

Long-distance Detection Prevents Unexpected Facility Stoppages

- Exceptional sensing distance*¹. Nearly double the sensing distance of previous models.
- With high-brightness LED, indicator is visible 360° around.
- Only 10 seconds*² to replace a Proximity Sensor with Quick fix (Mounting Sleeve).
- Cables with enhanced oil resistance have 2-year oil resistance*³.
- IP69K compliant for water resistance and wash resistance.*⁴
- UL certification (UL60947-5-2) and CSA certification (CSA C22.2 UL60947-5-2-14)

*1. Based on July 2017 OMRON investigation.
 *2. Time required to adjust the distance when installing a Sensor. Based on OMRON investigation.
 *3. Refer to page 6 and 8 for details. However, E2EQ series is excluded.
 *4. E2EQ series is excluded.



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

Be sure to read *Safety Precautions* on page 15.

E2E/E2EQ NEXT Series Model Number Legend

DC 2-wire

E2E (1) - X (2) (3) D (4) (5) (6) - (7) - (8) (9) - (10) (11)

No.	Classification	Code	Meaning
(1)	Case	Blank	Without spatter-resistant coating
		Q	With spatter-resistant coating
(2)	Sensing distance	Number	Sensing distance (Unit: mm) (R: Indication of decimal point)
(3)	Shielding	Blank	Shielded Models
		M	Unshielded Models
(4)	Operation mode	1	Normally open (NO)
		2	Normally closed (NC)
(5)	Body size	Blank	Standard
		L	Long Body
(6)	Size (Omitted for the Single distance type.)	8	M8
		12	M12
		18	M18
		30	M30
(7)	Connecting method	Blank	Pre-wired Models
		M1TGJ	M12 Pre-wired Smartclick Connector Models pigtail
		M1TGJR	M12 Pre-wired Smartclick Connector Models (Robot (bending-resistant) PVC cable) robot pigtail
(8)	Polarity	Blank	Polarity
		T	No polarity
(9)	Cable specifications *	Blank	Standard PVC cable
		R	Robot (bending-resistant) PVC cable
(10)	New model	Blank	Other than Single distance model (Pre-wired Models)
		N	Single distance model (Applicable only to Pre-wired Models)
(11)	Cable length	Number M	Cable length

* (9) is only shown in the model number of Pre-wired Models.

Note: 1. The purpose of this model number legend is to provide understanding of the meaning of specifications from the model number. Models are not available for all combinations of code numbers.

2. Size description of the number 7 is not included in the Single-distance type.

E2E/E2EQ NEXT Series

Ordering Information

Sensors

E2E NEXT Series (Triple distance model)

DC 2-wire [Refer to *Dimensions* on page 18.]

Shielded Models *1

Size (Sensing distance)	Connection method	Polarity	Model	
			Operation mode: NO	Operation mode: NC
M8 (3 mm)	Pre-wired (2 m) *2 *3	Yes	E2E-X3D18 2M	E2E-X3D28 2M
		No	E2E-X3D18-T 2M	E2E-X3D28-T 2M
	M12 Pre-wired Smartclick Connector (0.3 m) *4	Yes	E2E-X3D18-M1TGJ 0.3M	E2E-X3D28-M1TGJ 0.3M
		No	E2E-X3D18-M1TGJ-T 0.3M	E2E-X3D28-M1TGJ-T 0.3M
M12 (7 mm)	Pre-wired (2 m) *2 *3	Yes	E2E-X7D112 2M	E2E-X7D212 2M
		No	E2E-X7D112-T 2M	E2E-X7D212-T 2M
	M12 Pre-wired Smartclick Connector (0.3 m) *4	Yes	E2E-X7D112-M1TGJ 0.3M	E2E-X7D212-M1TGJ 0.3M
		No	E2E-X7D112-M1TGJ-T 0.3M	E2E-X7D212-M1TGJ-T 0.3M
M18 (11 mm)	Pre-wired (2 m) *2 *3	Yes	E2E-X11D118 2M	E2E-X11D218 2M
		No	E2E-X11D118-T 2M	E2E-X11D218-T 2M
	M12 Pre-wired Smartclick Connector (0.3 m) *4	Yes	E2E-X11D118-M1TGJ 0.3M	E2E-X11D218-M1TGJ 0.3M
		No	E2E-X11D118-M1TGJ-T 0.3M	E2E-X11D218-M1TGJ-T 0.3M
M30 (20 mm)	Pre-wired (2 m) *2 *3	Yes	E2E-X20D130 2M	E2E-X20D230 2M
		No	E2E-X20D130-T 2M	E2E-X20D230-T 2M
	M12 Pre-wired Smartclick Connector (0.3 m) *4	Yes	E2E-X20D130-M1TGJ 0.3M	E2E-X20D230-M1TGJ 0.3M
		No	E2E-X20D130-M1TGJ-T 0.3M	E2E-X20D230-M1TGJ-T 0.3M

Unshielded Models

Size (Sensing distance)	Connection method	Polarity	Model	
			Operation mode: NO	Operation mode: NC
M8 (6 mm)	Pre-wired (2 m) *2 *3	Yes	E2E-X6MD18 2M	E2E-X6MD28 2M
		No	E2E-X6MD18-T 2M	E2E-X6MD28-T 2M
	M12 Pre-wired Smartclick Connector (0.3 m) *4	Yes	E2E-X6MD18-M1TGJ 0.3M	E2E-X6MD28-M1TGJ 0.3M
		No	E2E-X6MD18-M1TGJ-T 0.3M	E2E-X6MD28-M1TGJ-T 0.3M
M12 (10 mm)	Pre-wired (2 m) *2 *3	Yes	E2E-X10MD112 2M	E2E-X10MD212 2M
		No	E2E-X10MD112-T 2M	E2E-X10MD212-T 2M
	M12 Pre-wired Smartclick Connector (0.3 m) *4	Yes	E2E-X10MD112-M1TGJ 0.3M	E2E-X10MD212-M1TGJ 0.3M
		No	E2E-X10MD112-M1TGJ-T 0.3M	E2E-X10MD212-M1TGJ-T 0.3M
M18 (20 mm)	Pre-wired (2 m) *2 *3	Yes	E2E-X20MD1L18 2M	E2E-X20MD2L18 2M
		No	E2E-X20MD1L18-T 2M	E2E-X20MD2L18-T 2M
	M12 Pre-wired Smartclick Connector (0.3 m) *4	Yes	E2E-X20MD1L18-M1TGJ 0.3M	E2E-X20MD2L18-M1TGJ 0.3M
		No	E2E-X20MD1L18-M1TGJ-T 0.3M	E2E-X20MD2L18-M1TGJ-T 0.3M
M30 (40 mm)	Pre-wired (2 m) *2 *3	Yes	E2E-X40MD1L30 2M	E2E-X40MD2L30 2M
		No	E2E-X40MD1L30-T 2M	E2E-X40MD2L30-T 2M
	M12 Pre-wired Smartclick Connector (0.3 m) *4	Yes	E2E-X40MD1L30-M1TGJ 0.3M	E2E-X40MD2L30-M1TGJ 0.3M
		No	E2E-X40MD1L30-M1TGJ-T 0.3M	E2E-X40MD2L30-M1TGJ-T 0.3M

*1. When embedding the Proximity Sensor in metal, refer to *Influence of Surrounding Metal* on page 16.

*2. Models with 5-m cable length are also available with "5M" suffix. (Example: E2E-X3D18 5M)

*3. Models with 2-m and 5-m robot (bending-resistant) cables are also available with "-R" in the model number. (Example: E2E-X3D18-R 2M/E2E-X3D18-R 5M)

*4. Models with M12 Pre-wired Smartclick Connectors and robot (bending-resistant) cables are also available with "R" in the model number. (Example: E2E-X3D18-M1TGJR 0.3M/E2E-X3D18-M1TGJR-T 0.3M)

Sensors

E2EQ NEXT Series (Spatter-resistant Triple distance model)

DC 2-wire [Refer to *Dimensions* on page 21.]

Shielded Models *1

Size (Sensing distance)	Connection method	Polarity	Model	
			Operation mode: NO	Operation mode: NC
M8 (3 mm)	Pre-wired (2 m) *2	Yes	E2EQ-X3D18 2M	E2EQ-X3D28 2M
		No	E2EQ-X3D18-T 2M	E2EQ-X3D28-T 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	Yes	E2EQ-X3D18-M1TGJ 0.3M	E2EQ-X3D28-M1TGJ 0.3M
		No	E2EQ-X3D18-M1TGJ-T 0.3M	E2EQ-X3D28-M1TGJ-T 0.3M
M12 (7 mm)	Pre-wired (2 m) *2	Yes	E2EQ-X7D112 2M	E2EQ-X7D212 2M
		No	E2EQ-X7D112-T 2M	E2EQ-X7D212-T 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	Yes	E2EQ-X7D112-M1TGJ 0.3M	E2EQ-X7D212-M1TGJ 0.3M
		No	E2EQ-X7D112-M1TGJ-T 0.3M	E2EQ-X7D212-M1TGJ-T 0.3M
M18 (11 mm)	Pre-wired (2 m) *2	Yes	E2EQ-X11D118 2M	E2EQ-X11D218 2M
		No	E2EQ-X11D118-T 2M	E2EQ-X11D218-T 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	Yes	E2EQ-X11D118-M1TGJ 0.3M	E2EQ-X11D218-M1TGJ 0.3M
		No	E2EQ-X11D118-M1TGJ-T 0.3M	E2EQ-X11D218-M1TGJ-T 0.3M
M30 (20 mm)	Pre-wired (2 m) *2	Yes	E2EQ-X20D130 2M	E2EQ-X20D230 2M
		No	E2EQ-X20D130-T 2M	E2EQ-X20D230-T 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	Yes	E2EQ-X20D130-M1TGJ 0.3M	E2EQ-X20D230-M1TGJ 0.3M
		No	E2EQ-X20D130-M1TGJ-T 0.3M	E2EQ-X20D230-M1TGJ-T 0.3M

*1. When embedding the Proximity Sensor in metal, refer to *Influence of Surrounding Metal* on page 16.

*2. Models with 5-m cable length are also available with "5M" suffix. (Example: E2EQ-X3D18 5M)

E2E NEXT Series (Single distance model)

DC 2-wire [Refer to *Dimensions* on page 22.]

Shielded Models

Size (Sensing distance)	Connection method	Polarity	Model	
			Operation mode: NO	Operation mode: NC
M8 (1.5 mm)	Pre-wired (2 m) *2 *3	Yes	E2E-X1R5D1-N 2M	E2E-X1R5D2-N 2M
		No	E2E-X1R5D1-T-N 2M	E2E-X1R5D2-T-N 2M
	M12 Pre-wired Smartclick Connector (0.3 m) *4	Yes	E2E-X1R5D1-M1TGJ 0.3M	E2E-X1R5D2-M1TGJ 0.3M
		No	E2E-X1R5D1-M1TGJ-T 0.3M	E2E-X1R5D2-M1TGJ-T 0.3M
M12 (2.5 mm)	Pre-wired (2 m) *2 *3	Yes	E2E-X2R5D1-N 2M	E2E-X2R5D2-N 2M
		No	E2E-X2R5D1-T-N 2M	E2E-X2R5D2-T-N 2M
	M12 Pre-wired Smartclick Connector (0.3 m) *4	Yes	E2E-X2R5D1-M1TGJ 0.3M	E2E-X2R5D2-M1TGJ 0.3M
		No	E2E-X2R5D1-M1TGJ-T 0.3M	E2E-X2R5D2-M1TGJ-T 0.3M
M18 (5 mm)	Pre-wired (2 m) *2 *3	Yes	E2E-X5D1-N 2M	E2E-X5D2-N 2M
		No	E2E-X5D1-T-N 2M	E2E-X5D2-T-N 2M
	M12 Pre-wired Smartclick Connector (0.3 m) *4	Yes	E2E-X5D1-M1TGJ 0.3M	E2E-X5D2-M1TGJ 0.3M
		No	E2E-X5D1-M1TGJ-T 0.3M	E2E-X5D2-M1TGJ-T 0.3M

*1. Models with 5-m cable length are also available with "5M" suffix. (Example: E2E-X1R5D1-N 5M)

*2. Models with 2-m and 5-m robot (bending-resistant) cables are also available with "-R" in the model number. (Example: E2E-X1R5D1-R-N 2M/E2E-X1R5D1-R-N 5M)


*3. Models with M12 Smartclick connector model robot (bending-resistant) cables are also available with "R" in the model number. (Example: E2E-X1R5D1-M1TGJR 0.3M/E2E-X1R5D1-M1TGJR-T 0.3M)

E2E/E2EQ NEXT Series

Accessories (Sold Separately)



Sensor I/O Connectors

(Models for Pre-wired Connectors) A Sensor I/O Connector is not provided with the Sensor. It must be ordered separately as required.
Round Oil-resistant Connectors XS5 NEXT series

Appearance	Cable Specification	Type	Cable diameter (mm)	Cable Connection Direction	Cable length (m)	Sensor I/O Connector model number	Applicable Proximity Sensor model number
 <p>M12 Smartclick Connector Straight type</p>	Oil-resistant PVC cable	Sockets on One Cable End	6 dia.	Straight	1	XS5F-D421-C80-X	E2E-X□D□-M1TGJ(R)(-T) E2EQ-X□D□-M1TGJ(-T)
					2	XS5F-D421-D80-X	
					3	XS5F-D421-E80-X	
					5	XS5F-D421-G80-X	
					10	XS5F-D421-J80-X	
	Oil-resistant PVC robot cable	Sockets on One Cable End	6 dia.	Straight	1	XS5F-D421-C80-XR	
					2	XS5F-D421-D80-XR	
					3	XS5F-D421-E80-XR	
					5	XS5F-D421-G80-XR	
					10	XS5F-D421-J80-XR	
	Oil-resistant PVC cable	Socket and Plug on Cable Ends	6 dia.	Straight (Socket)/ Straight (Plug)	1	XS5W-D421-C81-X	
					2	XS5W-D421-D81-X	
					3	XS5W-D421-E81-X	
					5	XS5W-D421-G81-X	
					10	XS5W-D421-J81-X	
	Oil-resistant PVC robot cable	Socket and Plug on Cable Ends	6 dia.	Straight (Socket)/ Straight (Plug)	1	XS5W-D421-C81-XR	
					2	XS5W-D421-D81-XR	
					3	XS5W-D421-E81-XR	
5					XS5W-D421-G81-XR		
10					XS5W-D421-J81-XR		

Note: For details of the connector, refer to XS5 NEXT Series on page 87.

Round Water-resistant Connectors XS5 series

Appearance	Cable Specification	Type	Cable diameter (mm)	Cable Connection Direction	Cable length (m)	Sensor I/O Connector model number	Applicable Proximity Sensor model number			
 <p>M12 Smartclick Connector Straight type</p>  <p>Right-angle type</p>	PVC robot cable	Sockets on One Cable End	6 dia.	Straight	1	XS5F-D421-C80-F	E2E-X□D□-M1TGJ(R)(-T) E2EQ-X□D□-M1TGJ(-T)			
					2	XS5F-D421-D80-F				
					3	XS5F-D421-E80-F				
					5	XS5F-D421-G80-F				
					10	XS5F-D421-J80-F				
				Oil-resistant PVC robot cable	Socket and Plug on Cable Ends	6 dia.		Right-angle	1	XS5F-D422-C80-F
									2	XS5F-D422-D80-F
									3	XS5F-D422-E80-F
									5	XS5F-D422-G80-F
								Straight (Socket)/ Straight (Plug)	1	XS5W-D421-C81-F
	2	XS5W-D421-D81-F								
	3	XS5W-D421-E81-F								
	5	XS5W-D421-G81-F								
	Right-angle (Socket)/ Right-angle (Plug)	2	XS5W-D422-D81-F							
		5	XS5W-D422-G81-F							
		Straight (Socket)/ Right-angle (Plug)	2	XS5W-D423-D81-F						
			5	XS5W-D423-G81-F						
	Right-angle (Socket)/ Straight (Plug)	2	XS5W-D424-D81-F							
5		XS5W-D424-G81-F								

Note: For details of the connector, refer to XS5 Series on page 94.

Sensor I/O Connectors Oil resistance performance of mating combination


E2E NEXT Series Pre-wired Connector Models	Applicable connector Model	
	XS5 NEXT series	XS5 series
E2E-X□D□-M1TGJ(R)(-T)	2 years of oil resistance*	Water-resistant (IP67)

* Applicable cutting oil type: specified in JIS K 2241:2000

2 years of oil resistance indicates the median value of the product design and the oil-resistance performance criterion result (=Typical value).
Products to be shipped will have approximately 2 years of oil resistance, but will vary depending on the product.

Quick fix (Mounting Sleeves) [Refer to Dimensions on page 23.]

A Mounting Bracket is not provided with the Sensor. It must be ordered separately as required.

Appearance	Model	Applicable Sensors
	Y92E-J8S12	E2E NEXT M8 Shielded Sensors
	Y92E-J12S18	E2E NEXT M12 Shielded Sensors
	Y92E-J18S30	E2E NEXT M18 Shielded Sensors

Note: Not applicable for E2EQ NEXT Series (spatter-resistant) models.

E2E/E2EQ NEXT Series

Ratings and Specifications

E2E NEXT Series (Triple distance model) DC 2-wire

Item	Size		M8		M12		M18		M30					
	Shielded	Model	Shielded	Unshielded	Shielded	Unshielded	Shielded	Unshielded	Shielded	Unshielded				
			E2E-X3D□	E2E-X6MD□	E2E-X7D□	E2E-X10MD□	E2E-X11D□	E2E-X20MD□	E2E-X20D□	E2E-X40MD□				
Sensing distance			3 mm ±10%	6 mm ±10%	7 mm ±10%	10 mm ±10%	11 mm ±10%	20 mm ±10%	20 mm ±10%	40 mm ±10%				
Setting distance *1			0 to 2.4 mm	0 to 4.8 mm	0 to 5.6 mm	0 to 8 mm	0 to 8.8 mm	0 to 16 mm	0 to 16 mm	0 to 32 mm				
Differential travel			15% max. of sensing distance											
Detectable object			Ferrous metal (The sensing distance decreases with non-ferrous metal. Refer to <i>Engineering Data</i> on page 9.)											
Standard sensing object			Iron, 9 × 9 × 1 mm	Iron, 18 × 18 × 1 mm	Iron, 21 × 21 × 1 mm	Iron, 30 × 30 × 1 mm	Iron, 33 × 33 × 1 mm	Iron, 60 × 60 × 1 mm	Iron, 60 × 60 × 1 mm	Iron, 120 × 120 × 1 mm				
Response frequency *2			350 Hz	250 Hz	350 Hz	200 Hz	250 Hz	200 Hz	200 Hz	50 Hz				
Power supply voltage			10 to 30 VDC, (including 10% ripple (p-p))											
Leakage current			0.8 mA max.											
Control output	Load current	3 to 100 mA												
	Residual voltage	Polarity: 3 V max. (Load current: 100 mA, Cable length: 2 m) No polarity: 5 V max. (Load current: 100 mA, Cable length: 2 m)												
Indicator			D1 Models: Operation indicator (orange), Setting indicator (green) D2 Models: Operation indicator (orange)											
Operation mode			D1 Models: NO D2 Models: NC Refer to the timing charts under <i>I/O Circuit Diagrams</i> on page 13 for details.											
Protection circuits			Surge suppressor, Load short-circuit protection											
Ambient temperature range			Operating: -25 to 70°C, Storage: -40 to 85°C (with no icing or condensation)											
Ambient humidity range			Operating and Storage: 35% to 95% (with no condensation)											
Temperature influence			±10% max. of sensing distance at 23°C in the temperature range of -25 to 70°C				±20% max. of sensing distance at 23°C in the temperature range of -25 to 70°C		±10% max. of sensing distance at 23°C in the temperature range of -25 to 70°C		±20% max. of sensing distance at 23°C in the temperature range of -25 to 70°C			
Voltage influence			±1% max. of sensing distance at rated voltage in the rated voltage ±15% range											
Insulation resistance			50 MΩ min. (at 500 VDC) between current-carrying parts and case											
Dielectric strength			1,000 VAC, 50/60 Hz for 1 minute between current-carrying parts and case											
Vibration resistance (destruction)			10 to 55 Hz, 1.5-mm double amplitude for 2 hours each in X, Y, and Z directions											
Shock resistance (destruction)			500 m/s ² 10 times each in X, Y, and Z directions				1,000 m/s ² 10 times each in X, Y, and Z directions							
Degree of protection			Pre-wired Models/Pre-wired Connector Models: IP67 (IEC 60529), IP67G *3 (JIS C 0920 Annex 1) Passed OMRON's Oil-resistant Component Evaluation Standards *4 (Cutting oil type: specified in JIS K 2241:2000, Temperature: 35 °C max.) and ISO 20653 (old standard: DIN 40050 PART9) IP69K											
Connecting method			Pre-wired Models (Standard cable length: 2 m) and Pre-wired Connector Models (Standard cable length: 0.3 m)											
Weight (packed state)	Pre-wired Models	Approx. 60 g			Approx. 70 g		Approx. 130 g		Approx. 150 g		Approx. 180 g		Approx. 210 g	
	Pre-wired Connector Models	Approx. 30 g			Approx. 40 g		Approx. 70 g		Approx. 90 g		Approx. 110 g		Approx. 140 g	
Materials	Case	Nickel-plated brass	Stainless steel (SUS303)		Nickel-plated brass									
	Sensing surface	Polybutylene terephthalate (PBT)												
	Clamping nuts	Nickel-plated brass												
	Toothed washer	Zinc-plated iron												
Cable	Vinyl chloride (PVC)													
Accessories			Instruction manual, Clamping nuts, Toothed washer											

*1. Use the Sensor within the range in which the setting indicator (green LED) is ON (except D2 Models).

*2. The response frequency is an average value. Measurement conditions are as follows: standard sensing object, a distance of twice the standard sensing object, and a set distance of half the sensing distance.

*3. The IP67G is the degree of protection which is defined according to the JIS (Japanese Industrial Standards). The IP67 indicates the same level of protection as defined by the IEC, and the G indicates that a device has resistance to oil.

*4. The Oil-resistant Component Evaluation Standards are OMRON's own durability evaluation standards. 2-year oil resistance indicates the median value of the product design and the oil-resistance performance criterion result (=Typical value). The Pre-wired Connector Model verifies 2 years of oil resistance when mating with Round Oil-resistant Connectors XS5 NEXT series correctly. The degree of protection is not satisfied with the part where cable wires are uncovered for the Pre-wired Models.

E2EQ NEXT Series (Spatter-resistant Triple distance model) DC 2-wire

Item	Size Shielded Model	M8	M12	M18	M30
		Shielded			
		E2EQ-X3D□	E2EQ-X7D□	E2EQ-X11D□	E2EQ-X20D□
Sensing distance		3 mm ±10%	7 mm ±10%	11 mm ±10%	20 mm ±10%
Setting distance *1		0 to 2.4 mm	0 to 5.6 mm	0 to 8.8 mm	0 to 16 mm
Differential travel		15% max. of sensing distance			
Detectable object		Ferrous metal (The sensing distance decreases with non-ferrous metal. Refer to <i>Engineering Data</i> on page 9.)			
Standard sensing object		Iron, 9 × 9 × 1 mm	Iron, 21 × 21 × 1 mm	Iron, 33 × 33 × 1 mm	Iron, 60 × 60 × 1 mm
Response frequency *2		250 Hz	250 Hz	250 Hz	200 Hz
Power supply voltage		10 to 30 VDC, (including 10% ripple (p-p))			
Leakage current		0.8 mA max.			
Control output	Load current	3 to 100 mA			
	Residual voltage	Polarity: 3 V max. (Load current: 100 mA, Cable length: 2 m) No polarity: 5 V max. (Load current: 100 mA, Cable length: 2 m)			
Indicator		D1 Models: Operation indicator (orange), Setting indicator (green) D2 Models: Operation indicator (orange)			
Operation mode		D1 Models: NO Refer to the timing charts under <i>I/O Circuit Diagrams</i> on page 13 for details. D2 Models: NC			
Protection circuits		Surge suppressor, Load short-circuit protection			
Ambient temperature range		Operating: -25 to 70°C, Storage: -40 to 85°C (with no icing or condensation)			
Ambient humidity range		Operating and Storage: 35% to 95% (with no condensation)			
Temperature influence		±10% max. of sensing distance at 23°C in the temperature range of -25 to 70°C		±20% max. of sensing distance at 23°C in the temperature range of -25 to 70°C	
Voltage influence		±1% max. of sensing distance at rated voltage in the rated voltage ±15% range			
Insulation resistance		50 MΩ min. (at 500 VDC) between current-carrying parts and case			
Dielectric strength		1,000 VAC, 50/60 Hz for 1 minute between current-carrying parts and case			
Vibration resistance (destruction)		10 to 55 Hz, 1.5-mm double amplitude for 2 hours each in X, Y, and Z directions			
Shock resistance (destruction)		500 m/s ² 10 times each in X, Y, and Z directions	1,000 m/s ² 10 times each in X, Y, and Z directions		
Degree of protection		Pre-wired Models/Pre-wired Connector Models: IP67 (IEC 60529) and IP67G *3 (JIS C 0920 Annex 1)			
Connecting method		Pre-wired Models (Standard cable length: 2 m) and Pre-wired Connector Models (Standard cable length: 0.3 m)			
Weight (packed state)	Pre-wired Models	Approx. 60 g	Approx. 70 g	Approx. 150 g	Approx. 210 g
	Pre-wired Connector Models	Approx. 30 g	Approx. 40 g	Approx. 90 g	Approx. 140 g
Materials	Case	Fluororesin coating (Base material: brass)			
	Sensing surface	Fluororesin			
	Clamping nuts	Fluororesin coating (Base material: brass)			
	Toothed washer	Zinc-plated iron			
	Cable	Vinyl chloride (PVC)			
Accessories		Instruction manual, Clamping nuts, Toothed washer			

*1. Use the Sensor within the range in which the setting indicator (green LED) is ON (except D2 Models).

*2. The response frequency is an average value. Measurement conditions are as follows: standard sensing object, a distance of twice the standard sensing object, and a set distance of half the sensing distance.

*3. The IP67G is the degree of protection which is defined according to the JIS (Japanese Industrial Standards).

The IP67 indicates the same level of protection as defined by the IEC, and the G indicates that a device has resistance to oil.

E2E/E2EQ NEXT Series

E2E NEXT Series (Single distance model) DC 2-wire

Item	Size Shielded Model	M8	M12	M18
		Shielded		
		E2E-X1R5D□	E2E-X2R5D□	E2E-X5D□
Sensing distance		1.5 mm ±10%	2.5 mm ±10%	5 mm ±10%
Setting distance *1		0 to 1.2 mm	0 to 2 mm	0 to 4 mm
Differential travel		10% max. of sensing distance		
Detectable object		Ferrous metal (The sensing distance decreases with non-ferrous metal. Refer to <i>Engineering Data</i> on page 9.)		
Standard sensing object		Iron, 10 × 10 × 1 mm	Iron, 12 × 12 × 1 mm	Iron, 18 × 18 × 1 mm
Response frequency *2		250 Hz	250 Hz	250 Hz
Power supply voltage		10 to 30 VDC, (including 10% ripple (p-p))		
Leakage current		0.8 mA max.		
Control output	Load current	3 to 100 mA		
	Residual voltage	Polarity: 3 V max. (Load current: 100 mA, Cable length: 2 m) No polarity: 5 V max. (Load current: 100 mA, Cable length: 2 m)		
Indicator		D1 Models: Operation indicator (orange), Setting indicator (green) D2 Models: Operation indicator (orange)		
Operation mode		D1 Models: NO Refer to the timing charts under <i>I/O Circuit Diagrams</i> on page 13 for details. D2 Models: NC		
Protection circuits		Surge suppressor, Load short-circuit protection		
Ambient temperature range		Operating: -25 to 70°C, Storage: -40 to 85°C (with no icing or condensation)		
Ambient humidity range		Operating and Storage: 35% to 95% (with no condensation)		
Temperature influence		±10% max. of sensing distance at 23°C in the temperature range of -25 to 70°C		
Voltage influence		±1% max. of sensing distance at rated voltage in the rated voltage ±15% range		
Insulation resistance		50 MΩ min. (at 500 VDC) between current-carrying parts and case		
Dielectric strength		1,000 VAC, 50/60 Hz for 1 minute between current-carrying parts and case		
Vibration resistance (destruction)		10 to 55 Hz, 1.5-mm double amplitude for 2 hours each in X, Y, and Z directions		
Shock resistance (destruction)		500 m/s ² 10 times each in X, Y, and Z directions	1,000 m/s ² 10 times each in X, Y, and Z directions	
Degree of protection		Pre-wired Models/Pre-wired Connector Models: IP67 (IEC 60529), IP67G *3 (JIS C 0920 Annex 1) Passed OMRON's Oil-resistant Component Evaluation Standards *4 (Cutting oil type: specified in JIS K 2241:2000, Temperature: 35°C max.) and ISO 20653 (old standard: DIN 40050 PART9) IP69K		
Connecting method		Pre-wired Models (Standard cable length: 2 m) and Pre-wired Connector Models (Standard cable length: 0.3 m)		
Weight (packed state)	Pre-wired Models	Approx. 60 g	Approx. 70 g	Approx. 130 g
	Pre-wired Connector Models	Approx. 30 g	Approx. 40 g	Approx. 70 g
Materials	Case	Stainless steel (SUS303)	Nickel-plated brass	
	Sensing surface	Polybutylene terephthalate (PBT)		
	Clamping nuts	Nickel-plated brass		
	Toothed washer	Zinc-plated iron		
	Cable	Vinyl chloride (PVC)		
Accessories		Instruction manual, Clamping nuts, Toothed washer		

*1. Use the Sensor within the range in which the setting indicator (green LED) is ON (except D2 Models).

*2. The response frequency is an average value. Measurement conditions are as follows: standard sensing object, a distance of twice the standard.

*3. The IP67G is the degree of protection which is defined according to the JIS (Japanese Industrial Standards). The IP67 indicates the same level of protection as defined by the IEC, and the G indicates that a device has resistance to oil.

*4. The Oil-resistant Component Evaluation Standards are OMRON's own durability evaluation standards. 2-year oil resistance indicates the median value of the product design and the oil-resistance performance criterion result (=Typical value). The Pre-wired Connector Model verifies 2 years of oil resistance when mating with Round Oil-resistant Connectors XS5 NEXT series correctly. The degree of protection is not satisfied with the part where cable wires are uncovered for the Pre-wired Models.

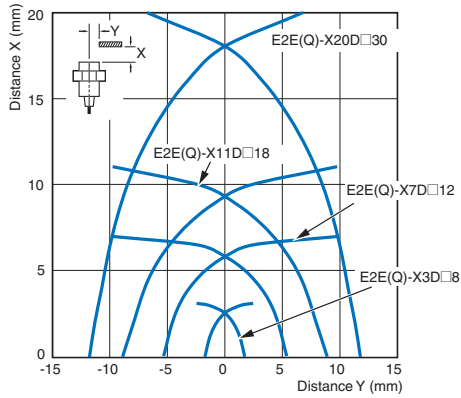
Engineering Data (Reference Value)

Sensing Area

Triple distance model, Spatter-resistant Triple distance model

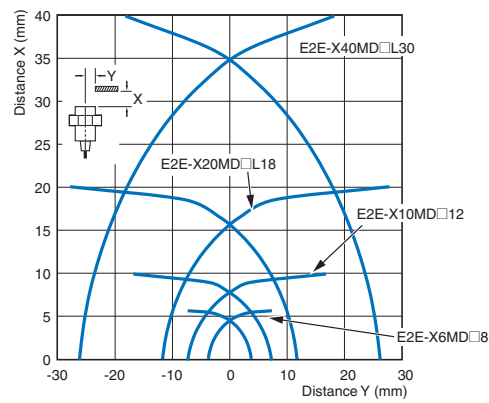
Shielded Models

E2E(Q)-X□D□



Unshielded Models

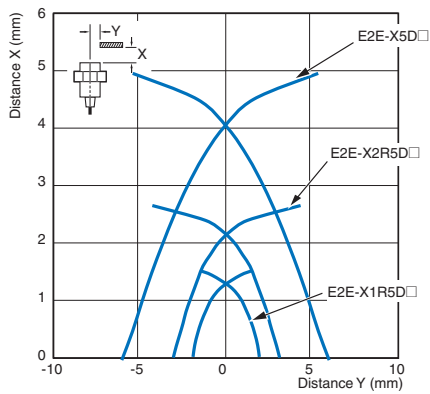
E2E-X□MD□



Single distance model

Shielded Models

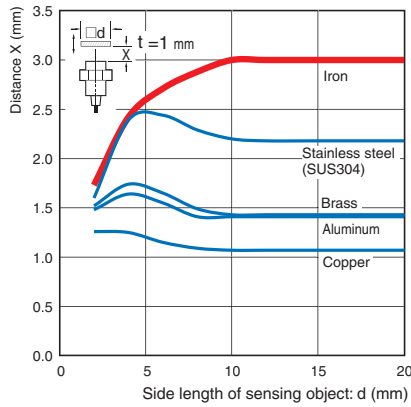
E2E-X1R5D□/-X2R5D□/-X5D□



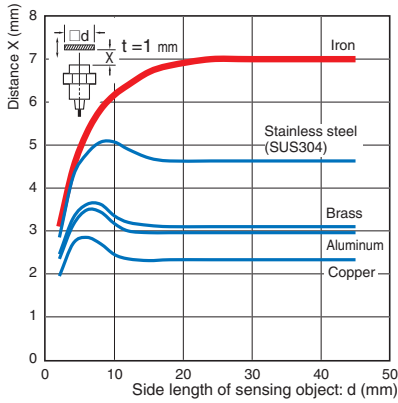
Influence of Sensing Object Size and Materials

Triple distance model, Spatter-resistant Triple distance model
Shielded Models

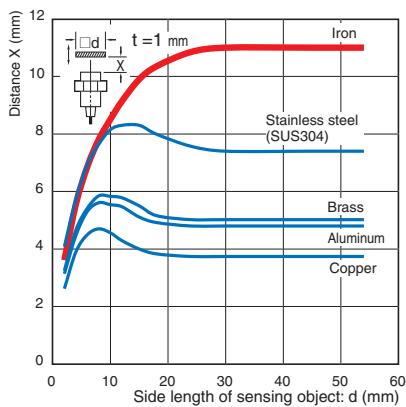
E2E(Q)-X3D□8



E2E(Q)-X7D□12



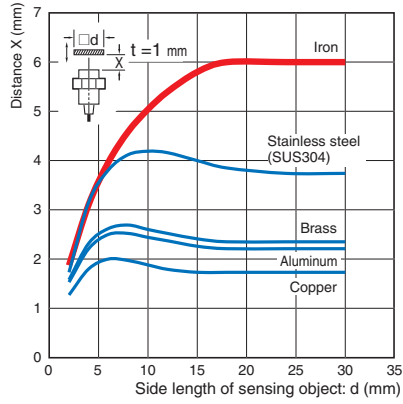
E2E(Q)-X11D□18



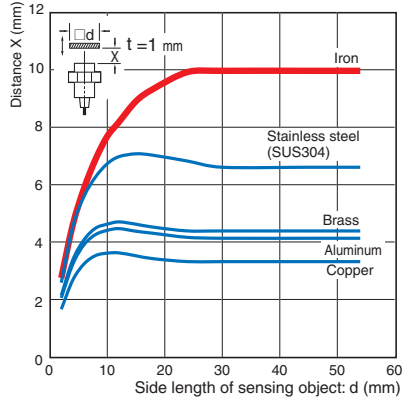
E2E(Q)-X20D□30

Unshielded Models

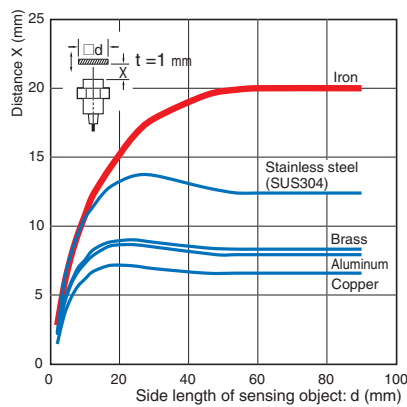
E2E-X6MD□8



E2E-X10MD□12



E2E-X20MD□L18

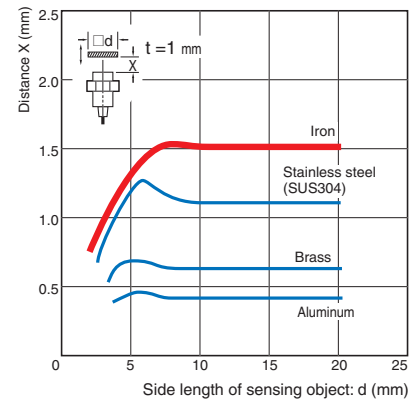


E2E-X40MD□L30

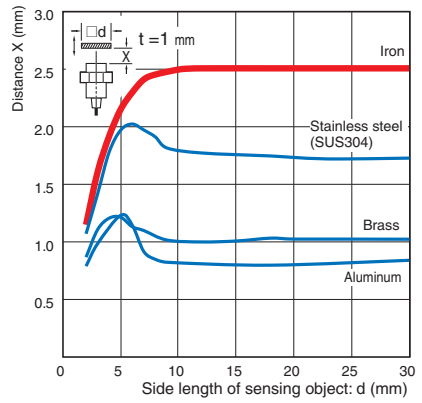
Single distance model

Shielded Models

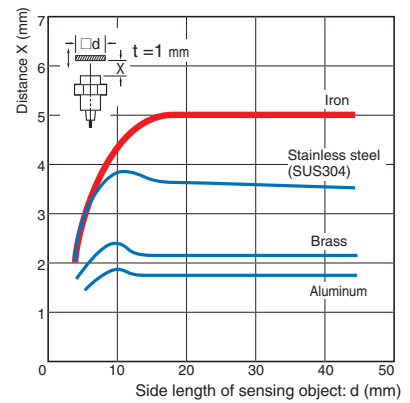
E2E-X1R5D□

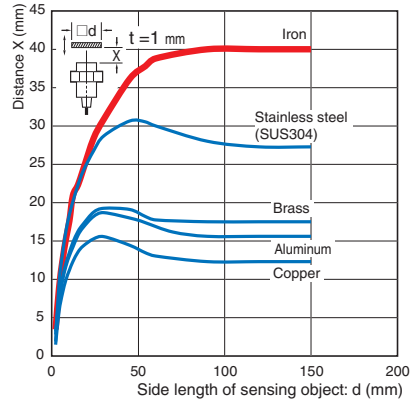
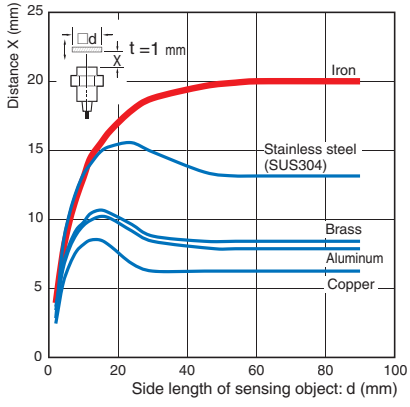


E2E-X2R5D□



E2E-X5D□



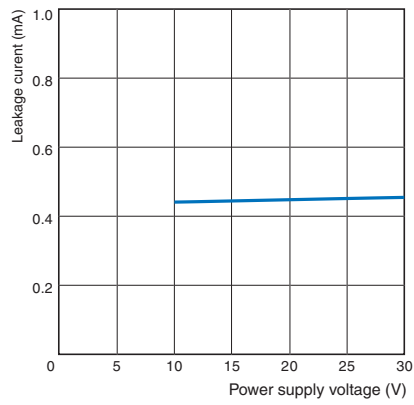


E2E/E2EQ NEXT Series

Leakage Current

Triple distance model, Spatter-resistant Triple distance model, Single distance model

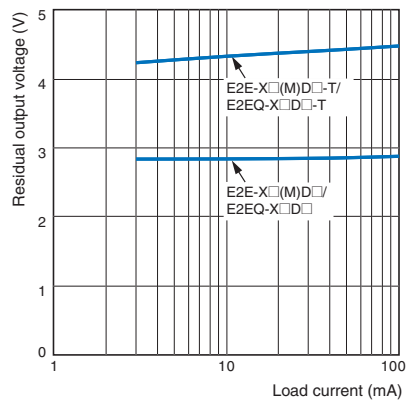
E2E-X□(M)D□(-T)/E2EQ-X□D□(-T)



Residual Output Voltage

Triple distance model, Spatter-resistant Triple distance model, Single distance model

E2E-X□(M)D□(-T)/E2EQ-X□D□(-T)



I/O Circuit Diagrams

DC 2-Wire Models

Operation mode	Model	Timing Chart	Output circuit
NO	E2E(Q)-X□D1□	<p>Non-sensing area, Unstable sensing area, Stable sensing area, Sensing object, Proximity Sensor, Set position, (%), 100, 80, 0</p>	<p>Connector Pin Arrangement: ①, ②, ③, ④. Note: Pins 2 and 3 are not used.</p>
	E2E(Q)-X□D1□-T	<p>Rated sensing distance, ON Setting indicator (green), OFF (green), ON Operation indicator (orange), OFF (orange), ON Control output, OFF</p>	<p>Connector Pin Arrangement: ①, ②, ③, ④. Note: Pins 1 and 2 are not used.</p>
NC	E2E(Q)-X□D2□	<p>Non-sensing area, Sensing area, Sensing object, Proximity Sensor, (%), 100, 0</p>	<p>Connector Pin Arrangement: ①, ②, ③, ④. Note: Pins 3 and 4 are not used.</p>
	E2E(Q)-X□D2□-T	<p>Rated sensing distance, ON Operation indicator (orange), OFF (orange), ON Control output, OFF</p>	<p>Connector Pin Arrangement: ①, ②, ③, ④. Note: Pins 3 and 4 are not used.</p>

E2E/E2EQ NEXT Series

Connections to Sensor I/O Connectors

Proximity Sensor				Sensor I/O Connector model number	Connections
Type	Polarity	Operation mode	Model		
DC 2-wire (Smartclick Connector)	Yes	NO	E2E-X□D1□-M1TGJ E2EQ-X□D1□-M1TGJ	XS5F-D421-□80-X□ XS5F-D42□-□80-F XS5W-D421-□81-X□ XS5W-D42□-□81-F Note: For details of the connector, refer to XS5 NEXT Series on page 87. XS5 Series on page 94.	
	No	NC	E2E-X□D2□-M1TGJ E2EQ-X□D2□-M1TGJ		
	Yes	NO	E2E-X□D1□-M1TGJ-T E2EQ-X□D1□-M1TGJ-T		
	No	NC	E2E-X□D2□-M1TGJ-T E2EQ-X□D2□-M1TGJ-T		


Note: Different from Proximity Sensor wire colors.

* If the XS5W Series Connector which has a socket and plug on the cable ends is connected to the Sensor, this part will be a plug.



Safety Precautions




Be sure to read the precautions for all models in the website at: <http://www.ia.omron.com/>.

Warning Indications

 WARNING	Warning level Indicates a potentially hazardous situation which, if not avoided, will result in minor or moderate injury, or may result in serious injury or death. Additionally there may be significant property damage.
Precautions for Safe Use	Supplementary comments on what to do or avoid doing, to use the product safely.
Precautions for Correct Use	Supplementary comments on what to do or avoid doing, to prevent failure to operate, malfunction or undesirable effect on product performance.

Meaning of Product Safety Symbols

	General prohibition Indicates the instructions of unspecified prohibited action.
	Caution, explosion Indicates the possibility of explosion under specific conditions.

 WARNING
<p>This product is not designed or rated for ensuring safety of persons either directly or indirectly. Do not use it for such purposes.</p> <div style="text-align: right;"></div>
<p>Risk of explosion.</p> <p>Do not connect sensor to AC power supply.</p> <div style="text-align: right;"></div>

Precautions for Safe Use

The following precautions must be observed to ensure safe operation.

1. Do not use the product in an environment where flammable or explosive gas is present.
2. Do not attempt to disassemble, repair, or modify the product.
3. Do not use a voltage that exceeds the rated operating voltage range. Applying a voltage that is higher than the operating voltage range may result in damage or burnout.
4. Be sure that the power supply polarity and other wiring is correct. Incorrect wiring may cause explosion or burnout.
5. If the power supply is connected directly without a load, the internal elements may explode or burn. Be sure to insert a load when connecting the power supply.
6. Dispose of this product as industrial waste.

Precautions for Correct Use

Do not use this product under ambient conditions that exceed the ratings.

Operating Environment

1. Do not install the product in the following locations. Doing so may result in product failure or malfunction.
 - (1) Outdoor locations directly subject to sunlight, rain, snow, water droplets, or oil.
 - (2) Locations subject to atmospheres with chemical vapors, in particular solvents and acids.
 - (3) Locations subject to corrosive gases.
2. The Sensor may malfunction if used near ultrasonic cleaning equipment, high-frequency equipment, transceivers, cellular phones, inverters, or other devices that generate a high-frequency electric field. Please refer to the Precautions for Correct Use on the OMRON website (www.ia.omron.com) for typical measures.
3. Laying the Proximity Sensor wiring in the same conduit or duct as high-voltage wires or power lines may result in incorrect operation and damage due to induction. Wire the Sensor using a separate conduit or independent conduit.
4. Never use thinner or other solvents. Otherwise, the Sensor surface may be dissolved.
5. The following conditions shall be observed if you use the product under an environment using cutting oil that may affect product's life and/or performance.
 - Usage under the cutting oil condition designated by the specification
 - Usage under the cutting oil dilution ratio recommended by its manufacturer
 - Usage in oil or water is prohibited

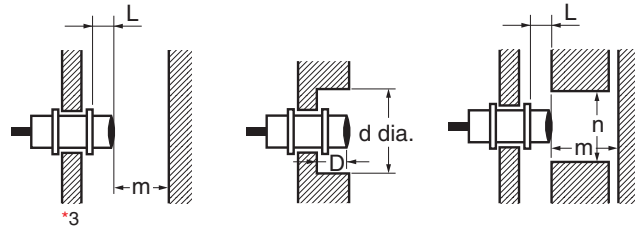
Impact on the product life may differ depending on the oil you use. Before using the cutting oil, make sure that it should not cause deterioration or degradation of sealing components.

E2E/E2EQ NEXT Series

Design

Influence of Surrounding Metal

When mounting the Proximity Sensor using a nut, only use the provided nut. And ensure that the minimum distances given in the following table are maintained.



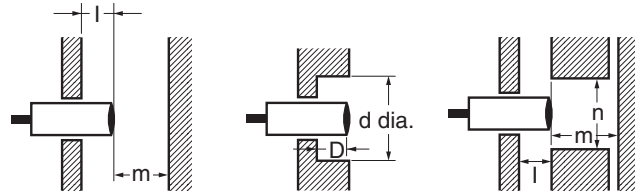
(Unit: mm)

Type		Item	M8	M12	M18	M30
Triple distance model/ Spatter-resistant Triple distance model E2E(Q)-X□D□(-T) *1	Shielded	L	0	0	0	0
		d	20	20	50	70
		D	2	4	4	8
		m	9	18	33	60
		n	18	20	54	90
Triple distance model E2E-X□MD□(-T) *2	Unshielded	L	10	16	31	50 *3
		d	30	50	90	170
		D	13	20	35	55
		m	18	30	60	120
		n	30	50	80	140
Single distance model E2E-X□R5D□(-T) E2E-X5D□(-T) *2	Shielded	L	0	0	0	---
		d	8	12	18	
		D	0	0	0	
		m	4.5	8	20	
		n	12	18	27	

Note: Nuts that are supplied along with each Sensor (*1, *2) are different. Refer to *Dimensions* for details on shapes.

*3. If you use the M30 Triple distance model of Unshielded Model, the panel thickness (t) is 4 mm or less.

When the Proximity Sensor is mounted in metal, ensure that the minimum distances given in the following table are maintained.

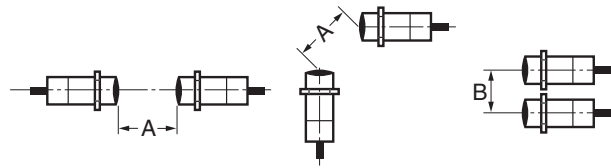


(Unit: mm)

Type		Item	M8	M12	M18	M30
Triple distance model/ Spatter-resistant Triple distance model E2E(Q)-X□D□(-T)	Shielded	l	2	4	4	8
		d	20	20	50	70
		D	2	4	4	8
		m	9	18	33	60
		n	18	20	54	90
Triple distance model E2E-X□MD□(-T)	Unshielded	l	13	20	35	55
		d	30	50	90	170
		D	13	20	35	55
		m	18	30	60	120
		n	30	50	80	140
Single distance model E2E-X□R5D□(-T) E2E-X5D□(-T)	Shielded	l	0	0	0	---
		d	8	12	18	
		D	0	0	0	
		m	4.5	8	20	
		n	12	18	27	

Mutual Interference

When the Proximity Sensor is embedded in metal, ensure that the minimum distances given in the following table are maintained.



(Unit: mm)

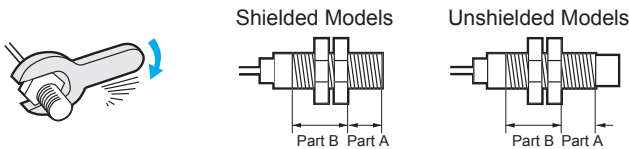
Type		Item	M8	M12	M18	M30
Triple distance model/ Spatter-resistant Triple distance model E2E(Q)-X□D□(-T)	Shielded	A	25	40	70	140
		B	20	30	45	70
Triple distance model E2E-X□MD□(-T)	Unshielded	A	80	120	200	380
		B	60	100	120	280
Single distance model E2E-X□R5D□(-T) E2E-X5D□(-T)	Shielded	A	20	30	50	---
		B	15	20	35	---

Mounting

Tightening Force

Do not tighten the nut with excessive force.

A washer must be used with the nut.



- Note:**
- The allowable tightening strength depends on the distance from the edge of the head, as shown in the following table. (A is the distance from the edge of the head. B includes the nut on the head side. If the edge of the nut is in part A, the tightening torque for part A applies instead.)
 - The following strengths assume washers are being used.

Triple distance model

Model		Part A		Part B
		Dimension (mm)	Torque	Torque
M8	Shielded	9	4 N·m	10 N·m
	Unshielded	3		
M12	Shielded	16	6 N·m	15 N·m
	Unshielded	9		
M18	Shielded	16	15 N·m	60 N·m
	Unshielded	3		
M30	Shielded	23	40 N·m	80 N·m
	Unshielded	8		

Spatter-resistant Triple distance model

Model	Part A		Part B
	Dimension (mm)	Torque	Torque
M8	9	4 N·m	10 N·m
M12	16	6 N·m	15 N·m
M18	16	15 N·m	30 N·m
M30	23	40 N·m	80 N·m

Single distance model

Model	Part A		Part B
	Dimension (mm)	Torque	Torque
M8	9	9 N·m	12 N·m
M12	---	30 N·m	
M18	---	70 N·m	

E2E/E2EQ NEXT Series

Dimensions

(Unit: mm)
Tolerance class IT16 applies to dimensions in this data sheet unless otherwise specified.

Sensors

E2E NEXT Series (Triple distance model)

DC 2-wire

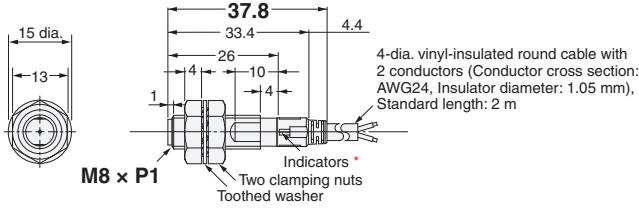
Pre-wired Models Shielded



Pre-wired Models Unshielded

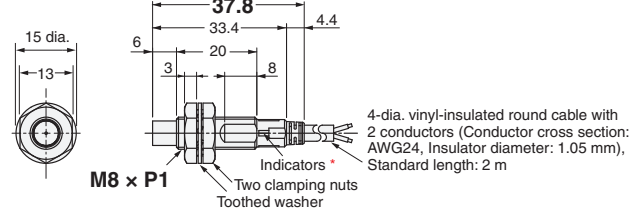


E2E-X3D□8



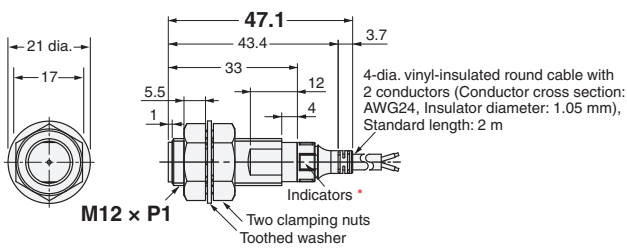
* D1 Models: Operation indicator (Orange), Setting indicator (Green)
D2 Models: Operation indicator (Orange)

E2E-X6MD□8



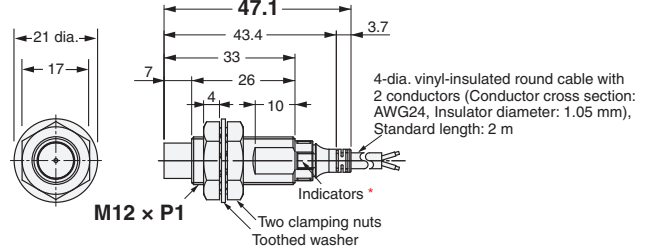
* D1 Models: Operation indicator (Orange), Setting indicator (Green)
D2 Models: Operation indicator (Orange)

E2E-X7D□12



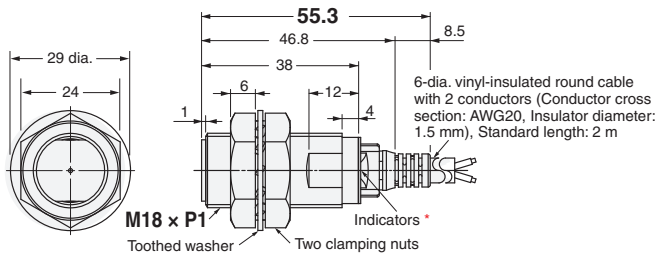
* D1 Models: Operation indicator (Orange), Setting indicator (Green)
D2 Models: Operation indicator (Orange)

E2E-X10MD□12



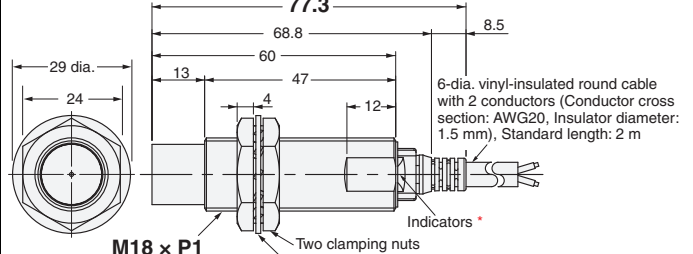
* D1 Models: Operation indicator (Orange), Setting indicator (Green)
D2 Models: Operation indicator (Orange)

E2E-X11D□18



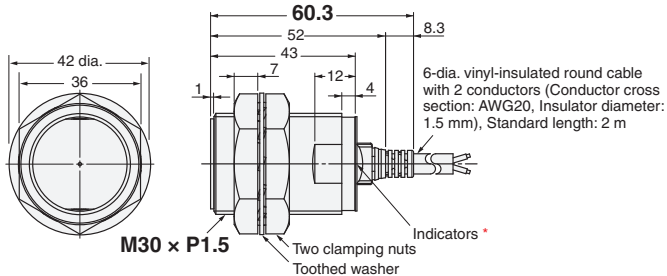
* D1 Models: Operation indicator (Orange), Setting indicator (Green)
D2 Models: Operation indicator (Orange)

E2E-X20MD□L18



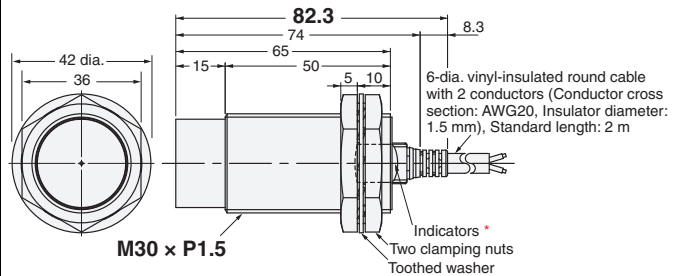
* D1 Models: Operation indicator (Orange), Setting indicator (Green)
D2 Models: Operation indicator (Orange)

E2E-X20D□30



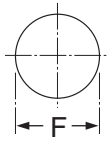
* D1 Models: Operation indicator (Orange), Setting indicator (Green)
D2 Models: Operation indicator (Orange)

E2E-X40MD□L30



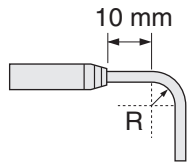
* D1 Models: Operation indicator (Orange), Setting indicator (Green)
D2 Models: Operation indicator (Orange)

Mounting Hole Dimensions



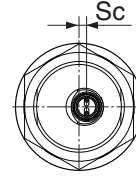
Dimensions	F (mm)
M8	8.5 dia. $+0.5_0$
M12	12.5 dia. $+0.5_0$
M18	18.5 dia. $+0.5_0$
M30	30.5 dia. $+0.5_0$

Angle R of the Bending Wire



Dimensions	R (mm)
M8	12
M12	12
M18	18
M30	18

Wire pullout position



Dimensions	Sc (mm)
M8	- (0)
M12	- (0)
M18	2.5
M30	2.5

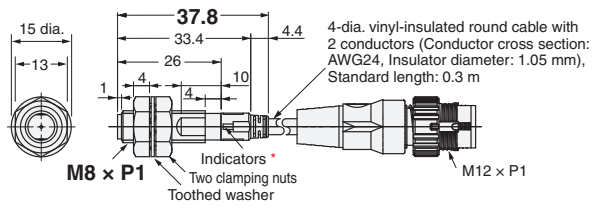
Pre-wired Connector Models Shielded



Pre-wired Connector Models Unshielded

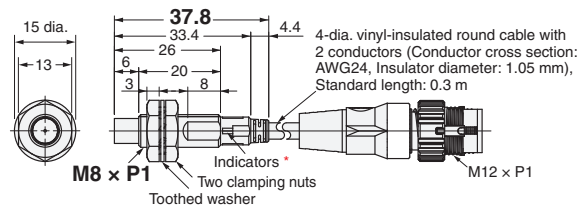


E2E-X3D□8-M1TGJ



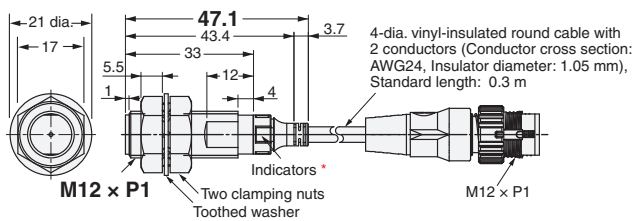
* D1 Models: Operation indicator (Orange), Setting indicator (Green)
D2 Models: Operation indicator (Orange)

E2E-X6MD□8-M1TGJ



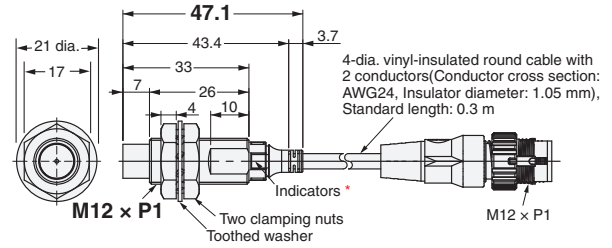
* D1 Models: Operation indicator (Orange), Setting indicator (Green)
D2 Models: Operation indicator (Orange)

E2E-X7D□12-M1TGJ



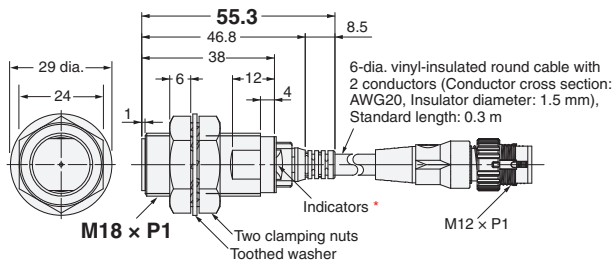
* D1 Models: Operation indicator (Orange), Setting indicator (Green)
D2 Models: Operation indicator (Orange)

E2E-X10MD□12-M1TGJ



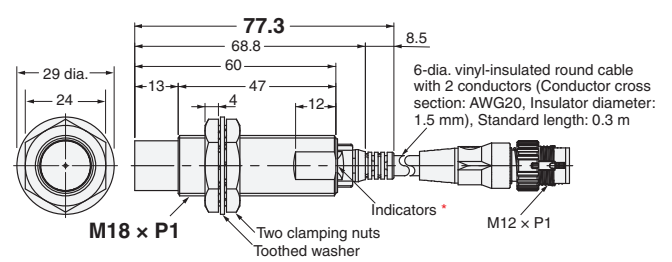
* D1 Models: Operation indicator (Orange), Setting indicator (Green)
D2 Models: Operation indicator (Orange)

E2E-X11D□18-M1TGJ



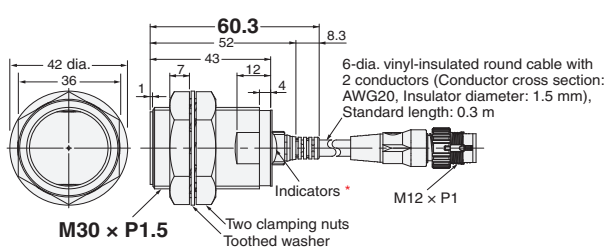
* D1 Models: Operation indicator (Orange), Setting indicator (Green)
D2 Models: Operation indicator (Orange)

E2E-X20MD□L18-M1TGJ



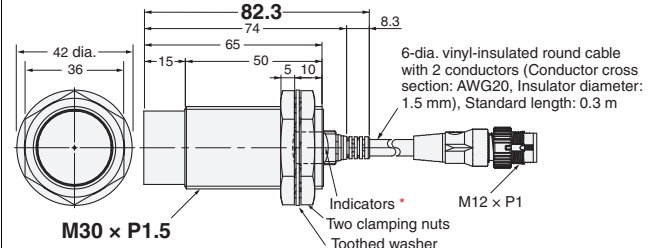
* D1 Models: Operation indicator (Orange), Setting indicator (Green)
D2 Models: Operation indicator (Orange)

E2E-X20D□30-M1TGJ



* D1 Models: Operation indicator (Orange), Setting indicator (Green)
D2 Models: Operation indicator (Orange)

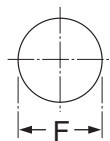
E2E-X40MD□L30-M1TGJ



* D1 Models: Operation indicator (Orange), Setting indicator (Green)
D2 Models: Operation indicator (Orange)

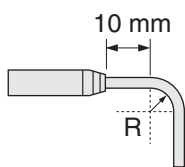
E2E/E2EQ NEXT Series

Mounting Hole Dimensions



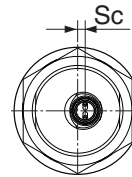
Dimensions	F (mm)
M8	8.5 dia. $\begin{smallmatrix} +0.5 \\ 0 \end{smallmatrix}$
M12	12.5 dia. $\begin{smallmatrix} +0.5 \\ 0 \end{smallmatrix}$
M18	18.5 dia. $\begin{smallmatrix} +0.5 \\ 0 \end{smallmatrix}$
M30	30.5 dia. $\begin{smallmatrix} +0.5 \\ 0 \end{smallmatrix}$

Angle R of the Bending Wire



Dimensions	R (mm)
M8	12
M12	
M18	18
M30	

Wire pullout position



Dimensions	Sc (mm)
M8	- (0)
M12	
M18	2.5
M30	

Sensors

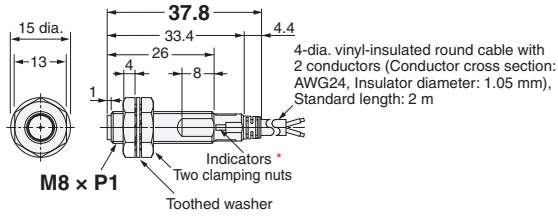
E2EQ NEXT Series (Spatter-resistant Triple distance model)

DC 2-wire

Pre-wired Models
Shielded

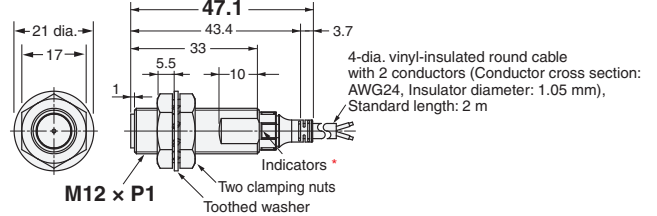


E2EQ-X3D□8



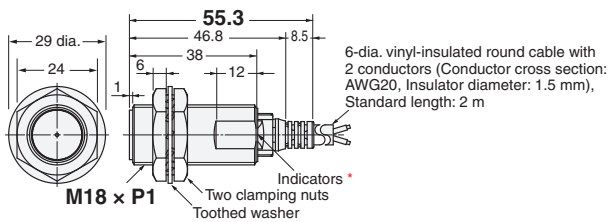
* D1 Models: Operation indicator (Orange), Setting indicator (Green)
D2 Models: Operation indicator (Orange)

E2EQ-X7D□12



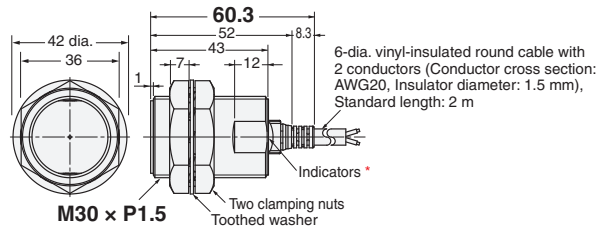
* D1 Models: Operation indicator (Orange), Setting indicator (Green)
D2 Models: Operation indicator (Orange)

E2EQ-X11D□18



* D1 Models: Operation indicator (Orange), Setting indicator (Green)
D2 Models: Operation indicator (Orange)

E2EQ-X20D□30

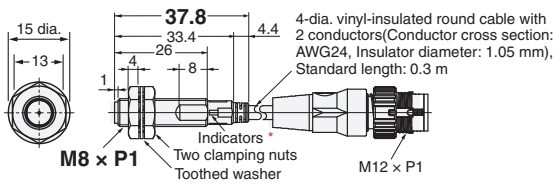


* D1 Models: Operation indicator (Orange), Setting indicator (Green)
D2 Models: Operation indicator (Orange)

Pre-wired Connector Models
Shielded

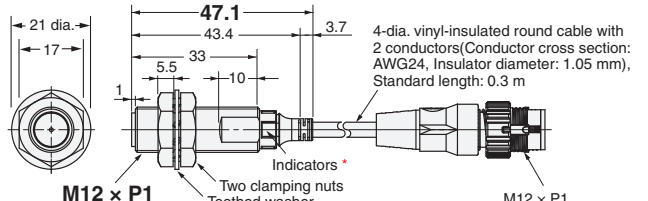


E2EQ-X3D□8-M1TGJ



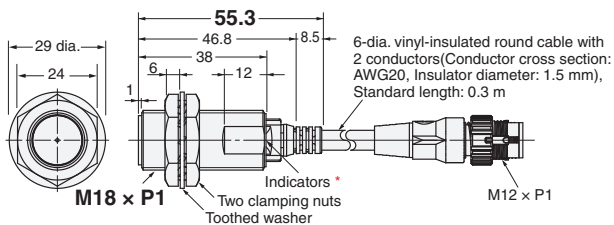
* D1 Models: Operation indicator (Orange), Setting indicator (Green)
D2 Models: Operation indicator (Orange)

E2EQ-X7D□12-M1TGJ



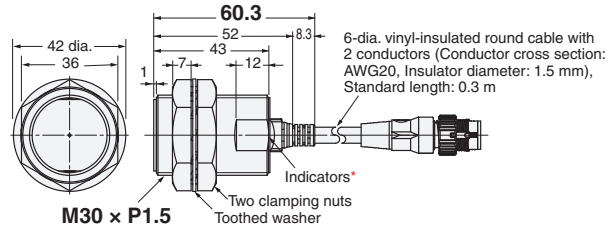
* D1 Models: Operation indicator (Orange), Setting indicator (Green)
D2 Models: Operation indicator (Orange)

E2EQ-X11D□18-M1TGJ



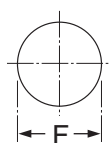
* D1 Models: Operation indicator (Orange), Setting indicator (Green)
D2 Models: Operation indicator (Orange)

E2EQ-X20D□30-M1TGJ



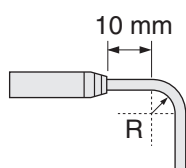
* D1 Models: Operation indicator (Orange), Setting indicator (Green)
D2 Models: Operation indicator (Orange)

Mounting Hole Dimensions



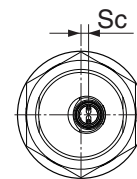
Dimensions	F (mm)
M8	8.5 dia. $^{+0.5}_0$
M12	12.5 dia. $^{+0.5}_0$
M18	18.5 dia. $^{+0.5}_0$
M30	30.5 dia. $^{+0.5}_0$

Angle R of the Bending Wire



Dimensions	R (mm)
M8	12
M12	12
M18	18
M30	18

Wire pullout position



Dimensions	Sc (mm)
M8	- (0)
M12	- (0)
M18	2.5
M30	2.5

E2E/E2EQ NEXT Series

Sensors

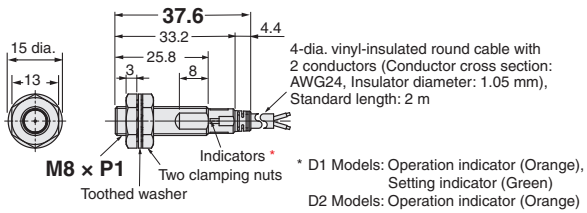
E2E NEXT Series (Single distance model)

DC 2-wire

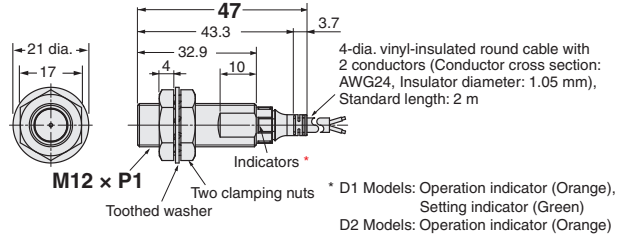
Pre-wired Models Shielded



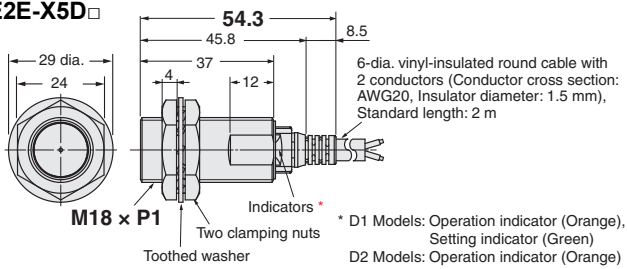
E2E-X1R5D□



E2E-X2R5D□



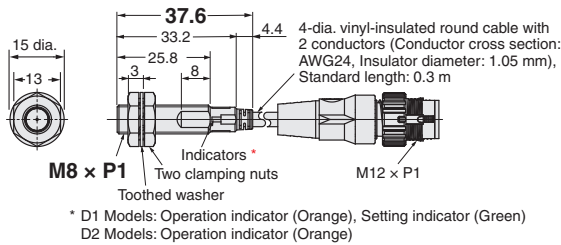
E2E-X5D□



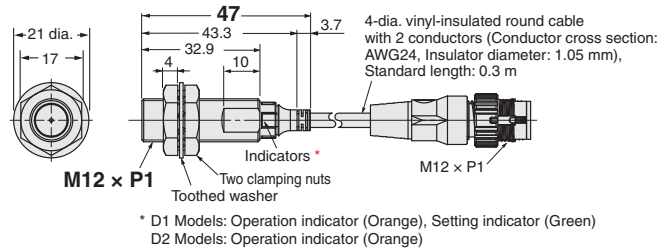
Pre-wired Connector Models Shielded



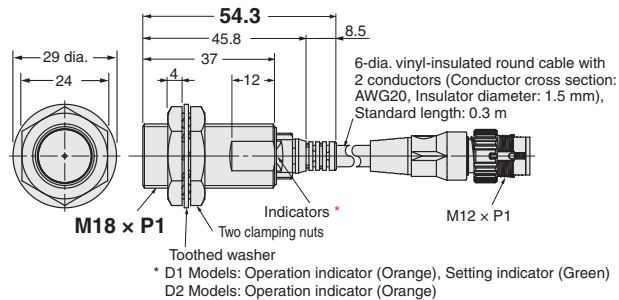
E2E-X1R5D□-M1TGJ



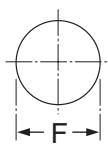
E2E-X2R5D□-M1TGJ



E2E-X5D□-M1TGJ

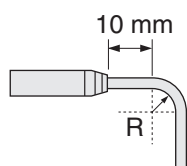


Mounting Hole Dimensions



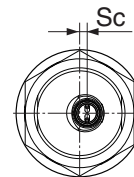
Dimensions	F (mm)
M8	8.5 dia. $+0.5_0$
M12	12.5 dia. $+0.5_0$
M18	18.5 dia. $+0.5_0$
M30	30.5 dia. $+0.5_0$

Angle R of the Bending Wire



Dimensions	R (mm)
M8	12
M12	12
M18	18
M30	18

Wire pullout position

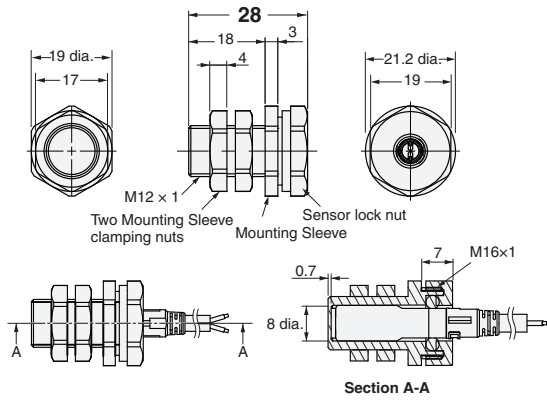


Dimensions	Sc (mm)
M8	- (0)
M12	- (0)
M18	2.5
M30	2.5

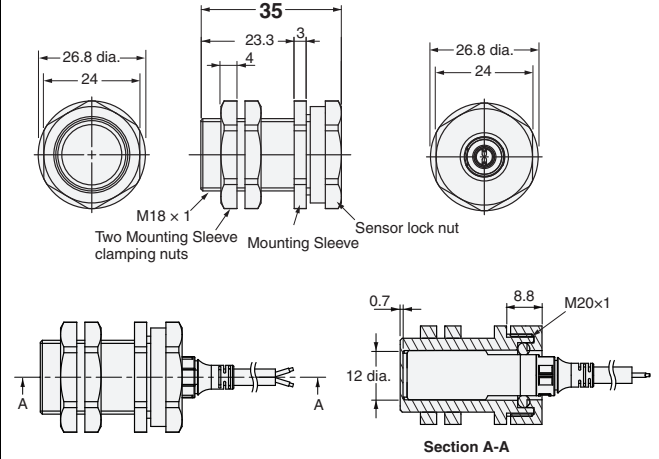
Accessories (Sold Separately)

Quick fix (Mounting Sleeves)

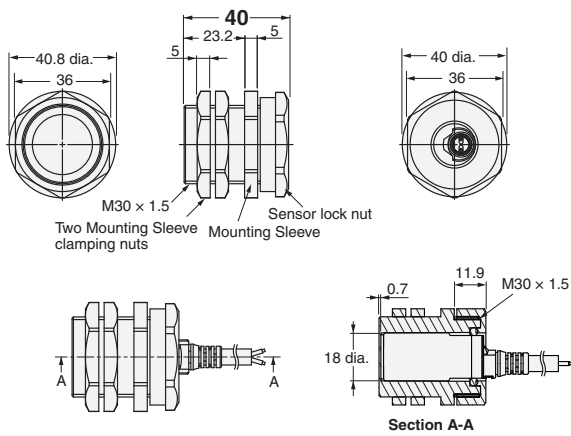
Y92E-J8S12



Y92E-J12S18



Y92E-J18S30



Material

Mounting Sleeve	Polyetheretherketone (PEEK) / Polybutylene terephthalate (PBT)
Mounting Sleeve clamping nut	Polybutylene terephthalate (PBT)
Sensor lock nut	Polybutylene terephthalate (PBT)
Sensor lock O-ring	Material combining HNBR and fluororubber

Tightening Force

Model	Torque	
	Mounting Sleeve clamping nut	Sensor lock nut
Y92E-J8S12	0.6 N·m	0.6 N·m
Y92E-J12S18	1.2 N·m	1.2 N·m
Y92E-J18S30	5 N·m	3.5 N·m

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