



WFM30-40P321

WFM

FORK SENSORS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

Type	Part no.
WFM30-40P321	6037819

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
Minimum detectable object (MDO)	0.8 mm
Adjustment	None

Mechanics/electronics

Current consumption	< 20 mA ¹⁾
Stability of response time	± 15 µs
Switching output	PNP
Switching output (voltage)	PNP: HIGH = V _S - ≤ 1.5 V / LOW = 0 V NPN: HIGH = approx. V _S / LOW ≤ 1.5 V
Switching mode	Dark switching
Output current I _{max.}	100 mA
Initialization time	140 ms
Connection type	Connector M8, 3-pin
Circuit protection	U _V connections, reverse polarity protected Output Q short-circuit protected Interference pulse suppression
Weight	Approx. 80 g ... 190 g ²⁾
Housing material	Aluminum

¹⁾ Without load.

²⁾ Depending on fork width.

Safety-related parameters

MTTF _D	131 years
DC _{avg}	0 %

Ambient data

Shock load	According to EN 60068-2-27
UL File No.	NRKH.E191603 & NRKH7.E191603

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

The technical drawing illustrates a shaft-hub assembly in two views:

- Top View (Front View):** Shows the shaft of length b inserted into a hub of total width a . The shaft has a diameter of $\varnothing 10$ (tolerance 0.39). The hub features a central bore with a diameter of $\varnothing 8$ (tolerance 0.32) and a keyway at each end with a width of 4 (tolerance 0.16). The distance between the inner faces of the keyways is 13.5 (tolerance 0.53).
- Bottom View (Side View):** Shows the axial alignment of the components. The total length of the assembly is A . The shaft extends beyond the hub by distances $C1$, $C2$, and $C3$. The hub's outer diameter is $\varnothing 12.1$ (tolerance 0.48). The shaft has a shoulder with a height of 10.5 (tolerance 0.41) on both ends. A dimension of 3 (tolerance 0.12) indicates the offset from the end face to the start of the shaft's main section.




Callouts ① through ⑤ identify specific features: ① points to the shaft, ② points to the keyways, ③ points to the hub bore, ④ points to the shaft shoulder, and ⑤ points to the shaft end face.

- Dimensions in mm (inch)**

Connection diagram

Recommended accessories

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

	Brief description	Type	Part no.
Others			
	<ul style="list-style-type: none">• Connection type head A: Female connector, M8, 3-pin, straight• Description: Unshielded• Connection systems: Screw-type terminals• Permitted cross-section: 0.14 mm² ... 0.5 mm²	DOS-0803-G	7902077
	<ul style="list-style-type: none">• Connection type head A: Male connector, M8, 3-pin, straight• Description: Unshielded• Connection systems: Screw-type terminals• Permitted cross-section: 0.14 mm² ... 0.5 mm²	STE-0803-G	6037322
	<ul style="list-style-type: none">• Connection type head A: Female connector, M8, 3-pin, straight, A-coded• Connection type head B: Flying leads• Signal type: Sensor/actuator cable• Cable: 5 m, 3-wire, PVC• Description: Sensor/actuator cable, unshielded• Application: Zones with chemicals	YF8U13-050VA1XLEAX	2095884

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:

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