

WFM30-40N111S02

WFM

FORK SENSORS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

Type	part no.
WFM30-40N111S02	6051399

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

Detailed technical data

Features

Functional principle	Optical detection principle
Dimensions (W x H x D)	10 mm x 50 mm x 59.5 mm
Fork width	30 mm
Fork depth	42 mm
Light source	LED, visible red light
Minimum detectable object (MDO)	0.8 mm
Adjustment	None

Electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	< 10 %
Current consumption	< 20 mA ¹⁾
Initialization time	140 ms
Switching frequency	4 kHz
Response time	≤ 125 μs
Stability of response time	± 15 μs
Switching output	NPN
Switching output (voltage)	PNP: HIGH = $V_S - \leq 1.5 \text{ V}$ / LOW = 0 V NPN: HIGH = approx. V_S / LOW ≤ 1.5 V
Switching mode	Light switching
Output current $I_{max.}$	100 mA

¹⁾ Without load.

²⁾ Reference voltage DC 50 V.

Protection class	III ²⁾
Circuit protection	U _V connections, reverse polarity protected Output Q short-circuit protected Interference pulse suppression
Connection type	Cable, 3-wire, 3 m

¹⁾ Without load.

²⁾ Reference voltage DC 50 V.

Mechanics

Housing material	Aluminum
Weight	Approx. 80 g ... 190 g ¹⁾

¹⁾ Depending on fork width.

Ambient data

Ambient operating temperature	-10 °C ... +60 °C ¹⁾
Ambient temperature, storage	-40 °C ... +80 °C
Ambient light immunity	≤ 10,000 lx
Shock load	According to EN 60068-2-27
Enclosure rating	IP67
UL File No.	NRKH.E191603 & NRKH7.E191603

¹⁾ Do not bend below 0 °C.

Classifications

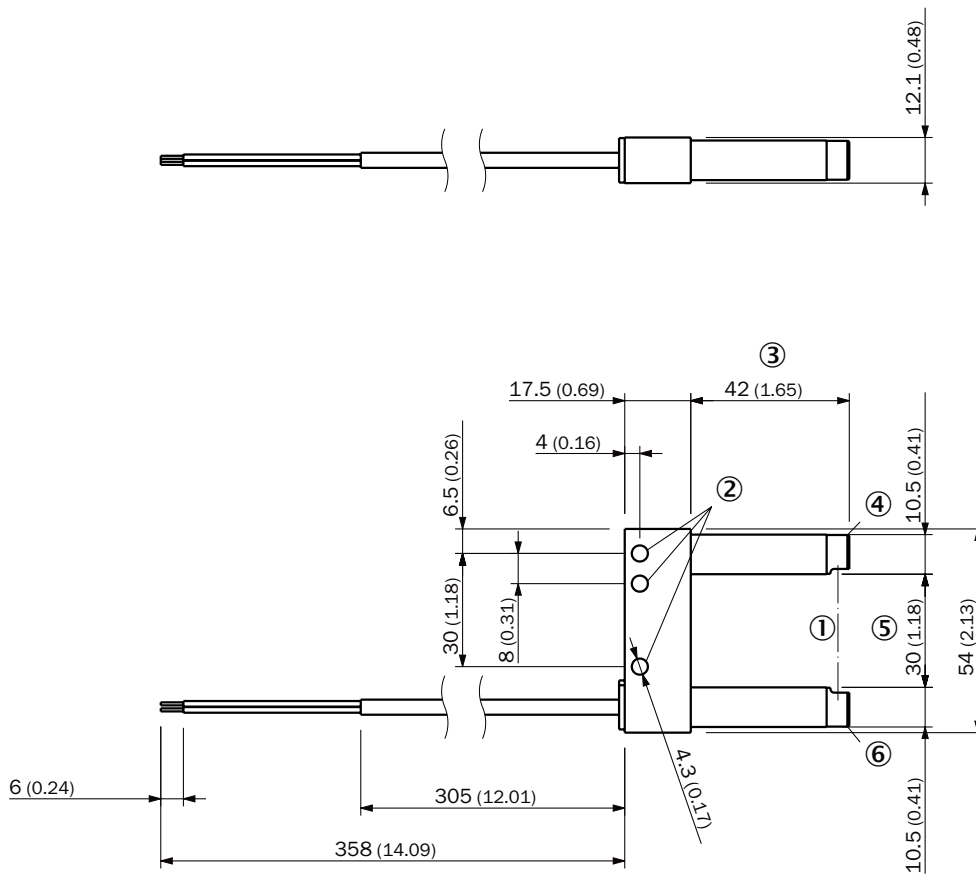
ECLASS 5.0	27270909
ECLASS 5.1.4	27270909
ECLASS 6.0	27270909
ECLASS 6.2	27270909
ECLASS 7.0	27270909
ECLASS 8.0	27270909
ECLASS 8.1	27270909
ECLASS 9.0	27270909
ECLASS 10.0	27270909
ECLASS 11.0	27270909
ECLASS 12.0	27270909
ETIM 5.0	EC002720
ETIM 6.0	EC002720
ETIM 7.0	EC002720
ETIM 8.0	EC002720
UNSPSC 16.0901	39121528

Certificates

EU declaration of conformity	✓
UK declaration of conformity	✓

ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
cULus certificate	✓

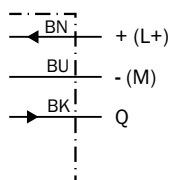
Dimensional drawing



Dimensions in mm (inch)

- ① Optical axis
- ② Mounting hole, \varnothing 4.3 mm
- ③ Fork depth
- ④ Transmitted light (red)
- ⑤ Fork width
- ⑥ Function signal indicator (yellow), switching output

Connection diagram Cd-044



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