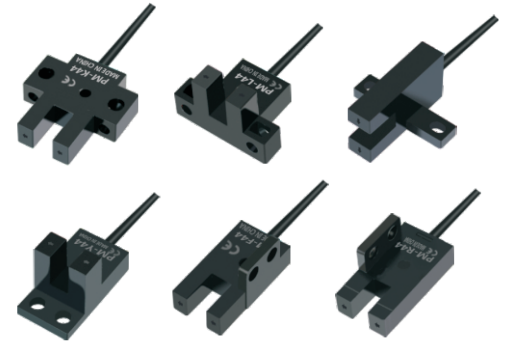


Micro U-shaped Photoelectric Switch ■PM-□44

- Light-ON and Dark-ON are adjustable
- Response frequency: 2K HZ
- Power supply: 5-24 V DC



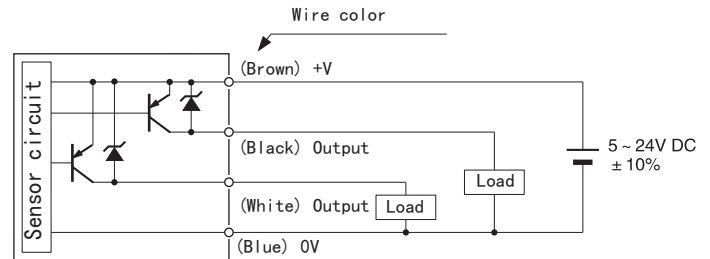
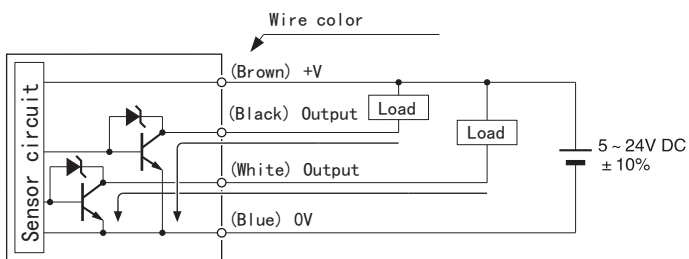
Standard Models

Appearance		Operation Mode	Indicator mode	Connection Method	Output	
					NPN	PNP
K-shaped		Dark ON	Light ON	Pre-wired (1m)	PM-K44	PM-K44P
		Light ON	Dark ON			
T-shaped		Dark ON	Light ON		PM-T44	PM-T44P
		Light ON	Dark ON			
L-shaped		Dark ON	Light ON		PM-L44	PM-L44P
		Light ON	Dark ON			
Y-shaped		Dark ON	Light ON		PM-Y44	PM-Y44P
		Light ON	Dark ON			
F-shaped		Dark ON	Light ON		PM-F44	PM-F44P
		Light ON	Dark ON			
R-shaped		Dark ON	Light ON		PM-R44	PM-R44P
		Light ON	Dark ON			

I/O Circuit Diagram

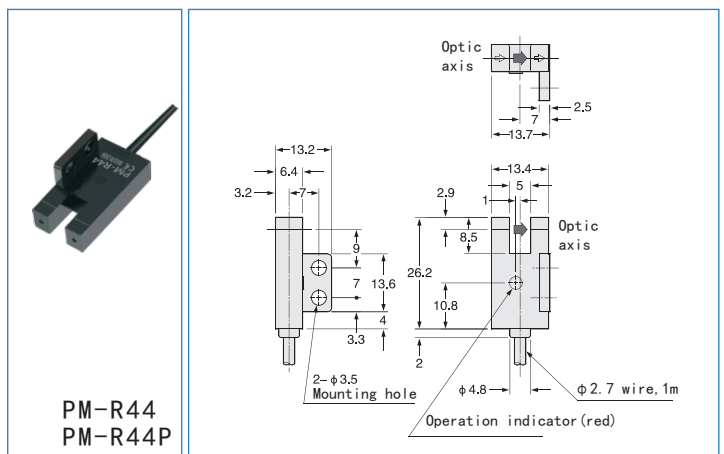
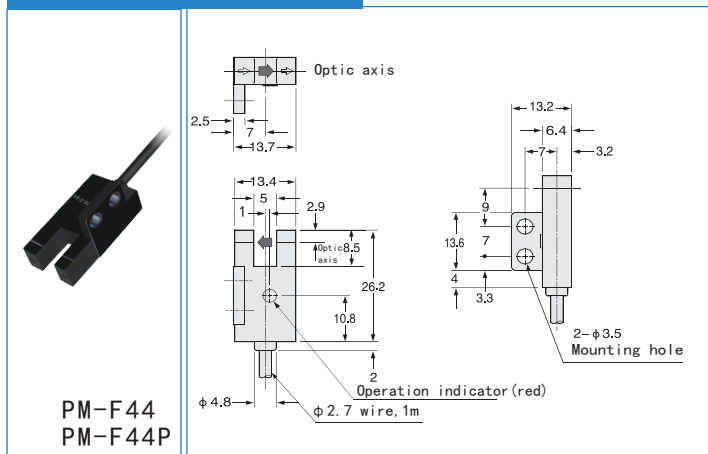
NPN

PNP



Note: White wire (Dark-ON), Black wire (Light-ON)


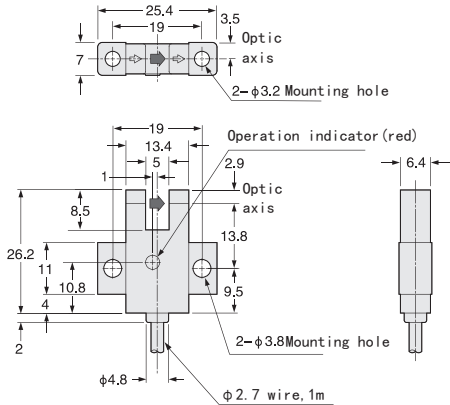
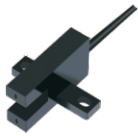
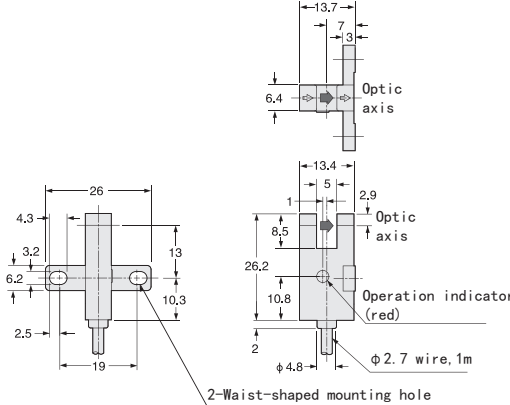

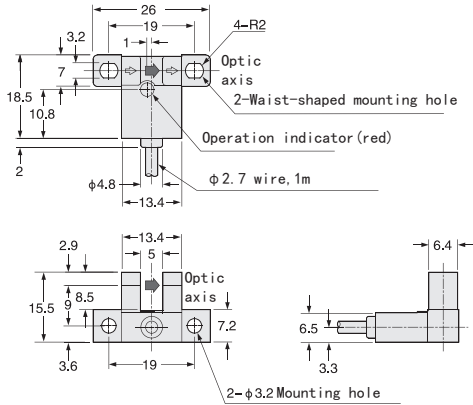
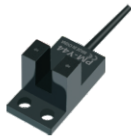
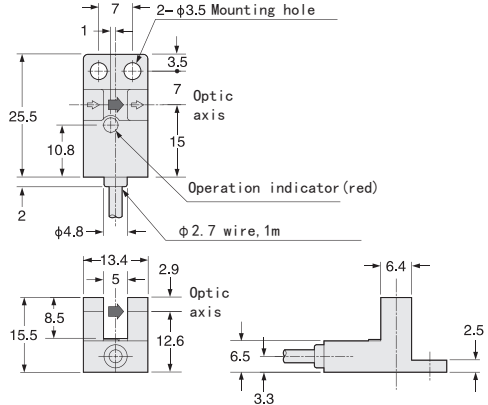
Dimensions



Ratings and Specifications

Sensing method		Thru-beam in the slot
Sensing distance		5mm (slot width)
Standard sensing object		Opaque object, 1.8x0.8mm min.
Hysteresis		0.025mm max.
Light source (wave length)		Infrared LED (940nm)
Power supply		5-24V DC $\pm 10\%$, ripple (P-P $\pm 10\%$ max.)
Current Consumption		15mA max.
Output		NPN open-collector transistor: Sink current: 50mA max. Applied voltage: 30V DC max. (between output and 0V) Residual voltage: 0.7V max. (at 50mA sink current), 0.4V max. (at 16mA sink current)
		PNP open-collector transistor: Source current: 50mA max. Applied voltage: 30V DC max. (between output and +V) Residual voltage: 0.7V max. (at 50mA source current), 0.4V max. (at 16mA source current)
Response frequency		1K HZ min. (average 3K HZ)
Ambient illumination		Incandescent lamp: 1,000 Lx max.
Ambient temperature		Operating: -25 to 55°C, Storage: -30 to 80°C (with no icing or condensation)
Ambient humidity		Operating: 5%-85%RH, Storage: 5%-95%RH (with no icing or condensation)
Vibration resistance		Destruction: 20-2,000HZ, 1.5mm double amplitude for 2 hours each in X,Y and Z directions
Shock resistance		Destruction: acceleration of 500 m/s ² , 3 times each in X,Y, and Z directions
Protection degree		IP50 by IEC60529
Connection method		Pre-wired (Standard: 1m, wire length customizable)
Material	Case	PBT
	Emitter and receiver cover	Polycarbonate

Dimensions

 <p>PM-K44 PM-K44P</p>	 <p>Dimensions for PM-K44 and PM-K44P: 25.4, 19, 3.5, 7, 13.4, 5, 1, 8.5, 26.2, 11, 10.8, 4, 2, 19, 13.4, 5, 2.9, 13.8, 9.5, 2-φ3.2 Mounting hole, 2-φ3.8 Mounting hole, φ4.8, φ2.7 wire, 1m, Operation indicator (red), Optic axis.</p>	 <p>PM-T44 PM-T44P</p>	 <p>Dimensions for PM-T44 and PM-T44P: 13.7, 7, 3, 6.4, 13.4, 5, 2.9, 13.8, 9.5, 2-φ3.2 Mounting hole, 2-φ3.8 Mounting hole, φ4.8, φ2.7 wire, 1m, Operation indicator (red), Optic axis, 2-Waist-shaped mounting hole.</p>
 <p>PM-L44 PM-L44P</p>	 <p>Dimensions for PM-L44 and PM-L44P: 26, 19, 3.2, 7, 18.5, 10.8, 2, 4.8, 13.4, 2.9, 13.4, 5, 2.9, 13.8, 9.5, 2-φ3.2 Mounting hole, 2-φ3.8 Mounting hole, φ4.8, φ2.7 wire, 1m, Operation indicator (red), Optic axis, 2-Waist-shaped mounting hole.</p>	 <p>PM-Y44 PM-Y44P</p>	 <p>Dimensions for PM-Y44 and PM-Y44P: 7, 2-φ3.5 Mounting hole, 1, 3.5, 7, 25.5, 10.8, 15, 2, 4.8, 13.4, 5, 2.9, 13.8, 9.5, 2-φ3.2 Mounting hole, 2-φ3.8 Mounting hole, φ4.8, φ2.7 wire, 1m, Operation indicator (red), Optic axis, 2-Waist-shaped mounting hole.</p>