

NARROW BEAM, WAFER MAPPING

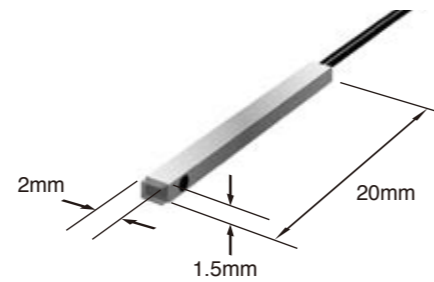
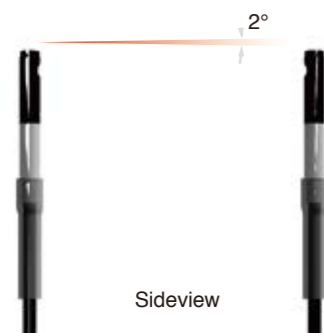


Installed lens narrows light angle that detects.
This reduces cross talk.

Super narrow beam and super thin type

Super narrow view type: Aperture is 2° max.
Ideal for wafer mapping.
Straight type: NF-TG01
Side type: NF-TG02,03

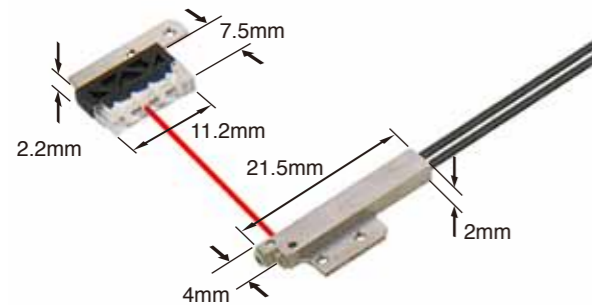
NF-DZ01 is head ON type screen array,
2*15mm, fiber unit that can detect object with holes.



Retro-reflective and diffuse type

Super thin 2mm height Retro-reflective type enables wafer mapping saving space.

Retro-reflective type
NF-RG01



Diffuse type
NF-DR09



Specifications (Thru-beam/Thru-beam Side)

	Sensing head	Sensing distance (unit:mm) Value in parenthesis is the Minimum detectable object size. (copper wire)			Operation temperature (°C~°C)	Radius (mm)	Part Number					
		D3RF	D2RF	BRF								
Thru-beam	aperture2° Free cut 	7-EL 3,600	Long 3,000 Std 2,000 Fast 1,300	2,300	-40~70	R=25	NF-TG01					
		6-UL 3,600										
5-PL 3,600												
4-LG 3,200												
3-ST 2,100												
2-FS 2,000												
1-HS 790												
2x1.5	aperture3° Free cut 	7-EL 1,000						Long 500 Std 300 Fast 150	220	-40~55	R=10	NF-TG04
		6-UL 900										
		5-PL 790										
		4-LG 690										
		3-ST 450										
		2-FS 260										
1-HS 90												
Thru-beam side	aperture2° Flexible Free cut 	7-EL 3,600	Long 2,500 Std 1,600 Fast 800	900	-40~60	R=25	NF-TG03					
		6-UL 3,600										
5-PL 3,600												
4-LG 3,300												
3-ST 2,100												
2-FS 1,780												
1-HS 510												
φ4	aperture2° Flexible Free cut 	7-EL 3,600						Long 2,500 Std 1,600 Fast 800	1,000	-40~55	R=1	NF-TG02
		6-UL 3,600										
		5-PL 3,600										
		4-LG 3,300										
		3-ST 2,100										
		2-FS 1,500										
1-HS 520												
φ3.5	aperture5° Free cut 	7-EL 4,000	Long 4,000 Std 3,000 Fast 2,000	1,700	-40~70	R=25	NF-TS12					
		6-UL 4,000										
		5-PL 4,000										
φ3.5	aperture3° Free cut 	7-EL 4,000	Long 3,000 Std 1,600 Fast 700	750	-40~70	R=25	NF-TS22					
		6-UL 4,000										
		5-PL 4,000										
φ3.5	aperture3° Heat resistant Free cut 	7-EL 3,500	Long 1,200 Std 700 Fast 500	500	-40~70	R=10	NF-TS22H					
		6-UL 2,500										
		5-PL 2,300										
□1.5	aperture2.5° Heat resistant Free cut 	7-EL 2,300	Long 600 Std 300 Fast 100	200	-40~70	R=10	NF-TS25					
		6-UL 1,200										
		5-PL 1,100										
□2	aperture2.5° Heat resistant Free cut 	7-EL 3,500	Long 900 Std 600 Fast 400	400	-40~70	R=10	NF-TS23					
		6-UL 2,400										
		5-PL 2,200										
□2	aperture2.5° Heat resistant Free cut 	7-EL 2,000	Long 500 Std 300 Fast 100	150	-40~70	R=30	NF-TS27					
		6-UL 1,000										
		5-PL 950										

Operating humidity is 35~85%RH. Please use in 0~40 deg.C when it's 85%RH.

