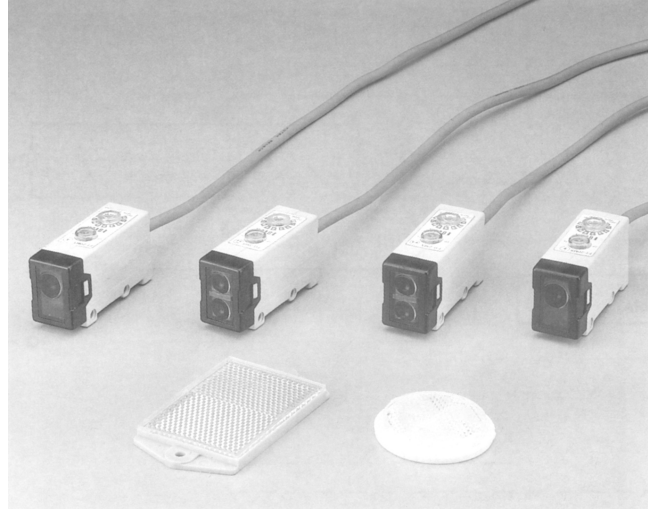


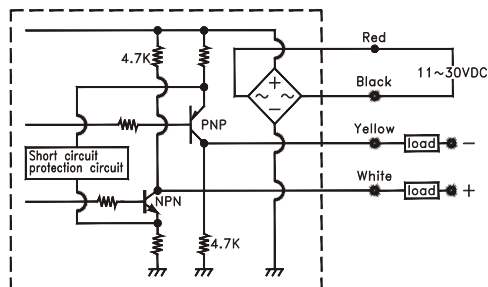
- ※ Operating Voltage : 11~30VDC
- ※ NPN & PNP Two Output , NO / NC Changeable .
- ※ Polarity Reversed Protection Circuit .
- ※ Vertical & Horizontal Sensing Direction Are Available . Protected By Short Circuit &
- ※ Long Sensing Distance
 Reflex Type : 2M
 Mirror Reflex Type : 4M
 Thru Beam Type : 20M



General Specification

Specification	Data
Operating Voltage	10~30 VDC ; Ripple < 20% of Peak to Peak
Output Method	NPN & PNP Two Output
Output Status	NO < Normal Open > , NC Type Available Also
Output Current	150mA max.
Protection Circuit	Short Circuit & Polarity Reversed Protection
Residual Voltage	0.8V max.
Leakage Current	0.8mA max.
Sensitivity Adjuster	270° Trimmer
Response Time	2ms Max.
Hysteresis	10% of Sensing Distance Max.
Emitter	Infrared LED
Illumination	Sunlight < 50,000 Lux. ; Lamplight < 10,000 Lux.
Connection Method	4 Cores / 5.0φ X 2m
Housing Material	Intensive PBT
Operating Temp./Hum.	-20°C~+60°C ; 35%~85% RH
Protection Class	IP-65

Output Circuit & Connection Diagram



Specification

Reflex Type	FR-1MX	FR-1MX-V	FR-2MX	FR-2MX-V
Sensing Direction	Horizontal	Vertical	Horizontal	Vertical
Sensing Distance	1m		2m	
Current Consumption	20mA max.		35mA max.	
Weight	Appr. 105g	Appr. 120g	Appr. 105g	Appr. 125g
Mirror Reflex Type	FG-3MX		FG-3MX-V	
Sensing Direction	Horizontal		Vertical	
Sensing Distance	4m			
Current Consumption	20mA max.			
Weight	Appr. 105g		Appr. 120g	
Thru Beam Type	FT-10MX	FT-10MX-V	FT-20MX	FT-20MX-V
Sensing Direction	Horizontal	Vertical	Horizontal	Vertical
Sensing Distance	10m		20m	
Current Consumption	Emitter < 30mA ; Receiver < 20mA			
Weight	Appr. 210g	Appr. 240g	Appr. 210g	Appr. 240g

Dimension

FR • FG	FR-V • FG-V	Mirror MR-1
<p>Technical drawing of FR and FG sensors. Dimensions include: 2.0, 7.0, 8.0, 12.0, 32.0, 8.0, 19.0, 21.0, 3.0, 15.0, 25.0, 22.0, 7.0, 29.0, 16.0, 17.0, 18.0, 35.0, 8.0, 4.2, 4.2. Components labeled: Removable adjuster's cap, LED, Bracket Cable 5#X2M, Bracket or rail fixed claw, Fixed hole 4.2#-2, Bracket.</p>	<p>Technical drawing of FR-V and FG-V sensors. Dimensions include: 21.0, 2.0, 33.0, 7.0, 8.5, 12.0, 18.5, 82.0, 35.0, 7.0, 28.5, 16.0, 25.0, 17.0, 5.0, 35.0, 2.0, 7.0. Components labeled: Fixed bracket, Fixed hole 4.2#-2, Removable adjuster's cap, LED, Bracket or rail fixed claw, Cable 5# x 2m.</p>	<p>Technical drawing of Mirror MR-1. Dimensions include: 61.0, 65.0, 74.0, 86.0, 3.0, 6.0, 42.0, 46.0. Component labeled: Fixed Hole 4.2# X 2.</p>
FT	FT-V	
<p>Technical drawing of FT sensors. Dimensions include: 21.0, 2.0, 33.0, 7.0, 10.5, 10.5, 28.5, 82.0, 35.0, 7.0, 38.5, 35.0, 16.0, 25.0, 17.0, 5.0, 35.0, 2.0, 7.0. Components labeled: Fixed bracket, Fixed hole 4.2#-2, Removable adjuster's cap, LED, Bracket or rail fixed claw, Cable 5# x 2m.</p>	<p>Technical drawing of FT-V sensors. Dimensions include: 2.0, 7.0, 10.5, 32.0, 18.5, 19.0, 21.0, 3.0, 3.0, 15.0, 25.0, 22.0, 7.0, 29.0, 16.0, 17.0, 18.0, 35.0, 8.0, 4.2, 4.2. Components labeled: Removable adjuster's cap, LED, Bracket Cable 5#X2M, Bracket or rail fixed claw, Fixed hole 4.2#-2, Bracket.</p>	