

Enables easier and standardized designs previously not possible

- The world's longest sensing distance*¹
Nearly double the sensing distance of previous
- With high-brightness LED, the indicator is visible anywhere from 360°.
- Only 10 Seconds*² to Replace a Proximity Sensor with the "e-jig" (Mounting Sleeve).
- Cables with enhanced oil resistance enabled 2-year oil resistance*³.
- IP69K compliant for water resistance and wash resistance*⁴
- Comes in a wide variation to make sensor selection easy
- UL certification (UL60947-5-2)*⁵ and CSA certification (CSA C22.2 UL60947-5-2-14)

*1. Based on December 2018 OMRON investigation.

*2. Time required to adjust the distance when installing a Sensor. Based on OMRON investigation.

*3. Refer to *Ratings and Specifications* for details. However, E2E Connector Models and E2EQ series is excluded.

*4. E2EQ series is excluded.

*5. M8 (4-pin) Connector Models are not UL certified.



Be sure to read *Safety Precautions* on page 61.



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

Features

PREMIUM Model

Easy design

Standardized design

Exceptional sensing range*⁶

9 [M12] mm*⁷

The PREMIUM Model, which has a longer detection range compared to previous models, allows for more spacious designs with less risk of contact. It also enables you to standardize your designs by letting you adopt a single one-size model instead of multiple models of different sizes.

*6. Based on December 2018 OMRON investigation.

*7. Quadruple distance models of M12 sized

Quadruple distance model

9mm [M12]

Triple distance model

6mm [M12]

New standards for usability

Early error detection

1 location, all new E2E Sensors can be monitored with IO-Link  IO-Link

Less unexpected facility stoppages

Strong resistance to cutting oil **2**-year oil resistance*⁹

*9. E2E Connector Models and E2EQ series is excluded.

Quick recovery

10 second replaceable with e-jig (adaptor)*⁸
360° degree view with high visibility LED indicator

*8. Time required to adjust the distance when installing a Sensor. Based on OMRON investigation.

BASIC Model

In addition to our HIGH SPEC Models, we also offer mid/short-distance BASIC Models, to meet various facility design requirement specifications.

Double distance model

4mm [M12]

Single distance model

2mm [M12]



E2E/E2EQ NEXT Series

E2E/E2EQ NEXT Series Model Number Legend

DC 3-wire

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

No.	Type	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
		M	Unshielded
(4)	Output configuration	B	PNP open collector
		C	NPN open collector
(5)	Operation mode	1	Normally open (NO)
		2	Normally closed (NC)
		3	Normally open, Normally closed (NO+NC)
(6)	IO-Link baud rate	Blank	Non IO-Link compliant
		D	COM2 (38.4 kbps)
		T	COM3 (230.4 kbps)
(7)	Body size	Blank	Standard
		L	Long Body
(8)	Size	8	M8
		12	M12
		18	M18
		30	M30
(9)	Connection method	Blank	Pre-wired Models
		M1	M12 Connector Models
		M3	M8 (4-pin) Connector Models
		M5	M8 (3-pin) Connector Models
		M1TJ	M12 Pre-wired Smartclick Connector Models
		M1TJR	M12 Pre-wired Smartclick Connector Models Robot (bending-resistant) cable
(10)	Cable specifications *	Blank	Standard PVC cable
		R	Robot (bending-resistant) cable
(11)	Cable length	Number M	Cable length

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

Note: 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.

Ordering Information

PREMIUM Model

E2E NEXT Series (Quadruple distance model)

DC 3-wire [Refer to *Dimensions* on page 64.]

Shielded *1

Size (Sensing distance)	Connection method	Body size	Operation mode	Model		
				PNP		NPN
				IO-Link (COM3)	IO-Link (COM2) *5	--- *5
M8 (4 mm)	Pre-wired (2 m) *2	38 mm *3	NO	E2E-X4B1T8 2M	E2E-X4B1D8 2M	E2E-X4C18 2M
			NC	-	E2E-X4B28 2M	E2E-X4C28 2M
		48 mm	NO	E2E-X4B1TL8 2M	E2E-X4B1DL8 2M	E2E-X4C1L8 2M
			NC	-	E2E-X4B2L8 2M	E2E-X4C2L8 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	38 mm *4	NO	E2E-X4B1T8-M1TJ 0.3M	E2E-X4B1D8-M1TJ 0.3M	E2E-X4C18-M1TJ 0.3M
			NC	-	E2E-X4B28-M1TJ 0.3M	E2E-X4C28-M1TJ 0.3M
		48 mm	NO	E2E-X4B1TL8-M1TJ 0.3M	E2E-X4B1DL8-M1TJ 0.3M	E2E-X4C1L8-M1TJ 0.3M
			NC	-	E2E-X4B2L8-M1TJ 0.3M	E2E-X4C2L8-M1TJ 0.3M
	M12 Connector	43 mm	NO	E2E-X4B1T8-M1	E2E-X4B1D8-M1	E2E-X4C18-M1
			NC	-	E2E-X4B28-M1	E2E-X4C28-M1
		53 mm	NO	E2E-X4B1TL8-M1	E2E-X4B1DL8-M1	E2E-X4C1L8-M1
			NC	-	E2E-X4B2L8-M1	E2E-X4C2L8-M1
	M8 Connector (4-pin)	39 mm	NO	E2E-X4B1T8-M3	E2E-X4B1D8-M3	E2E-X4C18-M3
			NC	-	E2E-X4B28-M3	E2E-X4C28-M3
		49 mm	NO	E2E-X4B1TL8-M3	E2E-X4B1DL8-M3	E2E-X4C1L8-M3
			NC	-	E2E-X4B2L8-M3	E2E-X4C2L8-M3
	M8 Connector (3-pin)	39 mm	NO	E2E-X4B1T8-M5	E2E-X4B1D8-M5	E2E-X4C18-M5
			NC	-	E2E-X4B28-M5	E2E-X4C28-M5
		49 mm	NO	E2E-X4B1TL8-M5	E2E-X4B1DL8-M5	E2E-X4C1L8-M5
			NC	-	E2E-X4B2L8-M5	E2E-X4C2L8-M5
M12 (9 mm)	Pre-wired (2 m) *2	47 mm *3	NO	E2E-X9B1T12 2M	E2E-X9B1D12 2M	E2E-X9C112 2M
			NC	-	E2E-X9B212 2M	E2E-X9C212 2M
		69 mm	NO	E2E-X9B1TL12 2M	E2E-X9B1DL12 2M	E2E-X9C1L12 2M
			NC	-	E2E-X9B2L12 2M	E2E-X9C2L12 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	47 mm *4	NO	E2E-X9B1T12-M1TJ 0.3M	E2E-X9B1D12-M1TJ 0.3M	E2E-X9C112-M1TJ 0.3M
			NC	-	E2E-X9B212-M1TJ 0.3M	E2E-X9C212-M1TJ 0.3M
		69 mm	NO	E2E-X9B1TL12-M1TJ 0.3M	E2E-X9B1DL12-M1TJ 0.3M	E2E-X9C1L12-M1TJ 0.3M
			NC	-	E2E-X9B2L12-M1TJ 0.3M	E2E-X9C2L12-M1TJ 0.3M
	M12 Connector	48 mm	NO	E2E-X9B1T12-M1	E2E-X9B1D12-M1	E2E-X9C112-M1
			NC	-	E2E-X9B212-M1	E2E-X9C212-M1
		70 mm	NO	E2E-X9B1TL12-M1	E2E-X9B1DL12-M1	E2E-X9C1L12-M1
			NC	-	E2E-X9B2L12-M1	E2E-X9C2L12-M1
M18 (14 mm)	Pre-wired (2 m) *2	55 mm *3	NO	E2E-X14B1T18 2M	E2E-X14B1D18 2M	E2E-X14C118 2M
			NC	-	E2E-X14B218 2M	E2E-X14C218 2M
		77 mm	NO	E2E-X14B1TL18 2M	E2E-X14B1DL18 2M	E2E-X14C1L18 2M
			NC	-	E2E-X14B2L18 2M	E2E-X14C2L18 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	55 mm *4	NO	E2E-X14B1T18-M1TJ 0.3M	E2E-X14B1D18-M1TJ 0.3M	E2E-X14C118-M1TJ 0.3M
			NC	-	E2E-X14B218-M1TJ 0.3M	E2E-X14C218-M1TJ 0.3M
		77 mm	NO	E2E-X14B1TL18-M1TJ 0.3M	E2E-X14B1DL18-M1TJ 0.3M	E2E-X14C1L18-M1TJ 0.3M
			NC	-	E2E-X14B2L18-M1TJ 0.3M	E2E-X14C2L18-M1TJ 0.3M
	M12 Connector	53 mm	NO	E2E-X14B1T18-M1	E2E-X14B1D18-M1	E2E-X14C118-M1
			NC	-	E2E-X14B218-M1	E2E-X14C218-M1
		75 mm	NO	E2E-X14B1TL18-M1	E2E-X14B1DL18-M1	E2E-X14C1L18-M1
			NC	-	E2E-X14B2L18-M1	E2E-X14C2L18-M1

E2E/E2EQ NEXT Series

PREMIUM Model

Size (Sensing distance)	Connection method	Body size	Operation mode	Model		
				PNP		NPN
				IO-Link (COM3)	IO-Link (COM2) *5	--- *5
M30 (23 mm)	Pre-wired (2 m) *2	60 mm *4	NO	E2E-X23B1T30 2M	E2E-X23B1D30 2M	E2E-X23C130 2M
			NC	-	E2E-X23B230 2M	E2E-X23C230 2M
		82 mm	NO	E2E-X23B1TL30 2M	E2E-X23B1DL30 2M	E2E-X23C1L30 2M
			NC	-	E2E-X23B2L30 2M	E2E-X23C2L30 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	60 mm *4	NO	E2E-X23B1T30-M1TJ 0.3M	E2E-X23B1D30-M1TJ 0.3M	E2E-X23C130-M1TJ 0.3M
			NC	-	E2E-X23B230-M1TJ 0.3M	E2E-X23C230-M1TJ 0.3M
		82 mm	NO	E2E-X23B1TL30-M1TJ 0.3M	E2E-X23B1DL30-M1TJ 0.3M	E2E-X23C1L30-M1TJ 0.3M
			NC	-	E2E-X23B2L30-M1TJ 0.3M	E2E-X23C2L30-M1TJ 0.3M
	M12 Connector	58 mm	NO	E2E-X23B1T30-M1	E2E-X23B1D30-M1	E2E-X23C130-M1
			NC	-	E2E-X23B230-M1	E2E-X23C230-M1
		80 mm	NO	E2E-X23B1TL30-M1	E2E-X23B1DL30-M1	E2E-X23C1L30-M1
			NC	-	E2E-X23B2L30-M1	E2E-X23C2L30-M1

*1. When embedding the Proximity Sensor in metal, refer to *Influence of Surrounding Metal* on page 62.

*2. Models with 5-m cable length are also available with "5M" suffix. (Example: E2E-X9B1D12 5M)

*3. Models with 2-m and 5-m robot (bending-resistant) cables are also available with "-R" in the model number. (Example: E2E-X9B1D12-R 2M/ E2E-X9B1D12-R 5M)

*4. Models with M12 Smartclick connector model robot (bending-resistant) cables are also available with "R" in the model number. (Example: E2E-X9B1D12-M1TJR 0.3M)

*5. IO-Link is not supported for NC-type PNP outputs or all types of NPN outputs.

Note: Operation mode NO can be changed to NC via IO-Link communications.

PREMIUM Model

E2E NEXT Series (Quadruple distance model)

DC 3-wire [Refer to *Dimensions* on page 64.]

Unshielded

Size (Sensing distance)	Connection method	Body size	Operation mode	Model		
				PNP		NPN
				IO-Link (COM3)	IO-Link (COM2) *4	--- *4
M8 (8 mm)	Pre-wired (2 m) *1	38 mm *2	NO	E2E-X8MB1T8 2M	E2E-X8MB1D8 2M	E2E-X8MC18 2M
			NC	-	E2E-X8MB28 2M	E2E-X8MC28 2M
		48 mm	NO	E2E-X8MB1TL8 2M	E2E-X8MB1DL8 2M	E2E-X8MC1L8 2M
			NC	-	E2E-X8MB2L8 2M	E2E-X8MC2L8 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	38 mm *3	NO	E2E-X8MB1T8-M1TJ 0.3M	E2E-X8MB1D8-M1TJ 0.3M	E2E-X8MC18-M1TJ 0.3M
			NC	-	E2E-X8MB28-M1TJ 0.3M	E2E-X8MC28-M1TJ 0.3M
		48 mm	NO	E2E-X8MB1TL8-M1TJ 0.3M	E2E-X8MB1DL8-M1TJ 0.3M	E2E-X8MC1L8-M1TJ 0.3M
			NC	-	E2E-X8MB2L8-M1TJ 0.3M	E2E-X8MC2L8-M1TJ 0.3M
	M12 Connector	43 mm	NO	E2E-X8MB1T8-M1	E2E-X8MB1D8-M1	E2E-X8MC18-M1
			NC	-	E2E-X8MB28-M1	E2E-X8MC28-M1
		53 mm	NO	E2E-X8MB1TL8-M1	E2E-X8MB1DL8-M1	E2E-X8MC1L8-M1
			NC	-	E2E-X8MB2L8-M1	E2E-X8MC2L8-M1
	M8 Connector (4-pin)	39 mm	NO	E2E-X8MB1T8-M3	E2E-X8MB1D8-M3	E2E-X8MC18-M3
			NC	-	E2E-X8MB28-M3	E2E-X8MC28-M3
		49 mm	NO	E2E-X8MB1TL8-M3	E2E-X8MB1DL8-M3	E2E-X8MC1L8-M3
			NC	-	E2E-X8MB2L8-M3	E2E-X8MC2L8-M3
	M8 Connector (3-pin)	39 mm	NO	E2E-X8MB1T8-M5	E2E-X8MB1D8-M5	E2E-X8MC18-M5
			NC	-	E2E-X8MB28-M5	E2E-X8MC28-M5
		49 mm	NO	E2E-X8MB1TL8-M5	E2E-X8MB1DL8-M5	E2E-X8MC1L8-M5
			NC	-	E2E-X8MB2L8-M5	E2E-X8MC2L8-M5
M12 (16 mm)	Pre-wired (2 m) *1	47 mm *2	NO	E2E-X16MB1T12 2M	E2E-X16MB1D12 2M	E2E-X16MC112 2M
			NC	-	E2E-X16MB212 2M	E2E-X16MC212 2M
		69 mm	NO	E2E-X16MB1TL12 2M	E2E-X16MB1DL12 2M	E2E-X16MC1L12 2M
			NC	-	E2E-X16MB2L12 2M	E2E-X16MC2L12 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	47 mm *3	NO	E2E-X16MB1T12-M1TJ 0.3M	E2E-X16MB1D12-M1TJ 0.3M	E2E-X16MC112-M1TJ 0.3M
			NC	-	E2E-X16MB212-M1TJ 0.3M	E2E-X16MC212-M1TJ 0.3M
		69 mm	NO	E2E-X16MB1TL12-M1TJ 0.3M	E2E-X16MB1DL12-M1TJ 0.3M	E2E-X16MC1L12-M1TJ 0.3M
			NC	-	E2E-X16MB2L12-M1TJ 0.3M	E2E-X16MC2L12-M1TJ 0.3M
	M12 Connector	48 mm	NO	E2E-X16MB1T12-M1	E2E-X16MB1D12-M1	E2E-X16MC112-M1
			NC	-	E2E-X16MB212-M1	E2E-X16MC212-M1
		70 mm	NO	E2E-X16MB1TL12-M1	E2E-X16MB1DL12-M1	E2E-X16MC1L12-M1
			NC	-	E2E-X16MB2L12-M1	E2E-X16MC2L12-M1
M18 (30 mm)	Pre-wired (2 m) *1	77 mm *2	NO	E2E-X30MB1TL18 2M	E2E-X30MB1DL18 2M	E2E-X30MC1L18 2M
			NC	-	E2E-X30MB2L18 2M	E2E-X30MC2L18 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	77 mm *3	NO	E2E-X30MB1TL18-M1TJ 0.3M	E2E-X30MB1DL18-M1TJ 0.3M	E2E-X30MC1L18-M1TJ 0.3M
			NC	-	E2E-X30MB2L18-M1TJ 0.3M	E2E-X30MC2L18-M1TJ 0.3M
	M12 Connector	75 mm	NO	E2E-X30MB1TL18-M1	E2E-X30MB1DL18-M1	E2E-X30MC1L18-M1
			NC	-	E2E-X30MB2L18-M1	E2E-X30MC2L18-M1
M30 (50 mm)	Pre-wired (2 m) *1	97 mm *2	NO	E2E-X50MB1TL30 2M	E2E-X50MB1DL30 2M	E2E-X50MC1L30 2M
			NC	-	E2E-X50MB2L30 2M	E2E-X50MC2L30 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	97 mm *3	NO	E2E-X50MB1TL30-M1TJ 0.3M	E2E-X50MB1DL30-M1TJ 0.3M	E2E-X50MC1L30-M1TJ 0.3M
			NC	-	E2E-X50MB2L30-M1TJ 0.3M	E2E-X50MC2L30-M1TJ 0.3M
	M12 Connector	95 mm	NO	E2E-X50MB1TL30-M1	E2E-X50MB1DL30-M1	E2E-X50MC1L30-M1
			NC	-	E2E-X50MB2L30-M1	E2E-X50MC2L30-M1

*1. Models with 5-m cable length are also available (Example: E2E-X16MB1D12 5M)

*2. Models with 2-m and 5-m robot (bending-resistant) cables are also available with "-R" in the model number. (Example: E2E-X16MB1D12-R 5M)

*3. Models with M12 Smartclick connector model robot (bending-resistant) cables are also available with "R" in the model number. (Example: E2E-X16MB1D12-M1TJR 0.3M)

*4. IO-Link is not supported for NC-type PNP outputs or all types of NPN outputs.

Note: Operation mode NO can be changed to NC via IO-Link communications.

E2E/E2EQ NEXT Series

PREMIUM Model

E2E NEXT Series (Triple distance model)

DC 3-wire [Refer to *Dimensions* on page 64.]

Shielded *1

Size (Sensing distance)	Connection method	Body size	Operation mode	Model		
				PNP		NPN
				IO-Link (COM3)	IO-Link (COM2) *5	--- *5
M8 (3 mm)	Pre-wired (2 m) *2	38 mm *3	NO	E2E-X3B1T8 2M	E2E-X3B1D8 2M	E2E-X3C18 2M
			NC	-	E2E-X3B28 2M	E2E-X3C28 2M
		48 mm	NO	E2E-X3B1TL8 2M	E2E-X3B1DL8 2M	E2E-X3C1L8 2M
			NC	-	E2E-X3B2L8 2M	E2E-X3C2L8 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	38 mm *4	NO	E2E-X3B1T8-M1TJ 0.3M	E2E-X3B1D8-M1TJ 0.3M	E2E-X3C18-M1TJ 0.3M
			NC	-	E2E-X3B28-M1TJ 0.3M	E2E-X3C28-M1TJ 0.3M
		48 mm	NO	E2E-X3B1TL8-M1TJ 0.3M	E2E-X3B1DL8-M1TJ 0.3M	E2E-X3C1L8-M1TJ 0.3M
			NC	-	E2E-X3B2L8-M1TJ 0.3M	E2E-X3C2L8-M1TJ 0.3M
	M12 Connector	43 mm	NO	E2E-X3B1T8-M1	E2E-X3B1D8-M1	E2E-X3C18-M1
			NC	-	E2E-X3B28-M1	E2E-X3C28-M1
		53 mm	NO	E2E-X3B1TL8-M1	E2E-X3B1DL8-M1	E2E-X3C1L8-M1
			NC	-	E2E-X3B2L8-M1	E2E-X3C2L8-M1
	M8 Connector (4-pin)	39 mm	NO	E2E-X3B1T8-M3	E2E-X3B1D8-M3	E2E-X3C18-M3
			NC	-	E2E-X3B28-M3	E2E-X3C28-M3
		49 mm	NO	E2E-X3B1TL8-M3	E2E-X3B1DL8-M3	E2E-X3C1L8-M3
			NC	-	E2E-X3B2L8-M3	E2E-X3C2L8-M3
	M8 Connector (3-pin)	39 mm	NO	E2E-X3B1T8-M5	E2E-X3B1D8-M5	E2E-X3C18-M5
			NC	-	E2E-X3B28-M5	E2E-X3C28-M5
		49 mm	NO	E2E-X3B1TL8-M5	E2E-X3B1DL8-M5	E2E-X3C1L8-M5
			NC	-	E2E-X3B2L8-M5	E2E-X3C2L8-M5
M12 (6 mm)	Pre-wired (2 m) *2	47 mm *3	NO	E2E-X6B1T12 2M	E2E-X6B1D12 2M	E2E-X6C112 2M
			NC	-	E2E-X6B212 2M	E2E-X6C212 2M
			NO+NC	-	E2E-X6B3D12 2M	E2E-X6C312 2M
		69 mm	NO	E2E-X6B1TL12 2M	E2E-X6B1DL12 2M	E2E-X6C1L12 2M
			NC	-	E2E-X6B2L12 2M	E2E-X6C2L12 2M
			NO+NC	-	E2E-X6B3DL12 2M	E2E-X6C3L12 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	47 mm *4	NO	E2E-X6B1T12-M1TJ 0.3M	E2E-X6B1D12-M1TJ 0.3M	E2E-X6C112-M1TJ 0.3M
			NC	-	E2E-X6B212-M1TJ 0.3M	E2E-X6C212-M1TJ 0.3M
			NO+NC	-	E2E-X6B3D12-M1TJ 0.3M	E2E-X6C312-M1TJ 0.3M
		69 mm	NO	E2E-X6B1TL12-M1TJ 0.3M	E2E-X6B1DL12-M1TJ 0.3M	E2E-X6C1L12-M1TJ 0.3M
			NC	-	E2E-X6B2L12-M1TJ 0.3M	E2E-X6C2L12-M1TJ 0.3M
			NO+NC	-	E2E-X6B3DL12-M1TJ 0.3M	E2E-X6C3L12-M1TJ 0.3M
	M12 Connector	48 mm	NO	E2E-X6B1T12-M1	E2E-X6B1D12-M1	E2E-X6C112-M1
			NC	-	E2E-X6B212-M1	E2E-X6C212-M1
			NO+NC	-	E2E-X6B3D12-M1	E2E-X6C312-M1
		70 mm	NO	E2E-X6B1TL12-M1	E2E-X6B1DL12-M1	E2E-X6C1L12-M1
			NC	-	E2E-X6B2L12-M1	E2E-X6C2L12-M1
			NO+NC	-	E2E-X6B3DL12-M1	E2E-X6C3L12-M1

PREMIUM Model

Size (Sensing distance)	Connection method	Body size	Operation mode	Model		
				PNP		NPN
				IO-Link (COM3)	IO-Link (COM2) *5	--- *5
M18 (12 mm)	Pre-wired (2 m) *2	55 mm *3	NO	E2E-X12B1T18 2M	E2E-X12B1D18 2M	E2E-X12C118 2M
			NC	-	E2E-X12B218 2M	E2E-X12C218 2M
			NO+NC	-	E2E-X12B3D18 2M	E2E-X12C318 2M
		77 mm	NO	E2E-X12B1TL18 2M	E2E-X12B1DL18 2M	E2E-X12C1L18 2M
			NC	-	E2E-X12B2L18 2M	E2E-X12C2L18 2M
			NO+NC	-	E2E-X12B3DL18 2M	E2E-X12C3L18 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	55 mm *4	NO	E2E-X12B1T18-M1TJ 0.3M	E2E-X12B1D18-M1TJ 0.3M	E2E-X12C118-M1TJ 0.3M
			NC	-	E2E-X12B218-M1TJ 0.3M	E2E-X12C218-M1TJ 0.3M
			NO+NC	-	E2E-X12B3D18-M1TJ 0.3M	E2E-X12C318-M1TJ 0.3M
		77 mm	NO	E2E-X12B1TL18-M1TJ 0.3M	E2E-X12B1DL18-M1TJ 0.3M	E2E-X12C1L18-M1TJ 0.3M
			NC	-	E2E-X12B2L18-M1TJ 0.3M	E2E-X12C2L18-M1TJ 0.3M
			NO+NC	-	E2E-X12B3DL18-M1TJ 0.3M	E2E-X12C3L18-M1TJ 0.3M
	M12 Connector	53 mm	NO	E2E-X12B1T18-M1	E2E-X12B1D18-M1	E2E-X12C118-M1
			NC	-	E2E-X12B218-M1	E2E-X12C218-M1
			NO+NC	-	E2E-X12B3D18-M1	E2E-X12C318-M1
		75 mm	NO	E2E-X12B1TL18-M1	E2E-X12B1DL18-M1	E2E-X12C1L18-M1
			NC	-	E2E-X12B2L18-M1	E2E-X12C2L18-M1
			NO+NC	-	E2E-X12B3DL18-M1	E2E-X12C3L18-M1
M30 (22 mm)	Pre-wired (2 m) *2	60 mm *3	NO	E2E-X22B1T30 2M	E2E-X22B1D30 2M	E2E-X22C130 2M
			NC	-	E2E-X22B230 2M	E2E-X22C230 2M
			NO+NC	-	E2E-X22B3D30 2M	E2E-X22C330 2M
		82 mm	NO	E2E-X22B1TL30 2M	E2E-X22B1DL30 2M	E2E-X22C1L30 2M
			NC	-	E2E-X22B2L30 2M	E2E-X22C2L30 2M
			NO+NC	-	E2E-X22B3DL30 2M	E2E-X22C3L30 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	60 mm *4	NO	E2E-X22B1T30-M1TJ 0.3M	E2E-X22B1D30-M1TJ 0.3M	E2E-X22C130-M1TJ 0.3M
			NC	-	E2E-X22B230-M1TJ 0.3M	E2E-X22C230-M1TJ 0.3M
			NO+NC	-	E2E-X22B3D30-M1TJ 0.3M	E2E-X22C330-M1TJ 0.3M
		82 mm	NO	E2E-X22B1TL30-M1TJ 0.3M	E2E-X22B1DL30-M1TJ 0.3M	E2E-X22C1L30-M1TJ 0.3M
			NC	-	E2E-X22B2L30-M1TJ 0.3M	E2E-X22C2L30-M1TJ 0.3M
			NO+NC	-	E2E-X22B3DL30-M1TJ 0.3M	E2E-X22C3L30-M1TJ 0.3M
	M12 Connector	58 mm	NO	E2E-X22B1T30-M1	E2E-X22B1D30-M1	E2E-X22C130-M1
			NC	-	E2E-X22B230-M1	E2E-X22C230-M1
			NO+NC	-	E2E-X22B3D30-M1	E2E-X22C330-M1
		80 mm	NO	E2E-X22B1TL30-M1	E2E-X22B1DL30-M1	E2E-X22C1L30-M1
			NC	-	E2E-X22B2L30-M1	E2E-X22C2L30-M1
			NO+NC	-	E2E-X22B3DL30-M1	E2E-X22C3L30-M1

*1. When embedding the Proximity Sensor in metal, refer to *Influence of Surrounding Metal* on page 62.

*2. Models with 5-m cable length are also available (Example: E2E-X6B1D12 5M)

*3. Models with 2-m and 5-m robot (bending-resistant) cables are also available with "-R" in the model number. (Example: E2E-X6B1D12-R 2M/ E2E-X6B1D12-R 5M)

*4. Models with M12 Smartclick connector model robot (bending-resistant) cables are also available with "R" in the model number. (Example: E2E-X6B1D12-M1TJR 0.3M)

*5. IO-Link is not supported for NC-type PNP outputs or all types of NPN outputs.

Note: Operation mode NO can be changed to NC via IO-Link communications.

E2E/E2EQ NEXT Series

PREMIUM Model

E2E NEXT Series (Triple distance model)

DC 3-wire [Refer to *Dimensions* on page 64.]

Unshielded

Size (Sensing distance)	Connection method	Body size	Operation mode	Model		
				PNP		NPN
				IO-Link (COM3)	IO-Link (COM2) *4	--- *4
M8 (6 mm)	Pre-wired (2 m) *1	38 mm *2	NO	E2E-X6MB1T8 2M	E2E-X6MB1D8 2M	E2E-X6MC18 2M
			NC	-	E2E-X6MB28 2M	E2E-X6MC28 2M
		48 mm	NO	E2E-X6MB1TL8 2M	E2E-X6MB1DL8 2M	E2E-X6MC1L8 2M
			NC	-	E2E-X6MB2L8 2M	E2E-X6MC2L8 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	38 mm *3	NO	E2E-X6MB1T8-M1TJ 0.3M	E2E-X6MB1D8-M1TJ 0.3M	E2E-X6MC18-M1TJ 0.3M
			NC	-	E2E-X6MB28-M1TJ 0.3M	E2E-X6MC28-M1TJ 0.3M
		48 mm	NO	E2E-X6MB1TL8-M1TJ 0.3M	E2E-X6MB1DL8-M1TJ 0.3M	E2E-X6MC1L8-M1TJ 0.3M
			NC	-	E2E-X6MB2L8-M1TJ 0.3M	E2E-X6MC2L8-M1TJ 0.3M
	M12 Connector	43 mm	NO	E2E-X6MB1T8-M1	E2E-X6MB1D8-M1	E2E-X6MC18-M1
			NC	-	E2E-X6MB28-M1	E2E-X6MC28-M1
		53 mm	NO	E2E-X6MB1TL8-M1	E2E-X6MB1DL8-M1	E2E-X6MC1L8-M1
			NC	-	E2E-X6MB2L8-M1	E2E-X6MC2L8-M1
	M8 Connector (4-pin)	39 mm	NO	E2E-X6MB1T8-M3	E2E-X6MB1D8-M3	E2E-X6MC18-M3
			NC	-	E2E-X6MB28-M3	E2E-X6MC28-M3
		49 mm	NO	E2E-X6MB1TL8-M3	E2E-X6MB1DL8-M3	E2E-X6MC1L8-M3
			NC	-	E2E-X6MB2L8-M3	E2E-X6MC2L8-M3
	M8 Connector (3-pin)	39 mm	NO	E2E-X6MB1T8-M5	E2E-X6MB1D8-M5	E2E-X6MC18-M5
			NC	-	E2E-X6MB28-M5	E2E-X6MC28-M5
		49 mm	NO	E2E-X6MB1TL8-M5	E2E-X6MB1DL8-M5	E2E-X6MC1L8-M5
			NC	-	E2E-X6MB2L8-M5	E2E-X6MC2L8-M5
M12 (10 mm)	Pre-wired (2 m) *1	47 mm *2	NO	E2E-X10MB1T12 2M	E2E-X10MB1D12 2M	E2E-X10MC112 2M
			NC	-	E2E-X10MB212 2M	E2E-X10MC212 2M
			NO+NC	-	E2E-X10MB3D12 2M	E2E-X10MC312 2M
		69 mm	NO	E2E-X10MB1TL12 2M	E2E-X10MB1DL12 2M	E2E-X10MC1L12 2M
			NC	-	E2E-X10MB2L12 2M	E2E-X10MC2L12 2M
			NO+NC	-	E2E-X10MB3DL12 2M	E2E-X10MC3L12 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	47 mm *3	NO	E2E-X10MB1T12-M1TJ 0.3M	E2E-X10MB1D12-M1TJ 0.3M	E2E-X10MC112-M1TJ 0.3M
			NC	-	E2E-X10MB212-M1TJ 0.3M	E2E-X10MC212-M1TJ 0.3M
			NO+NC	-	E2E-X10MB3D12-M1TJ 0.3M	E2E-X10MC312-M1TJ 0.3M
		69 mm	NO	E2E-X10MB1TL12-M1TJ 0.3M	E2E-X10MB1DL12-M1TJ 0.3M	E2E-X10MC1L12-M1TJ 0.3M
			NC	-	E2E-X10MB2L12-M1TJ 0.3M	E2E-X10MC2L12-M1TJ 0.3M
			NO+NC	-	E2E-X10MB3DL12-M1TJ 0.3M	E2E-X10MC3L12-M1TJ 0.3M
	M12 Connector	48 mm	NO	E2E-X10MB1T12-M1	E2E-X10MB1D12-M1	E2E-X10MC112-M1
			NC	-	E2E-X10MB212-M1	E2E-X10MC212-M1
			NO+NC	-	E2E-X10MB3D12-M1	E2E-X10MC312-M1
		70 mm	NO	E2E-X10MB1TL12-M1	E2E-X10MB1DL12-M1	E2E-X10MC1L12-M1
			NC	-	E2E-X10MB2L12-M1	E2E-X10MC2L12-M1
			NO+NC	-	E2E-X10MB3DL12-M1	E2E-X10MC3L12-M1
M18 (20 mm)	Pre-wired (2 m) *1	77 mm *2	NO	E2E-X20MB1TL18 2M	E2E-X20MB1DL18 2M	E2E-X20MC1L18 2M
			NC	-	E2E-X20MB2L18 2M	E2E-X20MC2L18 2M
			NO+NC	-	E2E-X20MB3DL18 2M	E2E-X20MC3L18 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	77 mm *3	NO	E2E-X20MB1TL18-M1TJ	E2E-X20MB1DL18-M1TJ	E2E-X20MC1L18-M1TJ 0.3M
			NC	-	E2E-X20MB2L18-M1TJ 0.3M	E2E-X20MC2L18-M1TJ 0.3M
			NO+NC	-	E2E-X20MB3DL18-M1TJ 0.3M	E2E-X20MC3L18-M1TJ 0.3M
	M12 Connector	75 mm	NO	E2E-X20MB1TL18-M1	E2E-X20MB1DL18-M1	E2E-X20MC1L18-M1
			NC	-	E2E-X20MB2L18-M1	E2E-X20MC2L18-M1
			NO+NC	-	E2E-X20MB3DL18-M1	E2E-X20MC3L18-M1

PREMIUM Model

Size (Sensing distance)	Connection method	Body size	Operation mode	Model		
				PNP		NPN
				IO-Link (COM3)	IO-Link (COM2) *4	--- *4
M30 (40 mm)	Pre-wired (2 m) *1	82 mm *2	NO	E2E-X40MB1TL30 2M	E2E-X40MB1DL30 2M	E2E-X40MC1L30 2M
			NC	-	E2E-X40MB2L30 2M	E2E-X40MC2L30 2M
			NO+NC	-	E2E-X40MB3DL30 2M	E2E-X40MC3L30 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	82 mm *3	NO	E2E-X40MB1TL30-M1TJ 0.3M	E2E-X40MB1DL30-M1TJ 0.3M	E2E-X40MC1L30-M1TJ 0.3M
			NC	-	E2E-X40MB2L30-M1TJ 0.3M	E2E-X40MC2L30-M1TJ 0.3M
			NO+NC	-	E2E-X40MB3DL30-M1TJ 0.3M	E2E-X40MC3L30-M1TJ 0.3M
	M12 Connector	80 mm	NO	E2E-X40MB1TL30-M1	E2E-X40MB1DL30-M1	E2E-X40MC1L30-M1
			NC	-	E2E-X40MB2L30-M1	E2E-X40MC2L30-M1
			NO+NC	-	E2E-X40MB3DL30-M1	E2E-X40MC3L30-M1

*1. Models with 5-m cable length are also available (Example: E2E-X10MB1D12 5M)

*2. Models with 2-m and 5-m robot (bending-resistant) cables are also available with "-R" in the model number. (Example: E2E-X10MB1D12-R 2M/E2E-X10MB1D12-R 5M)

*3. Models with M12 Smartclick connector model robot (bending-resistant) cables are also available with "R" in the model number. (Example: E2E-X10MB1D12-M1TJR 0.3M)

*4. IO-Link is not supported for NC-type PNP outputs or all types of NPN outputs.

Note: Operation mode NO can be changed to NC via IO-Link communications.

E2E/E2EQ NEXT Series

PREMIUM Model

E2EQ NEXT Series (Spatter-resistant Triple distance model)

DC 3-wire [Refer to *Dimensions* on page 64.]

Shielded *1

Size (Sensing distance)	Connection method	Body size	Operation mode	Model		
				PNP		NPN
				IO-Link (COM3)	IO-Link (COM2) *3	--- *3
M8 (3 mm)	Pre-wired (2 m) *2	38 mm	NO	E2EQ-X3B1T8 2M	E2EQ-X3B1D8 2M	E2EQ-X3C18 2M
			NC	-	E2EQ-X3B28 2M	E2EQ-X3C28 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	38 mm	NO	E2EQ-X3B1T8-M1TJ 0.3M	E2EQ-X3B1D8-M1TJ 0.3M	E2EQ-X3C18-M1TJ 0.3M
			NC	-	E2EQ-X3B28-M1TJ 0.3M	E2EQ-X3C28-M1TJ 0.3M
	M12 Connector	43 mm	NO	E2EQ-X3B1T8-M1	E2EQ-X3B1D8-M1	E2EQ-X3C18-M1
			NC	-	E2EQ-X3B28-M1	E2EQ-X3C28-M1
M12 (6 mm)	Pre-wired (2 m) *2	47 mm	NO	E2EQ-X6B1T12 2M	E2EQ-X6B1D12 2M	E2EQ-X6C112 2M
			NC	-	E2EQ-X6B212 2M	E2EQ-X6C212 2M
			NO+NC	-	E2EQ-X6B3D12 2M	E2EQ-X6C312 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	47 mm	NO	E2EQ-X6B1T12-M1TJ 0.3M	E2EQ-X6B1D12-M1TJ 0.3M	E2EQ-X6C112-M1TJ 0.3M
			NC	-	E2EQ-X6B212-M1TJ 0.3M	E2EQ-X6C212-M1TJ 0.3M
			NO+NC	-	E2EQ-X6B3D12-M1TJ 0.3M	E2EQ-X6C312-M1TJ 0.3M
	M12 Connector	48 mm	NO	E2EQ-X6B1T12-M1	E2EQ-X6B1D12-M1	E2EQ-X6C112-M1
			NC	-	E2EQ-X6B212-M1	E2EQ-X6C212-M1
			NO+NC	-	E2EQ-X6B3D12-M1	E2EQ-X6C312-M1
M18 (12 mm)	Pre-wired (2 m) *2	55 mm	NO	E2EQ-X12B1T18 2M	E2EQ-X12B1D18 2M	E2EQ-X12C118 2M
			NC	-	E2EQ-X12B218 2M	E2EQ-X12C218 2M
			NO+NC	-	E2EQ-X12B3D18 2M	E2EQ-X12C318 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	55 mm	NO	E2EQ-X12B1T18-M1TJ 0.3M	E2EQ-X12B1D18-M1TJ 0.3M	E2EQ-X12C118-M1TJ 0.3M
			NC	-	E2EQ-X12B218-M1TJ 0.3M	E2EQ-X12C218-M1TJ 0.3M
			NO+NC	-	E2EQ-X12B3D18-M1TJ 0.3M	E2EQ-X12C318-M1TJ 0.3M
	M12 Connector	53 mm	NO	E2EQ-X12B1T18-M1	E2EQ-X12B1D18-M1	E2EQ-X12C118-M1
			NC	-	E2EQ-X12B218-M1	E2EQ-X12C218-M1
			NO+NC	-	E2EQ-X12B3D18-M1	E2EQ-X12C318-M1
M30 (22 mm)	Pre-wired (2 m) *2	60 mm	NO	E2EQ-X22B1T30 2M	E2EQ-X22B1D30 2M	E2EQ-X22C130 2M
			NC	-	E2EQ-X22B230 2M	E2EQ-X22C230 2M
			NO+NC	-	E2EQ-X22B3D30 2M	E2EQ-X22C330 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	60 mm	NO	E2EQ-X22B1T30-M1TJ 0.3M	E2EQ-X22B1D30-M1TJ 0.3M	E2EQ-X22C130-M1TJ 0.3M
			NC	-	E2EQ-X22B230-M1TJ 0.3M	E2EQ-X22C230-M1TJ 0.3M
			NO+NC	-	E2EQ-X22B3D30-M1TJ 0.3M	E2EQ-X22C330-M1TJ 0.3M
	M12 Connector	58 mm	NO	E2EQ-X22B1T30-M1	E2EQ-X22B1D30-M1	E2EQ-X22C130-M1
			NC	-	E2EQ-X22B230-M1	E2EQ-X22C230-M1
			NO+NC	-	E2EQ-X22B3D30-M1	E2EQ-X22C330-M1

*1. When embedding the Proximity Sensor in metal, refer to *Influence of Surrounding Metal* on page 62.

*2. Models with 5-m cable length are also available (Example: E2EQ-X6B1D12 5M)

*3. IO-Link is not supported for NC-type PNP outputs or all types of NPN outputs.

Note: Operation mode NO can be changed to NC via IO-Link communications.

BASIC Model

E2E NEXT Series (Double distance model)

DC 3-wire [Refer to *Dimensions* on page 65.]

Shielded

Size (Sensing distance)	Connection method	Body size	Operation mode	Model		
				PNP		NPN
				IO-Link (COM3)	IO-Link (COM2) *4	--- *4
M8 (2 mm)	Pre-wired (2 m) *1	38 mm *2	NO	E2E-X2B1T8 2M	E2E-X2B1D8 2M	E2E-X2C18 2M
			NC	-	E2E-X2B28 2M	E2E-X2C28 2M
		48 mm	NO	E2E-X2B1TL8 2M	E2E-X2B1DL8 2M	E2E-X2C1L8 2M
			NC	-	E2E-X2B2L8 2M	E2E-X2C2L8 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	38 mm *3	NO	E2E-X2B1T8-M1TJ 0.3M	E2E-X2B1D8-M1TJ 0.3M	E2E-X2C18-M1TJ 0.3M
			NC	-	E2E-X2B28-M1TJ 0.3M	E2E-X2C28-M1TJ 0.3M
		48 mm	NO	E2E-X2B1TL8-M1TJ 0.3M	E2E-X2B1DL8-M1TJ 0.3M	E2E-X2C1L8-M1TJ 0.3M
			NC	-	E2E-X2B2L8-M1TJ 0.3M	E2E-X2C2L8-M1TJ 0.3M
	M12 Connector	43 mm	NO	E2E-X2B1T8-M1	E2E-X2B1D8-M1	E2E-X2C18-M1
			NC	-	E2E-X2B28-M1	E2E-X2C28-M1
		53 mm	NO	E2E-X2B1TL8-M1	E2E-X2B1DL8-M1	E2E-X2C1L8-M1
			NC	-	E2E-X2B2L8-M1	E2E-X2C2L8-M1
	M8 Connector (4-pin)	39 mm	NO	E2E-X2B1T8-M3	E2E-X2B1D8-M3	E2E-X2C18-M3
			NC	-	E2E-X2B28-M3	E2E-X2C28-M3
		49 mm	NO	E2E-X2B1TL8-M3	E2E-X2B1DL8-M3	E2E-X2C1L8-M3
			NC	-	E2E-X2B2L8-M3	E2E-X2C2L8-M3
	M8 Connector (3-pin)	39 mm	NO	E2E-X2B1T8-M5	E2E-X2B1D8-M5	E2E-X2C18-M5
			NC	-	E2E-X2B28-M5	E2E-X2C28-M5
		49 mm	NO	E2E-X2B1TL8-M5	E2E-X2B1DL8-M5	E2E-X2C1L8-M5
			NC	-	E2E-X2B2L8-M5	E2E-X2C2L8-M5
M12 (4 mm)	Pre-wired (2 m) *1	47 mm *2	NO	E2E-X4B1T12 2M	E2E-X4B1D12 2M	E2E-X4C112 2M
			NC	-	E2E-X4B212 2M	E2E-X4C212 2M
			NO+NC	-	E2E-X4B3D12 2M	E2E-X4C312 2M
		69 mm	NO	E2E-X4B1TL12 2M	E2E-X4B1DL12 2M	E2E-X4C1L12 2M
			NC	-	E2E-X4B2L12 2M	E2E-X4C2L12 2M
			NO+NC	-	E2E-X4B3DL12 2M	E2E-X4C3L12 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	47 mm *3	NO	E2E-X4B1T12-M1TJ 0.3M	E2E-X4B1D12-M1TJ 0.3M	E2E-X4C112-M1TJ 0.3M
			NC	-	E2E-X4B212-M1TJ 0.3M	E2E-X4C212-M1TJ 0.3M
			NO+NC	-	E2E-X4B3D12-M1TJ 0.3M	E2E-X4C312-M1TJ 0.3M
		69 mm	NO	E2E-X4B1TL12-M1TJ 0.3M	E2E-X4B1DL12-M1TJ 0.3M	E2E-X4C1L12-M1TJ 0.3M
			NC	-	E2E-X4B2L12-M1TJ 0.3M	E2E-X4C2L12-M1TJ 0.3M
			NO+NC	-	E2E-X4B3DL12-M1TJ 0.3M	E2E-X4C3L12-M1TJ 0.3M
	M12 Connector	48 mm	NO	E2E-X4B1T12-M1	E2E-X4B1D12-M1	E2E-X4C112-M1
			NC	-	E2E-X4B212-M1	E2E-X4C212-M1
			NO+NC	-	E2E-X4B3D12-M1	E2E-X4C312-M1
		70 mm	NO	E2E-X4B1TL12-M1	E2E-X4B1DL12-M1	E2E-X4C1L12-M1
			NC	-	E2E-X4B2L12-M1	E2E-X4C2L12-M1
			NO+NC	-	E2E-X4B3DL12-M1	E2E-X4C3L12-M1

E2E/E2EQ NEXT Series DC 3-wire

E2E/E2EQ NEXT Series DC 2-wire

XS5 NEXT Series

XS5

XS3

E2E/E2EQ NEXT Series

BASIC Model

Size (Sensing distance)	Connection method	Body size	Operation mode	Model		
				PNP		NPN
				IO-Link (COM3)	IO-Link (COM2) *4	--- *4
M18 (8 mm)	Pre-wired (2 m) *1	55 mm *2	NO	E2E-X8B1T18 2M	E2E-X8B1D18 2M	E2E-X8C118 2M
			NC	-	E2E-X8B218 2M	E2E-X8C218 2M
			NO+NC	-	E2E-X8B3D18 2M	E2E-X8C318 2M
		77 mm	NO	E2E-X8B1TL18 2M	E2E-X8B1DL18 2M	E2E-X8C1L18 2M
			NC	-	E2E-X8B2L18 2M	E2E-X8C2L18 2M
			NO+NC	-	E2E-X8B3DL18 2M	E2E-X8C3L18 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	55 mm *3	NO	E2E-X8B1T18-M1TJ 0.3M	E2E-X8B1D18-M1TJ 0.3M	E2E-X8C118-M1TJ 0.3M
			NC	-	E2E-X8B218-M1TJ 0.3M	E2E-X8C218-M1TJ 0.3M
			NO+NC	-	E2E-X8B3D18-M1TJ 0.3M	E2E-X8C318-M1TJ 0.3M
		77 mm	NO	E2E-X8B1TL18-M1TJ 0.3M	E2E-X8B1DL18-M1TJ 0.3M	E2E-X8C1L18-M1TJ 0.3M
			NC	-	E2E-X8B2L18-M1TJ 0.3M	E2E-X8C2L18-M1TJ 0.3M
			NO+NC	-	E2E-X8B3DL18-M1TJ 0.3M	E2E-X8C3L18-M1TJ 0.3M
	M12 Connector	53 mm	NO	E2E-X8B1T18-M1	E2E-X8B1D18-M1	E2E-X8C118-M1
			NC	-	E2E-X8B218-M1	E2E-X8C218-M1
			NO+NC	-	E2E-X8B3D18-M1	E2E-X8C318-M1
		75 mm	NO	E2E-X8B1TL18-M1	E2E-X8B1DL18-M1	E2E-X8C1L18-M1
			NC	-	E2E-X8B2L18-M1	E2E-X8C2L18-M1
			NO+NC	-	E2E-X8B3DL18-M1	E2E-X8C3L18-M1
M30 (15 mm)	Pre-wired (2 m) *1	60 mm *2	NO	E2E-X15B1T30 2M	E2E-X15B1D30 2M	E2E-X15C130 2M
			NC	-	E2E-X15B230 2M	E2E-X15C230 2M
			NO+NC	-	E2E-X15B3D30 2M	E2E-X15C330 2M
		82 mm	NO	E2E-X15B1TL30 2M	E2E-X15B1DL30 2M	E2E-X15C1L30 2M
			NC	-	E2E-X15B2L30 2M	E2E-X15C2L30 2M
			NO+NC	-	E2E-X15B3DL30 2M	E2E-X15C3L30 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	60 mm *3	NO	E2E-X15B1T30-M1TJ 0.3M	E2E-X15B1D30-M1TJ 0.3M	E2E-X15C130-M1TJ 0.3M
			NC	-	E2E-X15B230-M1TJ 0.3M	E2E-X15C230-M1TJ 0.3M
			NO+NC	-	E2E-X15B3D30-M1TJ 0.3M	E2E-X15C330-M1TJ 0.3M
		82 mm	NO	E2E-X15B1TL30-M1TJ 0.3M	E2E-X15B1DL30-M1TJ 0.3M	E2E-X15C1L30-M1TJ 0.3M
			NC	-	E2E-X15B2L30-M1TJ 0.3M	E2E-X15C2L30-M1TJ 0.3M
			NO+NC	-	E2E-X15B3DL30-M1TJ 0.3M	E2E-X15C3L30-M1TJ 0.3M
	M12 Connector	58 mm	NO	E2E-X15B1T30-M1	E2E-X15B1D30-M1	E2E-X15C130-M1
			NC	-	E2E-X15B230-M1	E2E-X15C230-M1
			NO+NC	-	E2E-X15B3D30-M1	E2E-X15C330-M1
		80 mm	NO	E2E-X15B1TL30-M1	E2E-X15B1DL30-M1	E2E-X15C1L30-M1
			NC	-	E2E-X15B2L30-M1	E2E-X15C2L30-M1
			NO+NC	-	E2E-X15B3DL30-M1	E2E-X15C3L30-M1

*1. Models with 5-m cable length are also available (Example: E2E-X2B1D8 5M)

*2. Models with 2-m and 5-m robot (bending-resistant) cables are also available with "-R" in the model number. (Example: E2E-X2B1D8-R 2M/ E2E-X2B1D8-R 5M)

*3. Models with M12 Smartclick connector model robot (bending-resistant) cables are also available with "R" in the model number. (Example: E2E-X4B1T12-M1TJR 0.3M)

*4. IO-Link is not supported for NC-type PNP outputs or all types of NPN outputs.

Note: Operation mode NO can be changed to NC via IO-Link communications.

BASIC Model

E2E NEXT Series (Double distance model)

DC 3-wire [Refer to *Dimensions* on page 65.]

Unshielded

Size (Sensing distance)	Connection method	Body size	Operation mode	Model		
				PNP		NPN
				IO-Link (COM3)	IO-Link (COM2) *4	--- *4
M8 (4 mm)	Pre-wired (2 m) *1	38 mm *2	NO	E2E-X4MB1T8 2M	E2E-X4MB1D8 2M	E2E-X4MC18 2M
			NC	-	E2E-X4MB28 2M	E2E-X4MC28 2M
		48 mm	NO	E2E-X4MB1TL8 2M	E2E-X4MB1DL8 2M	E2E-X4MC1L8 2M
			NC	-	E2E-X4MB2L8 2M	E2E-X4MC2L8 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	38 mm *3	NO	E2E-X4MB1T8-M1TJ 0.3M	E2E-X4MB1D8-M1TJ 0.3M	E2E-X4MC18-M1TJ 0.3M
			NC	-	E2E-X4MB28-M1TJ 0.3M	E2E-X4MC28-M1TJ 0.3M
		48 mm	NO	E2E-X4MB1TL8-M1TJ 0.3M	E2E-X4MB1DL8-M1TJ 0.3M	E2E-X4MC1L8-M1TJ 0.3M
			NC	-	E2E-X4MB2L8-M1TJ 0.3M	E2E-X4MC2L8-M1TJ 0.3M
	M12 Connector	43 mm	NO	E2E-X4MB1T8-M1	E2E-X4MB1D8-M1	E2E-X4MC18-M1
			NC	-	E2E-X4MB28-M1	E2E-X4MC28-M1
		53 mm	NO	E2E-X4MB1TL8-M1	E2E-X4MB1DL8-M1	E2E-X4MC1L8-M1
			NC	-	E2E-X4MB2L8-M1	E2E-X4MC2L8-M1
	M8 Connector (4-pin)	39 mm	NO	E2E-X4MB1T8-M3	E2E-X4MB1D8-M3	E2E-X4MC18-M3
			NC	-	E2E-X4MB28-M3	E2E-X4MC28-M3
		49 mm	NO	E2E-X4MB1TL8-M3	E2E-X4MB1DL8-M3	E2E-X4MC1L8-M3
			NC	-	E2E-X4MB2L8-M3	E2E-X4MC2L8-M3
	M8 Connector (3-pin)	39 mm	NO	E2E-X4MB1T8-M5	E2E-X4MB1D8-M5	E2E-X4MC18-M5
			NC	-	E2E-X4MB28-M5	E2E-X4MC28-M5
		49 mm	NO	E2E-X4MB1TL8-M5	E2E-X4MB1DL8-M5	E2E-X4MC1L8-M5
			NC	-	E2E-X4MB2L8-M5	E2E-X4MC2L8-M5
M12 (8 mm)	Pre-wired (2 m) *1	47 mm *2	NO	E2E-X8MB1T12 2M	E2E-X8MB1D12 2M	E2E-X8MC112 2M
			NC	-	E2E-X8MB212 2M	E2E-X8MC212 2M
			NO+NC	-	E2E-X8MB3D12 2M	E2E-X8MC312 2M
		69 mm	NO	E2E-X8MB1TL12 2M	E2E-X8MB1DL12 2M	E2E-X8MC1L12 2M
			NC	-	E2E-X8MB2L12 2M	E2E-X8MC2L12 2M
			NO+NC	-	E2E-X8MB3DL12 2M	E2E-X8MC3L12 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	47 mm *3	NO	E2E-X8MB1T12-M1TJ 0.3M	E2E-X8MB1D12-M1TJ 0.3M	E2E-X8MC112-M1TJ 0.3M
			NC	-	E2E-X8MB212-M1TJ 0.3M	E2E-X8MC212-M1TJ 0.3M
			NO+NC	-	E2E-X8MB3D12-M1TJ 0.3M	E2E-X8MC312-M1TJ 0.3M
		69 mm	NO	E2E-X8MB1TL12-M1TJ 0.3M	E2E-X8MB1DL12-M1TJ 0.3M	E2E-X8MC1L12-M1TJ 0.3M
			NC	-	E2E-X8MB2L12-M1TJ 0.3M	E2E-X8MC2L12-M1TJ 0.3M
			NO+NC	-	E2E-X8MB3DL12-M1TJ 0.3M	E2E-X8MC3L12-M1TJ 0.3M
	M12 Connector	48 mm	NO	E2E-X8MB1T12-M1	E2E-X8MB1D12-M1	E2E-X8MC112-M1
			NC	-	E2E-X8MB212-M1	E2E-X8MC212-M1
			NO+NC	-	E2E-X8MB3D12-M1	E2E-X8MC312-M1
		70 mm	NO	E2E-X8MB1TL12-M1	E2E-X8MB1DL12-M1	E2E-X8MC1L12-M1
			NC	-	E2E-X8MB2L12-M1	E2E-X8MC2L12-M1
			NO+NC	-	E2E-X8MB3DL12-M1	E2E-X8MC3L12-M1

E2E/E2EQ NEXT Series

BASIC Model

Size (Sensing distance)	Connection method	Body size	Operation mode	Model		
				PNP		NPN
				IO-Link (COM3)	IO-Link (COM2) *4	--- *4
M18 (16 mm)	Pre-wired (2 m) *1	55 mm *2	NO	E2E-X16MB1T18 2M	E2E-X16MB1D18 2M	E2E-X16MC118 2M
			NC	-	E2E-X16MB218 2M	E2E-X16MC218 2M
			NO+NC	-	E2E-X16MB3D18 2M	E2E-X16MC318 2M
		77 mm	NO	E2E-X16MB1TL18 2M	E2E-X16MB1DL18 2M	E2E-X16MC1L18 2M
			NC	-	E2E-X16MB2L18 2M	E2E-X16MC2L18 2M
			NO+NC	-	E2E-X16MB3DL18 2M	E2E-X16MC3L18 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	55 mm *3	NO	E2E-X16MB1T18-M1TJ 0.3M	E2E-X16MB1D18-M1TJ 0.3M	E2E-X16MC118-M1TJ 0.3M
			NC	-	E2E-X16MB218-M1TJ 0.3M	E2E-X16MC218-M1TJ 0.3M
			NO+NC	-	E2E-X16MB3D18-M1TJ 0.3M	E2E-X16MC318-M1TJ 0.3M
		77 mm	NO	E2E-X16MB1TL18-M1TJ 0.3M	E2E-X16MB1DL18-M1TJ 0.3M	E2E-X16MC1L18-M1TJ 0.3M
			NC	-	E2E-X16MB2L18-M1TJ 0.3M	E2E-X16MC2L18-M1TJ 0.3M
			NO+NC	-	E2E-X16MB3DL18-M1TJ 0.3M	E2E-X16MC3L18-M1TJ 0.3M
	M12 Connector	53 mm	NO	E2E-X16MB1T18-M1	E2E-X16MB1D18-M1	E2E-X16MC118-M1
			NC	-	E2E-X16MB218-M1	E2E-X16MC218-M1
			NO+NC	-	E2E-X16MB3D18-M1	E2E-X16MC318-M1
		75 mm	NO	E2E-X16MB1TL18-M1	E2E-X16MB1DL18-M1	E2E-X16MC1L18-M1
			NC	-	E2E-X16MB2L18-M1	E2E-X16MC2L18-M1
			NO+NC	-	E2E-X16MB3DL18-M1	E2E-X16MC3L18-M1
M30 (30 mm)	Pre-wired (2 m) *1	82 mm *2	NO	E2E-X30MB1TL30 2M	E2E-X30MB1DL30 2M	E2E-X30MC1L30 2M
			NC	-	E2E-X30MB2L30 2M	E2E-X30MC2L30 2M
			NO+NC	-	E2E-X30MB3DL30 2M	E2E-X30MC3L30 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	82 mm *3	NO	E2E-X30MB1TL30-M1TJ 0.3M	E2E-X30MB1DL30-M1TJ 0.3M	E2E-X30MC1L30-M1TJ 0.3M
			NC	-	E2E-X30MB2L30-M1TJ 0.3M	E2E-X30MC2L30-M1TJ 0.3M
			NO+NC	-	E2E-X30MB3DL30-M1TJ 0.3M	E2E-X30MC3L30-M1TJ 0.3M
	M12 Connector	80 mm	NO	E2E-X30MB1TL30-M1	E2E-X30MB1DL30-M1	E2E-X30MC1L30-M1
			NC	-	E2E-X30MB2L30-M1	E2E-X30MC2L30-M1
			NO+NC	-	E2E-X30MB3DL30-M1	E2E-X30MC3L30-M1

*1. Models with 5-m cable length are also available (Example: E2E-X8MB1D12 5M)

*2. Models with 2-m and 5-m robot (bending-resistant) cables are also available with "R" in the model number. (Example: E2E-X8MB1D12-R 2M/
E2E-X8MB1D12-R 5M)

*3. Models with M12 Smartclick connector model robot (bending-resistant) cables are also available with R" in the model number. (Example: E2E-X8MB1D12-M1TJR 0.3M)

*4. IO-Link is not supported for NC-type PNP outputs or all types of NPN outputs.

Note: Operation mode NO can be changed to NC via IO-Link communications.

BASIC Model

E2E NEXT Series (Single distance model)

DC 3-wire [Refer to *Dimensions* on page 65.]

Shielded

Size (Sensing distance)	Connection method	Body size	Operation mode	Model		
				PNP		NPN
				IO-Link (COM3)	IO-Link (COM2) *4	--- *4
M8 (1.5 mm)	Pre-wired (2 m) *1	38 mm *2	NO	E2E-X1R5B1T8 2M	E2E-X1R5B1D8 2M	E2E-X1R5C18 2M
			NC	-	E2E-X1R5B28 2M	E2E-X1R5C28 2M
		48 mm	NO	E2E-X1R5B1TL8 2M	E2E-X1R5B1DL8 2M	E2E-X1R5C1L8 2M
			NC	-	E2E-X1R5B2L8 2M	E2E-X1R5C2L8 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	38 mm *3	NO	E2E-X1R5B1T8-M1TJ 0.3M	E2E-X1R5B1D8-M1TJ 0.3M	E2E-X1R5C18-M1TJ 0.3M
			NC	-	E2E-X1R5B28-M1TJ 0.3M	E2E-X1R5C28-M1TJ 0.3M
		48 mm	NO	E2E-X1R5B1TL8-M1TJ 0.3M	E2E-X1R5B1DL8-M1TJ 0.3M	E2E-X1R5C1L8-M1TJ 0.3M
			NC	-	E2E-X1R5B2L8-M1TJ 0.3M	E2E-X1R5C2L8-M1TJ 0.3M
	M12 Connector	43 mm	NO	E2E-X1R5B1T8-M1	E2E-X1R5B1D8-M1	E2E-X1R5C18-M1
			NC	-	E2E-X1R5B28-M1	E2E-X1R5C28-M1
		53 mm	NO	E2E-X1R5B1TL8-M1	E2E-X1R5B1DL8-M1	E2E-X1R5C1L8-M1
			NC	-	E2E-X1R5B2L8-M1	E2E-X1R5C2L8-M1
			NO+NC	-	E2E-X1R5B3DL8-M1	E2E-X1R5C3L8-M1
			-	-	-	-
	M8 Connector (4-pin)	39 mm	NO	E2E-X1R5B1T8-M3	E2E-X1R5B1D8-M3	E2E-X1R5C18-M3
			NC	-	E2E-X1R5B28-M3	E2E-X1R5C28-M3
		49 mm	NO	E2E-X1R5B1TL8-M3	E2E-X1R5B1DL8-M3	E2E-X1R5C1L8-M3
			NC	-	E2E-X1R5B2L8-M3	E2E-X1R5C2L8-M3
	M8 Connector (3-pin)	39 mm	NO	E2E-X1R5B1T8-M5	E2E-X1R5B1D8-M5	E2E-X1R5C18-M5
			NC	-	E2E-X1R5B28-M5	E2E-X1R5C28-M5
		49 mm	NO	E2E-X1R5B1TL8-M5	E2E-X1R5B1DL8-M5	E2E-X1R5C1L8-M5
			NC	-	E2E-X1R5B2L8-M5	E2E-X1R5C2L8-M5
M12 (2 mm)	Pre-wired (2 m) *1	47 mm *2	NO	E2E-X2B1T12 2M	E2E-X2B1D12 2M	E2E-X2C112 2M
			NC	-	E2E-X2B212 2M	E2E-X2C212 2M
			NO+NC	-	E2E-X2B3D12 2M	E2E-X2C312 2M
		69 mm	NO	E2E-X2B1TL12 2M	E2E-X2B1DL12 2M	E2E-X2C1L12 2M
			NC	-	E2E-X2B2L12 2M	E2E-X2C2L12 2M
			NO+NC	-	E2E-X2B3DL12 2M	E2E-X2C3L12 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	47 mm *3	NO	E2E-X2B1T12-M1TJ 0.3M	E2E-X2B1D12-M1TJ 0.3M	E2E-X2C112-M1TJ 0.3M
			NC	-	E2E-X2B212-M1TJ 0.3M	E2E-X2C212-M1TJ 0.3M
			NO+NC	-	E2E-X2B3D12-M1TJ 0.3M	E2E-X2C312-M1TJ 0.3M
		69 mm	NO	E2E-X2B1TL12-M1TJ 0.3M	E2E-X2B1DL12-M1TJ 0.3M	E2E-X2C1L12-M1TJ 0.3M
			NC	-	E2E-X2B2L12-M1TJ 0.3M	E2E-X2C2L12-M1TJ 0.3M
			NO+NC	-	E2E-X2B3DL12-M1TJ 0.3M	E2E-X2C3L12-M1TJ 0.3M
	M12 Connector	48 mm	NO	E2E-X2B1T12-M1	E2E-X2B1D12-M1	E2E-X2C112-M1
			NC	-	E2E-X2B212-M1	E2E-X2C212-M1
			NO+NC	-	E2E-X2B3D12-M1	E2E-X2C312-M1
		70 mm	NO	E2E-X2B1TL12-M1	E2E-X2B1DL12-M1	E2E-X2C1L12-M1
			NC	-	E2E-X2B2L12-M1	E2E-X2C2L12-M1
			NO+NC	-	E2E-X2B3DL12-M1	E2E-X2C3L12-M1

E2E/E2EQ NEXT Series DC 3-wire

E2E/E2EQ NEXT Series DC 2-wire

XS5 NEXT Series

XS5

XS3

E2E/E2EQ NEXT Series

BASIC Model

Size (Sensing distance)	Connection method	Body size	Operation mode	Model		
				PNP		NPN
				IO-Link (COM3)	IO-Link (COM2) *4	--- *4
M18 (5 mm)	Pre-wired (2 m) *1	55 mm *2	NO	E2E-X5B1T18 2M	E2E-X5B1D18 2M	E2E-X5C118 2M
			NC	-	E2E-X5B218 2M	E2E-X5C218 2M
			NO+NC	-	E2E-X5B3D18 2M	E2E-X5C318 2M
		77 mm	NO	E2E-X5B1TL18 2M	E2E-X5B1DL18 2M	E2E-X5C1L18 2M
			NC	-	E2E-X5B2L18 2M	E2E-X5C2L18 2M
			NO+NC	-	E2E-X5B3DL18 2M	E2E-X5C3L18 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	55 mm *3	NO	E2E-X5B1T18-M1TJ 0.3M	E2E-X5B1D18-M1TJ 0.3M	E2E-X5C118-M1TJ 0.3M
			NC	-	E2E-X5B218-M1TJ 0.3M	E2E-X5C218-M1TJ 0.3M
			NO+NC	-	E2E-X5B3D18-M1TJ 0.3M	E2E-X5C318-M1TJ 0.3M
		77 mm	NO	E2E-X5B1TL18-M1TJ 0.3M	E2E-X5B1DL18-M1TJ 0.3M	E2E-X5C1L18-M1TJ 0.3M
			NC	-	E2E-X5B2L18-M1TJ 0.3M	E2E-X5C2L18-M1TJ 0.3M
			NO+NC	-	E2E-X5B3DL18-M1TJ 0.3M	E2E-X5C3L18-M1TJ 0.3M
	M12 Connector	53 mm	NO	E2E-X5B1T18-M1	E2E-X5B1D18-M1	E2E-X5C118-M1
			NC	-	E2E-X5B218-M1	E2E-X5C218-M1
			NO+NC	-	E2E-X5B3D18-M1	E2E-X5C318-M1
		75 mm	NO	E2E-X5B1TL18-M1	E2E-X5B1DL18-M1	E2E-X5C1L18-M1
			NC	-	E2E-X5B2L18-M1	E2E-X5C2L18-M1
			NO+NC	-	E2E-X5B3DL18-M1	E2E-X5C3L18-M1
M30 (10 mm)	Pre-wired (2 m) *1	60 mm *2	NO	E2E-X10B1T30 2M	E2E-X10B1D30 2M	E2E-X10C130 2M
			NC	-	E2E-X10B230 2M	E2E-X10C230 2M
			NO+NC	-	E2E-X10B3D30 2M	E2E-X10C330 2M
		82 mm	NO	E2E-X10B1TL30 2M	E2E-X10B1DL30 2M	E2E-X10C1L30 2M
			NC	-	E2E-X10B2L30 2M	E2E-X10C2L30 2M
			NO+NC	-	E2E-X10B3DL30 2M	E2E-X10C3L30 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	60 mm *3	NO	E2E-X10B1T30-M1TJ 0.3M	E2E-X10B1D30-M1TJ 0.3M	E2E-X10C130-M1TJ 0.3M
			NC	-	E2E-X10B230-M1TJ 0.3M	E2E-X10C230-M1TJ 0.3M
			NO+NC	-	E2E-X10B3D30-M1TJ 0.3M	E2E-X10C330-M1TJ 0.3M
		82 mm	NO	E2E-X10B1TL30-M1TJ 0.3M	E2E-X10B1DL30-M1TJ 0.3M	E2E-X10C1L30-M1TJ 0.3M
			NC	-	E2E-X10B2L30-M1TJ 0.3M	E2E-X10C2L30-M1TJ 0.3M
			NO+NC	-	E2E-X10B3DL30-M1TJ 0.3M	E2E-X10C3L30-M1TJ 0.3M
	M12 Connector	58 mm	NO	E2E-X10B1T30-M1	E2E-X10B1D30-M1	E2E-X10C130-M1
			NC	-	E2E-X10B230-M1	E2E-X10C230-M1
			NO+NC	-	E2E-X10B3D30-M1	E2E-X10C330-M1
		80 mm	NO	E2E-X10B1TL30-M1	E2E-X10B1DL30-M1	E2E-X10C1L30-M1
			NC	-	E2E-X10B2L30-M1	E2E-X10C2L30-M1
			NO+NC	-	E2E-X10B3DL30-M1	E2E-X10C3L30-M1

*1. Models with 5-m cable length are also available (Example: E2E-X2B1D12 5M)

*2. Models with 2-m and 5-m robot (bending-resistant) cables are also available with "-R" in the model number. (Example: E2E-X2B1D12-R 2M/ E2E-X2B1D12-R 5M)

*3. Models with M12 Smartclick connector model robot (bending-resistant) cables are also available with "R" in the model number. (Example: E2E-X2B1D12-M1TJR 0.3M)

*4. IO-Link is not supported for NC-type PNP outputs or all types of NPN outputs.

Note: Operation mode NO can be changed to NC via IO-Link communications.

BASIC Model

E2E NEXT Series (Single distance model)

DC 3-wire [Refer to *Dimensions* on page 65.]

Unshielded

Size (Sensing distance)	Connection method	Body size	Operation mode	Model		
				PNP		NPN
				IO-Link (COM3)	IO-Link (COM2) *4	--- *4
M8 (2mm)	Pre-wired (2 m) *1	38 mm *2	NO	E2E-X2MB1T8 2M	E2E-X2MB1D8 2M	E2E-X2MC18 2M
			NC	-	E2E-X2MB28 2M	E2E-X2MC28 2M
		48 mm	NO	E2E-X2MB1TL8 2M	E2E-X2MB1DL8 2M	E2E-X2MC1L8 2M
			NC	-	E2E-X2MB2L8 2M	E2E-X2MC2L8 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	38 mm *3	NO	E2E-X2MB1T8-M1TJ 0.3M	E2E-X2MB1D8-M1TJ 0.3M	E2E-X2MC18-M1TJ 0.3M
			NC	-	E2E-X2MB28-M1TJ 0.3M	E2E-X2MC28-M1TJ 0.3M
		48 mm	NO	E2E-X2MB1TL8-M1TJ 0.3M	E2E-X2MB1DL8-M1TJ 0.3M	E2E-X2MC1L8-M1TJ 0.3M
			NC	-	E2E-X2MB2L8-M1TJ 0.3M	E2E-X2MC2L8-M1TJ 0.3M
	M12 Connector	43 mm	NO	E2E-X2MB1T8-M1	E2E-X2MB1D8-M1	E2E-X2MC18-M1
			NC	-	E2E-X2MB28-M1	E2E-X2MC28-M1
		53 mm	NO	E2E-X2MB1TL8-M1	E2E-X2MB1DL8-M1	E2E-X2MC1L8-M1
			NC	-	E2E-X2MB2L8-M1	E2E-X2MC2L8-M1
			NO+NC	-	E2E-X2MB3DL8-M1	E2E-X2MC3L8-M1
			-	-	-	-
	M8 Connector (4-pin)	39 mm	NO	E2E-X2MB1T8-M3	E2E-X2MB1D8-M3	E2E-X2MC18-M3
			NC	-	E2E-X2MB28-M3	E2E-X2MC28-M3
		49 mm	NO	E2E-X2MB1TL8-M3	E2E-X2MB1DL8-M3	E2E-X2MC1L8-M3
			NC	-	E2E-X2MB2L8-M3	E2E-X2MC2L8-M3
	M8 Connector (3-pin)	39 mm	NO	E2E-X2MB1T8-M5	E2E-X2MB1D8-M5	E2E-X2MC18-M5
			NC	-	E2E-X2MB28-M5	E2E-X2MC28-M5
		49 mm	NO	E2E-X2MB1TL8-M5	E2E-X2MB1DL8-M5	E2E-X2MC1L8-M5
			NC	-	E2E-X2MB2L8-M5	E2E-X2MC2L8-M5
M12 (5mm)	Pre-wired (2 m) *1	47 mm *2	NO	E2E-X5MB1T12 2M	E2E-X5MB1D12 2M	E2E-X5MC112 2M
			NC	-	E2E-X5MB212 2M	E2E-X5MC212 2M
			NO+NC	-	E2E-X5MB3D12 2M	E2E-X5MC312 2M
		69 mm	NO	E2E-X5MB1TL12 2M	E2E-X5MB1DL12 2M	E2E-X5MC1L12 2M
			NC	-	E2E-X5MB2L12 2M	E2E-X5MC2L12 2M
			NO+NC	-	E2E-X5MB3DL12 2M	E2E-X5MC3L12 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	47 mm *3	NO	E2E-X5MB1T12-M1TJ 0.3M	E2E-X5MB1D12-M1TJ 0.3M	E2E-X5MC112-M1TJ 0.3M
			NC	-	E2E-X5MB212-M1TJ 0.3M	E2E-X5MC212-M1TJ 0.3M
			NO+NC	-	E2E-X5MB3D12-M1TJ 0.3M	E2E-X5MC312-M1TJ 0.3M
		69 mm	NO	E2E-X5MB1TL12-M1TJ 0.3M	E2E-X5MB1DL12-M1TJ 0.3M	E2E-X5MC1L12-M1TJ 0.3M
			NC	-	E2E-X5MB2L12-M1TJ 0.3M	E2E-X5MC2L12-M1TJ 0.3M
			NO+NC	-	E2E-X5MB3DL12-M1TJ 0.3M	E2E-X5MC3L12-M1TJ 0.3M
	M12 Connector	48 mm	NO	E2E-X5MB1T12-M1	E2E-X5MB1D12-M1	E2E-X5MC112-M1
			NC	-	E2E-X5MB212-M1	E2E-X5MC212-M1
			NO+NC	-	E2E-X5MB3D12-M1	E2E-X5MC312-M1
		70 mm	NO	E2E-X5MB1TL12-M1	E2E-X5MB1DL12-M1	E2E-X5MC1L12-M1
			NC	-	E2E-X5MB2L12-M1	E2E-X5MC2L12-M1
			NO+NC	-	E2E-X5MB3DL12-M1	E2E-X5MC3L12-M1

E2E/E2EQ NEXT Series DC 3-wire

E2E/E2EQ NEXT Series DC 2-wire

XS5 NEXT Series

XS5

XS3

E2E/E2EQ NEXT Series

BASIC Model

Size (Sensing distance)	Connection method	Body size	Operation mode	Model		
				PNP		NPN
				IO-Link (COM3)	IO-Link (COM2) *4	--- *4
M18 (10mm)	Pre-wired (2 m) *1	55 mm *2	NO	E2E-X10MB1T18 2M	E2E-X10MB1D18 2M	E2E-X10MC118 2M
			NC	-	E2E-X10MB218 2M	E2E-X10MC218 2M
			NO+NC	-	E2E-X10MB3D18 2M	E2E-X10MC318 2M
		77 mm	NO	E2E-X10MB1TL18 2M	E2E-X10MB1DL18 2M	E2E-X10MC1L18 2M
			NC	-	E2E-X10MB2L18 2M	E2E-X10MC2L18 2M
			NO+NC	-	E2E-X10MB3DL18 2M	E2E-X10MC3L18 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	55 mm *3	NO	E2E-X10MB1T18-M1TJ 0.3M	E2E-X10MB1D18-M1TJ 0.3M	E2E-X10MC118-M1TJ 0.3M
			NC	-	E2E-X10MB218-M1TJ 0.3M	E2E-X10MC218-M1TJ 0.3M
			NO+NC	-	E2E-X10MB3D18-M1TJ 0.3M	E2E-X10MC318-M1TJ 0.3M
		77 mm	NO	E2E-X10MB1TL18-M1TJ 0.3M	E2E-X10MB1DL18-M1TJ 0.3M	E2E-X10MC1L18-M1TJ 0.3M
			NC	-	E2E-X10MB2L18-M1TJ 0.3M	E2E-X10MC2L18-M1TJ 0.3M
			NO+NC	-	E2E-X10MB3DL18-M1TJ 0.3M	E2E-X10MC3L18-M1TJ 0.3M
	M12 Connector	53 mm	NO	E2E-X10MB1T18-M1	E2E-X10MB1D18-M1	E2E-X10MC118-M1
			NC	-	E2E-X10MB218-M1	E2E-X10MC218-M1
			NO+NC	-	E2E-X10MB3D18-M1	E2E-X10MC318-M1
		75 mm	NO	E2E-X10MB1TL18-M1	E2E-X10MB1DL18-M1	E2E-X10MC1L18-M1
			NC	-	E2E-X10MB2L18-M1	E2E-X10MC2L18-M1
			NO+NC	-	E2E-X10MB3DL18-M1	E2E-X10MC3L18-M1
M30 (18mm)	Pre-wired (2 m) *1	60 mm *2	NO	E2E-X18MB1T30 2M	E2E-X18MB1D30 2M	E2E-X18MC130 2M
			NC	-	E2E-X18MB230 2M	E2E-X18MC230 2M
			NO+NC	-	E2E-X18MB3D30 2M	E2E-X18MC330 2M
		82 mm	NO	E2E-X18MB1TL30 2M	E2E-X18MB1DL30 2M	E2E-X18MC1L30 2M
			NC	-	E2E-X18MB2L30 2M	E2E-X18MC2L30 2M
			NO+NC	-	E2E-X18MB3DL30 2M	E2E-X18MC3L30 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	60 mm *3	NO	E2E-X18MB1T30-M1TJ 0.3M	E2E-X18MB1D30-M1TJ 0.3M	E2E-X18MC130-M1TJ 0.3M
			NC	-	E2E-X18MB230-M1TJ 0.3M	E2E-X18MC230-M1TJ 0.3M
			NO+NC	-	E2E-X18MB3D30-M1TJ 0.3M	E2E-X18MC330-M1TJ 0.3M
		82 mm	NO	E2E-X18MB1TL30-M1TJ 0.3M	E2E-X18MB1DL30-M1TJ 0.3M	E2E-X18MC1L30-M1TJ 0.3M
			NC	-	E2E-X18MB2L30-M1TJ 0.3M	E2E-X18MC2L30-M1TJ 0.3M
			NO+NC	-	E2E-X18MB3DL30-M1TJ 0.3M	E2E-X18MC3L30-M1TJ 0.3M
	M12 Connector	58 mm	NO	E2E-X18MB1T30-M1	E2E-X18MB1D30-M1	E2E-X18MC130-M1
			NC	-	E2E-X18MB230-M1	E2E-X18MC230-M1
			NO+NC	-	E2E-X18MB3D30-M1	E2E-X18MC330-M1
		80 mm	NO	E2E-X18MB1TL30-M1	E2E-X18MB1DL30-M1	E2E-X18MC1L30-M1
			NC	-	E2E-X18MB2L30-M1	E2E-X18MC2L30-M1
			NO+NC	-	E2E-X18MB3DL30-M1	E2E-X18MC3L30-M1

*1. Models with 5-m cable length are also available (Example: E2E-X5MB1D12 5M)

*2. Models with 2-m and 5-m robot (bending-resistant) cables are also available with "-R" in the model number. (Example: E2E-X5MB1D12-R 2M/ E2E-X5MB1D12-R 5M)

*3. Models with M12 Smartclick connector model robot (bending-resistant) cables are also available with "R" in the model number. (Example: E2E-X5MB1D12-M1TJR 2M)

*4. IO-Link is not supported for NC-type PNP outputs or all types of NPN outputs.

Note: Operation mode NO can be changed to NC via IO-Link communications.

BASIC Model

E2EQ NEXT Series (Spatter-resistant Double distance model)

DC 3-wire [Refer to *Dimensions* on page 65.]

Shielded

Size (Sensing distance)	Connection method	Body size	Operation mode	Model		
				PNP		NPN
				IO-Link (COM3)	IO-Link (COM2) *2	--- *2
M8 (2 mm)	Pre-wired (2 m) *1	38 mm	NO	E2EQ-X2B1T8 2M	E2EQ-X2B1D8 2M	E2EQ-X2C18 2M
			NC	-	E2EQ-X2B28 2M	E2EQ-X2C28 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	38 mm	NO	E2EQ-X2B1T8-M1TJ 0.3M	E2EQ-X2B1D8-M1TJ 0.3M	E2EQ-X2C18-M1TJ 0.3M
			NC	-	E2EQ-X2B28-M1TJ 0.3M	E2EQ-X2C28-M1TJ 0.3M
	M12 Connector	43 mm	NO	E2EQ-X2B1T8-M1	E2EQ-X2B1D8-M1	E2EQ-X2C18-M1
			NC	-	E2EQ-X2B28-M1	E2EQ-X2C28-M1
M12 (4 mm)	Pre-wired (2 m) *1	47 mm	NO	E2EQ-X4B1T12 2M	E2EQ-X4B1D12 2M	E2EQ-X4C112 2M
			NC	-	E2EQ-X4B212 2M	E2EQ-X4C212 2M
			NO+NC	-	E2EQ-X4B3D12 2M	E2EQ-X4C312 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	47 mm	NO	E2EQ-X4B1T12-M1TJ 0.3M	E2EQ-X4B1D12-M1TJ 0.3M	E2EQ-X4C112-M1TJ 0.3M
			NC	-	E2EQ-X4B212-M1TJ 0.3M	E2EQ-X4C212-M1TJ 0.3M
			NO+NC	-	E2EQ-X4B3D12-M1TJ 0.3M	E2EQ-X4C312-M1TJ 0.3M
	M12 Connector	48 mm	NO	E2EQ-X4B1T12-M1	E2EQ-X4B1D12-M1	E2EQ-X4C112-M1
			NC	-	E2EQ-X4B212-M1	E2EQ-X4C212-M1
			NO+NC	-	E2EQ-X4B3D12-M1	E2EQ-X4C312-M1
M18 (8 mm)	Pre-wired (2 m) *1	55 mm	NO	E2EQ-X8B1T18 2M	E2EQ-X8B1D18 2M	E2EQ-X8C118 2M
			NC	-	E2EQ-X8B218 2M	E2EQ-X8C218 2M
			NO+NC	-	E2EQ-X8B3D18 2M	E2EQ-X8C318 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	55 mm	NO	E2EQ-X8B1T18-M1TJ 0.3M	E2EQ-X8B1D18-M1TJ 0.3M	E2EQ-X8C118-M1TJ 0.3M
			NC	-	E2EQ-X8B218-M1TJ 0.3M	E2EQ-X8C218-M1TJ 0.3M
			NO+NC	-	E2EQ-X8B3D18-M1TJ 0.3M	E2EQ-X8C318-M1TJ 0.3M
	M12 Connector	53 mm	NO	E2EQ-X8B1T18-M1	E2EQ-X8B1D18-M1	E2EQ-X8C118-M1
			NC	-	E2EQ-X8B218-M1	E2EQ-X8C218-M1
			NO+NC	-	E2EQ-X8B3D18-M1	E2EQ-X8C318-M1
M30 (15 mm)	Pre-wired (2 m) *1	60 mm	NO	E2EQ-X15B1T30 2M	E2EQ-X15B1D30 2M	E2EQ-X15C130 2M
			NC	-	E2EQ-X15B230 2M	E2EQ-X15C230 2M
			NO+NC	-	E2EQ-X15B3D30 2M	E2EQ-X15C330 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	60 mm	NO	E2EQ-X15B1T30-M1TJ 0.3M	E2EQ-X15B1D30-M1TJ 0.3M	E2EQ-X15C130-M1TJ 0.3M
			NC	-	E2EQ-X15B230-M1TJ 0.3M	E2EQ-X15C230-M1TJ 0.3M
			NO+NC	-	E2EQ-X15B3D30-M1TJ 0.3M	E2EQ-X15C330-M1TJ 0.3M
	M12 Connector	58 mm	NO	E2EQ-X15B1T30-M1	E2EQ-X15B1D30-M1	E2EQ-X15C130-M1
			NC	-	E2EQ-X15B230-M1	E2EQ-X15C230-M1
			NO+NC	-	E2EQ-X15B3D30-M1	E2EQ-X15C330-M1

*1. Models with 5-m cable length are also available (Example: E2EQ-X6B1D12 5M)

*2. IO-Link is not supported for NC-type PNP outputs or all types of NPN outputs.

Note: Operation mode NO can be changed to NC via IO-Link communications.

E2E/E2EQ NEXT Series

BASIC Model

E2EQ NEXT Series (Spatter-resistant Single distance model)

DC 3-wire [Refer to *Dimensions* on page 65.]

Shielded

Size (Sensing distance)	Connection method	Body size	Operation mode	Model		
				PNP		NPN
				IO-Link (COM3)	IO-Link (COM2) *2	--- *2
M8 (1.5 mm)	Pre-wired (2 m) *1	38 mm	NO	E2EQ-X1R5B1T8 2M	E2EQ-X1R5B1D8 2M	E2EQ-X1R5C18 2M
			NC	-	E2EQ-X1R5B28 2M	E2EQ-X1R5C28 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	38 mm	NO	E2EQ-X1R5B1T8-M1TJ 0.3M	E2EQ-X1R5B1D8-M1TJ 0.3M	E2EQ-X1R5C18-M1TJ 0.3M
			NC	-	E2EQ-X1R5B28-M1TJ 0.3M	E2EQ-X1R5C28-M1TJ 0.3M
	M12 Connector	43 mm	NO	E2EQ-X1R5B1T8-M1	E2EQ-X1R5B1D8-M1	E2EQ-X1R5C18-M1
			NC	-	E2EQ-X1R5B28-M1	E2EQ-X1R5C28-M1
M12 (2 mm)	Pre-wired (2 m) *1	47 mm	NO	E2EQ-X2B1T12 2M	E2EQ-X2B1D12 2M	E2EQ-X2C112 2M
			NC	-	E2EQ-X2B212 2M	E2EQ-X2C212 2M
			NO+NC	-	E2EQ-X2B3D12 2M	E2EQ-X2C312 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	47 mm	NO	E2EQ-X2B1T12-M1TJ 0.3M	E2EQ-X2B1D12-M1TJ 0.3M	E2EQ-X2C112-M1TJ 0.3M
			NC	-	E2EQ-X2B212-M1TJ 0.3M	E2EQ-X2C212-M1TJ 0.3M
			NO+NC	-	E2EQ-X2B3D12-M1TJ 0.3M	E2EQ-X2C312-M1TJ 0.3M
	M12 Connector	48 mm	NO	E2EQ-X2B1T12-M1	E2EQ-X2B1D12-M1	E2EQ-X2C112-M1
			NC	-	E2EQ-X2B212-M1	E2EQ-X2C212-M1
			NO+NC	-	E2EQ-X2B3D12-M1	E2EQ-X2C312-M1
M18 (5 mm)	Pre-wired (2 m) *1	55 mm	NO	E2EQ-X5B1T18 2M	E2EQ-X5B1D18 2M	E2EQ-X5C118 2M
			NC	-	E2EQ-X5B218 2M	E2EQ-X5C218 2M
			NO+NC	-	E2EQ-X5B3D18 2M	E2EQ-X5C318 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	55 mm	NO	E2EQ-X5B1T18-M1TJ 0.3M	E2EQ-X5B1D18-M1TJ 0.3M	E2EQ-X5C118-M1TJ 0.3M
			NC	-	E2EQ-X5B218-M1TJ 0.3M	E2EQ-X5C218-M1TJ 0.3M
			NO+NC	-	E2EQ-X5B3D18-M1TJ 0.3M	E2EQ-X5C318-M1TJ 0.3M
	M12 Connector	53 mm	NO	E2EQ-X5B1T18-M1	E2EQ-X5B1D18-M1	E2EQ-X5C118-M1
			NC	-	E2EQ-X5B218-M1	E2EQ-X5C218-M1
			NO+NC	-	E2EQ-X5B3D18-M1	E2EQ-X5C318-M1
M30 (10 mm)	Pre-wired (2 m) *1	60 mm	NO	E2EQ-X10B1T30 2M	E2EQ-X10B1D30 2M	E2EQ-X10C130 2M
			NC	-	E2EQ-X10B230 2M	E2EQ-X10C230 2M
			NO+NC	-	E2EQ-X10B3D30 2M	E2EQ-X10C330 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	60 mm	NO	E2EQ-X10B1T30-M1TJ 0.3M	E2EQ-X10B1D30-M1TJ 0.3M	E2EQ-X10C130-M1TJ 0.3M
			NC	-	E2EQ-X10B230-M1TJ 0.3M	E2EQ-X10C230-M1TJ 0.3M
			NO+NC	-	E2EQ-X10B3D30-M1TJ 0.3M	E2EQ-X10C330-M1TJ 0.3M
	M12 Connector	58 mm	NO	E2EQ-X10B1T30-M1	E2EQ-X10B1D30-M1	E2EQ-X10C130-M1
			NC	-	E2EQ-X10B230-M1	E2EQ-X10C230-M1
			NO+NC	-	E2EQ-X10B3D30-M1	E2EQ-X10C330-M1

*1. Models with 5-m cable length are also available (Example: E2EQ-X6B1D12 5M)

*2. IO-Link is not supported for NC-type PNP outputs or all types of NPN outputs.

Note: Operation mode NO can be changed to NC via IO-Link communications.

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
M12 Smartclick Connector Models Straight type 	Oil-resistant PVC cable	Sockets on One Cable End	6 dia.	Straight	1	XS5F-D421-C80-X	E2E-X□□□-M1TJ(R) E2EQ-X□□□-M1TJ E2E(Q)-X□□□-M1
					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
M12 Smartclick Connector Straight type  Right-angle type 	PVC robot cable	Sockets on One Cable End	6 dia.	Straight	1	XS5F-D421-C80-F	E2E-X□□□-M1TJ(R) E2EQ-X□□□-M1TJ E2E(Q)-X□□□-M1
					2	XS5F-D421-D80-F	
					3	XS5F-D421-E80-F	
					5	XS5F-D421-G80-F	
					10	XS5F-D421-J80-F	
				Right-angle	1	XS5F-D422-C80-F	
					2	XS5F-D422-D80-F	
					3	XS5F-D422-E80-F	
					5	XS5F-D422-G80-F	
					10	XS5F-D422-J80-F	
		Socket and Plug on Cable Ends	6 dia.	Straight (Socket)/ Straight (Plug)	1	XS5W-D421-C81-F	
					2	XS5W-D421-D81-F	
					3	XS5W-D421-E81-F	
					5	XS5W-D421-G81-F	
					10	XS5W-D421-J81-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.

E2E/E2EQ NEXT Series

Round Water-resistant Connectors XS3 series

Appearance	Cable specification	Type	Cable diameter (mm)	No. of cable cores (Poles)	Cable connection direction	Cable length (m)	Sensor I/O Connector model number	Applicable Proximity Sensor model number
M8 Connector Straight type  Right-angle type 	PVC robot cable	Sockets on One Cable End	4 dia.	3	Straight	2	XS3F-M321-302-R	E2E-X□□□-M5
						5	XS3F-M321-305-R	
						10	XS3F-M321-310-R	
					Right-angle	2	XS3F-M322-302-R	
						5	XS3F-M322-305-R	
						10	XS3F-M322-310-R	
		Socket and Plug on Cable Ends		4	Straight	2	XS3F-M421-402-R	E2E-X□□□-M3
						5	XS3F-M421-405-R	
						10	XS3F-M421-410-R	
					Right-angle	2	XS3F-M422-402-R	
						5	XS3F-M422-405-R	
						10	XS3F-M422-410-R	
Socket and Plug on Cable Ends	3	Straight (Plug)/ Straight (Socket)	2	XS3W-M321-302-R	E2E-X□□□-M5			
			5	XS3W-M321-305-R				
			10	XS3W-M321-310-R				
		Straight (Plug)/ Straight (Socket)	2	XS3W-M421-402-R	E2E-X□□□-M3			
			5	XS3W-M421-405-R				
			10	XS3W-M421-410-R				

Note: For details of the connector, refer to *XS3 Series Datasheet* (No. G147).

Sensor I/O Connectors Oil resistance performance of mating combination

E2E NEXT Series		Applicable connector Model		
Connecting method	Model	XS5 NEXT Series	XS5 Series	XS3 Series
Pre-wired Connector Models	E2E-X□□-M1TJ(R)	Oil resistant (2 years) *	Water-resistant (IP67)	---
M12 Connector Models	E2E-X□□-M1	Water-resistant (IP67)	Water-resistant (IP67)	---
M8 Connector (4-pin) Models	E2E-X□□-M3	---	---	Water-resistant (IP67)
M8 Connector (3-pin) Models	E2E-X□□-M5	---	---	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 around 2 years of oil resistance, but will very depending on the product.

e-jig (Mounting Sleeves) [Refer to Dimensions on page 66.]

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

Only applicable to standard body-sized E2E NEXT Series Sensors.

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 E2E NEXT Series long-body models and E2EQ NEXT Series (spatter-resistant) models.

Ratings and Specifications

PREMIUM Model

E2E NEXT Series (Quadruple/Triple distance model) DC 3-wire Shielded

Types Size Model		Quadruple distance model				Triple distance model			
		M8	M12	M18	M30	M8	M12	M18	M30
Item		E2E-X4□8	E2E-X9□12	E2E-X14□18	E2E-X23□30	E2E-X3□8	E2E-X6□12	E2E-X12□18	E2E-X22□30
Sensing distance		4 mm±10%	9 mm±10%	14 mm±10%	23 mm±10%	3 mm±10%	6 mm±10%	12 mm±10%	22 mm±10%
Setting distance		0 to 3 mm	0 to 6.8 mm	0 to 10.6 mm	0 to 17.6 mm	0 to 2.4 mm	0 to 4.8 mm	0 to 9.6 mm	0 to 16.8 mm
Differential travel		15% max. of sensing distance							
Detectable object		Ferrous metals (For non-ferrous metals, refer to the <i>Engineering Data</i> on page 48.)							
Standard sensing object		Iron, 12 × 12 × 1 mm	Iron, 27 × 27 × 1 mm	Iron, 42 × 42 × 1 mm	Iron, 69 × 69 × 1 mm	Iron, 9 × 9 × 1 mm	Iron, 18 × 18 × 1 mm	Iron, 36 × 36 × 1 mm	Iron, 66 × 66 × 1 mm
Response frequency *1		700 Hz	700 Hz	350 Hz	200 Hz	1,000 Hz	800 Hz	500 Hz	200 Hz
Power supply voltage		10 to 30 VDC (including 10% ripple (p-p)), Class 2							
Current consumption		1-output models:16 mA max.					1-output models: 16 mA max., 2-output models: 20 mA max.		
Output configuration		B□ Models: PNP open collector, C□ Models: NPN open collector							
Operation mode (with sensing object approaching)		1-output models (B1, C1): NO (Normally open), 1-output models (B2, C2): NC (Normally closed)					1-output models (B1, C1): NO (Normally open), 1-output models (B2, C2): NC (Normally closed), 2-output models (B3, C3): NO+NC (Normally open, Normally closed)		
Control output	Load current	1-output models: 10 to 30 VDC, Class 2, 50 mA max.			1-outputmodels: 10 to 30 VDC, Class 2, 100 mA max.	1-output models: 10 to 30 VDC, Class 2, 100 mA max., 2-output models: 10 to 30 VDC, Class 2, 50 mA max.			
	Residual voltage	1-output models: 2 V max. (Load current: 50 mA, Cable length: 2 m)			1-outputmodels: 2 V max. (Load current: 100 mA, Cable length: 2 m)	1-output models: 2 V max. (Load current: 100 mA, Cable length: 2 m), 2-output models: 2 V max. (Load current: 50 mA, Cable length: 2 m)			
Indicator *2		In the Standard I/O mode (SIO mode): Operation indicator (orange, lit) and communication indicator (green, not lit) In the IO-Link communication mode (COM mode): Operation indicator (orange, lit) and communication indicator (green, blinking at 1 s intervals)							
Protection circuits		Power supply reverse polarity protection, Surge suppressor, Output short-circuit protection, Output reverse polarity protection							
Ambient temperature range		Operating: -25 to 60°C Storage: -25 to 70°C (with no icing or condensation)	Operating/Storage: -25 to 70°C (with no icing or condensation)						
Ambient humidity range		Operating/Storage: 35% to 95% (with no condensation)							
Temperature influence		-15% to 25% max. of sensing distance at 23°C in the temperature range of -25 to 60°C	±15% 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			
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			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: IEC 60529: IP67, ISO 20653 (old standard: DIN 40050 PART9): IP69K, JIS C 0920 Annex 1: IP67G, Passed OMRON's Oil-resistant Component Evaluation Standards *3 (Cutting oil type: specified in JIS K 2241: 2000; Temperature: 35°C max.) Connector Models: IEC 60529: IP67, ISO 20653 (old standard: DIN 40050 PART9): IP69K							
Connection method		Pre-wired Models (Standard cable length: 2 m), Pre-wired Connector Models (Standard cable length: 0.3 m) and Connector Models (M12 Connector, M8 (4-pin) Connector and M8 (3-pin) Connector)							
Weight *4 (packed state)	Pre-wired	Approx. 85 g	Approx. 95 g	Approx. 180 g	Approx. 260 g	Approx. 85 g	Approx. 95 g	Approx. 180 g	Approx. 260 g
	M12 Pre-wired Smartclick Connector	Approx. 55 g	Approx. 70 g	Approx. 115 g	Approx. 200 g	Approx. 55 g	Approx. 70 g	Approx. 115 g	Approx. 200 g
	Connector	Approx. 40 g *5	Approx. 55 g	Approx. 95 g	Approx. 180 g	Approx. 40 g *5	Approx. 55 g	Approx. 95 g	Approx. 180 g

E2E/E2EQ NEXT Series

Item	Types Size Model	Quadruple distance model				Triple distance model			
		M8	M12	M18	M30	M8	M12	M18	M30
		E2E-X4□8	E2E-X9□12	E2E-X14□18	E2E-X23□30	E2E-X3□8	E2E-X6□12	E2E-X12□18	E2E-X22□30
Materials	Case	Nickel-plated brass							
	Sensing surface	Polybutylene terephthalat (PBT)							
	Clamping nuts	Nickel-plated brass							
	Toothed washers	Zinc-plated iron							
	Cable	Vinyl chloride (PVC)							
Main IO-Link functions*2		Operation mode switching between NO and NC, self diagnosis enabling, excessive proximity judgment distance selecting, timer function of the control output and timer time selecting, instability output (IO-Link mode) ON delay timer time selecting function, monitor output, operating hours read-out, readout of the sensor internal temperature, and initial reset							
IO-Link Communication specifications *2	IO-Link specification	Ver 1.1							
	Baud rate	COM2 (38.4 kbps), COM3 (230.4 kbps)							
	Data length	PD size: 2 bytes, OD size: 1 byte (M-sequence type: TYPE_2_2)							
	Minimum cycle time	COM2: 2.3 ms, COM3: 0.4 ms							
Accessories		Instruction manual, Clamping nuts, Toothed washer							

*1. 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.

*2. IO-Link is not supported for NC-type PNP outputs or all types of NPN outputs.

*3. 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.

*4. Weight of the standard body-sized model.

*5. Both M8 connectors and M12 connectors are available.

PREMIUM Model

E2E NEXT Series (Quadruple/Triple distance model)
DC 3-wire
Unshielded

Types Size Model		Quadruple distance model				Triple distance model			
		M8	M12	M18	M30	M8	M12	M18	M30
Item		E2E-X8M□8	E2E-X16M□12	E2E-X30M□18	E2E-X50M□30	E2E-X6M□8	E2E-X10M□12	E2E-X20M□18	E2E-X40M□30
Sensing distance		8 mm±10%	16 mm±10%	30 mm±10%	50 mm±10%	6 mm±10%	10 mm±10%	20 mm±10%	40 mm±10%
Setting distance		0 to 6 mm	0 to 12.2 mm	0 to 23 mm	0 to 38.2 mm	0 to 4.8 mm	0 to 8 mm	0 to 16 mm	0 to 32 mm
Differential travel		15% max. of sensing distance							
Detectable object		Ferrous metals (For non-ferrous metals, refer to the <i>Engineering Data</i> on page 48.)							
Standard sensing object		Iron, 24 × 24 × 1 mm	Iron, 48 × 48 × 1 mm	Iron, 90 × 90 × 1 mm	Iron, 150 × 150 × 1 mm	Iron, 18 × 18 × 1 mm	Iron, 30 × 30 × 1 mm	Iron, 60 × 60 × 1 mm	Iron, 120 × 120 × 1 mm
Response frequency *1		500 Hz	400 Hz	200 Hz	100 Hz	800 Hz	400 Hz	200 Hz	100 Hz
Power supply voltage		10 to 30 VDC (including 10% ripple (p-p)), Class 2							
Current consumption		1-output models: 16 mA max.					1-output models: 16 mA max., 2-output models: 20 mA max.		
Output configuration		B□ Models: PNP open collector C□ Models: NPN open collector							
Operation mode (with sensing object approaching)		1-output models (B1, C1): NO (Normally open), 1-output models (B2, C2): NC (Normally closed)					1-output models (B1, C1): NO (Normally open), 1-output models (B2, C2): NC (Normally closed), 2-output models (B3, C3): NO+NC (Normally open, Normally closed)		
Control output	Load current	1-output models: 10 to 30 VDC, Class 2, 50 mA max.				1-output models: 10 to 30 VDC, Class 2, 100 mA max.	1-output models: 10 to 30 VDC, Class 2, 100 mA max., 2-output models: 10 to 30 VDC, Class 2, 50 mA max.		
	Residual voltage	1-output models: 2 V max. (Load current: 50 mA, Cable length: 2 m)				1-output models: 2 V max. (Load current: 100 mA, Cable length: 2 m)	1-output models: 2 V max. (Load current: 100 mA, Cable length: 2 m), 2-output models: 2 V max. (Load current: 50 mA, Cable length: 2 m)		
Indicator *2		In the Standard I/O mode (SIO mode): Operation indicator (orange, lit) and communication indicator (green, not lit) In the IO-Link communication mode (COM mode): Operation indicator (orange, lit) and communication indicator (green, blinking at 1 s intervals)							
Protection circuits		Power supply reverse polarity protection, Surge suppressor, Output short-circuit protection, Output reverse polarity protection							
Ambient temperature range		Operating/Storage: -25 to 70°C (with no icing or condensation)							
Ambient humidity range		Operating/Storage: 35% to 95% (with no condensation)							
Temperature influence		±15% 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			
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			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: IEC 60529:IP67, ISO 20653 (old standard: DIN 40050 PART9): IP69K, JIS C 0920 Annex 1: IP67G, Passed OMRON's Oil-resistant Component Evaluation Standards *3 (Cutting oil type: specified in JIS K 2241: 2000; Temperature: 35°C max.) Connector Models: IEC 60529: IP67, ISO 20653 (old standard: DIN 40050 PART9): IP69K							
Connection method		Pre-wired Models (Standard cable length: 2 m), Pre-wired Connector Models (Standard cable length: 0.3 m) and Connector Models (M12 Connector, M8 (4-pin) Connector and M8 (3-pin) Connector)							
Weight *4 (packed state)	Pre-wired	Approx. 85 g	Approx. 95 g	Approx. 190 g	Approx. 310 g	Approx. 85 g	Approx. 95 g	Approx. 190 g	Approx. 280 g
	M12 Pre-wired Smartclick Connector	Approx. 55 g	Approx. 70 g	Approx. 125 g	Approx. 250 g	Approx. 55 g	Approx. 70 g	Approx. 125 g	Approx. 220 g
	Connector	Approx. 40 g *5	Approx. 55 g	Approx. 105 g	Approx. 230 g	Approx. 40 g *5	Approx. 55 g	Approx. 105 g	Approx. 200 g

E2E/E2EQ NEXT Series

Types Size		Quadruple distance model				Triple distance model			
		M8	M12	M18	M30	M8	M12	M18	M30
Item	Model	E2E-X8M□8	E2E-X16M□12	E2E-X30M□18	E2E-X50M□30	E2E-X6M□8	E2E-X10M□12	E2E-X20M□18	E2E-X40M□30
Materials	Case	Stainless (SUS303)	Nickel-plated brass			Stainless (SUS303)	Nickel-plated brass		
	Sensing surface	Polybutylene terephthalat (PBT)							
	Clamping nuts	Nickel-plated brass							
	Toothed washers	Zinc-plated iron							
	Cable	Vinyl chloride (PVC)							
Main IO-Link functions*2		Operation mode switching between NO and NC, self diagnosis enabling, excessive proximity judgment distance selecting, timer function of the control output and timer time selecting, instability output (IO-Link mode) ON delay timer time selecting function, monitor output, operating hours read-out, readout of the sensor internal temperature, and initial reset							
IO-Link Communication specifications*2	IO-Link specification	Ver1.1							
	Baud rate	COM2 (38.4 kbps), COM3 (230.4 kbps)							
	Data length	PD size: 2 bytes, OD size: 1 byte (M-sequence type: TYPE_2_2)							
	Minimum cycle time	COM2: 2.3 ms, COM3: 0.4 ms							
Accessories		Instruction manual, Clamping nuts, Toothed washer							

*1. 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.

*2. IO-Link is not supported for NC-type PNP outputs or all types of NPN outputs.

*3. 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). Actual performance can be expected to decline after two years on average from shipment. 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.

*4. Weight of the standard body-sized model.

*5. Both M8 connectors and M12 connectors are available.

PREMIUM Model

E2EQ NEXT Series (Spatter-resistant Triple distance model)
DC 3-wire
Shielded

Types Size Model		Triple distance Models			
		M8	M12	M18	M30
Item	Model	E2EQ-X3□8	E2EQ-X6□12	E2EQ-X12□18	E2EQ-X22□30
Sensing distance		3 mm±10%	6 mm±10%	12 mm±10%	22 mm±10%
Setting distance		0 to 2.4 mm	0 to 4.8 mm	0 to 9.6 mm	0 to 16.8 mm
Differential travel		15% max. of sensing distance			
Detectable object		Ferrous metals (For non-ferrous metals, refer to the <i>Engineering Data</i> on page 48.)			
Standard sensing object		Iron, 9 × 9 × 1 mm	Iron, 18 × 18 × 1 mm	Iron, 36 × 36 × 1 mm	Iron, 66 × 66 × 1 mm
Response frequency *1		1,000 Hz	800 Hz	500 Hz	200 Hz
Power supply voltage		10 to 30 VDC (including 10% ripple (p-p)), Class 2			
Current consumption		1-output models: 16 mA max.	1-output models: 16 mA max. 2-output models: 20 mA max.		
Output configuration		B□ Models: PNP open collector, C□ Models: NPN open collector			
Operation mode (with sensing object approaching)		1-output models (B1, C1): NO (Normally open), 1-output models (B2, C2): NC (Normally closed) 2-output models (B3, C3): NO+NC (Normally open, Normally closed)			
Control output	Load current	1-output models: 10 to 30 VDC, Class 2, 100 mA max.	1-output models: 10 to 30 VDC, Class 2, 100 mA max., 2-output models: 10 to 30 VDC, Class 2, 50 mA max.		
	Residual voltage	1-output models: 2 V max. (Load current: 100 mA, Cable length: 2 m)	1-output models: 2 V max. (Load current: 100 mA, Cable length: 2 m), 2-output models: 2 V max. (Load current: 50 mA, Cable length: 2 m)		
Indicator *2		In the Standard I/O mode (SIO mode): Operation indicator (orange, lit) and communication indicator (green, not lit) In the IO-Link communication mode (COM mode): Operation indicator (orange, lit) and communication indicator (green, blinking at 1 s intervals)			
Protection circuits		Power supply reverse polarity protection, Surge suppressor, Output short-circuit protection, Output reverse polarity protection			
Ambient temperature range		Operating/Storage: -25 to 70°C (with no icing or condensation)			
Ambient humidity range		Operating/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: IEC 60529: IP67, JIS C 0920 Annex 1: IP67G Connector Models: IEC 60529: IP67			
Connection method		Pre-wired Models (Standard cable length: 2 m) and Pre-wired Connector Models (Standard cable length: 0.3 m), M12 Connector Models			
Weight *3 (packed state)	Pre-wired Models	Approx. 85 g	Approx. 95 g	Approx. 180 g	Approx. 260 g
	M12 Pre-wired Smartclick Connector	Approx. 55 g	Approx. 70 g	Approx. 115 g	Approx. 200 g
	Connector	Approx. 40 g	Approx. 55 g	Approx. 95 g	Approx. 180 g
Materials	Case	Fluororesin coating (Base material: brass)			
	Sensing surface	Fluorine resin			
	Clamping nuts	Fluororesin coating (Base material: brass)			
	Toothed washers	Zinc-plated iron			
	Cable	Vinyl chloride (PVC)			
Main IO-Link functions *2		Operation mode switching between NO and NC, self diagnosis enabling, excessive proximity judgment distance selecting, timer function of the control output and timer time selecting, instability output (IO-Link mode) ON delay timer time selecting function, monitor output, operating hours read-out, readout of the sensor internal temperature, and initial reset			
IO-Link Communication specifications *2	IO-Link specification	Ver 1.1			
	Baud rate	COM2 (38.4 kbps), COM3 (230.4 kbps)			
	Data length	PD size: 2 bytes, OD size: 1 byte (M-sequence type: TYPE_2_2)			
	Minimum cycle time	COM2: 2.3 ms, COM3: 0.4 ms			
Accessories		Instruction manual, Clamping nuts, Toothed washer			

*1. 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.

*2. IO-Link is not supported for NC-type PNP outputs or all types of NPN outputs.

*3. Weight of the standard body-sized model.

E2E/E2EQ NEXT Series

BASIC Model

E2E NEXT Series (Double/Single distance model)

DC 3-wire

Shielded

Types Size		Double distance				Single distance			
		M8	M12	M18	M30	M8	M12	M18	M30
Item	Model	E2E-X2□8	E2E-X4□12	E2E-X8□18	E2E-X15□30	E2E-X1R5□8	E2E-X2□12	E2E-X5□18	E2E-X10□30
Sensing distance		2 mm±10%	4 mm±10%	8 mm±10%	15 mm±10%	1.5 mm±10%	2 mm±10%	5 mm±10%	10 mm±10%
Setting distance		0 to 1.6 mm	0 to 3.2 mm	0 to 6.4 mm	0 to 12 mm	0 to 1.2 mm	0 to 1.6 mm	0 to 4 mm	0 to 8 mm
Differential travel		15% max. of sensing distance				10% max. of sensing distance			
Detectable object		Ferrous metals (For non-ferrous metals, refer to the <i>Engineering Data</i> on page 48.)							
Standard sensing object		Iron, 8 × 8 × 1 mm	Iron, 12 × 12 × 1 mm	Iron, 24 × 24 × 1 mm	Iron, 45 × 45 × 1 mm	Iron, 8 × 8 × 1 mm	Iron, 12 × 12 × 1 mm	Iron, 18 × 18 × 1 mm	Iron, 30 × 30 × 1 mm
Response frequency *1		1,500 Hz	1,000 Hz	500 Hz	250 Hz	2,000 Hz	1,500 Hz	600 Hz	400 Hz
Power supply voltage		10 to 30 VDC (including 10% ripple (p-p)), Class 2							
Current consumption		1-output models: 16 mA max. 2-output models: 20 mA max.							
Output configuration		B□ Models: PNP open collector C□ Models: NPN open collector							
Operation mode (with sensing object approaching)		1-output models (B1, C1): NO (Normally open), 1-output models (B2, C2): NC (Normally closed), 2-output models (B3, C3): NO+NC (Normally open, Normally closed) *3							
Control output	Load current	1-output models: 10 to 30 VDC, Class 2, 200 mA max., (-40 to 70°C), 100 mA max., (70 to 85°C) 2-output models: 10 to 30 VDC, Class 2, 50 mA max.	1-output models: 10 to 30 VDC, Class 2, 200 mA max., 2-output models: 10 to 30 VDC, Class 2, 100 mA max.			1-output models: 10 to 30 VDC, Class 2, 200 mA max., (-40 to 70°C), 100 mA max., (70 to 85°C) 2-output models: 10 to 30 VDC, Class 2, 50 mA max.	1-output models: 10 to 30 VDC, Class 2, 200 mA max., 2-output models: 10 to 30 VDC, Class 2, 100 mA max.		
	Residual voltage	1-output models: 2 V max. (Load current: 200 mA, Cable length: 2 m), 2-output models: 2 V max. (Load current: 50 mA, Cable length: 2 m)	1-output models: 2 V max. (Load current: 200 mA, Cable length: 2 m), 2-output models: 2 V max. (Load current: 100 mA, Cable length: 2 m)			1-output models: 2 V max. (Load current: 200 mA, Cable length: 2 m), 2-output models: 2 V max. (Load current: 50 mA, Cable length: 2 m)	1-output models: 2 V max. (Load current: 200 mA, Cable length: 2 m), 2-output models: 2 V max. (Load current: 100 mA, Cable length: 2 m)		
Indicator *2		In the Standard I/O mode (SIO mode): Operation indicator (orange, lit) and communication indicator (green, not lit) In the IO-Link communication mode (COM mode): Operation indicator (orange, lit) and communication indicator (green, blinking at 1 s intervals)							
Protection circuits		Power supply reverse polarity protection, Surge suppressor, Output short-circuit protection, Output reverse polarity protection							
Ambient temperature range		Operating/Storage: -40 to 85°C (with no icing or condensation) Note: The UL temperature rating for M12 Pre-wired Connector Models is -25 to 70°C.							
Ambient humidity range		Operating/Storage: 35% to 95% (with no condensation)							
Temperature influence		±15% max. of sensing distance at 23°C in the temperature range of -40 to 85°C ±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			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: IEC 60529:IP67, ISO 20653 (old standard: DIN 40050 PART9): IP69K, JIS C 0920 Annex 1: IP67G, Passed OMRON's Oil-resistant Component Evaluation Standards *4 (Cutting oil type: specified in JIS K 2241:2000; Temperature: 35°C max.) Connector Models: IEC 60529: IP67, ISO 20653 (old standard: DIN 40050 PART9): IP69K							
Connection method		Pre-wired Models (Standard cable length: 2 m), Pre-wired Connector Models (Standard cable length: 0.3 m) and Connector Models (M12 Connector, M8 (4-pin) Connector and M8 (3-pin) Connector)							
Weight *5 (packed state)	Pre-wired	Approx. 85 g	Approx. 95 g	Approx. 170 g	Approx. 240 g	Approx. 85 g	Approx. 95 g	Approx. 170 g	Approx. 240 g
	M12 Pre-wired Smartclick Connector	Approx. 55 g	Approx. 70 g	Approx. 105 g	Approx. 170 g	Approx. 55 g	Approx. 70 g	Approx. 105 g	Approx. 170 g
	Connector	Approx. 40 g *6	Approx. 55 g	Approx. 85 g	Approx. 160 g	Approx. 40 g *6	Approx. 55 g	Approx. 85 g	Approx. 160 g

Types Size		Double distance				Single distance			
		M8	M12	M18	M30	M8	M12	M18	M30
Item	Model	E2E-X2□8	E2E-X4□12	E2E-X8□18	E2E-X15□30	E2E-X1R5□8	E2E-X2□12	E2E-X5□18	E2E-X10□30
Materials	Case	Stainless (SUS303)	Nickel-plated brass			Stainless (SUS303)	Nickel-plated brass		
	Sensing surface	Polybutylene terephthalat (PBT)							
	Clamping nuts	Nickel-plated brass							
	Toothed washers	Zinc-plated iron							
	Cable	Vinyl chloride (PVC)							
Main IO-Link functions *2		Operation mode switching between NO and NC, self diagnosis enabling, excessive proximity judgment distance selecting, timer function of the control output and timer time selecting, instability output (IO-Link mode) ON delay timer time selecting function, monitor output, operating hours read-out, readout of the sensor internal temperature, and initial reset							
IO-Link Communica- tion specifica- tions *2	IO-Link specification	Ver1.1							
	Baud rate	COM2 (38.4 kbps), COM3 (230.4 kbps)							
	Data length	PD size: 2 bytes, OD size: 1 byte (M-sequence type: TYPE_2_2)							
	Minimum cycle time	COM2: 2.3 ms, COM3: 0.4 ms							
Accessories		Instruction manual, Clamping nuts, Toothed washer							

- *1. 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.
- *2. IO-Link is not supported for NC-type PNP outputs or all types of NPN outputs.
- *3. Dual-output specification for the M8-size models is only applicable to long-size M12 Connector models.
- *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). Actual performance can be expected to decline after two years on average from shipment. 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.
- *5. Weight of the standard body-sized model.
- *6. Both M8 connectors and M12 connectors are available.

E2E/E2EQ NEXT Series

BASIC Model

E2E NEXT Series (Double/Single distance model)

DC 3-wire

Unshielded

Types Size Model		Double distance model				Single distance model			
		M8	M12	M18	M30	M8	M12	M18	M30
Item		E2E-X4M□8	E2E-X8M□12	E2E-X16M□18	E2E-X30M□30	E2E-X2M□8	E2E-X5M□12	E2E-X10M□18	E2E-X18M□30
Sensing distance		4 mm±10%	8 mm±10%	16 mm±10%	30 mm±10%	2 mm±10%	5 mm±10%	10 mm±10%	18 mm±10%
Setting distance		0 to 3.2 mm	0 to 6.4 mm	0 to 12.8 mm	0 to 24 mm	0 to 1.6 mm	0 to 4 mm	0 to 8 mm	0 to 14.4 mm
Differential travel		15% max. of sensing distance				10% max. of sensing distance			
Detectable object		Ferrous metals (For non-ferrous metals, refer to the <i>Engineering Data</i> on page 48.)							
Standard sensing object		Iron, 12 × 12 × 1 mm	Iron, 24 × 24 × 1 mm	Iron, 48 × 48 × 1 mm	Iron, 90 × 90 × 1 mm	Iron, 8 × 8 × 1 mm	Iron, 15 × 15 × 1 mm	Iron, 30 × 30 × 1 mm	Iron, 54 × 54 × 1 mm
Response frequency *1		1,000 Hz	800 Hz	400 Hz	100 Hz	1,000 Hz	800 Hz	400 Hz	100 Hz
Power supply voltage		10 to 30 VDC (including 10% ripple (p-p)), Class 2							
Current consumption		1-output models: 16 mA max. 2-output models: 20 mA max.							
Output configuration		B□ Models: PNP open collector C□ Models: NPN open collector							
Operation mode (with sensing object approaching)		1-output models (B1, C1): NO (Normally open), 1-output models (B2, C3): NC (Normally closed) 2-output models (B3, C3): NO+NC (Normally open, Normally closed) *3							
Control output	Load current	1-output models: 10 to 30 VDC, Class 2, 200 mA max., (-40 to 70°C), 100 mA max., (70 to 85°C) 2-output models: 10 to 30 VDC, Class 2, 50 mA max.	1-output models: 10 to 30 VDC, Class 2, 200 mA max., 2-output models: 10 to 30 VDC, Class 2, 100 mA max.			1-output models: 10 to 30 VDC, Class 2, 200 mA max., (-40 to 70°C), 100 mA max., (70 to 85°C) 2-output models: 10 to 30 VDC, Class 2, 50 mA max.	1-output models: 10 to 30 VDC, Class 2, 200 mA max., 2-output models: 10 to 30 VDC, Class 2, 100 mA max.		
	Residual voltage	1-output models: 2 V max. (Load current: 200 mA, Cable length: 2 m), 2-output models: 2 V max. (Load current: 50 mA, Cable length: 2 m)	1-output models: 2 V max. (Load current: 200 mA, Cable length: 2 m), 2-output models: 2 V max. (Load current: 100 mA, Cable length: 2 m)			1-output models: 2 V max. (Load current: 200 mA, Cable length: 2 m), 2-output models: 2 V max. (Load current: 50 mA, Cable length: 2 m)	1-output models: 2 V max. (under load current of 200 mA with cable length of 2 m), 2-output models: 2 V max. (under load current of 100 mA with cable length of 2 m)		
Indicator *2		In the Standard I/O mode (SIO mode): Operation indicator (orange, lit) and communication indicator (green, not lit) In the IO-Link communication mode (COM mode): Operation indicator (orange, lit) and communication indicator (green, blinking at 1 s intervals)							
Protection circuits		Power supply reverse polarity protection, Surge suppressor, Output short-circuit protection, Output reverse polarity protection							
Ambient temperature range		Operating/Storage: -40 to 85°C (with no icing or condensation) Note: The UL temperature rating for M12 Pre-wired Connector Models is -25 to 70°C.							
Ambient humidity range		Operating/Storage: 35% to 95% (with no condensation)							
Temperature influence		±15% max. of sensing distance at 23°C in the temperature range of -40 to 85°C ±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			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: IEC 60529:IP67, ISO 20653 (old standard: DIN 40050 PART9): IP69K, JIS C 0920 Annex 1: IP67G, Passed OMRON's Oil-resistant Component Evaluation Standards *4 (Cutting oil type: specified in JIS K 2241:2000; Temperature: 35°C max.) Connector Models: IEC 60529:IP67, ISO 20653 (old standard: DIN 40050 PART9): IP69K							
Connection method		Pre-wired Models (Standard cable length: 2 m), Pre-wired Connector Models (Standard cable length: 0.3 m) and Models (M12 Connector, M8 (4-pin) Connector and M8 (3-pin) Connector)							
Weight *5 (packed state)	Pre-wired	Approx. 85 g	Approx. 95 g	Approx. 170 g	Approx. 280 g	Approx. 85 g	Approx. 95 g	Approx. 170 g	Approx. 240 g
	M12 Pre-wired Smartclick Connector	Approx. 55 g	Approx. 70 g	Approx. 105 g	Approx. 220 g	Approx. 55 g	Approx. 70 g	Approx. 105 g	Approx. 170 g
	Connector	Approx. 40 g *6	Approx. 55 g	Approx. 85 g	Approx. 200 g	Approx. 40 g *6	Approx. 55 g	Approx. 85 g	Approx. 160 g

Types Size Model		Double distance model				Single distance model			
		M8	M12	M18	M30	M8	M12	M18	M30
		E2E-X4M□8	E2E-X8M□12	E2E-X16M□18	E2E-X30M□30	E2E-X2M□8	E2E-X5M□12	E2E-X10M□18	E2E-X18M□30
Materials	Case	Stainless (SUS303)	Nickel-plated brass			Stainless (SUS303)	Nickel-plated brass		
	Sensing surface	Polybutylene terephthalat (PBT)							
	Clamping nuts	Nickel-plated brass							
	Toothed washers	Zinc-plated iron							
	Cable	Vinyl chloride (PVC)							
Main IO-Link functions *2		Operation mode switching between NO and NC, self diagnosis enabling, excessive proximity judgment distance selecting, timer function of the control output and timer time selecting, instability output (IO-Link mode) ON delay timer time selecting function, monitor output, operating hours read-out, readout of the sensor internal temperature, and initial reset							
IO-Link Communication specifications *2	IO-Link specification	Ver 1.1							
	Baud rate	COM2 (38.4 kbps), COM3 (230.4 kbps)							
	Data length	PD size: 2 bytes, OD size: 1 byte (M-sequence type: TYPE_2_2)							
	Minimum cycle time	COM2: 2.3 ms, COM3: 0.4 ms							
Accessories		Instruction manual, Clamping nuts, Toothed washer							

- *1. 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.
- *2. IO-Link is not supported for NC-type PNP outputs or all types of NPN outputs.
- *3. Dual-output specification for the M8-size models is only applicable to long-size M12 Connector models.
- *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). Actual performance can be expected to decline after two years on average from shipment. 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.
- *5. Weight of the standard body-sized model.
- *6. Both M8 connectors and M12 connectors are available.

E2E/E2EQ NEXT Series

BASIC Model

E2E Q NEXT Series (Spatter-resistant Double distance/Single distance model)

DC 3-Wire Models

Shielded

Types Size		Double distance				Single distance			
		M8	M12	M18	M30	M8	M12	M18	M30
Item	Model	E2EQ-X2□8	E2EQ-X4□12	E2EQ-X8□18	E2EQ-X15□30	E2EQ-X1R5□8	E2EQ-X2□12	E2EQ-X5□18	E2EQ-X10□30
Sensing distance		2 mm±10%	4 mm±10%	8 mm±10%	15 mm±10%	1.5 mm±10%	2 mm±10%	5 mm±10%	10 mm±10%
Setting distance		0 to 1.6 mm	0 to 3.2 mm	0 to 6.4 mm	0 to 12 mm	0 to 1.2 mm	0 to 1.6 mm	0 to 4 mm	0 to 8 mm
Differential travel		15% max. of sensing distance				10% max. of sensing distance			
Detectable object		Ferrous metals (For non-ferrous metals, refer to the <i>Engineering Data</i> on page 48.)							
Standard sensing object		Iron, 8 × 8 × 1 mm	Iron, 12 × 12 × 1 mm	Iron, 24 × 24 × 1 mm	Iron, 45 × 45 × 1 mm	Iron, 8 × 8 × 1 mm	Iron, 12 × 12 × 1 mm	Iron, 18 × 18 × 1 mm	Iron, 30 × 30 × 1 mm
Response frequency *1		1,500 Hz	1,000 Hz	500 Hz	250 Hz	2,000 Hz	1,500 Hz	600 Hz	400 Hz
Power supply voltage		10 to 30 VDC (including 10% ripple (p-p)), Class 2							
Current consumption		1-output models: 16 mA max. 2-output models: 20 mA max.							
Output configuration		B□ Models: PNP open collector, C□ Models: NPN open collector							
Operation mode (with sensing object approaching)		1-output models (B1, C1): NO (Normally open), 1-output models (B2, C2): NC (Normally closed) 2-output models (B3, C3): NO+NC (Normally open, Normally closed)							
Control output	Load current	1-output models: 10 to 30 VDC, Class 2, 200 mA max., (-40 to 70°C), 100 mA max., (70 to 85°C) 2-output models: 10 to 30 VDC, Class 2, 50 mA max.	1-output models: 10 to 30 VDC, Class 2, 200 mA max., 2-output models: 10 to 30 VDC, Class 2, 100 mA max.			1-output models: 10 to 30 VDC, Class 2, 200 mA max., (-40 to 70°C), 100 mA max., (70 to 85°C) 2-output models: 10 to 30 VDC, Class 2, 50 mA max.	1-output models: 10 to 30 VDC, Class 2, 200 mA max., 2-output models: 10 to 30 VDC, Class 2, 100 mA max.		
	Residual voltage	1-output models: 2 V max. (Load current: 200 mA, Cable length: 2 m), 2-output models: 2 V max. (Load current: 50 mA, Cable length: 2 m)	1-output models: 2 V max. (Load current: 200 mA, Cable length: 2 m), 2-output models: 2 V max. (Load current: 100 mA, Cable length: 2 m)			1-output models: 2 V max. (Load current: 200 mA, Cable length: 2 m), 2-output models: 2 V max. (Load current: 50 mA, Cable length: 2 m)	1-output models: 2 V max. (Load current: 200 mA, Cable length: 2 m), 2-output models: 2 V max. (Load current: 100 mA, Cable length: 2 m)		
Indicator *2		In the Standard I/O mode (SIO mode): Operation indicator (orange, lit) and communication indicator (green, not lit) In the IO-Link communication mode (COM mode): Operation indicator (orange, lit) and communication indicator (green, blinking at 1 s intervals)							
Protection circuits		Power supply reverse polarity protection, Surge suppressor, Output short-circuit protection, Output reverse polarity protection							
Ambient temperature range		Operating/Storage: -40 to 85°C (with no icing or condensation) Note: The UL temperature rating for M12 Pre-wired Connector Models is -25 to 70°C.							
Ambient humidity range		Operating/Storage: 35% to 95% (with no condensation)							
Temperature influence		±15% max. of sensing distance at 23°C in the temperature range of -40 to 85°C ±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			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: IEC 60529:IP67, JIS C 0920 Annex 1: IP67G Connector Models: IEC 60529 IP67							
Connection method		Pre-wired Models (Standard cable length: 2 m) and Pre-wired Connector Models (Standard cable length: 0.3 m), M12 Connector Models							
Weight *3 (packed state)	Pre-wired	Approx. 85 g	Approx. 95 g	Approx. 170 g	Approx. 240 g	Approx. 85 g	Approx. 95 g	Approx. 170 g	Approx. 240 g
	M12 Pre-wired Smartclick Connector	Approx. 55 g	Approx. 70 g	Approx. 105 g	Approx. 170 g	Approx. 55 g	Approx. 70 g	Approx. 105 g	Approx. 170 g
	Connector	Approx. 40 g	Approx. 55 g	Approx. 85 g	Approx. 160 g	Approx. 40 g	Approx. 55 g	Approx. 85 g	Approx. 160 g

Types Size		Double distance				Single distance			
		M8	M12	M18	M30	M8	M12	M18	M30
Item	Model	E2EQ-X2□8	E2EQ-X4□12	E2EQ-X8□18	E2EQ-X15□30	E2EQ-X1R5□8	E2EQ-X2□12	E2EQ-X5□18	E2EQ-X10□30
Materials	Case	Fluororesin coating (Base material: SUS303)	Fluororesin coating (Base material: brass)			Fluororesin coating (Base material: SUS303)	Fluororesin coating (Base material: brass)		
	Sensing surface	Fluorine resin							
	Clamping nuts	Fluororesin coating (Base material: brass)							
	Toothed washers	Zinc-plated iron							
	Cable	Vinyl chloride (PVC)							
Main IO-Link functions *2		Operation mode switching between NO and NC, self diagnosis enabling, excessive proximity judgment distance selecting, timer function of the control output and timer time selecting, instability output (IO-Link mode) ON delay timer time selecting function, monitor output, operating hours read-out, readout of the sensor internal temperature, and initial reset							
IO-Link Communication specifications *2	IO-Link specification	Ver1.1							
	Baud rate	COM2 (38.4 kbps), COM3 (230.4 kbps)							
	Data length	PD size: 2 bytes, OD size: 1 byte (M-sequence type: TYPE_2_2)							
	Minimum cycle time	COM2: 2.3 ms, COM3: 0.4 ms							
Accessories		Instruction manual, Clamping nuts, Toothed washer							

*1. 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.

*2. IO-Link is not supported for NC-type PNP outputs or all types of NPN outputs.

*3. Weight of the standard body-sized model.

E2E/E2EQ NEXT Series

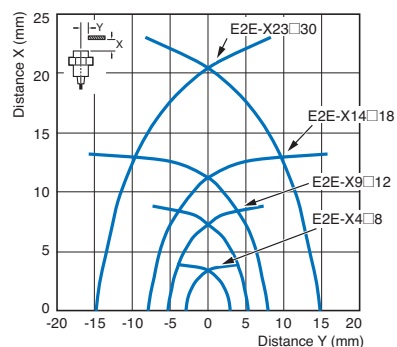
Engineering Data (Reference Value)

Sensing Area

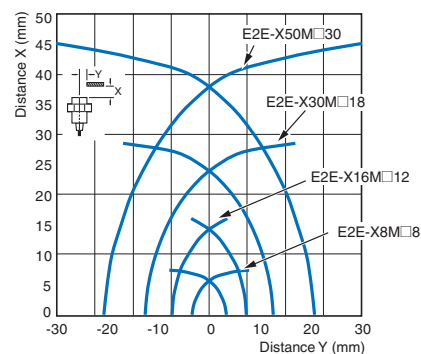
PREMIUM Model

Quadruple distance model

Shielded

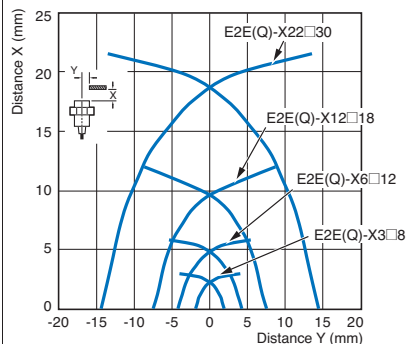


Unshielded

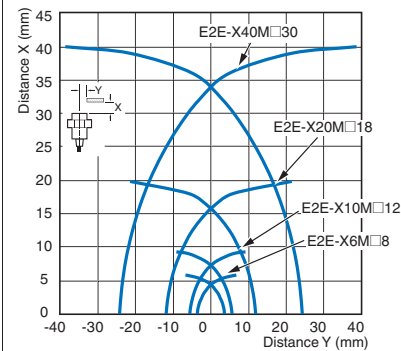


Triple distance model, Spatter-resistant Triple distance model

Shielded



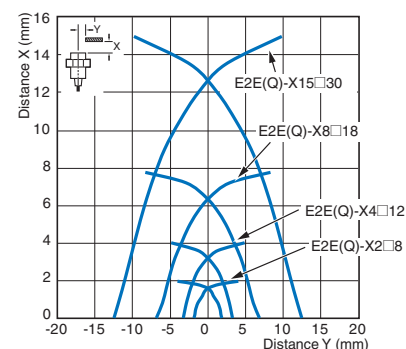
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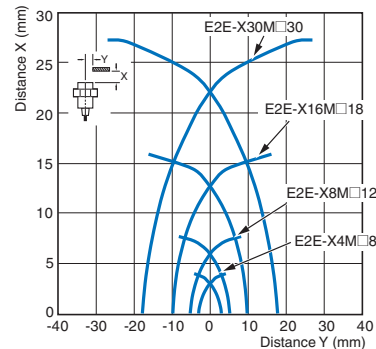
BASIC Model

Double distance model, Spatter-resistant Double distance model

Shielded

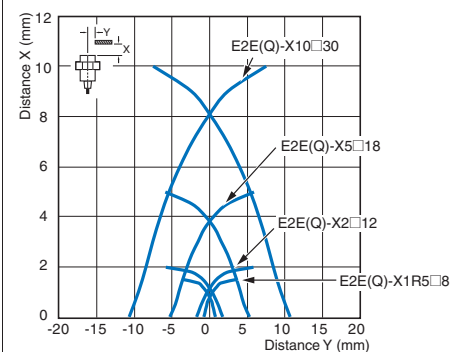


Unshielded

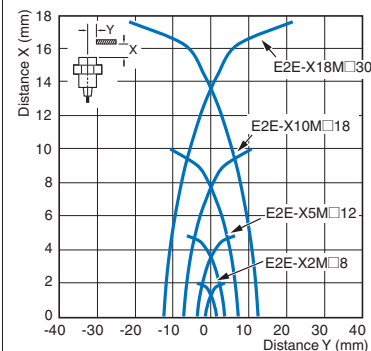


Single distance model, Spatter-resistant Single distance model

Shielded



Unshielded



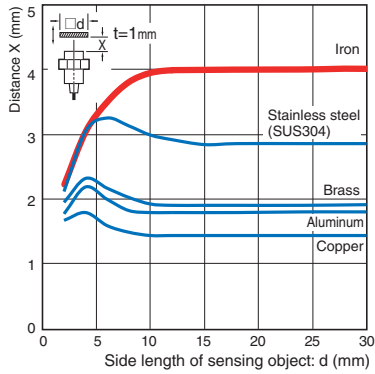
Influence of Sensing Object Size and Material

PREMIUM Model

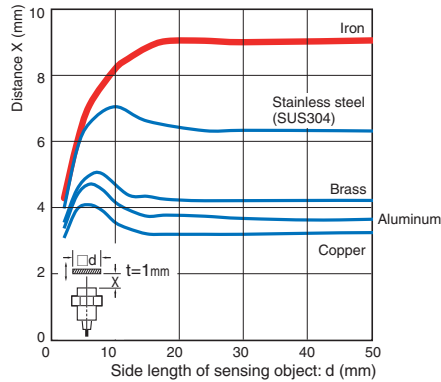
Shielded

Quadruple distance model

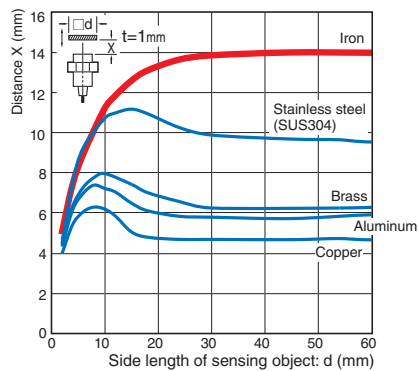
Size: M8 E2E-X4□8



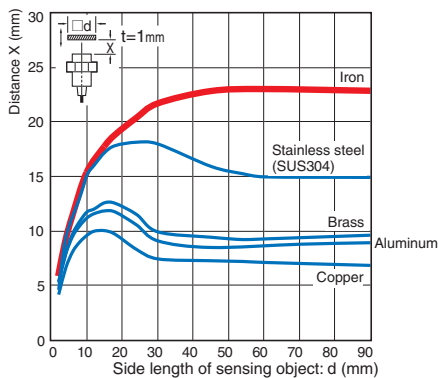
Size: M12 E2E-X9□12



Size: M18 E2E-X14□18

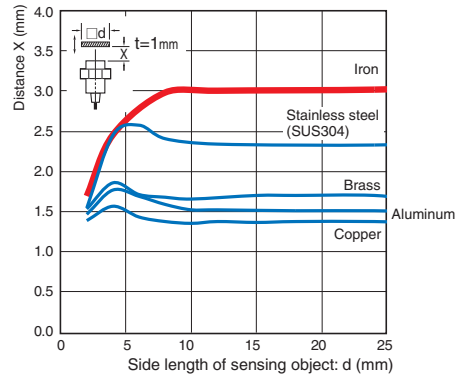


Size: M30 E2E-X23□30

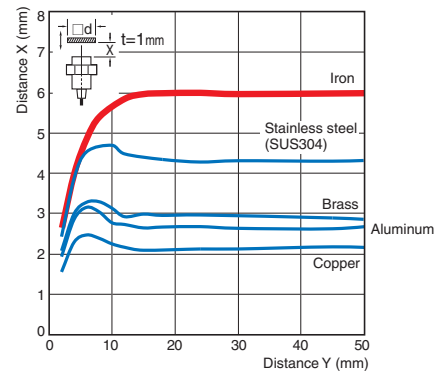


Triple distance model, Spatter-resistant Triple distance model

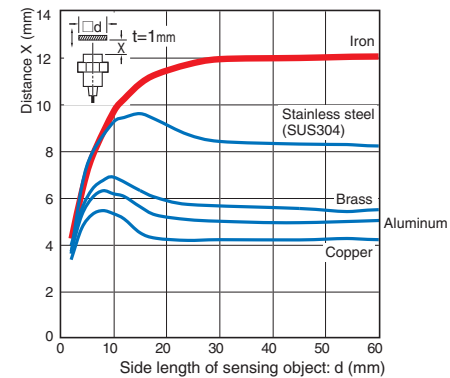
Size: M8 E2E(Q)-X3□8



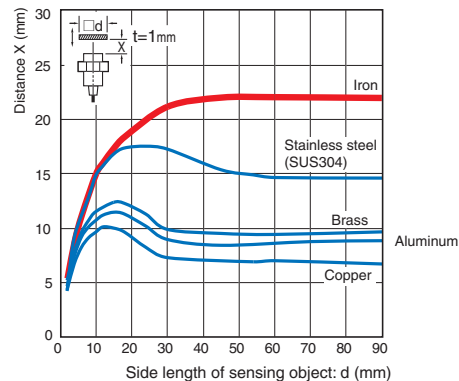
Size: M12 E2E(Q)-X6□12



Size: M18 E2E(Q)-X12□18



Size: M30 E2E(Q)-X22□30

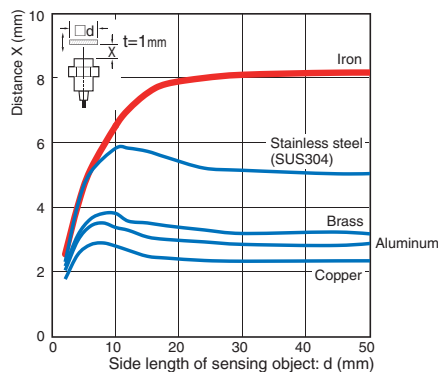


PREMIUM Model

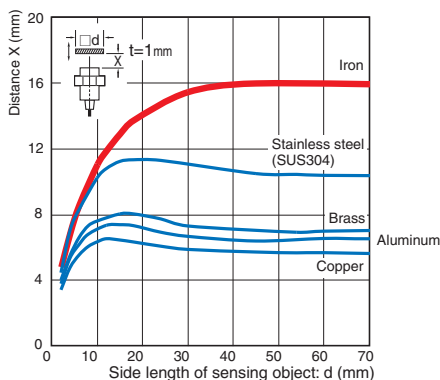
Unshielded

Quadruple distance model

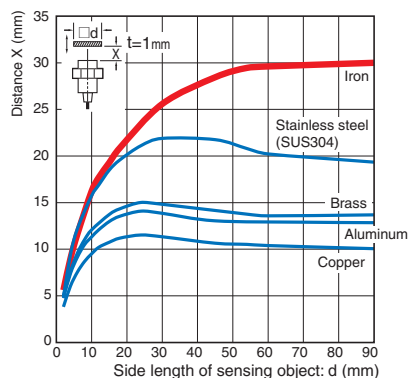
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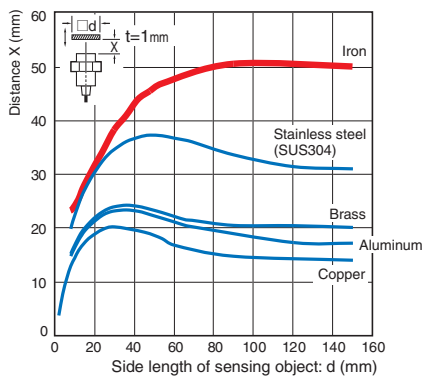
Size: M12 E2E-X16M□12



Size: M18 E2E-X30M□18

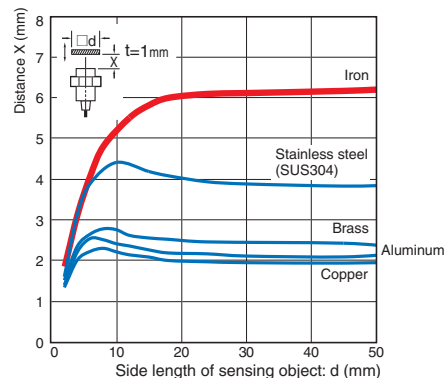


Size: M30 E2E-X50M□30

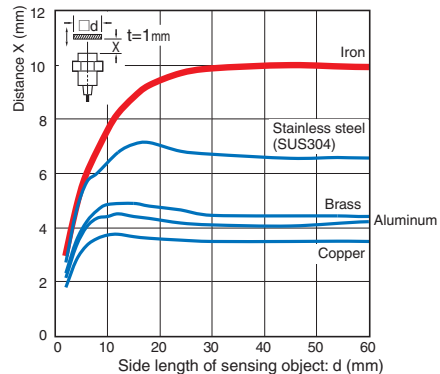


Triple distance model

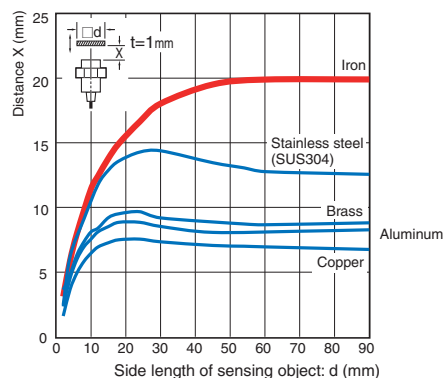
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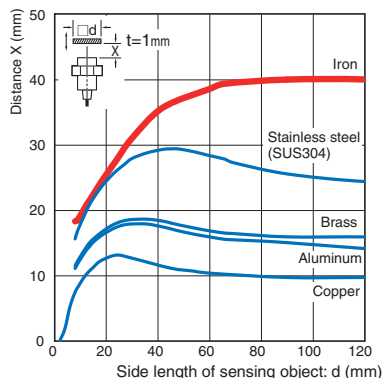
Size: M12 E2E-X10M□12



Size: M18 E2E-X20M□18



Size: M30 E2E-X40M□30

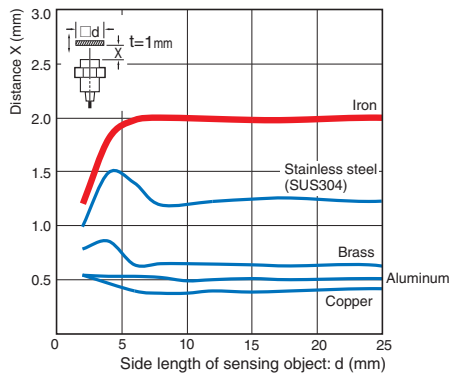


BASIC Model

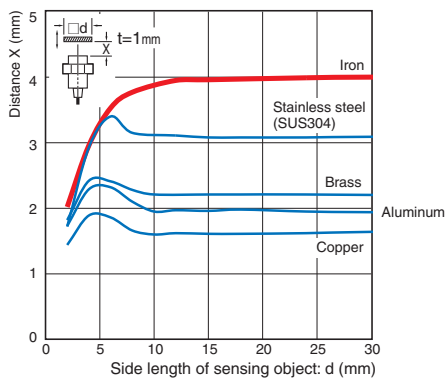
Shielded

Double distance model, Spatter-resistant Double distance model

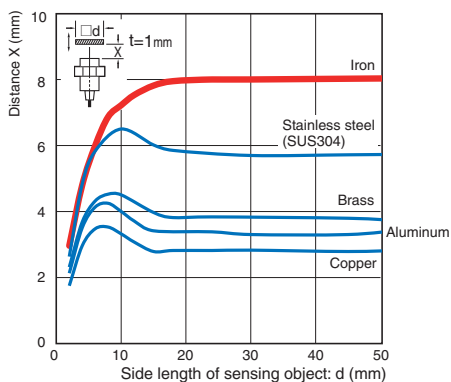
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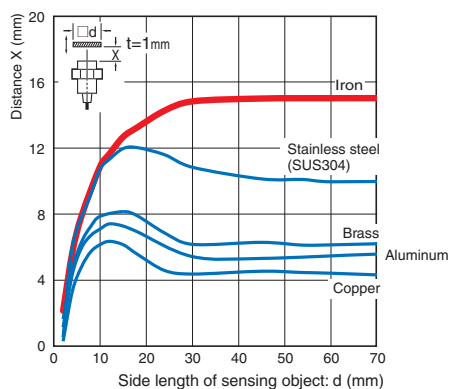
Size: M12 E2E(Q)-X4□12



Size: M18 E2E(Q)-X8□18

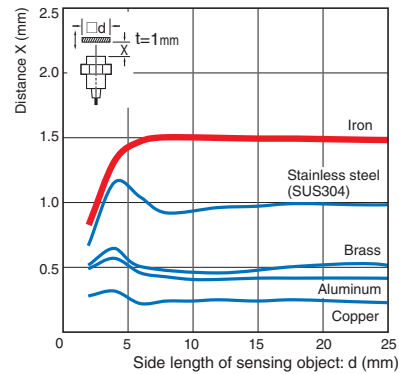


Size: M30 E2E(Q)-X15□30

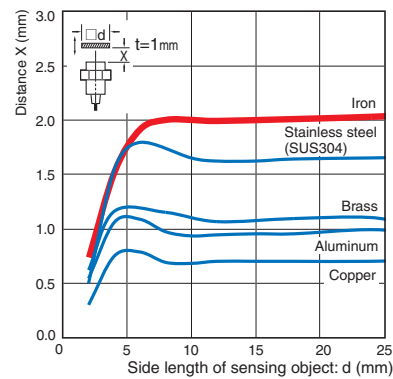


Single distance model, Spatter-resistant Single distance model

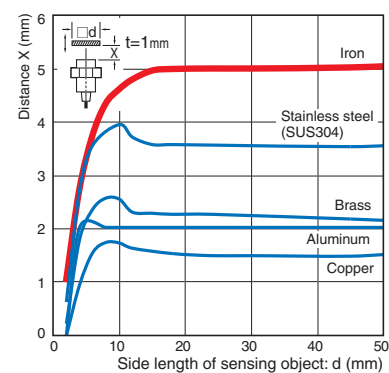
Size: M8 E2E(Q)-X1R5□8



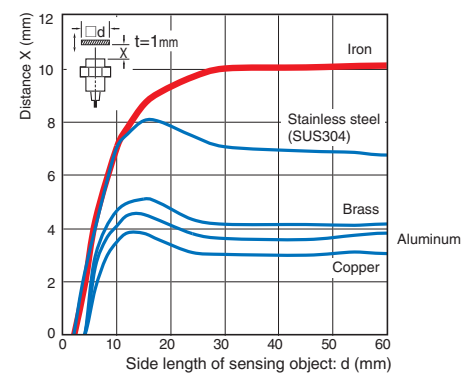
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Size: M18 E2E(Q)-X5□18



Size: M30 E2E(Q)-X10□30

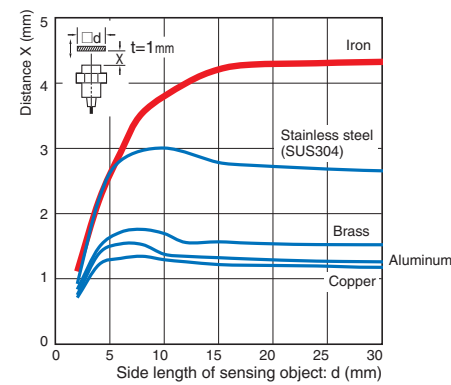


BASIC Model

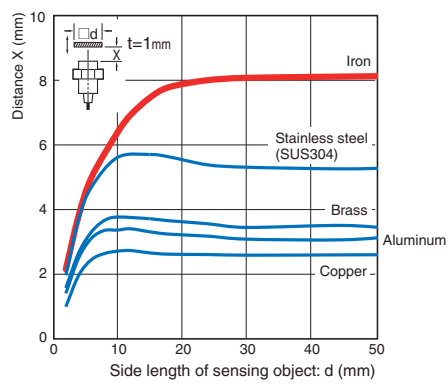
Unshielded

Double distance model

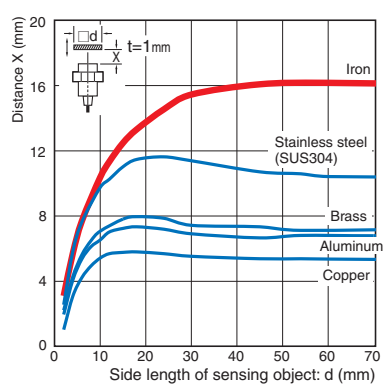
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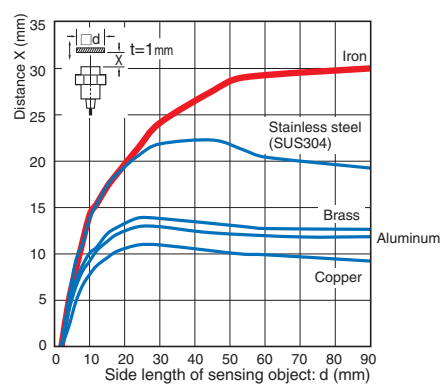
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Size: M18 E2E-X16M□18

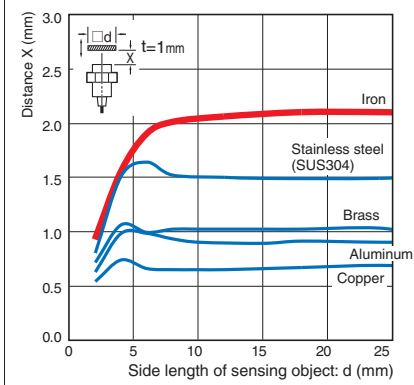


Size: M30 E2E-X30M□30

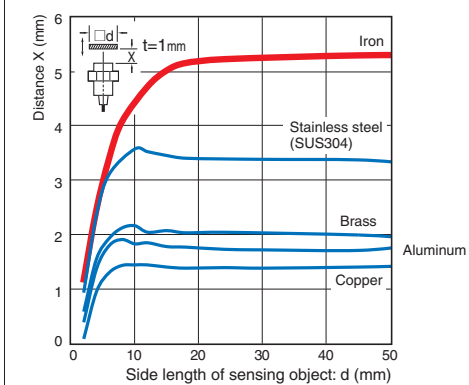


Single distance model

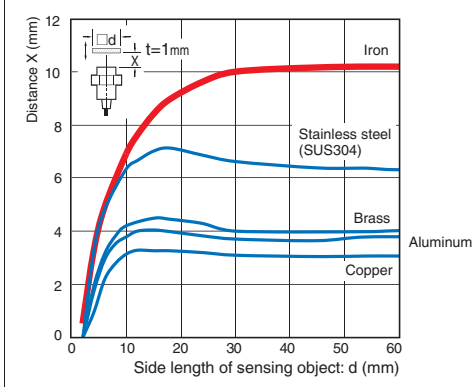
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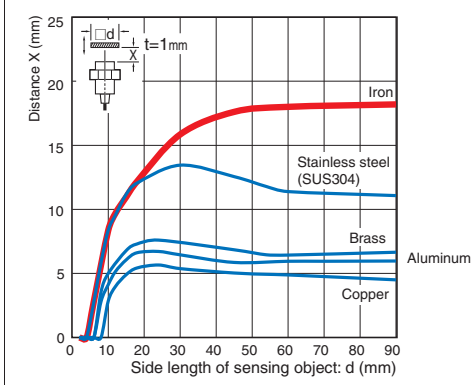
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Size: M18 E2E-X10M□18



Size: M30 E2E-X18M□30



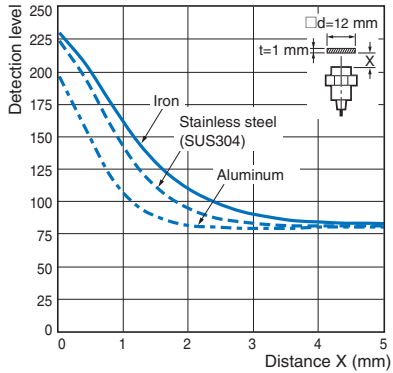
Monitor Output vs. Sensing Distance

PREMIUM Model

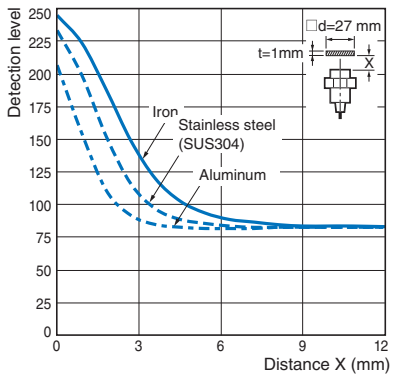
Shielded

Quadruple distance model

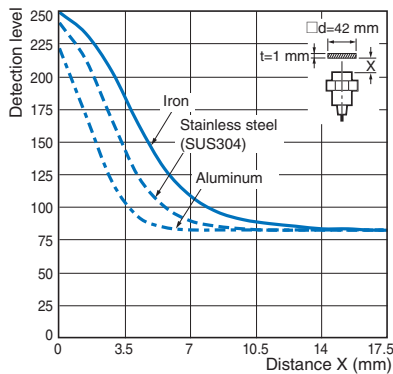
Size: M8 E2E-X4□8



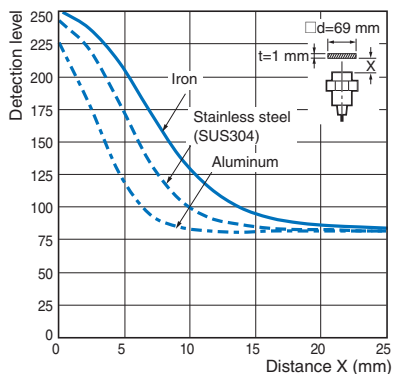
Size: M12 E2E-X9□12



Size: M18 E2E-X14□18

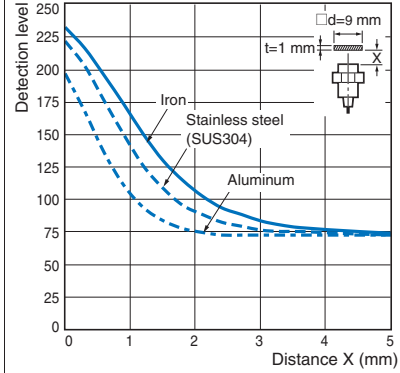


Size: M30 E2E-X23□30

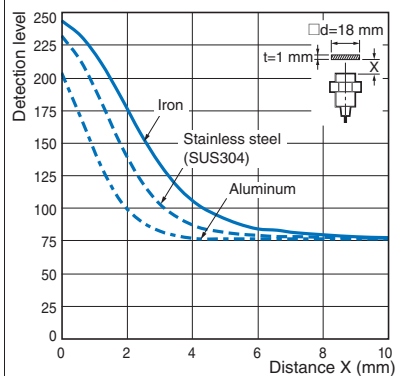


Triple model, Spatter-resistant Triple distance model

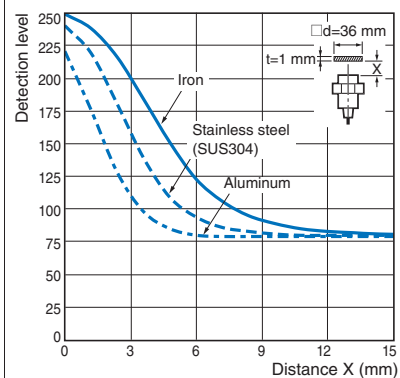
Size: M8 E2E(Q)-X3□8



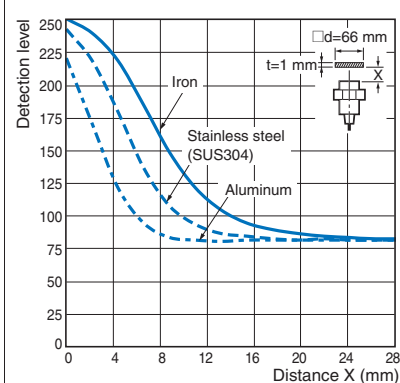
Size: M12 E2E(Q)-X6□12



Size: M18 E2E(Q)-X12□18



Size: M30 E2E(Q)-X22□30

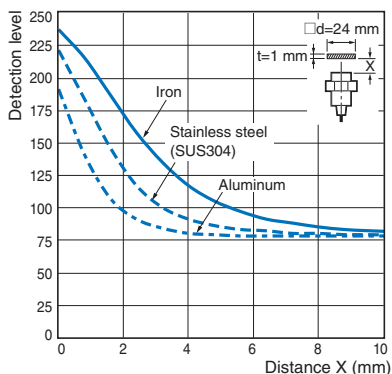


PREMIUM Model

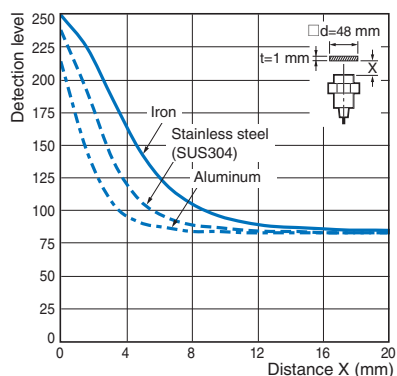
Unshielded

Quadruple distance model

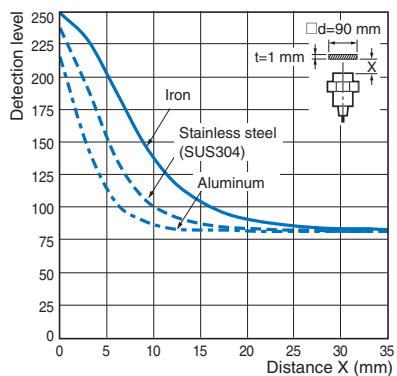
Size: M8 E2E-X8M□8



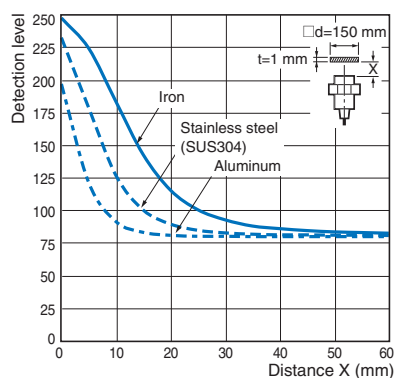
Size: M12 E2E-X16M□12



Size: M18 E2E-X30M□18

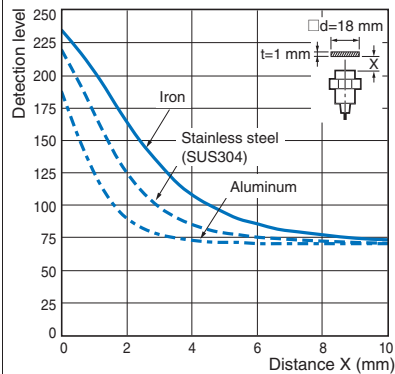


Size: M30 E2E-X50M□30

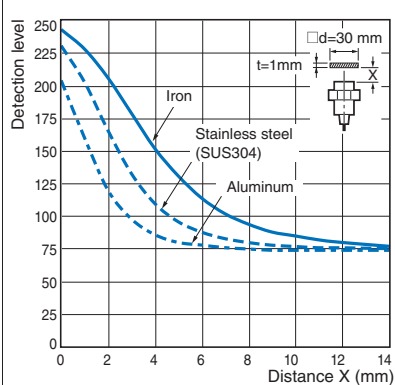


Triple distance model

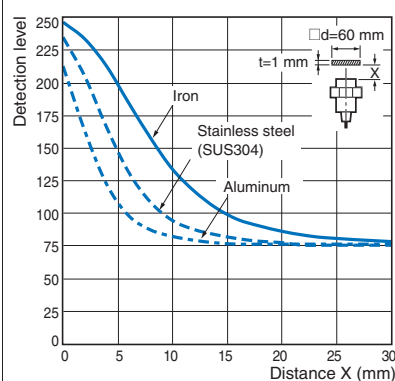
Size: M8 E2E-X6M□8



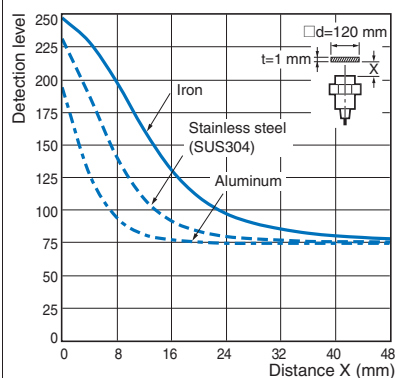
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Size: M18 E2E-X20M□18



Size: M30 E2E-X40M□30

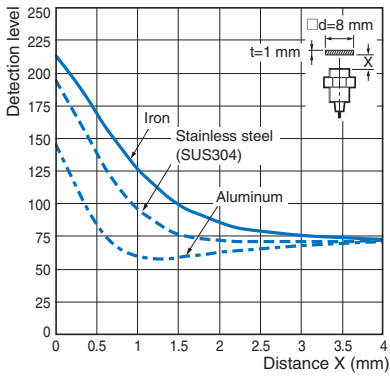


BASIC Model

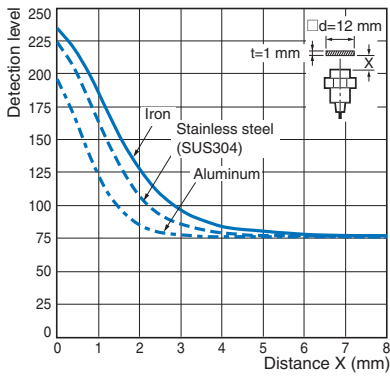
Shielded

Double distance model, Spatter-resistant Double distance model

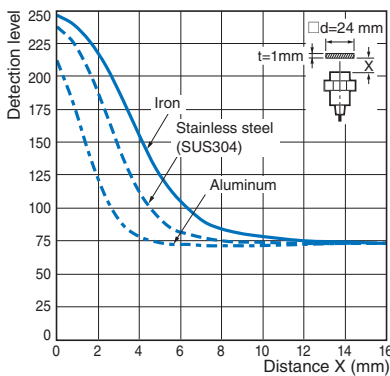
Size: M8 E2E(Q)-X2□8



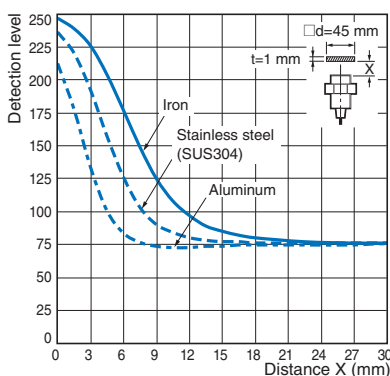
Size: M12 E2E(Q)-X4□12



Size: M18 E2E(Q)-X8□18

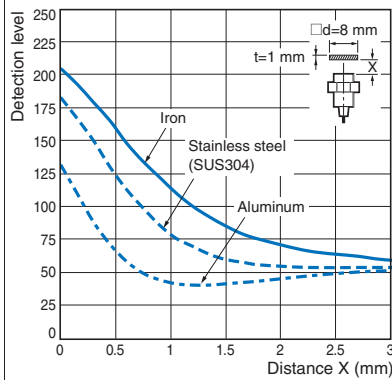


Size: M30 E2E(Q)-X15□30

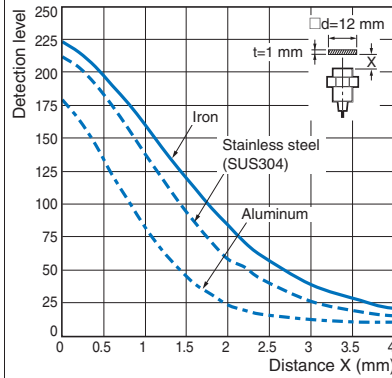


Single distance model, Spatter-resistant Single distance model

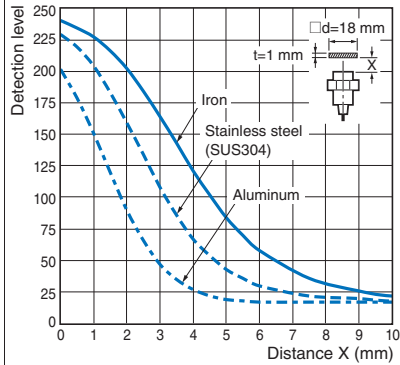
Size: M8 E2E(Q)-X1R5□8



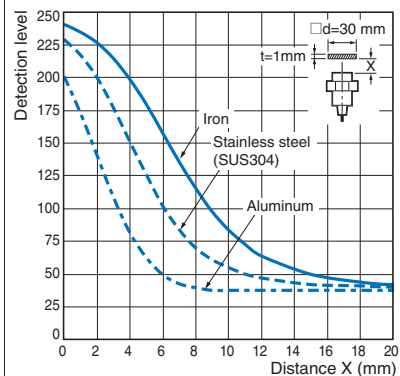
Size: M12 E2E(Q)-X2□12



Size: M18 E2E(Q)-X5□18



Size: M30 E2E(Q)-X10□30

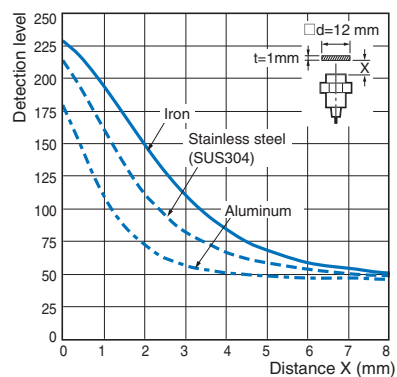


BASIC Model

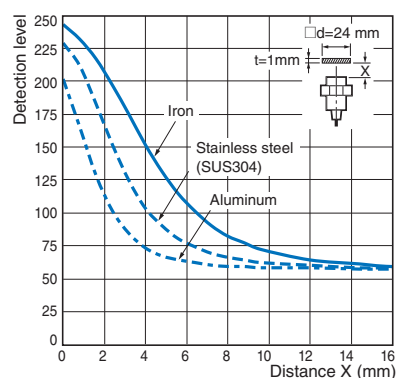
Unshielded

Double distance model

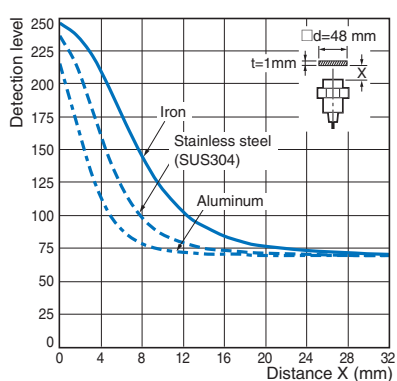
Size: M8 E2E-X4M□8



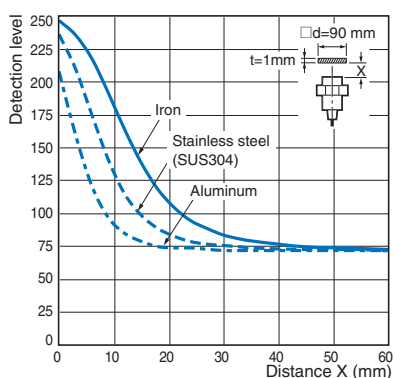
Size: M12 E2E-X8M□12



Size: M18 E2E-X16M□18

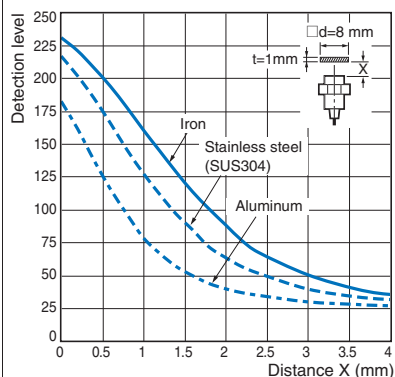


Size: M30 E2E-X30M□30

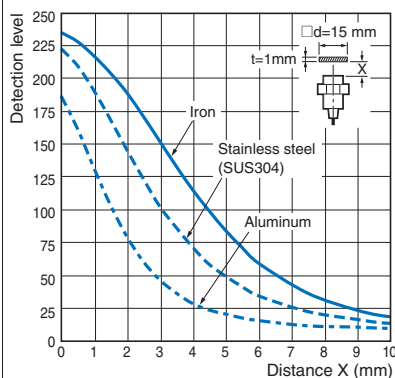


Single distance model

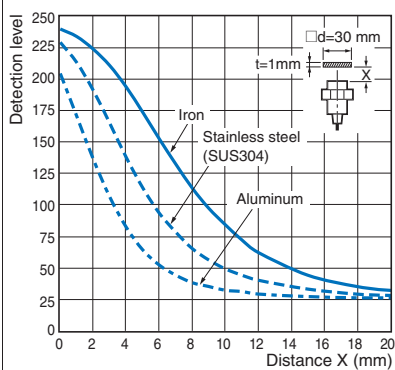
Size: M8 E2E-X2M□8



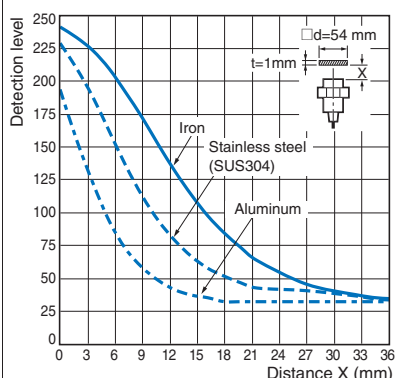
Size: M12 E2E-X5M□12



Size: M18 E2E-X10M□18



Size: M30 E2E-X18M□30



I/O Circuit Diagrams/Timing charts

DC 3-Wire
PNP output

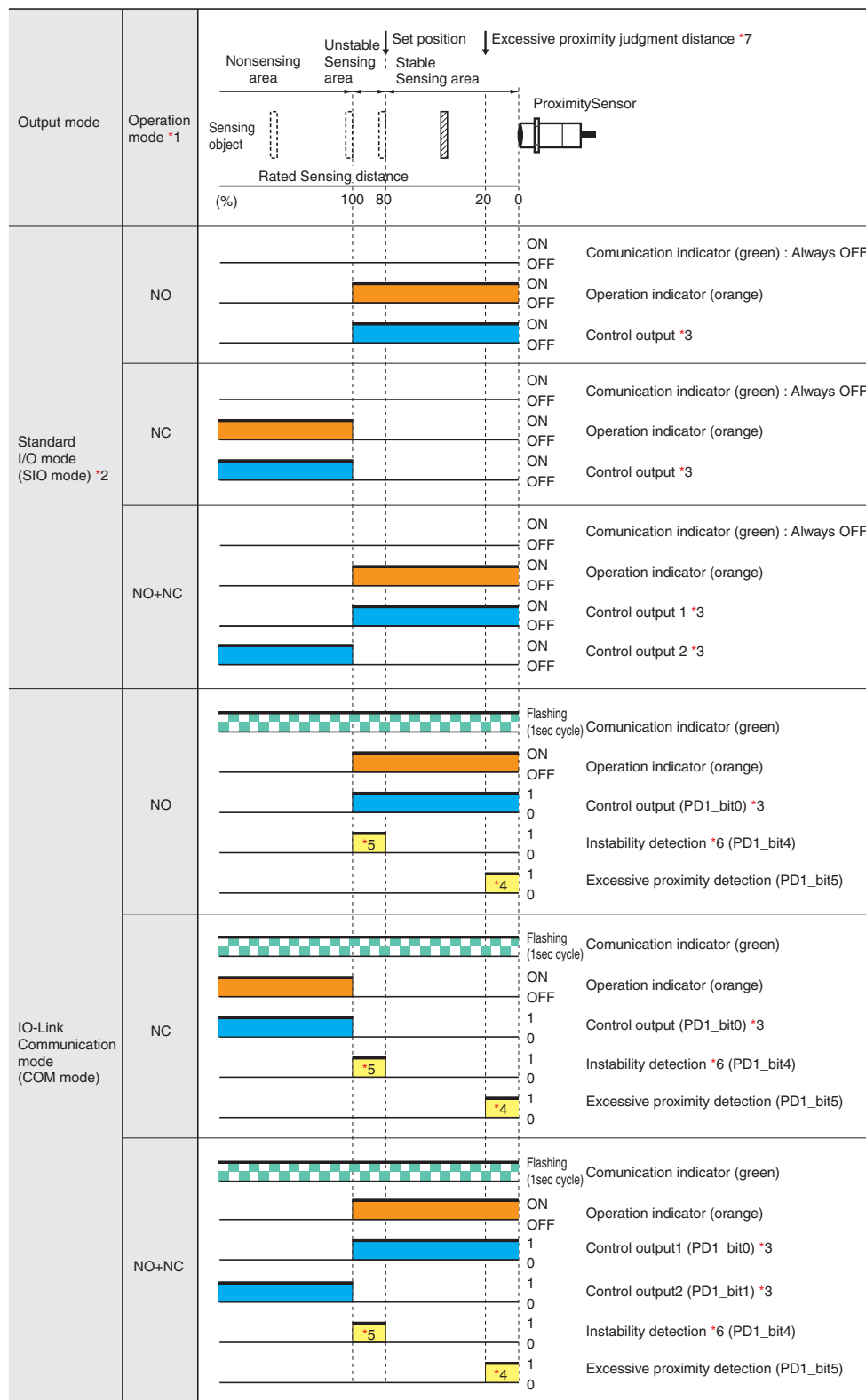
Operation mode	Model	Output circuit	
		Standard I/O mode (SIO mode) When using as a general	IO-Link Communication mode (COM mode) When using the Sensor connected to IO-Link Master Unit *
NO	E2E(Q)-□B1		
NC	E2E(Q)-□B2	Note: M8 (3-pin) Connector: (1)(4)(3)	---
NO+NC	E2E(Q)-□B3		

* In the IO-Link mode, the cord between the IO-Link master and sensor must have a length of 20 m or less.

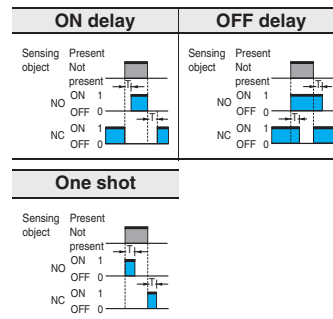
Connector Pin Arrangement

M12 Connector M12 Smartclick Connector	M8 (4-pin) Connector	M8 (3-pin) Connector

PNP output



*3. The timer function of the control output can be set up by the IO-Link communications. (It is able to select ON delay, OFF delay, or one-shot function and select a timer time of 1 to 16,383ms (T).)



*4. The excessive proximity diagnosis function can be selected by the IO-Link communications.

*5. The instability detection diagnosis can be selected by the IO-Link communications.

*6. The judgment time for the instability detection diagnosis can be selected by the IO-Link communications. (For the ON delay timer function, the setting can be selected from 0 (invalid), 10, 50, 100, 300, 500, or 1000 ms.)

*7. The judgment distance of the excessive proximity diagnosis function can be selected by the IO-Link communications. (The distance can be selected as a combination of the material of the object detected, such as iron, aluminum, or SUS and the judgment distance of approximately 10, 20, or 30%. However, it is not allowed to select a combination of aluminum and 30%.)

Please contact your OMRON sales representative regarding the IO-Link setup file (IODD file).

Please contact your OMRON sales representative regarding assignment of data.

*1. For models with IO-Link, the operation mode can be changed by the IO-Link communications.

*2. If using a model with IO-Link as a general sensor or using a model without IO-Link, it operates in the standard I/O mode (SIO mode).

NPN output

Operation mode	Model	Output circuit
NO	E2E(Q)-□C1	
NC	E2E(Q)-□C2	
NO+NC	E2E(Q)-□C3	

Connector Pin Arrangement

M12 Connector M12 Smartclick Connector	M8 (4-pin) Connector	M8 (3-pin) Connector

Operation mode	Nonsensing area	Stable sensing area	ProximitySensor
		Rated Sensing distance (%)	100 0
NO			ON OFF ON OFF Operation indicator (orange) Control output
NC			ON OFF ON OFF Operation indicator (orange) Control output
NO+NC			ON OFF ON OFF ON OFF Operation indicator (orange) Control output 1 Control output 2

E2E/E2EQ NEXT Series

Connections for Sensor I/O Connectors

DC 3-Wire

Proximity Sensor				Sensor I/O Connectors	
Types	Output	Operation mode	Model	Model	Connections *
DC 3-Wire (M12 Connector/ M12 Smartclick Connector)	PNP	NO	E2E(Q)-X□B1□- M1TJ/ M1	XS5F-D421-□80-X□ XS5F-D42□-□80-F XS5W-D421-□81-X□ XS5W-D42□-□81-F Note: For details of the connector, refer to <i>XS5 NEXT Series</i> on page 87 refer to <i>XS5 Series</i> on page 94	E2E/E2EQ NEXT Series XS5
		NC	E2E(Q)-X□B2□-M1TJ/M1		E2E/E2EQ NEXT Series XS5
		NO+NC	E2E(Q)-X□B3□-M1TJ/M1		E2E/E2EQ NEXT Series XS5
	NPN	NO	E2E(Q)-X□C1□-M1TJ/M1		E2E/E2EQ NEXT Series XS5
		NC	E2E(Q)-X□C2□-M1TJ/M1		E2E/E2EQ NEXT Series XS5
		NO+NC	E2E(Q)-X□C3□-M1TJ/M1		E2E/E2EQ NEXT Series XS5
	PNP	NO	E2E(Q)-X□B1□-M3		E2E/E2EQ NEXT Series XS3
		NC	E2E(Q)-X□B2□-M3		E2E/E2EQ NEXT Series XS3
	NPN	NO	E2E(Q)-X□C1□-M3		E2E/E2EQ NEXT Series XS3
		NC	E2E(Q)-X□C2□-M3		E2E/E2EQ NEXT Series XS3
DC 3-Wire (M8 Connector, 4-pin)	PNP	NO	E2E(Q)-X□B1□-M5	XS3W-M42□-4□-R XS3F-M42□-4□-R Note: For details of the connector, refer to <i>XS3 Series Datasheet</i> (No. G147).	E2E/E2EQ NEXT Series XS3
		NC	E2E(Q)-X□B2□-M5		E2E/E2EQ NEXT Series XS3
	NPN	NO	E2E(Q)-X□C1□-M5		E2E/E2EQ NEXT Series XS3
		NC	E2E(Q)-X□C2□-M5		E2E/E2EQ NEXT Series XS3

Note: Different from Proximity Sensor wire colors.

* If the XS5W Series or XS3W 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	
This product is not designed or rated for ensuring safety of persons either directly or indirectly. Do not use it for such purposes.	
Otherwise, explosion may result. Never use the product with an AC power supply.	

Precautions for Safe Use

The following precautions must be observed to ensure safe operation.

- Do not use the product in environments subject to flammable or explosive gases.
- Do not attempt to disassemble, repair, or modify the product.
- 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 explosion or fire.
- Be sure that the power supply polarity and other wiring is correct. Incorrect wiring may cause explosion or fire.
- 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.

Precautions for Correct Use

Do not use the product in any atmosphere or environment that exceeds the ratings.

Operating Environment

- Do not install the Sensor in the following locations.
 - Outdoor locations directly subject to sunlight, rain, snow, water droplets, or oil.
 - Locations subject to atmospheres with chemical vapors, in particular solvents and acids.
 - Locations subject to corrosive gases.
- 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.
- 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.
- Never use thinner or other solvents. Otherwise, the Sensor surface may be dissolved.
- 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.
- When turning on the power by influence of temperature environment, an output mis-pulse sometimes occurs. After the sensor has passed for 300 msec after turning on, please use in the stable state.
- The sensor is adjusted with a high degree of accuracy, so do not use in the environment with sudden temperature change.
- Operation check is performed using an OMRON's IO-Link master. If using an IO-Link master from another company, perform the operation check in advance.

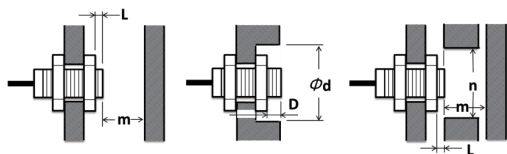
E2E/E2EQ NEXT Series

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.

When mounting the Proximity Sensor using a nut, only use the provided nut. Nuts that are supplied along with each Sensor are different. Refer to Dimensions for details on shapes.



(Unit: mm)

Shielded

Type	Model	L	d	D	m	n
Quadruple distance model	E2E-X4□8	3	30	3	12	20
	E2E-X9□12	2	40	2	27	30
	E2E-X14□18	2	60	2	42	70
	E2E-X23□30	2	100	2	69	100
Triple distance model/ Spatter-resistant Triple distance model	E2E(Q)-X3□8	0	20	0	9	18
	E2E(Q)-X6□12	0 *1	20	0 *2	18	20
	E2E(Q)-X12□18	0	50	0	36	54
	E2E(Q)-X22□30	0	70	0	66	90
Double distance model/ Spatter-resistant Double distance model	E2E(Q)-X2□8	0	8	0	4.5	12
	E2E(Q)-X4□12	0	18	0	12	18
	E2E(Q)-X8□18	0	27	0	24	27
	E2E(Q)-X15□30	0	45	0	45	45
Single distance model/ Spatter-resistant Single distance model	E2E(Q)-X1R5□8	0	8	0	4.5	12
	E2E(Q)-X2□12	0	12	0	8	18
	E2E(Q)-X5□18	0	18	0	20	27
	E2E(Q)-X10□30	0	30	0	40	45

*1. If using the E2EQ-X6□12, refer to L=2.

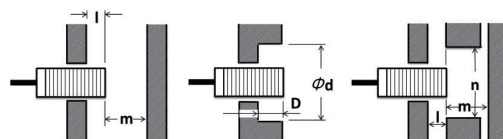
*2. If using the E2EQ-X6□12, refer to D=2.

Unshielded

Models	Model	L	d	D	m	n
Quadruple distance model	E2E-X8M□8	12	40	12	24	40
	E2E-X16M□12	21	70	21	48	80
	E2E-X30M□18	46	130	46	90	110
	E2E-X50M□30	60	200	60	150	180
Triple distance model	E2E-X6M□8	10	30	10	18	30
	E2E-X10M□12	16	50	16	30	50
	E2E-X20M□18	31	90	31	60	80
	E2E-X40M□30 *	50	170	50	120	140
Double distance model	E2E-X4M□8	9	24	9	8	24
	E2E-X8M□12	11	40	11	20	40
	E2E-X16M□18	21	70	21	48	70
	E2E-X30M□30	40	120	40	90	120
Single distance model	E2E-X2M□8	6	24	6	8	24
	E2E-X5M□12	11	40	11	20	36
	E2E-X10M□18	18	55	18	40	54
	E2E-X18M□30	25	90	25	70	90

* If you use the model E2E-X40M□30, 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)

Shielded

Models	Model	l	d	D	m	n
Quadruple distance model	E2E-X4□8	4	30	4	12	20
	E2E-X9□12	6	40	6	27	30
	E2E-X14□18	7	60	7	42	70
	E2E-X23□30	9	100	9	69	100
Triple distance model/ Spatter-resistant Triple distance model	E2E(Q)-X3□8	2	20	2	9	18
	E2E(Q)-X6□12	4	20	4	18	20
	E2E(Q)-X12□18	4	50	4	36	54
	E2E(Q)-X22□30	8	70	8	66	90
Double distance model/ Spatter-resistant Double distance model	E2E(Q)-X2□8	0	8	0	4.5	12
	E2E(Q)-X4□12	2.4	18	2.4	12	18
	E2E(Q)-X8□18	3.6	27	3.6	24	27
	E2E(Q)-X15□30	6	45	6	45	45
Single distance model/ Spatter-resistant Single distance model	E2E(Q)-X1R5□8	0	8	0	4.5	12
	E2E(Q)-X2□12	0	12	0	8	18
	E2E(Q)-X5□18	0	18	0	20	27
	E2E(Q)-X10□30	0	30	0	40	45

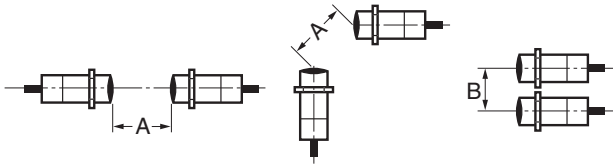
Unshielded

Models	Model	l	d	D	m	n
Quadruple distance model	E2E-X8M□8	15	40	15	24	40
	E2E-X16M□12	25	70	25	48	80
	E2E-X30M□18	50	130	50	90	110
	E2E-X50M□30	65	200	65	150	180
Triple distance model	E2E-X6M□8	13	30	13	18	30
	E2E-X10M□12	20	50	20	30	50
	E2E-X20M□18	35	90	35	60	80
	E2E-X40M□30 *	55	170	55	120	140
Double distance model	E2E-X4M□8	12	24	12	8	24
	E2E-X8M□12	15	40	15	20	40
	E2E-X16M□18	25	70	25	48	70
	E2E-X30M□30	45	120	45	90	120
Single distance model	E2E-X2M□8	6	24	6	8	24
	E2E-X5M□12	15	40	15	20	36
	E2E-X10M□18	22	55	22	40	54
	E2E-X18M□30	30	90	30	70	90

* If you use the model E2E-X40M□30, the panel thickness (t) is 4 mm or less.

Mutual Interference

When installing two or more Proximity Sensors face-to-face or side-by-side, ensure that the minimum distances given in the following table are maintained.



(Unit: mm)

Shielded

Models	Model	Item	
		A	B
Quadruple distance model	E2E-X4□8	40	20
	E2E-X9□12	60	35
	E2E-X14□18	90	50
	E2E-X23□30	150	90
Triple distance model/ Spatter-resistant Triple distance model	E2E(Q)-X3□8	25	20
	E2E(Q)-X6□12	40	30
	E2E(Q)-X12□18	70	45
	E2E(Q)-X22□30	150	90
Double distance model/ Spatter-resistant Double distance model	E2E(Q)-X2□8	20	15
	E2E(Q)-X4□12	30	20
	E2E(Q)-X8□18	60	35
	E2E(Q)-X15□30	110	90
Single distance model/ Spatter-resistant Single distance model	E2E(Q)-X1R5□8	20	15
	E2E(Q)-X2□12	30	20
	E2E(Q)-X5□18	50	35
	E2E(Q)-X10□30	100	70

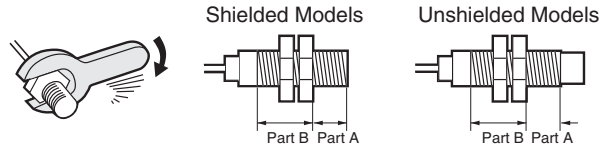
Unshielded

Models	Model	Item	
		A	B
Quadruple distance model	E2E-X8M□8	80	60
	E2E-X16M□12	160	120
	E2E-X30M□18	360	300
	E2E-X50M□30	700	480
Triple distance model	E2E-X6M□8	80	60
	E2E-X10M□12	120	100
	E2E-X20M□18	200	120
	E2E-X40M□30	380	300
Double distance model	E2E-X4M□8	80	60
	E2E-X8M□12	120	100
	E2E-X16M□18	200	120
	E2E-X30M□30	350	300
Single distance model	E2E-X2M□8	80	60
	E2E-X5M□12	120	100
	E2E-X10M□18	200	110
	E2E-X18M□30	300	200

Mounting

Tightening Force

Do not tighten the nut with excessive force.
A washer must be used with the nut.



- Note:**
1. 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.)
 2. The following strengths assume washers are being used.

Quadruple distance model, Triple distance model, Spatter-resistant Triple distance model

Size	Shielded	Part A		Part B
		Dimension (mm)	Torque	Torque
M8	Shielded	9	4 N·m	10 N·m
	Unshielded	3		
M12	Shielded	16	8 N·m	15 N·m
	Unshielded	9	6 N·m	
M18	Shielded	16	15 N·m	60 N·m (30 N·m*)
	Unshielded	3		
M30	Shielded	23	40 N·m	80 N·m
	Unshielded	8		

* If using the E2EQ (M18), refer to this torque value.

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

Size	Shielded	Part A		Part B
		Dimension (mm)	Torque	Torque
M8	Shielded	9	9 N·m	12 N·m
	Unshielded	3		
M12	---	---	30 N·m	
M18	---	---	70 N·m	
M30	---	---	180 N·m (100 N·m *)	

* If using the E2EQ (M30), refer to this torque value.

E2E/E2EQ NEXT Series

Dimensions

(Unit: mm)

Tolerance class IT16 applies to dimensions in this data sheet unless otherwise specified.

Sensors

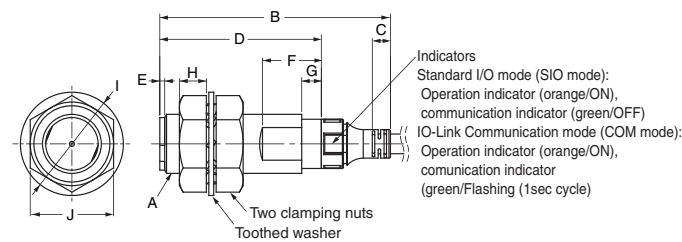
PREMIUM Model

E2E/E2EQ NEXT Series

(Quadruple distance/Triple distance/Spatter-resistant, Triple distance model)

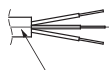
DC 3-Wire

Pre-wired Model/Pre-wired Connector Model
Shielded/Unshielded



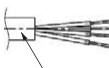
Pre-wired Models

(Operation mode: NO, NC Type)



Vinyl-insulated round cable with 3 conductors
M8, M12 size: 4-dia.
M18, M30 size: 6-dia.
(Conductor cross section: 0.2 mm² (AWG24),
Insulator diameter: 1.05 mm),
Standard length: 2 m

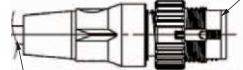
(Operation mode: NO+NC Type)



Vinyl-insulated round cable with 4 conductors
M12 size: 4.3-dia.
M18/M30 size: 6-dia.
(Conductor cross section: 0.2 mm² (AWG24),
Insulator diameter: 1.05 mm),
Standard length: 2 m

Pre-wired Connector Models (M12J)

(Operation mode: NO, NC Type)



Vinyl-insulated round cable with 3 conductors
M8, M12 size: 4-dia.
M18, M30 size: 6-dia.
(Conductor cross section: 0.2 mm² (AWG24),
Insulator diameter: 1.05 mm),
Standard length: 0.3 m

(Operation mode: NO+NC Type)
Vinyl-insulated round cable with 4 conductors
M12 size: 4.3-dia.
M18, M30 size: 6-dia.
(Conductor cross section: 0.2 mm² (AWG24),
Insulator diameter: 1.05 mm),
Standard length: 0.3 m

Shielded

Model	A	B	C	D	E	F	G*	H	I	J
E2E(Q)-X□8	M8XP1	37.8	4.4	26	1	10	4	4	15	13
E2E(Q)-X□12	M12XP1	47.1	3.7	33	1	12	4	5.5	21	17
E2E(Q)-X□18	M18XP1	55.3	8.5	38	1	12	4	6	29	24
E2E(Q)-X□30	M30XP1.5	60.3	8.3	43	1	12	4	7	42	36
E2E-X□L8	M8XP1	47.8	4.4	36	1	10	---	4	15	13
E2E-X□L12	M12XP1	69.1	3.7	55	1	12	---	5.5	21	17
E2E-X□L18	M18XP1	77.3	8.5	60	1	12	---	6	29	24
E2E-X□L30	M30XP1.5	82.3	8.3	65	1	12	---	7	42	36

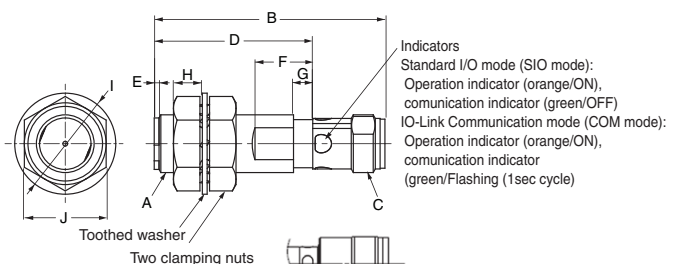
Unshielded

Model	A	B	C	D	E	F	G*	H	I	J
E2E-X□M□8	M8XP1	37.8	4.4	26	6	8	---	3	15	13
E2E-X□M□12	M12XP1	47.1	3.7	33	7	10	---	4	21	17
E2E-X□M□L8	M8XP1	47.8	4.4	36	6	8	---	3	15	13
E2E-X□M□L12	M12XP1	69.1	3.7	55	7	10	---	4	21	17
E2E-X□M□L18	M18XP1	77.3	8.5	60	13	12	---	4	29	24
E2E-S05S12□	M30XP1.5	82.3	8.3	65	15	10	---	5	42	36
E2E-S05S12□	M30X1.5	97.3	8.3	80	15	12	---	5	42	36

* Mounting part of sensor lock O-ring (Y92E-J□S□) ---: Out of a subject.

Connector Models

(M12 Connector, M8 (4-pin) Connector and M8 (3-pin) Connector)
Shielded/Unshielded



Model E2E(Q)-X□8-M1;
Shape of connection.

Shielded

Model	A	B	C	D	E	F	G*	H	I	J
E2E(Q)-X□8-M3/M5	M8XP1	39	M8XP1	26	1	10	4	4	15	13
E2E(Q)-X□8-M1	M8XP1	43	M12XP1	26	1	10	4	4	15	13
E2E(Q)-X□12-M1	M12XP1	48	M12XP1	33	1	12	4	5.5	21	17
E2E(Q)-X□18-M1	M18XP1	53	M12XP1	38	1	12	4	6	29	24
E2E(Q)-X□30-M1	M30XP1.5	58	M12XP1	43	1	12	4	7	42	36
E2E-X□L8-M3/M5	M8XP1	49	M8XP1	36	1	10	---	4	15	13
E2E-X□L8-M1	M8XP1	53	M12XP1	36	1	10	---	4	15	13
E2E-X□L12-M1	M12XP1	70	M12XP1	55	1	12	---	5.5	21	17
E2E-X□L18-M1	M18XP1	75	M12XP1	60	1	12	---	6	29	24
E2E-X□L30-M1	M30XP1.5	80	M12XP1	65	1	12	---	7	42	36

Unshielded

Model	A	B	C	D	E	F	G*	H	I	J
E2E-X□M□8-M3/M5	M8XP1	39	M8XP1	26	6	8	---	3	15	13
E2E-X□M□8-M1	M8XP1	43	M12XP1	26	6	8	---	3	15	13
E2E-X□M□12-M1	M12XP1	48	M12XP1	33	7	10	---	4	21	17
E2E-X□M□L8-M3/M5	M8XP1	49	M8XP1	36	6	8	---	3	15	13
E2E-X□M□L8-M1	M8XP1	53	M12XP1	36	6	8	---	3	15	13
E2E-X□M□L12-M1	M12XP1	70	M12XP1	55	7	10	---	4	21	17
E2E-X□M□L18-M1	M18XP1	75	M12XP1	60	13	12	---	4	29	24
E2E-X40M□L30-M1	M30XP1.5	80	M12XP1	65	15	10	---	5	42	36
E2E-X50M□L30-M1	M30XP1.5	95	M12XP1	80	15	12	---	5	42	36

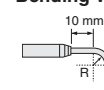
* Mounting part of sensor lock O-ring (Y92E-J□S□) ---: Out of a subject.

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



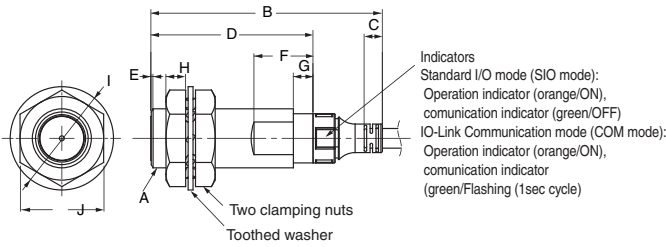
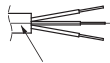
Dimensions	Sc (mm)
M8	- (0)
M12	- (0)
M18	2.5
M30	2.5

BASIC Model

E2E/E2EQ NEXT Series

(Double distance/Single distance/Spatter-resistant, Double distance/Single distance model)

DC 3-Wire

Pre-wired Model/Pre-wired Connector Model
Shielded/Unshielded**Pre-wired Models**
(Operation mode: NO, NC Type)**Pre-wired Connector Models (M1TJ)**

Vinyl-insulated round cable with 3 conductors
M8, M12 size: 4-dia.
M18, M30 size: 6-dia.
(Conductor cross section: 0.2 mm² (AWG24),
Insulator diameter: 1.05 mm),
Standard length: 2 m

(Operation mode: NO+NC Type)



Vinyl-insulated round cable with 4 conductors
M12 size: 4.3-dia.
M18, M30 size: 6-dia.
(Conductor cross section: 0.2 mm² (AWG24),
Insulator diameter: 1.05 mm),
Standard length: 2 m



(Operation mode: NO, NC Type)
Vinyl-insulated round cable with 3 conductors
M8, M12 size: 4-dia.
M18, M30 size: 6-dia.
(Conductor cross section: 0.2 mm² (AWG24),
Insulator diameter: 1.05 mm),
Standard length: 0.3 m

(Operation mode: NO+NC Type)
Vinyl-insulated round cable with 4 conductors
M12 size: 4.3-dia.
M18, M30 size: 6-dia.
(Conductor cross section: 0.2 mm² (AWG24),
Insulator diameter: 1.05 mm),
Standard length: 0.3 m

Shielded

Model	A	B	C	D	E	F*1	G*2	H	I	J
E2E(Q)-X□8	M8XP1	37.8	4.4	26	---	10 (8)	4	3	15	13
E2E(Q)-X□12	M12XP1	47.1	3.7	33	---	12 (10)	4	4	21	17
E2E(Q)-X□18	M18XP1	55.3	8.5	38	---	12 (10)	4	4	29	24
E2E(Q)-X□30	M30XP1.5	60.3	8.3	43	---	12 (10)	4	5	42	36
E2E-X□L8	M8XP1	47.8	4.4	36	---	8	---	3	15	13
E2E-X□L12	M12XP1	69.1	3.7	55	---	10	---	4	21	17
E2E-X□L18	M18XP1	77.3	8.5	60	---	10	---	4	29	24
E2E-X□L30	M30XP1.5	82.3	8.3	65	---	10	---	5	42	36

Unshielded

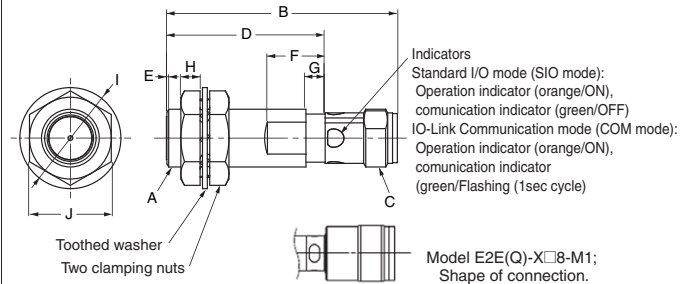
Model	A	B	C	D	E*3	F	G*2	H	I	J
E2E-X□M□8	M8XP1	37.8	4.4	26	6	8	---	3	15	13
E2E-X□M□12	M12XP1	47.1	3.7	33	7	10	---	4	21	17
E2E-X□M□18	M18XP1	55.3	8.5	38	10	10	---	4	29	24
E2E-X□M□30	M30XP1.5	60.3	8.3	43	13	10	---	5	42	36
E2E-X□M□L8	M8XP1	47.8	4.4	36	6	8	---	3	15	13
E2E-X□M□L12	M12XP1	69.1	3.7	55	7	10	---	4	21	17
E2E-X□M□L18	M18XP1	77.3	8.5	60	10	10	---	4	29	24
E2E-X□M□L30	M30XP1.5	82.3	8.3	65	13 (15)	10	---	5	42	36

*1. If using the E2EQ, refer to () dimensions.

*2. Mounting part of sensor lock O-ring (Y92E-J□S□) ---: Out of a subject.

*3. When using X30M□30, refer to (15).

Connector Models

(M12 Connector, M8 (4-pin) Connector and M8 (3-pin) Connector)
Shielded/Unshielded

Shielded

Model	A	B	C	D	E	F*1	G*2	H	I	J
E2E(Q)-X□30 X□8-M3/M5	M8XP1	39	M8XP1	26	---	10 (8)	4	3	15	13
E2E(Q)-X□8-M1	M8XP1	43	M12XP1	26	---	10 (8)	4	3	15	13
E2E(Q)-X□12-M1	M12XP1	48	M12XP1	33	---	12 (10)	4	4	21	17
E2E(Q)-X□18-M1	M18XP1	53	M12XP1	38	---	12 (10)	4	4	29	24
E2E(Q)-X□30-M1	M30XP1.5	58	M12XP1	43	---	12 (10)	4	5	42	36
E2E-X□L8-M3/M5	M8XP1	49	M8XP1	36	---	8	---	3	15	13
E2E-X□L8-M1	M8XP1	53	M12XP1	36	---	8	---	3	15	13
E2E-X□L12-M1	M12XP1	70	M12XP1	55	---	10	---	4	21	17
E2E-X□L18-M1	M18XP1	75	M12XP1	60	---	10	---	4	29	24
E2E-X□L30-M1	M30XP1.5	80	M12XP1	65	---	10	---	5	42	36

Unshielded

Model	A	B	C	D	E*3	F	G*2	H	I	J
E2E-X□M□8-M3/M5	M8XP1	39	M8XP1	26	6	8	---	3	15	13
E2E-X□M□8-M1	M8XP1	43	M12XP1	26	6	8	---	3	15	13
E2E-X□M□12-M1	M12XP1	48	M12XP1	26	7	10	---	4	21	17
E2E-X□M□18-M1	M18XP1	53	M12XP1	38	10	10	---	4	29	24
E2E-X□M□30-M1	M30XP1.5	58	M12XP1	43	13	10	---	5	42	36
E2E-X□M□L8-M3-M5	M8XP1	49	M8XP1	36	6	8	---	3	15	13
E2E-X□M□L8-M1	M8XP1	53	M12XP1	36	6	8	---	3	15	13
E2E-X□M□L12-M1	M12XP1	70	M12XP1	55	7	10	---	4	21	17
E2EX□M□L18-M1	M18XP1	75	M12XP1	60	10	10	---	4	29	24
E2E-X□M□L30-M1	M30XP1.5	80	M12XP1	65	13 (15)	10	---	5	42	36

*1. If using the E2EQ, refer to () dimensions.

*2. Mounting part of sensor lock O-ring (Y92E-J□S□) ---: Out of a subject.

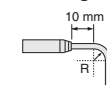
*3. When using X30M□30, refer to (15).

Mounting Hole Dimensions



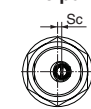
Dimensions	F (mm)
M8	8.5 dia. +0.5 0
M12	12.5 dia. +0.5 0
M18	18.5 dia. +0.5 0
M30	30.5 dia. +0.5 0

Angle R of the Bending Wire



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

Wire pullout position

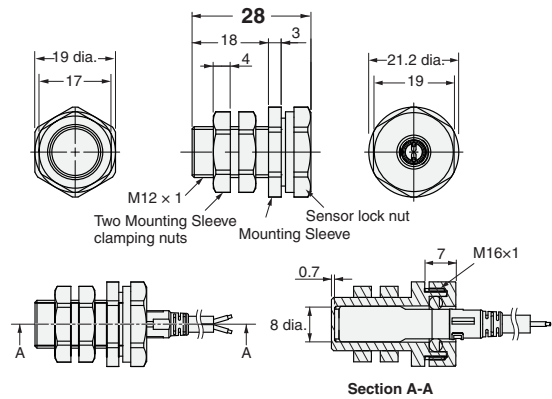


Dimensions	Sc (mm)
M8	- (0)
M12	- (0)
M18	2.5
M30	2.5

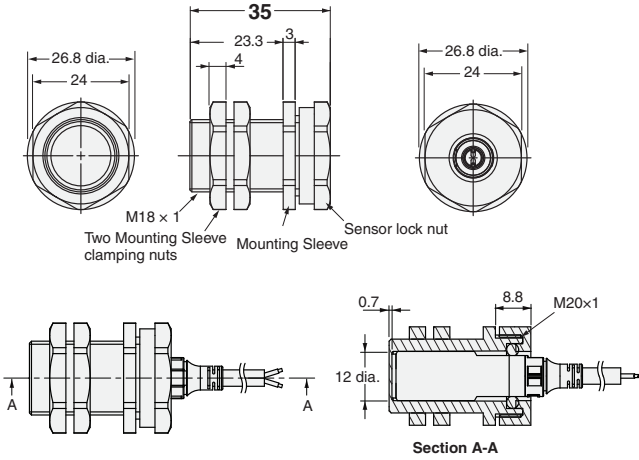
Accessories (Sold Separately)

e-jig (Mounting Sleeves)

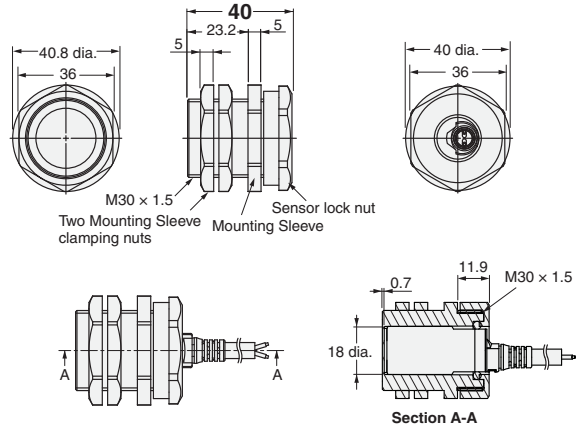
Y92E-J8S12



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

Long-distance Detection Prevents Unexpected Facility Stoppages

- The world's longest sensing distance*¹
Nearly double the sensing distance of previous
- With high-brightness LED, the indicator is visible anywhere from 360°.
- Only 10 Seconds*² to Replace a Proximity Sensor with the "e-jig" (Mounting Sleeve).
- Cables with enhanced oil resistance enabled 2-year oil resistance*³.
- 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 72 and 74 for details. However, E2EQ series is excluded.



Be sure to read *Safety Precautions* on page 80.



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

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
		M1TGJR	M12 Pre-wired Smartclick Connector Models (Robot (bending-resistant) PVC cable)
(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 82.]

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 81.

*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 84.]

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 81.

*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 85.]

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
M12 Smartclick Connector Straight type 	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
M12 Smartclick Connector Straight type  Right-angle type 	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	
				Right-angle	1	XS5F-D422-C80-F	
					2	XS5F-D422-D80-F	
					3	XS5F-D422-E80-F	
					5	XS5F-D422-G80-F	
					10	XS5F-D422-J80-F	
	PVC robot cable	Socket and Plug on Cable Ends	6 dia.	Straight (Socket)/ Straight (Plug)	1	XS5W-D421-C81-F	
					2	XS5W-D421-D81-F	
					3	XS5W-D421-E81-F	
					5	XS5W-D421-G81-F	
					10	XS5W-D421-J81-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 around 2 years of oil resistance, but will vary depending on the product.

e-jig (Mounting Sleeves) [Refer to Dimensions on page 86.]

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		Shielded	Unshielded	Shielded	Unshielded	Shielded	Unshielded	Shielded	Unshielded	
	Model		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 75.)								
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 Refer to the timing charts under <i>I/O Circuit Diagrams</i> on page 78 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	±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 4.9 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 75.)			
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 78 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/s² 10 times each in X, Y, and Z directions	1,000 m/s² 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	M8	M12	M18
	Shielded	Shielded		
	Model	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 75.)		
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 78 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.

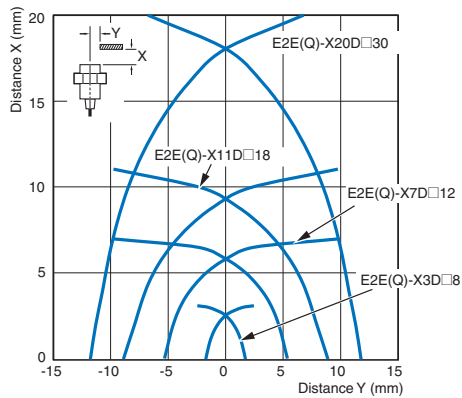
Engineering Data (Reference Value)

Sensing Area

Triple distance model, Spatter-resistant Triple distance model

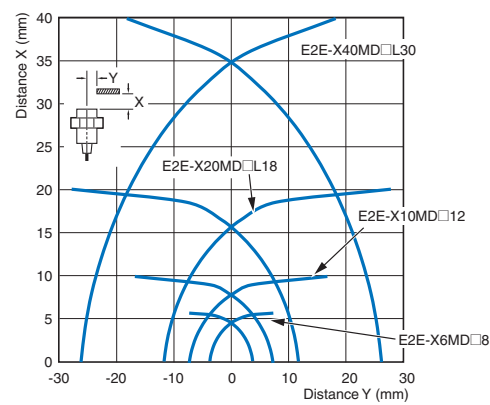
Shielded Models

E2E(Q)-X□D□



Unshielded Models

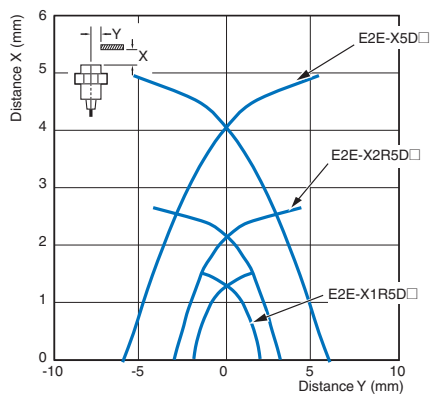
E2E-X□MD□



Single distance model

Shielded Models

E2E-X1R5D□/-X2R5D□/-X5D□

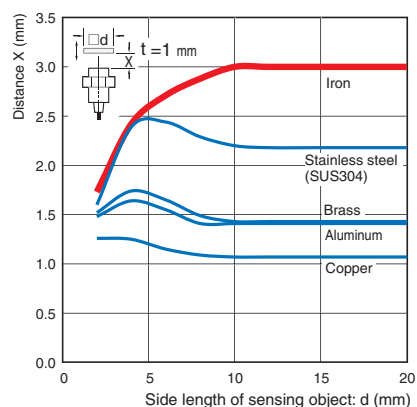


Influence of Sensing Object Size and Materials

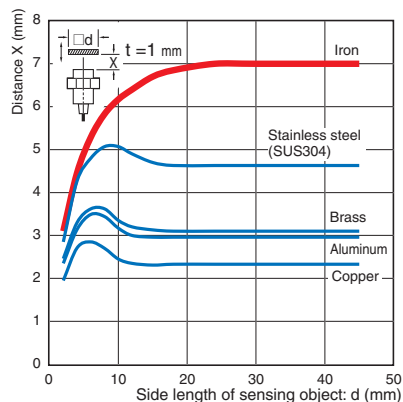
Triple distance model, Spatter-resistant Triple distance model

Shielded Models

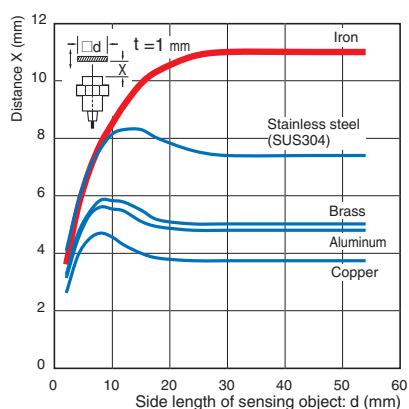
E2E(Q)-X3D□8



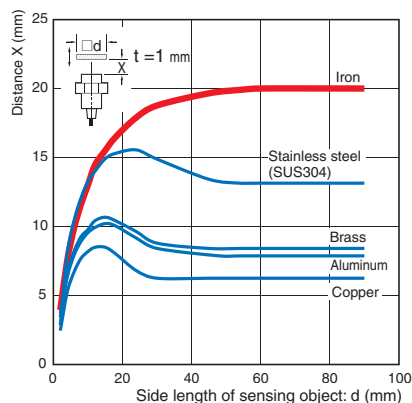
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E2E(Q)-X11D□18

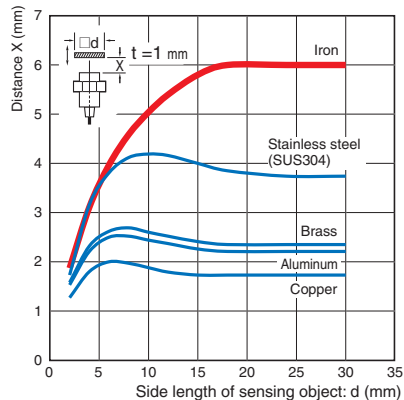


E2E(Q)-X20D□30

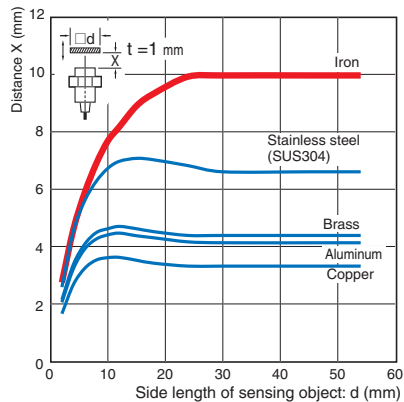


Unshielded Models

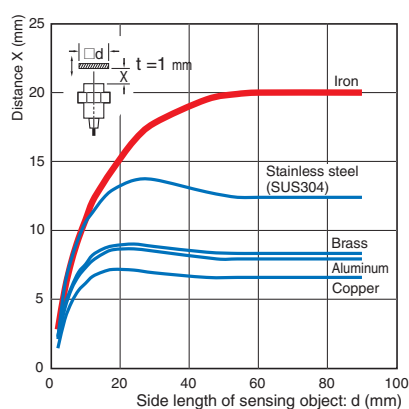
E2E-X6MD□8



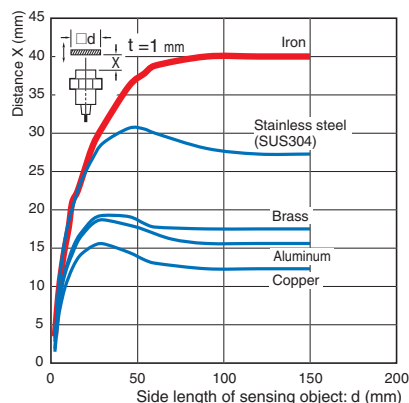
E2E-X10MD□12



E2E-X20MD□L18



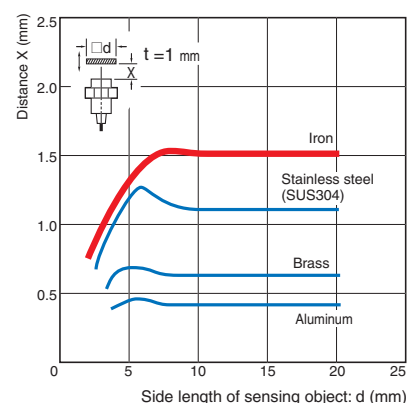
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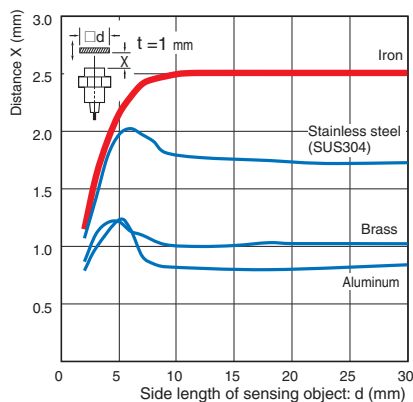
Single distance model

Shielded Models

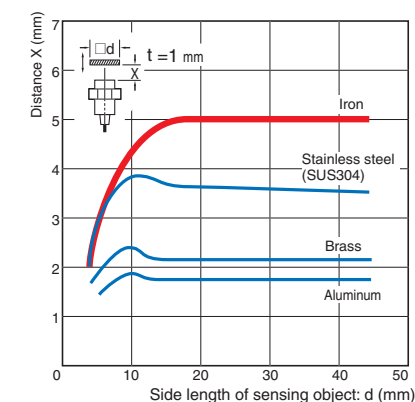
E2E-X1R5D□



E2E-X2R5D□



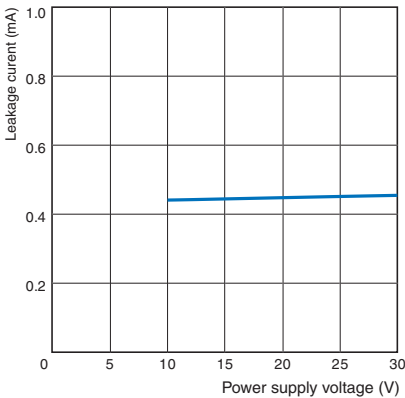
E2E-X5D□



Leakage Current

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

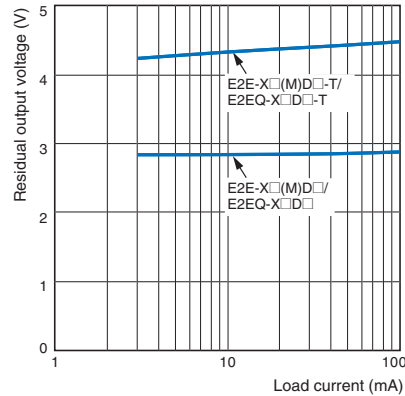
E2E-X□(M)D□(-T)/E2EQ-X□D□(-T)



Residual Output Voltage

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

E2E-X□(M)D□(-T)/E2EQ-X□D□(-T)



E2E/E2EQ NEXT Series

I/O Circuit Diagrams

DC 2-Wire Models

Operation mode	Model	Timing Chart	Output circuit
NO	E2E(Q)-X□D1□		Connector Pin Arrangement Note: Pins 2 and 3 are not used.
	E2E(Q)-X□D1□-T		Connector Pin Arrangement Note: Pins 1 and 2 are not used. Note1. The load can be connected to either the +V or 0 V side. 2. The E2E□-X□D1□(-M1TGJ)-T has no polarity. There is no need to be concerned about the polarity of brown and blue wires, or pins 3 and 4.
NC	E2E(Q)-X□D2□		Connector Pin Arrangement Note: Pins 3 and 4 are not used.
	E2E(Q)-X□D2□-T		Connector Pin Arrangement Note: Pins 3 and 4 are not used. Note1. The load can be connected to either the +V or 0 V side. 2. The E2E□-X□D1□(-M1TGJ)-T has no polarity. There is no need to be concerned about the polarity of brown and blue wires, or pins 1 and 2.

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 <i>XS5 NEXT Series</i> on page 87. <i>XS5 Series</i> 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.

E2E/E2EQ NEXT Series

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	
This product is not designed or rated for ensuring safety of persons either directly or indirectly. Do not use it for such purposes.	
	
Risk of explosion. Do not connect sensor to AC power supply.	
	

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

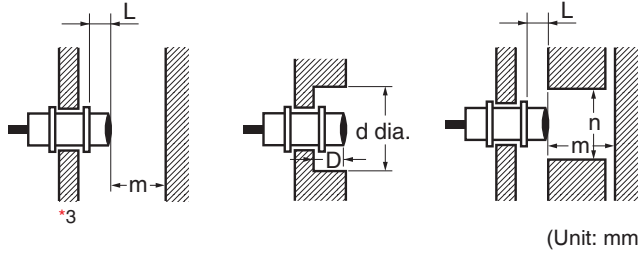
1. Do not install the product in the following locations. Doing so may result in product failure or malfunction.
 - (1) Outdoor locations directly subject to sunlight, rain, snow, water droplets, or oil.
 - (2) Locations subject to atmospheres with chemical vapors, in particular solvents and acids.
 - (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.

● 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	L	0	0 *4	0	0
	d	20	20	50	70
	D	2	4 *5	4	8
	m	9	18	33	60
	n	18	20	54	90
Triple distance model E2E-X□MD□(-T) *2	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	L	0	0	0	---
	d	8	12	18	
	D	0	0	0	
	m	4.5	8	20	
	n	12	18	27	

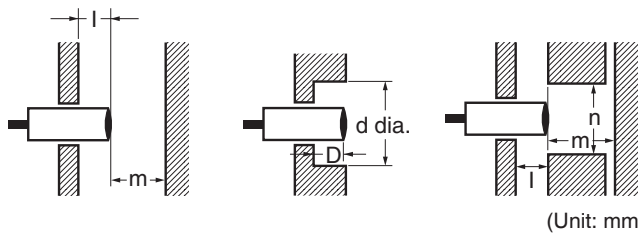
Note: Nuts that are supplied along with each Sensor (*1, *2) are different. Refer to *Dimensions* for details on shapes.

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

*4. If using the E2EQ-X7D□12, refer to L=2.

*5. If using the E2EQ-X7D□12, refer to D=7.5.

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

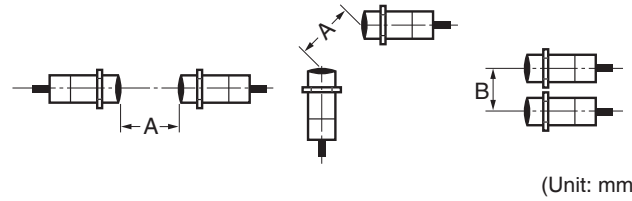


(Unit: mm)

Type	Item	M8	M12	M18	M30
Triple distance model/ Spatter-resistant Triple distance model E2E(Q)-X□D□(-T)	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)	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)	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.



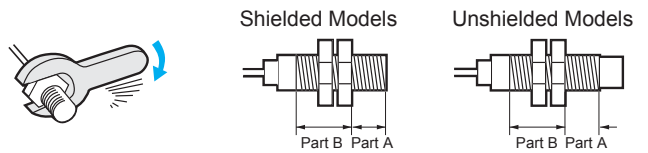
(Unit: mm)

Type	Item	M8	M12	M18	M30
Triple distance model/ Spatter-resistant Triple distance model E2E(Q)-X□D□(-T)	A	25	40	70	140
	B	20	30	45	70
Triple distance model E2E-X□MD□(-T)	A	80	120	200	380
	B	60	100	120	280
Single distance model E2E-X□R5D□(-T) E2E-X5D□(-T)	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: 1. 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.)
2. 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	8 N·m	15 N·m
	Unshielded	9	6 N·m	
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

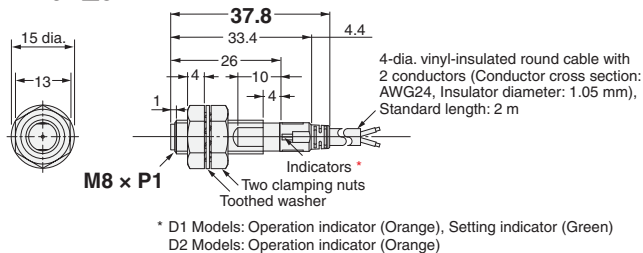
Pre-wired Models Shielded



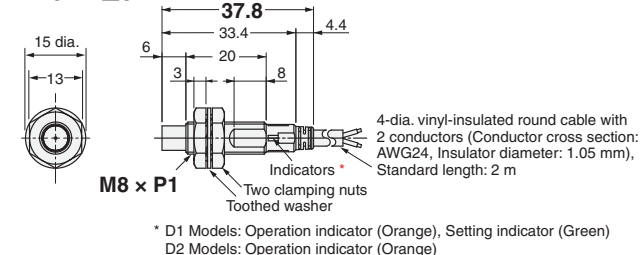
Pre-wired Models Unshielded



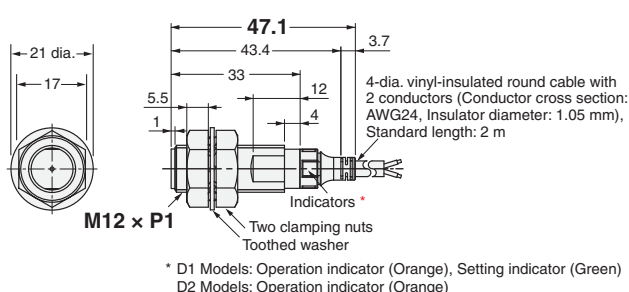
E2E-X3D□8



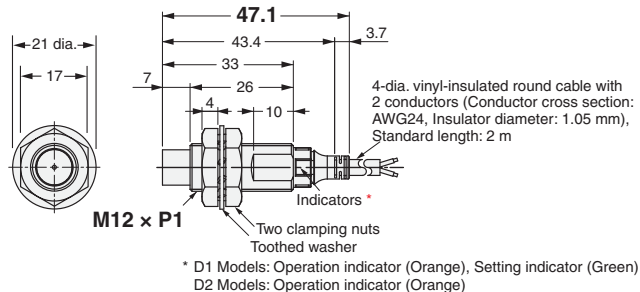
E2E-X6MD□8



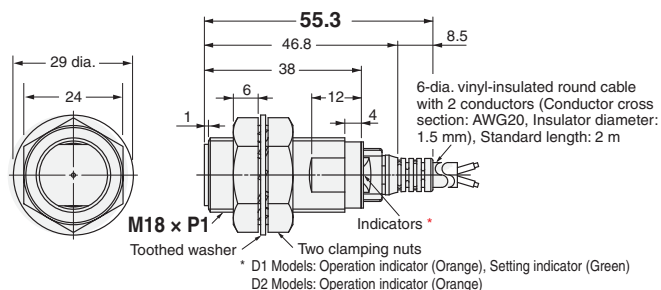
E2E-X7D□12



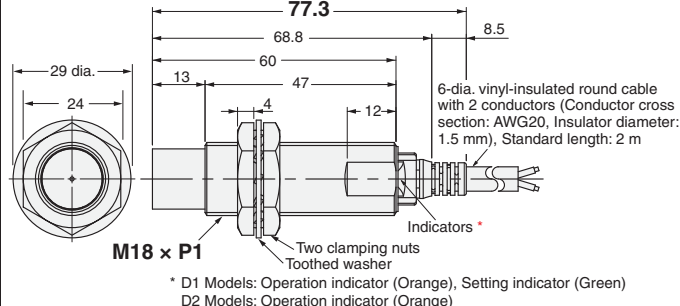
E2E-X10MD□12



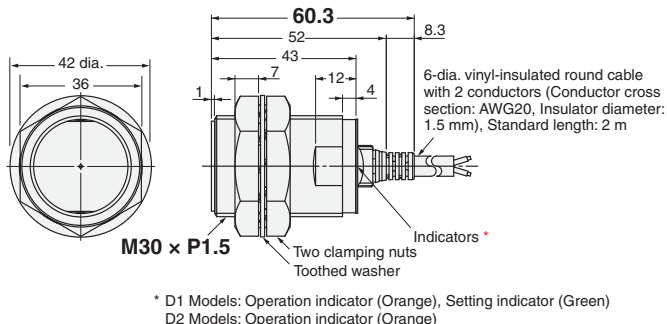
E2E-X11D□18



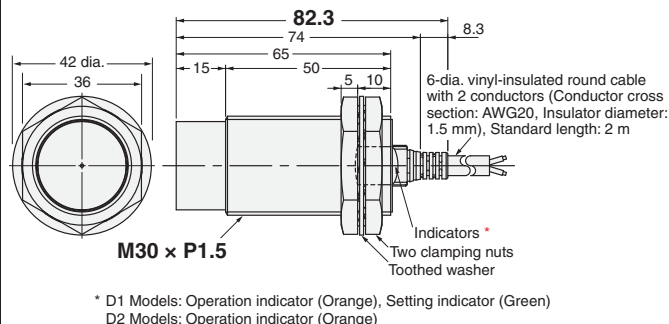
E2E-X20MD□L18



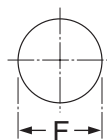
E2E-X20D□30



E2E-X40MD□L30

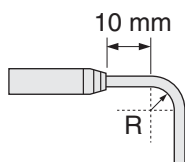


Mounting Hole Dimensions



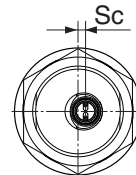
Dimensions	F (mm)
M8	8.5 dia. $+0.5$ ₀
M12	12.5 dia. $+0.5$ ₀
M18	18.5 dia. $+0.5$ ₀
M30	30.5 dia. $+0.5$ ₀

Angle R of the Bending Wire



Dimensions	R (mm)
M8	12
M12	
M18	18
M30	

Wire pullout position

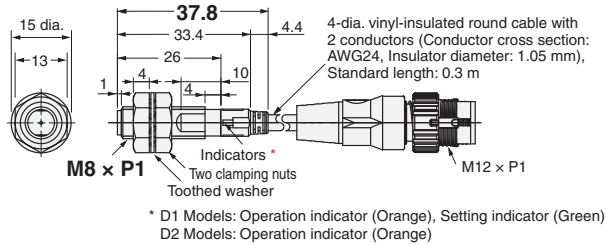


Dimensions	Sc (mm)
M8	- (0)
M12	
M18	2.5
M30	

Pre-wired Connector Models Shielded



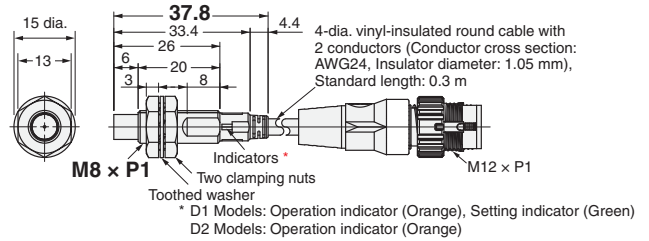
E2E-X3D□8-M1TGJ



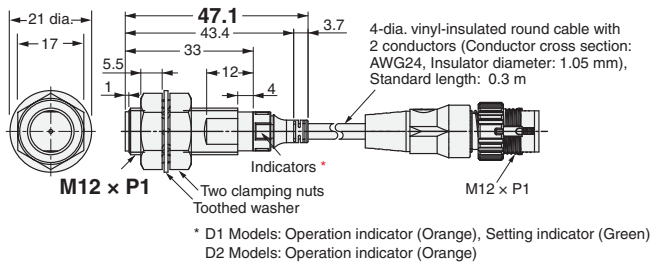
Pre-wired Connector Models Unshielded



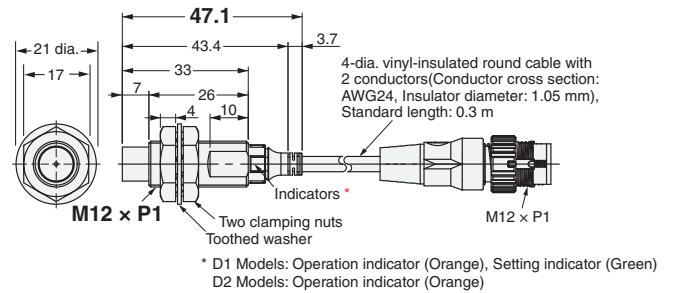
E2E-X6MD□8-M1TGJ



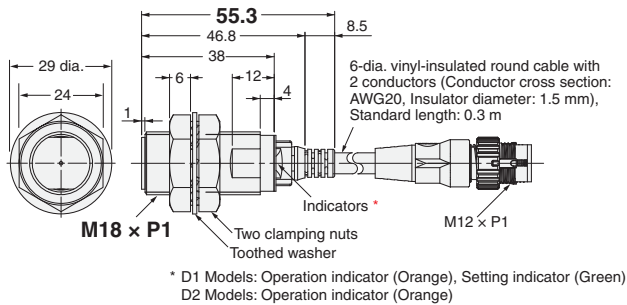
E2E-X7D□12-M1TGJ



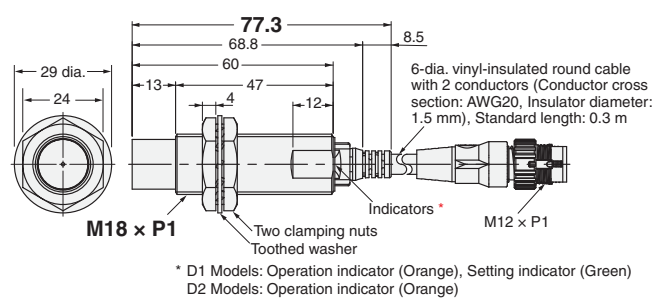
E2E-X10MD□12-M1TGJ



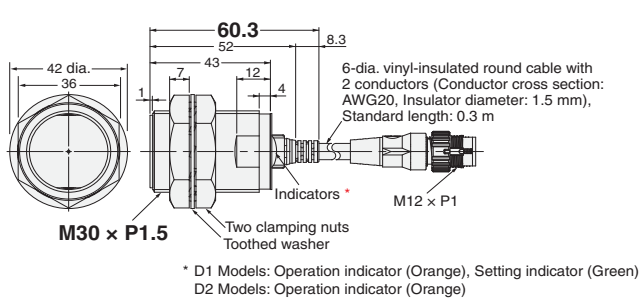
E2E-X11D□18-M1TGJ



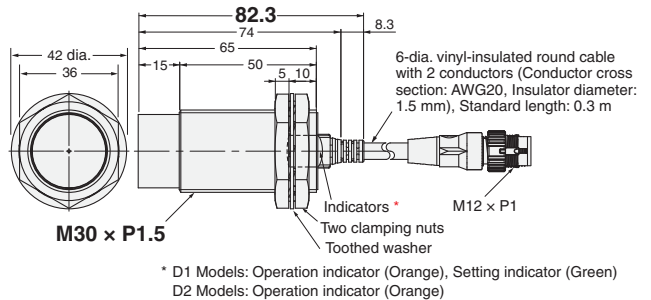
E2E-X20MD□18-M1TGJ



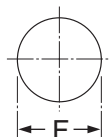
E2E-X20D□30-M1TGJ



E2E-X40MD□L30-M1TGJ

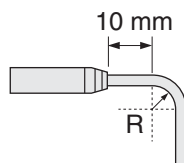


Mounting Hole Dimensions



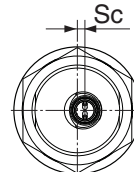
Dimensions	F (mm)
M8	8.5 dia. ^{+0.5} ₀
M12	12.5 dia. ^{+0.5} ₀
M18	18.5 dia. ^{+0.5} ₀
M30	30.5 dia. ^{+0.5} ₀

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

E2E/E2EQ NEXT Series

Sensors

E2EQ NEXT Series (Spatter-resistant Triple distance model)

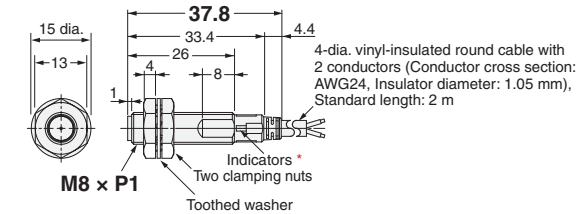
DC 2-wire

Pre-wired Models

Shielded

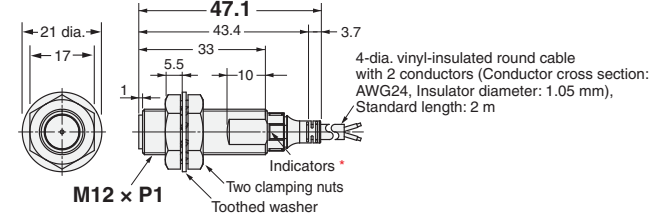


E2EQ-X3D□8



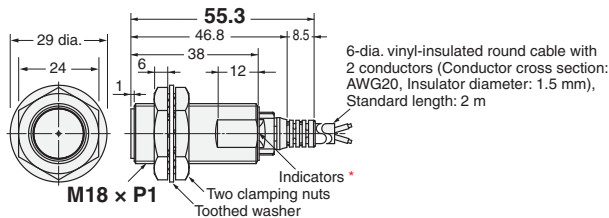
* D1 Models: Operation indicator (Orange), Setting indicator (Green)
D2 Models: Operation indicator (Orange)

E2EQ-X7D□12



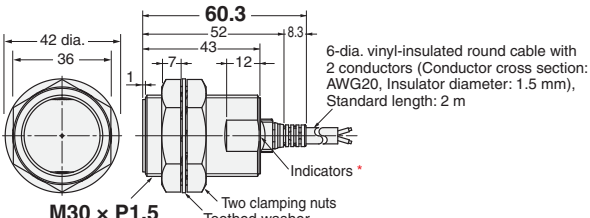
* D1 Models: Operation indicator (Orange), Setting indicator (Green)
D2 Models: Operation indicator (Orange)

E2EQ-X11D□18



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

E2EQ-X20D□30



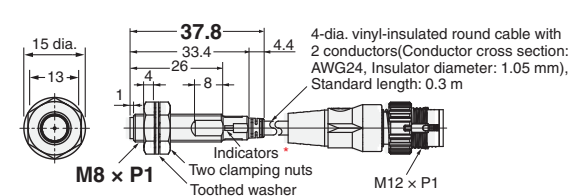
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D2 Models: Operation indicator (Orange)

Pre-wired Connector Models

Shielded

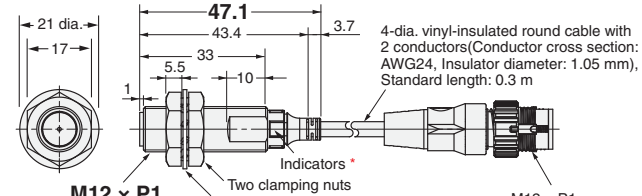


E2EQ-X3D□8-M1TGJ



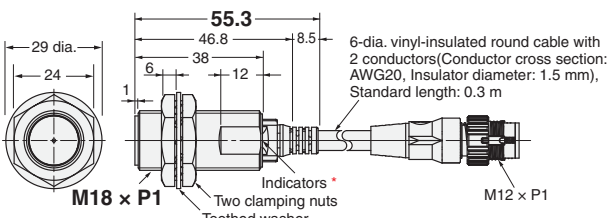
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D2 Models: Operation indicator (Orange)

E2EQ-X7D□12-M1TGJ



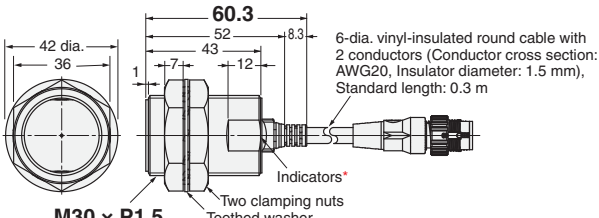
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D2 Models: Operation indicator (Orange)

E2EQ-X11D□18-M1TGJ



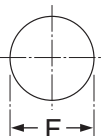
* D1 Models: Operation indicator (Orange), Setting indicator (Green)
D2 Models: Operation indicator (Orange)

E2EQ-X20D□30-M1TGJ



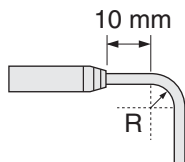
* D1 Models: Operation indicator (Orange), Setting indicator (Green)
D2 Models: Operation indicator (Orange)

Mounting Hole Dimensions



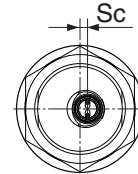
Dimensions	F (mm)
M8	8.5 dia. ^{+0.5} ₀
M12	12.5 dia. ^{+0.5} ₀
M18	18.5 dia. ^{+0.5} ₀
M30	30.5 dia. ^{+0.5} ₀

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	- (0)
M30	2.5

Sensors

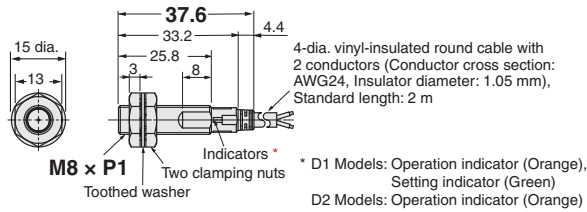
E2E NEXT Series (Single distance model)

DC 2-wire

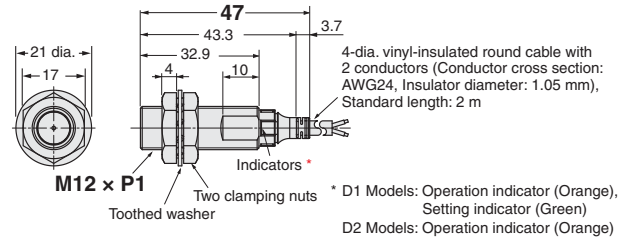
Pre-wired Models Shielded



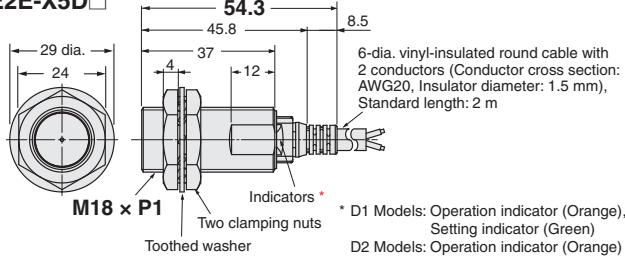
E2E-X1R5D□



E2E-X2R5D□



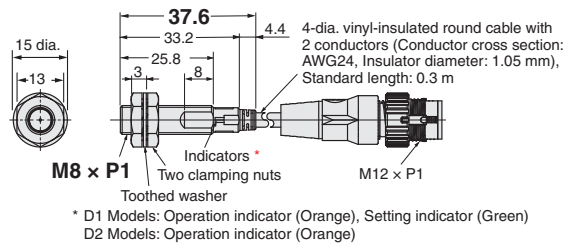
E2E-X5D□



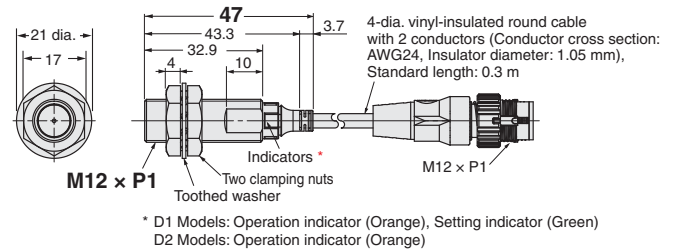
Pre-wired Connector Models Shielded



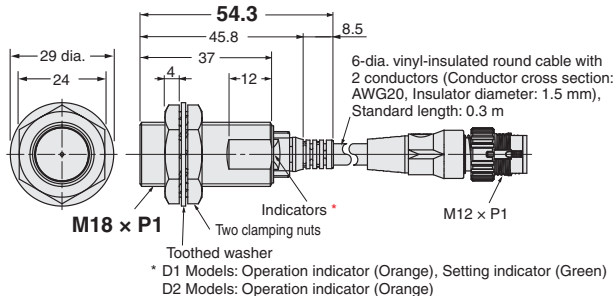
E2E-X1R5D□-M1TGJ



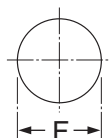
E2E-X2R5D□-M1TGJ



E2E-X5D□-M1TGJ

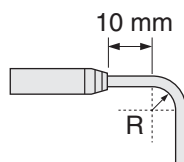


Mounting Hole Dimensions



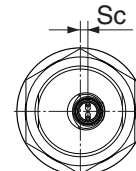
Dimensions	F (mm)
M8	8.5 dia. $^{+0.5}_0$
M12	12.5 dia. $^{+0.5}_0$
M18	18.5 dia. $^{+0.5}_0$
M30	30.5 dia. $^{+0.5}_0$

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