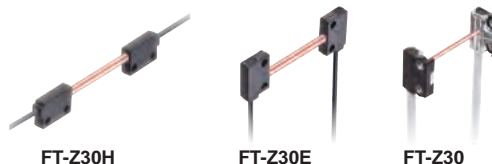


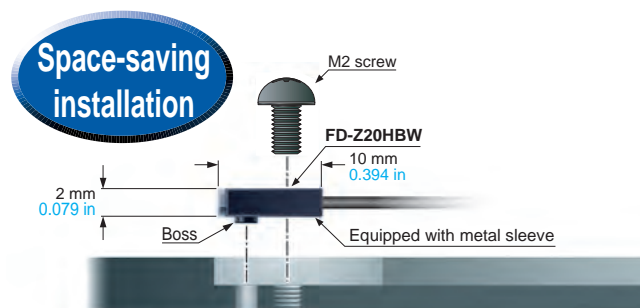
Flat Type

Since it has a thin, rectangular shape, it can be installed in narrow locations. It is also a fiber with good workability and can be mounted directly with screws.



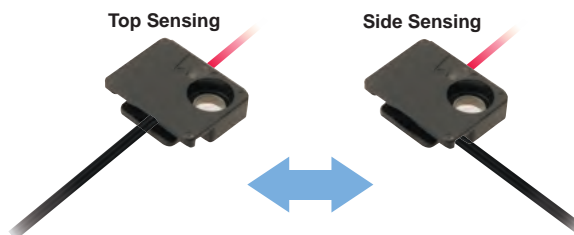
1 point mounting

The sensor can be mounted on 1 point with either M2 screw or M3 screw. Metal sleeve in the enclosure helps to be tightened firmly even with a single screw.



Fiber guide system contributes to space-saving

FT-Z□HBW and FD-Z□HBW is equipped with a fiber guide system. This enables to mount either way of top sensing and side sensing.



LIST OF FIBERS

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) (Note 1)			Beam axis dia. (mm)	Protection	Ambient temp.	Dimensions	
					FX-500 series	U-LG LONG FAST H-SP	FX-101 (Upper value) FX-102 (Lower value)					
Flat	Top sensing W3 x H8 x D12	Tough FT-Z30H	R2	2 m	STD 3,500 137.795	3,600 141.732 (Note 2)	1,400 55.118	2 x 3	IP40	-40 to +60 °C	P.54	
	Top sensing W3 x H8 x D12	FT-Z30HW	R1		HYPR (Note 2) 3,600 141.732	3,600 141.732 (Note 2)	2,600 102.362					3,200 125.984
	Side sensing W3 x H12 x D8	Tough FT-Z30E	R2		STD 3,500 137.795	3,600 141.732 (Note 2)	2,400 94.488					1,200 47.244
	Side sensing W3 x H12 x D8	FT-Z30EW	R1		HYPR (Note 2) 3,600 141.732	3,600 141.732 (Note 2)	740 29.134					3,200 125.984
	Front sensing W8.5 x H12 x D3	Tough FT-Z30	R2		STD 3,400 133.858	3,600 141.732 (Note 2)	2,000 78.740					1,400 55.118
	Front sensing W8.5 x H12 x D3	FT-Z30W			HYPR (Note 2) 3,600 141.732	3,600 141.732 (Note 2)	630 24.803					2,600 102.362
	Front sensing W8.5 x H12 x D3	FT-Z30W			STD 2,100 82.677	3,600 141.732 (Note 2)	410 16.142	710 27.953				
	Front sensing W8.5 x H12 x D3	FT-Z30W			HYPR (Note 2) 3,600 141.732	3,600 141.732 (Note 2)	1,200 47.244	2,300 90.551				
	Front sensing W10 x H7 x D2	FT-Z20W			STD 620 24.409	1,500 59.055	420 16.535	280 11.024				
	Front sensing W10 x H7 x D2	FT-Z20W			HYPR (Note 2) 1,600 62.992	1,500 59.055	130 5.118	730 28.740				
	Fiber bending type W2 x H10 x D10	FT-Z20HBW	R1		STD 260 10.236	670 26.378	570 22.441	100 3.937				
	Front sensing W14 x H7 x D3.5	FT-Z40W			HYPR (Note 2) 3,600 141.732	3,300 129.921	290 11.417	410 16.142				
Fiber bending type W3.5 x H14 x D11	FT-Z40HBW		STD 800 31.496	1,900 74.803	490 19.291	260 10.236						
Fiber bending type W3.5 x H14 x D11	FT-Z40HBW		HYPR (Note 2) 3,300 129.921	1,400 55.118	160 6.299	720 28.346						

Notes: 1) Note that the sensing range of the free-cut type fiber may be reduced by 20 % max. depending upon how the fiber is cut.
2) The fiber cable length practically limits the sensing range.

Tough : Refers to a fiber which possesses both unbreakable (bending radius: R10 mm R0.394 in, reciprocating bending: 180°) and more flexible (bending radius: R4 mm R0.157 in or less) features.

New product introduction
Tough Fiber

Fiber Selection Guide
Model
Choose by shape/application
How to read Model No.
Earlier models comparison table

Fibers
Super Quality
Threaded Type
Square Head Type
Cylindrical Type
Sleeve
Flat Type
Small Spot
Narrow Beam
Wide Beam
Convergent Reflective Type
Retroreflective Type
Chemical / Oil-resistant
Heat-resistant
Vacuum-resistant
Liquid Leak / Liquid Detection

Fiber Options

Semi-custom fibers





Fiber Dimensions
Thru-beam Type
Retroreflective Type
Reflective Type
Others

Amplifiers

FX-500 series
FX-100 series

INDEX

Reflective type

Type	Shape of fiber head (mm)	Model No.	Bending radius (mm)	Fiber cable length ✂️: Free-cut	Sensing range (mm in) (Note 1, 2)			Protection	Ambient temp.	Dimensions
					FX-500 series	U-LG LONG FAST H-SP	FX-101 (Upper value) FX-102 (Lower value)			
Flat With boss	Front sensing  W10 x H7 x D2	FD-Z20W	R1	✂️ 1 m	STD 1 to 65 0.039 to 2.559	150 5.906 130 5.118	2 to 32 0.079 to 1.260	IP40	-40 to +60 °C	P.65
	Fiber bending type  W2 x H10 x D10	FD-Z20HBW			HYPH 260 10.236	2 to 45 0.079 to 1.772 5 to 13 0.197 to 0.512	0.039 to 3.150			
	Front sensing  W14 x H7 x D3.5	FD-Z40W		✂️ 2 m	STD 190 7.480	440 17.323 390 15.354	1 to 74 0.039 to 2.913	IP40		
	Fiber bending type  W3.5 x H14 x D11	FD-Z40HBW			HYPH 790 31.102	1 to 120 0.039 to 4.724 2 to 35 0.079 to 1.378	200 7.874			
					540 21.260 470 18.504	1 to 90 0.039 to 3.543	IP67			
					HYPH 760 29.921	0.5 to 240 0.020 to 9.449				

Notes: 1) Note that the sensing range of the free-cut type fiber may be reduced by 20 % max. depending upon how the fiber is cut.
2) The sensing range is specified for white non-glossy paper.