

Distance-settable Photoelectric Sensor TOF Laser Sensor

E3AS-F Series

Optimal sensing distance (50 to 1,500 mm) for use on conveyor lines

- Wide sensing distance of 50 to 1,500 mm*, enabling use on any conveyor line width
- Time of flight (TOF) type sensors for use with any type of conveyed object
- Compact body can be mounted anywhere
- (Metal body (SUS316L), Plastic body type (PBT/PC))
- Teaching method allows anyone to set optimal threshold values
- Manufactured using Omron's proprietary laser sealing method (IP67/IP69K/IP67G)
- Antifouling coatings reduce the cleaning frequency on the lens.
- IO-Link reduces time required for startups and changeovers

* The sensing distance of the E3AS-F1500 series.



Refer to *Safety Precautions* on page 9.



For the most recent information on models that have been certified for safety standards, refer to your Omron website.

Ordering Information

Sensors [Refer to *Dimensions* on page 11.]

SUS 316L Body

Infrared light

Connection method	Sensing distance (white paper)	Output	Model		
		IO-Link baud rate	NPN output ---	PNP output COM2 (38.4 kbps)	PNP output COM3 (230.4 kbps)
Pre-wired (2 m) ¹			E3AS-F1500IMN 2M	E3AS-F1500IMD 2M	E3AS-F1500IMT 2M
M8 Connector			E3AS-F1500IMN M3	E3AS-F1500IMD M3	E3AS-F1500IMT M3
M8 Pre-wired Connector			E3AS-F1500IMN-M3J 0.3M	E3AS-F1500IMD-M3J 0.3M	E3AS-F1500IMT-M3J 0.3M
M12 Pre-wired Connector ²			E3AS-F1500IMN-M1TJ 0.3M	E3AS-F1500IMD-M1TJ 0.3M	E3AS-F1500IMT-M1TJ 0.3M
Pre-wired (2 m) ¹			E3AS-F1000IMN 2M	E3AS-F1000IMD 2M	E3AS-F1000IMT 2M
M8 Connector			E3AS-F1000IMN M3	E3AS-F1000IMD M3	E3AS-F1000IMT M3
M8 Pre-wired Connector			E3AS-F1000IMN-M3J 0.3M	E3AS-F1000IMD-M3J 0.3M	E3AS-F1000IMT-M3J 0.3M
M12 Pre-wired Connector ²			E3AS-F1000IMN-M1TJ 0.3M	E3AS-F1000IMD-M1TJ 0.3M	E3AS-F1000IMT-M1TJ 0.3M

PBT Body

Connection method	Sensing distance (white paper)	Output	Model		
		IO-Link baud rate	NPN output ---	PNP output COM2 (38.4 kbps)	PNP output COM3 (230.4 kbps)
Pre-wired (2 m) ¹			E3AS-F1500IPN 2M	E3AS-F1500IPD 2M	E3AS-F1500IPT 2M
M8 Connector			E3AS-F1500IPN M3	E3AS-F1500IPD M3	E3AS-F1500IPT M3
M8 Pre-wired Connector			E3AS-F1500IPN-M3J 0.3M	E3AS-F1500IPD-M3J 0.3M	E3AS-F1500IPT-M3J 0.3M
M12 Pre-wired Connector ²			E3AS-F1500IPN-M1TJ 0.3M	E3AS-F1500IPD-M1TJ 0.3M	E3AS-F1500IPT-M1TJ 0.3M
Pre-wired (2 m) ¹			E3AS-F1000IPN 2M	E3AS-F1000IPD 2M	E3AS-F1000IPT 2M
M8 Connector			E3AS-F1000IPN M3	E3AS-F1000IPD M3	E3AS-F1000IPT M3
M8 Pre-wired Connector			E3AS-F1000IPN-M3J 0.3M	E3AS-F1000IPD-M3J 0.3M	E3AS-F1000IPT-M3J 0.3M
M12 Pre-wired Connector ²			E3AS-F1000IPN-M1TJ 0.3M	E3AS-F1000IPD-M1TJ 0.3M	E3AS-F1000IPT-M1TJ 0.3M

1. Models with 5-m cable length are also available with "5M" suffix. (Example: E3AS-F1500IMN 5M/E3AS-F1500IPN 5M)

2. The Pre-wired Connector (M12) is Smartclick Connector.

E3AS-F Series

Accessories (Sold Separately)

Sensor I/O Connectors (Sockets on One Cable End)

(Models for Connectors / Pre-wired Connectors)

A Sensor I/O Connector is not provided with the Sensor. Order separately.

Round Water-resistant Connectors XS3F-M8 series

Appearance	Cable specification	Cable diameter (mm)	Cable connection direction	Cable length (m)	Sensor I/O Connector model number
M8 Connector	PVC cable	5 dia.	Straight	2	XS3F-M8PVC4S2M
Straight type				5	XS3F-M8PVC4S5M
			Right-angle	2	XS3F-M8PVC4A2M
				5	XS3F-M8PVC4A5M

Note: 1. The XS3W (Socket and Plug on Cable Ends) is also available. Refer to *XS3W-M8/XS3F-M8 Series Datasheet* (Cat. No. G140).

2. The connectors will not rotate after they are connected.

3. The cable is fixed at an angle of 180° from the sensor emitter/receiver surface.

Round Water-resistant Connectors XS5 series

Appearance	Cable specification	Cable diameter (mm)	Cable connection direction	Cable length (m)	Sensor I/O Connector model number
M12 Smartclick Connector	PVC robot cable	6 dia.	Straight	2	XS5F-D421-D80-F
Straight type				5	XS5F-D421-G80-F
			Right-angle	2	XS5F-D422-D80-F
				5	XS5F-D422-G80-F

Note: 1. The XS5W (Socket and Plug on Cable Ends) is also available. Refer to XS5 on your Omron website for details.

2. The connectors will not rotate after they are connected.

3. The cable is fixed at an angle of 180° from the sensor emitter/receiver surface.