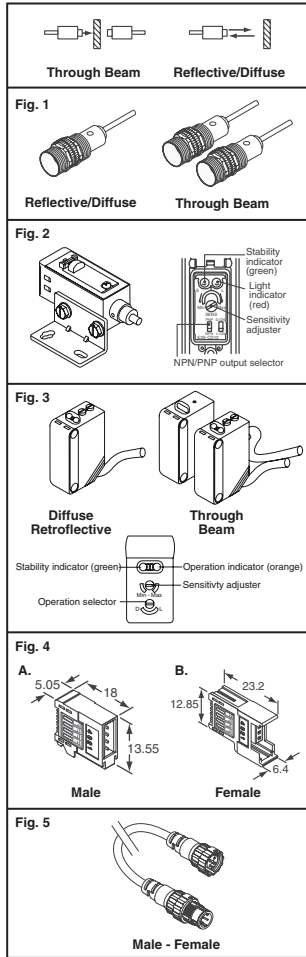


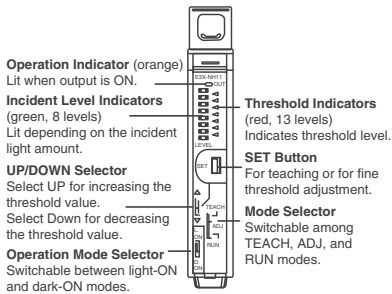
OMRON Photoelectric Sensors



Photoelectric sensors consist of a light source and detector for object detection. **Through-beam** sensors use a separate transmitter and receiver, which an object must pass between to block the light. **Retroreflective** sensors is a combined transmitter/receiver in one body and is reflected. A reflector typically is used to return the beam from the transmitter back to the receiver. Once an object is moved between the reflector and emitter/detector, the receiver output turns on. **Diffuse reflective** is a combined transmitter/receiver in one body. Objects are detected by moving an object closer to the sensor directly from the front, rather than from the side. Once an object has come within the sensing distance, the amount of reflected light is sufficient to trigger the receiver output. **XN2** connectors are easy connect (e-CON) connectors with spring loaded terminals for industrial applications and fast wire termination. **XS5** connectors feature an 1/8 turn smart click connection that is fully IP67 sealed. Offered in both single and double ended styles.

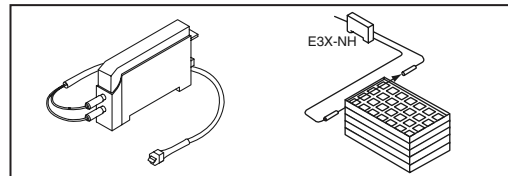
| Fig. | Description | Sensing Distance | Type | Digi-Key Part No. | 1 | Price Each 25 | 50 | Omron Part No. |
|---|---|------------------|------------|-------------------|--------|---------------|-----------------|-----------------|
| 1 | M18, Diffused Photoelectric Sensor, 10 - 30VDC, Nickel Plated Brass | 3.94" (10cm) | NPN | Z1087-ND | 54.86 | 50.80 | 47.41 | E3F2-DS10C4-N |
| | M18, Diffused Photoelectric Sensor, 24 - 240VAC, Plastic Housing | 3.94" (10cm) | NPN | Z1088-ND | 63.41 | 58.71 | 54.80 | E3F2-DS10Z1-N |
| | M18, Retroreflective Photoelectric Sensor, 24 - 240VAC, Plastic Housing | 6.56" (2m) | Light - On | Z1090-ND | 65.19 | 60.37 | 56.35 | E3F2-RZ21 |
| | M18, Through-Beam Photoelectric Sensor, 10 - 30VDC, Plastic Housing | 9.84" (3m) | Light - On | Z1091-ND | 95.40 | 88.34 | 82.46 | E3F2-3Z1 |
| 2 | Diffused Photoelectric Sensor, 10 - 30VDC, Metal Body Horizontal | 27.6" (70cm) | NPN/PNP | Z1096-ND | 138.39 | 128.15 | 119.60 | E3S-CD11 |
| | Diffused Photoelectric Sensor, 10 - 30VDC, Metal Body Horizontal | 6.56" (2m) | NPN/PNP | Z1097-ND | 149.04 | 138.01 | 128.81 | E3S-CD12 |
| | Diffused Photoelectric Sensor, 10 - 30VDC, Metal Body Vertical | 27.6" (70cm) | NPN/PNP | Z1098-ND | 138.39 | 128.15 | 119.60 | E3S-CD61 |
| | Diffused Photoelectric Sensor, 10 - 30VDC, Metal Body Vertical | 6.56" (2m) | NPN/PNP | Z1099-ND | 149.04 | 138.01 | 128.81 | E3S-CD62 |
| | Retroreflective Photoelectric Sensor, 10 - 30VDC, Metal Body, Horizontal | 9.84" (3m) | NPN/PNP | Z1100-ND | 138.39 | 128.15 | 119.60 | E3S-CR11 |
| | Retroreflective Photoelectric Sensor, 10 - 30VDC, Metal Body, Vertical | 9.84" (3m) | NPN/PNP | Z1101-ND | 138.39 | 128.15 | 119.60 | E3S-CR61 |
| 3 | Through-Beam Photoelectric Sensor, 10 - 30VDC, Metal Body, Horizontal | 98.43' (30m) | NPN/PNP | Z1102-ND | 168.70 | 156.21 | 145.79 | E3S-CT11 |
| | Through-Beam Photoelectric Sensor, 10 - 30VDC, Metal Body, Vertical | 98.43' (30m) | NPN/PNP | Z1103-ND | 168.70 | 156.21 | 145.79 | E3S-CT61 |
| | Compact Long Distance, Photoelectric Sensor, IR Through-Beam | 49.21' (15m) | NPN | Z1106-ND | 80.91 | 74.92 | 69.93 | E3Z-T61 |
| | Compact Long Distance, Photoelectric Sensor, IR Retroreflective | 13.12' (4m) | NPN | Z1107-ND | 64.43 | 59.66 | 55.69 | E3Z-R61 |
| 3 | Compact Long Distance, Photoelectric Sensor, IR Diffused | 3.94" (10cm) | NPN | Z1108-ND | 55.91 | 53.68 | 51.44 | E3Z-D61OMS |
| | Compact Long Distance, Photoelectric Sensor, IR Diffused | 3.28" (1m) | NPN | Z1109-ND | 62.77 | 58.13 | 54.25 | E3Z-D62 |
| | XN2 Photo Sensor Connectors (e-CON) — RoHS Compliant | | | | | | | |
| 4A | Discrete 4 Position Cable Plug - Free Hanging - Spring Clamp Type..... | | | Z2787-ND | 3.13 | 2.82 | 2.51 | XN2A-1430 |
| 4B | Discrete 4 Position Cable Socket - Free Hanging - Spring Clamp Type | | | Z2788-ND | 3.63 | 3.27 | 2.91 | XN2B-1430 |
| — | PCB 4 Position Socket, Single Socket Type for PCB Mount | | | Z2789-ND | 1.59 | 1.44 | 1.28 | XN2D-1431 |
| | PCB 4 Position Socket, Quad Socket Type for PCB Mount | | | Z2790-ND | 3.93 | 3.54 | 3.15 | XN2D-4431 |
| XS5 Waterproof Connectors and Cables — RoHS Compliant | | | | | | | | |
| 5 | Single Sided Cable Assembly - 4 Conductor - Female, 2m | | | Z2791-ND | 12.04 | 10.84 | 9.64 | XS5F-D421-D80-A |
| | Single Sided Cable Assembly - 4 Conductor - Female, 5m | | | Z2792-ND | 14.60 | 13.15 | 11.69 | XS5F-D421-G80-A |
| | Single Sided Cable Assembly - 4 Conductor - Female, 10m | | | Z2793-ND | 34.58 | 31.13 | 27.67 | XS5F-D421-J80-A |
| | Single Sided Cable Assembly - 4 Conductor - Male, 2m | | | Z2794-ND | 12.04 | 10.84 | 9.64 | XS5H-D421-D80-A |
| | Single Sided Cable Assembly - 4 Conductor - Male, 5m | | | Z2795-ND | 14.60 | 13.15 | 11.69 | XS5H-D421-G80-A |
| | Single Sided Cable Assembly - 4 Conductor - Male, 10m | | | Z2796-ND | 34.58 | 31.13 | 27.67 | XS5H-D421-J80-A |
| | Double Sided Cable Assembly - 4 Conductor - Male to Female, 1m | | | Z2797-ND | 17.62 | 15.86 | 14.10 | XS5W-D421-C81-A |
| | Double Sided Cable Assembly - 4 Conductor - Male to Female, 2m | | | Z2798-ND | 21.07 | 18.97 | 16.86 | XS5W-D421-D81-A |
| | Double Sided Cable Assembly - 4 Conductor - Male to Female, 3m | | | Z2799-ND | 20.92 | 18.83 | 16.74 | XS5W-D421-E81-A |
| | Double Sided Cable Assembly - 4 Conductor - Male to Female, 5m | | | Z2800-ND | 22.19 | 19.98 | 17.76 | XS5W-D421-G81-A |
| Double Sided Cable Assembly - 4 Conductor - Male to Female, 10m | | | Z2801-ND | 40.11 | 36.11 | 32.10 | XS5W-D421-J81-A | |

Optical Fiber Optic Amplifiers



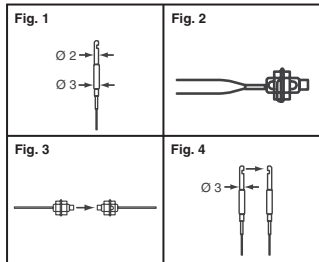
Omron's E3X-NH series of high performance Fiber Optic Amplifiers contain true 16 Bit processor which allows a very fine tuning sensitivity feature. Three separate teach modes for hassle free setup for different applications. Ideal for detecting very small objects or fine wires.

The E3X series feature high performance, fast switching response times. Set-mode blinking output aids in alignment. Sensing distances vary with the type of fiber used.



| Description | Output Type | Features | Digi-Key Part No. | 1 | Price Each 25 | 50 | Omron Part No. |
|--|-------------|----------------|-------------------|--------|---------------|--------|----------------|
| High Precision General Purpose Fiber Optic Amplifier, 12-24VDC | NPN | None | Z1110-ND | 153.14 | 141.79 | 132.34 | E3X-NH11 |
| High Precision General Purpose Fiber Optic Amplifier, 12-24VDC | PNP | None | Z1111-ND | 153.14 | 141.79 | 132.34 | E3X-NH41 |
| High Precision General Purpose Fiber Optic Amplifier with Timer 12-24VDC | NPN | with Delay Off | Z1112-ND | 153.14 | 141.79 | 132.34 | E3X-NH21 |
| High Precision General Purpose Fiber Optic Amplifier with Timer 12-24VDC | PNP | with Delay Off | Z1113-ND | 153.14 | 141.79 | 132.34 | E3X-NH51 |
| High Performance General Purpose Fiber Optic Amplifier with Timer 10-30VDC | NPN | with Delay Off | Z1116-ND | 162.65 | 150.60 | 140.56 | E3X-A21 |

Fiber Cables for E3X Amplifiers



Pre-made fiber optic cables that enable very confined mounting spaces and very fast target detection. Use **Through-beam** for long distance detection where the transmit and receive cable are separated. Use **Concentric Beam** for depth detection or changing target distances where eliminating background objects is required. Periscope sensing heads (Side Beam) save space in right angle detecting. Most fiber cables offer IP67 protection and temperature ratings of -40°C - 70°C.

| Fig. | Description | Distance Maximum | Terminal Type | Digi-Key Part No. | 1 | Price Each 25 | 50 | Omron Part No. |
|------|---|------------------|---------------|-------------------|--------|---------------|--------|----------------|
| 1 | Diffuse Side Beam Fiber Optic Cable, 2mm diameter | .6" (1.5cm) | 2m Cable | Z1118-ND | 90.83 | 84.10 | 78.50 | E32-D24 |
| | Diffuse Top Beam Fiber Optic Cable, Concentric Beam, 2mm diameter | .79" (2cm) | 2m Cable | Z1119-ND | 61.83 | 57.26 | 53.44 | E32-D32 |
| 2 | Diffuse Top Beam Fiber Optic Cable, Low Cost, M6 THD | .79" (2cm) | 2m Cable | Z1120-ND | 42.57 | 39.42 | 36.80 | E32-DC200 |
| | Diffuse Top Beam Fiber Optic Cable, Mini, M3 THD | .71" (1.8cm) | 2m Cable | Z1121-ND | 53.19 | 49.25 | 45.97 | E32-DC200E |
| | Diffuse Top Beam Fiber Optic Cable, Concentric Beam, M6 THD | 3" (7.5cm) | 2m Cable | Z1122-ND | 47.23 | 43.74 | 40.83 | E32-CC200 |
| | Cable Fiber Optic, Top Beam, High Temperature, M6 THD | 1.8" (4.5cm) | 2m Cable | Z1187-ND | 188.14 | 174.21 | 162.60 | E32-D61 |
| 3 | Diffuse Top Beam Fiber Optic Cable, Through Beam, M3 THD | 4.72" (12cm) | 2m Cable | Z1123-ND | 43.81 | 40.56 | 37.86 | E32-TC200A |
| | Cable Fiber Optic, Through Beam, Low Cost, M4 THD | 7.88" (20cm) | 2m Cable | Z1188-ND | 41.36 | 38.30 | 35.75 | E32-TC200 |
| 4 | Through Beam Fiber Optic Cable, Side Beam, 3mm diameter | 4.72" (12cm) | 2m Cable | Z1124-ND | 70.96 | 65.71 | 61.33 | E32-T14L |

Free shipping on orders over £50! All prices are in British pound sterling and include duties.

2264 (UK091)

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