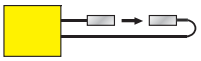
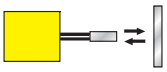
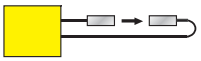
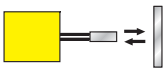
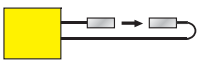
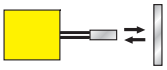
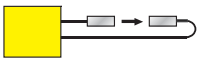
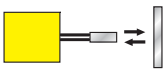
Plastic Fiber-optic Amplifier with Potentiometer Type

	Connection	Sensing Mode (Note)	Output Mode	Part Number
Red Light (680nm) Source	2m Cable 	 Thru-beam Mode Sensing Distance:500mm	NPN L.O./D.O.	~~FOS3-T0500N-CX6C4U2/P~~
			PNP L.O./D.O.	~~FOS3-T0500P-CX6C4U2/P~~
		 Diffuse Mode Sensing Distance:200mm	NPN L.O./D.O.	FOS3-D0200N-CX6C4U2/P
			PNP L.O./D.O.	FOS3-D0200P-CX6C4U2/P
	Quick Disconnect (Pico-style) 	 Thru-beam Mode Sensing Distance:500mm	NPN L.O./D.O.	~~FOS3-T0500N-CX6Q4UP/P~~
			PNP L.O./D.O.	~~FOS3-T0500P-CX6Q4UP/P~~
		 Diffuse Mode Sensing Distance:200mm	NPN L.O./D.O.	FOS3-D0200N-CX6Q4UP/P
			PNP L.O./D.O.	FOS3-D0200P-CX6Q4UP/P
Blue Light (465nm) Source	2m Cable 	 Thru-beam Mode Sensing Distance:300mm	NPN L.O./D.O.	~~FOS3-T0300N-CX4C4U2/P~~
			PNP L.O./D.O.	~~FOS3-T0300P-CX4C4U2/P~~
		 Diffuse Mode Sensing Distance:100mm	NPN L.O./D.O.	~~FOS3-D0100N-CX4C4U2/P~~
			PNP L.O./D.O.	~~FOS3-D0100P-CX4C4U2/P~~
	Quick Disconnect (Pico-style) 	 Thru-beam Mode Sensing Distance:300mm	NPN L.O./D.O.	~~FOS3-T0300N-CX4Q4UP/P~~
			PNP L.O./D.O.	~~FOS3-T0300P-CX4Q4UP/P~~
		 Diffuse Mode Sensing Distance:100mm	NPN L.O./D.O.	~~FOS3-D0100N-CX4Q4UP/P~~
			PNP L.O./D.O.	~~FOS3-D0100P-CX4Q4UP/P~~

Note: Sensing mode & range depends on fiber optic used (Please see our **Glass Fiber & Plastic Fiber** catalogue).
Coming Soon : Part numbers with underline
In Preparation: Part numbers with a line through the middle

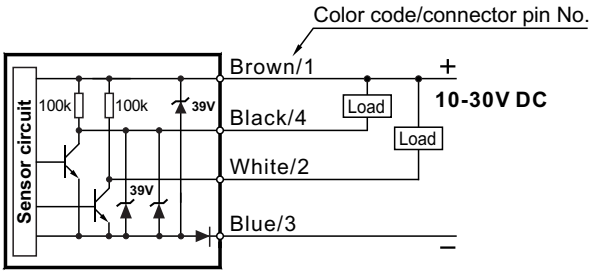
Specifications

Specifications

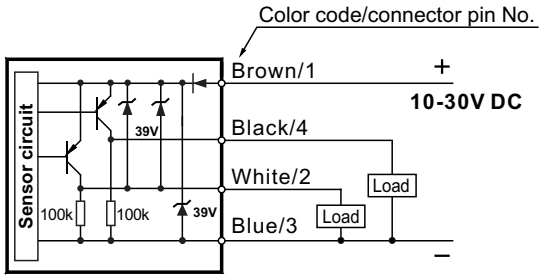
Sensing Range	Depends on fiber optics used (please see our **Glass Fiber & Plastic Fiber** catalogue).
Light Source	Red light 680nm or blue light 465nm (see each type)
Standard target	100X100 mm white (only for diffuse type)
Supply voltage range U_B	10...30 V DC
No-load supply current (at U_B=24V)	15 mA typ.
Hysteresis	10% typ.
Max. ripple content	20%
Output current	200 mA max.
Output voltage drop	2.0 V max. at 200mA
Max. switching frequency	1500 Hz
Switching time (↑ and ↓)	330μsec
Operation Mode	Switch selectable Light-ON/Dark-ON
Circuit Protection	Outputs short circuit & overload protected, VS reverse polarity protected
Max. ambient light	Halogen 5000 Lux Sun 10000Lux
Ambient temperature range	-25...+55 ℃
Degree of protection	IP64
Housing	Glass fiber reinforced plastic
EMC	IEC 60947-5-2, Parts 7.2.6.1. 2. 3 or RFI>3V/m(in 30-1000MHz), EFT>1KV, ESD>4KV(contact)
Voltage Withstand Ability	IEC 60947-5-2, Part 8.3.3.4 or 1500VAC for one min, between all supply terminals connected together and enclosure
Insulation Resistance	>20MΩ, with 1500V AC megger between all supply terminals connected together and enclosure
Vibration Resistance	IEC 60947-5-2, Part 7.4.2 or 10-55Hz, 1.0mm amplitude in x , y and z directions for 30 min
Shock Resistance	IEC 60947-5-2, Part 7.4.1 or 30g, 11ms in x , y and z directions for six time each
Weight	69 g(cable type) / 18 g (connector type)

Connection Diagrams / Response Curve / Dimensions

NPN output type



PNP output type

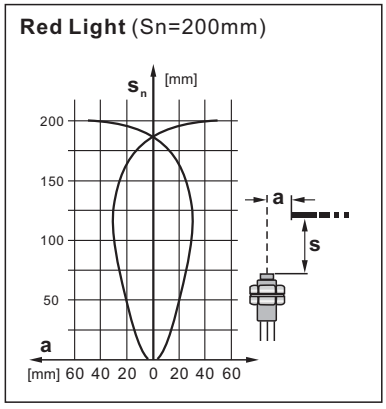


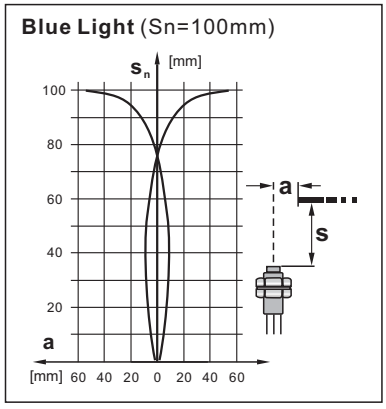
Connector face view

Pico-Style

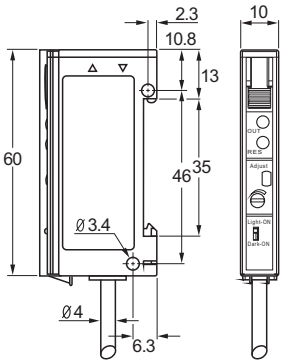
1.Brown (+)
2.White (Output)
3.Blue (-)
4.Black (Output)

Response Curve (Diffuse Type)

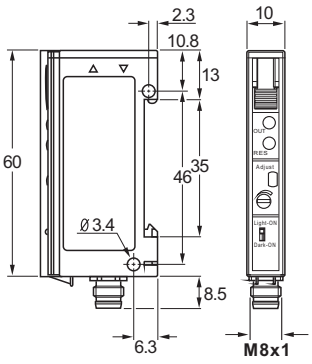




Dimensions (Unit: mm)



Cable Type



Connector Type