



Magnetic proximity sensors  
Cylindrical threaded housing, MM18

MM18-70APS-ZCK



**Model Name** > [MM18-70APS-ZCK](#)  
**Part No.** > [1040072](#)



**At a glance**

- Detection of magnets
- Operating distances up to 70 mm; Advanced series up to 120 mm or more based on the magnet strength
- Short-circuit, reverse polarity and power-up pulse suppression protection
- Robust nickel-plated brass housing with fine thread M18 x 1 mm
- IP 67 enclosure rating
- PNP or NPN output
- High switching frequency
- LED status indicator

**Your benefits**

- Non-contact operation eliminates interference from dirt, dust and vibrations, increasing sensor life and reducing maintenance costs
- Space-saving installation due to small design
- Large operating distances with reliable switching increase throughput
- Non-contact, universal detection through several substances, including plastic containers and pipes protective PTFE walls and non-magnetic metal walls



**Features**

Thread size:	M18 x 1
Housing:	Cylindrical
Sensing range Sn:	70 mm
Assured sensing range Sa:	56.7 mm
Magnetic sensitivity:	0.7 mT
Switching frequency:	1,000 Hz
Output type:	PNP
Output function:	NO
Electrical wiring:	DC 3-wire
Enclosure rating:	IP 67 <sup>1)</sup>
Magnetic alignment:	Axial
Connection type:	Connector M12, 4-pin

<sup>1)</sup> According to EN 60529

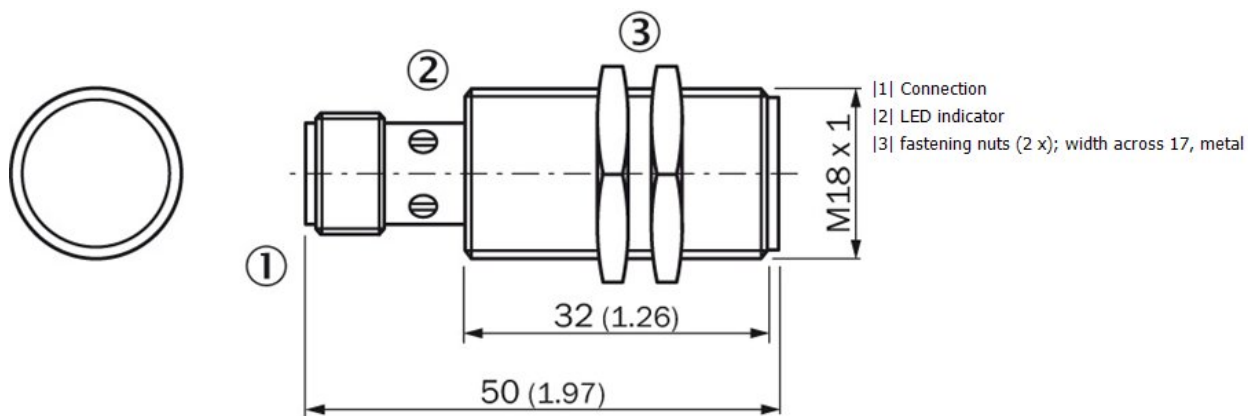
**Mechanics/electronics**

Housing length:	50 mm
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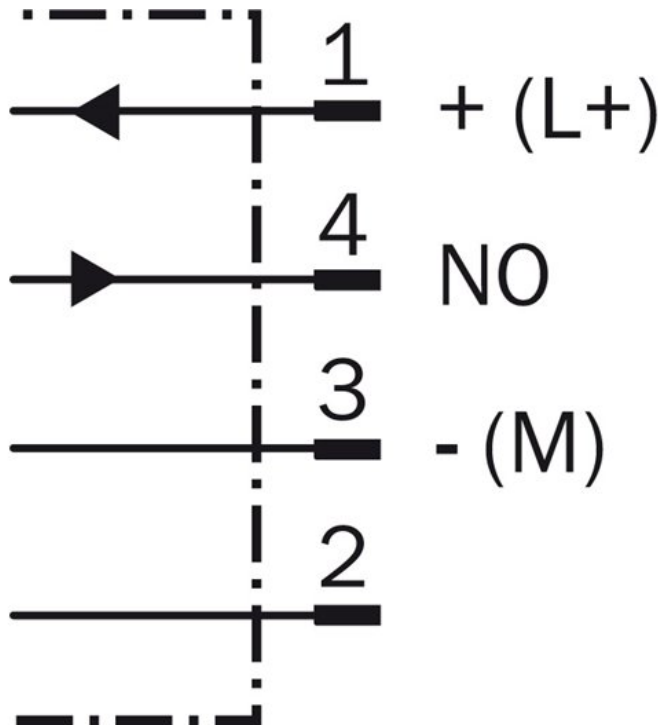
Supply voltage:	10 V DC ... 30 V DC
Residual ripple:	$\leq 10\%$ <sup>1)</sup>
Power consumption:	$\leq 10\text{ mA}$ <sup>2)</sup>
Voltage drop:	$\leq 2\text{ V}$ <sup>3)</sup>
Output current I <sub>a</sub> :	$\leq 200\text{ mA}$
Hysteresis:	1 % ... 10 %
Repeatability:	$\leq 1\%$ <sup>4)</sup>
Temperature drift (% of Sr):	$\pm 10\%$
EMC:	According to EN 60947-5-2
Tightening torque, max.:	40 Nm
Reverse polarity protection:	✓
Short-circuit protection <sup>5)</sup> :	✓
Housing material:	Metal, Nickel-plated brass
Special design:	Short version
Power-up pulse protection:	✓
Time delay before availability:	$\leq 20\text{ ms}$
Ambient operating temperature:	-25 °C ... 75 °C
Shock/vibration:	30 g, 11 ms/10 ... 55 Hz, 1 mm
Items supplied:	Fastening nuts (2 x)

1) Of V<sub>S</sub> 2) Without load 3) At I<sub>a</sub> max 4) Von Sr (VS und Ta constant) 5) Pulsed

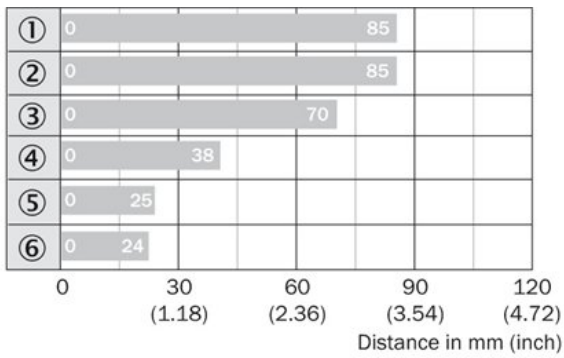
## Dimensional drawing



Connection diagram



Operating distance

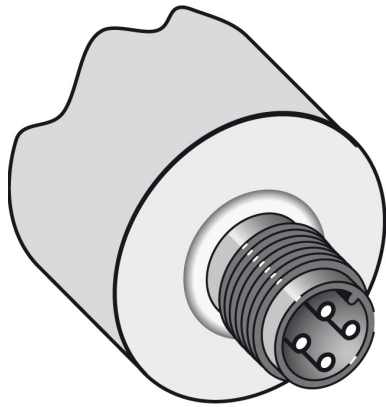


■ Max. sensing range  $S_n$ , flush or non-flush installation, non-magnetizable material

Magnet type	Part no.
① MAG-3315-B (M 5.1)	7902086
② MAG-3015-B (M 5.0)	7901786
③ MAG-3010-B (M 4.0)	7901785
④ MAG-2006-B (M 3.0)	7901784
⑤ MAG-0625-A (M 2.0)	7901783
⑥ MAG-1003-S (M 1.0)	7901782

Connection type

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