

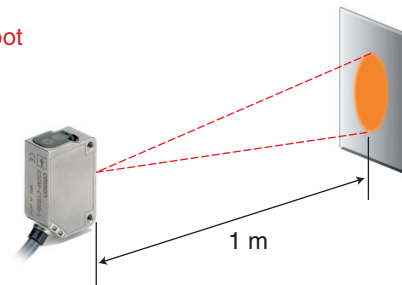
# Advanced Industrial Automation

## Perfectly Reliable Detection Performance and Connection Method

### Visible Beam. Long-distance Operation Even in Dusty, Dirty Environments

The E3ZM-CT□2B uses a bright orange LED to generate a spot that's visible 1 m away. And the stronger beam used to achieve a detection distance of 20 m means that Sensor operation is possible even in dusty, dirty environments (response time: 2 ms). It all adds up to a more visible, more dependable worksite.

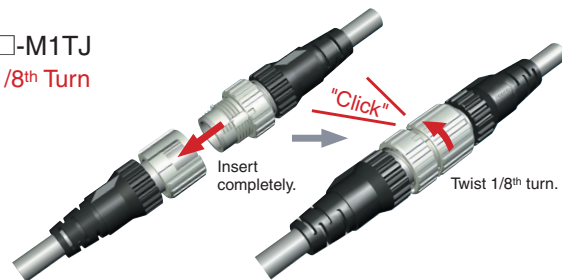
E3ZM-CT□2B  
Bright Orange Spot



### Simple, Yet Dependable M12 Twist-and-Click Pre-wired Connectors

These Connectors match the XS5 Connectors, which reduce wiring work. They eliminate the troublesome need to control torque when tightening connectors, and remove worries about screws loosening due to vibration.

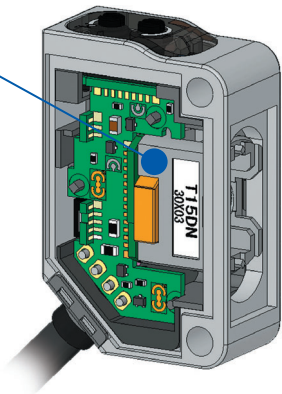
E3ZM-C□□□-M1TJ  
Locks with a 1/8<sup>th</sup> Turn



## Unique Miniaturization and Modularization Technologies

### Sensing Module

The optical system and signal processing are all contained in one module, providing all the main functions required of a Photoelectric Sensor.



Internal Structure

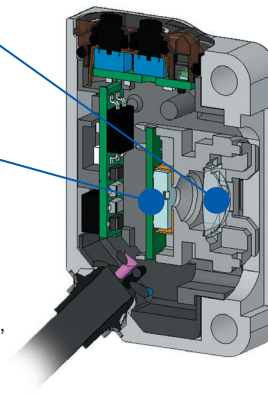
### Optical System

Maximizes manufacturing technology, including sophisticated inline optical axis adjustment.

### Signal Processing

Leading-edge technology for stabilization and miniaturization is obvious in the photo IC, which includes an external light interference prevention algorithm, CSP\* mounting, and other components.

\*Chip Scale Package



Cross Section


Oil-resistant, Robust, Compact Photoelectric Sensor (Stainless Housing and Built-in Amplifier)

# E3ZM-C

## Designed for the Automotive and Machine Tool Industries

- Oil-resistant, water-resistant, robust body made of stainless steel.
- Same size as the E3Z: The smallest square metal photoelectric sensor in the world.
- Through-beam Models with an orange spot that's visible 1 m away, and a long distance detection to reduce the influence of dirt (detection distance: 20 m, response time: 2 ms).
- Models with M12 twist-and-click pre-wired connectors.
- Reversed output polarity protection, external light interference prevention algorithm, and RoHS compliance to inherit the E3Z's reliability.

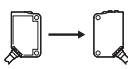


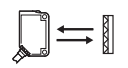

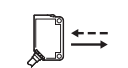

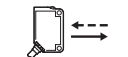





 Refer to "Safety Precautions" on page 13

## Ordering Information

### Sensors

 Orange light  Red light  Infrared light

Sensing method	Appearance	Connection method	Sensing distance	Model	
				NPN output	PNP output
Through-beam		Pre-wired (2 m)	 15 m	E3ZM-CT61	E3ZM-CT81
		Pre-wired (5 m)		E3ZM-CT61 5M	E3ZM-CT81 5M
		M12 twist-and-click pre-wired connector (0.3 m)		E3ZM-CT61-M1TJ	E3ZM-CT81-M1TJ
		Connector (M8, 4 pins)		E3ZM-CT66	E3ZM-CT86
		Pre-wired (2 m)	 20 m	E3ZM-CT62B	E3ZM-CT82B
		Pre-wired (5 m)		E3ZM-CT62B 5M	E3ZM-CT82B 5M
		M12 twist-and-click pre-wired connector (0.3 m)		E3ZM-CT62B-M1TJ	E3ZM-CT82B-M1TJ
		Connector (M8, 4 pins)		E3ZM-CT67B	E3ZM-CT87B
Retro-reflective		Pre-wired (2 m)	 4 m (100 mm)	E3ZM-CR61	E3ZM-CR81
		M12 twist-and-click pre-wired connector (0.3 m)		E3ZM-CR61-M1TJ	E3ZM-CR81-M1TJ
		Connector (M8, 4 pins)		E3ZM-CR66	E3ZM-CR86
Diffuse-reflective		Pre-wired (2 m)	 1 m	E3ZM-CD62	E3ZM-CD82
		M12 twist-and-click pre-wired connector (0.3 m)		E3ZM-CD62-M1TJ	E3ZM-CD82-M1TJ
		Connector (M8, 4 pins)		E3ZM-CD67	E3ZM-CD87
BGS reflective		Pre-wired (2 m)	 10 to 100 mm	E3ZM-CL61H	E3ZM-CL81H
		M12 twist-and-click pre-wired connector (0.3 m)		E3ZM-CL61H-M1TJ	E3ZM-CL81H-M1TJ
		Connector (M8, 4 pins)		E3ZM-CL66H	E3ZM-CL86H
		Pre-wired (2 m)	 10 to 150 mm	E3ZM-CL62H	E3ZM-CL82H
		M12 twist-and-click pre-wired connector (0.3 m)		E3ZM-CL62H-M1TJ	E3ZM-CL82H-M1TJ
		Connector (M8, 4 pins)		E3ZM-CL67H	E3ZM-CL87H
		Pre-wired (2 m)	 10 to 200 mm	E3ZM-CL64H	E3ZM-CL84H
		M12 twist-and-click pre-wired connector (0.3 m)		E3ZM-CL64H-M1TJ	E3ZM-CL84H-M1TJ
Connector (M8, 4 pins)	E3ZM-CL69H	E3ZM-CL89H			