

Mounting Brackets  
**E39-L**  
 Slits/Reflectors  
**E39-S/E39-R**

CSM\_E39-L/E39-S/E39-R\_DS\_E\_19\_10

**Mounting Brackets** [Refer to *Dimensions* on page 6.]

Model	Fitting materials	Count	Accessories			Applicable sensor (mounting pitch on sensor side)	Page
			Description	Material	Count		Dimensions
E39-L31	Iron, zinc plating	1	Slotted/Phillips screws, M3 × 12 (with spring washers)	Iron, zinc plating	2	E3C-S50 (8)	5
E39-L40	Iron, zinc plating	1	Phillips screws M4 × 25 (with spring and plain washers)	Iron, zinc plating	2	E3JK	
			Nuts M4	Iron, zinc plating	2		
E39-L41	Iron, zinc plating	2	Phillips screws M3 × 14 (with spring washers)	Iron, zinc plating	4	E3C-1 (10)	
			Plain washer M3	Iron, zinc plating	4		
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)	
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)	7
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	2	E3JM (40)	
				Iron, nickel plating	2		
E39-L53	Iron, zinc plating	1	---	---	---	E3JM (40)	
E39-L54V	Stainless steel (SUS304)	1	---	---	---	E32-T54V	
E39-L83	Stainless steel	1	---	---	---	E32-T24S E32-A03	8
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)	

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) E39-R1/E39-R3	9
			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) 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		
E39-L94	Iron, zinc plating	2	Phillips screws M3 × 10 Nuts M3	Iron, zinc plating Iron, zinc plating	4 4	E3Z-T16P (19) E3Z-T16PR (19)	10
E39-L96	Stainless steel (SUS304)	1	Phillips screws M3 × 6 (with spring and plain washers)	Iron, nickel plating	2	E39-R1	
* For installation of Sensor Adjuster E39- L93							
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)	11
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)	
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)	
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) E3Z-R21 (for installation of E39-R3) (25.4)	
E39-L116	Stainless steel (SUS304)	1	Nut plate	Stainless steel (SUS304)	1	E3T-S (9/15)	12
E39-L117	Stainless steel (SUS304)	1	Nut plate	Stainless steel (SUS304)	1	E3T-S (9/15)	
E39-L118	Stainless steel (SUS304)	1	Nut plate	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 Spring washer M2.3	Iron, zinc plating Iron, zinc plating	4 4	E3C-S10 (7.5)	
E39-L127-T2	Iron, zinc plating	1	Phillips screws M2.3 × 8 Spring washer M2.3	Iron, zinc plating Iron, zinc plating	4 4		
E39-L127-T3	Iron, zinc plating	1	Phillips screws M2.3 × 8 Spring washer M2.3	Iron, zinc plating Iron, zinc plating	4 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
			Description	Material	Count		Dimensions
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)	13
E39-L143	Stainless steel (SUS304)	1	None	---	---	E3X-ZV/MZV E3NX-CA E3NX-FA E3NX-MA E3NC-LA E3NC-SA E2CY-SD E9NC-TA E3X-NA E3C-LDA□N	
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 Shaft (brace) Bolt with hexagonal hole Nut Phillips screw Slotted/Phillips screws	PBT (polybutylene terephthalate) Stainless steel (SUS304) Stainless steel (SUSXM7) Stainless steel (SUS304) Stainless steel (SUSXM7) Stainless steel (SUS304)	1 1 1 1 2	E3Z (25.4) E3S-R6□/R8□ (20) E39-R3	14
E39-L151	Stainless steel (SUS304)	1	Holder/bracket Shaft (brace) Bolt with hexagonal hole Nut Phillips screw Slotted/Phillips screws	PBT (polybutylene terephthalate) Stainless steel (SUS304) Stainless steel (SUSXM7) Stainless steel (SUS304) Stainless steel (SUSXM7) Stainless steel (SUS304)	1 1 1 1 2	E3Z (25.4) E3S-R6□/R8□ (20) E39-R3	
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)	
E39-L166	Stainless steel (SUS304)	1	Nut plate	Stainless steel (SUS304)	1	E3T-S□□M (13/16)	15
E39-L167	Stainless steel (SUS304)	1	---	---	---	E3T-FD□□M (8)	
E39-L168	PBT (polybutylene terephthalate)	1	---	---	---	E3T-FD□□M	16
E39-L180	Stainless steel (SUS304)	1	Phillips screw Nut plate	Stainless steel Stainless steel	2 1	ZX1-LD50□ ZX1-LD100□	
E39-L181	Stainless steel (SUS304)	1	Phillips screw Nut plate	Stainless steel Stainless steel	2 1	ZX1-LD300□ ZX1-LD600□	
E39-L185	Stainless steel (SUS304)	1	Phillips screw Nut plate	Stainless steel Stainless steel	2 1	E3NC-LH02	
E39-L186	Stainless steel (SUS304)	1	Phillips screw Nut plate	Stainless steel Stainless steel	2 1	E3NC-LH01	
E39-L187	Stainless steel (SUS304)	1	Phillips screw Nut plate	Stainless steel Stainless steel	2 1	E3NC-SH250H E3NC-SH250 E3NC-SH100	
E39-L188	Stainless steel (SUS304)	1	Phillips screw Nut plate	Stainless steel Stainless steel	2 1	E3NC-SH250H E3NC-SH250 E3NC-SH100	
E39-L190	Stainless steel (SUS304)	1	Phillips screw Nut plate	Stainless steel Stainless steel	2 1	E3NC-LH03	

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
E39-S61	Width 0.5, 1, 2, 4 × 11 mm		E3S-CT□1
E39-S63	0.5-mm dia., 1 mm	Plug-in type	E3T-ST□
E39-S64	0.5-mm dia., 1 mm		E3T-FT□
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
E39-S76A	0.5-mm dia.	Plug-in type	E3T-ST□M
E39-S76B	1-mm dia.		

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

## Reflectors (Refer to Dimensions on page 18.)

Item	Name 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	E39-RSP1	E39-RP37		
Directional angle		30° min. *1				30° min. *2			30° min.			
Ambient operating temperature range		-25 to 55°C						-40 to 60°C		-25 to 55°C		
Ambient storage temperature range		-40 to 70°C		-40 to 55°C		-40 to 70°C			0 to 40°C			
Ambient operating humidity range		35% to 85%				35% to 95%		35% to 85%				
Ambient storage humidity range		35% to 95%						35% to 85%				
Degree of protection		IEC IP67						—				
Accessories		—						Phillips screws M3 × 8, spring washers M3, nuts M3				

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

\*2. 40° or higher for E3G-R.

Item	Name Model	Small reflector				Tape reflector *			
		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 × 8, spring washers M3, nuts M3	—			

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

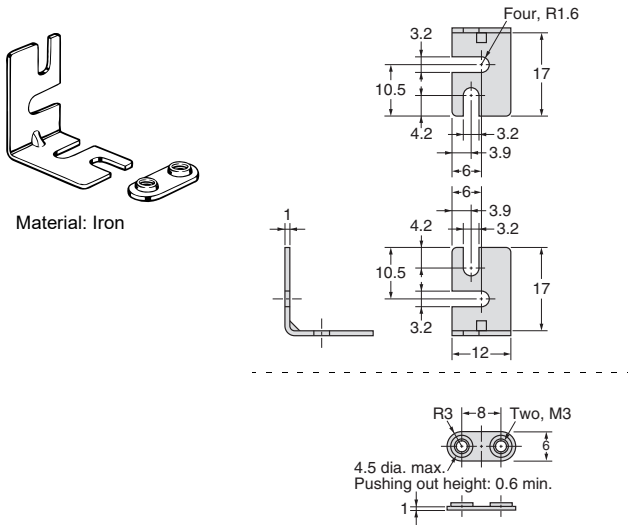
Item	Name Model	Laser Reflectors				
		Standard		Short-distance transparent object detection	Sheets	
		E39-R12	E39-R13	E39-R14	E39-RS4	E39-RS5
Ambient operating temperature range		-10 to 55°C (No icing)				
Ambient storage temperature range		-25 to 70°C (No icing)				
Ambient operating humidity range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

Name		Laser Reflectors			
Item	Model	Standard		Sheets	
		E39-R21 *	E39-R22 *	E39-RS10 *	E39-RS11 *
Ambient operating temperature range		-10 to 55°C (No icing and no condensation)			
Ambient storage temperature range		-25 to 70°C (No icing and no condensation)			
Ambient operating humidity range		35 to 85% (No condensation)			
Ambient storage humidity range		35 to 85% (No condensation)			

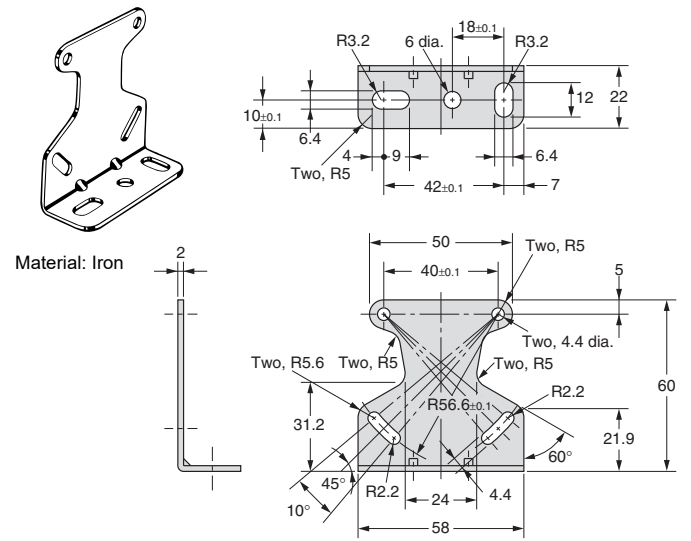
\* Models only for E3NC-LH03

Mounting Bracket Dimensions

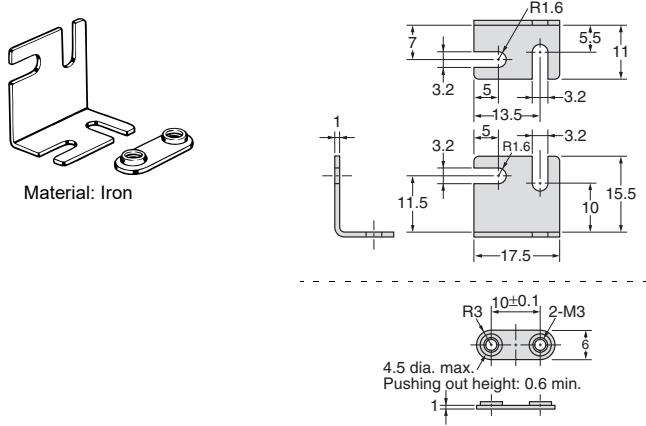
E39-L31



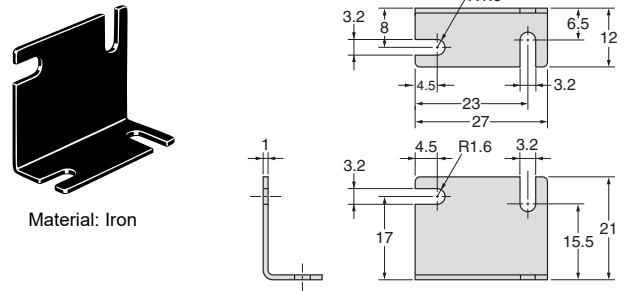
E39-L40



E39-L41

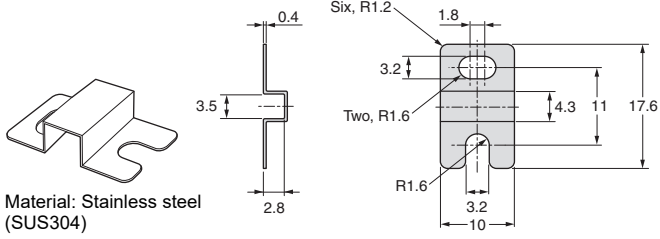


E39-L42



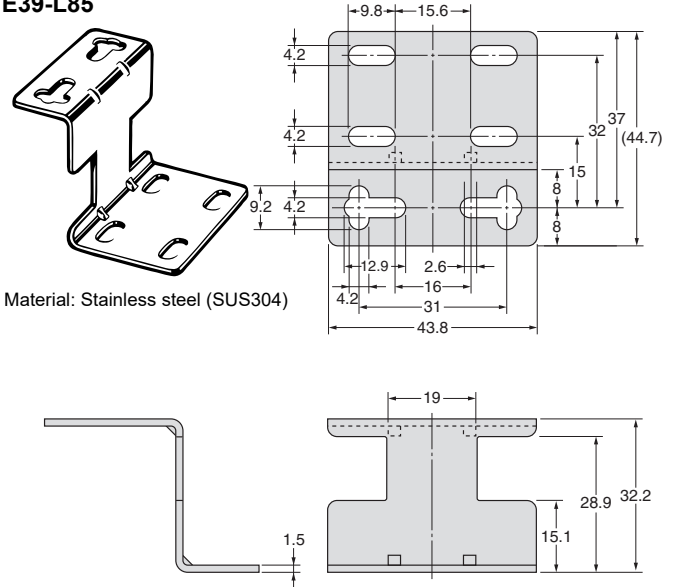


E39-L83



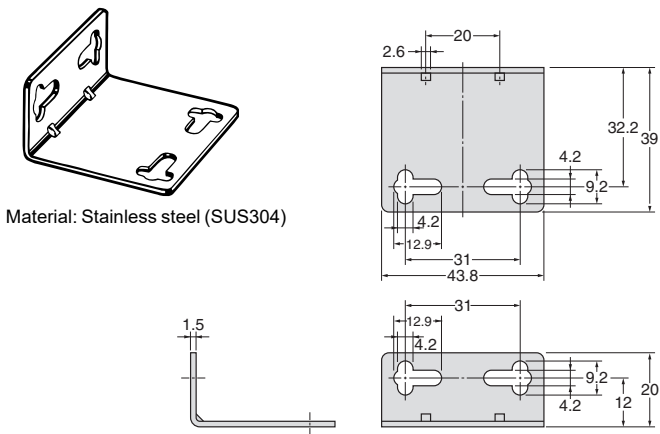
Material: Stainless steel (SUS304)

E39-L85



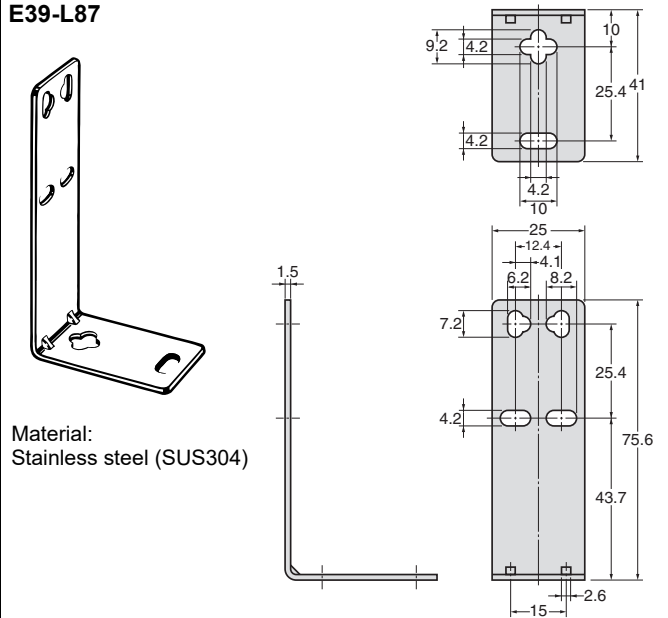
Material: Stainless steel (SUS304)

E39-L86



Material: Stainless steel (SUS304)

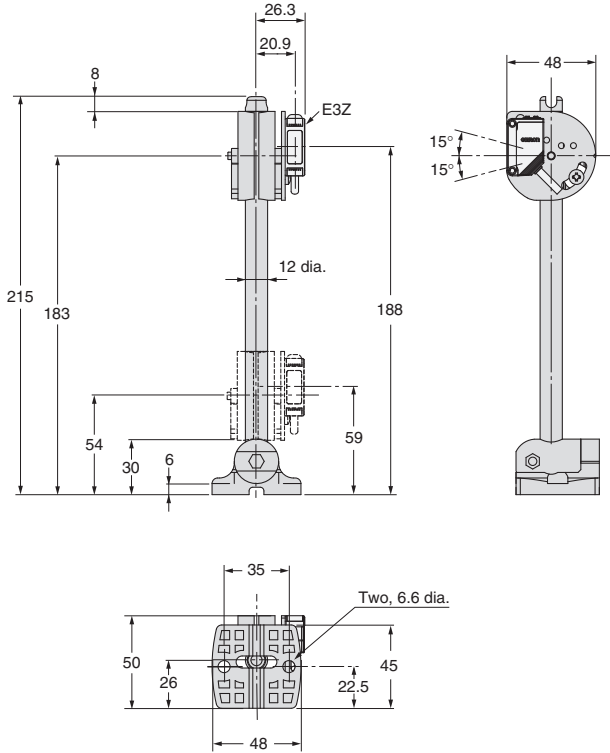
E39-L87



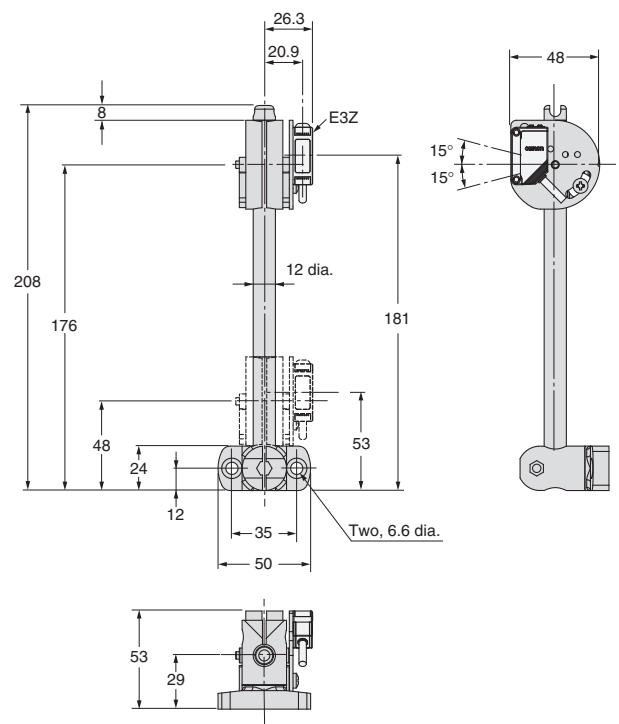
Material: Stainless steel (SUS304)



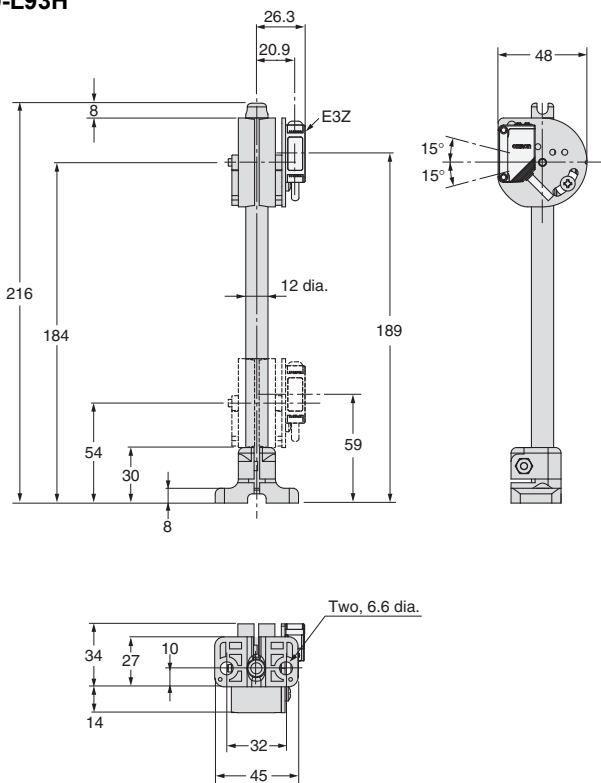
E39-L93FH



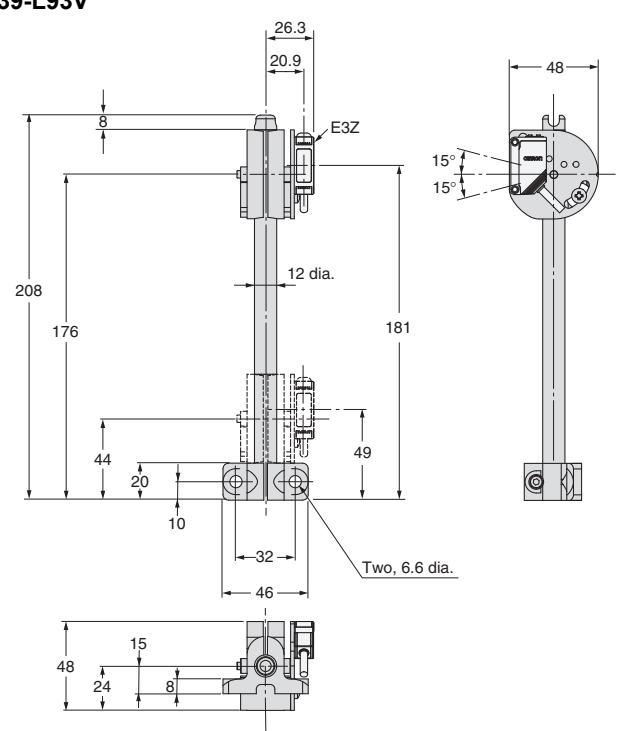
E39-L93FV



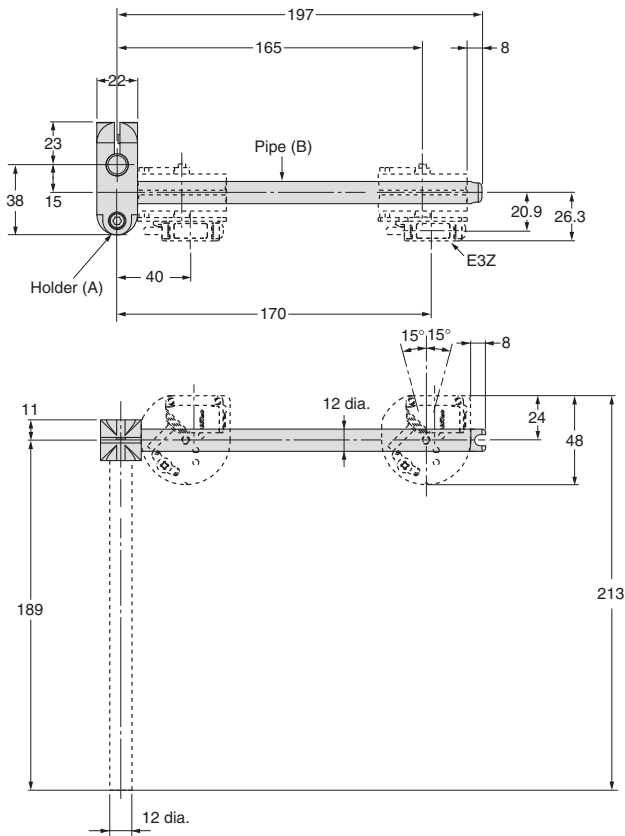
E39-L93H



E39-L93V

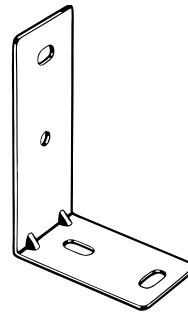


**E39-L93XY**

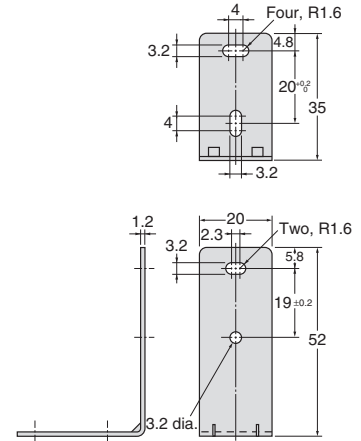


Note: The E39-L93XY consists of only the one joint holder (A) and pipe, and the two hexagonal bolts and nuts. It cannot be mounted to the Sensor alone.

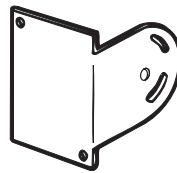
**E39-L94**



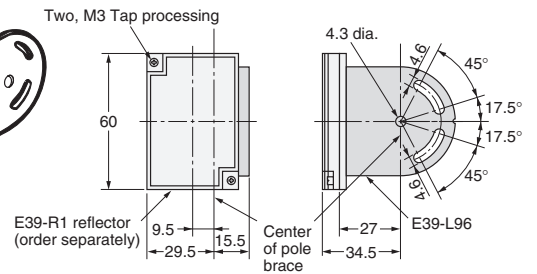
Material: Iron



**E39-L96**

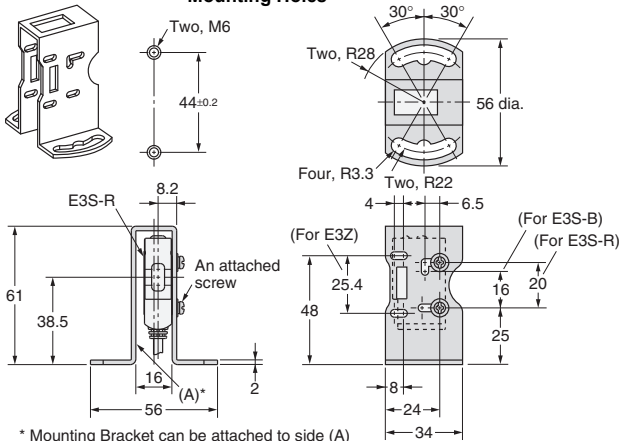


Material: Stainless steel (SUS304)  
2-mm-thick



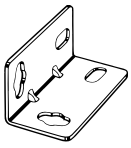
**E39-L98**

**Mounting Holes**

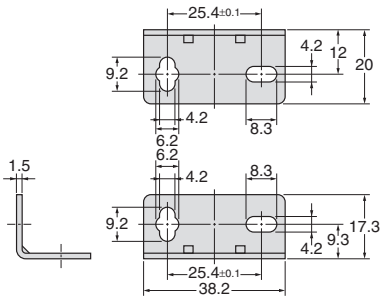


\* Mounting Bracket can be attached to side (A)  
Material: Stainless steel (SUS304)

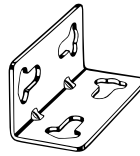
E39-L102



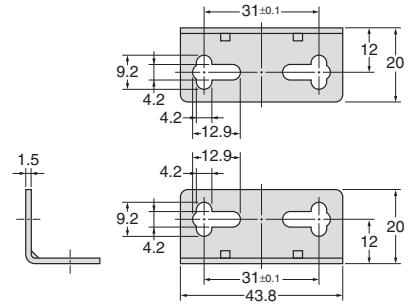
Material:  
Stainless steel (SUS304)



E39-L103



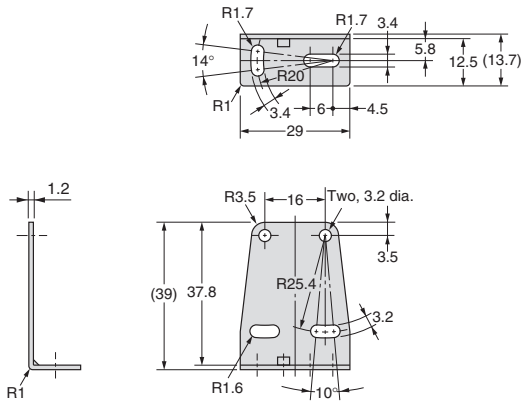
Material:  
Stainless steel (SUS304)



E39-L104

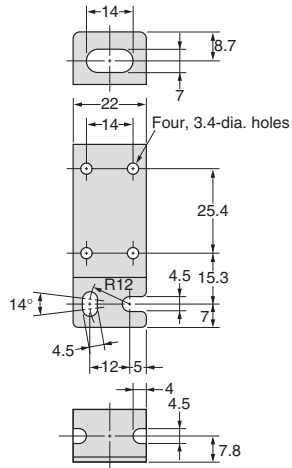
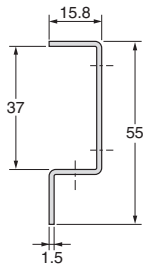


Material:  
Stainless steel (SUS304)



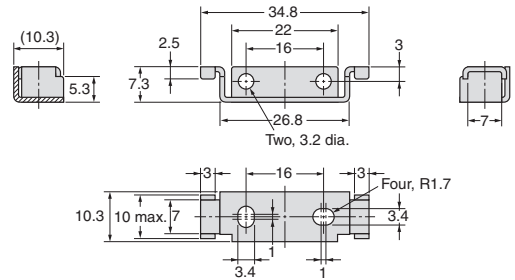
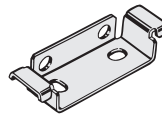


E39-L142



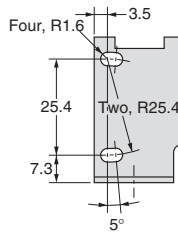
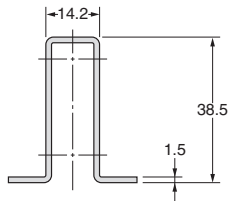
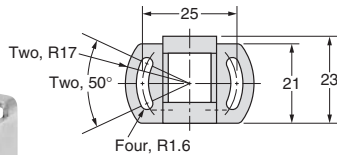
Material: Stainless steel (SUS304)

E39-L143



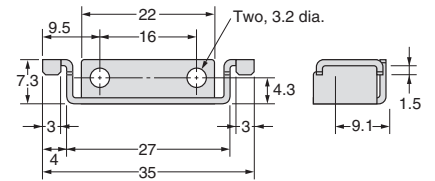
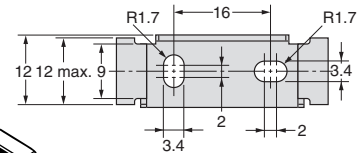
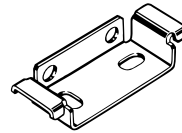
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E39-L144



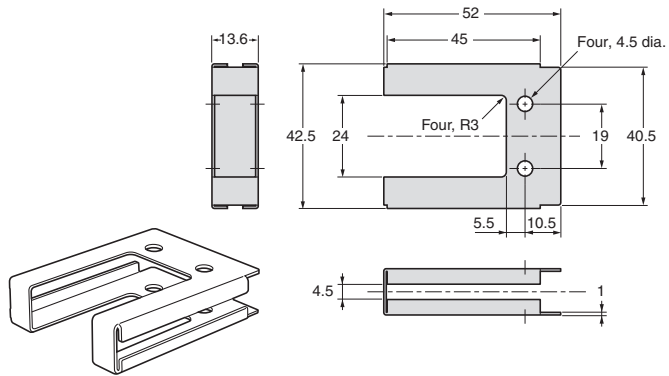
Material: Stainless steel (SUS304)

E39-L148



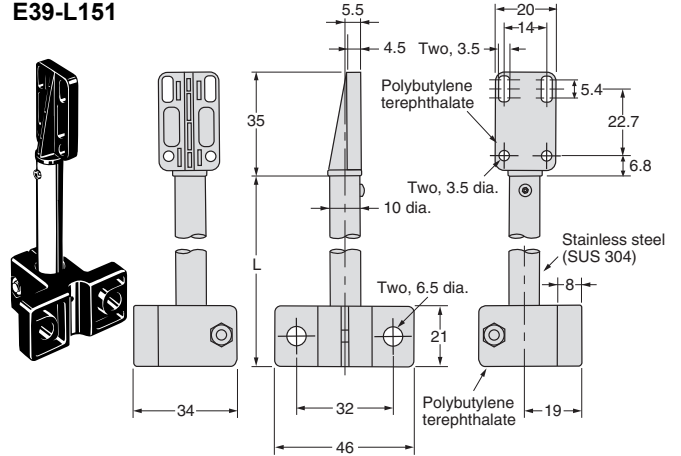
Material: Stainless steel (SUS304)

E39-L149



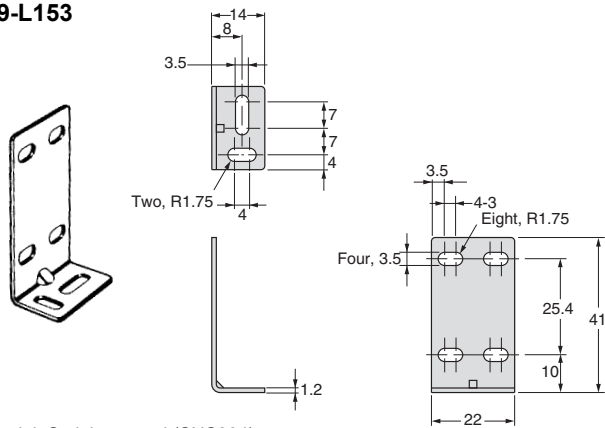
Material: Iron

E39-L150  
E39-L151



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

E39-L153

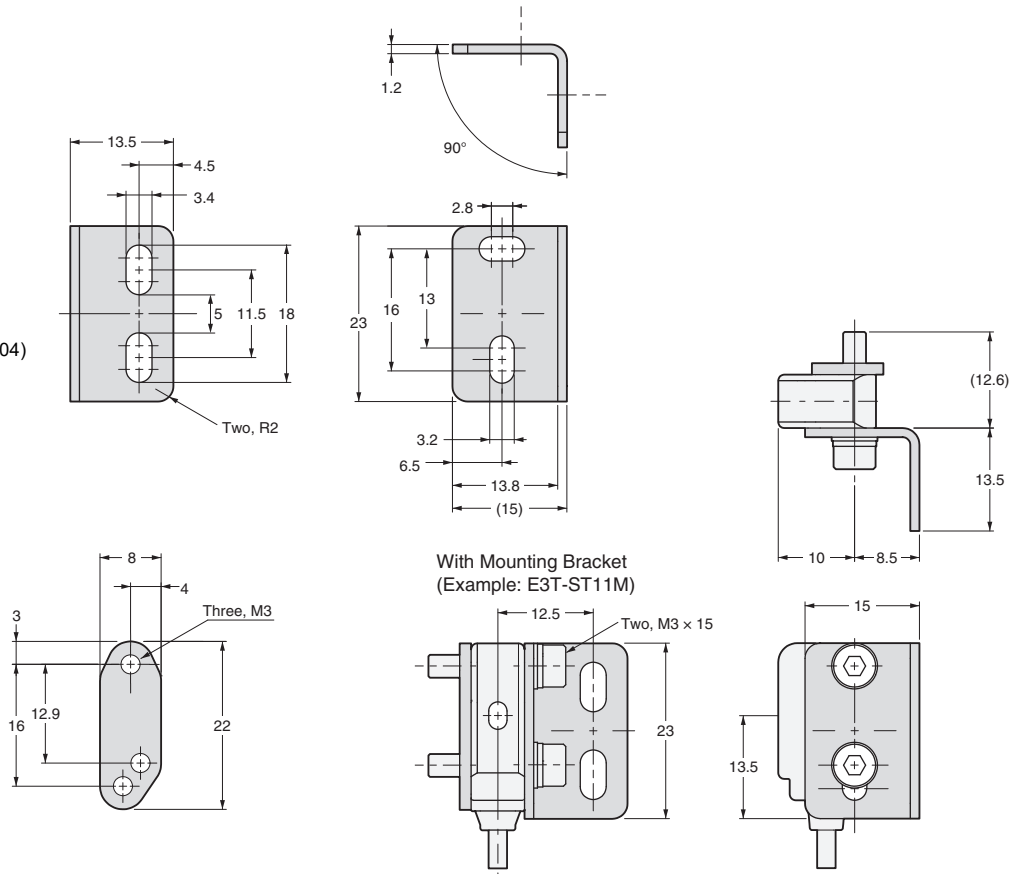


Material: Stainless steel (SUS304)

E39-L166



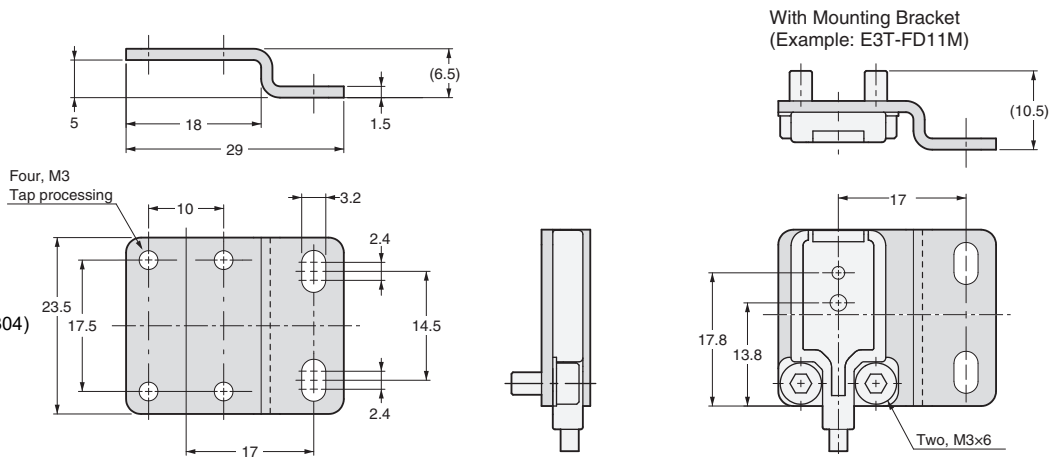
Material: Stainless steel (SUS304)  
1.2-mm-thick



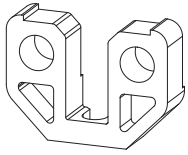
E39-L167



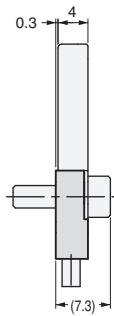
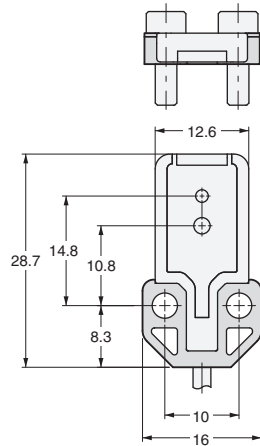
Material: Stainless steel (SUS304)  
1.5-mm-thick



E39-L168

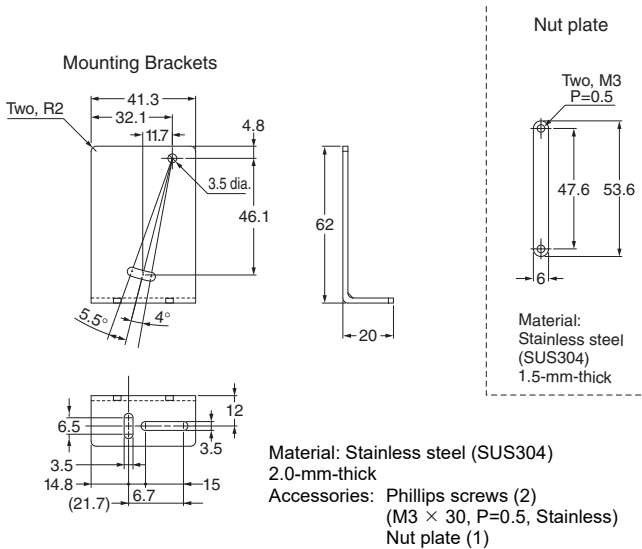


Material: Polybutylene terephthalate

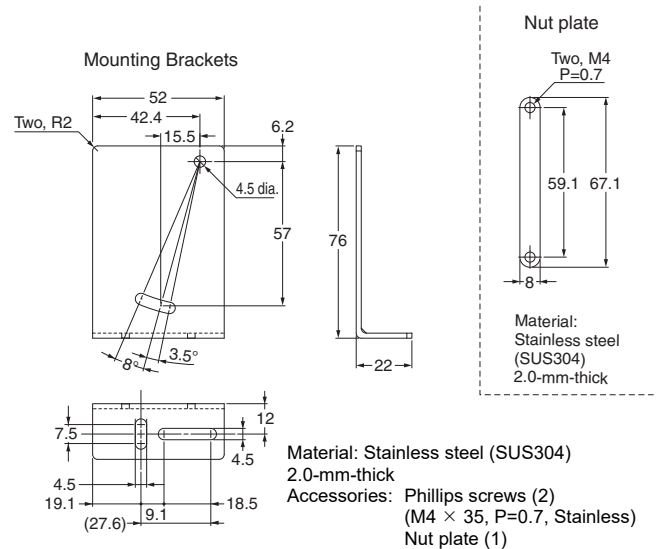


Note: Use this Spacer when mounting the Sensor from the back.

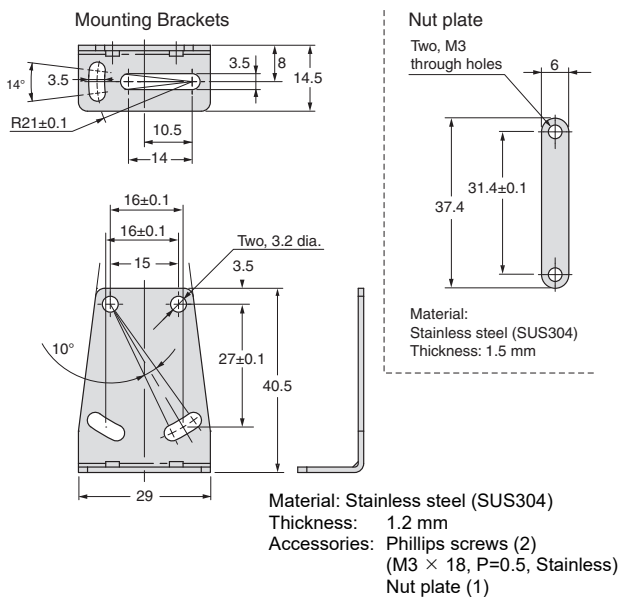
E39-L180



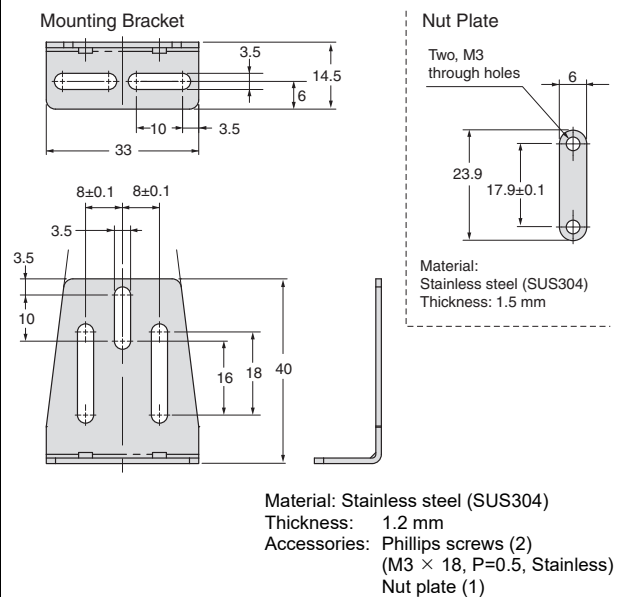
E39-L181



E39-L185

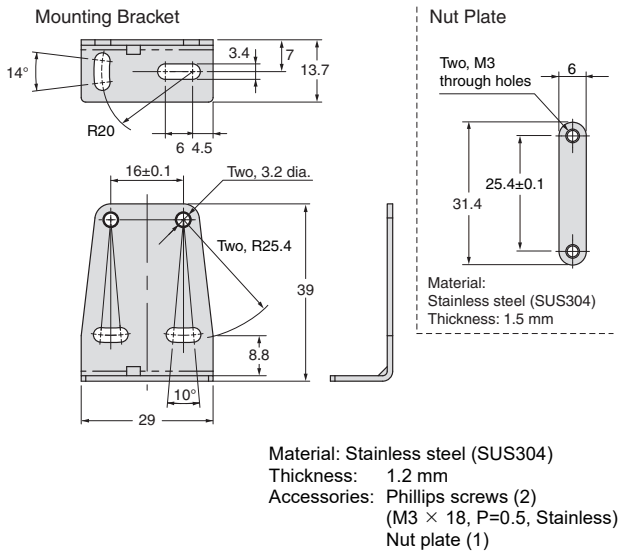


E39-L186

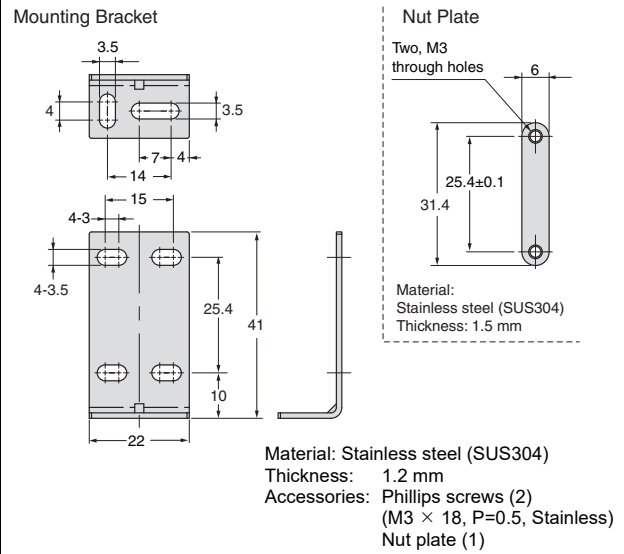




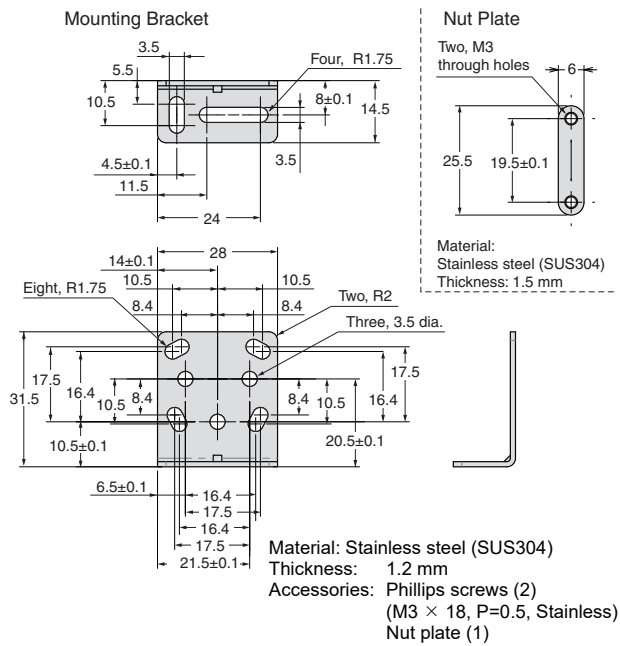
**E39-L187**



**E39-L188**



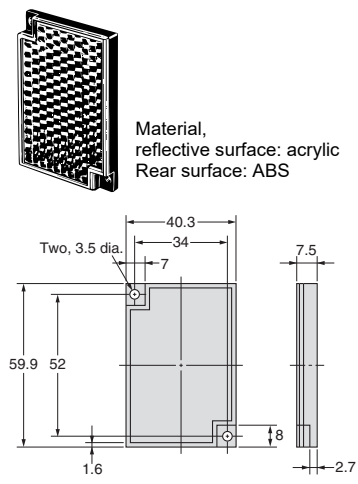
**E39-L190**



Reflector dimensions

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

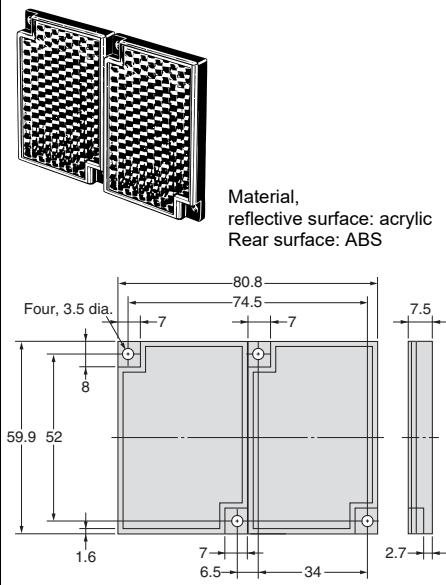
E39-R1  
E39-R1S  
E39-R1K \*



Material,  
reflective surface: acrylic  
Rear surface: ABS

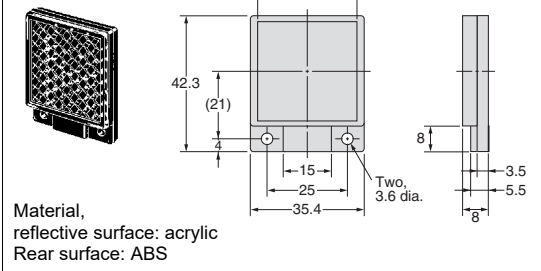
\* E39-R1K only  
Coating on reflective surface

E39-R2



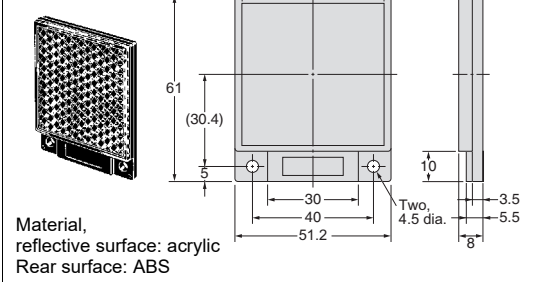
Material,  
reflective surface: acrylic  
Rear surface: ABS

E39-R9



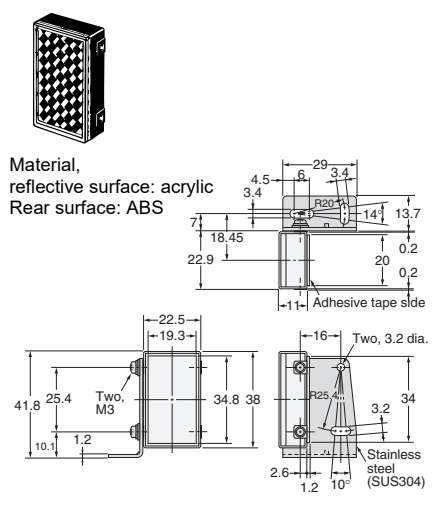
Material,  
reflective surface: acrylic  
Rear surface: ABS

E39-R10



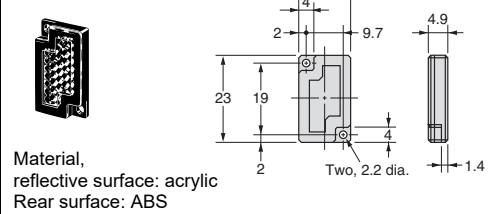
Material,  
reflective surface: acrylic  
Rear surface: ABS

E39-R3



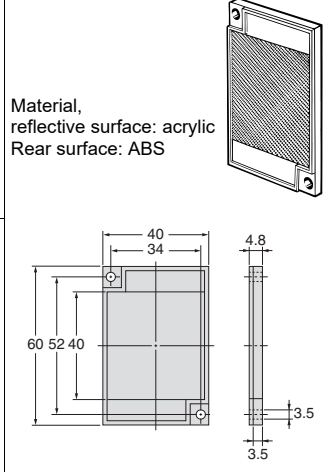
Material,  
reflective surface: acrylic  
Rear surface: ABS

E39-R4



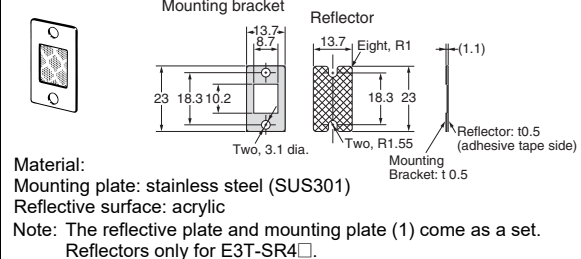
Material,  
reflective surface: acrylic  
Rear surface: ABS

E39-R6



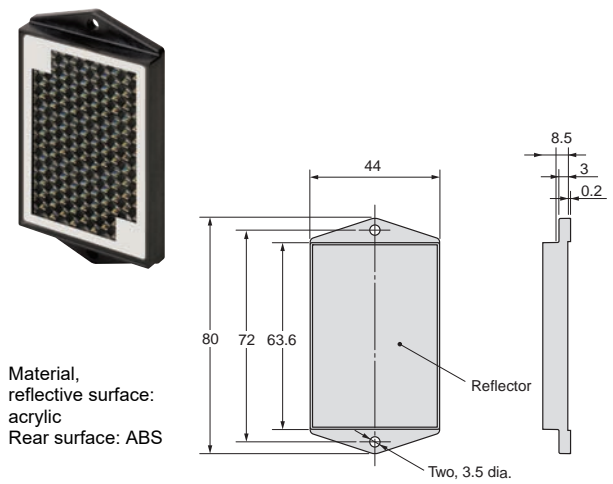
Material,  
reflective surface: acrylic  
Rear surface: ABS

E39-R37-CA



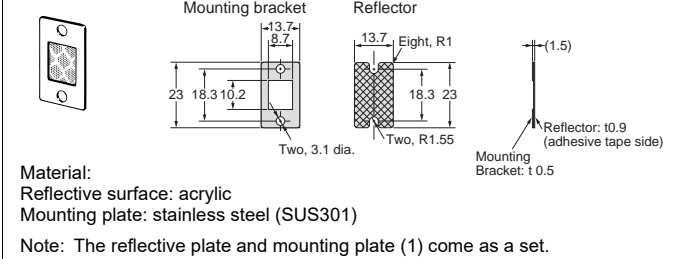
Material:  
Mounting plate: stainless steel (SUS301)  
Reflective surface: acrylic  
Note: The reflective plate and mounting plate (1) come as a set.  
Reflectors only for E3T-SR4□.

Retroreflector for E3ZM-B  
E39-RP1



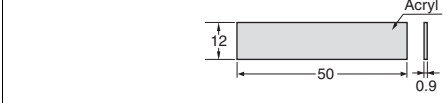
Material,  
reflective surface:  
acrylic  
Rear surface: ABS

Retroreflector for E3ZM-B  
E39-RP37

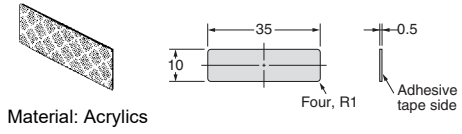


Material:  
Reflective surface: acrylic  
Mounting plate: stainless steel (SUS301)  
Note: The reflective plate and mounting plate (1) come as a set.

Retroreflector for E3ZM-B  
E39-RSP1

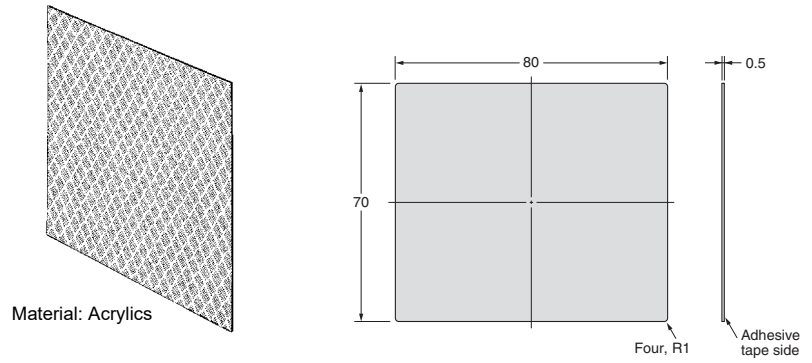


**E39-RS1**  
**E39-RS1-CA \*1**



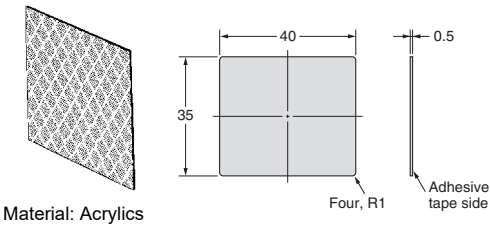
Material: Acrylics

**E39-RS3**  
**E39-RS3-CA \*1**



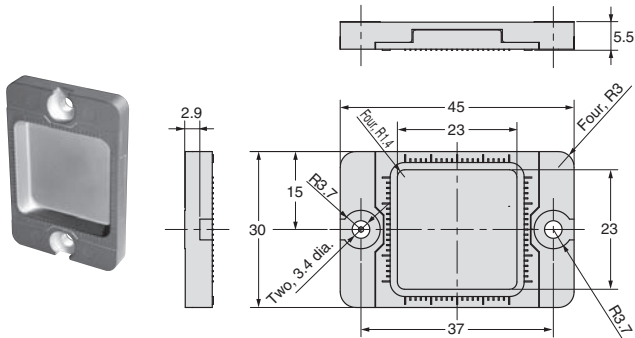
Material: Acrylics

**E39-RS2**  
**E39-RS2-CA \*1**

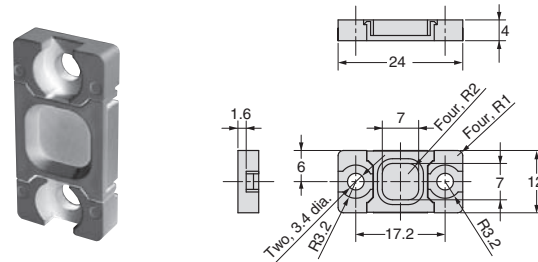


Material: Acrylics

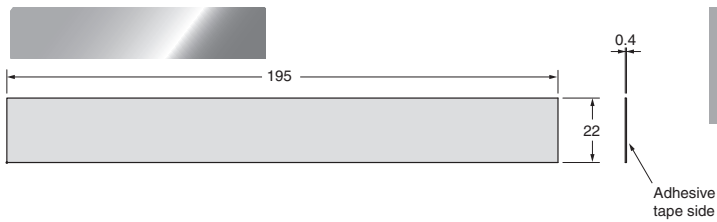
**E39-R12/R14 \*2**



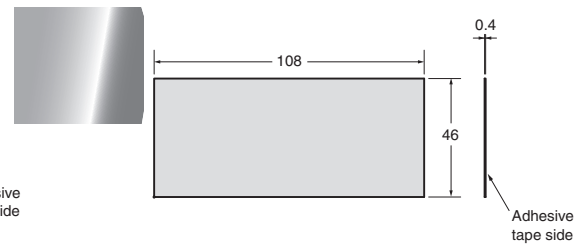
**E39-R13 \*2**



**E39-RS4 \*2**



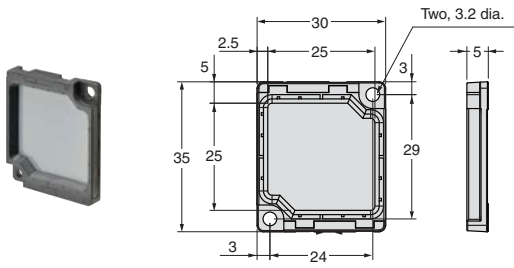
**E39-RS5 \*2**



\*1. Models ending in the suffix "-CA" are reflectors only for E3T-SR4□.

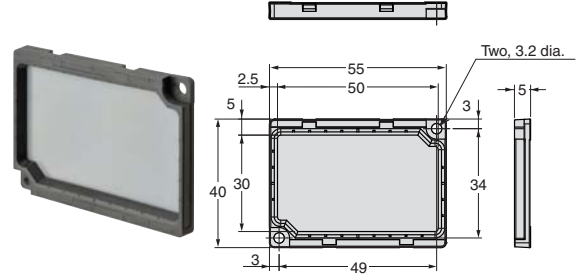
\*2. These Reflectors are for E3C-LDA-series Sensors. However, the E39-R12 can also be used with an E3Z-LR□ Retroreflective Laser Sensor.

E39-R21 \*3



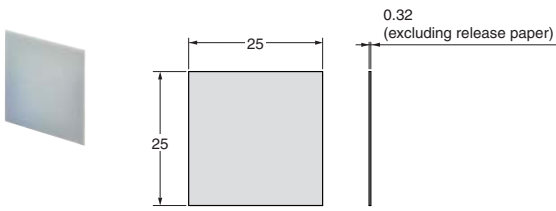
Material, reflective surface: methacrylic resin (PMMA)  
Rear surface: Polybutylene terephthalate (PBT)

E39-R22 \*3



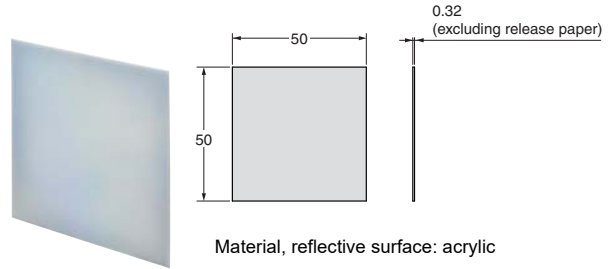
Material, reflective surface: methacrylic resin (PMMA)  
Rear surface: Polybutylene terephthalate (PBT)

E39-RS10 \*3



Material, reflective surface: acrylic

E39-RS11 \*3



Material, reflective surface: acrylic

\*3. Models only for E3NC-LH03

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