



Magnetic Cylinder Sensors Weld immune

MZU2-03VPS-TCM



Model Name > [MZU2-03VPS-TCM](#)
Part No. > [1017451](#)



At a glance

- Immune to all welding electrical fields: AC, DC, medium frequency (1,000 Hz)
- Output state is maintained during the welding process; sensor is switchable again once welding is completed
- 2 LEDs: yellow status indicator, green status indicator
- Flexible mounting options for various cylinder types due to mounting adapters: tie-rod and integrated profile cylinders, T-slot and short-stroke cylinders

Your benefits

- Reliable cylinder position detection in welding environments that increases uptime
- Increased sensor life reduces maintenance costs due to tough metal housing with optional weld slag-immune Teflon™ coating
- Special weld-field immunity (WFI) sensor is immune to all electrical welding processes (AC, DC or medium frequency), which increases sensor life and reduces false signals



Features

| | |
|------------------------------|--|
| Switching frequency typ.: | ± 40 Hz |
| Output type: | PNP |
| Output function: | NO |
| Electrical wiring: | DC 3-wire |
| Cylinder types with adapter: | Profile cylinder T-slot Tie rod cylinder |
| Housing length: | 48 mm |
| Enclosure rating: | IP 67 ¹⁾ |

¹⁾ According to EN 60529

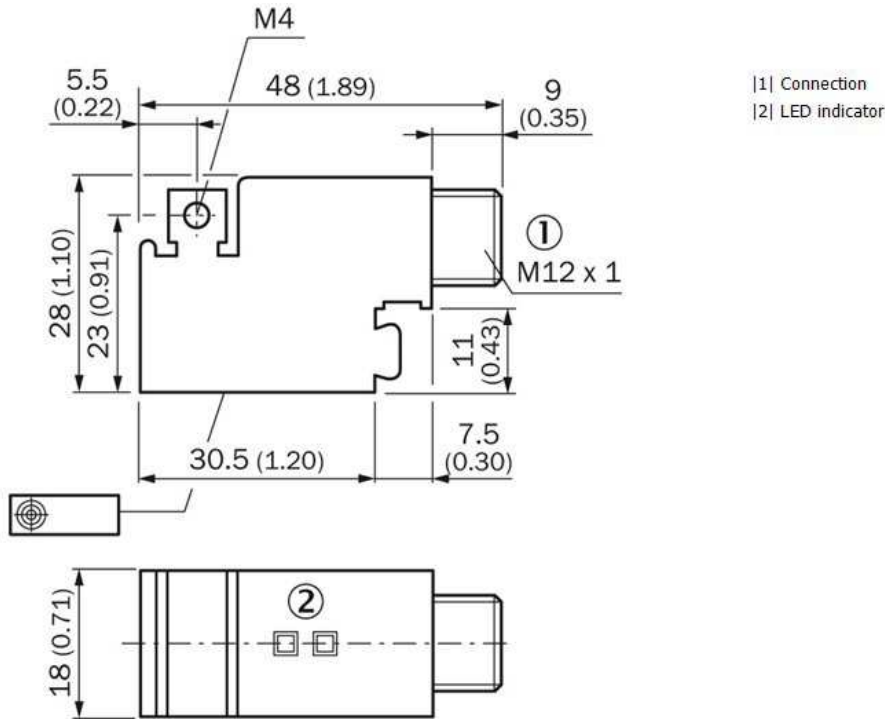
Mechanics/electronics

| | |
|---------------------------------|---------------------------|
| Connection type: | Connector M12, 4-pin |
| Dimensions (W x H x D): | 18 mm x 48 mm x 28 mm |
| Thread size: | M12 |
| Supply voltage: | 10 V DC ... 30 V DC |
| Current consumption: | ≤ 18 mA ¹⁾ |
| Voltage drop: | ≤ 2 V |
| Output current I _a : | ≤ 300 mA |
| EMC: | According to EN 60947-5-2 |
| Reverse polarity protection: | ✓ |

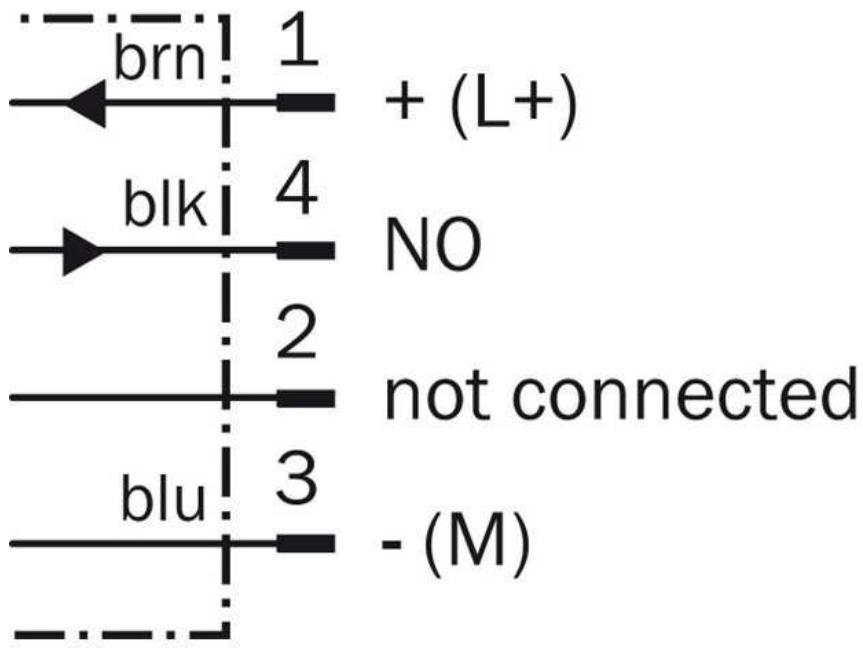
| | |
|-----------------------------------|------------------------------------|
| Short-circuit protection: | ✓ |
| Housing material: | Metal, Zinc diecast, teflon coated |
| Sensing face material: | Metal |
| Power-up pulse protection: | ✓ |
| Time delay before availability: | ≤ 20 ms |
| Repeatability: | ≤ 0.1 mm ²⁾ |
| Shock and vibration resistance: | 30 g, 11 ms/10 ... 55 Hz, 1 mm |
| Ambient operating temperature: | -25 °C ... +75 °C |
| Protection class: | III |
| Magnetic field sensitivity, typ.: | ≤ 3 mT |

1) Without load 2) Ub and Ta constant

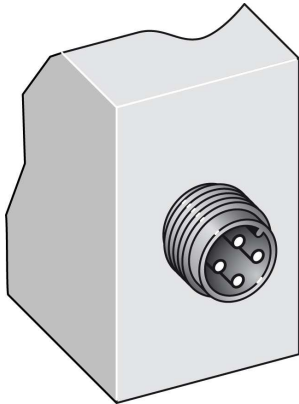
Dimensional drawing



Connection diagram



Connection type



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