Oil-resistive Sensors (Refer to Dimensions on na

| Oil-resistive Sens | OIS [Refer to Di | mensions on page i | 4.] | | Red light Infrared light | | |
|-------------------------|------------------|------------------------|-------------------------|--|--|--|--|
| Sensing method | Appearance | Connection method | Sensing distance | - | del | | |
| censing metrica | Appearance | Connection metrica | censing distance | NPN output | PNP output | | |
| Through-beam | <u> </u> | Pre-wired (2 m) | | E3Z-T61K 2M *4 Emitter E3Z-T61K-L 2M Receiver E3Z-T61K-D 2M | E3Z-T81K 2M *4 Emitter E3Z-T81K-L 2M Receiver E3Z-T81K-D 2M | | |
| (Emitter + Receiver) *3 | | Pre-wired M8 connector | \$\\$\]15 m | E3Z-T61K-M3J 0.3M Emitter E3Z-T61K-L-M3J 2M Receiver E3Z-T61K-D-M3J 2M | E3Z-T81K-M3J 0.3M Emitter E3Z-T81K-L-M3J 2M Receiver E3Z-T81K-D-M3J 2M | | |
| Retro-reflective with | | Pre-wired (2 m) | *2 | E3Z-R61K 2M *4 | E3Z-R81K 2M | | |
| MSR function | *1 | Pre-wired M8 connector | 3 m (150 mm) | E3Z-R61K-M3J 0.3M E3Z-R81K-M3J 0. | | | |
| | | Pre-wired (2 m) | [5 to 100 (vide view) | E3Z-D61K 2M *4 | E3Z-D81K 2M | | |
| Diffuse-reflective | □ + | Pre-wired M8 connector | 5 to 100 mm (wide view) | E3Z-D61K-M3J 0.3M | E3Z-D81K-M3J 0.3M | | |
| Diliuse-Tellective | | Pre-wired (2 m) | | E3Z-D62K 2M *4 | E3Z-D82K 2M | | |
| | | Pre-wired M8 connector | 1 m | E3Z-D62K-M3J 0.3M | E3Z-D82K-M3J 0.3M | | |

^{*1.} The Reflector is sold separately. Select the Reflector model most suited to the application.

Accessories (Order Separately)

Slit (A Slit is not provided with Through-beam Sensors) Order a Slit separately if required. [Refer to Dimensions on page 16.]

| ` ' | | , | • | | |
|-------------|--------------------|------------------|---|----------|----------------------|
| Slit width | Sensing E3Z-T□□ | distance E3Z-T A | Minimum detectable object (Reference value) | Model | Contents |
| 0.5-mm dia. | 50 mm | 35 mm | 0.2-mm dia. | E39-S65A | |
| 1-mm dia. | 200 mm | 150 mm | 0.4-mm dia. | E39-S65B | One set |
| 2-mm dia. | 800 mm | 550 mm | 0.7-mm dia. | E39-S65C | (contains Slits for |
| 0.5 × 10 mm | 1 m | 700 mm | 0.2-mm dia. | E39-S65D | both the Emitter and |
| 1 × 10 mm | 2.2 m | 1.5 m | 0.5-mm dia. | E39-S65E | Receiver) |
| 2 × 10 mm | 5 m | 3.5 m | 0.8-mm dia. | E39-S65F | |

Reflectors (Reflector required for Retroreflective Sensors) A Reflector is not provided with the Sensor. Be sure to order a Reflector separately. [Refer to Dimensions on E39-L/E39-S/E39-R]

| | | S | ensing distance | * | | | | |
|---------------------------|--|--|-----------------|----------------|--------------|---------|----------|-------------------------------|
| | E37 | Z-R | E3Z-R□K | E3Z-B□1/-B□6 | E3Z-B□2/-B□7 | | | |
| Name | Rated value (sensing distance of 15 m) | Reference value (sensing distance of 10 m) | Rated value | Rated value | Rated value | Model | Quantity | Remarks |
| | 3 m (100 mm) | | 2 m (100 mm) | | | E39-R1 | 1 | |
| | 4 m (100 mm) | | 3 m (150 mm) | 500 mm (80 mm) | 2 m (500 mm) | E39-R1S | 1 | |
| Reflector | | 5 m (100 mm) | | | | E39-R2 | 1 | Retro-reflective |
| | | 2.5 m (100 mm) | | | | E39-R9 | 1 | models are not |
| | | 3.5 m(100 mm) | | | | E39-R10 | 1 | provided with |
| Fog Preventive Coating | | 3 m (100 mm) | | 500 mm (80 mm) | 2 m (500 mm) | E39-R1K | 1 | Reflectors. The MSR function |
| Small Reflector | | 1.5 m (50 mm) | | | | E39-R3 | 1 | is enabled. |
| | | 700 mm (150 mm) | | | | E39-RS1 | 1 | |
| Tape Reflector | | 1.1 m (150 mm) | | | | E39-RS2 | 1 | |
| | | 1.4 m (150 mm) | | | | E39-RS3 | 1 | |

Note: 1. If you use the Reflector at any distance other than the rated distance, make sure that the stability indicator lights properly when you install the Sensor.

2. Refer to Reflectors on E39-L/E39-S/E39-R for details.

* Values in parentheses indicates the minimum required distance between the Sensor and Reflector.

Mutual Interference Protection Filter A Filter is not provided with the Sensor (for the through-beam E3Z-T□□A). Order a Filter separately if required.

| | The first of the first had been been as a first and a second first and a first and a first of the f | | | | | | |
|------------------|--|---------|---|--|--|--|--|
| Sensing distance | Appearance/Dimensions | Model | Quantity | Remarks | | | |
| 3 m | 10.8 17.4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | E39-E11 | Two sets each for the Emitter and Receiver (total of four pieces) | Can be used with the E3Z-T A Throughbeam models. The arrow indicates the direction of polarized light. Mutual interference can be prevented by altering the direction of polarized light from or to adjacent Emitters and Receivers. | | | |

Note: The polarization directions of the Filters are offset by 90° to prevent interference. When you install the Emitter and Receiver, install them at the same angle to maintain this offset.

^{*2.} The sensing distance specified is possible when the E39-R1S is used. Values in parentheses indicate the minimum required distance between the Sensor and Reflector.
*3. Through-beam Sensors are normally sold in sets that include both the Emitter and Receiver.

^{*4.} M12 Standard Pre-wired Connector Models are also available. When ordering, add "-M1J 0.3M" to the end of the model number (e.g., E3Z-T61-M1J 0.3M). The cable is 0.3 m long.

Mounting Brackets A Mounting Bracket is not enclosed with the Sensor. Order a Mounting Bracket separately if required. [Refer to Dimensions on E39-L/E39-S/E39-R]

| Appearance | Model (material) | Quantity | Remarks | Appearance | Model (material) | Quantity | Remarks |
|------------|-------------------------|----------|--|------------|-------------------------|----------|--|
| | E39-L153 (SUS304) *1 | 1 | Manakina Bandak | | E39-L98 (SUS304) *2 | 1 | Metal Protective Cover Bracket |
| 5 | E39-L104 (SUS304) *1 | 1 | Mounting Brackets | | E39-L150 (SUS304) | 1 | (Sensor adjuster) |
| 10 | E39-L43 (SUS304) *2 | 1 | Horizontal Mounting Brackets | | E39-L151 | 1 | Easily mounted to the aluminum frame rails of conveyors and easily adjusted. |
| | E39-L142 (SUS304) *2 | 1 | Horizontal Protective Cover Bracket | | (SUS304) | ' | For left to right adjust- ment |
| | E39-L44 (SUS304) | 1 | Rear Mounting Bracket | | E39-L144 (SUS304) *2 | 1 | Compact Protective Cover Bracket (For E3Z only) |

Sensor I/O Connectors (Sockets on One Cable End)

(Models for Connectors and Pre-wired Connectors: A Connector is not provided with the Sensor. Be sure to order a Connector separately.) [Refer to Dimensions for XS3.]

| Size | Cable | Appe | arance | Cable | type | Model |
|-------------------------------|-----------------|------------------------------|--------------|-------|----------|-----------------|
| M8 *1 Standard | | Straight *3 | | 2 m | - 4-wire | XS3F-M421-402-A |
| | Ctondord | | | 5 m | | XS3F-M421-405-A |
| | Standard | 1 - de a m a al *0 *4 | | 2 m | | XS3F-M422-402-A |
| | | L-shaped *3 *4 | | 5 m | | XS3F-M422-405-A |
| PUR (Polyure- thane) cable *2 | | Straight *3 | | 2 m | 4-wire | XS3F-M421-402-L |
| | | Straight 3 | | 5 m | | XS3F-M421-405-L |
| | thane) cable *2 | L-shaped *3 *4 | | 2 m | | XS3F-M422-402-L |
| | | | L'Shaped 0 4 | | 5 m | |

Note: When using Through-beam models, order one connector for the Receiver and one for the Emitter.

Note: 1. When using Through-beam models, order one bracket for the Receiver and one for the Emitter.

2. Refer to Mounting Brackets on E39-L/E39-S/E39-R for details.

*1. Cannot be used for Standard Connector models with mounting surface on the bottom. In that case, use Pre-wired Connector models.

^{*2.} Cannot be used for Standard Connector models.

^{*1.} Refer to Introduction to Sensor I/O Connectors/Sensor Controllers for details.

^{*2.} The Sensor can be used in low-temperature environments (-25°C to -40°C). Do not use the Sensor in locations that are subject to oil.

^{*3.} The connector will not rotate after connecting.

^{*4.} The cable is fixed at an angle of 180° from the sensor emitter/receiver surface.