

Newest Minimal Cylindrical Diffuse Reflective Sensors

Achieved amplifier unnecessary like fiber sensor and Easiest Mounting



M6 body designed for constrained area applications

Durable Stainless Steel housing with IP67

Sensitivity adjustment volume for Fine Tuning

Specifications

Model	NPN output	UX3-R5V
	PNP output	UX3-R5VPN
Detection method	Diffuse reflective	
Shape	Head-on	
Detecting distance	3 to 50mm *1	
Standard detection object	100mm×100mm white paper	
Thread size	M6 × 0.75	
power supply	12 to 24VDC ±10%	
Current consumption	No more than 20mA	
Operation mode	Light ON	
Output mode	NPN output	Rating: sink current: max 80mA (30VDC)
	PNP output	Rating: source current: max 80mA (30VDC)
Response time	0.5ms or less	
Light source	Infrared LED	
Indicators	Operational indicator: Orange LED, Stability indicator: Green LED	
Sensitivity adjustment	Sensitivity adjustment volume *1	
Protective circuit	Reverse connection, output short-circuit and output reverse connection	
Material	Case/Nut/Internal tooth lock washer: SUS303, Lens: Polysulfone	
Connection method	Cord-attached type 2.8mm o.d. 2m in length 0.15mm ² × 3-core	
Weight	Approx. 30g	
Accessories	Instruction Manual, nut, internal tooth lock washer, adjusting screwdriver	

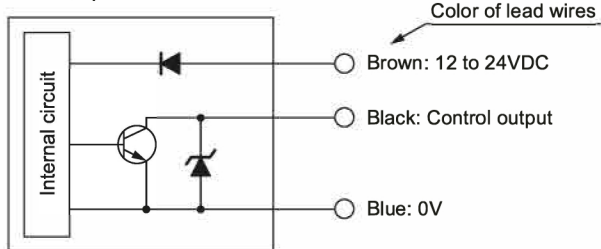
*1 When using the sensitivity adjustment volume, use the accessory screwdriver provided. The torque must not exceed 0.8 N·cm.

Environmental specifications

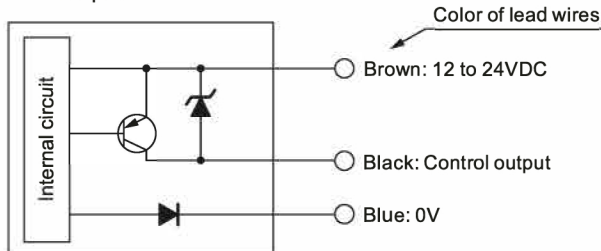
Ambient light	3,000 lx or less
Ambient temperature	-25 to +55°C -40 to +70°C at storage (no freezing)
Ambient humidity	35 to 85%RH (no dew condensation)
Protection	IP67
Anti-vibration	10 to 55Hz, double amplitude 1.5mm, X, Y, and Z directions, 2 hours each
Shock	500 m/s ² , 3 times each in X, Y and Z directions
Dielectric withstand voltage	500VAC for 1min
Insulation resistance	At least 20MΩ with 500VDC Megger

Connection

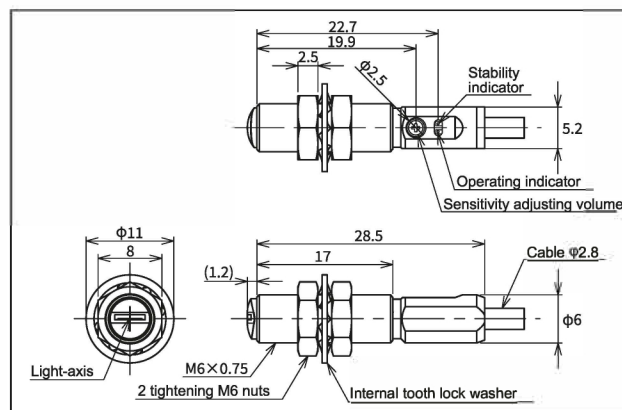
NPN output



PNP output

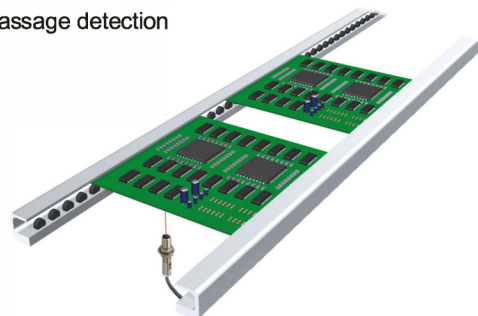


Dimensions (in mm)



Applications

PCB passage detection



- This product is designed for industrial applications to detect a various kinds of objects. It has no function to prevent disasters, accidents, death or injuries.
- 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.
- This product cannot be used as safety equipment.
- This product is designed and manufactured for industrial use. It cannot be used where there is a requirement for a high degree of reliability or considerable care or attention to safety.
- Read this instruction manual carefully and use the product properly according to it.
- This instruction manual including the specifications and dimensions may be subject to change without notice.