



## Magnetic Cylinder Sensors Sensors for C-slot cylinders

MZC1-6V0P0-KRDS05



**Model Name** > [MZC1-6V0PO-KRDS05](#)  
**Part No.** > [1068618](#)



#### At a glance

- Fits into all commonly used cylinders, linear slides and grippers with C-slots, such as, Festo or SMC
- Complete range with PNP / NPN, PUR and PVC cable , M8 and M12 connector
- Combined Allen and flathead installation screw
- Very short sensor housing, making it easier to install on short stroke cylinders
- LED function indicator
- IP 67 / IP 68 / IP 69K enclosure rating (depending on type)

#### Your benefits

- Reduced maintenance cost as the sensor keeps its position under shock and vibration and does not move out
- Increased machine throughput thanks to SICK' s proprietary GMR technology (giant magneto resistive) as well as the SICK-ASIC (application specific integrated circuit) that ensure precise one-time switching while eliminating false signals
- Flexible installation via Allen wrench or flathead screwdriver
- Time saving single-hand mounting with ¼-turn installation.
- Convenient installation and sensor replacement due to drop-in installation - installer does not need to disassemble the cylinder from the machine for sensor replacement.
- Extremely rugged VISTAL-housing - rated for IP67 respectively IP 68 and IP 69K, enlarging sensor life time



#### Features

Switching frequency typ.:	1,000 Hz
Output type:	PNP
Output function:	NC
Electrical wiring:	DC 3-wire
Cylinder type:	C-slot
Cylinder types with adapter:	SMC rail cylinder CDQ2 SMC rail cylinder ECDQ2
Housing length:	23.7 mm
Special features:	20 ms pulse stretching (off delay)

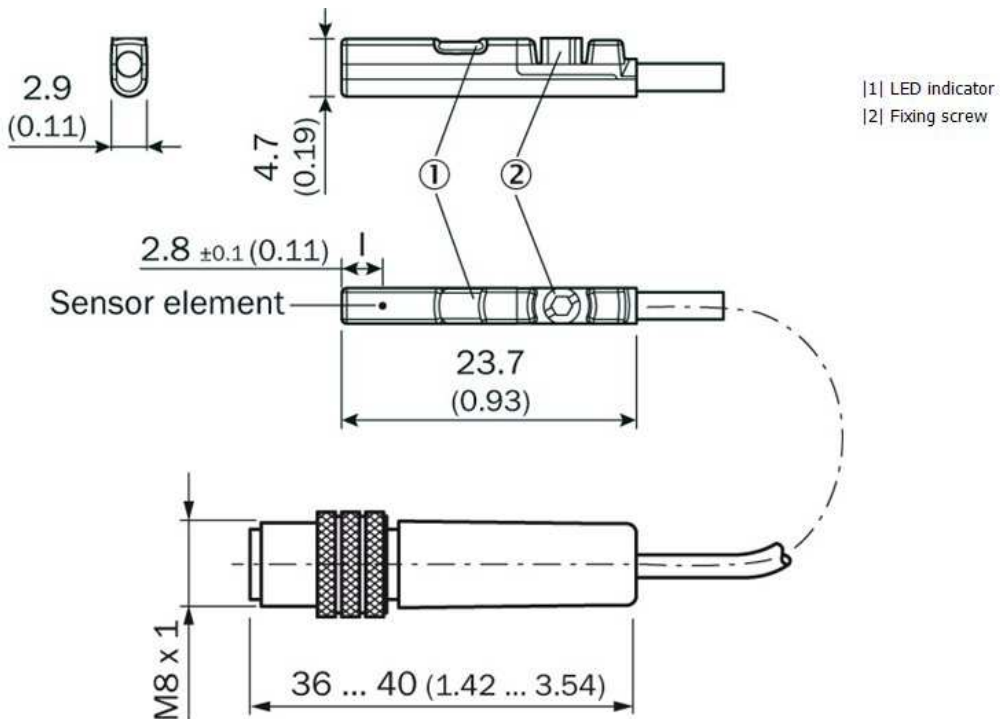
According to EN 60529 (IP67/IP68);

## Mechanics/electronics

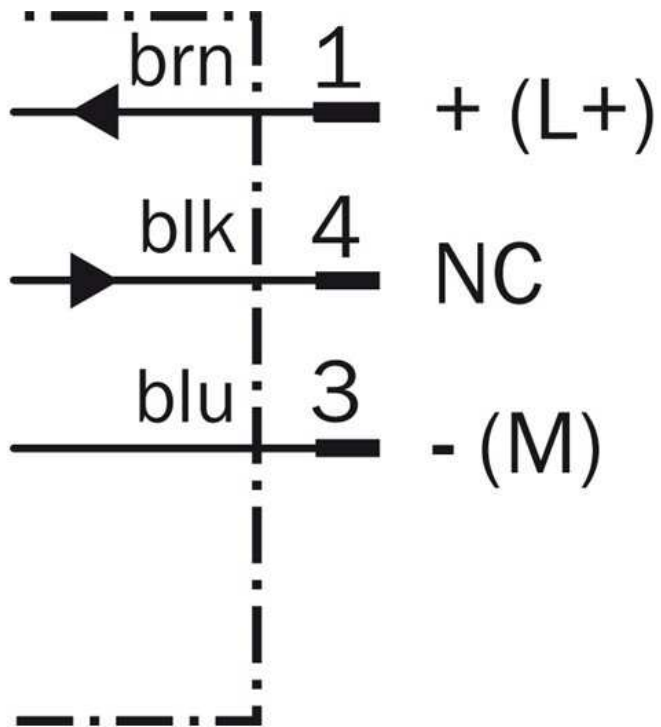
Electrical connection:	Cable with connector M8, 3-pin, with knurled nuts, 0.5 m
Supply voltage:	10 V DC ... 30 V DC
Power consumption:	$\leq 8 \text{ mA}$ <sup>1)</sup>
Voltage drop:	$\leq 2.5 \text{ V}$
Output current $I_a$ :	$\leq 100 \text{ mA}$
EMC:	According to EN 60947-5-2
Cable material:	PUR
Conductor cross-section:	$0.09 \text{ mm}^2$
Reverse polarity protection:	✓
Short-circuit protection:	✓
Power-up pulse protection:	-
Repeatability:	$\leq 0.1 \text{ mT}$ <sup>2)</sup>
Overrun distance typ.:	4 mm
Shock and vibration resistance:	30 g, 11 ms/10 ... 55 Hz, 1 mm
Ambient operating temperature:	-30 °C ... +80 °C
Protection class:	III
Hysteresis typ.:	$\leq 0.8 \text{ mT}$
Magnetic field sensitivity, typ.:	6 mT
Housing material:	Plastic

1) Without load <sup>2)</sup>  $U_b$  and  $T_a$  constant

## Dimensional drawing



Connection diagram



Connection type



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