



IME18-08BDSZQ9S

IME

INDUCTIVE PROXIMITY SENSORS

SICK
Sensor Intelligence.

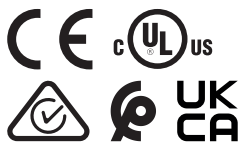


Ordering information

| Type | part no. |
|-----------------|----------|
| IME18-08BDSZQ9S | 1068719 |

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

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



Detailed technical data

Features

| | |
|--|---|
| Housing | Metric |
| Housing | Standard design |
| Thread size | M18 x 1 |
| Diameter | Ø 18 mm |
| Sensing range S_n | 8 mm |
| Safe sensing range S_a | 6.48 mm |
| Installation type | Flush |
| Switching frequency | 1,000 Hz |
| Connection type | Cable with M12 male connector, 4-pin, 0.3 m |
| Output function | NO |
| Electrical wiring | DC 2-wire |
| Enclosure rating | IP67 ¹⁾ |
| 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 | ≤ 4 V ¹⁾ ≤ 4.5 V ²⁾ |
| Time delay before availability | ≤ 100 ms |

¹⁾ At $I_a = 30$ mA.

²⁾ At I_a max.

³⁾ Supply voltage U_B and constant ambient temperature T_a .

⁴⁾ Of Sr.

| | |
|---|-----------------------------------|
| Hysteresis | 5 % ... 15 % |
| Reproducibility | $\leq 2 \%$ ³⁾ 4) |
| Temperature drift (of S_r) | $\pm 10 \%$ |
| EMC | According to EN 60947-5-2 |
| Continuous current I_a | $\leq 100 \text{ mA}$ |
| Off-state current | $\leq 0.8 \text{ mA}$ |
| Minimum load current | $\geq 3 \text{ mA}$ |
| Cable material | PVC |
| Cable diameter | Ø 3.9 mm |
| Short-circuit protection | ✓ |
| Power-up pulse | $\leq 5 \text{ ms}$ |
| Shock and vibration resistance | 30 g, 11 ms/10 Hz ... 55 Hz, 1 mm |
| Ambient operating temperature | -25 °C ... +75 °C |
| Housing material | Brass, nickel-plated |
| Sensing face material | Plastic, PA 66 |
| Housing length | 67 mm |
| Thread length | 52 mm |
| Tightening torque, max. | $\leq 40 \text{ Nm}$ |
| UL File No. | NRKH.E181493 |

1) At I_a = 30 mA.

2) At I_a max.

3) Supply voltage U_B and constant ambient temperature T_a.

4) Of S_r.

Safety-related parameters

| | |
|-------------------------------------|-------------|
| MTTF_D | 1,103 years |
| DC_{avg} | 0 % |
| T_M (mission time) | 20 years |

Reduction factors

| | |
|-----------------------------------|--|
| Note | The values are reference values which may vary |
| St37 steel (Fe) | 1 |
| Stainless steel (V2A, 304) | Approx. 0.8 |
| Aluminum (Al) | Approx. 0.45 |
| Copper (Cu) | Approx. 0.4 |
| Brass (Br) | Approx. 0.4 |

Installation note

| | |
|---------------|---------------------------------------|
| Remark | Associated graphic see "Installation" |
| B | 36 mm |
| C | 18 mm |
| D | 24 mm |
| F | 64 mm |

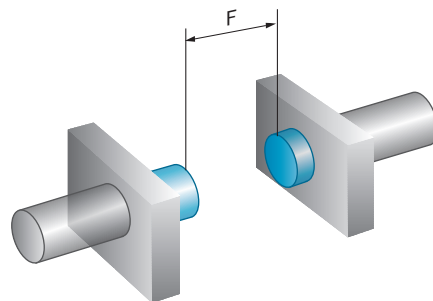
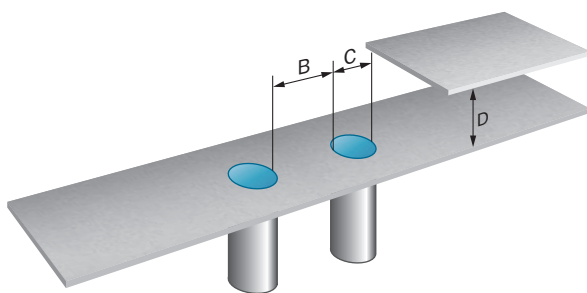
Certificates

| | |
|---|---|
| EU declaration of conformity | ✓ |
| UK declaration of conformity | ✓ |
| ACMA declaration of conformity | ✓ |
| Moroccan declaration of conformity | ✓ |
| China-RoHS | ✓ |
| cULus certificate | ✓ |

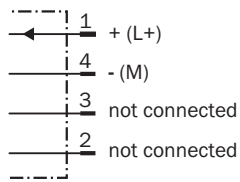
Classifications

| | |
|-----------------------|----------|
| 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 |

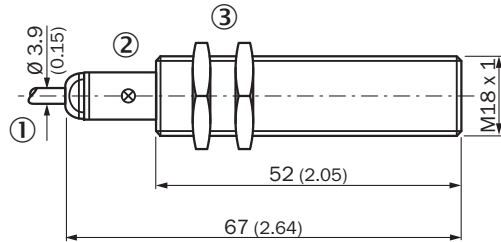
Installation note Flush installation



Connection diagram Cd-015



Dimensional drawing IME18 standard, cable with male connector, flush



Recommended accessories

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

| | Brief description | Type | part no. |
|------------------|--|-------------|----------|
| Mounting systems | | | |
| | <ul style="list-style-type: none"> Description: Clamping block for round sensors M18, with fixed stop Material: Plastic Details: Plastic (PA12), glass-fiber reinforced Items supplied: Mounting hardware included Suitable for: GR18, MH15V, V180-2, V18 | BEF-KHF-M18 | 2051482 |
| | <ul style="list-style-type: none"> Description: Clamping block for round sensors M18, without fixed stop Material: Plastic Details: Plastic (PA12), glass-fiber reinforced Items supplied: Mounting hardware included Suitable for: GR18, MH15V, V180-2, V18 | BEF-KH-M18 | 2051481 |
| | <ul style="list-style-type: none"> Description: Mounting plate for M18 sensors Material: Steel Details: Steel, zinc coated Items supplied: Without mounting hardware Suitable for: GR18, V180-2, V18, W15, Z1, Z2 | BEF-WG-M18 | 5321870 |
| | <ul style="list-style-type: none"> Description: Mounting bracket for M18 sensors Material: Steel Details: Steel, zinc coated Items supplied: Without mounting hardware Suitable for: GR18, V180-2, V18, W15, Z1, Z2 | BEF-WN-M18 | 5308446 |

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