

WT24-2B420



Nazwa modelu > **WT24-2B420**

Numer części > **1017885**



At a glance

- Precise background suppression at ranges up to 2500 mm
- Immune to ambient light and crosstalk from another photoelectric sensor
- Switch selectable PNP or NPN output, Switch selectable Light or Dark operating mode
- Variants with DC voltage and universal AC/DC voltage with UL approval
- Optional test input, adjustable ON and OFF time delays, alarm output and front screen heating also available in high-power version
- M12 or terminal chamber connection: 90° rotatable
- Red light or long-range IR

Your benefits

- Metal housing that has been IP 69K tested provides reliability and a long service life
- Immune to ambient light and crosstalk, reducing sensor downtime
- Precise detection at long sensing ranges
- User interface is stored under a durable protection hood to prevent unwanted tampering and protect vital components
- Selectable output type, operating mode, and adjustable time delays makes integration easier and reduce the number of devices needed
- Variants with DC voltage and universal AC/DC voltage provide installation flexibility



Cechy

Zasada działania czujnika/Sposób detekcji:	Fotoprzełącznik odbiciowy, Tłumienie tła
Wymiary (Szer. x Wys. x Głęb.):	27 mm x 87,5 mm x 65 mm
Housing design (light emission):	Prostopadłościenna
Maks. strefa działania:	100 mm ... 2.500 mm ¹⁾
Sensing range:	100 mm ... 2.500 mm
Rodzaj światła:	Światło podczerwone
Nadajnik światła:	LED ²⁾
Light spot diameter (distance):	Ø 80 mm (2.500 mm)
Adjustment of operating distance:	Potentiometer
Typ czasu:	Przełącznik z opóźniaczem
Czas opóźnienia:	Adjustable via time delay selector switch: 0,5 ... 10 s

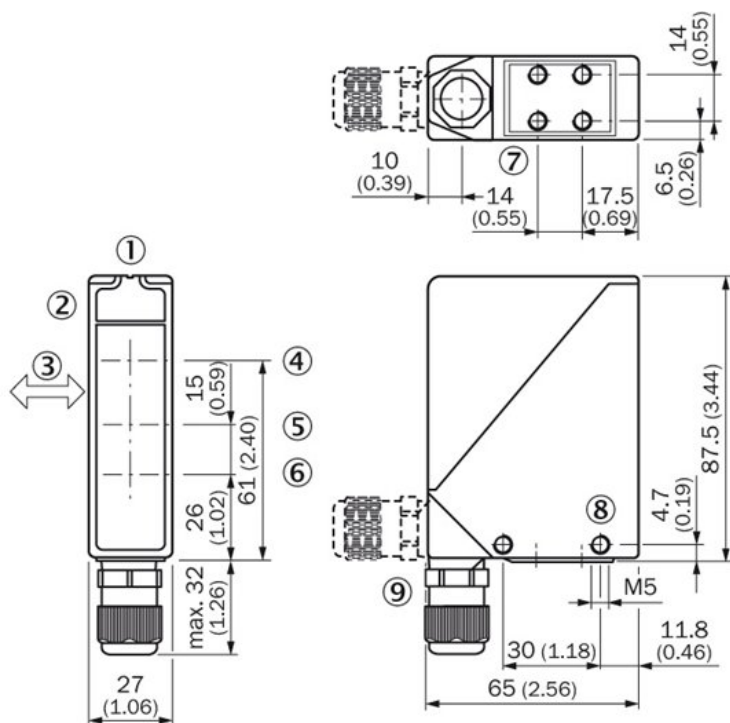
¹⁾ Obiekt odbijający 90% światła (standardowy biały zgodnie z normą DIN 5033) ²⁾ Average service life 100,000 h at Ta = +25 °C

Mechanika/elektronika

Napięcie zasilania:	10 V DC ... 30 V DC ¹⁾
Tętnienia resztkowe:	< 5 Vss ²⁾
Pobór prądu:	≤ 70 mA ³⁾
Wyjście przełączające:	NPN, przełączanie jasno/ciemno, wybierane, selectable via NPN/PNP selector, PNP, selectable via light/dark selector
Switching mode selector:	Selectable via light/dark selector, Selectable via NPN/PNP selector
Output current I _{max} ..:	100 mA
Czas reakcji:	≤ 500 μs ⁴⁾
Switching frequency:	1.000 Hz ⁵⁾
Sposób przyłączenia:	Connector M12, 4-pin ⁶⁾
Układ zabezpieczenia:::	A, C, D ^{7) 8) 9)}
Klasa ochronności:	II ¹⁰⁾
Ciężar:	330 g
Ogrzewanie przedniej szyby:	✓
Tworzywo, obudowa:	Cynkowa, odlewana
Tworzywo, układ optyczny:	PMMA
Rodzaj zabezpieczenia:	IP 69K
Wejście testowe, nadajnik wyłączony:	TE to 0 V
Ambient operating temperature:	-40 °C ... 60 °C
Ambient storage temperature:	-40 °C ... 75 °C

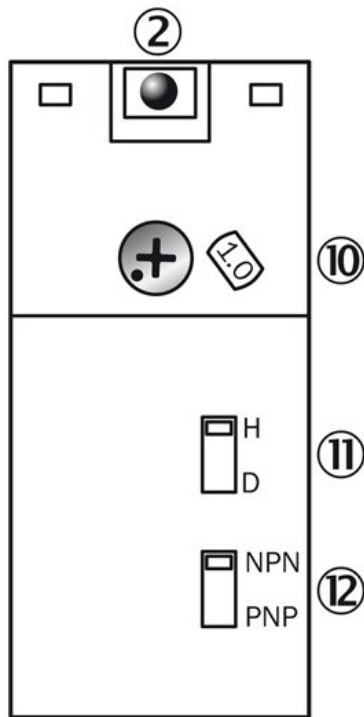
¹⁾ Limit values ²⁾ May not exceed or fall short of V_S ³⁾ Without load ⁴⁾ Signal transit time with resistive load ⁵⁾ With light/dark ratio 1:1 ⁶⁾ Connection rotatable by 90° ⁷⁾ A = V_S connections reverse-polarity protected ⁸⁾ C = interference suppression ⁹⁾ D = outputs overcurrent and short-circuit protected ¹⁰⁾ Reference voltage 50 V DC

Dimensional drawing



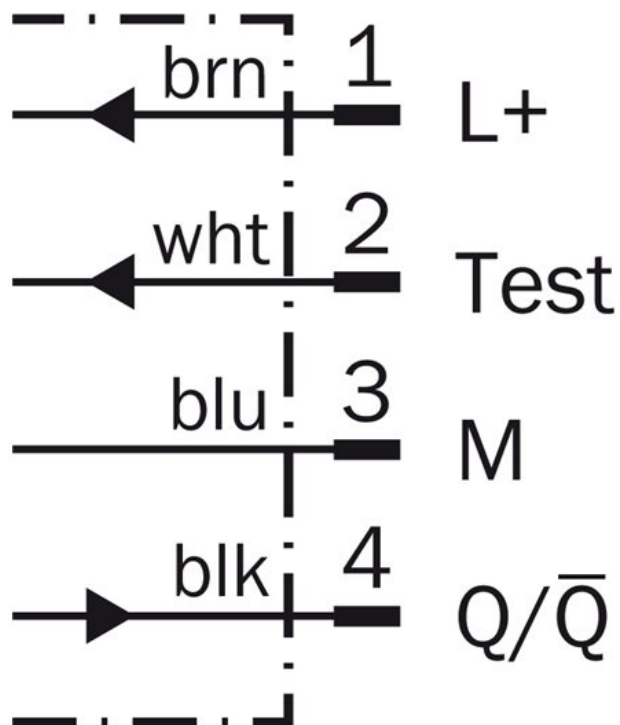
- |1| Alignment sight
- |2| LED signal strength indicator
- |3| Standard direction of the material being scanned
- |4| Center of optical axis, sender
- |5| Centre of optical axis, receiver (close range)
- |6| Centre of optical axis, receiver (far range)
- |7| M5 threaded mounting hole, 6 mm deep
- |8| M5 threaded mounting hole, through-hole
- |9| M16 screw fixing and plug rotatable by 90°

Adjustments possible

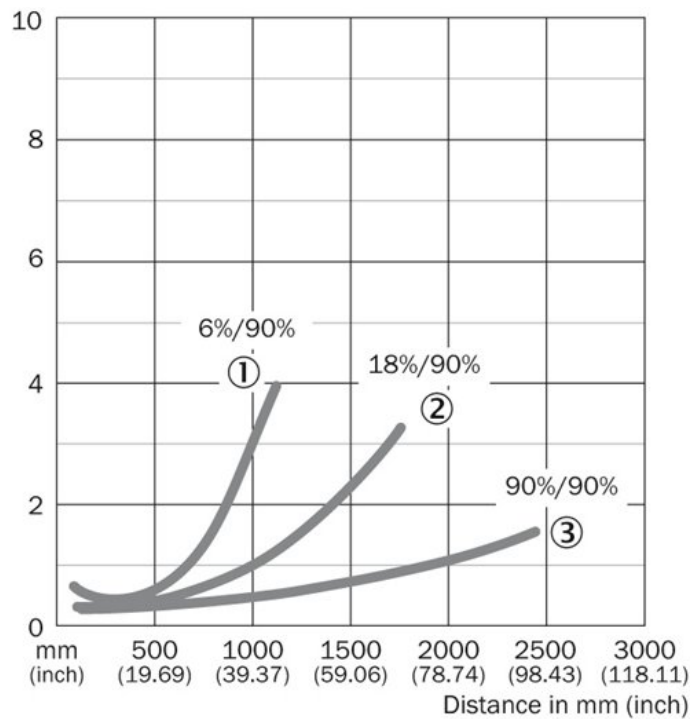


- |2| LED signal strength indicator
- |10| Sensing distance adjustment
- |11| Light/dark selector
- |12| NPN/ PNP selector

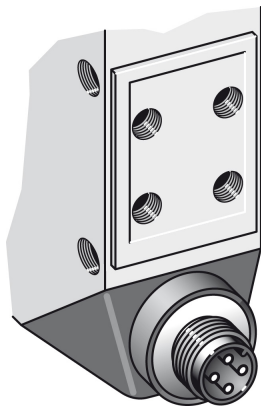
Connection diagram



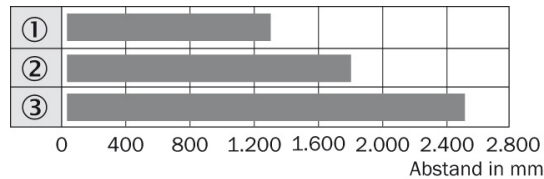
Characteristic curve



Connection type



Sensing range diagram



- Betriebstastweite
- ① Tastbereich auf Schwarz, 6 % Remission
 - ② Tastbereich auf Grau, 18 % Remission
 - ③ Tastbereich auf Weiß, 90 % Remission

Australia

Phone +61 3 9457 0600
1800 334 802 – 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 sac@sick.com.br

Canada

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

Ceská 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 kundenservice@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 +972-4-6801000
E-Mail info@sick-sensors.com

Italia

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

Japan

Phone +81 (0)3 3358 1341
E-Mail support@sick.jp

Magyarország

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

Nederlands

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

Norge

Phone +47 67 81 50 00
E-Mail austefjord@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 admin@sicksgp.com.sg

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 8865 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