

# **MMN**

NAMUR magnetic proximity sensors in a cylindrical housing for explosive areas









#### Technical data overview

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Housing	Cylindrical thread design	
Thread size	M12 x 1 M18 x 1	
Sensing range S <sub>n</sub>	60 mm 120 mm (depending on type)	
Magnetic field sensitivity, min.	$\leq 0.4 \text{ mT} \dots \leq 1 \text{ mT (depending on type)}$	
Housing material	Nickel-plated brass / Stainless steel V4A (1.4404, 316L) (depending on type)	
Enclosure rating	IP67	
Connection	Male connector M12, 4-pin / Cable, 2-wire / Cable with connector M9, 5-pin, with knurled nuts (depending on type)	

#### **Product description**

MM NAMUR magnetic proximity sensors provide large operating distances that can reliably detect magnetic objects. Magnetic proximity sensors are resistant to dust, heat and vibration, making them ideal for use in harsh environments – even highly explosive atmospheres. By using magnetic conductors, these sensors are able to reliably detect objects over greater distances. The NAMUR design for hazardous areas is available in MM12 and MM18 designs.

#### At a glance

- Types: M12 to M18
- Sensing range: up to 120 mmElectrical configuration: NAMUR
- Enclosure rating: IP 67
- Temperature range: -25 °C to +70 °C
- Nickel-plated brass housing; plastic sensing face
- Reliable detection of permanent magnets through non-ferromagnetic materials such as stainless steel, aluminum, plastic or wood
- NAMUR design for usage in explosion-hazardous areas

#### Your benefits

- NAMUR version ensures safe function in explosion-hazardous areas
- Non-contact operation eliminates interference from dirt, dust and vibrations, increasing sensor life and reducing maintenance costs
- Large sensing ranges ensure reliable switching, even with target position tolerances
- Universal use since detection through other objects, such as plastic walls or non-magnetic stainless steel walls, is also possible

## Ordering information

Other models and accessories → www.sick.com/MMN

Switching output: NAMURHousing material: metal

Sensing range S <sub>n</sub>	Connection type	Туре	Part no.
≤ 60 mm	Cable, 2-wire, 2 m <sup>1)</sup>	MM12-60A-N-ZW0	7900286
≤ 70 mm	Cable, 2-wire, 2 m <sup>1)</sup>	MM12-70A-N-ZW0	1102541
		MM18-70A-N-ZW0	1102545
			7900288
	Male connector M12, 4-pin	MM12-70A-N-ZC0	1102540
		MM18-70A-N-ZC0	1102544
			7900289
≤ 90 mm	Cable with connector M9, 5- pin, with knurled nuts, 0.8 m	MM12-90A-N-ZUD	1102542
			1046761
≤ 120 mm	Male connector M12, 4-pin	MM18-00A-N-VC0	1102546
		MM18-00A-N-ZC0	1026614

 $<sup>^{1)}</sup>$  Do not bend below 0 °C.

## SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is "Sensor Intelligence."

## **WORLDWIDE PRESENCE:**

Contacts and other locations -www.sick.com

