MZ2Q-CSSPSKP0

MZ2Q-C

SENSORS FOR C-SLOT CYLINDERS

SICK
Sensor Intelligence.

MZ2Q-CSSPSKP0 | MZ2Q-C
SENSORS FOR C-SLOT CYLINDERS

Ordering information

Type	Part no.
MZ2Q-CSSPSKP0	1042238

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

Detailed technical data

Features

Cylinder type	C-slot
Preferred manufacturer slot	SMC Bimba Schunk
Detection zone	0 mm ... 50 mm
Cylinder types with adapter	SMC rail ECDQ2 SMC rail CDQ2
Housing length	19.5 mm
Switching output	2 x PNP
Output function	NO
Electrical wiring	DC 4-wire
Enclosure rating	IP67 [1]
Adjustment	
Teach-in control panel	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	Typ. 20 mA, without load
Voltage drop	≤ 2.2 V
Continuous current I_a	≤ 100 mA
Protection class	III
Hysteresis, typ.	1 mT
Reproducibility	≤ 0.1 mT [1]

[1] Supply voltage U_B and constant ambient temperature Ta.

Reverse polarity protection	Yes
Short-circuit protection	Yes
Status indicator LED	Yes
Teach-in	Yes
Power-up pulse protection	Yes
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 M8 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

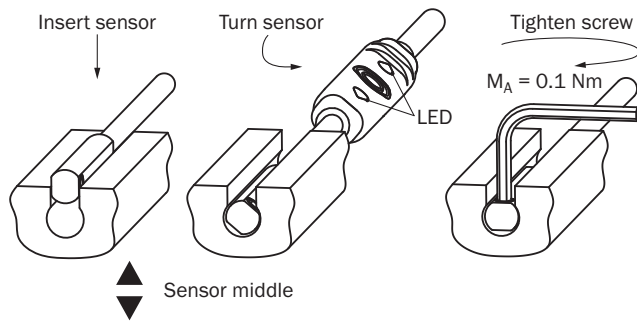[1] Supply voltage U_B and constant ambient temperature Ta.

Safety-related parameters

$MTTF_D$	799 years
DC_{avg}	0%
T_M (mission time)	20 years

Classifications

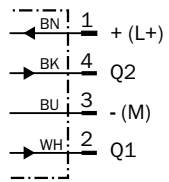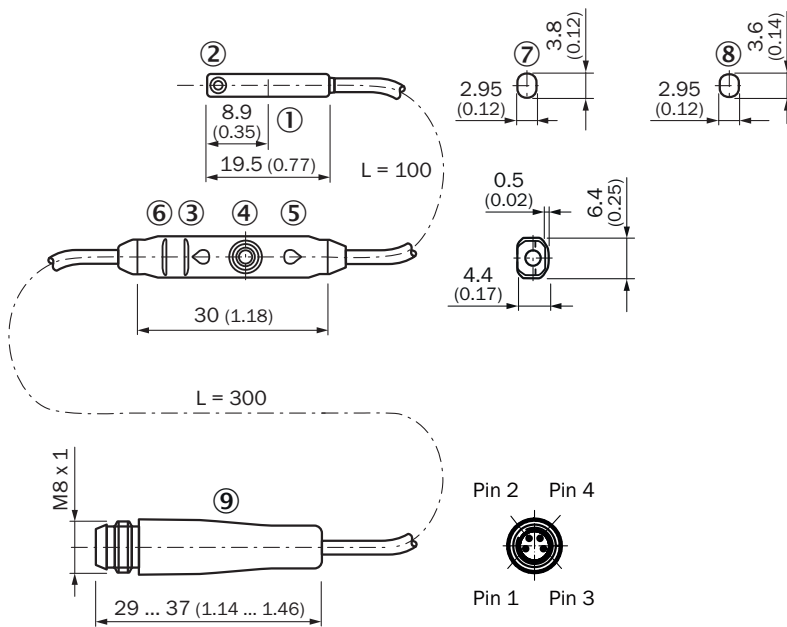|	
ECLASS 5.0	27270104
ECLASS 5.1.4	27270104
ECLASS 6.0	27270104
ECLASS 6.2	27270104
ECLASS 7.0	27270104
ECLASS 8.0	27270104
ECLASS 8.1	27270104
ECLASS 9.0	27270104
ECLASS 10.0	27270104
ECLASS 11.0	27270104
ECLASS 12.0	27274301
ETIM 5.0	EC002544
ETIM 6.0	EC002544
ETIM 7.0	EC002544
ETIM 8.0	EC002544
UNSPSC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

Installation note

Insert sensor — Turn sensor — LED — Tighten screw — $M_A = 0.1$ Nm

Sensor middle

Connection type

Connection diagram

Cd-032

BN	1	+ (L+)
BK	4	Q2
BU	3	- (M)
WH	2	Q1

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

	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
	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
Plug connectors and cables			
	• **Connection type head A:** Female connector, M8, 4-pin, straight, A-coded • **Connection type head B:** Flying leads • **Signal type:** Sensor/actuator cable • **Cable:** 2 m, 4-wire, PVC • **Description:** Sensor/actuator cable, unshielded • **Application:** Zones with chemicals	YF8U14-020VA3XLEAX	2095888
	• **Connection type head A:** Female connector, M8, 4-pin, straight, A-coded • **Connection type head B:** Flying leads • **Signal type:** Sensor/actuator cable • **Cable:** 5 m, 4-wire, PVC • **Description:** Sensor/actuator cable, unshielded • **Application:** Zones with chemicals	YF8U14-050VA3XLEAX	2095889
	• **Connection type head A:** Female connector, M8, 4-pin, angled, A-coded • **Connection type head B:** Flying leads • **Signal type:** Sensor/actuator cable • **Cable:** 2 m, 4-wire, PVC • **Description:** Sensor/actuator cable, unshielded • **Application:** Zones with chemicals	YG8U14-020VA3XLEAX	2095962
	• **Connection type head A:** Female connector, M8, 4-pin, angled, A-coded • **Connection type head B:** Flying leads • **Signal type:** Sensor/actuator cable • **Cable:** 5 m, 4-wire, PVC • **Description:** Sensor/actuator cable, unshielded • **Application:** Zones with chemicals	YG8U14-050VA3XLEAX	2095963
	• **Connection type head A:** Female connector, M8, 4-pin, straight • **Description:** Unshielded • **Connection systems:** Screw-type terminals • **Permitted cross-section:** 0.14 mm² … 0.5 mm²	DOS-0804-G	6009974
	• **Connection type head A:** Female connector, M8, 4-pin, angled • **Description:** Unshielded • **Connection systems:** Solder connection • **Permitted cross-section:** ≤ 0.25 mm²	DOS-0804-W	6009975
	• **Connection type head A:** Male connector, M8, 4-pin, straight • **Description:** Unshielded • **Connection systems:** Screw-type terminals • **Permitted cross-section:** 0.14 mm² … 0.5 mm²	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**

SICK
Sensor Intelligence.