



DATA SHEET

MZT1-03VPS-KQ0

MZT1
Cylinder sensors

SICK

Sensor Intelligence



CYLINDER SENSORS

MZT1-03VPS-KQ0

ORDERING INFORMATION

Type	part no.
MZT1-03VPS-KQ0	1022188

Further device versions and accessories at www.sick.com/MZT1

DETAILED TECHNICAL DATA

FEATURES

Cylinder type	T-slot
Cylinder types with adapter	Profile cylinder Tie rod cylinder Dovetail groove cylinder Round body cylinder SMC rail CDQ2 SMC rail ECDQ2
Housing length	30.5 mm
Switching output	PNP
Switching output detail	PNP
Switching frequency	5,000 Hz
Output function	NO
Electrical wiring	DC 3-wire
Enclosure rating	IP67 ¹⁾

¹⁾ According to EN 60529.

MECHANICS/ELECTRONICS

Supply voltage	10 V DC ... 30 V DC
Power consumption	10 mA, without load
Voltage drop	≤ 2 V ¹⁾
Continuous current I _a	≤ 100 mA
Protection class	III
Response sensitivity, typ.	≤ 2.8 mT
Overrun distance, typ.	9 mm
Hysteresis, typ.	≤ 0.5 mT

¹⁾ At I_a max.

²⁾ Supply voltage U_s and constant ambient temperature T_a.

Reproducibility	$\leq 0.1 \text{ mT}^{2)}$	
Reverse polarity protection	Yes	
Short-circuit protection	Yes	
Status indicator LED	Yes	
Power-up pulse protection	Yes	
Ambient operating temperature	$-25^{\circ}\text{C} \dots +75^{\circ}\text{C}$	
Shock and vibration resistance	30 g, 11 ms / 10 ... 55 Hz, 1 mm	
EMC	According to EN 60947-5-2	
Connection type	Cable with connector M12, 3-pin, 0.3 m	
Connection type Detail		
	Conductor cross section	0.14 mm ²
Material		
	Housing	Plastic
	Cable	PUR
UL File No.	NRKH.E181493	

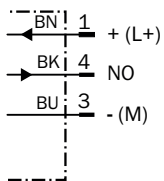
¹⁾ At I_a max.

²⁾ Supply voltage U_s and constant ambient temperature T_a .

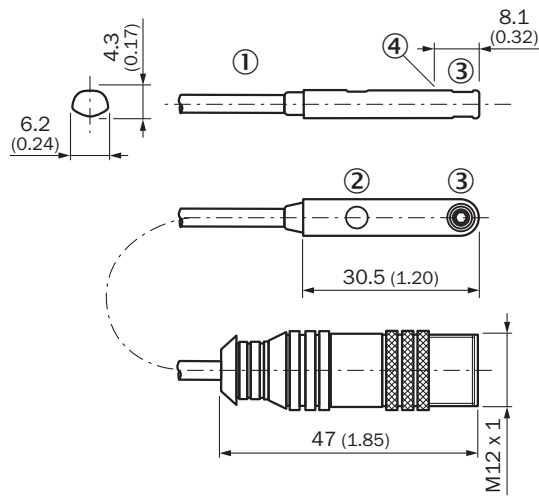
CONNECTION TYPE



CONNECTION DIAGRAM CD-002



DIMENSIONAL DRAWING CABLE WITH M12 MALE CONNECTOR



Dimensions in mm (inch)

- ① Connection
- ② Display LED
- ③ Fixing screw
- ④ Position sensor element

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/1022188



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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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