



MZR1-03VPS-AT0

MZR1

CYLINDER SENSORS

SICK
Sensor Intelligence.



Ordering information

Type	part no.
MZR1-03VPS-ATO	7900594

Other models and accessories → www.sick.com/MZR1



Detailed technical data

Features

Cylinder types with adapter	Round body cylinder
Housing length	37 mm
Switching output	PNP
Switching frequency	5,000 Hz
Output function	NO
Electrical wiring	DC 3-wire
Enclosure rating	IP67 ¹⁾
Sensing face	Front

¹⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Power consumption	10 mA, without load
Voltage drop	≤ 2.2 V ¹⁾
Continuous current I_a	≤ 200 mA
Time delay before availability	≤ 30 ms
Response sensitivity, typ.	≤ 3 mT
Reproducibility	≤ 0.1 mm ²⁾
Reverse polarity protection	Yes
Short-circuit protection	Yes
Status indicator LED	Yes
Teach-in	No

¹⁾ At I_a max.

²⁾ Supply voltage U_B and constant ambient temperature T_a.

Power-up pulse protection	Yes
Ambient operating temperature	-25 °C ... +75 °C
Shock and vibration resistance	30 g, 11 ms / 10 ... 55 Hz, 1 mm
EMC	According to EN 60947-5-2
Connection type	Connector M8, 3-pin
Material	
Housing	Metal, Aluminum
Sensing face	Plastic, plastic

1) At I_a max.

2) Supply voltage U_B and constant ambient temperature T_a .

Safety-related parameters

MTTF_D	1,891 years
DC_{avg}	0 %
T_M (mission time)	20 years

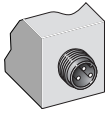
Certificates

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China-RoHS	✓

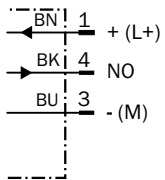
Classifications

ECLASS 5.0	27270104
ECLASS 5.1.4	27270104
ECLASS 6.0	27270104
ECLASS 6.2	27270104
ECLASS 7.0	27270104
ECLASS 8.0	27270104
ECLASS 8.1	27270104
ECLASS 9.0	27270104
ECLASS 10.0	27270104
ECLASS 11.0	27270104
ECLASS 12.0	27274301
ETIM 5.0	EC002544
ETIM 6.0	EC002544
ETIM 7.0	EC002544
ETIM 8.0	EC002544
UNSPSC 16.0901	39122230

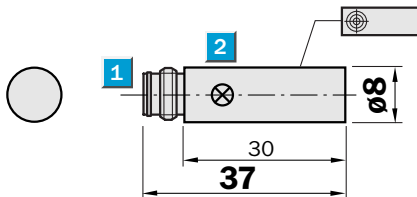
Connection type



Connection diagram Cd-002



Dimensional drawing



Dimensions in mm (inch)

- ① Connection
- ② Display LED

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