

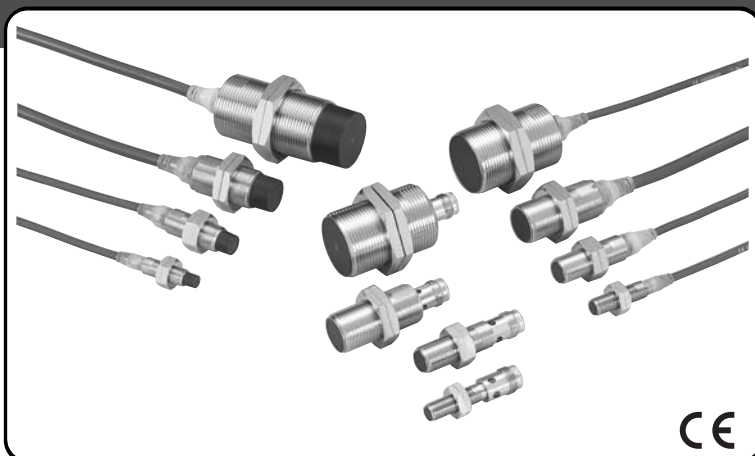
## Cylindrical Proximity Sensor E2A

### 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 |
|      |              |                  |                      |                 | 49 (62)                        | NPN                  | E2A-S08KS02-WP-C1 2M | E2A-S08KS02-WP-C2 2M |
|      |              |                  |                      |                 |                                | PNP                  | E2A-S08LS02-WP-B1 2M | E2A-S08LS02-WP-B2 2M |
|      |              |                  |                      |                 | 49 (62)                        | 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    |
|      |              |                  |                      |                 | 49 (65)                        | NPN                  | E2A-S08KS02-M1-C1    | E2A-S08KS02-M1-C2    |
|      |              |                  |                      |                 |                                | PNP                  | E2A-S08LS02-M1-B1    | E2A-S08LS02-M1-B2    |
|      |              |                  |                      |                 | 49 (65)                        | NPN                  | E2A-S08LS02-M1-C1    | E2A-S08LS02-M1-C2    |
|      |              |                  |                      | Brass           | 27 (43)                        | PNP                  | E2A-M08KS02-M1-B1    | E2A-M08KS02-M1-B2    |
|      |              |                  |                      |                 | 49 (65)                        | NPN                  | E2A-M08KS02-M1-C1    | E2A-M08KS02-M1-C2    |
|      |              |                  |                      |                 |                                | PNP                  | E2A-M08LS02-M1-B1    | E2A-M08LS02-M1-B2    |
|      |              |                  |                      |                 | 49 (65)                        | 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    |
|      |              |                  |                      |                 | 49 (61)                        | NPN                  | E2A-S08KS02-M5-C1    | E2A-S08KS02-M5-C2    |
|      |              |                  |                      |                 |                                | PNP                  | E2A-S08LS02-M5-B1    | E2A-S08LS02-M5-B2    |
|      |              |                  |                      |                 | 49 (61)                        | 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 |
|      |              |                  |                      |                 | 49 (62)                        | NPN                  | E2A-S08KN04-WP-C1 2M | E2A-S08KN04-WP-C2 2M |
|      |              |                  |                      |                 |                                | PNP                  | E2A-S08LN04-WP-B1 2M | E2A-S08LN04-WP-B2 2M |
|      |              |                  |                      |                 | 49 (62)                        | 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    |
|      |              |                  |                      |                 | 49 (65)                        | NPN                  | E2A-S08KN04-M1-C1    | E2A-S08KN04-M1-C2    |
|      |              |                  |                      |                 |                                | PNP                  | E2A-S08LN04-M1-B1    | E2A-S08LN04-M1-B2    |
|      |              |                  |                      |                 | 49 (65)                        | NPN                  | E2A-S08LN04-M1-C1    | E2A-S08LN04-M1-C2    |
|      |              |                  |                      | Brass           | 27 (43)                        | PNP                  | E2A-M08KN04-M1-B1    | E2A-M08KN04-M1-B2    |
|      |              |                  |                      |                 | 49 (65)                        | NPN                  | E2A-M08KN04-M1-C1    | E2A-M08KN04-M1-C2    |
|      |              |                  |                      |                 |                                | PNP                  | E2A-M08LN04-M1-B1    | E2A-M08LN04-M1-B2    |
|      |              |                  |                      |                 | 49 (65)                        | 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    |
|      |              |                  |                      |                 | 49 (61)                        | NPN                  | E2A-S08KN04-M5-C1    | E2A-S08KN04-M5-C2    |
|      |              |                  |                      |                 |                                | PNP                  | E2A-S08LN04-M5-B1    | E2A-S08LN04-M5-B2    |
|      |              |                  |                      |                 | 49 (61)                        | 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)<br>(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)<br>(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.