SUNX

INSTRUCTION MANUAL

Photoelectric Sensor

Convergent Reflective

EX4-LD50

Thank you very much for using SUNX products. Please read this Instruction Manual carefully and thoroughly for the correct and optimum use of this product. Kindly keep this manual in a convenient place for quick reference.

WARNING

- **Never use this product as a sensing device for personnel protection.**
- **In case of using sensing devices for personnel protection, use products which meet standards, such as OSHA, ANSI or IEC etc., for personnel protection applicable in each region or country.**

1 SPECIFICATIONS

Item \ Type	Diffused beam type
Model No.	**EX4-LD50**
Sensing range	27 to 80mm (Conv. point: 50mm) with white non-glossy paper (100×100mm)
Hysteresis	10% or less of operation distance
Repeatability	0.1mm (perpendicular to sensing axis)
Supply voltage	24V DC±10% Ripple P-P 10% or less
Current consumption	25mA or less
Output	NPN open-collector transistor ・Maximum sink current: 100mA ・Applied voltage: 30V DC or less (between output and 0V) ・Residual voltage: 1V or less (at 100mA sink current) 0.4V or less (at 16mA sink current)
Output operation	Light-ON
Response time	8ms or less
Operation indicator	Red LED (lights up when the output is ON)
Ambient temperature	-10 to +40°C (No dew condensation or icing allowed) Storage: -20 to +50°C
Ambient humidity	35 to 85% RH, Storage: 35 to 85% RH
Cable	0.2mm² 3-core cabtyre cable, 3m long
Weight	80g approx.
Accessory	Adjusting screwdriver: 1 pc.

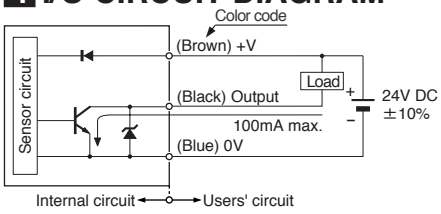
2 CAUTIONS

- This product has been developed / produced for industrial use only.
- Make sure that the power supply is off while wiring.
- Take care that wrong wiring will damage the sensor.
- Verify that the supply voltage variation is within the rating.
- If power is supplied from a commercial switching regulator, ensure that the frame ground (F.G.) terminal of the power supply is connected to an actual ground.
- In case noise generating equipment (switching regulator, inverter motor, etc.) is used in the vicinity of this product, connect the frame ground (F.G.) terminal of the equipment to an actual ground.
- Do not run the wires together with high-voltage lines or power lines or put them in the same raceway. This can cause malfunction due to induction.
- Take care that the sensor is not directly exposed to fluorescent lamp from a rapid-starter lamp, a high frequency lighting device or sunlight, as it may affect the sensing performance.
- Do not use during the initial transient time (100ms) after the power supply is switched on.
- The output does not incorporate a short-circuit protection circuit. Do not connect it directly to a power supply or a capacitive load.
- Extension up to total 50m is possible with a 0.2mm², or more, cable.
- This sensor is suitable for indoor use only.
- Do not use this sensor in places having excessive vapor, dust, etc., or where it may come in direct contact with water, or corrosive gas.
- Take care that the sensor does not come in contact with water, oil, grease, strong acid, alkali, or organic solvents, such as, thinner etc.

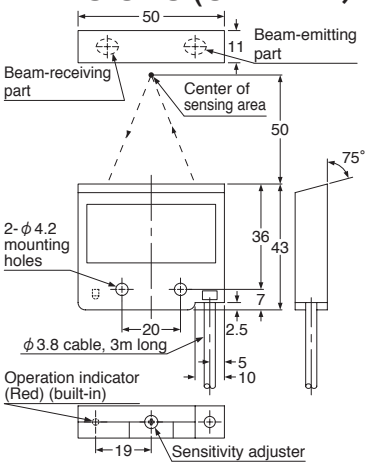
3 MOUNTING

- Mount using M4 screws. The tightening torque should be 0.49N・m or less.

4 I/O CIRCUIT DIAGRAM



5 DIMENSIONS (Unit: mm)



6 INTENDED PRODUCTS FOR CE MARKING

- The models listed under '1 SPECIFICATIONS' come with CE Marking.
  As for all other models, please contact our office.

CE

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