

OMRON Photoelectric Sensors



OMRON E3F2 SERIES: M18 CYLINDRICAL PHOTOELECTRIC SENSORS

Specifications:

- Housing material: Plastic or Nickel plated brass (NPB)
- Connection method: 2m cable
- Supply voltage: AC models - 24-240 VAC; DC models - 10-30 VDC
- Response time: AC models - 30 ms max.; DC models - 2.5ms max.
- Enclosure Rating: IEC IP66; NEMA 4
- Through-beam models include emitter and receiver pair
- Retroreflective type is non-polarized

Features:

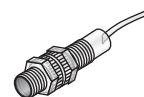
- Threaded with built-in amplifier
- PVC cable sheath
- Compact and space-saving
- Watertight construction
- DC switching types available with connector connection upon request



For quantities of 20 and up, call for quote.

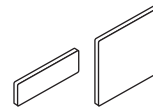
| MOUSER STOCK NO. | Omron Part Number | Type | Light Source | Sensing | Range | Body Material | Price Each | | |
|--------------------|-------------------|---|--------------|----------|-------|---------------|--------------------|--------|--------|
| | | | | | | | 1 | 5 | 10 |
| AC Supply | | | | | | | | | |
| 653-E3F2-DS1N | E3F2-DS10Z1-N | Diffuse | Infrared LED | Light-On | 100mm | Plastic | 77.13 | 75.35 | 73.26 |
| 653-E3F2-DS2N | E3F2-DS10Z2-N | Diffuse | Infrared LED | Dark-On | 100mm | Plastic | 95.45 | 91.60 | 86.71 |
| 653-E3F2-R2Z1 | E3F2-R2Z1 | Retroreflective | Infrared LED | Light-On | 2m | Plastic | 79.31 | 76.54 | 74.29 |
| 653-E3F2-R2Z2 | E3F2-R2Z2 | Retroreflective | Infrared LED | Dark-On | 2m | Plastic | 100.94 | 95.60 | 92.18 |
| 653-E3F2-3Z2 | E3F2-3Z2 | Through-beam | Infrared LED | Dark-On | 3m | Plastic | 145.07 | 137.02 | 133.12 |
| DC Supply | | | | | | | | | |
| 653-E3F2-DS4N | E3F2-DS10C4-N | Diffuse | Infrared LED | NPN | 10cm | Plastic | 66.73 | 65.93 | 63.47 |
| 653-E3F2-DS4M | E3F2-DS10C4-M | Diffuse | Infrared LED | NPN | 10cm | NPB | 91.06 | 79.30 | 75.72 |
| 653-E3F2-R4C4 | E3F2-R4C4 | Retroreflective | Infrared LED | NPN | 4m | Plastic | 71.33 | 61.45 | 58.62 |
| 653-E3F2-7C4 | E3F2-7C4 | Through-beam | Infrared LED | NPN | 7m | Plastic | 97.27 | 93.97 | 91.05 |
| Accessories | | | | | | | Description | | |
| 653-Y92E-B18 | Y92E-B18 | Sensor mounting bracket | | | | | 3.00 | 2.60 | 2.46 |
| 653-E39-RSA | E39-RSA | Adhesive back reflector sheet, size 35x10mm | | | | | 8.22 | 7.59 | 6.97 |
| 653-E39-RSB | E39-RSB | Adhesive back reflector sheet, size 40x35mm | | | | | 11.35 | 9.27 | 8.84 |
| 653-E39-R1 | E39-R1 | Reflector - supplied w/retroreflective units, 100mm-6m sensing | | | | | 13.45 | 10.15 | 9.67 |
| 653-E39-L7 | E39-L7 | Mounting bracket for E39-R1 reflector (not supplied with reflector) | | | | | 5.70 | 5.17 | 4.55 |

E3F2 Series



E3F2-DS10C4-N
E3F2-DS10C4-M
E3F2-R4C4
E3F2-7C4
E3F2-DS10Z1-N
E3F2-DS10Z2-N
E3F2-3Z2
E3F2-R2Z1
E3F2-R2Z2

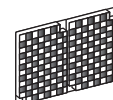
Accessories



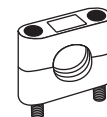
Adhesive backed reflector (E39-RSA) (E39-RSB)



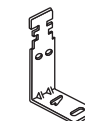
Reflector (E39-R1)



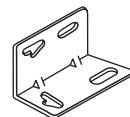
Reflector (E39-R2)



Sensor mounting bracket (Y92E-B18)



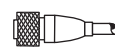
Mounting bracket (E39-L59)



Mounting bracket (E39-L69) (E39-L7)

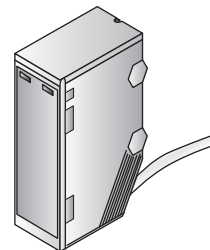


R/A cordset (Y96E-43RD10)



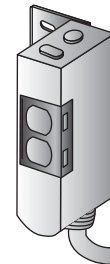
Straight cordset (Y96E-43SD10)

E3G Series

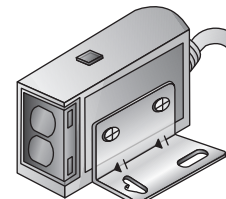


E3G-R13

E3S-A Series



E3S-AT61
E3S-AR61



E3S-AT11
E3S-AR11



E3S-AR86

OMRON E3G SERIES: LONG DISTANCE PHOTOELECTRIC SENSORS

Specifications:

- Operation mode: Light-ON/Dark-ON switch selectable
- Supply voltage: 10 - 30 VDC
- Sensitivity adjustment: E3G-R13 - 1-turn potentiometer; E3G-L73 - Teaching
- Retroreflective type is non-polarized
- Response time: E3G - 1ms; E3G-L73 - 5ms
- Connection method: 2m cable

Features:

- Circuit protection from reversed power supply connection, load short-circuit, and mutual interference
- E39-R2 reflector is supplied with E3G-R13 sensor
- E3G-L73 has a "Teach" mode, allowing for one-point teaching, two-point teaching, and zone teaching



RoHS Compliant

For quantities of 20 and up, call for quote.

| MOUSER STOCK NO. | Omron Part Number | Type | Light Source | Output | Range | Price Each | | |
|--------------------|-------------------|--|--------------|---------|---------------|--------------------|--------|--------|
| | | | | | | 1 | 5 | 10 |
| 653-E3G-R13 | E3G-R13 | Retroreflective | Red LED | NPN/PNP | 500 mm - 10 m | 164.99 | 159.38 | 154.43 |
| Accessories | | | | | | Description | | |
| 653-E39-R1 | E39-R1 | Reflector, 100mm-6m sensing | | | | 13.45 | 10.15 | 9.67 |
| 653-E39-R2 | E39-R2 | Reflector - supplied with retroreflective units, 500mm-10m sensing | | | | 19.46 | 14.99 | 13.56 |
| 653-E39-L7 | E39-L7 | Mounting bracket for E39-R1 reflector | | | | 5.70 | 5.17 | 4.55 |

OMRON E3S-A SERIES: COMPACT PHOTOELECTRIC SENSORS

Specifications:

- Supply voltage: 10 - 30 VDC
- Response time: 0.5 ms max. ON, 0.5 ms max. OFF
- Operation Mode: Light-ON/Dark-ON, switch selectable
- Light source: Red LED
- Retroreflective type is polarized
- Pre-wired versions have 2m cable

Features:

- Enclosure meets NEMA 4X, 6, and IP67
- User-friendly features for ease of installation and use
- Mounting bracket E36-L69 supplied with horizontal sensors
- Mounting bracket E36-L70 supplied with vertical sensors
- Retroreflective sensors include E39-R1 reflector
- Through-beam sensors include both emitter and receiver



For quantities of 20 and up, call for quote.

| MOUSER STOCK NO. | Omron Part Number | Type | Mounting Position | Output | Range | Connection Method | Price Each | | |
|--------------------|-------------------|--|-------------------|--------|--------|-------------------|--------------------|--------|--------|
| | | | | | | | 1 | 5 | 10 |
| 653-E3S-AT11 | E3S-AT11 | Through-beam | Horizontal | NPN | 0-7m | Pre-wired | 185.57 | 179.26 | 173.70 |
| 653-E3S-AT61 | E3S-AT61 | Through-beam | Vertical | NPN | 0-7m | Pre-wired | 185.57 | 179.26 | 173.70 |
| 653-E3S-AR11 | E3S-AR11 | Retroreflective | Horizontal | NPN | 0.1-2m | Pre-wired | 159.20 | 153.79 | 149.01 |
| 653-E3S-AR61 | E3S-AR61 | Retroreflective | Vertical | NPN | 0.1-2m | Pre-wired | 159.20 | 153.79 | 149.01 |
| 653-E3S-AR86 | E3S-AR86 | Retroreflective | Vertical | PNP | 0.1-2m | Connector | 162.50 | 156.98 | 152.10 |
| Accessories | | | | | | | Description | | |
| 653-E39-RSA | E39-RSA | Adhesive back reflector sheet, size 35x10mm | | | | 8.22 | 7.59 | 6.97 | |
| 653-E39-RSB | E39-RSB | Adhesive back reflector sheet, size 40x35mm | | | | 11.35 | 9.27 | 8.84 | |
| 653-E39-R1 | E39-R1 | Reflector, 100mm-6m sensing | | | | 13.45 | 10.15 | 9.67 | |
| 653-E39-L59 | E39-L59 | Vertical mtg. bracket for vertical sensors (2 required for through-beam) | | | | 5.45 | 5.17 | 4.55 | |
| 653-E39-L69 | E39-L69 | Mounting bracket for vertical sensors (supplied with each sensor) | | | | 7.79 | 7.17 | 6.40 | |
| 653-Y96E-43SD10 | Y96E-43SD10 | Straight connector cordset, 10m cable | | | | 23.00 | 21.53 | 20.15 | |
| 653-Y96E-43RD10 | Y96E-43RD10 | Right angle connector cordset, 10m cable | | | | 23.00 | 21.53 | 20.15 | |