

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 cord protector.
- With an easy-to-see indicator, deeper mounting holes, and tightening flats for wrenches.
- The new series of E2E models includes M8 plug-in connector models.

Note: Detailed information is available for the replacement of conventional E2E models with new E2E models. Ask your OMRON representative for a copy of OMRON's E2E/E2E2 Conversion Guide.



Ordering Information

E2E

DC 2-wire/Pre-wired Models

| Self-diagnostic output function | Type | Size | Sensing distance | Part number | |
|---------------------------------|------------|------|------------------|---------------------------------|-------------|
| | | | | 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 1 and 2) | E2E-X2D2-N |
| | | M12 | 3 mm | E2E-X3D1-N (see notes 1 and 2) | E2E-X3D2-N |
| | | M18 | 7 mm | E2E-X7D1-N (see notes 1 and 2) | E2E-X7D2-N |
| | | M30 | 10 mm | E2E-X10D1-N (see notes 1 and 2) | E2E-X10D2-N |
| | Unshielded | M8 | 4 mm | E2E-X4MD1 (see notes 1 and 2) | E2E-X4MD2 |
| | | M12 | 8 mm | E2E-X8MD1 (see notes 1 and 2) | E2E-X8MD2 |
| | | M18 | 14 mm | E2E-X14MD1 (see notes 1 and 2) | E2E-X14MD2 |
| | | M30 | 20 mm | E2E-X20MD1 (see notes 1 and 2) | 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).

DC 2-wire/Plug-in Models

| Connector | Self-diagnostic output function | Type | Size | Sensing distance | Part number | |
|-----------|---------------------------------|------------|------|------------------|---------------------------|----------------|
| | | | | | 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-X3D1-M3G | E2E-X3D2-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/Connector Extension Models

| Type | Size | Sensing distance | Output configuration | Polarity | Part number | |
|---|-------|------------------|----------------------|----------|-----------------|-----------------|
| Shielded  | M12 | 3 mm | NO | Yes | E2E-X3D1-M1GJ | |
| | | | | No | E2E-X3D1-M1J-T | |
| | | | | Yes | E2E-X7D1-M1GJ | |
| | M18 | 7 mm | | No | E2E-X7D1-M1J-T | |
| | | | | Yes | E2E-X10D1-M1GJ | |
| | | | | No | E2E-X10D1-M1J-T | |
| Unshielded  | M12 | 8 mm | NO | Yes | E2E-X8MD1-M1GJ | |
| | | | | | E2E-X14MD1-M1GJ | |
| | | | | | E2E-X20MD1-M1GJ | |
| | M18 | 14 mm | | NO | | E2E-X14MD1-M1GJ |
| | | | | | | E2E-X14MD2-M1GJ |
| | | | | | | E2E-X20MD1-M1GJ |
| M30 | 20 mm | NO | | | E2E-X20MD1-M1GJ | |
| | | | | | E2E-X20MD2-M1GJ | |
| | | | | | 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 PC's ON voltage, for example) when connecting the Proximity Sensor to a load.

2. The standard cord length is 30 cm. 50-cm and 1-m models are also available.

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.

| Type | Size | Output configuration | Part number | Sensing head | | Output configuration | Part number |
|----------|------|----------------------|--------------|--------------|-----|----------------------|---------------|
| 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 |