



MM08-60ANS-ZTK

MME

MAGNETIC SENSORS

SICK
Sensor Intelligence.



Ordering information

Type	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

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

¹⁾ Sensing range based on installation in non-magnetic material using Magnet MAG-3010-B (M4.0).

²⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 % ¹⁾
Voltage drop	≤ 2 V ²⁾

¹⁾ Of V_S .

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von Sr (VS und Ta constant).

⁵⁾ Pulsed.

Current consumption	10 mA ³⁾
Time delay before availability	≤ 20 ms
Hysteresis	1 % ... 10 %
Reproducibility	≤ 1 % ⁴⁾
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 200 mA
Reverse polarity protection	Yes
Short-circuit protection	Yes ⁵⁾
Power-up pulse protection	✓
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

¹⁾ Of V_S.

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von S_r (V_S und T_a constant).

⁵⁾ Pulsed.

Safety-related parameters

MTTF_D	1,980 years
DC_{avg}	0%
T_M (mission time)	20 years

Classifications

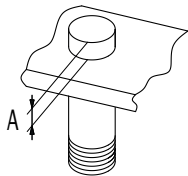
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ECLASS 5.1.4	27270104
ECLASS 6.0	27270104
ECLASS 6.2	27270104
ECLASS 7.0	27270104
ECLASS 8.0	27270104
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ETIM 5.0	EC002544
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ETIM 8.0	EC002544

UNSPSC 16.0901

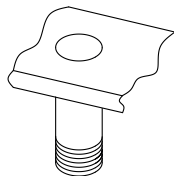

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Installation note

installation in magnetizable material

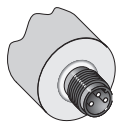


installation in non-magnetizable material

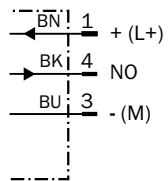
Ø	A (mm)	M (Nm)
M8	10	< 6

Connection type



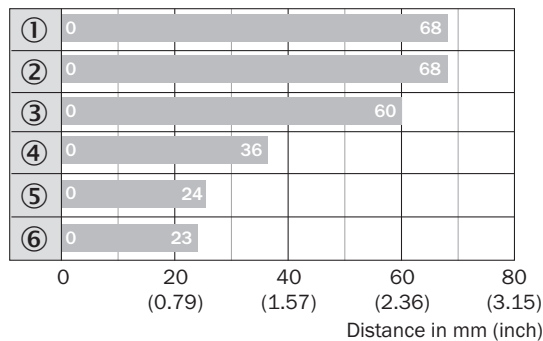
Connection diagram

Cd-002



Sensing range diagram

Sensing range

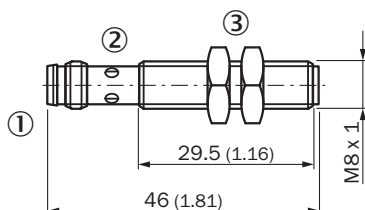


■ Max. sensing range S_n , flush or non-flush installation, non-magnetizable material

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

Dimensional drawing (Dimensions in mm (inch))


MM08, connector, short-body housing





- 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	Type	Part no.
Mounting brackets and plates			
	Mounting plate for M8 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M08	5321722

	Brief description	Type	Part no.
	Mounting bracket for M8 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M08	5321721
Terminal and alignment brackets			
	Clamping block for round sensors M8, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KH-M08	2051477
	Clamping block for round sensors M8, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KHF-M08	2051478
Others			
	<ul style="list-style-type: none"> • Connection type head A: Male connector, M8, 3-pin, straight, A-coded • Description: Unshielded • Connection systems: Screw-type terminals • Permitted cross-section: 0.14 mm² ... 0.5 mm² 	STE-0803-G	6037322
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M8, 3-pin, straight, A-coded • Description: Unshielded • Connection systems: Screw-type terminals • Permitted cross-section: 0.14 mm² ... 0.5 mm² 	DOS-0803-G	7902077
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M8, 3-pin, angled, A-coded • Description: Unshielded • Connection systems: Solder connection • Permitted cross-section: ≤ 0.25 mm² 	DOS-0803-W	7902078
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M8, 3-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 2 m, 3-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals 	YF8U13-020VA1XLEAX	2095860
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M8, 3-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 5 m, 3-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals 	YF8U13-050VA1XLEAX	2095884
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M8, 3-pin, angled, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 2 m, 3-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals 	YG8U13-020VA1XLEAX	2096165
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M8, 3-pin, angled, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 5 m, 3-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals 	YG8U13-050VA1XLEAX	2096166
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M8, 3-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 2 m, 3-wire, PUR, halogen-free • Description: Sensor/actuator cable, unshielded • Application: Zones with oils and lubricants, Drag chain operation, Robot 	YF8U13-020UA1XLEAX	2094782
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M8, 3-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 5 m, 3-wire, PUR, halogen-free • Description: Sensor/actuator cable, unshielded • Application: Zones with oils and lubricants, Drag chain operation, Robot 	YF8U13-050UA1XLEAX	2094788

	Brief description	Type	Part no.
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M8, 3-pin, angled, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 2 m, 3-wire, PUR, halogen-free • Description: Sensor/actuator cable, unshielded • Application: Zones with oils and lubricants, Drag chain operation, Robot 	YG8U13-020UA1XLEAX	2094794
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M8, 3-pin, angled, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 5 m, 3-wire, PUR, halogen-free • Description: Sensor/actuator cable, unshielded • Application: Zones with oils and lubricants, Drag chain operation, Robot 	YG8U13-050UA1XLEAX	2095586

SICK AT A GLANCE

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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



MM08-60APO-ZT0

MME

MAGNETIC SENSORS

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Ordering information

Type	Part no.
MM08-60APO-ZT0	1069742

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

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



Detailed technical data

Features

Housing	Metric
Housing	Short-body
Thread size	M8 x 1
Diameter	Ø 8 mm
Sensing range S_n	0 mm ... 60 mm ¹⁾
Safe sensing range S_a	48.6 mm
Magnetic sensitivity	≤ 1 mT
Switching frequency	1,000 Hz
Connection type	Connector M8, 3-pin
Switching output	PNP
Output function	NC
Electrical wiring	DC 3-wire
Magnetic alignment	Axial
Enclosure rating	IP67 ²⁾
Items supplied	Mounting nut, brass, nickel-plated (2x)

¹⁾ Sensing range based on installation in non-magnetic material using Magnet MAG-3010-B (M4.0).

²⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 % ¹⁾
Voltage drop	≤ 2 V ²⁾

¹⁾ Of V_S .

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von Sr (V_S und T_a constant).

⁵⁾ Pulsed.

Current consumption	10 mA ³⁾
Time delay before availability	≤ 20 ms
Hysteresis	1 % ... 10 %
Reproducibility	≤ 1 % ⁴⁾
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 200 mA
Reverse polarity protection	Yes
Short-circuit protection	Yes ⁵⁾
Power-up pulse protection	✓
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

¹⁾ Of V_S.

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von S_r (V_S und T_a constant).

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Safety-related parameters

MTTF_D	1,980 years
DC_{avg}	0 %
T_M (mission time)	20 years

Classifications

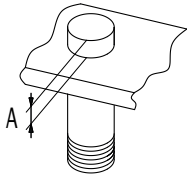
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UNSPSC 16.0901

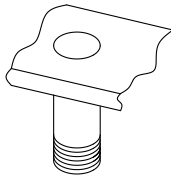

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Installation note

installation in magnetizable material



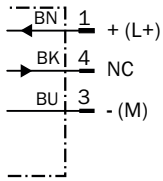
installation in non-magnetizable material

Ø	A (mm)	M (Nm)
M8	10	< 6

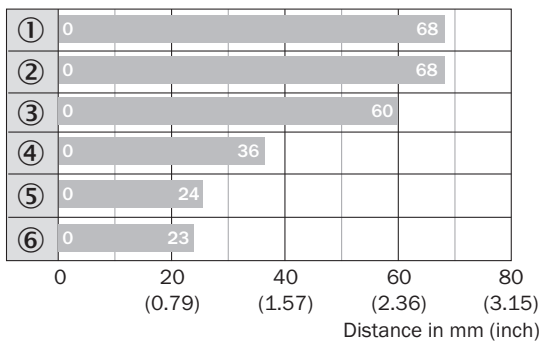
Connection diagram

Cd-004



Sensing range diagram

Sensing range



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

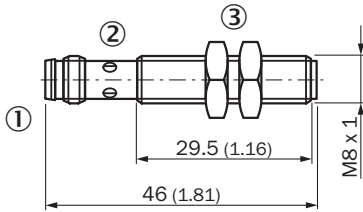
Magnet type

Part no.

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②	MAG-3015-B (M 5.0)	7901786
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④	MAG-2006-B (M 3.0)	7901784
⑤	MAG-0625-A (M 2.0)	7901783
⑥	MAG-1003-S (M 1.0)	7901782

Dimensional drawing (Dimensions in mm (inch))




MM08, connector, short-body housing



- 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	Type	Part no.
Mounting brackets and plates			
	Mounting plate for M8 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M08	5321722
	Mounting bracket for M8 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M08	5321721
Terminal and alignment brackets			
	Clamping block for round sensors M8, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KH-M08	2051477
	Clamping block for round sensors M8, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KHF-M08	2051478

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MM08-60APO-ZT0

MME

MAGNETIC SENSORS

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Ordering information

Type	Part no.
MM08-60APO-ZT0	1069742

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

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



Detailed technical data

Features

Housing	Metric
Housing	Short-body
Thread size	M8 x 1
Diameter	Ø 8 mm
Sensing range S_n	0 mm ... 60 mm ¹⁾
Safe sensing range S_a	48.6 mm
Magnetic sensitivity	≤ 1 mT
Switching frequency	1,000 Hz
Connection type	Connector M8, 3-pin
Switching output	PNP
Output function	NC
Electrical wiring	DC 3-wire
Magnetic alignment	Axial
Enclosure rating	IP67 ²⁾
Items supplied	Mounting nut, brass, nickel-plated (2x)

¹⁾ Sensing range based on installation in non-magnetic material using Magnet MAG-3010-B (M4.0).

²⁾ According to EN 60529.

Mechanics/electronics

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Time delay before availability	≤ 20 ms
Hysteresis	1 % ... 10 %
Reproducibility	≤ 1 % ⁴⁾
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 200 mA
Reverse polarity protection	Yes
Short-circuit protection	Yes ⁵⁾
Power-up pulse protection	✓
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

¹⁾ Of V_S.

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Safety-related parameters

MTTF_D	1,980 years
DC_{avg}	0 %
T_M (mission time)	20 years

Classifications

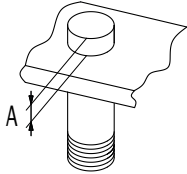
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UNSPSC 16.0901

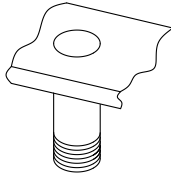

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Installation note

installation in magnetizable material



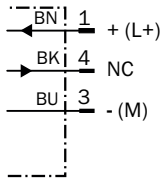
installation in non-magnetizable material

Ø	A (mm)	M (Nm)
M8	10	< 6

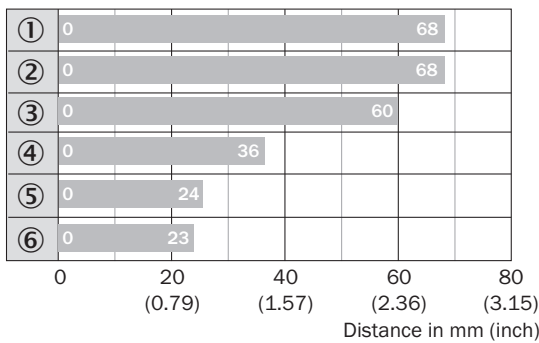
Connection diagram

Cd-004



Sensing range diagram

Sensing range



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

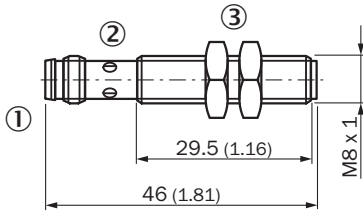
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⑥	MAG-1003-S (M 1.0)	7901782

Dimensional drawing (Dimensions in mm (inch))




MM08, connector, short-body housing



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

Recommended accessories

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WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com



MM08-60APO-ZUA

MME

MAGNETIC SENSORS

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Sensor Intelligence.



Ordering information

Type	Part no.
MM08-60APO-ZUA	1042425

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

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



Detailed technical data

Features

Housing	Metric
Housing	Short-body
Thread size	M8 x 1
Diameter	Ø 8 mm
Sensing range S_n	0 mm ... 60 mm ¹⁾
Safe sensing range S_a	48.6 mm
Magnetic sensitivity	≤ 1 mT
Switching frequency	1,000 Hz
Connection type	Cable, 3-wire, 3 m
Switching output	PNP
Output function	NC
Electrical wiring	DC 3-wire
Magnetic alignment	Axial
Enclosure rating	IP67 ²⁾
Items supplied	Mounting nut, brass, nickel-plated (2x)

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Current consumption	10 mA ³⁾
Time delay before availability	≤ 20 ms
Hysteresis	1 % ... 10 %
Reproducibility	≤ 1 % ⁴⁾
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 200 mA
Cable material	PUR/PVC
Reverse polarity protection	Yes
Short-circuit protection	Yes ⁵⁾
Power-up pulse protection	✓
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	48 mm
Thread length	29.5 mm
Tightening torque, max.	6 Nm

¹⁾ Of V_S.

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von S_r (V_S und T_a constant).

⁵⁾ Pulsed.

Safety-related parameters

MTTF_D	2,339 years
DC_{avg}	0 %

Classifications

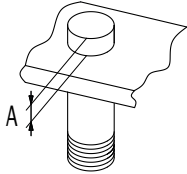
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ECLASS 6.0	27270104
ECLASS 6.2	27270104
ECLASS 7.0	27270104
ECLASS 8.0	27270104
ECLASS 8.1	27270104
ECLASS 9.0	27270104
ECLASS 10.0	27270104
ECLASS 11.0	27270104
ECLASS 12.0	27274301
ETIM 5.0	EC002544
ETIM 6.0	EC002544
ETIM 7.0	EC002544
ETIM 8.0	EC002544

UNSPSC 16.0901

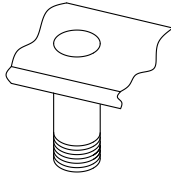

39122230

Installation note

installation in magnetizable material



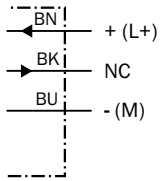
installation in non-magnetizable material

Ø	A (mm)	M (Nm)
M8	10	< 6

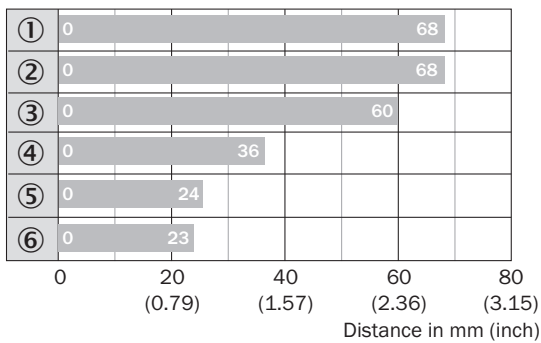
Connection diagram

Cd-003



Sensing range diagram

Sensing range



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

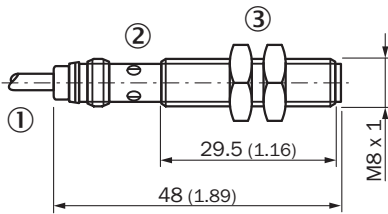
Magnet type

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

Dimensional drawing (Dimensions in mm (inch))




MM08, cable, short-body housing



- 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	Type	Part no.
Mounting brackets and plates			
	Mounting plate for M8 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M08	5321722
	Mounting bracket for M8 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M08	5321721
Terminal and alignment brackets			
	Clamping block for round sensors M8, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KH-M08	2051477
	Clamping block for round sensors M8, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KHF-M08	2051478

SICK AT A GLANCE

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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



MM08-60APS-ZTK

MME

MAGNETIC SENSORS

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Ordering information

Type	Part no.
MM08-60APS-ZTK	1040067

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

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



Detailed technical data

Features

Housing	Metric
Housing	Short-body
Thread size	M8 x 1
Diameter	Ø 8 mm
Sensing range S_n	0 mm ... 60 mm ¹⁾
Safe sensing range S_a	48.6 mm
Magnetic sensitivity	1 mT
Switching frequency	1,000 Hz
Connection type	Connector M8, 3-pin
Switching output	PNP
Output function	NO
Electrical wiring	DC 3-wire
Magnetic alignment	Axial
Enclosure rating	IP67 ²⁾
Items supplied	Mounting nut, brass, nickel-plated (2x)

¹⁾ Sensing range based on installation in non-magnetic material using Magnet MAG-3010-B (M4.0).

²⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 % ¹⁾
Voltage drop	≤ 2 V ²⁾

¹⁾ Of V_S .

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von Sr (VS und Ta constant).

⁵⁾ Pulsed.

Current consumption	10 mA ³⁾
Time delay before availability	≤ 20 ms
Hysteresis	1 % ... 10 %
Reproducibility	≤ 1 % ⁴⁾
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 200 mA
Reverse polarity protection	Yes
Short-circuit protection	Yes ⁵⁾
Power-up pulse protection	✓
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

¹⁾ Of V_S.

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von S_r (V_S und T_a constant).

⁵⁾ Pulsed.

Safety-related parameters

MTTF_D	1,980 years
DC_{avg}	0%
T_M (mission time)	20 years

Classifications

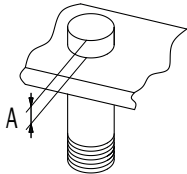
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ECLASS 5.1.4	27270104
ECLASS 6.0	27270104
ECLASS 6.2	27270104
ECLASS 7.0	27270104
ECLASS 8.0	27270104
ECLASS 8.1	27270104
ECLASS 9.0	27270104
ECLASS 10.0	27270104
ECLASS 11.0	27270104
ECLASS 12.0	27274301
ETIM 5.0	EC002544
ETIM 6.0	EC002544
ETIM 7.0	EC002544
ETIM 8.0	EC002544

UNSPSC 16.0901

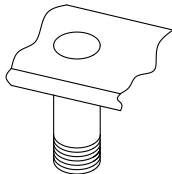

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Installation note

installation in magnetizable material

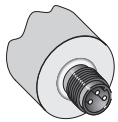


installation in non-magnetizable material

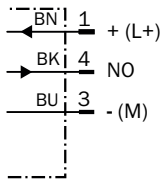
Ø	A (mm)	M (Nm)
M8	10	< 6

Connection type



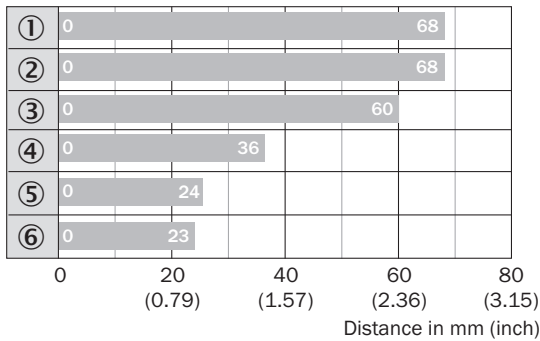
Connection diagram

Cd-002



Sensing range diagram

Sensing range

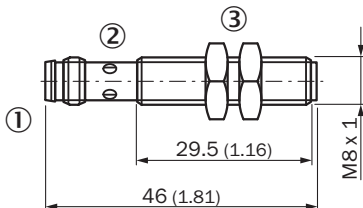


■ Max. sensing range S_n, flush or non-flush installation, non-magnetizable material

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

Dimensional drawing (Dimensions in mm (inch))


MM08, connector, short-body housing





- 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	Type	Part no.
Mounting brackets and plates			
	Mounting plate for M8 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M08	5321722

	Brief description	Type	Part no.
	Mounting bracket for M8 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M08	5321721
Terminal and alignment brackets			
	Clamping block for round sensors M8, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KH-M08	2051477
	Clamping block for round sensors M8, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KHF-M08	2051478
Others			
	<ul style="list-style-type: none"> • Connection type head A: Male connector, M8, 3-pin, straight, A-coded • Description: Unshielded • Connection systems: Screw-type terminals • Permitted cross-section: 0.14 mm² ... 0.5 mm² 	STE-0803-G	6037322
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M8, 3-pin, straight, A-coded • Description: Unshielded • Connection systems: Screw-type terminals • Permitted cross-section: 0.14 mm² ... 0.5 mm² 	DOS-0803-G	7902077
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M8, 3-pin, angled, A-coded • Description: Unshielded • Connection systems: Solder connection • Permitted cross-section: ≤ 0.25 mm² 	DOS-0803-W	7902078
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M8, 3-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 2 m, 3-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals 	YF8U13-020VA1XLEAX	2095860
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M8, 3-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 5 m, 3-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals 	YF8U13-050VA1XLEAX	2095884
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M8, 3-pin, angled, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 2 m, 3-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals 	YG8U13-020VA1XLEAX	2096165
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M8, 3-pin, angled, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 5 m, 3-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals 	YG8U13-050VA1XLEAX	2096166
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M8, 3-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 2 m, 3-wire, PUR, halogen-free • Description: Sensor/actuator cable, unshielded • Application: Zones with oils and lubricants, Drag chain operation, Robot 	YF8U13-020UA1XLEAX	2094782
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M8, 3-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 5 m, 3-wire, PUR, halogen-free • Description: Sensor/actuator cable, unshielded • Application: Zones with oils and lubricants, Drag chain operation, Robot 	YF8U13-050UA1XLEAX	2094788

	Brief description	Type	Part no.
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M8, 3-pin, angled, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 2 m, 3-wire, PUR, halogen-free • Description: Sensor/actuator cable, unshielded • Application: Zones with oils and lubricants, Drag chain operation, Robot 	YG8U13-020UA1XLEAX	2094794
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M8, 3-pin, angled, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 5 m, 3-wire, PUR, halogen-free • Description: Sensor/actuator cable, unshielded • Application: Zones with oils and lubricants, Drag chain operation, Robot 	YG8U13-050UA1XLEAX	2095586

SICK AT A GLANCE

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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



MM08-60APS-ZUK

MME

MAGNETIC SENSORS

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Ordering information

Type	Part no.
MM08-60APS-ZUK	1040027

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

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



Detailed technical data

Features

Housing	Metric
Housing	Short-body
Thread size	M8 x 1
Diameter	Ø 8 mm
Sensing range S_n	0 mm ... 60 mm ¹⁾
Safe sensing range S_a	48.6 mm
Magnetic sensitivity	1 mT
Switching frequency	1,000 Hz
Connection type	Cable, 3-wire, 2 m
Switching output	PNP
Output function	NO
Electrical wiring	DC 3-wire
Magnetic alignment	Axial
Enclosure rating	IP67 ²⁾
Items supplied	Mounting nut, brass, nickel-plated (2x)

¹⁾ Sensing range based on installation in non-magnetic material using Magnet MAG-3010-B (M4.0).

²⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 % ¹⁾
Voltage drop	≤ 2 V ²⁾

¹⁾ Of V_S .

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von Sr (VS und Ta constant).

⁵⁾ Pulsed.

Current consumption	10 mA ³⁾
Time delay before availability	≤ 20 ms
Hysteresis	1 % ... 10 %
Reproducibility	≤ 1 % ⁴⁾
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 200 mA
Cable material	PUR
Reverse polarity protection	Yes
Short-circuit protection	Yes ⁵⁾
Power-up pulse protection	✓
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	48 mm
Thread length	29.5 mm
Tightening torque, max.	6 Nm

¹⁾ Of V_S.

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von S_r (V_S und T_a constant).

⁵⁾ Pulsed.

Safety-related parameters

MTTF_D	1,980 years
DC_{avg}	0%
T_M (mission time)	20 years

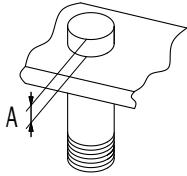
Classifications

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
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

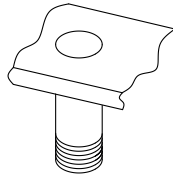
ETIM 8.0	EC002544
UNSPSC 16.0901	39122230

Installation note

installation in magnetizable material



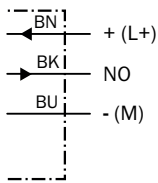
installation in non-magnetizable material



Ø	A (mm)	M (Nm)
M8	10	< 6

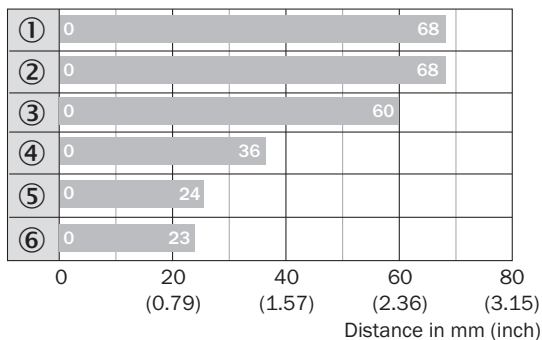
Connection diagram

Cd-001



Sensing range diagram

Sensing range



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

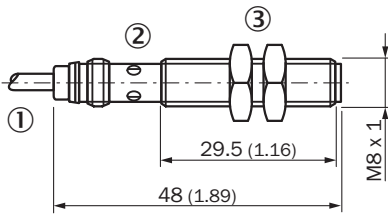
Magnet type

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

Dimensional drawing (Dimensions in mm (inch))




MM08, cable, short-body housing



- 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	Type	Part no.
Mounting brackets and plates			
	Mounting plate for M8 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M08	5321722
	Mounting bracket for M8 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M08	5321721
Terminal and alignment brackets			
	Clamping block for round sensors M8, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KH-M08	2051477
	Clamping block for round sensors M8, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KHF-M08	2051478

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WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com



MM12-45APS-ZCKS01

MME

MAGNETIC SENSORS

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Illustration may differ



Ordering information

Type	Part no.
MM12-45APS-ZCKS01	1050342

Included in delivery: BEF-MU-M12 (1)

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

Detailed technical data

Features

Housing	Metric
Housing	Short-body
Thread size	M12 x 1
Diameter	Ø 12 mm
Sensing range S_n	0 mm ... 45 mm ¹⁾
Safe sensing range S_a	36.45 mm
Magnetic sensitivity	≤ 1 mT
Switching frequency	1,000 Hz
Connection type	Male connector M12, 4-pin
Switching output	PNP
Output function	NO
Electrical wiring	DC 3-wire
Magnetic alignment	Axial
Enclosure rating	IP67 ²⁾
Items supplied	Mounting nut, brass, nickel-plated (2x)

¹⁾ Sensing range based on installation in non-magnetic material using Magnet MAG-3010-B (M4.0).

²⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 % ¹⁾
Voltage drop	≤ 2 V ²⁾
Current consumption	10 mA ³⁾

¹⁾ Of V_S .

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von Sr (VS und Ta constant).

⁵⁾ Pulsed.

Time delay before availability	≤ 20 ms
Hysteresis	1 % ... 10 %
Reproducibility	≤ 1 % ⁴⁾
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 200 mA
Reverse polarity protection	Yes
Short-circuit protection	Yes ⁵⁾
Power-up pulse protection	✓
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	61 mm
Tightening torque, max.	15 Nm

¹⁾ Of V_S.

²⁾ At I_a max.

³⁾ Without load.

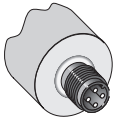
⁴⁾ Von Sr (VS und Ta constant).

⁵⁾ Pulsed.

Classifications

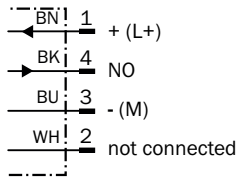
ECLASS 5.0	27270104
ECLASS 5.1.4	27270104
ECLASS 6.0	27270104
ECLASS 6.2	27270104
ECLASS 7.0	27270104
ECLASS 8.0	27270104
ECLASS 8.1	27270104
ECLASS 9.0	27270104
ECLASS 10.0	27270104
ECLASS 11.0	27270104
ECLASS 12.0	27274301
ETIM 5.0	EC002544
ETIM 6.0	EC002544
ETIM 7.0	EC002544
ETIM 8.0	EC002544
UNSPSC 16.0901	39122230

Connection type

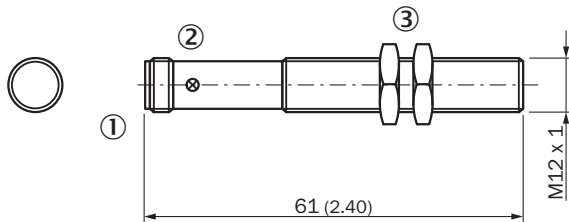


Connection diagram

Cd-011






Dimensional drawing (Dimensions in mm (inch))




- ① Connection
- ② Display LED
- ③ Fastening nuts (2x); width across 17, metal

Recommended accessories

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

	Brief description	Type	Part no.
Mounting brackets and plates			
	Mounting plate for M12 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M12	5321869
	Mounting bracket for M12 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M12	5308447
Terminal and alignment brackets			
	Clamping block for round sensors M12, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KH-M12	2051479
	Clamping block for round sensors M12, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KHF-M12	2051480

	Brief description	Type	Part no.
Others			
	<ul style="list-style-type: none"> Connection type head A: Male connector, M12, 4-pin, angled, A-coded Description: Unshielded Connection systems: Screw-type terminals Permitted cross-section: ≤ 0.75 mm² 	STE-1204-W	6022084
	<ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, straight, A-coded Description: Unshielded, Head A: female connector, M12, 4-pin, straight, unshielded, for power supply, for cable diameter 4 mm ... 6 mm Head B: - Connection systems: Screw-type terminals Permitted cross-section: ≤ 0.75 mm² 	DOS-1204-G	6007302
	<ul style="list-style-type: none"> Connection type head A: Male connector, M12, 4-pin, straight, A-coded Description: Unshielded Connection systems: Screw-type terminals Permitted cross-section: ≤ 0.75 mm² 	STE-1204-G	6009932
	<ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Zones with oils and lubricants, Drag chain operation, Robot 	YF2A14-020UB3XLEAX	2095607
	<ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Zones with oils and lubricants, Drag chain operation, Robot 	YF2A14-050UB3XLEAX	2095608
	<ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Zones with oils and lubricants, Drag chain operation, Robot 	YG2A14-020UB3XLEAX	2095766
	<ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Zones with oils and lubricants, Drag chain operation, Robot 	YG2A14-050UB3XLEAX	2095767
	<ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals 	YF2A14-020VB3XLEAX	2096234
	<ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals 	YF2A14-050VB3XLEAX	2096235
	<ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals 	YG2A14-020VB3XLEAX	2095895

	Brief description	Type	Part no.
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, angled, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 5 m, 4-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals 	YG2A14-050VB3XLEAX	2095897

SICK AT A GLANCE

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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



MM12-60ANO-ZU0

MME

MAGNETIC SENSORS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

Type	Part no.
MM12-60ANO-ZU0	1016927

Included in delivery: BEF-MU-M12 (1)

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

Detailed technical data

Features

Housing	Metric
Housing	Standard
Thread size	M12 x 1
Diameter	Ø 12 mm
Sensing range S_n	5 mm ... 60 mm ¹⁾
Safe sensing range S_a	48.6 mm
Magnetic sensitivity	≤ 1 mT
Switching frequency	5,000 Hz
Connection type	Cable, 3-wire, 2 m
Switching output	NPN
Output function	NC
Electrical wiring	DC 3-wire
Magnetic alignment	Axial
Enclosure rating	IP67 ²⁾
Items supplied	Mounting nut, brass, nickel-plated (2x)

¹⁾ Sensing range based on installation in non-magnetic material using Magnet MAG-3010-B (M4.0).

²⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 % ¹⁾

¹⁾ Of V_S.

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von Sr (VS und Ta constant).

⁵⁾ Pulsed.

Voltage drop	$\leq 2.2 \text{ V}^{2)}$
Current consumption	10 mA ³⁾
Time delay before availability	$\leq 30 \text{ ms}$
Hysteresis	1 % ... 10 %
Reproducibility	$\leq 1 \%^{4)}$
Temperature drift (of S_r)	$\pm 10 \%$
EMC	According to EN 60947-5-2
Continuous current I_a	$\leq 200 \text{ mA}$
Cable material	PUR/PVC
Wire-break protection	✓
Reverse polarity protection	Yes
Short-circuit protection	Yes ⁵⁾
Power-up pulse protection	✓
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	50 mm
Thread length	40 mm
Tightening torque, max.	$\leq 7 \text{ Nm}$

1) Of V_S.

2) At I_a max.

3) Without load.

4) Von Sr (VS und Ta constant).

5) Pulsed.

Classifications

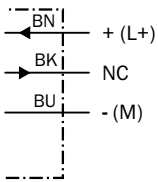
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ECLASS 5.1.4	27270104
ECLASS 6.0	27270104
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ECLASS 7.0	27270104
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ECLASS 8.1	27270104
ECLASS 9.0	27270104
ECLASS 10.0	27270104
ECLASS 11.0	27270104
ECLASS 12.0	27274301
ETIM 5.0	EC002544
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ETIM 7.0	EC002544
ETIM 8.0	EC002544
UNSPSC 16.0901	39122230

Connection type



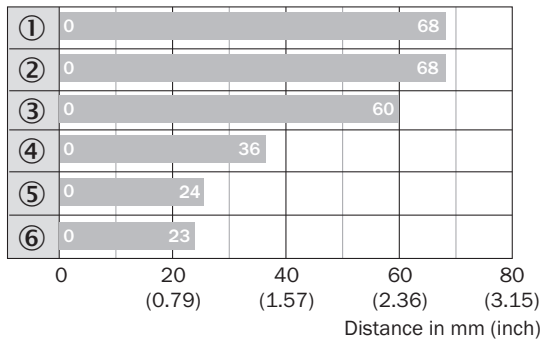
Connection diagram

Cd-003



Sensing range diagram

Sensing range



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

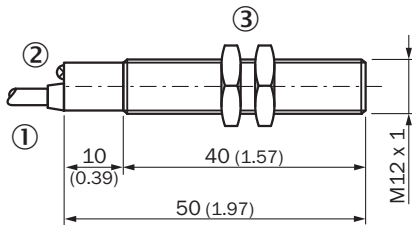
Magnet type

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

Dimensional drawing (Dimensions in mm (inch))




MM12, cable, standard housing



- ① Connection
- ② Display LED
- ③ Fastening nuts (2x); width across 17, metal

Recommended accessories

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

	Brief description	Type	Part no.
Mounting brackets and plates			
	Mounting plate for M12 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M12	5321869
	Mounting bracket for M12 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M12	5308447
Terminal and alignment brackets			
	Clamping block for round sensors M12, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KH-M12	2051479
	Clamping block for round sensors M12, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KHF-M12	2051480

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Contacts and other locations –www.sick.com



MM12-60ANS-ZCK

MME

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Illustration may differ



Ordering information

Type	Part no.
MM12-60ANS-ZCK	1040071

Included in delivery: BEF-MU-M12 (1)

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

Detailed technical data

Features

Housing	Metric
Housing	Short-body
Thread size	M12 x 1
Diameter	Ø 12 mm
Sensing range S_n	0 mm ... 60 mm ¹⁾
Safe sensing range S_a	48.6 mm
Magnetic sensitivity	1 mT
Switching frequency	1,000 Hz
Connection type	Male connector M12, 4-pin
Switching output	NPN
Output function	NO
Electrical wiring	DC 3-wire
Magnetic alignment	Axial
Enclosure rating	IP67 ²⁾
Items supplied	Mounting nut, brass, nickel-plated (2x)

¹⁾ Sensing range based on installation in non-magnetic material using Magnet MAG-3010-B (M4.0).

²⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 % ¹⁾
Voltage drop	≤ 2 V ²⁾
Current consumption	10 mA ³⁾

¹⁾ Of V_S .

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von Sr (VS und Ta constant).

⁵⁾ Pulsed.

Time delay before availability	≤ 20 ms
Hysteresis	1 % ... 10 %
Reproducibility	≤ 1 % ⁴⁾
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 200 mA
Reverse polarity protection	Yes
Short-circuit protection	Yes ⁵⁾
Power-up pulse protection	✓
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	28 mm
Tightening torque, max.	15 Nm

¹⁾ Of V_S.

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von Sr (VS und Ta constant).

⁵⁾ Pulsed.

Safety-related parameters

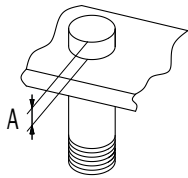
MTTF_D	1,980 years
DC_{avg}	0%
T_M (mission time)	20 years

Classifications

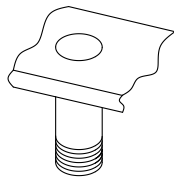
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ECLASS 6.0	27270104
ECLASS 6.2	27270104
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ECLASS 8.1	27270104
ECLASS 9.0	27270104
ECLASS 10.0	27270104
ECLASS 11.0	27270104
ECLASS 12.0	27274301
ETIM 5.0	EC002544
ETIM 6.0	EC002544
ETIM 7.0	EC002544
ETIM 8.0	EC002544
UNSPSC 16.0901	39122230

Installation note

installation in magnetizable material



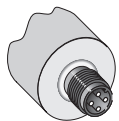
installation in non-magnetizable material



Ø	A (mm)	M (Nm)
M12	10	< 15

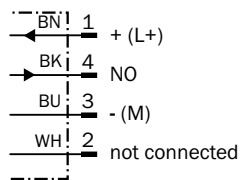


Connection type



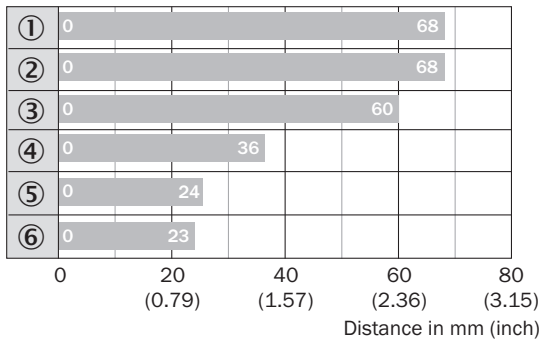
Connection diagram

Cd-011



Sensing range diagram

Sensing range

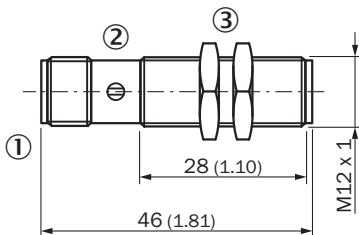


■ Max. sensing range S_n, flush or non-flush installation, non-magnetizable material

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

Dimensional drawing (Dimensions in mm (inch))


MM12, connector, short-body housing





- ① Connection
- ② Display LED
- ③ Fastening nuts (2x); width across 17, metal

Recommended accessories

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

	Brief description	Type	Part no.
Mounting brackets and plates			
	Mounting plate for M12 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M12	5321869

	Brief description	Type	Part no.
	Mounting bracket for M12 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M12	5308447
Terminal and alignment brackets			
	Clamping block for round sensors M12, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KH-M12	2051479
	Clamping block for round sensors M12, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KHF-M12	2051480
Others			
	<ul style="list-style-type: none"> Connection type head A: Male connector, M12, 4-pin, angled, A-coded Description: Unshielded Connection systems: Screw-type terminals Permitted cross-section: ≤ 0.75 mm² 	STE-1204-W	6022084
	<ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, straight, A-coded Description: Unshielded, Head A: female connector, M12, 4-pin, straight, unshielded, for power supply, for cable diameter 4 mm ... 6 mm Head B: - Connection systems: Screw-type terminals Permitted cross-section: ≤ 0.75 mm² 	DOS-1204-G	6007302
	<ul style="list-style-type: none"> Connection type head A: Male connector, M12, 4-pin, straight, A-coded Description: Unshielded Connection systems: Screw-type terminals Permitted cross-section: ≤ 0.75 mm² 	STE-1204-G	6009932
	<ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Zones with oils and lubricants, Drag chain operation, Robot 	YF2A14-020UB3XLEAX	2095607
	<ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Zones with oils and lubricants, Drag chain operation, Robot 	YF2A14-050UB3XLEAX	2095608
	<ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Zones with oils and lubricants, Drag chain operation, Robot 	YG2A14-020UB3XLEAX	2095766
	<ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Zones with oils and lubricants, Drag chain operation, Robot 	YG2A14-050UB3XLEAX	2095767
	<ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals 	YF2A14-020VB3XLEAX	2096234
	<ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals 	YF2A14-050VB3XLEAX	2096235

	Brief description	Type	Part no.
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, angled, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 2 m, 4-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals 	YG2A14-020VB3XLEAX	2095895
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, angled, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 5 m, 4-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals 	YG2A14-050VB3XLEAX	2095897

SICK AT A GLANCE

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Contacts and other locations –www.sick.com



MM12-60ANS-ZUK

MME

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Illustration may differ



Ordering information

Type	Part no.
MM12-60ANS-ZUK	1040026

Included in delivery: BEF-MU-M12 (1)

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

Detailed technical data

Features

Housing	Metric
Housing	Short-body
Thread size	M12 x 1
Diameter	Ø 12 mm
Sensing range S_n	0 mm ... 60 mm ¹⁾
Safe sensing range S_a	48.6 mm
Magnetic sensitivity	1 mT
Switching frequency	1,000 Hz
Connection type	Cable, 3-wire, 2 m
Switching output	NPN
Output function	NO
Electrical wiring	DC 3-wire
Magnetic alignment	Axial
Enclosure rating	IP67 ²⁾
Items supplied	Mounting nut, brass, nickel-plated (2x)

¹⁾ Sensing range based on installation in non-magnetic material using Magnet MAG-3010-B (M4.0).

²⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 % ¹⁾
Voltage drop	≤ 2 V ²⁾
Current consumption	10 mA ³⁾

¹⁾ Of V_S .

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von Sr (VS und Ta constant).

⁵⁾ Pulsed.

Time delay before availability	≤ 20 ms
Hysteresis	1 % ... 10 %
Reproducibility	≤ 1 % ⁴⁾
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 200 mA
Cable material	PUR
Reverse polarity protection	Yes
Short-circuit protection	Yes ⁵⁾
Power-up pulse protection	✓
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	48 mm
Thread length	28 mm
Tightening torque, max.	15 Nm

¹⁾ Of V_S.

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von S_r (V_S und T_a constant).

⁵⁾ Pulsed.

Safety-related parameters

MTTF_D	1,980 years
DC_{avg}	0%
T_M (mission time)	20 years

Classifications

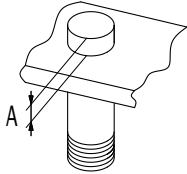
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ECLASS 8.0	27270104
ECLASS 8.1	27270104
ECLASS 9.0	27270104
ECLASS 10.0	27270104
ECLASS 11.0	27270104
ECLASS 12.0	27274301
ETIM 5.0	EC002544
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UNSPSC 16.0901

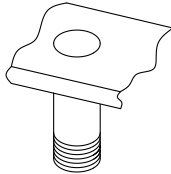

39122230

Installation note

installation in magnetizable material



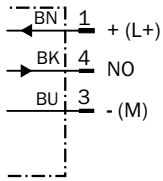
installation in non-magnetizable material

Ø	A (mm)	M (Nm)
M12	10	< 15

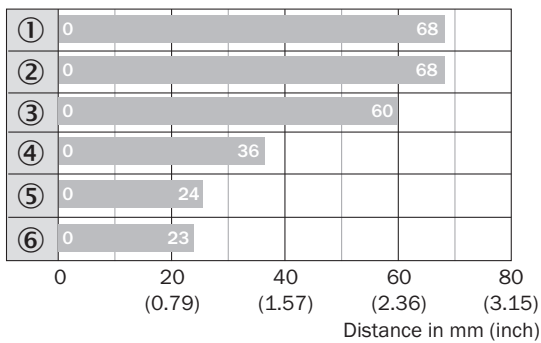
Connection diagram

Cd-002



Sensing range diagram

Sensing range



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

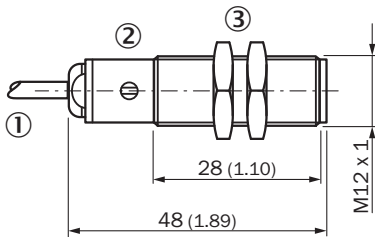
Magnet type

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

Dimensional drawing (Dimensions in mm (inch))




MM12, cable, short-body housing



- ① Connection
- ② Display LED
- ③ Fastening nuts (2x); width across 17, metal

Recommended accessories

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

	Brief description	Type	Part no.
Mounting brackets and plates			
	Mounting plate for M12 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M12	5321869
	Mounting bracket for M12 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M12	5308447
Terminal and alignment brackets			
	Clamping block for round sensors M12, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KH-M12	2051479
	Clamping block for round sensors M12, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KHF-M12	2051480

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MM12-60APO-ZUK

MME

MAGNETIC SENSORS

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Illustration may differ



Ordering information

Type	Part no.
MM12-60APO-ZUK	1040065

Included in delivery: BEF-MU-M12 (1)

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

Detailed technical data

Features

Housing	Metric
Housing	Short-body
Thread size	M12 x 1
Diameter	Ø 12 mm
Sensing range S_n	0 mm ... 60 mm ¹⁾
Safe sensing range S_a	48.6 mm
Magnetic sensitivity	1 mT
Switching frequency	1,000 Hz
Connection type	Cable, 3-wire, 2 m
Switching output	PNP
Output function	NC
Electrical wiring	DC 3-wire
Magnetic alignment	Axial
Enclosure rating	IP67 ²⁾
Items supplied	Mounting nut, brass, nickel-plated (2x)

¹⁾ Sensing range based on installation in non-magnetic material using Magnet MAG-3010-B (M4.0).

²⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 % ¹⁾
Voltage drop	≤ 2 V ²⁾
Current consumption	10 mA ³⁾

¹⁾ Of V_S .

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von Sr (VS und Ta constant).

⁵⁾ Pulsed.

Time delay before availability	≤ 20 ms
Hysteresis	1 % ... 10 %
Reproducibility	≤ 1 % ⁴⁾
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 200 mA
Cable material	PUR
Reverse polarity protection	Yes
Short-circuit protection	Yes ⁵⁾
Power-up pulse protection	✓
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	48 mm
Thread length	28 mm
Tightening torque, max.	15 Nm

¹⁾ Of V_S.

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von Sr (VS und Ta constant).

⁵⁾ Pulsed.

Safety-related parameters

MTTF_D	1,980 years
DC_{avg}	0%
T_M (mission time)	20 years

Classifications

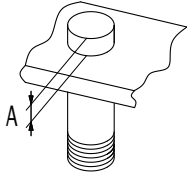
ECLASS 5.0	27270104
ECLASS 5.1.4	27270104
ECLASS 6.0	27270104
ECLASS 6.2	27270104
ECLASS 7.0	27270104
ECLASS 8.0	27270104
ECLASS 8.1	27270104
ECLASS 9.0	27270104
ECLASS 10.0	27270104
ECLASS 11.0	27270104
ECLASS 12.0	27274301
ETIM 5.0	EC002544
ETIM 6.0	EC002544
ETIM 7.0	EC002544
ETIM 8.0	EC002544

UNSPSC 16.0901

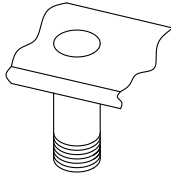
39122230

Installation note

installation in magnetizable material



installation in non-magnetizable material

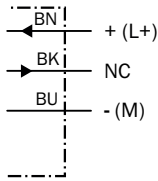


Ø	A (mm)	M (Nm)
M12	10	< 15



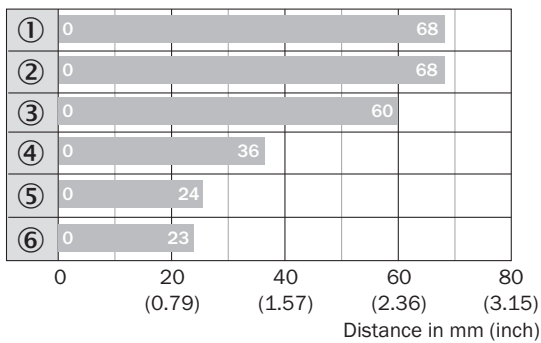
Connection diagram

Cd-003



Sensing range diagram

Sensing range



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

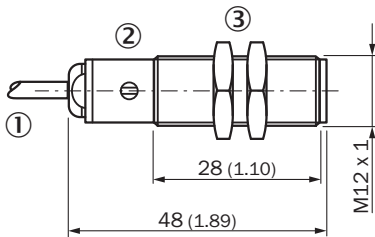
Magnet type

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

Dimensional drawing (Dimensions in mm (inch))




MM12, cable, short-body housing



- ① Connection
- ② Display LED
- ③ Fastening nuts (2x); width across 17, metal

Recommended accessories

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

	Brief description	Type	Part no.
Mounting brackets and plates			
	Mounting plate for M12 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M12	5321869
	Mounting bracket for M12 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M12	5308447
Terminal and alignment brackets			
	Clamping block for round sensors M12, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KH-M12	2051479
	Clamping block for round sensors M12, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KHF-M12	2051480

SICK AT A GLANCE

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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



MM12-60APS-ZCK

MME

MAGNETIC SENSORS

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Illustration may differ



Ordering information

Type	Part no.
MM12-60APS-ZCK	1040070

Included in delivery: BEF-MU-M12 (1)

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

Detailed technical data

Features

Housing	Metric
Housing	Short-body
Thread size	M12 x 1
Diameter	Ø 12 mm
Sensing range S_n	0 mm ... 60 mm ¹⁾
Safe sensing range S_a	48.6 mm
Magnetic sensitivity	≤ 1 mT
Switching frequency	1,000 Hz
Connection type	Male connector M12, 4-pin
Switching output	PNP
Output function	NO
Electrical wiring	DC 3-wire
Magnetic alignment	Axial
Enclosure rating	IP67 ²⁾
Items supplied	Mounting nut, brass, nickel-plated (2x)

¹⁾ Sensing range based on installation in non-magnetic material using Magnet MAG-3010-B (M4.0).

²⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 % ¹⁾
Voltage drop	≤ 2 V ²⁾
Current consumption	10 mA ³⁾

¹⁾ Of V_S .

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von Sr (VS und Ta constant).

⁵⁾ Pulsed.

Time delay before availability	≤ 20 ms
Hysteresis	1 % ... 10 %
Reproducibility	≤ 1 % ⁴⁾
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 200 mA
Reverse polarity protection	Yes
Short-circuit protection	Yes ⁵⁾
Power-up pulse protection	✓
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	28 mm
Tightening torque, max.	15 Nm

¹⁾ Of V_S.

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von S_r (V_S und T_a constant).

⁵⁾ Pulsed.

Safety-related parameters

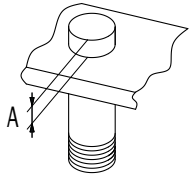
MTTF_D	1,980 years
DC_{avg}	0%
T_M (mission time)	20 years

Classifications

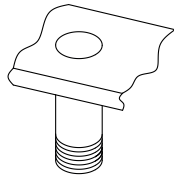
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ECLASS 5.1.4	27270104
ECLASS 6.0	27270104
ECLASS 6.2	27270104
ECLASS 7.0	27270104
ECLASS 8.0	27270104
ECLASS 8.1	27270104
ECLASS 9.0	27270104
ECLASS 10.0	27270104
ECLASS 11.0	27270104
ECLASS 12.0	27274301
ETIM 5.0	EC002544
ETIM 6.0	EC002544
ETIM 7.0	EC002544
ETIM 8.0	EC002544
UNSPSC 16.0901	39122230

Installation note

installation in magnetizable material



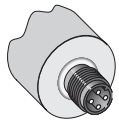
installation in non-magnetizable material



Ø	A (mm)	M (Nm)
M12	10	< 15

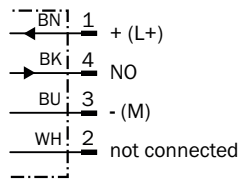


Connection type



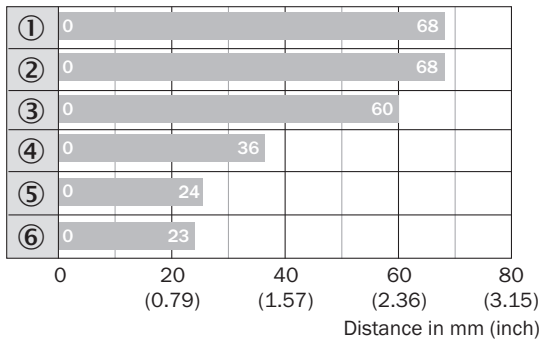
Connection diagram

Cd-011



Sensing range diagram

Sensing range

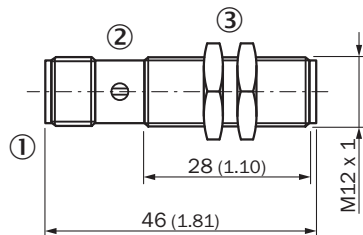


■ Max. sensing range S_n, flush or non-flush installation, non-magnetizable material

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

Dimensional drawing (Dimensions in mm (inch))


MM12, connector, short-body housing





- ① Connection
- ② Display LED
- ③ Fastening nuts (2x); width across 17, metal

Recommended accessories

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

	Brief description	Type	Part no.
Mounting brackets and plates			
	Mounting plate for M12 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M12	5321869

	Brief description	Type	Part no.
	Mounting bracket for M12 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M12	5308447
Terminal and alignment brackets			
	Clamping block for round sensors M12, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KH-M12	2051479
	Clamping block for round sensors M12, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KHF-M12	2051480
Others			
	<ul style="list-style-type: none"> Connection type head A: Male connector, M12, 4-pin, angled, A-coded Description: Unshielded Connection systems: Screw-type terminals Permitted cross-section: ≤ 0.75 mm² 	STE-1204-W	6022084
	<ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, straight, A-coded Description: Unshielded, Head A: female connector, M12, 4-pin, straight, unshielded, for power supply, for cable diameter 4 mm ... 6 mm Head B: - Connection systems: Screw-type terminals Permitted cross-section: ≤ 0.75 mm² 	DOS-1204-G	6007302
	<ul style="list-style-type: none"> Connection type head A: Male connector, M12, 4-pin, straight, A-coded Description: Unshielded Connection systems: Screw-type terminals Permitted cross-section: ≤ 0.75 mm² 	STE-1204-G	6009932
	<ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Zones with oils and lubricants, Drag chain operation, Robot 	YF2A14-020UB3XLEAX	2095607
	<ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Zones with oils and lubricants, Drag chain operation, Robot 	YF2A14-050UB3XLEAX	2095608
	<ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Zones with oils and lubricants, Drag chain operation, Robot 	YG2A14-020UB3XLEAX	2095766
	<ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Zones with oils and lubricants, Drag chain operation, Robot 	YG2A14-050UB3XLEAX	2095767
	<ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals 	YF2A14-020VB3XLEAX	2096234
	<ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals 	YF2A14-050VB3XLEAX	2096235

	Brief description	Type	Part no.
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, angled, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 2 m, 4-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals 	YG2A14-020VB3XLEAX	2095895
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, angled, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 5 m, 4-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals 	YG2A14-050VB3XLEAX	2095897

SICK AT A GLANCE

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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



MM12-60APS-ZUA

MME

MAGNETIC SENSORS

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Illustration may differ



Ordering information

Type	Part no.
MM12-60APS-ZUA	1042365

Included in delivery: BEF-MU-M12 (1)

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

Detailed technical data

Features

Housing	Metric
Housing	Standard
Thread size	M12 x 1
Diameter	Ø 12 mm
Sensing range S_n	5 mm ... 60 mm ¹⁾
Safe sensing range S_a	48.6 mm
Magnetic sensitivity	1 mT
Switching frequency	5,000 Hz
Connection type	Cable, 3-wire, 3 m
Switching output	PNP
Output function	NO
Electrical wiring	DC 3-wire
Magnetic alignment	Axial
Enclosure rating	IP67 ²⁾
Items supplied	Mounting nut, brass, nickel-plated (2x)

¹⁾ Sensing range based on installation in non-magnetic material using Magnet MAG-3010-B (M4.0).

²⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 % ¹⁾

¹⁾ Of V_S .

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von Sr (VS und Ta constant).

⁵⁾ Pulsed.

Voltage drop	$\leq 1.5 \text{ V}^{2)}$
Current consumption	10 mA ³⁾
Time delay before availability	$\leq 2 \text{ ms}$
Hysteresis	1 % ... 10 %
Reproducibility	$\leq 1 \%^{4)}$
Temperature drift (of S_r)	$\pm 10 \%$
EMC	According to EN 60947-5-2
Continuous current I_a	$\leq 300 \text{ mA}$
Cable material	PUR/PVC
Wire-break protection	✓
Reverse polarity protection	Yes
Short-circuit protection	Yes ⁵⁾
Power-up pulse protection	✓
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	50 mm
Thread length	40 mm
Tightening torque, max.	7 Nm

1) Of V_S.

2) At I_a max.

3) Without load.

4) Von Sr (VS und Ta constant).

5) Pulsed.

Safety-related parameters

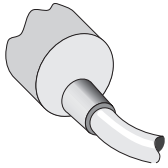
MTTF_D	1,980 years
DC_{avg}	0 %
T_M (mission time)	20 years

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
ECLASS 9.0	27270104
ECLASS 10.0	27270104
ECLASS 11.0	27270104
ECLASS 12.0	27274301
ETIM 5.0	EC002544

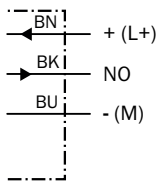
ETIM 6.0	EC002544
ETIM 7.0	EC002544
ETIM 8.0	EC002544
UNSPSC 16.0901	39122230

Connection type



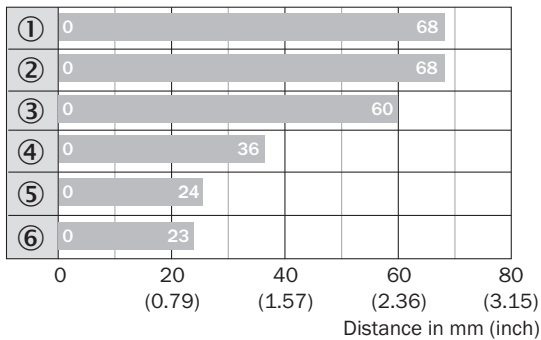
Connection diagram

Cd-001



Sensing range diagram

Sensing range



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

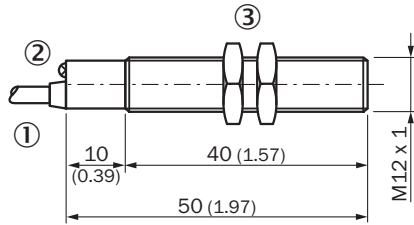
Magnet type

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

Dimensional drawing (Dimensions in mm (inch))




MM12, cable, standard housing



- ① Connection
- ② Display LED
- ③ Fastening nuts (2x); width across 17, metal

Recommended accessories

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

	Brief description	Type	Part no.
Mounting brackets and plates			
	Mounting plate for M12 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M12	5321869
	Mounting bracket for M12 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M12	5308447
Terminal and alignment brackets			
	Clamping block for round sensors M12, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KH-M12	2051479
	Clamping block for round sensors M12, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KHF-M12	2051480

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Contacts and other locations –www.sick.com



MM12-60APS-ZUK

MME

MAGNETIC SENSORS

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Illustration may differ



Ordering information

Type	Part no.
MM12-60APS-ZUK	1040069

Included in delivery: BEF-MU-M12 (1)

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

Detailed technical data

Features

Housing	Metric
Housing	Short-body
Thread size	M12 x 1
Diameter	Ø 12 mm
Sensing range S_n	0 mm ... 60 mm ¹⁾
Safe sensing range S_a	48.6 mm
Magnetic sensitivity	1 mT
Switching frequency	1,000 Hz
Connection type	Cable, 3-wire, 2 m
Switching output	PNP
Output function	NO
Electrical wiring	DC 3-wire
Magnetic alignment	Axial
Enclosure rating	IP67 ²⁾
Items supplied	Mounting nut, brass, nickel-plated (2x)

¹⁾ Sensing range based on installation in non-magnetic material using Magnet MAG-3010-B (M4.0).

²⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 % ¹⁾
Voltage drop	≤ 2 V ²⁾
Current consumption	10 mA ³⁾

¹⁾ Of V_S .

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von Sr (VS und Ta constant).

⁵⁾ Pulsed.

Time delay before availability	≤ 20 ms
Hysteresis	1 % ... 10 %
Reproducibility	≤ 1 % ⁴⁾
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 200 mA
Cable material	PUR
Reverse polarity protection	Yes
Short-circuit protection	Yes ⁵⁾
Power-up pulse protection	✓
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	48 mm
Thread length	28 mm
Tightening torque, max.	15 Nm

¹⁾ Of V_S.

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von S_r (V_S und T_a constant).

⁵⁾ Pulsed.

Safety-related parameters

MTTF_D	1,980 years
DC_{avg}	0%
T_M (mission time)	20 years

Classifications

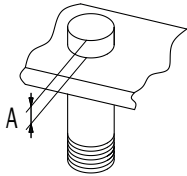
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ECLASS 6.0	27270104
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ECLASS 8.0	27270104
ECLASS 8.1	27270104
ECLASS 9.0	27270104
ECLASS 10.0	27270104
ECLASS 11.0	27270104
ECLASS 12.0	27274301
ETIM 5.0	EC002544
ETIM 6.0	EC002544
ETIM 7.0	EC002544
ETIM 8.0	EC002544

UNSPSC 16.0901

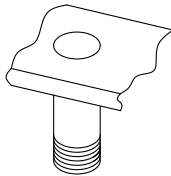
39122230

Installation note

installation in magnetizable material



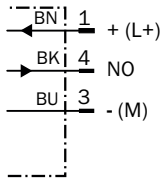
installation in non-magnetizable material



Ø	A (mm)	M (Nm)
M12	10	< 15

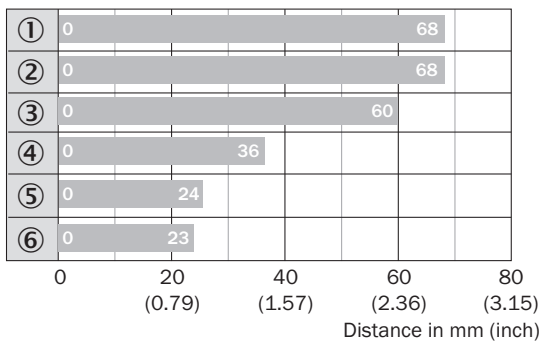
Connection diagram

Cd-002



Sensing range diagram

Sensing range



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

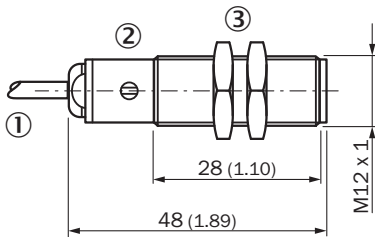
Magnet type

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

Dimensional drawing (Dimensions in mm (inch))




MM12, cable, short-body housing



- ① Connection
- ② Display LED
- ③ Fastening nuts (2x); width across 17, metal

Recommended accessories

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

	Brief description	Type	Part no.
Mounting brackets and plates			
	Mounting plate for M12 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M12	5321869
	Mounting bracket for M12 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M12	5308447
Terminal and alignment brackets			
	Clamping block for round sensors M12, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KH-M12	2051479
	Clamping block for round sensors M12, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KHF-M12	2051480

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

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WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com



MM12-90ANS-ZU0

MME

MAGNETIC SENSORS

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Ordering information

Type	Part no.
MM12-90ANS-ZU0	1051013

Included in delivery: BEF-MU-M12 (1)

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

Illustration may differ



Detailed technical data

Features

Housing	Metric
Housing	Advanced
Thread size	M12 x 1
Diameter	Ø 12 mm
Sensing range S_n	5 mm ... 90 mm ¹⁾
Safe sensing range S_a	72.9 mm
Magnetic sensitivity	≤ 0.6 mT
Switching frequency	1,000 Hz
Connection type	Cable, 3-wire, 2 m
Switching output	NPN
Output function	NO
Electrical wiring	DC 3-wire
Magnetic alignment	Axial
Enclosure rating	IP67 ²⁾
Items supplied	Mounting nut, brass, nickel-plated (2x)

¹⁾ Sensing range based on installation in non-magnetic material using Magnet MAG-3010-B (M4.0).

²⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 % ¹⁾
Voltage drop	≤ 2.2 V ²⁾

¹⁾ Of V_S .

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von S_r (V_S und T_a constant).

⁵⁾ Pulsed.

Current consumption	10 mA ³⁾
Time delay before availability	≤ 30 ms
Hysteresis	≤ 25 %
Reproducibility	≤ 1 % ⁴⁾
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 200 mA
Cable material	PUR
Reverse polarity protection	Yes
Short-circuit protection	Yes ⁵⁾
Power-up pulse protection	✓
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	50 mm
Thread length	40 mm
Tightening torque, max.	≤ 7 Nm

¹⁾ Of V_S.

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von S_r (V_S und T_a constant).

⁵⁾ Pulsed.

Safety-related parameters

MTTF_D	2,238 years
DC_{avg}	0 %
T_M (mission time)	20 years

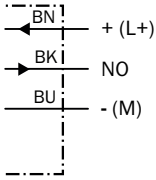
Classifications

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
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

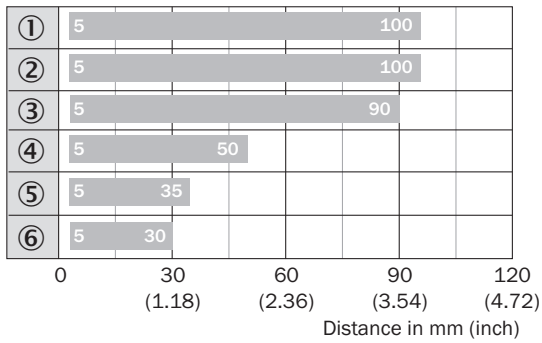
ETIM 8.0	EC002544
UNSPSC 16.0901	39122230

Connection diagram

Cd-001



Sensing range diagram

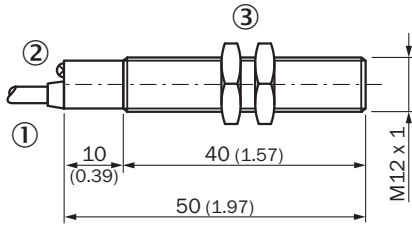


■ Max. sensing range S_m , flush or non-flush installation, non-magnetizable material

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

Dimensional drawing (Dimensions in mm (inch))




MM12, cable, standard housing



- ① Connection
- ② Display LED
- ③ Fastening nuts (2x); width across 17, metal

Recommended accessories

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

	Brief description	Type	Part no.
Mounting brackets and plates			
	Mounting plate for M12 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M12	5321869
	Mounting bracket for M12 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M12	5308447
Terminal and alignment brackets			
	Clamping block for round sensors M12, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KH-M12	2051479
	Clamping block for round sensors M12, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KHF-M12	2051480

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MM12-90APS-ZC0

MME

MAGNETIC SENSORS

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Ordering information

Type	Part no.
MM12-90APS-ZCO	1029950

Included in delivery: BEF-MU-M12 (1)

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

Illustration may differ



Detailed technical data

Features

Housing	Metric
Housing	Advanced
Thread size	M12 x 1
Diameter	Ø 12 mm
Sensing range S_n	5 mm ... 90 mm ¹⁾
Safe sensing range S_a	72.9 mm
Magnetic sensitivity	≤ 0.6 mT
Switching frequency	1,000 Hz
Connection type	Male connector M12, 4-pin
Switching output	PNP
Output function	NO
Electrical wiring	DC 3-wire
Magnetic alignment	Axial
Enclosure rating	IP67 ²⁾
Items supplied	Mounting nut, brass, nickel-plated (2x)

¹⁾ Sensing range based on installation in non-magnetic material using Magnet MAG-3010-B (M4.0).

²⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 % ¹⁾
Voltage drop	≤ 2.2 V ²⁾

¹⁾ Of V_S .

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von S_r (V_S und T_a constant).

⁵⁾ Pulsed.

Current consumption	10 mA ³⁾
Time delay before availability	≤ 30 ms
Hysteresis	≤ 25 %
Reproducibility	≤ 1 % ⁴⁾
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 200 mA
Reverse polarity protection	Yes
Short-circuit protection	Yes ⁵⁾
Power-up pulse protection	✓
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	62.5 mm
Thread length	40 mm
Tightening torque, max.	≤ 7 Nm

¹⁾ Of V_S.

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von S_r (V_S und T_a constant).

⁵⁾ Pulsed.

Safety-related parameters

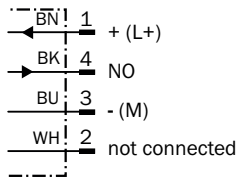
MTTF_D	2,519 years
DC_{avg}	0 %

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
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

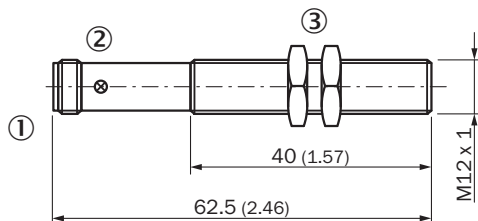
Connection diagram

Cd-011



Dimensional drawing (Dimensions in mm (inch))




MM12, connector, Standard housing



- ① Connection
- ② Display LED
- ③ Fastening nuts (2x); width across 17, metal

Recommended accessories

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

	Brief description	Type	Part no.
Mounting brackets and plates			
	Mounting plate for M12 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M12	5321869
	Mounting bracket for M12 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M12	5308447
Terminal and alignment brackets			
	Clamping block for round sensors M12, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KH-M12	2051479
	Clamping block for round sensors M12, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KHF-M12	2051480

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WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com



MM12-90APS-ZU0

MME

MAGNETIC SENSORS

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Ordering information

Type	Part no.
MM12-90APS-ZUO	1029951

Included in delivery: BEF-MU-M12 (1)

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

Illustration may differ



Detailed technical data

Features

Housing	Metric
Housing	Advanced
Thread size	M12 x 1
Diameter	Ø 12 mm
Sensing range S_n	5 mm ... 90 mm ¹⁾
Safe sensing range S_a	72.9 mm
Magnetic sensitivity	0.6 mT
Switching frequency	1,000 Hz
Connection type	Cable, 3-wire, 2 m
Switching output	PNP
Output function	NO
Electrical wiring	DC 3-wire
Magnetic alignment	Axial
Enclosure rating	IP67 ²⁾
Items supplied	Mounting nut, brass, nickel-plated (2x)

¹⁾ Sensing range based on installation in non-magnetic material using Magnet MAG-3010-B (M4.0).

²⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 % ¹⁾
Voltage drop	≤ 2.2 V ²⁾

¹⁾ Of V_S .

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von S_r (V_S und T_a constant).

⁵⁾ Pulsed.

Current consumption	10 mA ³⁾
Time delay before availability	≤ 30 ms
Hysteresis	≤ 25 %
Reproducibility	≤ 1 % ⁴⁾
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 200 mA
Cable material	PUR
Reverse polarity protection	Yes
Short-circuit protection	Yes ⁵⁾
Power-up pulse protection	✓
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	50 mm
Thread length	40 mm
Tightening torque, max.	7 Nm

¹⁾ Of V_S.

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von S_r (V_S und T_a constant).

⁵⁾ Pulsed.

Safety-related parameters

MTTF_D	2,519 years
DC_{avg}	0 %

Classifications

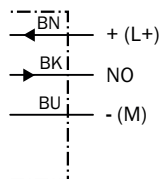
ECLASS 5.0	27270104
ECLASS 5.1.4	27270104
ECLASS 6.0	27270104
ECLASS 6.2	27270104
ECLASS 7.0	27270104
ECLASS 8.0	27270104
ECLASS 8.1	27270104
ECLASS 9.0	27270104
ECLASS 10.0	27270104
ECLASS 11.0	27270104
ECLASS 12.0	27274301
ETIM 5.0	EC002544
ETIM 6.0	EC002544
ETIM 7.0	EC002544
ETIM 8.0	EC002544

UNSPSC 16.0901

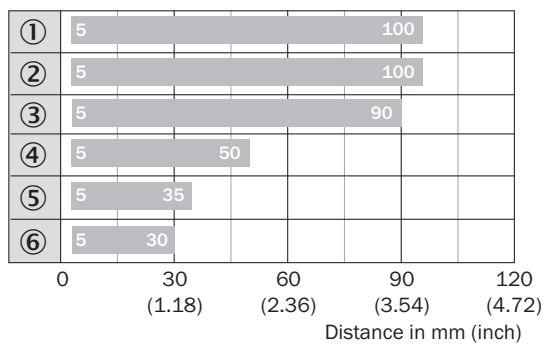
39122230

Connection diagram

Cd-001



Sensing range diagram

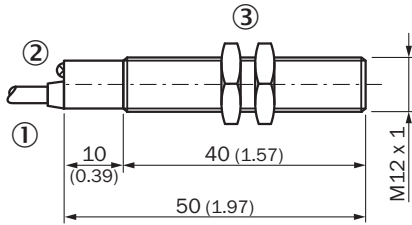


■ Max. sensing range S_n , flush or non-flush installation, non-magnetizable material

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

Dimensional drawing (Dimensions in mm (inch))




MM12, cable, standard housing



- ① Connection
- ② Display LED
- ③ Fastening nuts (2x); width across 17, metal

Recommended accessories

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

	Brief description	Type	Part no.
Mounting brackets and plates			
	Mounting plate for M12 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M12	5321869
	Mounting bracket for M12 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M12	5308447
Terminal and alignment brackets			
	Clamping block for round sensors M12, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KH-M12	2051479
	Clamping block for round sensors M12, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KHF-M12	2051480

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WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com



MM18-00APS-ZCK

MME

MAGNETIC SENSORS

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Ordering information

Type	Part no.
MM18-00APS-ZCK	1076085

Included in delivery: BEF-MU-M18 (1)

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



Detailed technical data

Features

Housing	Metric
Housing	Short-body
Thread size	M18 x 1
Diameter	Ø 18 mm
Sensing range S_n	5 mm ... 120 mm 1) 2) 3)
Safe sensing range S_a	97.2 mm 2) 2) 3) 3)
Magnetic sensitivity	0.4 mT
Switching frequency	5,000 Hz
Connection type	Male connector M12, 4-pin
Switching output	PNP
Output function	NO
Electrical wiring	DC 3-wire
Enclosure rating	IP67 ⁴⁾
Items supplied	Mounting nut, brass, nickel-plated (2x)

1) Max. flux density allowed at the sensor: 280mT.

2) Excluding the geomagnetic field.

3) Based on M4.0 magnet.

4) According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 %
Voltage drop	≤ 2 V ¹⁾

1) At I_a max.

2) Without load.

3) Supply voltage U_B and constant ambient temperature T_a .

4) Of S_r .

5) Pulsed.

Current consumption	10 mA ²⁾
Time delay before availability	≤ 100 ms
Hysteresis	10 % ... 20 %
Reproducibility	≤ 1 % ^{3) 4)}
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 200 mA
Reverse polarity protection	Yes
Short-circuit protection	Yes ⁵⁾
Power-up pulse protection	✓
Shock and vibration resistance	30 g, 11 ms/10 Hz ... 55 Hz, 1 mm
Ambient operating temperature	-40 °C ... +75 °C
Housing material	Metal, Nickel-plated brass
Sensing face material	Plastic
Housing length	58 mm
Thread length	42 mm
Tightening torque, max.	≤ 40 Nm
Protection class	III

1) At I_a max.

2) Without load.

3) Supply voltage U_B and constant ambient temperature T_a.

4) Of S_r.

5) Pulsed.

Safety-related parameters

MTTF_D	2,238 years
DC_{avg}	0%
T_M (mission time)	20 years

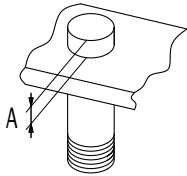
Classifications

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
ECLASS 9.0	27270104
ECLASS 10.0	27270104
ECLASS 11.0	27270104
ECLASS 12.0	27274301
ETIM 5.0	EC002544
ETIM 6.0	EC002544

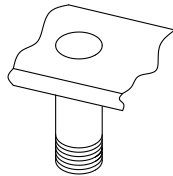

ETIM 7.0	EC002544
ETIM 8.0	EC002544
UNSPSC 16.0901	39122230

Installation note

installation in magnetizable material



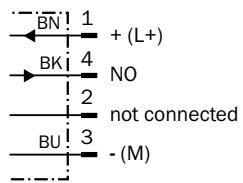
installation in non-magnetizable material

Ø	A (mm)	M (Nm)
M18	20	< 40

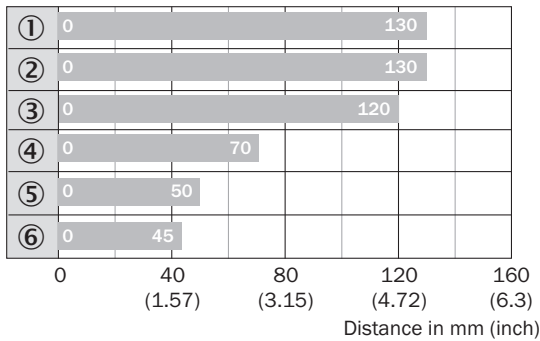
Connection diagram

Cd-007



Sensing range diagram

Sensing range

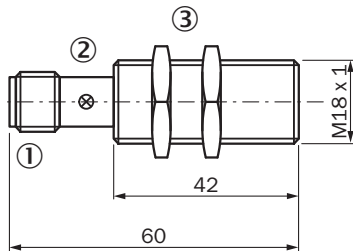


■ Max. sensing range S_n, flush or non-flush installation, non-magnetizable material

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

Dimensional drawing (Dimensions in mm (inch))


MM18 Namur, connector



- ① Connection
- ② Display LED
- ③ Fastening nuts (2x); width across 24, metal

Recommended accessories

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

	Brief description	Type	Part no.
Mounting brackets and plates			
	Mounting plate for M18 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M18	5321870

	Brief description	Type	Part no.
	Mounting bracket for M18 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M18	5308446
Terminal and alignment brackets			
	Clamping block for round sensors M18, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KH-M18	2051481
	Clamping block for round sensors M18, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KHF-M18	2051482
Others			
	<ul style="list-style-type: none"> • Connection type head A: Male connector, M12, 4-pin, angled, A-coded • Description: Unshielded • Connection systems: Screw-type terminals • Permitted cross-section: ≤ 0.75 mm² 	STE-1204-W	6022084
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, straight, A-coded • Description: Unshielded, Head A: female connector, M12, 4-pin, straight, unshielded, for power supply, for cable diameter 4 mm ... 6 mm Head B: - • Connection systems: Screw-type terminals • Permitted cross-section: ≤ 0.75 mm² 	DOS-1204-G	6007302
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, angled, A-coded • Description: Unshielded, Head A: female connector, M12, 4-pin, angled, unshielded, for power supply, for cable diameter 3 mm ... 6.5 mm Head B: - • Connection systems: Screw-type terminals • Permitted cross-section: ≤ 0.75 mm² 	DOS-1204-W	6007303
	<ul style="list-style-type: none"> • Connection type head A: Male connector, M12, 4-pin, straight, A-coded • Description: Unshielded • Connection systems: Screw-type terminals • Permitted cross-section: ≤ 0.75 mm² 	STE-1204-G	6009932
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 2 m, 4-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals 	YF2A14-020VB3XLEAX	2096234
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 5 m, 4-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals 	YF2A14-050VB3XLEAX	2096235
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, angled, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 2 m, 4-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals 	YG2A14-020VB3XLEAX	2095895
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, angled, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 5 m, 4-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals 	YG2A14-050VB3XLEAX	2095897

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



MM18-00APS-ZUA

MME

MAGNETIC SENSORS

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Ordering information

Type	Part no.
MM18-00APS-ZUA	1087221

Included in delivery: BEF-MU-M18 (1)

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

Illustration may differ



Detailed technical data

Features

Housing	Metric
Housing	Advanced
Thread size	M18 x 1
Diameter	Ø 18 mm
Sensing range S_n	5 mm ... 120 mm ¹⁾
Safe sensing range S_a	97.2 mm
Magnetic sensitivity	0.3 mT
Switching frequency	1,000 Hz
Connection type	Cable, 3-wire, 3 m
Switching output	PNP
Output function	NO
Electrical wiring	DC 3-wire
Magnetic alignment	Axial
Enclosure rating	IP67 ²⁾
Items supplied	Mounting nut, brass, nickel-plated (2x)

¹⁾ Sensing range based on installation in non-magnetic material using Magnet MAG-3010-B (M4.0).

²⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 % ¹⁾
Voltage drop	≤ 1.5 V ²⁾
Current consumption	10 mA ³⁾

¹⁾ Of V_S .

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von S_r (V_S und T_a constant).

⁵⁾ Pulsed.

Time delay before availability	≤ 30 ms
Hysteresis	< 25 %
Reproducibility	≤ 1 % ⁴⁾
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 200 mA
Cable material	PUR
Reverse polarity protection	Yes
Short-circuit protection	Yes ⁵⁾
Power-up pulse protection	✓
Shock and vibration resistance	30 g, 11 ms / 10 ... 55 Hz, 1 mm
Ambient operating temperature	-40 °C ... +75 °C
Housing material	Metal, Nickel-plated brass
Housing length	50 mm
Thread length	40 mm
Tightening torque, max.	≤ 25 Nm

¹⁾ Of V_S.

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von Sr (VS und Ta constant).

⁵⁾ Pulsed.

Safety-related parameters

MTTF_D	2,238 years
DC_{avg}	0 %
T_M (mission time)	20 years

Classifications

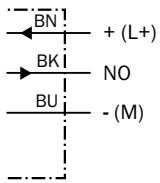
ECLASS 5.0	27270104
ECLASS 5.1.4	27270104
ECLASS 6.0	27270104
ECLASS 6.2	27270104
ECLASS 7.0	27270104
ECLASS 8.0	27270104
ECLASS 8.1	27270104
ECLASS 9.0	27270104
ECLASS 10.0	27270104
ECLASS 11.0	27270104
ECLASS 12.0	27274301
ETIM 5.0	EC002544
ETIM 6.0	EC002544
ETIM 7.0	EC002544
ETIM 8.0	EC002544

UNSPSC 16.0901

39122230

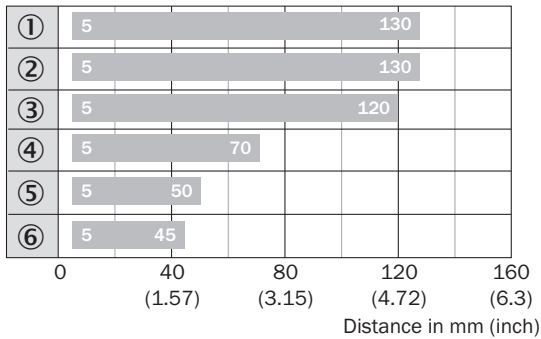
Connection diagram

Cd-001



Sensing range diagram

Sensing range

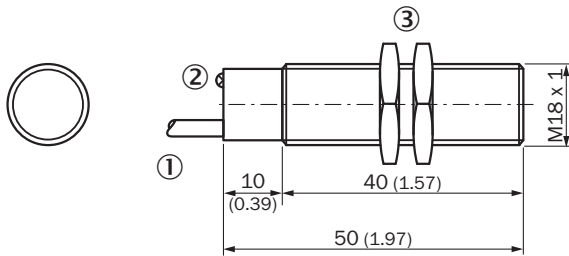


■ Max. sensing range S_n , flush or non-flush installation, non-magnetizable material

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

Dimensional drawing (Dimensions in mm (inch))




MM18, cable, standard housing



- ① Connection
- ② Display LED
- ③ Fastening nuts (2x); width across 17, metal

Recommended accessories

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

	Brief description	Type	Part no.
Mounting brackets and plates			
	Mounting plate for M18 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M18	5321870
	Mounting bracket for M18 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M18	5308446
Terminal and alignment brackets			
	Clamping block for round sensors M18, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KH-M18	2051481
	Clamping block for round sensors M18, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KHF-M18	2051482

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Contacts and other locations –www.sick.com



MM18-00APS-ZUK

MME

MAGNETIC SENSORS

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Ordering information

Type	Part no.
MM18-00APS-ZUK	1077120

Included in delivery: BEF-MU-M18 (1)

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



Detailed technical data

Features

Housing	Metric
Housing	Short-body
Thread size	M18 x 1
Diameter	Ø 18 mm
Sensing range S_n	5 mm ... 120 mm 1) 2) 3)
Safe sensing range S_a	97.2 mm 2) 2) 3) 3)
Magnetic sensitivity	0.4 mT
Switching frequency	5,000 Hz
Connection type	Cable, 3-wire, 2 m
Switching output	PNP
Output function	NO
Electrical wiring	DC 3-wire
Enclosure rating	IP67 ⁴⁾
Items supplied	Mounting nut, brass, nickel-plated (2x)

¹⁾ Max. flux density allowed at the sensor: 280mT.

²⁾ Excluding the geomagnetic field.

³⁾ Based on M4.0 magnet.

⁴⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 %
Voltage drop	≤ 2 V ¹⁾

¹⁾ At I_a max.

²⁾ Without load.

³⁾ Supply voltage U_B and constant ambient temperature T_a .

⁴⁾ Of S_r .

⁵⁾ Pulsed.

Current consumption	10 mA ²⁾
Time delay before availability	≤ 100 ms
Hysteresis	10 % ... 20 %
Reproducibility	≤ 1 % ^{3) 4)}
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 200 mA
Cable material	PUR
Reverse polarity protection	Yes
Short-circuit protection	Yes ⁵⁾
Power-up pulse protection	✓
Shock and vibration resistance	30 g, 11 ms/10 Hz ... 55 Hz, 1 mm
Ambient operating temperature	-40 °C ... +75 °C
Housing material	Metal, Nickel-plated brass
Sensing face material	Plastic
Housing length	58 mm
Thread length	42 mm
Tightening torque, max.	≤ 40 Nm
Protection class	III

1) At I_a max.

2) Without load.

3) Supply voltage U_B and constant ambient temperature T_a.

4) Of S_r.

5) Pulsed.

Safety-related parameters

MTTF_D	2,238 years
DC_{avg}	0 %
T_M (mission time)	20 years

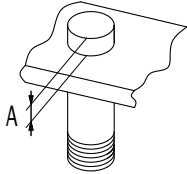
Classifications

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
ECLASS 9.0	27270104
ECLASS 10.0	27270104
ECLASS 11.0	27270104
ECLASS 12.0	27274301
ETIM 5.0	EC002544

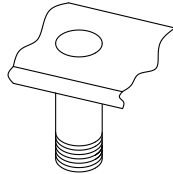

ETIM 6.0	EC002544
ETIM 7.0	EC002544
ETIM 8.0	EC002544
UNSPSC 16.0901	39122230

Installation note

installation in magnetizable material



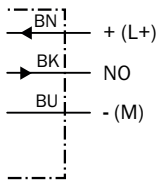
installation in non-magnetizable material

Ø	A (mm)	M (Nm)
M18	20	< 40

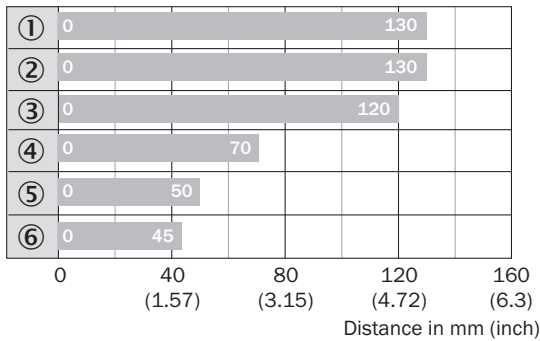
Connection diagram

Cd-001



Sensing range diagram

Sensing range

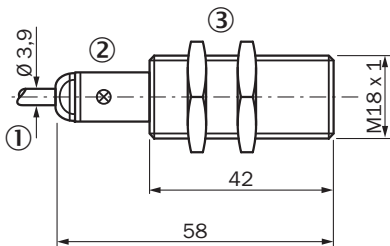


■ Max. sensing range S_n, flush or non-flush installation, non-magnetizable material

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

Dimensional drawing (Dimensions in mm (inch))


MM18 Namur, cable





- ① Connection
- ② Display LED
- ③ Fastening nuts (2x); width across 24, metal

Recommended accessories

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

	Brief description	Type	Part no.
Mounting brackets and plates			
	Mounting plate for M18 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M18	5321870

	Brief description	Type	Part no.
	Mounting bracket for M18 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M18	5308446
Terminal and alignment brackets			
	Clamping block for round sensors M18, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KH-M18	2051481
	Clamping block for round sensors M18, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KHF-M18	2051482

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WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com



MM18-70ANS-ZCK

MME

MAGNETIC SENSORS

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Ordering information

Type	Part no.
MM18-70ANS-ZCK	1040073

Included in delivery: BEF-MU-M18 (1)

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

Illustration may differ



Detailed technical data

Features

Housing	Metric
Housing	Short-body
Thread size	M18 x 1
Diameter	Ø 18 mm
Sensing range S_n	0 mm ... 70 mm ¹⁾
Safe sensing range S_a	56.7 mm
Magnetic sensitivity	0.7 mT
Switching frequency	5,000 Hz
Connection type	Male connector M12, 4-pin
Switching output	NPN
Output function	NO
Electrical wiring	DC 3-wire
Magnetic alignment	Axial
Enclosure rating	IP67 ²⁾
Items supplied	Mounting nut, brass, nickel-plated (2x)

¹⁾ Sensing range based on installation in non-magnetic material using Magnet MAG-3010-B (M4.0).

²⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 % ¹⁾
Voltage drop	≤ 2 V ²⁾
Current consumption	10 mA ³⁾

¹⁾ Of V_S .

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von S_r (V_S und T_a constant).

⁵⁾ Pulsed.

Time delay before availability	≤ 20 ms
Hysteresis	1 % ... 10 %
Reproducibility	≤ 1 % ⁴⁾
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 200 mA
Reverse polarity protection	Yes
Short-circuit protection	Yes ⁵⁾
Power-up pulse protection	✓
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	50 mm
Thread length	32 mm
Tightening torque, max.	40 Nm

¹⁾ Of V_S.

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von S_r (V_S und T_a constant).

⁵⁾ Pulsed.

Safety-related parameters

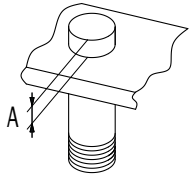
MTTF_D	1,980 years
DC_{avg}	0%
T_M (mission time)	20 years

Classifications

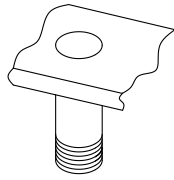
ECLASS 5.0	27270104
ECLASS 5.1.4	27270104
ECLASS 6.0	27270104
ECLASS 6.2	27270104
ECLASS 7.0	27270104
ECLASS 8.0	27270104
ECLASS 8.1	27270104
ECLASS 9.0	27270104
ECLASS 10.0	27270104
ECLASS 11.0	27270104
ECLASS 12.0	27274301
ETIM 5.0	EC002544
ETIM 6.0	EC002544
ETIM 7.0	EC002544
ETIM 8.0	EC002544
UNSPSC 16.0901	39122230

Installation note

installation in magnetizable material



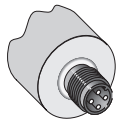
installation in non-magnetizable material



Ø	A (mm)	M (Nm)
M18	15	< 40

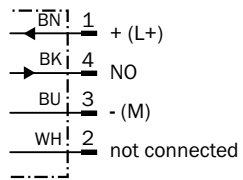


Connection type



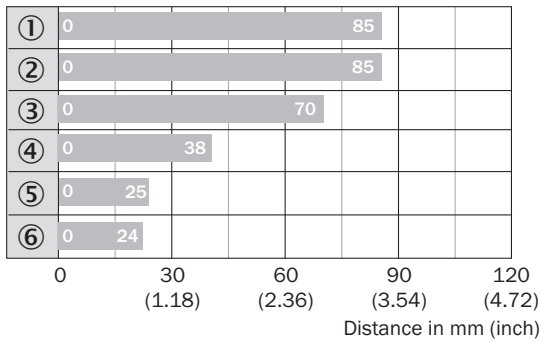
Connection diagram

Cd-011



Sensing range diagram

Sensing range

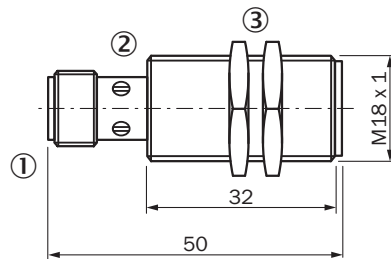


■ Max. sensing range S_n , flush or non-flush installation, non-magnetizable material

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

Dimensional drawing (Dimensions in mm (inch))

MM18, connector, short-body housing




- ① Connection
- ② Display LED
- ③ Fastening nuts (2x); width across 17, metal

Recommended accessories

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

	Brief description	Type	Part no.
Mounting brackets and plates			
	Mounting plate for M18 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M18	5321870
	Mounting bracket for M18 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M18	5308446
Terminal and alignment brackets			
	Clamping block for round sensors M18, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KH-M18	2051481
	Clamping block for round sensors M18, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KHF-M18	2051482
Others			
	<ul style="list-style-type: none"> • Connection type head A: Male connector, M12, 4-pin, angled, A-coded • Description: Unshielded • Connection systems: Screw-type terminals • Permitted cross-section: ≤ 0.75 mm² 	STE-1204-W	6022084
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, straight, A-coded • Description: Unshielded, Head A: female connector, M12, 4-pin, straight, unshielded, for power supply, for cable diameter 4 mm ... 6 mm Head B: - • Connection systems: Screw-type terminals • Permitted cross-section: ≤ 0.75 mm² 	DOS-1204-G	6007302
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, angled, A-coded • Description: Unshielded, Head A: female connector, M12, 4-pin, angled, unshielded, for power supply, for cable diameter 3 mm ... 6.5 mm Head B: - • Connection systems: Screw-type terminals • Permitted cross-section: ≤ 0.75 mm² 	DOS-1204-W	6007303
	<ul style="list-style-type: none"> • Connection type head A: Male connector, M12, 4-pin, straight, A-coded • Description: Unshielded • Connection systems: Screw-type terminals • Permitted cross-section: ≤ 0.75 mm² 	STE-1204-G	6009932
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 2 m, 4-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals 	YF2A14-020VB3XLEAX	2096234
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 5 m, 4-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals 	YF2A14-050VB3XLEAX	2096235
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, angled, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 2 m, 4-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals 	YG2A14-020VB3XLEAX	2095895

	Brief description	Type	Part no.
	<ul style="list-style-type: none">• Connection type head A: Female connector, M12, 4-pin, angled, A-coded• Connection type head B: Flying leads• Signal type: Sensor/actuator cable• Cable: 5 m, 4-wire, PVC• Description: Sensor/actuator cable, unshielded• Application: Zones with chemicals	YG2A14-050VB3XLEAX	2095897

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WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com



MM18-70ANS-ZUK

MME

MAGNETIC SENSORS

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Ordering information

Type	Part no.
MM18-70ANS-ZUK	1040085

Included in delivery: BEF-MU-M18 (1)

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

Illustration may differ



Detailed technical data

Features

Housing	Metric
Housing	Short-body
Thread size	M18 x 1
Diameter	Ø 18 mm
Sensing range S_n	0 mm ... 70 mm ¹⁾
Safe sensing range S_a	56.7 mm
Magnetic sensitivity	0.7 mT
Switching frequency	5,000 Hz
Connection type	Cable, 3-wire, 2 m
Switching output	NPN
Output function	NO
Electrical wiring	DC 3-wire
Magnetic alignment	Axial
Enclosure rating	IP67 ²⁾
Items supplied	Mounting nut, brass, nickel-plated (2x)

¹⁾ Sensing range based on installation in non-magnetic material using Magnet MAG-3010-B (M4.0).

²⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 % ¹⁾
Voltage drop	≤ 2 V ²⁾
Current consumption	10 mA ³⁾

¹⁾ Of V_S .

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von S_r (V_S und T_a constant).

⁵⁾ Pulsed.

Time delay before availability	≤ 20 ms
Hysteresis	1 % ... 10 %
Reproducibility	≤ 1 % ⁴⁾
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 200 mA
Cable material	PUR
Reverse polarity protection	Yes
Short-circuit protection	Yes ⁵⁾
Power-up pulse protection	✓
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	48 mm
Thread length	32 mm
Tightening torque, max.	40 Nm

¹⁾ Of V_S.

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von S_r (V_S und T_a constant).

⁵⁾ Pulsed.

Safety-related parameters

MTTF_D	1,980 years
DC_{avg}	0%
T_M (mission time)	20 years

Classifications

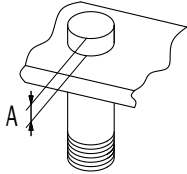
ECLASS 5.0	27270104
ECLASS 5.1.4	27270104
ECLASS 6.0	27270104
ECLASS 6.2	27270104
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ECLASS 8.0	27270104
ECLASS 8.1	27270104
ECLASS 9.0	27270104
ECLASS 10.0	27270104
ECLASS 11.0	27270104
ECLASS 12.0	27274301
ETIM 5.0	EC002544
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ETIM 7.0	EC002544
ETIM 8.0	EC002544

UNSPSC 16.0901

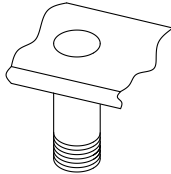

39122230

Installation note

installation in magnetizable material



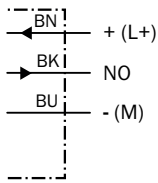
installation in non-magnetizable material

Ø	A (mm)	M (Nm)
M18	15	< 40

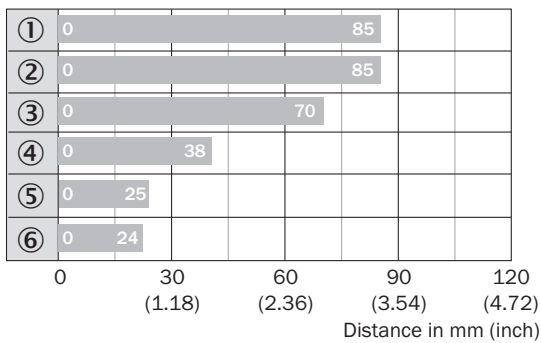
Connection diagram

Cd-001



Sensing range diagram

Sensing range



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

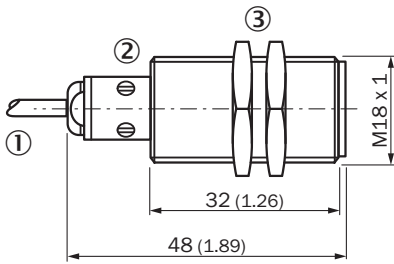
Magnet type

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

Dimensional drawing (Dimensions in mm (inch))




MM18, cable, short-body housing



- ① Connection
- ② Display LED
- ③ Fastening nuts (2x); width across 17, metal

Recommended accessories

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

	Brief description	Type	Part no.
Mounting brackets and plates			
	Mounting plate for M18 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M18	5321870
	Mounting bracket for M18 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M18	5308446
Terminal and alignment brackets			
	Clamping block for round sensors M18, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KH-M18	2051481
	Clamping block for round sensors M18, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KHF-M18	2051482

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WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com



MM18-70APO-VCK

MME

MAGNETIC SENSORS

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Ordering information

Type	Part no.
MM18-70APO-VCK	1099419

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

Illustration may differ



Detailed technical data

Features

Housing	Metric
Housing	Short-body
Thread size	M18 x 1
Diameter	Ø 18 mm
Sensing range S_n	0 mm ... 70 mm ¹⁾
Safe sensing range S_a	56.7 mm
Magnetic sensitivity	≤ 0.7 mT
Switching frequency	5,000 Hz
Connection type	Male connector M12, 4-pin
Switching output	PNP
Output function	NC
Electrical wiring	DC 3-wire
Magnetic alignment	Axial
Enclosure rating	IP67 ²⁾
Items supplied	Mounting nut, V2A stainless steel (2x)

¹⁾ Sensing range based on installation in non-magnetic material using Magnet MAG-3010-B (M4.0).

²⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 % ¹⁾
Voltage drop	≤ 2 V ²⁾
Current consumption	10 mA ³⁾

¹⁾ Of V_S .

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von S_r (V_S und T_a constant).

⁵⁾ Pulsed.

Time delay before availability	≤ 20 ms
Hysteresis	1 % ... 10 %
Reproducibility	≤ 1 % ⁴⁾
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 200 mA
Reverse polarity protection	Yes
Short-circuit protection	Yes ⁵⁾
Power-up pulse protection	✓
Shock and vibration resistance	30 g, 11 ms / 10 ... 55 Hz, 1 mm
Ambient operating temperature	-25 °C ... +75 °C
Housing material	Stainless steel, V4A
Housing length	50 mm
Thread length	32 mm
Tightening torque, max.	40 Nm

¹⁾ Of V_S.

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von S_r (V_S und T_a constant).

⁵⁾ Pulsed.

Safety-related parameters

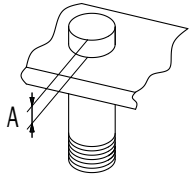
MTTF_D	1,980 years
DC_{avg}	0%
T_M (mission time)	20 years

Classifications

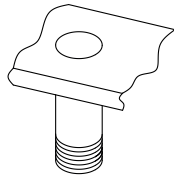
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ECLASS 5.1.4	27270104
ECLASS 6.0	27270104
ECLASS 6.2	27270104
ECLASS 7.0	27270104
ECLASS 8.0	27270104
ECLASS 8.1	27270104
ECLASS 9.0	27270104
ECLASS 10.0	27270104
ECLASS 11.0	27270104
ECLASS 12.0	27274301
ETIM 5.0	EC002544
ETIM 6.0	EC002544
ETIM 7.0	EC002544
ETIM 8.0	EC002544
UNSPSC 16.0901	39122230

Installation note

installation in magnetizable material



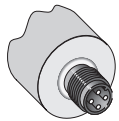
installation in non-magnetizable material



Ø	A (mm)	M (Nm)
M18	15	< 40

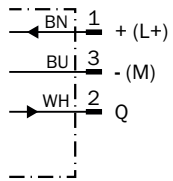


Connection type



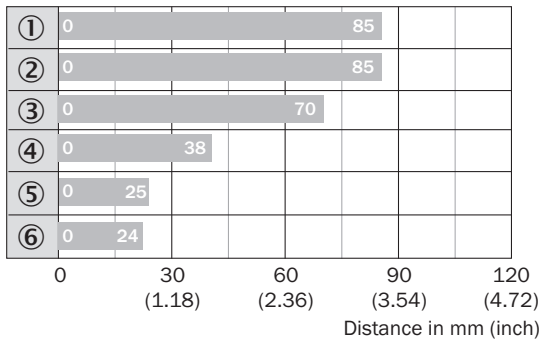
Connection diagram

Cd-279



Sensing range diagram

Sensing range

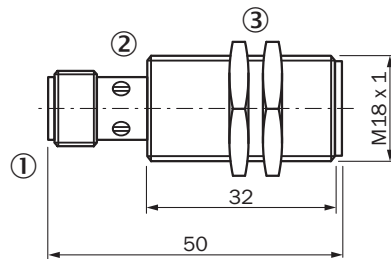


■ Max. sensing range S_n, flush or non-flush installation, non-magnetizable material

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

Dimensional drawing (Dimensions in mm (inch))

MM18, connector, short-body housing




- ① Connection
- ② Display LED
- ③ Fastening nuts (2x); width across 17, metal

Recommended accessories

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

	Brief description	Type	Part no.
Mounting brackets and plates			
	Mounting plate for M18 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M18	5321870
	Mounting bracket for M18 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M18	5308446
Terminal and alignment brackets			
	Clamping block for round sensors M18, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KH-M18	2051481
	Clamping block for round sensors M18, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KHF-M18	2051482
Others			
	<ul style="list-style-type: none"> • Connection type head A: Male connector, M12, 4-pin, angled, A-coded • Description: Unshielded • Connection systems: Screw-type terminals • Permitted cross-section: ≤ 0.75 mm² 	STE-1204-W	6022084
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, straight, A-coded • Description: Unshielded, Head A: female connector, M12, 4-pin, straight, unshielded, for power supply, for cable diameter 4 mm ... 6 mm Head B: - • Connection systems: Screw-type terminals • Permitted cross-section: ≤ 0.75 mm² 	DOS-1204-G	6007302
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, angled, A-coded • Description: Unshielded, Head A: female connector, M12, 4-pin, angled, unshielded, for power supply, for cable diameter 3 mm ... 6.5 mm Head B: - • Connection systems: Screw-type terminals • Permitted cross-section: ≤ 0.75 mm² 	DOS-1204-W	6007303
	<ul style="list-style-type: none"> • Connection type head A: Male connector, M12, 4-pin, straight, A-coded • Description: Unshielded • Connection systems: Screw-type terminals • Permitted cross-section: ≤ 0.75 mm² 	STE-1204-G	6009932
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 2 m, 4-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals 	YF2A14-020VB3XLEAX	2096234
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 5 m, 4-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals 	YF2A14-050VB3XLEAX	2096235
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, angled, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 2 m, 4-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals 	YG2A14-020VB3XLEAX	2095895

	Brief description	Type	Part no.
	<ul style="list-style-type: none">• Connection type head A: Female connector, M12, 4-pin, angled, A-coded• Connection type head B: Flying leads• Signal type: Sensor/actuator cable• Cable: 5 m, 4-wire, PVC• Description: Sensor/actuator cable, unshielded• Application: Zones with chemicals	YG2A14-050VB3XLEAX	2095897

SICK AT A GLANCE

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WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com



MM18-70APO-ZCK

MME

MAGNETIC SENSORS

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Ordering information

Type	Part no.
MM18-70APO-ZCK	1047255

Included in delivery: BEF-MU-M18 (1)

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

Illustration may differ



Detailed technical data

Features

Housing	Metric
Housing	Short-body
Thread size	M18 x 1
Diameter	Ø 18 mm
Sensing range S_n	0 mm ... 70 mm ¹⁾
Safe sensing range S_a	56.7 mm
Magnetic sensitivity	0.7 mT
Switching frequency	5,000 Hz
Connection type	Male connector M12, 4-pin
Switching output	PNP
Output function	NC
Electrical wiring	DC 3-wire
Magnetic alignment	Axial
Enclosure rating	IP67 ²⁾
Items supplied	Mounting nut, brass, nickel-plated (2x)

¹⁾ Sensing range based on installation in non-magnetic material using Magnet MAG-3010-B (M4.0).

²⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 % ¹⁾
Voltage drop	≤ 2 V ²⁾
Current consumption	10 mA ³⁾

¹⁾ Of V_S .

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von S_r (V_S und T_a constant).

⁵⁾ Pulsed.

Time delay before availability	≤ 20 ms
Hysteresis	1 % ... 10 %
Reproducibility	≤ 1 % ⁴⁾
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 200 mA
Reverse polarity protection	Yes
Short-circuit protection	Yes ⁵⁾
Power-up pulse protection	✓
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	50 mm
Thread length	32 mm
Tightening torque, max.	40 Nm

¹⁾ Of V_S.

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von Sr (VS und Ta constant).

⁵⁾ Pulsed.

Safety-related parameters

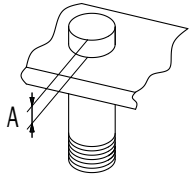
MTTF_D	1,980 years
DC_{avg}	0%
T_M (mission time)	20 years

Classifications

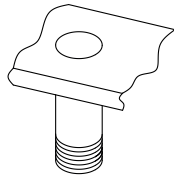
ECLASS 5.0	27270104
ECLASS 5.1.4	27270104
ECLASS 6.0	27270104
ECLASS 6.2	27270104
ECLASS 7.0	27270104
ECLASS 8.0	27270104
ECLASS 8.1	27270104
ECLASS 9.0	27270104
ECLASS 10.0	27270104
ECLASS 11.0	27270104
ECLASS 12.0	27274301
ETIM 5.0	EC002544
ETIM 6.0	EC002544
ETIM 7.0	EC002544
ETIM 8.0	EC002544
UNSPSC 16.0901	39122230

Installation note

installation in magnetizable material



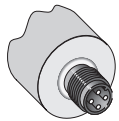
installation in non-magnetizable material



Ø	A (mm)	M (Nm)
M18	15	< 40

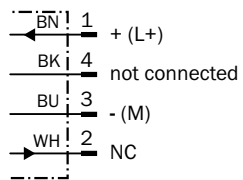


Connection type



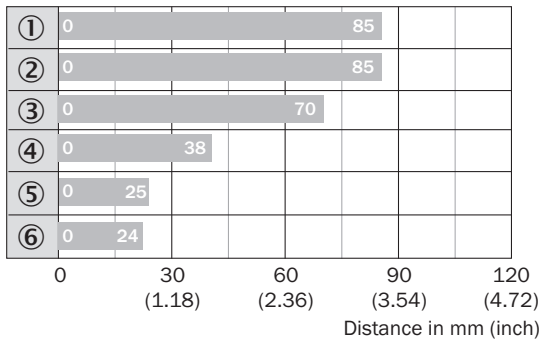
Connection diagram

Cd-008



Sensing range diagram

Sensing range

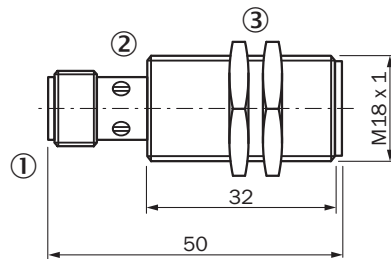


■ Max. sensing range S_n, flush or non-flush installation, non-magnetizable material

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

Dimensional drawing (Dimensions in mm (inch))

MM18, connector, short-body housing




- ① Connection
- ② Display LED
- ③ Fastening nuts (2x); width across 17, metal

Recommended accessories

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

	Brief description	Type	Part no.
Mounting brackets and plates			
	Mounting plate for M18 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M18	5321870
	Mounting bracket for M18 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M18	5308446
Terminal and alignment brackets			
	Clamping block for round sensors M18, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KH-M18	2051481
	Clamping block for round sensors M18, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KHF-M18	2051482
Others			
	<ul style="list-style-type: none"> Connection type head A: Male connector, M12, 4-pin, angled, A-coded Description: Unshielded Connection systems: Screw-type terminals Permitted cross-section: ≤ 0.75 mm² 	STE-1204-W	6022084
	<ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, straight, A-coded Description: Unshielded, Head A: female connector, M12, 4-pin, straight, unshielded, for power supply, for cable diameter 4 mm ... 6 mm Head B: - Connection systems: Screw-type terminals Permitted cross-section: ≤ 0.75 mm² 	DOS-1204-G	6007302
	<ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, angled, A-coded Description: Unshielded, Head A: female connector, M12, 4-pin, angled, unshielded, for power supply, for cable diameter 3 mm ... 6.5 mm Head B: - Connection systems: Screw-type terminals Permitted cross-section: ≤ 0.75 mm² 	DOS-1204-W	6007303
	<ul style="list-style-type: none"> Connection type head A: Male connector, M12, 4-pin, straight, A-coded Description: Unshielded Connection systems: Screw-type terminals Permitted cross-section: ≤ 0.75 mm² 	STE-1204-G	6009932
	<ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals 	YF2A14-020VB3XLEAX	2096234
	<ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals 	YF2A14-050VB3XLEAX	2096235
	<ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals 	YG2A14-020VB3XLEAX	2095895

	Brief description	Type	Part no.
	<ul style="list-style-type: none">• Connection type head A: Female connector, M12, 4-pin, angled, A-coded• Connection type head B: Flying leads• Signal type: Sensor/actuator cable• Cable: 5 m, 4-wire, PVC• Description: Sensor/actuator cable, unshielded• Application: Zones with chemicals	YG2A14-050VB3XLEAX	2095897

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WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com



MM18-70APO-ZCKS01

MME

MAGNETIC SENSORS

SICK
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Ordering information

Type	Part no.
MM18-70APO-ZCKS01	1049025

Included in delivery: BEF-MU-M18 (1)

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

Illustration may differ



Detailed technical data

Features

Housing	Metric
Housing	Short-body
Thread size	M18 x 1
Diameter	Ø 18 mm
Sensing range S_n	0 mm ... 70 mm ¹⁾
Safe sensing range S_a	56.7 mm
Magnetic sensitivity	0.7 mT
Switching frequency	5,000 Hz
Connection type	Male connector M12, 4-pin
Switching output	PNP
Output function	NC
Electrical wiring	DC 3-wire
Magnetic alignment	Axial
Enclosure rating	IP67 ²⁾
Items supplied	Mounting nut, brass, nickel-plated (2x)

¹⁾ Sensing range based on installation in non-magnetic material using Magnet MAG-3010-B (M4.0).

²⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 % ¹⁾
Voltage drop	≤ 2 V ²⁾
Current consumption	10 mA ³⁾

¹⁾ Of V_S .

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von S_r (V_S und T_a constant).

⁵⁾ Pulsed.

Time delay before availability	≤ 20 ms
Hysteresis	1 % ... 10 %
Reproducibility	≤ 1 % ⁴⁾
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 400 mA
Reverse polarity protection	Yes
Short-circuit protection	Yes ⁵⁾
Power-up pulse protection	✓
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	50 mm
Thread length	32 mm
Tightening torque, max.	40 Nm

¹⁾ Of V_S.

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von S_r (V_S und T_a constant).

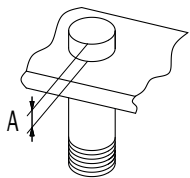
⁵⁾ Pulsed.

Classifications


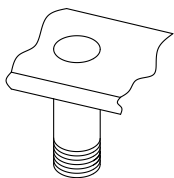
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ECLASS 5.1.4	27270104
ECLASS 6.0	27270104
ECLASS 6.2	27270104
ECLASS 7.0	27270104
ECLASS 8.0	27270104
ECLASS 8.1	27270104
ECLASS 9.0	27270104
ECLASS 10.0	27270104
ECLASS 11.0	27270104
ECLASS 12.0	27274301
ETIM 5.0	EC002544
ETIM 6.0	EC002544
ETIM 7.0	EC002544
ETIM 8.0	EC002544
UNSPSC 16.0901	39122230

Installation note

installation in magnetizable material

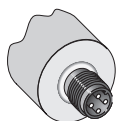


installation in non-magnetizable material



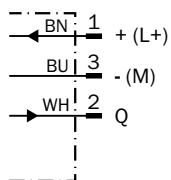
\emptyset	A (mm)	M (Nm)
M18	15	< 40

Connection type



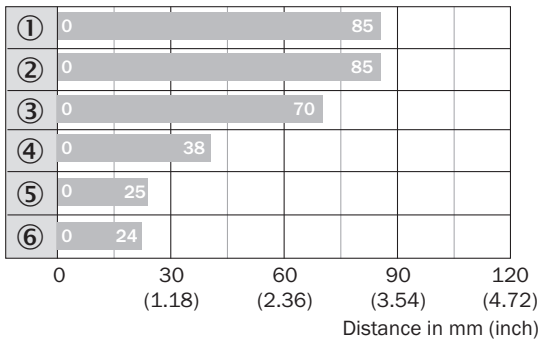
Connection diagram

Cd-279



Sensing range diagram

Sensing range

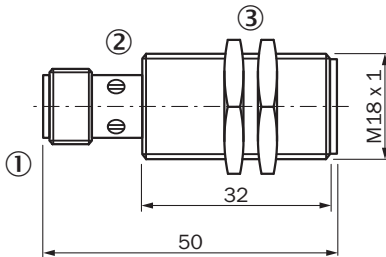


■ Max. sensing range S_n, flush or non-flush installation, non-magnetizable material

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

Dimensional drawing (Dimensions in mm (inch))

MM18, connector, short-body housing




- ① Connection
- ② Display LED
- ③ Fastening nuts (2x); width across 17, metal

Recommended accessories

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

	Brief description	Type	Part no.
Mounting brackets and plates			
	Mounting plate for M18 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M18	5321870
	Mounting bracket for M18 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M18	5308446
Terminal and alignment brackets			
	Clamping block for round sensors M18, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KH-M18	2051481
	Clamping block for round sensors M18, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KHF-M18	2051482
Others			
	<ul style="list-style-type: none"> • Connection type head A: Male connector, M12, 4-pin, angled, A-coded • Description: Unshielded • Connection systems: Screw-type terminals • Permitted cross-section: ≤ 0.75 mm² 	STE-1204-W	6022084
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, straight, A-coded • Description: Unshielded, Head A: female connector, M12, 4-pin, straight, unshielded, for power supply, for cable diameter 4 mm ... 6 mm Head B: - • Connection systems: Screw-type terminals • Permitted cross-section: ≤ 0.75 mm² 	DOS-1204-G	6007302
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, angled, A-coded • Description: Unshielded, Head A: female connector, M12, 4-pin, angled, unshielded, for power supply, for cable diameter 3 mm ... 6.5 mm Head B: - • Connection systems: Screw-type terminals • Permitted cross-section: ≤ 0.75 mm² 	DOS-1204-W	6007303
	<ul style="list-style-type: none"> • Connection type head A: Male connector, M12, 4-pin, straight, A-coded • Description: Unshielded • Connection systems: Screw-type terminals • Permitted cross-section: ≤ 0.75 mm² 	STE-1204-G	6009932
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 2 m, 4-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals 	YF2A14-020VB3XLEAX	2096234
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 5 m, 4-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals 	YF2A14-050VB3XLEAX	2096235
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, angled, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 2 m, 4-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals 	YG2A14-020VB3XLEAX	2095895

	Brief description	Type	Part no.
	<ul style="list-style-type: none">• Connection type head A: Female connector, M12, 4-pin, angled, A-coded• Connection type head B: Flying leads• Signal type: Sensor/actuator cable• Cable: 5 m, 4-wire, PVC• Description: Sensor/actuator cable, unshielded• Application: Zones with chemicals	YG2A14-050VB3XLEAX	2095897

SICK AT A GLANCE

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For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com



MM18-70APO-ZCKS03

MME

MAGNETIC SENSORS

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Ordering information

Type	Part no.
MM18-70APO-ZCKS03	1072234

Included in delivery: BEF-MU-M18 (1)

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

Illustration may differ



Detailed technical data

Features

Housing	Metric
Housing	Short-body
Thread size	M18 x 1
Diameter	Ø 18 mm
Sensing range S_n	0 mm ... 70 mm ¹⁾
Safe sensing range S_a	56.7 mm
Magnetic sensitivity	0.7 mT
Switching frequency	5,000 Hz
Connection type	Male connector M12, 4-pin
Switching output	PNP
Output function	NC
Electrical wiring	DC 3-wire
Magnetic alignment	Axial
Enclosure rating	IP67 ²⁾
Special features	Switching output on pin 4 instead of pin 2
Items supplied	Mounting nut, brass, nickel-plated (2x)

¹⁾ Sensing range based on installation in non-magnetic material using Magnet MAG-3010-B (M4.0).

²⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 % ¹⁾
Voltage drop	≤ 2 V ²⁾

¹⁾ Of V_S .

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von S_r (V_S und T_a constant).

⁵⁾ Pulsed.

Current consumption	10 mA ³⁾
Time delay before availability	≤ 20 ms
Hysteresis	1 % ... 10 %
Reproducibility	≤ 1 % ⁴⁾
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 200 mA
Reverse polarity protection	Yes
Short-circuit protection	Yes ⁵⁾
Power-up pulse protection	✓
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	50 mm
Thread length	32 mm
Tightening torque, max.	40 Nm

¹⁾ Of V_S.

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von S_r (V_S und T_a constant).

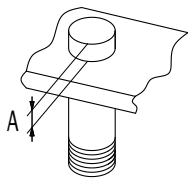
⁵⁾ Pulsed.

Classifications


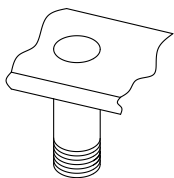
ECLASS 5.0	27270104
ECLASS 5.1.4	27270104
ECLASS 6.0	27270104
ECLASS 6.2	27270104
ECLASS 7.0	27270104
ECLASS 8.0	27270104
ECLASS 8.1	27270104
ECLASS 9.0	27270104
ECLASS 10.0	27270104
ECLASS 11.0	27270104
ECLASS 12.0	27274301
ETIM 5.0	EC002544
ETIM 6.0	EC002544
ETIM 7.0	EC002544
ETIM 8.0	EC002544
UNSPSC 16.0901	39122230

Installation note

installation in magnetizable material

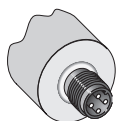


installation in non-magnetizable material



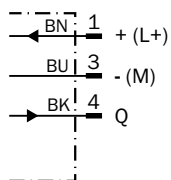
\emptyset	A (mm)	M (Nm)
M18	15	< 40

Connection type



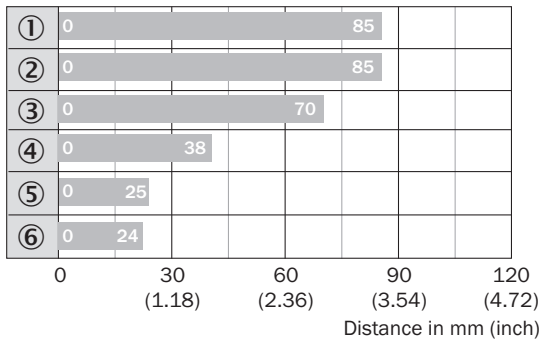
Connection diagram

Cd-045



Sensing range diagram

Sensing range

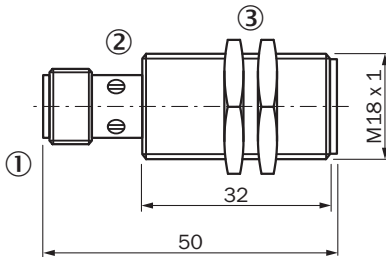


■ Max. sensing range S_n, flush or non-flush installation, non-magnetizable material

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

Dimensional drawing (Dimensions in mm (inch))

MM18, connector, short-body housing




- ① Connection
- ② Display LED
- ③ Fastening nuts (2x); width across 17, metal

Recommended accessories

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

	Brief description	Type	Part no.
Mounting brackets and plates			
	Mounting plate for M18 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M18	5321870
	Mounting bracket for M18 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M18	5308446
Terminal and alignment brackets			
	Clamping block for round sensors M18, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KH-M18	2051481
	Clamping block for round sensors M18, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KHF-M18	2051482
Others			
	<ul style="list-style-type: none"> • Connection type head A: Male connector, M12, 4-pin, angled, A-coded • Description: Unshielded • Connection systems: Screw-type terminals • Permitted cross-section: ≤ 0.75 mm² 	STE-1204-W	6022084
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, straight, A-coded • Description: Unshielded, Head A: female connector, M12, 4-pin, straight, unshielded, for power supply, for cable diameter 4 mm ... 6 mm Head B: - • Connection systems: Screw-type terminals • Permitted cross-section: ≤ 0.75 mm² 	DOS-1204-G	6007302
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, angled, A-coded • Description: Unshielded, Head A: female connector, M12, 4-pin, angled, unshielded, for power supply, for cable diameter 3 mm ... 6.5 mm Head B: - • Connection systems: Screw-type terminals • Permitted cross-section: ≤ 0.75 mm² 	DOS-1204-W	6007303
	<ul style="list-style-type: none"> • Connection type head A: Male connector, M12, 4-pin, straight, A-coded • Description: Unshielded • Connection systems: Screw-type terminals • Permitted cross-section: ≤ 0.75 mm² 	STE-1204-G	6009932
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 2 m, 4-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals 	YF2A14-020VB3XLEAX	2096234
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 5 m, 4-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals 	YF2A14-050VB3XLEAX	2096235
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, angled, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 2 m, 4-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals 	YG2A14-020VB3XLEAX	2095895

	Brief description	Type	Part no.
	<ul style="list-style-type: none">• Connection type head A: Female connector, M12, 4-pin, angled, A-coded• Connection type head B: Flying leads• Signal type: Sensor/actuator cable• Cable: 5 m, 4-wire, PVC• Description: Sensor/actuator cable, unshielded• Application: Zones with chemicals	YG2A14-050VB3XLEAX	2095897

SICK AT A GLANCE

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WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com



MM18-70APS-VCK

MME

MAGNETIC SENSORS

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Ordering information

Type	Part no.
MM18-70APS-VCK	1050765

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

Illustration may differ



Detailed technical data

Features

Housing	Metric
Housing	Short-body
Thread size	M18 x 1
Diameter	Ø 18 mm
Sensing range S_n	0 mm ... 70 mm ¹⁾
Safe sensing range S_a	56.7 mm
Magnetic sensitivity	≤ 0.7 mT
Switching frequency	5,000 Hz
Connection type	Male connector M12, 4-pin
Switching output	PNP
Output function	NO
Electrical wiring	DC 3-wire
Magnetic alignment	Axial
Enclosure rating	IP67 ²⁾
Items supplied	Mounting nut, V2A stainless steel (2x)

¹⁾ Sensing range based on installation in non-magnetic material using Magnet MAG-3010-B (M4.0).

²⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 % ¹⁾
Voltage drop	≤ 2 V ²⁾
Current consumption	10 mA ³⁾

¹⁾ Of V_S.

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von Sr (VS und Ta constant).

⁵⁾ Pulsed.

Time delay before availability	≤ 20 ms
Hysteresis	1 % ... 10 %
Reproducibility	≤ 1 % ⁴⁾
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 200 mA
Reverse polarity protection	Yes
Short-circuit protection	Yes ⁵⁾
Power-up pulse protection	✓
Shock and vibration resistance	30 g, 11 ms / 10 ... 55 Hz, 1 mm
Ambient operating temperature	-25 °C ... +75 °C
Housing material	Stainless steel, V4A
Housing length	50 mm
Thread length	32 mm
Tightening torque, max.	40 Nm

¹⁾ Of V_S.

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von S_r (V_S und T_a constant).

⁵⁾ Pulsed.

Safety-related parameters

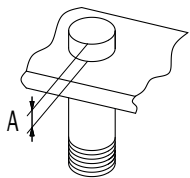
MTTF_D	1,980 years
DC_{avg}	0%
T_M (mission time)	20 years

Classifications

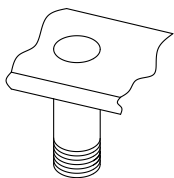
ECLASS 5.0	27270104
ECLASS 5.1.4	27270104
ECLASS 6.0	27270104
ECLASS 6.2	27270104
ECLASS 7.0	27270104
ECLASS 8.0	27270104
ECLASS 8.1	27270104
ECLASS 9.0	27270104
ECLASS 10.0	27270104
ECLASS 11.0	27270104
ECLASS 12.0	27274301
ETIM 5.0	EC002544
ETIM 6.0	EC002544
ETIM 7.0	EC002544
ETIM 8.0	EC002544
UNSPSC 16.0901	39122230

Installation note

installation in magnetizable material



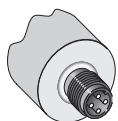
installation in non-magnetizable material



Ø	A (mm)	M (Nm)
M18	15	< 40

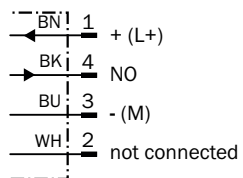


Connection type



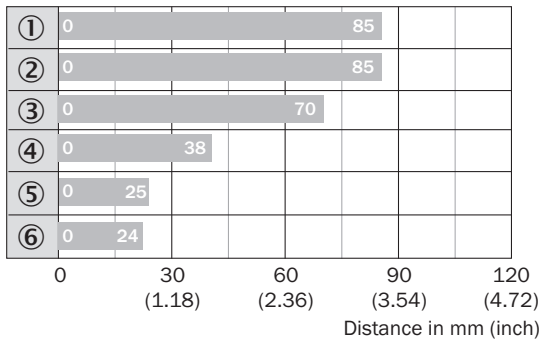
Connection diagram

Cd-011



Sensing range diagram

Sensing range

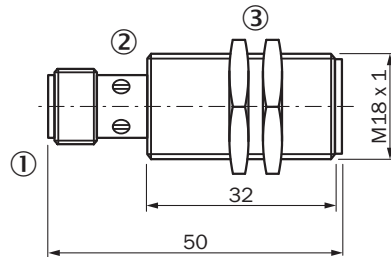


■ Max. sensing range S_n , flush or non-flush installation, non-magnetizable material

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

Dimensional drawing (Dimensions in mm (inch))

MM18, connector, short-body housing




- ① Connection
- ② Display LED
- ③ Fastening nuts (2x); width across 17, metal

Recommended accessories

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

	Brief description	Type	Part no.
Mounting brackets and plates			
	Mounting plate for M18 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M18	5321870
	Mounting bracket for M18 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M18	5308446
Terminal and alignment brackets			
	Clamping block for round sensors M18, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KH-M18	2051481
	Clamping block for round sensors M18, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KHF-M18	2051482
Others			
	<ul style="list-style-type: none"> • Connection type head A: Male connector, M12, 4-pin, angled, A-coded • Description: Unshielded • Connection systems: Screw-type terminals • Permitted cross-section: ≤ 0.75 mm² 	STE-1204-W	6022084
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, straight, A-coded • Description: Unshielded, Head A: female connector, M12, 4-pin, straight, unshielded, for power supply, for cable diameter 4 mm ... 6 mm Head B: - • Connection systems: Screw-type terminals • Permitted cross-section: ≤ 0.75 mm² 	DOS-1204-G	6007302
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, angled, A-coded • Description: Unshielded, Head A: female connector, M12, 4-pin, angled, unshielded, for power supply, for cable diameter 3 mm ... 6.5 mm Head B: - • Connection systems: Screw-type terminals • Permitted cross-section: ≤ 0.75 mm² 	DOS-1204-W	6007303
	<ul style="list-style-type: none"> • Connection type head A: Male connector, M12, 4-pin, straight, A-coded • Description: Unshielded • Connection systems: Screw-type terminals • Permitted cross-section: ≤ 0.75 mm² 	STE-1204-G	6009932
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 2 m, 4-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals 	YF2A14-020VB3XLEAX	2096234
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 5 m, 4-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals 	YF2A14-050VB3XLEAX	2096235
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, angled, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 2 m, 4-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals 	YG2A14-020VB3XLEAX	2095895

	Brief description	Type	Part no.
	<ul style="list-style-type: none">• Connection type head A: Female connector, M12, 4-pin, angled, A-coded• Connection type head B: Flying leads• Signal type: Sensor/actuator cable• Cable: 5 m, 4-wire, PVC• Description: Sensor/actuator cable, unshielded• Application: Zones with chemicals	YG2A14-050VB3XLEAX	2095897

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WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com



MM18-70APS-ZCK

MME

MAGNETIC SENSORS

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Ordering information

Type	Part no.
MM18-70APS-ZCK	1040072

Included in delivery: BEF-MU-M18 (1)

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

Illustration may differ



Detailed technical data

Features

Housing	Metric
Housing	Short-body
Thread size	M18 x 1
Diameter	Ø 18 mm
Sensing range S_n	0 mm ... 70 mm ¹⁾
Safe sensing range S_a	56.7 mm
Magnetic sensitivity	0.7 mT
Switching frequency	5,000 Hz
Connection type	Male connector M12, 4-pin
Switching output	PNP
Output function	NO
Electrical wiring	DC 3-wire
Magnetic alignment	Axial
Enclosure rating	IP67 ²⁾
Items supplied	Mounting nut, brass, nickel-plated (2x)

¹⁾ Sensing range based on installation in non-magnetic material using Magnet MAG-3010-B (M4.0).

²⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 % ¹⁾
Voltage drop	≤ 2 V ²⁾
Current consumption	10 mA ³⁾

¹⁾ Of V_S .

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von S_r (V_S und T_a constant).

⁵⁾ Pulsed.

Time delay before availability	≤ 20 ms
Hysteresis	1 % ... 10 %
Reproducibility	≤ 1 % ⁴⁾
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 200 mA
Reverse polarity protection	Yes
Short-circuit protection	Yes ⁵⁾
Power-up pulse protection	✓
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	50 mm
Thread length	32 mm
Tightening torque, max.	40 Nm

¹⁾ Of V_S.

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von S_r (V_S und T_a constant).

⁵⁾ Pulsed.

Safety-related parameters

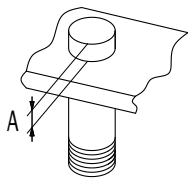
MTTF_D	1,980 years
DC_{avg}	0%
T_M (mission time)	20 years

Classifications

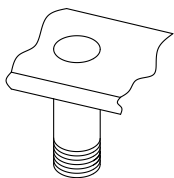
ECLASS 5.0	27270104
ECLASS 5.1.4	27270104
ECLASS 6.0	27270104
ECLASS 6.2	27270104
ECLASS 7.0	27270104
ECLASS 8.0	27270104
ECLASS 8.1	27270104
ECLASS 9.0	27270104
ECLASS 10.0	27270104
ECLASS 11.0	27270104
ECLASS 12.0	27274301
ETIM 5.0	EC002544
ETIM 6.0	EC002544
ETIM 7.0	EC002544
ETIM 8.0	EC002544
UNSPSC 16.0901	39122230

Installation note

installation in magnetizable material



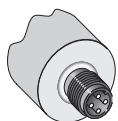
installation in non-magnetizable material



Ø	A (mm)	M (Nm)
M18	15	< 40

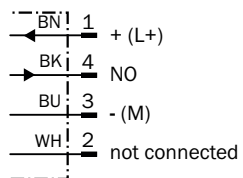


Connection type



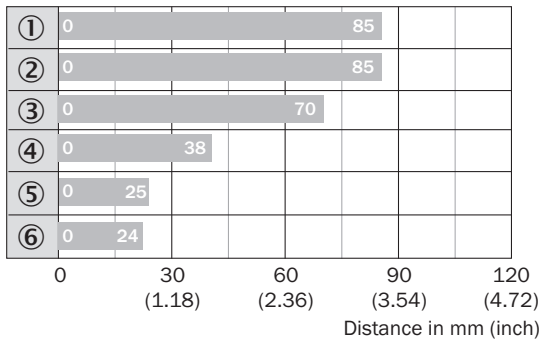
Connection diagram

Cd-011



Sensing range diagram

Sensing range

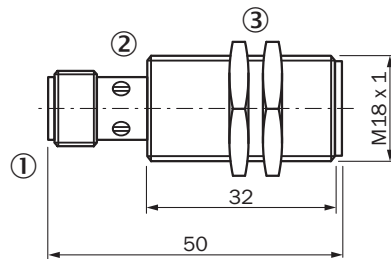


■ Max. sensing range S_n, flush or non-flush installation, non-magnetizable material

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

Dimensional drawing (Dimensions in mm (inch))

MM18, connector, short-body housing




- ① Connection
- ② Display LED
- ③ Fastening nuts (2x); width across 17, metal

Recommended accessories

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

	Brief description	Type	Part no.
Mounting brackets and plates			
	Mounting plate for M18 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M18	5321870
	Mounting bracket for M18 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M18	5308446
Terminal and alignment brackets			
	Clamping block for round sensors M18, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KH-M18	2051481
	Clamping block for round sensors M18, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KHF-M18	2051482
Others			
	<ul style="list-style-type: none"> • Connection type head A: Male connector, M12, 4-pin, angled, A-coded • Description: Unshielded • Connection systems: Screw-type terminals • Permitted cross-section: ≤ 0.75 mm² 	STE-1204-W	6022084
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, straight, A-coded • Description: Unshielded, Head A: female connector, M12, 4-pin, straight, unshielded, for power supply, for cable diameter 4 mm ... 6 mm Head B: - • Connection systems: Screw-type terminals • Permitted cross-section: ≤ 0.75 mm² 	DOS-1204-G	6007302
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, angled, A-coded • Description: Unshielded, Head A: female connector, M12, 4-pin, angled, unshielded, for power supply, for cable diameter 3 mm ... 6.5 mm Head B: - • Connection systems: Screw-type terminals • Permitted cross-section: ≤ 0.75 mm² 	DOS-1204-W	6007303
	<ul style="list-style-type: none"> • Connection type head A: Male connector, M12, 4-pin, straight, A-coded • Description: Unshielded • Connection systems: Screw-type terminals • Permitted cross-section: ≤ 0.75 mm² 	STE-1204-G	6009932
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 2 m, 4-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals 	YF2A14-020VB3XLEAX	2096234
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 5 m, 4-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals 	YF2A14-050VB3XLEAX	2096235
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, angled, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 2 m, 4-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals 	YG2A14-020VB3XLEAX	2095895

	Brief description	Type	Part no.
	<ul style="list-style-type: none">• Connection type head A: Female connector, M12, 4-pin, angled, A-coded• Connection type head B: Flying leads• Signal type: Sensor/actuator cable• Cable: 5 m, 4-wire, PVC• Description: Sensor/actuator cable, unshielded• Application: Zones with chemicals	YG2A14-050VB3XLEAX	2095897

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.

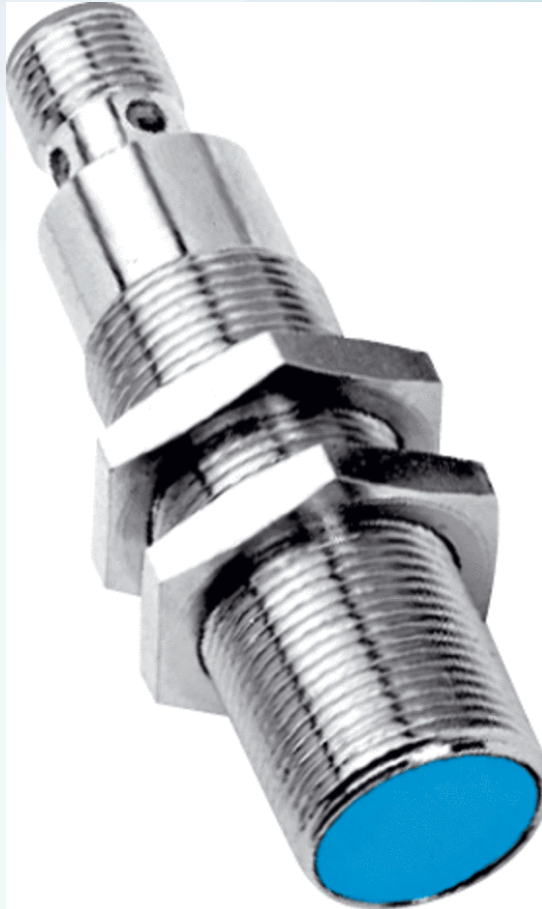
We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with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

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WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com



MM18-70APS-ZU0

MME

MAGNETIC SENSORS

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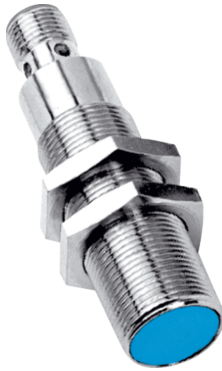


Illustration may differ



Ordering information

Type	Part no.
MM18-70APS-ZUO	7900272

Included in delivery: BEF-MU-M18 (1)

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

Detailed technical data

Features

Housing	Metric
Housing	Standard
Thread size	M18 x 1
Diameter	Ø 18 mm
Sensing range S_n	5 mm ... 70 mm ¹⁾
Safe sensing range S_a	56.7 mm
Magnetic sensitivity	≤ 0.7 mT
Switching frequency	5,000 Hz
Connection type	Cable, 3-wire, 2 m
Switching output	PNP
Output function	NO
Electrical wiring	DC 3-wire
Magnetic alignment	Axial
Enclosure rating	IP67 ²⁾
Items supplied	Mounting nut, brass, nickel-plated (2x)

¹⁾ Sensing range based on installation in non-magnetic material using Magnet MAG-3010-B (M4.0).

²⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 % ¹⁾

¹⁾ Of V_S .

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von Sr (VS und Ta constant).

⁵⁾ Pulsed.

Voltage drop	≤ 1.5 V ²⁾
Current consumption	10 mA ³⁾
Time delay before availability	≤ 2 ms
Hysteresis	1 % ... 10 %
Reproducibility	≤ 1 % ⁴⁾
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 300 mA
Cable material	PUR/PVC
Wire-break protection	✓
Reverse polarity protection	Yes
Short-circuit protection	Yes ⁵⁾
Power-up pulse protection	✓
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	50 mm
Thread length	40 mm
Tightening torque, max.	≤ 25 Nm

1) Of V_S.

2) At I_a max.

3) Without load.

4) Von Sr (VS und Ta constant).

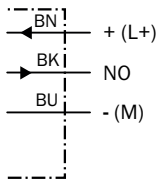
5) Pulsed.

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
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

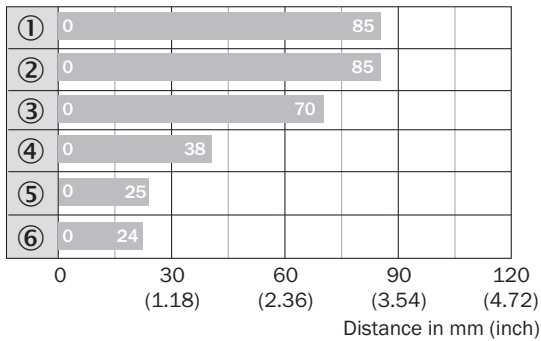
Connection diagram

Cd-001



Sensing range diagram

Sensing range

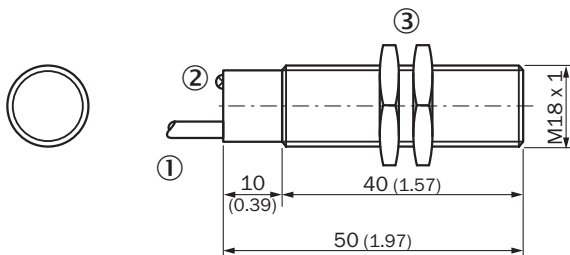


■ Max. sensing range S_n , flush or non-flush installation, non-magnetizable material

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

Dimensional drawing (Dimensions in mm (inch))




MM18, cable, standard housing



- ① Connection
- ② Display LED
- ③ Fastening nuts (2x); width across 17, metal

Recommended accessories

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

	Brief description	Type	Part no.
Mounting brackets and plates			
	Mounting plate for M18 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M18	5321870
	Mounting bracket for M18 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M18	5308446
Terminal and alignment brackets			
	Clamping block for round sensors M18, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KH-M18	2051481
	Clamping block for round sensors M18, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KHF-M18	2051482

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Contacts and other locations –www.sick.com



MM18-70APS-ZUK

MME

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Ordering information

Type	Part no.
MM18-70APS-ZUK	1040029

Included in delivery: BEF-MU-M18 (1)

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

Illustration may differ



Detailed technical data

Features

Housing	Metric
Housing	Short-body
Thread size	M18 x 1
Diameter	Ø 18 mm
Sensing range S_n	0 mm ... 70 mm ¹⁾
Safe sensing range S_a	56.7 mm
Magnetic sensitivity	0.7 mT
Switching frequency	5,000 Hz
Connection type	Cable, 3-wire, 2 m
Switching output	PNP
Output function	NO
Electrical wiring	DC 3-wire
Magnetic alignment	Axial
Enclosure rating	IP67 ²⁾
Items supplied	Mounting nut, brass, nickel-plated (2x)

¹⁾ Sensing range based on installation in non-magnetic material using Magnet MAG-3010-B (M4.0).

²⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 % ¹⁾
Voltage drop	≤ 2 V ²⁾
Current consumption	10 mA ³⁾

¹⁾ Of V_S .

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von S_r (V_S und T_a constant).

⁵⁾ Pulsed.

Time delay before availability	≤ 20 ms
Hysteresis	1 % ... 10 %
Reproducibility	≤ 1 % ⁴⁾
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 200 mA
Cable material	PUR
Reverse polarity protection	Yes
Short-circuit protection	Yes ⁵⁾
Power-up pulse protection	✓
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	48 mm
Thread length	32 mm
Tightening torque, max.	40 Nm

¹⁾ Of V_S.

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von S_r (V_S und T_a constant).

⁵⁾ Pulsed.

Safety-related parameters

MTTF_D	1,980 years
DC_{avg}	0%
T_M (mission time)	20 years

Classifications

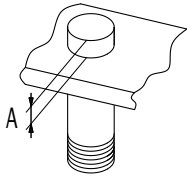
ECLASS 5.0	27270104
ECLASS 5.1.4	27270104
ECLASS 6.0	27270104
ECLASS 6.2	27270104
ECLASS 7.0	27270104
ECLASS 8.0	27270104
ECLASS 8.1	27270104
ECLASS 9.0	27270104
ECLASS 10.0	27270104
ECLASS 11.0	27270104
ECLASS 12.0	27274301
ETIM 5.0	EC002544
ETIM 6.0	EC002544
ETIM 7.0	EC002544
ETIM 8.0	EC002544

UNSPSC 16.0901

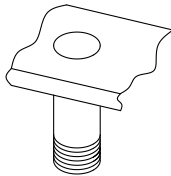

39122230

Installation note

installation in magnetizable material



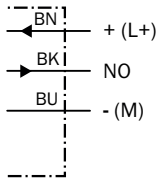
installation in non-magnetizable material

Ø	A (mm)	M (Nm)
M18	15	< 40

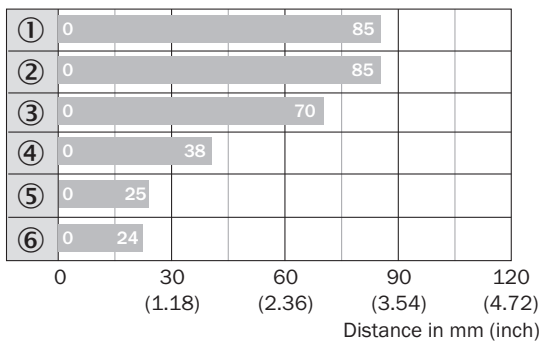
Connection diagram

Cd-001



Sensing range diagram

Sensing range



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

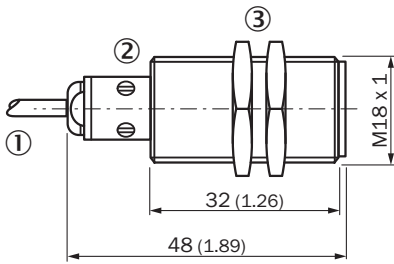
Magnet type

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

Dimensional drawing (Dimensions in mm (inch))




MM18, cable, short-body housing



- ① Connection
- ② Display LED
- ③ Fastening nuts (2x); width across 17, metal

Recommended accessories

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

	Brief description	Type	Part no.
Mounting brackets and plates			
	Mounting plate for M18 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M18	5321870
	Mounting bracket for M18 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M18	5308446
Terminal and alignment brackets			
	Clamping block for round sensors M18, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KH-M18	2051481
	Clamping block for round sensors M18, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KHF-M18	2051482

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Contacts and other locations –www.sick.com



RM08-10AU0-ZUKS03

MME

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Ordering information

Type	Part no.
RM08-10AUO-ZUKS03	1076783

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

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



Detailed technical data

Features

Housing	Metric
Housing	Short-body
Thread size	M8 x 1
Diameter	Ø 8 mm
Magnetic sensitivity	2.6 mT
Switching frequency	200 Hz
Connection type	Cable, 2-wire, 2.5 m
Switching output	Reed
Output function	NC
Electrical wiring	DC 2-wire
Magnetic alignment	Axial
Enclosure rating	IP67 ¹⁾
Items supplied	Mounting nut, brass, nickel-plated (2x)

¹⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 60 V DC
Ripple	≤ 10 % ¹⁾
Voltage drop	≤ 2 V ²⁾
Hysteresis	1 % ... 10 %
Temperature drift (of S_v)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 500 mA
Cable material	PUR

¹⁾ Of V_S.

²⁾ At I_a max.

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	48 mm
Thread length	29.5 mm
Tightening torque, max.	6 Nm

1) Of V_S .

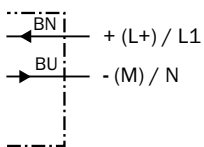
2) At I_a max.

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
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

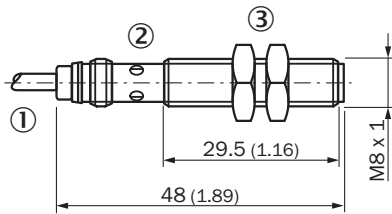
Connection diagram

Cd-037



Dimensional drawing (Dimensions in mm (inch))




MM08, cable, short-body housing



- 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	Type	Part no.
Mounting brackets and plates			
	Mounting plate for M8 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M08	5321722
	Mounting bracket for M8 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M08	5321721
Terminal and alignment brackets			
	Clamping block for round sensors M8, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KH-M08	2051477
	Clamping block for round sensors M8, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KHF-M08	2051478

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