

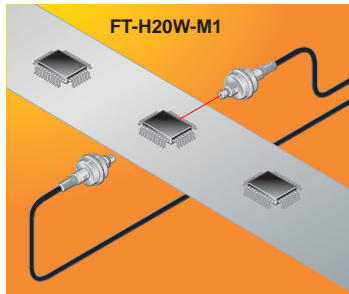
Heat-resistant

- It can be used under environments of -60 to +350 °C
-76 to +662 °F.
- A joint type for wider workability is also available.

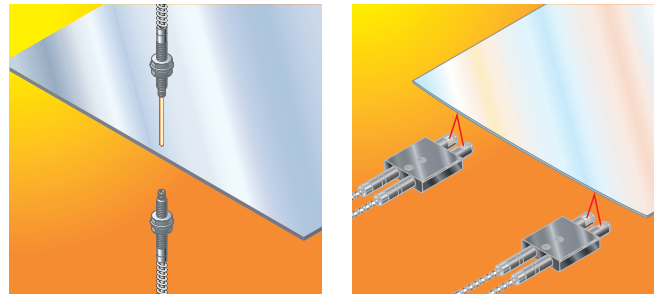


Applications

IC detection within a high temperature handler



Detecting glass substrates



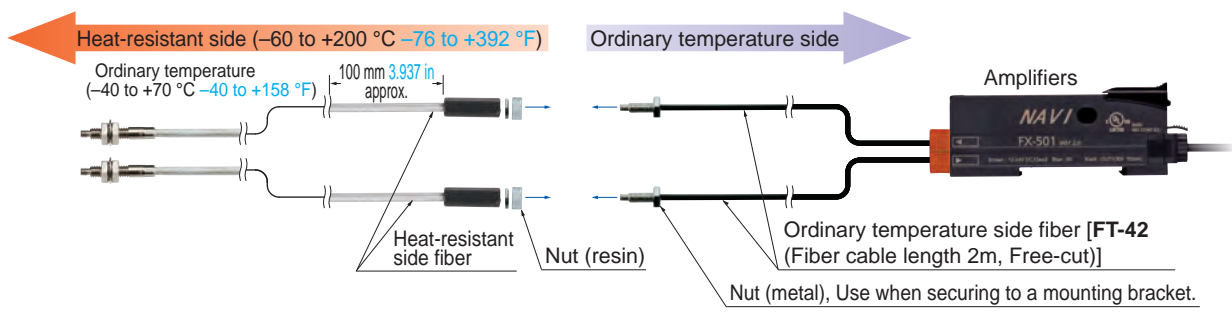
LIST OF FIBERS

Thru-beam type (one pair set)

Type	Heat-resistant temp.	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)	Ambient temp.	Dimensions			
						FX-500 series	U-LG LONG FAST H-SP	FX-101 (Upper value) FX-102 (Lower value)						
Heat-resistant	350 °C	Lens mountable (FX-LE1/LE2/SV1) 	FT-H35-M2	R25	2 m	STD 430 16.929	880 34.646	170 6.693	ø1.2	-60 to +350 °C	P.50			
		Sleeve 60 mm 	FT-H35-M2S6	Fiber R25 Sleeve R10		HYPR 1,200 47.244	670 26.378	490 19.291						
	200 °C	Allows flexible wiring Lens mountable (FX-LE1/LE2/SV1) 	FT-H20W-M1	R10	1 m	STD 470 18.504	1,000 39.370	100 3.937	ø0.8	-60 to +200 °C				
		Lens mountable (FX-LE1/LE2/SV1) 	FT-H20-M1	R25		HYPR (Note 2) 1,600 62.992	840 33.071	300 11.811						
130 °C	Lens mountable (FX-LE2 only) 	FT-H13-FM2	R25	2 m	STD 540 21.260	1,300 51.181	210 8.268	ø1.2	-60 to +130 °C	P.49				
					HYPR (Note 2) 1,600 62.992	960 37.795	330 12.992							
Heat-resistant (joint)	200 °C	Lens mountable (FX-LE1/LE2/SV1) 	FT-H20-J20-S (Note 5)	Heat-resistant side R18 (Note 4)	✂️ 200 mm (Note 3)	STD 470 18.504	1,000 39.370	135 5.315	ø1.2	-60 to +200 °C	P.50			
			FT-H20-J30-S (Note 5)		✂️ 300 mm (Note 3)							HYPR 1,600 62.992	790 31.102	300 11.811
			FT-H20-J50-S (Note 5)		✂️ 500 mm (Note 3)							STD 600 23.622	1,300 51.181	150 5.906
		Side-view 	FT-H20-VJ50-S (Note 5)		✂️ 800 mm (Note 3)									

- 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.
 3) Fiber length (fixed-length) for heat-resistant fiber side. Fiber length for ordinary temperature side is 2 m 6.562 ft (free-cut).
 4) Bending durable fiber R4 mm R0.157 in or more for ordinary temperature side.
 5) Heat-resistant joint fibers and ordinary-temperature fibers (FT-42) are sold as a set.

Heat-resistant joint fiber set contents



Model No. when ordering individually as spare parts

- Heat-resistant side fiber **one pair set**
FT-H20-J20, FT-H20-J30, FT-H20-J50, FT-H20-VJ50, FT-H20-VJ80
- Ordinary temperature side fiber **one pair set**
FT-42

LIST OF FIBERS

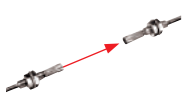
Reflective type

Type	Heat-resistant temp.	Shape of fiber head (mm)	Model No.	Bending radius (mm)	Fiber cable length ✂️: Free-cut	Sensing range (mm in) (Note 1, 2)			Ambient temp.	Dimensions		
						FX-500 series	U-LG LONG FAST H-SP	FX-101 (Upper value) FX-102 (Lower value)				
Heat-resistant	350 °C	Coaxial M6 25	FD-H35-M2	R25	2 m	STD 260 10.236	540 21.260	75 2.953	-60 to +350 °C	P.61		
		Sleeve 60 mm M6 ø2.8 22	FD-H35-M2S6	Fiber R25		HYPR 720 28.346	460 18.110				150 5.906	45 1.772
		Sleeve 90 mm M4 ø2.1 27	FD-H35-20S	Sleeve R10		STD 260 10.236	550 21.654				85 3.346	200 7.874
	200 °C	Coaxial M6 28	FD-H20-M1	1 m	HYPR 840 33.071	500 19.685	120 4.724	-60 to +200 °C	P.60			
	Coaxial M4 27	FD-H20-21	STD 230 9.055		500 19.685	90 3.543						
	130 °C	Coaxial M6 21	FD-H13-FM2	✂️	2 m	STD 350 13.780	640 25.197	100 3.937	-60 to +130 °C			
	Glass substrate detection convergent reflective	300 °C	W19 x H27 x D5	FD-H30-L32	R25	2 m	STD 17 0.669	30 1.181	2 to 9	-60 to +300 °C	P.61	
		250 °C	W21 x H33.2 x D5	FD-H25-L43	3 m	HYPR 40 1.575	1 to 26 0.059 to 1.024	1 to 28 0.039 to 1.102	0.079 to 0.354	-20 to +250 °C	P.60	
			W21 x H34.5 x D5	FD-H25-L45		STD 5 to 42 0.197 to 1.654	4 to 43 0.157 to 1.693	7 to 35	0.276 to 1.378	(Ordinary temp. side)		
		180 °C	W19 x H27 x D5	FD-H18-L31	✂️	2 m	HYPR 60 2.362	32 1.260	0 to 10	-60 to +180 °C		

Notes: 1) The sensing range of reflective type is the value for white non-glossy paper (50 × 50 mm 1.969 × 1.969 in glass substrate for **FD-H30-L32**, **FD-H18-L31**, transparent glass 100 × 100 × 0.7 mm 3.937 × 3.937 × 0.028 in for **FD-H25-L43** and **FD-H25-L45**).
 2) Note that the sensing range of the free-cut type fiber may be reduced by 20 % max. depending upon how the fiber is cut.

FIBER OPTION

Lens (For thru-beam type fiber) ▶ P.42



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
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 Others

Amplifiers
 FX-500 series
 FX-100 series

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