



Fork sensors WF, WF Standard

WF2-B4210



Model Name > [WF2-B4210](#)
Part No. > [6012062](#)



Illustration may differ

At a glance

- Infrared light source
- Simple and accurate adjustment via teach-in or manually via "+"/"-" buttons
- Fast response time (max. 100 µs)
- PNP and NPN switching output
- Light/dark switching function
- 21 different models with different fork widths and depths
- Rugged, IP 65 aluminum housing

Your benefits

- Fast response time and fine resolution ensure reliable detection even at high speeds
- Infrared light source provides excellent ambient light immunity
- User friendly setting via teach-in or "+"/"-" button
- A wide range of different fork sizes enables flexible installation
- The aluminum housing meets all requirements for use in harsh industrial conditions



Features

Functional principle:	Optical detection principle
Fork width:	2 mm
Fork depth:	60 mm
Label detection:	✓
Light source:	LED
Type of light:	Infrared light
Output function:	Light/darkswitching, adjustable via reverse polarity
Housing design (light emission):	Fork shaped

Mechanics/electronics

Residual ripple ¹⁾ :	< 10 %
Power consumption ²⁾ :	40 mA
Switching frequency ³⁾ :	10 kHz
Response time ⁴⁾ :	30 µs
Output type:	NPN: HIGH = approx. VS / LOW ≤ 2 V PNP: HIGH = VS- ≤ 2 V / LOW approx. 0 V
Switching mode:	PNP/NPN (Push/ Pull)
Output current I _{max.} :	100 mA
Electrical connection:	Connector M8, 4-pin

Protection class ⁵⁾ :	III
Circuit protection:	Output Q short-circuit protected Interference suppression
Enclosure rating:	IP 65
Weight:	Ca. 36 g ... 160 g ⁶⁾
Housing material:	Aluminum, Metal
Teach-in:	0
Supply voltage:	10 V DC ... 30 V DC ⁷⁾
Ambient light immunity:	Incandescent lamp: ≤ 3,000 klx
Fieldbus interface:	-

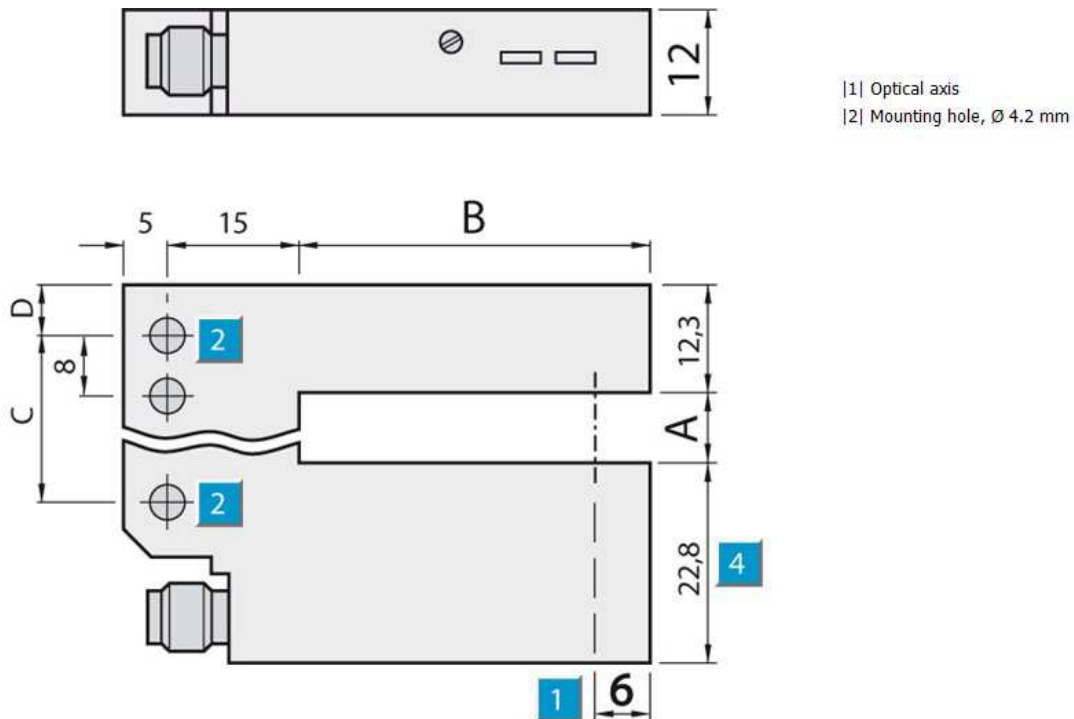
¹⁾ May not exceed or fall short of V_S tolerances ²⁾ Without load ³⁾ With light/dark ratio 1:1, no time delay ⁴⁾ Signal transit time with resistive load ⁵⁾ Reference voltage
DC 50 V ⁶⁾ Depending on fork width ⁷⁾ Limit values, reverse-polarity protected, operation in short-circuit protected network: max. 8 A

Ambient data

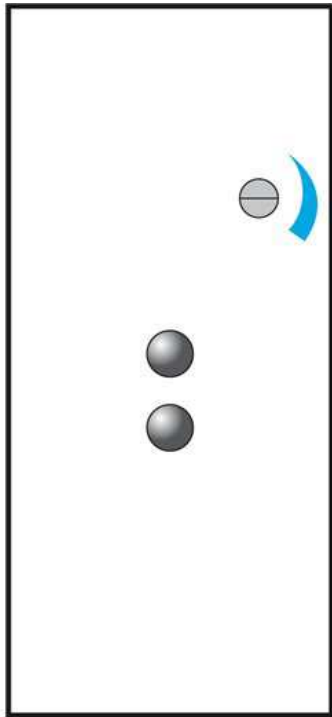
Shock load:	According to EN 60068-2-27
UL File No.:	NRKH.E191603
Ambient temperature operation:	-20 °C ... +60 °C ¹⁾
Ambient storage temperature:	-20 °C ... +80 °C

¹⁾ Do not bend below 0 °C

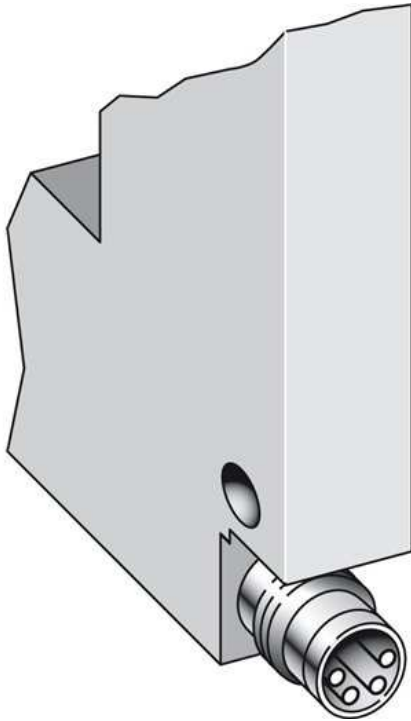
Dimensional drawing



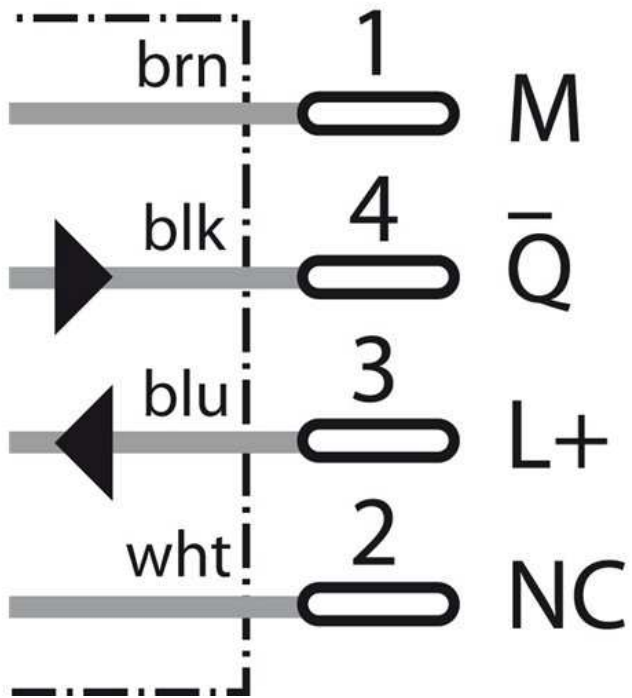
Adjustments



Connection type



Connection 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