

Miniature Photoelectric Sensor

Flat Type

FMF



SALIENT FEATURES

- ◆ 1m Sensing
- ◆ Visible Red LED
- ◆ Ultra Slim Housing
- ◆ IP-64, Shock Resistant
- ◆ Power & Output Indication



Model Number Legend

FMF - □ - □□ - □

1 2 3 4 5

1. Series

FMF

2. Type

T: Through Beam
D: Diffuse Reflective

3. Sensing Distance

30: 30 mm
1M: 1 Meter

4. Output

NO: NPN - NO
PO: PNP - NO

5. Connection

2M: 2m Cable

#. Accessories included

Mounting Screws : 1 Set

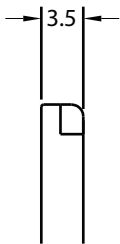
Example:

FMF-T-1MPO-2M

FMF Series - Through Beam Type - 1 meter Sensing Distance, PNP NO Output - 2m Cable

NOTE: Contact us for models not shown in catalogue.

Product Highlights



◆ **Ultra Slim!!!**

Upto 30% slim than competing models. Only 3.5mm thickness.

◆ **Red LED**

Red LED is provided to make alignment and focusing easier.



◆ **Diffuse to Retro-reflective**

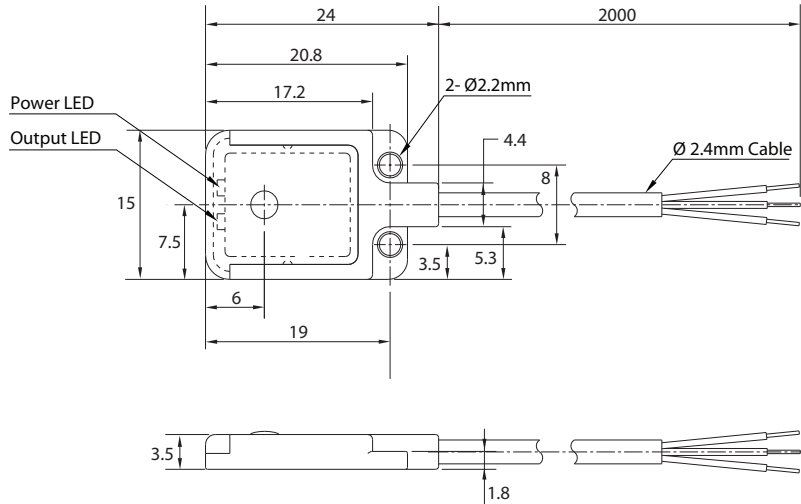
FMF-D models work as retro-reflective with an addition of a reflector. This increases the sensing distance of the sensor. Eg., V-61 reflector increases the sensing distance of the sensor to 200mm from 30mm.

Ratings and Specifications

| Sensing Type | Through Beam | | Diffuse Reflective | |
|---------------------------|---|---------------|-----------------------------|---------------|
| Output Type | NPN | PNP | NPN | PNP |
| Models | FMF-T-1MNO-2M | FMF-T-1MPO-2M | FMF-D-30NO-2M | FMF-D-30PO-2M |
| Sensing Distance | 1 Meter | | 30 mm | |
| Sensing Area | Opaque min. 5mm dia. | | 100 x 100mm (white) at 50mm | |
| Light Source | Red LED (602nm) | | | |
| Response Time | max. 0.5ms | | | |
| Operation Mode | Dark ON | | Light ON | |
| Supply Voltage | 12 - 24 VDC (Ripple Max 10%) | | | |
| Current Consumption | max. 20mA | | max. 15mA | |
| Protection Circuits | Reverse polarity protection; Output short circuit protection | | | |
| Control Output | NO - NPN or PNP open collector output (depending on model) | | | |
| Control Output Rating | max 100mA at 24VDC | | | |
| Operation Indication | Power: Green; Output: Red LEDs | | | |
| Shock Resistance | 20 G- X,Y, Z three directions | | | |
| Vibration Resistance | 1.5mm amplitude 10-1000Hz for 1 hour in X, Y, Z directions | | | |
| Dielectric Strength | 1000VAC at 50/60 Hz for 60 Sec. | | | |
| Insulation Resistance | min. 20MΩ at 500VDC | | | |
| Environmental Illuminance | Sunlight: 10,000 lux, Lamp: 5,000 lux | | | |
| Ambient Temperature | Operation: -15° ~ 45°C; Storage: -10° ~ 55°C (non- freezing; non- condensing) | | | |
| Ambient Humidity | Operation: 35 ~ 85% RH; Storage: 35 ~ 95% RH (non- condensing) | | | |
| Protection Class | IP64 | | | |
| Weight | aprox. 40g | | aprox. 20g | |
| Material | Housing: ABS, Lens: Acrylic | | | |

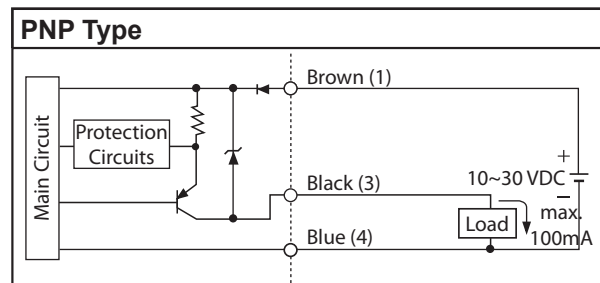
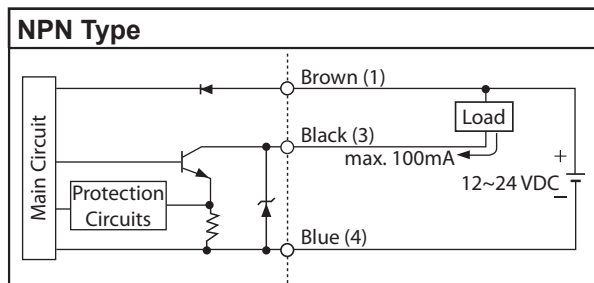
Sensor Dimension Drawing

FMF

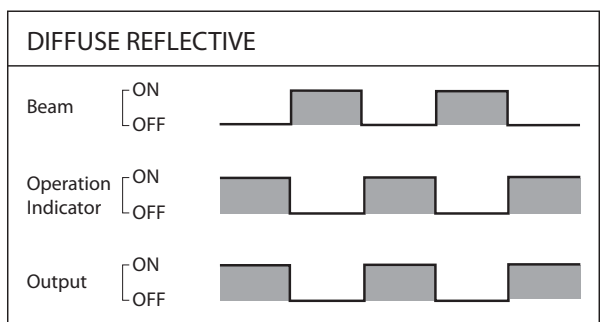
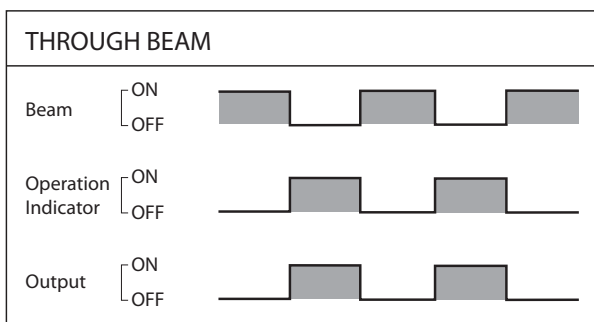


All dimensions are in mm

Control Output Diagram



Operation Type



Proximity Sensors

Photoelectric Sensors

Measurement Sensors

Vision & Safety Sensors

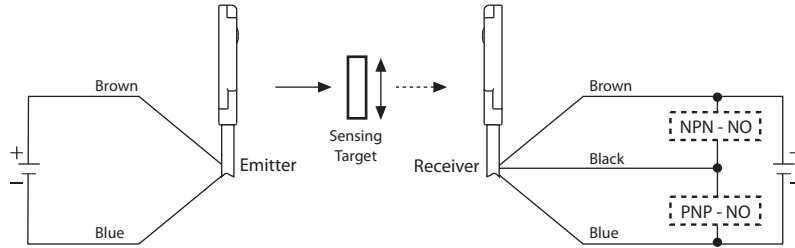
Control

Weighing

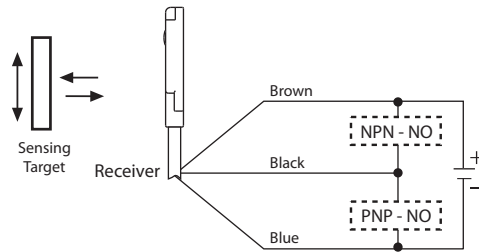
Automation

Components

◆ Through Beam



◆ Diffuse Reflective



- Brown : DC 10~30V
- Black : Control Output
- Blue : 0V

Exclusively Represented by:

Intech Systems Chennai Pvt Ltd
 S-2, Guindy Industrial Estate
 Chennai - 600 032. Ph: 4353 8888
 Email: info@intechchennai.com

INNOTM
www.inno.sg

© INNO, Rights Reserved
 In the interest of continuous product improvement
 specifications are subject to change without notice

Cat. No. FMF-B12