



Photoelectric sensors
W27-3, Photoelectric proximity sensor,
Background suppression

WTB27-3S1511P08



Model Name > **WTB27-3S1511P08**
Part No. > **1051143**



Illustration may differ

At a glance

- Precise background suppression with no scanning distance drift
- PinPoint technology: intense red LED with consistent light spot
- Resistant to ambient light, optical reflections, and crosstalk from other photoelectric devices
- Sensing range adjustment with potentiometer or teach-in
- Operating temperature: -40 °C to +60 °C
- Flexible sensing ranges and hysteresis settings
- Key lock function, remote teach, quality monitoring
- Diagnostics messages (contamination and short-circuit)

Your benefits

- PinPoint technology can replace laser photoelectric proximity sensors in some applications. No laser safety regulations and a longer operating life due to PinPoint technology
- Less downtime due to ASIC (application-specific integrated circuit) chip technology by SICK
- Resistant to ambient light, optical reflections, and immune to crosstalk from other photoelectric devices, reducing false detection
- Durable housing with reinforced mounting holes withstands harsh conditions
- Reliable operation in harsh environments with temperatures as low as -40 °C
- Quick and easy format adjustment
- Easy monitoring of sensor status
- Key lock function and parameter download prevent incorrect settings
- Simple sensor cloning



Features

Sensor/detection principle:	Photoelectric proximity sensor, Background suppression
Dimensions (W x H x D):	24.6 mm x 80.6 mm x 54 mm
Housing design (light emission):	Rectangular
Sensing range max.:	30 mm ... 2,000 mm ¹⁾
Sensing range:	100 mm ... 2,000 mm
Type of light:	Infrared light
Light source:	LED ²⁾
Wave length:	880 nm
Special features:	Pre-assembled on bracket in an angle of 104 °Pre-assembled on bracket in an angle of 104 °, Including front lens for fast mountingIncluding front lens for fast mounting, Sensing range 2000 mmSensing range 2000 mm
Adjustment:	Potentiometer

Light spot size (distance): Ø 25 mm (800 mm)

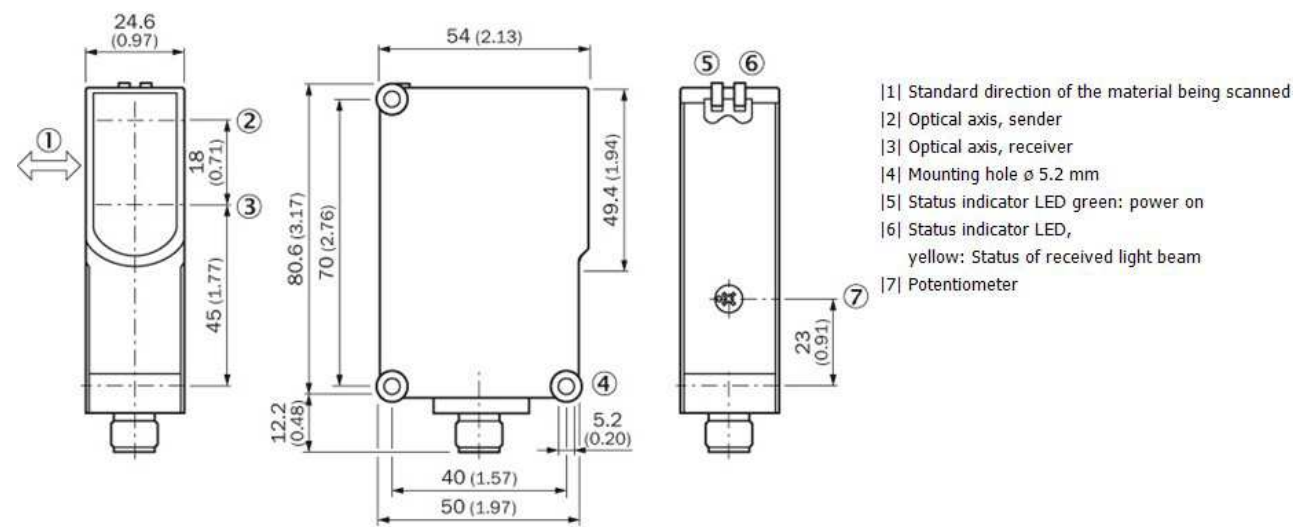
¹⁾ Object with 90 % reflectance (referred to standard white DIN 5033) ²⁾ Average service life of 100,000 h at $T_A = +25\text{ °C}$

Mechanics/electronics

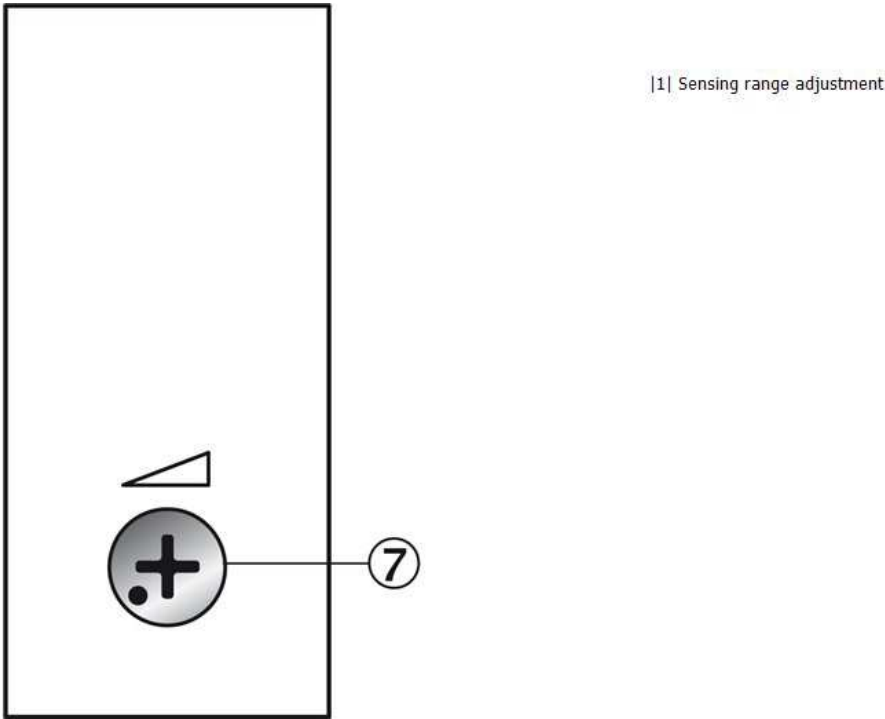
Supply voltage: 24 V AC/DC ... 240 V AC/DC ¹⁾
Power consumption: ≤ 2.5 VA
Output type: Relay ²⁾
Output function: Change-over contacts
Switching mode: Light switching ³⁾
Output characteristic: Electrically isolated
Switching current (switching voltage): 0.11 A (250 V DC), 3 A (24 V DC), 3 A (250 V AC)
Response time: ≤ 10 ms
Switching frequency: 10 Hz ⁴⁾
Connection type: Cable, 5-wire, 2 m ⁵⁾
Cable material: PVC
Circuit protection: A, C ⁶⁾ ⁷⁾
Protection class: II ⁸⁾
Weight: 500 g
Special device: ✓
Housing material: ABS, Plastic
Optics material: PMMA
Enclosure rating: IP 66
IP 67
Usage category: AC-15, DC-13, According to EN 60947-1
Ambient operating temperature: -40 °C ... 60 °C
Ambient storage temperature: -40 °C ... 75 °C
UL File No.: NRKH.E181493 & NRKH7.E181493

¹⁾ +- 10 % ^{2) 3)} Provide suitable spark suppression for inductive or capacitive loads ⁴⁾ With light/dark ratio 1:1 ⁵⁾ Do not bend below 0 °C ⁶⁾ A = V_S connections
reverse-polarity protected ⁷⁾ C = interference suppression ⁸⁾ Reference voltage 250 V AC

Dimensional drawing



Adjustments possible



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