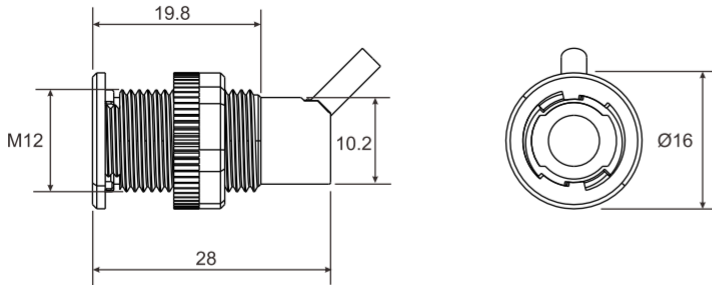


Cylindrical Photoelectric Sensor

PSM12

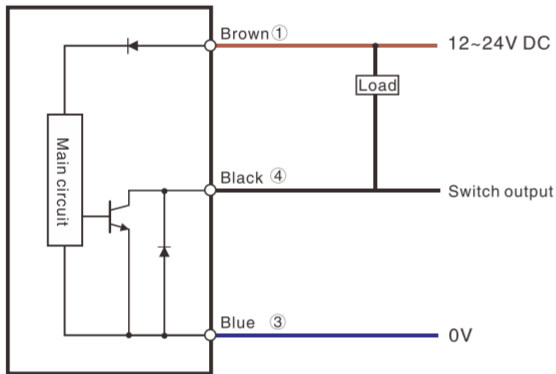


Basic Features	Working Principle	Optical detection principle	
	Sensing method	Through-beam	
	Type	Cylindrical	
	Sensing distance	5m	
	Spot size	-	
	Minimum sensing object diameter	8mm	
	Light source	Infrared LED(940nm)	
	Indicator	Running: green; Output: yellow	
	Sensitivity adjustment	-	
Electrical Data	Operation model	Light.on	Dark.on
	Output model	NPN/PNP available by model	
	Response time	2ms	
	Response frequency	1 kHz	
	Repeatability	-	
	Hysteresis	-	
	Operating Voltage	12~24V ±10%	
	No load current	Emitters≤18mA; Receiver≤15mA	
	Voltage drop	<1.0V	
	Load current	≤50mA	
	Insulation resistance	≥50MΩ/500V DC	
	Dielectric strength	1000V AC at 50/60Hz for 1 min	
	Protection Circuit	Reverse Polarity Protection/Short-circuit Protection	
	Operating Temperature	-25℃~+55℃ (No Freezing)	
Environmental Conditions	Storage Temperature	-30℃~+70℃ (No Freezing)	
	Operating Humidity	30%~85% RH (No Condensation)	
	Storage Humidity	35%~95% RH (No Condensation)	
	Ambient illumination	Incandescent lamp≤3,000lux; Sunlight≤10,000lux	
	Vibration resistance	10~55Hz, 1.5mm double amplitude for 2hours each in X/Y/Z directions	
	Enclosure rating	IP67	
	Tightening torque, max.	1N.m	
Mechanical Data	Connection	Emitter: 2m/2-wire Cable; Receiver: 2m/3-wire Cable	
	Dimensions (WxHxD)	M12x28.0mm	
	Material	PC	
	Weight	25g	
	Accessories	Nuts	
Model	NPN	PSM12-TM05NC	PSM12-TM05NO
	PNP	PSM12-TM05PC	PSM12-TM05PO

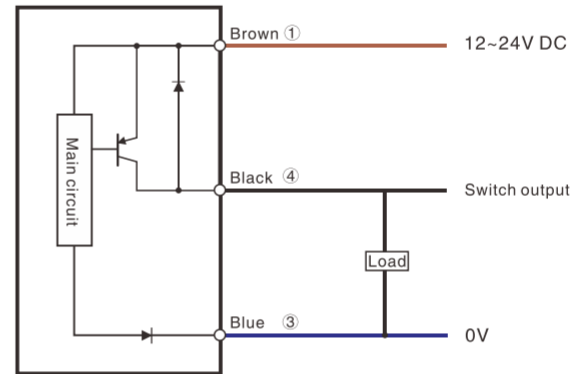


Circuit diagram

NPN Output



PNP Output



Fiber Optic

Fork

Photoelectric

Inductive

Capacitive

Magnetic

Contact

Ultrasonic

Curtains

Selection Guide

Cylindrical

Rectangular

Ultra-slim

BGS

Time-of-Flight

IP69K

Reflector