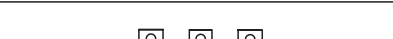
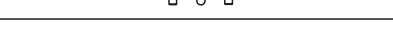
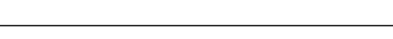
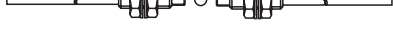


■ Specifications(Through-beam)

Dimension	Model	(Note1) Cable length (L)	(Note2) Detecting distance (mm)	(Note3) Min. detecting target	Allowable bend radius	Fiber hood fixed nut torque	Tensile strength	Tempe- rature
Free cut 	FT-320-05	2m	150	∅ 0.5	15R	Max. 3kg・f・cm	Max. 2kg・f	-40 ~ +70℃ (Humidity 35 ~ 85%RH)
Free cut 	FT-420-10	2m	500	∅ 1	30R	Max. 8kg・f・cm	Max. 2kg・f	
Free cut Cylinder type 	FTC-220-05	2m	150	∅ 0.5	15R	Max. 3kg・f・cm	Max. 2kg・f	
Free cut Cylinder type 	FTC-320-10	2m	500	∅ 1	30R	Max. 3kg・f・cm	Max. 2kg・f	
Free cut SUS Cylinder type 	FTCS-220-05	2m	150	∅ 1	30R	Max. 3kg・f・cm	Max. 2kg・f	
Free cut Plastic type 	FTP-320-10	2m	500	∅ 1	30R	Max. 3kg・f・cm	Max. 2kg・f	
Free cut 90° banding type 	FTR-420-10	2m	500	∅ 1	30R	Max. 8kg・f・cm	Max. 2kg・f	
Free cut SUS type 	FTS-320-05	2m	150	∅ 0.5	30R (SUS part 10R)	Max. 3kg・f・cm	Max. 2kg・f	
	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	
Free cut Heat- resistant type 	FT-420-10H	2m	300	∅ 1.0	30R	Max. 8kg・f・cm	Max. 2kg・f	-40~ +125℃
Free cut Heat- resistant type 	FT-420-10H1	2m	500	∅ 1.0	30R	Max. 8kg・f・cm	Max. 2kg・f	-40~ +150℃
Glass type Heat- resistant type 	GT-420-14H2	2m	500	∅ 1.4	50R	Max. 8kg・f・cm	Max. 2kg・f	-40~ +250℃

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

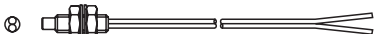
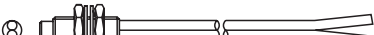
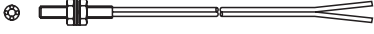
※ (Note2) Above detecting distance is measured from detecting non-glossy white paper by using BF4R series's maximum sensitivity.
For BF4G series, the detecting distance is 10% of BF4G series.

※ (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	Tempe- rature
Free cut 	FD-320-05	2m	40	φ 0.03	15R	Max. 3kg・f・cm	Max. 2kg・f	-40 ~ +70℃ (Humidity 35 ~ 85%RH)
Free cut 	FD-420-05	2m	40	φ 0.03	15R	Max. 8kg・f・cm	Max. 2kg・f	
Free cut 	FD-620-10	2m	120	φ 0.03	30R	Max. 10kg・f・cm	Max. 3kg・f	
Free cut Cylinder type 	FDC-320-05	2m	40	φ 0.03	15R	Max. 3kg・f・cm	Max. 2kg・f	
Free cut SUS Cylinder type 	FDCS-320-05	2m	40	φ 0.03	15R	Max. 3kg・f・cm	Max. 2kg・f	
Free cut Plastic type 	FDP-320-10	2m	120	φ 0.03	30R	Max. 3kg・f・cm	Max. 2kg・f	
Free cut SUS type 	FDS-320-05	2m	40	φ 0.03	15R (SUS part 10R)	Max. 3kg・f・cm	Max. 2kg・f	
	FDS2-320-05							
Free cut SUS type 	FDS-420-05	2m	40	φ 0.03	15R (SUS part 10R)	Max. 8kg・f・cm	Max. 2kg・f	
	FDS2-420-05							
Free cut SUS type 	FDS-620-10	2m	120	φ 0.03	30R (SUS part 10R)	Max. 10kg・f・cm	Max. 3kg・f	
	FDS2-620-10							
Free cut Coaxial type 	FD-320-F	2m	60	φ 0.03	15R	Max. 3kg・f・cm	Max. 2kg・f	
Free cut Coaxial type 	FD-320-F1	2m	40	φ 0.03	15R	Max. 3kg・f・cm	Max. 2kg・f	
Free cut Coaxial type 	FD-620-F2	2m	120	φ 0.03	30R	Max. 10kg・f・cm	Max. 3kg・f	
Free cut Heat- resistant type 	FD-620-10H	2m	120	φ 0.03	30R	Max. 10kg・f・cm	Max. 3kg・f	-40~ +125℃
Free cut Heat- resistant type 	FD-620-15H1	2m	160	φ 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 φ0.5, φ0.25×9 Free cut Adapter 1- φ0.5 (Through-beam) 9- φ0.25(Light receiver) M3X0.5 Through-beam φ1 Light receiver φ1.3		FTS1-320-05 M3-D0.5 SUS φ1.0×35mm Free cut Adapter φ0.5 φ1 M3x0.5 φ1	
FD-620-F2 Co-axial M6 φ1.0 φ0.25×16 Free cut 1- φ1 (Through-beam) 16- φ0.265(Light receiver) M6X0.75 2- φ2.2		FT-420-10H M4-D1.0 Heat RESISTANT 125°C Free cut φ1 M2.6X0.45 M4X0.7 φ2.2	
FD-620-10H M6-D1.0 Heat Resistant 125°C Free cut 2- φ1 M6X0.75 2- φ2.2		FT-420-10H1 M4-D1.0 Heat Resistant 150°C Free cut φ1 M2.6X0.45 M4X0.7 φ2.2	
FD-620-15H1 M6-D1.5 Heat Resistant 150°C Free cut 2- φ1.5 M6X0.75 2- φ2.2		GT-420-14H2 M4-D1.4 Heat Resistant Max.250°C Glass Terminal φ1.4 M2.6X0.45 M4X0.7 φ2.9 Glass φ5 φ2.2 Glass fiber with φ2.9 sus protective armor.	

■ Fiber optic cable protection

●Usage : Protect from impact or cutting

Unit:mm

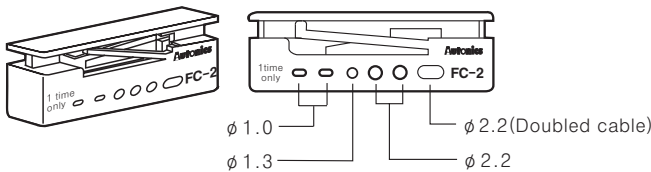
Model	Dimension
FTH-310	
FTH-410	
FDH-610	

■ Accessories

◎Fiber cutter

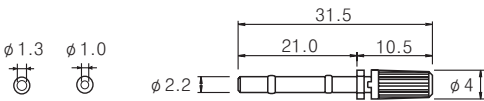
Usage : Free cut type, fiber optic cable cutting

●FC-2



◎Adapter

Adapter : should be used.



※Note1)The inside diameter φ1.0(Standard)
The inside diameter φ1.3(Only applied light receiver)

Unit:mm