Magnetic Cylinder Sensors Sensors for T-slot cylinders

MZT8-03VPS-KPD







Model Name > MZT8-03VPS-KPD Part No. > 1044461

# 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 1/4-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: Enclosure rating:	24 mm IP 68 <sup>1)</sup>

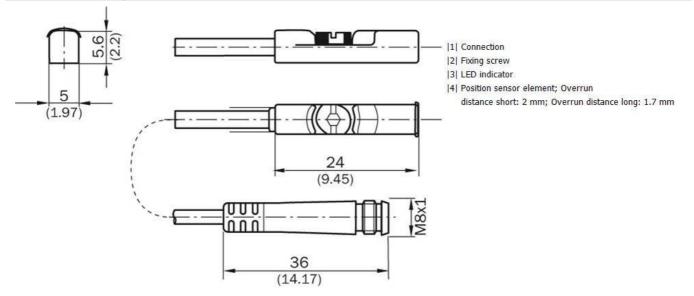


# Mechanics/electronics

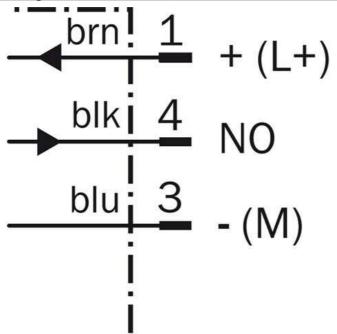
Connection type:	Cable with connector M8, 3-pin, 0.75 m
Thread size:	M8
Supply voltage:	10 V DC 30 V DC
Power consumption:	≤ 10 mA <sup>1)</sup>
Voltage drop:	≤ 2.2 V
Output current la:	≤ 200 mA
EMC:	According to EN 60947-5-2
Cable material:	PUR
Conductor cross-section:	14 mm²
Reverse polarity protection:	$\checkmark$
Short-circuit protection:	$\checkmark$
Housing material:	Plastic
Housing cap material:	PA12
Power-up pulse protection:	$\checkmark$
Repeatability:	≤ 0.1 mT <sup>2)</sup>
Overrun distance typ.:	3 mm
Shock and vibration resistance:	30 g, 11 ms ∕ 10 55 Hz, 1 mm
Ambient operating temperature:	-30 °C +80 °C
Protection class:	111
Hysteresis typ.:	> 0.5 mT
Magnetic field sensitivity, typ.:	2.6 mT
<sup>1)</sup> Without load <sup>2)</sup> Ub and Ta constant	

Magnetic Cylinder Sensors

# **Dimensional drawing**



**Connection diagram** 



**Connection type** 



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