

Fiber Optic Cables

Attachments

Type/Model	Description	Dimensions (mm)	Remarks																																						
Lens unit	FA714	<ul style="list-style-type: none"> For fiber optic cable with two-tiered screw And M2.6 tip Does not apply to reflective types 	<ul style="list-style-type: none"> • Detecting distance (mm) <table border="1"> <thead> <tr> <th rowspan="2">Fiber optic cable</th> <th colspan="2">Amplifier</th> <th rowspan="2">F70R F70AR</th> <th rowspan="2">F71R</th> <th rowspan="2">F2R</th> </tr> <tr> <th>Long-distance</th> <th>High-speed</th> </tr> </thead> <tbody> <tr> <td>FT7BC</td> <td>3400</td> <td>1900</td> <td>1900</td> <td>1150</td> <td>500</td> </tr> <tr> <td>FTH7BC</td> <td>3400</td> <td>1900</td> <td>1900</td> <td>1150</td> <td>500</td> </tr> </tbody> </table> <p>(With lens attached to transmitter and receiver)</p>	Fiber optic cable	Amplifier		F70R F70AR	F71R	F2R	Long-distance	High-speed	FT7BC	3400	1900	1900	1150	500	FTH7BC	3400	1900	1900	1150	500																		
	Fiber optic cable	Amplifier			F70R F70AR	F71R				F2R																															
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	FT7BC	3400	1900	1900	1150	500																																			
	FTH7BC	3400	1900	1900	1150	500																																			
	FA814	<ul style="list-style-type: none"> For fiber optic cables with M3, 0.5 mm-pitch screw Does not apply to reflective types 	<ul style="list-style-type: none"> • Detecting distance (mm) <table border="1"> <thead> <tr> <th rowspan="2">Fiber optic cable</th> <th colspan="2">Amplifier</th> <th rowspan="2">F70R F70AR</th> <th rowspan="2">F71R</th> <th rowspan="2">F2R</th> </tr> <tr> <th>Long-distance</th> <th>High-speed</th> </tr> </thead> <tbody> <tr> <td>FT8EBC</td> <td>3400</td> <td>1900</td> <td>1900</td> <td>1200</td> <td>500</td> </tr> <tr> <td>FT8BC</td> <td>3400</td> <td>1900</td> <td>1900</td> <td>1200</td> <td>500</td> </tr> <tr> <td>FT19YBC</td> <td>1000</td> <td>570</td> <td>570</td> <td>350</td> <td>120</td> </tr> <tr> <td>FT108BC</td> <td>3400</td> <td>1900</td> <td>1900</td> <td>1200</td> <td>500</td> </tr> <tr> <td>GTKseries</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>450</td> </tr> </tbody> </table> <p>(With lens attached to transmitter and receiver)</p>	Fiber optic cable	Amplifier		F70R F70AR	F71R	F2R	Long-distance	High-speed	FT8EBC	3400	1900	1900	1200	500	FT8BC	3400	1900	1900	1200	500	FT19YBC	1000	570	570	350	120	FT108BC	3400	1900	1900	1200	500	GTKseries	-	-	-	-	450
	Fiber optic cable	Amplifier			F70R F70AR	F71R				F2R																															
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FT108BC	3400	1900	1900	1200	500																																				
GTKseries	-	-	-	-	450																																				
形式・FA514	<ul style="list-style-type: none"> For through-beam fiber optic cables with M4, 0.7 mm-pitch screw Does not apply to reflective types Increases sensing distance by 10 times (with ϕ 1.0 fiber optic cable core) 	Also applicable to fiber optic cables with ϕ 0.5, 1.0 or 1.5 core.																																							
FA205	<ul style="list-style-type: none"> For through-beam fiber optic cables with M4, 0.7 mm-pitch screw Increases sensing distance by 20 times (with ϕ 1.0 fiber optic cable core) 	Also applicable to fiber optic cables with ϕ 0.5, 1.0 or 1.5 core.																																							
FA200	<ul style="list-style-type: none"> For coaxial reflective fiber optic cables with M4, 0.7 mm-pitch screw 	<p>Applicable fiber optic cable: FX**BC and FX200J Series excluding FX801BC</p> <p>Detecting distance: 10-11 mm / Spot diameter: 0.5-0.3 mm</p>																																							
FA240	<p>Body: aluminum (black anodized aluminum) Secure with nut and washer provided with fiber optic cable, etc.</p>	Detecting distance: 7-16 mm Spot diameter: 0.6-1.7 mm																																							


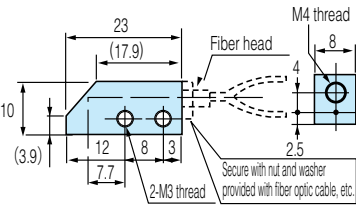

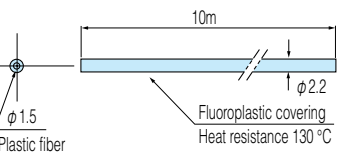

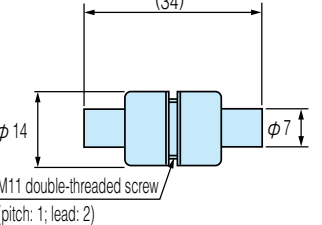

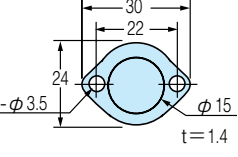

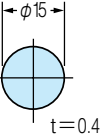

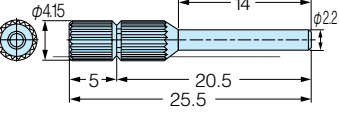
Fiber Optic Cables

Attachments

Type/Model	Description	Dimensions (mm)	Remarks
Lens unit	FA250		Detection distance: 18-25 mm Spot diameter: 0.4-0.7 mm
	FA260		Applicable fiber optic cable: Coaxial reflective FX**BC and FX200J Series excluding FX801BC Detecting distance: 18 mm Spot diameter: approximately 0.5 mm
	FA263		Detecting distance: 35 mm Spot diameter: approximately 1.5 mm
	FA261		Applicable fiber optic cable: FX801BC Detecting distance: 18 mm Spot diameter: approximately 0.5 mm
Side-view	FA712		Applicable fiber optic cable: fiber optic cables with two-tiered screw with M2.6 tip (FTH7BC, FT7BC) Detecting distance not affected
	FA12F5		Detecting distance not affected


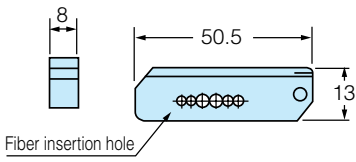

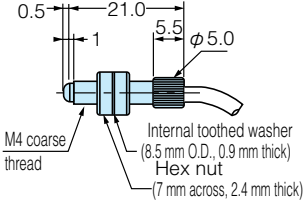

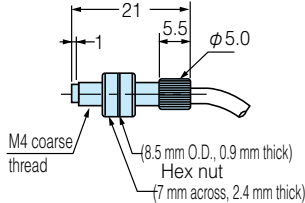

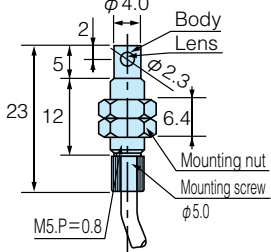
Fiber Optic Cables

Attachments

Type/Model	Description	Dimensions (mm)	Remarks
FA252 	<ul style="list-style-type: none"> Attachable to reflective fiber optic cable with M4, 0.7 mm-pitch screw for side-on use 	 <p>23 (17.9) M4 thread 8 4 2.5 10 (3.9) 12 8 3 7.7 2-M3 thread Secure with nut and washer provided with fiber optic cable, etc.</p>	<p>Detecting distances depend on the insertion length of fiber optic cables.</p>
FA6001FE 	<ul style="list-style-type: none"> PFA-covered fiber optic cable allows use in high-temperature atmosphere of up to 130 °C 	 <p>10m $\phi 1.5$ Plastic fiber $\phi 2.2$ Fluoroplastic covering Heat resistance 130 °C</p>	<p>Applicable to all amplifiers. Use the fiber optic cable attachment specified.</p>
FA7CN 	<ul style="list-style-type: none"> Convenient for extending fiber optic cables when they are broken, etc. <p>(Use fiber optic cables with cores of the same diameter on both sides of the connector.)</p>	 <p>(34) $\phi 14$ $\phi 7$ M11 double-threaded screw (pitch: 1; lead: 2)</p>	<p>Applicable fiber optic cable Outer diameter: 2.2 mm Core diameter: 1.0, 1.5mm</p>
S-15B 	<ul style="list-style-type: none"> For use of fiber optic sensors in combination with reflectors. Although reflectors increase detecting distances, the sensitivity must be reduced for preventing false detection due to diffuse reflection. 	 <p>30 22 24 $2-\phi 3.5$ $\phi 15$ $t=1.4$</p>	<p>With base Mount by screwing or with adhesive</p>
S-15 		 <p>$\phi 15$ $t=0.4$</p>	<p>Without base Mount with adhesive</p>
Adapter Model FA191BC (gray): $\phi 1$ Model FA181BC (black): $\phi 1.25$ 	<ul style="list-style-type: none"> Adapters for small-diameter fiber optic cables. 	 <p>$\phi 4.15$ 14 $\phi 2.2$ 5 20.5 25.5</p>	<p>Applicable amplifiers F2R Series F71 Series F70 Series F80R Series</p>

Fiber Optic Cables

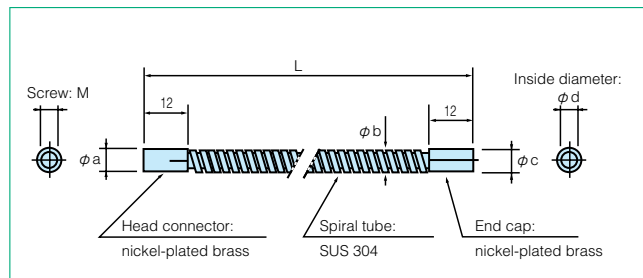
Attachments

Type/Model	Description	Dimensions (mm)	Remarks
Fiber cutter 	<ul style="list-style-type: none"> Cuts fiber optic cable to an arbitrary length according to the installation situation. 		Be sure to cut one cable at a time and use one hole of cutter once only.
Fiber optic cable attachment	Model • FA511 		For longer detecting distances
	Model • FA510 		Applicable fiber optic cable Outer diameter: 2.2 mm Core diameter: 0.5, 1.0, 1.5mm
	Model • FA512 		Detecting distance not affected

Fiber Protector


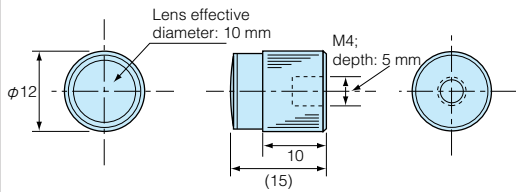

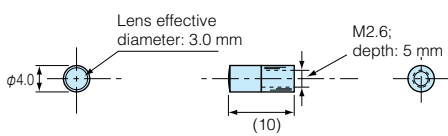

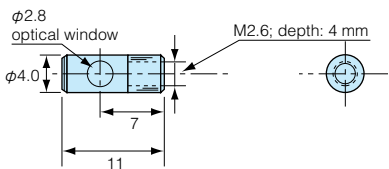

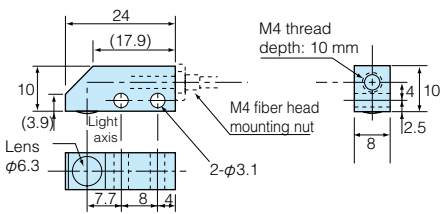

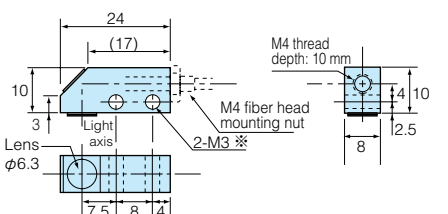
Model	FA3SP10	FA4SP10	FA6SP10
Length : Lmm	1000mm		
ϕa	$\phi 6.0$		$\phi 8.5$
ϕb	$\phi 4.8$		$\phi 7.0$
ϕc	$\phi 6.0$		$\phi 8.5$
ϕd	$\phi 3.0$		$\phi 5.0$
Screw: M	M3x0.5 Depth: 4	M4x0.7 Depth:4	M6x0.75 Depth:4
Applicable fiber optic cable	FT8BC FT8EBC FTS8BC FTS88BC	FT5BC FR84BC FT7BC FRS84BC FTH7BC FX84BC FTS5BC FTS53BC FTSV5BC	FR7BC FRH7BC FX7BC
Allowable bending radius	R30 mm min.		
Tensile strength (at normal temperature)	1.5 N·m between tube and head connector, end cap, tube (2.0 N·m)		
Compressive load	Tube: 30 N		

Dimensions (in mm)



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Type/Model	Description	Dimensions (mm)	Remarks
FA515	 <ul style="list-style-type: none"> Round for M4 screw 	 <p>Lens effective diameter: 10 mm $\phi 12$ M4; depth: 5 mm 10 (15)</p>	Body: SUS304 Lens: Glass Upper temperature limit: 350°C
FA714H	 <ul style="list-style-type: none"> Round for M2.6 screw 	 <p>Lens effective diameter: 3.0 mm $\phi 4.0$ M2.6; depth: 5 mm (10)</p>	Body: SUS304 Lens: Glass Upper temperature limit: 350°C
FA712H	 <ul style="list-style-type: none"> Round side-view for M2.6 screw 	 <p>$\phi 2.8$ optical window $\phi 4.0$ M2.6; depth: 4 mm 7 11</p>	Body: SUS304 Lens: Glass Upper temperature limit: 350°C
FA252M	 <ul style="list-style-type: none"> Square side-view for M4 screw 	 <p>24 (17.9) 10 (3.9) Light axis $\phi 6.3$ 7.7 8 4 M4 thread depth: 10 mm M4 fiber head mounting nut 10 2.5 8</p>	Body: SUS304 Lens: Glass Upper temperature limit: 200°C
FA252H-□*	 <ul style="list-style-type: none"> Square side-view for M4 screw 	 <p>24 (17) 10 3 Light axis $\phi 6.3$ 7.5 8 4 M4 thread depth: 10 mm M4 fiber head mounting nut 2-M3* 14 10 12.5 8</p>	Body: SUS304 Lens: Glass Upper temperature limit: 350°C * -B $\phi 3.1$