TAKEX

Ultra-Extreme Miniature Embedded Amplifier Photo Sensor

UX3 series

CE UK CA

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		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
Accesorries		Instruction Manual, nut, internal tooth lock washer, adjusting screwdriver

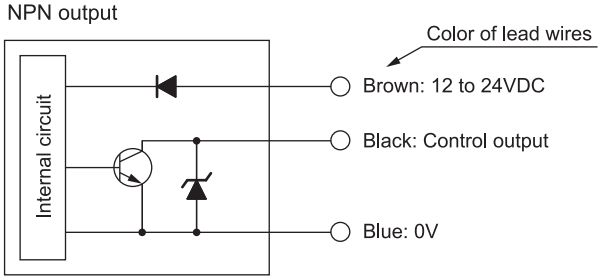
*1 When using the sensitivity adjustment volume, use the accessory screwdriver provided. The torque must not exceed 0.8 N·cm.

Environmental specifications

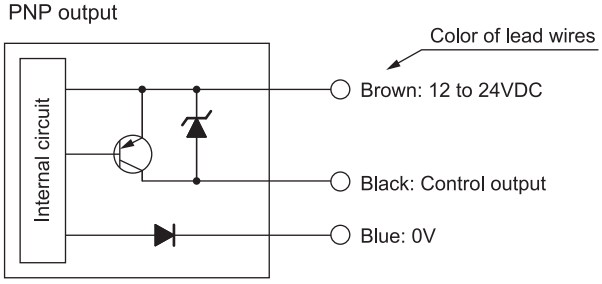
Ambient light	3,000 lx or less
Ambient temperature	−25 to +55℃ −40 to +70℃ at storage (no freezing)
Ambient humidity	35 to 85%RH (no dew condensation)
Protection	IP67
Anti-vibration	10 to 55Hz, double amplitude 1.5mm, X, Y, and Z directions, 2 hours each
Shock	500 m/s^2, 3 times each in X, Y and Z directions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

Connection

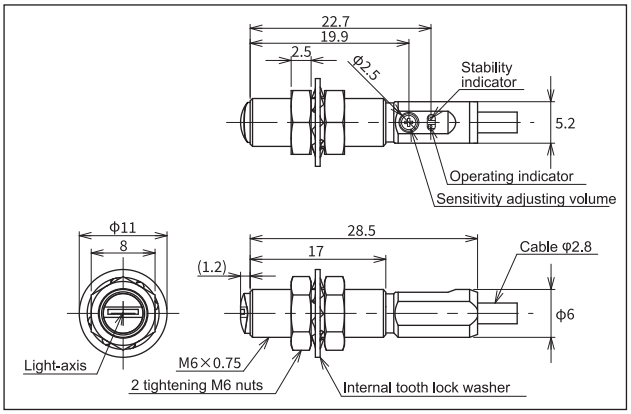
NPN output



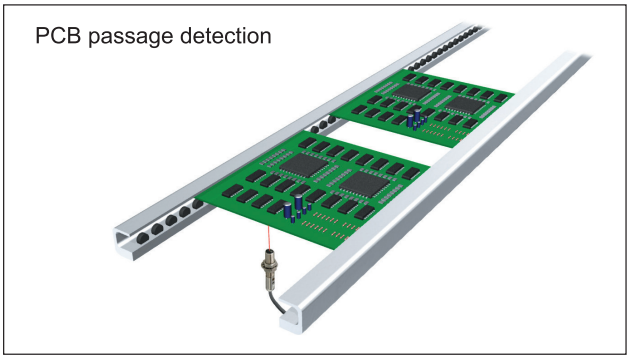
PNP output



Dimensions (in mm)



Applications



CAUTION

- 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 reliabilty 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.

Takenaka Sensor Group

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