



IME08-03BNSZW2K

IME

INDUCTIVE PROXIMITY SENSORS

SICK
Sensor Intelligence.



Ordering information

| Type | Part no. |
|-----------------|----------|
| IME08-03BNSZW2K | 1074009 |

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

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

Illustration may differ



Detailed technical data

Features

| | |
|--|---|
| Housing | Metric |
| Housing | Short-body |
| Thread size | M8 x 1 |
| Diameter | Ø 8 mm |
| Sensing range S_n | 3 mm |
| Safe sensing range S_a | 2.43 mm |
| Installation type | Quasi-flush |
| Switching frequency | 1,000 Hz |
| Connection type | Cable, 3-wire, 2 m |
| Switching output | NPN |
| Output function | NO |
| Electrical wiring | DC 3-wire |
| Enclosure rating | IP67 ¹⁾ |
| Special features | Triple sensing range |
| Items supplied | Mounting nut, brass, nickel-plated (2x) |

¹⁾ 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⁾ Supply voltage U_B and constant ambient temperature T_a .

³⁾ Of S_r .

| | |
|---|-----------------------------------|
| Time delay before availability | ≤ 50 ms |
| Hysteresis | 1 % ... 15 % |
| Reproducibility | ≤ 5 % ^{2) 3)} |
| Temperature drift (of S_r) | ± 10 % |
| EMC | According to EN 60947-5-2 |
| Continuous current I_a | ≤ 200 mA |
| No load current | ≤ 10 mA |
| Cable material | PVC |
| Conductor size | 0.25 mm ² |
| Cable diameter | Ø 3.9 mm |
| Short-circuit protection | ✓ |
| Power-up pulse protection | ✓ |
| Shock and vibration resistance | 30 g, 11 ms/10 Hz ... 55 Hz, 1 mm |
| Ambient operating temperature | -25 °C ... +75 °C |
| Ambient temperature, storage | -25 °C ... +75 °C |
| Housing material | Brass, nickel-plated |
| Sensing face material | Plastic, PA 66 |
| Housing length | 43 mm |
| Thread length | 25 mm |
| Tightening torque, max. | ≤ 5 Nm |
| UL File No. | NRKH.E181493 |

¹⁾ At I_a max.

²⁾ Supply voltage U_B and constant ambient temperature T_a.

³⁾ Of S_r.

Safety-related parameters

| | |
|-------------------------|-------------|
| MTTF_D | 1,735 years |
| DC_{avg} | 0 % |

Reduction factors

| | |
|-----------------------------------|--|
| Note | The values are reference values which may vary |
| St37 steel (Fe) | 1 |
| Stainless steel (V2A, 304) | Approx. 0.75 |
| Aluminum (Al) | Approx. 0.46 |
| Copper (Cu) | Approx. 0.42 |
| Brass (Br) | Approx. 0.56 |

Installation note

| | |
|---------------|---------------------------------------|
| Remark | Associated graphic see "Installation" |
| A | 3 mm |
| B | 20 mm |
| C | 8 mm |
| D | 9 mm |

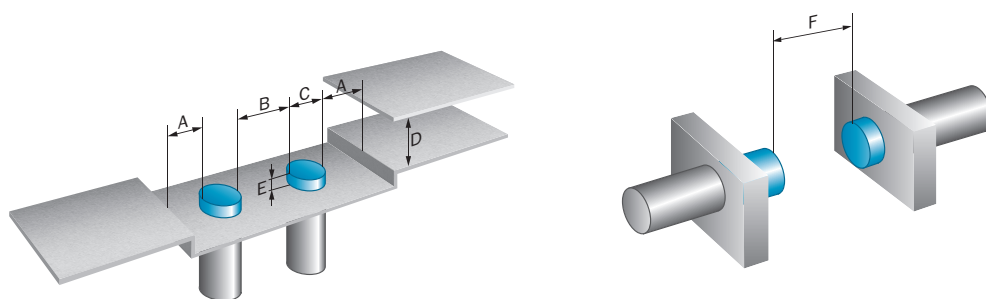
| | |
|----------|-------|
| E | 1 mm |
| F | 30 mm |

Classifications

| | |
|-----------------------|----------|
| ECLASS 5.0 | 27270101 |
| ECLASS 5.1.4 | 27270101 |
| ECLASS 6.0 | 27270101 |
| ECLASS 6.2 | 27270101 |
| ECLASS 7.0 | 27270101 |
| ECLASS 8.0 | 27270101 |
| ECLASS 8.1 | 27270101 |
| ECLASS 9.0 | 27270101 |
| ECLASS 10.0 | 27270101 |
| ECLASS 11.0 | 27270101 |
| ECLASS 12.0 | 27274001 |
| ETIM 5.0 | EC002714 |
| ETIM 6.0 | EC002714 |
| ETIM 7.0 | EC002714 |
| ETIM 8.0 | EC002714 |
| UNSPSC 16.0901 | 39122230 |

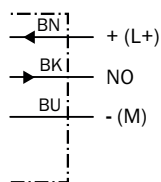
Installation note

Quasi-flush installation








Connection diagram

Cd-001



Recommended accessories

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

| | Brief description | Type | Part no. |
|---|--|--------------------|----------|
| Mounting brackets and plates | | | |
|  | <ul style="list-style-type: none"> Description: Mounting plate for M8 sensors Material: Steel Details: Steel, zinc coated Items supplied: Without mounting hardware | BEF-WG-M08 | 5321722 |
|  | <ul style="list-style-type: none"> Description: Mounting bracket for M8 sensors Material: Steel Details: Steel, zinc coated Items supplied: Without mounting hardware | BEF-WN-M08 | 5321721 |
| Terminal and alignment brackets | | | |
|  | <ul style="list-style-type: none"> Description: Clamping block for round sensors M8, without fixed stop Material: Plastic Details: Plastic (PA12), glass-fiber reinforced Items supplied: Mounting hardware included | BEF-KH-M08 | 2051477 |
| | <ul style="list-style-type: none"> Description: Clamping block for round sensors M8, with fixed stop Material: Plastic Details: Plastic (PA12), glass-fiber reinforced Items supplied: Mounting hardware included | BEF-KHF-M08 | 2051478 |
| Others | | | |
|  | <ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Male connector, M8, 4-pin, straight, A-coded Signal type: Sensor/actuator cable Cable: 1 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation | YF2A14-020UA3M8U14 | 2096112 |
|  | <ul style="list-style-type: none"> Connection type head A: Female connector, M12, 5-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 5-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation | YF2A15-020UB5XLEAX | 2095617 |

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:

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