



# MZC2-1V7PS-SQD

MZC2

SENSORS FOR C-SLOT CYLINDERS

**SICK**  
Sensor Intelligence.



## Ordering information

Type	Part no.
MZC2-1V7PS-SQD	1111053

Other models and accessories → [www.sick.com/MZC2](http://www.sick.com/MZC2)



## Detailed technical data

### Features

<b>Cylinder type</b>	C-slot
<b>Preferred manufacturer slot</b>	SMC, Schunk, PHD, Bimba
<b>Cylinder types with adapter</b>	SMC rail ECDQ2 SMC rail CDQ2
<b>Housing length</b>	19.5 mm
<b>Switching output</b>	PNP
<b>Switching frequency</b>	1,000 Hz
<b>Output function</b>	NO
<b>Electrical wiring</b>	DC 3-wire
<b>Enclosure rating</b>	IP67
<b>Special features</b>	Completely embedded mounting in the slot, providing protection

### Mechanics/electronics

<b>Supply voltage</b>	10 V DC ... 30 V DC
<b>Power consumption</b>	8 mA, without load
<b>Voltage drop</b>	≤ 2.5 V
<b>Continuous current I<sub>a</sub></b>	≤ 100 mA
<b>Protection class</b>	III
<b>Response sensitivity, typ.</b>	≤ 1.7 mT
<b>Overrun distance, typ.</b>	2 mm
<b>Hysteresis, typ.</b>	≤ 0.4 mT
<b>Reproducibility</b>	≤ 0.1 mT <sup>1)</sup>
<b>Reverse polarity protection</b>	Yes
<b>Short-circuit protection</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> U<sub>b</sub> and T<sub>a</sub> constant.

<b>EMC</b>	According to EN 60947-5-2	
<b>Connection type</b>	Cable with connector M12, 3-pin, with knurled nuts, drag chain use, 0.5 m	
<b>Connection type Detail</b>		
	Conductor cross section	0.09 mm <sup>2</sup>
	Cable diameter	Ø 1.9 mm
	Bending radius	With fixed installation = 12 x cable diameter For flexible use = 15 x cable diameter
	Cable outlet	Axial
<b>Material</b>		
	Housing	Plastic
	Cable	PUR
<b>UL File No.</b>	E181493	

<sup>1)</sup> Ub and Ta constant.

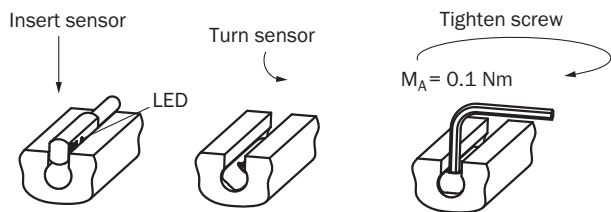
### Safety-related parameters

<b>MTTF<sub>D</sub></b>	1,469 years
<b>DC<sub>avg</sub></b>	0 %
<b>T<sub>M</sub> (mission time)</b>	20 years

### Classifications

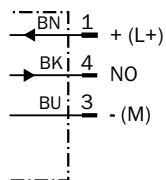
<b>eCl@ss 5.0</b>	27270104
<b>eCl@ss 5.1.4</b>	27270104
<b>eCl@ss 6.0</b>	27270104
<b>eCl@ss 6.2</b>	27270104
<b>eCl@ss 7.0</b>	27270104
<b>eCl@ss 8.0</b>	27270104
<b>eCl@ss 8.1</b>	27270104
<b>eCl@ss 9.0</b>	27270104
<b>eCl@ss 10.0</b>	27270104
<b>eCl@ss 11.0</b>	27270104
<b>eCl@ss 12.0</b>	27274301
<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

## Installation note



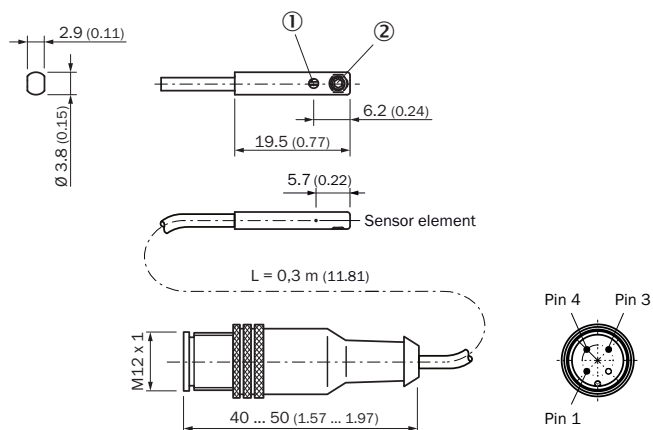
## Connection diagram

Cd-002



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




Cable with connector M12, with knurled nuts



- ① LED indicator yellow
- ② Threaded pins M2,5 x 2

## Recommended accessories

Other models and accessories → [www.sick.com/MZC2](http://www.sick.com/MZC2)

	Brief description	Type	Part no.
<b>Brackets for cylinder sensors</b>			
	1 piece, Mounting bracket on round body cylinder with piston diameter of 12 mm, ambient temperature min 0 °C max 50 °C, plastic, Aluminum	BEF-KHZ-RC-12	2077673
	1 piece, Mounting bracket on round body cylinder with piston diameter of 16 mm, ambient temperature min 0 °C max 50 °C, plastic, Aluminum	BEF-KHZ-RC-16	2077672
	1 piece, Mounting bracket on round body cylinder with piston diameter of 20 mm, ambient temperature min 0 °C max 50 °C, plastic, Aluminum	BEF-KHZ-RC-20	2077671
	1 piece, Mounting bracket on round body cylinder with piston diameter of 25 mm, ambient temperature min 0 °C max 50 °C, plastic, Aluminum	BEF-KHZ-RC-25	2077670
	1 piece, Mounting bracket on round body cylinder with piston diameter of 32 mm, ambient temperature min 0 °C max 50 °C, plastic, Aluminum	BEF-KHZ-RC-32	2077669
	1 piece, Mounting bracket on round body cylinder with piston diameter of 40 mm, ambient temperature min 0 °C max 50 °C, plastic, Aluminum	BEF-KHZ-RC-40	2077668
	1 piece, Mounting bracket on round body cylinder with piston diameter of 50 mm, ambient temperature min 0 °C max 50 °C, plastic, Aluminum	BEF-KHZ-RC-50	2077667
	1 piece, Mounting bracket on round body cylinder with piston diameter of 63 mm, ambient temperature min 0 °C max 50 °C, plastic, Aluminum	BEF-KHZ-RC-63	2077666
	1 piece, Mounting bracket on round body cylinder with piston diameter of 1 mm ... 130 mm, ambient temperature min -30 °C max 80 °C, stainless steel, Aluminum	BEF-KHZ-RC1-130	2077686
	1 piece, Mounting bracket on round body cylinder with piston diameter of 1 mm ... 25 mm, ambient temperature min -30 °C max 80 °C, stainless steel, Aluminum	BEF-KHZ-RC1-25	2077685
<b>Plug connectors and cables</b>			
	Head A: female connector, M12, 3-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 2 m	YF2A13-020UB1XLEAX	2095604
	Head A: female connector, M12, 3-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 2 m	YG2A13-020UB1XLEAX	2095752

## 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)