

## Mounting Brackets

| Model    | Fitting materials        | Count | Accessories  |                          |       | Applicable sensor (mounting pitch on sensor side)             | Page       |
|----------|--------------------------|-------|--|--------------------------|-------|---|------------|
|          |                          |       | Description  | Material                 | Count |   | Dimensions |
| E39-L2   | Iron, zinc plating       | 1     | Hexagonal bolts M4 × 12 (with spring and plain washers)                    | Iron, zinc plating       | 2     | E3S-RS30E4□ (25.4)<br>E3S-R1E4□ (25.4)                        | 5          |
| E39-L4   | Iron, zinc plating       | 1     | Slotted/Phillips screws M3 × 12 (with spring and plain washers)            | Iron, zinc plating       | 2     | E32-T16 (20)  |            |
| E39-L5   | Iron, zinc plating       | 1     | Hexagonal bolts M4 × 20 (with spring and plain washers)<br>Nuts M4         | Iron, zinc plating       | 2     | E3L-DS50E4  |            |
|          |                          |       |  | Iron, zinc plating       | 2     |   |            |
| E39-L6   | Iron, zinc plating       | 1     | Hexagonal bolts M4 × 12 (with spring and plain washers)                    | Iron, zinc plating       | 2     | E3L-2RC4 (25.4)<br>E3S-RS30E4□ (25.4)<br>E3S-R1E4□ (25.4)     |            |
| E39-L31  | Iron, zinc plating       | 1     | Slotted/Phillips screws, M3 × 12 (with spring washers)                     | Iron, zinc plating       | 2     | E3C-S50 (8)   |            |
| E39-L40  | Iron, zinc plating       | 1     | Phillips screws M4 × 25 (with spring and plain washers)<br>Nuts M4         | Iron, zinc plating       | 2     | E3JK  |            |
|          |                          |       |  | Iron, zinc plating       | 2     |   |            |
| E39-L41  | Iron, zinc plating       | 2     | Phillips screws M3 × 14 (with spring washers)<br>Plain washer M3           | Iron, zinc plating       | 4     | E3C-1 (10)  |            |
|          |                          |       |  | Iron, zinc plating       | 4     |   |            |
| E39-L42  | Iron, black coating      | 2     | Phillips screws M3 × 10 (with spring washers)<br>Plain washer M3           | Iron, zinc plating       | 4     | E3C-2 (20)<br>E3C-DS10 (19)<br>E3C-VS1G (19)<br>E3C-VS3R (19) |            |
|          |                          |       |  | Iron, zinc plating       | 4     |   |            |
| E39-L43  | Stainless steel (SUS304) | 1     | Slotted/Phillips screws M3 × 8 (with spring and plain washers)             | Stainless steel (SUS304) | 2     | E3Z pre-wired model (25.4)                                    | 6          |
| E39-L44  | Stainless steel (SUS304) | 1     | Slotted/Phillips screws M3 × 8 (with spring and plain washers)             | Stainless steel (SUS304) | 2     | E3Z pre-wired model (25.4)                                    |            |
| E39-L51  | Iron, zinc plating       | 1     | Slotted/Phillips screws M4 × 30 (with spring and plain washers)<br>Nuts M4 | Iron, zinc plating       | 2     | E3JM (40)   |            |
|          |                          |       |  | Iron, nickel plating     | 2     |   |            |
| E39-L53  | Iron, zinc plating       | 1     | ---  | ---                      | ---   | E3JM (40)   |            |
| E39-L54V | Stainless steel (SUS304) | 1     | ---  | ---                      | ---   | E32-T54V  |            |
| E39-L69  | Stainless steel (SUS304) | 1     | Slotted/Phillips screws M3 × 12 (with spring and plain washers)            | Stainless steel (SUS304) | 2     | E3S-R1□ (20)<br>E3S-R3□ (20)                                  | 6          |
| E39-L70  | Stainless steel (SUS304) | 1     | Slotted/Phillips screws M3 × 12 (with spring and plain washers)            | Stainless steel (SUS304) | 2     | E3S-R6□ (20)<br>E3S-R8□ (20)                                  |            |
| E39-L83  | Stainless steel          | 1     | ---  | ---                      | ---   | E32-T24S<br>E32-A03   |            |
| E39-L85  | Stainless steel (SUS304) | 1     | Hexagonal bolts M4 × 12 (with spring and plain washers)                    | Iron, zinc plating       | 2     | E3S-C (25.4)  |            |
| E39-L86  | Stainless steel (SUS304) | 1     | Hexagonal bolts M4 × 12 (with spring and plain washers)                    | Iron, zinc plating       | 2     | E3S-C (25.4)  |            |
| E39-L87  | Stainless steel (SUS304) | 1     | Hexagonal bolts M4 × 12 (with spring and plain washers)                    | Iron, zinc plating       | 2     | E3S-C (25.4)<br>E3S-CR62/67 (25.4)                            |            |

Note:   Applicable models that appear shaded come with the Mounting Brackets at left as accessories.

# E39-L/F39-L/E39-S/E39-R

| Model   | Fitting materials        | Count | Accessories   |  |        | Applicable sensor<br>(mounting pitch on sensor side)                      | Page<br>Dimensions |
|---|--------------------------|-------|---|--|--------|---|--------------------|
|   |                          |       | Description   | Material                                   | Count  |   |                    |
| E39-L93FH                                     | Stainless steel (SUS304) | 1     | Holder (upper)  | Heat-resistant ABS resin                   | 1      | E3Z (25.4)<br>E3S-R1□/R3□<br>/R6□/R8□ (20)<br>E39-R1/E39-R3               | 8                  |
|   |                          |       | Holder (lower)  | 66 nylon                                   | 1      |   |                    |
|   |                          |       | Pipe  | Stainless steel (SUS304)                   | 1      |   |                    |
| E39-L93FV                                     | Stainless steel (SUS304) | 1     | Bolts M4 × 12 with Hexagonal holes                              | Iron, nickel plating                       | 2      |   |                    |
|   |                          |       | Bolts M4 × 30 with hexagonal holes                              | Iron, nickel plating                       | 1      |   |                    |
| E39-L93H                                      | Stainless steel (SUS304) | 1     | Phillips screws M3 × 12 (with spring and plain washers)         | Stainless steel (SUS304)                   | 2      |   |                    |
| E39-L93V                                      | Stainless steel (SUS304) | 1     | Spring washer M4  | Iron, nickel plating                       | 1      |   |                    |
|   |                          |       | Plain washer M4   | Iron, nickel plating                       | 1      |   |                    |
|   |                          |       | Nuts M4   | Iron, nickel plating                       | 3      |   |                    |
| E39-L93XY                                     | ---                      | ---   | Holder  | 66 nylon                                   | 1      | E3Z (25.4)<br>E3S-R1□/R3□<br>/R6□/R8□ (20)<br>E39-R1/E39-R3               |                    |
|   |                          |       | Pipe  | Stainless steel (SUS304)                   | 1      |   |                    |
|   |                          |       | Bolts M5 × 16 with hexagonal holes                              | Stainless steel (SUS304)                   | 2      |   |                    |
|   |                          |       | Nuts M5   | Stainless steel (SUS304)                   | 2      |   |                    |
|   |                          |       | Phillips screws M3 × 10   | Iron, zinc plating                         | 4      |   |                    |
| E39-L94                                       | Iron, zinc plating       | 2     | Nuts M3   | Iron, zinc plating                         | 4      | E32-T16P (19)   |                    |
| E39-L96                                       | Stainless steel (SUS304) | 1     | Phillips screws M3 × 6 (with spring and plain washers)          | Iron, nickel plating                       | 2      | E39-R1  | 9                  |
| * For installation of Sensor Adjuster E39-L93 |                          |       |   |  |        |   |                    |
| E39-L97                                       | Stainless steel (SUS304) | 1     | Slotted/Phillips screws M3 × 12 (with spring and plain washers) | Stainless steel (SUS304)                   | 2      | E3S-R1□/R3□ (20)  |                    |
| E39-L98                                       | Stainless steel (SUS304) | 1     | Slotted/Phillips screws M3 × 12 (with spring and plain washers) | Stainless steel (SUS304)                   | 2      | E3Z pre-wired model (25.4)<br>E3S-R6□/R8□ (20)                            |                    |
| E39-L102                                      | Stainless steel (SUS304) | 1     | Hexagonal bolts M4 × 12 (with spring and plain washers)         | Iron, zinc plating                         | 2      | E3S-C (horizontal type) (25.4)  | 10                 |
| E39-L103                                      | Stainless steel (SUS304) | 1     | Hexagonal bolts M4 × 12 (with spring and plain washers)         | Iron, zinc plating                         | 2      | E3S-C (vertical type) (25.4)<br>E3S-CR62/67 (25.4)                        |                    |
| E39-L104                                      | Stainless steel (SUS304) | 1     | Slotted/Phillips screws M3 × 8 (with spring and plain washers)  | Stainless steel (SUS304)                   | 2      | E3Z pre-wired model (25.4)<br>E32-R21 (for installation of E39-R3) (25.4) |                    |
| E39-L109                                      | Stainless steel (SUS430) | 1     | ---   | ---  | ---    | E32-S15-□ (13.2)  |                    |
| E39-L114                                      | Stainless steel (SUS430) | 2     | Phillips screws M5 × 10   | Iron, zinc plating                         | 4      | E3MC (28)   |                    |
| E39-L115                                      | Stainless steel (SUS304) | 1     | Phillips screws M5 × 8<br>Slotted/Phillips screws M3 × 8        | Iron, zinc plating<br>Iron, nickel plating | 4<br>2 | E3MC  |                    |
| E39-L116                                      | Stainless steel (SUS304) | 1     | ---   | ---  | ---    | E3T-S (9/15)  | 11                 |
| E39-L117                                      | Stainless steel (SUS304) | 1     | ---   | ---  | ---    | E3T-S (9/15)  |                    |
| E39-L118                                      | Stainless steel (SUS304) | 1     | ---   | ---  | ---    | E3T-S (9/15)  |                    |
| E39-L119                                      | Stainless steel (SUS304) | 1     | ---   | ---  | ---    | E3T-F (8)   |                    |
| E39-L120                                      | Stainless steel (SUS304) | 1     | ---   | ---  | ---    | E3T-F (8)   |                    |
| E39-L127-T1                                   | Iron, zinc plating       | 1     | Phillips screws M2.3 × 8<br>Spring washer M2.3                  | Iron, zinc plating<br>Iron, zinc plating   | 4<br>4 | E3C-S10 (7.5)   |                    |
| E39-L127-T2                                   | Iron, zinc plating       | 1     | Phillips screws M2.3 × 8<br>Spring washer M2.3                  | Iron, zinc plating<br>Iron, zinc plating   | 4<br>4 |   |                    |
| E39-L127-T3                                   | Iron, zinc plating       | 1     | Phillips screws M2.3 × 8<br>Spring washer M2.3                  | Iron, zinc plating<br>Iron, zinc plating   | 4<br>4 |   |                    |

Note: Applicable models that appear shaded come with the Mounting Brackets at left as accessories.

| Model    | Fitting materials        | Count | Accessories   |  |       | Applicable sensor (mounting pitch on sensor side) | Page Dimensions |
|----------|--------------------------|-------|---|--|-------|---|-----------------|
|          |                          |       | Description   | Material   | Count |   |                 |
| E39-L131 | Stainless steel (SUS304) | 1     | Slotted/Phillips screws M4 × 25                                 | Stainless steel (SUS304)                             | 2     | E3G-R1□ (25)<br>E3G-L7□ (25)                      | 12              |
|          |                          |       | Spring washer M4  | Stainless steel (SUS304)                             | 2     |   |                 |
|          |                          |       | Plain washer M4   | Stainless steel (SUS304)                             | 2     |   |                 |
|          |                          |       | Nuts M4   | Stainless steel (SUS304)                             | 2     |   |                 |
| E39-L132 | Stainless steel (SUS304) | 1     | Slotted/Phillips screws M4 × 25                                 | Stainless steel (SUS304)                             | 2     | E3G-R1□ (25)<br>E3G-L7□ (25)                      |                 |
|          |                          |       | Spring washer M4  | Stainless steel (SUS304)                             | 2     |   |                 |
|          |                          |       | Plain washer M4   | Stainless steel (SUS304)                             | 2     |   |                 |
|          |                          |       | Nuts M4   | Stainless steel (SUS304)                             | 2     |   |                 |
| E39-L135 | Stainless steel (SUS304) | 1     | Slotted/Phillips screws M4 × 35                                 | Stainless steel (SUS304)                             | 2     | E3G-MR19 (T)<br>E3G-ML79 (T)                      |                 |
|          |                          |       | Spring washer M4  | Stainless steel (SUS304)                             | 2     |   |                 |
|          |                          |       | Plain washer M4   | Stainless steel (SUS304)                             | 2     |   |                 |
|          |                          |       | Nuts M4   | Stainless steel (SUS304)                             | 2     |   |                 |
| E39-L136 | Stainless steel (SUS304) | 1     | Slotted/Phillips screws M4 × 35                                 | Stainless steel (SUS304)                             | 2     | E3G-MR19 (T)<br>E3G-ML79 (T)                      |                 |
|          |                          |       | Spring washer M4  | Stainless steel (SUS304)                             | 2     |   |                 |
|          |                          |       | Plain washer M4   | Stainless steel (SUS304)                             | 2     |   |                 |
|          |                          |       | Nuts M4   | Stainless steel (SUS304)                             | 2     |   |                 |
| E39-L142 | Stainless steel (SUS304) | 1     | Slotted/Phillips screws M3 × 8 (with spring and plain washers)  | Stainless steel (SUS304)                             | 2     | E3Z pre-wired model (25.4)                        |                 |
| E39-L143 | Stainless steel (SUS304) | 1     | None  | ---  | ---   | E3X-DA-S/MDA<br>E3X-NA<br>E3C-LDA<br>E2C-EDA      |                 |
| E39-L144 | Stainless steel (SUS304) | 1     | Slotted/Phillips screws M3 × 12 (with spring and plain washers) | Stainless steel (SUS304)                             | 2     | E3Z pre-wired model (25.4)                        |                 |
| E39-L148 | Stainless steel (SUS304) | 1     | None  | ---  | ---   | E3X-NA  |                 |
| E39-L149 | Iron, black coating      | 1     | None  | ---  | ---   | E3Z-G   |                 |
| E39-L150 | Stainless steel (SUS304) | 1     | Holder/bracket  | PBT (polybutylene terephthalate)                     | 1     | E3Z (25.4)<br>E3S-R6□/R8□ (20)<br>E39-R3          | 13              |
|          |                          |       | Shaft (brace)   | Stainless steel (SUS304)                             | 1     |   |                 |
|          |                          |       | Bolt with hexagonal hole  | Stainless steel (SUSXM7)                             | 1     |   |                 |
|          |                          |       | Nut   | Stainless steel (SUS304)                             | 1     |   |                 |
|          |                          |       | Phillips screw  | Stainless steel (SUSXM7)                             | 1     |   |                 |
|          |                          |       | Slotted/Phillips screws   | Stainless steel (SUS304)                             | 2     |   |                 |
| E39-L151 | Stainless steel (SUS304) | 1     | Holder/bracket  | PBT (polybutylene terephthalate)                     | 1     | E3Z (25.4)<br>E3S-R6□/R8□ (20)<br>E39-R3          |                 |
|          |                          |       | Shaft (brace)   | Stainless steel (SUS304)                             | 1     |   |                 |
|          |                          |       | Bolt with hexagonal hole  | Stainless steel (SUSXM7)                             | 1     |   |                 |
|          |                          |       | Nut   | Stainless steel (SUS304)                             | 1     |   |                 |
|          |                          |       | Phillips screw  | Stainless steel (SUSXM7)                             | 1     |   |                 |
|          |                          |       | Slotted/Phillips screws   | Stainless steel (SUS304)                             | 2     |   |                 |
| E39-L153 | Stainless steel (SUS304) | 1     | Slotted/Phillips screws M3 × 8 (with spring and plain washers)  | Stainless steel (SUSXM7)<br>Stainless steel (SUS304) | 2     | E3Z pre-wired model (25.4)                        |                 |
| F39-L1   | Iron, zinc plating       | 4     | Phillips screws M4 × 20   | Brass, nickel-plated                                 | 8     | F3W-B   |                 |
|          |                          |       | Nuts M4   | Brass, nickel-plated                                 | 8     |   |                 |
| F39-L2   | Iron, zinc plating       | 4     | Phillips screws M4 × 25   | Brass, nickel-plated                                 | 8     | F3W-B   |                 |
|          |                          |       | Phillips screws M4 × 20   | Brass, nickel-plated                                 | 8     |   |                 |
|          |                          |       | Nuts M4   | Brass, nickel-plated                                 | 8     |   |                 |
|          |                          |       | Mounting Spacer   | Heat-resistant ABS resin                             | 4     |   |                 |
| F39-L3   | Iron, zinc plating       | 4     | ---   | ---  | ---   | F3W-A   |                 |
| F39-L4   | Iron, zinc plating       | 4     | ---   | ---  | ---   | F3W-C   |                 |
| F39-L5   | Iron, zinc plating       | 4     | ---   | ---  | ---   | F3W-C   |                 |
| F39-L9   | Stainless steel (SUS304) | 1     | Slotted/Phillips screws M3 × 25                                 | Iron, zinc plating                                   | 2     | F3UV-A  |                 |
|          |                          |       | Plain washer M3   | Iron, zinc plating                                   | 2     |   |                 |
| F39-L10  | Iron                     | 2     | Phillips screws M4 × 15   | Iron   | 4     | F3W-D   |                 |
|          |                          |       | Nuts M4   | Iron   | 4     |   |                 |
| F39-L11  | Iron                     | 2     | Phillips screws M4 × 15   | Iron   | 4     | F3W-D   |                 |
|          |                          |       | Nuts M4   | Iron   | 4     |   |                 |
| F39-L12  | Iron                     | 2     | Phillips screws M4 × 15   | Iron   | 4     | F3W-D<br>Protective fittings                      |                 |
|          |                          |       | Nuts M4   | Iron   | 4     |   |                 |

Note: Applicable models that appear shaded come with the Mounting Brackets at left as accessories.

## Contact Mounting Plates

| Model   | Material                         | Count | Applicable type | Page       |
|---------|----------------------------------|-------|-----------------|------------|
|         |                                  |       |                 | Dimensions |
| E39-L60 | PBT (polybutylene terephthalate) | 1     | E3S-R□6         | 15         |

Note: Applicable models that appear shaded come with the Mounting Brackets at left as accessories.

## Slits

| Model    | Slit width                 | Installation procedure | Applicable type           |
|----------|----------------------------|------------------------|---------------------------|
| E39-S39  | Width 1 × 20 mm            | Seal type              | E3JM-10□4 (T)<br>E3JK-5□□ |
| E39-S60  | Width 0.5, 1 × 15 mm       | Seal type              | E32-T16                   |
| E39-S61  | Width 0.5, 1, 2, 4 × 11 mm | Plug-in type           | E3S-CT□1                  |
| E39-S63  | 0.5-mm dia., 1 mm          |                        | E3T-ST1□                  |
| E39-S64  | 0.5-mm dia., 1 mm          |                        | E3T-FT1□                  |
| E39-S65A | 0.5 mm dia.                |                        | E3Z-T□□                   |
| E39-S65B | 1-mm dia.                  |                        |                           |
| E39-S65C | 2-mm dia.                  |                        |                           |
| E39-S65D | Width 0.5 × 10 mm          |                        |                           |
| E39-S65E | Width 1 × 10 mm            |                        |                           |
| E39-S65F | Width 2 × 10 mm            |                        |                           |

Note: Applicable models that appear shaded come with the Slits at left as accessories

## Reflectors (Refer to Dimensions on page 16.)

| Name<br>Item Model                  | Reflectors  |         | Non-fogging reflective plate | Reflectors  |          |            | Special Reflector for E3ZM-B |
|-------------------------------------|-------------|---------|------------------------------|-------------|----------|------------|------------------------------|
|                                     | E39-R1      | E39-R1S | E39-R1K                      | E39-R2      | E39-R6   | E39-R10    | E39-RP1                      |
| Directional angle                   | 30° min. *1 |         |                              | 30° min. *2 | 30° min. |            |                              |
| Ambient operating temperature range | -25 to 55°C |         |                              |             |          |            | -40 to 60°C                  |
| Ambient storage temperature range   | -40 to 70°C |         | -40 to 55°C                  | -40 to 70°C |          |            |                              |
| Ambient operating humidity range    | 35% to 85%  |         |                              |             |          | 35% to 95% | 35% to 85%                   |
| Ambient storage humidity range      | 35% to 95%  |         |                              |             |          |            |                              |
| Degree of protection                | IEC IP67    |         |                              |             |          |            |                              |
| Accessories                         | ---         |         |                              |             |          |            |                              |

\*1. 40° or higher for E3JM-R and E3JK-R.

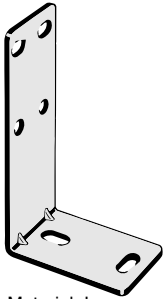
\*2. 40° or higher for E3G-R.

| Name<br>Item Model                  | Small reflector |  |                |  | Tape reflector        |                       |                       |
|-------------------------------------|-----------------|--|----------------|--|-----------------------|-----------------------|-----------------------|
|                                     | E39-R9          | E39-R3                                   | E39-R4         | E39-R37-CA   | E39-RS1<br>E39-RS1-CA | E39-RS2<br>E39-RS2-CA | E39-RS3<br>E39-RS3-CA |
| Directional angle                   | 30° min.        |  | 2° to 20° min. | 30° min.   |                       |                       |                       |
| Ambient operating temperature range | -25 to 55°C     |  |                |  |                       |                       |                       |
| Ambient storage temperature range   | -40 to 70°C     |  |                | 0 to 40°C  |                       |                       |                       |
| Ambient operating humidity range    | 35% to 95%      | 35% to 85%                               |                |  |                       |                       |                       |
| Ambient storage humidity range      | 35% to 95%      |  |                | 35% to 85%   |                       |                       |                       |
| Degree of protection                | IEC IP67        |  |                |  |                       |                       |                       |
| Accessories                         | ---             | Mounting Brackets E39-L104 (with screws) | ---            | Phillips screws M3 × 3, spring washers M3, nuts M3 | ---                   |                       |                       |

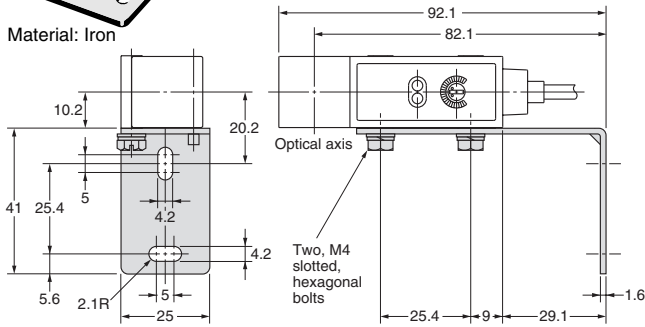
| Name<br>Item Model                  | Laser Reflectors            |         |   |         |         |
|-------------------------------------|-----------------------------|---------|---|---------|---------|
|                                     | Standard                    |         | Short-distance transparent object detection | Sheets  |         |
|                                     | E39-R12                     | E39-R13 |   | E39-R14 | E39-RS4 |
| Ambient operating temperature range | -10 to 55°C (No icing)      |         |   |         |         |
| Ambient storage temperature range   | -25 to 70°C (No icing)      |         |   |         |         |
| Ambient operating humidity range    | 35 to 85% (No condensation) |         |   |         |         |
| Ambient storage humidity range      | 35 to 85% (No condensation) |         |   |         |         |

## Mounting Bracket Dimensions

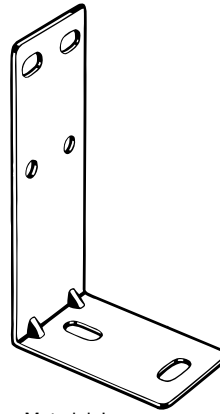
### E39-L2



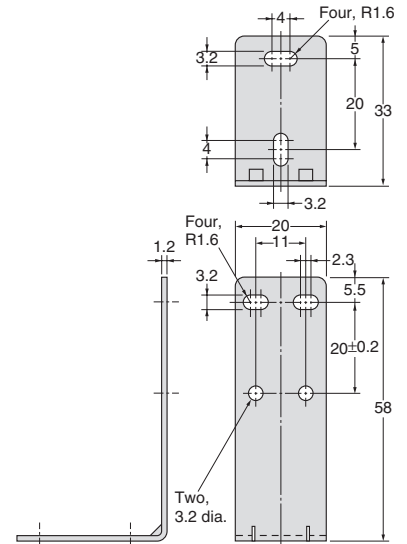
Material: Iron



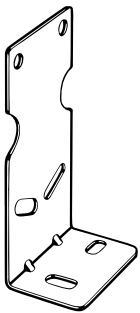
### E39-L4



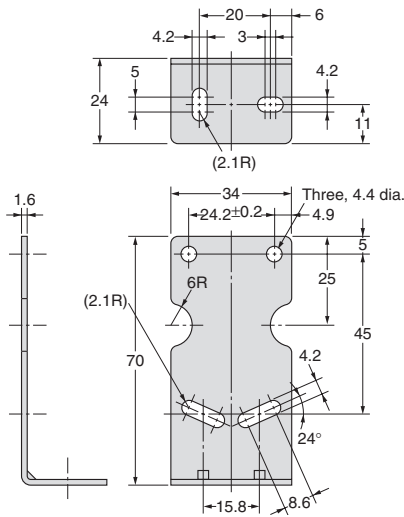
Material: Iron



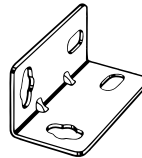
### E39-L5



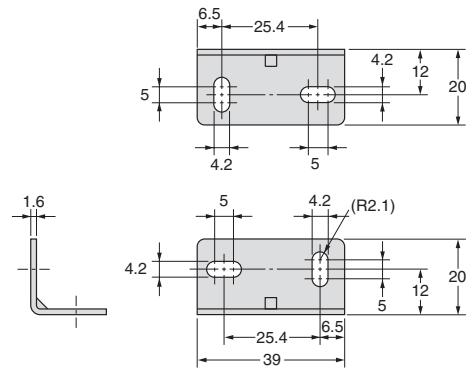
Material: Iron



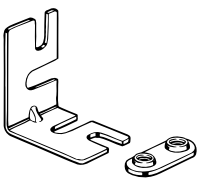
### E39-L6



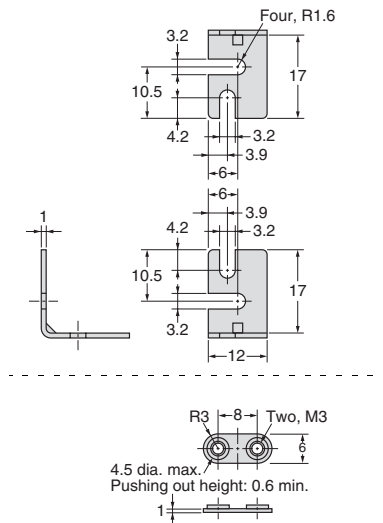
Material: Iron



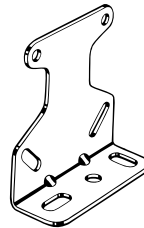
### E39-L31



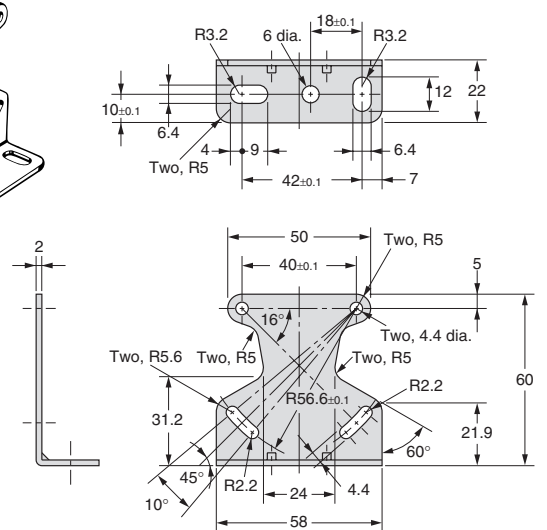
Material: Iron



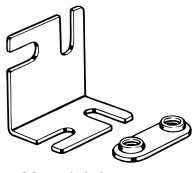
### E39-L40



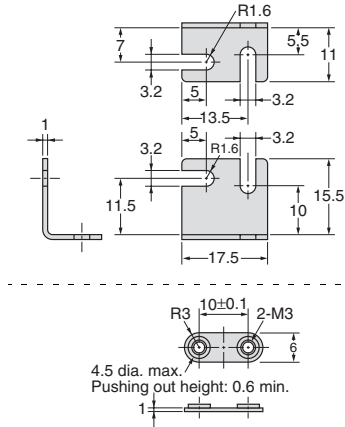
Material: Iron



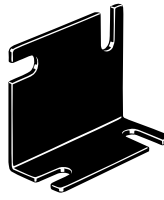
## E39-L41



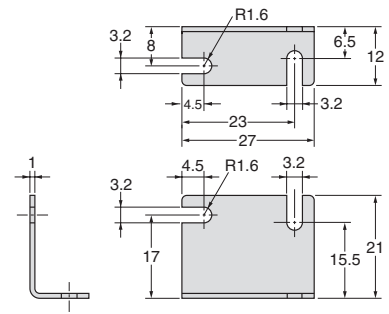
Material: Iron



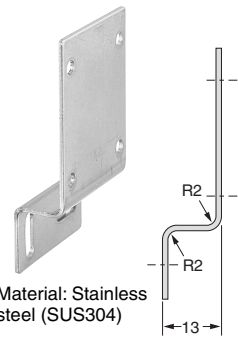
## E39-L42



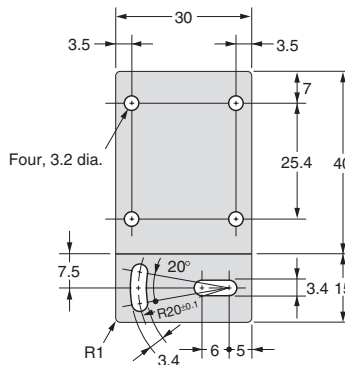
Material: Iron



## E39-L43



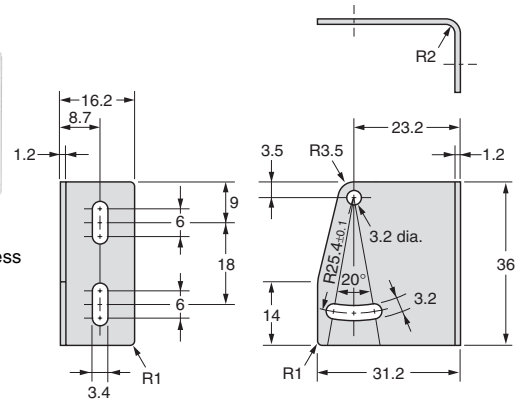
Material: Stainless steel (SUS304)



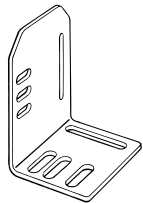
## E39-L44



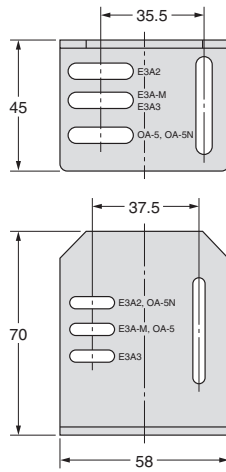
Material: Stainless steel (SUS304)



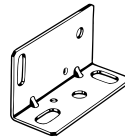
## E39-L51



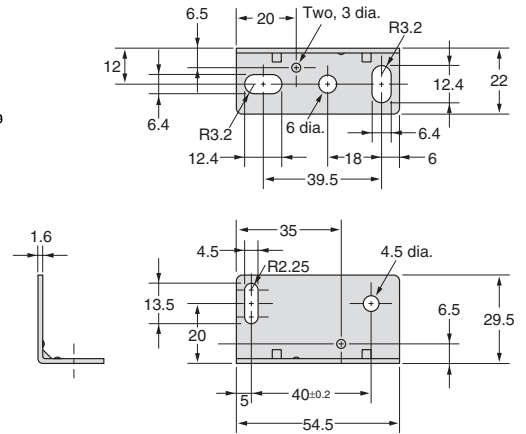
Material: Iron



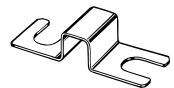
## E39-L53



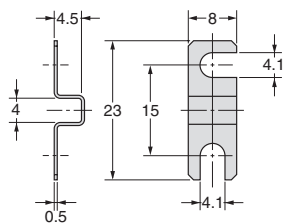
Material: Iron



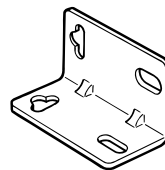
## E39-L54V



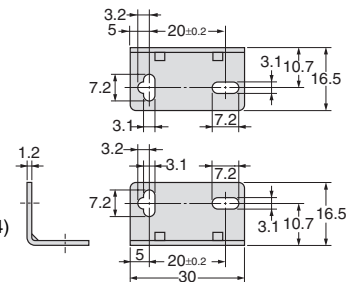
Material: Stainless steel (SUS304)



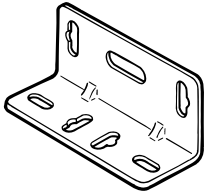
## E39-L69



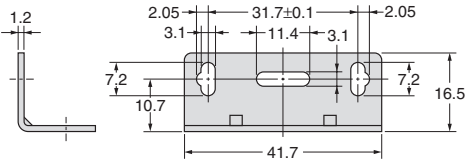
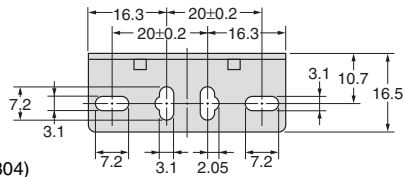
Material: Stainless steel (SUS304)



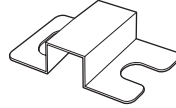
E39-L70



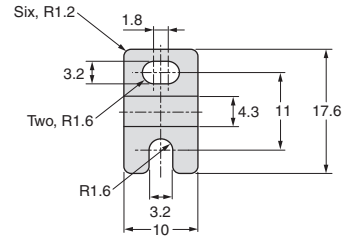
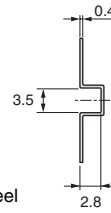
Material: Stainless steel (SUS304)



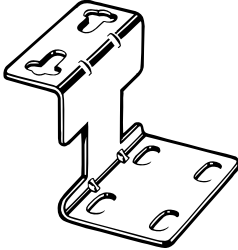
E39-L83



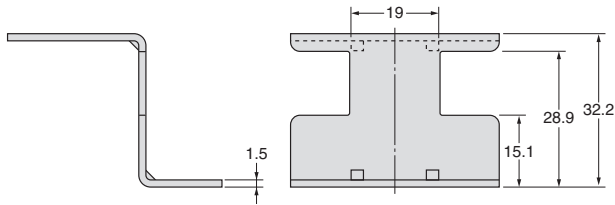
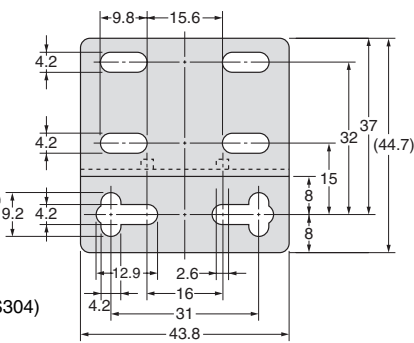
Material: Stainless steel



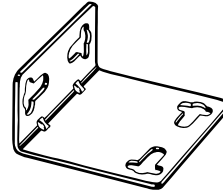
E39-L85



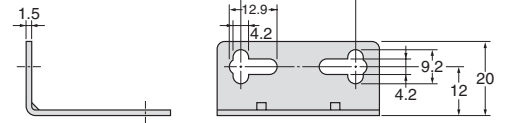
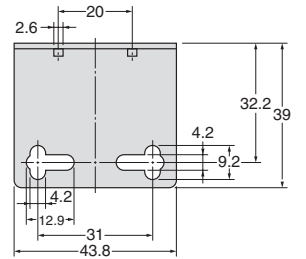
Material: Stainless steel (SUS304)



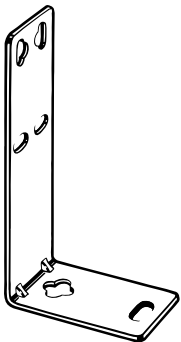
E39-L86



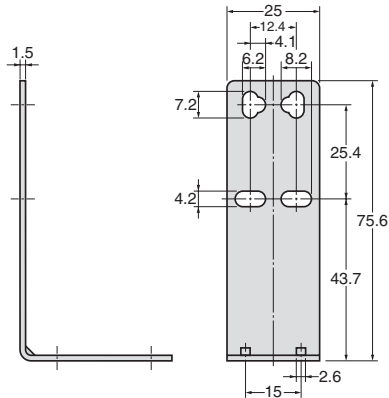
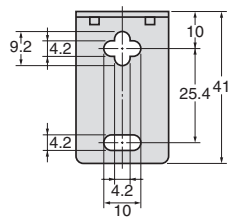
Material: Stainless steel (SUS304)



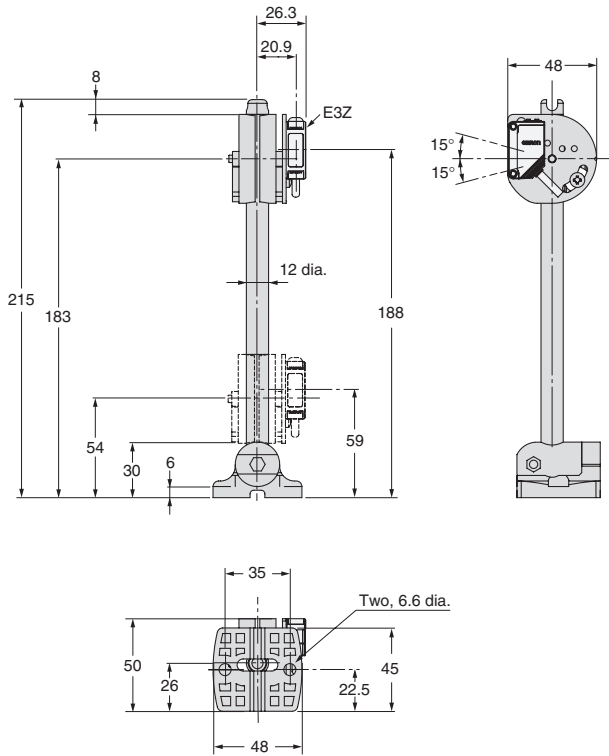
E39-L87



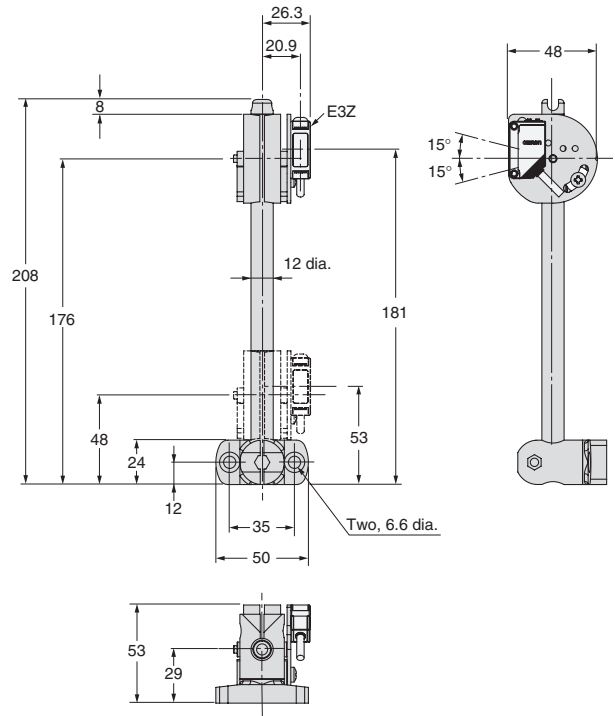
Material: Stainless steel (SUS304)



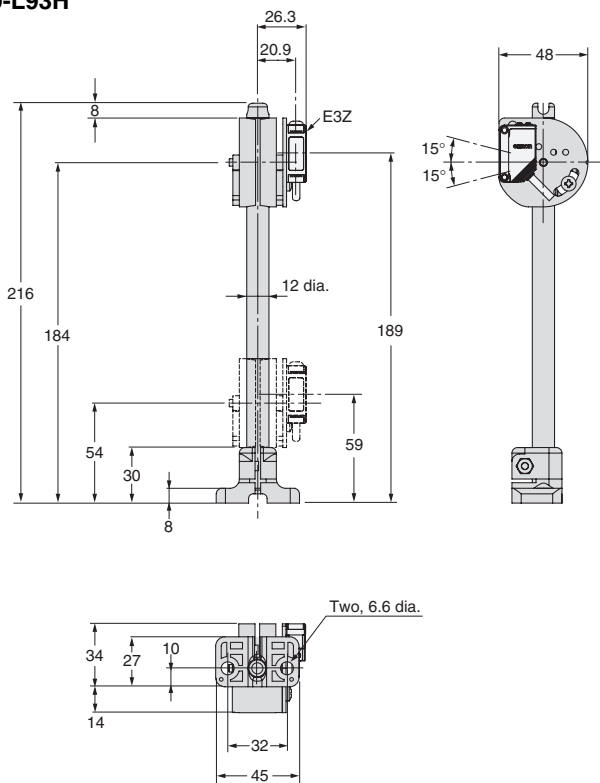
## E39-L93FH



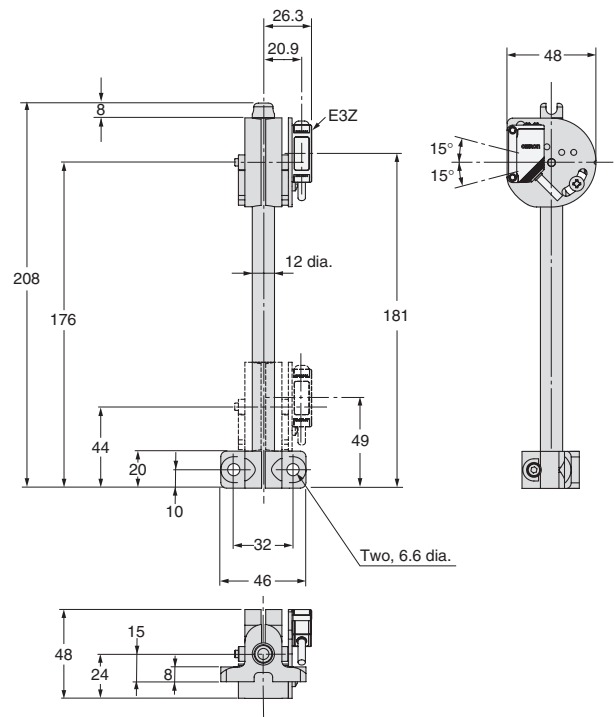
## E39-L93FV



## E39-L93H



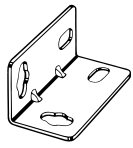
## E39-L93V



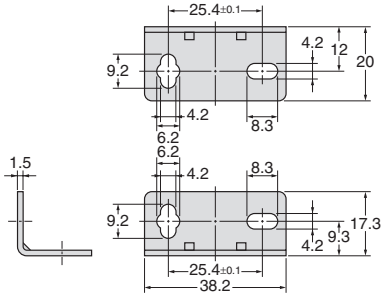




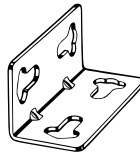
E39-L102



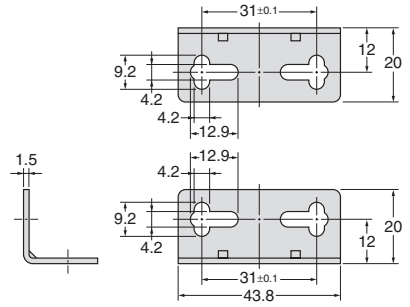
Material:  
Stainless steel (SUS304)



E39-L103



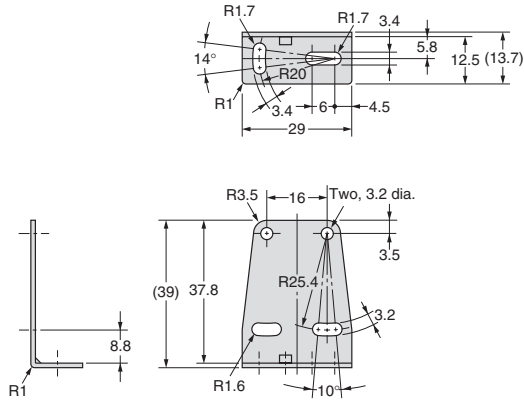
Material:  
Stainless steel (SUS304)



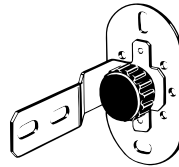
E39-L104



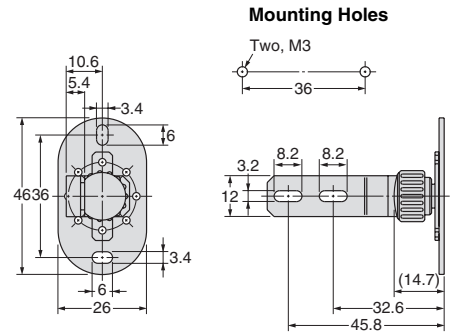
Material:  
Stainless steel (SUS304)



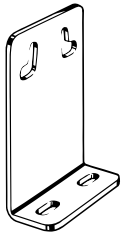
E39-L109



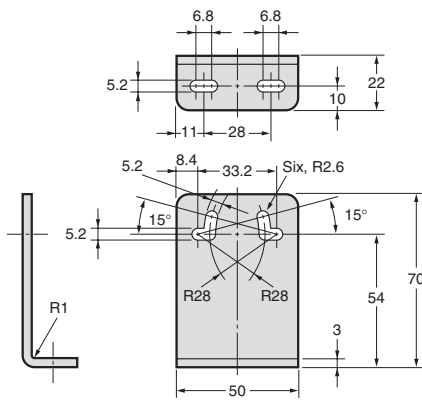
Material:  
Stainless steel (SUS430)



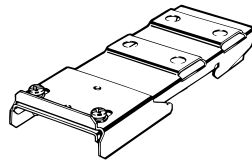
E39-L114



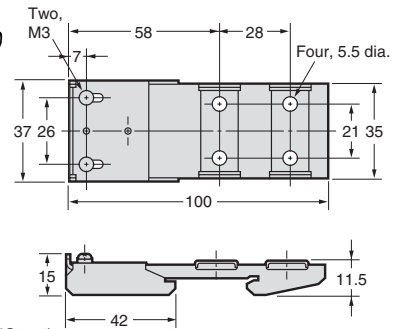
Material:  
Stainless steel (SUS430)



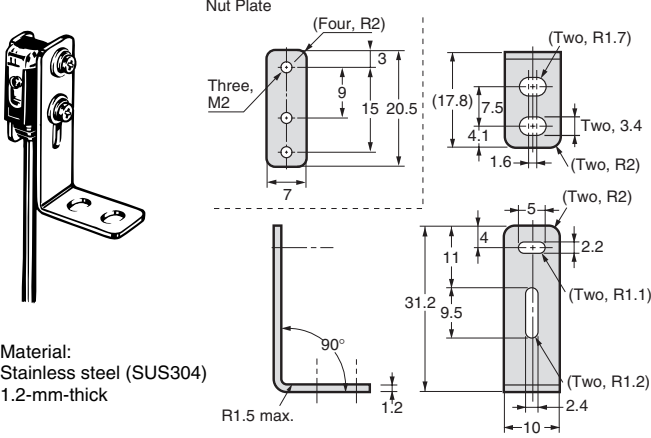
E39-L115



Material: Stainless steel (SUS304)

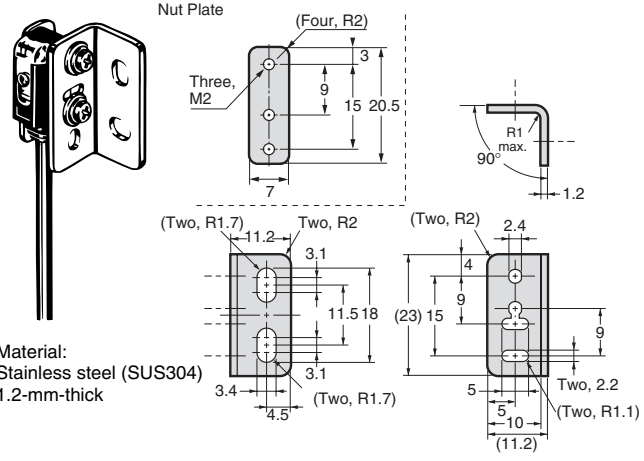


E39-L116



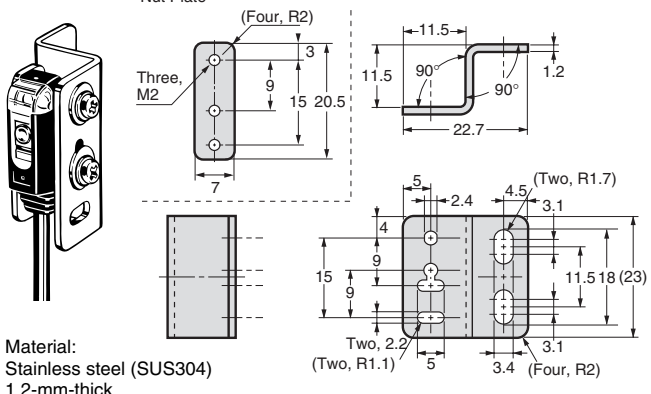
Material: Stainless steel (SUS304)  
1.2-mm-thick

E39-L117



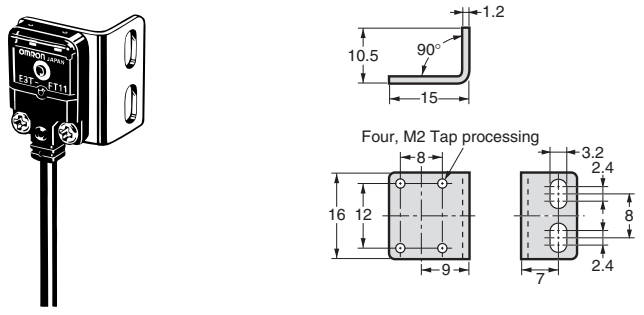
Material: Stainless steel (SUS304)  
1.2-mm-thick

E39-L118



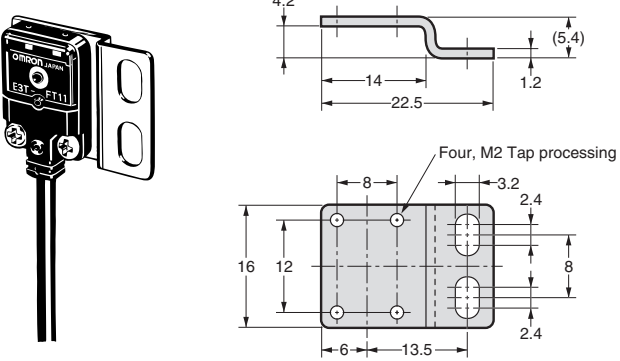
Material: Stainless steel (SUS304)  
1.2-mm-thick

E39-L119



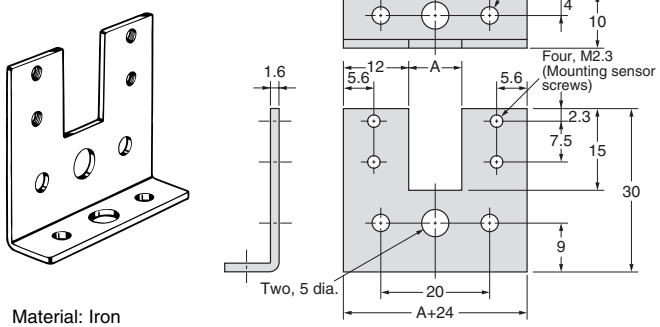
Material: Stainless steel (SUS304)  
1.2-mm-thick

E39-L120



Material: Stainless steel (SUS304)  
1.2-mm-thick

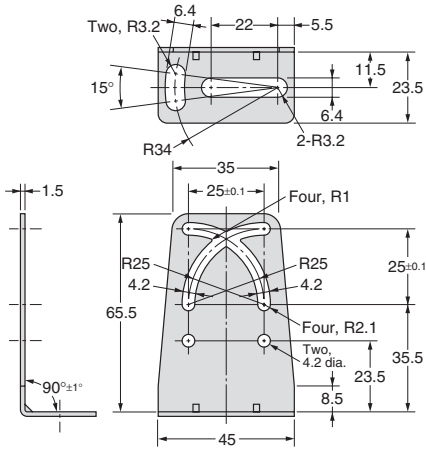
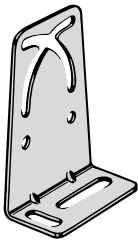
E39-L127-T1  
E39-L127-T2  
E39-L127-T3



Material: Iron

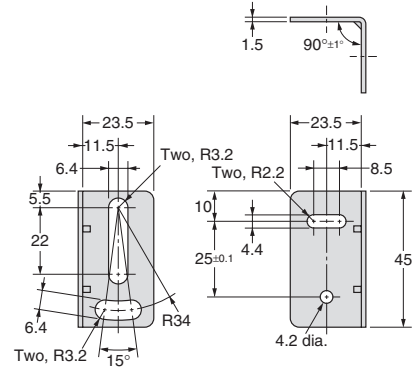
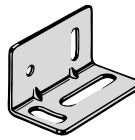
| Model       | Dimension A (mm) |
|-------------|------------------|
| E39-L127-T1 | 10               |
| E39-L127-T2 | 20               |
| E39-L127-T3 | 30               |

## E39-L131



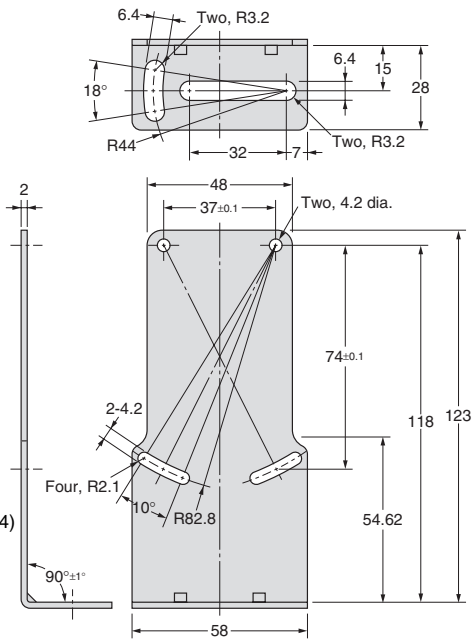
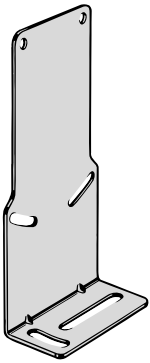
Material: Stainless steel (SUS304)

## E39-L132



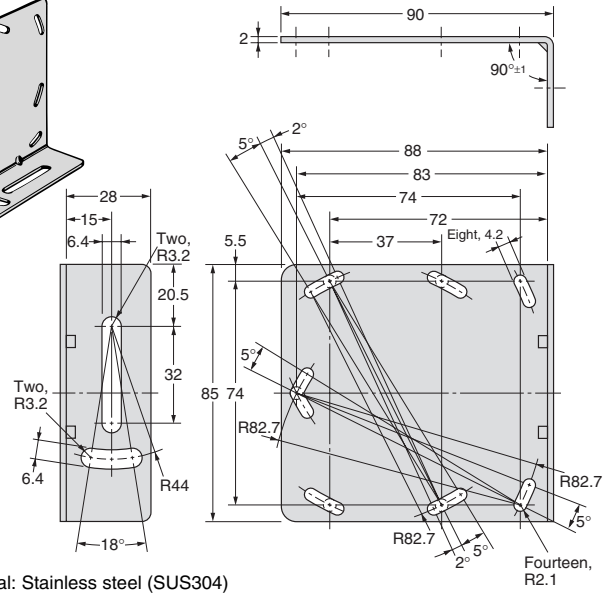
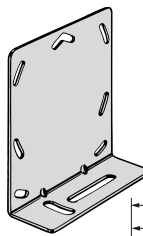
Material: Stainless steel (SUS304)

## E39-L135



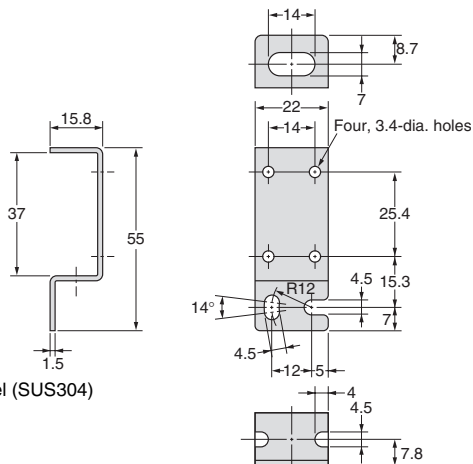
Material: Stainless steel (SUS304)

## E39-L136



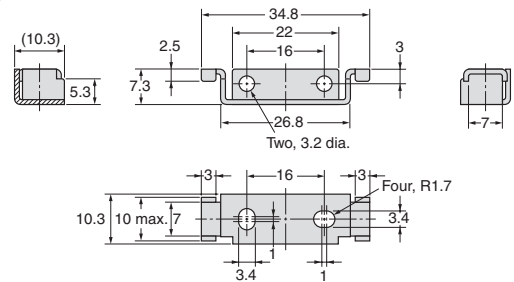
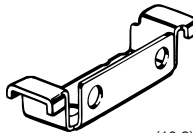
Material: Stainless steel (SUS304)

## E39-L142



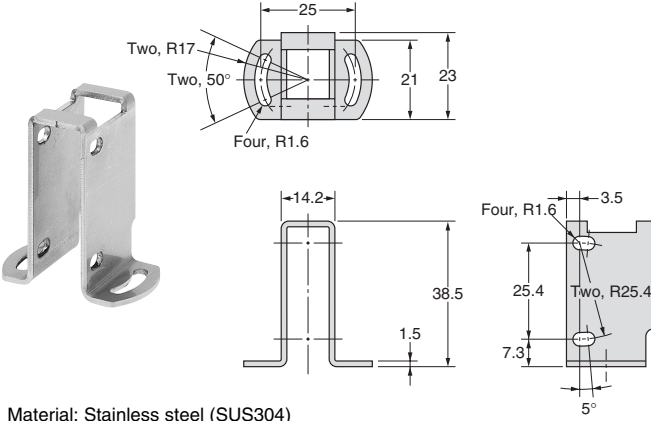
Material: Stainless steel (SUS304)

## E39-L143



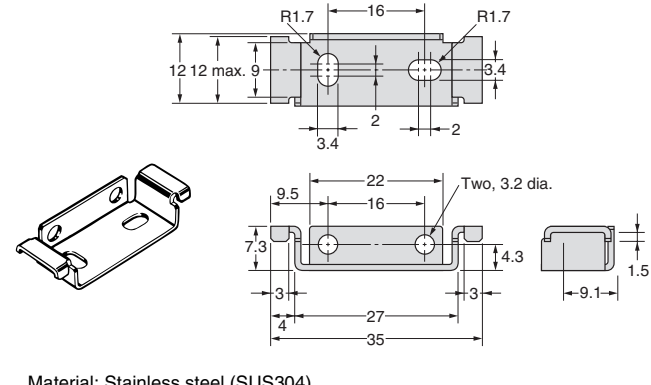
Material: Stainless steel (SUS304)

E39-L144



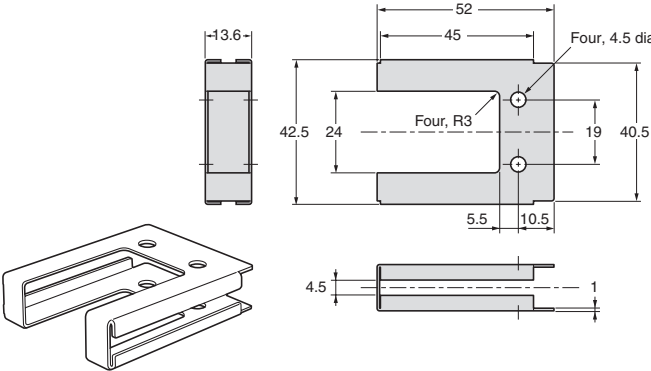
Material: Stainless steel (SUS304)

E39-L148



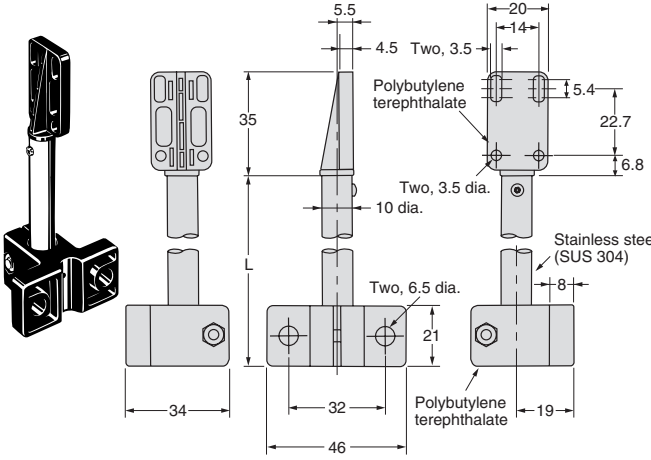
Material: Stainless steel (SUS304)

E39-L149



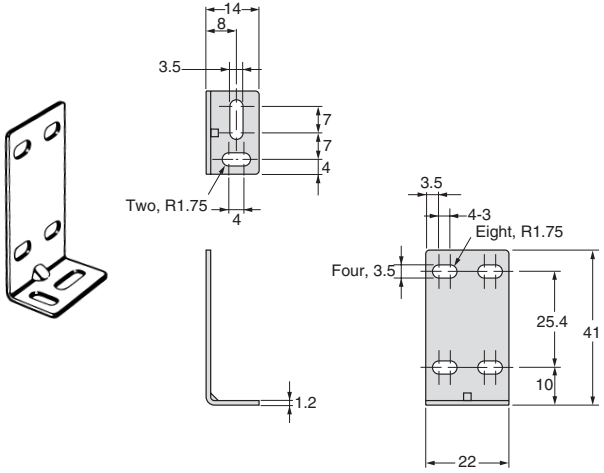
E39-L150

E39-L151

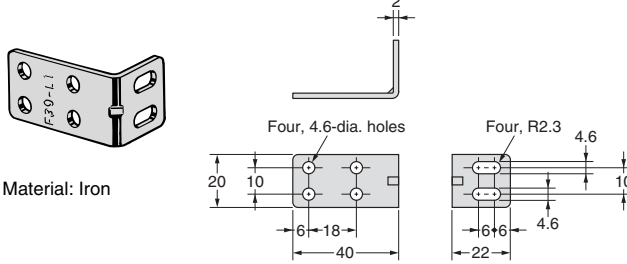


| Length (mm) |     |
|-------------|-----|
| Model       | L   |
| E39-L150    | 65  |
| E39-L151    | 165 |

E39-L153

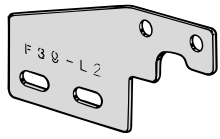


F39-L1

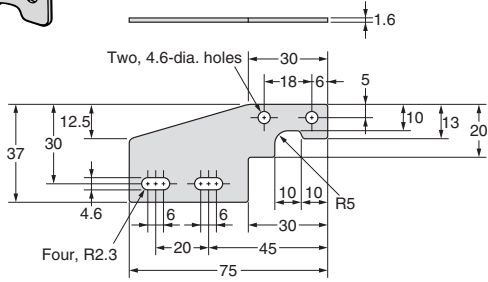


Material: Iron

**F39-L2**



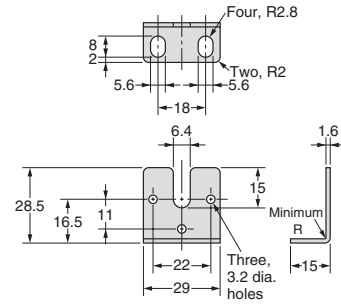
Material: Iron



**F39-L3**

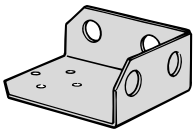


Material: Iron

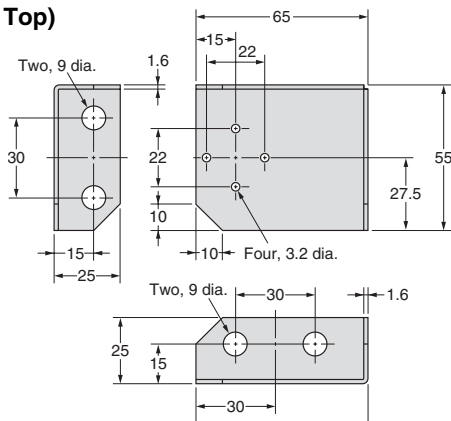


**F39-L4**

**C Type (Receiver, Top)**

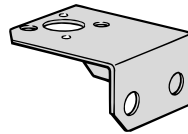


Material: Iron

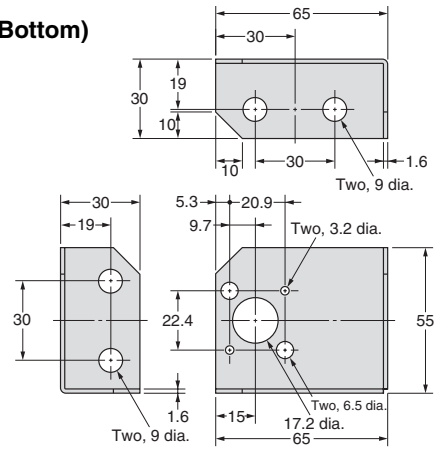


**F39-L4**

**D Type (Receiver, Bottom)**

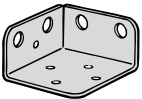


Material: Iron

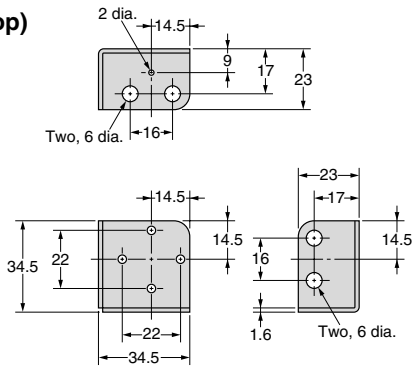


**F39-L5**

**A Type (Emitter, Top)**

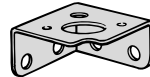


Material: Iron

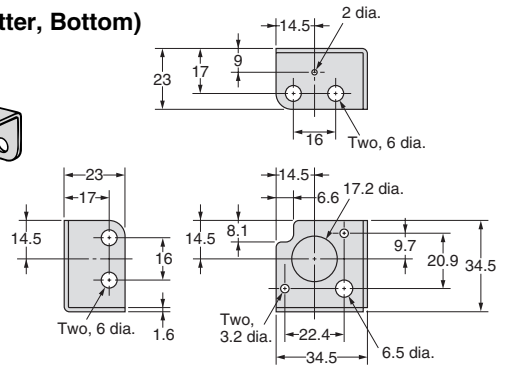


**F39-L5**

**B Type (Emitter, Bottom)**

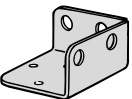


Material: Iron

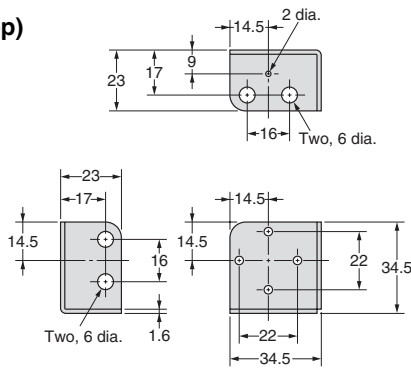


**F39-L5**

**C Type (Receiver, Top)**

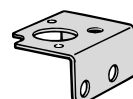


Material: Iron

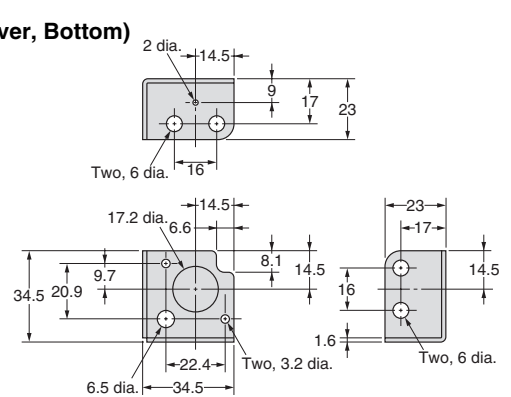


**F39-L5**

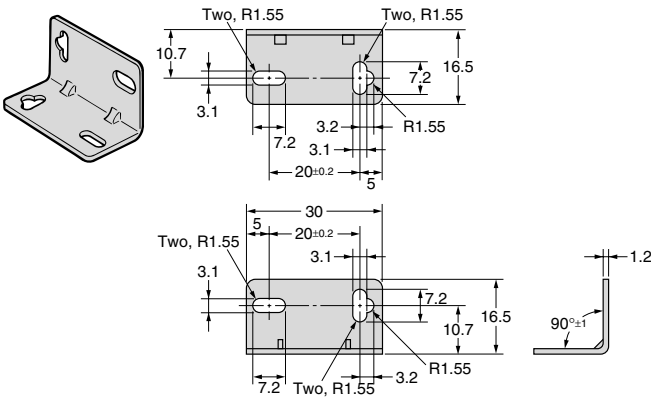
**D Type (Receiver, Bottom)**



Material: Iron

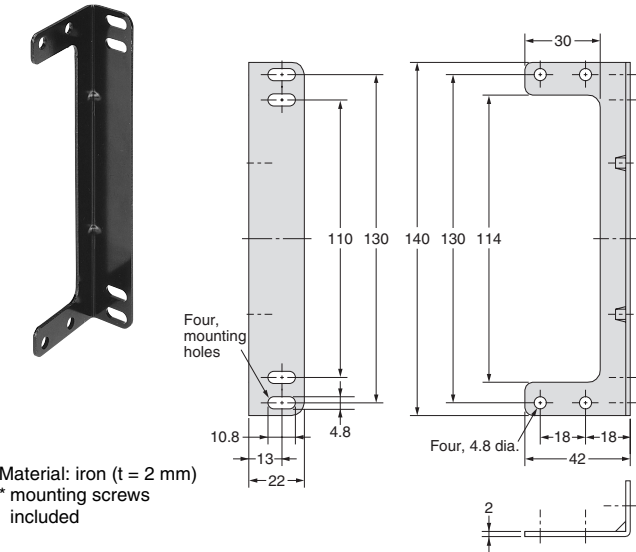


F39-L9



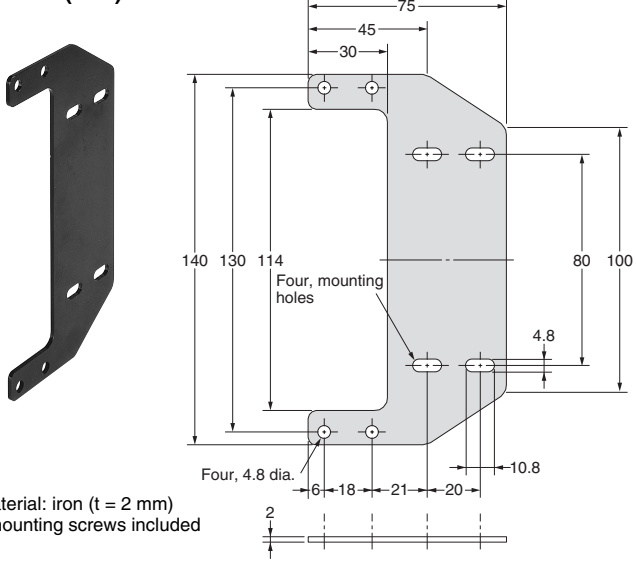
Material: Stainless steel (SUS304-CP)

F39-L10 (L-shaped)



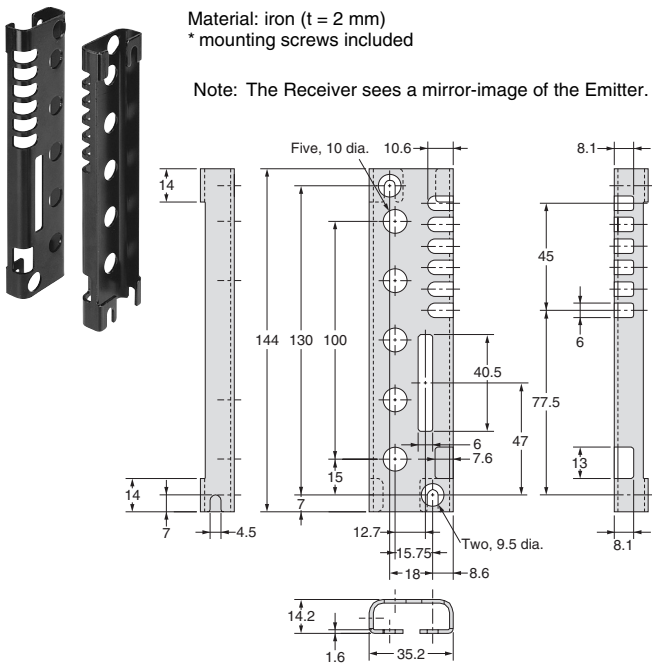
Material: iron (t = 2 mm)  
\* mounting screws included

F39-L11 (Flat)



Material: iron (t = 2 mm)  
\* mounting screws included

F39-L12 (Receiver)



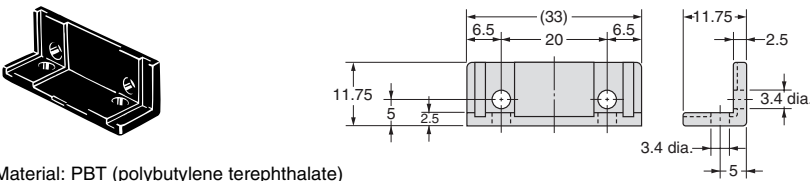
Material: iron (t = 2 mm)  
\* mounting screws included

Note: The Receiver sees a mirror-image of the Emitter.

Contact Mounting Plate

(Unit: mm)  
Tolerance class IT16 applies to dimensions in this datasheet unless otherwise specified.

E39-L60



Material: PBT (polybutylene terephthalate)

# E39-L/F39-L/E39-S/E39-R

(Unit: mm)

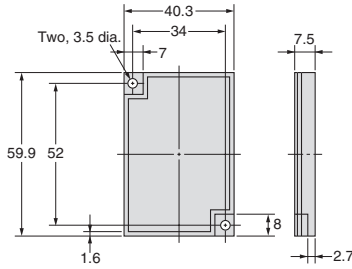
Tolerance class IT16 applies to dimensions in this datasheet unless otherwise specified.

## Reflector dimensions

**E39-R1**  
**E39-R1S**  
**E39-R1K \***

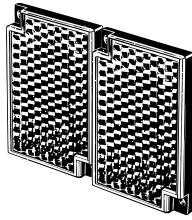


Material,  
reflective surface: acrylic  
Rear surface: ABS

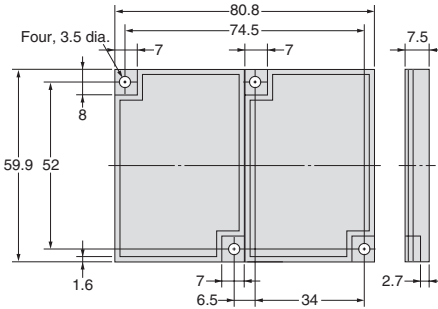


\* E39-R1K only  
Coating on reflective surface

**E39-R2**



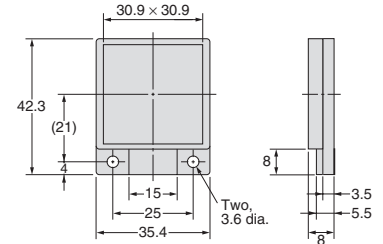
Material,  
reflective surface: acrylic  
Rear surface: ABS



**E39-R9**



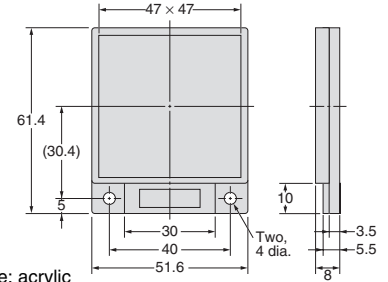
Material,  
reflective surface: acrylic  
Rear surface: ABS



**E39-R10**



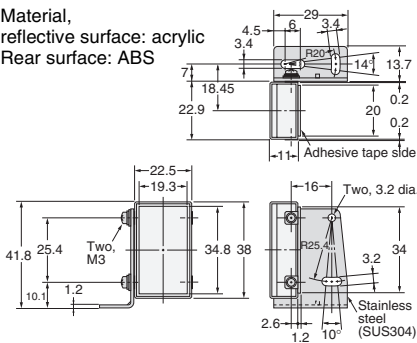
Material,  
reflective surface: acrylic  
Rear surface: ABS



**E39-R3**



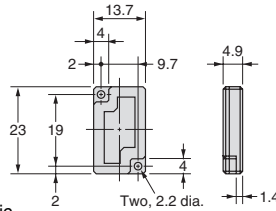
Material,  
reflective surface: acrylic  
Rear surface: ABS



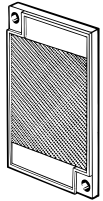
**E39-R4**



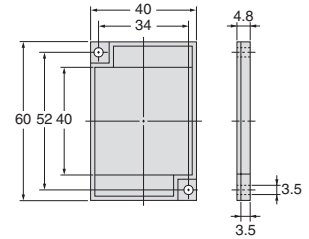
Material,  
reflective surface: acrylic  
Rear surface: ABS



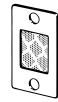
**E39-R6**



Material,  
reflective surface: acrylic  
Rear surface: ABS

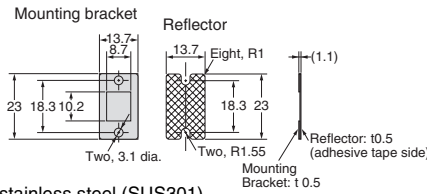


**E39-R37-CA**

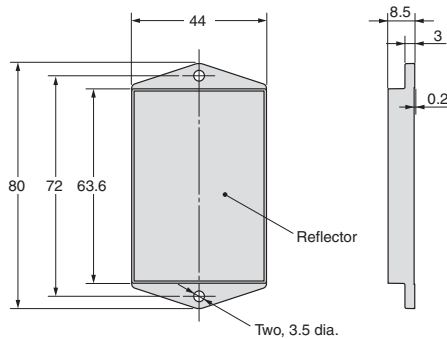


Material:  
Mounting plate: stainless steel (SUS301)  
Reflective surface: acrylic

Note: The reflective plate and mounting plate (1) come as a set.

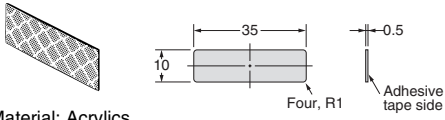


**Retroreflector for E3ZM-B**  
**E39-RP1**



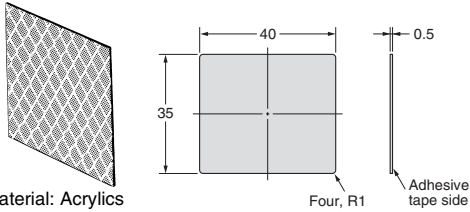


## E39-RS1 E39-RS1-CA



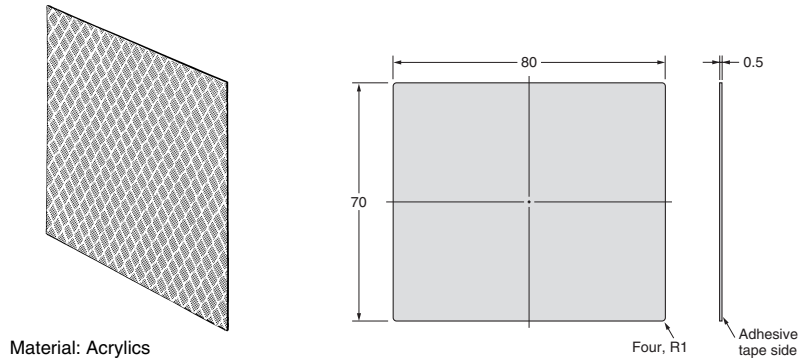
Material: Acrylics

## E39-RS2 E39-RS2-CA



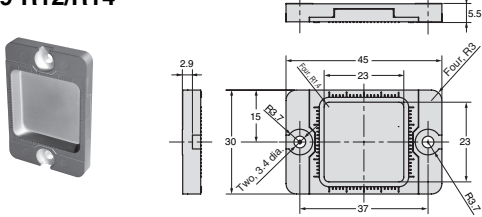
Material: Acrylics

## E39-RS3 E39-RS3-CA

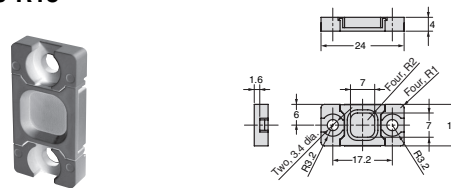


Material: Acrylics

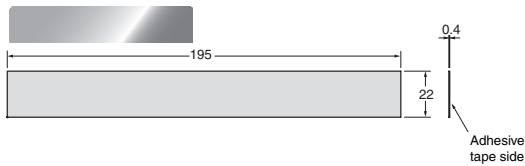
## E39-R12/R14



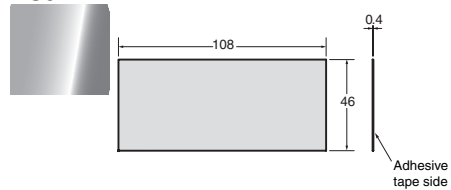
## E39-R13



## E39-RS4



## E39-RS5



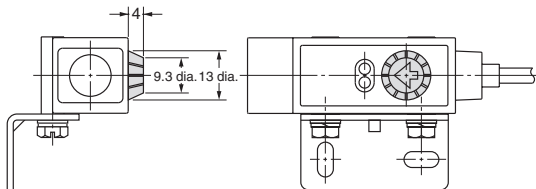
## Sensitivity Adjuster

(Unit: mm)  
Tolerance class IT16 applies to dimensions in this datasheet unless otherwise specified.

### E39-G1



Material: Polycarbonate



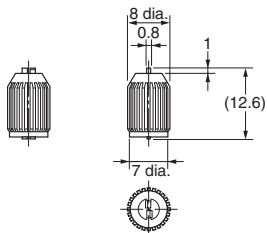
## Sensitivity Adjustment Driver

(Unit: mm)  
Tolerance class IT16 applies to dimensions in this datasheet unless otherwise specified.

### E39-G2



Material: Polycarbonate

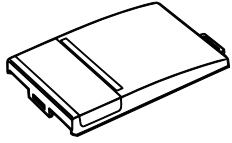


## Protective Cover

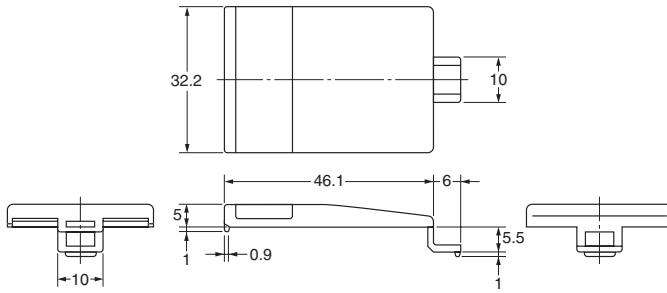
(Unit: mm)

Tolerance class IT16 applies to dimensions in this datasheet unless otherwise specified.

### E39-G9



Material: Polycarbonate

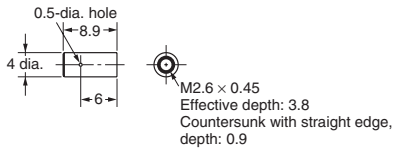


## Lens Unit

(Unit: mm)

Tolerance class IT16 applies to dimensions in this datasheet unless otherwise specified.

### E39-F1V

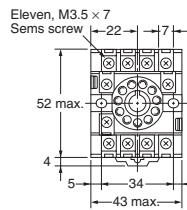
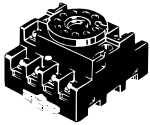


## Connection Sockets

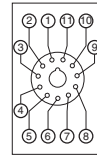
(Unit: mm)

Tolerance class IT16 applies to dimensions in this datasheet unless otherwise specified.

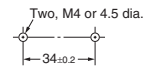
### Front Connection Socket PF113A



#### Terminal arrangement/Internal connections (top view)

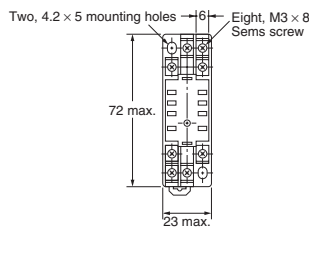
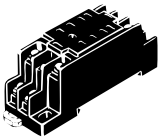


#### Mounting Holes

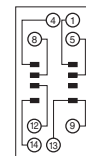


Note: Rail mounting also possible.

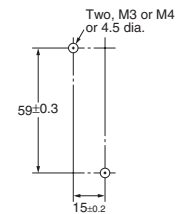
### Front Connection Socket PYF08A



#### Terminal arrangement/Internal connections (top view)

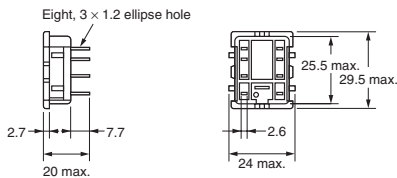
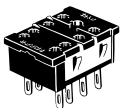


#### Mounting Holes

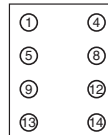


Note: Rail mounting also possible.

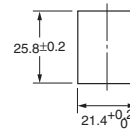
### Front Connection Socket PY08



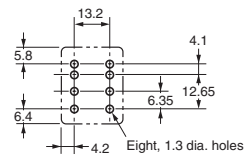
#### Terminal arrangement/Internal connections (bottom view)



#### Mounting Holes



#### PCB Cutout Dimensions



## Read and Understand This Catalog

Please read and understand this catalog before purchasing the products. Please consult your OMRON representative if you have any questions or comments.

## Warranty and Limitations of Liability

### WARRANTY

OMRON's exclusive warranty is that the products are free from defects in materials and workmanship for a period of one year (or other period if specified) from date of sale by OMRON.

OMRON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, REGARDING NON-INFRINGEMENT, MERCHANTABILITY, OR FITNESS FOR PARTICULAR PURPOSE OF THE PRODUCTS. ANY BUYER OR USER ACKNOWLEDGES THAT THE BUYER OR USER ALONE HAS DETERMINED THAT THE PRODUCTS WILL SUITABLY MEET THE REQUIREMENTS OF THEIR INTENDED USE. OMRON DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED.

### LIMITATIONS OF LIABILITY

OMRON SHALL NOT BE RESPONSIBLE FOR SPECIAL, INDIRECT, OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE PRODUCTS, WHETHER SUCH CLAIM IS BASED ON CONTRACT, WARRANTY, NEGLIGENCE, OR STRICT LIABILITY.

In no event shall the responsibility of OMRON for any act exceed the individual price of the product on which liability is asserted.

IN NO EVENT SHALL OMRON BE RESPONSIBLE FOR WARRANTY, REPAIR, OR OTHER CLAIMS REGARDING THE PRODUCTS UNLESS OMRON'S ANALYSIS CONFIRMS THAT THE PRODUCTS WERE PROPERLY HANDLED, STORED, INSTALLED, AND MAINTAINED AND NOT SUBJECT TO CONTAMINATION, ABUSE, MISUSE, OR INAPPROPRIATE MODIFICATION OR REPAIR.

## Application Considerations

### SUITABILITY FOR USE

OMRON shall not be responsible for conformity with any standards, codes, or regulations that apply to the combination of products in the customer's application or use of the products.

At the customer's request, OMRON will provide applicable third party certification documents identifying ratings and limitations of use that apply to the products. This information by itself is not sufficient for a complete determination of the suitability of the products in combination with the end product, machine, system, or other application or use.

The following are some examples of applications for which particular attention must be given. This is not intended to be an exhaustive list of all possible uses of the products, nor is it intended to imply that the uses listed may be suitable for the products:

- Outdoor use, uses involving potential chemical contamination or electrical interference, or conditions or uses not described in this catalog.
- Nuclear energy control systems, combustion systems, railroad systems, aviation systems, medical equipment, amusement machines, vehicles, safety equipment, and installations subject to separate industry or government regulations.
- Systems, machines, and equipment that could present a risk to life or property.

Please know and observe all prohibitions of use applicable to the products.

NEVER USE THE PRODUCTS FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO ADDRESS THE RISKS, AND THAT THE OMRON PRODUCTS ARE PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.

### PROGRAMMABLE PRODUCTS

OMRON shall not be responsible for the user's programming of a programmable product, or any consequence thereof.

## Disclaimers

### CHANGE IN SPECIFICATIONS

Product specifications and accessories may be changed at any time based on improvements and other reasons.

It is our practice to change model numbers when published ratings or features are changed, or when significant construction changes are made. However, some specifications of the products may be changed without any notice. When in doubt, special model numbers may be assigned to fix or establish key specifications for your application on your request. Please consult with your OMRON representative at any time to confirm actual specifications of purchased products.

### DIMENSIONS AND WEIGHTS

Dimensions and weights are nominal and are not to be used for manufacturing purposes, even when tolerances are shown.

### PERFORMANCE DATA

Performance data given in this catalog is provided as a guide for the user in determining suitability and does not constitute a warranty. It may represent the result of OMRON's test conditions, and the users must correlate it to actual application requirements. Actual performance is subject to the OMRON Warranty and Limitations of Liability.

### ERRORS AND OMISSIONS

The information in this document has been carefully checked and is believed to be accurate; however, no responsibility is assumed for clerical, typographical, or proofreading errors, or omissions.

2008.11

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

**OMRON Corporation**  
Industrial Automation Company

<http://www.ia.omron.com/>

(c)Copyright OMRON Corporation 2008 All Right Reserved.

## Данный компонент на территории Российской Федерации

### Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

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

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

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.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

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:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: [info@moschip.ru](mailto:info@moschip.ru)

Skype отдела продаж:

moschip.ru

moschip.ru\_4

moschip.ru\_6

moschip.ru\_9