

Thank you for using **TAKEX** products. Please read this instruction manual carefully prior to sensor use.

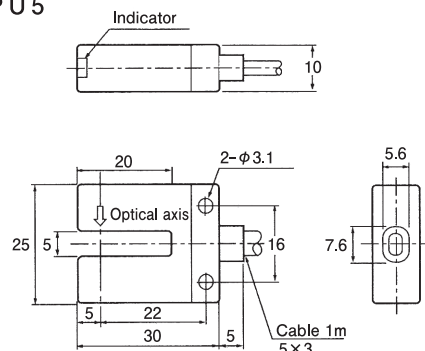
#### SPECIFICATIONS



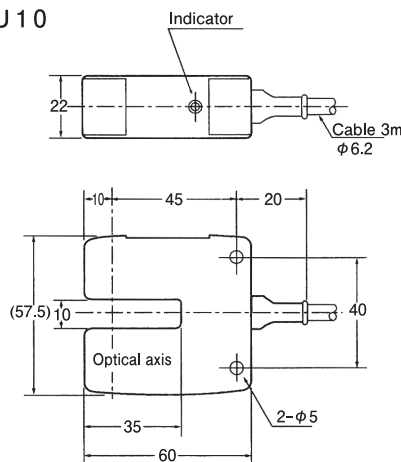
Model	P U 5	P U 10
Detection method	Through-beam	
Range	5mm fixed	10mm fixed
Detection object	φ1mm opaque	φ2mm opaque
Power supply	12-24VDC ±10%	Ripple 10% max.
Current consumption	20mA (max.)	45mA (max.)
Output mode	NPN open collector output Rating : Sink current 100mA (30VDC) max.	Current output : Sink current 75mA (48VDC) max. Voltage output : Output impedance 4.7KΩ
Operating mode	Light ON / Dark ON (2 outputs)	
Response time	200 μs max.	50 μs max.
Light source	Infrared LED (910nm)	Infrared LED (890nm)
Indicators	Light reception indicator (Red LED)	
Short-circuit protection	—	
Materials	Case	Polycarbonate
	Lens	Polycarbonate / Acrylic
Connection	Attached cable (outer dia 5×3mm) 1m	Attached cable (outer dia φ6.2mm) 3m
Weight	Approx. 40g	Approx. 220g

#### DIMENSIONS (in mm)

Model : P U 5



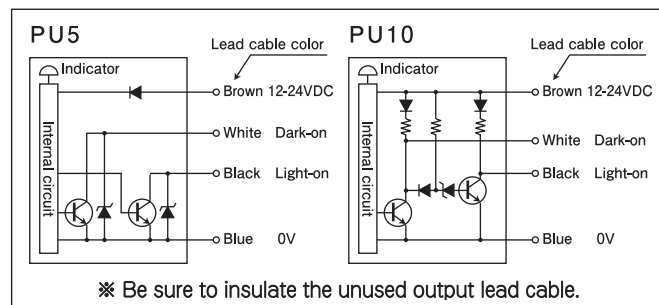
Model : P U 10



#### ENVIRONMENTAL CHARACTERISTICS

Ambient Temperature	PU 5 : -25~+55℃ (non-freezing) PU10 : -10~+55℃
Ambient humidity	35 to 85%RH (non-condensing)
Protective structure	PU5 : IP67 / PU10 : IP40
Vibration	10 to 55Hz, 1.5mm double amplitude, 2hrs. in X, Y and Z directions
Dielectric withstanding	500VAC for 1minute
Insulation resistance	Min. 100MΩ (at 500VDC)

#### OUTPUT CIRCUIT AND WIRING



#### NOTES

- The tightening torque for the mounting screw should not exceed 0.29N·m max.
- Check correct wiring before power is supplied as mis-wiring may cause burns or damage.
- For cleaning the lens of a fiber optic cable, use a dry cloth, etc. and wipe gently (do not use organic solvent such as thinner or alcohol).
- Use the power supply which is limited the current (PU5 : 2A, PU10 : 3A) in accordance with the lead wire size of the sensor.

- This sensor is designed to detect a specific object. It is not provided with control functions for prevention of injuries or accidents in itself.
- Takex will not held responsible for any damage or loss incurred due to accidents, faulty installation, abuse, misuse, improper maintenance or acts of God including lightning surge.
- Specifications and dimensions may be subject to change without notice.