



DATA SHEET

WTV4-3P2271

MultiV
Photoelectric sensors

SICK Sensor Intelligence



Illustration may differ

PHOTOELECTRIC SENSORS

WTV4-3P2271

ORDERING INFORMATION

Type	part no.
WTV4-3P2271	1046644

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

DETAILED TECHNICAL DATA

FEATURES

Functional principle	Photoelectric proximity sensor
Functional principle detail	Background suppression
Dimensions (W x H x D)	16 mm x 39,5 mm x 12 mm
Housing design (light emission)	Rectangular
Sensing range max.	3 mm ... 50 mm ¹⁾
Sensing range	5 mm ... 50 mm ¹⁾
Type of light	Visible red light
Light source	PinPoint LED ²⁾
Light spot size (distance)	3 mm x 20 mm (40 mm)
Wave length	650 nm
Adjustment	Potentiometer, 5 turns
AutoAdapt	✓
Special feature	V-optics, Line-shaped light spot
Special applications	Detecting perforated objects, Detecting objects with position tolerances, Detecting uneven, shiny objects, Detecting objects wrapped in film

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

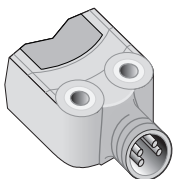
²⁾ Average service life: 100,000 h at T_u = +25 °C.

MECHANICS/ELECTRONICS

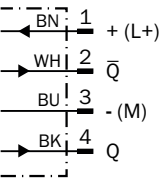
Supply voltage	10 V DC ... 30 V DC ¹⁾
Ripple	< 5 V _{pp} ²⁾
Current consumption	20 mA ³⁾
Switching output	PNP
Output function	Complementary
Switching mode	Light switching
Output current I _{max}	≤ 100 mA
Response time	< 0.5 ms ⁴⁾
Switching frequency	1,000 Hz ⁵⁾
Connection type	Male connector M8, 4-pin
Circuit protection	A ⁶⁾ C ⁷⁾ D ⁸⁾
Protection class	III
Weight	30 g
Housing material	Plastic, ABS
Optics material	Plastic, PMMA
Enclosure rating	IP67 IP66
Special feature	V-optics, Line-shaped light spot
Ambient operating temperature	-40 °C ... +60 °C
Ambient temperature, storage	-40 °C ... +75 °C
UL File No.	NRKH.E181493 & NRKH7.E181493

¹⁾ Limit values.²⁾ May not exceed or fall below U_i tolerances.³⁾ Without load.⁴⁾ Signal transit time with resistive load.⁵⁾ With light/dark ratio 1:1.⁶⁾ A = V_s connections reverse-polarity protected.⁷⁾ C = interference suppression.⁸⁾ D = outputs overcurrent and short-circuit protected.**SAFETY-RELATED PARAMETERS**

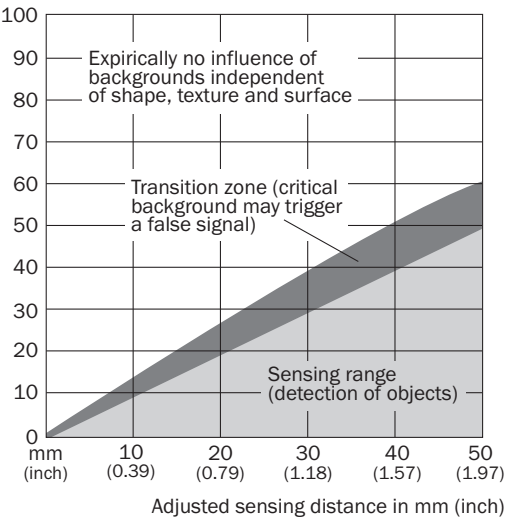
MTTF _D	1,146 years
DC _{avg}	0 %

CONNECTION TYPE

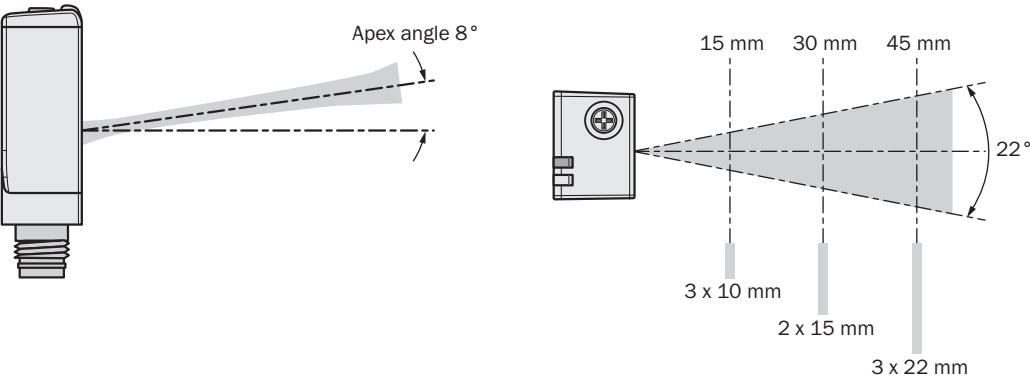
CONNECTION DIAGRAM CD-083

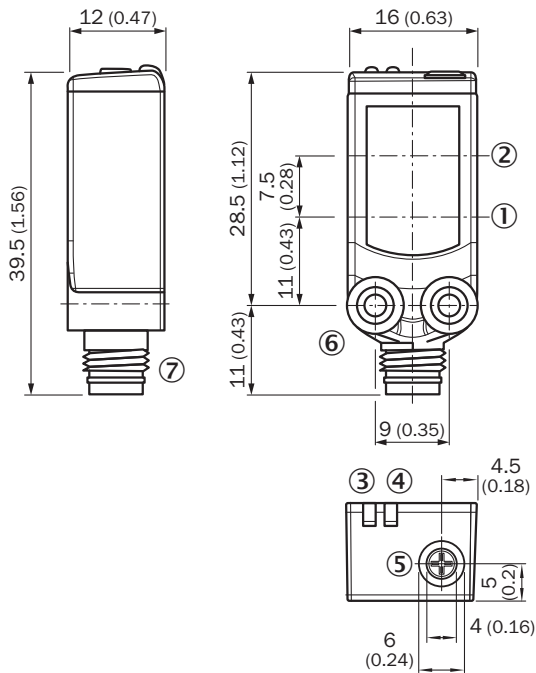


CHARACTERISTIC CURVE WTV4-3, V-OPTICS, LINE-SHAPED LIGHT SPOT



LIGHT SPOT SIZE WTV4-3, V-OPTICS, LINE-SHAPED LIGHT SPOT



DIMENSIONAL DRAWING

Dimensions in mm (inch)

- ① Optical axis, sender
- ② Optical axis, receiver
- ③ LED indicator yellow: Status of received light beam
- ④ LED indicator green: Supply voltage active
- ⑤ Potentiometer
- ⑥ Threaded mounting hole M3
- ⑦ Connection

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/1046644



SICK AG
WALDKIRCH
GERMANY
SICK.COM

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

SICK
Sensor Intelligence