

Inductive Sensors

E2A family



Cylindrical Proximity Sensor

Ensures a sensing distance approximately 1.5 to 2 times larger than that of any conventional OMRON Sensor.

Problems such as the collision of workpieces are eliminated.

Full range of standard sizes (M8, M12, M18 and M30; both long and short barrels)

Modular construction simplifies customization.

- sensing distance 2-30mm
- setting distance 0-24mm
- extended (double) sensing distance IP67 and IP69k for highest water protection
- power supply voltage 12 to 24VDC
- DC 3-wire (NO, NC) models
- response frequency: 100Hz up to 1,5kHz
- output configuration PNP-NO, 200mA
- pre-wired versions with different cable materials and diameters, M8 and M12 connector types, pre-wired types with cable end connectors
- operating temperature: -40°C to 70°C

Part No.	Description
E2A-M12KN08-WP-B1	M12, non-shielded, 8mm s.d., length 34mm, 2m cable
E2A-M12KS04-M1-B1	M12, shielded, 4mm, thread length 34mm, M12 conn.
E2A-M12KS04-WP-B1	M12, shielded, 4mm, thread length 34mm, 2m cable
E2A-M18KN16-M1-B1	M18, non-shielded, 16mm, th.length 39mm, M12 conn.
E2A-M18KN16-WP-B1	M18, non-shielded, 16mm, th.length 39mm, 2m cable
E2A-M18KS08-M1-B1	M18, shielded, 8mm, th. length 39mm, M12 connector
E2A-M18KS08-WP-B1	M18, shielded, 8mm, thread length 39mm, 2m cable
E2A-M30LS15-WP-B1	M30, shielded, 15mm, thread length 66mm, 2m cable
E2A-S08KS02-M5-B1	M8, shielded, 2mm, th.length 27mm, M8conn., st. steel
E2A-S08KS02-WP-B1	M8, shielded, 2mm, th.length 27mm, 2m cable, st. steel

Part No.	Ord.No.
S E2A-M12KN08-WP-B1 2M	71082
S E2A-M12KS04-M1-B1	71083
S E2A-M12KS04-WP-B1 2M	71084
S E2A-M18KN16-M1-B1	71085
S E2A-M18KN16-WP-B1 2M	71086
S E2A-M18KS08-M1-B1	71087
S E2A-M18KS08-WP-B1 2M	71088
S E2A-M30LS15-WP-B1 2M	71089
S E2A-S08KS02-M5-B1	71090
S E2A-S08KS02-WP-B1 2M	71091



Please find appropriate connectors and cables with connectors on pages F34 to F37.

Capacitive Sensors

E2K-F family



Flat Proximity Sensor

Flat, Built-in Amplifier Models offer excellent space efficiency and provide a 10-mm sensing distance. Detects both metallic and nonmetallic objects (water, oil, glass, plastic, etc.).

Direct mounting onto a metallic surface is possible.

- Sensing distance 10 mm ±10%
- dimensions: 10(h) x 20(w) x 50 (l) mm
- power supply 12 to 24 VDC
- DC 3-wire model with 2m long cable
- detection indicator (red LED)
- NPN-NO output, 100mA
- operating ambient temperature -10° to +55°C

Part No.	Description
E2K-F10MC1	Flat capacitive sensor, sensing distance 10mm, 2m cable

Part No.	Ord.No.
S E2K-F10MC1	71358

Photoelectric Sensors

E3Z family



Compact Photoelectric Sensor with Built-in Amplifier

Long sensing distance of 15 m for Through-beam Models, 4 m for Retro-reflective Models, and 1 m for Diffusereflective Models.

Unique algorithm minimizes external interference from inverter fluorescent lighting.

- power supply voltage 12 to 24 VDC
- dimensions 10,8 x 20x 31mm
- plastic housing
- PNP output, 100mA/26,4 VDC
- response time 1ms max.
- LIGHT-ON/DARK-ON switch selectable
- adjustable sensitivity
- output short-circuit and reverse polarity protection
- light source - infrared LED, retroreflective types with polarized light (red LED)
- connection method: pre-wired 2m, 4-pin M8 connector
- LED indicators: green - power supply/stability, orange - output
- provides a high degree of protection (IP67), mutual interference prevention, and EN standard compliance.
- operating ambient temperature -25° to +55°C
- accessories for light beam width adjustment for types: receiver_emitter

Part No.	Description
E3Z-D81	diffusive, IR, 2m cable long, 10cm sensing distance
E3Z-D82	diffusive, IR, 2m cable long, 1m sensing distance
E3Z-D86	diffusive, IR, M8 connector, 10cm sensing distance
E3Z-D87	diffusive, IR, M8 connector, dosah 1m sensing distance
E3Z-R81	retroreflective, 2m cable long, dosah 4m sensing distance
E3Z-R86	retroreflective, M8 connector, 4m sensing distance
E3Z-T81	emitter-receiver, 2m cable long, 15m sensing distance

Part No.	Ord.No.
S E3Z-D81 2M	71362
S E3Z-D82 2M	71363
S E3Z-D86	71364
S E3Z-D87	67557
S E3Z-R81 2M	71367
S E3Z-R86	71368
S E3Z-T81 2M	71369

E3Z-B family



Reliable Detection of Transparent Objects, Including Thin-walled Clear, Plastic Bottles

Uses OMRON's unique optical system ("Inner View") that can detect various shapes of clear, plastic bottles. Detects a wide range of bottles from 500-ml bottles to 2-l bottles, and from single bottles to sets of stocked bottles.

- sensing distance 500mm
- power supply voltage 12 to 24 VDC
- dimensions: 10,8 x 20x 31mm
- connection method: pre-wired 2m or M8 connector
- adjustable sensitivity
- PNP output 100mA/26,4VDC
- LIGHT-ON/DARK-ON switch selectable
- response time 1ms max.
- LED indicators: green - power supply/stability, orange - output
- provides a high degree of protection (IP67)
- operating ambient temperature -25° up to +55°C

Part No.	Description
E3Z-B81	retroreflective, 50cm sensing distance, 2m cable long

Part No.	Ord.No.
O E3Z-B81 2M	71361

General Purpose Reflector



Part No.	Description
E39-R1S	General purpose reflector for photoelectric (retroreflective)sensors

Part No.	Ord.No.
S E39-R1S	71477