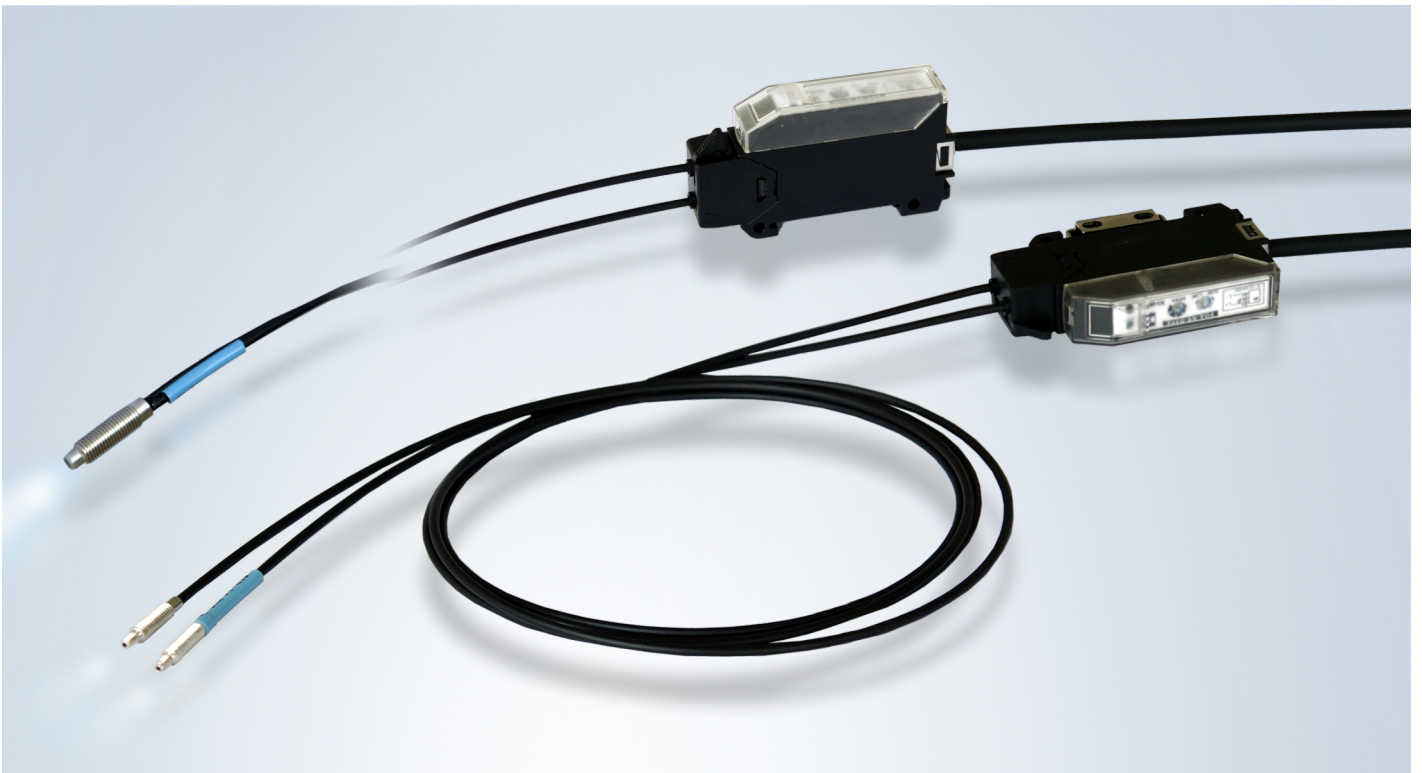
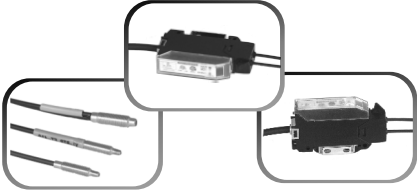


## Fiber Optic Sensor

### Features

- High response frequency, detect with super high speed.
- Compact shape , suitable for detecting small objects, high sensitivity.
- Non-contact , non-destructive detection , can be used in harsh conditions .
- Simple mounting by DIN connection
- Fiber cable length can be customized.

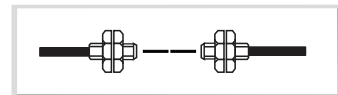


Fiber Optic Amplifier / J-01

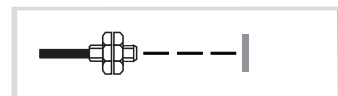
Fiber Optic Sensor selection guide / J-02

Fiber Optic Cable / J-03

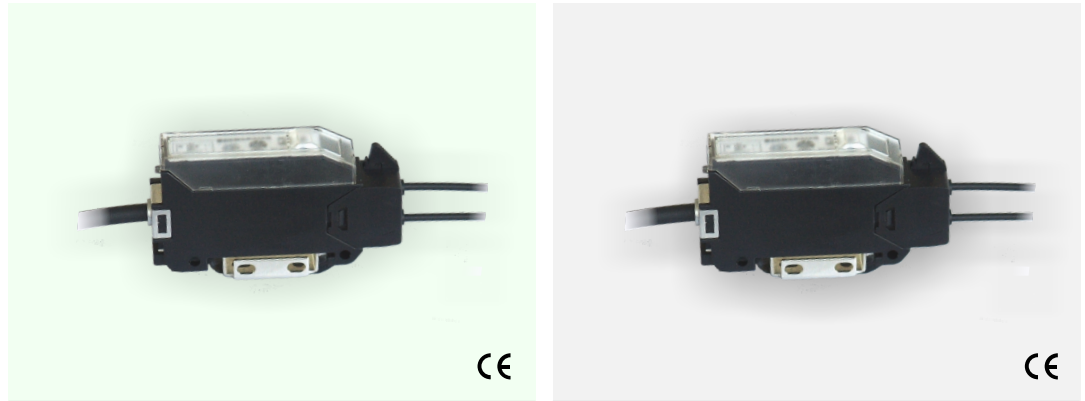
■ Thru-beam type (T)



■ Diffuse-reflective type (D)

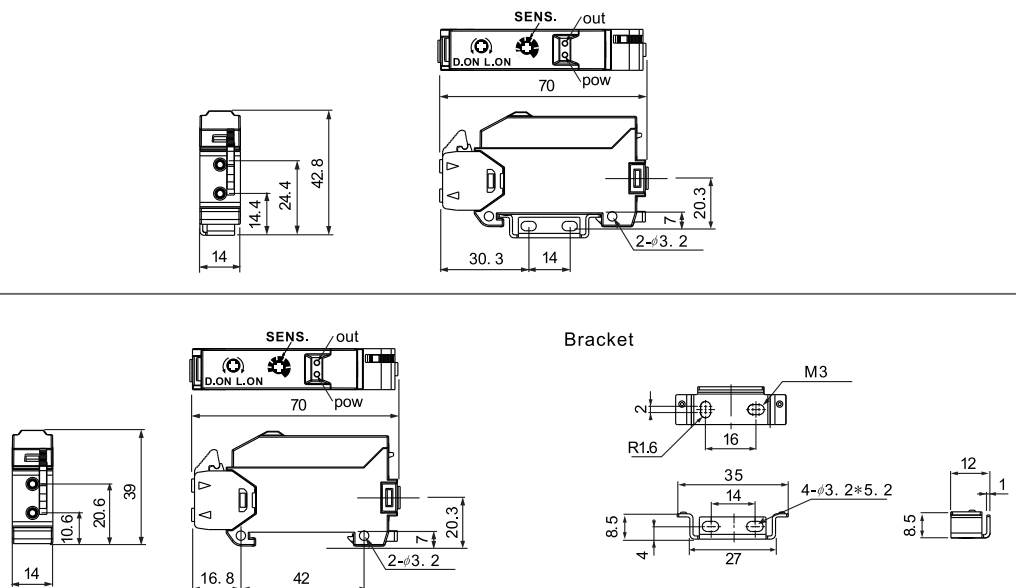


PICTURE



<b>Model</b>	<b>FOA-NS-D3Y2</b>	*05	<b>FOA-PS-D3Y2</b>	*06
<b>Response time</b>	Max.1ms			
<b>Power supply</b>	12...24V DC, ripple(p-p):10% max.			
<b>Consumption</b>	Max.40mA			
<b>Light source</b>	Invisible infrared light			
<b>Sensitivity adjustment</b>	Yes			
<b>Operation mode</b>	NPN N.O. / N.C. changeover		PNP N.O. / N.C. changeover	
<b>Control output</b>	Load voltage: Max.30VDC		Output voltage: Min.(Supply voltage-2.5)V	
	Load current: Max.200mA		Load current: Max.200mA	
	Residual voltage:Max.1V		Residual voltage:Max.1V	
<b>Protection circuit</b>	Short circuit protection , revised polarity protection and overload protection			
<b>Display</b>	Power : Red LED ; Action : Green LED			
<b>Insulation resistance</b>	Min.20MΩ (based on 500VDC measuring voltage)			
<b>Anti-interface</b>	4000V square pulses emitted by interference simulator (pulse width: 2.5KHZ)			
<b>Withstand voltage</b>	1000VAC 50/60Hz for 1minute			
<b>Anti-vibration</b>	10...55Hz(amplitude 1.5mm)X、 Y、 Z direction each 2 hours			
<b>Anti-impact</b>	500m/s <sup>2</sup> (500G) ; X、 Y、 Z direction 3 times each			
<b>Operating temperature</b>	-10 to 50℃,storage:-25 to 70℃ & 35 to 85%RH			
<b>Material</b>	Case:ABS,Cover:PC			
<b>Connection</b>	Cable : ø4.8mm , 2M			
<b>Accessory</b>	Mounting bracket, screws, nuts			

Dimensional drawing



**PF T P - 4 20 - 10**

	<b>Fiber material</b>	
PF	Plastic Fiber cable	
PG	Glass Fiber cable	
	<b>Sensing type</b>	
T	Thru-beam type	
D	Diffuse reflective type	
	<b>Appearance &amp; material</b>	
	<b>Standard thread type</b>	
P	Plastic type	
D	Smooth cylindrical type	
S	SUS type(SUS length: 90mm)	
S1	SUS type(SUS length: 35mm)	
S2	SUS type(SUS length: 45mm)	
	<b>Probe diameter</b>	
2	Φ2mm(M2)	
3	Φ3mm(M3)	
4	Φ4mm(M4)	
5	Φ5mm(M5)	
6	Φ6mm(M6)	
	<b>Cable length</b>	
10	1m	
20	2m	
	<b>Fiber cable diameter</b>	
05	Φ0.5mm	
10	Φ1.0mm	
15	Φ1.5mm	
20	Φ2.5mm	
F	Φ0.5mm, Φ0.25mm x4 (coaxial type)	
F1	Φ0.5mm, Φ0.25mm x9 (coaxial type)	
F2	Φ0.5mm, Φ0.25mm x16 (coaxial type)	
	<b>Others</b>	
	Standard type (-40 to 70 °C )	
H	Heat-resistance(-40 to 105°C )	
R	Flexible type	

\* Please check related page for detailed model NO and specifications .

Diffuse-reflective type

Type	Dimension	Model	Length	Sensing distance	Min. sensible object/mm	Max. bending radius	Operating environment	
Standard type		PFD-320-05	2m	40mm	Φ0.03	15R	-40 to +70°C 35 to 85%RH	
	Unit:mm 							
		PFD-420-05	2m	40mm	Φ0.03	15R		
	Unit:mm 							
		PFDS-320-05	2m	40mm	Φ0.03	15R (SUS10R)		
	Unit:mm 							
		PFDS2-320-05	2m	40mm	Φ0.03	15R (SUS10R)		
	Unit:mm 							
		PFDS-420-05	2m	40mm	Φ0.03	15R (SUS10R)		
	Unit:mm 							
		PFDS2-420-05	2m	40mm	Φ0.03	15R (SUS10R)		
	Unit:mm 							
		PFD-620-10	2m	120mm	Φ0.03	30R		
Unit:mm 								

Notice:

1. Length of fiber optic cable can be customized.
2. The sensing distance is measured by standard amplifier.
3. Dimension of min. sensing objects is detected under max sensitivity, not a fixed value.

Diffuse-reflective type

Type	Dimension	Model	Length	Sensing distance	Min. sensible object/mm	Max. bending radius	Operating environment
Coaxial type		PFD-320-F	2m	40mm	Φ0.03	15R	-40 to +70°C 35 to 85%RH
		PFD-320-F1	2m	60mm	Φ0.03	15R	
		PFD-620-F2	2m	120mm	Φ0.03	30R	

Thru-beam type

Type	Dimension	Model	Length	Sensing distance	Min. sensible object/mm	Max. bending radius	Operating environment
Standard type		PFT-320-05	2m	150mm	Φ0.5	15R	-40 to +70°C 35 to 85%RH
		PFT-420-10	2m	500mm	Φ1	30R	
		PFT-320-05R	2m	85mm	Φ0.3	1R	
		PFT-420-10R	2m	380mm	Φ0.5	1R	

- Notice: 1. Length of fiber optic cable can be customized.  
 2. The sensing distance is measured by standard amplifier.  
 3. Dimension of min. sensing objects is detected under max sensitivity, not a fixed value.