



Photoelectric sensors
W27-2 Laser, Photoelectric proximity sensor,
Background suppression

WT27L-2F430



Model Name > [WT27L-2F430](#)
Part No. > [1016019](#)



Illustration may differ

At a glance

- 2 mm diameter light spot at a distance of 400 mm
- Precise adjustable background suppression
- Visible red laser LED
- Sensing range adjustment via potentiometer
- UL approval

Your benefits

- Precise detection of very small parts up to a distance of 400 mm due to 2 mm light spot
- Highly visible red laser provides quick and easy alignment
- Durable design provides high resistance to vibration



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 ... 800 mm ¹⁾
Sensing range:	100 mm ... 800 mm
Type of light:	Visible red light
Light source:	Laser ²⁾
Laser class:	2, 2 (EN 60825-1), low power. Eyes normally protected by averting reaction and eyelid closing reflex
Wave length:	650 nm
Adjustment:	Potentiometer
Light spot size (distance):	Ø 2 mm (400 mm)

¹⁾ Object with 90 % reflectance (referred to standard white, DIN 5033) ²⁾ Average service life 50,000 h at T_A = +25 °C

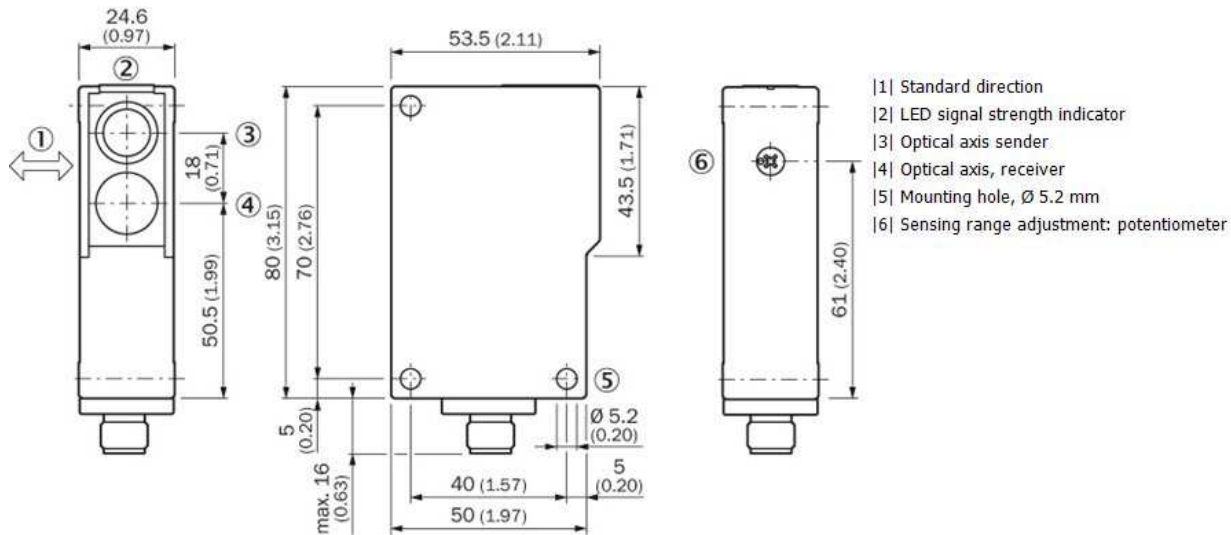
Mechanics/electronics

Supply voltage:	10 V DC ... 30 V DC ¹⁾
Ripple:	≤ 5 % ²⁾
Current consumption:	≤ 35 mA ³⁾
Output type:	PNP
Output function:	Complementary
Switching mode:	Light/dark switching

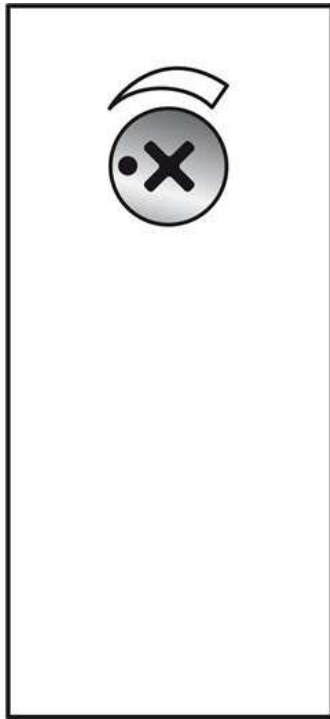
Output current I _{max} ..:	≤ 100 mA
Response time:	< 500 μs ⁴⁾
Switching frequency:	1,000 Hz ⁵⁾
Connection type:	Connector M12, 4-pin
Circuit protection:::	A, C, D ^{6) 7) 8)}
Protection class:	II ⁹⁾
Weight:	100 g
Special device:	-
Enclosure rating:	IP 67
Ambient operating temperature:	-10 °C ... +45 °C
Ambient storage temperature:	-10 °C ... +75 °C
UL File No.:	NRKH.E181493 & NRKH7.E181493
Housing material:	ABS, Plastic

1) Limit values, operation in short-circuit protected network max. 8 A 2) May not exceed or fall short of V_S 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 9) Reference voltage: 50 V DC

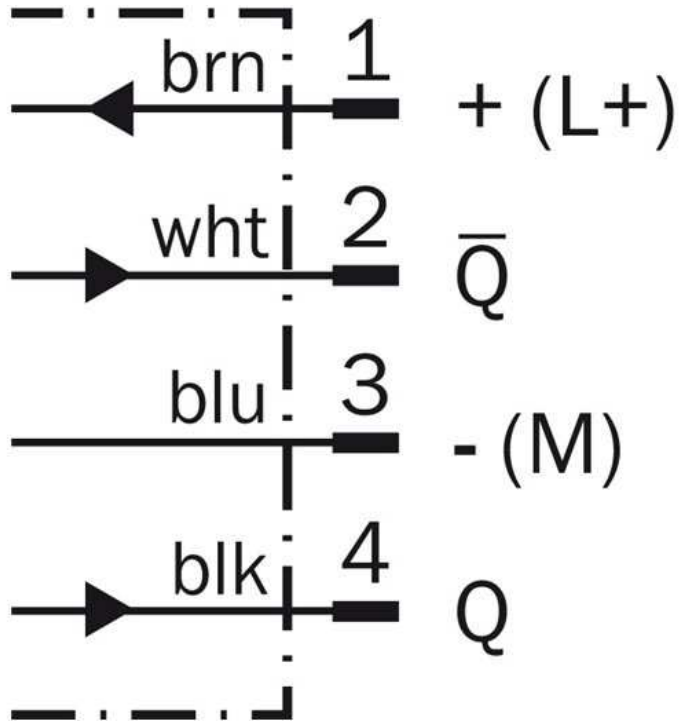
Dimensional drawing



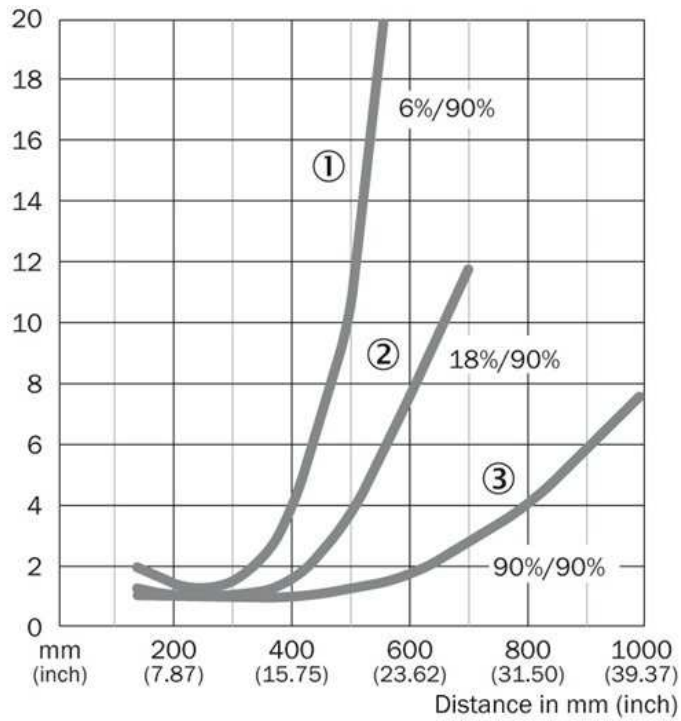
Adjustments possible



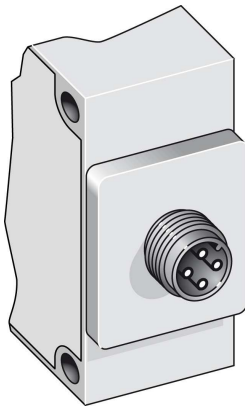
Connection diagram



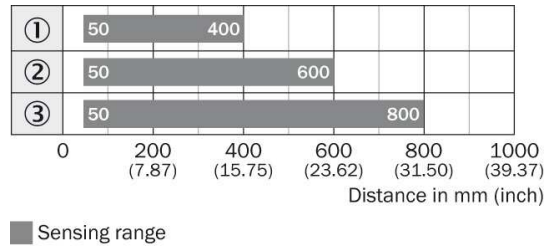
Characteristic curve



Connection type



Sensing range diagram



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