

- ※ 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 ~ 250 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				
	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				
	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								
	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									
	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

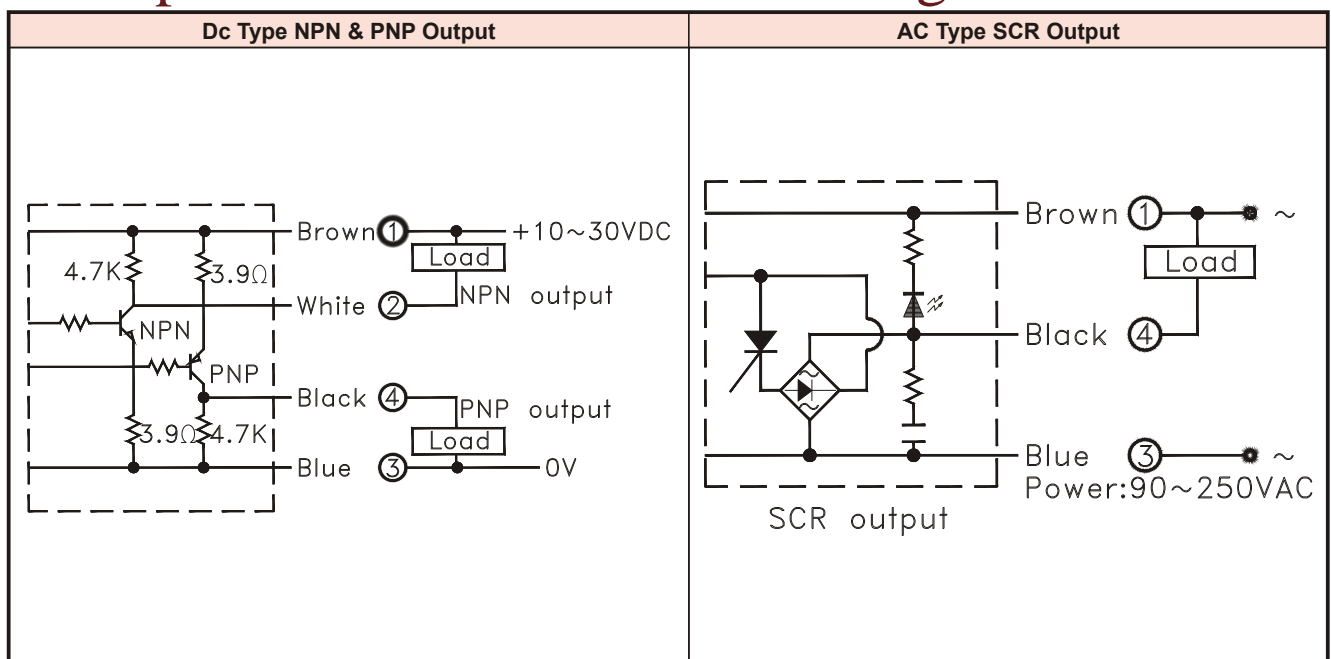
### ⑤ Sensing Direction

V=Vertical Type  
 Non=Horizontal Type

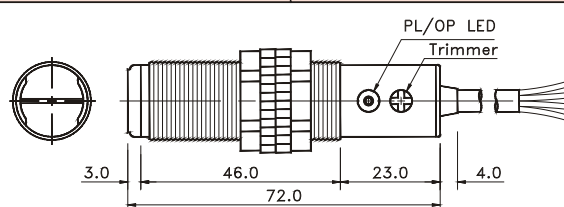
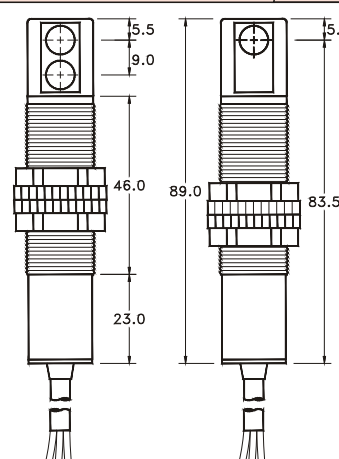
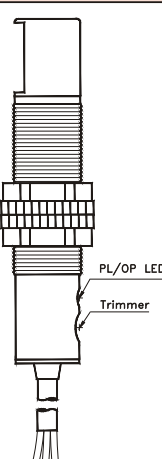
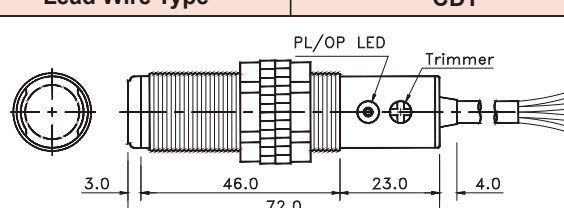
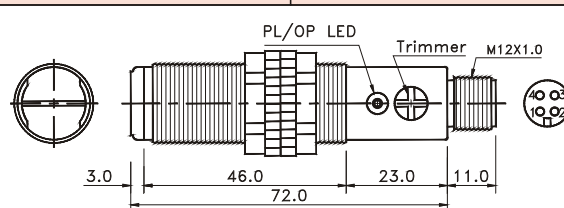
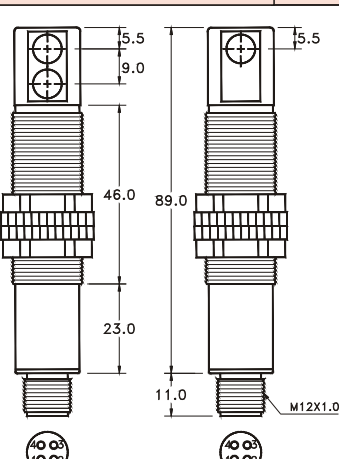
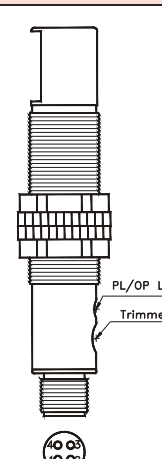
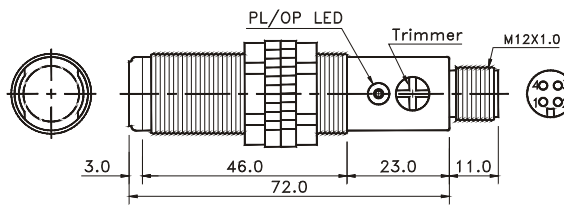
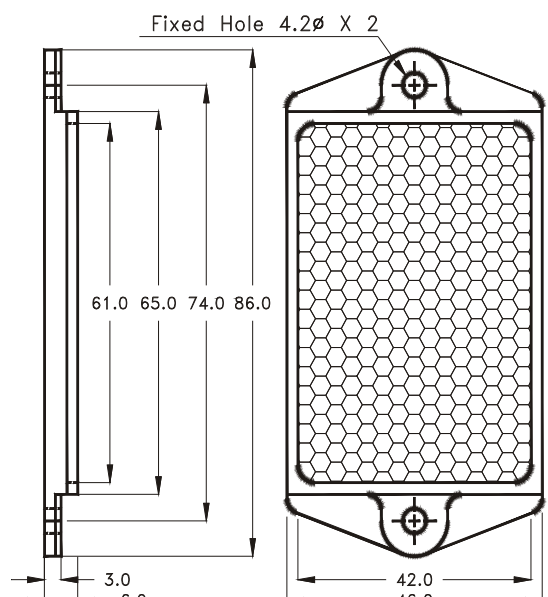
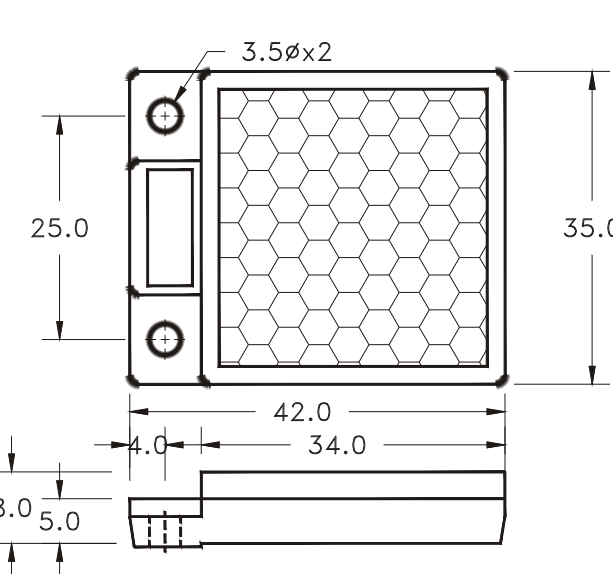
### ⑥ Connector Type

M12= M12x1.0

## Output Circuit & Connection Diagram



Dimension

<p><b>Lead Wire Type</b></p>  <p>PL/OP LED Trimmer</p> <p>3.0 46.0 72.0 23.0 4.0</p>	<p><b>CDR/CAR/CDM/CAM</b></p>	<p><b>Lead Wire Type</b></p>  <p>5.5 9.0 5.5 46.0 89.0 83.5 23.0</p>	<p><b>Vertical Type</b></p>  <p>PL/OP LED Trimmer</p>
<p><b>Lead Wire Type</b></p>  <p>PL/OP LED Trimmer</p> <p>3.0 46.0 72.0 23.0 4.0</p>	<p><b>CDT</b></p>		
<p><b>Connector Type</b></p>  <p>PL/OP LED Trimmer M12X1.0</p> <p>3.0 46.0 72.0 23.0 11.0</p>	<p><b>CDR-M12/CDM-M12</b></p>	<p><b>Connector Type</b></p>  <p>5.5 9.0 5.5 46.0 89.0 83.5 23.0 11.0 M12X1.0</p>	<p><b>Vertical Type</b></p>  <p>PL/OP LED Trimmer</p>
<p><b>Connector Type</b></p>  <p>PL/OP LED Trimmer M12X1.0</p> <p>3.0 46.0 72.0 23.0 11.0</p>	<p><b>CDT</b></p>		
<p><b>Mirror</b></p> <p>Fixed Hole 4.2<math>\phi</math> X 2</p>  <p>61.0 65.0 74.0 86.0 3.0 6.0 42.0 46.0</p>	<p><b>MR-1</b></p>	<p><b>Mirror</b></p>  <p>3.5<math>\phi</math>x2 25.0 35.0 42.0 34.0 4.0 8.0 5.0</p>	<p><b>MR-2</b></p>