



Wide Facula Type



Basic Features	Working Principle	Optical detection principle		
	Sensing method	Diffuse		
	Type	Rectangular		
	Sensing distance	5~100mm	5~200mm	5~200mm
	Spot size	-		Ø130mm/20cm
	Minimum sensing object diameter	-		
	Light source	Infrared LED(940nm)		Red LED(630nm)
	Indicator	Running: green; Output: red		
	Sensitivity adjustment	1-turn potentiometer		
Electrical Data	Operation model	Light.on/Dark.on switching		
	Output model	NPN/PNP available by model		
	Response time	≤1.6ms		
	Response frequency	≤300Hz		
	Repeatability	≤5%		
	Hysteresis	≤20%		
	Operating Voltage	10~30V ±10%		
	No load current	≤20mA		≤25mA
	Voltage drop	<1.5V		
	Load current	≤100mA		
	Insulation resistance	≥50MΩ/500V DC		
	Dielectric strength	1000V AC at 50/60Hz for 1 min		
	Protection Circuit	Reverse Polarity Protection/Surge protection/Short-circuit Protection		
Environmental Conditions	Operating Temperature	-25°C~+55°C (No Freezing)		
	Storage Temperature	-30°C~+70°C (No Freezing)		
	Operating Humidity	35%~85% RH (No Condensation)		
	Storage Humidity	35%~95% RH (No Condensation)		
	Ambient illumination	Incandescent lamps1,000lux; Sunlights10,000lux		
	Vibration resistance	10~55Hz, 1.5mm double amplitude for 2hours each in X/Y/Z directions		
	Enclosure rating	IP65		
Mechanical Data	Tightening torque, max.	0.5N.m		
	Connection	2m/3-wire Cable		
	Dimensions (WxHxD)	20.0x31.0x11.0mm		
	Material	PBT		
	Weight	50g		
	Accessories	Nuts, Bracket, Screwdriver		
Model	NPN	PTVW-D10N	PTVW-D20N	PTEW-D20N
	PNP	PTVW-D10P	PTVW-D20P	PTEW-D20P

Fiber Optic

Fork

Photoelectric

Inductive

Capacitive

Magnetic

Contact

Ultrasonic

Curtains

Selection Guide

Cylindrical

Rectangular

Ultra-slim

BGS

Time-of-Flight

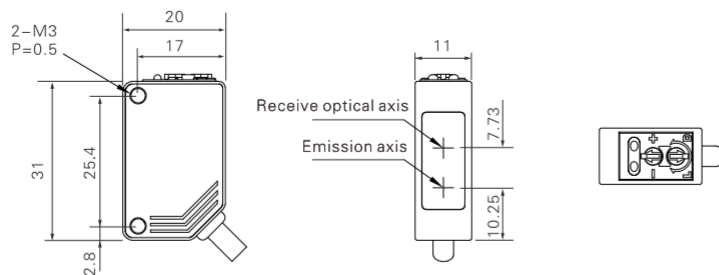
IP69K

Reflector

Square Photoelectric Sensor

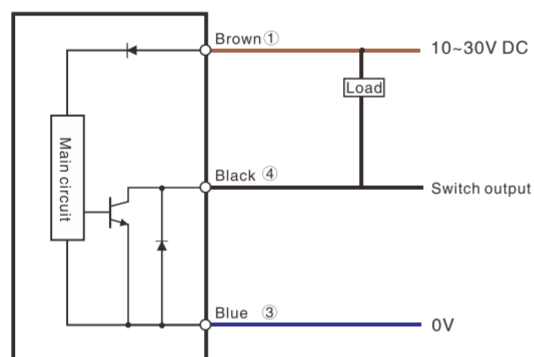
Dimensions

Unit: mm



Circuit diagram

NPN Output



PNP Output

