



Magnetic Cylinder Sensors Sensors for T-slot cylinders

MZT8-03VPO-KU0



Model Name > [MZT8-03VPO-KU0](#)
Part No. > [1044931](#)



At a glance

- Magnetic piston detection for all conventional pneumatic cylinders with T-slots
- Short sensor housing length - only 24 mm
- Sensor element at the tip of the housing
- Proprietary GMR-ASIC technology ensures precise switching and low hysteresis
- Enclosure rating: IP 68 / IP 69K (PUR) respectively IP 67 / IP 69K (PVC)
- Captive screw
- LED function indicator
- 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

- Shortest sensor on the market, making it ideal for short stroke cylinders
- Sensor element at the tip of the sensor - piston detection possible without stroke loss
- Captive installation screw enables reliable and optimized installation
- Time saving "single-handed mounting" with 1/4 turn
- Flexible installation via Allen wrench or flathead screwdriver
- Extremely rugged housing - rated for IP67 respectively IP 68 and IP 69K, enlarging sensor life time



Features

Output type:	PNP
Output function:	NC
Electrical wiring:	DC 3-wire
Enclosure rating:	IP 68 IP 69K 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:	24 mm
Switching frequency typ.:	1,000 Hz
Cylinder type:	T-slot

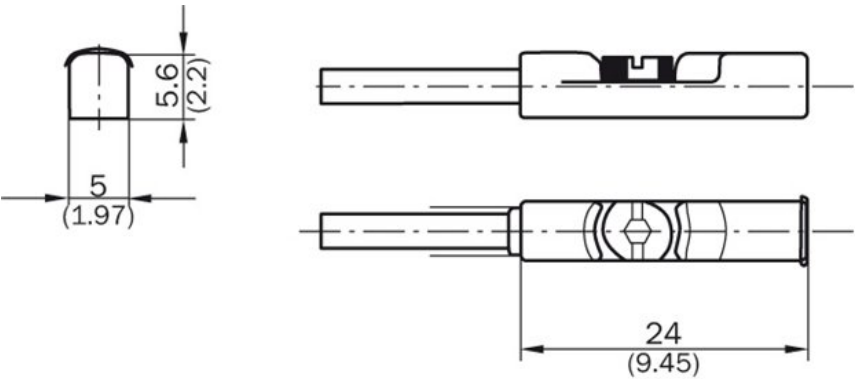
¹⁾ According to EN40050

Mechanics/electronics

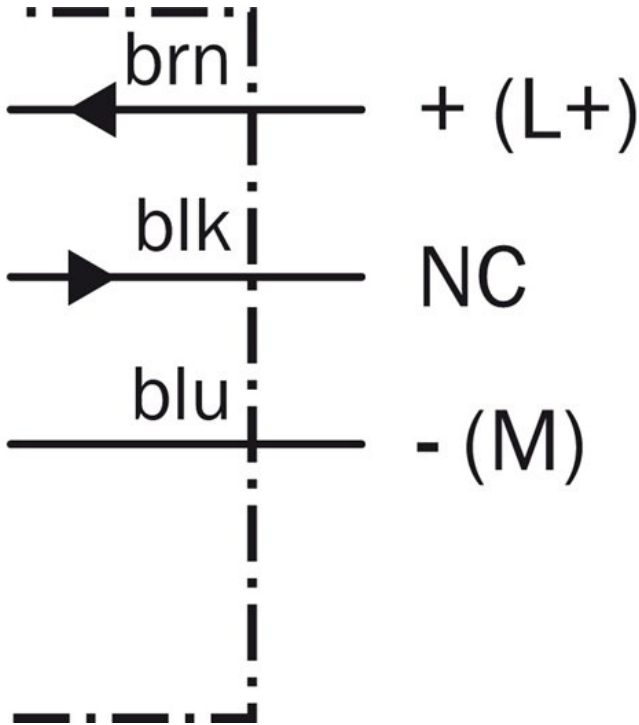
Connection type:	Cable, 3-wire, 2 m
Supply voltage:	10 V DC ... 30 V DC
Power consumption:	$\leq 10 \text{ mA}$ ¹⁾
Voltage drop:	$\leq 2.2 \text{ V}$
Output current I_a :	$\leq 200 \text{ mA}$
Hysteresis:	$> 0.5 \text{ mT}$
Repeatability:	$\leq 0.1 \text{ mT}$ ²⁾
EMC:	According to EN 60947-5-2
Cable material:	PUR
Reverse polarity protection:	✓
Short-circuit protection:	✓
Housing material:	Plastic
Housing cap material:	PA12
Sensing face material:	Plastic
Ambient operating temperature:	$-30 \text{ °C} \dots 80 \text{ °C}$
Power-up pulse protection:	✓
Magnetic field sensitivity, min.:	2.6 mT
Overrun distance typ.:	3 mm
Shock/vibration:	30 g, 11 ms/10 ... 55 Hz, 1 mm

¹⁾ Without load ²⁾ U_b and T_a constant

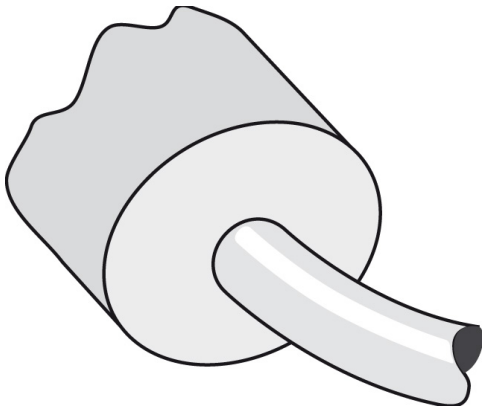
Dimensional drawing



Connection diagram



Connection type



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