

The SICK logo is displayed in a bold, blue, sans-serif font. It is centered within a white rectangular box, which is itself centered on a light gray background.

DATA SHEET

WT100-2P1432S02

W100
Photoelectric sensors

The SICK logo is shown in a large, bold, blue, sans-serif font. To its right, the words "Sensor Intelligence" are written in a smaller, blue, sans-serif font.



Illustration may differ

PHOTOELECTRIC SENSORS

WT100-2P1432S02

ORDERING INFORMATION

Type	part no.
WT100-2P1432S02	6060469

Further device versions and accessories at www.sick.com/WT100



DETAILED TECHNICAL DATA

FEATURES

Functional principle	Photoelectric proximity sensor
Functional principle detail	Energetic
Dimensions (W x H x D)	11 mm x 31 mm x 20 mm
Housing design (light emission)	Rectangular
Sensing range max.	0 mm ... 1,200 mm ¹⁾
Sensing range	0 mm ... 750 mm ¹⁾
Type of light	Visible red light
Light source	LED ²⁾
Light spot size (distance)	Ø 75 mm (1,000 mm)
Wave length	632 nm
Adjustment	Potentiometer (Sensing range)

¹⁾ Object with 90% remission (based on standard white, DIN 5033).

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

MECHANICS/ELECTRONICS

Supply voltage U_B	10 V DC ... 30 V DC ¹⁾
Ripple	$\pm 10\%$ ²⁾
Current consumption	30 mA ³⁾
Switching output	PNP
Signal voltage PNP HIGH/LOW	$U_V - 1,8\text{ V} / \text{ca. } 0\text{ V}$
Output current I_{max}	$\leq 100\text{ mA}$
Response time	$\leq 0,5\text{ ms}$ ⁴⁾
Switching frequency	1,000 Hz ⁵⁾
Connection type	Cable with Stocko-connector (MKF-13264), 300 mm ⁶⁾
Cable material	Plastic, PUR
Conductor cross section	0.18 mm ²
Circuit protection	A ⁷⁾ B ⁸⁾ D ⁹⁾
Protection class	III
Housing material	Plastic, ABS/PC/POM
Optics material	Plastic, PMMA
Enclosure rating	IP67
Ambient operating temperature	-30 °C ... +55 °C ¹⁰⁾
Ambient temperature, storage	-40 °C ... +70 °C

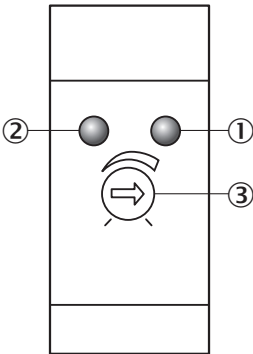
¹⁾ Limit values.²⁾ May not fall below or exceed U_V tolerances.³⁾ Without load.⁴⁾ Signal transit time with resistive load.⁵⁾ With light/dark ratio 1:1.⁶⁾ Do not bend below 0 °C.⁷⁾ A = V_s connections reverse-polarity protected.⁸⁾ B = output reverse-polarity protected.⁹⁾ D = outputs overcurrent and short-circuit protected.¹⁰⁾ Temperature stability following adjustment $\pm 10\text{ °C}$.**SAFETY-RELATED PARAMETERS**

MTTF _D	954 years
DC _{avg}	0 %

CERTIFICATES

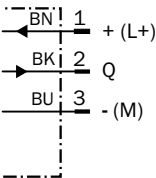
EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
China Compulsory Product Certification (CCC) exempt	✓
Photobiological safety (DIN EN 62471) certificate	✓

ADJUSTMENTS

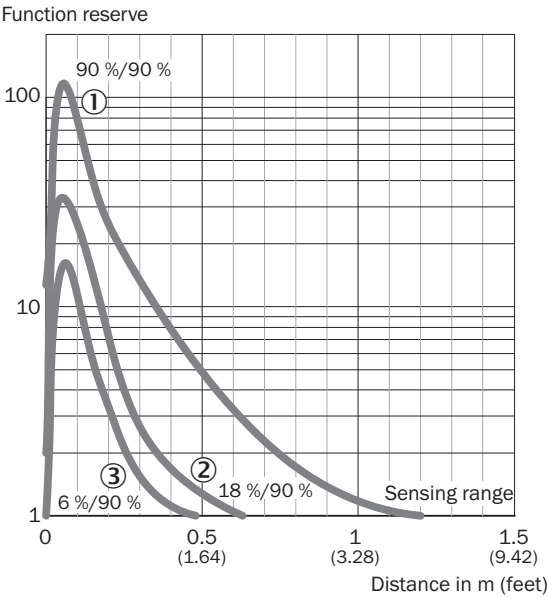


- ① LED indicator orange: switching output active
- ② LED indicator green: power on
- ③ Sensing range adjustment: potentiometer

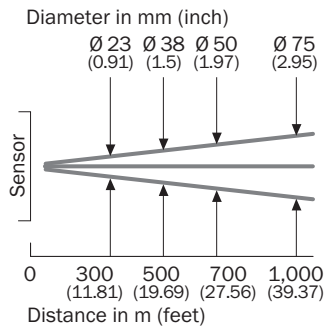
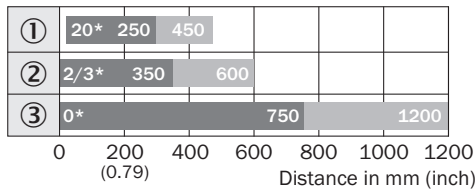
CONNECTION DIAGRAM CD-240



CHARACTERISTIC CURVE WT100-2, ENERGETIC



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

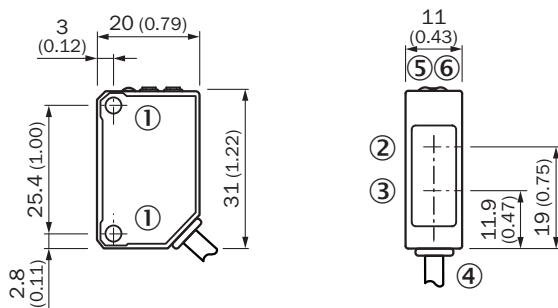
LIGHT SPOT SIZE**SENSING RANGE DIAGRAM WT100-2, ENERGETIC**

■ Sensing range

■ Sensing range max.

*Close-up range at maximum sensitivity

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

DIMENSIONAL DRAWING

Dimensions in mm (inch)

- ① Threaded mounting hole M3
- ② Center of optical axis, receiver
- ③ Center of optical axis, sender
- ④ Connection
- ⑤ LED indicator orange: switching output active
- ⑥ LED indicator green: power on

Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at www.sick.com/6060469



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SICK AT A GLANCE

SICK is a leading global technology company for intelligent sensors and integrated solutions in industrial automation. Our technologies set benchmarks, making your industrial processes more efficient, safer and more sustainable – both in logistics and manufacturing operations.

SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

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