



MZ2Q-CFSPSKQ0

MZ2Q-C

SENSORS FOR C-SLOT CYLINDERS

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
MZ2Q-CFSPKQ0	1042244

Other models and accessories → www.sick.com/MZ2Q-C



Detailed technical data

Features

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

¹⁾ According to EN 60529.

Mechanics/electronics

Detection zone	0 mm ... 50 mm
Supply voltage	12 V DC ... 30 V DC
Power consumption	15 mA ¹⁾
Voltage drop	≤ 2.2 V
Continuous current I_a	≤ 100 mA
Protection class	III
For Festo cylinders	✓
Hysteresis, typ.	1 mT
Reproducibility	≤ 0.1 mT ²⁾

¹⁾ Without load.

²⁾ U_b and T_a constant.

Reverse polarity protection	✓
Short-circuit protection	✓
Power-up pulse protection	✓
Ambient operating temperature	-20 °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	Cable with M12 male connector, 4-pin, 0.3 m
Connection type Detail	
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
Material	
Housing	Plastic
Cable	PUR
UL File No.	NRKH.E181493 & NRKH7.E181493

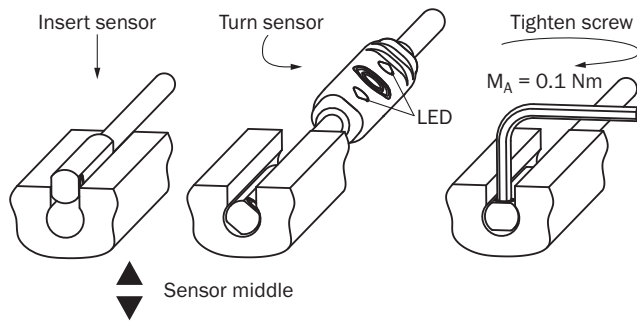
¹⁾ Without load.

²⁾ U_b and T_a constant.

Classifications

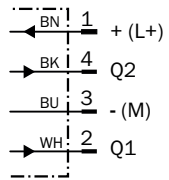
ECl@ss 5.0	27270104
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ECl@ss 6.2	27270104
ECl@ss 7.0	27270104
ECl@ss 8.0	27270104
ECl@ss 8.1	27270104
ECl@ss 9.0	27270104
ECl@ss 10.0	27270104
ECl@ss 11.0	27270104
ETIM 5.0	EC002544
ETIM 6.0	EC002544
ETIM 7.0	EC002544
UNSPSC 16.0901	39122230

Installation note



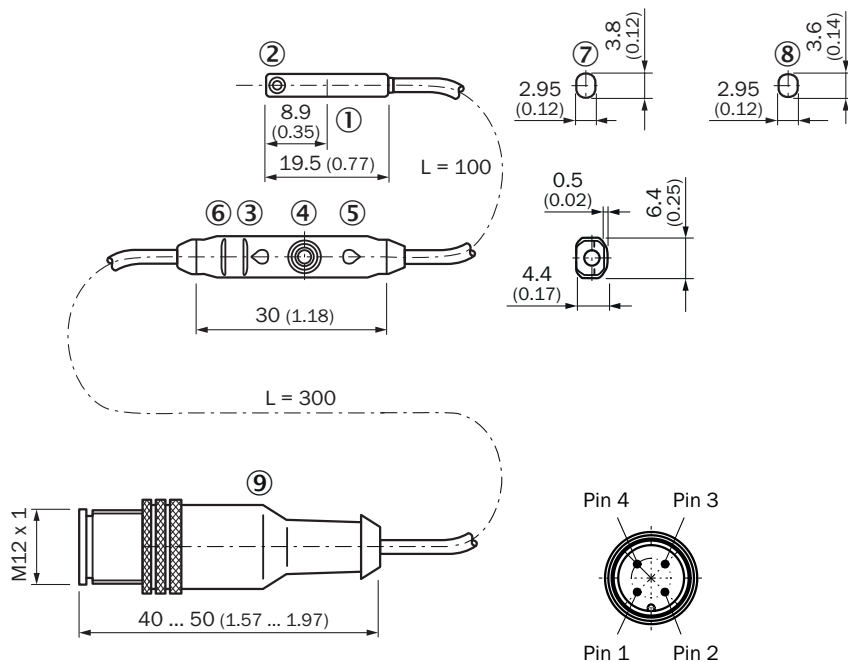
Connection diagram

Cd-032



Dimensional drawing (Dimensions in mm (inch))


Cable with M12 male connector











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

Recommended accessories

Other models and accessories → www.sick.com/MZ2Q-C

	Brief description	Type	Part no.
Brackets for cylinder sensors			
	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

	Brief description	Type	Part no.
	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
Plug connectors and cables			
	Head A: female connector, M12, 4-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 2 m	YF2A14-020VB3XLEAX	2096234
	Head A: female connector, M12, 4-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m	YF2A14-050VB3XLEAX	2096235
	Head A: female connector, M12, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 2 m	YG2A14-020VB3XLEAX	2095895
	Head A: female connector, M12, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m	YG2A14-050VB3XLEAX	2095897
	Head A: female connector, M12, 4-pin, angled with LED, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 2 m Only suitable for PNP sensors	YI2A14-020VB3XLEAX	2096222
	Head A: female connector, M12, 4-pin, angled with LED, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m Only suitable for PNP sensors	YI2A14-050VB3XLEAX	2096223
	Head A: female connector, M12, 4-pin, straight Head B: - Cable: unshielded	DOS-1204-G	6007302
	Head A: female connector, M12, 4-pin, angled Head B: - Cable: unshielded	DOS-1204-W	6007303
	Head A: male connector, M12, 4-pin, straight Head B: - Cable: unshielded	STE-1204-G	6009932
	Head A: male connector, M12, 4-pin, angled Head B: - Cable: unshielded	STE-1204-W	6022084

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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.”

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