

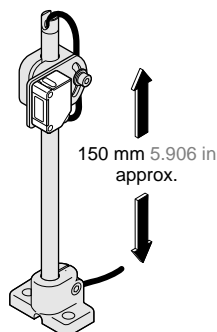
# MS-AJ SERIES

## Universal Sensor Mounting Stand

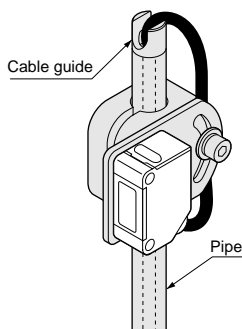


Simple mounting and easy adjustment with versatile mounting stand

### Flexible height adjustment



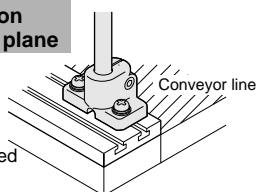
### Cable can be neatly threaded into pipe



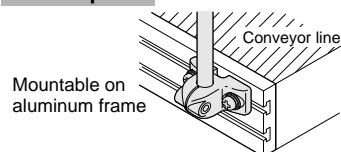
Note: Do not thread the fiber cable into the pipe in case of **MS-AJ□-F** (assembly for fiber).

### Mountable on vertical or horizontal plane

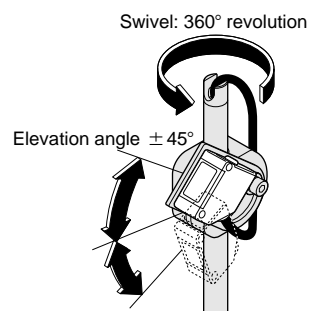
#### Mounting on horizontal plane



#### Mounting on vertical plane



### Flexible angle adjustment



Note: The elevation angle is  $\pm 20^\circ$  for **MS-AJ□-F** (assembly for fiber).

### Eight models

#### MS-AJ□ (Basic assembly)

It is used to mount **CX-400**, **CX-20**, **CX-30**, **EQ-20**, **EX-40** and **EZ-10** series sensors, and the **RF-210** reflector.



MS-AJ1



MS-AJ2

#### MS-AJ□-A (Lateral arm assembly)

A lateral arm is added to the **MS-AJ□** basic assembly. Sensing is possible from above an assembly line.



MS-AJ1-A MS-AJ2-A

#### MS-AJ□-M (Assembly for reflector)

The **MS-AJ□** basic assembly is modified to mount a reflector. It can be used for **RF-220** and **RF-230** reflector.



MS-AJ1-M MS-AJ2-M

#### MS-AJ□-F (Assembly for fiber)

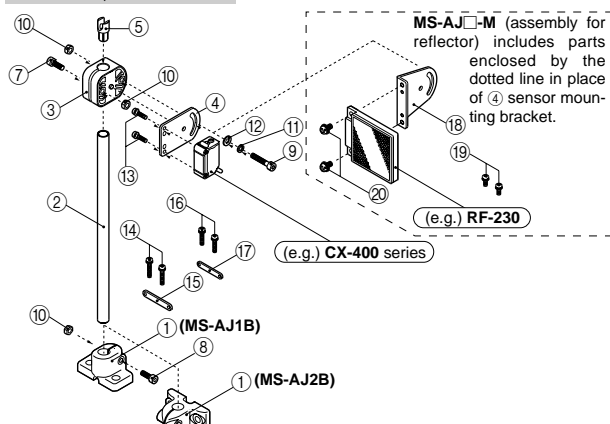
The sensor mounting bracket of **MS-AJ□-A** is replaced with a fiber mounting bracket. It can be used with **FD-L51**, **FD-L52**, **FD-L53**, **FD-L54** and **M3**, **M4** or **M6** threaded head fiber.



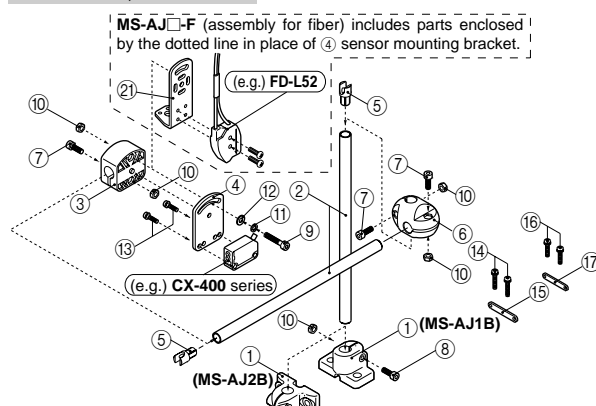
MS-AJ1-F MS-AJ2-F

## STRUCTURE

## MS-AJ□, MS-AJ□-M



## MS-AJ□-A, MS-AJ□-F



Designation	Type	Assembly sets				Components									
	Model No.	MS-AJ□ (Basic assembly)	MS-AJ□-A (Lateral arm assembly)	MS-AJ□-M (Assembly for reflector)	MS-AJ□-F (Assembly for fiber)	MS-AJS (Sensor mounting unit)	MS-AJR (Reflector mounting unit)	MS-AJ-R1 (Reflector mounting bracket)	MS-AJD (Fiber mounting unit)	MS-FD-1 (Fiber mounting bracket)	MS-AJL (Arm joint unit)	MS-AJ1B (Base unit) (Note 2)	MS-AJ2B (Base unit) (Note 2)	MS-AJG (Cable guide)	MS-AJP (Arm (Pipe))
① Base		1	1	1	1	—	—	—	—	—	—	1	1	—	—
② Arm (Pipe)		1	2	1	2	—	—	—	—	—	—	—	—	—	1
③ Attachment		1	1	1	1	1	1	—	1	—	—	—	—	—	—
④ Sensor mounting bracket		1	1	—	—	1	—	—	—	—	—	—	—	—	—
⑤ Cable guide		1	2	—	2	—	—	—	—	—	—	—	—	1	—
⑥ Arm joint		—	1	—	1	—	—	—	—	—	1	—	—	—	—
⑦ M4 (length 12 mm 0.472 in) hexagon-socket-head bolt (DriLube applied product)		1	3	1	3	1	1	—	1	—	2	—	—	—	—
⑧ M4 (length 15 mm 0.591 in) hexagon-socket-head bolt (DriLube applied product)		1	1	1	1	—	—	—	—	—	—	1	1	—	—
⑨ M4 (length 22 mm 0.866 in) hexagon-socket-head bolt (DriLube applied product)		1	1	1	1	1	1	—	1	—	—	—	—	—	—
⑩ M4 nut		3	5	3	5	2	2	—	2	—	2	1	1	—	—
⑪ M4 spring washer		1	1	1	1	1	1	—	1	—	—	—	—	—	—
⑫ M4 plain washer		1	1	1	1	1	1	—	1	—	—	—	—	—	—
⑬ M3 (length 14 mm 0.551 in) screw with washers for CX-400, CX-20, CX-30 and EZ-10 series		2	2	—	—	2	—	—	—	—	—	—	—	—	—
⑭ M3 (length 18 mm 0.709 in) screw with washers for EQ-20 series		2	2	—	—	2	—	—	—	—	—	—	—	—	—
⑮ Auxiliary mounting plate for EQ-20 series		1	1	—	—	1	—	—	—	—	—	—	—	—	—
⑯ M3 (length 16 mm 0.630 in) screw with washers for EX-40 series		2	2	—	—	2	—	—	—	—	—	—	—	—	—
⑰ Auxiliary mounting plate for EX-40 series		1	1	—	—	1	—	—	—	—	—	—	—	—	—
⑱ Reflector mounting bracket		—	—	1	—	—	1	1	—	—	—	—	—	—	—
⑲ M3 (length 8 mm 0.315 in) screw with washers for RF-220		—	—	2	—	—	2	2	—	—	—	—	—	—	—
⑳ M4 (length 8 mm 0.315 in) screw with washers for RF-230		—	—	2	—	—	2	2	—	—	—	—	—	—	—
㉑ Fiber mounting bracket		—	—	—	1	—	—	—	1	1	—	—	—	—	—

Notes: 1) The numbers shown in the table above indicate the quantities of the respective parts.

2) One MS-AJ1B, horizontal mounting type, and one MS-AJ2B, vertical mounting type, are included in each assembly set.

## ORDER GUIDE

Type		Appearance	Model No.	Applicable sensor, reflector and fiber
Basic assembly	Horizontal mounting type		MS-AJ1	CX-400 series CX-20 series CX-30 series EQ-20 series EX-40 series EZ-10 series RF-210 (Reflector)
	Vertical mounting type		MS-AJ2	
Lateral arm assembly	Horizontal mounting type		MS-AJ1-A	
	Vertical mounting type		MS-AJ2-A	
Assembly for reflector	Horizontal mounting type		MS-AJ1-M	RF-220 (Reflector) RF-230 (Reflector)
	Vertical mounting type		MS-AJ2-M	
Assembly for fiber	Horizontal mounting type		MS-AJ1-F	FD-L51 (Fiber) FD-L52 (Fiber) FD-L53 (Fiber) FD-L54 (Fiber) M3, M4 and M6 threaded head fibers
	Vertical mounting type		MS-AJ2-F	

## Individual components are also available as follows

Designation	Appearance	Model No.
Sensor mounting unit		MS-AJS
Reflector mounting unit		MS-AJR
Reflector mounting bracket		MS-AJ-R1
Fiber mounting unit		MS-AJD
Fiber mounting bracket		MS-FD-1
Arm joint unit		MS-AJL
Base unit (Horizontal mounting type)		MS-AJ1B
Base unit (Vertical mounting type)		MS-AJ2B
Cable guide		MS-AJG
Arm (Pipe)		MS-AJP

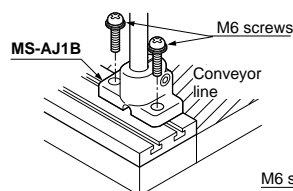
# MS-AJ

## PRECAUTIONS FOR PROPER USE

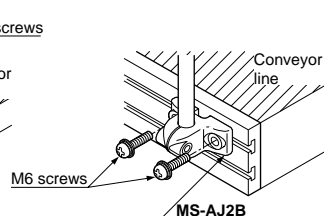
### Mounting

- To mount the universal sensor mounting stand on your equipment, use M6 screws. The tightening torque should be 2.0 N·m or less.

#### Mounting on horizontal plane

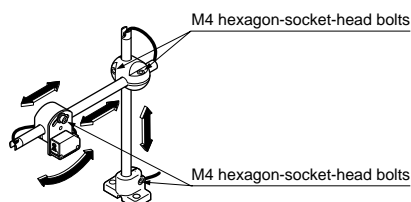


#### Mounting on vertical plane



### Adjustment

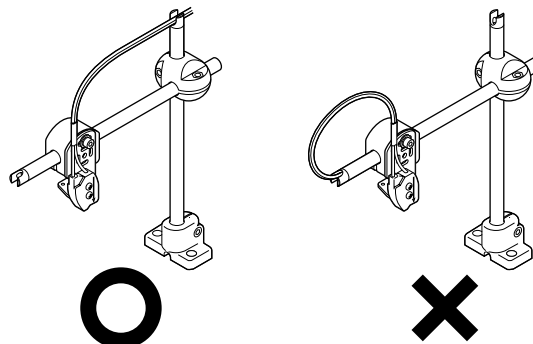
- Arm, attachment, base and arm joint can be adjusted as shown by the arrows in the figure below by loosening the M4 hexagon-socket-head bolts.



- After the adjustment, the tightening torque of the M4 hexagon-socket-head bolts should be 1.2 N·m or less.

### Threading cable into pipe

- When the sensor is mounted on **MS-AJ** (basic assembly) or on **MS-AJ-A** (lateral arm assembly), the sensor cable can be threaded through the pipe. However, do not thread the fiber cable through the pipe when a fiber head is mounted on **MS-AJ-F** (assembly for fiber).



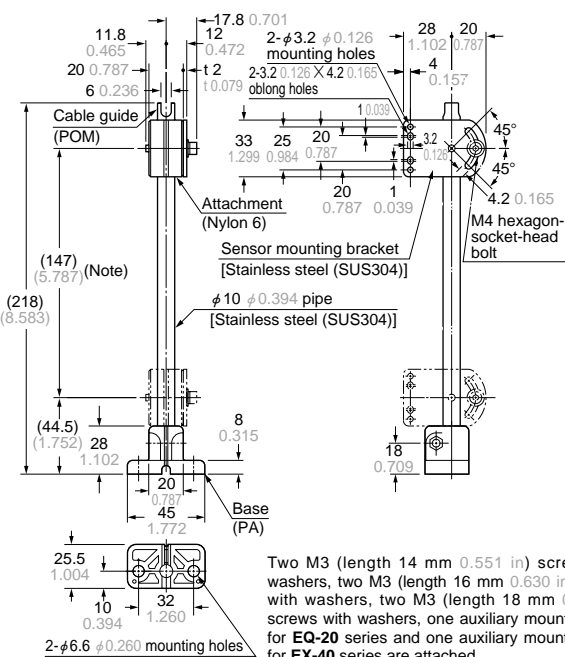
### Others

- Do not apply excessive force on any part of the universal sensor mounting stand.
- When using this stand, take care that excessive vibration is not applied to the sensor.

## DIMENSIONS (Unit: mm in)

### MS-AJ1

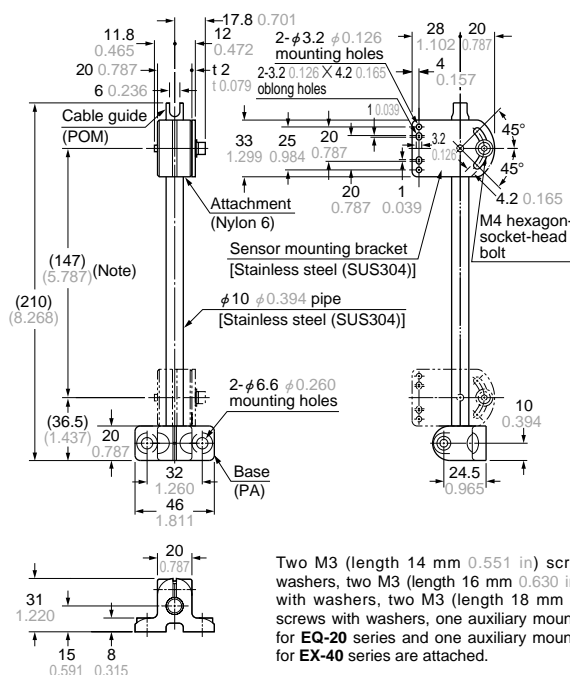
#### Basic assembly



Note: The dimensions in the brackets indicate the adjustable range of the movable part.

### MS-AJ2

#### Basic assembly



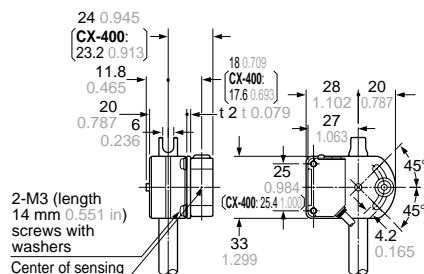
Note: The dimensions in the brackets indicate the adjustable range of the movable part.

## DIMENSIONS (Unit: mm in)

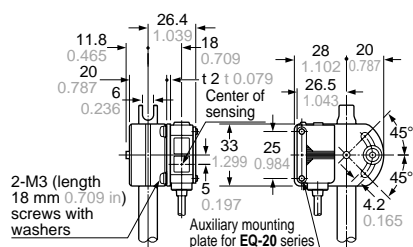
MS-AJ1  
MS-AJ2

## Basic assembly

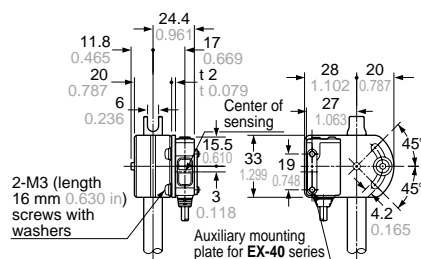
Assembly dimensions with CX-400 series, CX-20 series, CX-30 series, EZ-10 series  
(Mounting part only)



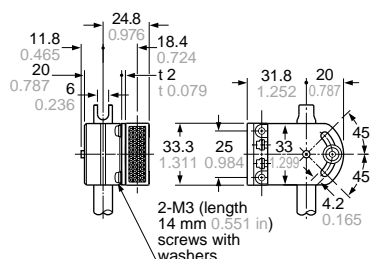
Assembly dimensions with EQ-20 series  
(Mounting part only)



Assembly dimensions with EX-40 series  
(Mounting part only)

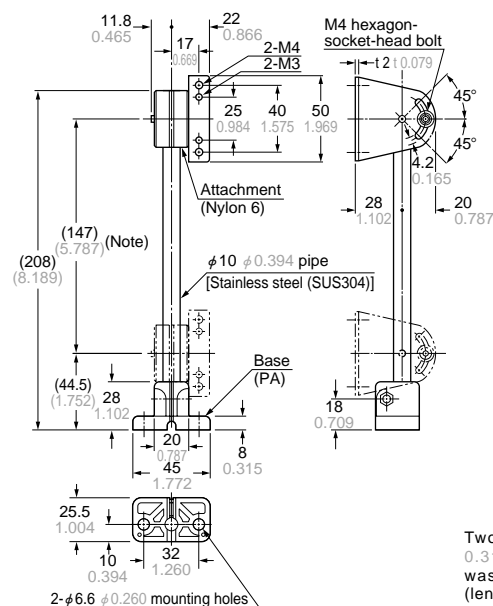


Assembly dimensions with RF-210 (Reflector)  
(Mounting part only)



## MS-AJ1-M

## Assembly for reflector

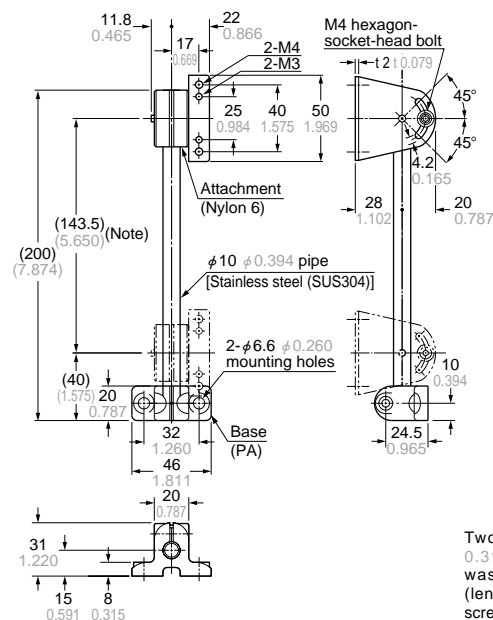


Two M3 (length 8 mm 0.315 in) screws with washers and two M4 (length 8 mm 0.315 in) screws with washers are attached.

Note: The dimensions in the brackets indicate the adjustable range of the movable part.

## MS-AJ2-M

## Assembly for reflector



Two M3 (length 8 mm 0.315 in) screws with washers and two M4 (length 8 mm 0.315 in) screws with washers are attached.

Note: The dimensions in the brackets indicate the adjustable range of the movable part.

Amplifier Built-in

RT-610

Sensor Mounting Stand

MS-AJ

Micro

PM

PM2

NX5

VF

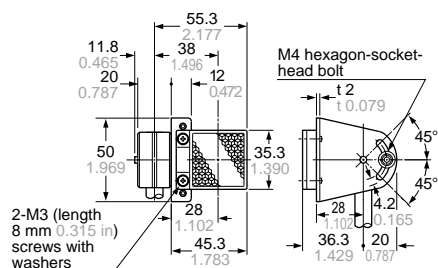
EQ-500

### DIMENSIONS (Unit: mm in)

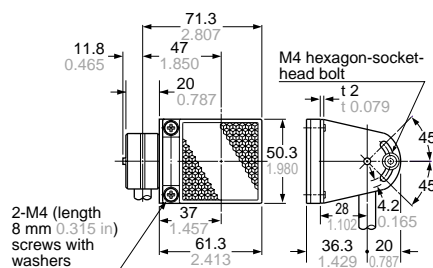
MS-AJ1-M  
MS-AJ2-M

### Assembly for reflector

### Assembly dimensions with RF-220 (Reflector) (Mounting part only)

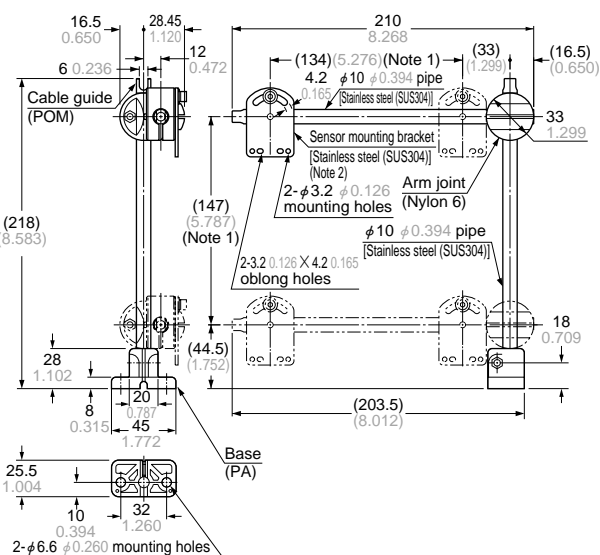


### Assembly dimensions with RF-230 (Reflector) (Mounting part only)



## MS-AJ1-A

## Lateral arm assembly



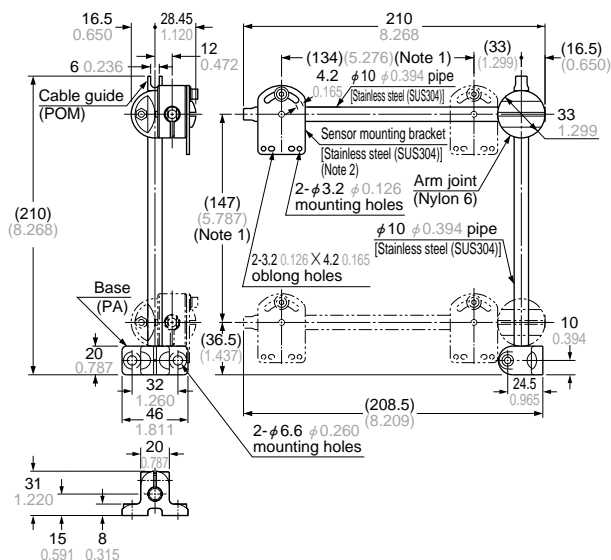
Two M3 (length 14 mm 0.551 in) screws with washers, two M3 (length 16 mm 0.630 in) screws with washers, two M3 (length 18 mm 0.709 in) screws with washers, one auxiliary mounting plate for **EQ-20** series and one auxiliary mounting plate for **EX-40** series are attached.

Notes: 1) The dimensions in the brackets indicate the adjustable range of the movable part.

2) Refer to **MS-AJ1/AJ2** (basic assembly) for the assembly diagram with the sensor mounting bracket, sensor or reflector.

**MS-AJ2-A**

## Lateral arm assembly

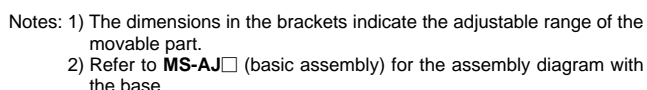


Two M3 (length 14 mm 0.551 in) screws with washers, two M3 (length 16 mm 0.630 in) screws with washers, two M3 (length 18 mm 0.709 in) screws with washers, one auxiliary mounting plate for **EQ-20** series and one auxiliary mounting plate for **EX-40** series are attached.

Notes: 1) The dimensions in the brackets indicate the adjustable range of the movable part.

2) Refer to **MS-AJ1/AJ2** (basic assembly) for the assembly diagram with the sensor mounting bracket, sensor or reflector.

**MS-AJ1-F** Assembly for fiber



Notes: 1) The dimensions in the brackets indicate the adjustable range of the movable part.  
2) Refer to **MS-AJ** (basic assembly) for the assembly diagram with the base.

Material: Stainless steel (SUS304)

Note: The above diagram is in case of M6 threaded head fiber.