

# MM

Magnetic proximity sensors in common M8, M12, and M18 cylindrical housing

**MAGNETIC PROXIMITY SENSORS** 







### Technical data overview

Housing	Cylindrical thread design			
Thread size	M8 x 1 M12 x 1 M18 x 1			
Sensing range S <sub>n</sub>	45 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 / V4A (depending on type)			
Enclosure rating	IP67			
Connection	Connector M8, 3-pin / Cable, 3-wire / cable with AMP male connector, 3-pin / male connector M12, 4-pin (depending on type)			

## **Product description**

MM magnetic proximity sensors provide long sensing ranges that can reliably detect magnetic objects. Magnetic proximity sensors are resistant to dust, heat, vibrations and other harsh environments. The MM magnetic sensors are enclosed in a cylindrical housing and are available in sizes MM08, MM12 and MM18.

## At a glance

- Types: M8 to M18
- Sensing range: up to 120 mmElectrical configuration: DC 3-wire
- Enclosure rating: IP 67
- Temperature range: -25 °C to +75 °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
- Solves high-temperature applications by installing the permanent magnet in the high-temperature area and the sensor behind an insulated area

#### 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 ranges 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

# Ordering information

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

Sensing range S <sub>n</sub>	Switching output	Connection type	Housing material	Output function	Туре	Part no.
≤ 45 mm	PNP	Male connector M12, 4-pin	Metal	NO	MM12-45APS- ZCKS01	1050342
≤ 60 mm	NPN	Cable, 3-wire, 2 m	Metal	NC	MM12-60ANO-ZU0	1016927
				NO	MM08-60ANS-ZU0	7900265
				MM08-60ANS-ZUK	1040066	

Sensing range S <sub>n</sub>	Switching output	Connection type	Housing material	Output function	Туре	Part no.
					MM12-60ANS-ZU0	7900269
					MM12-60ANS-ZUK	1040026
		Connector	Metal	NO	MM08-60ANS-ZT0	7900267
		M8, 3-pin			MM08-60ANS-ZTK	1040068
		Male connec-	Metal	NO	MM12-60ANS-ZC0	7900271
		tor M12, 4-pin			MM12-60ANS-ZCK	1040071
	PNP	Cable, 3-wire, 2 m	Metal	NC	MM12-60AP0-ZU0	1017462
					MM12-60APO-ZUK	1040065
				NO	MM08-60APS-ZU0	7900264
					MM08-60APS-ZUK	1040027
					MM12-60APS-ZU0	7900268
					MM12-60APS-ZUK	1040069
		Cable, 3-wire, 3 m	Metal	NC	MM08-60APO-ZUA	1042425
				NO	MM12-60APS-ZUA	1042365
		Connector	Metal	NC	MM08-60APO-ZTO	1069742
		M8, 3-pin		NO	MM08-60APS-ZT0	7900266
					MM08-60APS-ZTK	1040067
		Cable with AMP male connec- tor, 3-pin, 0.2 m	Metal	NO	MM08-60APS- ZUDS06	1117037
		Male connector M12, 4-pin	Metal	NO	MM12-60APS-ZC0	7900270
					MM12-60APS-ZCK	1040070
≤ 70 mm	NPN	Cable, 3-wire, 2 m	Metal	NO	MM18-70ANS-ZUK	1040085
		Male connec-		NO	MM18-70ANS-ZCO	7900275
		tor M12, 4-pin			MM18-70ANS-ZCK	1040073
	PNP	Cable, 3-wire, 2 m	Metal	NO	MM18-70APS-ZU0	7900272
					MM18-70APS-ZUK	1040029
		Male connector M12, 4-pin	Metal	NC	MM18-70APO-ZCO	1047934
					MM18-70APO-ZCK	1047255
					MM18-70APO- ZCKS01	1049025
					MM18- 70APOZCKS03	1072234
				NO	MM18-70APS-ZC0	7900274
					MM18-70APS-ZCK	1040072
			Stainless steel	NC	MM18-70APO-VCK	1099419
				NO	MM18-70APS-VCK	1050765
≤ 90 mm	NPN	Cable, 3-wire, 2 m	Metal	NO	MM12-90ANS-ZU0	1051013
	PNP	Cable, 3-wire, 2 m	Metal	NO	MM12-90APS-ZU0	1029951
		Male connector M12, 4-pin	Metal	NO	MM12-90APS-ZC0	1029950

Sensing range S <sub>n</sub>	Switching output	Connection type	Housing material	Output function	Туре	Part no.
≤ 120 mm PNP	Cable, 3-wire, 2 m	Metal	NO	MM18-00APS-ZU0	1029952	
					MM18-00APS-ZUK	1077120
		Male connec-	Metal	NO	MM18-00APS-ZC0	1029861
	tor M12, 4-pin			MM18-00APS-ZCK	1076085	

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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

