

# Cylindrical Proximity Sensor E2E/E2E2

## A New Series of Easy-to-use and Tough E2E/E2E2 Models Long-size E2E2 Proximity Sensor Conforms to CENELEC

- Ideal for a variety of applications.
- With a metal connector that can be tightened securely and a cable protector.
- With an easy-to-see indicator, deeper mounting holes, and tightening flats for wrenches.
- New 3-dia. size (sensing distance: 0.6 mm) added to the lineup.







### <READ AND UNDERSTAND THIS CATALOG>

Please read and understand this catalog before purchasing the products. Please consult your OMRON representative if you have any questions or comments.

## Ordering Information

### E2E

#### DC 2-wire/Pre-wired Models






Self-diagnostic output function	Size		Sensing distance	Model	
				NO	NC
Yes	Shielded 	M12	3 mm	E2E-X3D1S (See note 1.)	---
		M18	7 mm	E2E-X7D1S (See note 1.)	---
		M30	10 mm	E2E-X10D1S (See note 1.)	---
	Unshielded 	M12	8 mm	E2E-X8MD1S (See note 1.)	---
		M18	14 mm	E2E-X14MD1S (See note 1.)	---
		M30	20 mm	E2E-X20MD1S (See note 1.)	---
No	Shielded 	M8	2 mm	E2E-X2D1-N (See notes 2 and 3.)	E2E-X2D2-N (See note 3.)
		M12	3 mm	E2E-X3D1-N (See notes 1, 2 and 3.)	E2E-X3D2-N (See note 3.)
		M18	7 mm	E2E-X7D1-N (See notes 1, 2 and 3.)	E2E-X7D2-N (See note 3.)
		M30	10 mm	E2E-X10D1-N (See notes 1, 2 and 3.)	E2E-X10D2-N
	Unshielded 	M8	4 mm	E2E-X4MD1 (See notes 2 and 3.)	E2E-X4MD2
		M12	8 mm	E2E-X8MD1 (See notes 1, 2 and 3.)	E2E-X8MD2
		M18	14 mm	E2E-X14MD1 (See notes 1, 2 and 3.)	E2E-X14MD2
		M30	20 mm	E2E-X20MD1 (See notes 1, 2 and 3.)	E2E-X20MD2

**Note 1.** In addition to the above models, E2E-X□□15 models (e.g., E2E-X3D15-N), which are different in frequency from the above models, are available.

**2.** E2E models with a robotics cable are available as well. The model number of a model with a robotics cable has the suffix “-R” (e.g., E2E-X3D1-R).



**3.** Cables with a length of 5 m are also available. Specify the cable length at the end of the model number (e.g., E2E-X3D1-N 5M).

## DC 2-wire/Connector Models

Connector	Self-diagnostic output function	Size	Sensing distance	Model		
				NO	NC	
M12	Yes	Shielded 	M12	3 mm	E2E-X3D1S-M1	---
			M18	7 mm	E2E-X7D1S-M1	---
			M30	10 mm	E2E-X10D1S-M1	---
		Unshielded 	M12	8 mm	E2E-X8MD1S-M1	---
			M18	14 mm	E2E-X14MD1S-M1	---
			M30	20 mm	E2E-X20MD1S-M1	---
	No	Shielded 	M8	2 mm	E2E-X2D1-M1G	E2E-X2D2-M1G
			M12	3 mm	E2E-X3D1-M1G (See note.)	E2E-X3D2-M1G
			M18	7 mm	E2E-X7D1-M1G (See note.)	E2E-X7D2-M1G
			M30	10 mm	E2E-X10D1-M1G (See note.)	E2E-X10D2-M1G
		Unshielded 	M8	4 mm	E2E-X4MD1-M1G	E2E-X4MD2-M1G
			M12	8 mm	E2E-X8MD1-M1G (See note.)	E2E-X8MD2-M1G
			M18	14 mm	E2E-X14MD1-M1G (See note.)	E2E-X14MD2-M1G
			M30	20 mm	E2E-X20MD1-M1G (See note.)	E2E-X20MD2-M1G
M8	Shielded 	M8	2 mm	E2E-X2D1-M3G	E2E-X2D2-M3G	
			4 mm	E2E-X4MD1-M3G	E2E-X4MD2-M3G	

**Note:** In addition to the above models, E2E-X□D15-M1G models (e.g., E2E-X3D15-M1G), which are different in frequency from the above models, are available.

## DC 2-wire/Pre-wired Connector Models

Size	Sensing distance	Operation mode	Polarity	Model
Shielded 	M12	NO	Yes	E2E-X3D1-M1GJ
			No	E2E-X3D1-M1J-T
	M18		Yes	E2E-X7D1-M1GJ
			No	E2E-X7D1-M1J-T
	M30		Yes	E2E-X10D1-M1GJ
			No	E2E-X10D1-M1J-T
Unshielded 	M12	8 mm	Yes	E2E-X8MD1-M1GJ
	M18	14 mm		E2E-X14MD1-M1GJ
	M30	20 mm		E2E-X20MD1-M1GJ



**Note 1.** A model with no polarity has a residual voltage of 5 V, which must be taken into consideration together with the interface condition (the PLC's ON voltage, for example) when connecting the Proximity Sensor to a load.

**2.** The standard cable length is 300 mm. Models are also available with 500 mm and 1 m cables.

## Connector Pin Assignments of DC 2-wire Model

The connector pin assignments of each new E2E DC 2-wire conforms to IEC947-5-2 Table III.

The following E2E models with conventional connector pin assignments are available as well.

Size	Operation mode	Model	Size	Operation mode	Model
Shielded 	M8	NO	Unshielded 	M8	NO
		NC			NC
	M12	NO		M12	NO
		NC			NC
	M18	NO		M18	NO
		NC			NC
	M30	NO		M30	NO
		NC			NC