

■ Specifications (through-beam type)

(based on Non-glossy white paper)

Type	Appearance	Feature	Model	Sensing distance (mm)	Min. sensing target ^{※3}	Allowable bend radius	Cable length(L) ^{※4}	Temp.	
Flexible type ^{※5}	Line-up	Flat type / Top view	FTFU-210-05R	110 ^{※1}	Ø0.04	R1	1m Free cut	-40 to 60°C	
	Line-up	Flat type / Side view	FTFN-210-05R						
	Line-up	Flat type / Flat view	FTF-210-05R	100 ^{※1}					
	Line-up	Flat type / Top+Side view	FTFB-210-05R	110 ^{※1}					
	Line-up	Integrated bracket (L type) / Top view	FTLU-310-10R FTLU1-310-10R FTLU2-310-10R	500 ^{※1}					Ø0.06
	Line-up	M3 Bolt	FT-320-05R	110 ^{※1}					Ø0.3
	Line-up	Ø2 Cylinder type	FTC-220-05R						
	Line-up	M4 Bolt	FT-420-10R	500 ^{※1}					Ø0.5
Flexible type ^{※5}	Line-up	M3 Bolt	FT-320-06B	110 ^{※2}	Ø0.3	R5	2m Free cut		
	Line-up	Ø1.5 Cylinder type	FTC-1520-06B						
	Line-up	M4 Bolt	FT-420-13B	400 ^{※2}	Ø0.6				

※1: The sensing distance is a standard for BF5 Series.

※2: The sensing distance is a standard for red LED of BF4 Series and 10% of red LED is applied when it is green LED. It is applied to 40% of sensing distance for BF3RX.

※3: Min. sensing target is a value measured opaque material in accurate output status and the sensing distance is different with the rated sensing distance ※2.

※4: Fiber optic cable out of the rated length can be customizable.

※5: ● **Flexible optical fiber (Multi core)** : A large number of ultra-fine cores are all surrounded by cladding. Easy to install the many places where are bending areas because the change of the intensity of radiation by bending is small.

● **Break-resistant optical fiber** : The fiber units contain a large number of independent fine fibers, ensuring a high degree of flexibility. It can be used for moving parts(robot hand) and it is not easily broken.

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

※FT-420-13 was discontinued. FT-420-13B is replacement.

(A) Photo electric sensor

(B) Fiber optic sensor

(C) Door/Area sensor

(D) Proximity sensor

(E) Pressure sensor

(F) Rotary encoder

(G) Connector/Socket

(H) Temp. controller

(I) SSR/ Power controller

(J) Counter

(K) Timer

(L) Panel meter

(M) Tacho/ Speed/ Pulse meter

(N) Display unit

(O) Sensor controller

(P) Switching mode power supply

(Q) Stepper motor& Driver&Controller

(R) Graphic/ Logic panel

(S) Field network device

(T) Software

(U) Other