

# MM08-60ANS-ZTK

MME

**MAGNETIC SENSORS** 





### Ordering information

Туре	part no.
MM08-60ANS-ZTK	1040068

Included in delivery: BEF-MU-M08 (1)

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



#### Detailed technical data

#### **Features**

reatures	
Housing	Metric
Housing	Short-body
Thread size	M8 x 1
Diameter	Ø 8 mm
Sensing range S <sub>n</sub>	0 mm 60 mm <sup>1)</sup>
Safe sensing range S <sub>a</sub>	48.6 mm
Magnetic sensitivity	1 mT
Switching frequency	1,000 Hz
Connection type	Connector M8, 3-pin
Switching output	NPN
Switching output detail	NPN
Output function	NO
Electrical wiring	DC 3-wire
Magnetic alignment	Axial
Enclosure rating	IP67 <sup>2)</sup>
Items supplied	Mounting nut, brass, nickel-plated (2x)

 $<sup>^{1)}</sup>$  Sensing range based on installation in non-magnetic material using Magnet MAG-3010-B (M4.0).

### Mechanics/electronics

Supply voltage	10 V DC 30 V DC

 $<sup>^{1)}</sup>$  Of  $V_S$ .

<sup>&</sup>lt;sup>2)</sup> According to EN 60529.

<sup>&</sup>lt;sup>2)</sup> At I<sub>a</sub> max.

<sup>3)</sup> Without load.

 $<sup>^{4)}</sup>$  Von Sr (VS und Ta constant).

<sup>&</sup>lt;sup>5)</sup> Pulsed.

Ripple	≤ 10 % <sup>1)</sup>
Voltage drop	$\leq$ 2 V $^{2)}$
Current consumption	10 mA <sup>3)</sup>
Time delay before availability	≤ 20 ms
Hysteresis	1 % 10 %
Reproducibility	≤ 1 % <sup>4)</sup>
Temperature drift (of S <sub>r</sub> )	± 10 %
EMC	According to EN 60947-5-2
Continuous current I <sub>a</sub>	≤ 200 mA
Reverse polarity protection	Yes
Short-circuit protection	Yes <sup>5)</sup>
Power-up pulse protection	<b>√</b>
Shock and vibration resistance	30 g, 11 ms / 10 55 Hz, 1 mm
Ambient operating temperature	-25 °C +75 °C
Housing material	Metal, Nickel-plated brass
Housing length	46 mm
Thread length	29.5 mm
Tightening torque, max.	6 Nm

 $<sup>^{1)}</sup>$  Of  $V_{S}$ .

# Safety-related parameters

MTTF <sub>D</sub>	1,980 years
DC <sub>avg</sub>	0%
T <sub>M</sub> (mission time)	20 years

### Certificates

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	1
China RoHS	✓

### Classifications

ECLASS 5.0	27270104
ECLASS 5.1.4	27270104
ECLASS 6.0	27270104
ECLASS 6.2	27270104
ECLASS 7.0	27270104
ECLASS 8.0	27270104
ECLASS 8.1	27270104

<sup>&</sup>lt;sup>2)</sup> At I<sub>a</sub> max.

<sup>3)</sup> Without load.

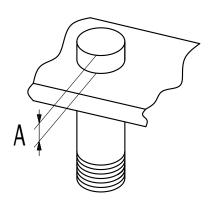
<sup>&</sup>lt;sup>4)</sup> Von Sr (VS und Ta constant).

<sup>&</sup>lt;sup>5)</sup> Pulsed.

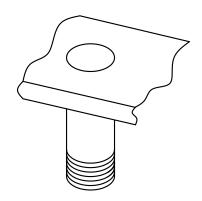
ECLASS 9.0	27270104
ECLASS 10.0	27270104
ECLASS 11.0	27270104
ECLASS 12.0	27274301
ETIM 5.0	EC002544
ETIM 6.0	EC002544
ETIM 7.0	EC002544
ETIM 8.0	EC002544
UNSPSC 16.0901	39122230

### Installation note

# installation in magnetizable material



# installation in non-magnetizable material



Ø	A (mm)	M (Nm)
M8	10	< 6

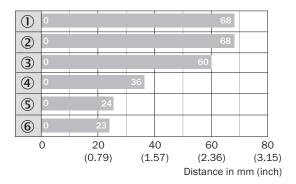
 $\leq$ 

# Connection type



# Connection diagram Cd-002

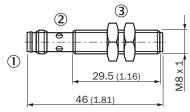
### Sensing range



Max. sensing range S<sub>n</sub>, 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
<b>⑤</b> MAG-0625-A (M 2.0)	7901783
<b>6</b> MAG-1003-S (M 1.0)	7901782

# Dimensional drawing MM08, connector, short-body housing



Dimensions in mm (inch)

- ① Connection
- ② Display LED
- 3 fastening nuts (2 x); width across 13, plastic

### Recommended accessories

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

	Brief description	Туре	part no.	
Mounting syst	Mounting systems			
	Description: Mounting bracket for M8 sensors     Material: Steel     Details: Steel, zinc coated     Items supplied: Without mounting hardware	BEF-WN-M08	5321721	
(913)	<ul> <li>Description: Mounting plate for M8 sensors</li> <li>Material: Steel</li> <li>Details: Steel, zinc coated</li> <li>Items supplied: Without mounting hardware</li> </ul>	BEF-WG-M08	5321722	
	<ul> <li>Description: Clamping block for round sensors M8, without fixed stop</li> <li>Material: Plastic</li> <li>Details: Plastic (PA12), glass-fiber reinforced</li> <li>Items supplied: Mounting hardware included</li> </ul>	BEF-KH-M08	2051477	
	<ul> <li>Description: Clamping block for round sensors M8, with fixed stop</li> <li>Material: Plastic</li> <li>Details: Plastic (PA12), glass-fiber reinforced</li> <li>Items supplied: Mounting hardware included</li> </ul>	BEF-KHF-M08	2051478	

	Brief description	Туре	part no.		
connectors an	connectors and cables				
	<ul> <li>Connection type head A: Male connector, M8, 3-pin, straight, A-coded</li> <li>Description: Unshielded</li> <li>Connection systems: Screw-type terminals</li> <li>Permitted cross-section: 0.14 mm² 0.5 mm²</li> </ul>	STE-0803-G	6037322		
	<ul> <li>Connection type head A: Female connector, M8, 3-pin, straight, A-coded</li> <li>Description: Unshielded</li> <li>Connection systems: Screw-type terminals</li> <li>Permitted cross-section: 0.14 mm² 0.5 mm²</li> </ul>	DOS-0803-G	7902077		
	<ul> <li>Connection type head A: Female connector, M8, 3-pin, angled, A-coded</li> <li>Description: Unshielded</li> <li>Connection systems: Solder connection</li> <li>Permitted cross-section: ≤ 0.25 mm²</li> </ul>	DOS-0803-W	7902078		
<b>1</b>	<ul> <li>Connection type head A: Female connector, M8, 3-pin, straight, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 2 m, 3-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals, Uncontaminated zones</li> </ul>	YF8U13-020VA1XLEAX	2095860		
0	<ul> <li>Connection type head A: Female connector, M8, 3-pin, straight, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 5 m, 3-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals, Uncontaminated zones</li> </ul>	YF8U13-050VA1XLEAX	2095884		
3	<ul> <li>Connection type head A: Female connector, M8, 3-pin, angled, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 2 m, 3-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals, Uncontaminated zones</li> </ul>	YG8U13-020VA1XLEAX	2096165		
3	<ul> <li>Connection type head A: Female connector, M8, 3-pin, angled, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 5 m, 3-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals, Uncontaminated zones</li> </ul>	YG8U13-050VA1XLEAX	2096166		
	<ul> <li>Connection type head A: Female connector, M8, 3-pin, straight, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 2 m, 3-wire, PUR, halogen-free</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li> </ul>	YF8U13-020UA1XLEAX	2094782		
· Co	<ul> <li>Connection type head A: Female connector, M8, 3-pin, straight, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 5 m, 3-wire, PUR, halogen-free</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li> </ul>	YF8U13-050UA1XLEAX	2094788		
3	<ul> <li>Connection type head A: Female connector, M8, 3-pin, angled, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 2 m, 3-wire, PUR, halogen-free</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li> </ul>	YG8U13-020UA1XLEAX	2094794		
3	<ul> <li>Connection type head A: Female connector, M8, 3-pin, angled, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 5 m, 3-wire, PUR, halogen-free</li> <li>Description: Sensor/actuator cable, unshielded</li> </ul>	YG8U13-050UA1XLEAX	2095586		

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# MAGNETIC SENSORS

	Brief description	Туре	part no.
	Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation		
3	<ul> <li>Connection type head A: Female connector, M8, 3-pin, angled, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 0.6 m, 3-wire, PUR, halogen-free</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li> </ul>	YG8U13- C60UA1XLEAX	2145889
3	<ul> <li>Connection type head A: Female connector, M8, 3-pin, angled, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 3 m, 3-wire, PUR, halogen-free</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li> </ul>	YG8U13-030UA1XLEAX	2145891
No.	<ul> <li>Connection type head A: Female connector, M8, 3-pin, straight, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 0.6 m, 3-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals, Uncontaminated zones</li> </ul>	YF8U13- C60VA1XLEAX	2146368

# 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."

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