MEMO

TOF Laser Sensor with Built-in Amplifier

E3AS-HF Series

CSM_E3AS-HF_DS_E_1_1

High-sensitivity TOF Laser Sensor to increase equipment design flexibility

- A sensing range of 0.05 to 6 m and angle characteristics of ±85° max.
- TOF method to stably detect various workpieces
- Laser class 1 for safety
- Automatic Mutual Interference Prevention to reduce equipment disruptions
- OLED Display with 5 languages supported
- Antifouling coating to prevent contamination of the sensing surface
- IP67, IP69K rated, and ECOLAB approved
- All models with IO-Link connectivity (NPN type excluded)

For the most recent information on models that have been certified for safety standards, refer to your OMRON website.

Refer to *Safety Precautions* on page 27.

Table of Contents

Ordering Information

Spot beam type [Refer to *Dimensions* on page 30]

Red light

Connection method	Sensing distance	Output	Model	
			NPN output	PNP output
		IO-Link baud rate	---	COM3 (230.4 kbps)
Pre-wired (2 m) *1			E3AS-HF6000SMN 2M	E3AS-HF6000SMT 2M
M12 Connector (horizontal)			E3AS-HF6000SMN M1H	E3AS-HF6000SMT M1H
M12 Connector (vertical)			E3AS-HF6000SMN M1V	E3AS-HF6000SMT M1V
M12 Pre-wired Smartclick Connector			E3AS-HF6000SMN-M1TJ 0.3M	E3AS-HF6000SMT-M1TJ 0.3M

Wide beam type

Connection method	Sensing distance	Output	Model	
			NPN output	PNP output
		IO-Link baud rate	---	COM3 (230.4 kbps)
Pre-wired (2 m) *1			E3AS-HF6000DMN 2M	E3AS-HF6000DMT 2M
M12 Connector (horizontal)			E3AS-HF6000DMN M1H	E3AS-HF6000DMT M1H
M12 Connector (vertical)			E3AS-HF6000DMN M1V	E3AS-HF6000DMT M1V
M12 Pre-wired Smartclick Connector (0.3m)			E3AS-HF6000DMN-M1TJ 0.3M	E3AS-HF6000DMT-M1TJ 0.3M

∗1. Models with 5-m cable length are also available with “5M” suffix. (Example: E3AS-HF6000SMN 5M)

Accessories (Sold Separately)

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

(Models for Connectors / Pre-wired Connectors)

A Sensor I/O Connector is not provided with the Sensor. It must be ordered separately as required.

Round Water-resistant Connectors XS5 serie

Appearance	Cable specification	Cable diameter (mm)	Cable connection direction	Cable length (m)	Sensor I/O Connector model number
M12 Smartclick Connector Straight type  Right-angle type 	PVC robot cable	6 dia.	Straight	2	**XS5F-D421-D80-F**
				5	**XS5F-D421-G80-F**
			Right-angle	2	**XS5F-D422-D80-F**
				5	**XS5F-D422-G80-F**

Round Water-resistant Connectors XS2 serie

Appearance	Cable specification	Cable diameter (mm)	Cable connection direction	Cable length (m)	Sensor I/O Connector model number
M12 Screw Connector Straight type  Right-angle type 	PVC robot cable	6 dia.	Straight	2	**XS2F-D421-D80-F**
				5	**XS2F-D421-G80-F**
			Right-angle	2	**XS2F-D422-D80-F**
				5	**XS2F-D422-G80-F**

Note: 1. The XS5W/XS2W (Socket and Plug on Cable Ends) are also available. Refer to XS5/XS2 on your OMRON website for details.
2. The connectors will not rotate after they are connected.
3. The cable is fixed at an angle of 180° from the sensor emitter/receiver surface.

Mounting Brackets

For E3AS-HF series **[Refer to *Dimensions* on page 33]**

A Mounting Bracket is not enclosed with the Sensor. Order a Mounting Bracket separately if required.

Appearance	Model	Pre-wired	M12 Pre-wired Smartclick Connector	M12 Connector (horizontal)	M12 Connector (vertical)
L-shaped Mounting Bracket (180°) 	**E39-L245**	Yes	Yes	Yes	---
L-shaped Mounting Bracket (360°) 	**E39-L255**	Yes	Yes	Yes	---
Flexible Mounting Bracket *1 	**E39-L264**	Yes	Yes	Yes	Yes
Post 50 mm 	**E39-L262**	Yes	Yes	Yes	---
Post 100 mm 	**E39-L263**	Yes	Yes	Yes	Yes
Air Blow Unit *2, *3 	**E39-E17**	Yes	Yes	Yes	Yes
Front Protection Cover 	**E39-E20**	Yes	Yes	Yes	Yes

⁎1. The Flexible Mounting Bracket is not provided with a Post (E39-L262/E39-L263). It must be ordered separately.
⁎2. When using the Air Blow Unit (E39-E17), use the L-shaped Mounting Bracket (E39-L245).
⁎3. The tube for air is not included.

Ratings and Specifications

Item		Model		
Sensing method		TOF (Time of flight)		
Type		Spot beam type	Diffused beam type	
Model	NPN Output	E3AS-HF6000SMN□	E3AS-HF6000DMN□	
Item	PNP Output	E3AS-HF6000SMT□	E3AS-HF6000DMT□	
Sensing distance		50 to 6,000 mm		
Beam size		Variable (Refer to diagram on page 20)	Variable (Refer to diagram on page 20)	
Light source (wavelength)		Red laser (660 nm)		
Power supply voltage		10 to 30 VDC, (including ripple (p-p) 10%), Class2		
Consumption current *1		65 mA max. (when power voltage is 24 V), 155 mA max. (when power voltage is 10 V). Note: 125 max. at environment below the freezing point (when power voltage is 24 V)		
Control output		Load power supply voltage 10 to 30 VDC (Class2), Load current 100 mA max. each output (total of 2 outputs is 200 mA max.) Residual voltage (Load current 10 mA max.: 1 VDC max., Load current 10 to 100 mA: 2 VDC max.) Open collector output type (Depends on the NPN/PNP output type) NO/ NC selectable		
Current output		4 to 20 mA, maximum load resistance 500 Ω		
External input		Laser OFF / Teaching / Zero reset selectable NPN ON time: 0 V short-circuit or 1.5 V or less (Outflow current: 1 mA or less) OFF time: Power supply voltage short-circuit or open PNP ON time: Power supply voltage short-circuit or within power supply voltage - 1.5 V (Sink current: 1 mA or less) OFF time: 0 V short-circuit or open		
Protection circuits		Reversed power polarity protection, Output short-circuit protection and Output reverse polarity protection		
Indicator		OLED Display (White), Power/Communication indicator (Green), Operation indicator (Orange), and Bottom indicator (Green, Orange)		
Response time		2 ms / 10 ms / 50 ms / 200 ms selectable		
Mutual interference prevention		Auto setting (Manual setting is also possible: up to 4 units)		
Ambient illumination		Incandescent lamp / Sunlight: 100,000 lx max.		
Ambient temperature		Operating: -30 to 55°C (with no icing or condensation) *2, Storage: -30 to 70°C (with no icing or condensation) Note: The UL temperature rating for M12 Pre-wired Smartclick Connector Models is -25 to 55°C.		
Ambient humidity		Operating: 35 to 85%, Storage: 35 to 95%RH (with no condensation)		
Insulation resistance		20 MΩ min. at 500 VDC		
Dielectric strength		1,000 VAC at 50 / 60 Hz for 1 min		
Vibration resistance		10 to 55 Hz, 1.5-mm double amplitude for 2 hours each in X, Y, and Z directions		
Shock resistance		500 m/s^2 for 3 times each in X, Y, and Z directions		
Enclosure ratings		IP67 (IEC60529), IP69K (ISO20653), IP67G (JIS C 0920 Annex 1) *3		
Weight (packed state/Sensor only)	Pre-wired (2 m)	Approx. 280 g/approx. 167 g		
	M12 Connector (horizontal/vertical)	Approx. 223 g/approx. 114 g		
	M12 Pre-wired Smartclick Connector (0.3 m)	Approx. 237 g/approx. 128 g		
Material	Case	Aluminum die cast (Chrome plating)		
	Cover	SUS304		
	Indicator	Polyethersulfone (PES)		
	Lens cover and Display	Methacrylic resin (PMMA), Antifouling coating (Lens cover)		
IO-Link Communication specifications	IO-Link specification	Ver. 1.1		
	Baud rate	COM3: 230.4 kbps		
	Data length	PD size: 4 bytes, OD size: 2 byte (M-sequence type: TYPE_2_V)		
	Minimum cycle time	COM3: 1.2 ms		
	Device profile	Smart Sensor Profile (SSP4.1.1) Identification and Diagnosis (I&D)		
Conformity standards		UL/CSA Certification, CE Marking, RCM, UKCA, Various laser standards *4, Ecolab, RoHs2, WEEE2		
MTTFd		340 year		
Accessories		Instruction manual, compliance sheet, index list (attached for IO-Link type only), FDA certification label Note: Mounting Brackets must be ordered separately.		

Note: 1. Altitude: Up to 2000 m, Pollution degree: 3, Enclosure type: Type1.

✻1. Excluding load current.

✻2. When the product is used in an environment with a temperature of -10°C or less, a warm-up time (10 min maximum) is required.

✻3. JIS C 0920 Annex 1 describes the IP67G rating oil and the oil resistance of the product has been assessed by the document. Please visit the website of the Japanese Industrial Standards for more informarion. (https://www.jisc.go.jp/index.html)

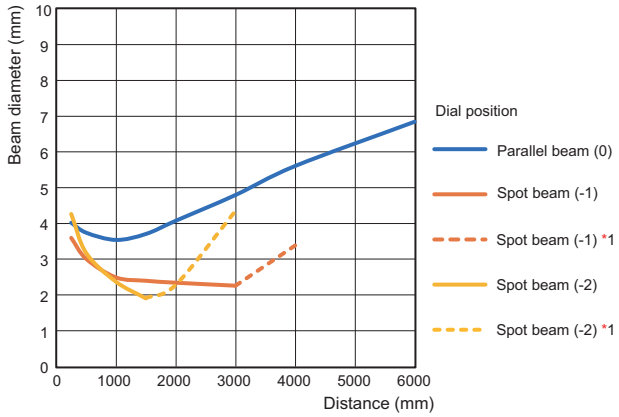
✻4. For details, refer to the *To safely use laser products* on page 28.

Engineering Data (Reference Value)

Beam Diameter vs. Sensing Distance

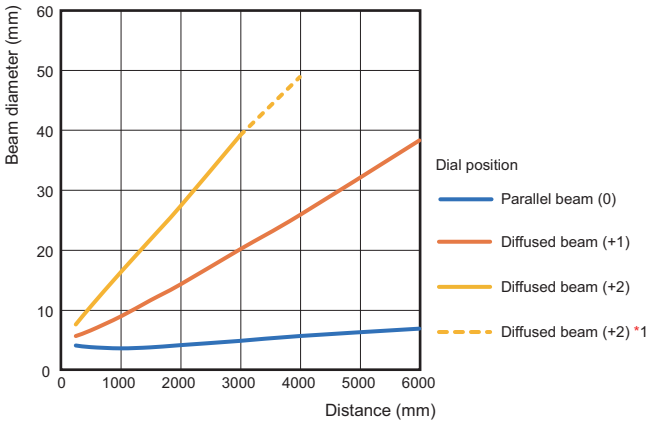
Spot beam type

E3AS-HF6000S□□



Diffused beam type

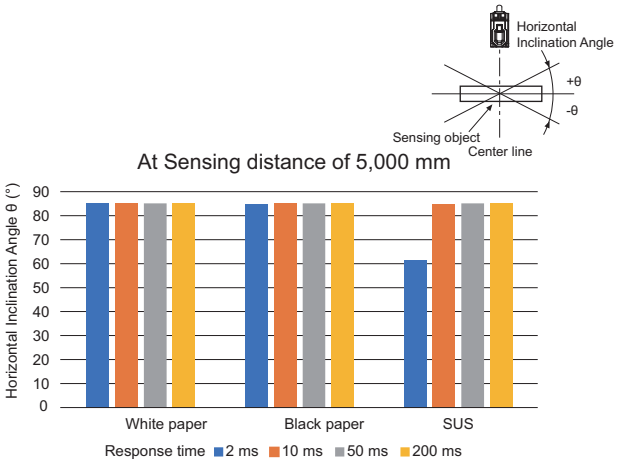
E3AS-HF6000D□□

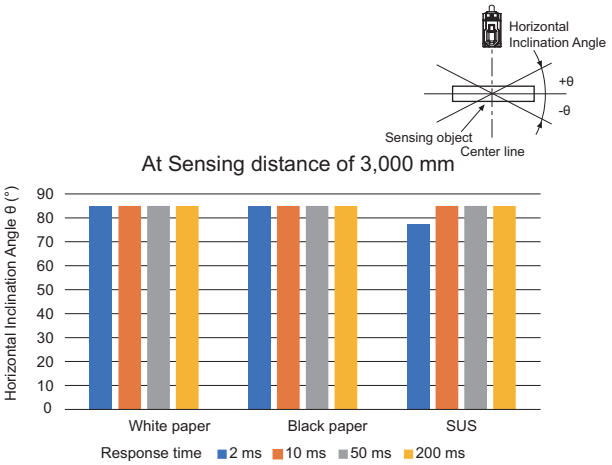


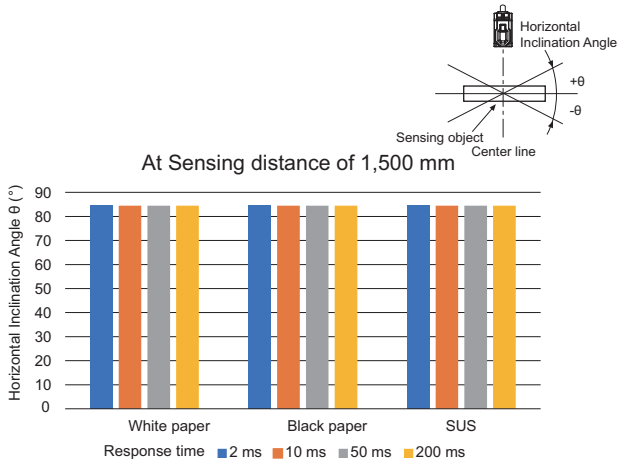
✻1. Please refrain from using the product within the dotted line area.

Sensing Object Angle Characteristics

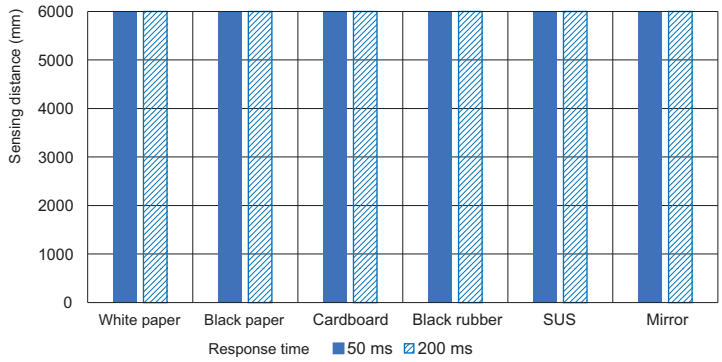
Reflectance: 90% (White paper)/10% (Black paper)







Sensing Distance vs. Sensing Object Material

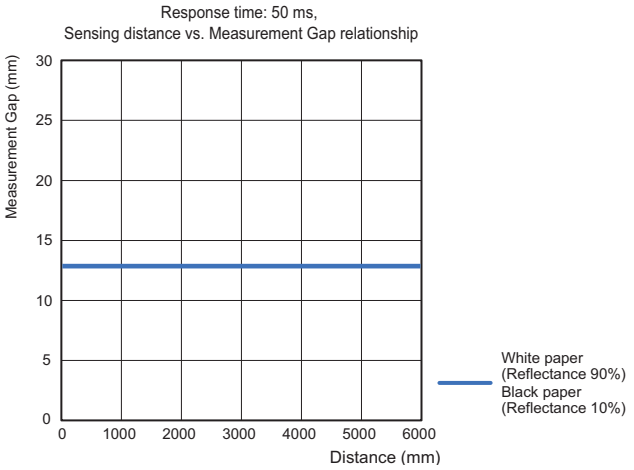


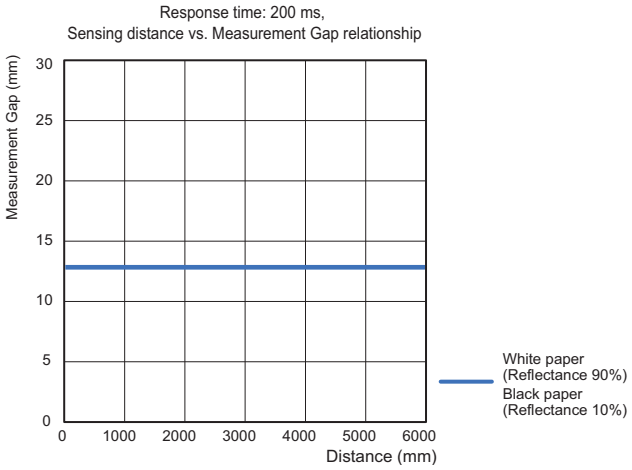
Repeat accuracy

		White paper (Reflectance 90%)				Gray paper (Reflectance 18%)				Black paper (Reflectance 10%)			
		Response time (ms)				Response time (ms)				Response time (ms)			
		2	10	50	200	2	10	50	200	2	10	50	200
Sensing distance (mm)	60	±4	±3	±1	±1	±5	±2	±1	±1	±7	±3	±1	±1
	200	±4	±1	±1	±1	±5	±2	±1	±1	±4	±1	±1	±1
	1000	±4	±2	±1	±1	±4	±1	±1	±1	±5	±2	±1	±1
	2000	±4	±2	±1	±1	±5	±3	±2	±1	±6	±4	±1	±1
	3000	±4	±2	±1	±1	±6	±3	±2	±1	±9	±5	±3	±1
	5000	±6	±2	±1	±1	±17	±6	±2	±1	±24	±8	±4	±1
	6000	±7	±3	±1	±1	±21	±7	±3	±1	±31	±10	±4	±2

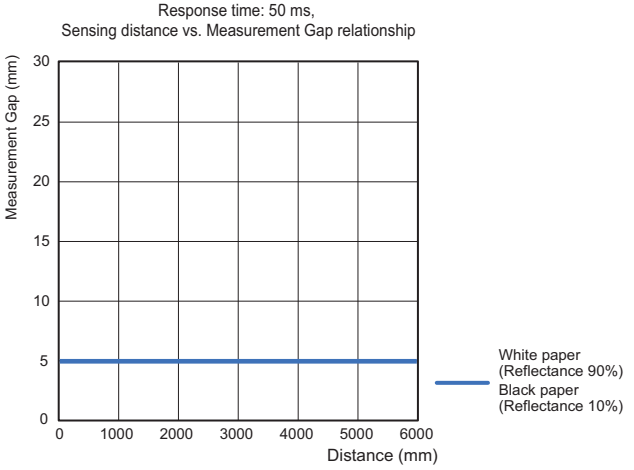
Minimum Measurement Gap vs. Distance

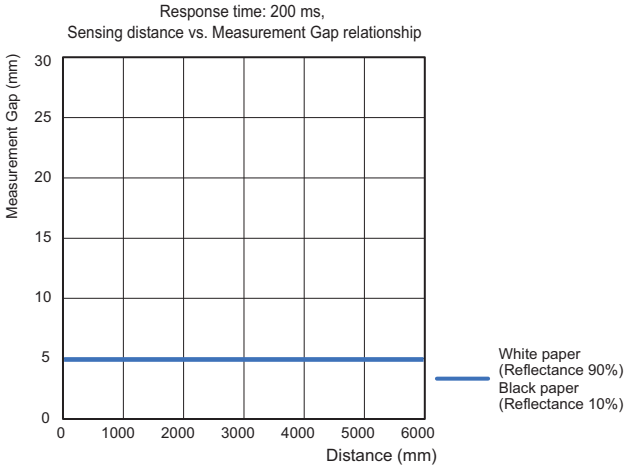
Hysteresis: Auto setting (10 mm)





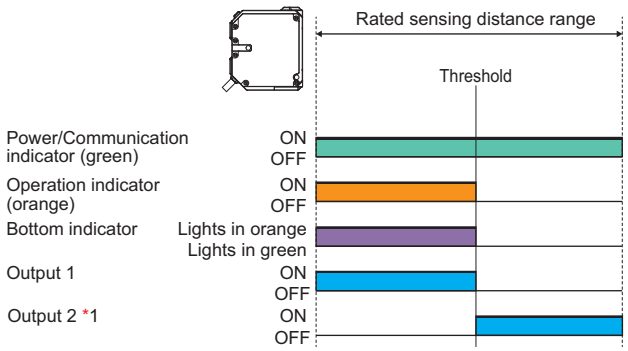
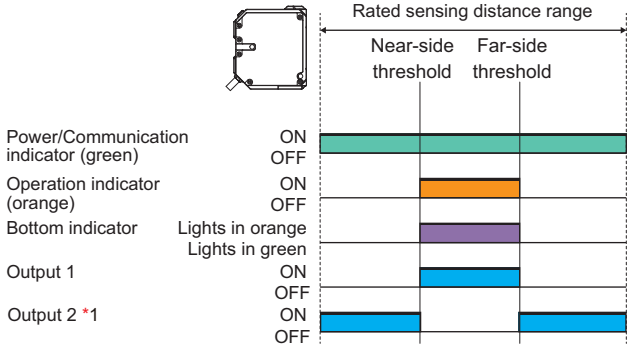
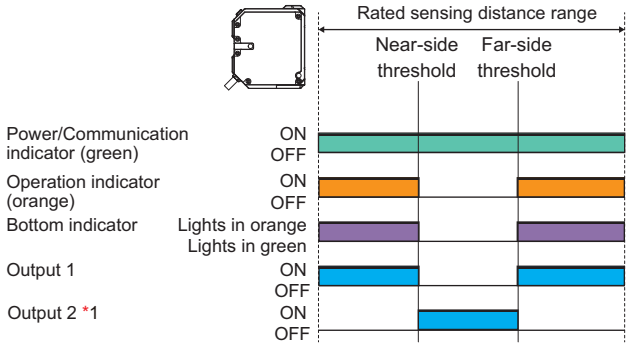
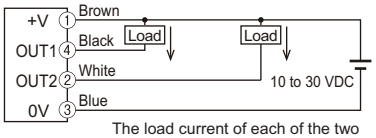
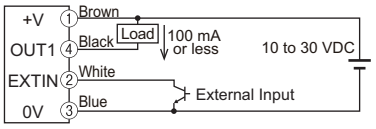
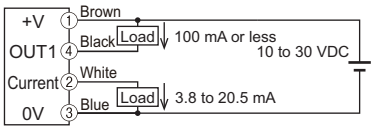
Hysteresis: Manual setting (3 mm)





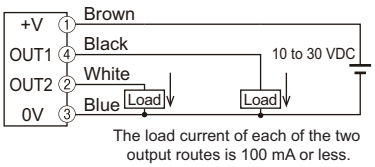
I/O Circuit Diagrams/ Timing Charts

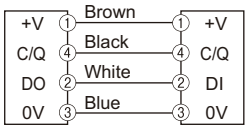
NPN Output

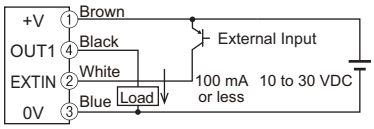
Model	Timing chart	Output circuit
E3AS-HF6000DMN□ E3AS-HF6000SMN□	**Single Point Mode [Single]**  **Window BGS mode [Window BGS]**  **Window FGS mode [Window FGS]** 	**Using Pin2 (white wire) as output**  The load current of each of the two output routes is 100 mA or less. **Using Pin2 (white wire) as external input**  **External Input** / **NPN** **ON time**: 0 V short-circuit or 1.5 V or less (Outflow current: 1 mA or less) **OFF time**: Power supply voltage short-circuit or open **Using Pin2 (white wire) as current**  Connector Pin Arrangement M12 Pre-wired Smartclick Connector M12 Connector 

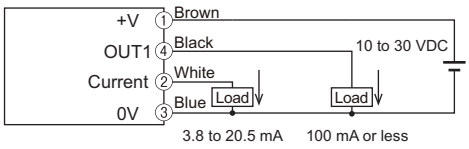
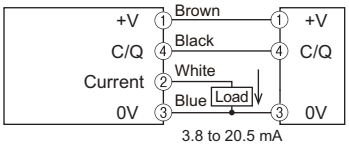
∗1. The initial value of output 2 is reverse of output 1.

PNP Output

<table>
<tr><th rowspan="2">Model</th><th colspan="2">Output circuit</th></tr>
<tr><th>Standard I/O mode (SIO mode) *1</th><th>IO-Link Communication mode (COM mode) *2</th></tr>
<tr><td rowspan="3">E3AS-HF6000DMT□
E3AS-HF6000SMT□</td><td>Using Pin2 (white wire) as output
 

The load current of each of the two output routes is 100 mA or less.</td><td>Using Pin2 (white wire) as output
 

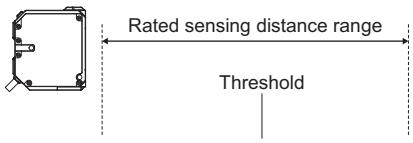
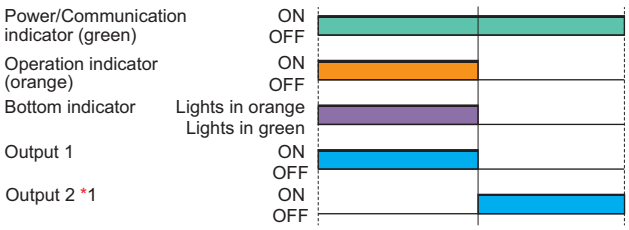
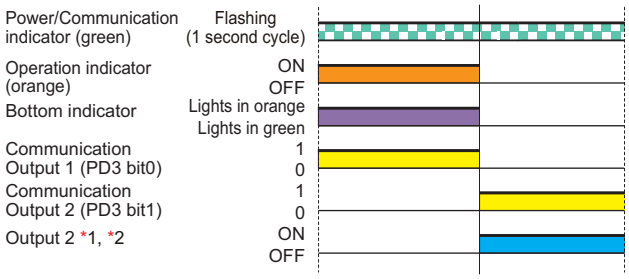
IO-Link Master</td></tr>
<tr><td>Using Pin2 (white wire) as external input
 

<table>
<tr><th>External Input</th><th>PNP</th></tr>
<tr><td>ON time</td><td>Power supply voltage short-circuit or within power supply voltage - 1.5 V (Sink current: 1 mA or less)</td></tr>
<tr><td>OFF time</td><td>0 V short-circuit or open</td></tr>
</table></td><td>---</td></tr>
<tr><td>Using Pin2 (white wire) as current *3
 
</td><td>Using Pin2 (white wire) as current *3
 

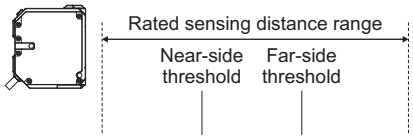
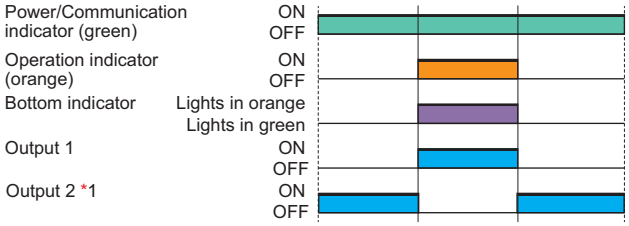
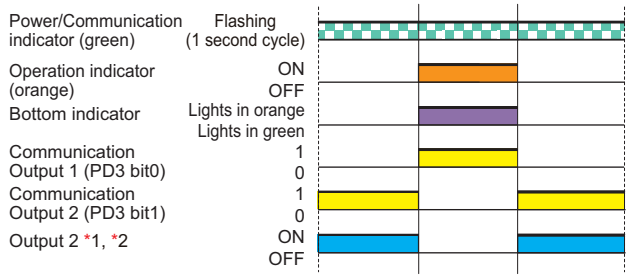
IO-Link Master</td></tr>
<tr><td colspan="2">Connector Pin Arrangement
M12 Pre-wired Smartclick Connector
M12 Connector
 
</td></tr>
</table>

***1.** Standard I/O mode is used as PNP ON/OFF output.
***2.** IO-Link Communication mode is used for communications with the IO-Link Master. C/Q performs IO-Link communications. Sensor output DO performs ON/OFF output.
***3.** Switch Pin2 setting to "Current" before wiring. There is a risk of a load short-circuit error.

Single Point Mode [Single]

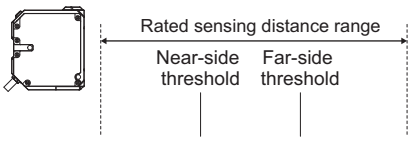
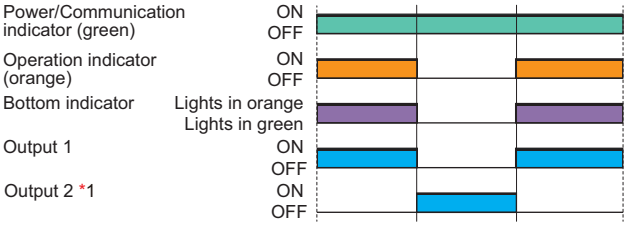
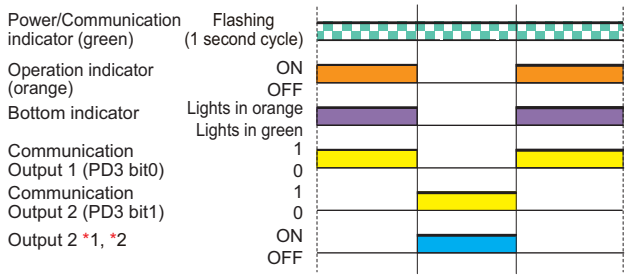
	Timing charts
Output mode	
Standard I/O mode (SIO mode)	
IO-Link Communication mode (COM mode)	

Window BGS mode [Window BGS]

	Timing charts
Output mode	
Standard I/O mode (SIO mode)	
IO-Link Communication mode (COM mode)	

✻1. The initial value of output 2 is reverse of output 1.
✻2. In IO-Link mode, output 2 can also be used in addition to communication output.

Window FGS mode [Window FGS]

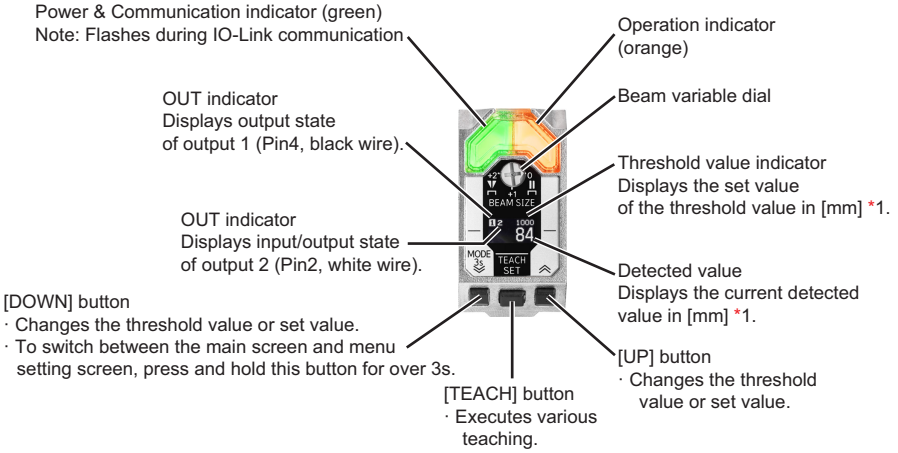
	Timing charts
Output mode	
Standard I/O mode (SIO mode)	
IO-Link Communication mode (COM mode)	

∗1. The initial value of output 2 is reverse of output 1.
∗2. In IO-Link mode, output 2 can also be used in addition to communication output.

Refer to the index list for the default settings at time of shipment from factory.
Please contact your OMRON sales representative regarding the IO-Link setup file (IODD file).

Note: Shown above are the factory settings.

Nomenclature



Bottom indicator (green/orange)
Note: The bottom indicator is linked with the operation indicator, and lights in either green or orange.

∗1. Reference value

Safety Precautions

Be sure to read the precautions for all models in the website at: http://www.ia.omron.com/.

Warning Indications

⚠ WARNING	**Warning level** Indicates a potentially hazardous situation which, if not avoided, will result in minor or moderate injury, or may result in serious injury or death. Additionally there may be significant property damage.
⚠ CAUTION	**Caution level** Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury or in property damage.
Precautions for Safe Use	Supplementary comments on what to do or avoid doing, to use the product safely.
Precautions for Correct Use	Supplementary comments on what to do or avoid doing, to prevent failure to operate, malfunction or undesirable effect on product performance.

Meaning of Product Safety Symbols

	**General prohibition** Indicates the instructions of unspecified prohibited action
	**Caution, explosion** Indicates the possibility of explosion under specific conditions
	**General caution** Indicates unspecified general alert.
	**Laser Caution** Indicates information related to laser safety
	**Disassembly prohibited** Prohibit the disassembly of a device because of the possibility of injuries due to electric shock.

⚠ WARNING

This product is not designed or rated for ensuring safety of persons either directly or indirectly.
Do not use it for such purposes.

Never use this product with AC power supply.
Also, do not use the product with voltage in excess of the rated voltage.
These may result in burst or fire.

⚠ CAUTION

Its component may be damaged and/or degree of protection may be degraded.
Please do not apply high pressure water intensively at one place during cleaning.

When the sensor is connected to a device, changing the output by configuring the sensor settings may cause the device to malfunction. Stop the device during sensor setup.

Do not use the product in a location where the light receiving surface will be exposed to direct sunlight or strong ambient light.

To safely use laser products

⚠ WARNING

Do not expose your eyes to the laser beam either directly or indirectly (i.e., after reflection from a mirror or shiny surface). The laser beam has a high power density and exposure may result in loss of sight.

Do not disassemble this product. Doing so may cause exposure to the built-in light source which can damage eyes and skin. Never disassemble it.

Laser safety measures for laser equipment are stipulated by the country of use. Follow the instructions described below categorized in four cases.

1. Usage in Japan

The JIS C6802:2018 standard stipulates the safety precautions that users must take according to the class of the laser product. This product is classified into CLASS 1 LASER PRODUCT defined by this standard.

2. Usage in U.S.

This product is subjected to the U.S. FDA (Food and Drug Administration) laser regulations. This product is classified into CLASS 1 LASER PRODUCT by the IEC 60825-1:2014 standard according to the regulations of Laser Notice No.56 of the FDA standard. This product is already reported to CDRH (Center for Devices and Radiological Health).

Accession Number: 2420801-000

When using a device equipped with the product in the U.S., attach an FDA certification label near the sensor mounted on customer equipment.

FDA certification label

This laser product complies with
21 CFR 1040. 10 and 1040. 11 except for
conformance with IEC 60825-1 Ed. 3., as described
in Laser Notice No. 56, dated May 8, 2019.
OMRON Corporation
Shiokoji Horikawa,Shimogyo-ku,
Kyoto 600-8530 JAPAN
Place of manufacture:
Shanghai Factory,OMRON Corp.
Manufactured in

3. Usage in China

This product is classified into CLASS 1 LASER PRODUCT by the GB7247.1:2012 (IEC60825-1:2007) standard.

4. Usage in countries other than U.S. and China

This product is classified into CLASS 1 LASER PRODUCT by the IEC60825-1:2014/EN60825-1:2014+A11:2021 standard.

Precautions for Safe Use

The following precautions must be observed to ensure safe operation.

1. Do not reverse connection of DC power supply polarity.
2. Do not short the load.
3. Insulate unused input/output wires individually.
4. Use in an explosion-proof area is not possible. Do not use the product in environments where flammable or explosive gases are present.
5. Do not dismantle, modify, or repair the product.
6. Do not touch the metal surface with your bare hands when the temperature is low. Touching the surface may result in a cold burn.
7. Burn injury may occur. The product surface temperature rises depending on application conditions, such as the ambient temperature and the power supply voltage. Attention must be paid during operation or cleaning.
8. To prevent an accident due to the product falling, wear appropriate protective gear when performing installation work in a high location.
9. Do not use the product while the case is damaged.
10. Do not use the product while the cord is pinched.
11. In the event that you notice an abnormality, immediately stop use, turn off the power, and contact your Omron representative.
12. There is a risk of damage to the current input device or burnout of the load resistor. When using Pin2 (white wire) as current output, switch the Pin2 setting to "Current" in advance and then connect the current input device or load resistor.

Precautions for Correct Use

1. Do not hit the product using a hammer for installation.
2. The product must be installed with the specified torque or less. For the M12 connector, the proper tightening torque is from 0.39 to 0.49 N·m.
   In the case of the Pre-wired M12 Smartclick Connector, firmly tighten the connector to the mating complete mark position by hand.
3. The base of the connector does not rotate. Do not try to forcibly turn it.
4. Do not use the product in any atmosphere or environment that exceeds the ratings.
5. Output pulses may occur when the power supply is turned OFF. We recommend that you turn OFF the power supply to the load or load line first.
6. Use an extension cable less than 100 m long for Standard I/O mode and less than 20 m for IO-Link Communication mode.
7. Do not use the product in a location with an intense electric field or ferromagnetic field.
8. Do not pull on the cable with excessive strength.
9. Be sure to turn off the power supply when connecting or disconnecting the cable.
10. Wait for at least 1.5 s after turning on the product's power.
11. When the product is used at an ambient temperature of -10°C or less, a warm-up time of 10 minutes maximum is required. The output remains OFF and does not change during warming up.
12. The product is rated as IP67 but please avoid using the product underwater, under rain, and outdoors.
13. If the Sensor wiring is placed in the same conduits or ducts as high-voltage or high-power lines, inductive noise may cause malfunction or damage. Wire the cables separately or use a shielded cable.
14. Do not use the product in locations subject to direct sunlight.
15. Please assess the safety beforehand when using the product in chemicals and/or oil environments.
16. Do not use the product where humidity is high and dew condensation may occur.
17. Do not use the product where corrosive gases may exist.
18. If high-pressure washing water and so on hits the button, it might lead to malfunctioning. So, consider use of the key lock function.
19. Do not apply high-pressure washing water directly to the sensor's light emitting / receiving surface from a short distance. As the antifouling feature may be impaired, keep a sufficient distance from the light emitting / receiving surface.
20. Do not use the product at a location subject to shock or vibration.
21. To use a commercially available switching regulator, FG (frame ground) must be grounded.
22. Do not use organic solvents (e.g. paint thinner and alcohol) for cleaning. Otherwise optical properties and protective structure may deteriorate.
23. Be sure to check the influence caused by surrounding environments such as background objects and LED lighting before using the product.
24. Do not exceed 100,000 writing operations of the EEPROM (non-volatile memory). Setting information is written to the EEPROM when a threshold value change, teaching, or zero reset is executed.
25.  Please dispose in accordance with applicable regulations.
26. Perform the beam size adjustment operation by using a screwdriver of the appropriate size to rotate the screw with a force of 0.06 N/m or less. Do not use the product at other than a selectable position.
27. When installing the product, install it so that the laser beam of another sensor does not directly enter the light receiving lens. This product is equipped with a mutual interference prevention function for up to 4 sensors, but a malfunction may occur if intense interference light is received.
28. For an object with a mirror or glossy surface, tilt the sensor so that specular reflection light from the object does not directly enter the receiver. This will enable more stable detection.

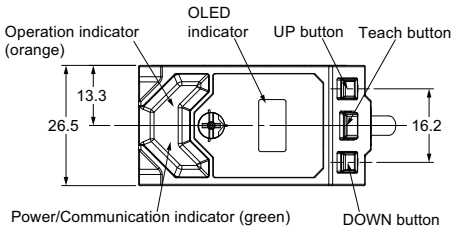
Dimensions

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

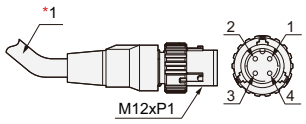
Sensors

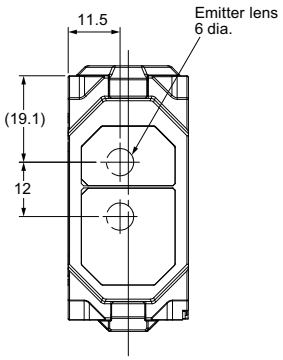
Pre-wired Models/Pre-wired Connector Models

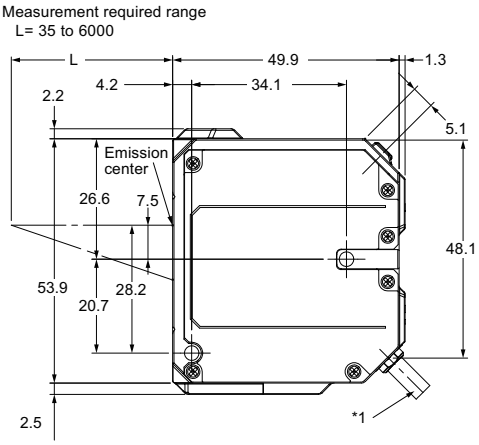
E3AS-HF6000□ (-M1TJ)



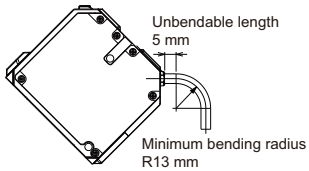
M12 Pre-wired Smartclick Connector Models E3AS-HF6000□-M1TJ

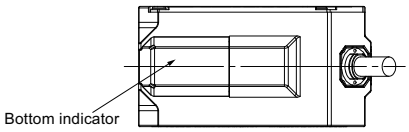






Minimum bending radius/unbendable length of cord



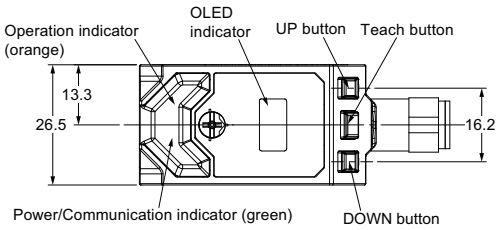


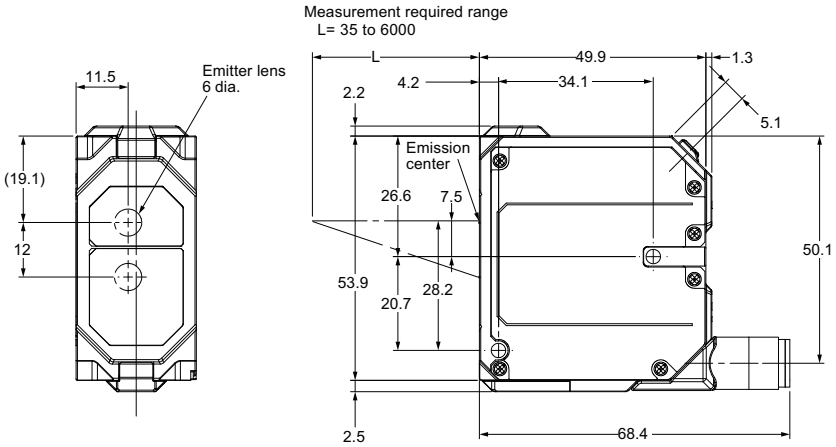
✻1. Specification of the cable

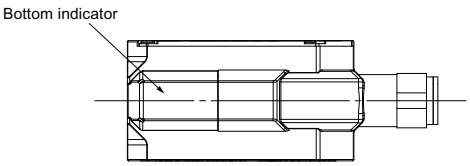
Model	Specification	Number of cores	Length
E3AS-HF6000□ 2M	PVC Cable: 4.25 dia. Conductor cross section: 0.3 mm^2 Insulator diameter: 1.05 mm	1. Brown: +V 2. White: Output 2 3. Blue: 0V 4. Black: Output 1	2 M
E3AS-HF6000□ 5M			5 M
E3AS-HF6000□-M1TJ 0.3M		PIN No.1: +V PIN No.2: Output 2 PIN No.3: 0V PIN No.4: Output 1	0.3 M

M12 Connector (horizontal)

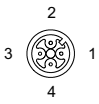
E3AS-HF6000□ M1H





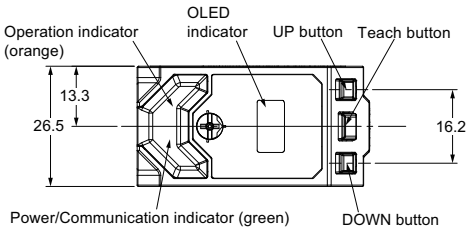


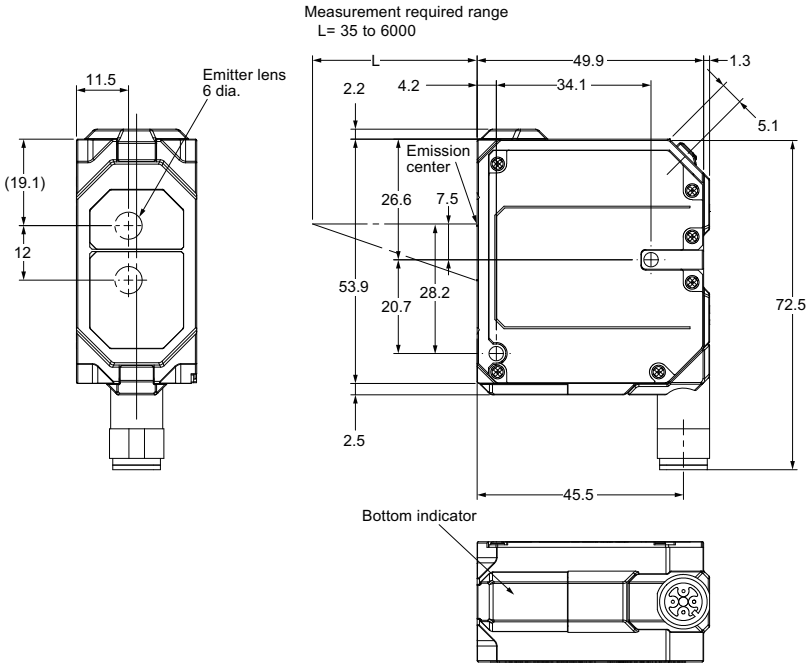
PIN No.	Connection
1	+V
2	OUTPUT 2
3	0V
4	OUTPUT 1



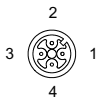
M12 Connector (vertical)

E3AS-HF6000□ M1V





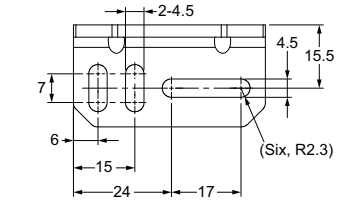
PIN No.	Connection
1	+V
2	OUTPUT 2
3	0V
4	OUTPUT 1

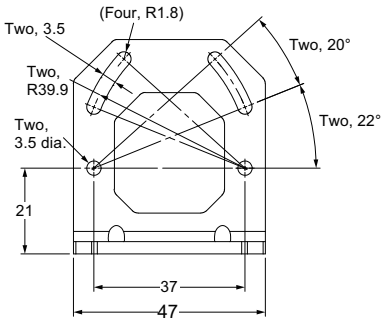


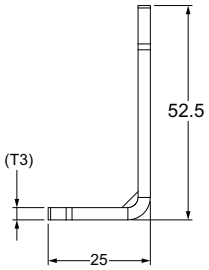
Accessories (Sold Separately)

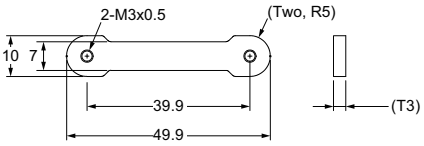
Mounting Brackets

E39-L245

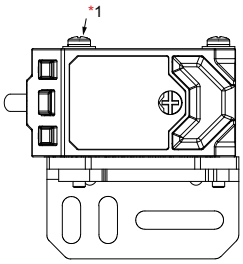


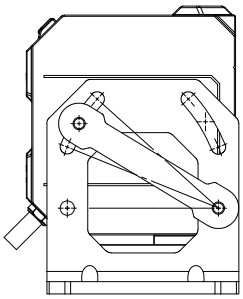


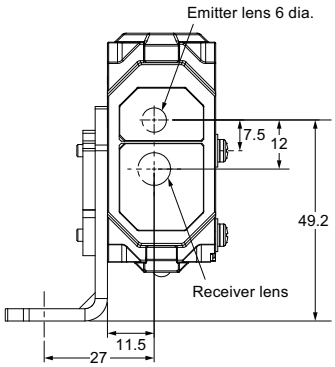


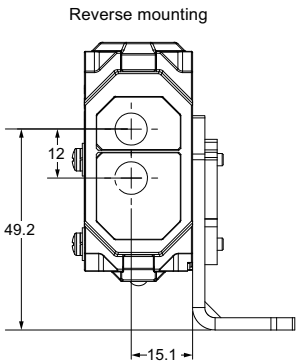


Photoelectric Sensor Accessory are installed
(Example of E3AS-HF)





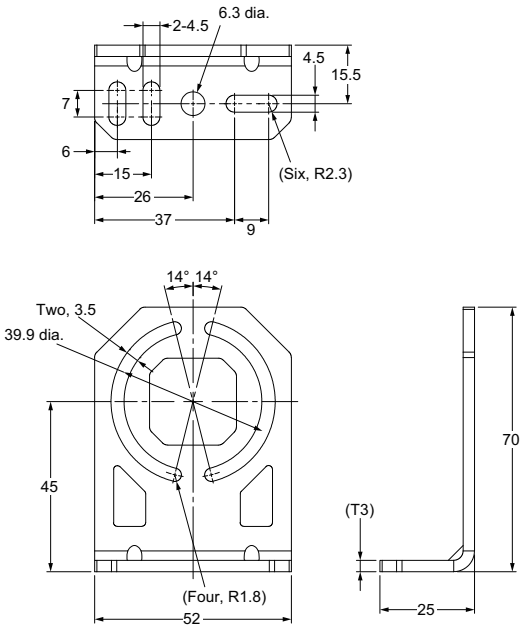


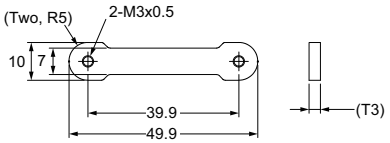


Material: Stainless steel (SUS304)

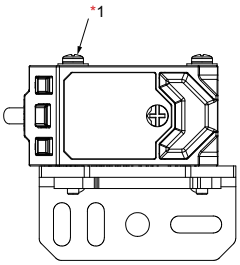
✻1. Accessories
2-M3-L35 Cross Recessed Pan Head Screws (Attached to SW+JIS W)
Material: Stainless steel (SUSXM7)

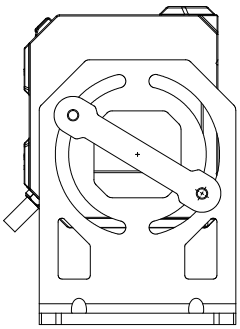
E39-L255

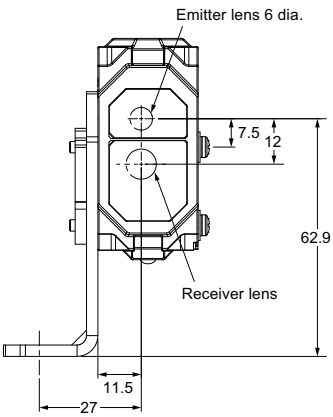


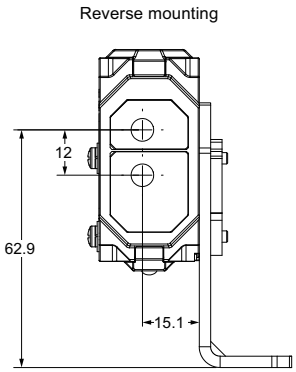


Photoelectric Sensor Accessory are installed
(Example of E3AS-HF)







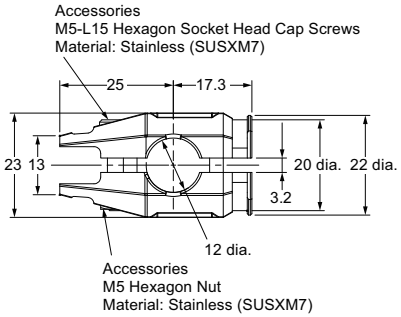


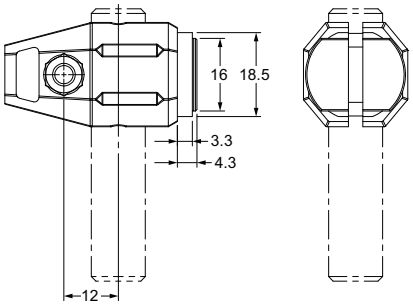
Material: Stainless steel (SUS304)

***1.** Accessories
2-M3-L35 Cross Recessed Pan Head Screws (Attached to SW+JIS W)
Material: Stainless steel (SUSXM7)

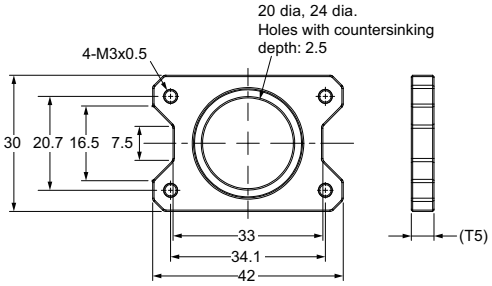
Flexible Mounting Bracket

E39-L264



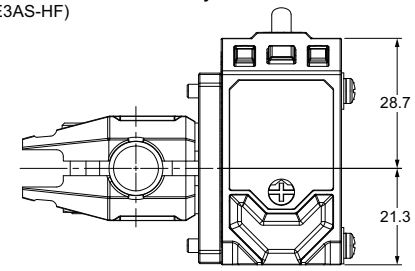


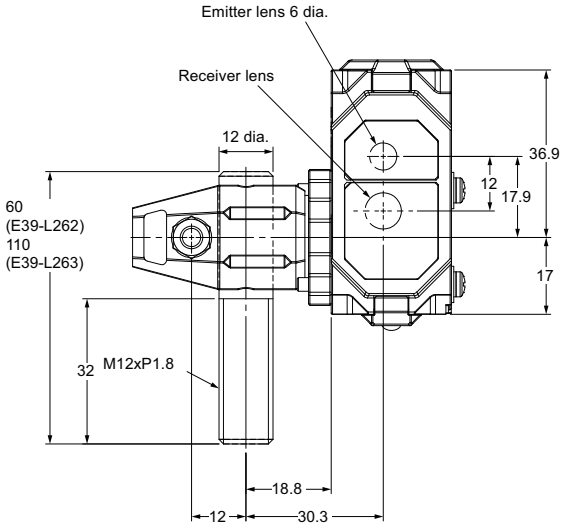
Material: ZDC2
Finished: NI Plaiting

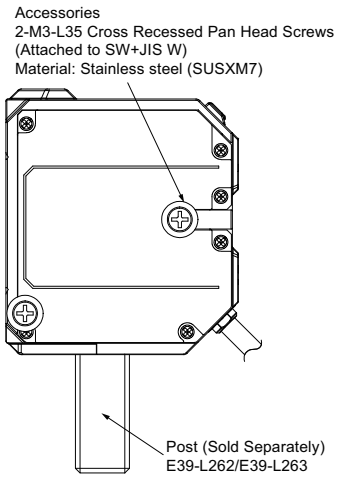


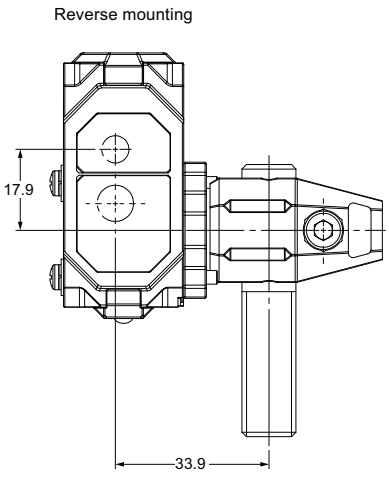
Material: Stainless steel (SUS304)

Photoelectric Sensor Accessory are installed
(Example of E3AS-HF)



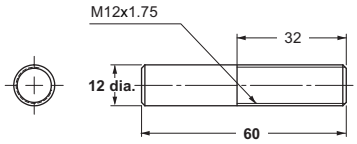


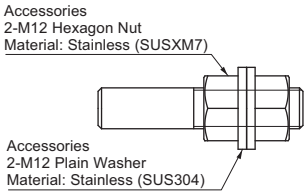




Post

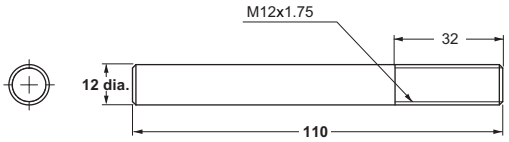
50 mm
E39-L262

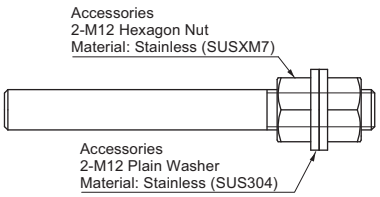




Material: Stainless steel (SUS304)

100 mm
E39-L263

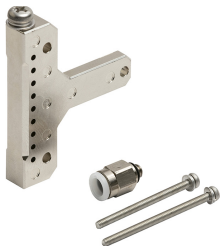


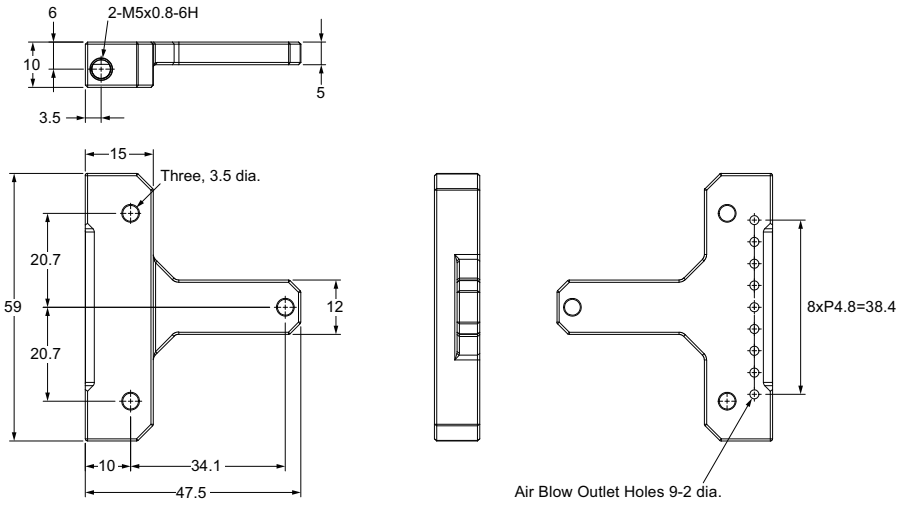


Material: Stainless steel (SUS304)

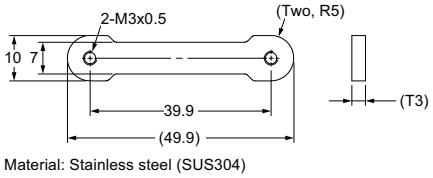
Air Blow Unit

E39-E17

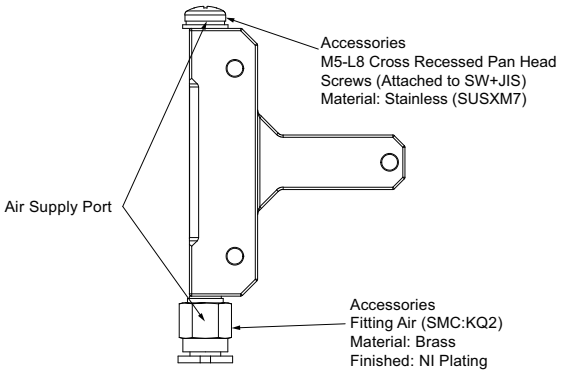




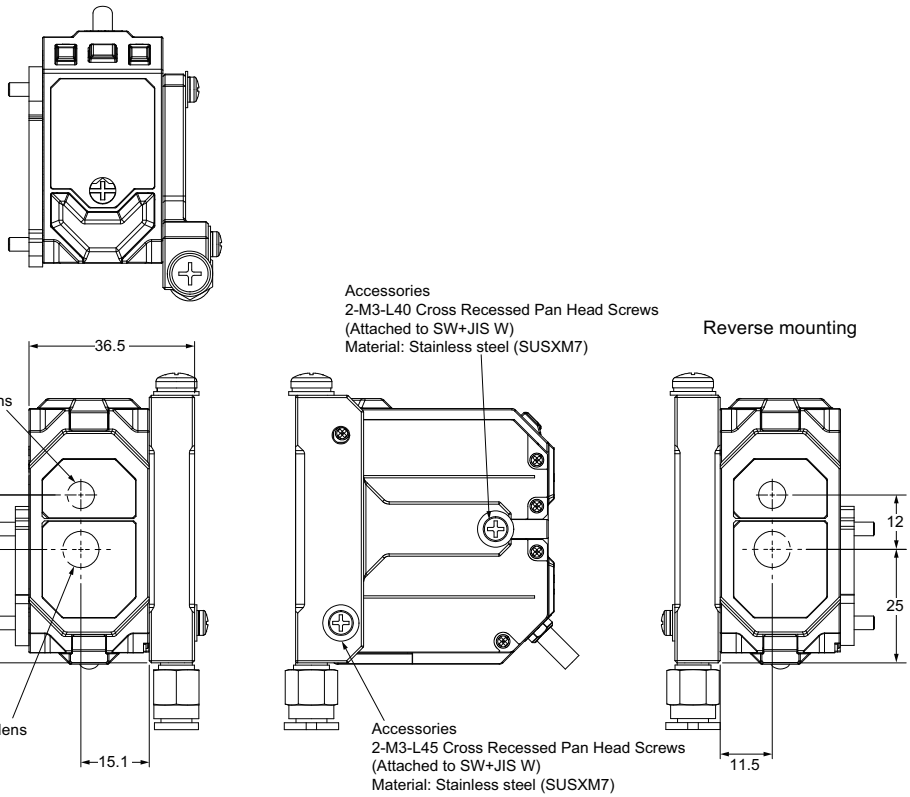
Material: ZDC2
Finished: NI Plaiting



Material: Stainless steel (SUS304)

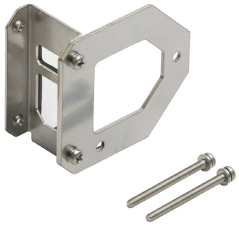


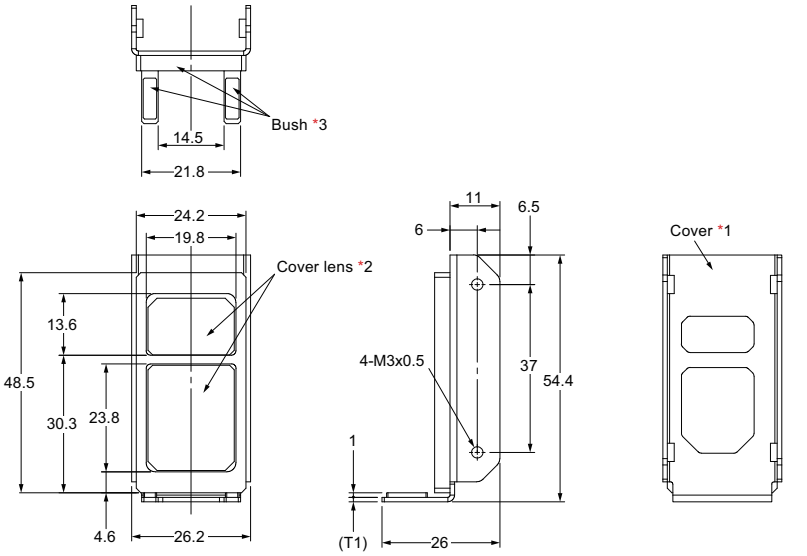
Photoelectric Sensor Accessory are installed
(Example of E3AS-HF)



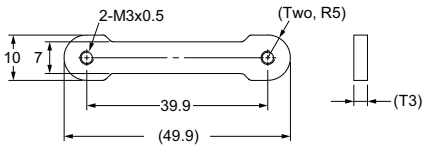
Front Protection Cover

E39-E20

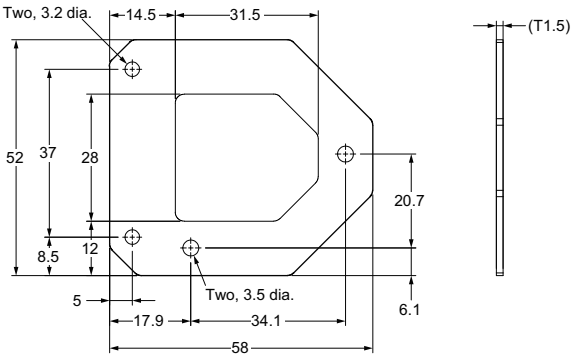




*1. Material: Stainless steel (SUS304)
*2. Material: PC
*3. Material: NBR

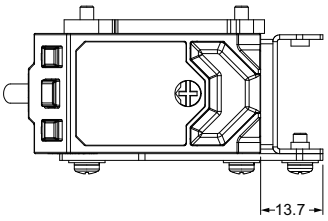


Material: Stainless steel (SUS304)



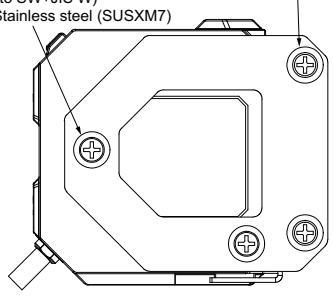
Material: Stainless steel (SUS304)

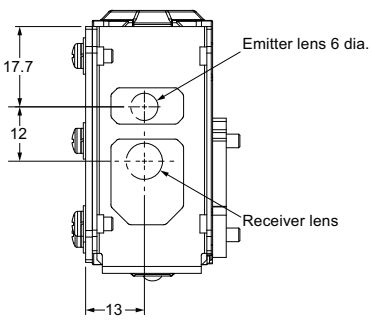
Photoelectric Sensor Accessory are installed
(Example of E3AS-HF)



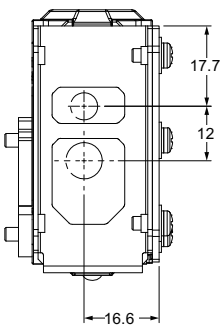
Accessories
2-M3-L7 Cross Recessed Pan Head Screws
(Attached to SW+JIS W)
Material: Stainless steel (SUSXM7)

Accessories
2-M3-L35 Cross Recessed Pan Head Screws
(Attached to SW+JIS W)
Material: Stainless steel (SUSXM7)





Reverse mounting



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