

## Cylindrical Proximity Sensor

## E2EL

A new series of easy-to-use models for standard- and double-distance

- Stainless steel and brass housing
- Two housing length for each type
- Pre-wired and Plug-in connector types
- Short-circuit protection and reverse polarity protection



## Ordering Information

### ■ Cable types

#### Brass housing

| Diameter | Length | Mounting     | Sensing Distance | Output           |                  |                  |                  |
|----------|--------|--------------|------------------|------------------|------------------|------------------|------------------|
|          |        |              |                  | NPN / NO         | NPN / NC         | PNP / NO         | PNP / NC         |
| Ø6,5     | 30 mm  | Shielded     | 1,5 mm           | E2EL-C1R5E1 2M   | E2EL-C1R5E2 2M   | E2EL-C1R5F1 2M   | E2EL-C1R5F2 2M   |
|          | 32 mm  | Non-shielded | 2,0 mm           | E2EL-C2ME1 2M    | E2EL-C2ME2 2M    | E2EL-C2MF1 2M    | E2EL-C2MF2 2M    |
|          | 45 mm  | Shielded     | 1,5 mm           | E2EL-C1R5E1-L 2M | E2EL-C1R5E2-L 2M | E2EL-C1R5F1-L 2M | E2EL-C1R5F2-L 2M |
|          | 47 mm  | Non-shielded | 2,0 mm           | E2EL-C2ME1-L 2M  | E2EL-C2ME2-L 2M  | E2EL-C2MF1-L 2M  | E2EL-C2MF2-L 2M  |
| M8       | 30 mm  | Shielded     | 1,5 mm           | E2EL-X1R5E1 2M   | E2EL-X1R5E2 2M   | E2EL-X1R5F1 2M   | E2EL-X1R5F2 2M   |
|          | 32 mm  | Non-shielded | 2,0 mm           | E2EL-X2ME1 2M    | E2EL-X2ME2 2M    | E2EL-X2MF1 2M    | E2EL-X2MF2 2M    |
|          | 45 mm  | Shielded     | 1,5 mm           | E2EL-X1R5E1-L 2M | E2EL-X1R5E2-L 2M | E2EL-X1R5F1-L 2M | E2EL-X1R5F2-L 2M |
|          | 47 mm  | Non-shielded | 2,0 mm           | E2EL-X2ME1-L 2M  | E2EL-X2ME2-L 2M  | E2EL-X2MF1-L 2M  | E2EL-X2MF2-L 2M  |
| M12      | 41 mm  | Shielded     | 2,0 mm           | E2EL-X2E1 2M     | E2EL-X2E2 2M     | E2EL-X2F1 2M     | E2EL-X2F2 2M     |
|          |        | Shielded     | 4,0 mm           | E2EL-X4E1-D 2M   | E2EL-X4E2-D 2M   | E2EL-X4F1-D 2M   | E2EL-X4F2-D 2M   |
|          |        | Non-shielded | 4,0 mm           | E2EL-X4ME1 2M    | E2EL-X4ME2 2M    | E2EL-X4MF1 2M    | E2EL-X4MF2 2M    |
|          | 53 mm  | Shielded     | 2,0 mm           | E2EL-X2E1-L 2M   | E2EL-X2E2-L 2M   | E2EL-X2F1-L 2M   | E2EL-X2F2-L 2M   |
|          |        | Shielded     | 4,0 mm           | E2EL-X4E1-DL 2M  | E2EL-X4E2-DL 2M  | E2EL-X4F1-DL 2M  | E2EL-X4F2-DL 2M  |
|          |        | Non-shielded | 4,0 mm           | E2EL-X4ME1-L 2M  | E2EL-X4ME2-L 2M  | E2EL-X4MF1-L 2M  | E2EL-X4MF2-L 2M  |
| M18      | 40 mm  | Shielded     | 5,0 mm           | E2EL-X5E1 2M     | E2EL-X5E2 2M     | E2EL-X5F1 2M     | E2EL-X5F2 2M     |
|          |        | Shielded     | 8,0 mm           | E2EL-X8E1-D 2M   | E2EL-X8E2-D 2M   | E2EL-X8F1-D 2M   | E2EL-X8F2-D 2M   |
|          |        | Non-shielded | 8,0 mm           | E2EL-X8ME1 2M    | E2EL-X8ME2 2M    | E2EL-X8MF1 2M    | E2EL-X8MF2 2M    |
|          | 73 mm  | Shielded     | 5,0 mm           | E2EL-X5E1-L 2M   | E2EL-X5E2-L 2M   | E2EL-X5F1-L 2M   | E2EL-X5F2-L 2M   |
|          |        | Shielded     | 8,0 mm           | E2EL-X8E1-DL 2M  | E2EL-X8E2-DL 2M  | E2EL-X8F1-DL 2M  | E2EL-X8F2-DL 2M  |
|          |        | Non-shielded | 8,0 mm           | E2EL-X8ME1-L 2M  | E2EL-X8ME2-L 2M  | E2EL-X8MF1-L 2M  | E2EL-X8MF2-L 2M  |
| M30      | 40 mm  | Shielded     | 10,0 mm          | E2EL-X10E1 2M    | E2EL-X10E2 2M    | E2EL-X10F1 2M    | E2EL-X10F2 2M    |
|          |        | Non-shielded | 15,0 mm          | E2EL-X15ME1 2M   | E2EL-X15ME2 2M   | E2EL-X15MF1 2M   | E2EL-X15MF2 2M   |
|          | 80 mm  | Shielded     | 10,0 mm          | E2EL-X10E1-L 2M  | E2EL-X10E2-L 2M  | E2EL-X10F1-L 2M  | E2EL-X10F2-L 2M  |
|          |        | Non-shielded | 15,0 mm          | E2EL-X15ME1-L 2M | E2EL-X15ME2-L 2M | E2EL-X15MF1-L 2M | E2EL-X15MF2-L 2M |

## Stainless steel housing

| Diameter | Length | Mounting | Sensing Distance | Output           |                  |                  |                  |
|----------|--------|----------|------------------|------------------|------------------|------------------|------------------|
|          |        |          |                  | NPN / NO         | NPN / NC         | PNP / NO         | PNP / NC         |
| Ø6,5     | 30 mm  | Shielded | 2,0 mm           | E2EL-C2E1-DS 2M  | E2EL-C2E2-DS 2M  | E2EL-C2F1-DS 2M  | E2EL-C2F2-DS 2M  |
|          | 45 mm  | Shielded | 2,0 mm           | E2EL-C2E1-DSL 2M | E2EL-C2E2-DSL 2M | E2EL-C2F1-DSL 2M | E2EL-C2F2-DSL 2M |
| M8       | 30 mm  | Shielded | 2,0 mm           | E2EL-X2E1-DS 2M  | E2EL-X2E2-DS 2M  | E2EL-X2F1-DS 2M  | E2EL-X2F2-DS 2M  |
|          | 45 mm  | Shielded | 2,0 mm           | E2EL-X2E1-DSL 2M | E2EL-X2E2-DSL 2M | E2EL-X2F1-DSL 2M | E2EL-X2F2-DSL 2M |
| M12      | 41 mm  | Shielded | 4,0 mm           | E2EL-X4E1-DS 2M  | E2EL-X4E2-DS 2M  | E2EL-X4F1-DS 2M  | E2EL-X4F2-DS 2M  |
|          | 53 mm  | Shielded | 4,0 mm           | E2EL-X4E1-DSL 2M | E2EL-X4E2-DSL 2M | E2EL-X4F1-DSL 2M | E2EL-X4F2-DSL 2M |
| M18      | 40 mm  | Shielded | 8,0 mm           | E2EL-X8E1-DS 2M  | E2EL-X8E2-DS 2M  | E2EL-X8F1-DS 2M  | E2EL-X8F2-DS 2M  |
|          | 73 mm  | Shielded | 8,0 mm           | E2EL-X8E1-DSL 2M | E2EL-X8E2-DSL 2M | E2EL-X8F1-DSL 2M | E2EL-X8F2-DSL 2M |

## ■ Plug types

## Brass housing

| Diameter / Connection | Length | Mounting     | Sensing Distance | Output          |                 |                 |                 |
|-----------------------|--------|--------------|------------------|-----------------|-----------------|-----------------|-----------------|
|                       |        |              |                  | NPN / NO        | NPN / NC        | PNP / NO        | PNP / NC        |
| Ø6,5 / Plug M8        | 45 mm  | Shielded     | 1,5 mm           | E2EL-C1R5E1-M3  | E2EL-C1R5E2-M3  | E2EL-C1R5F1-M3  | E2EL-C1R5F2-M3  |
|                       | 47 mm  | Non-shielded | 2,0 mm           | E2EL-C2ME1-M3   | E2EL-C2ME2-M3   | E2EL-C2MF1-M3   | E2EL-C2MF2-M3   |
|                       | 54 mm  | Shielded     | 1,5 mm           | E2EL-C1R5E1-M3L | E2EL-C1R5E2-M3L | E2EL-C1R5F1-M3L | E2EL-C1R5F2-M3L |
|                       | 56 mm  | Non-shielded | 2,0 mm           | E2EL-C2ME1-M3L  | E2EL-C2ME2-M3L  | E2EL-C2MF1-M3L  | E2EL-C2MF2-M3L  |
| M8 / Plug M8          | 45 mm  | Shielded     | 1,5 mm           | E2EL-X1R5E1-M3  | E2EL-X1R5E2-M3  | E2EL-X1R5F1-M3  | E2EL-X1R5F2-M3  |
|                       | 47 mm  | Non-shielded | 2,0 mm           | E2EL-X2ME1-M3   | E2EL-X2ME2-M3   | E2EL-X2MF1-M3   | E2EL-X2MF2-M3   |
|                       | 54 mm  | Shielded     | 1,5 mm           | E2EL-X1R5E1-M3L | E2EL-X1R5E2-M3L | E2EL-X1R5F1-M3L | E2EL-X1R5F2-M3L |
|                       | 56 mm  | Non-shielded | 2,0 mm           | E2EL-X2ME1-M3L  | E2EL-X2ME2-M3L  | E2EL-X2MF1-M3L  | E2EL-X2MF2-M3L  |
| M8 / Plug M12         | 44 mm  | Shielded     | 1,5 mm           | E2EL-X1R5E1-M1  | E2EL-X1R5E2-M1  | E2EL-X1R5F1-M1  | E2EL-X1R5F2-M1  |
|                       | 46 mm  | Non-shielded | 2,0 mm           | E2EL-X2ME1-M1   | E2EL-X2ME2-M1   | E2EL-X2MF1-M1   | E2EL-X2MF2-M1   |
|                       | 60 mm  | Shielded     | 1,5 mm           | E2EL-X1R5E1-M1L | E2EL-X1R5E2-M1L | E2EL-X1R5F1-M1L | E2EL-X1R5F2-M1L |
|                       | 62 mm  | Non-shielded | 2,0 mm           | E2EL-X2ME1-M1L  | E2EL-X2ME2-M1L  | E2EL-X2MF1-M1L  | E2EL-X2MF2-M1L  |
| M12 / Plug M12        | 49 mm  | Shielded     | 2,0 mm           | E2EL-X2E1-M1    | E2EL-X2E2-M1    | E2EL-X2F1-M1    | E2EL-X2F2-M1    |
|                       |        | Shielded     | 4,0 mm           | E2EL-X4E1-DM1   | E2EL-X4E2-DM1   | E2EL-X4F1-DM1   | E2EL-X4F2-DM1   |
|                       |        | Non-shielded | 4,0 mm           | E2EL-X4ME1-M1   | E2EL-X4ME2-M1   | E2EL-X4MF1-M1   | E2EL-X4MF2-M1   |
|                       | 60 mm  | Shielded     | 2,0 mm           | E2EL-X2E1-M1L   | E2EL-X2E2-M1L   | E2EL-X2F1-M1L   | E2EL-X2F2-M1L   |
|                       |        | Shielded     | 4,0 mm           | E2EL-X4E1-DM1L  | E2EL-X4E2-DM1L  | E2EL-X4F1-DM1L  | E2EL-X4F2-DM1L  |
|                       |        | Non-shielded | 4,0 mm           | E2EL-X4ME1-M1L  | E2EL-X4ME2-M1L  | E2EL-X4MF1-M1L  | E2EL-X4MF2-M1L  |
| M18 / Plug M12        | 53 mm  | Shielded     | 5,0 mm           | E2EL-X5E1-M1    | E2EL-X5E2-M1    | E2EL-X5F1-M1    | E2EL-X5F2-M1    |
|                       |        | Shielded     | 8,0 mm           | E2EL-X8E1-DM1   | E2EL-X8E2-DM1   | E2EL-X8F1-DM1   | E2EL-X8F2-DM1   |
|                       |        | Non-shielded | 8,0 mm           | E2EL-X8ME1-M1   | E2EL-X8ME2-M1   | E2EL-X8MF1-M1   | E2EL-X8MF2-M1   |
|                       | 80 mm  | Shielded     | 5,0 mm           | E2EL-X5E1-M1L   | E2EL-X5E2-M1L   | E2EL-X5F1-M1L   | E2EL-X5F2-M1L   |
|                       |        | Shielded     | 8,0 mm           | E2EL-X8E1-DM1L  | E2EL-X8E2-DM1L  | E2EL-X8F1-DM1L  | E2EL-X8F2-DM1L  |
|                       |        | Non-shielded | 8,0 mm           | E2EL-X8ME1-M1L  | E2EL-X8ME2-M1L  | E2EL-X8MF1-M1L  | E2EL-X8MF2-M1L  |
| M30 / Plug M12        | 55 mm  | Shielded     | 10,0 mm          | E2EL-X10E1-M1   | E2EL-X10E2-M1   | E2EL-X10F1-M1   | E2EL-X10F2-M1   |
|                       |        | Non-shielded | 15,0 mm          | E2EL-X15ME1-M1  | E2EL-X15ME2-M1  | E2EL-X15MF1-M1  | E2EL-X15MF2-M1  |
|                       | 80 mm  | Shielded     | 10,0 mm          | E2EL-X10E1-M1L  | E2EL-X10E2-M1L  | E2EL-X10F1-M1L  | E2EL-X10F2-M1L  |
|                       |        | Non-shielded | 15,0 mm          | E2EL-X15ME1-M1L | E2EL-X15ME2-M1L | E2EL-X15MF1-M1L | E2EL-X15MF2-M1L |

## Stainless steel housing

| Diameter / Connection | Length | Mounting | Sensing Distance | Output          |                 |                 |                 |
|-----------------------|--------|----------|------------------|-----------------|-----------------|-----------------|-----------------|
|                       |        |          |                  | NPN / NO        | NPN / NC        | PNP / NO        | PNP / NC        |
| M8 / Plug M8          | 54 mm  | Shielded | 2,0 mm           | E2EL-X2E1-DM3SL | E2EL-X2E2-DM3SL | E2EL-X2F1-DM3SL | E2EL-X2F2-DM3SL |
| M12 / Plug M12        | 49 mm  | Shielded | 4,0 mm           | E2EL-X4E1-DM1S  | E2EL-X4E2-DM1S  | E2EL-X4F1-DM1S  | E2EL-X4F2-DM1S  |
|                       | 60 mm  | Shielded | 4,0 mm           | E2EL-X4E1-DM1SL | E2EL-X4E2-DM1SL | E2EL-X4F1-DM1SL | E2EL-X4F2-DM1SL |
| M18 / Plug M12        | 53 mm  | Shielded | 8,0 mm           | E2EL-X8E1-DM1S  | E2EL-X8E2-DM1S  | E2EL-X8F1-DM1S  | E2EL-X8F2-DM1S  |
|                       | 80 mm  | Shielded | 8,0 mm           | E2EL-X8E1-DM1SL | E2EL-X8E2-DM1SL | E2EL-X8F1-DM1SL | E2EL-X8F2-DM1SL |

# Specifications

## ■ Brass type

| Type                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  | Ø6,5                               |     | M8    |     | M12     |     |     | M18     |     |         | M30  |         |         |
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| Operating voltage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  | 10 to 35 VDC                       |     |       |     |         |     |     |         |     |         |      |         |         |
| Rated supply voltage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  | 24 VDC                             |     |       |     |         |     |     |         |     |         |      |         |         |
| Current consumption                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    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| Sensing object                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  | Ferrous metals                     |     |       |     |         |     |     |         |     |         |      |         |         |
| Mounting ((s)hielded, (n)on-shielded) (see note 1)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     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| Operating distance in mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  | 1,5                                | 2,0 | 1,5   | 2,0 | 2,0     | 4,0 | 4,0 | 5,0     | 8,0 | 8,0     | 10,0 | 15,0    |         |
| Tolerance of operating distance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |  | ±10%                               |     |       |     |         |     |     |         |     |         |      |         |         |
| Standard target size in mm (L x W x H in mm, FE 37)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |  | 6,5x6,5x1                          |     | 8x8x1 |     | 12x12x1 |     |     | 18x18x1 |     | 24x24x1 |      | 30x30x1 | 45x45x1 |
| Differential travel                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |  | 1 % ... 15 % of operating distance |     |       |     |         |     |     |         |     |         |      |         |         |
| Max. response frequency in kHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  | 5,0                                |     | 5,0   |     | 2,0     | 0,6 | 1,0 | 0,5     | 0,3 | 0,5     | 0,25 | 0,15    |         |
| Control output    Type<br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br>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|  |  |                                    |     |       |     |         |     |     |         |     |         |      |         |         |

**Note:** 1. For detailed mounting instruction please refer to page 11.  
2. PUR cable and different length on request.

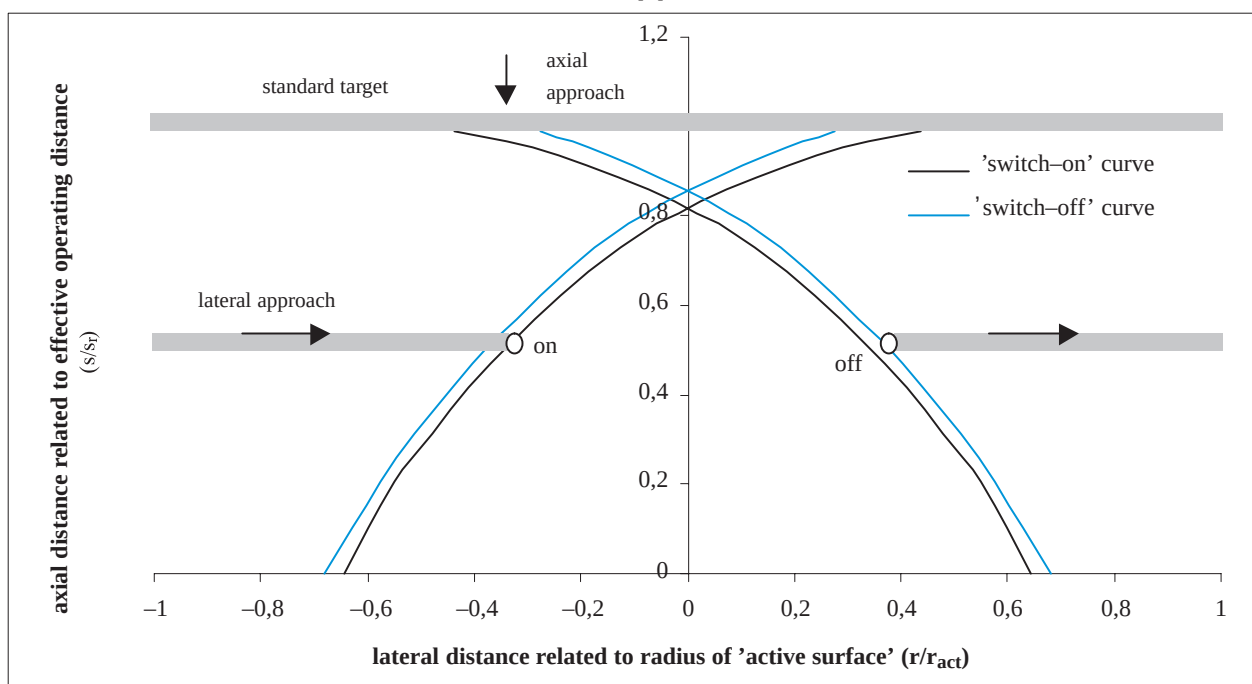
## ■ Stainless steel type

| Type                                             |                           |       | Ø6,5                                                                                       | M8      | M12      | M18                         |
|--------------------------------------------------|---------------------------|-------|--------------------------------------------------------------------------------------------|---------|----------|-----------------------------|
| Operating voltage                                |                           |       | 10 to 35 VDC                                                                               |         |          |                             |
| Rated supply voltage                             |                           |       | 24 VDC                                                                                     |         |          |                             |
| Current consumption                              |                           |       | max. 15 mA at 24 VDC                                                                       |         |          |                             |
| Mounting (see note 1)                            |                           |       | Shielded                                                                                   |         |          |                             |
| Sensing object                                   |                           |       | Ferrous metals                                                                             |         |          |                             |
| Operating distance in mm                         |                           |       | 2,0                                                                                        | 2,0     | 4,0      | 8,0                         |
| Tolerance of operating distance                  |                           |       | ±10%                                                                                       |         |          |                             |
| Standard target size<br>(L x W x H in mm, FE 37) |                           |       | 6,5x6,5x1                                                                                  | 8x8x1   | 12x12x1  | 24x24x1                     |
| Differential travel                              |                           |       | 1 % ... 15 % of operating distance                                                         |         |          |                             |
| Max. response frequency in kHz                   |                           |       | 4,0                                                                                        | 4,0     | 0,6      | 0,25                        |
| Control output                                   | Type                      |       | E2EL-... E1 type: NPN-NO<br>E2 type: NPN-NC<br>F1 type: PNP-NO<br>F2 type: PNP-NC          |         |          |                             |
|                                                  | Max-Load                  |       | 200 mA                                                                                     |         |          |                             |
|                                                  | Max-on-state Voltage drop |       | 2,5 VDC (at 200mA load current and with 2 m cable)                                         |         |          |                             |
| Circuit protection                               |                           |       | Reverse polarity, output short-circuit                                                     |         |          |                             |
| Indicator                                        |                           |       | Operating indicator (yellow LED)                                                           |         |          |                             |
| Ambient temperature                              |                           |       | Operating: -25° to 70°C                                                                    |         |          |                             |
| Humidity                                         |                           |       | 35 to 95 % RH                                                                              |         |          |                             |
| Influence of temperature                         |                           |       | ± 10 % max. of Sn at 23°C in temperature range of -25° to 70°C                             |         |          |                             |
| Dielectric strength                              |                           |       | 1.500 VAC, 50/60 Hz for 1 min. between current carry parts and case                        |         |          |                             |
| Electromagnetic compatibility EMC                |                           |       | EN 60947-5-2                                                                               |         |          |                             |
| Vibration resistance                             |                           |       | Destruction: 10 to 70 Hz, 1,5 mm double amplitude for 1 hour each in X, Y and Z directions |         |          |                             |
| Shock resistance                                 |                           |       | Destruction: 300 m/s² (approx. 30 G) for 6 times each in X, Y and Z directions             |         |          |                             |
| Enclosure rating                                 |                           |       | IP 67 (EN 60947-1)                                                                         |         |          |                             |
| Connection<br>(see note 2)                       | Pre-wired                 |       | 2 m PVC-cable, 3 x 0,14 mm²                                                                |         |          | 2 m PVC-cable, 3 x 0,25 mm² |
|                                                  | Connector                 |       | –                                                                                          | M8 plug | M12 plug |                             |
| Weight in g                                      | Pre-wired                 | long  | 45                                                                                         | 50      | 75       | 120                         |
|                                                  |                           | short | 43                                                                                         | 48      | 70       | 105                         |
|                                                  | Connector                 | long  | –                                                                                          | 10      | 25       | 65                          |
|                                                  |                           | short | –                                                                                          | –       | 20       | 55                          |
| Material                                         | Case                      |       | stainless steel 1.4305 / AISI 303                                                          |         |          |                             |
|                                                  | Sensing face              |       | PBTP                                                                                       |         |          |                             |

- Note:** 1. For detailed mounting instruction please refer to page 11.  
2. PUR cable and different length on request.

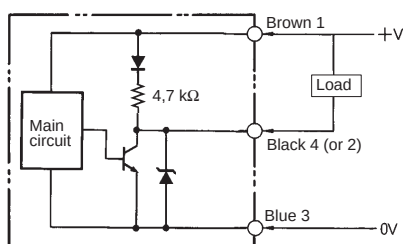
# Engineering Data

## ■ Standardized characteristic for lateral approach

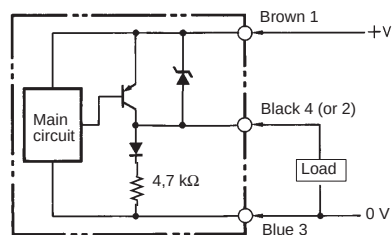


## ■ Output Circuit Diagram and Timing Chart

### E2EL-X□E□ NPN Output



### E2EL-X□F□ PNP Output



### E2EL-X□E□ NPN Output

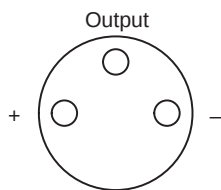
|                  | NO  | NC      |
|------------------|-----|---------|
| Sensing object   | Yes | No      |
| Yellow indicator | Lit | Not lit |
| Control output   | ON  | OFF     |

### E2EL-X□F□ PNP Output

|                  | NO  | NC      |
|------------------|-----|---------|
| Sensing object   | Yes | No      |
| Yellow indicator | Lit | Not lit |
| Control output   | ON  | OFF     |

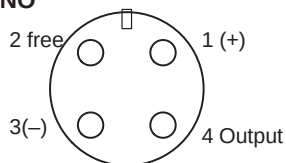
## ■ Pin Arrangement at Connector Types

### 1. Connector M8 (viewed to plug pins)

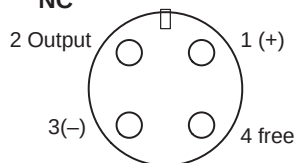


### 2. Connector M12 (viewed to plug pins)

**NO**



**NC**

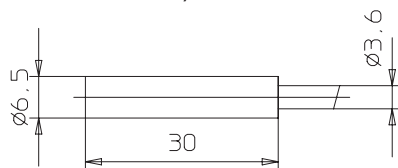


## Dimensions

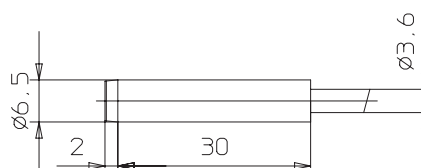
- Note:**
1. All units are in millimeters unless otherwise indicated.
  2. Unless otherwise specified, a tolerance of  $\pm 0.4$  mm applies to all dimensions. Values in parentheses () are cumulative values and may exceed tolerance of  $\pm 0.4$  mm.
  3. The square  $\square$  in the models represents the output configuration. Refer to *Ordering Information*.

### Cable Types

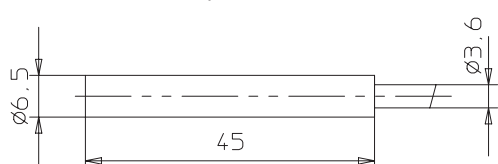
**E2EL-C1 $\square$ R5 2M, E2EL-C2 $\square$ -DS 2M**



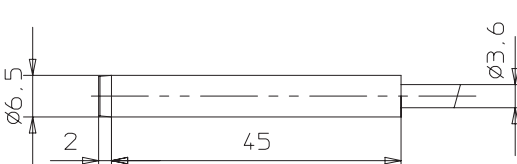
**E2EL-C2M $\square$  2M**



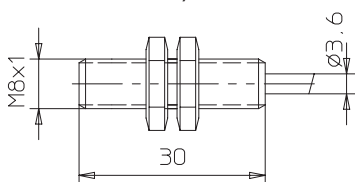
**E2EL-C1R5 $\square$ -L 2M, E2EL-C2 $\square$ -DSL 2M**



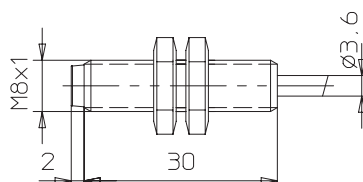
**E2EL-C2M $\square$ -L 2M**



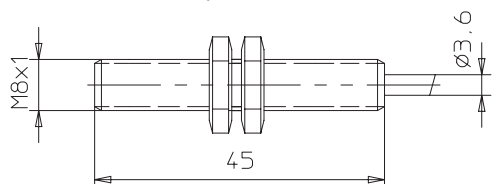
**E2EL-X1R5 $\square$  2M, E2EL-X2 $\square$ -DS 2M**



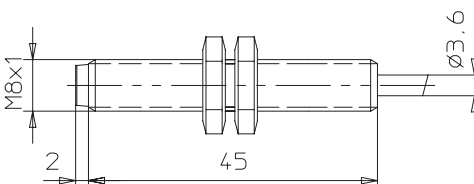
**E2EL-X2M $\square$  2M**



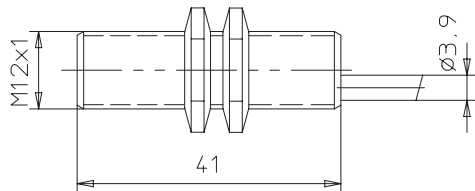
**E2EL-X1R5 $\square$ -L 2M, E2EL-X2 $\square$ -DSL 2M**



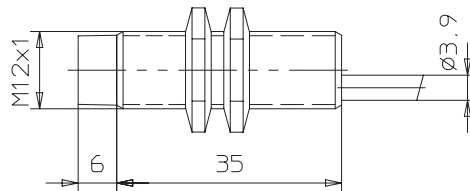
**E2EL-X2M $\square$ -L 2M**



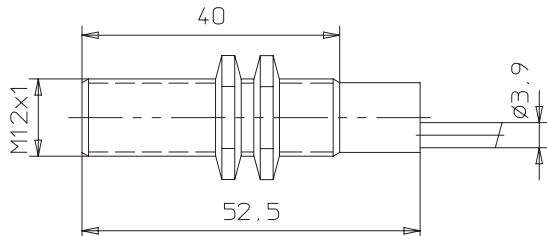
E2EL-X2□ 2M, E2EL-X4□-D 2M, E2EL-X4□-DS 2M



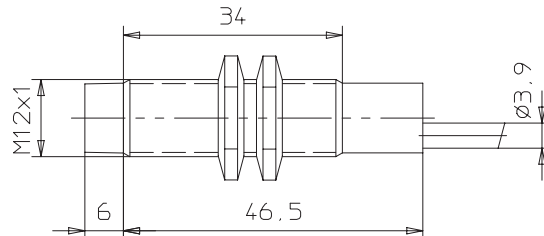
E2EL-X4M□ 2M



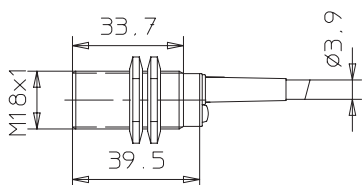
E2EL-X2□-L 2M, E2EL-X4□-DL 2M, E2EL-X4□-DSL 2M



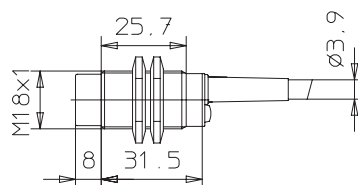
E2EL-X4M□-L 2M



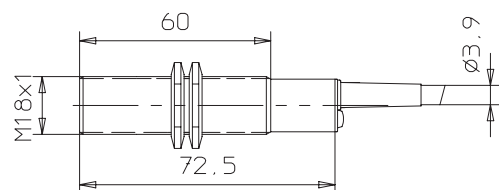
E2EL-X5□ 2M, E2EL-X8□-D 2M, E2EL-X8□-DS 2M



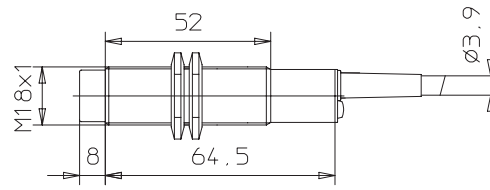
E2EL-X8M□ 2M



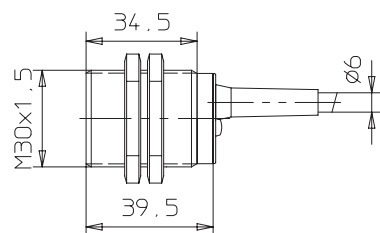
E2EL-X5□-L 2M, E2EL-X8□-DL 2M, E2EL-X8□-DSL 2M



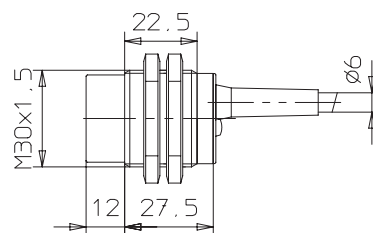
E2EL-X8M□-L 2M



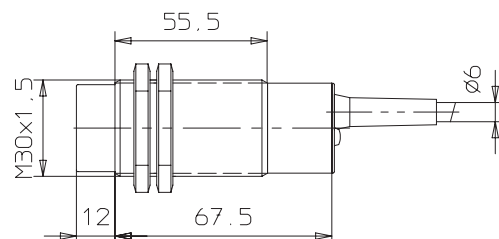
E2EL-X10□ 2M



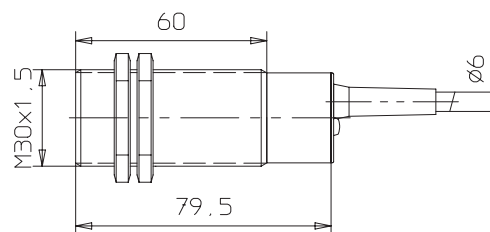
E2EL-X15M□ 2M



E2EL-X10□-L 2M

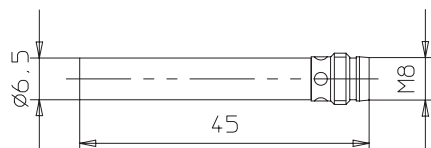


E2EL-X15M□-L 2M

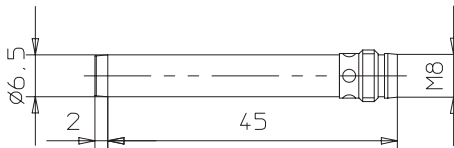


## Plug Types

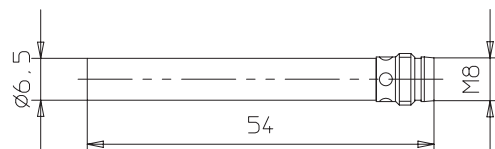
E2EL-C1R5□-M3



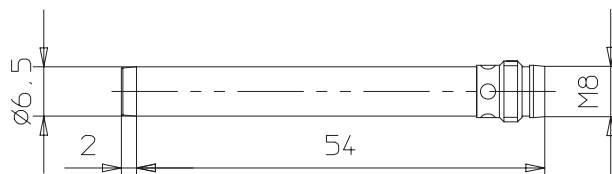
E2EL-C2M□-M3



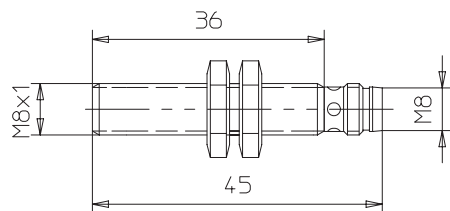
E2EL-C1R5□-M3L



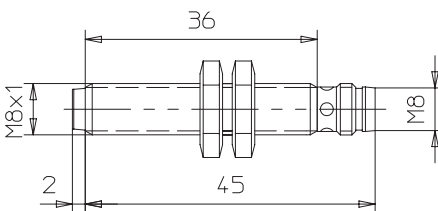
E2EL-C2M□-M3L



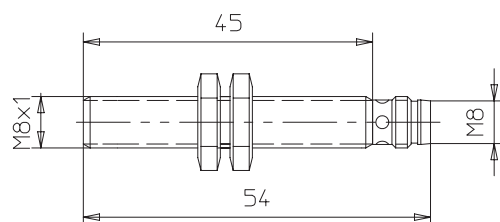
E2EL-X1R5□-M3



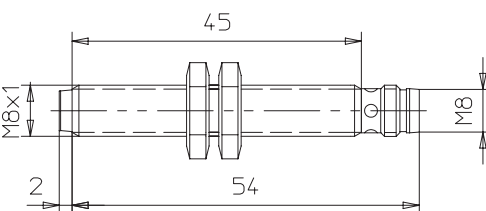
E2EL-X2M□-M3



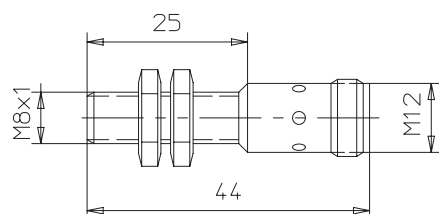
E2EL-X1R5□-M3L, E2EL-X2□DM3S



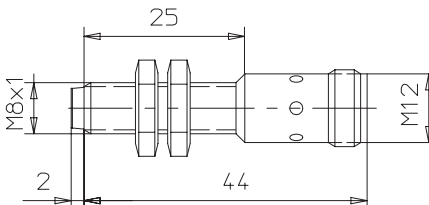
E2EL-X2M□-M3L



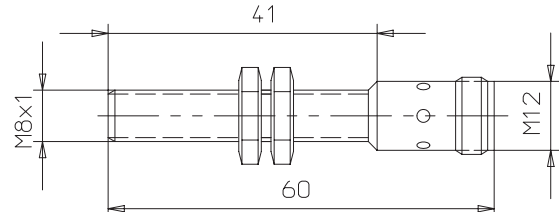
E2EL-X1R5□-M1



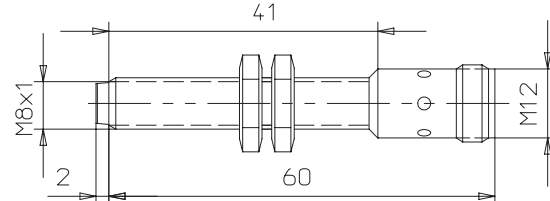
E2EL-X2M□-M1



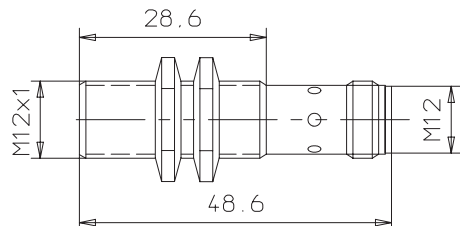
E2EL-X1R5□-M1L



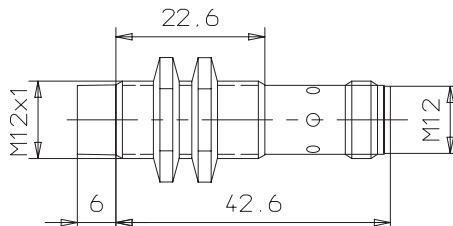
E2EL-X2M□-M1L

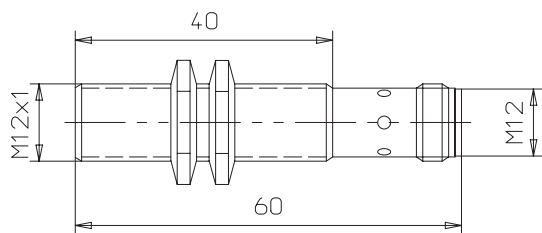
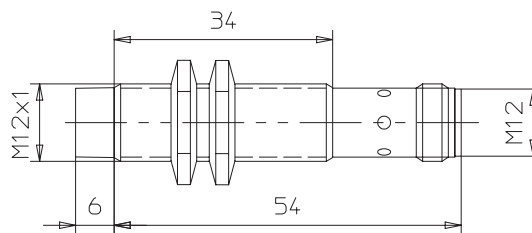
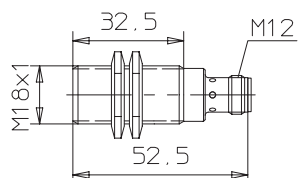
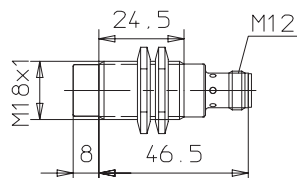
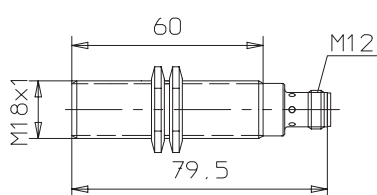
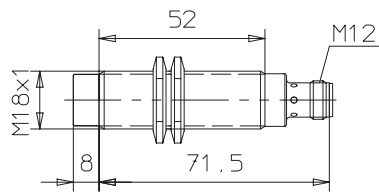
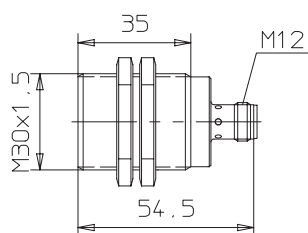
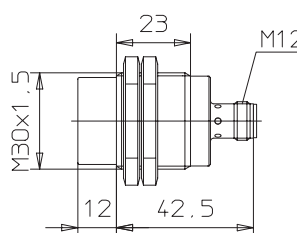
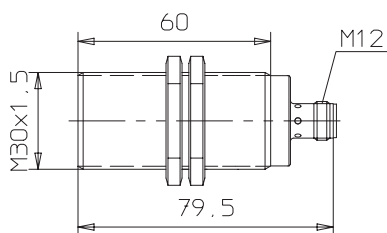
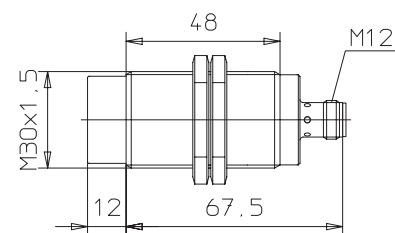


E2EL-X2□-M1, E2EL-X4□-DM1, E2EL-X4□-DM1S



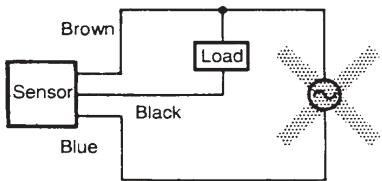
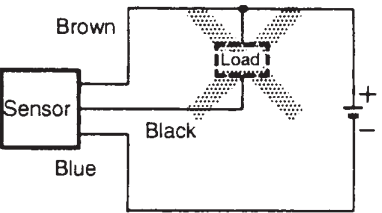
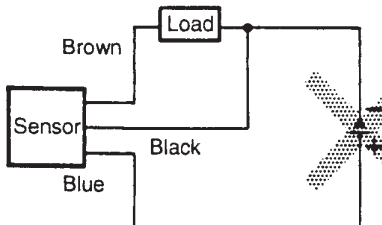
E2EL-X4M□-M1



**E2EL-X2□-M1L, E2EL-X4□-DM1L, E2EL-X4□-DM1SL****E2EL-X4M□-M1L****E2EL-X5□-M1, E2EL-X8□-DM1, E2EL-X8□-DM1S****E2EL-X8M□-M1****E2EL-X5□-M1L, E2EL-X8□-DM1L, E2EL-X8□-DM1SL****E2EL-X8M□-M1L****E2EL-X10□-M1****E2EL-X15M□-M1****E2EL-X10□-M1L****E2EL-X15M□-M1L**

# Installation

## ■ Caution

| Item                                                                                                                                                                                                                                                      | Examples                                                                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| <b>Power Supply</b><br>Do not impose an excessive voltage on the E2EL, otherwise it may explode or burn.<br><br>Do not impose 24 VAC on any E2EL model, otherwise it may explode or burn.                                                                 |  |
| <b>Load short-circuit</b><br>Do not short-circuit the load, or the E2EL may explode or burn.<br><br>The E2EL's short-circuit protection function is valid, if the polarity of the supply voltage imposed is incorrect and within the rated voltage range. |  |
| <b>Wiring</b><br>Be sure to wire the E2EL and load correctly, otherwise it may explode or burn.                                                                                                                                                           |  |

## ■ Correct Use

### Installation

#### Power Reset Time

The Proximity Sensor is ready to operate within 100 ms after power is supplied. If power supplies are connected to the Proximity Sensor and load respectively, be sure to supply power to the Proximity Sensor before supplying power to the load.

#### Power OFF

The Proximity Sensor may output a pulse signal when it is turned off. Therefore, it is recommended to turn off the load before turning off the Proximity Sensor.

#### Power Supply Transformer

When using a DC power supply, make sure that the DC power supply has an insulated transformer. Do not use a DC power supply with an auto-transformer.

#### Sensing Object

Metal Coating:

The sensing distance of the Proximity Sensor vary with the metal coating on sensing objects.

### Wiring

#### High-tension Lines

Wiring through Metal Conduit

If there a power or high-tension line near the cord of the Proximity Sensor, wire the cord through an independent metal conduit to prevent against Proximity Sensor damage or malfunctioning.

#### Core Traction Force

Do not pull cords with the tractive force exceeding the following:  
 pull force (N) = 20 x cable diameter ( mm)

#### Mounting

The Proximity Sensor must not be subjected to excessive shock with a hammer when it is installed, otherwise the Proximity Sensor may be damaged or lose the water-resistivity.

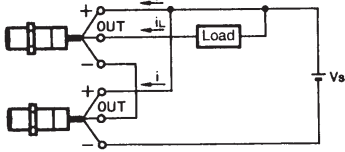
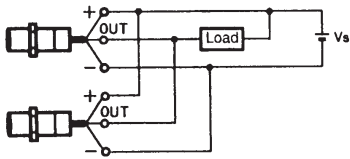
### Environment

#### Water-Resistivity

Do not use the Proximity Sensor underwater, outdoors or in the rain.

#### Operating Environment

Be sure to use the Proximity Sensor within operating ambient temperature range and do not use the Proximity Sensor outdoors so that its reliability and life expectancy can be maintained. Although the Proximity Sensor is water resistive, a cover to protect the Proximity Sensor from water or soluble machining oil is recommended so that its reliability and life expectancy can be maintained. Do not use the Proximity Sensor in an environment with chemical gas (e. G., strong alkaline or acid gases including nitric, chromic, and concentrated sulfuric acid gases).

| Item                               | Examples                                                                                                | Item                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------------------------------|---------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>AND</b><br>(serial connection)  | <p><b>Correct</b></p>  | <p>The Sensors connected together must satisfy the following conditions:</p> $i_L + (N-1) \times i = \text{Upper-limit of control output of each Sensor}$ $V_S - N \times V_R = \text{Load operating voltage}$ <p> <math>N</math> = No. of Sensors<br/> <math>V_R</math> = Residual voltage of each Sensor<br/> <math>V_S</math> = Supply voltage<br/> <math>i</math> = Current consumption of the Sensor<br/> <math>i_L</math> = Load current </p> <p>If the MY Relay, which operate at 24 VDC, is used as a load for example, a maximum of two Proximity Sensors can be connected to the load.</p> |
| <b>OR</b><br>(parallel connection) | <p><b>Correct</b></p>  | <p>The number of Sensors connected in parallel varies with the Proximity Sensor model.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

## Effects of Surrounding Metal

### Shielded types:

Shielded types allow direct installation on metal plates in an embedded manner without performance change. A minimum distance of  $3s_n$  is required between the active surface and a metallic surface in front of the device. (Fig. 1).

For SUS shielded types the following minimum distances are required to avoid performance change (see Fig.2 and table below):

| Shielded SUS Types | Free zone |
|--------------------|-----------|
| E2EL-C2□-DS        | 0,5 mm    |
| E2EL-X2□-DS        | 0,5 mm    |
| E2EL-X4□-D□S       | 1,0 mm    |
| E2EL-X8□-D□S       | 2,0 mm    |

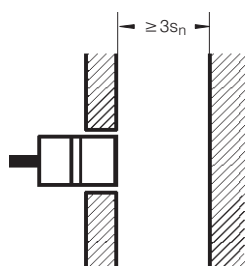


Fig.1: Shielded type (except SUS)

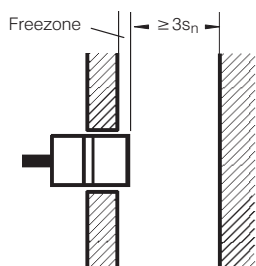


Fig.2: Shielded SUS type

### Non-shielded types:

Installation of non-shielded types in metal require the minimum distances according to Fig. 3.

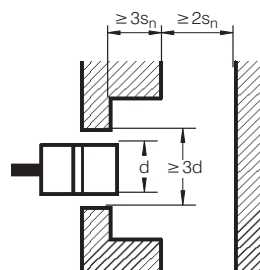


Fig.3: Non-shielded type

**In the interest of product improvement, specifications are subject to change without notice.**

**ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.**

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

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Fax: +49-70 32-811-199

Cat. No. D093-E2-1

## Данный компонент на территории Российской Федерации

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<http://moschip.ru/get-element>

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Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

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Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

### Офис по работе с юридическими лицами:

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