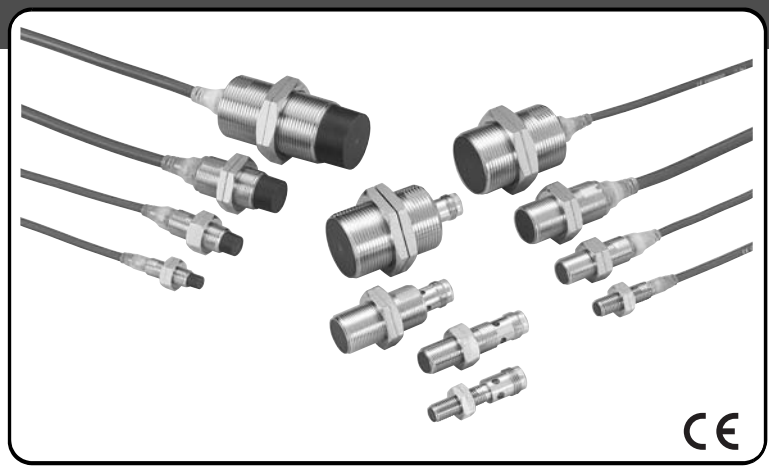
OMRON

# Cylindrical Proximity Sensor
# E2A



## Safe Mounting with Greater Sensing Distance

- 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.

**<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

| Size | | Sensing distance | Connection | Body material | Thread length (overall length) | Output configuration | Operation mode NO | Operation mode NC |
|---|---|---|---|---|---|---|---|---|
| M8 | Shielded | 2.0 mm | Pre-wired | Stainless steel | 27 (40) | PNP | E2A-S08KS02-WP-B1 2M | E2A-S08KS02-WP-B2 2M |
| | | | | | | NPN | E2A-S08KS02-WP-C1 2M | E2A-S08KS02-WP-C2 2M |
| | | | | | 49 (62) | PNP | E2A-S08LS02-WP-B1 2M | E2A-S08LS02-WP-B2 2M |
| | | | | | | NPN | E2A-S08LS02-WP-C1 2M | E2A-S08LS02-WP-C2 2M |
| | | | M12 connector | Stainless steel | 27 (43) | PNP | E2A-S08KS02-M1-B1 | E2A-S08KS02-M1-B2 |
| | | | | | | NPN | E2A-S08KS02-M1-C1 | E2A-S08KS02-M1-C2 |
| | | | | | 49 (65) | PNP | E2A-S08LS02-M1-B1 | E2A-S08LS02-M1-B2 |
| | | | | | | NPN | E2A-S08LS02-M1-C1 | E2A-S08LS02-M1-C2 |
| | | | | Brass | 27 (43) | PNP | E2A-M08KS02-M1-B1 | E2A-M08KS02-M1-B2 |
| | | | | | | NPN | E2A-M08KS02-M1-C1 | E2A-M08KS02-M1-C2 |
| | | | | | 49 (65) | PNP | E2A-M08LS02-M1-B1 | E2A-M08LS02-M1-B2 |
| | | | | | | NPN | E2A-M08LS02-M1-C1 | E2A-M08LS02-M1-C2 |
| | | | M8 connector (3-pin) | Stainless steel | 27 (39) | PNP | E2A-S08KS02-M5-B1 | E2A-S08KS02-M5-B2 |
| | | | | | | NPN | E2A-S08KS02-M5-C1 | E2A-S08KS02-M5-C2 |
| | | | | | 49 (61) | PNP | E2A-S08LS02-M5-B1 | E2A-S08LS02-M5-B2 |
| | | | | | | NPN | E2A-S08LS02-M5-C1 | E2A-S08LS02-M5-C2 |
| | Non-shielded | 4.0 mm | Pre-wired | Stainless steel | 27 (40) | PNP | E2A-S08KN04-WP-B1 2M | E2A-S08KN04-WP-B2 2M |
| | | | | | | NPN | E2A-S08KN04-WP-C1 2M | E2A-S08KN04-WP-C2 2M |
| | | | | | 49 (62) | PNP | E2A-S08LN04-WP-B1 2M | E2A-S08LN04-WP-B2 2M |
| | | | | | | NPN | E2A-S08LN04-WP-C1 2M | E2A-S08LN04-WP-C2 2M |
| | | | M12 connector | Stainless steel | 27 (43) | PNP | E2A-S08KN04-M1-B1 | E2A-S08KN04-M1-B2 |
| | | | | | | NPN | E2A-S08KN04-M1-C1 | E2A-S08KN04-M1-C2 |
| | | | | | 49 (65) | PNP | E2A-S08LN04-M1-B1 | E2A-S08LN04-M1-B2 |
| | | | | | | NPN | E2A-S08LN04-M1-C1 | E2A-S08LN04-M1-C2 |
| | | | | Brass | 27 (43) | PNP | E2A-M08KN04-M1-B1 | E2A-M08KN04-M1-B2 |
| | | | | | | NPN | E2A-M08KN04-M1-C1 | E2A-M08KN04-M1-C2 |
| | | | | | 49 (65) | PNP | E2A-M08LN04-M1-B1 | E2A-M08LN04-M1-B2 |
| | | | | | | NPN | E2A-M08LN04-M1-C1 | E2A-M08LN04-M1-C2 |
| | | | M8 connector (3-pin) | Stainless steel | 27 (39) | PNP | E2A-S08KN04-M5-B1 | E2A-S08KN04-M5-B2 |
| | | | | | | NPN | E2A-S08KN04-M5-C1 | E2A-S08KN04-M5-C2 |
| | | | | | 49 (61) | PNP | E2A-S08LN04-M5-B1 | E2A-S08LN04-M5-B2 |
| | | | | | | NPN | E2A-S08LN04-M5-C1 | E2A-S08LN04-M5-C2 |

| Size | | Sensing distance | Connection | Body material | Thread length (overall length) | Output configuration | Operation mode NO | Operation mode NC |
|---|---|---|---|---|---|---|---|---|
| M12 | Shielded | 4.0 mm | Pre-wired | Brass | 34 (50) | PNP | E2A-M12KS04-WP-B1 2M | E2A-M12KS04-WP-B2 2M |
| | | | | | | NPN | E2A-M12KS04-WP-C1 2M | E2A-M12KS04-WP-C2 2M |
| | | | | | 56 (72) | PNP | E2A-M12LS04-WP-B1 2M | E2A-M12LS04-WP-B2 2M |
| | | | | | | NPN | E2A-M12LS04-WP-C1 2M | E2A-M12LS04-WP-C2 2M |
| | | | M12 connector | Brass | 34 (48) | PNP | E2A-M12KS04-M1-B1 | E2A-M12KS04-M1-B2 |
| | | | | | | NPN | E2A-M12KS04-M1-C1 | E2A-M12KS04-M1-C2 |
| | | | | | 56 (70) | PNP | E2A-M12LS04-M1-B1 | E2A-M12LS04-M1-B2 |
| | | | | | | NPN | E2A-M12LS04-M1-C1 | E2A-M12LS04-M1-C2 |
| | Non-shielded | 8.0 mm | Pre-wired | Brass | 34 (50) | PNP | E2A-M12KN08-WP-B1 2M | E2A-M12KN08-WP-B2 2M |
| | | | | | | NPN | E2A-M12KN08-WP-C1 2M | E2A-M12KN08-WP-C2 2M |
| | | | | | 56 (72) | PNP | E2A-M12LN08-WP-B1 2M | E2A-M12LN08-WP-B2 2M |
| | | | | | | NPN | E2A-M12LN08-WP-C1 2M | E2A-M12LN08-WP-C2 2M |
| | | | M12 connector | Brass | 34 (48) | PNP | E2A-M12KN08-M1-B1 | E2A-M12KN08-M1-B2 |
| | | | | | | NPN | E2A-M12KN08-M1-C1 | E2A-M12KN08-M1-C2 |
| | | | | | 56 (70) | PNP | E2A-M12LN08-M1-B1 | E2A-M12LN08-M1-B2 |
| | | | | | | NPN | E2A-M12LN08-M1-C1 | E2A-M12LN08-M1-C2 |
| M18 | Shielded | 8.0 mm | Pre-wired | Brass | 39 (59) | PNP | E2A-M18KS08-WP-B1 2M | E2A-M18KS08-WP-B2 2M |
| | | | | | | NPN | E2A-M18KS08-WP-C1 2M | E2A-M18KS08-WP-C2 2M |
| | | | | | 61 (81) | PNP | E2A-M18LS08-WP-B1 2M | E2A-M18LS08-WP-B2 2M |
| | | | | | | NPN | E2A-M18LS08-WP-C1 2M | E2A-M18LS08-WP-C2 2M |
| | | | M12 connector | Brass | 39 (53) | PNP | E2A-M18KS08-M1-B1 | E2A-M18KS08-M1-B2 |
| | | | | | | NPN | E2A-M18KS08-M1-C1 | E2A-M18KS08-M1-C2 |
| | | | | | 61 (75) | PNP | E2A-M18LS08-M1-B1 | E2A-M18LS08-M1-B2 |
| | | | | | | NPN | E2A-M18LS08-M1-C1 | E2A-M18LS08-M1-C2 |
| | Non-shielded | 16.0 mm | Pre-wired | Brass | 39 (59) | PNP | E2A-M18KN16-WP-B1 2M | E2A-M18KN16-WP-B2 2M |
| | | | | | | NPN | E2A-M18KN16-WP-C1 2M | E2A-M18KN16-WP-C2 2M |
| | | | | | 61 (81) | PNP | E2A-M18LN16-WP-B1 2M | E2A-M18LN16-WP-B2 2M |
| | | | | | | NPN | E2A-M18LN16-WP-C1 2M | E2A-M18LN16-WP-C2 2M |
| | | | M12 connector | Brass | 39 (53) | PNP | E2A-M18KN16-M1-B1 | E2A-M18KN16-M1-B2 |
| | | | | | | NPN | E2A-M18KN16-M1-C1 | E2A-M18KN16-M1-C2 |
| | | | | | 61 (75) | PNP | E2A-M18LN16-M1-B1 | E2A-M18LN16-M1-B2 |
| | | | | | | NPN | E2A-M18LN16-M1-C1 | E2A-M18LN16-M1-C2 |
| M30 | Shielded | 15.0 mm | Pre-wired | Brass | 44 (64) | PNP | E2A-M30KS15-WP-B1 2M | E2A-M30KS15-WP-B2 2M |
| | | | | | | NPN | E2A-M30KS15-WP-C1 2M | E2A-M30KS15-WP-C2 2M |
| | | | | | 66 (86) | PNP | E2A-M30LS15-WP-B1 2M | E2A-M30LS15-WP-B2 2M |
| | | | | | | NPN | E2A-M30LS15-WP-C1 2M | E2A-M30LS15-WP-C2 2M |
| | | | M12 connector | Brass | 44 (58) | PNP | E2A-M30KS15-M1-B1 | E2A-M30KS15-M1-B2 |
| | | | | | | NPN | E2A-M30KS15-M1-C1 | E2A-M30KS15-M1-C2 |
| | | | | | 66 (80) | PNP | E2A-M30LS15-M1-B1 | E2A-M30LS15-M1-B2 |
| | | | | | | NPN | E2A-M30LS15-M1-C1 | E2A-M30LS15-M1-C2 |
| | Non-shielded | 20.0 mm | Pre-wired | Brass | 44 (64) (See note.) | PNP | E2A-M30KN20-WP-B1 2M | E2A-M30KN20-WP-B2 2M |
| | | | | | | NPN | E2A-M30KN20-WP-C1 2M | E2A-M30KN20-WP-C2 2M |
| | | 30.0 mm | | | 66 (86) | PNP | E2A-M30LN30-WP-B1 2M | E2A-M30LN30-WP-B2 2M |
| | | | | | | NPN | E2A-M30LN30-WP-C1 2M | E2A-M30LN30-WP-C2 2M |
| | | 20.0 mm | M12 connector | Brass | 44 (58) (See note.) | PNP | E2A-M30KN20-M1-B1 | E2A-M30KN20-M1-B2 |
| | | | | | | NPN | E2A-M30KN20-M1-C1 | E2A-M30KN20-M1-C2 |
| | | 30.0 mm | | | 66 (80) | PNP | E2A-M30LN30-M1-B1 | E2A-M30LN30-M1-B2 |
| | | | | | | NPN | E2A-M30LN30-M1-C1 | E2A-M30LN30-M1-C2 |

**Note:** M30 non-shielded Models with double sensing distance and short barrels cannot be mounted due to the necessary separation distance from the surrounding metal. Standard sensing models are thus available.