



Magnetic Cylinder Sensors Sensors for T-slot cylinders

MZT1-03VNS-KU0



Model Name > MZT1-03VNS-KU0
Part No. > 1023009



At a glance

- Compact housing design
- LED function indicator
- IP 67 enclosure rating
- Magnetoresistive (GMR) element
- For all commonly used cylinders with T-slots, e.g., Festo or SMC and it can be applied to multiple cylinders types such as round, tie-rod, integrated profile or dove-tail cylinders with mounting brackets

Your benefits

- Economic solution providing reliable switching performance
- Drop-in T-slot mounting from above makes assembly easy
- Easy installation with Allen wrench
- Resistant to shock, vibration and liquids, enlarging sensor life time



Features

Output type:	NPN
Output function:	NO
Electrical wiring:	DC 3-wire
Enclosure rating:	IP 67 ¹⁾
Sensing face:	Front
Cylinder types with adapter:	Profile cylinder Roundbody cylinder Dove-tail groove cylinder SMC rail cylinder CDQ2 (T-Slot) SMC rail cylinder ECDQ2 (T-Slot) Tie rod cylinder
Housing length:	30.5 mm
Switching frequency typ.:	5,000 Hz
Cylinder type:	T-slot

¹⁾ According to EN 60529

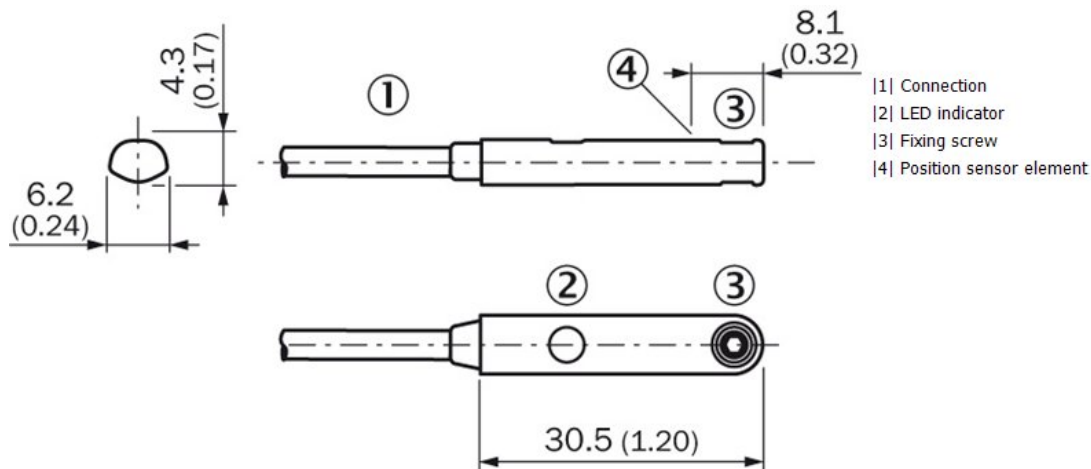
Mechanics/electronics

Connection type:	Cable, 3-wire, 2 m
Supply voltage:	10 V DC ... 30 V DC
Power consumption:	≤ 10 mA ¹⁾
Voltage drop:	≤ 2 V ²⁾
Output current I _a :	≤ 100 mA

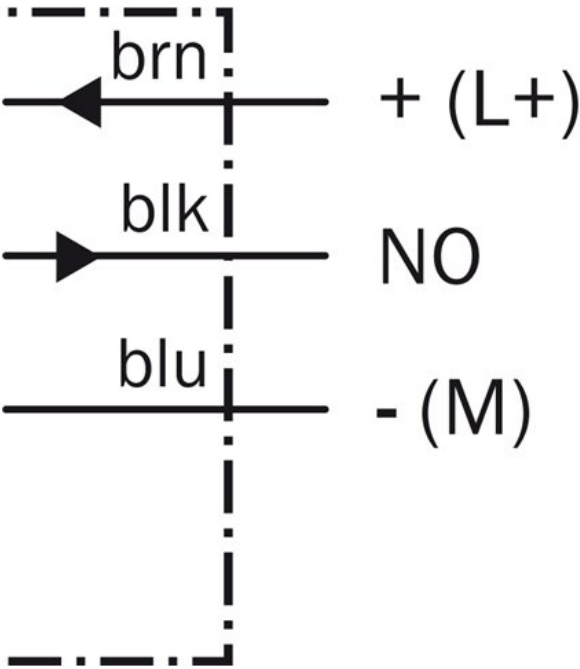
Hysteresis:	$\leq 0.5 \text{ mT}$
Repeatability:	$\leq 0.1 \text{ mT}^{3)}$
EMC:	According to EN 60947-5-2
Cable material:	PUR
Conductor cross-section:	0.14 mm^2
Reverse polarity protection:	✓
Short-circuit protection:	✓
Housing material:	Plastic
Sensing face material:	Plastic
Ambient operating temperature:	$-25 \text{ °C} \dots 75 \text{ °C}$
Power-up pulse protection:	✓
Magnetic field sensitivity, min.:	$\leq 2.8 \text{ mT}$
Output indicator:	✓
Overrun distance typ.:	9 mm
Shock/vibration:	30 g, 11 ms/10 ... 55 Hz, 1 mm

1) Without load 2) At $I_{a \text{ max}}$ 3) U_b and T_a constant

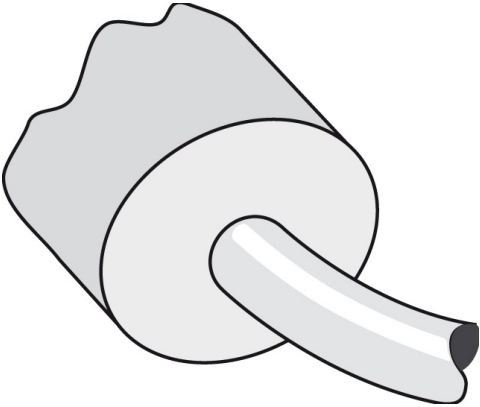
Dimensional drawing



Connection diagram



Connection type



Australia

Phone +61 3 9457 0600
1800 334 802 – 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 sac@sick.com.br

Canada

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

Ceská 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 kundenservice@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 +972-4-6801000
E-Mail info@sick-sensors.com

Italia

Phone +39 02 27 43 41
E-Mail info@sick.it

Japan

Phone +81 (0)3 3358 1341
E-Mail support@sick.jp

Magyarország

Phone +36 1 371 2680
E-Mail office@sick.hu

Nederlands

Phone +31 (0)30 229 25 44
E-Mail info@sick.nl

Norge

Phone +47 67 81 50 00
E-Mail austefjord@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 admin@sicksgp.com.sg

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 8865 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