Online data sheet



WF225-B4150

WF

FORK SENSORS

SICK
Sensor Intelligence.



Illustration may differ

Ordering information

Type	Part no.
WF225-B4150	6022139

Other models and accessories → www.sick.com/WF

Detailed technical data

Features

Functional principle	Optical detection principle
Dimensions (W x H x D)	12 mm x 60 mm x 80 mm
Housing design (light emission)	Fork shaped
Fork width	225 mm
Fork depth	60 mm
Light source	LED, Infrared light [1]
Output function	Light/darkswitching, adjustable via reverse polarity

[1] Continuous.

Interfaces

IO-Link functions	—
Advanced functions	—
Fieldbus, industrial network	-
Type of fieldbus integration	-

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC [1]
Ripple	< 10 % [2]
Power consumption	40 mA [3]
Switching frequency	0.5 kHz [4]

[1] Limit values, reverse-polarity protected, operation in short-circuit protected network: max. 8 A.
[2] May not exceed or fall below U_V tolerances.
[3] Without load.
[4] With light/dark ratio 1:1, without timer stage.
[5] Signal transit time with resistive load.
[6] Reference voltage DC 50 V.
[7] Depending on fork width.

Response time	1 ms [5]
Switching output	PNP/NPN
Switching output (voltage)	PNP: HIGH = V_S– ≤ 2 V / LOW approx. 0 V NPN: HIGH = approx. V_S / LOW ≤ 2 V
Switching output	Light/dark switching
Output current $I_{max.}$	100 mA
Connection type	Male connector M8, 4-pin
Ambient light immunity	Sunlight: ≤ 10,000 lx
Protection class	III [6]
Circuit protection	Output Q short-circuit protected Interference pulse suppression
Enclosure rating	IP65
Weight	Approx. 36 g ... 160 g [7]
Housing material	Aluminum

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[5] Signal transit time with resistive load.
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Ambient data

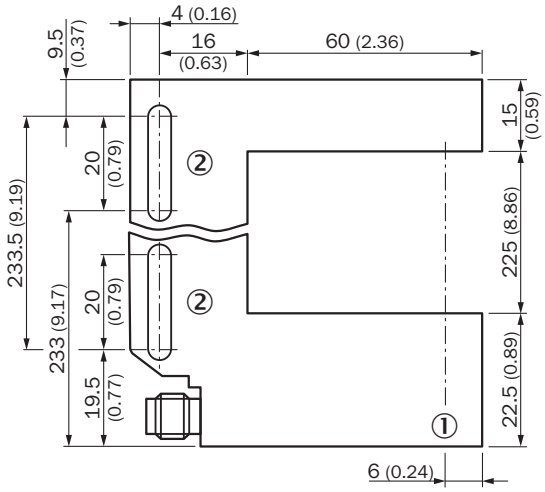
Ambient operating temperature	–20 °C ... +60 °C [1]
Ambient storage temperature	–20 °C ... +80 °C
Shock load	According to EN 60068-2-27
UL File No.	NRKH.E191603

[1] Do not bend below 0 °C.

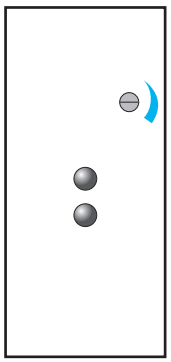
Classifications

ECl@ss 5.0	27270909
ECl@ss 5.1.4	27270909
ECl@ss 6.0	27270909
ECl@ss 6.2	27270909
ECl@ss 7.0	27270909
ECl@ss 8.0	27270909
ECl@ss 8.1	27270909
ECl@ss 9.0	27270909
ETIM 5.0	EC002720
ETIM 6.0	EC002720
UNSPSC 16.0901	39121528

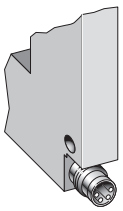
Dimensional drawing (Dimensions in mm (inch))



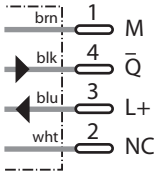
Adjustments



Connection type



Connection diagram



SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com