OMRON

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.

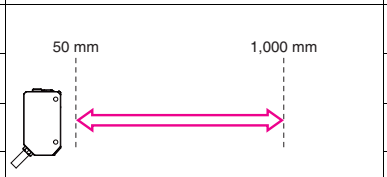
For the most recent information on models that have been certified for safety standards, refer to your Omron website.

Ordering Information

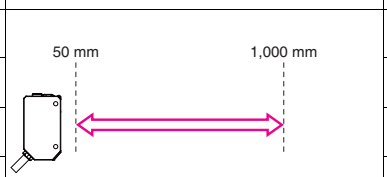
Sensors [Refer to *Dimensions* on page 11.]

SUS 316L Body

Infrared light

Connection method	Sensing distance (white paper)	Output	Model		
			NPN output	PNP output	PNP output
		IO-Link baud rate	---	COM2 (38.4 kbps)	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		
			NPN output	PNP output	PNP output
		IO-Link baud rate	---	COM2 (38.4 kbps)	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.

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 Straight type 	PVC cable	5 dia.	Straight	2	**XS3F-M8PVC4S2M**
				5	**XS3F-M8PVC4S5M**
Right-angle type 			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 Straight type 	PVC robot cable	6 dia.	Straight	2	**XS5F-D421-D80-F**
				5	**XS5F-D421-G80-F**
Right-angle type 			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.