



Cat. No. FKF-412

FKF FLAT MOUNT PHOTOELECTRIC SENSOR



INSTRUCTION SHEET

Thank you for selecting INNO for your requirement.

This sheet describes the procedure and precautions required for installing and operating the product.

Kindly read this sheet before operating or installing the product. Store the sheet for future reference.

CAUTION FOR SAFETY

- ① Please keep this sheet for review before use of unit.
- ① Please observe the following:

⚠ WARNING
Serious injury may occur if instructions are not followed

⚠ CAUTION
Product failure or injury can occur if instructions are not followed

⚠ WARNING

- This is not a safety product and is not to be used with machinery that requires use of safety control.
- Do not disassemble or modify this unit. It may lead to electric shock/ fire.

Do not connect sensor to AC power supply.
RISK OF EXPLOSION!



⚠ CAUTION

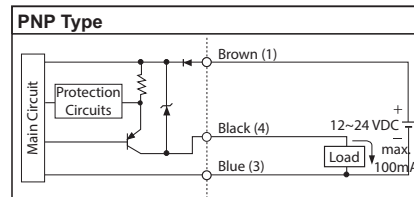
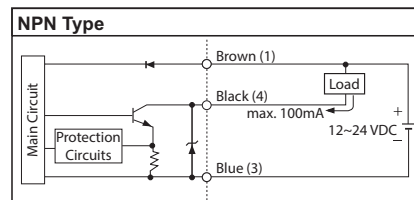
- This unit shall not be used outdoors.
- Do not use the unit in places where there is flammable or explosive gas.
- Please observe the rated specifications in Instruction Sheet.
- Do not use this unit beyond rated power and do not supply AC power at DC power type.
- Please check the polarity of power and wrong wiring.
- Do not use this unit in places where there is vibration or impact.
- Do not use water or oil based detergent for cleaning the unit.
- Do not use excessive force to tighten the unit and do not hammer the unit.
- Please process it as industrial waste and dispose responsibly.

SPECIFICATIONS

*For details on Customized/ Special Models contact Seller

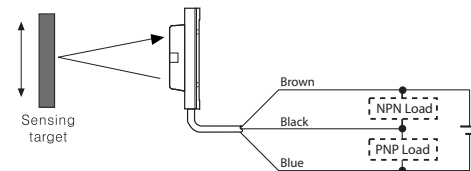
Type	Diffuse Reflective				
*Models	NPN	FKF-DL-2MNO-2M	FKF-DL-2MNO-M12J3	FKF-DD-2MNO-2M	FKF-DD-2MNO-M12J3
	PNP	FKF-DL-2MPO-2M	FKF-DL-2MPO-M12J3	FKF-DD-2MPO-2M	FKF-DD-2MPO-M12J3
Sensing Distance	2 meters				
Hysteresis	max. 20%				
Response Time	1 m sec				
Light Source	Infrared LED				
Light Wavelength	850 nm				
Sensitivity Adjustment	Built-in externally adjustable pot.				
Operation Mode	Light ON		Dark ON		
Supply Voltage	12 - 24 VDC (Ripple Max 10%)				
Current Consumption	max. 30mA				
Protection Circuits	Reverse Polarity, Output Short Circuit Protection				
Connection	Prewired 2 meter cable outgoing type	M12 Jn. Connector, 0.3m extension	Prewired 2 meter cable outgoing type	M12 Jn. Connector, 0.3m extension	
Control Output	NPN or PNP open collector output (depending on model)				
Control Output Rating	Load Voltage: max. 26 VDC; Load Current: max 100mA				
Operation Indication	RED: Operation; ORANGE: Light ON; GREEN: Dark ON				
Shock Resistance	10 G- X,Y, Z three directions				
Environmental Illuminance	Sunlight: 11,000 lux, Lamp: 3,000 lux				
Ambient Temperature	Operation: -20° ~ 55°C; Storage: -25° ~ 70°C (non- freezing; non- condensing)				
Ambient Humidity	Operation: 35 ~ 80% RH; Storage: 35 ~ 85% RH (non- condensing)				
Protection Class	IP64				
Weight	approx. 50g				
Material	Housing: ABS, Lens: Acrylic				

OUTPUT CIRCUIT DIAGRAM

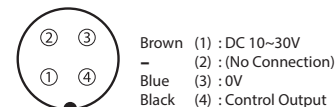


CONNECTION DIAGRAM

• Cable



• M12 Junction Connector



Represented by:

Intech Systems Chennai Pvt. Ltd.
S-2, Guindy Industrial Estate
Chennai - 32. Ph: 044 4353 8888
Email: info@intechchennai.com

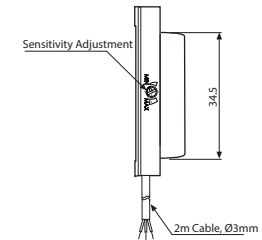
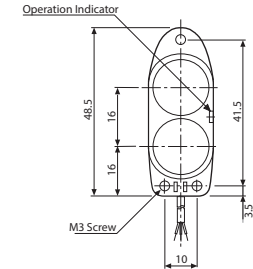
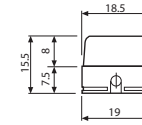


www.inno.sg

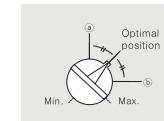
© Rights Reserved

DIMENSIONS

• Cable Type and Junction Connector Type



ADJUSTMENT



The sensitivity adjuster is to be set in such a way that the Stable Indication is 'ON' when the object is sensed. The stable indication color is defined in the 'Operation Type'.

The position 'a' is the minimum sensitivity position.
The position 'b' is the maximum sensitivity position.
Rotate the adjuster between minimum and maximum to achieve the desired sensitivity for Stable Detection Indication.