



Photoelectric sensors
W2 Slim, Photoelectric proximity sensor,
energetic

WT2S-P261



Model Name > WT2S-P261
Part No. > 1023640



Illustration may differ

At a glance

- Very small, focused laser-like light spot with diameter $\lt; \varnothing 1.5 \text{ mm}$
- Two background suppression variants with a fixed sensing range of 15 mm and 30 mm
- Energetic proximity sensor with a fixed sensing range of 55 mm
- Fast response time of 0.6 ms

Your benefits

- Precise recognition of all objects regardless of color or composition
- Laser-like light spot enables precise detection with a high level of accuracy
- V-optics reliably detects transparent and glossy objects
- Highly immunity to reflective and critical backgrounds, enabling use in the most restricted machine environments

Note: This product will be discontinued and replaced by a successor - orders will be accepted until January 31st 2015



Features

| | |
|----------------------------------|---|
| Sensor/detection principle: | Photoelectric proximity sensor, energetic |
| Dimensions (W x H x D): | 7.6 mm x 25.1 mm x 12.5 mm |
| Housing design (light emission): | Rectangular |
| Sensing range max.: | 1 mm ... 55 mm ¹⁾ |
| Sensing range: | 1 mm ... 55 mm ²⁾ |
| Type of light: | Visible red light |
| Light source: | PinPoint LED ³⁾ |
| Wave length: | 660 nm |
| Focus adjustable: | - |
| Light spot size (distance): | $\varnothing 3.5 \text{ mm}$ (50 mm) |

^{1) 2)} Object with 90 % reflectance (referred to standard white, DIN 5033) ³⁾ Average service life 75,000 h at $T_A = +25 \text{ }^\circ\text{C}$

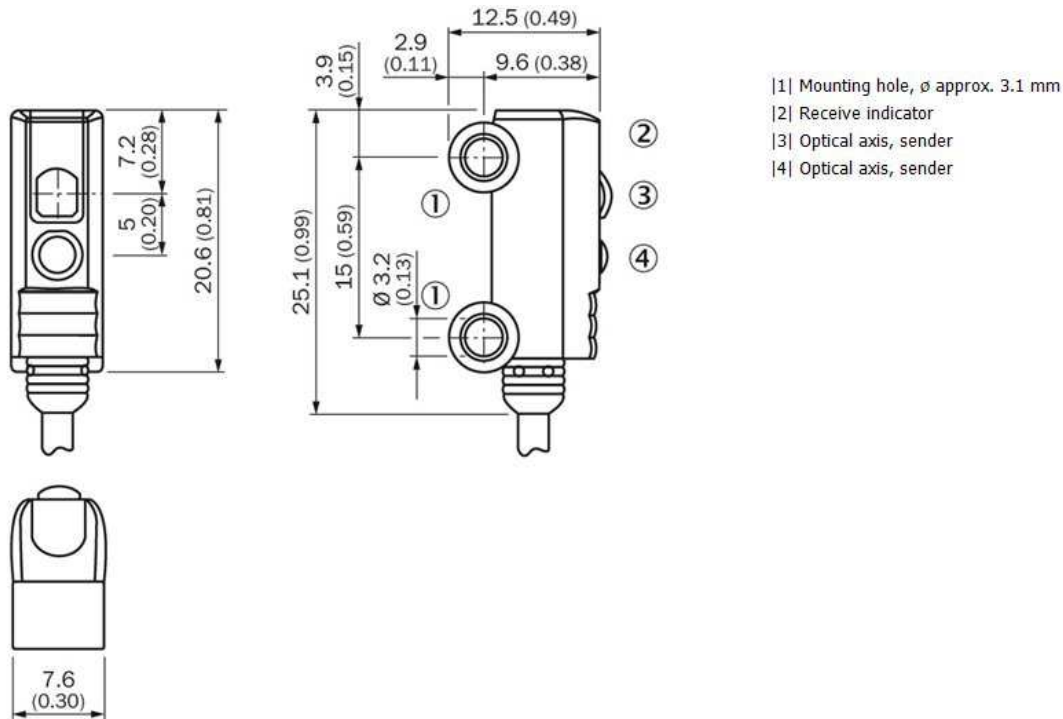
Mechanics/electronics

| | |
|------------------------------------|------------------------------------|
| Supply voltage: | 10 V DC ... 30 V DC ¹⁾ |
| Ripple: | $\leq 5 \text{ Vpp}$ ²⁾ |
| Output type: | PNP |
| Switching mode: | Light switching |
| Output current I _{max.} : | $\leq 50 \text{ mA}$ |
| Response time: | $< 0.6 \text{ ms}$ ³⁾ |

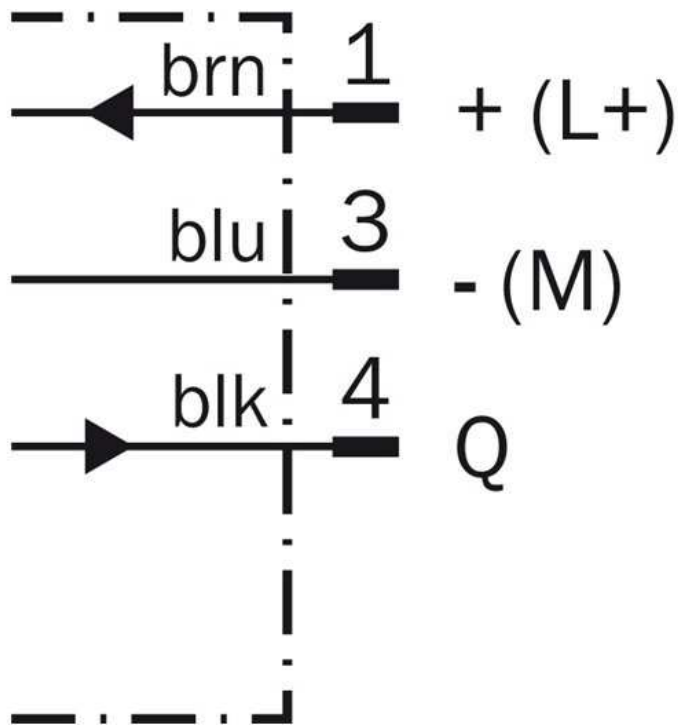
| | |
|--------------------------------|--|
| Switching frequency: | 800 Hz ⁴⁾ |
| Connection type: | Cable with connector M8, 3-pin, 200 mm ⁵⁾ |
| Cable material: | PVC |
| Cable diameter: | Ø 2.4 mm |
| Circuit protection::: | A, C, D ^{6) 7) 8)} |
| Weight: | 20 g |
| Polarisation filter: | - |
| Special device: | - |
| Reverse polarity protection: | ✓ |
| Short-circuit protection: | ✓ |
| Optics material: | PMMA |
| Enclosure rating: | IP 67 IP 69K |
| Ambient operating temperature: | -20 °C ... +50 °C |
| Ambient storage temperature: | -40 °C ... +75 °C |
| Housing material: | ABS, Plastic |

¹⁾ Limit values ²⁾ May not exceed or fall short of V_S tolerances ³⁾ Signal transit time with resistive load ⁴⁾ With light/dark ratio 1:1 ⁵⁾ Do not bend below 0 °C ⁶⁾ A = V
⁷⁾ S connections reverse-polarity protected ⁷⁾ C = interference suppression ⁸⁾ D = outputs overcurrent and short-circuit protected

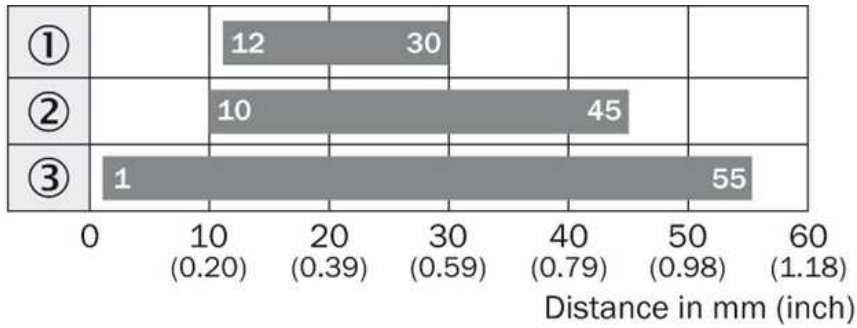
Dimensional drawing



Connection diagram



Sensing range diagram

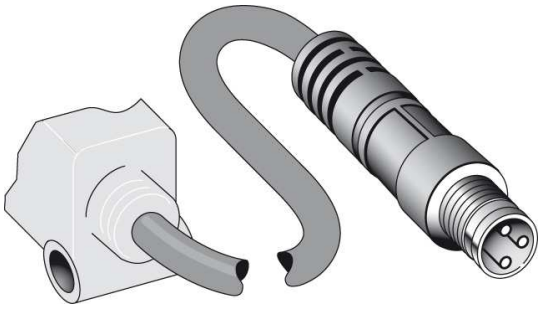


- |1| Sensing range on black, 6 % remission
- |2| Sensing range on gray, 18 % remission
- |3| Sensing range on white, 90 % remission

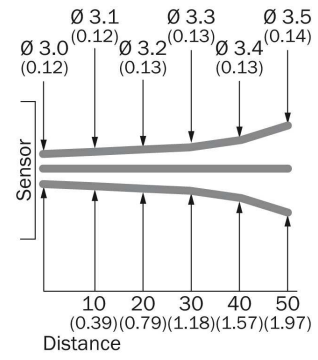
■ Sensing range

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

Connection type



Light spot size



All dimensions in mm (inch)

Australia

Phone +61 3 9457 0600
1800 33 48 02 – tollfree
E-Mail sales@sick.com.au

Belgium/Luxembourg

Phone +32 (0)2 466 55 66
E-Mail info@sick.be

Brasil

Phone +55 11 3215-4900
E-Mail marketing@sick.com.br

Canada

Phone +1 905 771 14 44
E-Mail information@sick.com

Česká republika

Phone +420 2 57 91 18 50
E-Mail sick@sick.cz

China

Phone +86 4000 121 000
E-Mail info.china@sick.net.cn
Phone +852-2153 6300
E-Mail ghk@sick.com.hk

Danmark

Phone +45 45 82 64 00
E-Mail sick@sick.dk

Deutschland

Phone +49 211 5301-301
E-Mail info@sick.de

España

Phone +34 93 480 31 00
E-Mail info@sick.es

France

Phone +33 1 64 62 35 00
E-Mail info@sick.fr

Great Britain

Phone +44 (0)1727 831121
E-Mail info@sick.co.uk

India

Phone +91-22-4033 8333
E-Mail info@sick-india.com

Israel

Phone +972-4-6881000
E-Mail info@sick-sensors.com

Italia

Phone +39 02 27 43 41
E-Mail info@sick.it

Japan

Phone +81 (0)3 5309 2112
E-Mail support@sick.jp

Magyarország

Phone +36 1 371 2680
E-Mail office@sick.hu

Nederland

Phone +31 (0)30 229 25 44
E-Mail info@sick.nl

Norge

Phone +47 67 81 50 00
E-Mail sick@sick.no

Österreich

Phone +43 (0)22 36 62 28 8-0
E-Mail office@sick.at

Polska

Phone +48 22 837 40 50
E-Mail info@sick.pl

România

Phone +40 356 171 120
E-Mail office@sick.ro

Russia

Phone +7-495-775-05-30
E-Mail info@sick.ru

Schweiz

Phone +41 41 619 29 39
E-Mail contact@sick.ch

Singapore

Phone +65 6744 3732
E-Mail sales.gsg@sick.com

Slovenija

Phone +386 (0)1-47 69 990
E-Mail office@sick.si

South Africa

Phone +27 11 472 3733
E-Mail info@sickautomation.co.za

South Korea

Phone +82 2 786 6321/4
E-Mail info@sickkorea.net

Suomi

Phone +358-9-25 15 800
E-Mail sick@sick.fi

Sverige

Phone +46 10 110 10 00
E-Mail info@sick.se

Taiwan

Phone +886 2 2375-6288
E-Mail sales@sick.com.tw

Türkiye

Phone +90 (216) 528 50 00
E-Mail info@sick.com.tr

United Arab Emirates

Phone +971 (0) 4 88 65 878
E-Mail info@sick.ae

USA/México

Phone +1(952) 941-6780
1 (800) 325-7425 – tollfree
E-Mail info@sickusa.com

More representatives and agencies
at www.sick.com