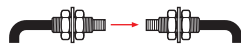


**DIMENSIONS (Unit: mm in)**

Refer to the **FX-500 series** (p.156), **FX-100 series** (p.175), **FX-300 series** (p.203), **FX-410 series** (p.221), and **FX-311 series** (p.237) for dimensions of the amplifiers. The CAD data in the dimensions can be downloaded from our website.

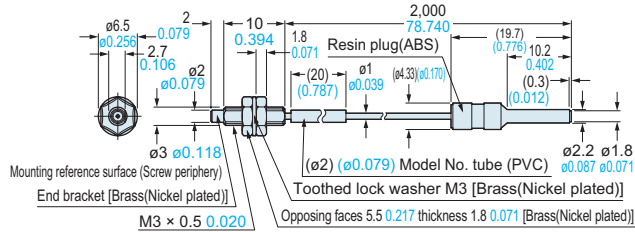
**Thru-beam type fibers**



Dimensions are listed in the order of thru-beam type, retroreflective type, and reflective type, and in alphabetic order of the model No.

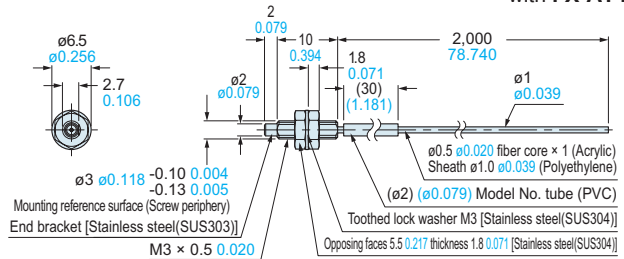
**FT-30**

<with FX-AT2>



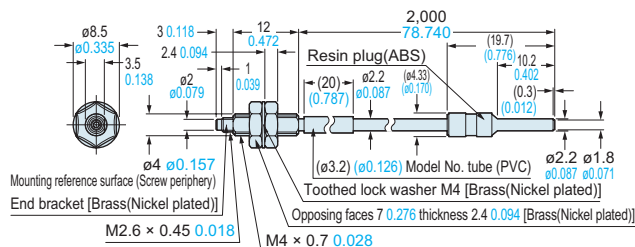
**FT-31**

Free-cut <with FX-AT4>



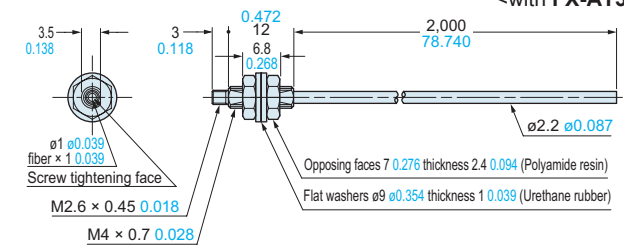
**FT-40**

<with FX-AT2>



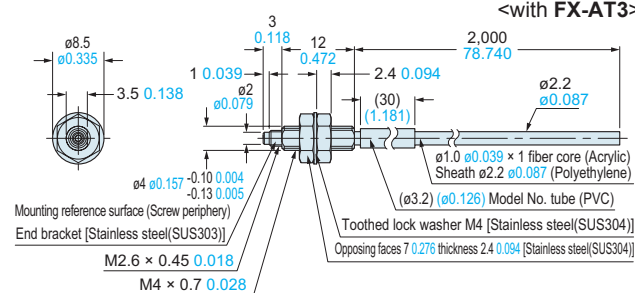
**FT-41**

Free-cut <with FX-AT3>



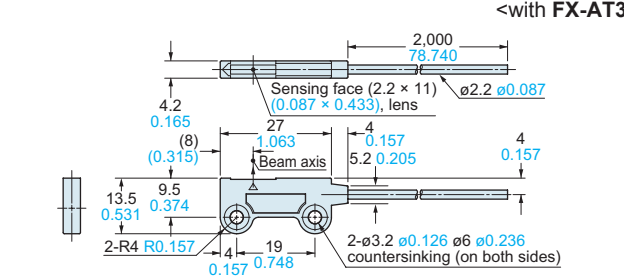
**FT-42**

Free-cut <with FX-AT3>



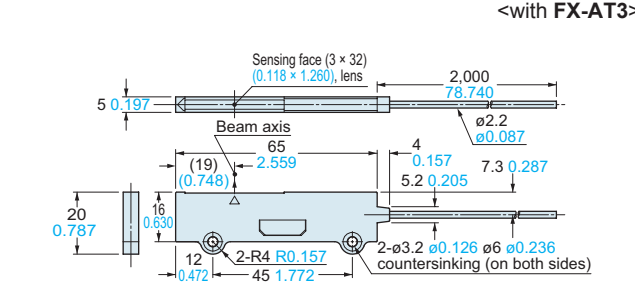
**FT-A8**

Free-cut <with FX-AT3>



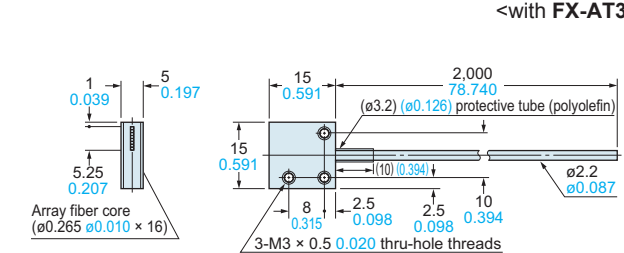
**FT-A30**

Free-cut <with FX-AT3>



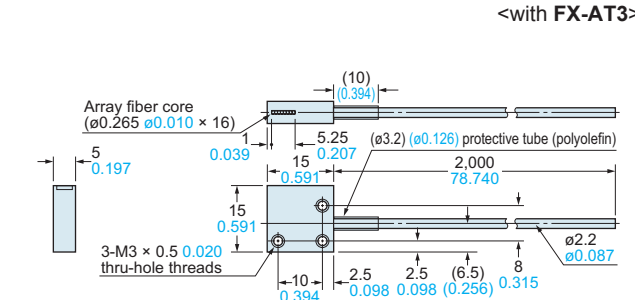
**FT-AFM2**

Free-cut <with FX-AT3>



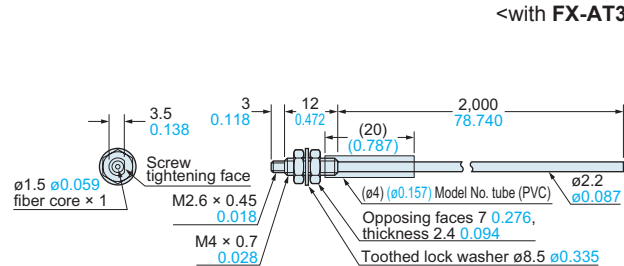
**FT-AFM2E**

Free-cut <with FX-AT3>



**FT-B8**

Free-cut <with FX-AT3>



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FA COMPONENTS

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**DIMENSIONS (Unit: mm in)**

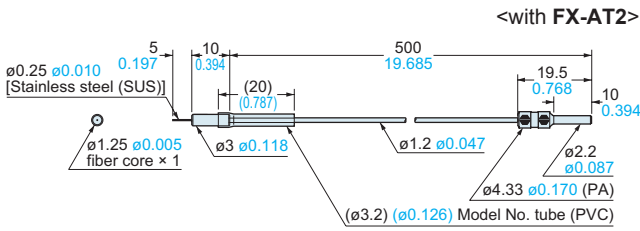
Refer to the **FX-500** series (p.156), **FX-100** series (p.175), **FX-300** series (p.203), **FX-410** series (p.221), and **FX-311** series (p.237) for dimensions of the amplifiers. The CAD data in the dimensions can be downloaded from our website.

**Thru-beam type fibers**

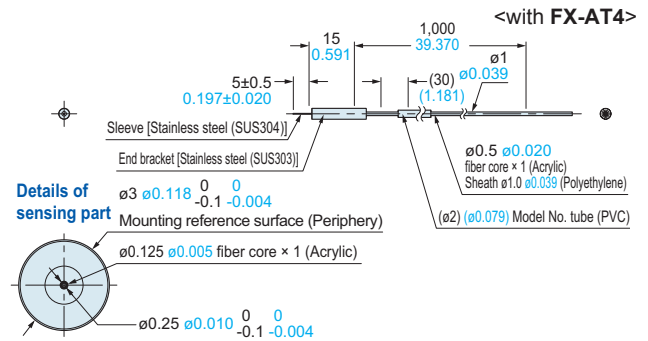


Dimensions are listed in the order of thru-beam type, retroreflective type, and reflective type, and in alphabetic order of the model No.

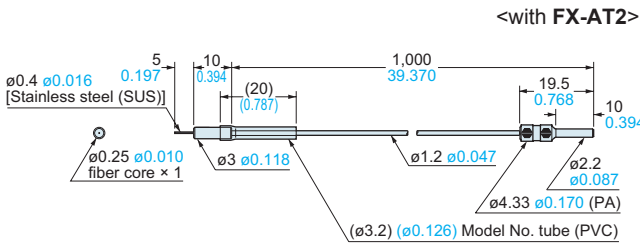
**FT-E12**



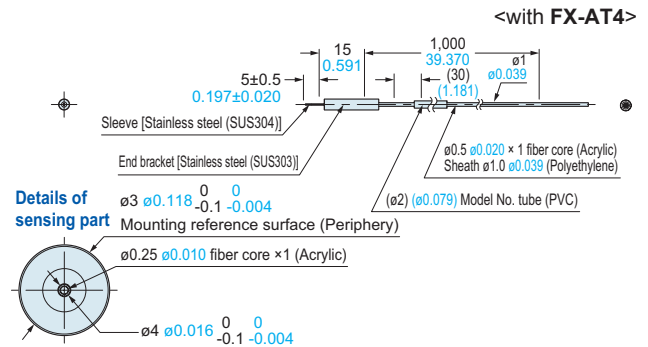
**FT-E13**



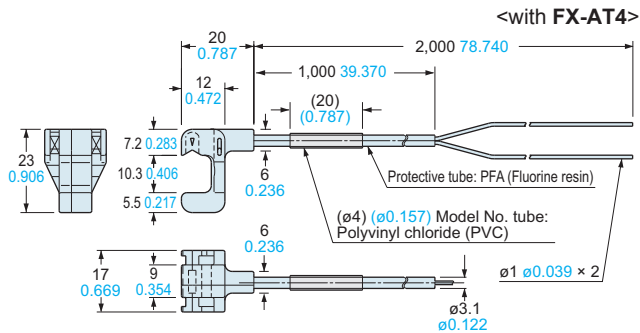
**FT-E22**



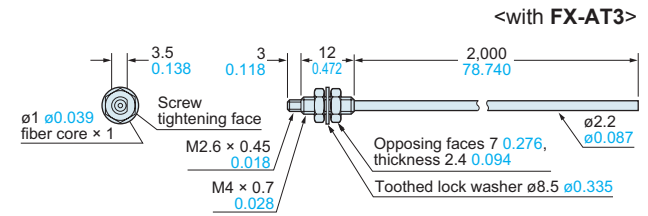
**FT-E23**



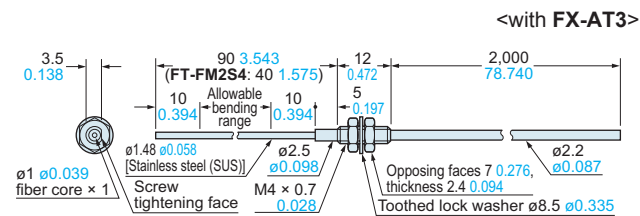
**FT-F902**



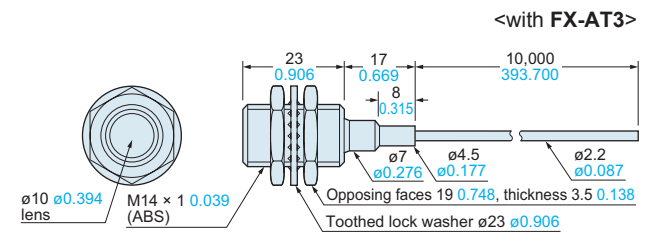
**FT-FM2**



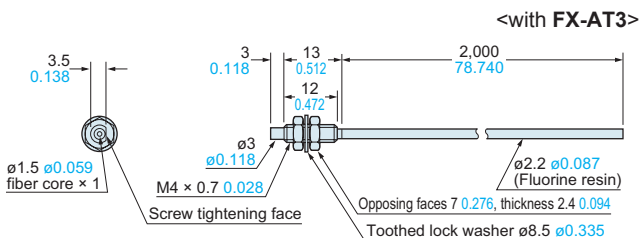
**FT-FM2S FT-FM2S4**



**FT-FM10L**



**FT-H13-FM2**



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- FA COMPONENTS
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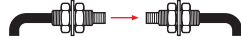
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### DIMENSIONS (Unit: mm in)

Refer to the **FX-500** series (p.156), **FX-100** series (p.175), **FX-300** series (p.203), **FX-410** series (p.221), and **FX-311** series (p.237) for dimensions of the amplifiers. The CAD data in the dimensions can be downloaded from our website.

#### Thru-beam type fibers

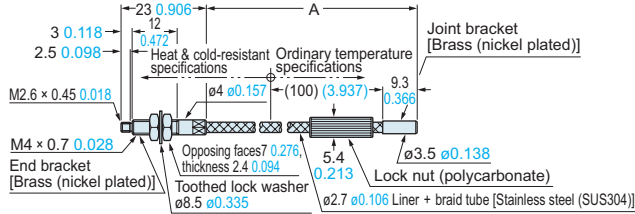


Dimensions are listed in the order of thru-beam type, retroreflective type, and reflective type, and in alphabetic order of the model No.

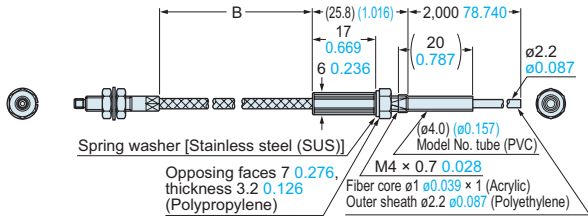
#### FT-H20-J20-S FT-H20-J30-S FT-H20-J50-S Free-cut (Note)

<with FX-AT3>

##### Heat-resistant side unit diagram (side view)



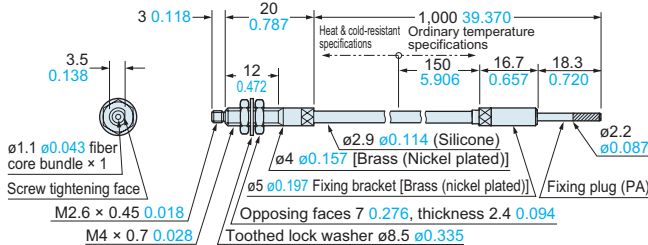
##### Ordinary temperature side fiber (FT-FM2) connection diagram (front view)



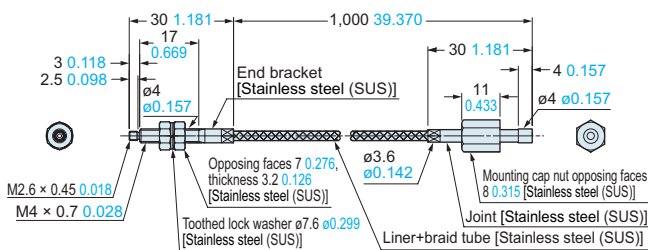
Model No.	A	B
<b>FT-H20-J20-S</b>	200 <sup>+25</sup> <sub>0</sub> 7.874 <sup>+0.984</sup> <sub>0</sub>	185 <sup>+30</sup> <sub>0</sub> 7.284 <sup>+1.181</sup> <sub>0</sub>
<b>FT-H20-J30-S</b>	300 <sup>+25</sup> <sub>0</sub> 11.811 <sup>+0.984</sup> <sub>0</sub>	285 <sup>+30</sup> <sub>0</sub> 11.221 <sup>+1.181</sup> <sub>0</sub>
<b>FT-H20-J50-S</b>	500 <sup>+25</sup> <sub>0</sub> 19.685 <sup>+0.984</sup> <sub>0</sub>	485 <sup>+30</sup> <sub>0</sub> 19.095 <sup>+1.181</sup> <sub>0</sub>

Note: Ordinary temperature side fiber (FT-FM2) only.

#### FT-H20-M1

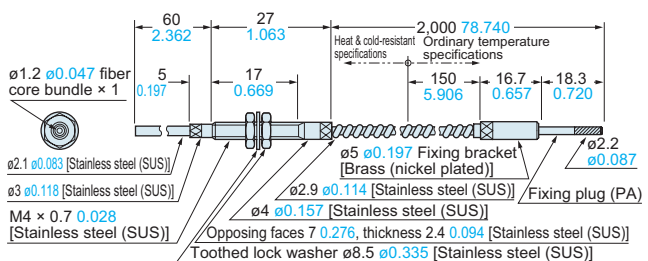


#### FT-H30-M1V-S



Note: The **FT-H30-M1V-S** is a set with the **FT-H30-M1V**, photo-terminal **FV-BR1**, and atmospheric side fiber **FT-J8**. Refer to p.108 and p.109 for dimensions of the atmospheric side fiber and photo-terminals.

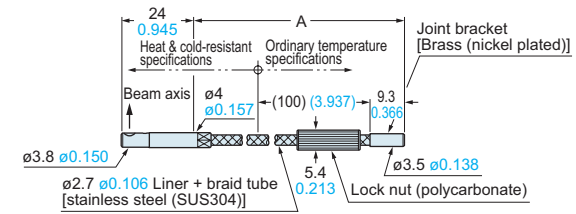
#### FT-H35-M2S6



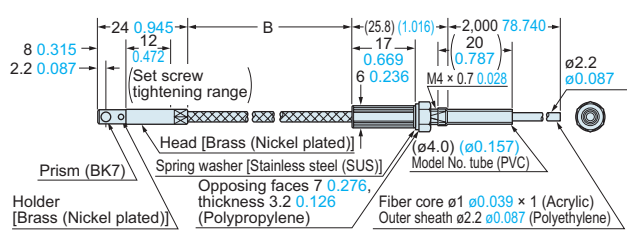
#### FT-H20-VJ50-S FT-H20-VJ80-S Free-cut (Note)

<with FX-AT3>

##### Heat-resistant side unit diagram (side view)



##### Ordinary temperature side fiber (FT-FM2) connection diagram (front view)

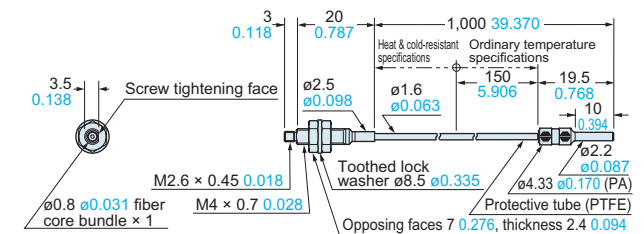


Model No.	A	B
<b>FT-H20-VJ50-S</b>	500 <sup>+25</sup> <sub>0</sub> 19.685 <sup>+0.984</sup> <sub>0</sub>	485 <sup>+30</sup> <sub>0</sub> 19.095 <sup>+1.181</sup> <sub>0</sub>
<b>FT-H20-VJ80-S</b>	800 <sup>+50</sup> <sub>0</sub> 31.496 <sup>+1.969</sup> <sub>0</sub>	785 <sup>+55</sup> <sub>0</sub> 30.906 <sup>+2.165</sup> <sub>0</sub>

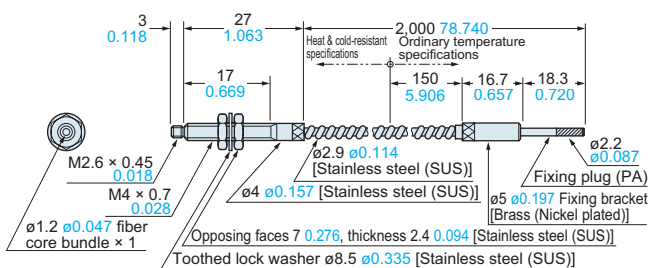
Note: Ordinary temperature side fiber (FT-FM2) only.

#### FT-H20W-M1

<with FX-AT3>

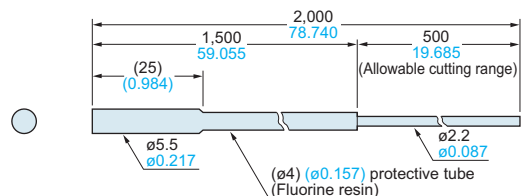


#### FT-H35-M2



#### FT-HL80Y Free-cut

<with FX-AT3>



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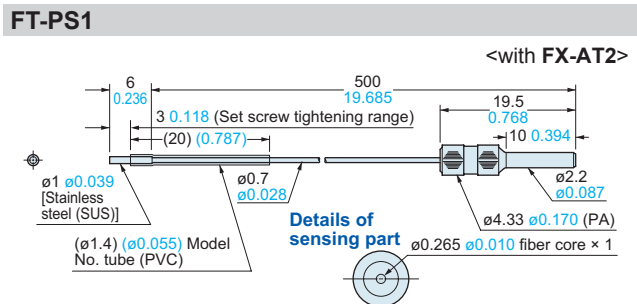
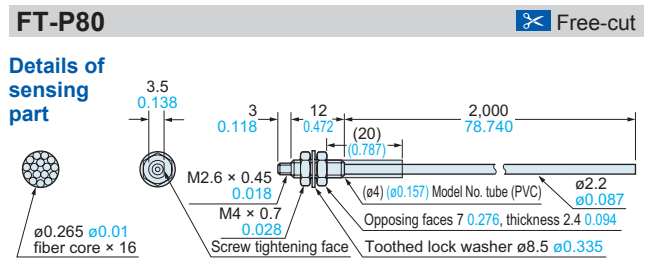
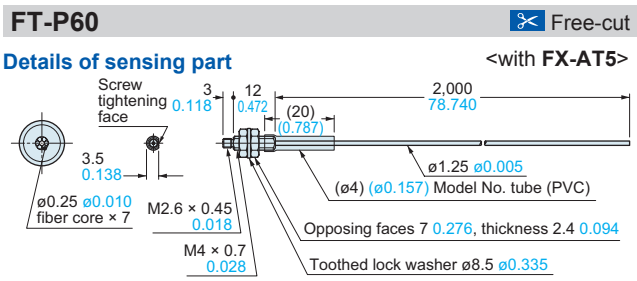
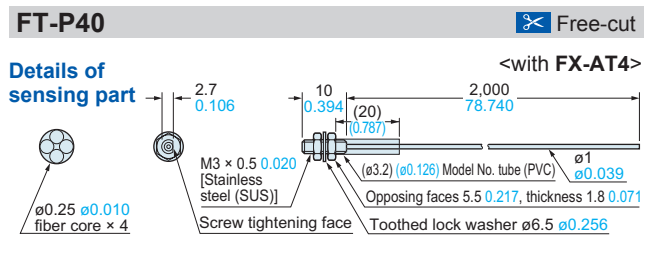
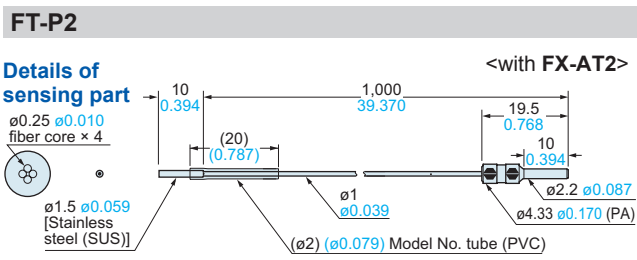
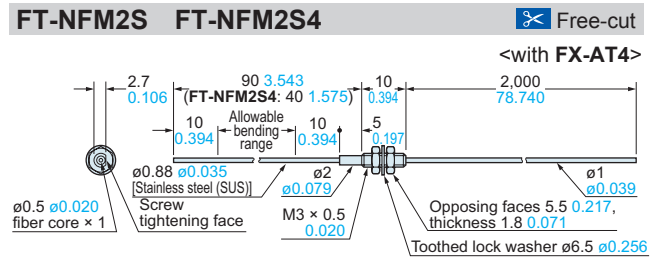
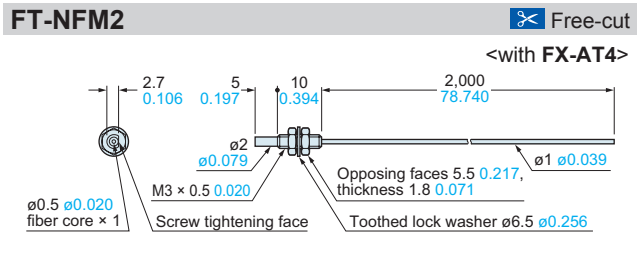
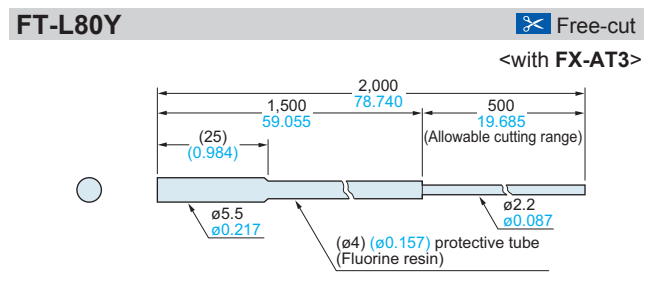
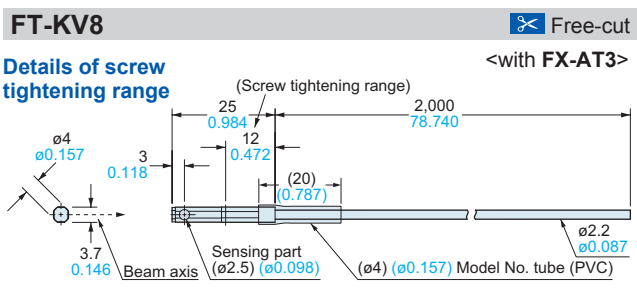
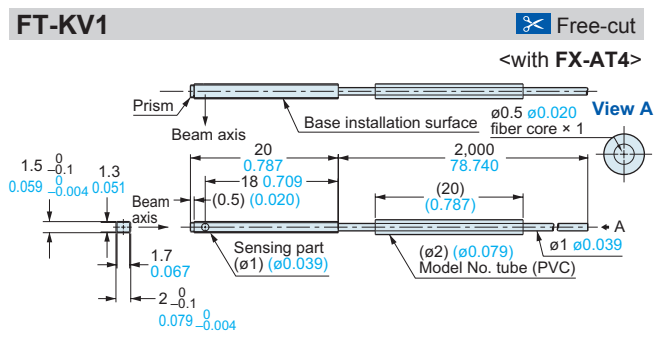
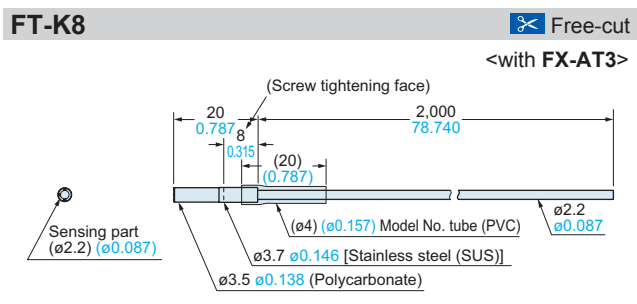
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**DIMENSIONS (Unit: mm in)** Refer to the **FX-500** series (p.156), **FX-100** series (p.175), **FX-300** series (p.203), **FX-410** series (p.221), and **FX-311** series (p.237) for dimensions of the amplifiers. The CAD data in the dimensions can be downloaded from our website.

**Thru-beam type fibers**

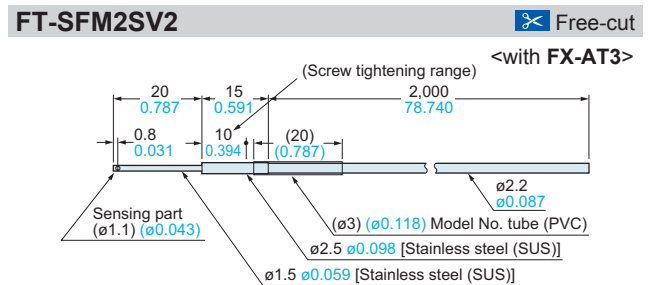
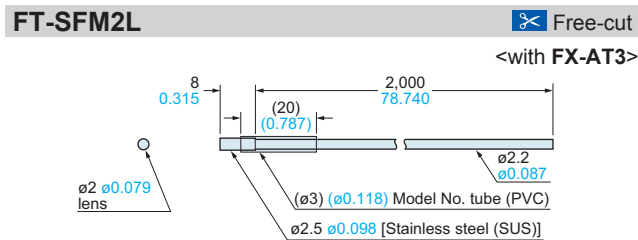
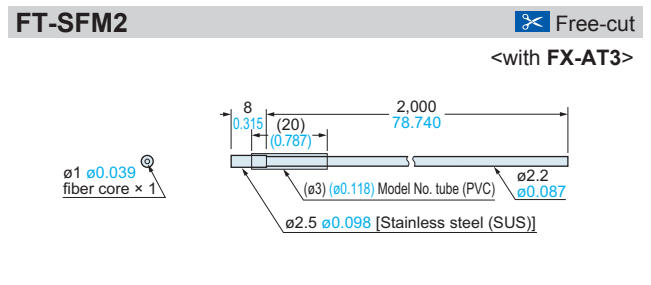
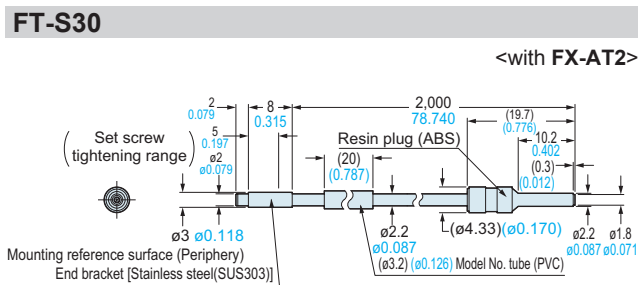
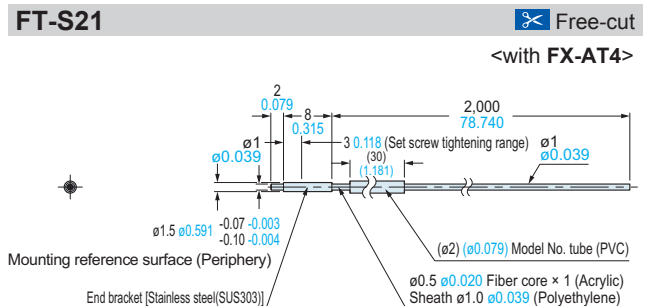
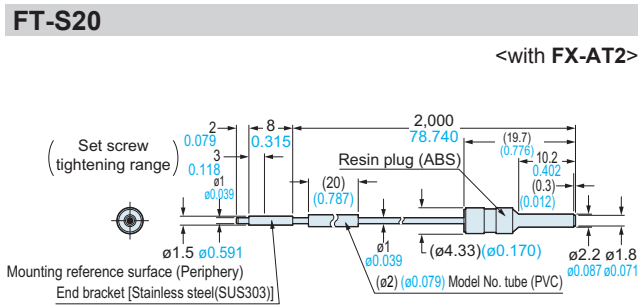
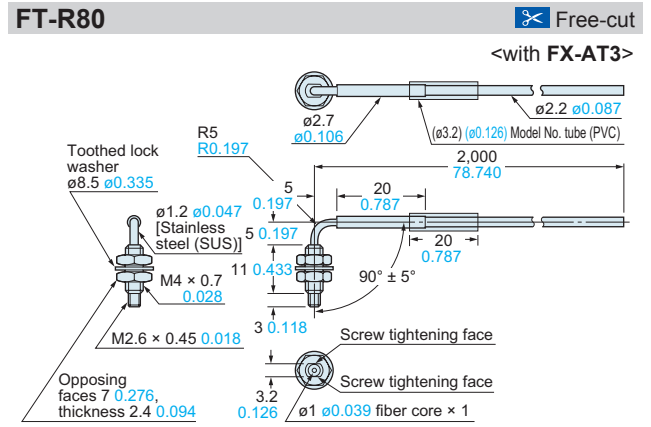
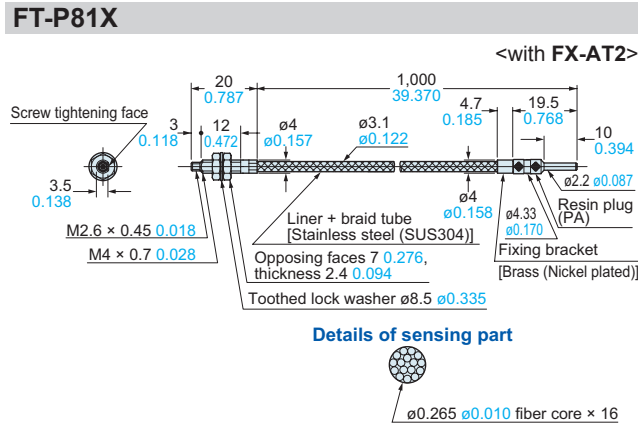
Dimensions are listed in the order of thru-beam type, retroreflective type, and reflective type, and in alphabetic order of the model No.



**DIMENSIONS (Unit: mm in)** Refer to the **FX-500 series** (p.156), **FX-100 series** (p.175), **FX-300 series** (p.203), **FX-410 series** (p.221), and **FX-311 series** (p.237) for dimensions of the amplifiers. The CAD data in the dimensions can be downloaded from our website.

**Thru-beam type fibers**

Dimensions are listed in the order of thru-beam type, retroreflective type, and reflective type, and in alphabetic order of the model No.



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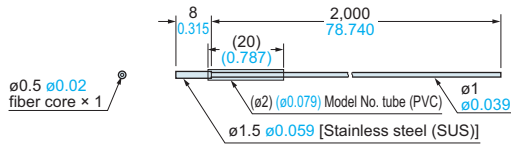
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**DIMENSIONS (Unit: mm in)** Refer to the **FX-500** series (p.156), **FX-100** series (p.175), **FX-300** series (p.203), **FX-410** series (p.221), and **FX-311** series (p.237) for dimensions of the amplifiers. The CAD data in the dimensions can be downloaded from our website.

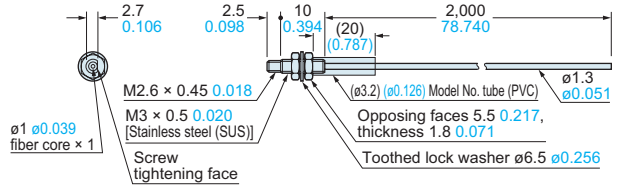
**Thru-beam type fibers**

Dimensions are listed in the order of thru-beam type, retroreflective type, and reflective type, and in alphabetic order of the model No.

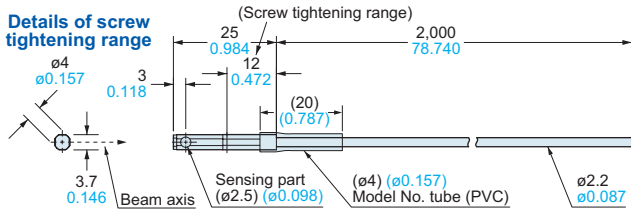
**FT-SNFM2** Free-cut  
<with FX-AT4>



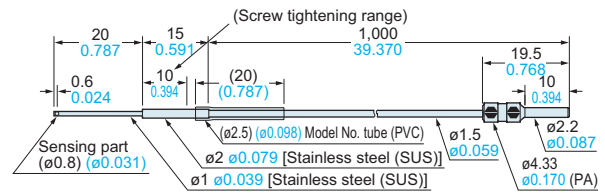
**FT-T80** Free-cut  
<with FX-AT5>



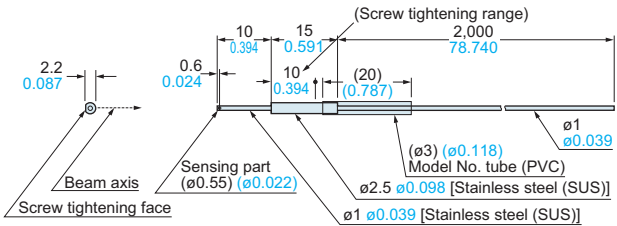
**FT-V10** Free-cut  
<with FX-AT3>



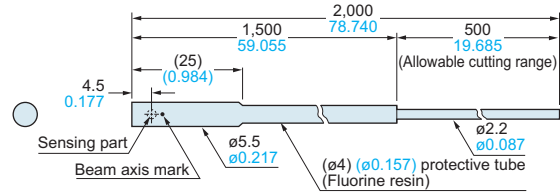
**FT-V22** Free-cut  
<with FX-AT2>



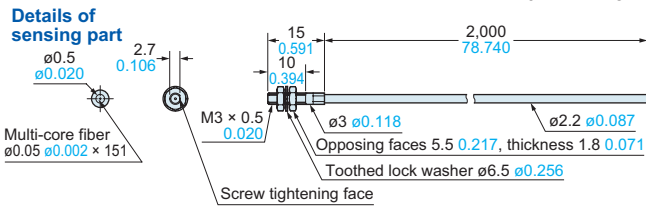
**FT-V41** Free-cut  
<with FX-AT4>



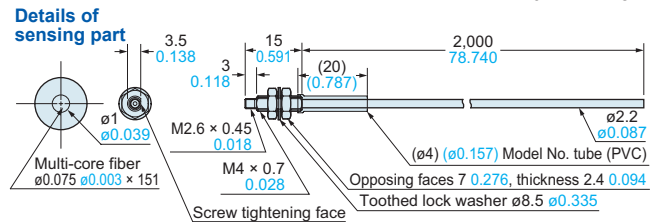
**FT-V80Y** Free-cut  
<with FX-AT3>



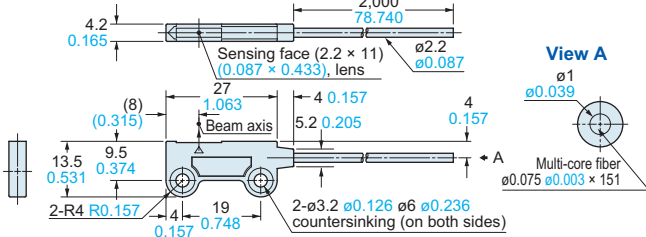
**FT-W4** Free-cut  
<with FX-AT3>



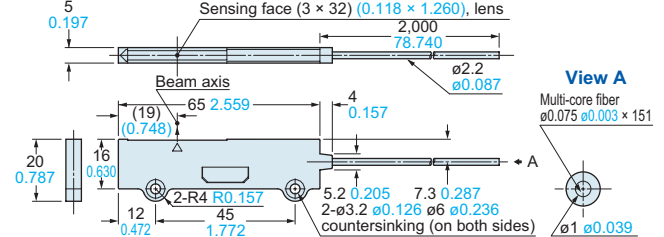
**FT-W8** Free-cut  
<with FX-AT3>



**FT-WA8** Free-cut  
<with FX-AT3>



**FT-WA30** Free-cut  
<with FX-AT3>



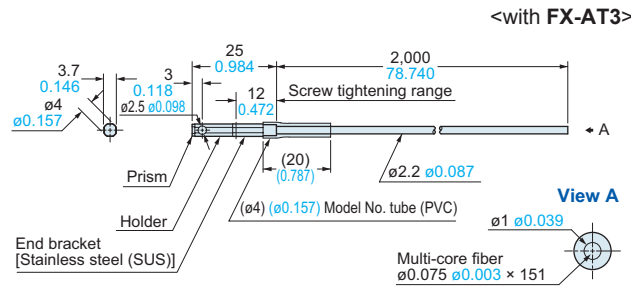
- FIBER SENSORS
- LASER SENSORS
- PHOTO-ELECTRIC SENSORS
- MICRO PHOTO-ELECTRIC SENSORS
- AREA SENSORS
- LIGHT CURTAINS
- PRESSURE / FLOW SENSORS
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**DIMENSIONS (Unit: mm in)** Refer to the **FX-500 series** (p.156), **FX-100 series** (p.175), **FX-300 series** (p.203), **FX-410 series** (p.221), and **FX-311 series** (p.237) for dimensions of the amplifiers. The CAD data in the dimensions can be downloaded from our website.

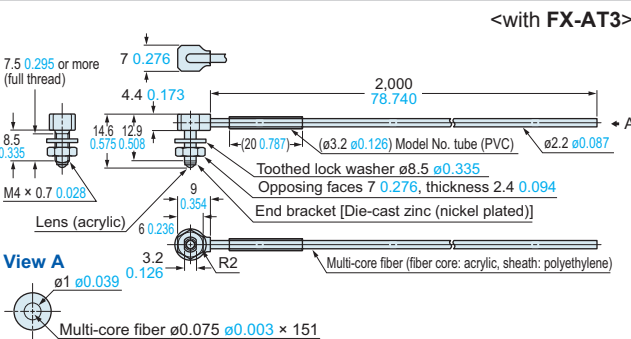
**Thru-beam type fibers** 


Dimensions are listed in the order of thru-beam type, retroreflective type, and reflective type, and in alphabetic order of the model No.

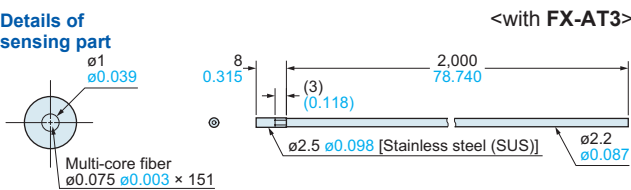
**FT-WKV8**  Free-cut



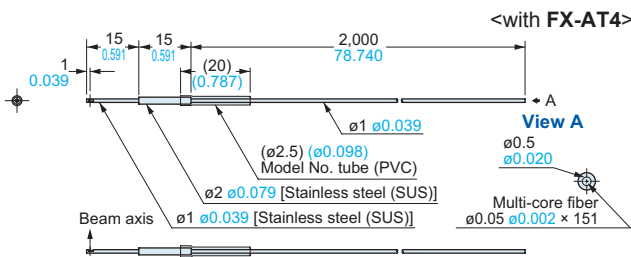
**FT-WR80L**  Free-cut



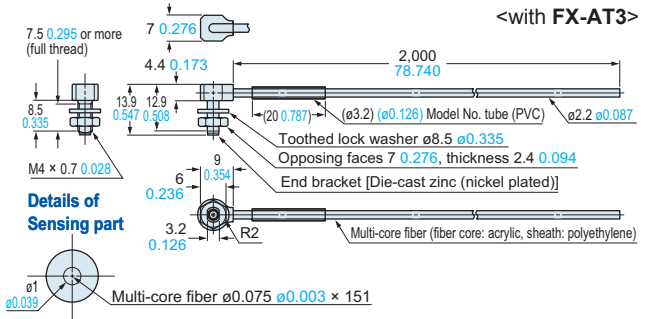
**FT-WS8**  Free-cut



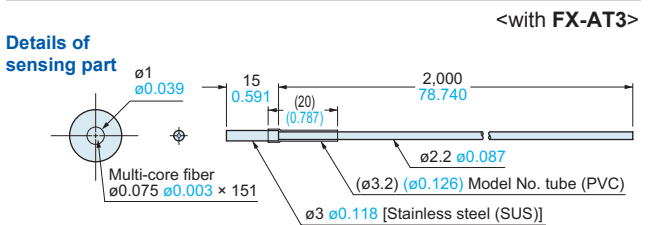
**FT-WV42**  Free-cut




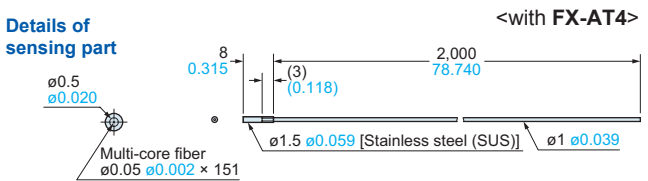
**FT-WR80**  Free-cut




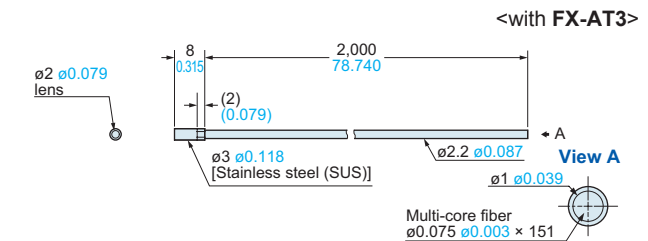
**FT-WS3**  Free-cut



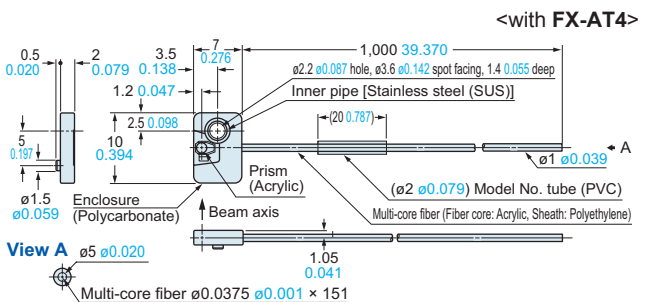
**FT-WS4**  Free-cut



**FT-WS8L**  Free-cut



**FT-WZ4**  Free-cut



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**DIMENSIONS (Unit: mm in)**

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**Thru-beam type fibers**

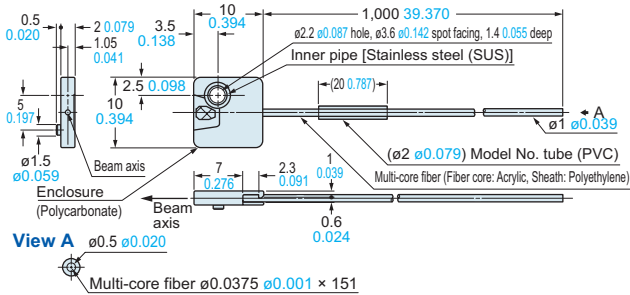


Dimensions are listed in the order of thru-beam type, retroreflective type, and reflective type, and in alphabetic order of the model No.

**FT-WZ4HB**

Free-cut

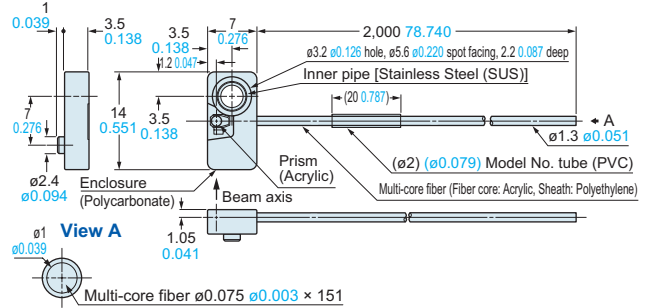
<with FX-AT4>



**FT-WZ7**

Free-cut

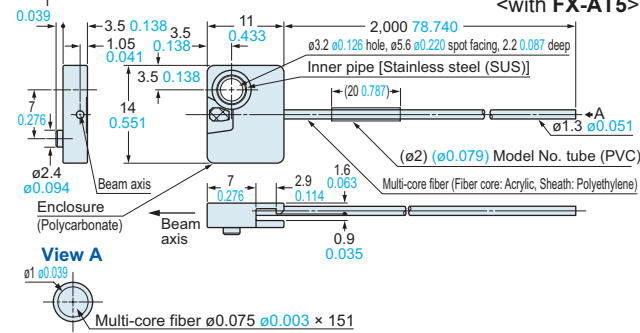
<with FX-AT5>



**FT-WZ7HB**

Free-cut

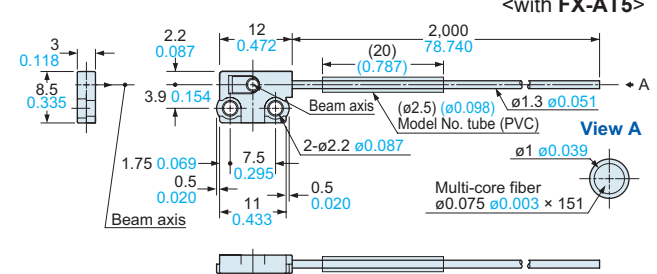
<with FX-AT5>



**FT-WZ8**

Free-cut

<with FX-AT5>

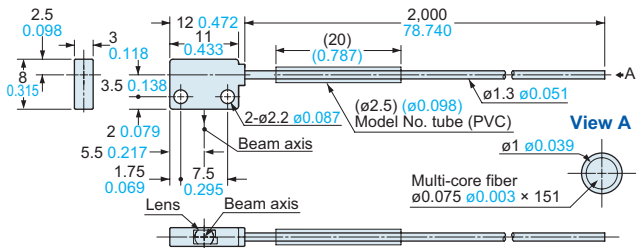


Note: The emitter and receiver are symmetric.

**FT-WZ8E**

Free-cut

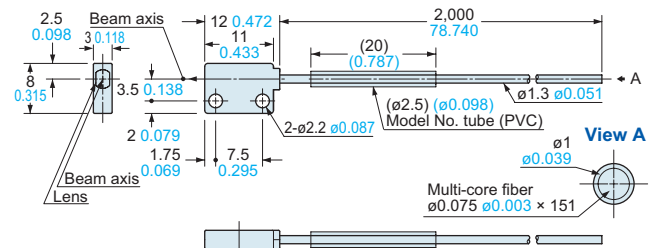
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**FT-WZ8H**

Free-cut

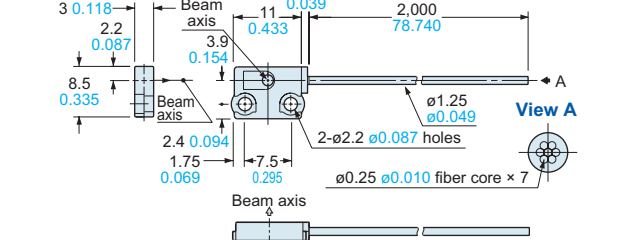
<with FX-AT5>



**FT-Z8**

Free-cut

<with FX-AT5>

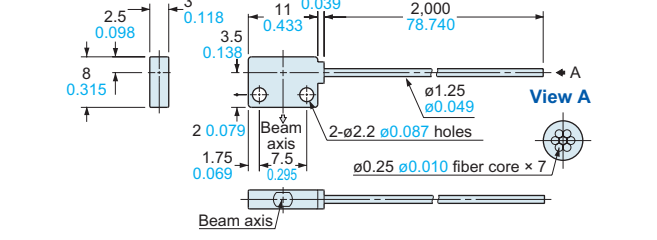


Note: The emitter and receiver are symmetric.

**FT-Z8E**

Free-cut

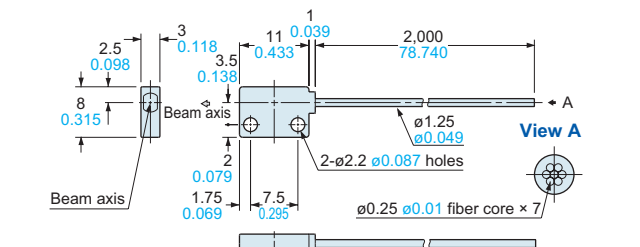
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**FT-Z8H**

Free-cut

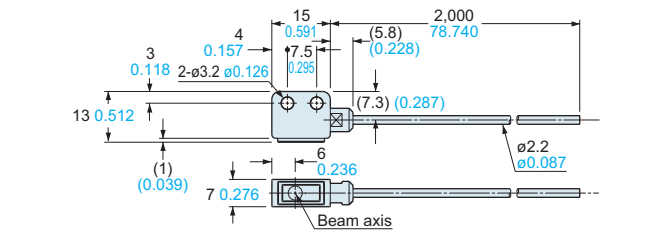
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**FT-Z802Y**

Free-cut

<with FX-AT3>



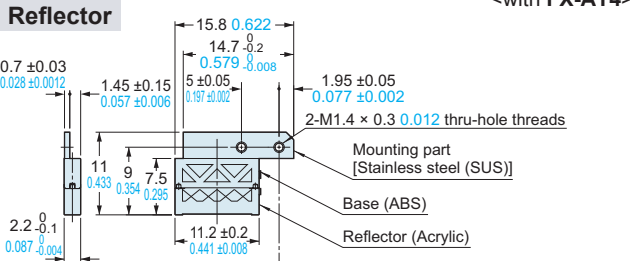


**DIMENSIONS (Unit: mm in)** Refer to the FX-500 series (p.156), FX-100 series (p.175), FX-300 series (p.203), FX-410 series (p.221), and FX-311 series (p.237) for dimensions of the amplifiers. The CAD data in the dimensions can be downloaded from our website.

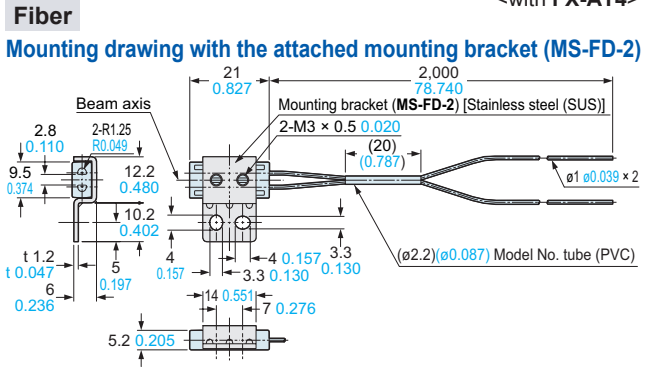
**Retroreflective type fibers** 

Dimensions are listed in the order of thru-beam type, retroreflective type, and reflective type, and in alphabetic order of the model No.

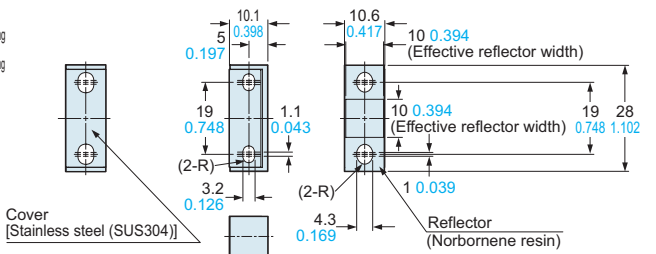
**FR-KV1**  Free-cut



**FR-KZ21**  Free-cut



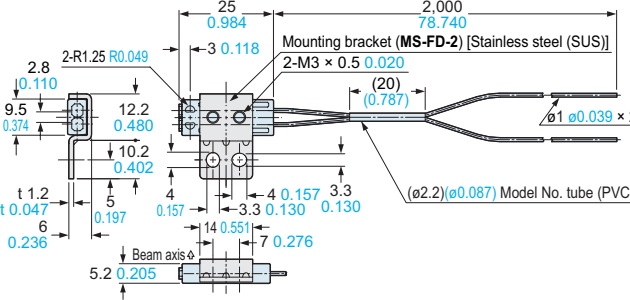
**Reflector / RF-003** (Accessory for FR-KZ21)



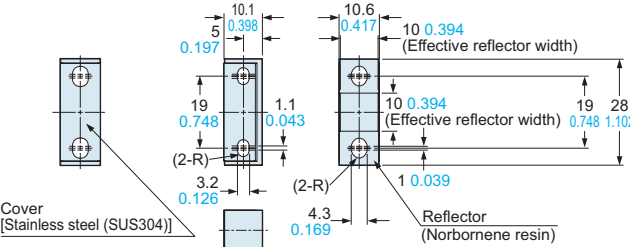
**FR-KZ21E**  Free-cut

**Fiber**

**Mounting drawing with the attached mounting bracket (MS-FD-2)**

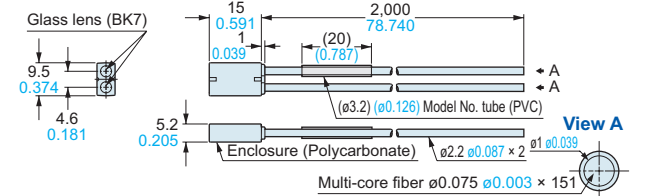


**Reflector / RF-003** (Accessory for FR-KZ21E)

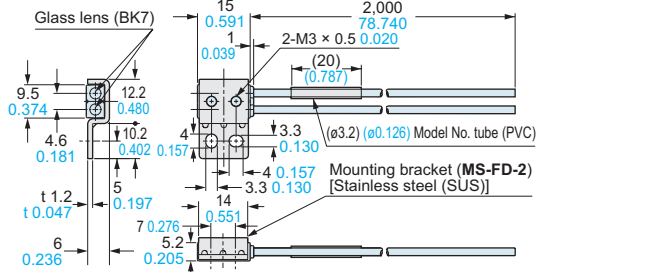


**FR-WKZ11**  Free-cut

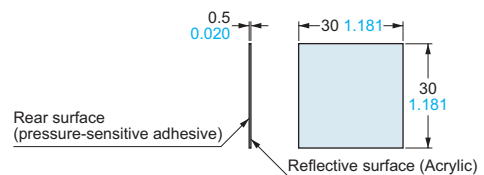
**Fiber**



**Mounting drawing with the fiber mounting bracket (MS-FD-2)**



**Reflective tape / RF-13** (Accessory for FR-WKZ11)



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**DIMENSIONS (Unit: mm in)**

Refer to the **FX-500** series (p.156), **FX-100** series (p.175), **FX-300** series (p.203), **FX-410** series (p.221), and **FX-311** series (p.237) for dimensions of the amplifiers. The CAD data in the dimensions can be downloaded from our website.

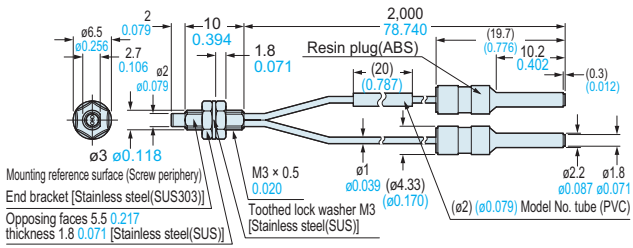
**Reflective type fibers**



Dimensions are listed in the order of thru-beam type, retroreflective type, and reflective type, and in alphabetic order of the model No.

**FD-30**

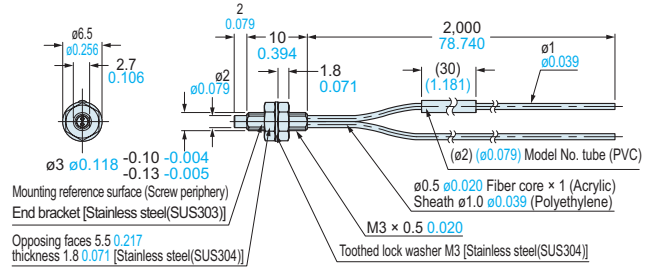
<with FX-AT2>



**FD-31**

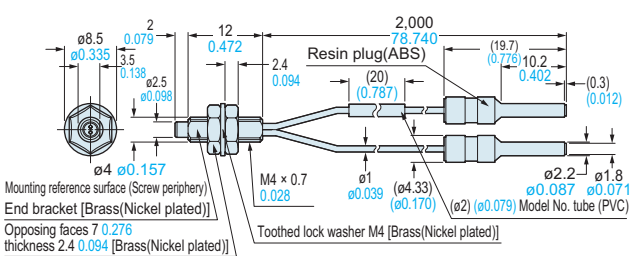
Free-cut

<with FX-AT4>



**FD-40**

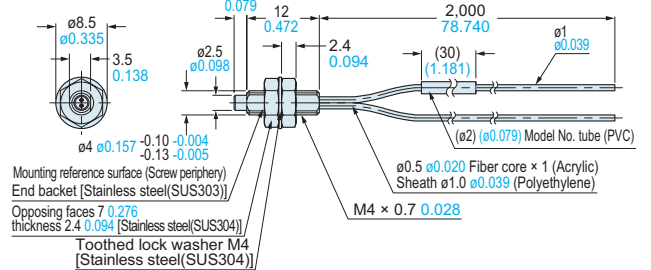
<with FX-AT2>



**FD-41**

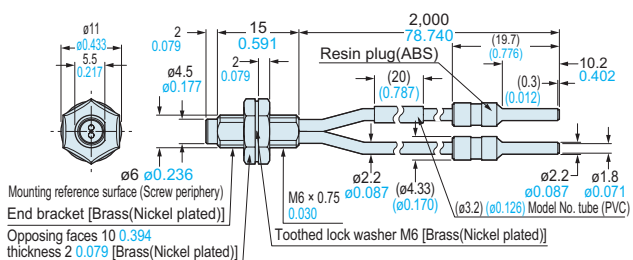
Free-cut

<with FX-AT4>



**FD-60**

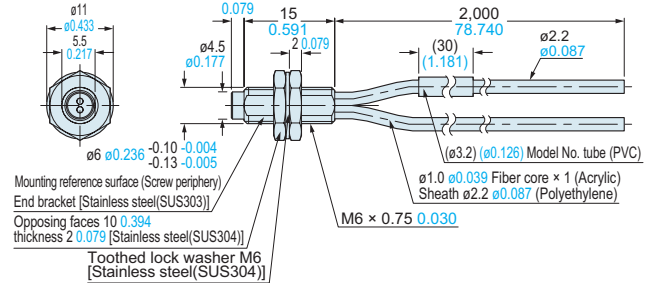
<with FX-AT2>



**FD-61**

Free-cut

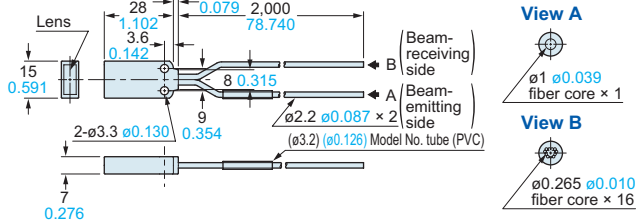
<with FX-AT3>



**FD-A15**

Free-cut

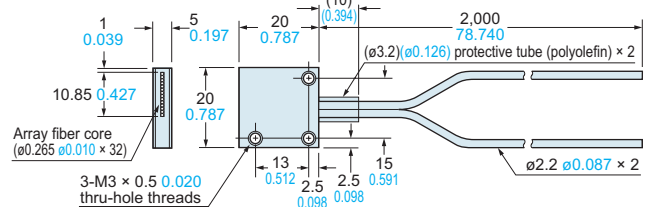
<with FX-AT3>



**FD-AFM2**

Free-cut

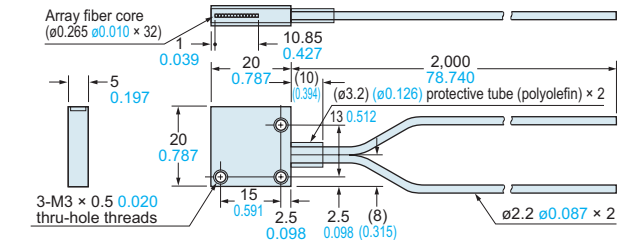
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**FD-AFM2E**

Free-cut

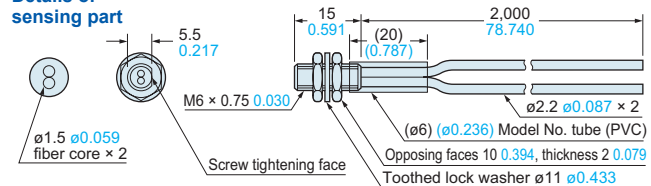
<with FX-AT3>



**FD-B8**

Free-cut

<with FX-AT3>



**Details of sensing part**

**DIMENSIONS (Unit: mm in)**

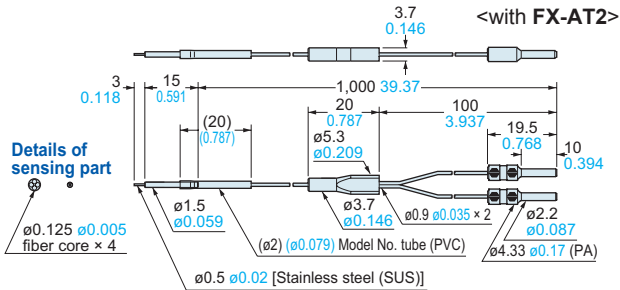
Refer to the **FX-500 series** (p.156), **FX-100 series** (p.175), **FX-300 series** (p.203), **FX-410 series** (p.221), and **FX-311 series** (p.237) for dimensions of the amplifiers. The CAD data in the dimensions can be downloaded from our website.

**Reflective type fibers**

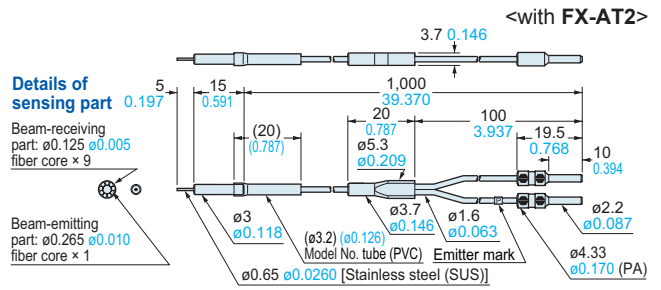


Dimensions are listed in the order of thru-beam type, retroreflective type, and reflective type, and in alphabetic order of the model No.

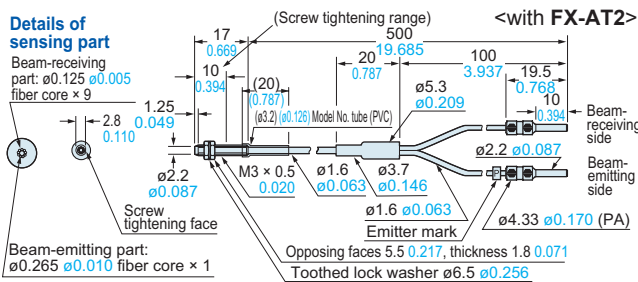
**FD-E12**



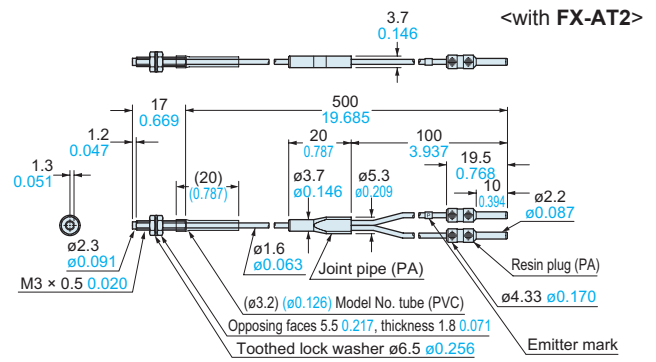
**FD-E22**



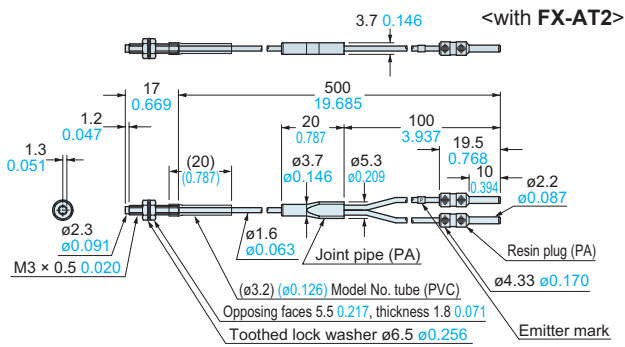
**FD-EG1**



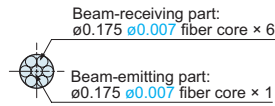
**FD-EG2**



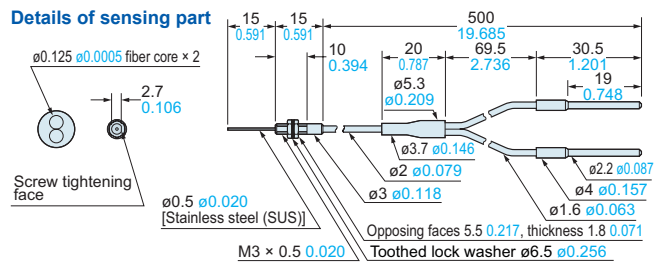
**FD-EG3**



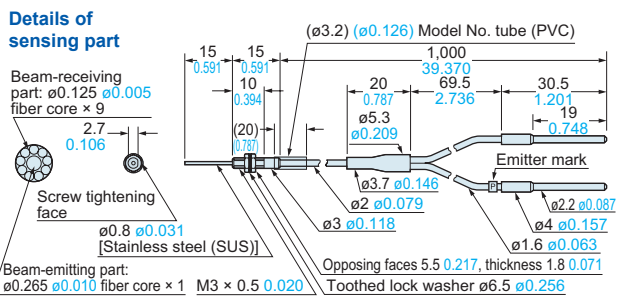
**Details of sensing part**



**FD-EN500S1**

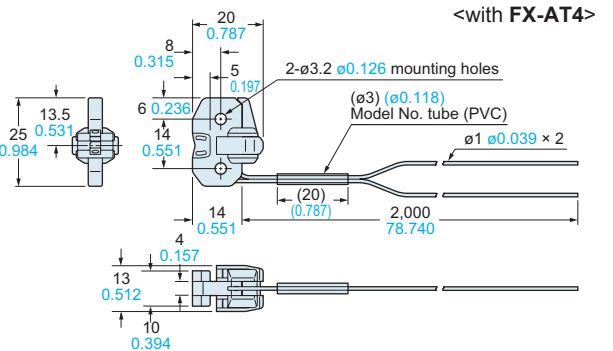


**FD-ENM1S1**



**FD-F4 FD-F41**

Free-cut



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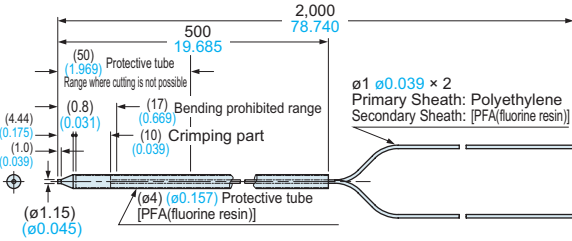
**DIMENSIONS (Unit: mm in)** Refer to the **FX-500** series (p.156), **FX-100** series (p.175), **FX-300** series (p.203), **FX-410** series (p.221), and **FX-311** series (p.237) for dimensions of the amplifiers. The CAD data in the dimensions can be downloaded from our website.

**Reflective type fibers**

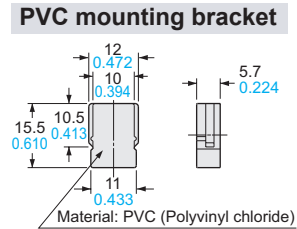
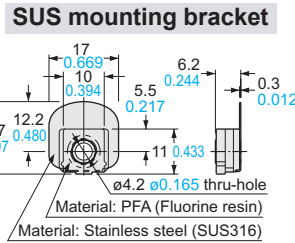
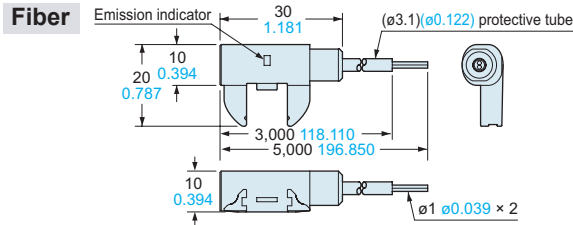


Dimensions are listed in the order of thru-beam type, retroreflective type, and reflective type, and in alphabetic order of the model No.

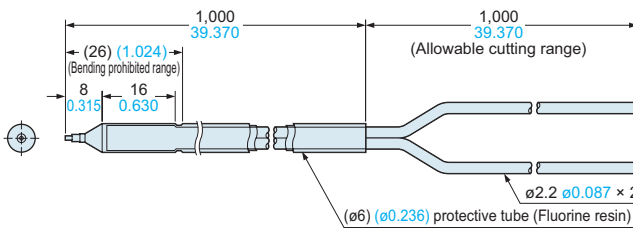
**FD-F41Y** ✂ Free-cut  
 <with FX-AT4>



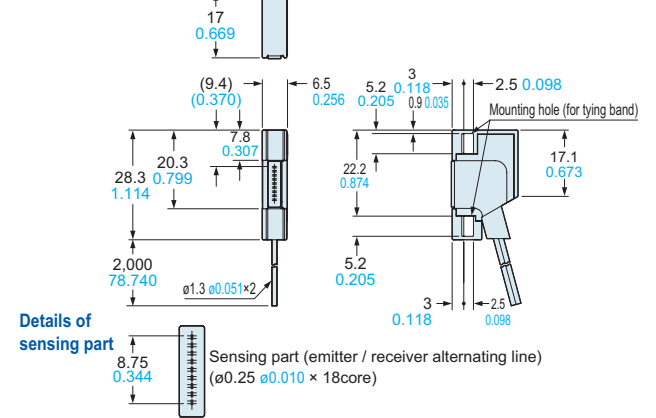
**FD-F705** ✂ Free-cut  
 <with FX-AT4>



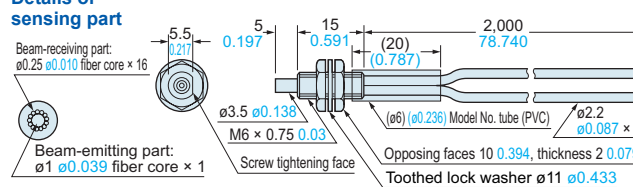
**FD-F8Y** ✂ Free-cut  
 <with FX-AT3>



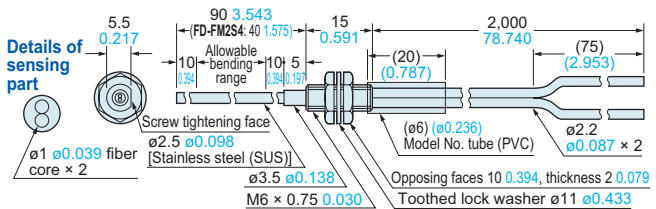
**FD-FA90** ✂ Free-cut  
 <with fiber attachment>



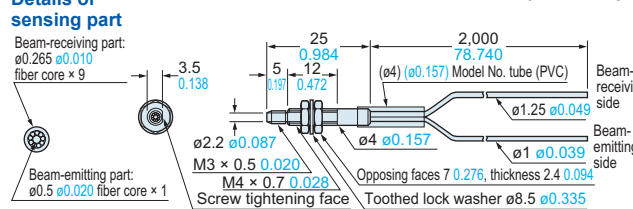
**FD-FM2** ✂ Free-cut  
 <with FX-AT3>



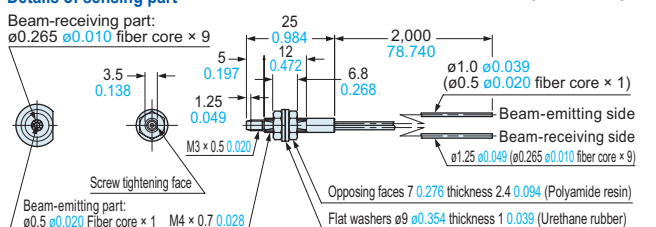
**FD-FM2S FD-FM2S4** ✂ Free-cut  
 <with FX-AT3>



**FD-G4** ✂ Free-cut  
 <with FX-AT6>



**FD-G40** ✂ Free-cut  
 <with FX-AT6>



**DIMENSIONS (Unit: mm in)** Refer to the **FX-500 series** (p.156), **FX-100 series** (p.175), **FX-300 series** (p.203), **FX-410 series** (p.221), and **FX-311 series** (p.237) for dimensions of the amplifiers. The CAD data in the dimensions can be downloaded from our website.

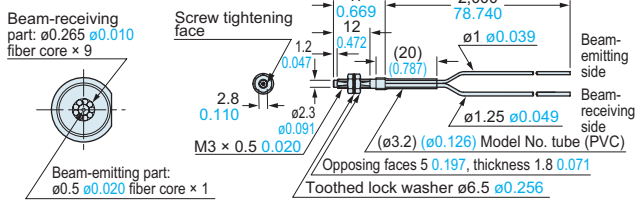
**Reflective type fibers**



Dimensions are listed in the order of thru-beam type, retroreflective type, and reflective type, and in alphabetic order of the model No.

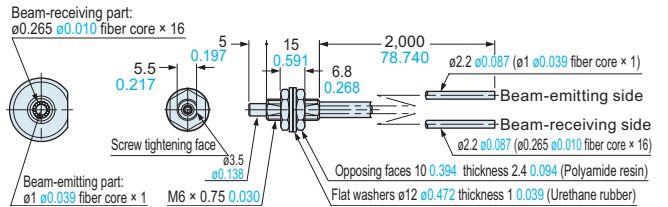
**FD-G6** Free-cut

**Details of sensing part**

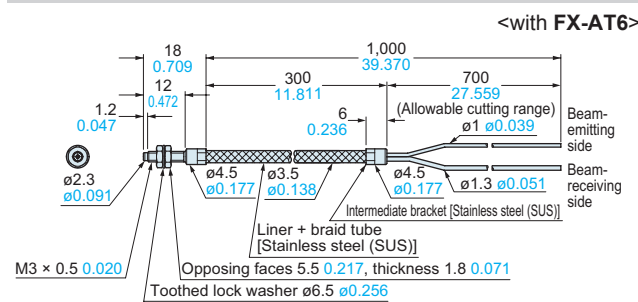


**FD-G60** Free-cut

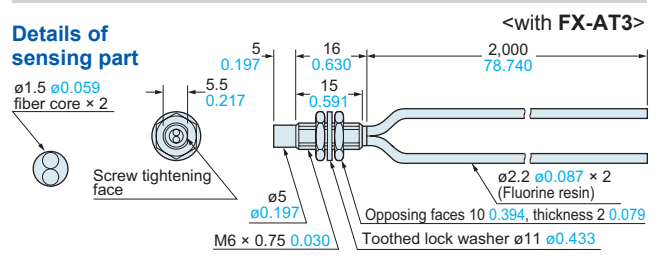
**Details of sensing part**



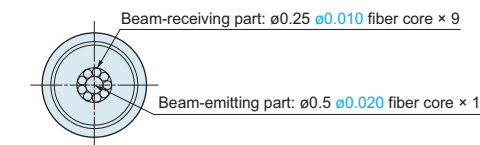
**FD-G6X** Free-cut



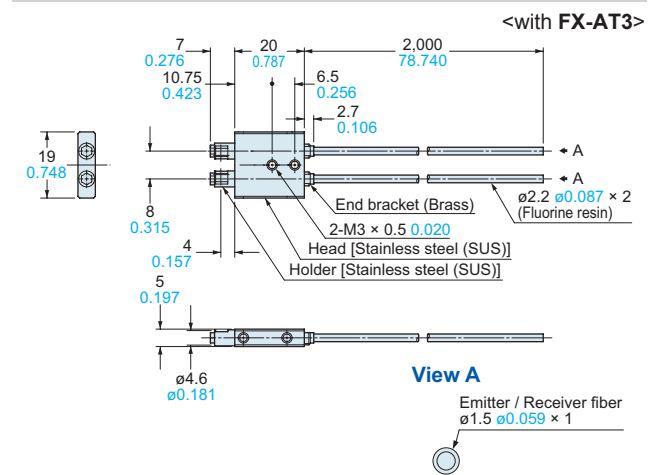
**FD-H13-FM2** Free-cut



**Details of sensing part**

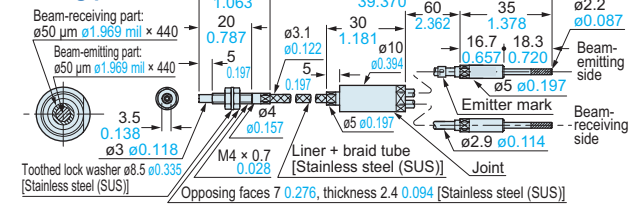


**FD-H18-L31** Free-cut



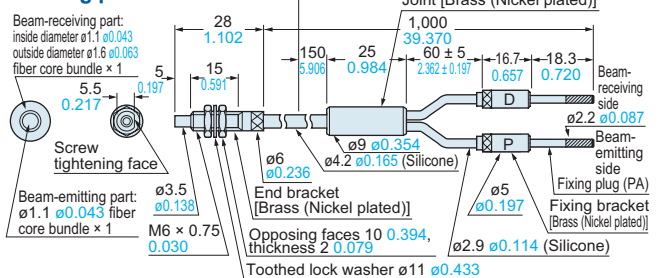
**FD-H20-21**

**Details of sensing part**



**FD-H20-M1**

**Details of sensing part**



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## DIMENSIONS (Unit: mm in)

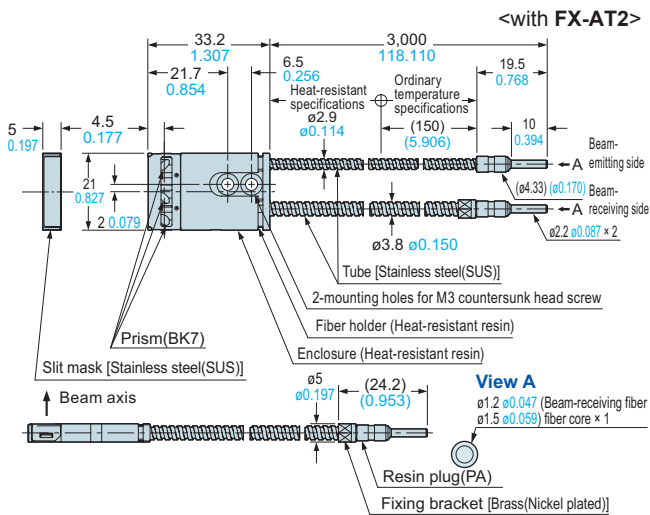
Refer to the **FX-500** series (p.156), **FX-100** series (p.175), **FX-300** series (p.203), **FX-410** series (p.221), and **FX-311** series (p.237) for dimensions of the amplifiers. The CAD data in the dimensions can be downloaded from our website.

### Reflective type fibers

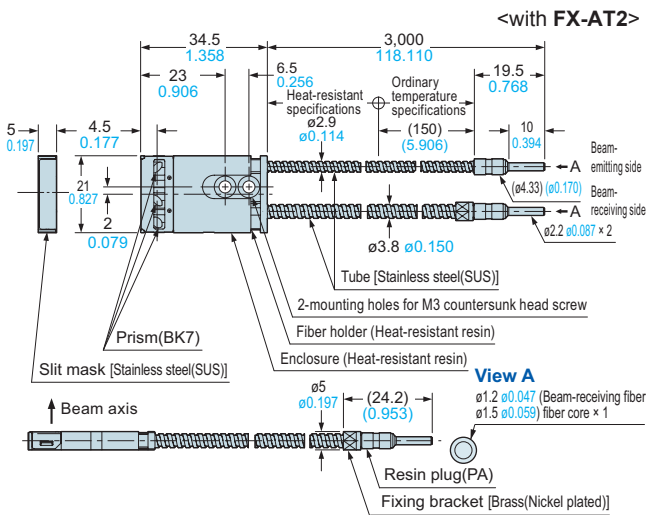


Dimensions are listed in the order of thru-beam type, retroreflective type, and reflective type, and in alphabetic order of the model No.

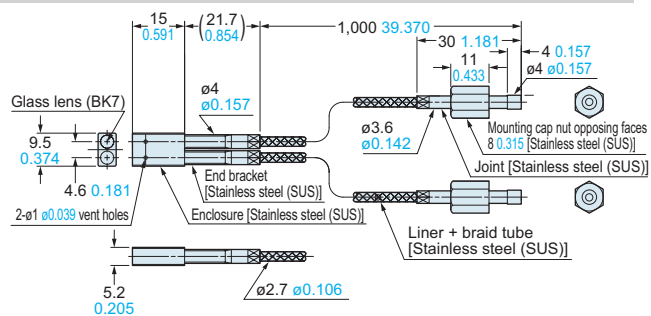
#### FD-H25-L43



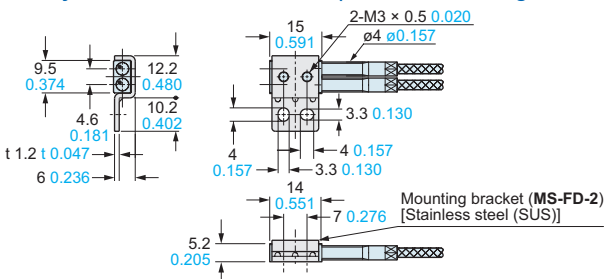
#### FD-H25-L45



#### FD-H30-KZ1V-S

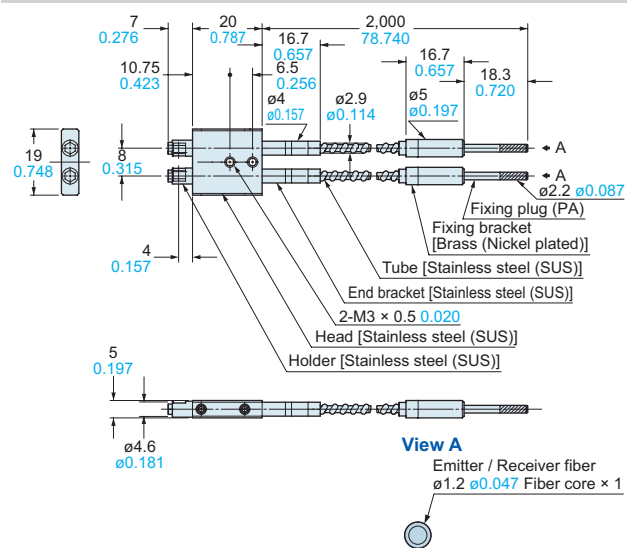


#### Assembly dimensions with MS-FD-2 (attached mounting bracket)

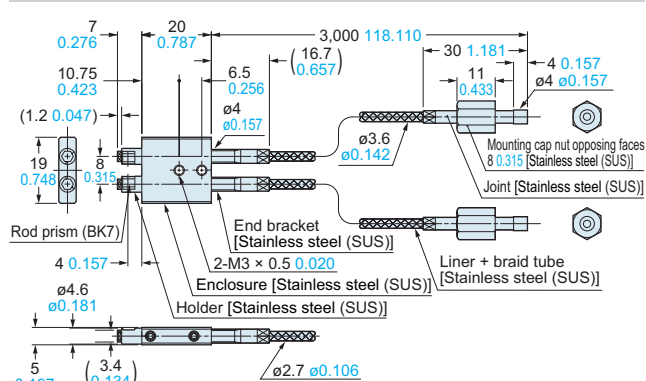


Note: The FD-H30-KZ1V-S is a set with the FD-H30-KZ1V, photo-terminal **FV-BR1**, and atmospheric side fiber **FT-J8**. Refer to p.108 and p.109 for dimensions of the atmospheric side fiber and photo-terminals.

#### FD-H30-L32



#### FD-H30-L32V-S



Note: The FD-H30-L32V-S is a set with the FD-H30-L32V, photo-terminal **FV-BR1**, and atmospheric side fiber **FT-J8**. Refer to p.108 and p.109 for dimensions of the atmospheric side fiber and photo-terminals.

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## DIMENSIONS (Unit: mm in)

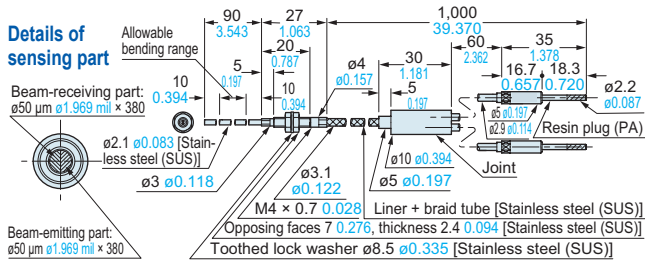
Refer to the FX-500 series (p.156), FX-100 series (p.175), FX-300 series (p.203), FX-410 series (p.221), and FX-311 series (p.237) for dimensions of the amplifiers. The CAD data in the dimensions can be downloaded from our website.

### Reflective type fibers

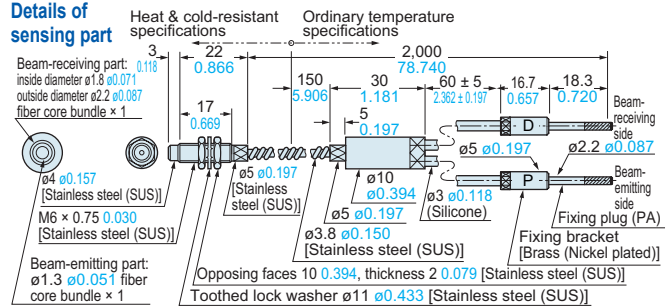


Dimensions are listed in the order of thru-beam type, retroreflective type, and reflective type, and in alphabetic order of the model No.

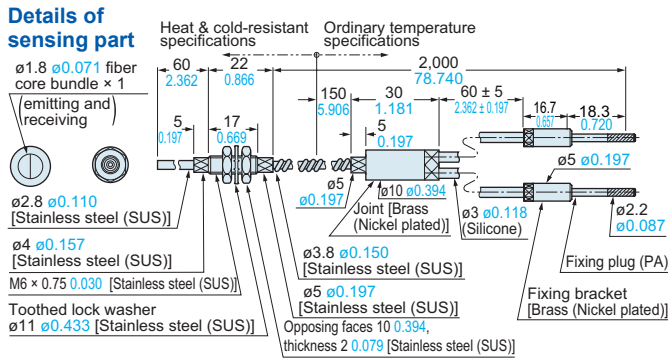
#### FD-H35-20S



#### FD-H35-M2

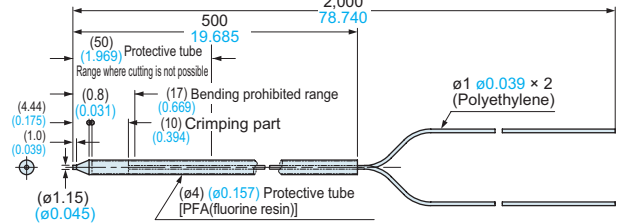


#### FD-H35-M2S6



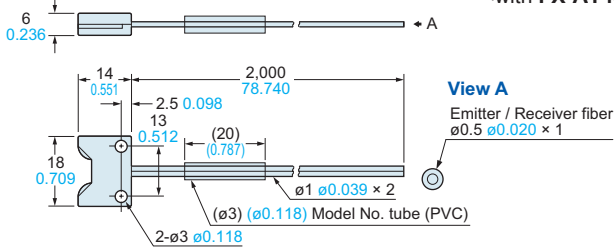
#### FD-HF40Y

Free-cut <with FX-AT4>



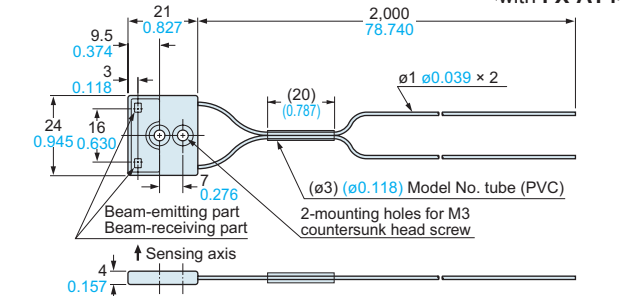
#### FD-L4

Free-cut <with FX-AT4>



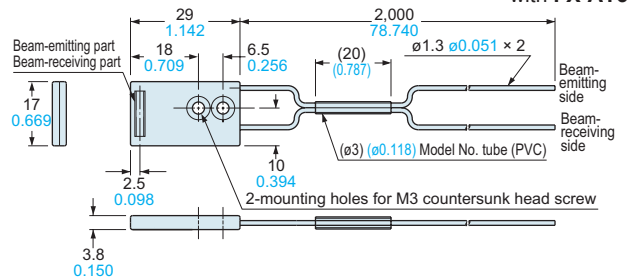
#### FD-L41

Free-cut <with FX-AT4>



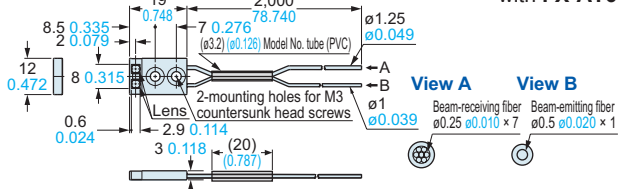
#### FD-L43

Free-cut <with FX-AT5>



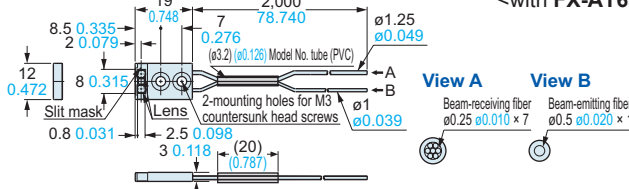
#### FD-L44

Free-cut <with FX-AT6>



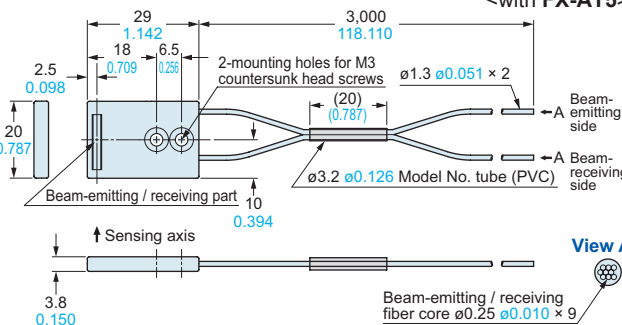
#### FD-L44S

Free-cut <with FX-AT6>



#### FD-L45

Free-cut <with FX-AT5>



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**DIMENSIONS (Unit: mm in)**

Refer to the **FX-500 series** (p.156), **FX-100 series** (p.175), **FX-300 series** (p.203), **FX-410 series** (p.221), and **FX-311 series** (p.237) for dimensions of the amplifiers. The CAD data in the dimensions can be downloaded from our website.

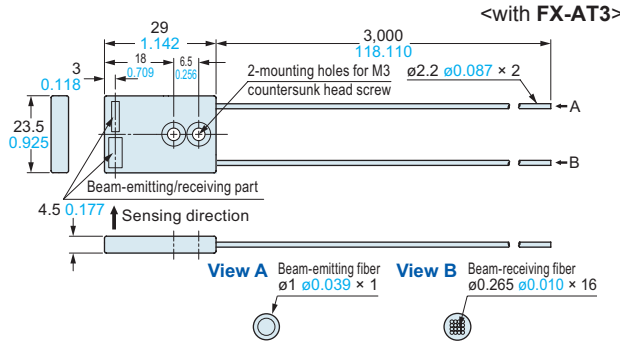
**Reflective type fibers**



Dimensions are listed in the order of thru-beam type, retroreflective type, and reflective type, and in alphabetic order of the model No.

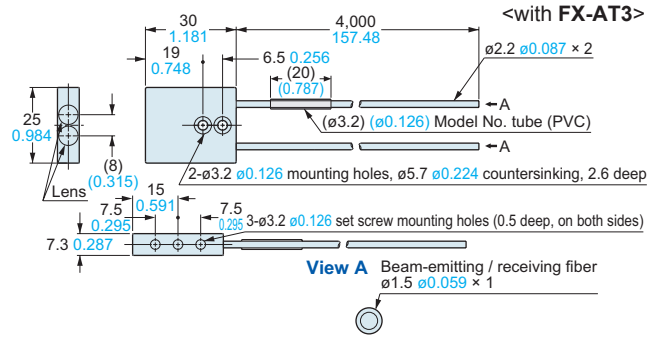
**FD-L45A**

Free-cut



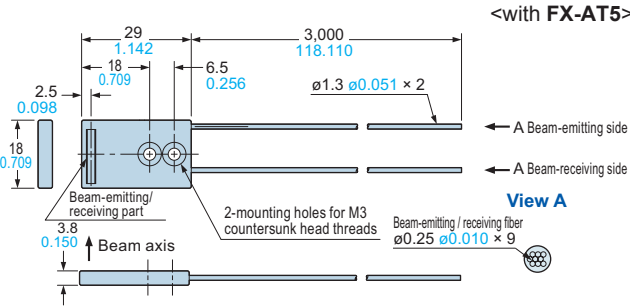
**FD-L46**

Free-cut



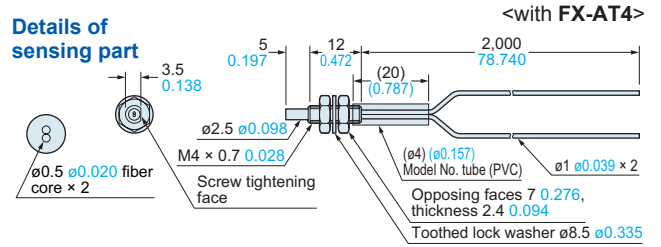
**FD-L47**

Free-cut



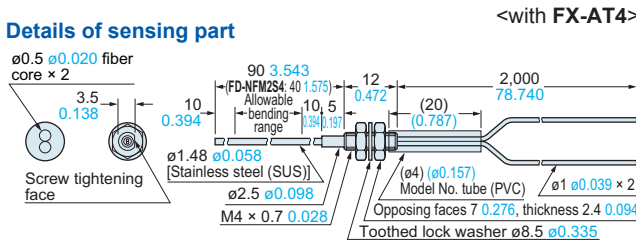
**FD-NFM2**

Free-cut



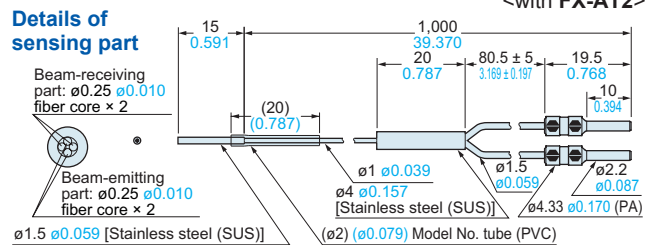
**FD-NFM2S FD-NFM2S4**

Free-cut



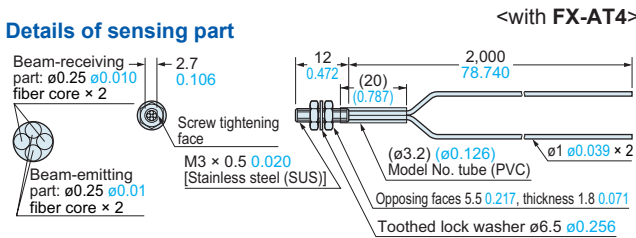
**FD-P2**

Free-cut



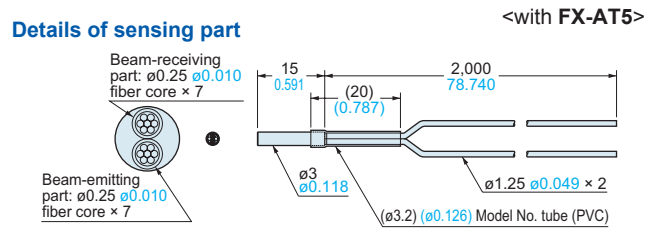
**FD-P40**

Free-cut



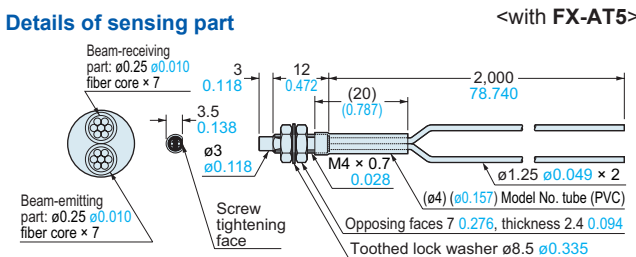
**FD-P50**

Free-cut



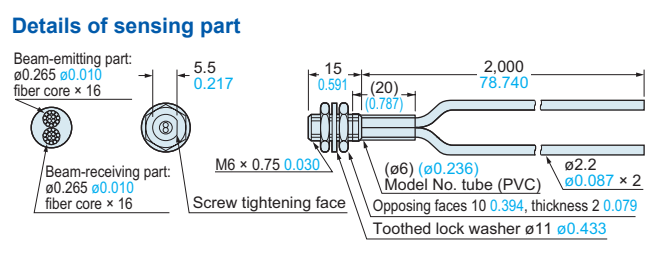
**FD-P60**

Free-cut



**FD-P80**

Free-cut





**DIMENSIONS (Unit: mm in)**

Refer to the **FX-500 series** (p.156), **FX-100 series** (p.175), **FX-300 series** (p.203), **FX-410 series** (p.221), and **FX-311 series** (p.237) for dimensions of the amplifiers. The CAD data in the dimensions can be downloaded from our website.

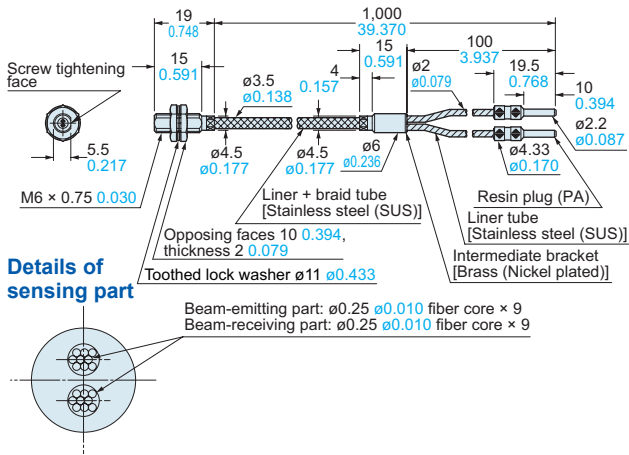
**Reflective type fibers**



Dimensions are listed in the order of thru-beam type, retroreflective type, and reflective type, and in alphabetic order of the model No.

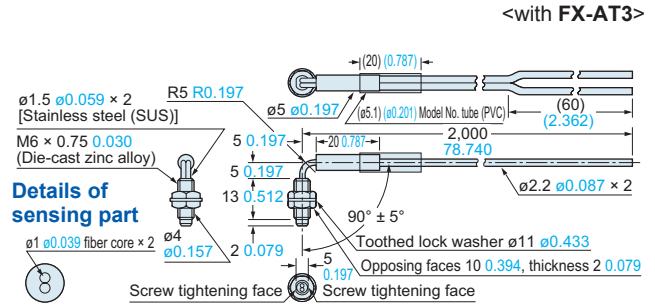
**FD-P81X**

<with FX-AT2>



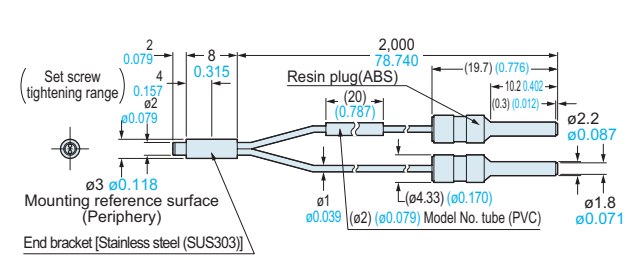
**FD-R80**

Free-cut <with FX-AT3>



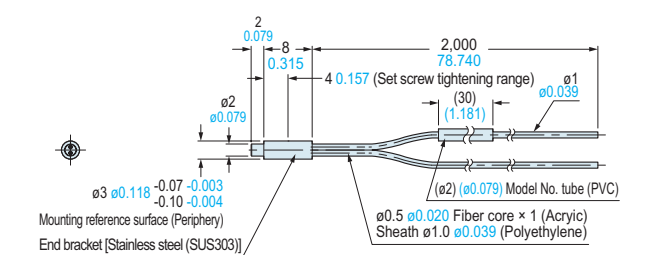
**FD-S30**

<with FX-AT2>



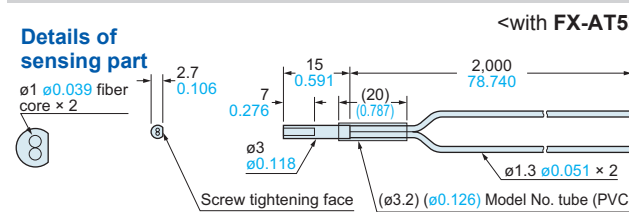
**FD-S31**

Free-cut <with FX-AT4>



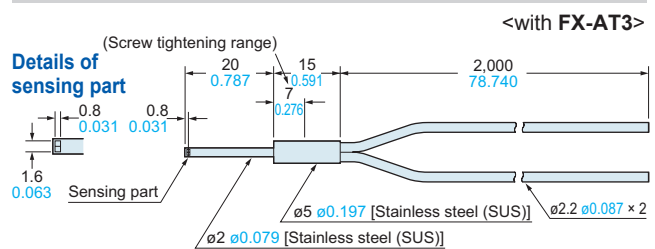
**FD-S80**

Free-cut <with FX-AT5>



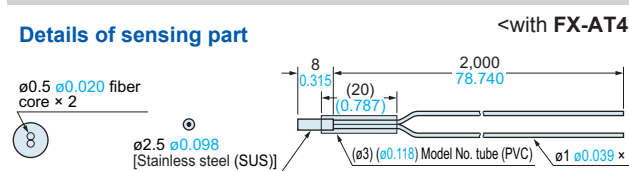
**FD-SFM2SV2**

Free-cut <with FX-AT3>



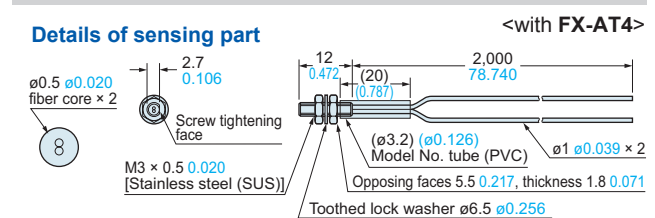
**FD-SNFM2**

Free-cut <with FX-AT4>



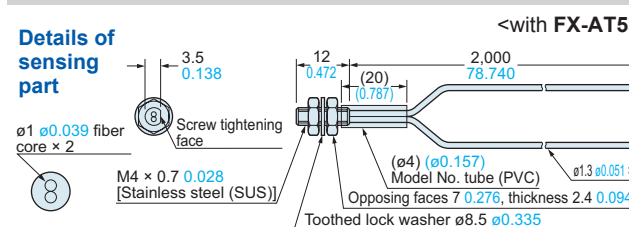
**FD-T40**

Free-cut <with FX-AT4>



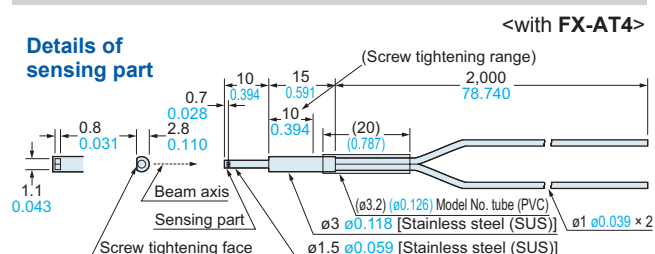
**FD-T80**

Free-cut <with FX-AT5>



**FD-V41**

Free-cut <with FX-AT4>



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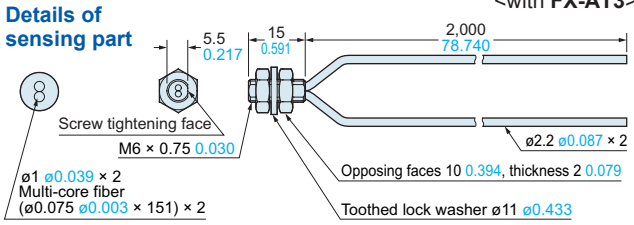
**DIMENSIONS (Unit: mm in)**

**Reflective type fibers**

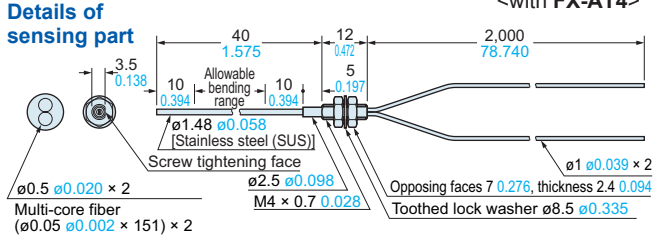


Dimensions are listed in the order of thru-beam type, retroreflective type, and reflective type, and in alphabetic order of the model No.

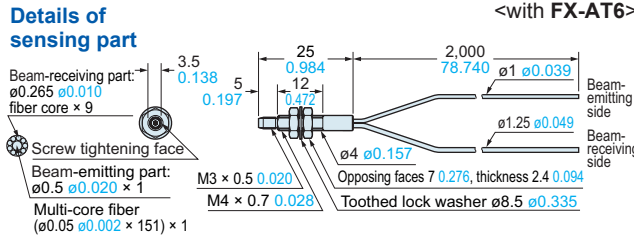
**FD-W8** Free-cut



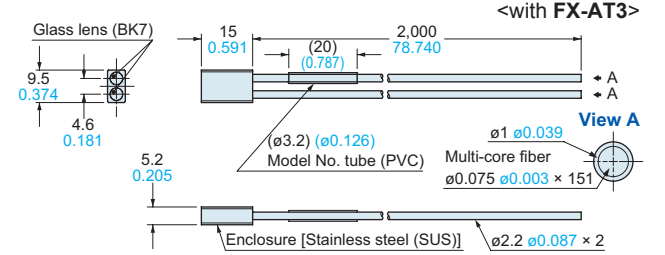
**FD-W44** Free-cut



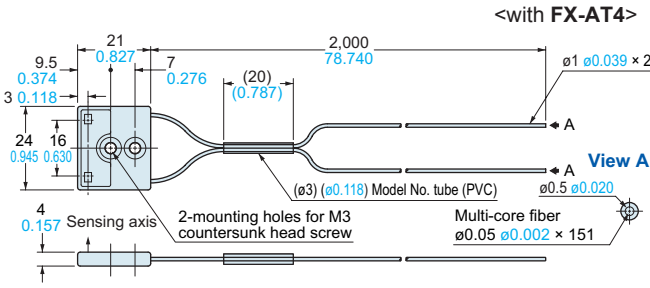
**FD-WG4** Free-cut



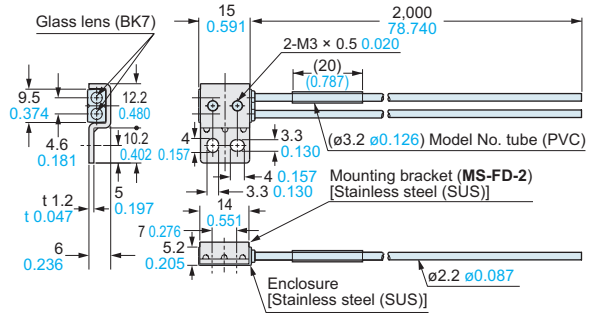
**FD-WKZ1** Free-cut



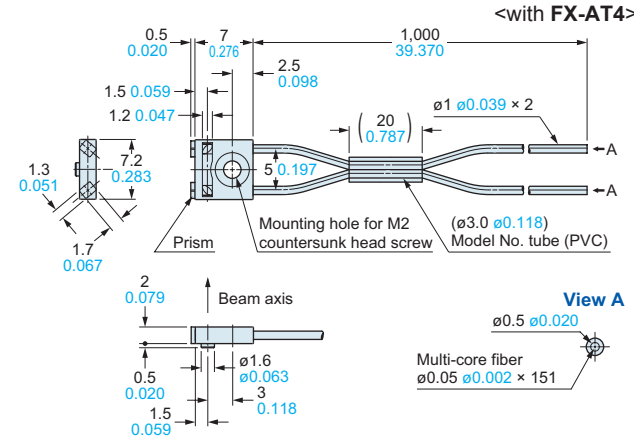
**FD-WL41** Free-cut



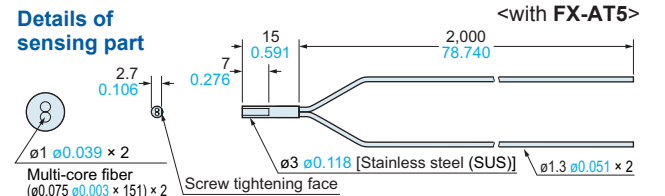
**Assembly dimensions with MS-FD-2 (attached mounting bracket)**



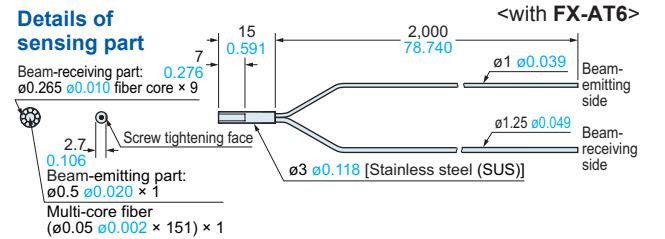
**FD-WL48** Free-cut



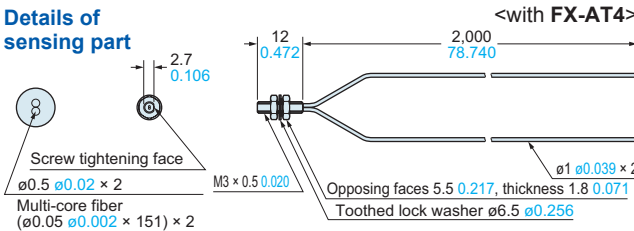
**FD-WS8** Free-cut



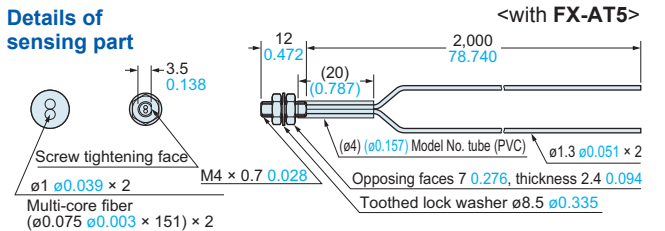
**FD-WSG4** Free-cut



**FD-WT4** Free-cut



**FD-WT8** Free-cut



**DIMENSIONS (Unit: mm in)** Refer to the FX-500 series (p.156), FX-100 series (p.175), FX-300 series (p.203), FX-410 series (p.221), and FX-311 series (p.237) for dimensions of the amplifiers. The CAD data in the dimensions can be downloaded from our website.

**Reflective type fibers**

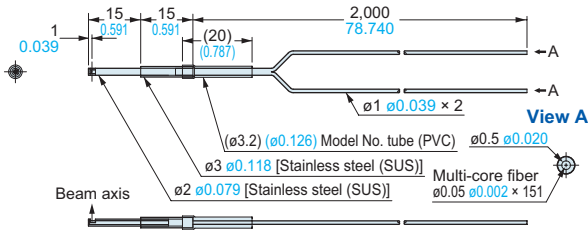


Dimensions are listed in the order of thru-beam type, retroreflective type, and reflective type, and in alphabetic order of the model No.

**FD-WV42**

Free-cut

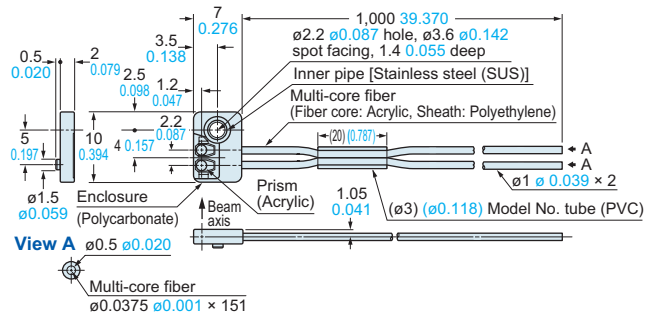
<with FX-AT4>



**FD-WZ4**

Free-cut

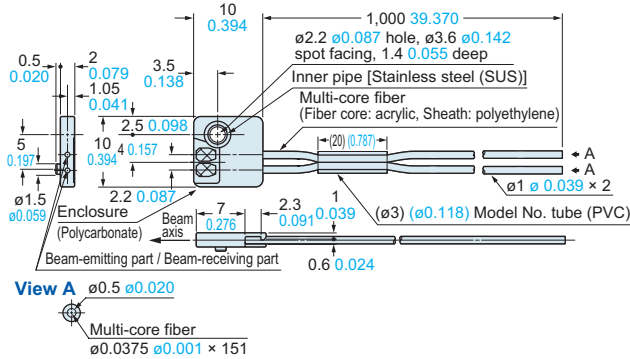
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**FD-WZ4HB**

Free-cut

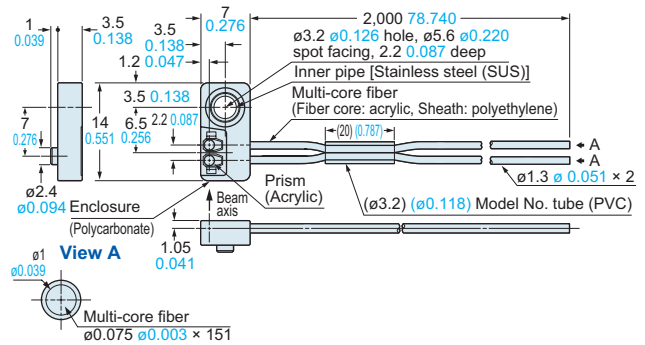
<with FX-AT4>



**FD-WZ7**

Free-cut

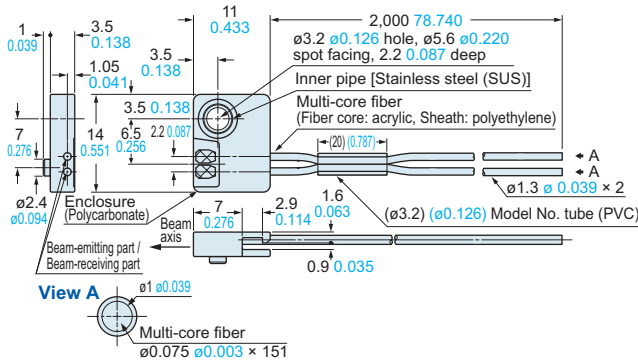
<with FX-AT5>



**FD-WZ7HB**

Free-cut

<with FX-AT5>

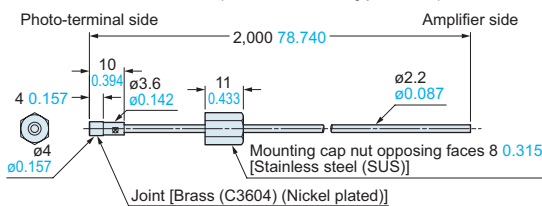


**Vacuum-resistant Atmospheric side fiber**

**FT-J8**

Free-cut

(with vacuum type fiber) <with FX-AT3>



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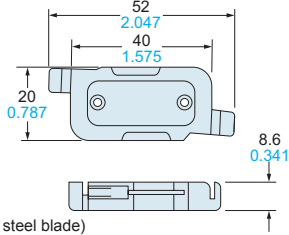
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**DIMENSIONS (Unit: mm in)** Refer to the **FX-500** series (p.156), **FX-100** series (p.175), **FX-300** series (p.203), **FX-410** series (p.221), and **FX-311** series (p.237) for dimensions of the amplifiers. The CAD data in the dimensions can be downloaded from our website.

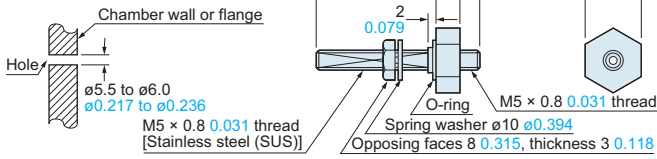
**FB-1** Fiber bender (Optional)



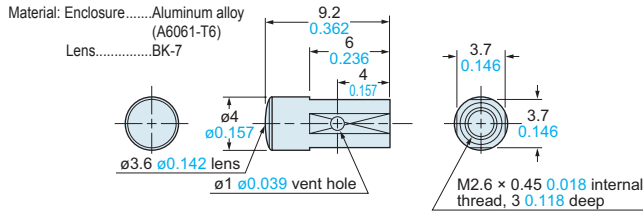
Material: PP (Containing steel blade)

**FV-BR1** Photo-terminal (for vacuum-resistant fiber) (with vacuum type fiber)

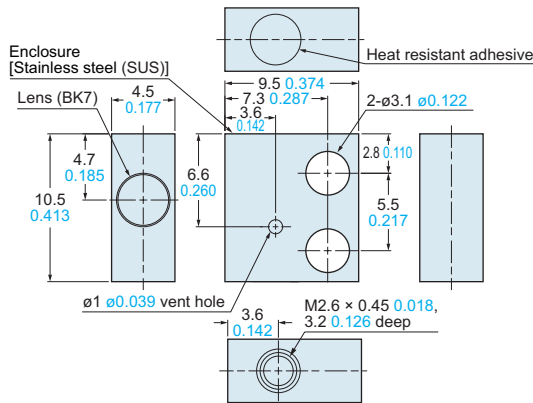
**Mounting hole**



**FV-LE1** Vacuum resistant expansion lens (Optional)

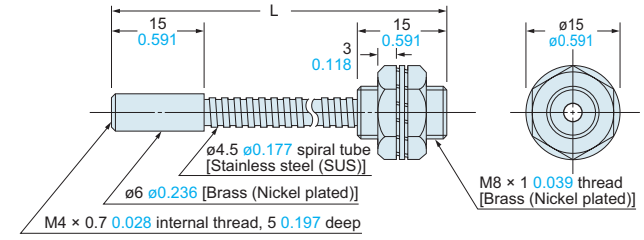


**FV-SV2** Vacuum resistant side-view lens (Optional)

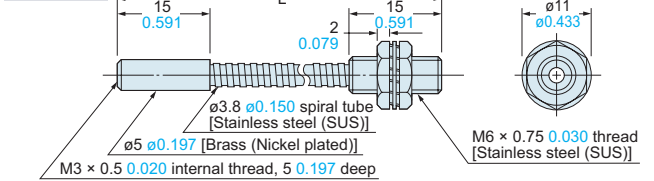


**FTP-□ FDP-□** Protective tube (Optional)

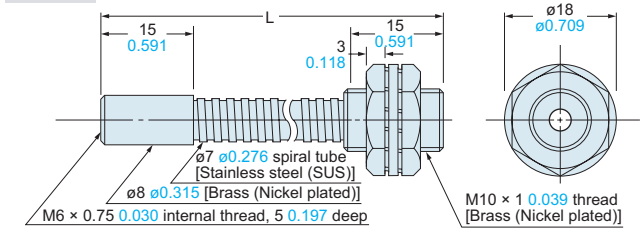
**FTP-□, FDP-N□**



**FTP-N□**



**FDP-□**



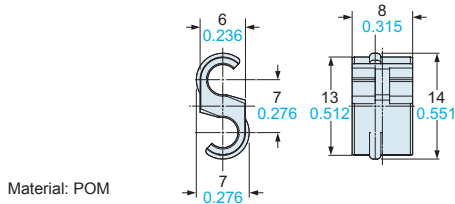
• Length L

Model No.	Length L
FTP-500, FTP-N500, FDP-N500, FDP-500	500 <sup>+10</sup> <sub>0</sub> 19.685 <sup>+0.394</sup> <sub>0</sub>
FTP-1000, FTP-N1000, FDP-N1000, FDP-1000	1,000 <sup>+10</sup> <sub>0</sub> 39.370 <sup>+0.394</sup> <sub>0</sub>
FTP-1500, FTP-N1500, FDP-N1500, FDP-1500	1,500 <sup>+10</sup> <sub>0</sub> 59.055 <sup>+0.394</sup> <sub>0</sub>

**DIMENSIONS (Unit: mm in)**

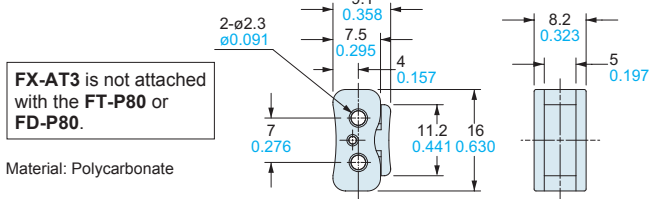
Refer to the **FX-500** series (p.156), **FX-100** series (p.175), **FX-300** series (p.203), **FX-410** series (p.221), and **FX-311** series (p.237) for dimensions of the amplifiers. The CAD data in the dimensions can be downloaded from our website.

**FX-AT2** Attachment for fixed-length fiber (Accessory for fixed-length fiber)



Material: POM

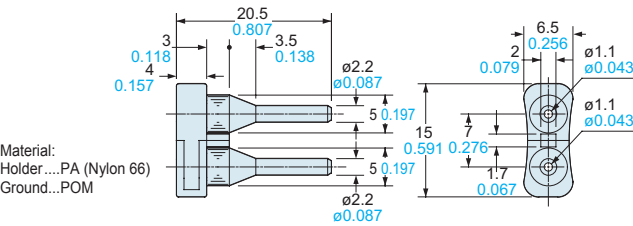
**FX-AT3** Attachment for  $\varnothing 2.2$  mm  $\varnothing 0.087$  in fiber (Accessory for  $\varnothing 2.2$  mm  $\varnothing 0.087$  in fiber)



FX-AT3 is not attached with the FT-P80 or FD-P80.

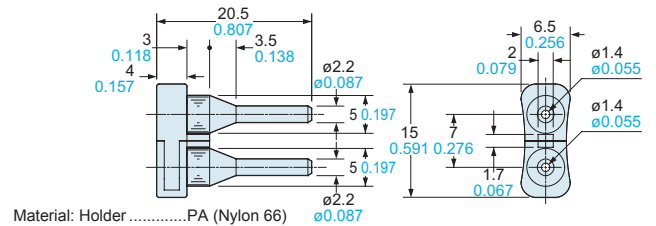
Material: Polycarbonate

**FX-AT4** Attachment for  $\varnothing 1$  mm  $\varnothing 0.039$  in fiber (Accessory for  $\varnothing 1$  mm  $\varnothing 0.039$  in fiber)



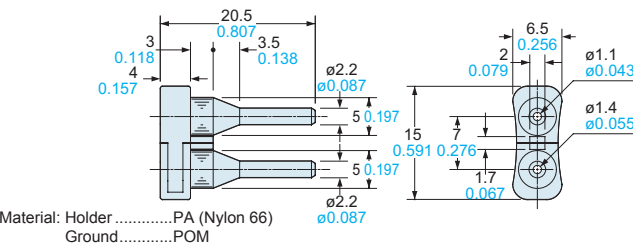
Material: Holder.....PA (Nylon 66)  
Ground.....POM

**FX-AT5** Attachment for  $\varnothing 1.3$  mm  $\varnothing 0.051$  in fiber (Accessory for  $\varnothing 1.3$  mm  $\varnothing 0.051$  in fiber)



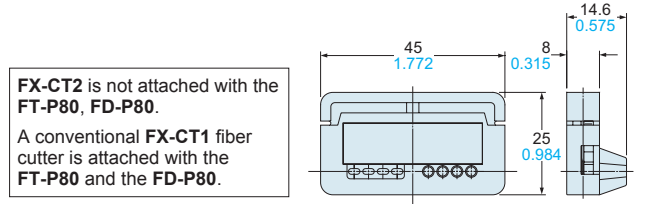
Material: Holder.....PA (Nylon 66)  
Ground.....POM

**FX-AT6** Attachment for  $\varnothing 1$  mm  $\varnothing 0.039$  in /  $\varnothing 1.3$  mm  $\varnothing 0.051$  in mixed fiber (Accessory for  $\varnothing 1$  mm  $\varnothing 0.039$  in /  $\varnothing 1.3$  mm  $\varnothing 0.051$  in mixed fiber)



Material: Holder.....PA (Nylon 66)  
Ground.....POM

**FX-CT2** Fiber cutter (Accessory for free-cut type fiber)

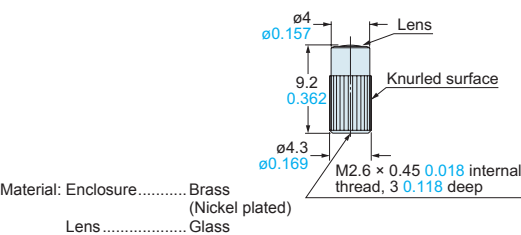


FX-CT2 is not attached with the FT-P80, FD-P80.

A conventional FX-CT1 fiber cutter is attached with the FT-P80 and the FD-P80.

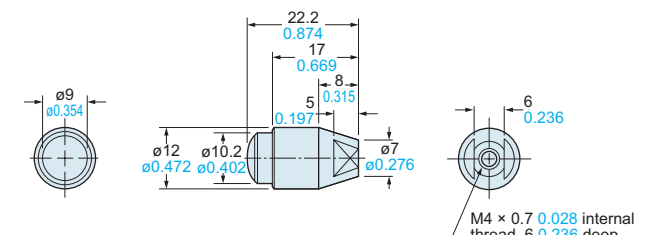
Material: ABS

**FX-LE1** Expansion lens (Optional)



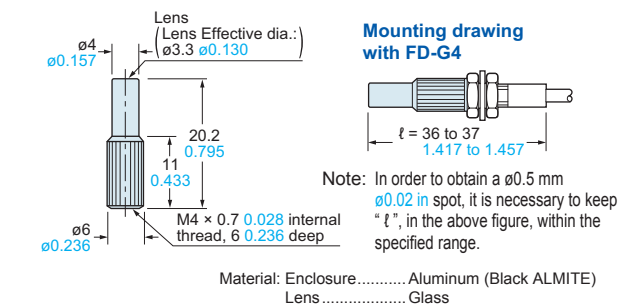
Material: Enclosure.....Brass (Nickel plated)  
Lens.....Glass

**FX-LE2** Super-expansion lens (Optional)



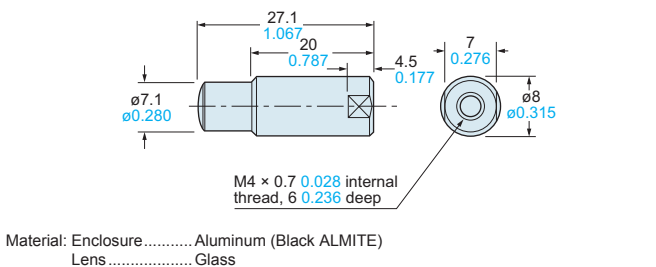
Material: Enclosure.....Stainless steel (SUS303)  
Lens.....Glass

**FX-MR1** Pinpoint spot lens (Optional)



Material: Enclosure.....Aluminum (Black ALMITE)  
Lens.....Glass

**FX-MR2** Zoom lens (Optional)



Material: Enclosure.....Aluminum (Black ALMITE)  
Lens.....Glass

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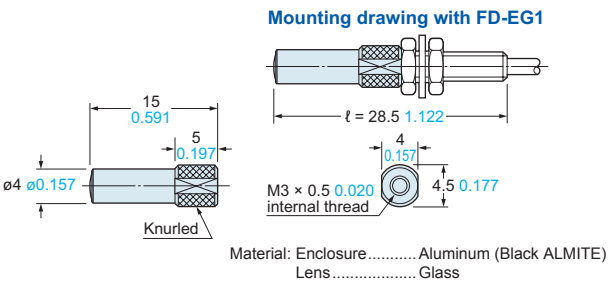
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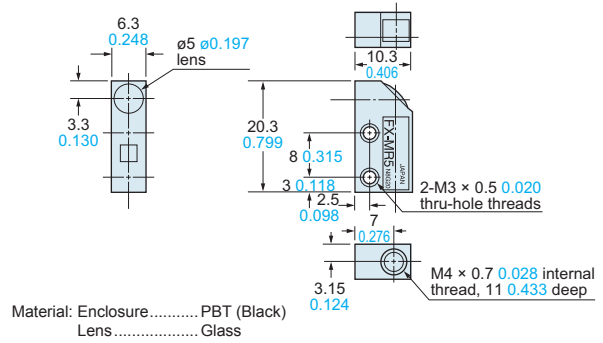
Refer to the **FX-500** series (p.156), **FX-100** series (p.175), **FX-300** series (p.203), **FX-410** series (p.221), and **FX-311** series (p.237) for dimensions of the amplifiers. The CAD data in the dimensions can be downloaded from our website.

**FX-MR3**      **Finest spot lens (Optional)**

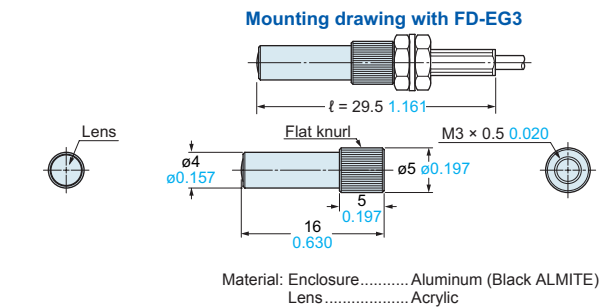


Note: When inserting the fiber, insert fully till it stops.

**FX-MR5**      **Zoom lens (Optional)**

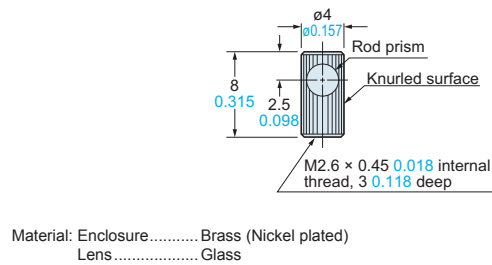


**FX-MR6**      **Finest spot lens (Optional)**

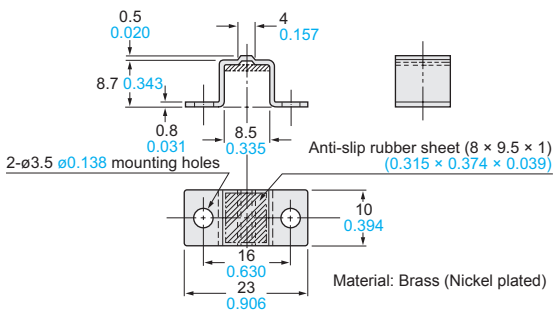


Note: When inserting the fiber, insert fully till it stops.

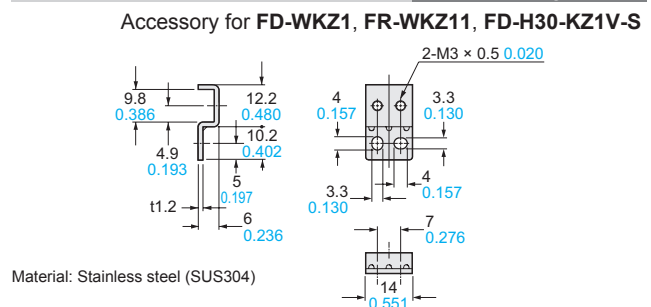
**FX-SV1**      **Side-view lens (Optional)**



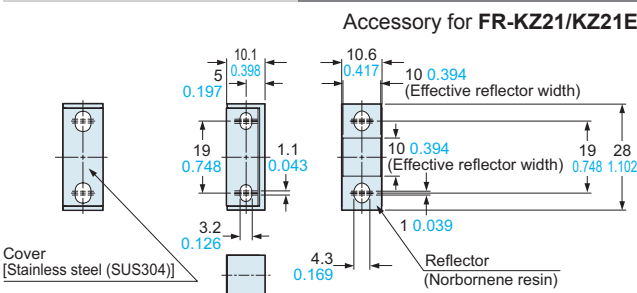
**MS-EX-3**      **Mounting bracket for FX-MR2 (Accessory for FX-MR2)**



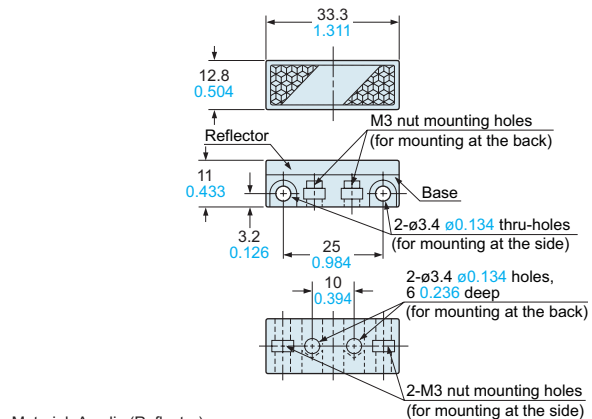
**MS-FD-2**      **Fiber mounting bracket**



**RF-003**      **Reflector for FR-KZ21/KZ21E**



**RF-210**      **Reflector (Optional)**

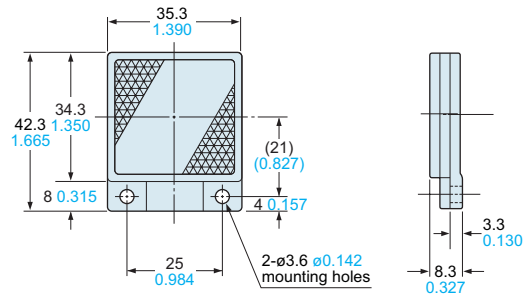


**DIMENSIONS (Unit: mm in)**

Refer to the **FX-500** series (p.156), **FX-100** series (p.175), **FX-300** series (p.203), **FX-410** series (p.221), and **FX-311** series (p.237) for dimensions of the amplifiers. The CAD data in the dimensions can be downloaded from our website.

**RF-220**

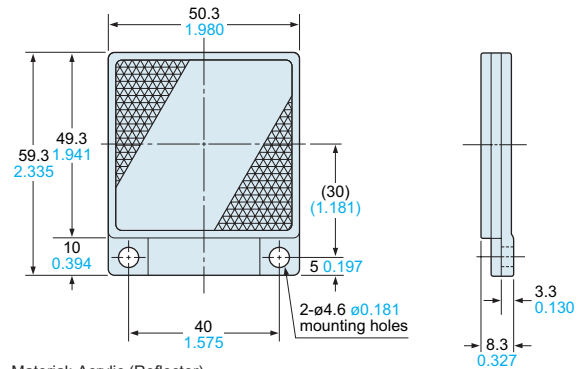
**Reflector (Optional)**



Material: Acrylic (Reflector)  
ABS (Base)

**RF-230**

**Reflector (Optional)**



Material: Acrylic (Reflector)  
ABS (Base)

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<b>FT-A30</b>	P.47 ~	P.90
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<b>FT-AFM2E</b>	P.47 ~	P.90
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<b>FT-H20-J50-S</b>	P.49 ~	P.92
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<b>FT-H20-VJ50-S</b>	P.49 ~	P.92
<b>FT-H20-VJ80-S</b>	P.49 ~	P.92
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<b>FT-H35-M2</b>	P.47 ~	P.92
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<b>FT-V10</b>	P.43 ~	P.95
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<b>FT-WA30</b>	P.47 ~	P.95
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<b>FT-WS8L</b>	P.41 ~	P.96
<b>FT-WV42</b>	P.43 ~	P.96
<b>FT-WZ4</b>	P.45 ~	P.96
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<b>FT-WZ7</b>	P.45 ~	P.97
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