MR /MG /MT Series

MINI & WATER -PROOF PHOTO SENSOR

- High solid compact structure.
  - 13.5 (W) x 25.0 (H) x 30.0 (L)
- High Protection Class IP-67
- Long Sensing Distance
  - Reflex Type : 10 CM ,30 CM ,60CM
  - Mirror Reflex Type : 2M
  - Thru Bream Type : 6M



❖ General Specification

Data	
Operating voltage	10 ~ 30 VDC ; Ripple< 20% peak to peak.
Output method	NPN(NO) & PNP(NO)Two Output or NPN NO/NC Two Output
Output current	150mA max.
Leakage current	0.8mA max.
Residual Voltage	0.6V max.
Protection circuit	Short circuit & polarity reversed protection
Response Time	2 ms. max.
Sensitivity Adjuster	270° Trimmer
Emitter	Infrared LED or Red LED
Illumination	Sunlight <10,000 Lux ; Lamplight < 5,000 Lux.
Hysteresis	10% of sensing distance max.
Housing Material	Case : PBT ; Lens : PC
Operating circumstance	-20 °C~ +80 °C ; 35% ~ 85% RH
Connection Method	Lead Wire Type : 4 Cores /5.0ϕ x2M Plug Type : 4 Pins
Model of NC Type	Reflex Type : MR-10XB ,MR-10XPB , MR-30XB ,MR-30XPB , MR-60XB ,MR-60XPB PR-10XB ,PR-10XPB , PR-30XB ,PR-30XPB , PR-60XB ,PR-60XPB Mirror Reflex Type : MG-2MXB ,MG-2MXPB ,PG-2MXB ,PG-2MXPB Thru Bream Type : MT-6MXB ,MT-6MXPB ,RT-6MXB ,RT-6MXPB
Remarks	Water Proof By Expose Filled for IP-67

❖ Reflex Type

Type	Lead Wire Type Standard 2M								
Model	**MR-10NE**	**MR-10X**	**MR-10XP**	**MR-30N**	**MR-30X**	**MR-30XP**	**MR-60N**	**MR-60X**	**MR-60XP**
Protection class	IP-65		IP-67	IP-65		IP-67	IP-65		IP-67
Sensing distance	15 cm			30 cm			60 cm		
Output method	NPN	NPN & PNP		NPN	NPN & PNP		NPN	NPN & PNP	
Output status	NO & NC	NO		NO & NC	NO		NO & NC	NO	
Emitter	Red LED	Infrared LED							
Operating voltage	10 ~ 30 VDC ; 20% peak to peak.								
Current consumption	30 mA max.								
Output current	150 mA max.								
Protection Current	Short circuit & polarity reversed protection								
Weight <Appr.>	78 g	78 g	84 g	78 g	78 g	84 g	78 g	78 g	84 g
Type	Plug Type M8 Connector								
Model	**PR-10NE**	**PR-10X**	**PR-10XP**	**PR-30N**	**PR-30X**	**PR-30XP**	**PR-60N**	**PR-60X**	**PR-60XP**
Protection class	IP-65		IP-67	IP-65		IP-67	IP-65		IP-67
Sensing distance	15 cm			30 cm			60 cm		
Output method	NPN	NPN & PNP		NPN	NPN & PNP		NPN	NPN & PNP	
Output status	NO / NC	NO		NO / NC	NO		NO / NC	NO	
Emitter	Red LED	Infrared LED							
Operating voltage	10 ~ 30 VDC ; 20% peak to peak.								
Current consumption	30 mA max.								
Output current	150 mA max.								
Protection Current	Short circuit & polarity reversed protection								
Weight <Appr.>	12 g	12 g	18 g	12 g	12 g	18 g	12 g	12 g	18 g

❖ Mirror Reflex Type

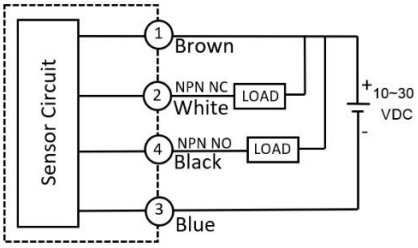
Type	Lead Wire Type Standard 2M		Plug Type M8 Connector	
Model	**MG-2MX**	**MG-2MXP**	**PG-2MX**	**PG-2MXP**
Protection class	IP-65	IP-67	IP-65	IP-67
Sensing distance	2.0 M		2.0 M	
Output method	NPN & PNP			
Output status	NO			
Emitter	Infrared LED			
Operating voltage	10 ~ 30 VDC ; 20% peak to peak.			
Current consumption	30 mA max.			
Output current	150 mA max.			
Protection Current	Short circuit & polarity reversed protection			
Weight <Appr.>	78 g	84 g	12 g	18 g

❖ Thru Beam Type

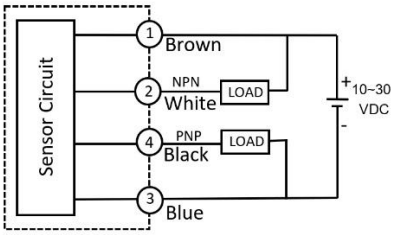
Type	Lead Wire Type Standard 2M		Plug Type M8 Connector	
Model	**MT-6MX**	**MT-6MXP**	**PT-6MX**	**MT-6MXP**
Protection class	IP-65	IP-67	IP-65	IP-67
Sensing distance	6.0 M		6.0 M	
Output method	NPN & PNP			
Output status	NO			
Emitter	Infrared LED			
Operating voltage	10 ~ 30 VDC ; 20% peak to peak.			
Current consumption	Emitter <20 mA , Receiver <25mA.			
Output current	150 mA max.			
Protection Current	Short circuit & polarity reversed protection			
Weight <Appr.>	180 g	162 g	20 g	32 g

❖ Output Circuit & Connection Diagram

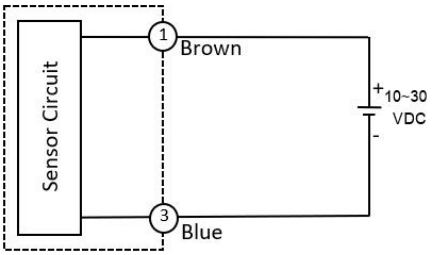
NPN OUTPUT



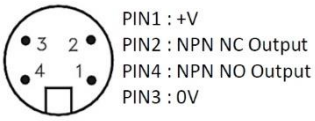
NPN & PNP OUTPUT

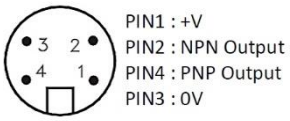


Emitter



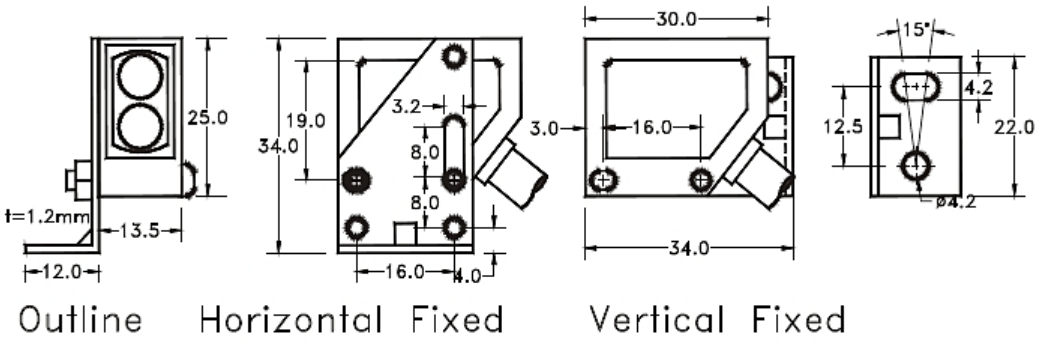
Plug Type

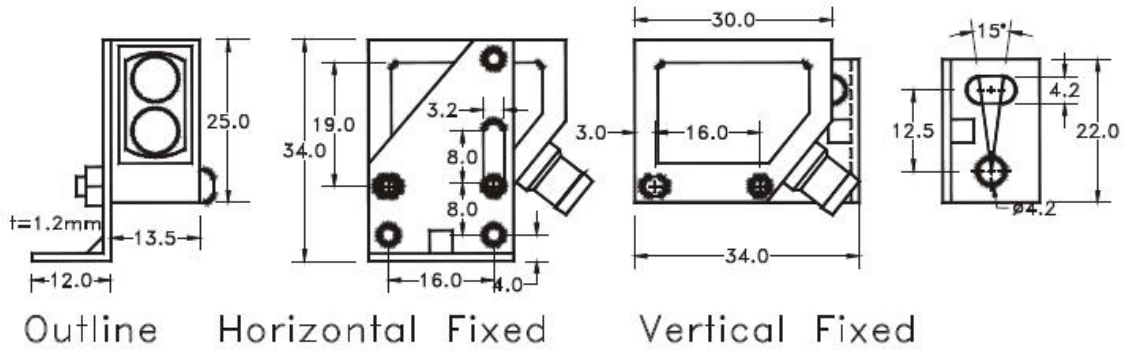




❖ Dimension

Lead Wire Type



Plug Type M8 Connector


❖ Mirror

MR-1	MR-2	MR-3
