



Description

The digital mark sensor is equipped with a light projection component integrating red, green, and blue LEDs, offering selectable mark mode and color mode. Featuring ultra-scratch-resistant lens, it enables simple setup through digital display and achieves high-precision detection. Suitable for industries such as packaging, printing, textiles, and papermaking.

Features

- 4 digits LED display + teaching function
- High detection accuracy and rich functionality
- Capable of achieving ultra-high-speed detection at 45 us

Type

Type	Distance	Light source	Output	Switching mode	Connection	Wiring
OS48-CK10VN6	10 mm±3 mm	RGB	NPN	NO + NC	2m cable	Fig. 1
OS48-CK10VP6	10 mm±3 mm	RGB	PNP	NO + NC	2m cable	Fig. 2

Technical Data

Supply voltage	12 ... 24 V DC + 10% ripple P-P below 10%
Light source	Red / Green / Blue composite LED (Wavelength: 622 nm / 525 nm / 465 nm)
Detecting distance	10 mm ± 3 mm
Spot size	1 × 5 mm@10 mm
Output type	NPN / PNP
Power consumption	750 mW or less
Load current	Output 1 ≤ 100 mA; Output 2 ≤ 100 mA
Response time	Mark mode: 45 us or less; Color mode: 150 us or less
Output operation	Mark mode: NO + NC Auto-setting method on teaching (Output 1 is opposite to Output 2) Color mode: Coincidence-ON + Non-coincidence-ON (Output 1 is opposite to Output 2)
Sensitivity setting	Mark mode: 2-level teaching / Full-auto teaching, Color mode: 1-level teaching
Timer function	Incorporated OFF-delay timer / ON-delay timer, switchable either effective or ineffective
Protecon circuit	Reverse polarity protection, short circuit protection, overload protection
Ambient temperature	-10 ... +55 °C (No dew condensation or icing allowed); Storage: -20 ... +70 °C
Material	Enclosure: PBT; Display: Polycarbonate
Connection method	5-core PVC cable, 2 m long
Shock resistance	Complex amplitude 1.5 mm 10 ... 50 Hz (2hr X, Y, Z respectively)
Impact resistance	500 m/s ² (50G) 3 times X, Y, Z respectively
Voltage resistance	1000V/AC 50/60Hz 60s
Insulation impedance	≥ 50 MΩ (500 V DC)
Protecon class	IP67
Dimensions	57 × 24 × 39.5 mm

Interface output

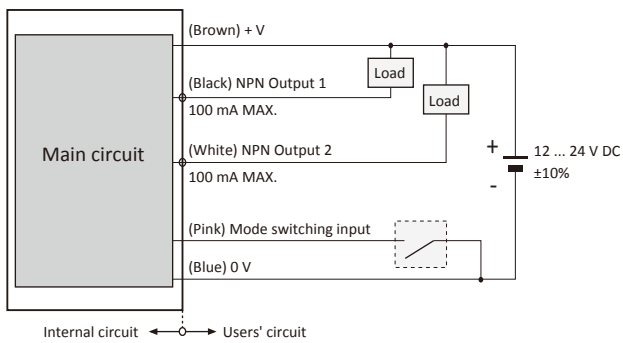


Fig. 1

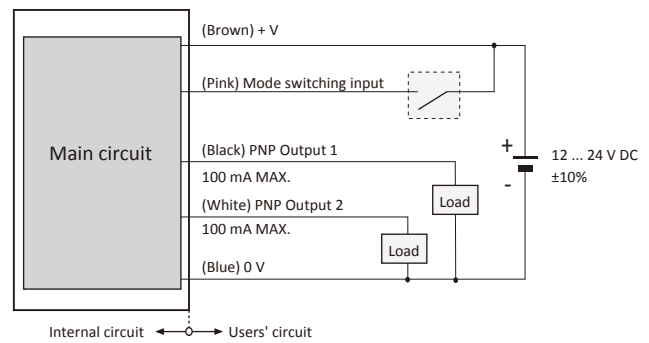
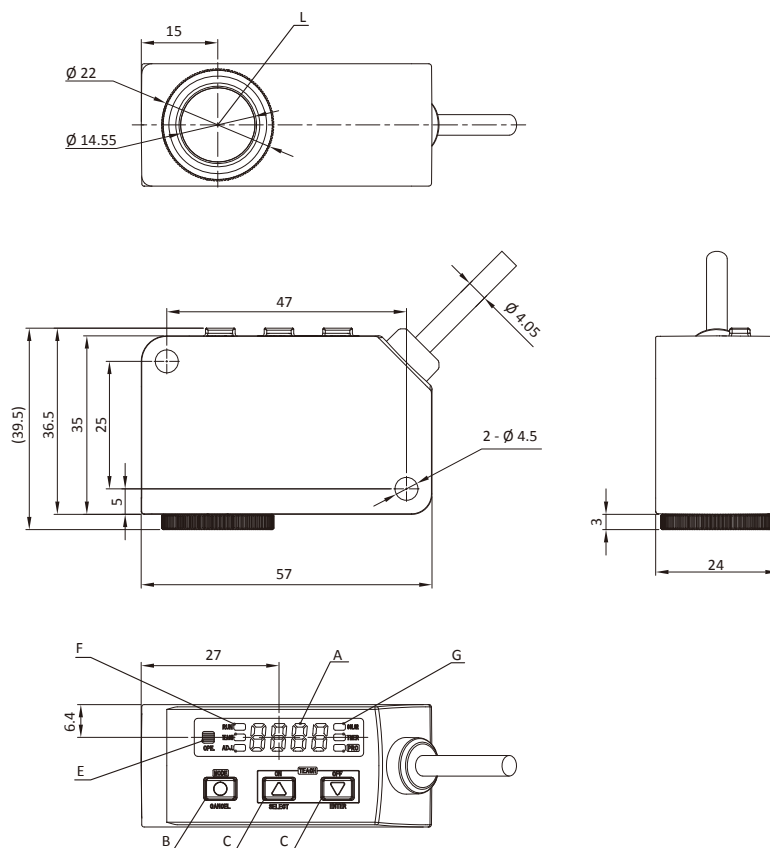


Fig. 2

Dimensions



- A: 4 digits LED display
- B: MODE / CANCEL key
- C: ON / SELECT key
- D: OFF / ENTER key
- E: Operation indicator
- F/G: Mode indicator