

Fiber amplifier FD3 series



Features

- Sensitivity can be adjusted by simple operation and supports automatic calibration
- Support delayed response, increase detection stability
- Rich functions, easy to set up, and widely used
- Fixed on DIN rail for easy installation and removal

Model specification

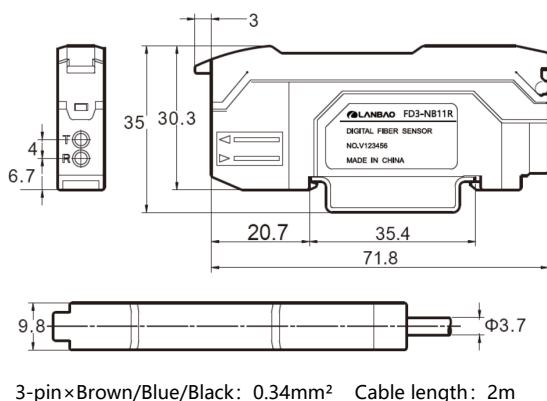
NPN	FD3-NB11R	PNP	FD3-PB11R
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Specifications

Light source	Red LED
Response time	50μs(HIGH SPEED)/250μs(FINE)/1ms(SUPER)/16ms(MEGA)
Output select	NO/NC Optional
Delay function	Off-delay timer/on-delay timer/single timer
Control output	NPN 0V, load current: ≤100mA ; remaining voltage: ≤1V
	PNP 0V, load current: ≤100mA ; remaining voltage: ≤1V
Protect the circuit	Short circuit protection, Overload protection, Reverse polarity protection
Supply voltage	12...24VDC±10%, Ripple (P-P):≤10%
Power consumption *	NPN: Normal: ≤900mW(24V: ≤36mA; 12V: ≤48mA); Power save mode: ≤800mW(24V: ≤32mA;12V: ≤39mA)
	PNP: Normal: ≤950mW(24V: ≤39mA; 12V: ≤52mA); Power save mode: ≤850mW(24V: ≤35mA at; 12V: ≤44mA)
Anti ambient light	Incandescent: ≤20,000lux; Daylight: ≤30,000lux
Ambient temperature	-20...55°C(No freezing)
Environment humidity	35...85%RH(No condensation)
Vibration resistance	10...55Hz, Dual amplitude 1.5mm(2 hours each in X, Y, Z directions)
Impulse withsand	500m/s ² , 3 times each for X,Y,Z direction
Housing material	PC
Connection method	2m PVC cable
Weight	About 66g

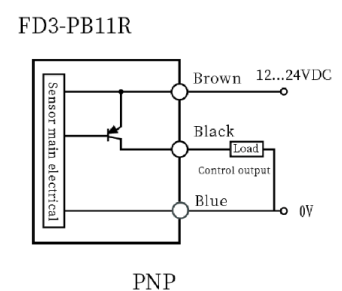
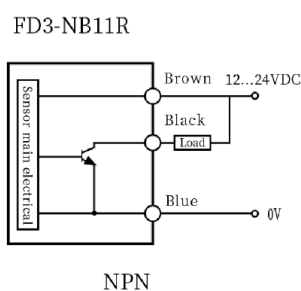
*High speed mode makes an increase of 160mW (7mA) power consumption

Dimensions

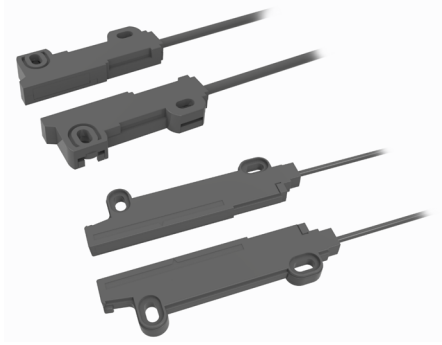


Circuit Diagrams

Toggle the power selection switch to output two different channel(NPN/PNP) type switch modes



Optical fiber **PFT** series



Features

- Long spot design to cover large area
- Stable detection of hollowed-carved materials
- Match with fiber amplifier to realize deviation correction

Model specification	PFT-R01	PFT-R02
Detection distance	700...1200mm	1400...2000mm
Minimum bending radius	R2	R2
Temperature resistance	- 40...70°C	- 40...70°C

Dimensions : PFT-R01

Optical axis
Detection area 2×11

4.5, 3.6, 1.4, 18.6, 1.4, 2000, 5, 10.5, 7, 29.8, 7.7, 10.3, 4, Ø2.2, 2-2.1×3.5 Mounting hole, 3.6×5 Countersink hole, d=1.4*
*Including M2 screws and nuts

A, B, 29.8

Optical axis
Detection area 2×11

Dimensions : PFT-R02

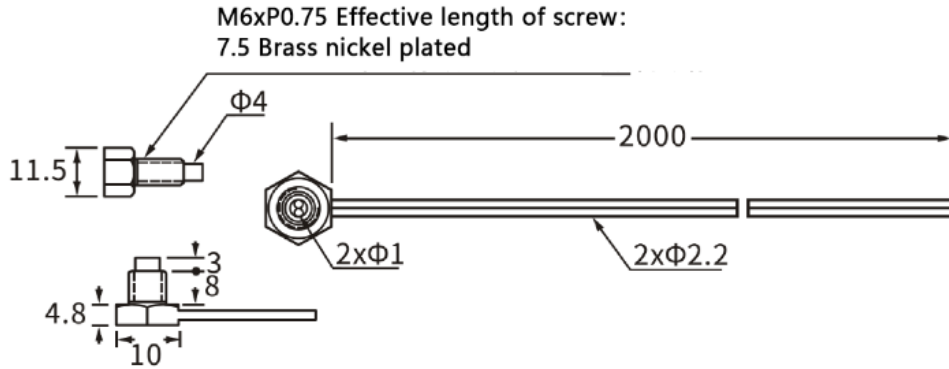
5.1, 22, Optical axis, Detection area 3×40


12.5, 69, 2000, 19.5, 3, 6, 9, 6, 9, 18, 8.1, Ø2.2, 12, 43, 3

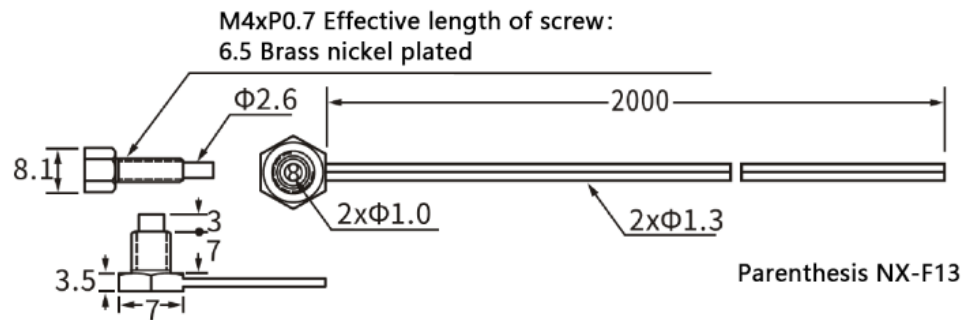
2-3.2×6.2 Mounting hole, 6×9 Countersink hole
Supplied with M3×8 screws


Optical fiber **PFR** series

	Model specification	PFR-610-V
	Detection distance	15/30/45mm
	Minimum bending radius	R2
	Temperature resistance	- 40...70°C



	Model specification	PFR-410-V
	Detection distance	35/110/200mm
	Minimum bending radius	R2
	Temperature resistance	- 40...70°C



	Model specification	PFT-410-V
	Detection distance	150/500/2000mm
	Minimum bending radius	R2
	Temperature resistance	- 40...70°C

