

Sunx PM-T44-Micro Photoelectric Sensor

Technical Specifications

Sensing range: 5 mm (fixed)

Minimum sensing object: 0.8×1.8 mm opaque object

Hysteresis: 0.05 mm or less

Repeatability: 0.03 mm or less

Supply voltage: 5–24 V DC

Current consumption: 15 mA or less

Output:

- ◆ **Maximum sinks current:** 50 mA
- ◆ **Applied voltage:** 30 V DC or less
- ◆ **Residual voltage:** 0.7 V or less (at 50 mA sink current)
0.4 V or less (at 16 mA sink current)

Output operation: 2 NPN outputs (Light-ON / Dark-ON)

Response time:

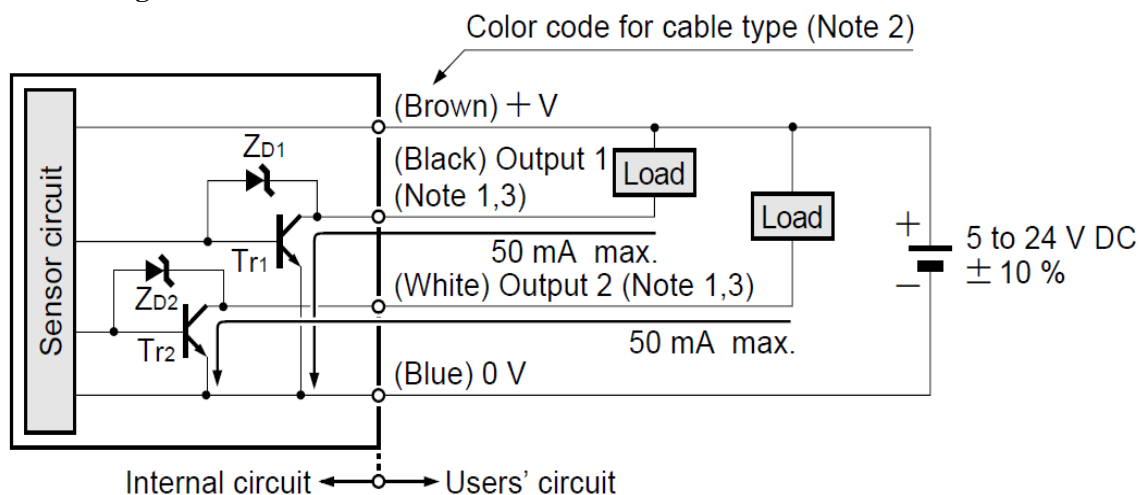
- ◆ **Under light received condition:** 20 μs or less
- ◆ **Under light interrupted condition:** 100 μs or less
- ◆ **Response frequency:** 1 kHz or more

Cable: 0.09 mm² (4-core cable)

Weight: 15 g

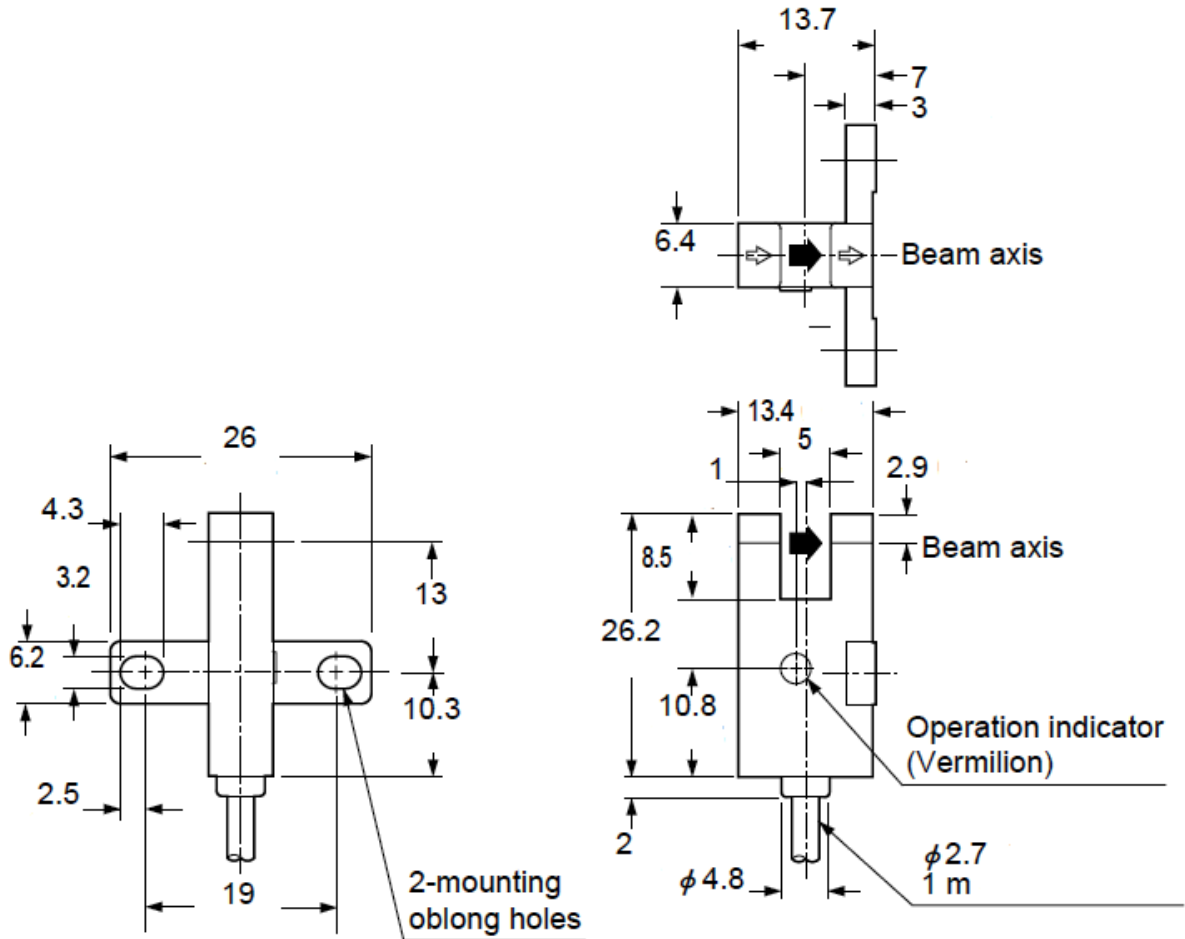
Dimensions, Configuration and Pin-out

Circuit Diagram:

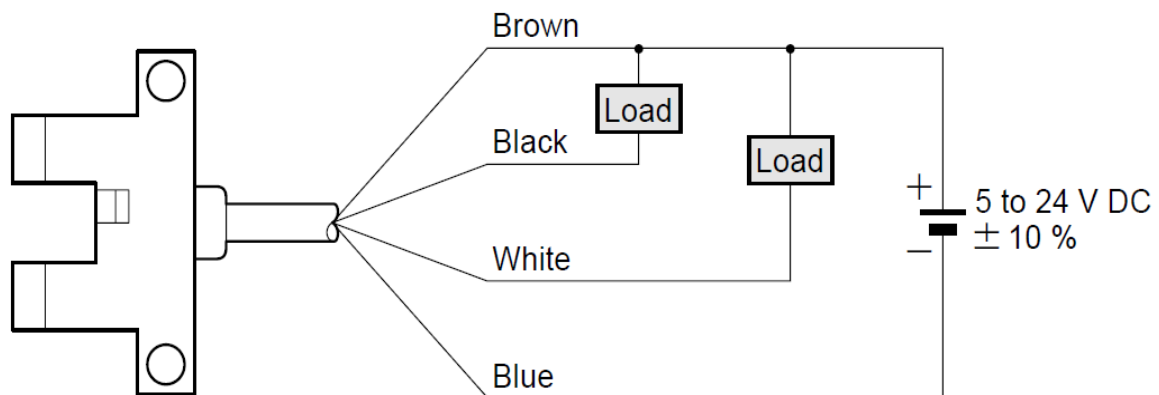


Symbols ... Z_{D1}, Z_{D2}: Surge absorption zener diode
Tr₁, Tr₂ : PNP output transistor

Product dimension (unit:mm):



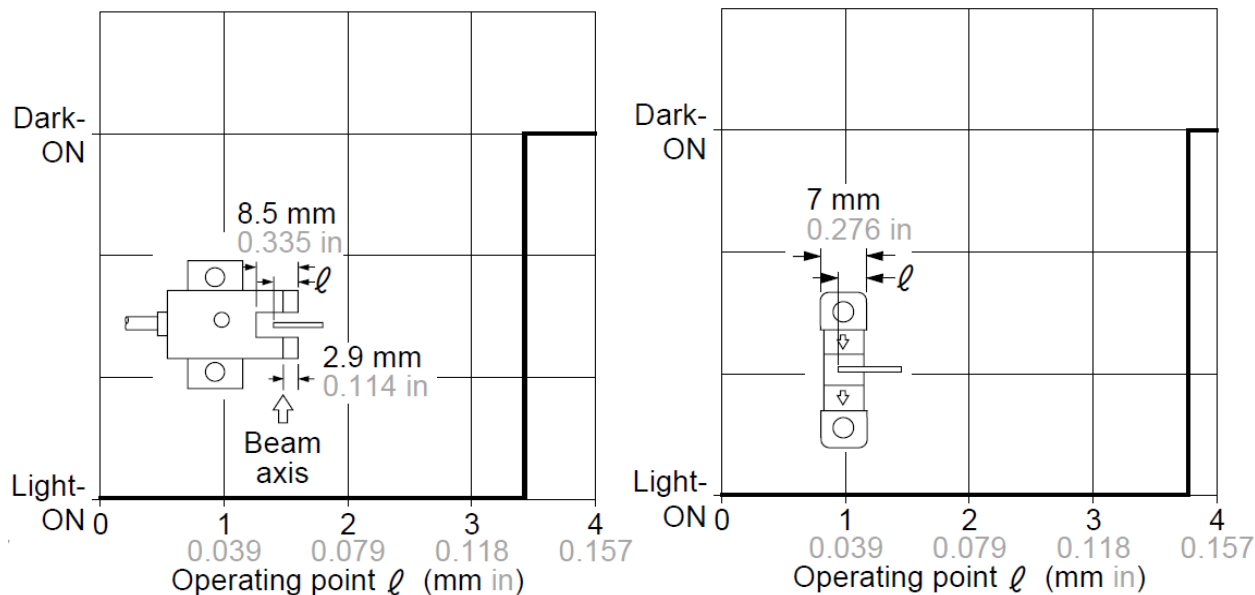
Wiring Diagram:



Output Operation:

	Color Code	Output operation
Output 1	Black	Light-ON
Output 2	White	Light-OFF

Sensing position:



Applications

- 1) Sensing the starting point on a rotating body
- 2) Determining the pallet position
- 3) Sensing the starting point and overrun of a moving body
- 4) Detection of present/absence and counting of product in total packing

IMPORTANT NOTES

1. Make sure to connect terminals correctly as the sensor does not incorporate a reverse polarity protection circuit.
2. Further, the output is not incorporated with a short-circuit protection circuit. Do not connect it directly to a power supply or a capacitive load. Faulty wiring may result in damage.
3. The color code of the connector attached cable is also the same.
4. Ensure to insulate the unused output wire.
5. Do not use during the initial transient time (50 ms) after the power supply is switched on.
6. Take care that extraneous light is not directly incident on the beam receiving section.