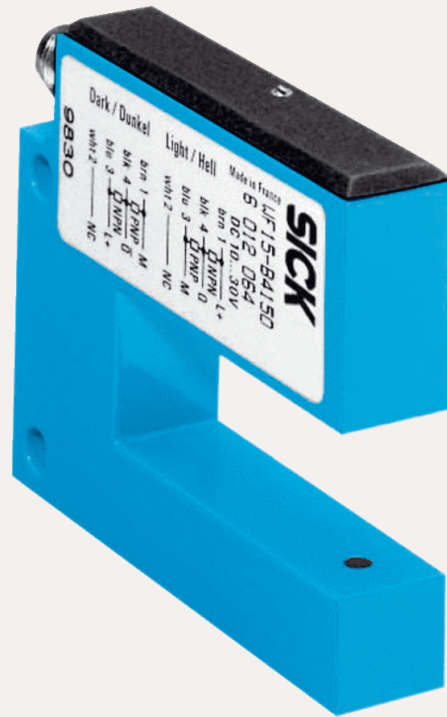




DATA SHEET

WF225-B4150

WF
Fork sensors

SICK

Sensor Intelligence

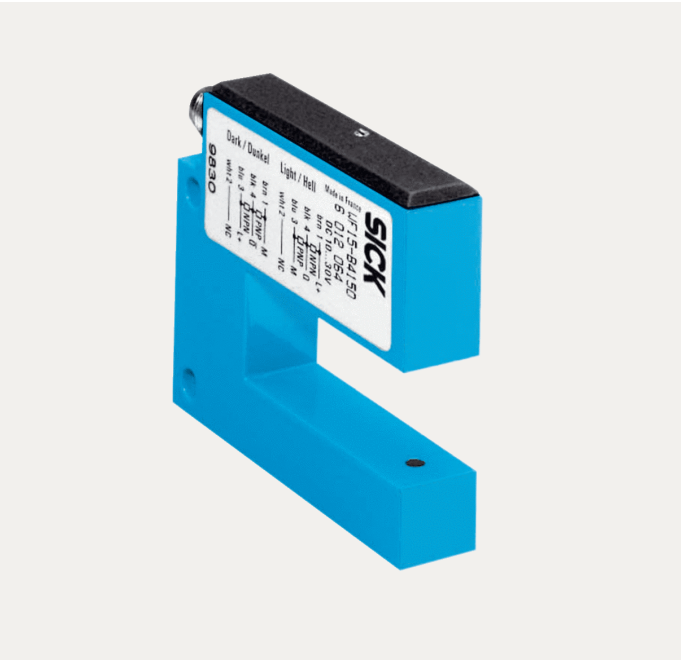


Illustration may differ

FORK SENSORS

WF225-B4150

ORDERING INFORMATION

Type	part no.
WF225-B4150	6022139

Further device versions and accessories at www.sick.com/WF



DETAILED TECHNICAL DATA

FEATURES

Functional principle	Optical detection principle
Dimensions (W x H x D)	12 mm x 262.5 mm x 80 mm
Fork width	225 mm
Fork depth	60 mm
Light source	LED, Infrared light
Output function	Light/darkswitching, adjustable via reverse polarity
Safety-related parameters	MTTF _o 97 years DC _{avg} 0 %

ELECTRONICS

Supply voltage	10 V DC ... 30 V DC
Ripple	< 10 %
Current consumption	40 mA ¹⁾
Switching frequency	0.5 kHz
Response time	≤ 1 ms
Switching output	PNP/NPN
Switching output (voltage)	PNP: HIGH = U _v ≤ 2 V / LOW approx. 0 V NPN: HIGH = approx. U _v / LOW ≤ 2 V
Switching mode	Light/dark switching
Output current I _{max}	100 mA
Protection class	III ²⁾
Circuit protection	Output Q short-circuit protected

¹⁾ Without load.
²⁾ Reference voltage DC 50 V.

	Interference pulse suppression
Connection type	Male connector M8, 4-pin

¹⁾ Without load.

²⁾ Reference voltage DC 50 V.

MECHANICS

Housing material	Aluminum
Weight	Approx. 36 g ... 160 g ¹⁾

¹⁾ Depending on fork width.

AMBIENT DATA

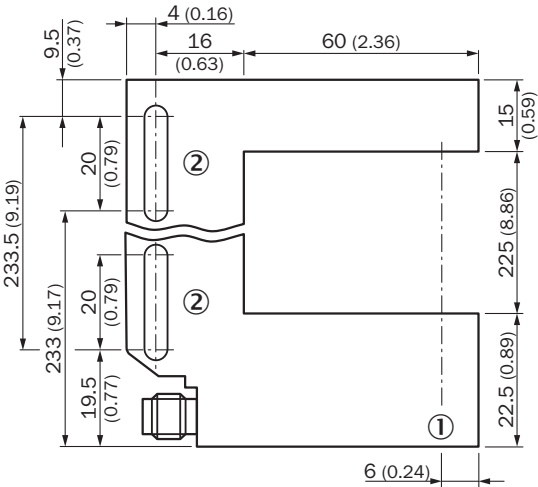
Ambient operating temperature	-20 °C ... +60 °C ¹⁾
Ambient temperature, storage	-20 °C ... +80 °C
Ambient light immunity	≤ 10,000 lx
Shock load	According to EN 60068-2-27
Enclosure rating	IP65
UL File No.	NRKH.E191603

¹⁾ Do not bend below 0 °C.

CERTIFICATES

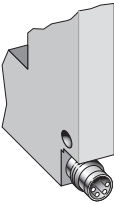
EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
China Compulsory Product Certification (CCC) exempt	✓
cULus certificate	✓
Photobiological safety (IEC EN 62471)	✓

DIMENSIONAL DRAWING

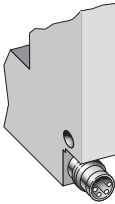
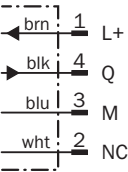


Dimensions in mm (inch)
① Optical axis
② Mounting hole, Ø 4.2 mm

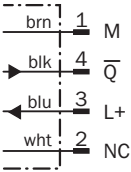
CONNECTION TYPE AND DIAGRAM



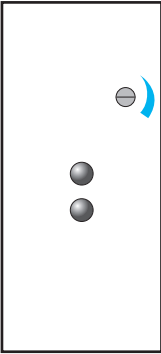
Light switching



Dark switching



ADJUSTMENTS



Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at www.sick.com/6022139



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SICK AT A GLANCE

SICK is a leading global technology company for intelligent sensors and integrated solutions in industrial automation. Our technologies set benchmarks, making your industrial processes more efficient, safer and more sustainable – both in logistics and manufacturing operations.

SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

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