

The E32 Range is the Broadest Range of Standard and Special Purpose Fibre Sensors Stocked in the UK

All E3X amplifiers are compatible with all E32 fibres.

### Ordering Information

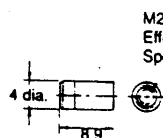
| Sensing method                  | Features   | Order Number |
|---------------------------------|--|--------------|
| Diffuse                         | Fibres are coaxially mounted within sensor head to give positional accuracy                | E32-CC200    |
|                                 | General purpose type for large targets   | E32-DC200    |
|                                 | General purpose type has needle head for large targets in confined space                   | E32-DC200B   |
|                                 | General purpose type for small targets   | E32-DC200E   |
|                                 | General purpose type has needle head for small targets in confined space                   | E32-DC200F   |
|                                 | Long sensing distance type for large targets   | E32-DC11L    |
|                                 | Long sensing distance type with side view sensing for large targets                        | E32-D14L     |
|                                 | Small sensor head with side view sensing for confined space                                | E32-D24      |
|                                 | General purpose type with coaxially mounted fibres in small head for accuracy              | E32-D32*     |
|                                 | General purpose type with coaxially mounted fibres to give positional accuracy             | E32-D32L     |
|                                 | Thin needle head gives detail detection  | E32-D33      |
|                                 | High temperature detection type resists up to 300°C  | E32-D61**    |
|                                 | Convergent spot type gives focused displacement accuracy                                   | E32-L25      |
| Retroreflective                 | General purpose type can detect transparent objects  | E32-R16      |
|                                 | Small sensor head can detect transparent objects   | E32-R21      |
| Through-beam<br>(sold in pairs) | General purpose type offers good sensing distance  | E32-TC200    |
|                                 | General purpose type with fine needle had for small objects                                | E32-TC200F   |
|                                 | General purpose type with long sensing distance  | E32-T11L     |
|                                 | Long sensing distance type has prism head for side viewing                                 | E32-T14      |
|                                 | Long sensing distance type has thin head with side view                                    | E32-T14L     |
|                                 | Special purpose type has 10 mm slit for wide target area                                   | E32-T16      |
|                                 | Special purpose very long sensing distance type  | E32-T17L     |
|                                 | Thin needle heads with side view for confined space  | E32-T24      |
|                                 | High temperature type can withstand up to 300°C  | E32-T61**    |
|                                 | Both emitter and receiver are divided into 4 heads to give AND/OR operation and wide cover | E32-M21**    |
|                                 | Slot type head has opposed emitter and receiver  | E32-G14      |

\* E39-F3A lens can be used with E32-D32 to increase positional accuracy and detail detection.

\*\* The length cannot be trimmed.

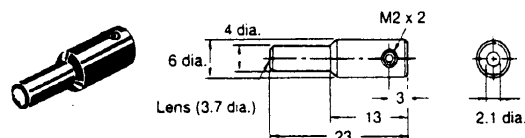
### Accessories (Order separately)

**E39-F1**  
Lens kit

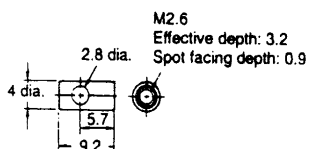


Lens (glass)

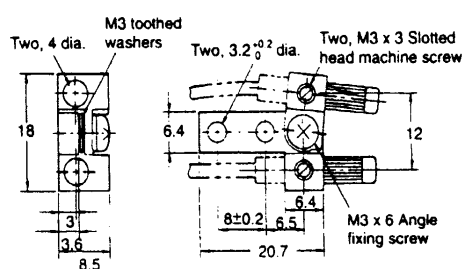
**E39-F3A**  
Reflective Lens Unit (for the E32-D32)






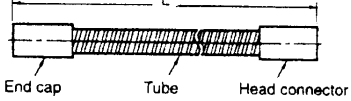
**E39-F2**  
Side-view attachment



**E39-F3**  
Convergent Beam Conversion Kit



| Name             | Fibre Cutter   | Fine-fibre Attachment   | Fibre Connector*   |
|------------------|--|---|--|
| Model            | E39-F4   | E39-F9  | E39-F10  |
| Appearance       |                     |   |   |
| Features         | Used to cut fibres to desired lengths  | Used when inserting the fibres into the amp   | Used to connect fibres to extend total length  |
| Applicable fibre | All models equipped with trimmable fibres (cutter is included as standard with all trimmable fibres) | E32-DC200E, -TC200E<br>E32-DC200F(4), -TC200F(4)<br>E32-D21, -D21L, -D22L<br>E32-T21, -T21L, -T22L<br>E32-D32, -T22<br>E32-D24, -T24<br>E32-D33 *included with fibre<br>E32-R21 | E32-DC200, -TC200<br>E32-DC200B(4), -TC200B(4)<br>E32-TC200A<br>E32-T14, -G14<br>E32-D11L, -T11L, -T12L<br>E32-D14L, -T14L<br>E32-T17L |

| Name                       | Protective Spiral Tubes  |  |  |   |
|----------------------------|--|--|--|---|
| Model                      | E39-F32A   | E39-F32B                                   | E39-F32C   | E39-F32D  |
| Appearance                 |                              |  |  |   |
| Length                     | 1000 mm  |  |  |   |
| Applicable fibre           | E32-DC200E<br>E32-DC200F(4)<br>E32-D21   | TC200E<br>TC200F(4)<br>E32-T21<br>E32-T21L | E32-TC200<br>E32-TC200B(4)<br>E32-T11<br>E32-T51<br>E32-T11L | E32-DC200<br>E32-DC200B(4),<br>E32-CC200<br>E32-D11L<br>E32-D51<br>E32-D11L |
| Ambient temperature        | Operating: -40°C to 150°C (do not exceed the operating temperature of the fibre)                               |  |  |   |
| Ambient humidity           | Operating: 35% to 85%  |  |  |   |
| Permissible bending radius | R: 30 mm min.  |  |  |   |
| Tensile strength           | Between head connector and end cap with tube: 15 kgf • cm max. (1.5 N • m)<br>Tube: 20 kgf • cm max. (2 N • m) |  |  |   |
| Compression load           | Tube: 3 kg max. (29.4 N)   |  |  |   |

\* OMRON does not sell fibre optic cable

## Sensing Distances

### ■ Diffuse

| Fibre Model | Sensing Distance with:   |                    |                    |                    |                |
|-------------|--------------------------|--------------------|--------------------|--------------------|----------------|
|             | Amplifier Type 'A'       | Amplifier Type 'F' | Amplifier Type 'H' | Amplifier Type 'T' | Amplifier 'VG' |
| E32-CC200   | 75 mm                    | 33 mm              | 150 mm             | 100 mm             | 10 mm          |
| E32-DC200   | 75 mm                    | 33 mm              | 150 mm             | 100 mm             | 10 mm          |
| E32-DC200B  | 75 mm                    | 33 mm              | 150 mm             | 100 mm             | 10 mm          |
| E32-DC200E  | 18 mm                    | 8 mm               | 36 mm              | 20 mm              | 2 mm           |
| E32-DC200F  | 18 mm                    | 8 mm               | 36 mm              | 20 mm              | 2 mm           |
| E32-D11L    | 100 mm                   | 45 mm              | 200 mm             | 150 mm             | 10 mm          |
| E32-D14L    | 40 mm                    | 12 mm              | 40 mm              | 40 mm              | 1.5 mm         |
| E32-D24     | 15 mm                    | 4 mm               | 15 mm              | 15 mm              | 1.6 mm         |
| E32-D32     | 20 mm                    | 9 mm               | 40 mm              | 30 mm              | 2.5 mm         |
| E32-D32L    | 40 mm                    | 11 mm              | 80 mm              | 60 mm              | 4 mm           |
| E32-D33     | 5 mm                     | 1.8mm              | 10 mm              | 6 mm               | -              |
| E32-D61     | 45 mm slot width         | 20 mm              | 45 mm              | 45 mm              | 5 mm           |
| E32-L25     | 3.3 mm (convergent slot) |                    |                    |                    |                |

### ■ Retroreflective

|         |                |              |                |                |   |
|---------|----------------|--------------|----------------|----------------|---|
| E32-R16 | 150 TO 1500 mm | 50 to 700 mm | 150 to 1500 mm | 150 to 1500 mm | - |
| E32-R21 | 10 to 250 mm   | 20 to 230 mm | 10 to 250 mm   | 25 to 250 mm   | - |

■ Through-beam

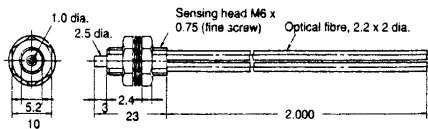
|            |                      |         |                      |                      |                    |
|------------|----------------------|---------|----------------------|----------------------|--------------------|
| E32-TC200  | 200 mm<br>(1500 mm)* | 80 mm   | 400 mm<br>(3000 mm)* | 270 mm<br>(2000 mm)* | 28 mm<br>(190 mm)* |
| E32-TC200F | 50 mm                | 26 mm   | 100 mm               | 70 mm                | 8 mm               |
| E32-T11L   | 350 mm<br>(1000 mm)* | 150 mm  | 700 mm<br>(2000 mm)* | 500 mm<br>(1200 mm)* | 40 mm<br>(120 mm)* |
| E32-T14    | 900 mm               | 380 mm  | 1800 mm              | 1000 mm              | 80 mm              |
| E32-T14L   | 120 mm               | 30 mm   | 240 mm               | 130 mm               | 10 mm              |
| E32-T16    | 750 mm               | 330 mm  | 1500 mm              | 1000 mm              | 150 mm             |
| E32-T17L   | 7000 mm              | 3000 mm | 14000 mm             | 7000 mm              | 800 mm             |
| E32-T24    | 45 mm                | 15 mm   | 90 mm                | 45 mm                | 2 mm               |
| E32-T61    | 150 mm               | 60 mm   | 300 mm               | 180 mm               | 18 mm              |
| E32-M21    | 150 mm               | 65 mm   | 300 mm               | 200 mm               | 20 mm              |
| E32-G14    | 10 mm slot width     |         |                      |                      |                    |

\* With E39-F1 lens kit

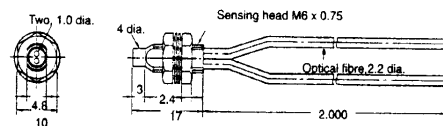
Dimensions

■ Diffuse Reflective

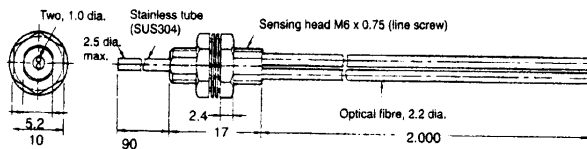
E32-CC200



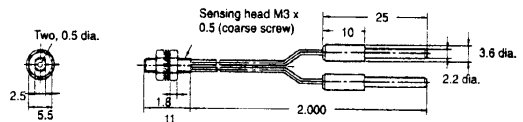
E32-DC200



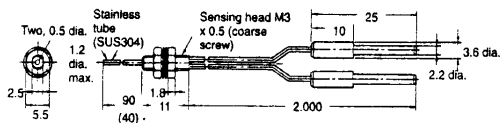
E32-DC200B



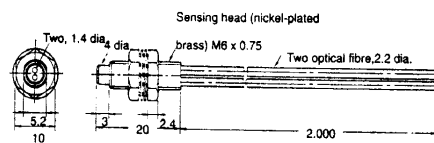
E32-DC200E



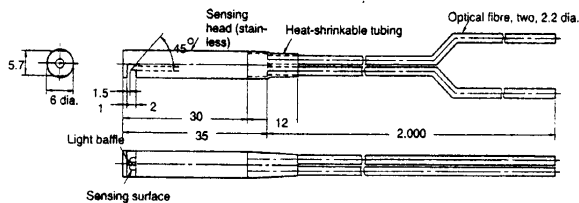
E32-DC200F



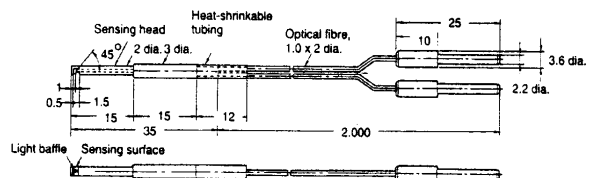
E32-D11L



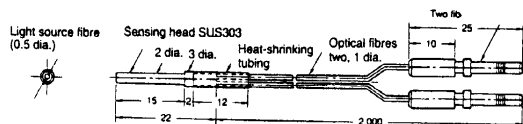
E32-D14L



E32-D24

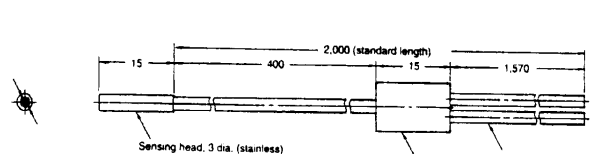


E32-D32



Note: The fibre for the light source is identified by a white line

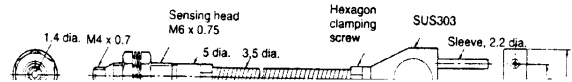
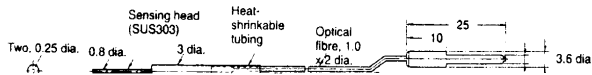
E32-D32L



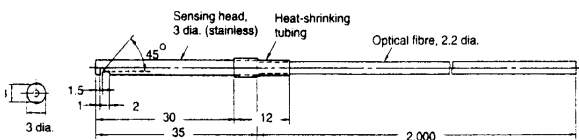
Note: The fibre for the light source is identified by a yellow dotted line

E32-D33

E32-D61



E32-T14L



E32-T16

