

Mounting Brackets

E39-L/F39-L

Slits/Reflectors

E39-S/E39-R

CSM_E39-L_F39-L_E39-S_E39-R_DS_E_15_1

Mounting Brackets [Refer to Dimensions on page 5.]

Model	Fitting materials	Count	Accessories			Applicable sensor (mounting pitch on sensor side)	Page Dimensions
			Description	Material	Count		
E39-L2	Iron, zinc plating	1	Hexagonal bolts M4 × 12 (with spring and plain washers)	Iron, zinc plating	2	E3S-RS30E4□ (25.4) 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-L6	Iron, zinc plating	1	Hexagonal bolts M4 × 12 (with spring and plain washers)	Iron, zinc plating	2	E3S-RS30E4□ (25.4) 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) Nuts M4	Iron, zinc plating Iron, zinc plating	2 2	E3JK	
E39-L41	Iron, zinc plating	2	Phillips screws M3 × 14 (with spring washers) Plain washer M3	Iron, zinc plating Iron, zinc plating	4 4	E3C-1 (10)	6
E39-L42	Iron, black coating	2	Phillips screws M3 × 10 (with spring washers) Plain washer M3	Iron, zinc plating Iron, zinc plating	4 4	E3C-2 (20) E3C-DS10 (19) E3C-VS1G (19) E3C-VS3R (19)	
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)	
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) Nuts M4	Iron, zinc plating Iron, nickel plating	2 2	E3JM (40)	
E39-L53	Iron, zinc plating	1	---	---	---	E3JM (40)	6
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) E3S-R3□ (20)	
E39-L70	Stainless steel (SUS304)	1	Slotted/Phillips screws M3 × 12 (with spring and plain washers)	Stainless steel (SUS304)	2	E3S-R6□ (20) E3S-R8□ (20)	
E39-L83	Stainless steel	1	---	---	---	E32-T24S 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) E3S-CR62/67 (25.4)	

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-L93FH	Stainless steel (SUS304)	1	Holder (upper)	Heat-resistant ABS resin	1	E3Z (25.4) E3S-R1□/R3□ /R6□/R8□ (20) E39-R1/E39-R3	8
E39-L93FV	Stainless steel (SUS304)	1	Holder (lower)	66 nylon	1		
			Pipe	Stainless steel (SUS304)	1		
E39-L93H	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-L93V	Stainless steel (SUS304)	1	Phillips screws M3 × 12 (with spring and plain washers)	Stainless steel (SUS304)	2		
			Spring washer M4	Iron, nickel plating	1	E3Z (25.4) E3S-R1□/R3□ /R6□/R8□ (20) E39-R1/E39-R3	9
			Plain washer M4	Iron, nickel plating	1		
E39-L93XY	---	---	Nuts M4	Iron, nickel plating	3		
			Holder	66 nylon	1		
			Pipe	Stainless steel (SUS304)	1		
			Bolts M5 × 16 with hexagonal holes	Stainless steel (SUS304)	2		
E39-L94	Iron, zinc plating	2	Nuts M5	Stainless steel (SUS304)	2	E32-T16P (19)	10
			Phillips screws M3 × 10	Iron, zinc plating	4		
E39-L96	Stainless steel (SUS304)	1	Phillips screws M3 × 6 (with spring and plain washers)	Iron, zinc plating	4	E32-T16P (19)	9
E39-L97	Stainless steel (SUS304)	1	Nuts M3	Iron, zinc plating	4		
E39-L96	Stainless steel (SUS304)	1	Phillips screws M3 × 6 (with spring and plain washers)	Iron, nickel plating	2	E39-R1	10
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) E3S-R6□/R8□ (20)	
E39-L102	Stainless steel (SUS304)	1	Hexagonal bolts M4 × 12 (with spring and plain washers)	Stainless steel (SUS304)	2	E3S-C (horizontal type) (25.4)	
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) E3S-CR62/67 (25.4)	
E39-L104	Stainless steel (SUS304)	1	Slotted/Phillips screws M3 × 8 (with spring and plain washers)	Iron, zinc plating	2	E3Z pre-wired model (25.4) E32-R21 (for installation of E39-R3) (25.4)	
E39-L109	Stainless steel (SUS430)	1	---	Stainless steel (SUS304)	2	E32-S15-□ (13.2)	11
E39-L114	Stainless steel (SUS430)	2	Phillips screws M5 × 10	---	---	E32-S15-□ (13.2)	
E39-L115	Stainless steel (SUS304)	1	Phillips screws M5 × 8	Iron, zinc plating	4	E3MC (28)	
E39-L116	Stainless steel (SUS304)	1	Slotted/Phillips screws M3 × 8	Iron, zinc plating	4	E3MC	
E39-L117	Stainless steel (SUS304)	1	---	Iron, nickel plating	2	E3MC	
E39-L118	Stainless steel (SUS304)	1	---	---	---	E3T-S (9/15)	
E39-L119	Stainless steel (SUS304)	1	---	---	---	E3T-S (9/15)	
E39-L120	Stainless steel (SUS304)	1	---	---	---	E3T-S (9/15)	
E39-L121	Stainless steel (SUS304)	1	---	---	---	E3T-F (8)	
E39-L122	Stainless steel (SUS304)	1	---	---	---	E3T-F (8)	
E39-L127-T1	Iron, zinc plating	1	Phillips screws M2.3 × 8	---	---	E3T-F (8)	11
E39-L127-T2	Iron, zinc plating	1	Spring washer M2.3	Iron, zinc plating	4	E3C-S10 (7.5)	
E39-L127-T3	Iron, zinc plating	1	Phillips screws M2.3 × 8	Iron, zinc plating	4	E3C-S10 (7.5)	
E39-L127-T4	Iron, zinc plating	1	Spring washer M2.3	Iron, zinc plating	4	E3C-S10 (7.5)	

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

Model	Fitting materials	Count	Accessories			Applicable sensor (mounting pitch on sensor side)	Page
			Description	Material	Count		Dimensions
E39-L131	Stainless steel (SUS304)	1	Slotted/Phillips screws M4 × 25	Stainless steel (SUS304)	2	E3G-R1□ (25) 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) 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) 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) 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 E3X-NA E3C-LDA E2C-EDA E4C-UDA	
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) E3S-R6□/R8□ (20) 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-L151	Stainless steel (SUS304)	1	Holder/bracket	PBT (polybutylene terephthalate)	1	E3Z (25.4) E3S-R6□/R8□ (20) 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) Stainless steel (SUS304)	2	E3Z pre-wired model (25.4)	

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

Contact Mounting Plates [Refer to Dimensions on page 13.]

Model	Material	Count	Applicable type	Page
				Dimensions
E39-L60	PBT (polybutylene terephthalate)	1	E3S-R□6	13

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)-N E3JK-5□□-N
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		
E39-S68	Width 0.5, 1 × 13.4 mm	Seal type	E32-T16P E32-T16PR

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

Reflectors (Refer to Dimensions on page 14.)

Name	Reflectors		Non-fogging reflective plate	Reflectors			Special Reflector for E3ZM-B	
Item	Model	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.

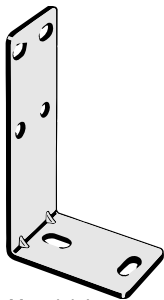
Item	Name	Small reflector				Tape reflector *		
	Model	E39-R9	E39-R3	E39-R4	E39-R37-CA *	E39-RS1 E39-RS1-CA	E39-RS2 E39-RS2-CA	E39-RS3 E39-RS3-CA
Directional angle	30° min.							
Ambient operating temperature range	−25 to 55°C							
Ambient storage temperature range	−40 to 70°C				0 to 40°C			
Ambient 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	---			

* Models ending in the suffix "-CA" are reflectors only for E3T-SR4□.

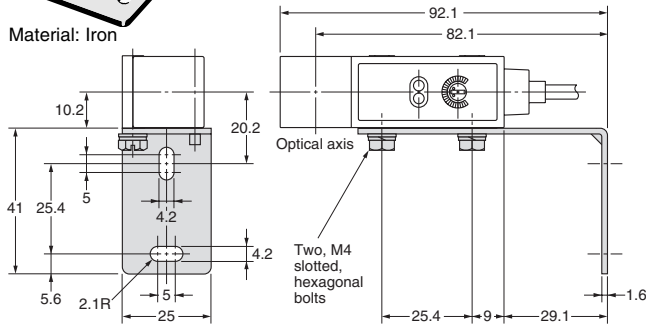
Item	Name	Laser Reflectors				
		Standard		Short-distance transparent object detection	Sheets	
	Model	E39-R12	E39-R13	E39-R14	E39-RS4	E39-RS5
Ambient operating temperature range		-10 to 55°C (No icing)				
Ambient storage temperature range		-25 to 70°C (No icing)				
Ambient operating humidity range		35 to 85% (No condensation)				
Ambient storage humidity range		35 to 85% (No condensation)				

Mounting Bracket Dimensions

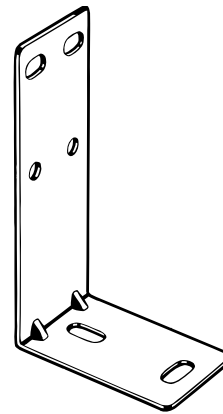
E39-L2



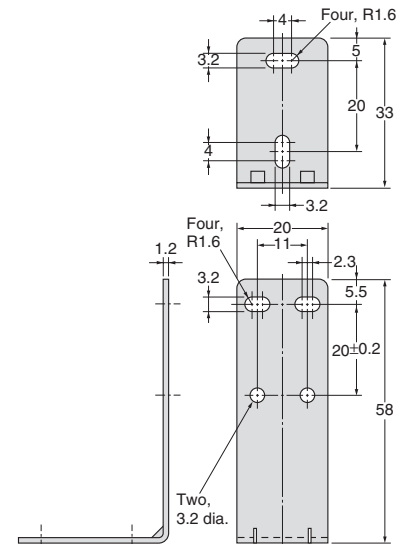
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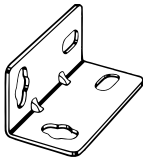
E39-L4



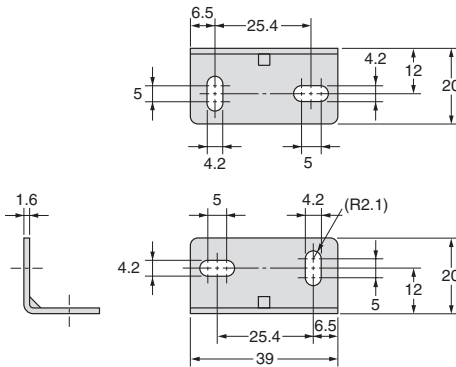
Material: Iron



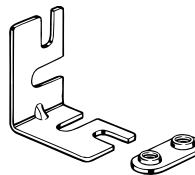
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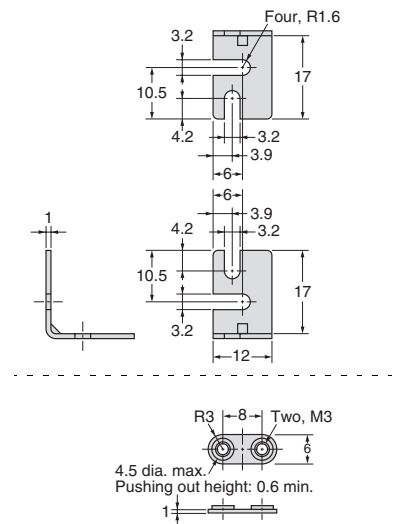
Material: Iron



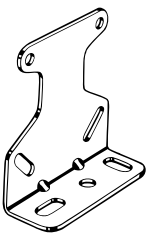
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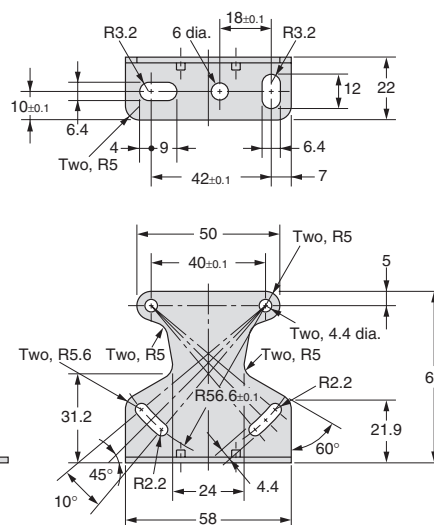
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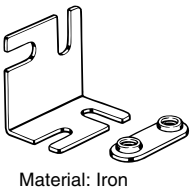
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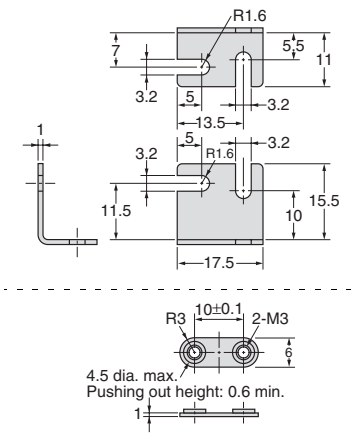
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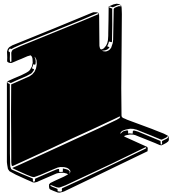
E39-L41



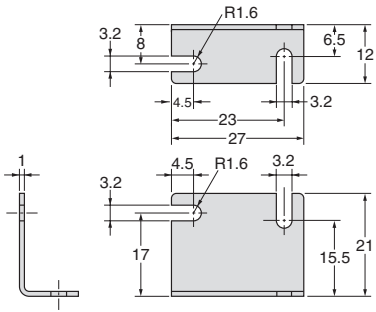
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E39-L42



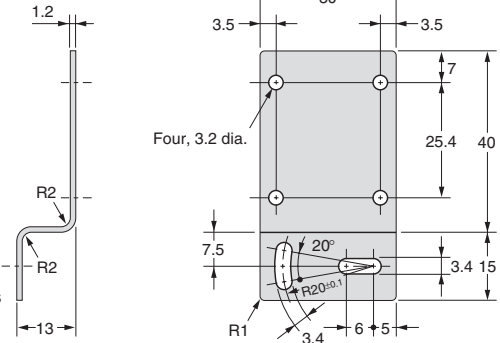
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E39-L43



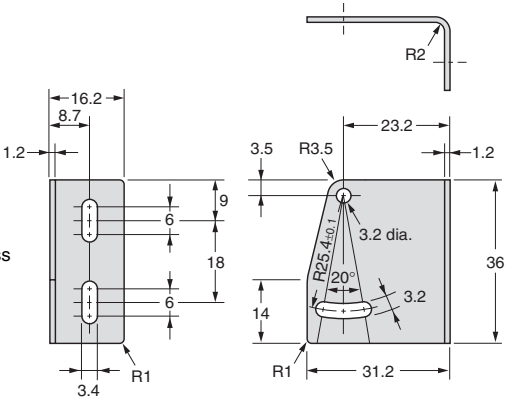
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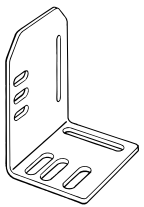
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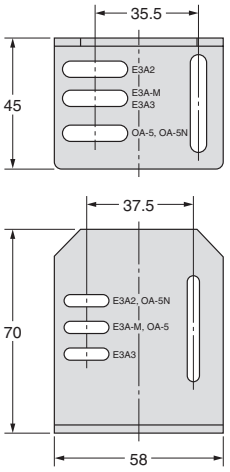
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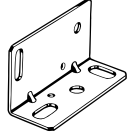
E39-L51



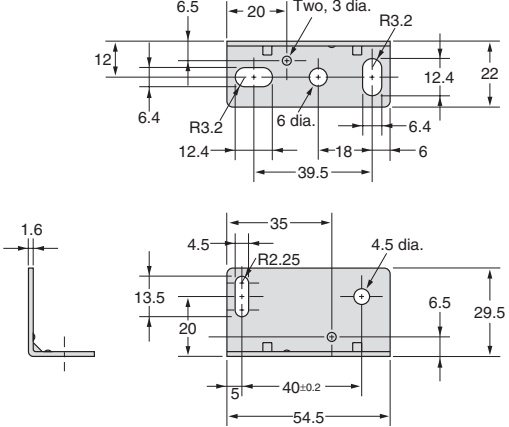
Material: Iron



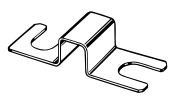
E39-L53



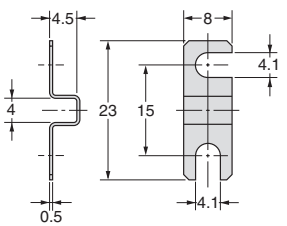
Material: Iron



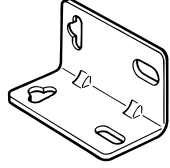
E39-L54V



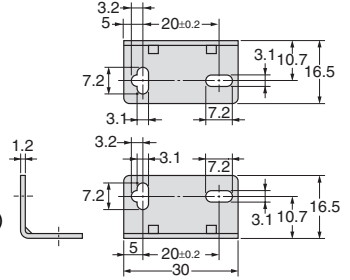
Material: Stainless steel (SUS304)



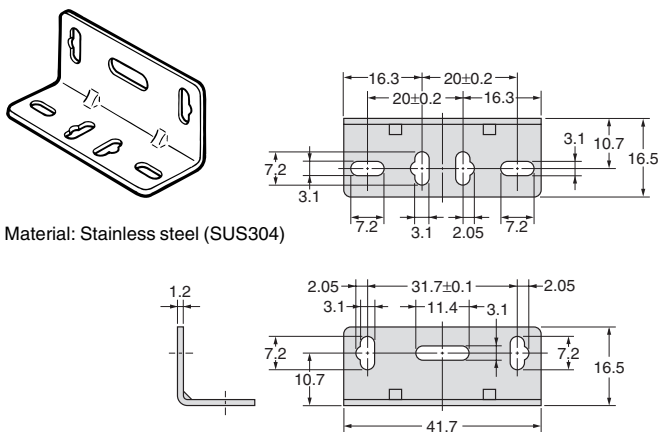
E39-L69



Material: Stainless steel (SUS304)

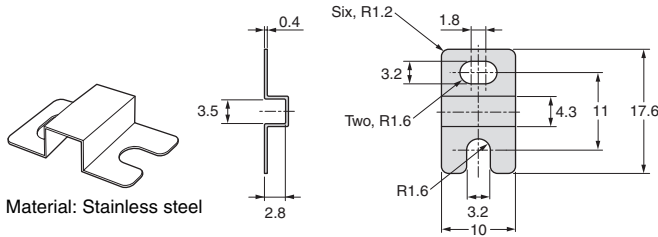


E39-L70



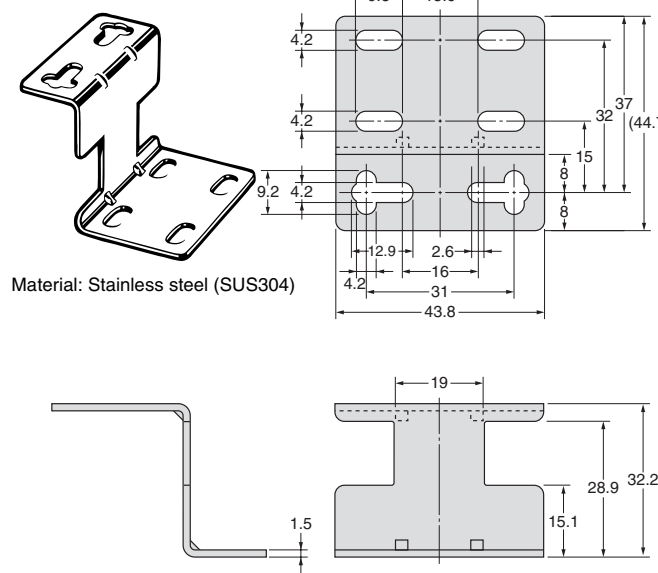
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E39-L83



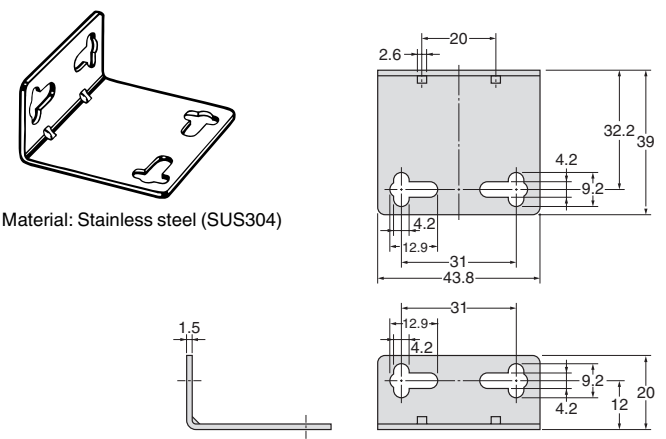
Material: Stainless steel

E39-L85



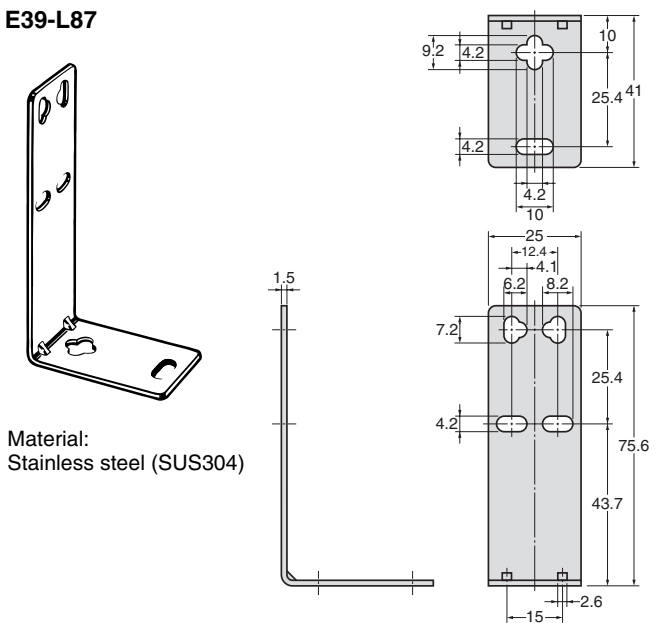
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E39-L86



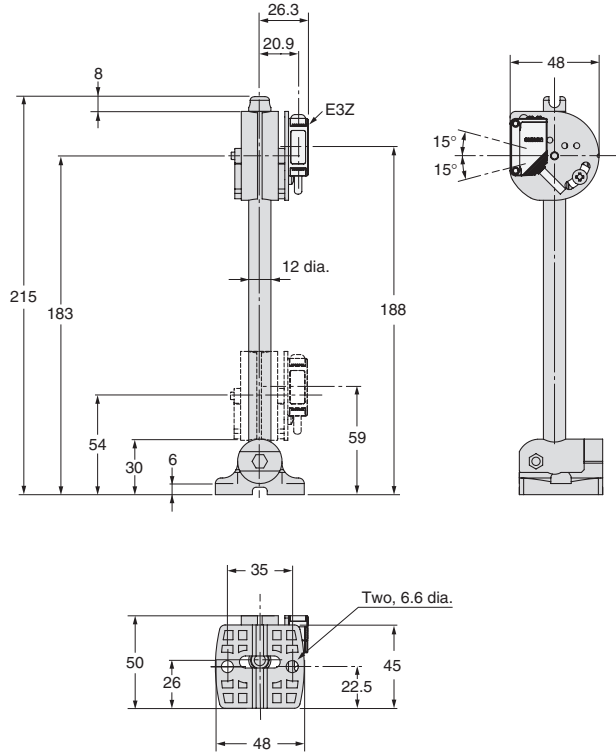
Material: Stainless steel (SUS304)

E39-L87

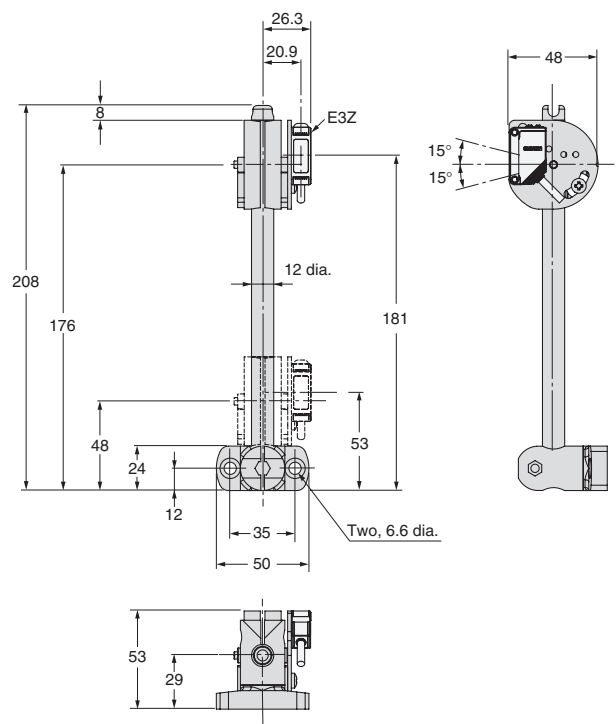


Material:
Stainless steel (SUS304)

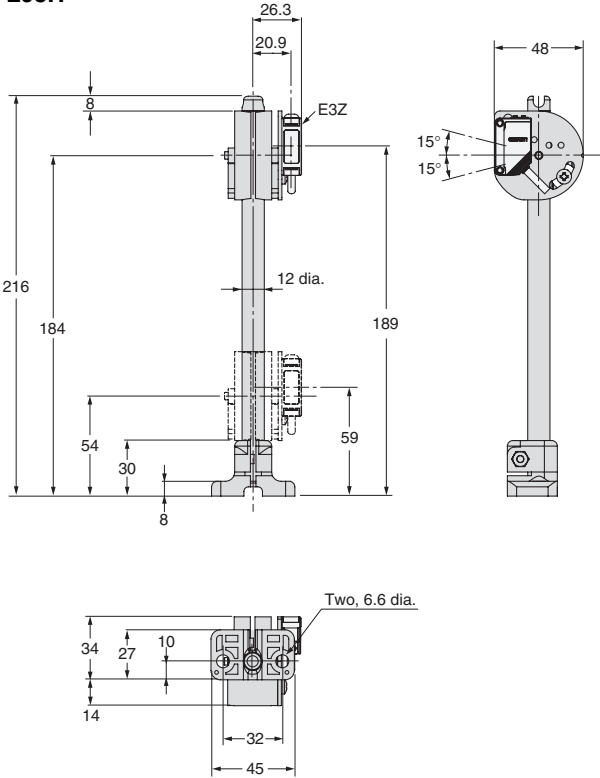
E39-L93FH



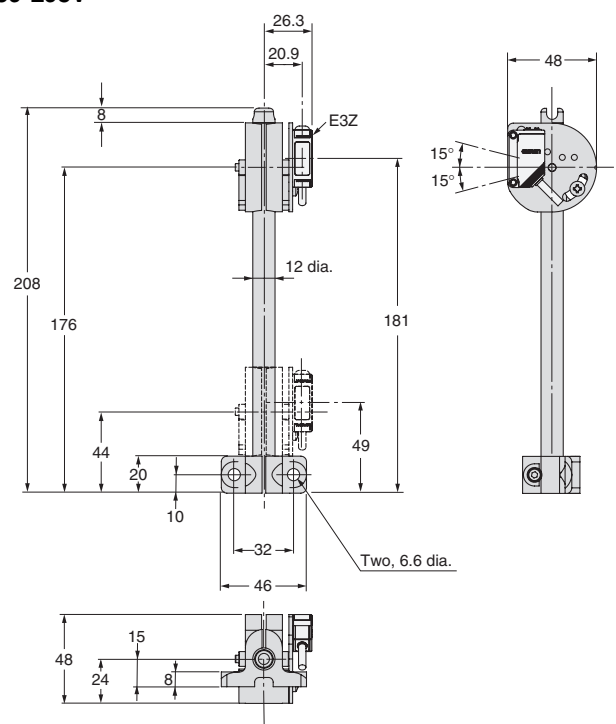
E39-L93FV



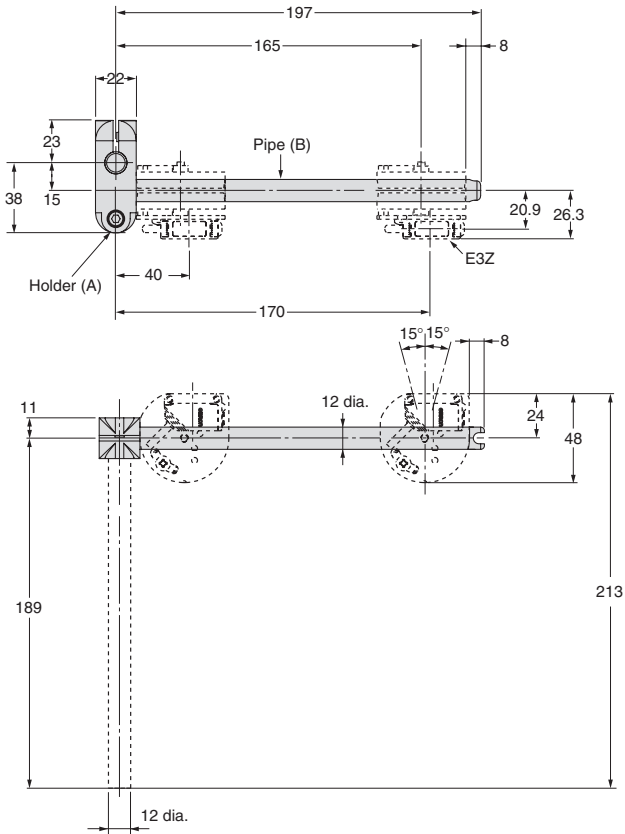
E39-L93H



E39-L93V

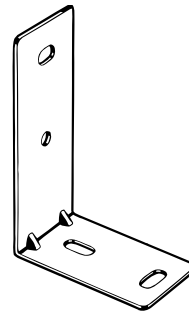


E39-L93XY

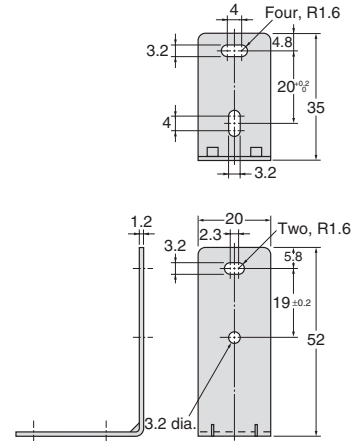


Note: The E39-L93XY consists of only the one joint holder (A) and pipe, and the two hexagonal bolts and nuts. It cannot be mounted to the Sensor alone.

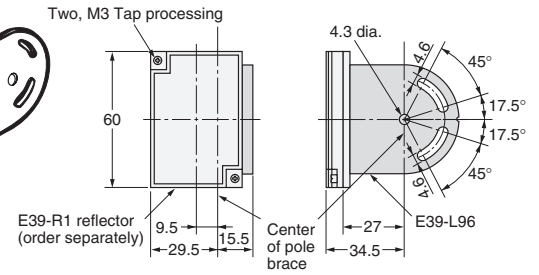
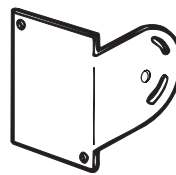
E39-L94



Material: Iron



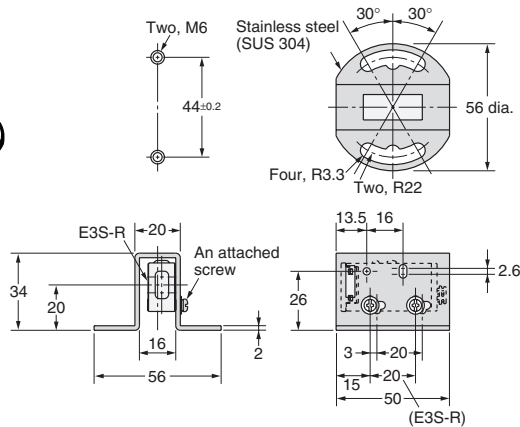
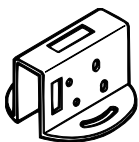
E39-L96



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

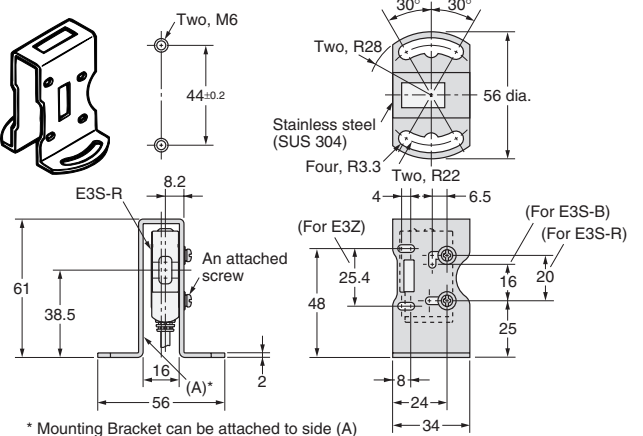
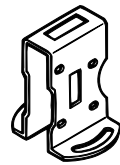
E39-L97

Mounting Holes



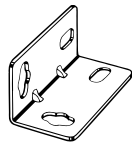
E39-L98

Mounting Holes

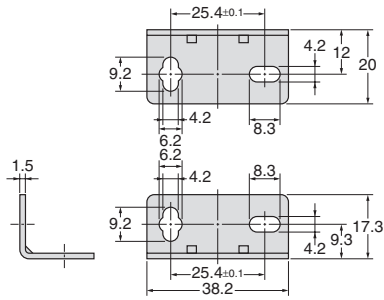


* Mounting Bracket can be attached to side (A)

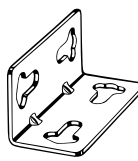
E39-L102



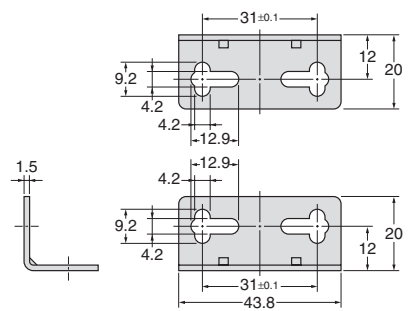
Material:
Stainless steel (SUS304)



E39-L103



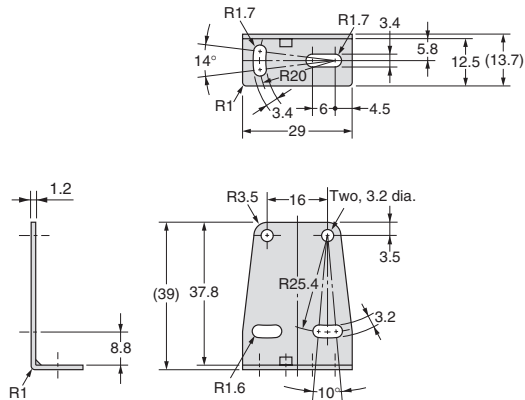
Material:
Stainless steel (SUS304)



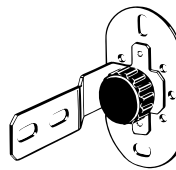
E39-L104



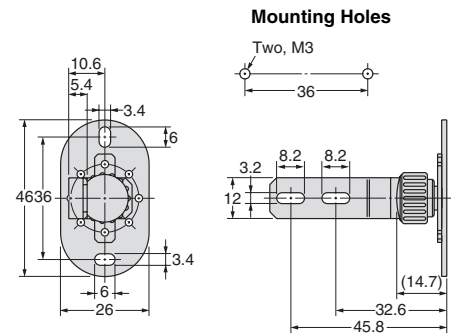
Material:
Stainless steel
(SUS304)



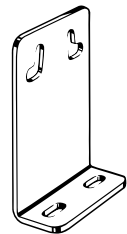
E39-L109



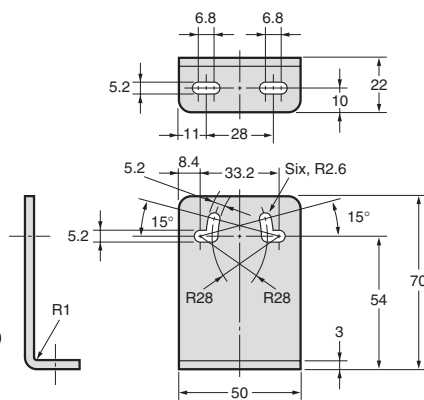
Material:
Stainless steel
(SUS430)



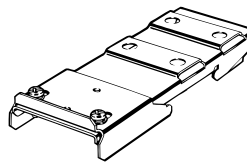
E39-L114



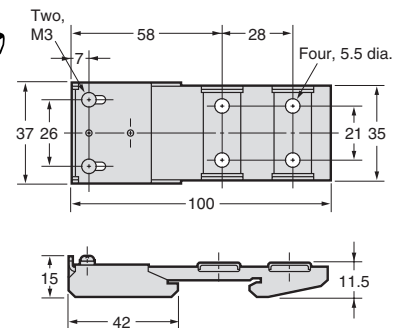
Material:
Stainless steel (SUS430)



E39-L115

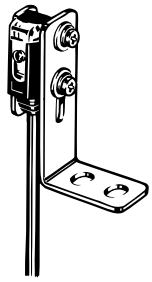


Material: Stainless steel (SUS304)

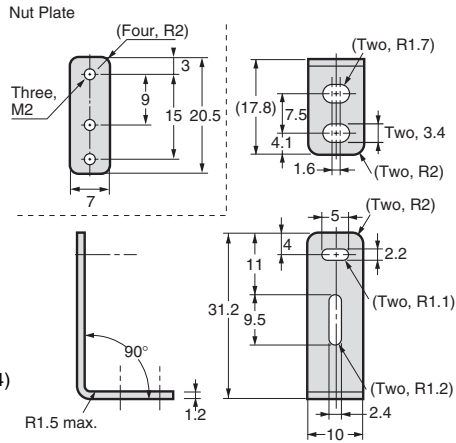


E39-L/F39-L/E39-S/E39-R

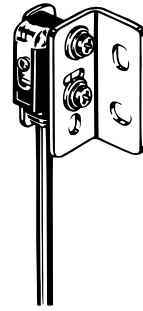
E39-L116



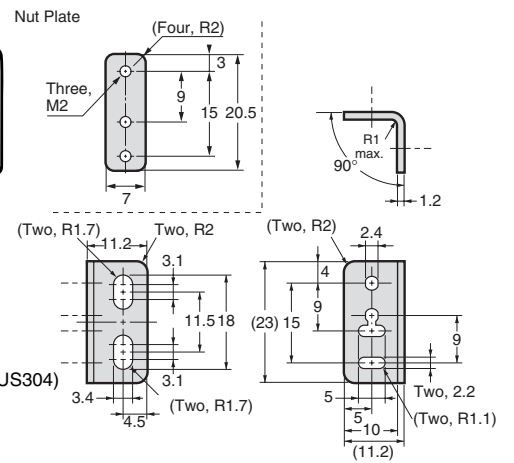
Material:
Stainless steel (SUS304)
1.2-mm-thick



E39-L117



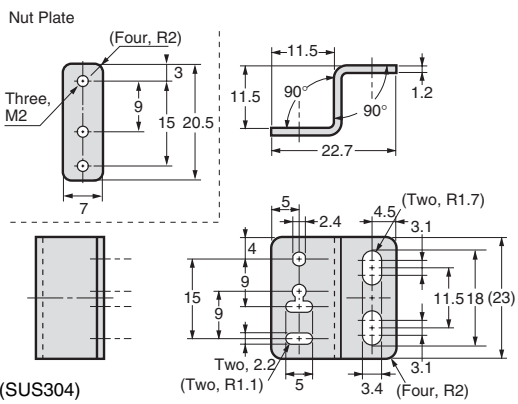
Material:
Stainless steel (SUS304)
1.2-mm-thick



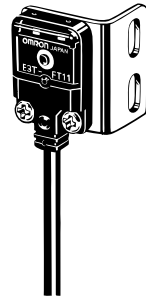
E39-L118



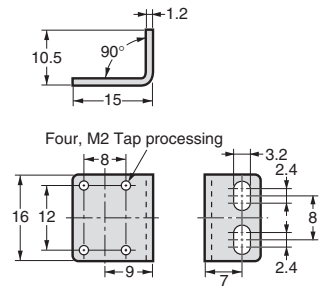
Material:
Stainless steel (SUS304)
1.2-mm-thick



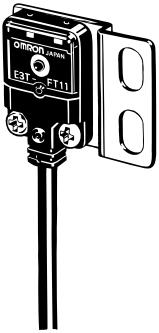
E39-L119



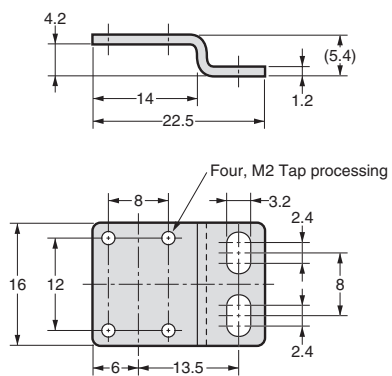
Material:
Stainless steel (SUS304)
1.2-mm-thick



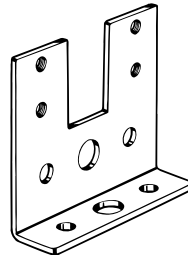
E39-L120



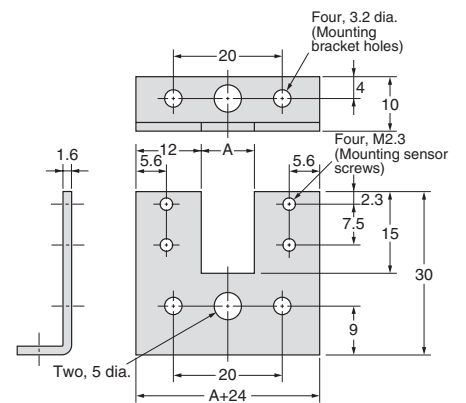
Material: Stainless steel (SUS304)
1.2-mm-thick



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

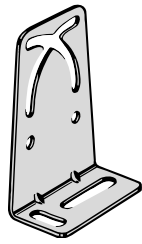


Material: Iron

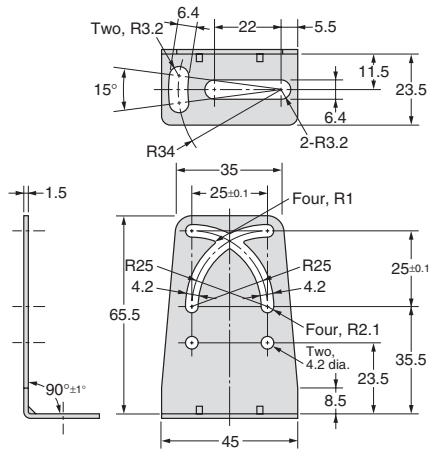


Model	Dimension A (mm)
E39-L127-T1	10
E39-L127-T2	20
E39-L127-T3	30

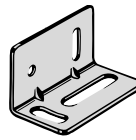
E39-L131



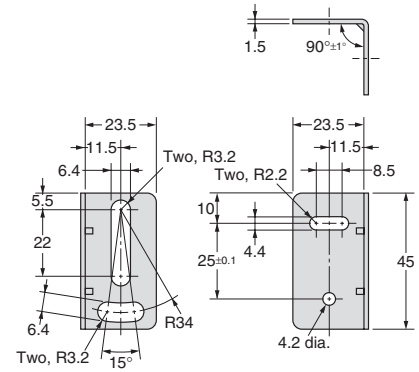
Material:
Stainless steel (SUS304)



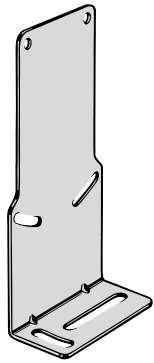
E39-L132



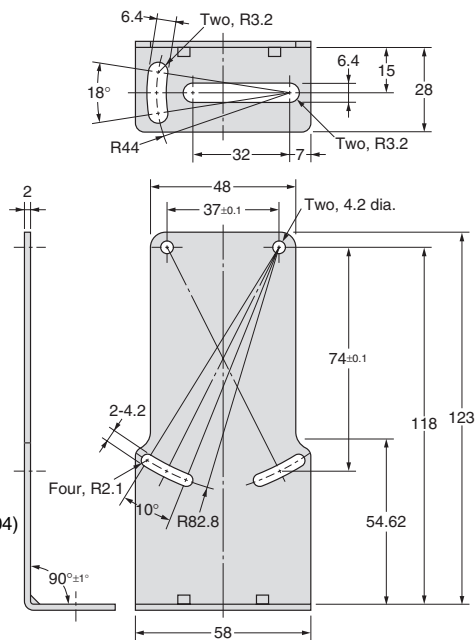
Material: Stainless steel (SUS304)



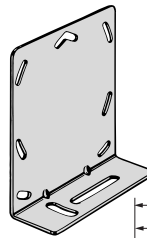
E39-L135



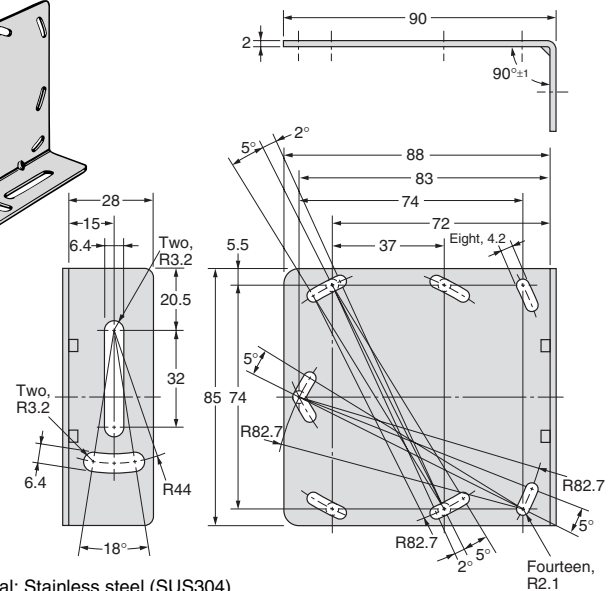
Material:
Stainless steel (SUS304)



E39-L136



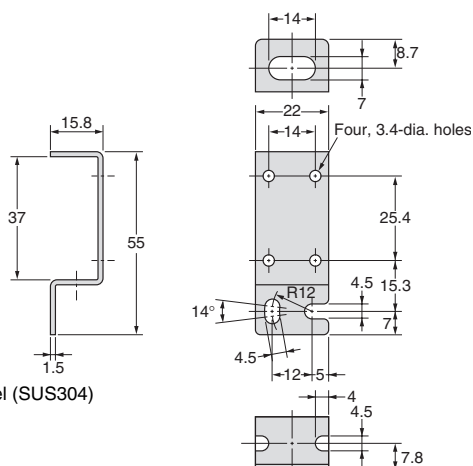
Material: Stainless steel (SUS304)



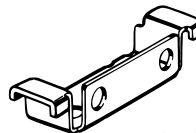
E39-L142



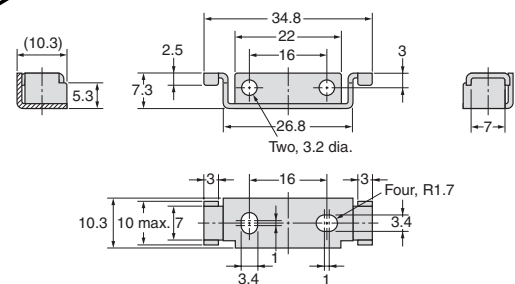
Material: Stainless steel (SUS304)



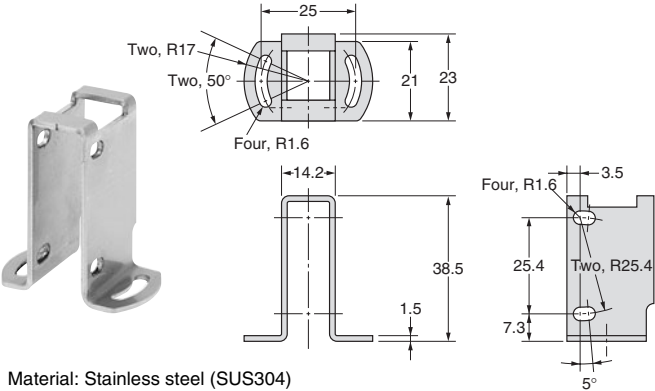
E39-L143



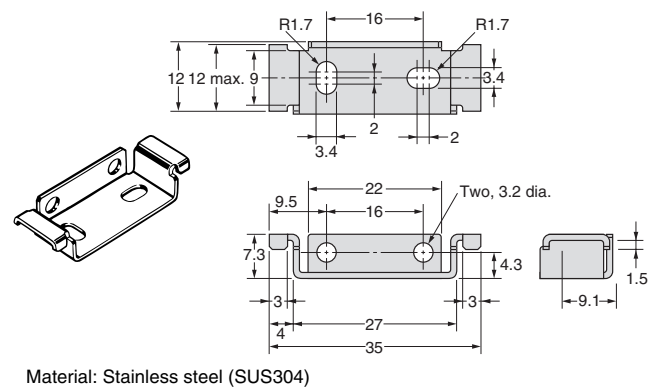
Material: Stainless steel (SUS304)



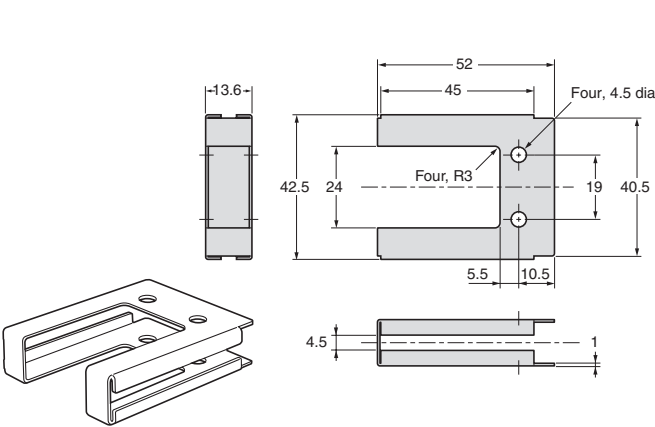
E39-L144



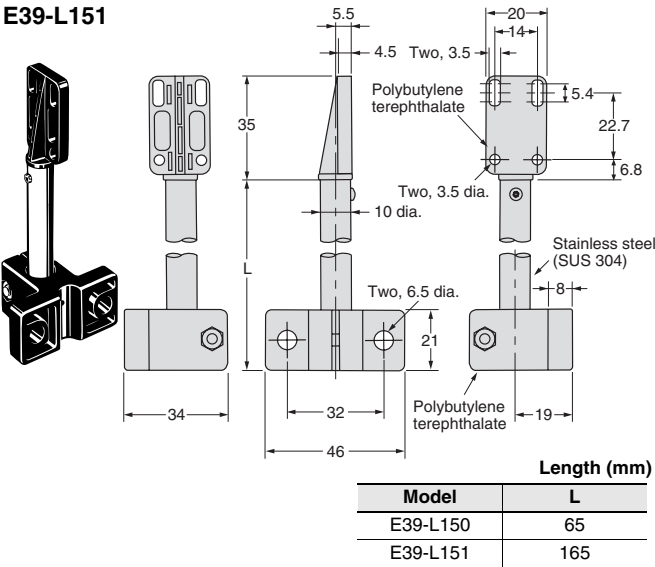
E39-L148



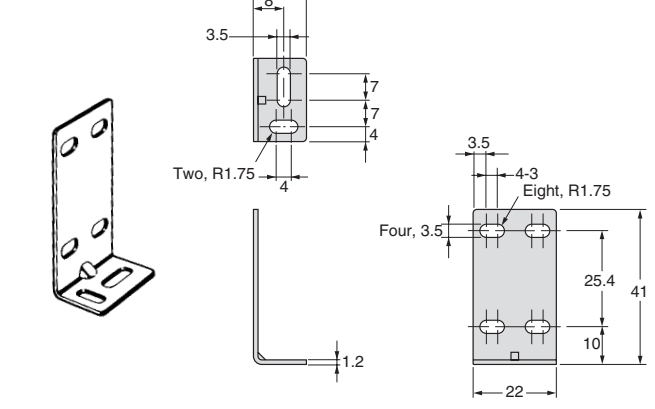
E39-L149



E39-L150

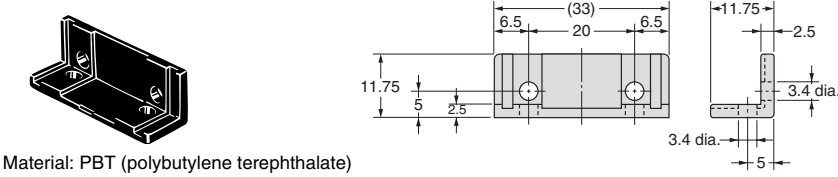


E39-L153



Contact Mounting Plate

E39-L60



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

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

Reflector dimensions

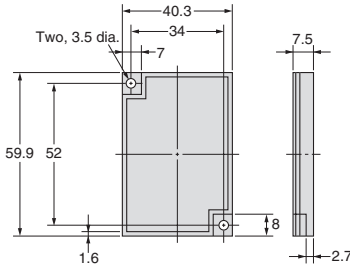
(Unit: mm)

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

E39-R1 E39-R1S E39-R1K *

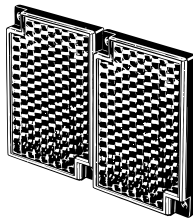


Material,
reflective surface: acrylic
Rear surface: ABS

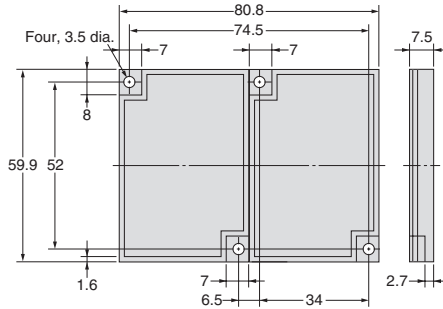


* E39-R1K only
Coating on reflective surface

E39-R2



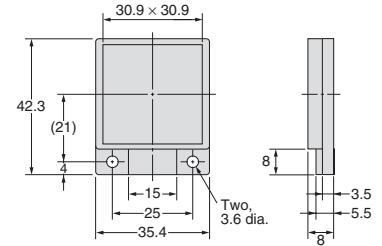
Material,
reflective surface: acrylic
Rear surface: ABS



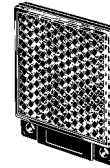
E39-R9



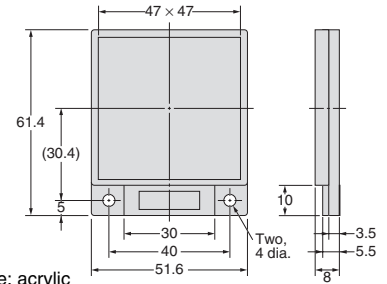
Material,
reflective surface: acrylic
Rear surface: ABS



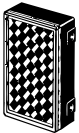
E39-R10



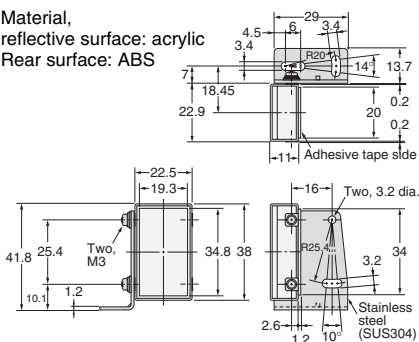
Material,
reflective surface: acrylic
Rear surface: ABS



E39-R3



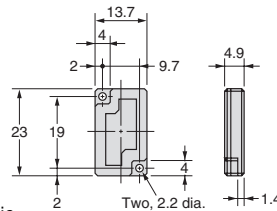
Material,
reflective surface: acrylic
Rear surface: ABS



E39-R4



Material,
reflective surface: acrylic
Rear surface: ABS

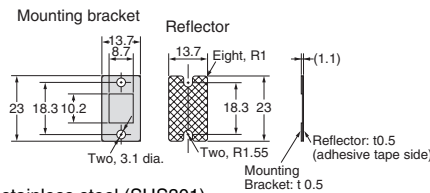


E39-R37-CA

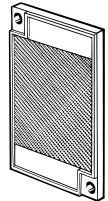


Material:
Mounting plate: stainless steel (SUS301)
Reflective surface: acrylic

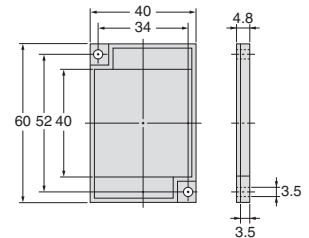
Note: The reflective plate and mounting plate (1) come as a set.
Reflectors only for E3T-SR4□.



E39-R6

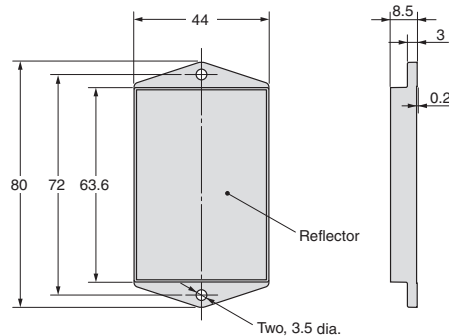
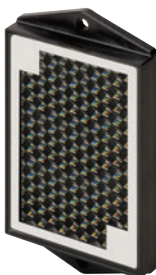


Material,
reflective surface: acrylic
Rear surface: ABS

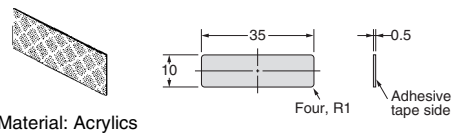


Retroreflector for E3ZM-B

E39-RP1

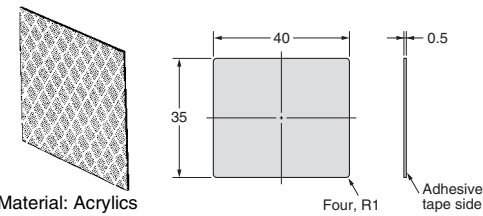


E39-RS1
E39-RS1-CA *



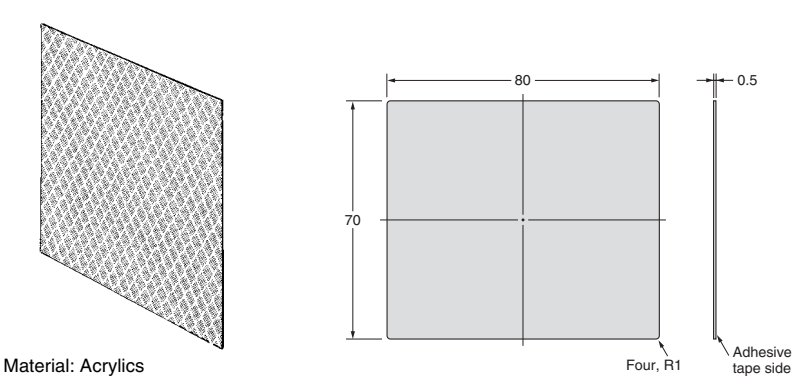
Material: Acrylics

E39-RS2
E39-RS2-CA *



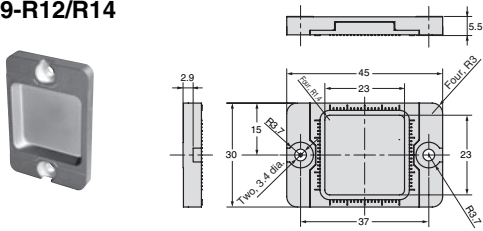
Material: Acrylics

E39-RS3
E39-RS3-CA *

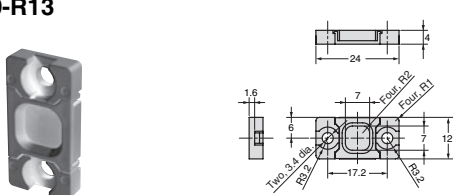


Material: Acrylics

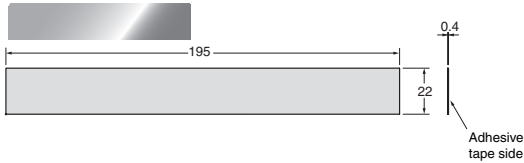
E39-R12/R14



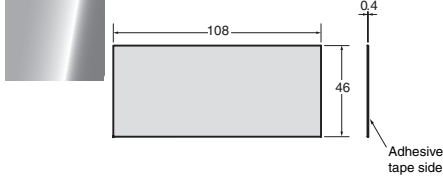
E39-R13



E39-RS4



E39-RS5

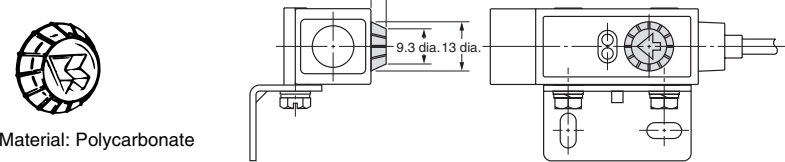


* Models ending in the suffix “-CA” are reflectors only for E3T-SR4□.

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



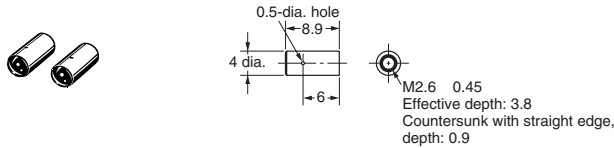
Material: Polycarbonate

Lens Unit

(Unit: mm)

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

E39-F1V

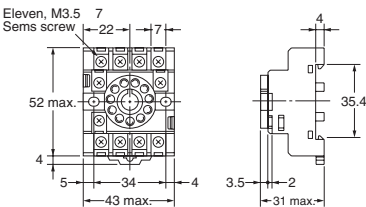
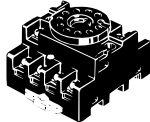


Connection Sockets

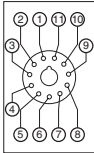
(Unit: mm)

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

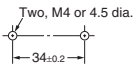
Front Connection Socket PF113A



Terminal arrangement/Internal connections (top view)

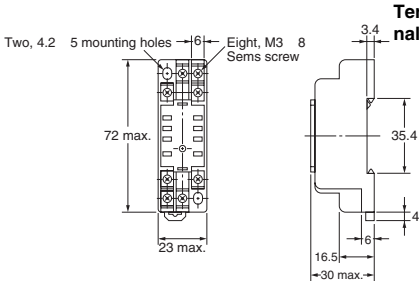
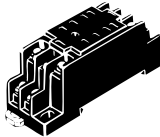


Mounting Holes

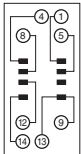


Note: Rail mounting also possible.

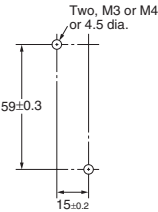
Front Connection Socket PYF08A



Terminal arrangement/Internal connections (top view)

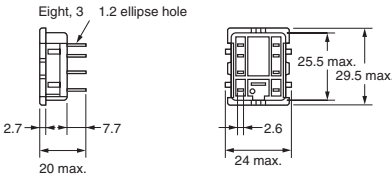
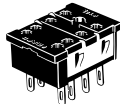


Mounting Holes

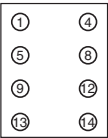


Note: Rail mounting also possible.

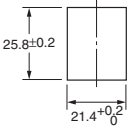
Front Connection Socket PY08



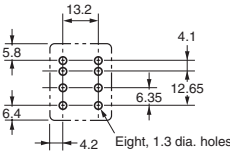
Terminal arrangement/Internal connections (bottom view)



Mounting Holes



PCB Cutout Dimensions



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