

# Fiber amplifier FD2 series



## Features

- Industry leading dual monitoring mode
- Built-in high-speed digital processing chip
- Automatic and manual correction functions are optional
- Leading high-precision detection of similar products
- Exceeds the detection distance of conventional optical fibers
- Wiring system for easy installation and maintenance



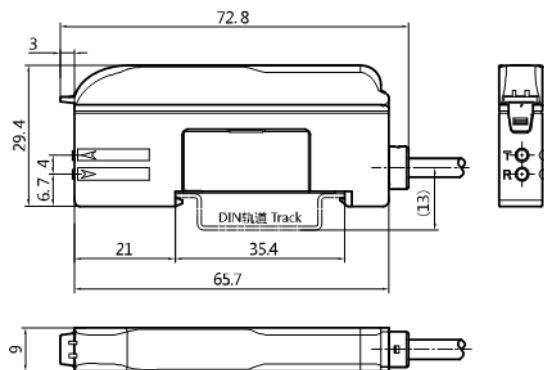
## Model specification

NPN NO/NC	FD2-NB11R
PNP NO/NC	FD2-PB11R

## Specifications

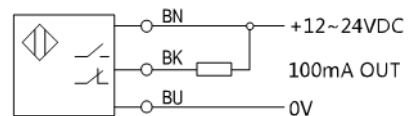
Supply voltage	DC 12-24V	Output indication	4-digit LED digital display, LED bar display, action display
Consumption current	< 60mA	Features	Optional transmit power and optional output delay
Voltage drop	< 1V	High pressure resistant	1000V/AC 50/60Hz 60s
Load current	< 100mA	Insulation resistance	≥50MΩ(500VDC)
Response time	< 200us(FINE), < 300us(TURBO), < 550us(SUPER)	Vibration resistance	Amplitude:0.5mm;Frequency:10...50Hz
Detection accuracy	> 0.01mm(Fiber-related)	Shock proof	500m/s <sup>2</sup> (50G) 3 times each for X,Y,Z direction
Light source	660nm Visible red light	Protection degree	IP54
Anti ambient light	Incandescent3000lux, daylight 10000lux	Housing material	PC+ABS
Protection circuit	Surge, reverse polarity, overload protection	Connection type	2m PVC cable
Ambient temperature	-10°C...+50°C(no icing)		

## Dimensions

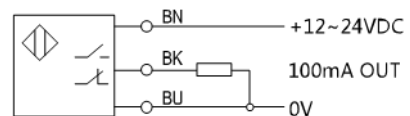


## Circuit Diagrams

### FD2-NB11R



### FD2-PB11R



# Optical fiber PFR series









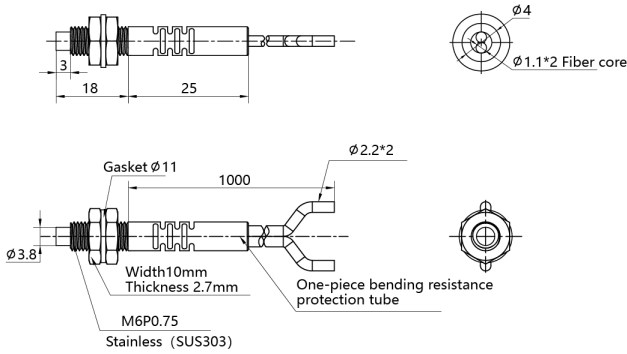
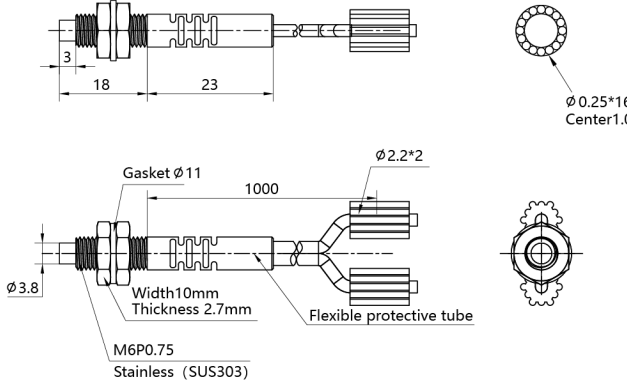
### Features

- Standard thread shape for easy installation
- Fiber optic head made of stainless steel, high durability
- Suitable for installation in small spaces with high detection accuracy

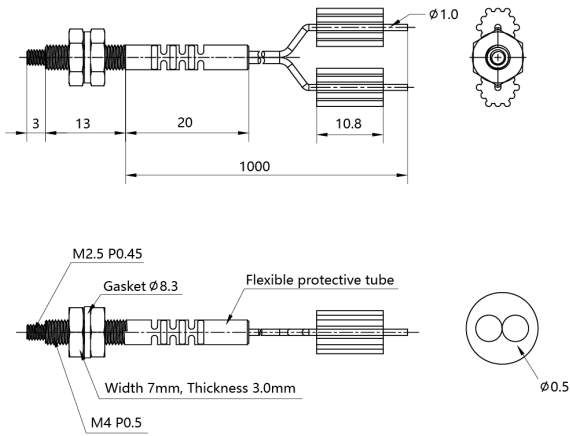


### Diffuse reflection

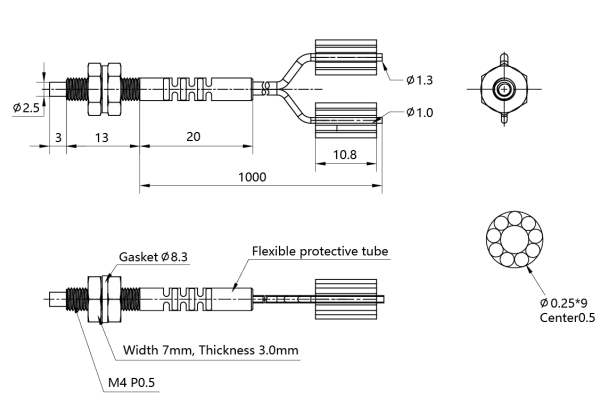
Model	Size	Appearance	Minimum bending radius	Detection distance(mm)	Smallest detectable(mm)
PFR-610	M6		R25	FINE:110 TURBO:190 SUPER:290	φ0.2
PFRC-610	M6		R25	FINE:80 TURBO:170 SUPER:280	φ0.1
PFRD-410	M4		R15	FINE:40 TURBO:90 SUPER:240	φ0.1
PFRC-410	M4		R15	FINE:40 TURBO:70 SUPER:160	φ0.1
PFRD-310	M3		R15	FINE:40 TURBO:70 SUPER:120	φ0.1
PFRC-310	M3		R15	FINE:40 TURBO:80 SUPER:120	φ0.05

Dimensions:PFR-610	Dimensions:PFRC-610
 <p>                     Gasket <math>\phi 11</math>                      Width 10mm                      Thickness 2.7mm                      M6P0.75                      Stainless (SUS303)                      One-piece bending resistance protection tube  <math>\phi 2.2 \times 2</math>  <math>\phi 3.8</math>  <math>\phi 4</math>  <math>\phi 1.1 \times 2</math> Fiber core                 </p>	 <p>                     Gasket <math>\phi 11</math>                      Width 10mm                      Thickness 2.7mm                      M6P0.75                      Stainless (SUS303)                      Flexible protective tube  <math>\phi 2.2 \times 2</math>  <math>\phi 3.8</math>  <math>\phi 0.25 \times 16</math>                      Center 1.0                 </p>

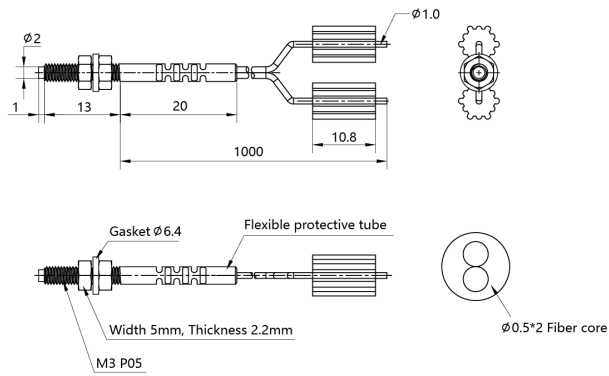
**Dimensions: PFRD-410**



**Dimensions: PFRC-410**



**Dimensions: PFRD-310**



**Dimensions: PFRC-310**

