



# MZ2Q-CFSPSKPOS04

MZ2Q-C

SENSORS FOR C-SLOT CYLINDERS

**SICK**  
Sensor Intelligence.



### Ordering information

Type	Part no.
MZ2Q-CFSPSKPOS04	1051025

Other models and accessories → [www.sick.com/MZ2Q-C](http://www.sick.com/MZ2Q-C)



### Detailed technical data

#### Features

<b>Cylinder type</b>	C-slot
<b>Preferred manufacturer slot</b>	Festo
<b>Detection zone</b>	0 mm ... 50 mm
<b>Housing length</b>	19.5 mm
<b>Switching output</b>	2 x PNP
<b>Output function</b>	NO
<b>Electrical wiring</b>	DC 4-wire
<b>Enclosure rating</b>	IP67 <sup>1)</sup>
<b>Adjustment</b>	
Teach-in control panel	Teaching in switching points 1 and 2
<b>Special features</b>	Special hysteresis

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

#### Mechanics/electronics

<b>Detection zone</b>	0 mm ... 50 mm
<b>Supply voltage</b>	12 V DC ... 30 V DC
<b>Power consumption</b>	Typ. 20 mA, without load
<b>Voltage drop</b>	≤ 2.2 V
<b>Continuous current I<sub>a</sub></b>	≤ 100 mA
<b>Protection class</b>	III
<b>Hysteresis, typ.</b>	1 mT
<b>Reproducibility</b>	≤ 0.1 mT <sup>1)</sup>
<b>Reverse polarity protection</b>	Yes
<b>Short-circuit protection</b>	Yes

<sup>1)</sup> U<sub>b</sub> and T<sub>a</sub> constant.

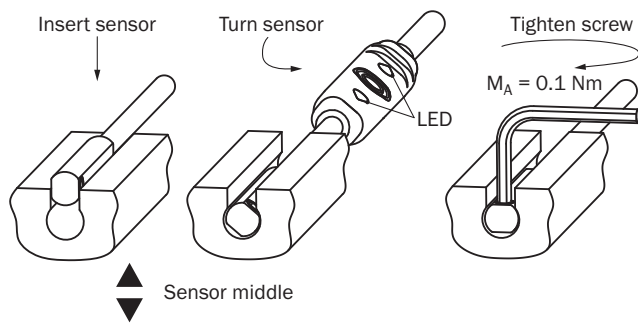
<b>Teach-in</b>	Yes
<b>Power-up pulse protection</b>	Yes
<b>Ambient operating temperature</b>	+10 °C ... +35 °C
<b>Shock and vibration resistance</b>	30 g, 11 ms / 10 ... 55 Hz, 1 mm
<b>EMC</b>	According to EN 60947-5-2
<b>Connection type</b>	Cable with M8 male connector, 4-pin, 0.3 m
<b>Connection type Detail</b>	
Cable diameter	Ø 2.6 mm
Bending radius	With fixed installation > 5 x cable diameter For flexible use > 10 x cable diameter
Cable outlet	Axial
<b>Material</b>	
Housing	Plastic
Cable	PUR
<b>UL File No.</b>	NRKH.E181493 & NRKH7.E181493

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

## 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

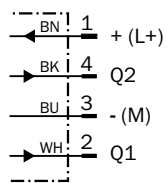


### Connection type



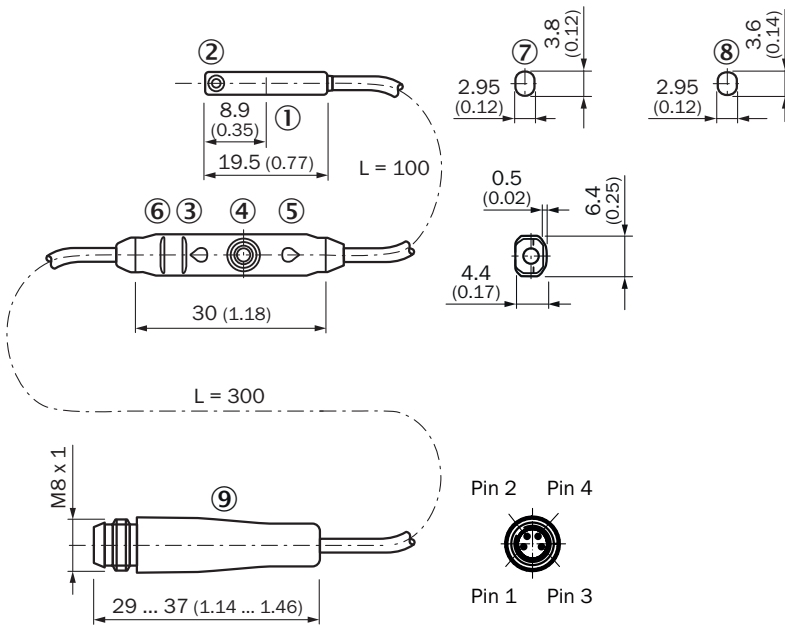
### Connection diagram

Cd-032



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


Cable with connector M8









- ① Center of sensor element
- ② Fixing screw SW 1.3
- ③ Display LED
- ④ Teach-in button
- ⑤ Display LED
- ⑥ Ribbing for cable ties
- ⑦ For SMC/ Bimba cylinder (MZ2Q-CSxxxx)
- ⑧ For festo cylinder (MZ2Q-CFxxxx)
- ⑨ Connection

**Recommended accessories**

Other models and accessories → [www.sick.com/MZ2Q-C](http://www.sick.com/MZ2Q-C)

	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

	Brief description	Type	Part no.
	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, M8, 4-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 2 m	YF8U14-020VA3XLEAX	2095888
	Head A: female connector, M8, 4-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m	YF8U14-050VA3XLEAX	2095889
	Head A: female connector, M8, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 2 m	YG8U14-020VA3XLEAX	2095962
	Head A: female connector, M8, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m	YG8U14-050VA3XLEAX	2095963
	Head A: female connector, M8, 4-pin, straight Cable: unshielded	DOS-0804-G	6009974
	Head A: female connector, M8, 4-pin, angled Cable: unshielded	DOS-0804-W	6009975
	Head A: male connector, M8, 4-pin, straight Cable: unshielded	STE-0804-G	6037323

## 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)