



# MZR1-03VPS-AT0

MZR1

**ROUND BODY CYLINDER**

**SICK**  
Sensor Intelligence.



### Ordering information

Type	Part no.
MZR1-03VPS-ATO	7900594

Other models and accessories → [www.sick.com/MZR1](http://www.sick.com/MZR1)



### Detailed technical data

#### Features

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

<sup>1)</sup> According to EN 60529.

#### Mechanics/electronics

<b>Supply voltage</b>	10 V DC ... 30 V DC
<b>Power consumption</b>	10 mA, without load
<b>Voltage drop</b>	≤ 2.2 V <sup>1)</sup>
<b>Continuous current I<sub>a</sub></b>	≤ 200 mA
<b>Time delay before availability</b>	≤ 30 ms
<b>Response sensitivity, typ.</b>	≤ 3 mT
<b>Reproducibility</b>	≤ 0.1 mm <sup>2)</sup>
<b>Reverse polarity protection</b>	Yes
<b>Short-circuit protection</b>	Yes
<b>Status indicator LED</b>	Yes
<b>Power-up pulse protection</b>	Yes
<b>Ambient operating temperature</b>	-25 °C ... +75 °C
<b>Shock and vibration resistance</b>	30 g, 11 ms / 10 ... 55 Hz, 1 mm

<sup>1)</sup> At I<sub>a</sub> max.

<sup>2)</sup> Supply voltage U<sub>B</sub> and constant ambient temperature T<sub>a</sub>.

<b>EMC</b>	According to EN 60947-5-2	
<b>Connection type</b>	Connector M8, 3-pin	
<b>Material</b>	Housing	Metal, Aluminum
	Sensing face	Plastic, plastic

1) At  $I_a$  max.

2) Supply voltage  $U_B$  and constant ambient temperature  $T_a$ .

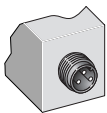
### Safety-related parameters

<b>MTTF<sub>D</sub></b>	1,891 years
<b>DC<sub>avg</sub></b>	0 %
<b>T<sub>M</sub> (mission time)</b>	20 years

### Classifications

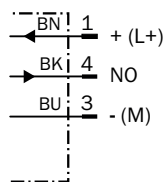
<b>ECLASS 5.0</b>	27270104
<b>ECLASS 5.1.4</b>	27270104
<b>ECLASS 6.0</b>	27270104
<b>ECLASS 6.2</b>	27270104
<b>ECLASS 7.0</b>	27270104
<b>ECLASS 8.0</b>	27270104
<b>ECLASS 8.1</b>	27270104
<b>ECLASS 9.0</b>	27270104
<b>ECLASS 10.0</b>	27270104
<b>ECLASS 11.0</b>	27270104
<b>ECLASS 12.0</b>	27274301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

### Connection type

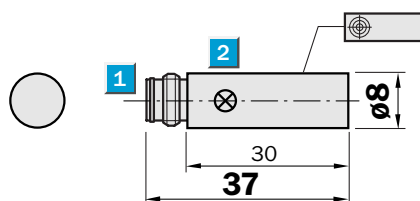


### Connection diagram

Cd-002



### Dimensional drawing (Dimensions in mm (inch))



## 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](http://www.sick.com)