

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
		Unshielded 		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	3 mm	NO	Yes	E2E-X3D1-M1GJ
	M18	7 mm		No	E2E-X3D1-M1J-T
				Yes	E2E-X7D1-M1GJ
	M30	10 mm		No	E2E-X7D1-M1J-T
				Yes	E2E-X10D1-M1GJ
	M30	10 mm		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		E2E-X2D1-M1		Unshielded 	M8	NO		E2E-X4MD1-M1	
		NC		E2E-X2D2-M1				NC		E2E-X4MD2-M1	
	M12	NO		E2E-X3D1-M1			M12	NO		E2E-X8MD1-M1	
		NC		E2E-X3D2-M1				NC		E2E-X8MD2-M1	
	M18	NO		E2E-X7D1-M1			M18	NO		E2E-X14MD1-M1	
		NC		E2E-X7D2-M1				NC		E2E-X14MD2-M1	
	M30	NO		E2E-X10D1-M1			M30	NO		E2E-X20MD1-M1	
		NC		E2E-X10D2-M1				NC		E2E-X20MD2-M1	