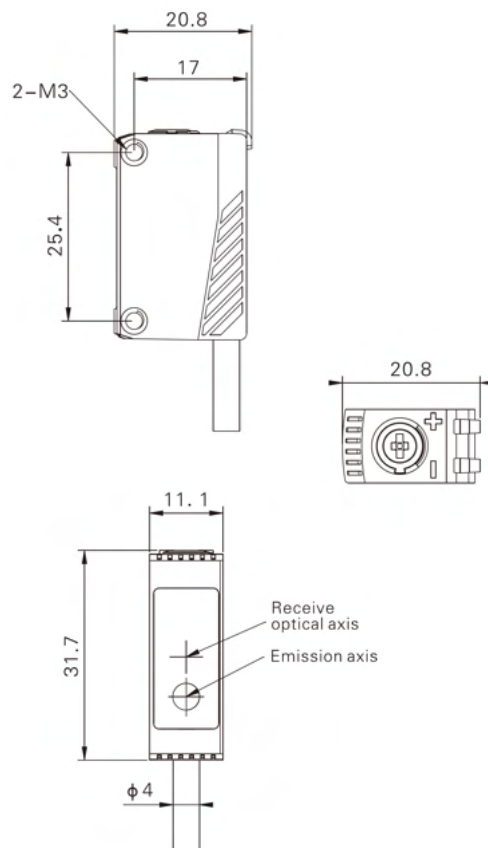


## ZX-PE0040N (NPN)

## ZX-PE0040P (PNP)



### DIMENSION



### BASIC FEATURES

|                           |                                                                   |
|---------------------------|-------------------------------------------------------------------|
| Working Principle         | Photoelectric Sensor                                              |
| Housing Style             | Square                                                            |
| Optical Working Principle | Background suppression diffuse reflection                         |
| Detection Range           | 20 ~ 400 mm                                                       |
| Light Source              | Red laser, 650 nm ( modulated ), Class 2                          |
| Spot Size                 | about $\phi 1.5$ mm / 400 mm                                      |
| Detected Object           | $\phi 0.5$ mm                                                     |
| Indicator Light           | Operating indicator light : green<br>Output indicator light : red |
| Sensitivity Adjustment    | 6-turn potentionmeter                                             |

### ELECTRICAL DATA

|                       |                                                               |
|-----------------------|---------------------------------------------------------------|
| Switching Mode        | L.on ( light-on action ) / D.on ( dark-on action ) switchable |
| Output mode           | NPN or PNP collector open                                     |
| Response Time         | $\leq 1.2$ ms                                                 |
| Hysteresis            | $\leq 5\%$                                                    |
| Operating Voltage     | 10 ~ 30VDC $\pm 10\%$                                         |
| Current Consumption   | $\leq 20$ mA                                                  |
| Residual Voltage      | $< 1.5$ V                                                     |
| Load Current          | 100 mA                                                        |
| Insulation Resistance | $\geq 20$ M $\Omega$ ( 250V DC )                              |
| Withstand Voltage     | 1000 VAC ( 50 / 60Hz )                                        |
| Protection circuit    | Reverse polarity protection / Short-circuit protection        |

### ENVIRONMENTAL CONDITIONS

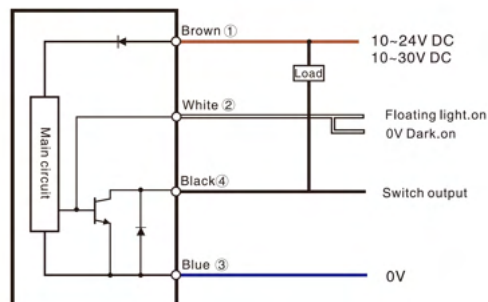
|                       |                                                                                            |
|-----------------------|--------------------------------------------------------------------------------------------|
| Operating Temperature | -10 ~ 50°C ( no freezing )                                                                 |
| Storage Temperature   | -30°C ~ 70°C ( no freezing )                                                               |
| Operating Humidity    | 35% ~ 85% RH ( non-condensation )                                                          |
| Storage Humidity      | 35% ~ 95% RH ( non-condensation )                                                          |
| Ambient Light         | Incandescent light $\leq 1000$ Lux; LED light $\leq 600$ Lux;<br>Sunlight $\leq 20000$ Lux |
| Vibration Resistance  | 10 ~ 55 Hz, amplitude 1.5 mm, 2 hours each in X/Y/Z axes                                   |
| Protection Rating     | IP65                                                                                       |

### MECHANICAL DATA

|                           |                                             |
|---------------------------|---------------------------------------------|
| Maximum Tightening Torque | $\leq 0.5$ Nm                               |
| Connection Method         | 2 m / 4-core cable                          |
| Dimensions                | 11.1 x 31.7 x 20.8 mm                       |
| Material                  | PBT+ glass fiber ( housing ); PMMA ( lens ) |
| Weight                    | about 68g                                   |

### CIRCUIT DIAGRAM

#### NPN Output



#### PNP Output

