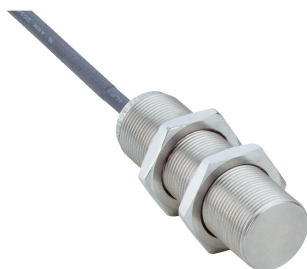


IMI18-08BPSNU2S

IMI

INDUCTIVE PROXIMITY SENSORS

SICK
Sensor Intelligence.



Ordering information

| Type | Part no. |
|-----------------|----------|
| IMI18-08BPSNU2S | 1093935 |

Included in delivery: BEF-MU-M18N1 (1)

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

Illustration may differ



Detailed technical data

Features

| | |
|--|--|
| Housing | Cylindrical thread 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 | 50 Hz |
| Connection type | Cable, 3-wire, 2 m |
| Switching output | PNP |
| Output function | NO |
| Electrical wiring | DC 3-wire |
| Enclosure rating | IP68, IP69K ¹⁾ |
| Special features | Sensing face made of stainless steel V4A, Resistant to cleaning agents |
| Special applications | Hygienic and washdown zones, Difficult application conditions |
| Items supplied | Mounting nut, V4A stainless steel (2x) |

¹⁾ According to EN 60529.

Mechanics/electronics

| | |
|---------------------------------------|----------------------|
| Supply voltage | 10 V DC ... 30 V DC |
| Ripple | ≤ 10 % ¹⁾ |
| Voltage drop | ≤ 2 V ²⁾ |
| Time delay before availability | ≤ 300 ms |
| Hysteresis | 1 % ... 20 % |

¹⁾ Of V_S .

²⁾ With I max.

³⁾ Of S_r .

| | |
|---|---|
| Reproducibility | ≤ 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 | PUR |
| Conductor size | 0.34 mm ² |
| Cable diameter | Ø 4.5 mm |
| Short-circuit protection | ✓ |
| Reverse polarity protection | ✓ |
| Power-up pulse protection | ✓ |
| Shock and vibration resistance | 100 g / 5 ms / 1000 cycles; 150 g / 1 Mio cycles; 10 Hz ... 55 Hz, 1 mm / 55 Hz ... 500 Hz / 60 g |
| Ambient operating temperature | -25 °C ... +75 °C |
| Housing material | Stainless steel V4A, DIN 1.4404 / AISI 316L |
| Sensing face material | Stainless steel V4A, DIN 1.4404 / AISI 316L |
| Housing length | 59.5 mm |
| Thread length | 55 mm |
| Tightening torque, max. | ≤ 60 Nm |
| Protection class | III |
| UL File No. | E181493 |

¹⁾ Of V_S.

²⁾ With I max.

³⁾ Of S_r.

Safety-related parameters

| | |
|-------------------------|-------------|
| MTTF_D | 1,892 years |
| DC_{avg} | 0 % |

Reduction factors

| | |
|-----------------------------------|--|
| Note | The values are reference values which may vary |
| St37 steel (Fe) | Approx. 1 |
| Stainless steel (V2A, 304) | Approx. 0.83 |
| Aluminum (Al) | Approx. 0.52 |
| Copper (Cu) | Approx. 0.32 |
| Brass (Br) | Approx. 0.6 |

Installation note

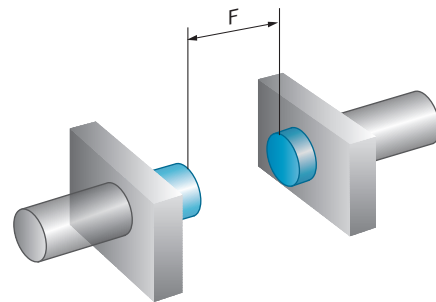
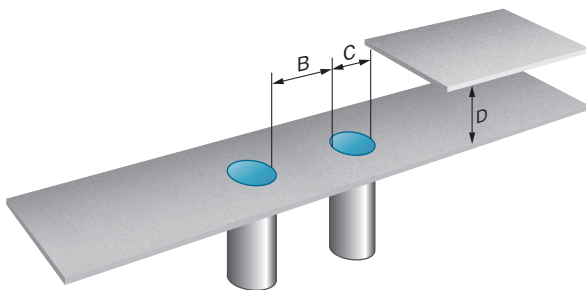
| | |
|---------------|---------------------------------------|
| Remark | Associated graphic see "Installation" |
| B | 25 mm |
| C | 18 mm |
| D | 24 mm |
| F | 50 mm |

Classifications

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

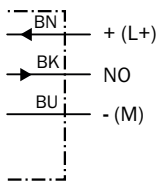
Installation note

Flush installation

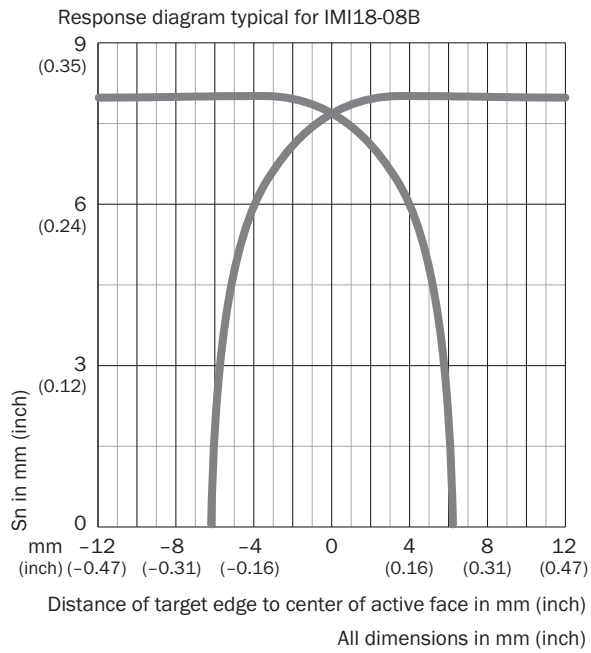


Connection diagram

Cd-001

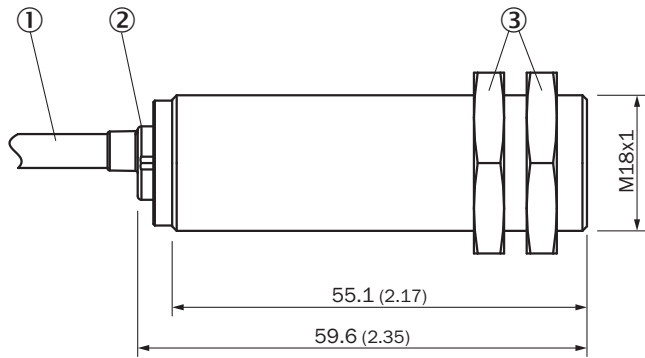


Response diagram



Dimensional drawing (Dimensions in mm (inch))





IM18 Inox, flush



- ① Connection
- ② Display LED
- ③ Fastening nuts (2 x); width across 24, stainless steel V4A

Recommended accessories

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

| | Brief description | Type | Part no. |
|---|--|-------------|----------|
| Plug connectors and cables | | | |
|  | Head A: female connector, M12, 4-pin, straight Cable: unshielded | DOS-1204-GN | 6028357 |
|  | Head A: female connector, M12, 4-pin, angled Cable: unshielded | DOS-1204-WN | 6028358 |
|  | Head A: male connector, M12, 4-pin, straight Cable: unshielded | STE-1204-GN | 6028359 |
|  | Head A: male connector, M12, 4-pin, straight Cable: unshielded For 2 cable connections | STE-1204-TN | 6028360 |

Recommended services

Additional services → www.sick.com/IMI

| | Type | Part no. |
|--|------------------------|------------|
| Function Block Factory | | |
| <ul style="list-style-type: none"> Description: The Function Block Factory supports common programmable logic controllers (PLCs) from various manufacturers, such as Siemens, Beckhoff, Rockwell Automation and B&R. More information on the FBF can be found here. | Function Block Factory | On request |

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