



Magnetic Cylinder Sensors Sensors for T-slot cylinders

MZT8-28VPS-KR0S02



Model Name > [MZT8-28VPS-KR0S02](#)
Part No. > [1048174](#)



At a glance

- Fits into all commonly used cylinders, linear slides and grippers with T-slots and it can be also applied to multiple cylinders types such as round, tie-rod, integrated profile or dove-tail cylinders with mounting brackets
- Complete range with PNP/ NPN, PUR and PVC cable , M8 and M12 connector
- Combined Allen and flathead installation screw
- Very short sensor housing to install on short stroke cylinders
- LED function indicator
- IP 67 / IP 68 / IP 69K enclosure rating (depending on type)

Your benefits

- Best-in-class switching performance for precise piston position
- 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 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:	NO
Electrical wiring:	DC 3-wire
Cylinder type:	T-slot
Cylinder types with adapter:	Profile cylinder Roundbody cylinder SMC rail cylinder CDQ2 SMC rail cylinder ECDQ2 Tie rod cylinder Cylinders with dovetail slots
Housing length:	24 mm
Special features:	With 2 label markings

Enclosure rating:

IP 68 ¹⁾

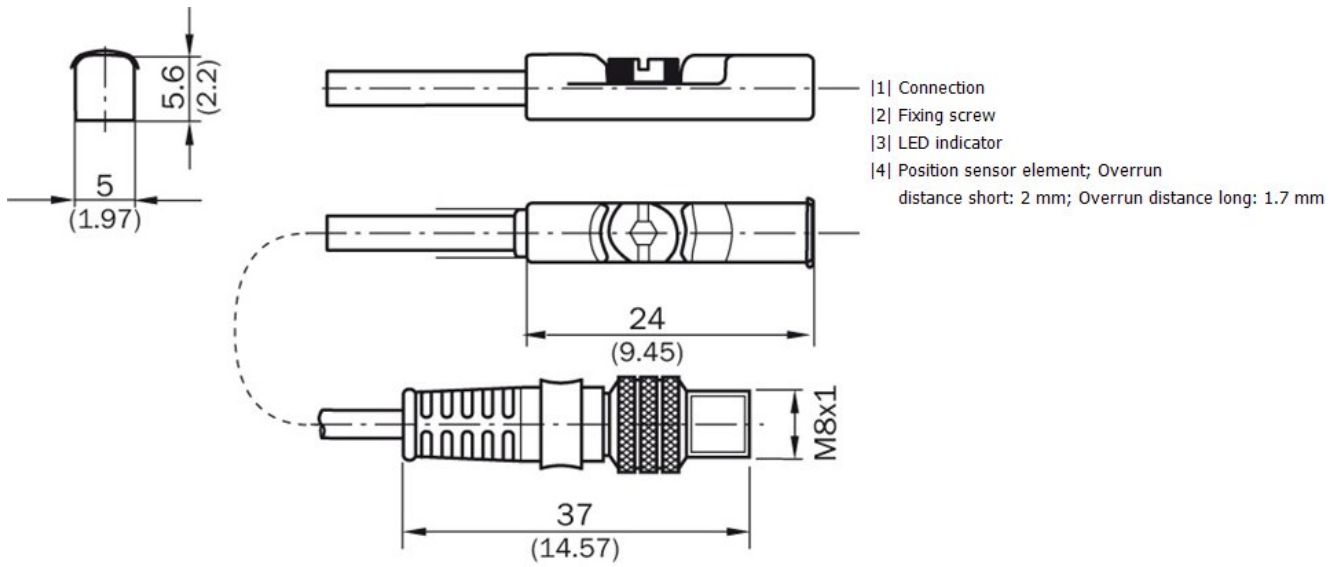
¹⁾ According to EN 60529 (IP67/IP68)

Mechanics/electronics

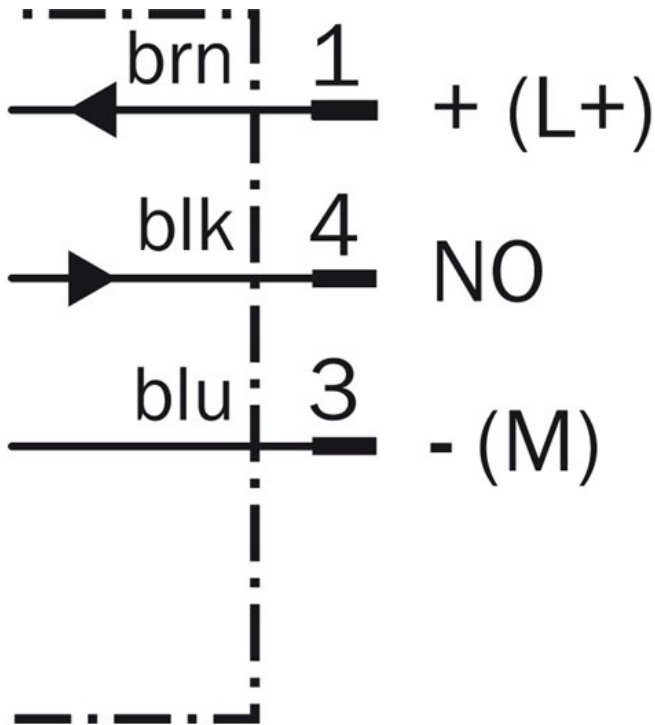
Connection type:	Cable with connector M8, 3-pin, with knurled nuts, 0.5 m
Supply voltage:	10 V DC ... 30 V DC
Power consumption:	$\leq 10 \text{ mA}$ ¹⁾
Voltage drop:	$\leq 2.2 \text{ V}$
Output current I_a :	$\leq 200 \text{ mA}$
EMC:	According to EN 60947-5-2
Cable material:	PUR
Conductor cross-section:	14 mm ²
Reverse polarity protection:	✓
Short-circuit protection:	✓
Housing material:	Plastic
Housing cap material:	PA12
Power-up pulse protection:	✓
Repeatability:	$\leq 0.1 \text{ mT}$ ²⁾
Overrun distance typ.:	9 mm
Shock/vibration:	30 g, 11 ms/10 ... 55 Hz, 1 mm
Ambient operating temperature:	-30 °C ... +80 °C
Protection class:	III
Hysteresis typ.:	> 0.5 mT
Magnetic field sensitivity, typ.:	2.8 mT

¹⁾ Without load ²⁾ U_b and T_a constant

Dimensional drawing



Connection diagram



Connection type



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