

- ※ All type with sensitivity adjuster, easy to get the best sensing condition.
- ※ All DC type with NPN & PNP output, meet any control requirement.
- ※ All DC type having over load protection, and polarity reversed-Protection.
- ※ All AC type with surge protection, may avoided damaged.
- ※ Unique vertical type saving mounted space.
- ※ High solid compact structure, IP66 applied in poor circumstance suitable.



Specification

Power Type	DC Type	AC Type
Operating Voltage	10 ~ 30 VDC , Ripple < 20% of Vp-p	90 ~ 25 VAC , 50/60 Hz
Output Method	NPN & PNP	SCR
Output Current	150mA max.	100mA max.
Residual Voltage	0.8V max.	
Leakage Current	0.8mA max.	2mA max.
Protection Circuit	Short Circuit & Polarity Reversed Protection	Surge Protection Circuit
Response Time	2ms	10ms
Sensitivity Adjuster	270° Trimmer	Non
Hysteresis	10% of Sensing Distance max.	
Illumination	Lamplight < 10,000 Lux. ; Sunlight < 30,000 Lux.	
Connection Method	Lead Wire : 4 Cores / 5.0φ X 2m	Lead Wire : 3 Cores / 4.2φ X 2m
	Plug : 4 Pins	Plug : 3 Pins
Housing Color	Grey	Blue
Housing Material	Intensive Polymid	
Operating Temp./Hum.	-20°C ~ +60°C ; 35% ~ 95% RH	
Protection Class	IP-66	
Weight		

Reflex Type

Type	Model	Output Status	Sensing Direction	Sensing Distance	Operating Voltage	Current Consumption	Output Method	Sensitivity Adjuster
Lead Wire	CDR-10X	NO	Horizontal	10cm	10~30VDC	25mA max.	NPN & PNP 150mA max.	270° Trimmer
	CDR-10XB	NC						
	CDR-30X	NO		30cm				
	CDR-30XB	NC						
	CDR-30X-V	NO	Vertical	30cm	90~250VAC 50/60Hz	0.5VA max.	SCR 100mA	270° Trimmer
	CDR-30XB-V	NC						
	CAR-10X	NO	Horizontal	10cm	90~250VAC 50/60Hz	0.5VA max.	SCR 100mA	270° Trimmer
	CAR-10XB	NC						
	CAR-10X-V	NO	Vertical	10cm	90~250VAC 50/60Hz	0.5VA max.	SCR 100mA	270° Trimmer
	CAR-10XB-V	NC						
Connector	CDR-10X-M12	NO	Horizontal	10cm	10~30VDC	25mA max.	NPN & PNP 150mA max.	270° Trimmer
	CDR-10XB-M12	NC						
	CDR-30X-M12	NO	Horizontal	30cm				
	CDR-30XB-M12	NC						
	CDR-30X-V-M12	NO	Vertical	30cm				
	CDR-30XB-V-M12	NC						

Mirror Reflex Type

Type	Model	Output Status	Sensing Direction	Sensing Distance	Operating Voltage	Current Consumption	Output Method	Sensitivity Adjuster
Lead Wire	CDM-1MR	NO	Horizontal	0.1m~1.6m	10~30VDC	20mA max.	NPN & PNP 150mA max.	270° Trimmer
	CDM-1MRB	NC						
	CDM-2MX	NO		0.1m~2.5m				
	CDM-2MXB	NC						
	CDM-2MX-V	NO	Vertical	0.1m~2.0m	90~250VAC	0.5VA max.	SCR 100mA	270° Trimmer
	CDM-2MXB-V	NC						
	CAM-2MX	NO	Horizontal	0.1m~2.0m	90~250VAC	0.5VA max.	SCR 100mA	270° Trimmer
	CAM-2MXB	NC						
	CAM-2MX-V	NO	Vertical	0.1m~2.0m	90~250VAC	0.5VA max.	SCR 100mA	270° Trimmer
	CAM-2MXB-V	NC						
Connector	CDM-2MX-M12	NO	Horizontal	0.1m~2.5m	10~30VDC	20mA max.	NPN & PNP 150mA max.	270° Trimmer
	CDM-2MXB-M12	NC						
	CDM-2MX-V-M12	NO	Vertical	0.1m~2.0m				
	CDM-2MXB-V-M12	NC						

Thru Beam Type

Type	Model	Output Status	Sensing Direction	Sensing Distance	Operating Voltage	Current Consumption	Output Method	Sensitivity Adjuster
Lead Wire	CDT-10MX	NO	Horizontal	10m	10~30VDC	P<20mA R<25mA	NPN & PNP 150mA	270° Trimmer
	CDT-10MXB	NC						
	CDT-6MX-V	NO	Vertical	6m				
	CDT-6MXB-V	NC						
Connector	CDT-10MX-M12	NO	Horizontal	10m	10~30VDC	P<20mA R<25mA	NPN & PNP 150mA	270° Trimmer
	CDT-10MXB-M12	NC						
	CDT-6MX-V-M12	NO	Vertical	6m				
	CDT-6MXB-V-M12	NC						

Guiding of Model

Ex. **CDR-30X-B-V-M12**

① ② ③ ④ ⑤ ⑥

① Model

CDR=DC Reflex Type
 CAR=AC Reflex Type
 CDM=DC Mirror Reflex Type
 CAM=AC Mirror Reflex Type
 CDT=DC Thru Beam Type

② Sensing Distance

30=30cm
 2M=2m
 10M=10m

③ Light Source

X=Infrared LED
 R=Red LED

④ Output Status

B=NC Type
 Non=NO Type

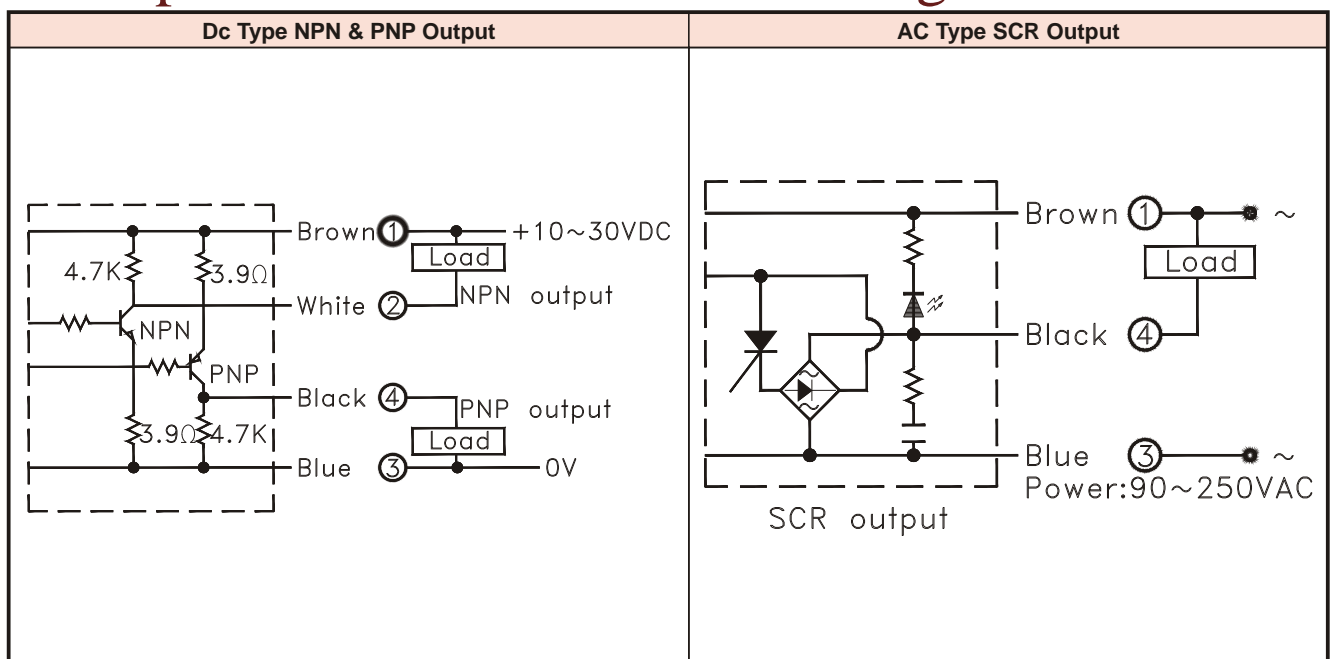
⑤ Sensing Direction

V=Vertical Type
 Non=Horizontal Type

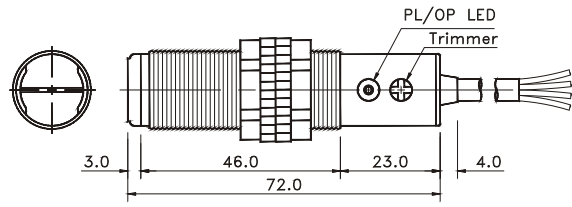
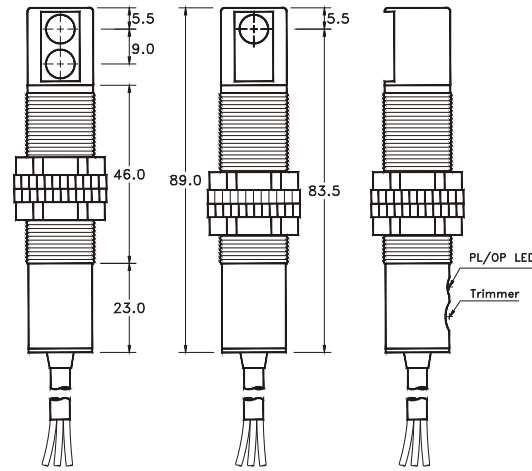
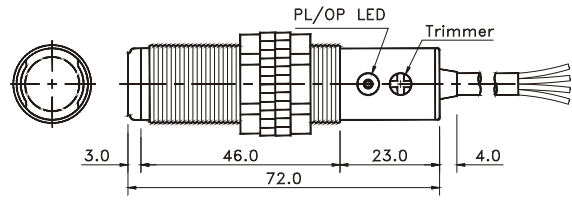
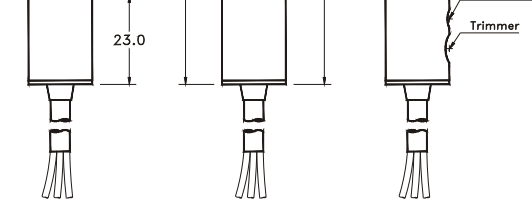
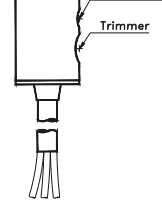
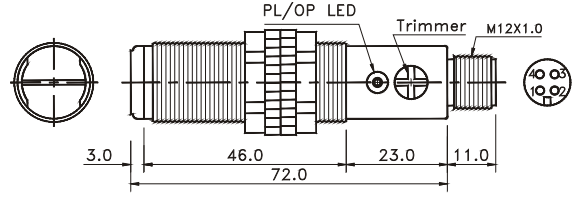
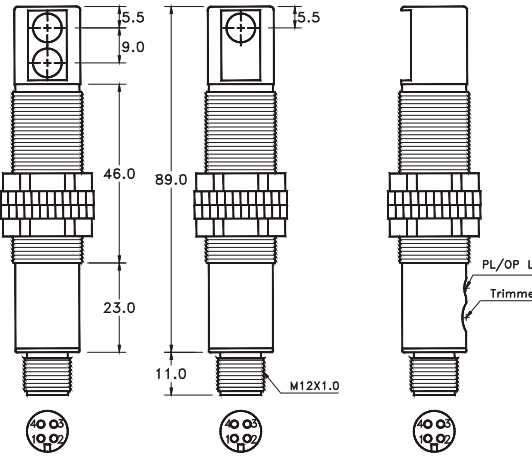
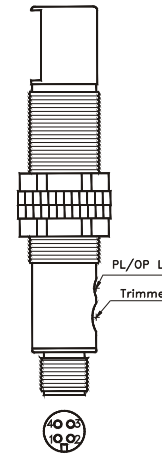
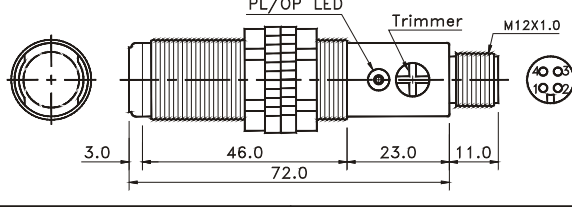
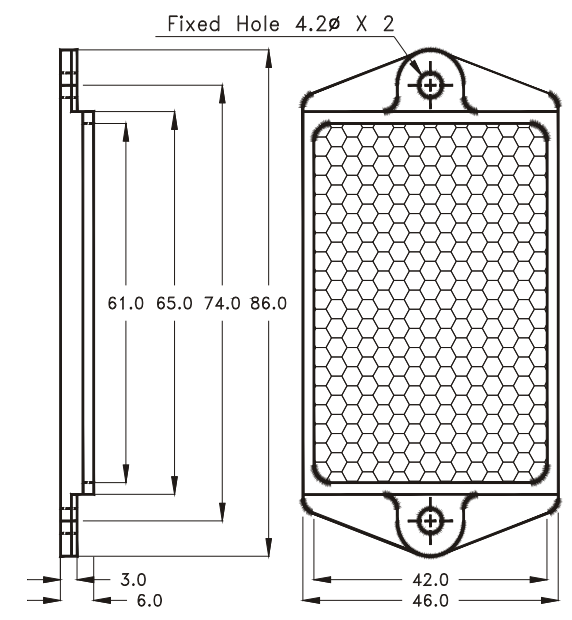
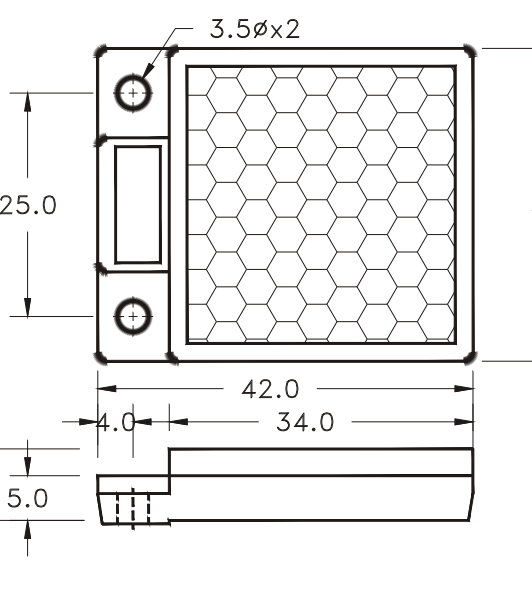
⑥ Connector Type

M12= M12x1.0

Output Circuit & Connection Diagram



Dimension

Lead Wire Type	CDR/CAR/CDM/CAM	Lead Wire Type	Vertical Type
 <p>Diagram showing a side view of the sensor with a lead wire. Dimensions: 3.0, 46.0, 72.0, 23.0, 4.0. Labels: PL/OP LED, Trimmer.</p>		 <p>Three vertical views of the sensor with lead wires. Dimensions: 5.5, 9.0, 46.0, 89.0, 83.5, 23.0.</p>	
Lead Wire Type	CDT	Connector Type	Vertical Type
 <p>Diagram showing a side view of the sensor with a lead wire. Dimensions: 3.0, 46.0, 72.0, 23.0, 4.0. Labels: PL/OP LED, Trimmer.</p>		 <p>Three vertical views of the sensor with connector. Dimensions: 5.5, 9.0, 46.0, 89.0, 83.5, 23.0.</p>	 <p>Vertical view of the sensor with connector. Labels: PL/OP LED, Trimmer.</p>
Connector Type	CDR-M12/CDM-M12	Connector Type	Vertical Type
 <p>Diagram showing a side view of the sensor with an M12 connector. Dimensions: 3.0, 46.0, 72.0, 23.0, 11.0. Labels: PL/OP LED, Trimmer, M12X1.0.</p>		 <p>Three vertical views of the sensor with M12 connector. Dimensions: 5.5, 9.0, 46.0, 89.0, 83.5, 23.0, 11.0. Labels: M12X1.0.</p>	 <p>Vertical view of the sensor with M12 connector. Labels: PL/OP LED, Trimmer.</p>
Connector Type	CDT	Mirror	MR-2
 <p>Diagram showing a side view of the sensor with an M12 connector. Dimensions: 3.0, 46.0, 72.0, 23.0, 11.0. Labels: PL/OP LED, Trimmer, M12X1.0.</p>		 <p>Diagram showing a side view and a top view of the MR-1 mirror. Labels: Fixed Hole 4.2φ X 2. Dimensions: 61.0, 65.0, 74.0, 86.0, 3.0, 6.0, 42.0, 46.0.</p>	 <p>Diagram showing a top view and a side view of the MR-2 mirror. Labels: 3.5φx2. Dimensions: 25.0, 35.0, 42.0, 34.0, 4.0, 8.0, 5.0.</p>