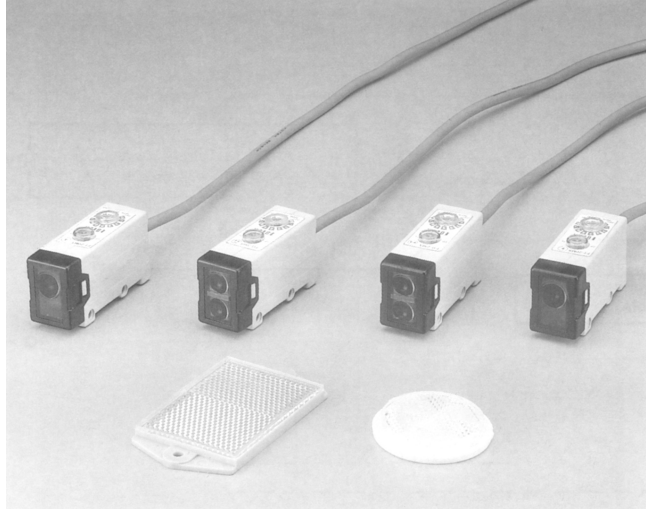


- ※ Operating Voltage : 11~30VDC
- ※ NPN & PNP Two Output ,
NO / NC Changeable .
- ※ Polarity Reversed Protection Circuit .
- ※ Vertical & Horizontal Sensing
Direction Are Available .
Protected By Short Circuit &
- ※ Long Sensing Distance
Reflex Type : 2M
Mirror Reflex Type : 4M
Thru Beam Type : 20M



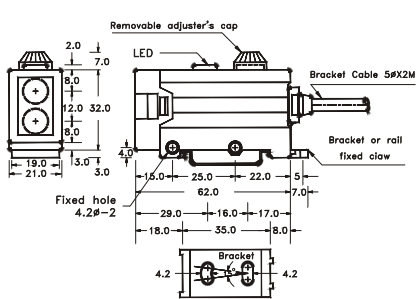
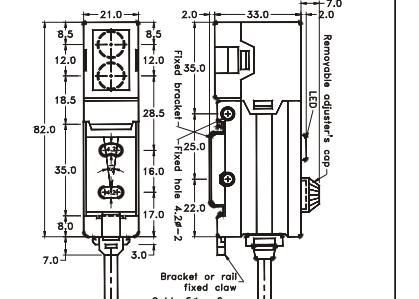
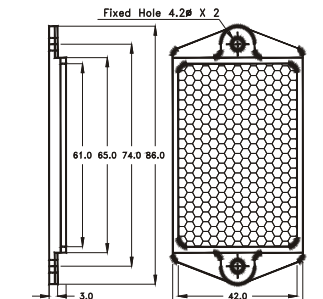
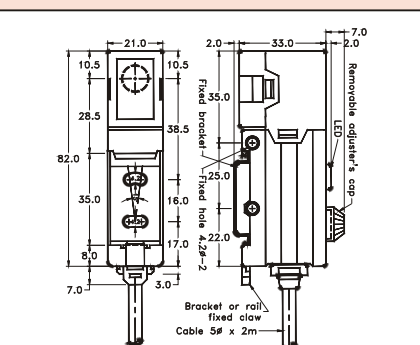
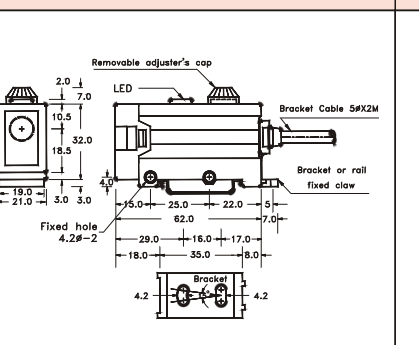
General Specification

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
 FR • FG dimensions diagram showing a top view and a side view. The top view shows a rectangular unit with a fixed hole (4.2#-2) and a bracket cable (5#X2M). The side view shows the unit's profile with a removable adjuster's cap and a fixed claw. Dimensions include 2.0, 7.0, 8.0, 12.0, 32.0, 19.0, 21.0, 3.0, 15.0, 25.0, 22.0, 5.0, 29.0, 16.0, 17.0, 18.0, 35.0, 8.0, 4.2, and 4.2.	 FR-V • FG-V dimensions diagram showing a side view of the unit. It includes a fixed bracket, a fixed hole (4.2#-2), a bracket cable (5# x 2m), and a removable adjuster's cap. Dimensions include 21.0, 2.0, 33.0, 7.0, 8.5, 12.0, 18.5, 82.0, 35.0, 28.5, 16.0, 25.0, 17.0, 5.0, 7.0, 3.0, 15.0, 25.0, 22.0, 5.0, 29.0, 16.0, 17.0, 18.0, 35.0, 8.0, 4.2, and 4.2.	 Mirror MR-1 dimensions diagram showing a top view of the mirror unit. It features a fixed hole (4.2# X 2) and a bracket cable (5#X2M). Dimensions include 61.0, 65.0, 74.0, 86.0, 3.0, 6.0, 42.0, and 46.0.
FT	FT-V	
 FT dimensions diagram showing a side view of the unit. It includes a fixed bracket, a fixed hole (4.2#-2), a bracket cable (5# x 2m), and a removable adjuster's cap. Dimensions include 21.0, 2.0, 33.0, 7.0, 10.5, 10.5, 28.5, 38.5, 82.0, 35.0, 25.0, 16.0, 22.0, 5.0, 7.0, 3.0, 15.0, 25.0, 22.0, 5.0, 29.0, 16.0, 17.0, 18.0, 35.0, 8.0, 4.2, and 4.2.	 FT-V dimensions diagram showing a side view of the unit. It includes a fixed bracket, a fixed hole (4.2#-2), a bracket cable (5#X2M), and a removable adjuster's cap. Dimensions include 2.0, 7.0, 8.0, 12.0, 32.0, 19.0, 21.0, 3.0, 15.0, 25.0, 22.0, 5.0, 29.0, 16.0, 17.0, 18.0, 35.0, 8.0, 4.2, and 4.2.	