

Optical Fiber Sensor

PVF SERIES CE

Large & Easy-to-see Indicators! Large Sensitivity Adjuster!

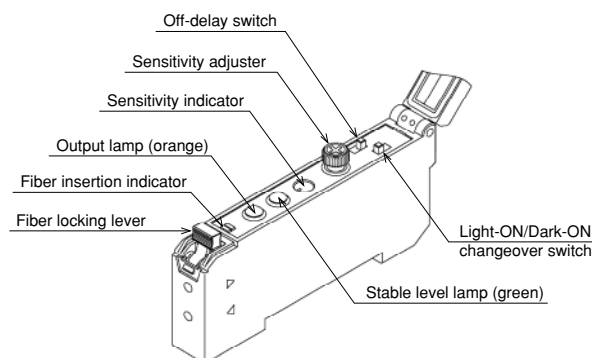
- Accessory such as screw driver for sensitivity adjuster is not required because large-sized adjuster is provided.
- Fiber insertion indicator is provided.
- It is easy to see stable level lamp and output lamp because of large size.
- NPN and PNP output type are lined-up.
- Off-delay timer (40msec) is provided.



Specifications

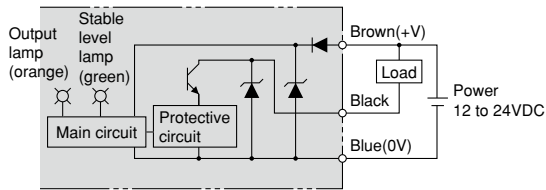
Model No.	PVF-CR	PVF-CRA
Power source	12 to 24VDC (10 to 30VDC, including ripple 10%)	
Current consumption	25mA	
Light source	Red LED	
Operating mode	Changeover of Light-ON/Dark-ON	
Output	NPN open-collector output, 100mA/30VDC or less Residual voltage 1.8V or less	PNP open-collector output, 100mA/30VDC or less Residual voltage 1.8V or less
Response time	250 μ s	
Timer function	Provided	
Timer time	OFF-delay (Fixed 40msec)	
Sensitivity adjustment	Provided (10 revolutions adjuster)	
Indication lamps	Stable level lamp (Green LED), output lamp (Orange LED)	
Connection	Cable type (length 2m, ϕ 3.8mm, 3 cores)	
Ambient illuminance	Sunlight: 10,000lx or less, incandescent lamp: 3,000lx or less	
Ambient temperature	-25 to +55°C	
Ambient humidity	35 to 85% (35 to 95% when stored), not icing/not condensing	
Insulation resistance	20M Ω or less (by 500VDC)	
Withstand voltage	1,000VAC, 50/60Hz/min.	
Vibration resistance	Double amplitude 1.5mm, 10 to 55Hz	
Impact resistance	500m/s ²	
Protective structure	IP66 (IEC standard)	
Case material	Case: PBT resin, cover: polycarbonate	
Weight	Approx. 70g (including cable)	
Accessory	Bracket	
Mounting	DIN-rail	

Amplifier

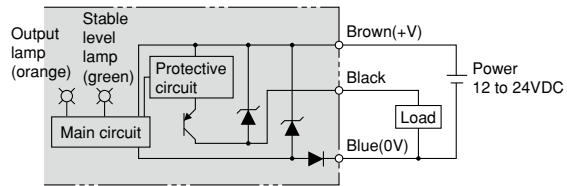


Output circuit

NPN output



PNP output

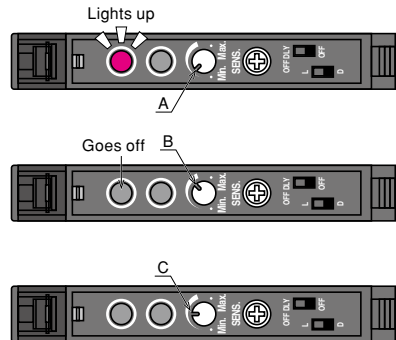


Caution

- (1) Don't make a parallel wiring with high voltage line or power line. Also, it may cause a malfunction by induction.
- (2) Be sure to make FG (frame ground terminal) and G (ground terminal) if using the commercial switching regulator.
- (3) Don't operate it during approx. 100msec after putting power source in.

Sensitivity

- ① After placing the detecting objects at the detecting position, turn the sensitivity adjuster clockwise from MIN. gradually.
- ② After removing the detecting objects, turn the sensitivity adjuster counterclockwise from MAX. gradually.
- ③ Suitable position is the intermediate between A and B.

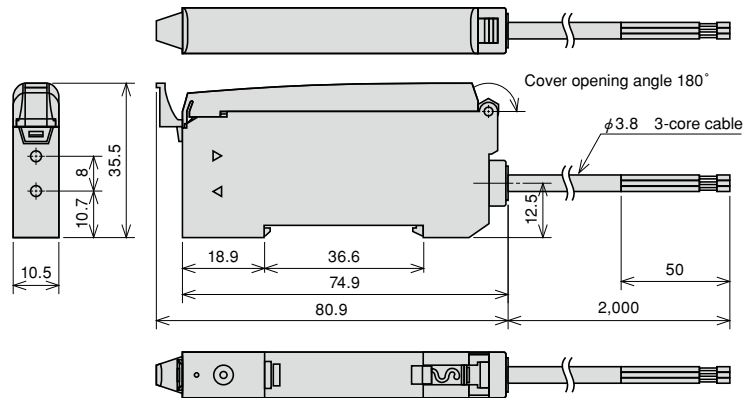


Caution

- (1) In case of through-beam type, you can use at Max. position but if you would detect semi-transparent objects, Adjust with the above procedure.
- (2) A and B position may be reverse depending on a kind of fiber unit or detecting condition.

External dimensions

Sensor



Bracket

