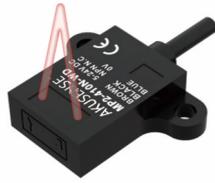


Flat Type

MP2 Series



Basic Features	Working Principle	Photoelectric Sensor	
	Housing Style	Flat Square	
	Optical Working Principle	Diffuse Reflection	
	Detection Range	2.5~8.0mm	
	Spot Size	Not Applicable (Infrared Light)	
	Detected Object	-	
	Light Source	Red LED 880nm	
	Indicator Light	Red LED	
	Sensitivity Adjustment	None	
Electrical data	Switching Mode	L.on (Light On Action) / D.on (Darkening Action) Model Optional	
	Output Mode	NPN or PNP collector open	
	Response Time	≤1ms	
	Switching Frequency	2 kHz	
	Repeatability	5%	
	Hysteresis	≤20%	
	Operating Voltage	12~24V DC	
	Current Consumption	-	
	Residual Voltage	≤3.0V(100mA)	
	Load Current	≤100mA(24VDC)	
	Insulation Resistance	Insulation Resistance between Power Terminal and Housing ≥ 50MΩ (500VDC)	
	Withstand Voltage	1000VAC (50/60Hz), 1 Minute between Power Terminal and Housing	
	Protection Circuit	Reverse Polarity Protection/surge Protection	
Environmental conditions	Operating Temperature	-10~55°C(No Freezing)	
	Storage Temperature	-25~80°C(No Freezing)	
	Operating Humidity	45~85%RH(No Condensation)	
	Storage Humidity	35~90%RH(No Condensation)	
	Ambient Light	Incandescent Lamp ≤ 3500 Lux; Sunlight ≤ 3500 Lux	
	Vibration Resistance	10~55Hz, amplitude 1.5mm, 2 hours each in X/Y/Z axes	
	Protection Rating	IP50	
Mechanical data	Maximum Tightening Torque	-	
	Connection Method	2m/3-core cable	
	Dimensions	26.0x20.5x7.0mm	
	Material	PC	
	Weight	0.023kg	
	Accessories	-	
	Model	NPN D. on	MP2-410N-WD
NPN L. on		MP2-410N-WL	MP2-412N-WL
PNP D. on		MP2-410P-WD	MP2-412P-WD
PNP L. on		MP2-410P-WL	MP2-412P-WL



Basic Features	Working Principle	Photoelectric Sensor	
	Housing Style	Flat Square	
	Optical Working Principle	Diffuse Reflection	
	Detection Range	40mm	
	Spot Size	Not Applicable (Infrared Light)	
	Detected Object	-	
	Light Source	Infrared Light 850nm	
	Indicator Light	operational status: Green LED	
	Sensitivity Adjustment	None	
Electrical data	Switching Mode	L.on (light-on action)/D.on (dark-on action) switchable	
	Output Mode	NPN or PNP collector open	
	Response Time	≤1ms	
	Switching Frequency	2 kHz	
	Repeatability	5%	
	Hysteresis	≤20%	
	Operating Voltage	12~24V DC	
	Current Consumption	≤20mA	≤25mA
	Residual Voltage	<2.5V(Load current 100mA)	
	Load Current	≤100mA(24VDC)	
	Insulation Resistance	Insulation Resistance between Power Terminal and Housing ≥ 20MΩ (500VDC)	
	Withstand Voltage	1000VAC (50/60Hz), 1 Minute between Power Terminal and Housing	
	Protection Circuit	Reverse Polarity Protection/surge Protection	
	Environmental conditions	Operating Temperature	-20~55°C(No Freezing)
Storage Temperature		-25~80°C(No Freezing)	
Operating Humidity		45~85%RH(No Condensation)	
Storage Humidity		35~90%RH(No Condensation)	
Ambient Light		Incandescent Lamp ≤ 3000 Lux; Sunlight ≤ 10000 Lux	
Vibration Resistance		10~55Hz, amplitude 1.5mm, 2 hours each in X/Y/Z axes	
Protection Rating		IP50	
Mechanical data	Maximum Tightening Torque	-	
	Connection Method	4-pin Connector	
	Dimensions	26.0x20.0x8.0mm	26.0x20.0x9.0mm
	Material	PC	
	Weight	0.003kg	
	Accessories	Installation Screws	
Model	NPN	MP2-410N-E Ⓜ	MP2-412N-E
	PNP	MP2-410P-E	MP2-412P-E

- Fiber Optic
- Slot Sensors
- Photoelectric**
- Laser
- Proximity
- Displacement
- Magnetic
- Contact
- Area
- Ultrasonic
- AI Image
- Code Readers
- Vibration
- Temperature
- RFID
- Safety door lock
- Pressure Switch
- Communication
- Accessories

Guidance

Photoelectric

Cylindrical

IP69K high protection type

Square

Flat type

Thin type

BGS

Color/Mark Detection

TOF type

Reflectors

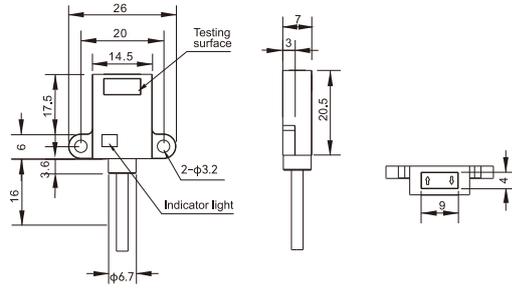
Reflectors

Flat Type

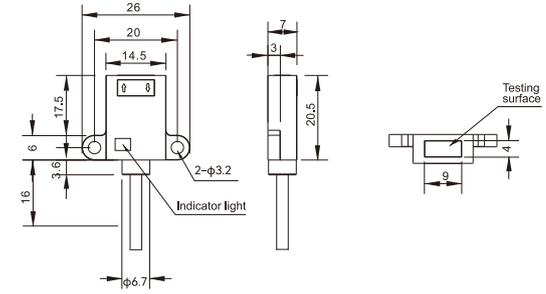
Dimensions

Unit: mm

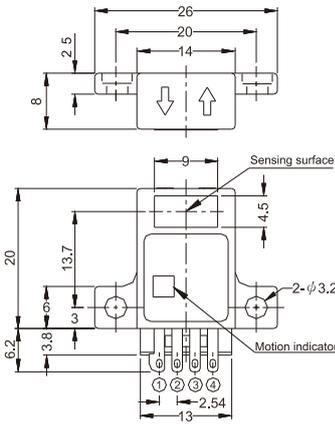
MP2-410□-W□



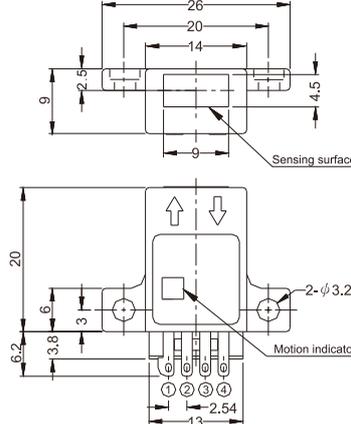
MP2-412□-W□



MP2-410N(P)-E



MP2-412N(P)-E

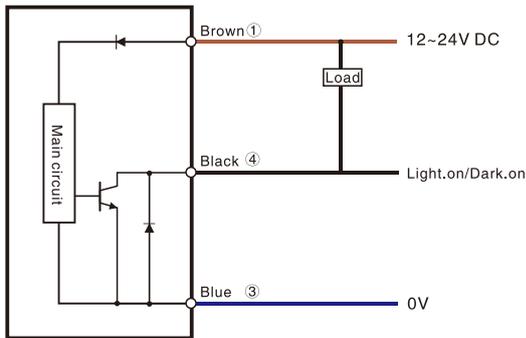


- ①: ○ Brown
- ②: ○ OUT1 White
- ③: ○ OUT2 Black
- ④: ○ Blue

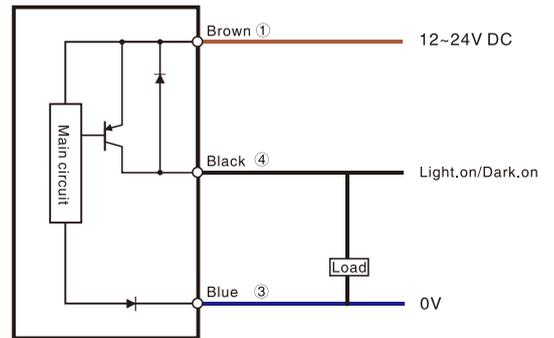
Connection cable: ME-1007

Circuit diagram

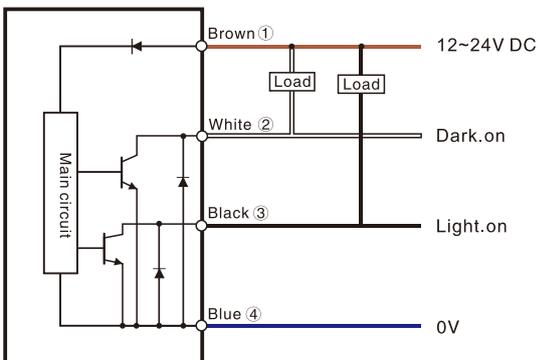
MP2-410□-W□ MP2-412□-W□
NPN



PNP



MP2-410N(P)-E MP2-412N(P)-E
NPN Output



PNP Output

