

Panasonic

**INSTRUCTION
MANUAL**

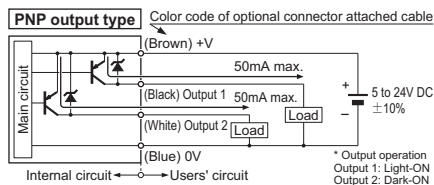
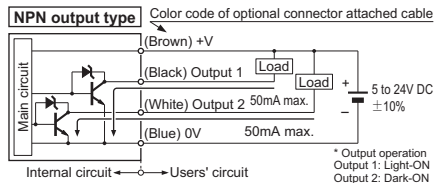
**Built-in U-shaped Micro-photosensor
PM-64 Series**

Thank you very much for purchasing Panasonic products. 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 laws and standards, such as OSHA, ANSI or IEC etc., for personnel protection applicable in each region or country.
- Since protection circuit against output short-circuit or reverse polarity connection is not incorporated, make sure to wire correctly. Also, ensure to insulate the unused output wire. Take care that wrong wiring will damage the sensor.

1 I/O CIRCUIT DIAGRAM

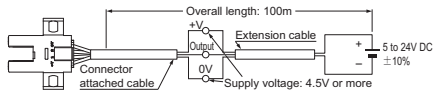


Note: PNP output type is not available for the PM-T64W type.

2 CAUTIONS

- This product has been developed / produced for industrial use only.
- Since the sensor is intended for use inside machines, no special countermeasures have been taken against extraneous light. Please take care that extraneous light is not directly incident on the beam receiving section.
- If the sensor is used in a place having excessive dust, periodically clean the emitting and receiving sections with a dry, soft cloth.
- Do not use during the initial transient time (50ms) after the power supply is switched on.

- Cable extension is possible up to an overall length of 100m with a 0.3mm², or more, cable. However, since a voltage drop shall occur due to the cable extension, ensure that the power supply voltage at the end of the cable attached to the sensor or at the sensor terminals is within the rating.



But, when the overall cable length, including the cable attached to the sensor, is as given below, there is no need to confirm the voltage.

Wire conductor cross-section area	Overall cable length
0.08 to 0.1mm ²	Up to 5m
0.2mm ²	Up to 10m
0.3mm ²	Up to 20m

- If there is a large surge generating equipment, such as, motor, solenoid, electromagnetic valve, etc., in the vicinity of the micro-photosensor, use a surge absorber on that equipment. Further, do not run the sensor cables along power lines and use a capacitor between +V and 0V, if required. Use the sensor after confirming that the surge has been eliminated.
- In case the sensor is fixed with screws, strictly observe the conditions described in the right diagram.

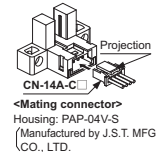
Screw	M3
Tightening torque	0.5N·m or less
Washer	φ 6mm (small diameter type)

Note: If the product is used at an ambient temperature of 50°C or more, make sure to mount it on a metallic body.

3 WIRING

Connection method

- Insert the cable with connector **CN-14A-C** in the connector part of this product as shown in the right figure.



<Connector pin position>

Connector pin No.	1	2	3	4
Terminal designation	+V	Output 1	Output 2	0V

Disconnection method

- Pressing the projection of the cable with connector, pull out the connector.

Note: Take care that if the cable is pulled out without pressing the projection, the cable may break.

4 INTENDED PRODUCTS FOR CE MARKING

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



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