
Material	Enclosure: PBT (Polybutylene terephthalate) Front cover: Polycarbonate Indicator cover: Polycarbonate
Cable	0.2 mm <sup>2</sup> 4-core cabtyre cable, 2 m 6.562 ft long
Cable extension	Extension up to total 100 m 328.084 ft is possible with 0.3 mm <sup>2</sup> , or more, cable.
Weight	Net weight: 55 g approx. Gross weight: 65 g approx.

### Accessories



Product Number **MS-AJ1**

Part Number **MS-AJ1**

Product name **Universal Sensor Mounting Stand MS-AJ**



Product Number **MS-AJ1-A**

Part Number **MS-AJ1-A**

Product name **Universal Sensor Mounting Stand MS-AJ**



Product Number **MS-AJ1-M**

Part Number **MS-AJ1-M**

Product name **Universal Sensor Mounting Stand MS-AJ**



Product Number **MS-AJ2**

Part Number **MS-AJ2**

Product name **Universal Sensor Mounting Stand MS-AJ**



Product Number **MS-AJ2-A**

Part Number **MS-AJ2-A**

Product name **Universal Sensor Mounting Stand MS-AJ**



Product Number **MS-AJ2-M**

Part Number **MS-AJ2-M**

Product name **Universal Sensor Mounting Stand MS-AJ**



Product Number **MS-CX-3**

Part Number **MS-CX-3**

Product **Sensor head mounting bracket**

Product name **Mounting bracket**



Product Number **MS-CX2-1**

Part Number **MS-CX2-1**

Product name **Mounting bracket**



Product Number **MS-CX2-2**

Part Number **MS-CX2-2**

Product name **Mounting bracket**



Product Number	<b>MS-CX2-4</b>	Product Number	<b>MS-CX2-5</b>
Part Number	<b>MS-CX2-4</b>	Part Number	<b>MS-CX2-5</b>
Product name	<b>Mounting bracket</b>	Product name	<b>Mounting bracket</b>

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