



## Magnetic Cylinder Sensors Sensors for T-slot cylinders

MZT8-03VNS-KUA



**Model Name** > [MZT8-03VNS-KUA](#)  
**Part No.** > [1068912](#)



**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:	NPN
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
Enclosure rating::	IP 68, IP 69K <sup>1) 2)</sup>

1) According to EN 60529 (IP67/IP68) 2) According to DIN 40050 (IP69K)

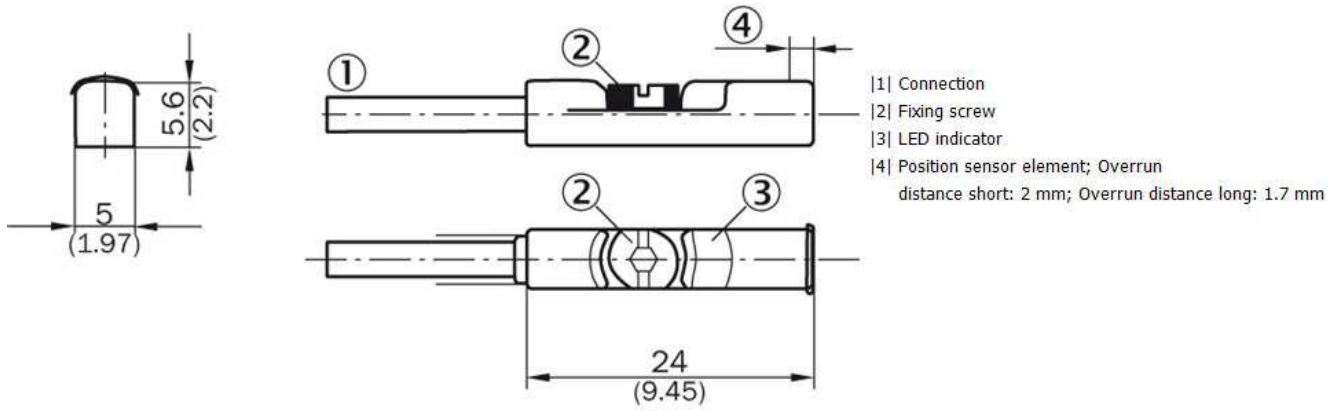
## Mechanics/electronics

---

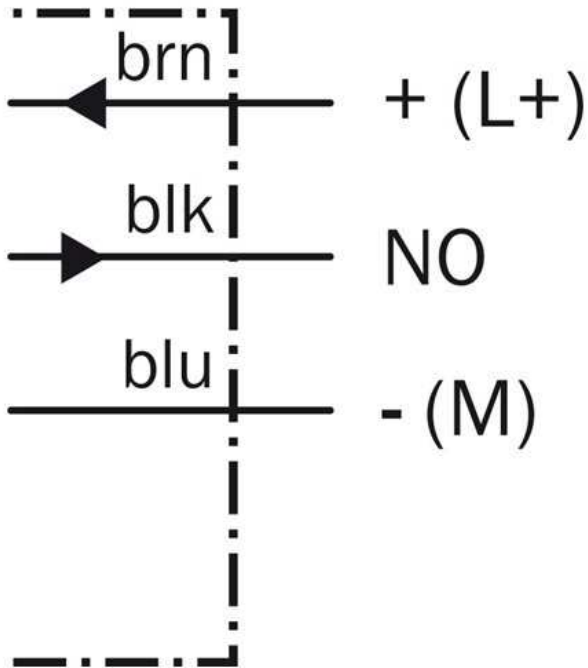
Electrical connection:	Cable, 3-wire, 3 m
Supply voltage:	10 V DC ... 30 V DC
Power consumption:	$\leq 10 \text{ mA}$ <sup>1)</sup>
Voltage drop:	$\leq 2.2 \text{ V}$
Output current I <sub>a</sub> :	$\leq 200 \text{ mA}$
EMC:	According to EN 60947-5-2
Cable material:	PUR
Conductor cross-section:	14 mm <sup>2</sup>
Reverse polarity protection:	✓
Short-circuit protection:	✓
Housing material:	Plastic
Housing cap material:	PA12
Power-up pulse protection:	✓
Repeatability:	$\leq 0.1 \text{ mT}$ <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 mT
Magnetic field sensitivity, typ.:	2.6 mT

1) Without load <sup>2)</sup> U<sub>b</sub> and T<sub>a</sub> constant

## Dimensional drawing

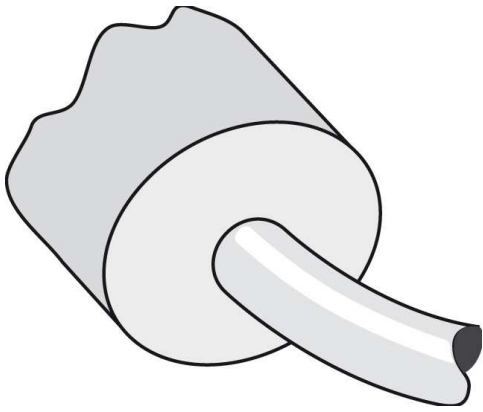


## Connection diagram



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

**Canada**

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

**España**

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

**India**

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

**Japan**

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

**Polska**

Phone +48 22 837 40 50  
E-Mail info@sick.pl

**România**

Phone +40 356 171 120  
E-Mail office@sick.ro

**Russia**

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

**Suomi**

Phone +358-9-25 15 800  
E-Mail sick@sick.fi

**Sverige**

Phone +46 10 110 10 00  
E-Mail info@sick.se

**Taiwan**

Phone +886 2 2375-6288  
E-Mail sales@sick.com.tw

**Türkiye**

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](http://www.sick.com)