



WT27-2S112

W27-2

PRODUCT PORTFOLIO

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

| Type | Part no. |
|------------|----------|
| WT27-2S112 | 1015093 |

Other models and accessories → www.sick.com/W27-2

Detailed technical data

Features

| | |
|--|--|
| Sensor/detection principle | Photoelectric proximity sensor, Background suppression |
| Dimensions (W x H x D) | 24.6 mm x 80 mm x 53.5 mm |
| Housing design (light emission) | Rectangular |
| Sensing range max. | 100 mm ... 1,500 mm ¹⁾ |
| Sensing range | 100 mm ... 1,500 mm |
| Type of light | Infrared light |
| Light source | LED ²⁾ |
| Light spot size (distance) | Ø 25 mm (800 mm) |
| Adjustment | PotentiometerPotentiometer |

¹⁾ Object with 90 % reflectance (referred to standard white, DIN 5033).

²⁾ Average service life: 100,000 h at T_U = +25 °C.

Mechanics/electronics

| | |
|--|--|
| Supply voltage | 24 V AC/DC ... 240 V AC/DC ¹⁾ |
| Power consumption | < 2 VA |
| Output type | Relay, electrically isolated ²⁾ |
| Output function | Change-over contacts |
| Switching current (switching voltage) | 4 A (240 V AC) |

¹⁾ + 10 %, -20 %.

²⁾ Provide suitable spark suppression for inductive or capacitive loads.

³⁾ Signal transit time with resistive load.

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.

| | |
|--------------------------------------|------------------------------------|
| | 0.2 A (120 V DC) 4 A (24 V DC) |
| Response time | < 6 ms ³⁾ |
| Switching frequency | 10 Hz ⁴⁾ |
| Connection type | Cable, 5-wire, 2 m ⁵⁾ |
| Conductor cross-section | 0.25 mm ² |
| Circuit protection | A ⁶⁾ C ⁷⁾ |
| Protection class | II ⁸⁾ |
| Weight | 100 g |
| Housing material | ABS |
| Enclosure rating | IP67 |
| Ambient operating temperature | -40 °C ... +60 °C |
| Ambient storage temperature | -40 °C ... +75 °C |
| UL File No. | NRKH.E181493 & NRKH7.E181493 |

1) + 10 %, -20 %.

2) Provide suitable spark suppression for inductive or capacitive loads.

3) Signal transit time with resistive load.

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.

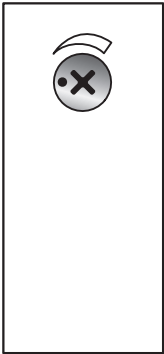
8) Reference voltage: 250 V AC.

Classifications

| | |
|-----------------------|----------|
| ECI@ss 5.0 | 27270904 |
| ECI@ss 5.1.4 | 27270904 |
| ECI@ss 6.0 | 27270904 |
| ECI@ss 6.2 | 27270904 |
| ECI@ss 7.0 | 27270904 |
| ECI@ss 8.0 | 27270904 |
| ECI@ss 8.1 | 27270904 |
| ECI@ss 9.0 | 27270904 |
| ETIM 5.0 | EC002719 |
| ETIM 6.0 | EC002719 |
| UNSPSC 16.0901 | 39121528 |

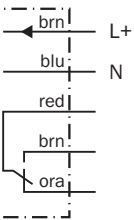
Adjustments possible

Potentiometer

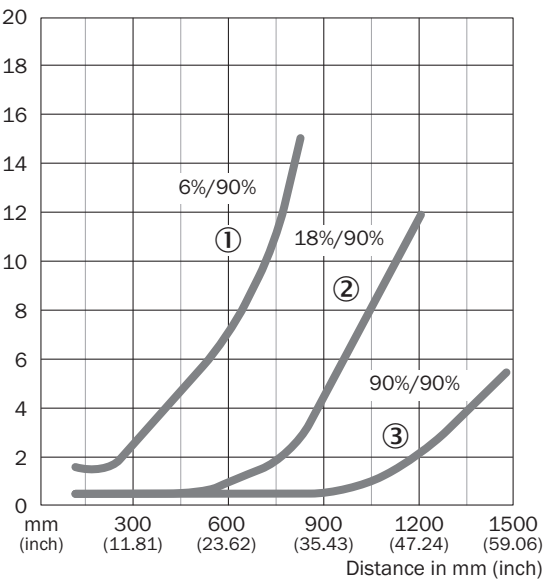


Connection diagram

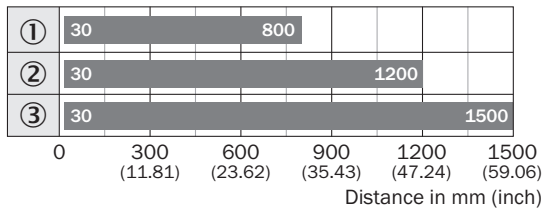
Cd-162



Characteristic curve



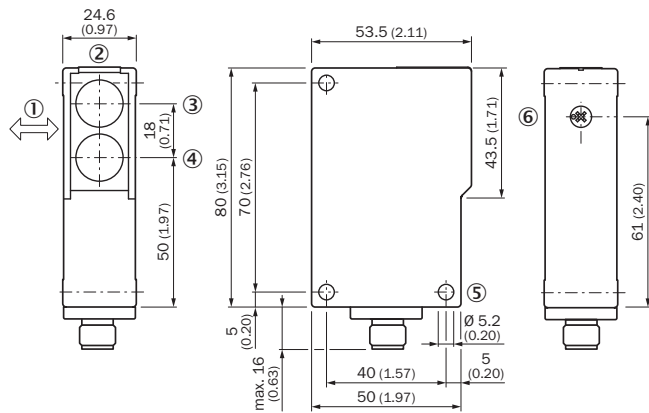
Sensing range diagram



■ Sensing range

- ① Sensing range on black, 6 % remission
- ② Sensing range on gray, 18 % remission
- ③ Sensing range on white, 90 % remission

Dimensional drawing (Dimensions in mm (inch))






- ① Standard direction
- ② LED signal strength indicator
- ③ Optical axis, sender
- ④ Optical axis, receiver
- ⑤ Fixing hole
- ⑥ Adjustment of sensing range

Recommended accessories

Other models and accessories → www.sick.com/W27-2

| | Brief description | Type | Part no. |
|--------------------------------|--|-------------|----------|
| Universal bar clamp systems | | | |
| | Plate N04 for universal clamp, steel, Zinc plated steel (sheet), Zinc die cast (clamping bracket), Universal clamp (5322626), mounting hardware | BEF-KHS-N04 | 2051610 |
| Device protection (mechanical) | | | |
| | Protective housing for universal clamp, Zinc plated steel (protective housing), Zinc die cast (clamping bracket), Universal clamp (2031357), mounting hardware | BEF-SG-W27 | 2039601 |

| | Brief description | Type | Part no. |
|---|--|--------------|----------|
|  | Weather hood for universal clamp bracket, steel, zinc coated, mounting hardware included | OBW-KHS-M01 | 2023240 |
| Mounting brackets and plates | | | |
|  | Mounting bracket with articulated arm for W11-2, W27, Dx50, steel, zinc coated, mounting hardware included | BEF-WN-MULTI | 2064469 |
|  | Mounting bracket with hinged arm, steel, zinc coated, mounting hardware included | BEF-WN-W27 | 2009122 |

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

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