PTEW/PTVW Series

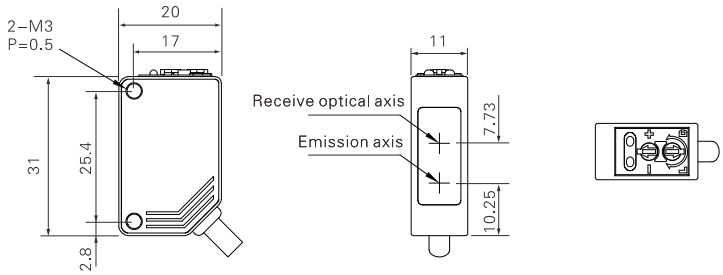
Wide Facula Type

Basic Features	Working Principle	Photoelectric Sensor		
	Housing Style	Square		
	Optical Working Principle	Diffuse Reflection		
	Detection Range	5~200mm	100mm	200mm
	Spot Size	Ø130.0mm/0.20m	Not Applicable (Infrared Light)	
	Detected Object	–		
	Light Source	Infrared LED 940nm(modulated)		
	Indicator Light	Output Function: Red LED, Operation Status: Green LED		
	Sensitivity Adjustment	6-turn Potentiometer		
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	10~30V DC		
	Current Consumption	≤25mA	≤20mA	
	Residual Voltage	≤1.5V(100mA)		
	Load Current	≤100mA(30VDC)		
	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/Output Reverse Polarity Protection/Short Circuit Protection/Surge Protection		
Environmental conditions	Operating Temperature	–25~55℃(No Freezing)		
	Storage Temperature	–30~70℃(No Freezing)		
	Operating Humidity	35~85%RH(No Condensation)		
	Storage Humidity	35~95%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	IP65		
Mechanical data	Maximum Tightening Torque	≤0.5Nm		
	Connection Method	2m/3-core cable		
	Dimensions	11.0x31.0x20.0mm		
	Material	PBT+Glass Fiber		
	Weight	0.05kg	0.049kg	0.05kg
	Accessories	Screwdriver		
Model	NPN	**PTEW-D20N**	**PTVW-D10N**	**PTVW-D20N**
	PNP	**PTEW-D20P**	**PTVW-D10P**	**PTVW-D20P**

Square

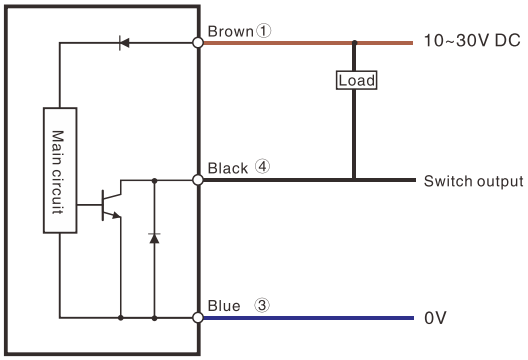
Dimensions

Unit: mm

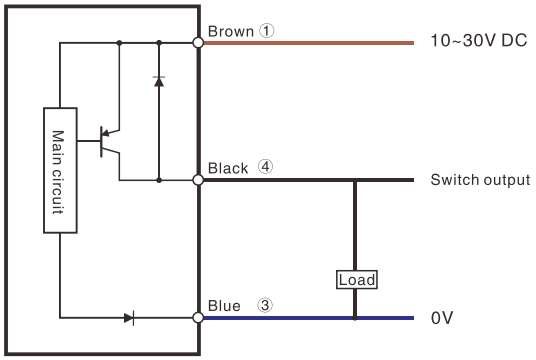


Circuit diagram

NPN Output



PNP Output



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