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Sensors

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CX-442 | Compact
Photoelectric Sensor CX-400 Ver.2

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Catalog/
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*Photo may vary from actual product.



Contact Us

Technical Inquiries,
Purchase Support &
Additional Assistance

Technical inquiry

Business inquiry

Other inquiry

Product Number	CX-442
Part Number	CX-442
Product	Compact Photoelectric Sensor
Details	Adjustable range reflective
Product Name	Compact Photoelectric Sensor CX-400 Ver.2

Contact Us

Technical inquiry

Business inquiry

Other inquiry

Spec
Detail



Accessories
(Option)



As of April 26, 2025 (JST)
*Specifications and design of the products are subject to change without notice for the product improvement.

Spec Detail

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

Item	Specifications
Product Number	CX-442
Part Number	CX-442
Products Name	Compact Photoelectric Sensor



Item	Specifications
Product details	Adjustable range reflective
The price of the product	Please contact our office
Applicable regulations and certifications	CE Marking (EMC Directive, RoHS Directive), UKCA Marking (EMC Regulations, RoHS Regulations), UL Recognition Certification
Adjustable range	40 to 300 mm 1.575 to 11.811 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)	20 to 300 mm 0.787 to 11.811 in
Hysteresis	5 % 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: 2 mm 0.008 in or less



Item	Specifications
	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 wit



Item	Specifications
	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



Item	Specifications
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 ² 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	Ø15 mm Ø0.591 in approx.(at 300 mm 11.811 in distance)
Material	Enclosure: PBT (Polybutylene terephthalate) Front cover: Polycarbonate Indicator cover: Polycarbonate
Cable	0.2 mm ² 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



Item	Specifications
	mm ² , or more, cable.
Weight	Net weight: 55 g approx. Gross weight: 65 g approx.

Accessories (Option)

	Product number	Part number	Product	D
No image	MS-AJ1	MS-AJ1	-	-
No image	MS-AJ1-A	MS-AJ1-A	-	-
No image	MS-AJ1-M	MS-AJ1-M	-	-
No image	MS-AJ2	MS-AJ2	-	-

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



- CX-441 | Compact Photoelectric Sensor
CX-400 Ver.2 >
- CX-424-P | Compact Photoelectric
Sensor CX-400 Ver.2 >
- CX-424 | Compact Photoelectric Sensor
CX-400 Ver.2 >
- CX-423-P | Compact Photoelectric
Sensor CX-400 Ver.2 >

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Control Components & Electronic Device Products Technical Support

Relays, Couplers,
Connectors, Switches,
and Other
Control Components &
Electronic Device
Products

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FA Sensors & Components, Motors Technical Support

FA Sensors, PLC ,Eco
Power Meters, Times,
Counters, Limit Switches
and Other FA Sensors &
Components

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Motors Technical Support

Motors for FA & Industrial
Application, Motors for
Appliance & Automotive

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Guidelines for Ordering and Usage



Requests to customers (FA Sensors & Components [Excluding motors])

Requests to customers (Dedicated to industrial motors)

Components & Devices	FA Sensors & Components			Motors for FA & Industrial Application
Relays / Couplers	Fiber Sensors	Sensor Options	Static Control Devices	AC Servo Motors for HVAC & Automotive
Connectors	Photoelectric Sensors / Laser Sensors	Wire-Saving Systems	Laser Markers / 2D Code Readers	
Switches	Micro Photoelectric Sensors	Programmable Controllers / Motion Controller	Machine Vision System	
Encoders / Potentiometers	Light Curtains / Safety Components	Human Machine Interface	Energy Management Solutions	
Transparent Conductive Film	Area Sensors	Pressure Sensors / Flow Sensors		
Cooling Fan	Inductive Proximity Sensors	Measurement Sensors		
	Particular Use Sensors			