

NEW

Proximity Sensors

DC 3-Wire Models

E2E NEXT Series

OMRON

9 mm
[Quadruple distance model of M12 sized]

Exceptional
sensing
range*1

Enables easier and
standardized design

 IO-Link

*1. Based on August 2022 OMRON investigation.

Enables easier and standardized previously not possible

PREMIUM Model

Easy design

Standardized design

Exceptional sensing range^{*1} **9** ^[M12] mm^{*2}

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.

*1. Based on August 2022 OMRON investigation.

*2. Quadruple distance models of M12 sized

P.4-7

Quadruple distance model

9 mm [M12]

Triple distance model

6 mm [M12]

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

4 mm [M12]

Single distance model

2 mm [M12]




designs



New standards for usability

Early error detection

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

P.8

Quick recovery

10 second replaceable with e-jig (adaptor)

P.10

360 degree view with high visibility LED indicator

P.10

Less unexpected facility stoppages

Strong resistance to cutting oil

2-year oil resistance *3

P.12

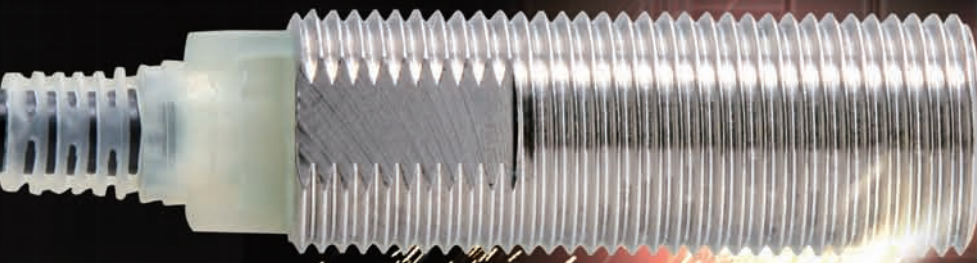
*3. Pre-wired models and pre-wired connector models.

Easy design

Equipped with exceptional sensing range*1 to enable collision-free sensor installation

Enables designs with more distance between the sensor and the sensing object, thereby reducing unexpected facility stoppages due to collision and false detection, which occurred with previous proximity sensors.

Previous models

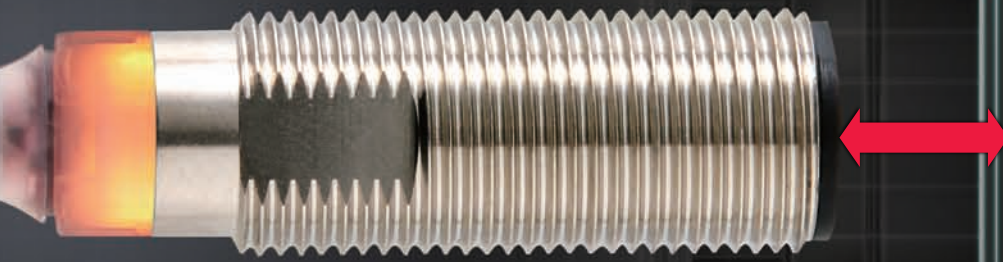


E2E NEXT

Exceptional sensing range*1

9 mm [Quadruple distance models of M12 sized]

*1. Based on August 2022 OMRON investigation.



Stable detection without collision

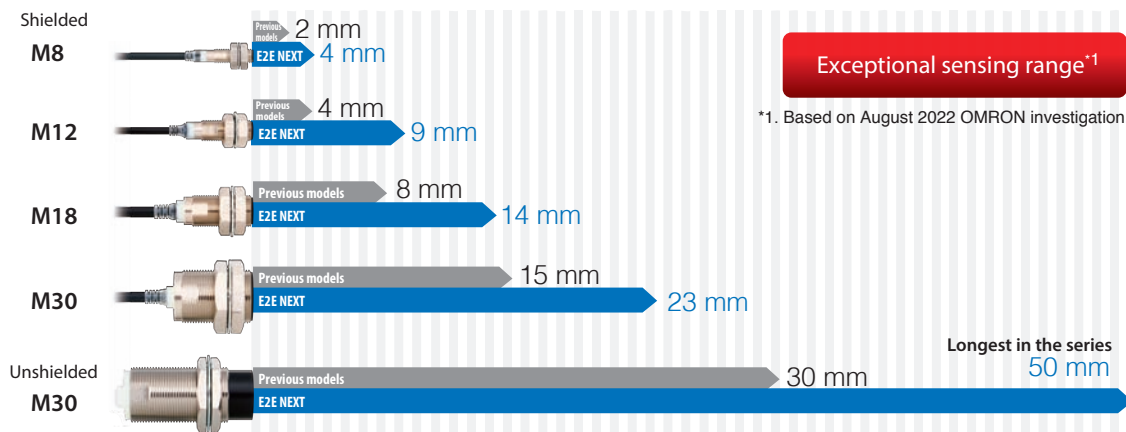
Allows for more spacious design with less risk of contact

With previous models, to avoid false detections, you were forced to adopt sensor installation designs that risked contact. The E2E NEXT PREMIUM Proximity Sensor can detect accurately from a greater distance, which means you can adopt designs with more space and less risk of contact.

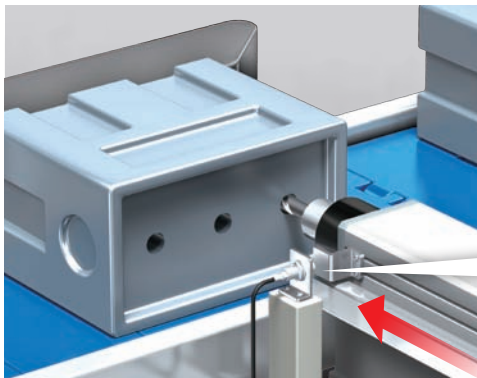


■ Approximately double the sensing distance of previous models

Sensing distance comparisons (Quadruple distance models)



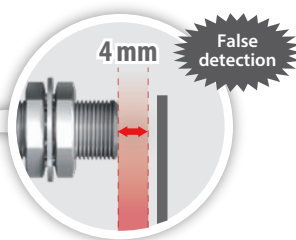
Less false detection even when a stationary gets away from the sensor due to equipment vibration



Spindle presence detection

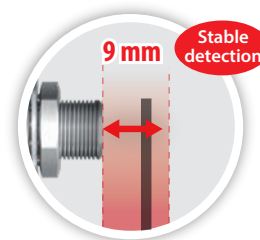
Previous models

The equipment vibration widens the distance between a stationary and a sensor to cause false detection and facility stoppages.



E2E NEXT

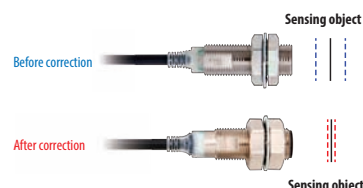
Long-distance detection enhances the degree of the detection margin. Stable detection even when a stationary gets away.



* Quadruple distance models of M12 sized

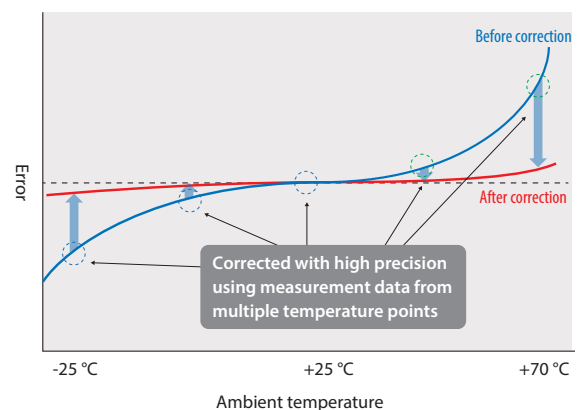
PROX3 hybrid circuitry with Thermal Distance Control 2 eliminates ambient temperature influence to enable extended sensing ranges.

Proximity sensors with longer sensing distance require increased sensitivity. However, with the increased sensitivity, temperature changes will have bigger influence in sensing distance, and differences between individual sensors will be bigger. E2E NEXT Proximity Sensors (3-wire models) solve these issues by newly implementing Thermal Distance Control 2, a technology to enable extended sensing ranges. It enables in-line measurements of each sensor's temperature characteristics, using multiple temperature points, in IoT-enabled production processes. The optimal correction values are then calculated based on our unique algorithm. The values are written into the analog digital hybrid IC (PROX3) for shipping to minimize differences between sensors and the influence of temperature changes that may occur in the customer's environments.



PATENTED^{*2} Thermal Distance Control 2 technology reduces the extent of error

Sensing distance fluctuation due to ambient temperature



*2. "Patent Pending" means that we applied for a patent in Japan, and "Patented" means that we obtained a patent in Japan. (As of September 2022)

Standardized design

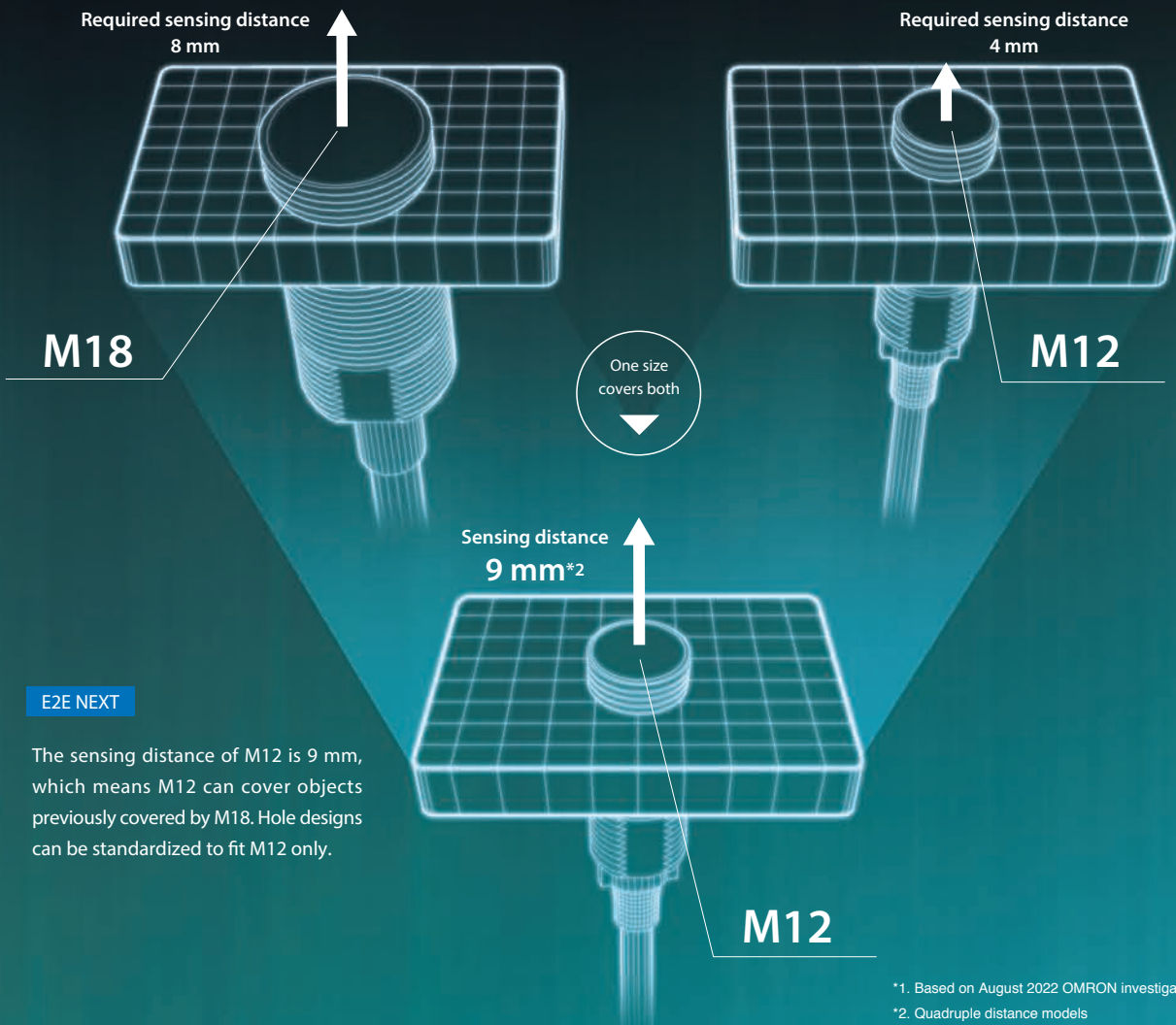
Exceptional sensing range*¹

allows you to standardize your design with a single one-size model

Ensures equivalent sensing distance while being one size smaller than previous models. Equipment and facilities formerly designed to use sensors of multiple sizes can now be designed to use sensors that are all the same size, allowing you to standardize your designs.

Case where either M12 or M18 is used depending on sensing distance

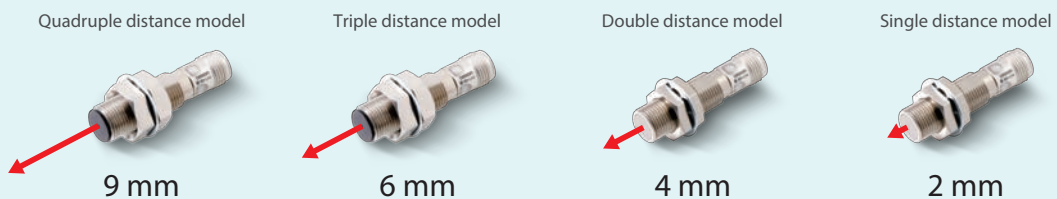
Previous modes Two different types of hole designs were required for the sensing distance of 4 mm and 8 mm.



E2E NEXT
The sensing distance of M12 is 9 mm, which means M12 can cover objects previously covered by M18. Hole designs can be standardized to fit M12 only.

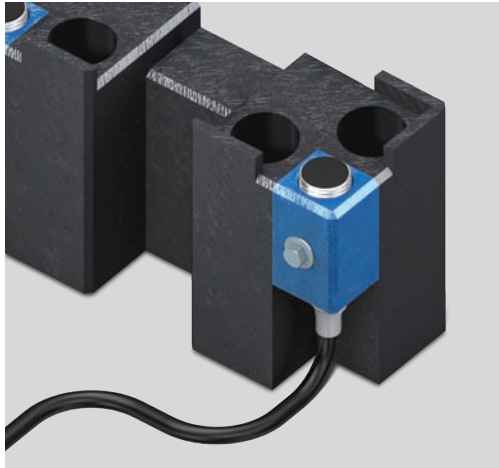
*1. Based on August 2022 OMRON investigation.
*2. Quadruple distance models

Four types of M12 size sensors are available to meet the need for variable sensing distances for different installation sites.



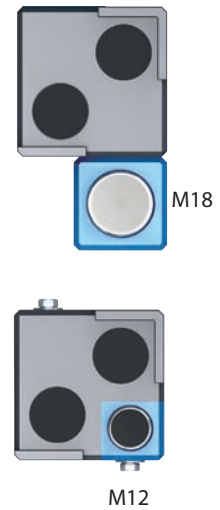
Easy to install, even where space is limited

E2E NEXT PREMIUM Model Proximity Sensors ensure equivalent sensing distance while being one size smaller than previous models, allowing you to install them in spaces where conventional sensors were too big to fit.



Previous models Proximity sensors could not be installed due to limited space.

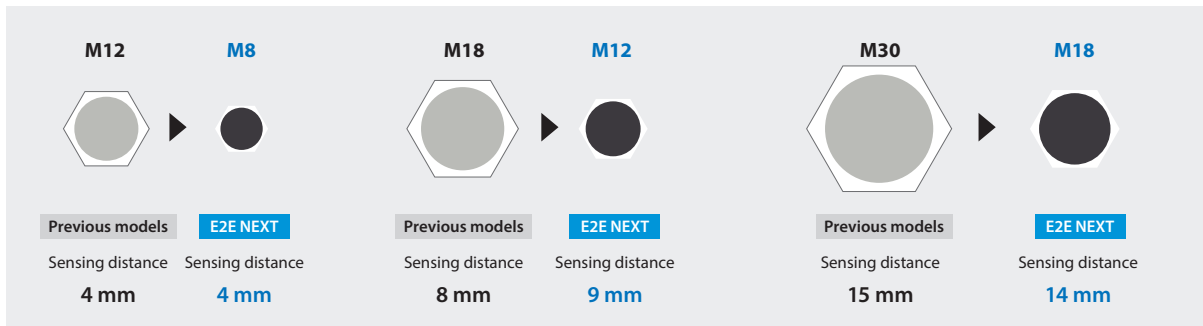
E2E NEXT **They can be installed due to limited space.**
One size smaller to allow you to install proximity sensors where space is limited.



Note: When installing proximity sensors, make sure to factor the influence of surrounding metal into your designs.
(Refer to *Influence of Surrounding Metal upon Design* on page 51, page 70, page 84 and page 105 for details.)

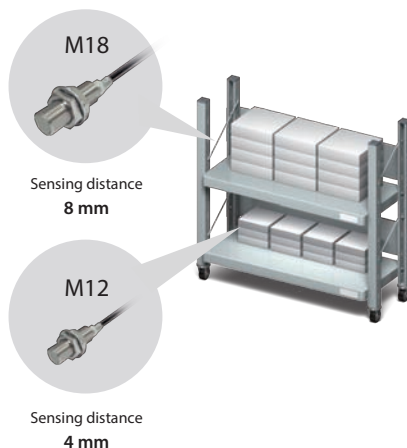
■ One size smaller than previous models

Size comparisons between models with equivalent sensing distance ("E2E NEXT" refers to quadruple distance models)

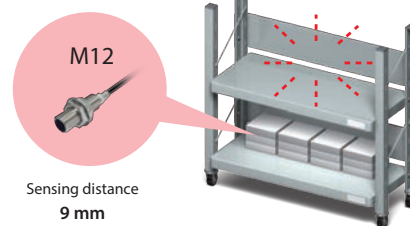


Unifying the model types to reduce the number of parts kept in inventory.

Previous models Two models (M12 and M18) stocked



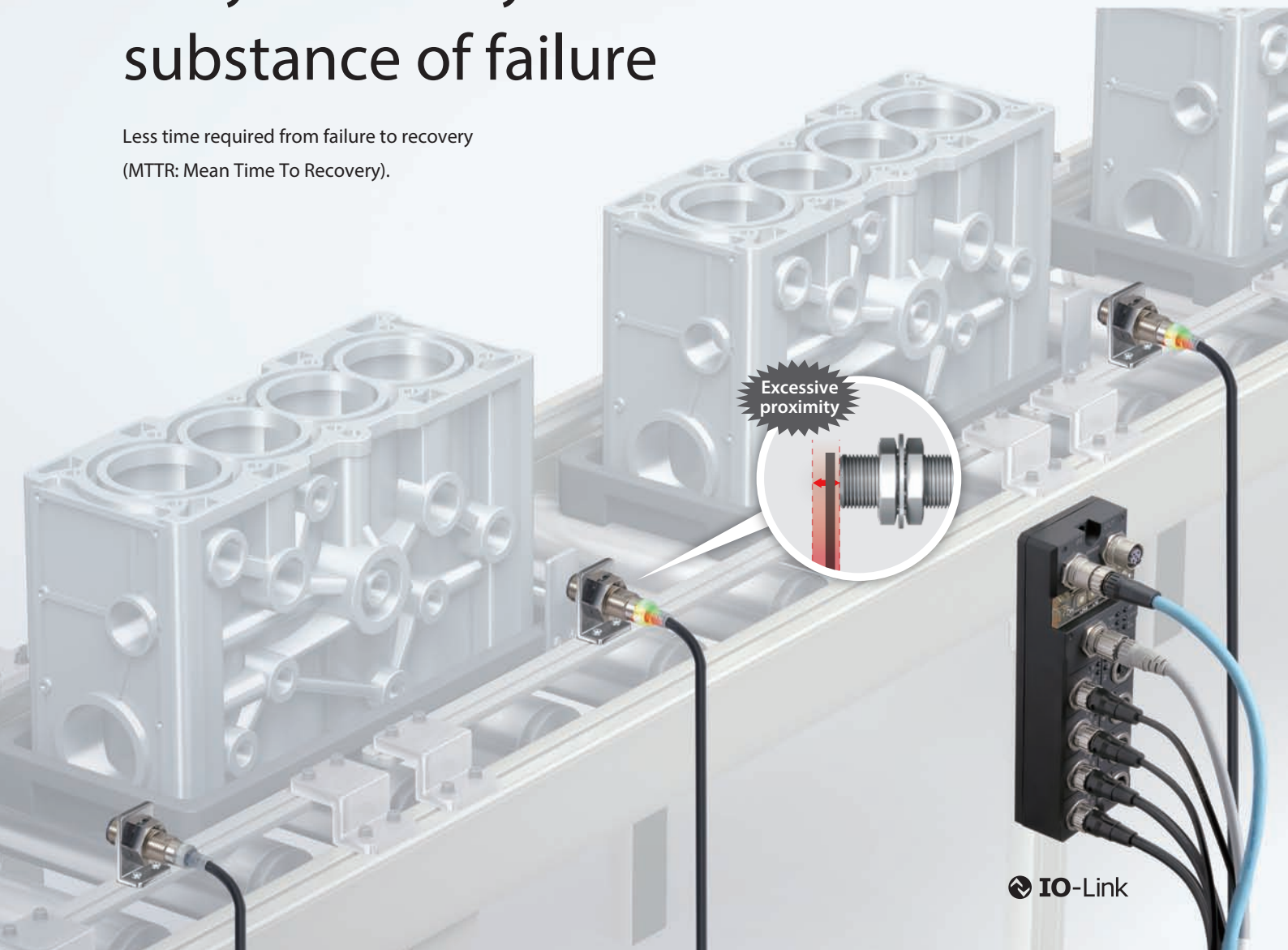
E2E NEXT The extended range of the new sensors allows you to reduce the sensor size from M18 down to M12.



New standards for usability | Early error detection

Enables facility designs that allow for early discovery of the site and substance of failure

Less time required from failure to recovery
(MTTR: Mean Time To Recovery).

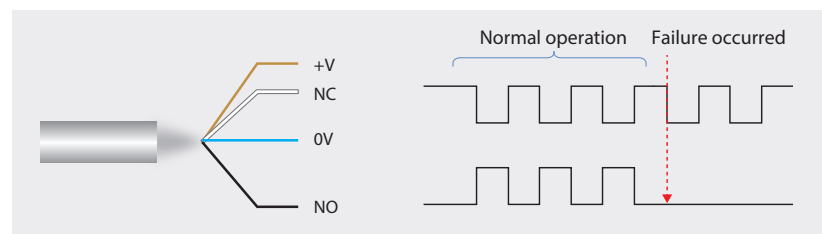


 IO-Link

Detects sensor failures through two output types, NO and NC

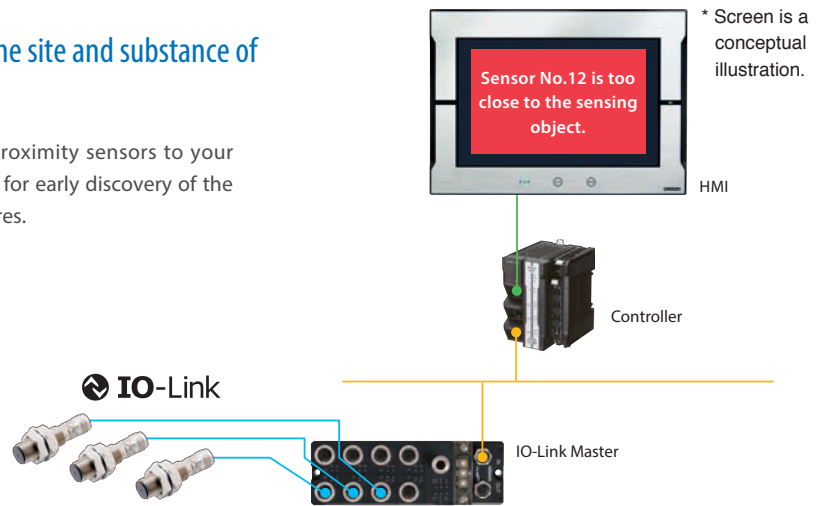
Enables failure discovery by wiring two outputs, NO and NC.

When NO cable is disconnected



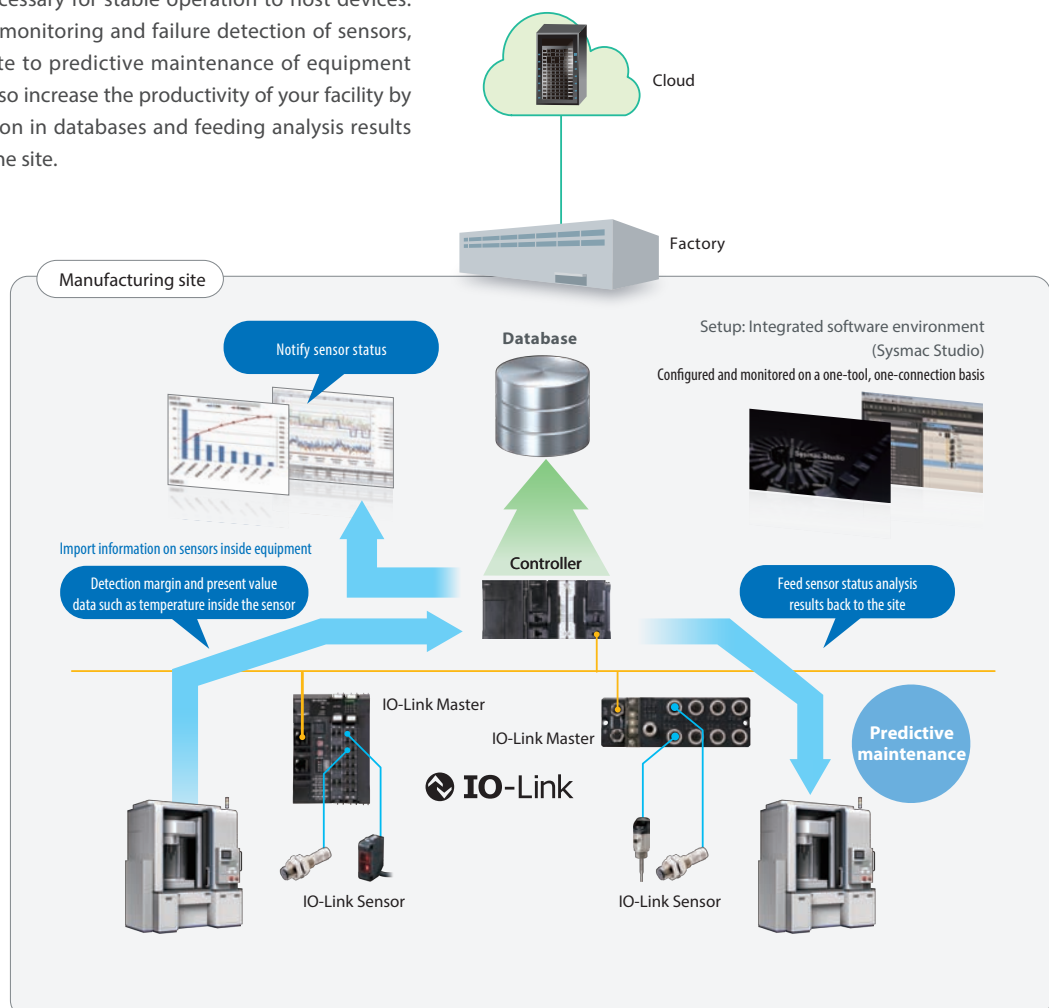
Enables real-time identification of the site and substance of sensor failure from a single location

By using the IO-Link Master to connect proximity sensors to your controller, you can use your monitor (HMI) for early discovery of the site and substance of proximity sensor failures.



Enables predictive maintenance through condition monitoring

Connecting sensors with controllers using IO-Link Master enables to send information necessary for stable operation to host devices. This enables condition monitoring and failure detection of sensors, which in turn contribute to predictive maintenance of equipment and facilities. You can also increase the productivity of your facility by accumulating information in databases and feeding analysis results back to equipment on the site.



New standards for usability | Quick recovery

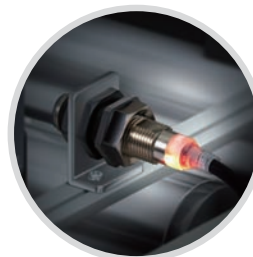
Enables facility designs that allow for quick recovery in case of failure

Less time required from failure to recovery
(MTTR: Mean Time To Recovery).



All around visible high-brightness LED indicator

Adopts high-brightness LED that is more luminous and visible than those in previous models. The indicator is visible from all angles, reducing the time required for operation checks after sensor replacement.



Visible even in areas deep inside the equipment,
allowing for quicker replacement

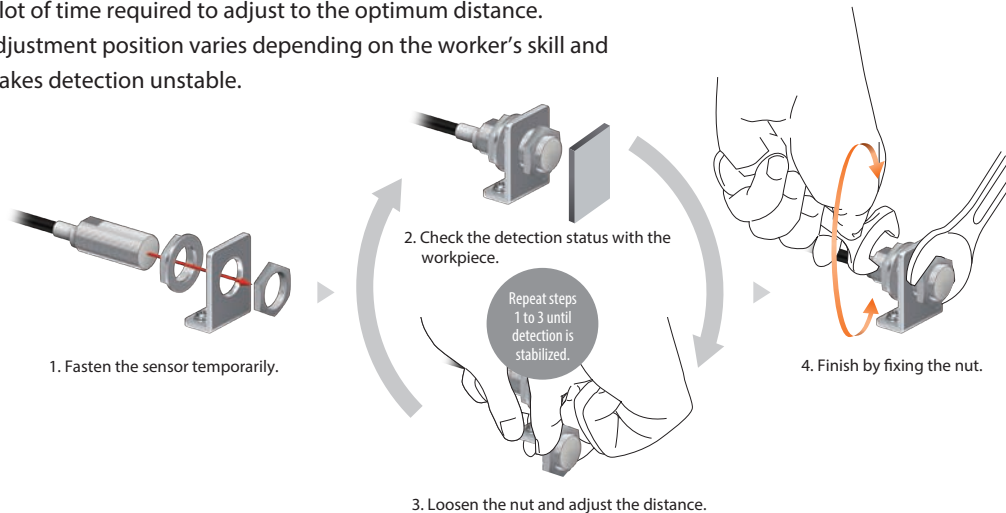


Replacements in as little as 10 seconds*¹ using e-jig

Using e-jig eliminates the need for adjustment so that anyone can install in the same position.

Previous models

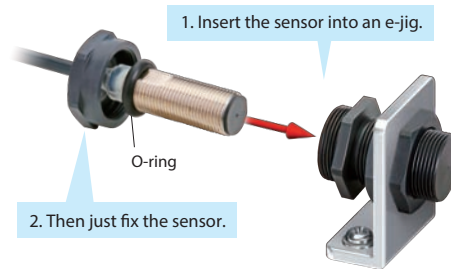
A lot of time required to adjust to the optimum distance.
Adjustment position varies depending on the worker's skill and makes detection unstable.



E2E NEXT

Replacement time reduced significantly to approx. **10 sec.***¹

Eliminating the need for adjustment allows for installation in the same position by any worker.



PATENTED*²

The O-ring blocks the ingress of foreign matter, including cutting oil, into the e-jig and ensures positioning precision (IP67G).

*1. Time required to adjust the distance when installing a sensor. Based on OMRON investigation.
*2. "Patent Pending" means that we applied for a patent in Japan, and "Patented" means that we obtained a patent in Japan. (As of September 2022)

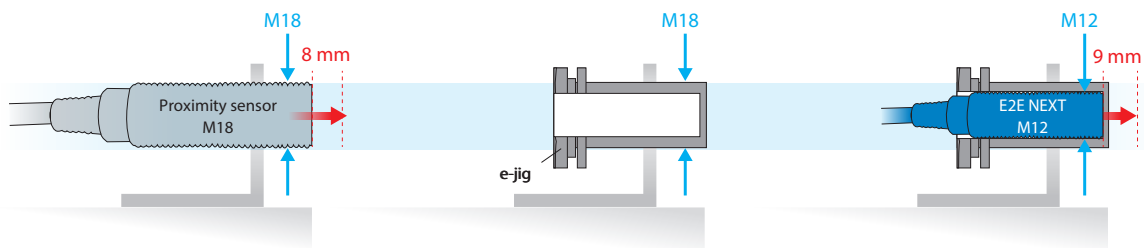
Easily upgrade existing facilities to enable "10-second"¹ proximity sensor replacements"

The HIGH SPEC Model's sensing distance is approximately twice that of previous models. For example, the sensing distance of the quadruple distance model of M12 sized is 9 mm, which is about the same as conventional M18 models. Using these sensors together with the e-jig allows you to easily upgrade your existing facilities so that you can replace their sensors in just 10 seconds.*¹

1. Dismount the M18 proximity sensor from the existing facility.

2. Mount an M18-sized e-jig.

3. Insert an E2E NEXT Series M12 Proximity Sensor into the e-jig.

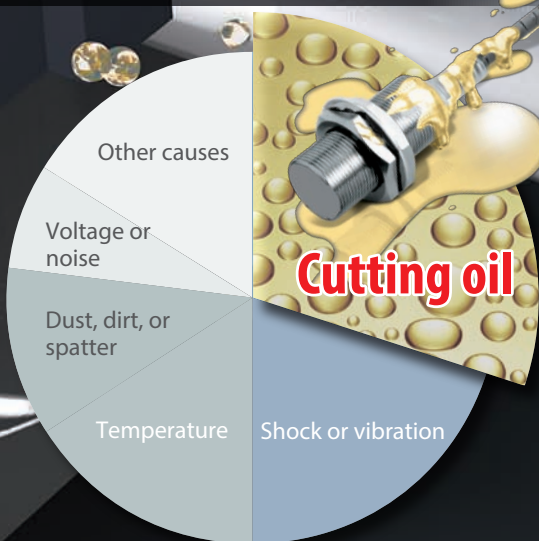


New standards for usability | Less unexpected facility stoppages

Excellent environmental resistance enables robust facility design

Reduces sudden facility stoppages by reducing the number of failures, even in severe environments.

Unexpected component failures:
Approx. **30 %** are caused by cutting oil.



■ Environmental Causes of Component Failures

(Based on June 2016 OMRON investigation.)

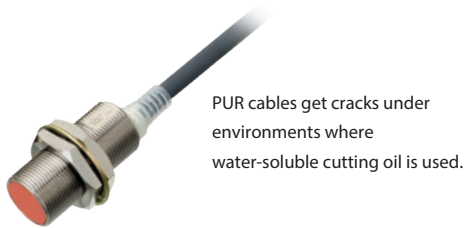
Cables with enhanced oil resistance shut out cutting oil for 2 years*1

Our new PVC compound protects against damage caused by swelling, deterioration or cracking, preventing oil from seeping into and destroying internal circuits. Designed to resist oil ingress for up to two years.

Two years*1 of stable operation verified by OMRON's unique evaluation technology

Previous models

Cables damaged by cutting oil



PUR cables get cracks under environments where water-soluble cutting oil is used.

E2E NEXT

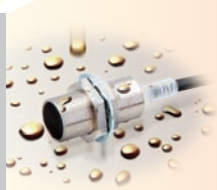
Verified 2-year oil resistance,*1 based on IP67G and OMRON's oil-resistant component evaluation standards



OMRON's E2E NEXT Series Proximity Sensors use PVC cables with enhanced oil resistance, and have been evaluated according to IP67G of JIS C 0920, and also OMRON's own, even stricter evaluation standards for oil-resistant components.

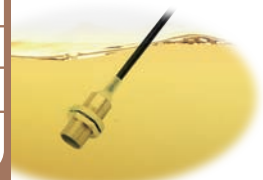
Oil resistance: 2 years*1

IP67G	
Oil type	N3 (water-insoluble cutting oil)
Evaluation time	48 hours
Evaluation temperature	Room temperature
Dilution concentration	—
Criteria	Appearance and performance



(Illustration)

OMRON's Oil-resistant Component Evaluation Standards	
Oil type	A1 (water-soluble cutting oil)
Evaluation time	1,000 hours of machining
Evaluation temperature	55 °C
Dilution concentration	Undiluted
Criteria	Appearance, performance, and no label text loss



(Illustration)

Two years*1 of stable operation verified for pre-wired connector models as well, using similar oil resistance tests

- Delivers 2-year oil resistance*1 by adopting technologies unique to OMRON and PVC cables with enhanced oil resistance. **PATENTED***2
- Smartclick connector cables block the ingress of cutting oil, and with the same torque, no matter who connects them.



Smartclick is a registered trademark of OMRON Corporation.

Fit with just 1/8 of a turn and a single click!

For machining processes where the amount of splashing cutting oil is large, **oil-resistant Proximity Sensors E2ER/E2ERZ**

Oil Resistance: 4 years



Cat. No. Y215

*1. • Applicable oil types: specified in JIS K 2241:2000

"2-year oil resistance" refers to median values (=Typical values) of the product designs and the oil-resistance performance evaluation results. Products to be shipped will have around 2 years of oil resistance; actual oil resistance will vary depending on the product.





• The pre-wired connector model has a verified oil resistance of 2 years when mated with XS5 NEXT series round oil-resistant connectors. This value has not been verified for connector models(M1/M3/M5).





*2. "Patent Pending" means that we applied for a patent in Japan, and "Patented" means that we obtained a patent in Japan. (As of September 2022)

IP69K compliant for water resistance and wash resistance

IEC 60529 compliant. Ensures water resistance during hot pressure washing, where equipment is washed intensively with high-pressure water or steam. (8,000 to 10,000 kPa pressure, 80°C hot water, 30 seconds for each angle)

E2E NEXT Series Functions and Specifications

Main functions and specifications			DC 3-wire									
			Shielded				Unshielded					
			Model		Quadruple distance	Triple distance	Double distance	Single distance	Quadruple distance	Triple distance	Double distance	Single distance
												
Detection performance	Sensing distance	M8	4mm	3mm	2mm	1.5mm	8mm	6mm	4mm	2mm		
		M12	9mm	6mm	4mm	2mm	16mm	10mm	8mm	5mm		
		M18	14mm	12mm	8mm	5mm	30mm	20mm	16mm	10mm		
		M30	23mm	22mm	15mm	10mm	50mm	40mm	30mm	18mm		
Installation	Flush with surface	—	—	● *2	●	—	—	—	—			
	Flush with surface using nut	—	● *1	●	●	—	—	—	—			
Usability	360° visible indicator		●	●	●	●	●	●	●	●		
	e-jig		● *3	● *3	—	—	—	—	—	—		
Industrial IoT enabled	Detection level and temp. visualization with IO-Link		●	●	●	●	●	●	●	●		
	2-output model		—	●	●	●	—	●	●	●		
Environmental resistance	Oil resistance	2 years	●	●	●	●	●	●	●	●		
Datasheet			P.18 ~	P.21 ~	P.25 ~	P.29 ~	P.20 ~	P.23 ~	P.27 ~	P.31 ~		



DC 2-wire						
Shielded				Unshielded		
						
Triple distance	Double distance	Standard	Single distance	Triple distance	Double distance	Standard
3mm	—	2mm	1.5mm	6mm	—	4mm
7mm	4mm	3mm	2.5mm	10mm	—	8mm
11mm	8mm	7mm	5mm	20mm	16mm	14mm
20mm	15mm	10mm	—	40mm	30mm	20mm
—	—	●	●	—	—	—
● *1	●	●	●	—	—	—
●	●	●	●	●	●	●
● *3	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
●	●	●	●	●	●	●
P.64 ~	P.75 ~	P.74 ~	P.75 ~	P.64 ~	P.75 ~	P.74 ~

*1. The nuts are longer than other models. Please refer to the datasheet for details.

*2. Applicable to some models. Please refer to datasheet for details.

*3. Pre-wired models only.

E2EQ NEXT Series Functions and Specifications

Main functions and specifications			DC 3-wire			DC 2-wire	
			Fluororesin head			Fluororesin head	
							
			Model		PREMIUM Model	BASIC Model	
			Triple distance	Double distance	Single distance	Triple distance	Double distance
Detection performance	Sensing distance	M8	3mm	2mm	1.5mm	3mm	—
		M12	6mm	4mm	2mm	7mm	4mm
		M18	12mm	8mm	5mm	11mm	8mm
		M30	22mm	15mm	10mm	20mm	15mm
	Installation	Flush with surface	—	—	●	—	—
Flush with surface using nut		●	●	●	●	●	
Environmental resistance	Spatter resistance	Standard fluororesin coating	●	●	●	●	●
Industrial IoT enabled	Detection level and temp. visualization with IO-Link		●	●	●	—	—
Usability	360° visible indicator		● (Orange)	● (Orange)	● (Orange)	● (Green)	● (Green)
	Laser printed model number		●	●	●	●	●
	2-output (NO+NC) model		● *1	● *1	● *1	—	—
Datasheet			P.89 ~			P.89 ~	

*1. 2-output (NO+NC) models only.

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
- Comes in a wide variation to make sensor selection easy
- UL certification (UL60947-5-2)*⁴ and CSA certification (CSA C22.2 UL60947-5-2-14)

*1. Based on August 2022 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 is excluded.

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

 Be sure to read *Safety Precautions* on page 50.



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

Model Number Legend

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

No.	Type	Code	Meaning
(1)	Sensing distance	Number	Sensing distance (Unit: mm) (R: Indication of decimal point)
(2)	Shielding	Blank	Shielded
		M	Unshielded
(3)	Output configuration	B	PNP open collector
		C	NPN open collector
(4)	Operation mode	1	Normally open (NO)
		2	Normally closed (NC)
		3	Normally open, Normally closed (NO+NC)
(5)	Oscillation frequency type	Blank	Standard frequency
		5	Different frequency
(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 (Only shown in the model number of Pre-wired Models.)	Blank	Standard PVC cable
		R	Robot (bending-resistant) cable
(11)	Cable length	Number M	Cable length

Note: The purpose of this model number legend is to provide understanding of the meaning of specifications from the model number.

E2E NEXT Series

Ordering Information

PREMIUM Model

E2E NEXT Series (Quadruple distance model)

DC 3-wire [Refer to *Dimensions* on page 53.]

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	

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 51.

*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.

E2E NEXT Series

PREMIUM Model

E2E NEXT Series (Quadruple distance model)

DC 3-wire [Refer to Dimensions on page 54.]

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 2M/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.

PREMIUM Model

E2E NEXT Series (Triple distance model)

DC 3-wire [Refer to Dimensions on page 53.]

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	

E2E NEXT Series

PREMIUM Model

Size (Sensing distance)	Connection method	Body size	Operation mode	Model		
				PNP		NPN ---*5
				IO-Link (COM3)	IO-Link (COM2) *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 51.

*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.

PREMIUM Model

E2E NEXT Series (Triple distance model)

DC 3-wire [Refer to Dimensions on page 54.]

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	
			NO	E2E-X10MB1TL12-M1	E2E-X10MB1DL12-M1	E2E-X10MC1L12-M1	
		70 mm	NC	-	E2E-X10MB2L12-M1	E2E-X10MC2L12-M1	
			NO+NC	-	E2E-X10MB3DL12-M1	E2E-X10MC3L12-M1	
			NO	E2E-X20MB1TL18 2M	E2E-X20MB1DL18 2M	E2E-X20MC1L18 2M	
			NC	-	E2E-X20MB2L18 2M	E2E-X20MC2L18 2M	
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
	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	
			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

E2E NEXT Series

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.

BASIC Model

E2E NEXT Series (Double distance model)

DC 3-wire [Refer to Dimensions on page 57.]

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 NEXT Series
DC 3-wire

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

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

E2EQ NEXT Series
DC 3-wire/DC 2-wire

XS5 NEXT Series

XS5

XS3

E2E NEXT Series

BASIC Model

Size (Sensing distance)	Connection method	Body size	Operation mode	Model		
				PNP		NPN ---*4
				IO-Link (COM3)	IO-Link (COM2) *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 58.]

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 NEXT Series
DC 3-wire

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

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

E2EQ NEXT Series
DC 3-wire/DC 2-wire

XSS5 NEXT Series

XSS5

XSS3

E2E 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 57.]

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	
	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 NEXT Series
DC 3-wire

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

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

E2EQ NEXT Series
DC 3-wire/DC 2-wire

XS5 NEXT Series

XS5

XS3

E2E NEXT Series

BASIC Model

Size (Sensing distance)	Connection method	Body size	Operation mode	Model		
				PNP		NPN ---*4
				IO-Link (COM3)	IO-Link (COM2) *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 58.]

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	
	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 NEXT Series
DC 3-wire

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

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

E2EQ NEXT Series
DC 3-wire/DC 2-wire

XSS5 NEXT Series

XSS5

XSS3

E2E 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.

Accessories (Sold Separately)

e-jig (Mounting Sleeves) [Refer to Dimensions on page 61.]

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

Appearance	Model	Applicable Sensor size	Applicable Sensor type
	Y92E-J8S12	M8	Triple distance model
	Y92E-J12S18	M12	Shielded models Pre-wired models
	Y92E-J18S30	M18	Standard body-sized

Nut Sets

A Nut Set is included with the Sensor. Order a Nut Set when required, e.g., if you lose the nuts.

Model	Applicable Sensors	Applicable Sensor diameter	Set contents
Y92E-NWM08-E2EN	E2E NEXT Series Quadruple distance/Triple distance model (Shielded models)	M8	Clamping nuts (bronze with nickel plating): 2 Toothed washer (iron with zinc plating): 2
Y92E-NWM12-E2EN		M12	
Y92E-NWM18-E2EN		M18	
Y92E-NWM30-E2EN		M30	
Y92E-NWM08-E2E	E2E NEXT Series Quadruple distance/Triple distance model (Unshielded models) Double distance/Single distance model (Shielded/Unshielded models)	M8	Clamping nuts (bronze with nickel plating): 2 Toothed washer (iron with zinc plating): 1
Y92E-NWM12-E2E		M12	
Y92E-NWM18-E2E		M18	
Y92E-NWM30-E2E		M30	

Sensor I/O Connectors (Sold Separately)

For details of the connector, refer to XS5 NEXT Series Round Oil-resistant Connectors (M12 Smartclick) on page 108.

For details of the connector, refer to XS5 Series Round Water-resistant Connectors (M12 Smartclick) on page 111.

For details of the connector, refer to XS3 Series Round Water-resistant Connectors (M8) on page 115.

E2E NEXT Series

Ratings and Specifications

PREMIUM Model

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

Types	Quadruple distance model				Triple distance model				
	M8	M12	M18	M30	M8	M12	M18	M30	
Item	Model	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 42.)							
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-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: -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 (M8/M12 Connector)	Approx. 55 g	Approx. 95 g	Approx. 180 g	Approx. 40 g (M8/M12 Connector)	Approx. 55 g	Approx. 95 g	Approx. 180 g

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) Note: Material of Pre-wired Models and Pre-wired Connector Models.							
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.

E2E NEXT Series

PREMIUM Model

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

Item	Types Size Model	Quadruple distance model				Triple distance model			
		M8	M12	M18	M30	M8	M12	M18	M30
		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 42.)							
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 (M8/M12 Connector)	Approx. 55 g	Approx. 105 g	Approx. 230 g	Approx. 40 g (M8/M12 Connector)	Approx. 55 g	Approx. 105 g	Approx. 200 g

Item	Types Size Model	Quadruple distance model				Triple distance model			
		M8	M12	M18	M30	M8	M12	M18	M30
		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) Note: Material of Pre-wired Models and Pre-wired Connector Models.							
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.

E2E NEXT Series

BASIC Model

DC 3-wire (Double/Single distance model) Shielded

Item	Types Size Model	Double distance model				Single distance model			
		M8	M12	M18	M30	M8	M12	M18	M30
		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 42.)							
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 (M8/M12 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

Item	Types Size Model	Double distance model				Single distance model			
		M8	M12	M18	M30	M8	M12	M18	M30
		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) Note: Material of Pre-wired Models and Pre-wired Connector Models.							
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. 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.

E2E NEXT Series

BASIC Model

DC 3-wire (Double/Single distance model) Unshielded

Item	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
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 42.)							
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 (M8/M12 Connector)	Approx. 40 g	Approx. 55 g	Approx. 85 g	Approx. 200 g	Approx. 40 g	Approx. 55 g	Approx. 85 g	Approx. 160 g

Item	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) Note: Material of Pre-wired Models and Pre-wired Connector Models.							
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.

E2E NEXT Series

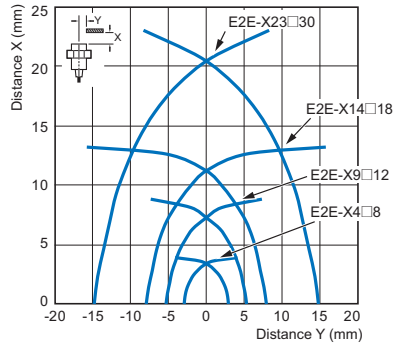
Engineering Data (Reference Value)

Sensing Area

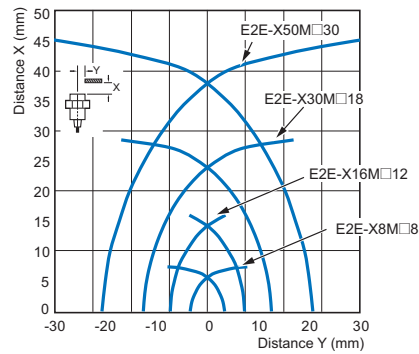
PREMIUM Model

Quadruple distance model

Shielded

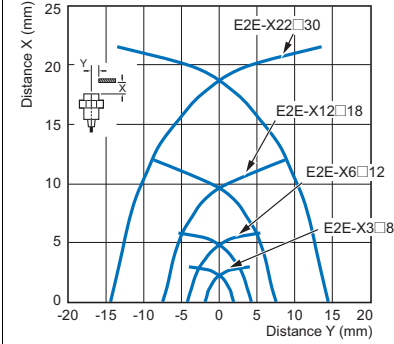


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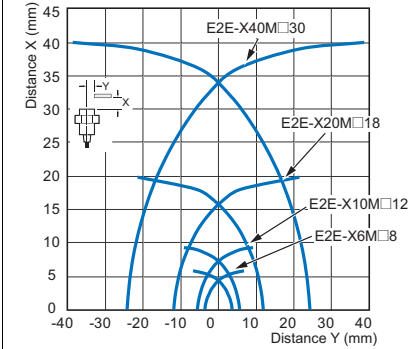


Triple distance model

Shielded



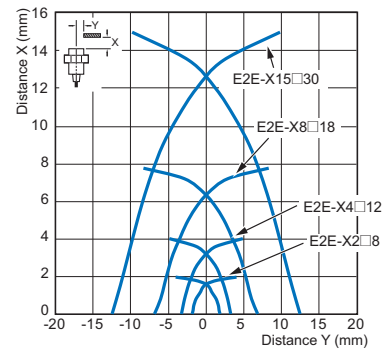
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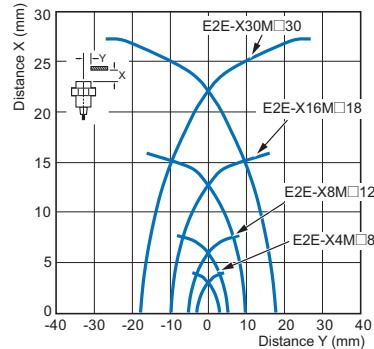
BASIC Model

Double distance model

Shielded

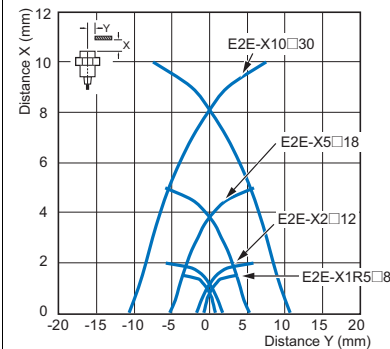


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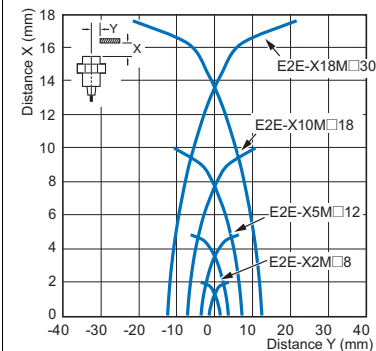


Single distance model

Shielded



Unshielded



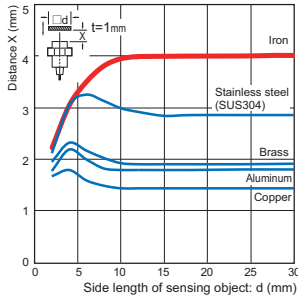
Influence of Sensing Object Size and Material

PREMIUM Model

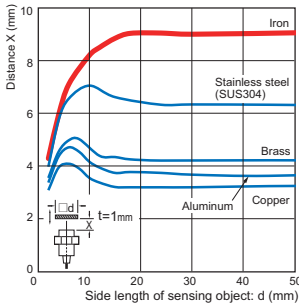
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Quadruple distance model

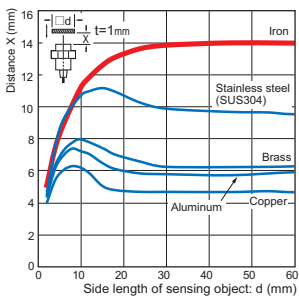
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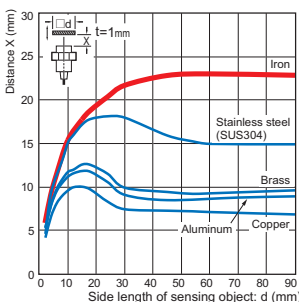
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Size: M18 E2E-X14□18

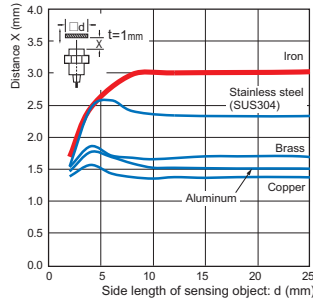


Size: M30 E2E-X23□30

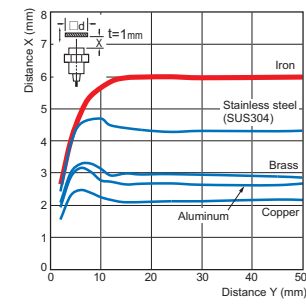


Triple distance model

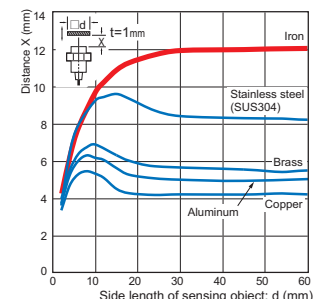
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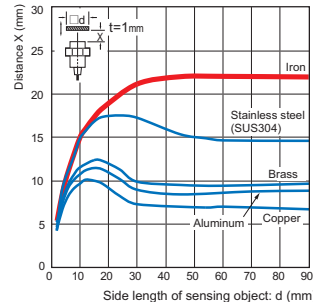
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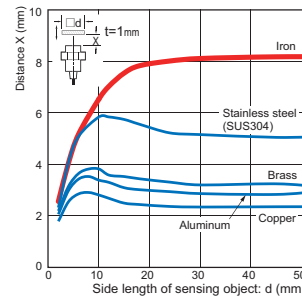
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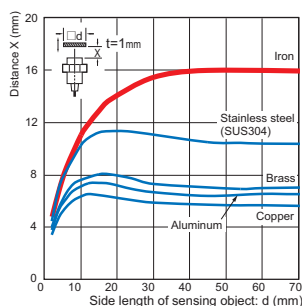
Unshielded

Quadruple distance model

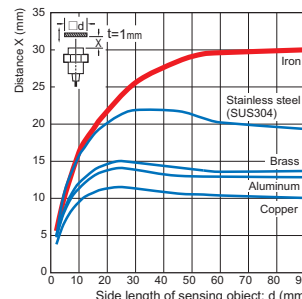
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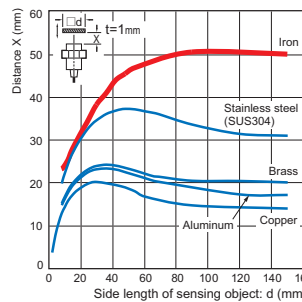
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Size: M18 E2E-X30M□18

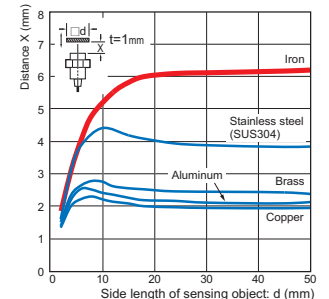


Size: M30 E2E-X50M□30

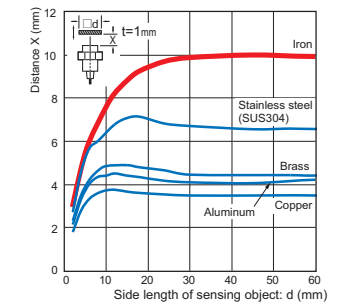


Triple distance model

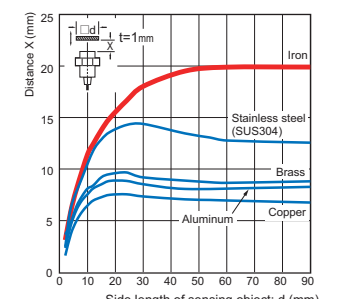
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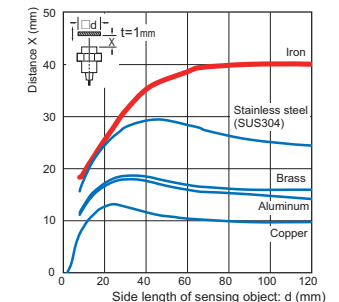
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Size: M18 E2E-X20M□18



Size: M30 E2E-X40M□30



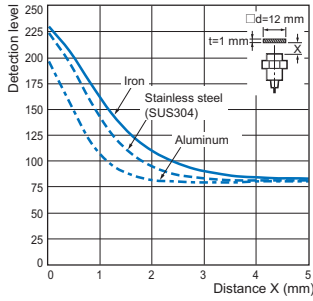
Monitor Output vs. Sensing Distance

PREMIUM Model

Shielded

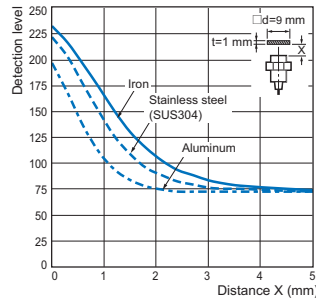
Quadruple distance model

Size: M8 E2E-X4□8



Triple model

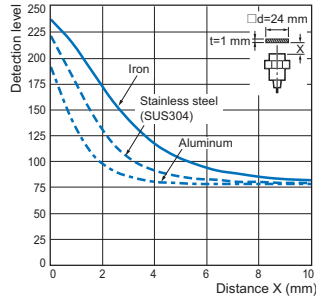
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Unshielded

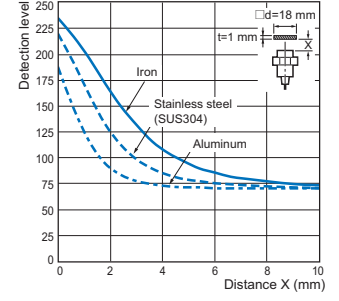
Quadruple distance model

Size: M8 E2E-X8M□8

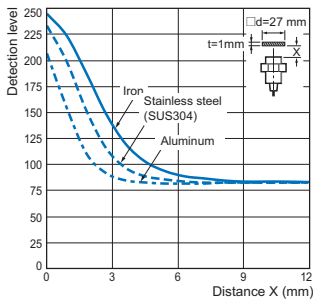


Triple distance model

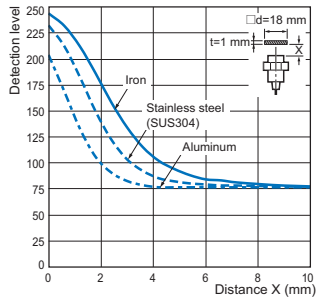
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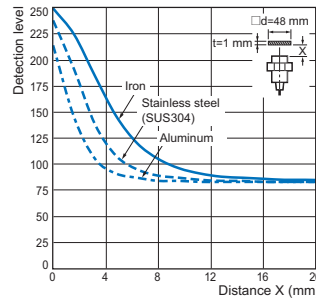
Size: M12 E2E-X9□12



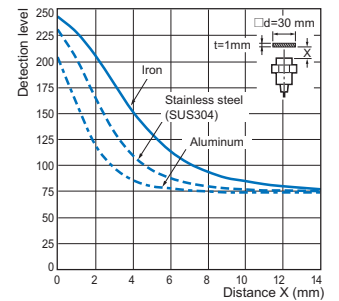
Size: M12 E2E-X6□12



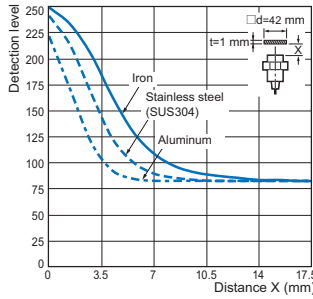
Size: M12 E2E-X16M□12



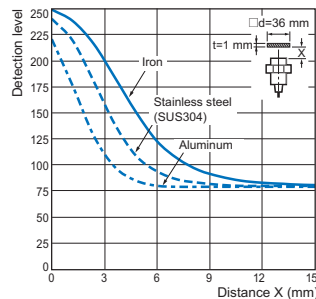
Size: M12 E2E-X10M□12



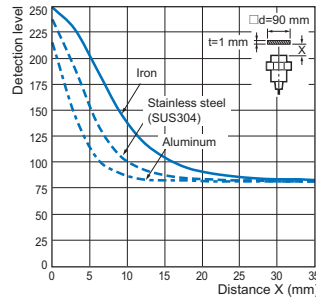
Size: M18 E2E-X14□18



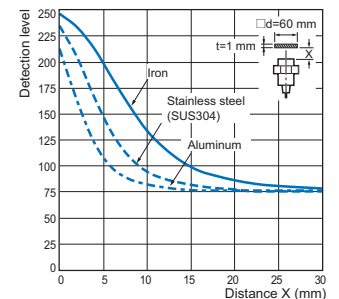
Size: M18 E2E-X12□18



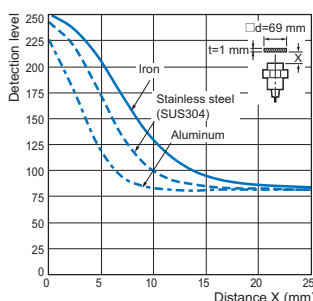
Size: M18 E2E-X30M□18



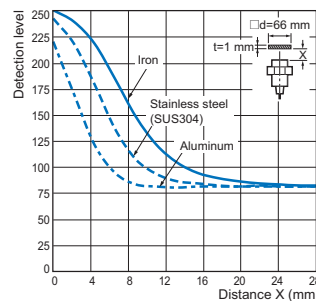
Size: M18 E2E-X20M□18



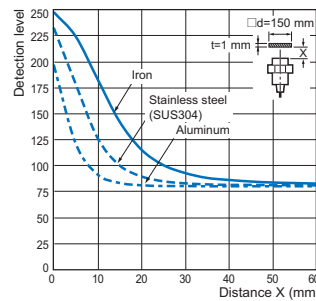
Size: M30 E2E-X23□30



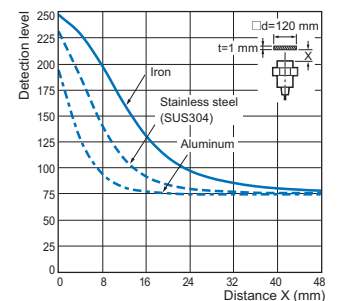
Size: M30 E2E-X22□30



Size: M30 E2E-X50M□30



Size: M30 E2E-X40M□30

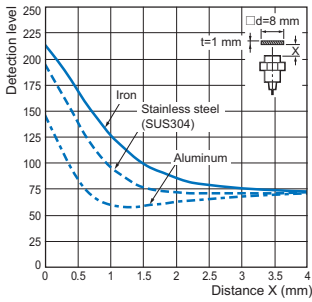


BASIC Model

Shielded

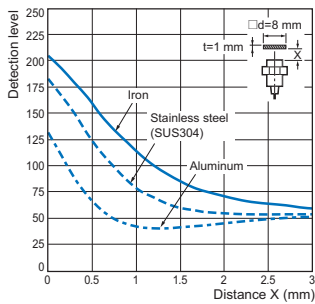
Double distance model

Size: M8 E2E-X2□8



Single distance model

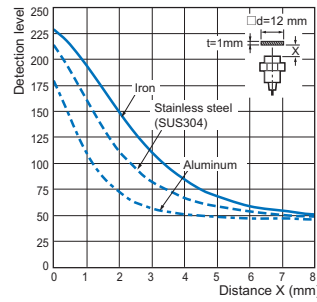
Size: M8 E2E-X1R5□8



Unshielded

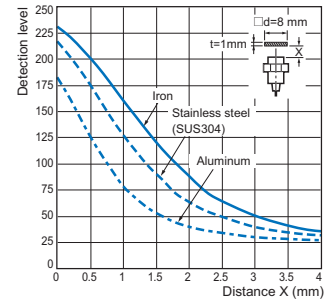
Double distance model

Size: M8 E2E-X4M□8

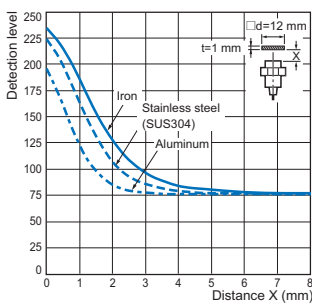


Single distance model

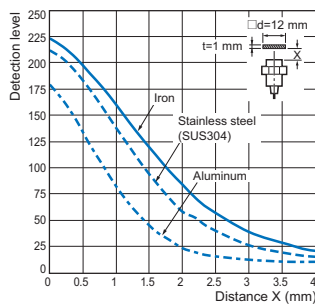
Size: M8 E2E-X2M□8



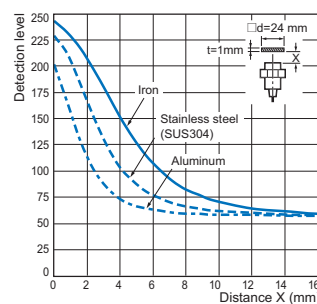
Size: M12 E2E-X4□12



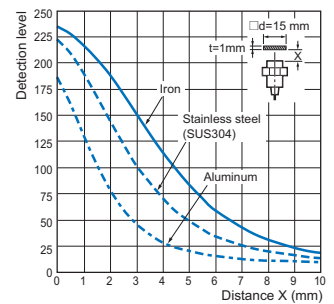
Size: M12 E2E-X2□12



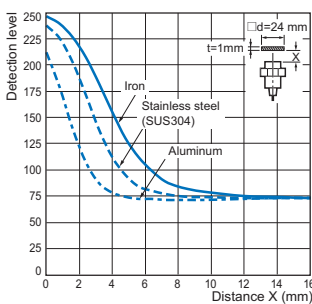
Size: M12 E2E-X8M□12



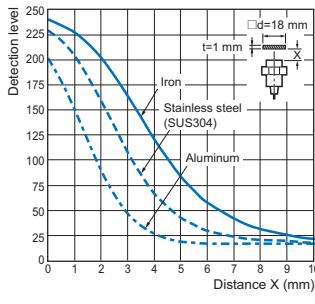
Size: M12 E2E-X5M□12



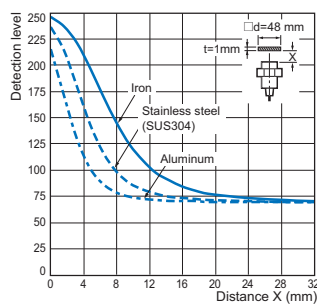
Size: M18 E2E-X8□18



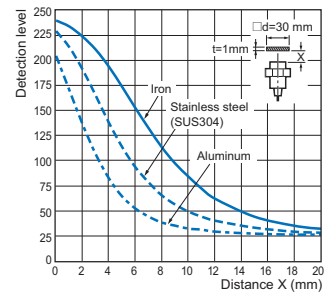
Size: M18 E2E-X5□18



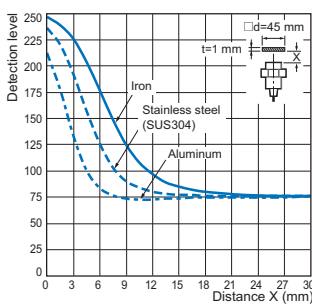
Size: M18 E2E-X16M□18



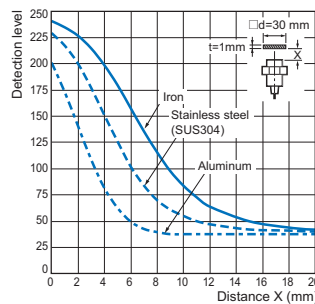
Size: M18 E2E-X10M□18



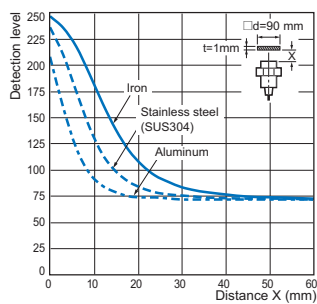
Size: M30 E2E-X15□30



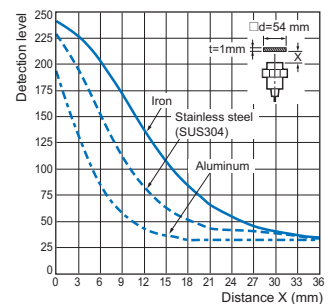
Size: M30 E2E-X10□30



Size: M30 E2E-X30M□30



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-□B1		
NC	E2E-□B2	<p>Note: M8 (3-pin) Connector: (1)(4)(3)</p>	---
NO+NC	E2E-□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

E2E NEXT Series
DC 3-wire

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

E2E NEXT Series
DC 2-wire (Standard/Double/Single distance mode)

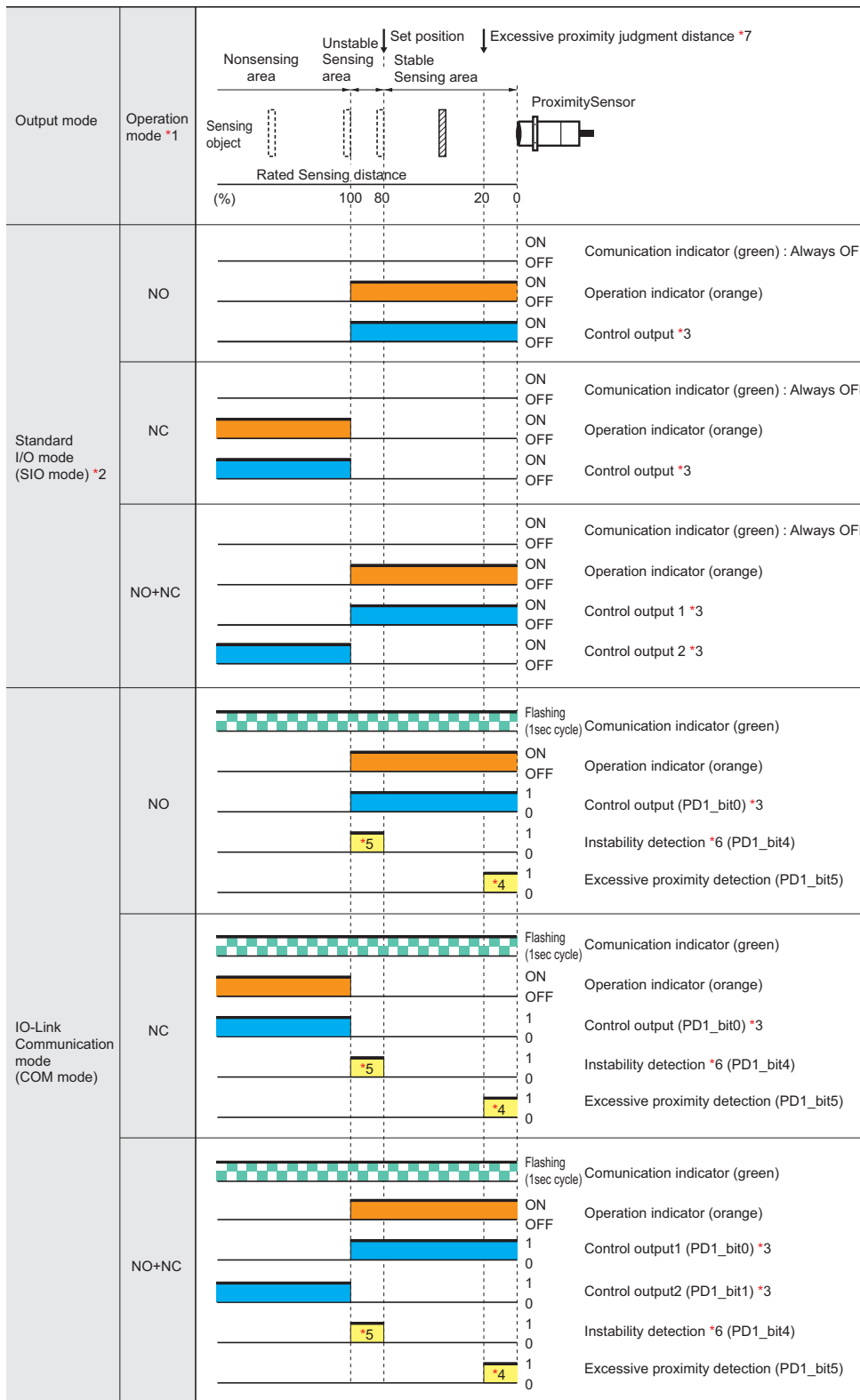
E2EQ NEXT Series
DC 3-wire/DC 2-wire

XS5 NEXT Series

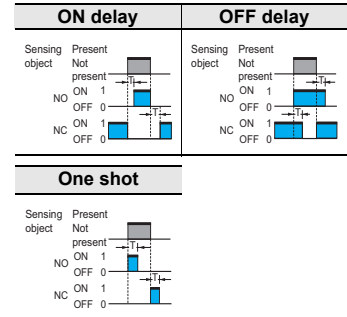
XS5

XS3

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-□C1	
NC	E2E-□C2	<p>Note: M8 (3-pin) Connector: (1)(4)(3)</p>
NO+NC	E2E-□C3	

Connector Pin Arrangement

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

Operation mode	Sensing area		Proximity Sensor	Output	
	Nonsensing area	Stable sensing area		ON/OFF	Output Name
NO	Sensing object	Rated Sensing distance (%)	100	ON	Operation indicator (orange)
				OFF	Control output
NC	Sensing object	Rated Sensing distance (%)	100	ON	Operation indicator (orange)
				OFF	Control output
NO+NC	Sensing object	Rated Sensing distance (%)	100	ON	Operation indicator (orange)
				OFF	Control output 1
				ON	Control output 2
				OFF	Control output 2



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.

1. Do not use the product in environments subject to flammable or explosive gases.
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 explosion or fire.
4. Be sure that the power supply polarity and other wiring is correct. Incorrect wiring may cause explosion or fire.
5. If the power supply is connected directly without a load, the internal elements may explode or burn.
6.  Dispose of the product according to applicable regulations (laws).

Precautions for Correct Use

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

Operating Environment

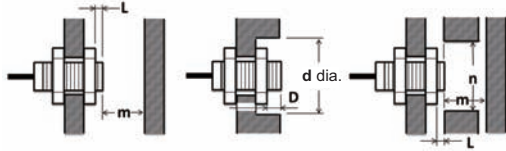
1. Do not install the Sensor in the following locations.
 - (1) Outdoor locations directly subject to sunlight, rain, snow, water droplets, or oil.
 - (2) Locations subject to atmospheres with chemical vapors, in particular solvents and acids.
 - (3) Locations subject to corrosive gases.
2. The Sensor 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.
6. 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.
7. The sensor is adjusted with a high degree of accuracy, so do not use in the environment with sudden temperature change.
8. 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.

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

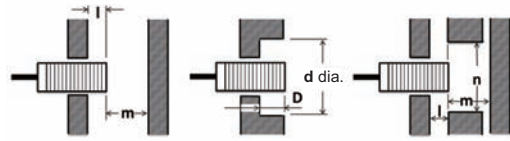
Type	Model	L	d	D	m	n
Quadruple distance model	E2E-X4□8	3	30	3	12	20
	E2E-X9□12	2	40	2	27	30
	E2E-X14□18	2	60	2	42	70
	E2E-X23□30	2	100	2	69	100
Triple distance model	E2E-X3□8	0	20	0	9	18
	E2E-X6□12	0	20	0	18	20
	E2E-X12□18	0	50	0	36	54
	E2E-X22□30	0	70	0	66	90
Double distance model	E2E-X2□8	0	8	0	4.5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

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	E2E-X3□8	2	20	2	9	18
	E2E-X6□12	4	20	4	18	20
	E2E-X12□18	4	50	4	36	54
	E2E-X22□30	8	70	8	66	90
Double distance model	E2E-X2□8	0	8	0	4.5	12
	E2E-X4□12	2.4	18	2.4	12	18
	E2E-X8□18	3.6	27	3.6	24	27
	E2E-X15□30	6	45	6	45	45
Single distance model	E2E-X1R5□8	0	8	0	4.5	12
	E2E-X2□12	0	12	0	8	18
	E2E-X5□18	0	18	0	20	27
	E2E-X10□30	0	30	0	40	45

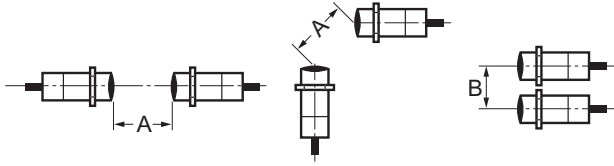
Unshielded

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	E2E-X3□8	25	20
	E2E-X6□12	40	30
	E2E-X12□18	70	45
	E2E-X22□30	150	90
Double distance model	E2E-X2□8	20	15
	E2E-X4□12	30	20
	E2E-X8□18	60	35
Single distance model	E2E-X15□30	110	90
	E2E-X1R5□8	20	15
	E2E-X2□12	30	20
	E2E-X5□18	50	35
	E2E-X10□30	100	70

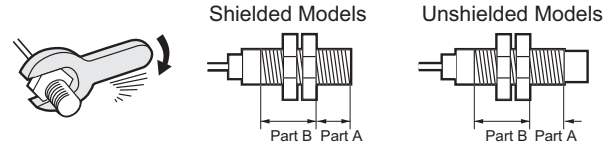
Unshielded

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 sensor mounting nuts with excessive force. Secure the mounting nuts to the corresponding torque values in the following table.



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

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
	Unshielded	3		
M30	Shielded	23	40 N·m	80 N·m
	Unshielded	8		

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	

Dimensions

Sensor **PREMIUM Model**

DC 3-wire (Quadruple/Triple distance model)

Pre-wired Models
Pre-wired Connector Models
(Shielded)



Note: Refer to the figure below the table for the connections of the Pre-wired Connector Model.

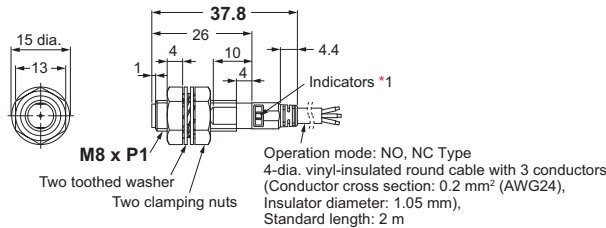
DC 3-wire (Long-body Quadruple/Triple distance model)

Pre-wired Models
Pre-wired Connector Models
(Shielded)

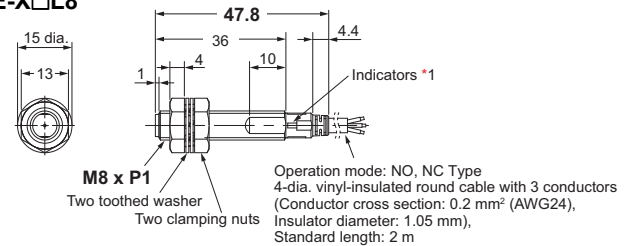


Note: Refer to the figure below the table for the connections of the Pre-wired Connector Model.

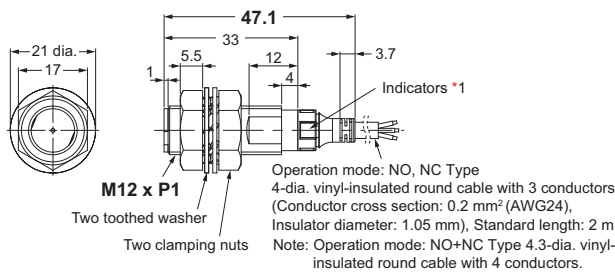
E2E-X□8



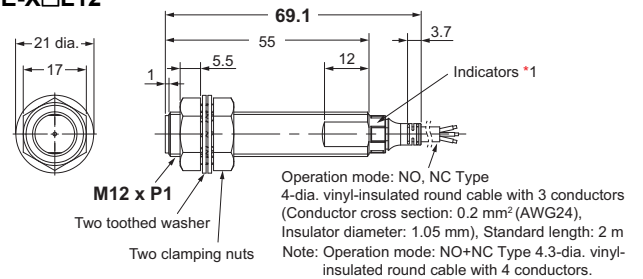
E2E-X□L8



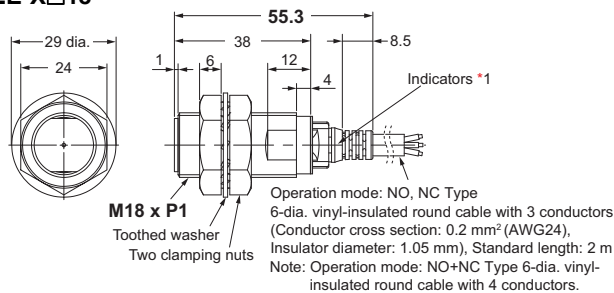
E2E-X□12



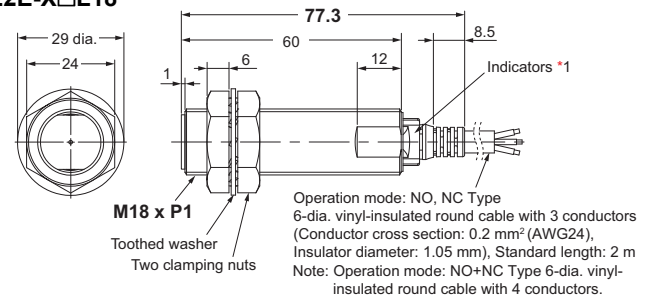
E2E-X□L12



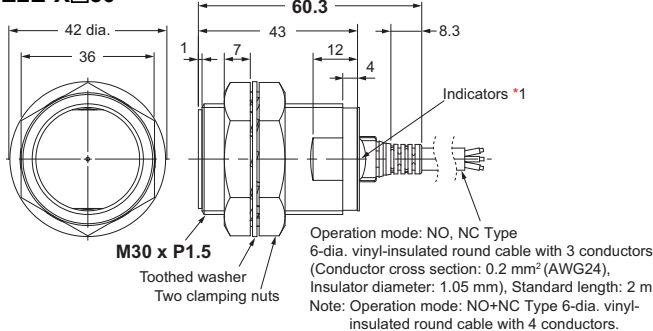
E2E-X□18



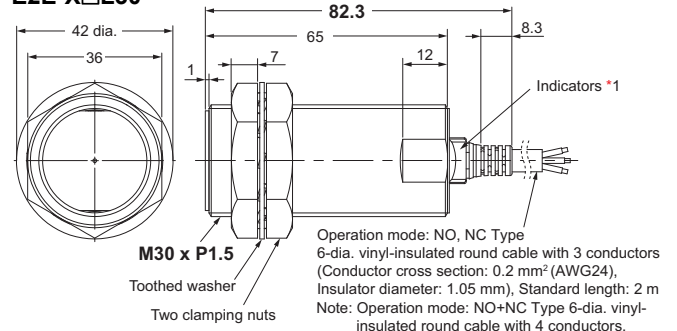
E2E-X□L18



E2E-X□30

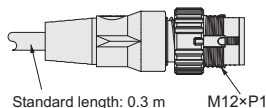


E2E-X□L30



*1. Standard I/O mode (SIO mode): Operation indicator (orange/ON), communication indicator (green/OFF)
IO-Link Communication mode (COM mode): Operation indicator (orange/ON), communication indicator (green/Flashing (1sec cycle))

Pre-wired Connector Models (-M1TJ)



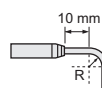
Note: Refer to the Pre-wired Model for the cable specifications of the Pre-wired Connector Model.

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

E2E NEXT Series

Sensors PREMIUM Model

DC 3-wire (Quadruple/Triple distance model)

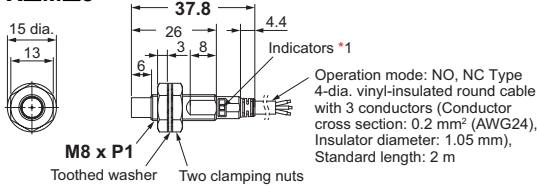
Pre-wired Models

Pre-wired Connector Models (Unshielded)

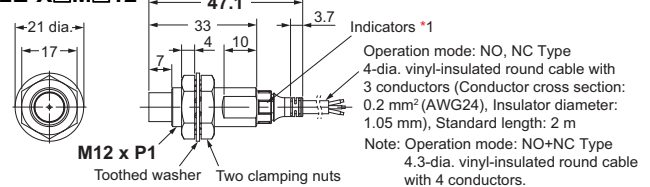


Note:
Refer to the figure below the table for the connections of the Pre-wired Connector Model.

E2E-X□M□8



E2E-X□M□12



DC 3-wire (Long-body Quadruple/Triple distance model)

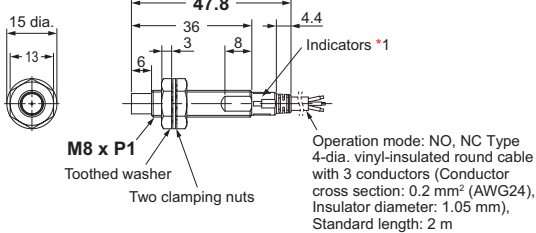
Pre-wired Models

Pre-wired Connector Models (Unshielded)

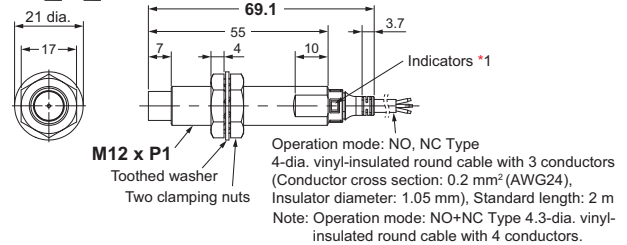


Note:
Refer to the figure below the table for the connections of the Pre-wired Connector Model.

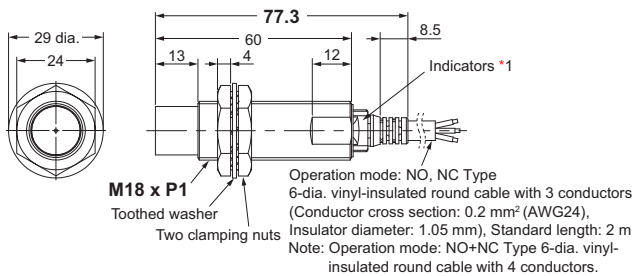
E2E-X□M□L8



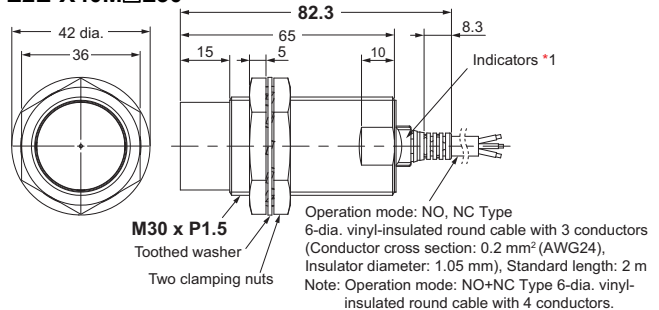
E2E-X□M□L12



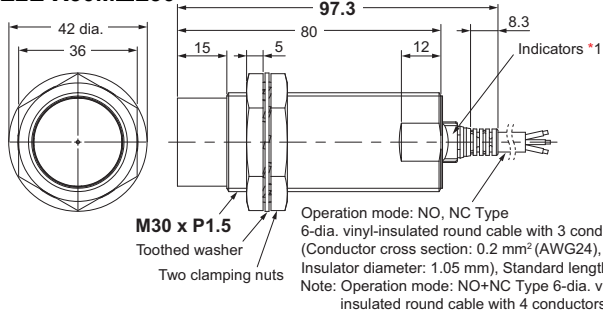
E2E-X□M□L18



E2E-X40M□L30

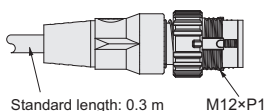


E2E-X50M□L30



*1. Standard I/O mode (SIO mode): Operation indicator (orange/ON), communication indicator (green/OFF)
IO-Link Communication mode (COM mode): Operation indicator (orange/ON), communication indicator (green/Flashing (1sec cycle))

Pre-wired Connector Models (-M1TJ)



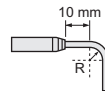
Note: Refer to the Pre-wired Model for the cable specifications of the Pre-wired Connector Model.

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

Sensors PREMIUM Model

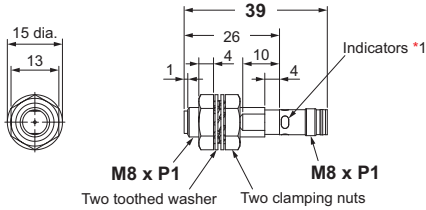
DC 3-wire (Quadruple/Triple distance model)
Connector Models
(Shielded)



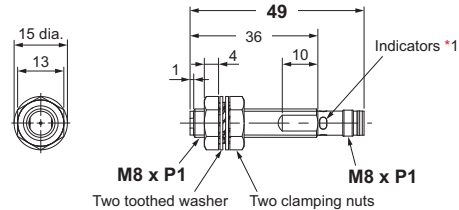
DC 3-wire (Long-body Quadruple/Triple distance model)
Connector Models
(Shielded)



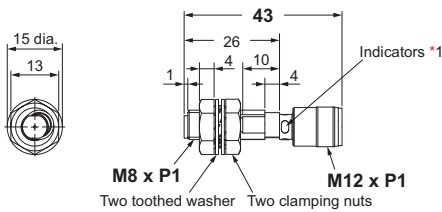
E2E-X□8-M3/M5



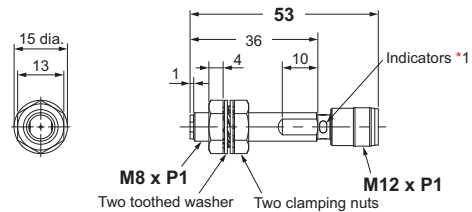
E2E-X□L8-M3/M5



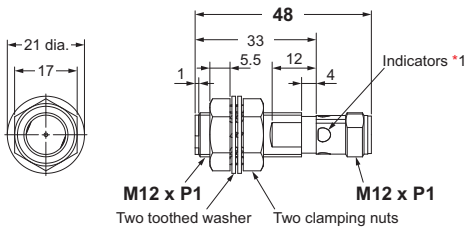
E2E-X□8-M1



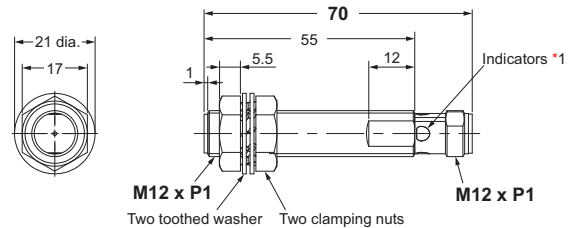
E2E-X□L8-M1



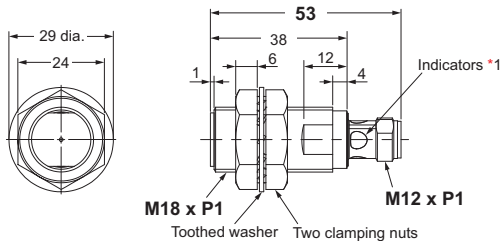
E2E-X□12-M1



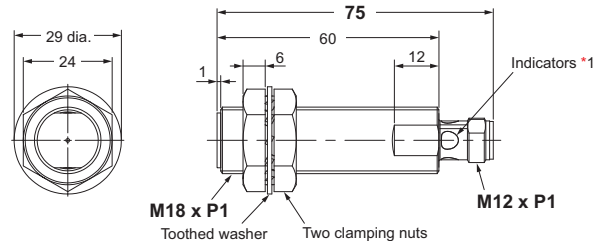
E2E-X□L12-M1



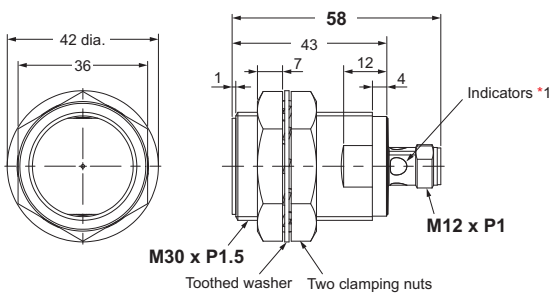
E2E-X□18-M1



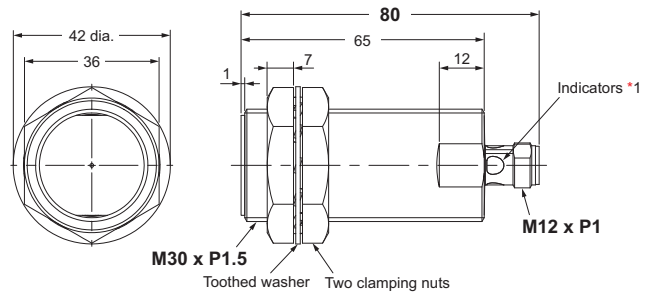
E2E-X□L18-M1



E2E-X□30-M1



E2E-X□L30-M1



*1. Standard I/O mode (SIO mode): Operation indicator (orange/ON), communication indicator (green/OFF)
 IO-Link Communication mode (COM mode): Operation indicator (orange/ON), communication indicator (green/Flashing (1sec cycle))

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. $^{+0.5}_0$

E2E NEXT Series
DC 3-wire

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

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

E2EQ NEXT Series
DC 3-wire/DC 2-wire

XS5 NEXT Series

XS5

XS3

E2E NEXT Series

Sensors PREMIUM Model

DC 3-wire (Quadruple/Triple distance model)

Connector Models
(Unshielded)

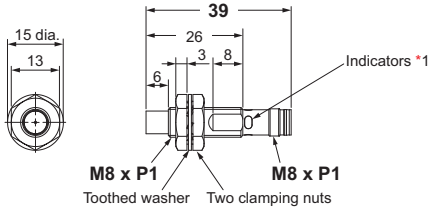


DC 3-wire (Long-body Quadruple/Triple distance model)

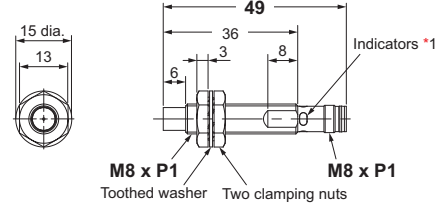
Connector Models
(Unshielded)



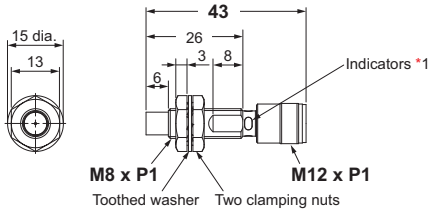
E2E-X□M□8-M3/M5



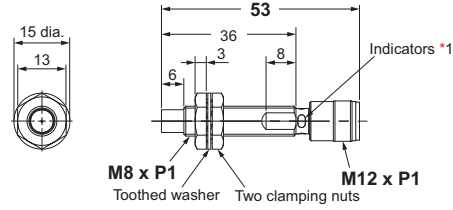
E2E-X□M□L8-M3/M5



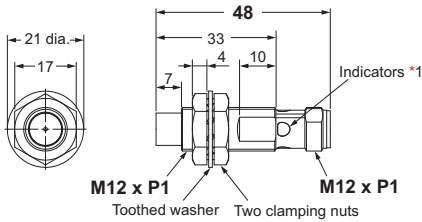
E2E-X□M□8-M1



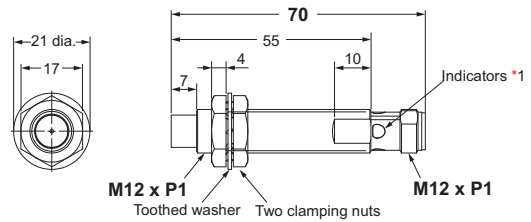
E2E-X□M□L8-M1



E2E-X□M□12-M1



E2E-X□M□L12-M1



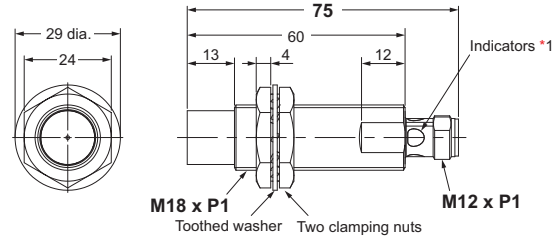
*1. Standard I/O mode (SIO mode): Operation indicator (orange/ON), communication indicator (green/OFF)
IO-Link Communication mode (COM mode): Operation indicator (orange/ON), communication indicator (green/Flashing (1sec cycle))

Mounting Hole Dimensions

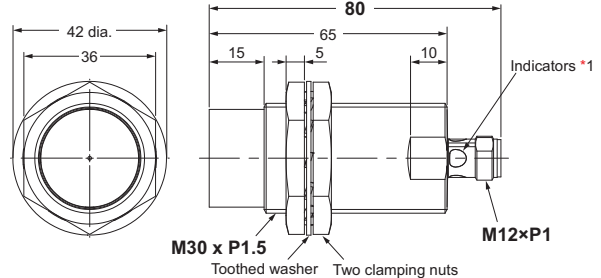


Dimensions	F (mm)
M8	8.5 dia. $^{+0.5}_0$
M12	12.5 dia. $^{+0.5}_0$
M18	18.5 dia. $^{+0.5}_0$
M30	30.5 dia. $^{+0.5}_0$

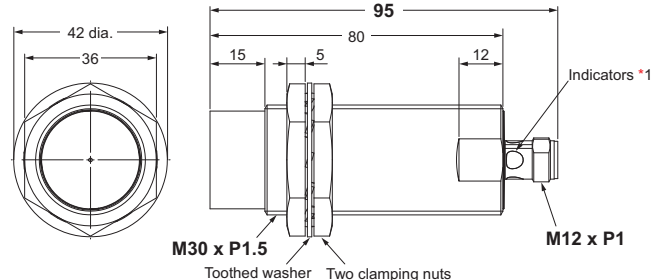
E2E-X□M□L18-M1



E2E-X40M□L30-M1



E2E-X50M□L30-M1



Sensors

BASIC Model

DC 3-wire (Double/Single distance model)

Pre-wired Models
Pre-wired Connector Models
(Shielded)



Note: Refer to the figure below the table for the connections of the Pre-wired Connector Model.

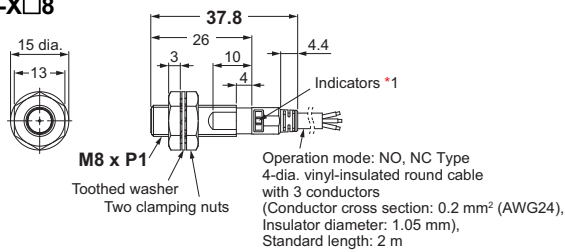
DC 3-wire (Long-body Double/Single distance model)

Pre-wired Models
Pre-wired Connector Models
(Shielded)

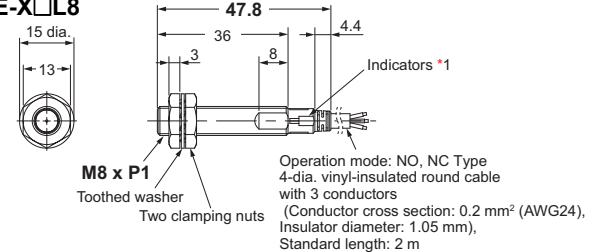


Note: Refer to the figure below the table for the connections of the Pre-wired Connector Model.

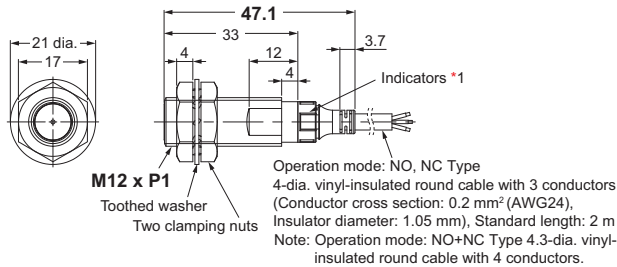
E2E-X□8



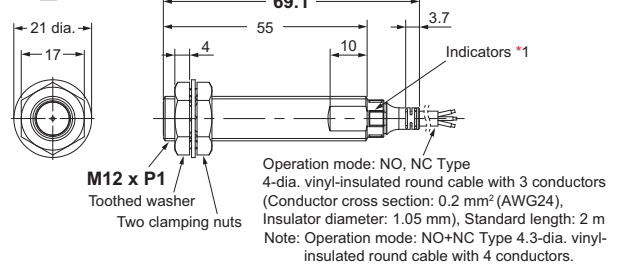
E2E-X□L8



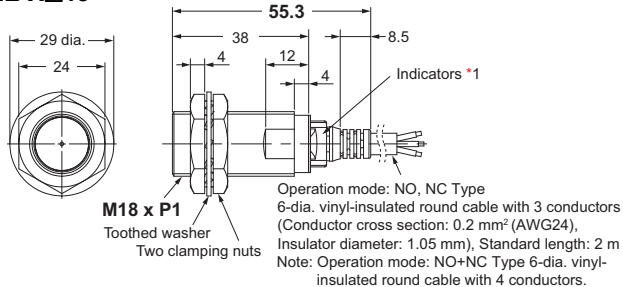
E2E-X□12



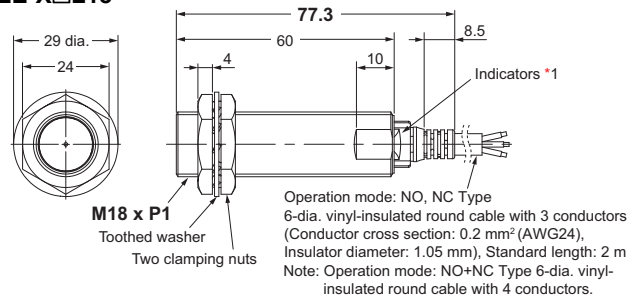
E2E-X□L12



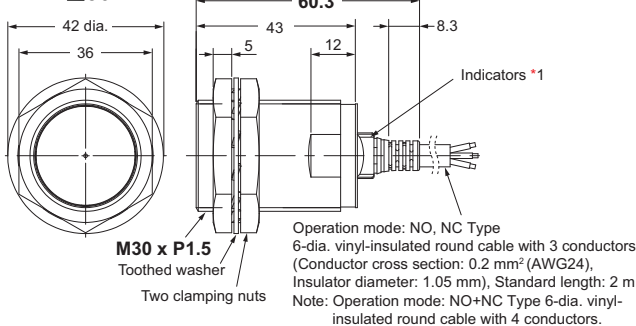
E2E-X□18



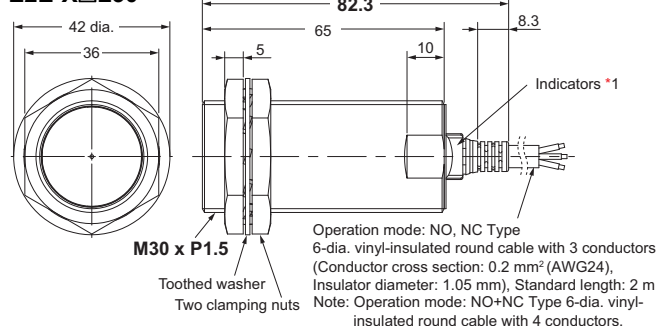
E2E-X□L18



E2E-X□30

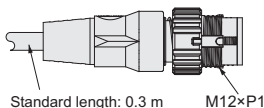


E2E-X□L30



*1. Standard I/O mode (SIO mode): Operation indicator (orange/ON), communication indicator (green/OFF)
IO-Link Communication mode (COM mode): Operation indicator (orange/ON), communication indicator (green/Flashing (1sec cycle))

Pre-wired Connector Models (-M1TJ)



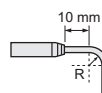
Note: Refer to the Pre-wired Model for the cable specifications of the Pre-wired Connector Model.

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	
M12	12
M18	
M30	18

Wire pullout position



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

E2E NEXT Series

Sensors **BASIC Model**

DC 3-wire (Double/Single distance model)

Pre-wired Models
Pre-wired Connector Models
(Unshielded)



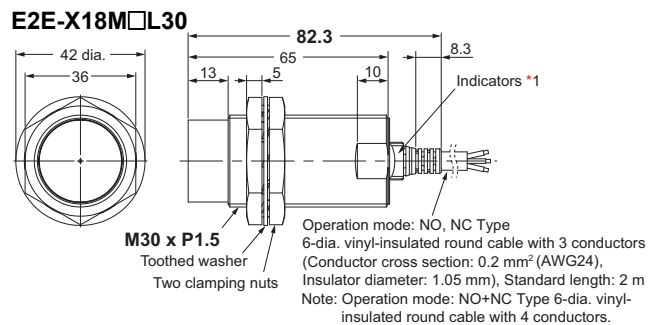
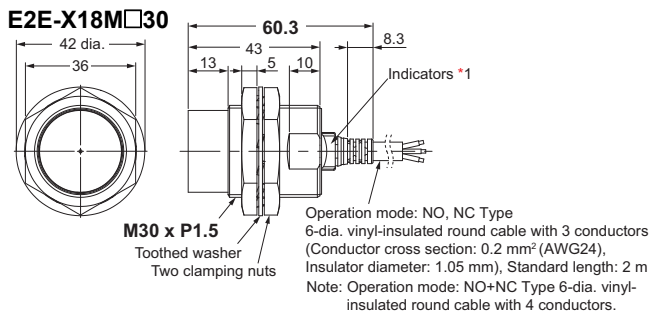
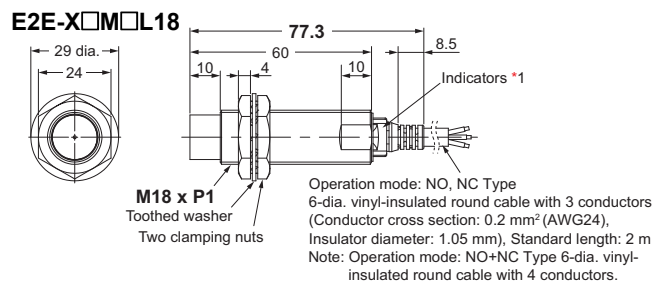
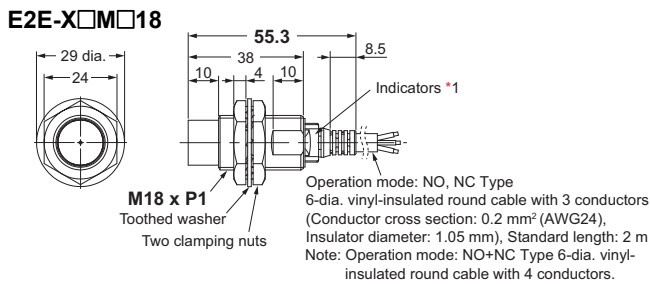
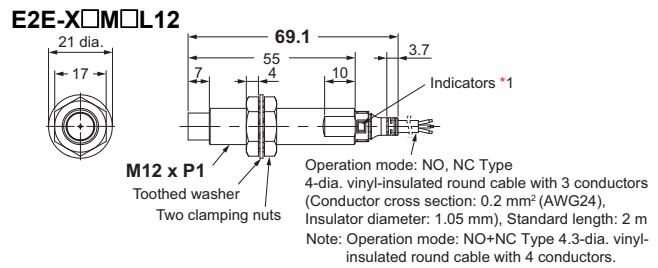
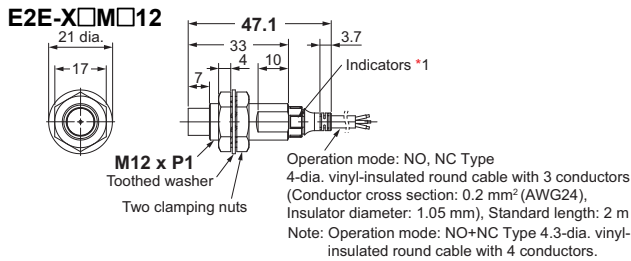
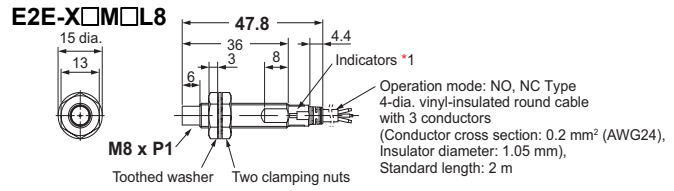
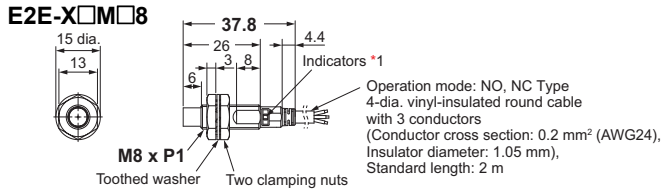
Note:
Refer to the figure below the table for the connections of the Pre-wired Connector Model.

DC 3-wire (Long-body Double/Single distance model)

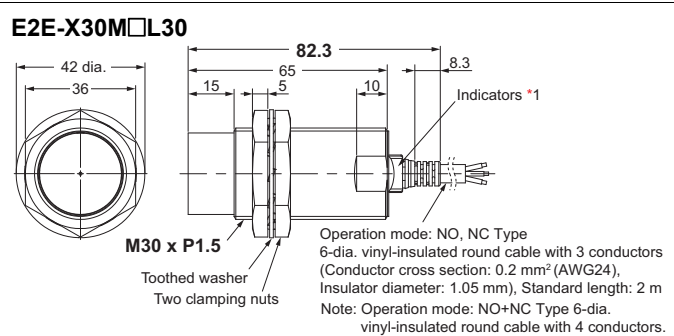
Pre-wired Models
Pre-wired Connector Models
(Unshielded)



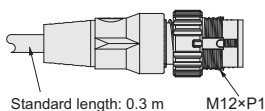
Note:
Refer to the figure below the table for the connections of the Pre-wired Connector Model.



*1. Standard I/O mode (SIO mode): Operation indicator (orange/ON), communication indicator (green/OFF)
IO-Link Communication mode (COM mode): Operation indicator (orange/ON), communication indicator (green/Flashing (1sec cycle))



Pre-wired Connector Models (-M1TJ)



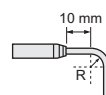
Note: Refer to the Pre-wired Model for the cable specifications of the Pre-wired Connector Model.

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	-
M12	
M18	2.5
M30	

Sensors BASIC Model

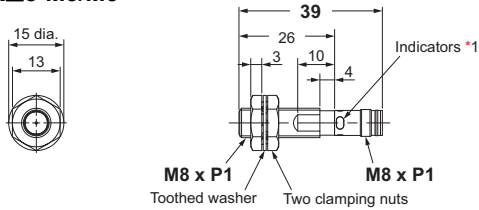
DC 3-wire (Double/Single distance model)
Connector Models (Shielded)



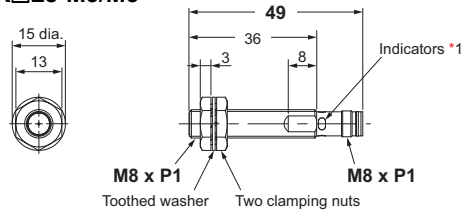
DC 3-wire (Long-body Double/Single distance model)
Connector Models (Shielded)



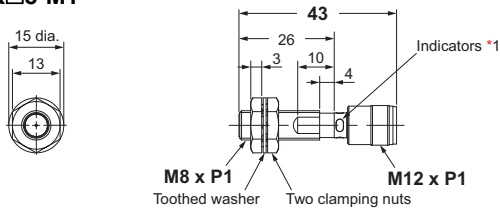
E2E-X□8-M3/M5



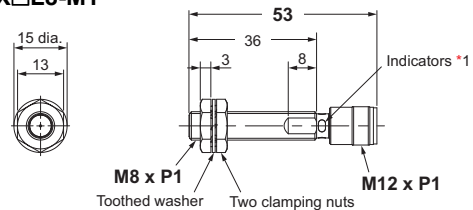
E2E-X□L8-M3/M5



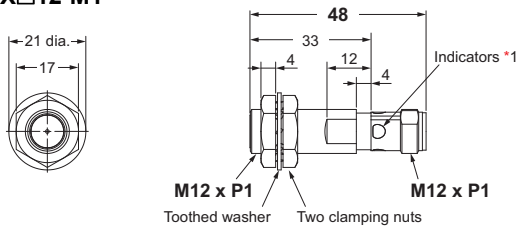
E2E-X□8-M1



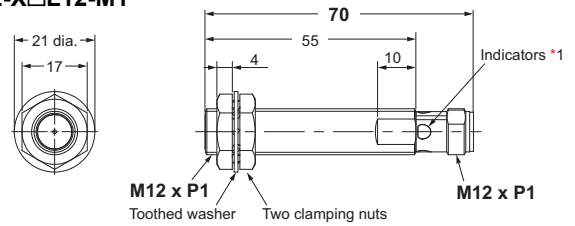
E2E-X□L8-M1



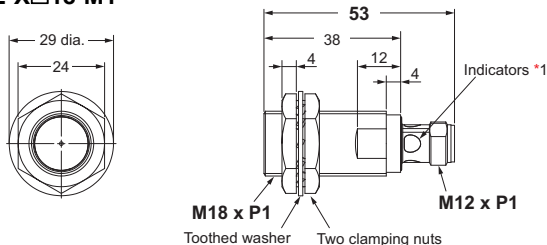
E2E-X□12-M1



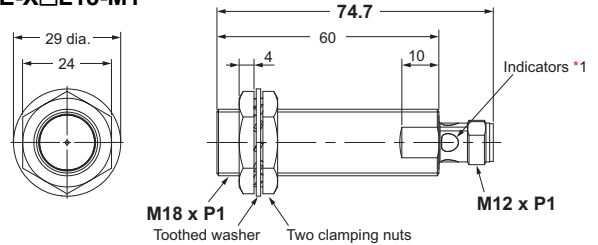
E2E-X□L12-M1



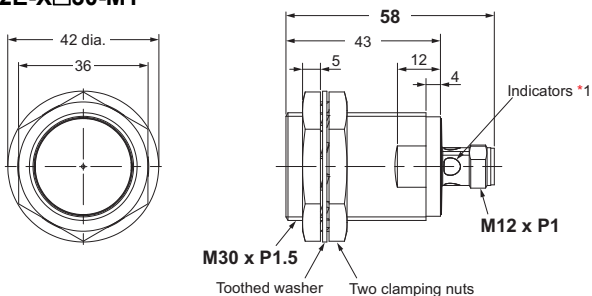
E2E-X□18-M1



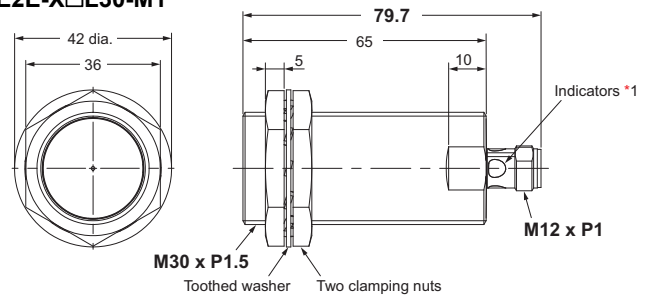
E2E-X□L18-M1



E2E-X□30-M1



E2E-X□L30-M1



*1. Standard I/O mode (SIO mode): Operation indicator (orange/ON), communication indicator (green/OFF)
 IO-Link Communication mode (COM mode): Operation indicator (orange/ON), communication indicator (green/Flashing (1sec cycle))

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. $^{+0.5}_0$

E2E NEXT Series
DC 3-wire

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

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

E2EQ NEXT Series
DC 3-wire/DC 2-wire

XS5 NEXT Series

XS5

XS3

E2E NEXT Series

Sensors **BASIC Model**

DC 3-wire (Double/Single distance model)

Connector Models (Unshielded)



Note: The sensing surface of size M30 is light gray.

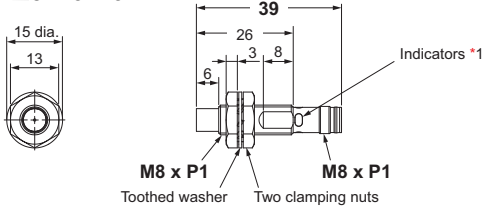
DC 3-wire (Long-body Double/Single distance model)

Connector Models (Unshielded)

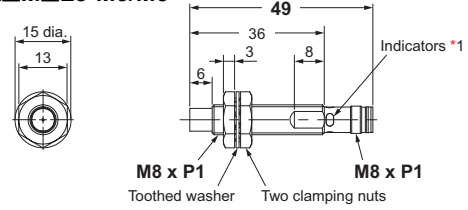


Note: The sensing surface of size M30 is light gray.

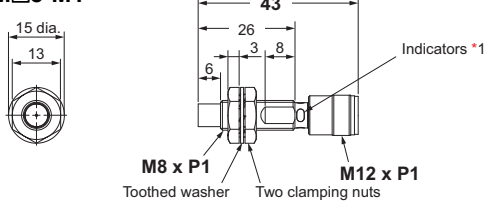
E2E-X□M□8-M3/M5



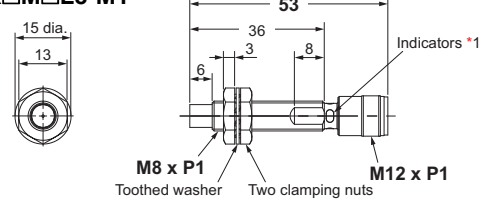
E2E-X□M□L8-M3/M5



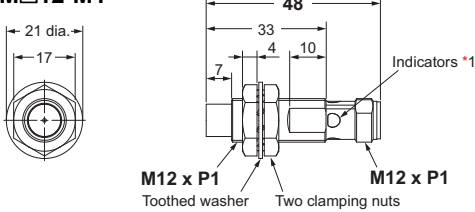
E2E-X□M□8-M1



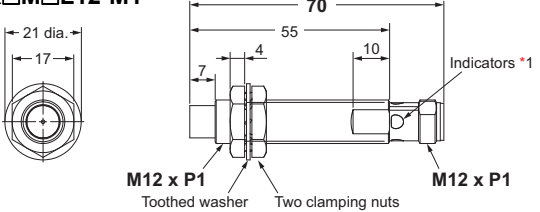
E2E-X□M□L8-M1



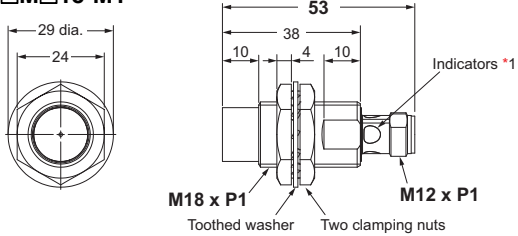
E2E-X□M□12-M1



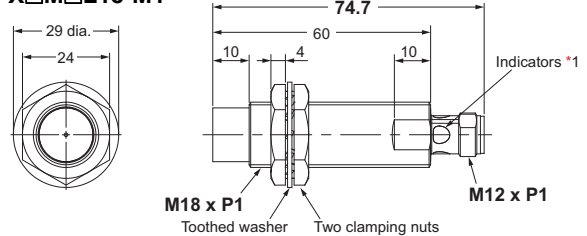
E2E-X□M□L12-M1



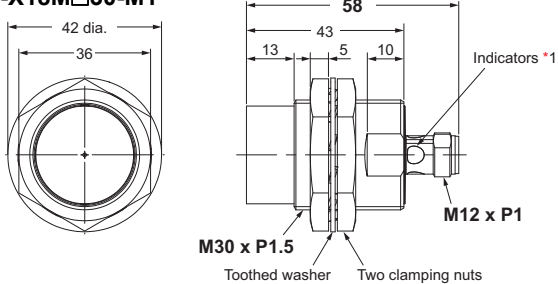
E2E-X□M□18-M1



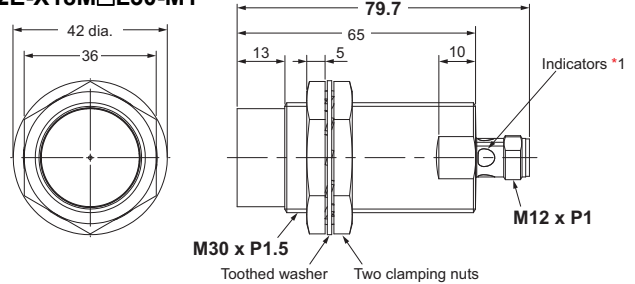
E2E-X□M□L18-M1



E2E-X18M□30-M1



E2E-X18M□L30-M1



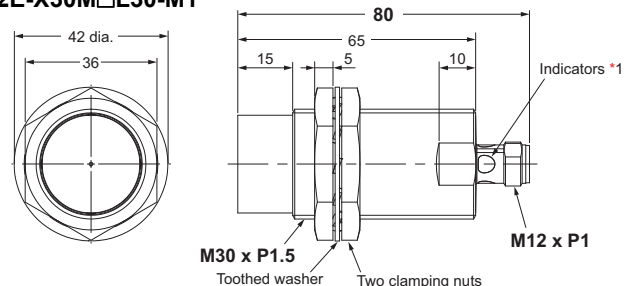
*1. Standard I/O mode (SIO mode): Operation indicator (orange/ON), communication indicator (green/OFF)
IO-Link Communication mode (COM mode): Operation indicator (orange/ON), communication indicator (green/Flashing (1sec cycle))

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. $^{+0.5}_0$

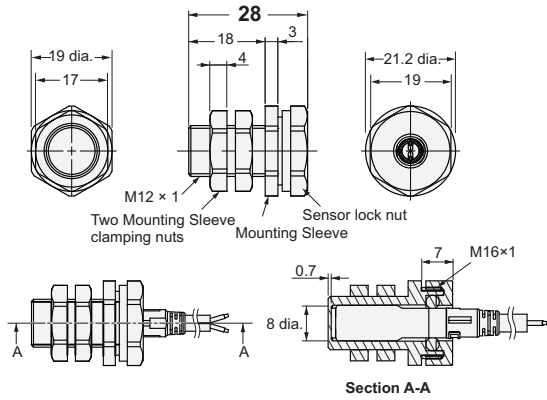
E2E-X30M□L30-M1



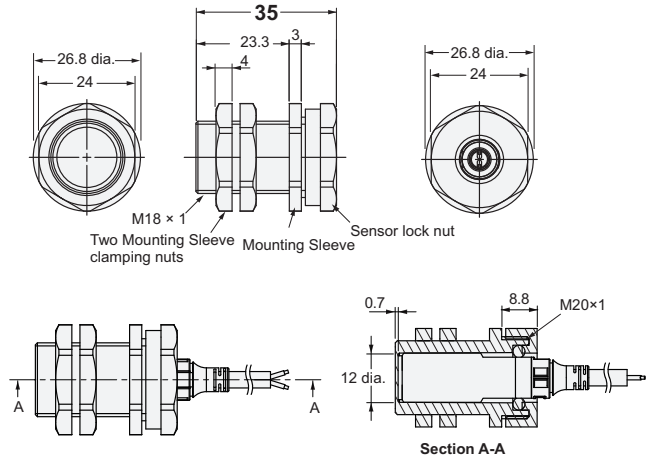
Accessories (Sold Separately)

e-jig (Mounting Sleeves)

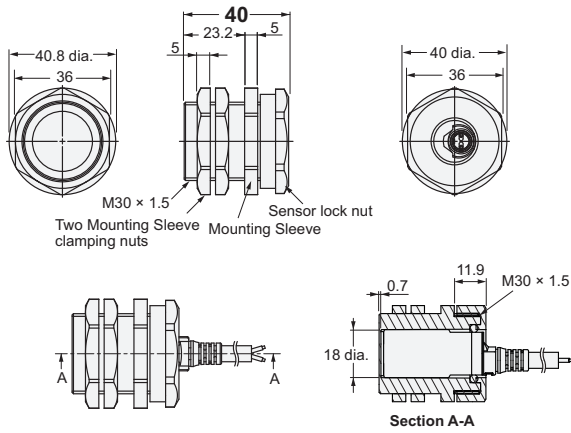
Y92E-J8S12



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

E2E NEXT Series
DC 3-wire

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

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

E2EQ NEXT Series
DC 3-wire/DC 2-wire

XS5 NEXT Series

XS5

XS3

