

Long-distance Detection Prevents Unexpected Facility Stoppages

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

*1. Based on October 2025 OMRON investigation.

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

*3. Refer to page 66 for details.



Be sure to read *Safety Precautions* on page 69.



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) D (3) (4) (5) - (6) - (7) (8) (9)

No.	Classification	Code	Meaning
(1)	Sensing distance	Number	Sensing distance (Unit: mm) (R: Indication of decimal point)
(2)	Shielding	Blank	Shielded Models
		M	Unshielded Models
(3)	Operation mode	1	Normally open (NO)
		2	Normally closed (NC)
(4)	Body size	Blank	Standard
		L	Long Body
(5)	Size	8	M8
		12	M12
		18	M18
		30	M30
(6)	Connecting method	Blank	Pre-wired Models
		M1TGJ	M12 Pre-wired Smartclick Connector Models
		M1TGJR	M12 Pre-wired Smartclick Connector Models (Robot (bending-resistant) PVC cable)
(7)	Polarity	Blank	Polarity
		T	No polarity
(8)	Cable specifications (Only shown in the model number of Pre-wired Models.)	Blank	Standard PVC cable
		R	Robot (bending-resistant) PVC cable
(9)	Cable length	Number M	Cable length

Note: 1. The purpose of this model number legend is to provide understanding of the meaning of specifications from the model number.

2. Pin arrangements vary depending on the model. Refer to I/O Circuit Diagrams on page 68 for details.

E2E NEXT Series

Ordering Information

Sensors

DC 2-wire (Triple distance model) [Refer to *Dimensions* on page 71.]

Shielded Models *1

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

Unshielded Models

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

*1. When embedding the Proximity Sensor in metal, refer to *Influence of Surrounding Metal* on page 70.

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

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

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

Enhanced Usability Enables Installation without Special Skills and Shortens Commissioning and Recovery Time

- With high-brightness LED, the indicator is visible anywhere from 360°.
- Cables with enhanced oil resistance enabled 2-year oil resistance*1.
- IP69K compliant for water resistance and wash resistance.
- UL certification (UL60947-5-2) and CSA certification (CSA C22.2 UL60947-5-2-14)

*1. Refer to page 77 to 79 for details.



Be sure to read *Safety Precautions* on page 83.



Note: Some models are not certified.

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) D (3) (4) (5) - (6) - (7) (8) - (9) (10)

No.	Type	Code	Meaning
(1)	Sensing distance	Number	Sensing distance (Unit: mm) (R: Indication of decimal point)
(2)	Shielding	Blank	Shielded
		M	Unshielded
(3)	Operation mode	1	Normally open (NO)
		2	Normally closed (NC)
(4)	Oscillation frequency type	Blank	Standard frequency
		5	Different frequency
(5)	Body size	Blank	Standard
		L	Long-body
		Blank	Pre-wired Models
		M1	M12 Connector Models (Old pin arrangement)
		M1G	M12 Connector Models (IEC pin arrangement)
		M1J	M12 Pre-wired Standard Connector Models (Old pin arrangement)
		M1GJ	M12 Pre-wired Standard Connector Models (IEC pin arrangement)
		M1TJ	M12 Pre-wired Smartclick Connector Models (Old pin arrangement)
		M1TGJ	M12 Pre-wired Smartclick Connector Models (IEC pin arrangement)
		M1TGJR	M12 Pre-wired Smartclick Connector Models Robot (bending-resistant) cable (IEC pin arrangement)
		M3G	M8 (4-pin) Connector Models (IEC pin arrangement)
(7)	Polarity	Blank	Polarity
		T	No polarity
(8)	Cable specifications (Only shown in the model number of Pre-wired Models.)	Blank	Standard PVC cable
		R	Robot (bending-resistant) PVC cable
(9)	New model	N	New model This is blank if the cable specification in number (8) is R.
(10)	Cable length	Number M	Cable length (Applicable to Pre-wired Models and Prewired Connector Models.)

Note: 1. The purpose of this model number legend is to provide understanding of the meaning of specifications from the model number.

2. Pin arrangements vary depending on the model. Refer to *I/O Circuit Diagrams* on page 82 for details.

E2E NEXT Series

Ordering Information

Sensors

DC 2-wire (Standard model) [Refer to *Dimensions* on page 85.]

Shielded Models

Size (Sensing distance)	Connection method	Body size	Polarity	Model	
				Operation mode: NO	Operation mode: NC
M8 (2mm)	Pre-wired (2 m)	38 mm	Yes	E2E-X2D1-N 2M *1 *2	E2E-X2D2-N 2M *1 *2
	M12 Pre-wired Smartclick Connector (0.3 m)	38 mm	Yes	E2E-X2D1-M1TGJ 0.3M *4 *5	---
	M12 Connector	43 mm	Yes	E2E-X2D1-M1G *5	E2E-X2D2-M1G *5
	M8 (4-pin) Connector	39 mm	Yes	E2E-X2D1-M3G	E2E-X2D2-M3G
M12 (3 mm)	Pre-wired (2 m)	47 mm	Yes	E2E-X3D1-N 2M *1 *2 *3	E2E-X3D2-N 2M *1 *2 *3
		69 mm		E2E-X3D1L 2M *1 *3	E2E-X3D2L 2M *1
	M12 Pre-wired Smartclick Connector (0.3 m)	47 mm	Yes	E2E-X3D1-M1TGJ 0.3M *4 *5	---
			No	E2E-X3D1-M1TJ-T 0.3M	---
	M12 Pre-wired Standard Connector (0.3 m)	47 mm	No	---	E2E-X3D2-M1GJ-T 0.3M
	M12 Connector	48 mm	Yes	E2E-X3D1-M1G *3 *5	E2E-X3D2-M1G *5
M18 (7 mm)	Pre-wired (2 m)	55 mm	Yes	E2E-X7D1-N 2M *1 *2 *3	E2E-X7D2-N 2M *1 *2 *3
		77 mm		E2E-X7D1L 2M *1 *3	E2E-X7D2L 2M *1
	M12 Pre-wired Smartclick Connector (0.3 m)	55 mm	Yes	E2E-X7D1-M1TGJ 0.3M *4 *5	---
			No	E2E-X7D1-M1TJ-T 0.3M	---
	M12 Pre-wired Standard Connector (0.3 m)	55 mm	No	---	E2E-X7D2-M1GJ-T 0.3M
	M12 Connector	53 mm	Yes	E2E-X7D1-M1G *3 *5	E2E-X7D2-M1G *5
M30 (10 mm)	Pre-wired (2 m)	60 mm	Yes	E2E-X10D1-N 2M *1 *2	E2E-X10D2-N 2M *1 *3
		82 mm		E2E-X10D1L 2M *1 *3	E2E-X10D2L 2M *1
	M12 Pre-wired Smartclick Connector (0.3 m)	60 mm	Yes	E2E-X10D1-M1TGJ 0.3M *3 *4 *5	---
			No	E2E-X10D1-M1TJ-T 0.3M	---
	M12 Connector	58 mm	Yes	E2E-X10D1-M1G *3 *5	E2E-X10D2-M1G *5
				E2E-X10D1-M1G *3 *5	E2E-X10D2-M1G *5

Unshielded Models

Size (Sensing distance)	Connection method	Body size	Polarity	Model	
				Operation mode: NO	Operation mode: NC
M8 (4 mm)	Pre-wired (2 m)	38 mm	Yes	E2E-X4MD1 2M *1 *2	E2E-X4MD2 2M *1 *2
	M12 Connector	43 mm	Yes	E2E-X4MD1-M1G *5	E2E-X4MD2-M1G *5
	M8 (4-pin) Connector	39 mm	Yes	E2E-X4MD1-M3G	E2E-X4MD2-M3G
M12 (8 mm)	Pre-wired (2 m)	47 mm	Yes	E2E-X8MD1 2M *1 *2	E2E-X8MD2 2M *1 *3
		69 mm		E2E-X8MD1L 2M *1 *3	E2E-X8MD2L 2M *1
	M12 Pre-wired Smartclick Connector (0.3 m)	47 mm	Yes	E2E-X8MD1-M1TGJ 0.3M *4 *5	---
M18 (14 mm)	Pre-wired (2 m)	55 mm	Yes	E2E-X14MD1 2M *1 *2 *3	E2E-X14MD2 2M *1 *2 *3
		77 mm		E2E-X14MD1L 2M *1 *3	E2E-X14MD2L 2M
	M12 Pre-wired Smartclick Connector (0.3 m)	55 mm	Yes	E2E-X14MD1-M1TGJ 0.3M *4 *5	---
	M12 Connector	53 mm	Yes	E2E-X14MD1-M1G *3 *5	E2E-X14MD2-M1G *5
M30 (20 mm)	Pre-wired (2 m)	60 mm	Yes	E2E-X20MD1 2M *1 *2 *3	E2E-X20MD2 2M *1 *3
		82 mm		E2E-X20MD1L 2M *1 *3	E2E-X20MD2L 2M *1
	M12 Pre-wired Smartclick Connector (0.3 m)	60 mm	Yes	E2E-X20MD1-M1TGJ 0.3M *4 *5	---
			Yes	E2E-X20MD1-M1G *3 *5	E2E-X20MD2-M1G *5

*1. Models with 5-m cable length are also available with "5M" suffix. (Example: E2E-X2D1-N 5M)

*2. Models with a 2-m or 5-m robot (bending-resistant) cables are also available with "-R" in the model number. (Example: E2E-X2D1-R 2M/E2E-X2D1-R 5M)

*3. Models with different frequencies are also available. The model number is E2E-X□D□5. (Example: E2E-X3D15-N 2M/E2E-X3D15L 2M)

*4. M12 Pre-wired Standard Connector Models with a 0.3-m cable are also available. The model numbers of models with IEC pin arrangement include "-M1GJ". (Example: E2E-X2D1-M1GJ 0.3M)

The model numbers of models with old pin arrangement include "-M1J". (Example: E2E-X2D1-M1J 0.3M)

Models with old pin arrangement of M12 Pre-wired Smartclick Connector Models are also available. The model numbers include "-M1TJ". (Example: E2E-X3D1-M1TJ 0.3M)

*5. Models with old pin arrangement are also available. The model number is E2E-X□D□-M1. (Example: E2E-X2D1-M1)