imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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MM18-70APS-ZUK

MAGNETIC PROXIMITY SENSORS



MM18-70APS-ZUK | MM

MAGNETIC PROXIMITY SENSORS



Ordering information

| Туре | Part no. |
|----------------|----------|
| MM18-70APS-ZUK | 1040029 |

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





Detailed technical data

| Features | |
|-----------------------------------|----------------------------------|
| Housing | Cylindrical thread design |
| Housing | Short-body |
| Thread size | M18 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 | 1,000 Hz |
| Connection type | Cable, 3-wire, 2 m ²⁾ |
| Switching output | PNP |
| Output function | NO |
| Electrical wiring | DC 3-wire |
| Magnetic alignment | Axial |
| Enclosure rating | IP67 ³⁾ |

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

²⁾ Do not bend below 0 °C.

 $^{\rm (3)}$ According to EN 60529.

Mechanics/electronics

| Supply voltage | 10 V DC 30 V DC |
|---------------------|----------------------------|
| Ripple | < 10 % ¹⁾ |
| Voltage drop | $\leq 2 V^{2}$ |
| Current consumption | \leq 10 mA ³⁾ |

 $^{1)}$ Of $\rm V_S.$

²⁾ At I_a max.

³⁾ Without load.

 $^{\rm 4)}$ Von Sr (VS und Ta constant).

⁵⁾ Pulsed.

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MAGNETIC PROXIMITY SENSORS

| 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 l _a | ≤ 200 mA |
| Cable material | PUR |
| Short-circuit protection | ✓ ⁵⁾ |
| Reverse polarity protection | ✓ |
| 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 |
| Items supplied | Fastening nuts (2 x) |
| Special feature | Short-body |

 $^{1)}$ Of V_S.

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von Sr (VS und Ta constant).

⁵⁾ Pulsed.

Classifications

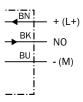
| ECI@ss 5.0 | 27270104 |
|----------------|----------|
| ECI@ss 5.1.4 | 27270104 |
| ECI@ss 6.0 | 27270104 |
| ECI@ss 6.2 | 27270104 |
| ECI@ss 7.0 | 27270104 |
| ECI@ss 8.0 | 27270104 |
| ECI@ss 8.1 | 27270104 |
| ECI@ss 9.0 | 27270104 |
| ETIM 5.0 | EC002544 |
| ETIM 6.0 | EC002544 |
| UNSPSC 16.0901 | 39122230 |

MM18-70APS-ZUK | MM

MAGNETIC PROXIMITY SENSORS

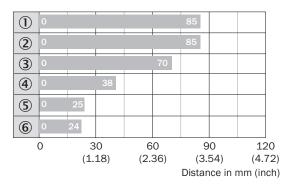
Connection diagram

cd-001



Sensing range diagram

MMxx-70Axx-xxx

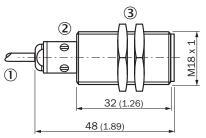


Max. sensing range S_n, flush or non-flush installation, non-magnetizable material

| 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 Indication LED

③ Fastening nuts (2x); width across 17, metal

Recommended accessories

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

| | Brief description | Туре | Part no. | |
|-----------------------------|---|--------------|----------|--|
| Universal bar clamp systems | | | | |
| 6 | Plate N06 for universal clamp bracket, M18, Zinc plated steel (sheet), Zinc die cast (clamping bracket), Universal clamp (5322626), mounting hardware | BEF-KHS-N06 | 2051612 | |
| | Plate N06N for universal clamp bracket, M18, Stainless steel 1.4571 (sheet), Stainless steel 1.4408 (clamp), Universal clamp (5322627), mounting hardware | BEF-KHS-N06N | 2051622 | |
| Mounting brac | Mounting brackets and plates | | | |
| | Mounting plate for M18 sensors, steel, zinc coated, without mounting hardware | BEF-WG-M18 | 5321870 | |
| 40 | 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 re- inforced, 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 | |
| Magnets | | | | |
| N | Magnet without mounting hole, Ø 6 mm, height 25 mm | MAG-0625-A | 7901783 | |
| • | Magnet without mounting hole, Ø 10 mm, height 3 mm | MAG-1003-S | 7901782 | |
| • | Magnet with mounting hole for M4 countersunk screw, Ø 20 mm, height 6.5 mm | MAG-2006-B | 7901784 | |
| | Magnet without mounting hole, Ø 30 mm, height 10 mm | MAG-3010-B | 7901785 | |
| ۲ | Magnet with mounting hole for M5 flat head screw, Ø 31 mm, height 15 mm | MAG-3015-B | 7901786 | |
| • | Magnet with mounting hole for M5 flat head screw, Ø 36 mm, height 19.5 mm | MAG-3515-B | 7902086 | |

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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."

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