

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

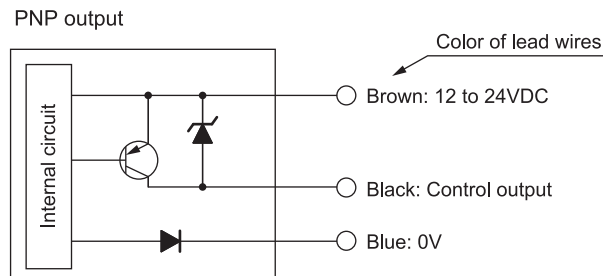
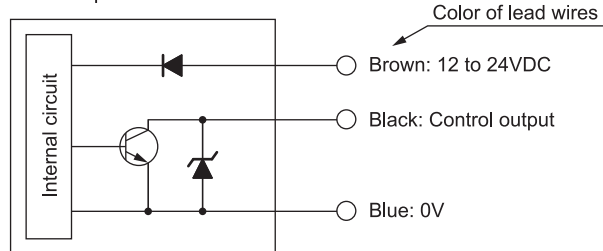
Sensitivity adjustment volume for Fine Tuning

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

■ 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

NPN output



Technical drawing of the M6×0.75 cable gland assembly, showing front and side views with dimensions and labels.

Front View (Top):

- Overall length: 22.7
- Distance from front flange to operating indicator: 19.9
- Flange thickness: 2.5
- Operating indicator diameter: $\phi 2.5$
- Stability indicator diameter: $\phi 2.5$
- Operating indicator label: Operating indicator
- Stability indicator label: Stability indicator
- Distance from operating indicator to cable entry: 5.2
- Light-axis label: Light-axis

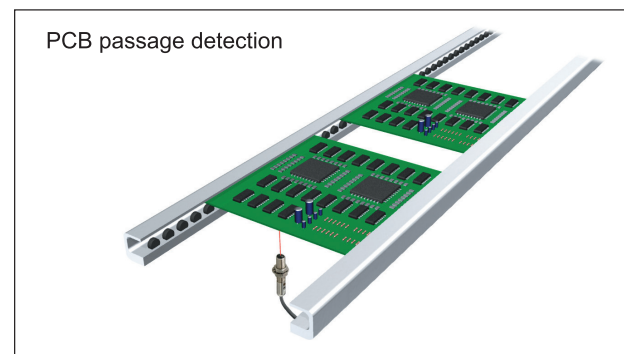
Side View (Bottom):

- Overall length: 28.5
- Distance from front flange to internal tooth lock washer: 17
- Internal tooth lock washer label: Internal tooth lock washer
- Distance from internal tooth lock washer to cable entry: 1.2
- Cable entry diameter: $\phi 6$
- Cable label: Cable $\phi 2.8$
- Light-axis label: Light-axis

Dimensions and Labels:

- Light-axis
- 2 tightening M6 nuts
- Internal tooth lock washer
- Cable $\phi 2.8$
- Operating indicator
- Stability indicator
- Sensitivity adjusting volume

■ 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 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.



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