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

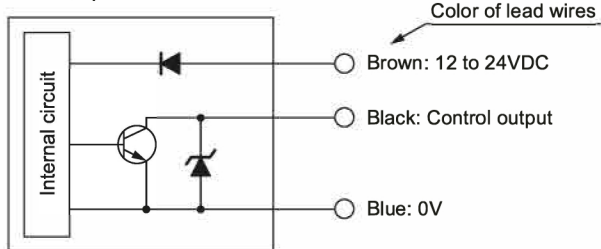| Model	NPN output	UX3－R5V
	PNP output	UX3－R5VPN
Detection method		Diffuse reflective
Shape		Head-on
Detecting distance		3 to 50mm *1
Standard detection object		100mm×100mm white paper
Thread size		M6 × 0.75
power supply		12 to 24VDC ±10%
Current consumption		No more than 20mA
Operation mode		Light ON
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
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.
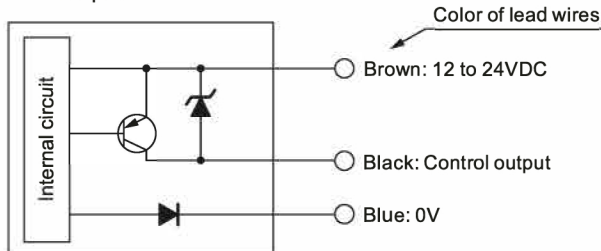
■ Environmental specifications

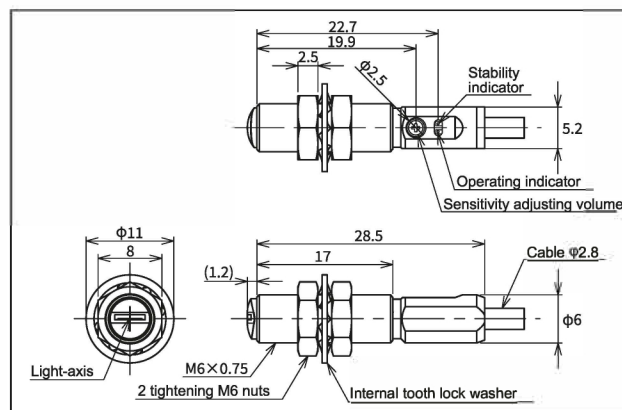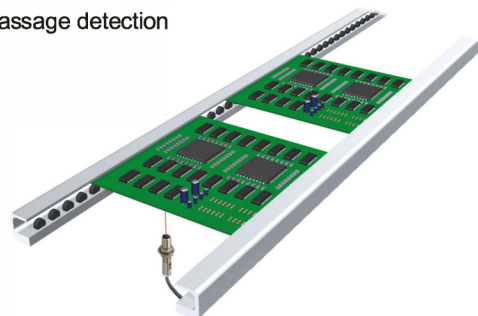| Ambient light	3,000 lx or less
Ambient temperature	−25 to ＋55℃ −40 to ＋70℃ at storage (no freezing)
Ambient humidity	35 to 85%RH (no dew condensation)
Protection	IP67
Anti-vibration	10 to 55Hz, double amplitude 1.5mm, X, Y, and Z directions, 2 hours each
Shock	500 m/s^2, 3 times each in X, Y and Z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

■ Connection

NPN output

PNP output

Color of lead wires

Brown: 12 to 24VDC
Black: Control output
Blue: 0V

■ Dimensions (in mm)

■ Applications

PCB passage detection