



Basic Features	Working Principle	Optical detection principle	
	Sensing method	Through-beam	
	Type	Rectangular	
	Sensing distance	800mm	1500mm
	Spot size	-	
	Minimum sensing object diameter	≥6mm	
	Light source	Infrared LED(940nm)	
	Indicator	Running: green; Output: yellow	
	Sensitivity adjustment	-	
Electrical Data	Operation model	Light.on/Dark.on available by model	
	Output model	NPN/PNP available by model	
	Response time	≤3.3ms	
	Response frequency	≤150Hz	
	Repeatability	-	
	Hysteresis	-	
	Operating Voltage	12~24V ±10%	
	No load current	≤20mA	
	Voltage drop	<2V	
	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	
Environmental Conditions	Operating Temperature	-20℃~+50℃ (No Freezing)	
	Storage Temperature	-30℃~+70℃ (No Freezing)	
	Operating Humidity	35%~90% RH (No Condensation)	
	Storage Humidity	35%~90% RH (No Condensation)	
	Ambient illumination	Incandescent lamp≤1,000lux; Sunlights≤10,000lux	
	Vibration resistance	10~55Hz, 1.5mm double amplitude for 2hours each in X/Y/Z directions	
	Enclosure rating	IP64	
Mechanical Data	Tightening torque, max.	0.5N.m	
	Connection	2m/3-wire Cable	
	Dimensions (WxHxD)	10.0x22.0x11.0mm	
	Material	PC	
	Weight	45g	
	Accessories	Nuts, Screwdriver	
Model	NPN L.on	PTJ-T80NC-I	PTJ-T150NC-I
	NPN D.on	PTJ-T80NO-I	PTJ-T150NO-I
	PNP L.on	PTJ-T80PC-I	PTJ-T150PC-I
	PNP D.on	PTJ-T80PO-I	PTJ-T150PO-I

Fiber Optic

Fork

Photoelectric

Inductive

Capacitive

Magnetic

Contact

Ultrasonic

Curtains

Selection Guide

Cylindrical

Rectangular

Ultra-slim

BGS

Time-of-Flight

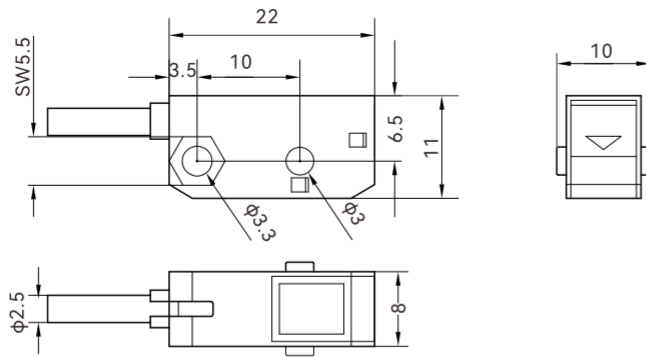
IP69K

Reflector

Square Photoelectric Sensor

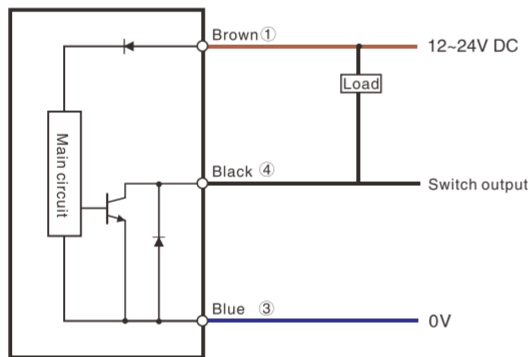
Dimensions

Unit: mm



Circuit diagram

NPN Output



PNP Output

