

Specifications (Thru-beam Side/Retro Reflective/Diffuse)

	Sensinghead	Sensingdistance(unit:mm)			Operation temperature (°C)	Radius (mm)	PartNumber
		D3RF	D2RF	BRF			
Thru-beam side φ5	<p>aperture3° Heat resistant</p> <p>rod prism:Glass (BK7) lens:Glass (BK7) SUS tube φ1 spiral tube material:SUS303</p> <p>detecting part detail</p>	<p>7-EL 1,000 6-UL 570 5-PL 520 4-LG 450 3-ST 300 2-FS 150 1-HS 45</p>	<p>Long 500 Std 300 Fast 100</p>	150	-40~70	<p>□□□ R=25 □□□ R=10</p>	NF-TS24
Retro reflective 4x2	<p>Wafer mapping:Super-smallFree cut</p> <p>mounting part (SUS) base (ABS) reflector (Acrylic) head block (SUS) prism optical axis marking band φ0.5x1 exterior of fiber φ3.2 (PVC) 2-M1.4x0.3 threaded</p>	<p>7-EL 590 6-UL 550 5-PL 480 4-LG 420 3-ST 270 2-FS 180 1-HS 70</p>	<p>Long 350 Std 230 Fast 130</p>	□□□	-40~60	R=10	NF-RG01
Diffuse square	<p>Long distance detection:FlexibleFree cut</p> <p>glass lens (BK7) multi core fiber φ0.075x151 case (SUS) mounting bracket accessories equipped detail glass lens (BK7) 2-M3x0.5 NF-DA51 (SUS) case (SUS)</p>	<p>7-EL 1,070 6-UL 990 5-PL 880 4-LG 770 3-ST 500 2-FS 310 1-HS 90</p>	<p>Long 600 Std 380 Fast 200</p>	250	-40~70	R=1	NF-DR09

Operating humidity is 35~85%RH. Please use in 0~40°C when it's 85%RH.
Sensing distance of diffuse type is for 500 x 500mm white paper.

HEAT RESISTANT (up to 130°C)



12 models to choose from featuring thru-beam and diffuse in both head-on and space saving side-view

Space saving

Heat resistant right angle type NF25-TH and NF25-DH help installing in limited space.

Straight type



Right angle type



Specifications (Thru-beam)

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		D3RF	D2RF	BRF			
130°C	<p>Free cut</p> <p>φ1.5x1 lens:PC screw tightening face width across flats 7 thickness2.4 tooth lock washerφ8.5</p>	<p>7-EL 2,100 6-UL 2,070 5-PL 1,800 4-LG 1,530 3-ST 990 2-FS 620 1-HS 200</p>	<p>Long 1,100 Std 650 Fast 400</p>	500	-60~130	R=25	NF-TH17
105°C	<p>NutiFree cut</p> <p>lens:PC M4 P-0.7 polyamide (PA6)</p>	<p>7-EL 2,000 6-UL 1,100 5-PL 1,000 4-LG 900 3-ST 600 2-FS 300 1-HS 90</p>	<p>Long 750 Std 500 Fast 170</p>	300	-40~105	R=25	NF25-TH
	<p>SideviewFree cut</p> <p>rod prism (materialBK7) lens (materialBK7) SUS303 detecting part detail</p>	<p>7-EL 3,500 6-UL 2,300 5-PL 2,000 4-LG 1,800</p>	<p>3-ST 1,200 2-FS 600 1-HS 170</p>	500	-40~105	R=10	NF-TS22M
	<p>Narrow BeamSideviewFree cut</p> <p>rod prism (materialBK7) lens (materialBK7) SUS303 detecting part detail</p>	<p>7-EL 3,500 6-UL 2,500 5-PL 2,300 4-LG 1,900</p>	<p>3-ST 1,300 2-FS 650 1-HS 200</p>	500	-40~105	R=10	NF-TS22H

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Amplifiers
Various Shapes for mounting
Tight Bend / High-Flex
Various Detecting Modes
Environment-resistant
Liquid
Extension lens
Notes

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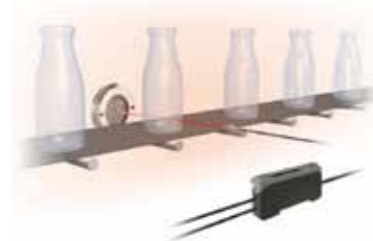
Specifications (Thru-beam/Diffuse)

	Sensinghead	Sensingdistance(unit=mm) Value in parenthesis is the Minimum detectable object size. (copper wire)			Operation temperature (°C)	Radius (mm)	PartNumber
		D3RF	D2RF	BRF			
Thru-beam 105°C	Narrow Beam:Sideview:Free cut rod prism : SUS303 lens : glass (BK7) or PC SUS303 φ1 20 2000 2.3 1.5 1.5 detecting part detail	7-EL 2,300 6-UL 1,200 5-PL 1,100 4-LG 950	3-ST 600 2-FS 300 1-HS 100	Long 600 Std 300 Fast 100	200	-40~105 R=10	NF-TS25
	Narrow Beam:Sideview:Free cut rod prism (BK7) lens (BK7) SUS303 φ1 20 2000 2.3 1.5 1.5 detecting part detail	7-EL 3,500 6-UL 2,400 5-PL 2,200 4-LG 1,900	3-ST 1,200 2-FS 600 1-HS 150	Long 900 Std 600 Fast 400	400	-40~105 R=10	NF-TS23
	φ1 Sleeve:25mm&10mm;45°oblique light axis:Heat resistant:Free cut φ1 2.2 25 15 1000 SUS304 φ2.5 SUS303 PC 0.5 1 1 1000 10 15 1000 light angle 135° SUS304 PC	7-EL 100 6-UL 55 5-PL 50 4-LG 40 3-ST 30 2-FS 10 1-HS 4		Long 28 Std 20 Fast 15	16	-40~105 R=10	NF-TH06
Thru-beam 100°C	lense attachable (P.82) :Free cut φ1 fiberx1 M2.6xP0.45 M4xP0.7 φ2.4 φ2.2 3 12 2000	7-EL 2,400 6-UL 1,400 5-PL 1,000 4-LG 900	3-ST 700 2-FS 300 1-HS 100	Long 700 Std 400 Fast 200	300	-40~100 R=25	NF-TH01
	Free cut φ1.5x2 5.5 16 15 2000 detecting part detail screw tightening face M6x0.75 width across flats10 thickness2 tooth lock washerφ11	7-EL 720 6-UL 670 5-PL 580 4-LG 510 3-ST 330 2-FS 200 1-HS 63		Long 350 Std 200 Fast 120	200	-60~130 R=25	NF-DH09
Diffuse 105°C	Free cut 10 12 6.8 2000 2.4 5 2φ2.2 lens:PC M6 P=1.0 polyamide (PA6) 14.4 4.4	7-EL 650 6-UL 350 5-PL 280 4-LG 240 3-ST 175 2-FS 100 1-HS 25		Long 120 Std 80 Fast 25	15	-40~105 R=25	NF25-DH
	Free cut φ1.0x2 18 2000 2-C0.5 2-φ2.2 M6xP0.75	7-EL 950 6-UL 500 5-PL 450 4-LG 400	3-ST 250 2-FS 130 1-HS 40	Long 300 Std 180 Fast 80	160	-40~105 R=25	FD-3SD1(100)
Diffuse 100°C	Free cut φ1x2 10 2000 φ2.5 SUS M6xP0.75 SUS φ2.2	7-EL 850 6-UL 550 5-PL 450 4-LG 375	3-ST 275 2-FS 170 1-HS 55	Long 250 Std 150 Fast 50	110	-40~100 R=25	NF-DH02

Operating humidity is 35~85%RH. Please use in 0~40°C when it's 85%RH.
Sensing distance of diffuse type is for 500 x 500mm white paper.

Heat resistant reflector SW50

SW50 can be used with heat resistant Retro-reflective fiber unit in high temperature atmosphere.



HEAT RESISTANT (up to 200°C)



14 models to choose from featuring thru-beam, diffuse and the new "joint type"

Various selection

We have 14 types of heat resistant, 180~200°C, fiber units.

Thru-beam (Standard)

Head view			Sideview		
NF-TH10	NF-TH11	NF-TH02	NF-TH04S-27V2	NF-TH05S-A	NF-TS27
Heat resistant 200°C	Heat resistant 200°C	Heat resistant 180°C	Heat resistant 200°C	Heat resistant 200°C	Heat resistant 200°C
Lens attachable	Lens attachable	Free cut	φ1 Sleeve	φ1.5 Sleeve	Aperture2.5°

Thru-beam (Joint type)

Head view			Sideview	
NF-TH12	NF-TH13	NF-TH14	NF-TH15	NF-TH16
Heat resistant 200°C	Heat resistant 200°C	Heat resistant 200°C	Heat resistant 200°C	Heat resistant 200°C
Free cut	Free cut	Free cut	Free cut	Free cut

*Freecut only at ordinary temp. part

Diffuse

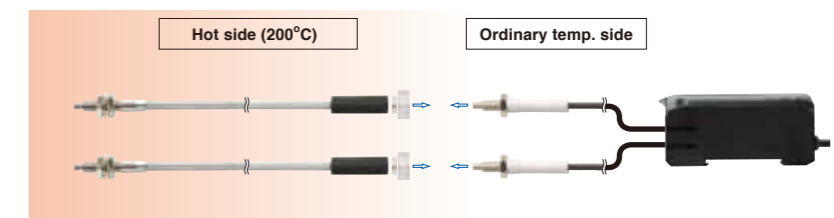
Coaxial	Standard
NF-DH07	NF-DH01
Heat resistant 200°C	Heat resistant 180°C
Metal coated	Free cut

Limited Diffuse

Detect glass
NF-DH08
Heat resistant 180°C
Free cut

New concept : Joint type

Heat-resistant fiber section is coupled with a standard cuttable fiber cable providing cut-to-length fiber cable installation.



Also available with heat-resistant side only (minus the standard cuttable fiber)