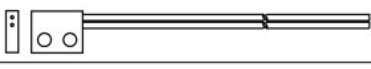
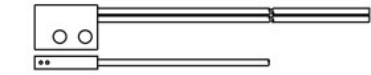
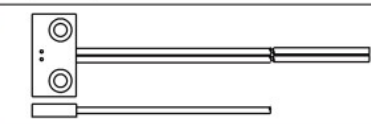


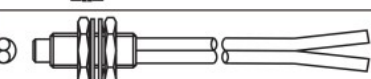

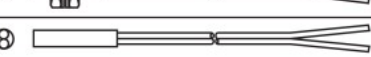

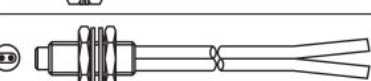


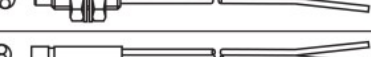
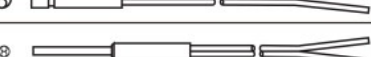
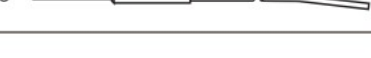




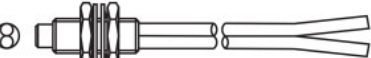




# Fiber Optic Cable

## ■ Specifications (diffuse reflective type)

(based on Non-glossy white paper)

Type	Appearance	Feature	Model	Sensing distance (mm)	Min. sensing target <sup>※3</sup>	Allowable bend radius	Cable length(L) <sup>※4</sup>	Temp.			
Flexible type <sup>※5</sup>	 Line-up	Flat type /Top view	FDFU-210-05R	35 <sup>※1</sup>	Ø0.0125	R1	1m <b>Free cut</b>	-40 to 60°C			
	 Line-up	Flat type /Side view	FDFN-210-05R	30 <sup>※1</sup>							
	 Line-up	Flat type /Flat view	FDF-210-05R								
	 Line-up	M3 Bolt	FD-320-05R	35 <sup>※1</sup>	Ø0.0125						
	 Line-up	M4 Bolt	FD-420-05R								
	 Line-up	M6 Bolt	FD-620-10R	130 <sup>※1</sup>	Ø0.04						
Break-resistant type <sup>※5</sup>	 Line-up	M3 Bolt	FD-320-06B	35 <sup>※2</sup>	Ø0.0125	R5	2m <b>Free cut</b>		-40 to 70°C		
	 Line-up	Ø3 Cylinder type	FDC-320-06B								
	 Line-up	M4 Bolt	FD-420-06B								
	 Line-up	M6 Bolt	FD-620-13B	100 <sup>※2</sup>							
Standard type	 Line-up	M3 Bolt	FD-320-05	40 <sup>※2</sup>	Ø0.03	R15				2m <b>Free cut</b>	-40 to 70°C
	 Line-up	M4 Bolt	FD-420-05								
	 Line-up	Ø3 Cylinder type	FDC-320-05								
	 Line-up	Ø3 Cylinder type SUS type(90mm)	FDCS-320-05								
	 Line-up	M3 Bolt SUS type(90mm)	FDS-320-05								
	 Line-up	M3 Bolt SUS type(45mm)	FDS2-320-05								
	 Line-up	M4 Bolt SUS type(90mm)	FDS-420-05								
	 Line-up	M4 Bolt SUS type(45mm)	FDS2-420-05								
	 Line-up	M6 Bolt	FD-620-10	120 <sup>※2</sup>		R30					
	 Line-up	M6 Bolt SUS type(90mm)	FDS-620-10								
 Line-up	M6 Bolt SUS type(45mm)	FDS2-620-10									
 Line-up	Plastic	FDP-320-10	R30								

※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.)

(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