

SCREEN BEAM ARRAY



NF-TS40 series

40 x 3.5mm Beam Array type with SUS (stainless steel) mounting metal.

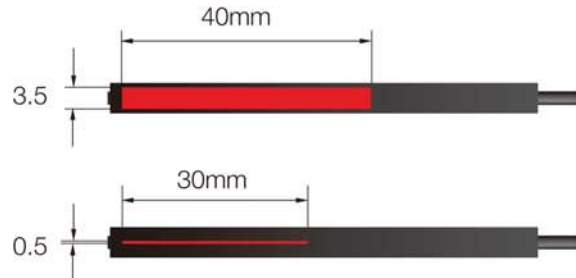
SUS (stainless steel) mounting

A rugged Stainless Steel mounting enables tough tightening of mounting position without breaking the mounting hole.



Adjustable line beam

40 x 3.5mm area of Beam Array is possible to change by using optional slit that limits the array into 30 x 0.5mm



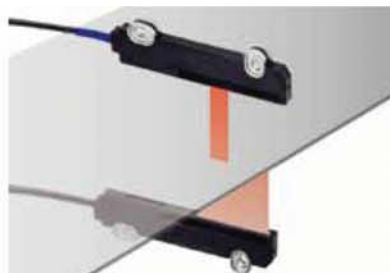
Fine sensing of 0.4mm diameter

The Clear optical system of the NF-TS40 ensures 0.4mm diameter detection at a 3500mm sensing distance (with D3RF amplifier)

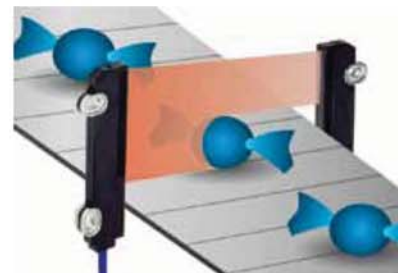
Applications



Control of dropping pills



Control of meandering sheet



Counting on a conveyor

Amplifiers

Various Shapes for mounting

Tight Bend / High-Flex

Various Detecting Modes

Environment-resistant

Liquid

Extension lens

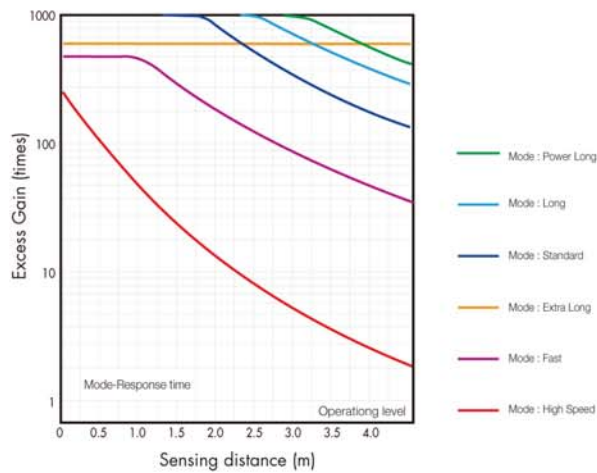
Notes

Specifications (Thru-beam/Diffuse)

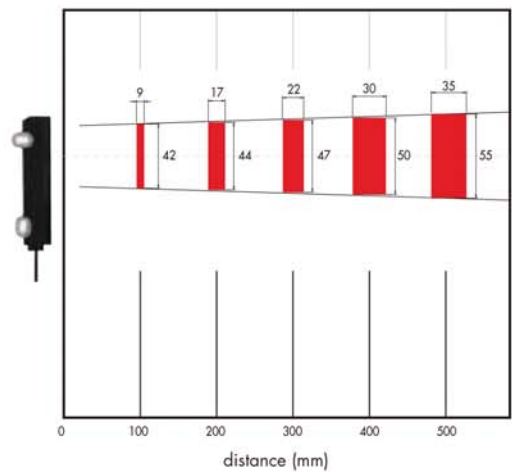
Sensinghead	Sensingdistance(unit=mm) Value in parenthesis is the Minimum detectable object size. (copper wire)			Operation temperature (°C ~ °C)	Radius (mm)	PartNumber
	D3RF	D2RF	BRF			
	7-EL 3,500			-40~70	R=2	NF-TS40
	6-UL 3,500					
	5-PL 3,500	Long 3,600				
	4-LG 3,500	Std 3,600	300			
	3-ST 3,500	Fast 3,600				
	2-FS 3,000					
	1-HS 2,500					

Model	NF-TS40
SensingRange(D3RFamplifier)	0 - 4mm
SpotSize	φ4mm @ 4mm
BendingRadius	R10
FiberLength	2000mm Free cut
AmbientTemp	-40 ~ +60°C
StorageTemp	-40 ~ +70°C
Dimensions(WxDxH)	12 □ 18 □ 4.3 mm
Material	Base , Cover : PC;Fiber : PMMA
Torque	3kgfcm max.
Weight	7g

Excess Gain Curves (Typical Value)



Spot size



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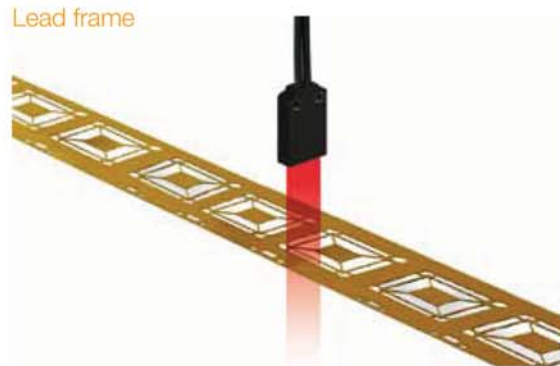
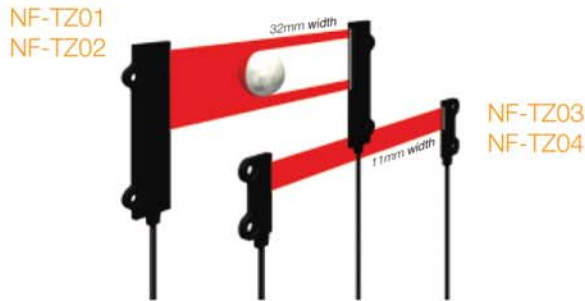
Extension lens

Notes

Screen array

It can detect object going through an area utilizing beam screen. It's effective when the position of the object goes through is not stable. We have 11mm width and 32mm width types.

NF-DZ01 is head ON type screen array, 2x15mm, fiber unit that can detect object with holes.



Slit masks can be used to shorten detection distance and for very small object detection.

The screen array beam is very collimated which helps prevent cross talk between sensors.

Beam array

Beam array fibers that have core fibers aligned are also available.

Thru-beamtype

NF-TZ05 Head ON



NF-TZ06 Side ON



Diffusetype

NF-DZ02 Head ON



NF-DZ03 Side ON



NF-TS10 Head ON



NF-TS14 Head ON



FD-ML02



Specifications (Thru-beam)

	Sensinghead	Sensingdistance(unit=mm)			Operation temperature (°C / °C)	Radius (mm)	PartNumber
		Value in parenthesis is the Minimum detectable object size. (copper wire)					
		D3RF	D2RF	BRF			
Thru-beam	11mm Screen beam array:Side ON Free cut 	7-EL 3,600 6-UL 3,600 5-PL 3,600 4-LG 3,240 3-ST 2,100 2-FS 2,100 1-HS 900	Long 3,500 Std 3,000 Fast 1,500	2,900	-40~70	R=10	NF-TZ04
	11mm Screen beam array:Flexible:Side ON Free cut 	7-EL 3,600 6-UL 3,600 5-PL 3,600 4-LG 3,240 3-ST 2,100 2-FS 2,100 1-HS 1,400	Long 3,500 Std 3,500 Fast 3,500	1,900	-40~55	R=1	NF-TZ03
	32mm Screen beam array:Side ON Free cut 	7-EL 3,600 6-UL 3,600 5-PL 3,600 4-LG 3,240 3-ST 2,100 2-FS 2,100 1-HS 1,400	Long 3,500 Std 3,500 Fast 3,500	3,500	-40~60	R=10	NF-TZ02
	32mm Screen beam array:Flexible:Side ON Free cut 	7-EL 3,600 6-UL 3,600 5-PL 3,600 4-LG 3,240 3-ST 2,100 2-FS 2,100 1-HS 1,400	Long 3,500 Std 3,500 Fast 3,500	3,500	-40~55	R=1	NF-TZ01
	5.25mm Screen beam array:Head ON Free cut 	7-EL 1,350 6-UL 1,260 5-PL 1,170 4-LG 990 3-ST 660 2-FS 400 1-HS 130	Long 650 Std 400 Fast 250	300	-40~70	R=25	NF-TZ05
	5.25mm Screen beam array:Side ON Free cut 	7-EL 1,440 6-UL 1,350 5-PL 1,170 4-LG 1,080 3-ST 710 2-FS 430 1-HS 130	Long 650 Std 400 Fast 250	300	-40~70	R=25	NF-TZ06
	5.25mm Screen beam array:Head ON Free cut 	7-EL 4,000 6-UL 1,600 5-PL 1,000 4-LG 900	3-ST 650 2-FS 330 1-HS 100	330	-40~70	R=25	NF-TS10
	10.5mm Screen beam array:Head ON Free cut 	7-EL 4,000 6-UL 1,600 5-PL 1,000 4-LG 900	3-ST 650 2-FS 330 1-HS 100	330	-40~70	R=25	NF-TS14

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

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