

MZT8-03VPS-KRDS04







# **Magnetic Cylinder Sensors** Sensors for T-slot cylinders

**Model Name** > MZT8-03VPS-KRDS04

Part No. > 1048502

### 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 \( \frac{1}{4}\)-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 **PNP** Output type: 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 mA  $^{1)}$ 

Power consumption:  $\leq$  10 mA <sup>1</sup> Voltage drop:  $\leq$  2.2 V Output current la:  $\leq$  200 mA

EMC: According to EN 60947-5-2

Cable material:PURConductor cross-section:14 mm²Reverse polarity protection:✓Short-circuit protection:✓Housing material:PlasticHousing cap material:PA12Power-up pulse protection:✓

Repeatability: ≤ 0.1 mT <sup>2)</sup>
Overrun distance typ.: 3 mm

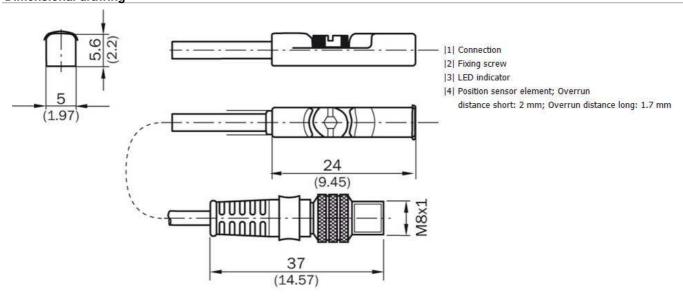
Shock and vibration resistance: 30 g, 11 ms/10 ... 55 Hz, 1 mm

Ambient operating temperature: -30 °C ... +80 °C

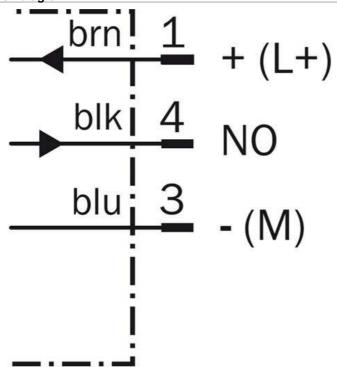
Protection class: III
Hysteresis typ.: > 0.5 mTMagnetic field sensitivity, typ.: 2.6 mT

1) Without load 2) Ub and Ta constant

**Dimensional drawing** 



## **Connection diagram**



Connection type



Australia

Phone +61 3 9457 0600 1800 33 48 02 - tollfree

E-Mail sales@sick.com.au

Belgium/Luxembourg

Phone +32 (0)2 466 55 66 E-Mail info@sick.be

Brasil

Phone +55 11 3215-4900

E-Mail marketing@sick.com.br

Phone +1 905 771 14 44 E-Mail information@sick.com

Česká republika

Phone +420 2 57 91 18 50

E-Mail sick@sick.cz

China

Phone +86 4000 121 000 E-Mail info.china@sick.net.cn Phone +852-2153 6300 E-Mail ghk@sick.com.hk

Danmark

Phone +45 45 82 64 00 E-Mail sick@sick.dk

Deutschland

Phone +49 211 5301-301

E-Mail info@sick.de

Phone +34 93 480 31 00

E-Mail info@sick.es

France

Phone +33 1 64 62 35 00

E-Mail info@sick.fr

**Great Britain** 

Phone +44 (0)1727 831121

E-Mail info@sick.co.uk

Phone +91-22-4033 8333

E-Mail info@sick-india.com

Israel

Phone +972-4-6881000

E-Mail info@sick-sensors.com

Italia

Phone +39 02 27 43 41

E-Mail info@sick.it

Phone +81 (0)3 5309 2112

E-Mail support@sick.jp

Magyarország

Phone +36 1 371 2680

E-Mail office@sick.hu

Nederland

Phone +31 (0)30 229 25 44

E-Mail info@sick.nl

Norge

Phone +47 67 81 50 00

E-Mail sick@sick.no

Österreich

Phone +43 (0)22 36 62 28 8-0

E-Mail office@sick.at

Phone +48 22 837 40 50

E-Mail info@sick.pl

România

Phone +40 356 171 120

E-Mail office@sick.ro

Phone +7-495-775-05-30

E-Mail info@sick.ru

Schweiz

Phone +41 41 619 29 39

E-Mail contact@sick.ch

Singapore

Phone +65 6744 3732

E-Mail sales.gsg@sick.com

Slovenija

Phone +386 (0)1-47 69 990

E-Mail office@sick.si

South Africa

Phone +27 11 472 3733

E-Mail info@sickautomation.co.za

South Korea

Phone +82 2 786 6321/4

E-Mail info@sickkorea.net

Phone +358-9-25 15 800

E-Mail sick@sick.fi

Sverige

Phone +46 10 110 10 00

E-Mail info@sick.se

Phone +886 2 2375-6288

E-Mail sales@sick.com.tw

Phone +90 (216) 528 50 00

E-Mail info@sick.com.tr

**United Arab Emirates** 

Phone +971 (0) 4 88 65 878

E-Mail info@sick.ae

USA/México

Phone +1(952) 941-6780

1 (800) 325-7425 - tollfree

E-Mail info@sickusa.com

More representatives and agencies

at www.sick.com

