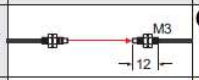
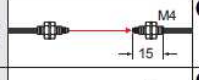
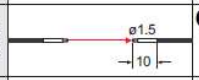
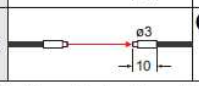
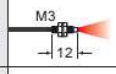
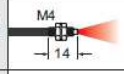
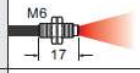
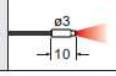
Thru-beam type (one pair set)

Type		Shape of fiber head (mm)	Model No.	Bending radius (mm)	Fiber cable length ✂: Free-cut	Sensing range (mm in) FX-500 series	Sensing range (mm in) U-LG LONG FAST H-SP	Sensing range (mm in) FX-101 (Upper value) FX-102 (Lower value)	Beam axis dia. (mm)	Beam axis position/ Inclination of beam axis	Optical transmission loss	Protection	Ambient temp.
Threaded	M3		Tough NEW FT-30	R2 Bending durability	2 m	STD 400 15.748 HYPR 1,350 53.150	810 31.890 650 25.591 210 8.268 75 2.953	135 5.315 400 15.748	ø0.5	150 µm /±2°	±10 %	IP67	–55 to +80 °C
	M4		Tough NEW FT-40	R4 Bending durability		STD 1,200 47.244 HYPR (Note) 3,600 141.732	2,200 86.614 1,700 66.929 530 20.866 190 7.480	320 12.598 870 34.252	ø1				
Cylindrical	ø1.5		Tough NEW FT-S20	R2 Bending durability		STD 400 15.748 HYPR 1,350 53.150	810 31.890 650 25.591 210 8.268 75 2.953	135 5.315 400 15.748	ø0.5				
	ø3		Tough NEW FT-S30	R4 Bending durability		STD 1,200 47.244 HYPR (Note) 3,600 141.732	2,200 86.614 1,700 66.929 530 20.866 190 7.480	320 12.598 870 34.252	ø1				

Note: The fiber cable length practically limits the sensing range.

Reflective type

Type		Shape of fiber head (mm)	Model No.	Bending radius (mm)	Fiber cable length ✂: Free-cut	Sensing range (mm in) (Note) FX-500 series	Sensing range (mm in) (Note) U-LG LONG FAST H-SP	Sensing range (mm in) (Note) FX-101 (Upper value) FX-102 (Lower value)	Beam axis position/ Inclination of beam axis	Optical transmission loss	Protection	Ambient temp.
Threaded	M3		Tough NEW FD-30	R2 Bending durability	2 m	STD 160 6.299 HYPR 600 23.622	330 12.992 250 9.843 80 3.150 25 0.984	45 1.772 155 6.102	150 µm /±3°	±10 %	IP67	–55 to +80 °C
	M4		Tough NEW FD-40									
	M6		Tough NEW FD-60	R4 Bending durability		STD 520 20.472 HYPR 1,550 61.024	900 35.433 740 29.134 260 10.236 90 3.543	140 5.512 420 16.535				
Cylindrical	ø3		Tough NEW FD-S30			STD 160 6.299 HYPR 600 23.622	330 12.992 250 9.843 80 3.150 25 0.984	45 1.772 155 6.102				

Note: The sensing range is specified for white non-glossy paper.