





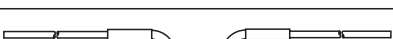
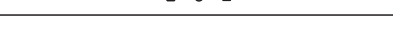




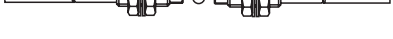


■ Specifications(Through-beam)

Dimension	Model	(Note1) Cable length (L)	(Note2) Detecting distance (mm)	(Note3) Min. detecting target	Allowable bend radius	Fiber hood fixed nut torque	Tensile strength	Temperature	(A) Counter	
Free cut 	FT-320-05	2m	150	∅ 0.5	15R	Max. 3kg · f · cm	Max. 2kg · f	-40 ~ +70 °C (Humidity 35 ~ 85%RH)	(B) Timer	
Free cut 	FT-420-10	2m	500	∅ 1	30R	Max. 8kg · f · cm	Max. 2kg · f		(C) Temp. controller	
Free cut Cylinder type 	FTC-220-05	2m	150	∅ 0.5	15R	Max. 3kg · f · cm	Max. 2kg · f		(D) Power controller	
Free cut Cylinder type 	FTC-320-10	2m	500	∅ 1	30R	Max. 3kg · f · cm	Max. 2kg · f		(E) Panel meter	
Free cut SUS Cylinder type 	FTCS-220-05	2m	150	∅ 1	30R	Max. 3kg · f · cm	Max. 2kg · f		(F) Tacho/Speed/Pulse meter	
Free cut Plastic type 	FTP-320-10	2m	500	∅ 1	30R	Max. 3kg · f · cm	Max. 2kg · f		(G) Display unit	
Free cut 90° banding type 	FTR-420-10	2m	500	∅ 1	30R	Max. 8kg · f · cm	Max. 2kg · f		(H) Sensor controller	
Free cut SUS type 	FTS-320-05	2m	150	∅ 0.5	30R (SUS part 10R)	Max. 3kg · f · cm	Max. 2kg · f		(I) Proximity sensor	
	FTS2-320-05									
Free cut SUS type 	FTS-420-10	2m	500	∅ 1.0	30R (SUS part 10R)	Max. 8kg · f · cm	Max. 2kg · f			
	FTS2-420-10									
Free cut SUS type 	FTS1-320-05	2m	150	∅ 0.5	15R	Max. 8kg · f · cm	Max. 2kg · f	(J) Photo electric sensor		
Free cut Heat-resistant type 	FT-420-10H	2m	300	∅ 1.0	30R	Max. 8kg · f · cm	Max. 2kg · f	-40~ +125 °C		(K) Pressure sensor
Free cut Heat-resistant type 	FT-420-10H1	2m	500	∅ 1.0	30R	Max. 8kg · f · cm	Max. 2kg · f	-40~ +150 °C		(L) Rotary encoder
Glass type Heat-resistant type 	GT-420-14H2	2m	500	∅ 1.4	50R	Max. 8kg · f · cm	Max. 2kg · f	-40~ +250 °C		(M) 5-Phase stepping motor & Driver & Controller

※ (Note1) The length of fiber optic cable is optional.

※ (Note2) Above detecting distance is measured from detecting non-glossy white paper by using BF4R series's maximum sensitivity. For BF4G series, the detecting distance is 10% of BF4G series.

※ (Note3) The smallest detecting target is detected by maximum sensitivity, so this value is not standard.

※ Free cut The detecting distance can be shorten about 20% than normal according to condition of the cable. [(FC-2) should be used for cutting fiber cable.]

Fiber Cable

■ Specifications(Diffuse reflective)

Dimension	Model	(Note1) Cable length (L)	(Note2) Detecting distance (mm)	(Note3) Min. detecting target	Allowable bend radius	Fiber hood fixed nut torque	Tensile strength	Temperature
Free cut 	FD-320-05	2m	40	∅ 0.03	15R	Max. 3kg・f・cm	Max. 2kg・f	-40 ~ +70℃ (Humidity 35 ~ 85%RH)
Free cut 	FD-420-05	2m	40	∅ 0.03	15R	Max. 8kg・f・cm	Max. 2kg・f	
Free cut 	FD-620-10	2m	120	∅ 0.03	30R	Max. 10kg・f・cm	Max. 3kg・f	
Free cut Cylinder type 	FDC-320-05	2m	40	∅ 0.03	15R	Max. 3kg・f・cm	Max. 2kg・f	
Free cut SUS Cylinder type 	FDCS-320-05	2m	40	∅ 0.03	15R	Max. 3kg・f・cm	Max. 2kg・f	
Free cut Plastic type 	FDP-320-10	2m	120	∅ 0.03	30R	Max. 3kg・f・cm	Max. 2kg・f	
Free cut SUS type 	FDS-320-05	2m	40	∅ 0.03	15R (SUS part 10R)	Max. 3kg・f・cm	Max. 2kg・f	
Free cut SUS type 	FDS2-320-05							
Free cut SUS type 	FDS-420-05	2m	40	∅ 0.03	15R (SUS part 10R)	Max. 8kg・f・cm	Max. 2kg・f	
Free cut SUS type 	FDS2-420-05							
Free cut SUS type 	FDS-620-10	2m	120	∅ 0.03	30R (SUS part 10R)	Max. 10kg・f・cm	Max. 3kg・f	
Free cut SUS type 	FDS2-620-10							
Free cut Coaxial type 	FD-320-F	2m	60	∅ 0.03	15R	Max. 3kg・f・cm	Max. 2kg・f	
Free cut Coaxial type 	FD-320-F1	2m	40	∅ 0.03	15R	Max. 3kg・f・cm	Max. 2kg・f	
Free cut Coaxial type 	FD-620-F2	2m	120	∅ 0.03	30R	Max. 10kg・f・cm	Max. 3kg・f	
Free cut Heat-resistant type 	FD-620-10H	2m	120	∅ 0.03	30R	Max. 10kg・f・cm	Max. 3kg・f	-40~ +125℃
Free cut Heat-resistant type 	FD-620-15H1	2m	160	∅ 0.03	50R	Max. 10kg・f・cm	Max. 3kg・f	-40~ +150℃

※ (Note1) The length of fiber optic cable is optional.

※ (Note2) Detecting distance is detecting with max. sensitivity from white non-glossy paper □ 50mm by BF4R Series.
For BF4G series, the detecting distance is 10% of BF4G series.

(But, above specification of FD-620 type is detecting with max. sensitivity from white non-glossy paper □ 100mm)

※ (Note3) The smallest detecting target is detected by maximum sensitivity, so this value is not standard.

※ Free cut The detecting distance can be shorten about 20% than normal according to condition of the cable.
[(FC-2) should be used for cutting fiber cable.]

Dimensions

Model	Diffuse reflective	Model	Through-beam
FD-320-05 M3-D0.5 Free cut Adapter		FT-320-05 M3-D0.5 Free cut Adapter	
FD-420-05 M4-D0.5 Free cut Adapter		FT-420-10 M4-D1.0 Free cut	
FD-620-10 M6-D1.0 Free cut		FTC-220-05 φ2-D0.5 Free cut Adapter	
FDC-320-05 M3-D0.5 Free cut Adapter		FTC-320-10 φ3-D1.0 Free cut	
FDCS-320-05 φ3-D0.5 SUS φ1.5×15mm Free cut Adapter		FTCS-220-05 φ1.0-D0.5 SUS φ1×15mm Free cut Adapter	
FDP-320-10 D1.0×2 Plastic Free cut		FTP-320-10 D1.0 Plastic Free cut	
FDS-320-05 M3-D0.5 SUS φ1.5×90mm Free cut Adapter		FTR-420-10 M4-D1.0 Free cut	
FDS2-320-05 M3-D0.5 SUS φ1.5×90mm Free cut Adapter			
FDS-420-05 M4-D0.5 SUS φ1.5×90mm Free cut Adapter			
FDS2-420-05 M4-D0.5 SUS φ1.5×90mm Free cut Adapter		FTS-320-05 M3-D0.5 SUS φ1.0×90mm Free cut Adapter	
FDS-620-10 M6-D1.0 SUS φ2.5×90mm Free cut		FTS2-320-05 M3-D0.5 SUS φ1.0×90mm Free cut Adapter	
FDS2-620-10 M6-D1.0 SUS φ2.5×90mm Free cut		FTS-420-10 M4-D1.0 SUS φ1.5×90mm Free cut	
FD-320-F Co-axial M3 φ0.5, φ0.25×4 Free cut Adapter		FTS2-420-10 M4-D1.0 SUS φ1.5×90mm Free cut	

(A) Counter

(B) Timer

(C) Temp. controller

(D) Power controller

(E) Panel meter

(F) Tacho/Speed/Pulse meter

(G) Display unit

(H) Sensor controller

(I) Proximity sensor

(J) Photo electric sensor

(K) Pressure sensor

(L) Rotary encoder

(M) 5-Phase stepping motor & Driver & Controller

Fiber Cable

Dimensions

Model	Diffuse reflective	Model	Through-beam
FD-320-F1 Co-axial M3 $\phi 0.5$, $\phi 0.25 \times 9$ Free cut Adapter 9- $\phi 0.25$ (Light receiver)		FTS1-320-05 M3-D0.5 SUS $\phi 1.0 \times 35$ mm Free cut Adapter $\phi 0.5$	
FD-620-F2 Co-axial M6 $\phi 1.0$ $\phi 0.25 \times 16$ Free cut		FT-420-10H M4-D1.0 Heat RESISTANT 125°C Free cut	
FD-620-10H M6-D1.0 Heat Resistant 125°C Free cut		FT-420-10H1 M4-D1.0 Heat Resistant 150°C Free cut	
FD-620-15H1 M6-D1.5 Heat Resistant 150°C Free cut		GT-420-14H2 M4-D1.4 Heat Resistant Max.250°C Glass Terminal	

Fiber optic cable protection

Usage : Protect from impact or cutting

Unit:mm

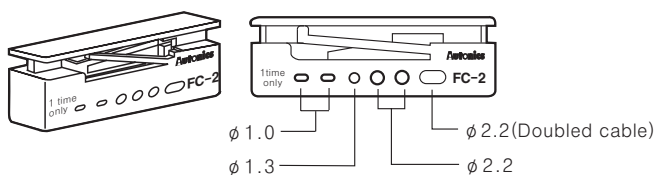
Model	Dimension
FTH-310	
FTH-410	
FDH-610	

Accessories

Fiber cutter

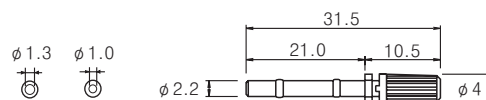
Usage : Free cut type, fiber optic cable cutting

FC-2



Adapter

Adapter : should be used.



※Note1)The inside diameter $\phi 1.0$ (Standard)
The inside diameter $\phi 1.3$ (Only applied light receiver)

Unit:mm