

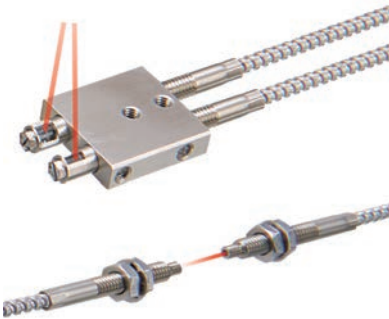
# 16 Heat resistant (250 to 350°C)

Related products

Fiber units Heat resistant (130°C or below) P.77



Fiber units Heat resistant (180 to 200°C) P.80



## Fiber units for ambient temperatures of 250 to 350°C

Limited diffuse reflective types are optimal for glass substrate alignment

This heat resistant series offers the most models in the industry at 30 models (according to in-house survey)

### Through-beam type/Diffuse type/Limited diffuse reflective type

Two through-beam types, three diffuse types, and three limited diffuse reflective types are available. We offer a total of 8 variations to suit any high-temperature application.

#### Through-beam type

Standard	60 mm sleeve
NF-TH08	NF-TH09

#### Diffuse type

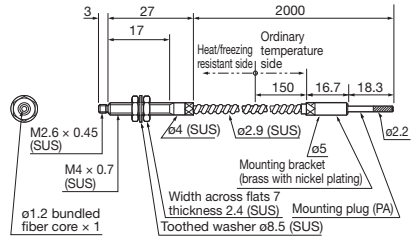
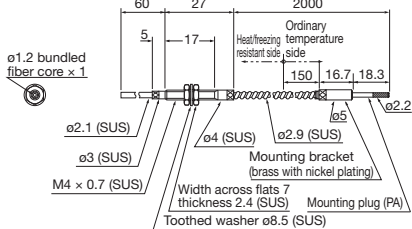
Coaxial	60 mm sleeve	90 mm sleeve
NF-DH03	NF-DH04	NF-DH05

#### Limited diffuse reflective type

Glass substrate detection	Glass substrate alignment	
NF-DH06	NF-DH10	NF-DH11

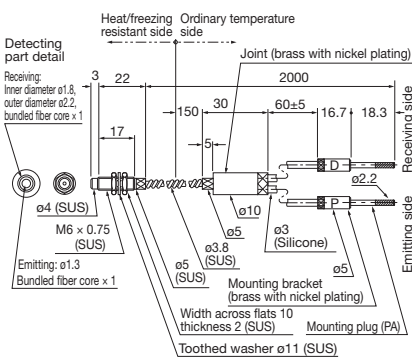
Fiber units Heat resistant (250 to 350°C)

Heat resistant <250 to 350°C or below> fiber units (through-beam type)

Type	Features/dimensions (mm)	Sensing distance (mm)			Ambient temperature	Bending radius (mm)	Model
		D3RF	D2RF	BRF			
Through-beam type 350°C	<p>Lens attachable (P.98)</p> 	<p>7-EL 1,440</p> <p>6-UL 1,350</p> <p>5-PL 1,240</p> <p>4-LG 1,080</p> <p>3-ST 710</p> <p>2-FS 430</p> <p>1-HS 130</p>	<p>Long 750</p> <p>Std 450</p> <p>Fast 220</p>	300	-30 to +350°C or -60 to +200°C	R25	NF-TH08 Standard item
	<p>ø2.1 sleeve: 60 mm long</p> 	<p>7-EL 1,350</p> <p>6-UL 1,260</p> <p>5-PL 1,120</p> <p>4-LG 900</p> <p>3-ST 630</p> <p>2-FS 410</p> <p>1-HS 120</p>	<p>Long 750</p> <p>Std 450</p> <p>Fast 220</p>	300	-30 to +350°C or -60 to +200°C	Fiber R25 Sleeve R10	NF-TH09

● Install with an ambient humidity between 35 and 85%. In the case of 85% RH, the ambient temperature should be between 0 and 40°C.

Heat resistant <250 to 350°C or below> fiber units (diffuse type)

Type	Features/dimensions (mm)	Sensing distance (mm)			Ambient temperature	Bending radius (mm)	Model
		D3RF	D2RF	BRF			
Diffuse type 350°C	<p>Coaxial</p> 	<p>7-EL 940</p> <p>6-UL 890</p> <p>5-PL 770</p> <p>4-LG 670</p> <p>3-ST 440</p> <p>2-FS 190</p> <p>1-HS 50</p>	<p>Long 650</p> <p>Std 250</p> <p>Fast 80</p>	150	-30 to +350°C or -60 to +200°C	R25	NF-DH03 Standard item

● The sensing distances for the diffuse type fiber units are values on 500 x 500 mm white paper.

● Install with an ambient humidity between 35 and 85%. In the case of 85% RH, the ambient temperature should be between 0 and 40°C.

Fiber Units

Easy mounting

Thread type

Cylindrical type

Sleeve type

Flexible R4/R2

Flexible R1/R2

Retro-reflective

Small object detection

Screen/Array

Limited diffuse

Narrow view/  
wafer mapping

Heat resistant

Chemical resistant

Vacuum resistant

Liquid level/liquid leakage/  
water detection

Lens for  
through-beam type

Correct use

Heat resistant <250 to 350°C or below> fiber units (diffuse type)

Type	Features/dimensions (mm)	Sensing distance (mm)			Ambient temperature	Bending radius (mm)	Model
		D3RF	D2RF	BRF			
Diffuse type	<p>350°C</p> <p>ø2.1 sleeve: 90 mm long</p>	<p>7-EL 1,110</p> <p>6-UL 1,050</p> <p>5-PL 910</p> <p>4-LG 800</p> <p>3-ST 520</p> <p>2-FS 190</p> <p>1-HS 50</p>	<p>Long 750</p> <p>Std 250</p> <p>Fast 80</p>	200	-30 to +350°C or -60 to +200°C	Fiber R25 Sleeve R10	NF-DH05
	<p>ø2.8 sleeve: 60 mm long</p>	<p>7-EL 950</p> <p>6-UL 900</p> <p>5-PL 780</p> <p>4-LG 680</p> <p>3-ST 450</p> <p>2-FS 200</p> <p>1-HS 59</p>	<p>Long 650</p> <p>Std 250</p> <p>Fast 80</p>	300	-30 to +350°C or -60 to +200°C	Fiber R25 Sleeve R10	NF-DH04

- The sensing distances for the diffuse type fiber units are values on 500 x 500 mm white paper.
- Install with an ambient humidity between 35 and 85%. In the case of 85% RH, the ambient temperature should be between 0 and 40°C.

Heat resistant reflector

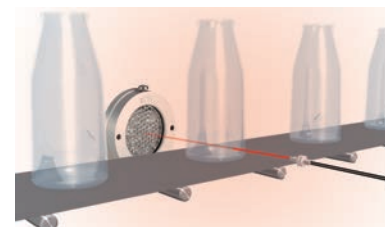
Possible to detect as retro-reflective type if the SW50 heat resistant reflector is used for the heat resistant diffuse type fiber. Demonstrates its strength in transparent object detection under high temperatures.

Reflector heat resistant to 300°C

Glass bottle detection under high temperatures



SW50  
ø80 x 20 mm (ø50 mm reflective surface)



130 と同じオプションページを追加

Heat resistant <250 to 350°C or below> fiber units (limited diffuse reflective type)

Type	Features/dimensions (mm)	Sensing distance (mm)			Ambient temperature	Bending radius (mm)	Model
		D3RF	D2RF	BRF			
Limited diffuse reflective type	<p>300°C</p> <p>Glass substrate detection Flat ON</p>	<p>7-EL 0 to 40</p> <p>6-UL 0 to 34</p> <p>5-PL 0 to 22</p> <p>4-LG 0 to 18</p> <p>3-ST 0 to 17</p> <p>2-FS 0 to 9</p> <p>1-HS 0 to 4</p>	<p>Long 0 to 15</p> <p>Std 0 to 10</p> <p>Fast 0 to 8</p>	6	-30 to +300°C or -60 to +200°C	R25	NF-DH06
	<p>250°C</p> <p>Glass substrate alignment Flat ON</p>	<p>7-EL 2 to 28</p> <p>6-UL 2 to 24</p> <p>5-PL 2 to 23</p> <p>4-LG 3 to 23</p> <p>3-ST 3 to 20</p> <p>2-FS 3 to 18</p> <p>1-HS 4 to 11</p>	<p>Long 4 to 20</p> <p>Std 4 to 20</p> <p>Fast 4 to 15</p>	4 to 17	-20 to +250°C (Ordinary temperature side: -20 to +70°C)	R25	NF-DH10
	<p>250°C</p> <p>Glass substrate alignment Flat ON</p>	<p>7-EL 2 to 45</p> <p>6-UL 3 to 40</p> <p>5-PL 3 to 39</p> <p>4-LG 3 to 38</p> <p>3-ST 4 to 35</p> <p>2-FS 6 to 28</p> <p>1-HS 8 to 19</p>	<p>Long 6 to 38</p> <p>Std 7 to 30</p> <p>Fast 8 to 25</p>	8 to 25	-20 to +250°C (Ordinary temperature side: -20 to +70°C)	R25	NF-DH11

●Install with an ambient humidity between 35 and 85%. In the case of 85% RH, the ambient temperature should be between 0 and 40°C.