

Inductive sensor

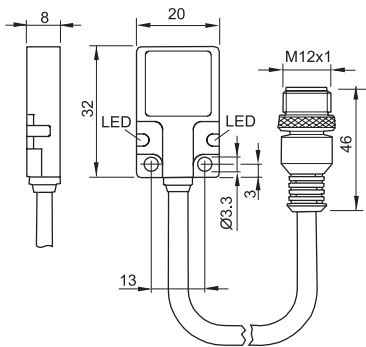
NBB5-F104M-E2-C-200MM-V1



- 5 mm flush
- 3-wire DC
- Weld Immune
- Metal housing



Dimensions



Technical Data

General specifications

| | | |
|-----------------------------|-------|--------------------|
| Switching function | | Normally open (NO) |
| Output type | | PNP |
| Rated operating distance | s_n | 5 mm |
| Installation | | flush |
| Output polarity | | DC |
| Assured operating distance | s_a | 0 ... 4 mm |
| Reduction factor r_{Al} | | 0.30 - 0.45 |
| Reduction factor r_{Cu} | | 0.25 - 0.45 |
| Reduction factor r_{304} | | 0.60 - 1.00 |
| Reduction factor r_{St37} | | 1 |
| Output type | | 3-wire |

Nominal ratings

| | | |
|-----------------------------|-------|----------------------------|
| Operating voltage | U_B | 10 ... 30 V DC |
| Switching frequency | f | 100 Hz |
| Hysteresis | H | typ. 5% |
| Reverse polarity protection | | reverse polarity protected |
| Short-circuit protection | | pulsing |
| Voltage drop | U_d | ≤ 2.5 V |

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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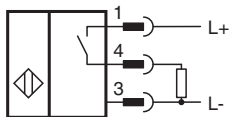
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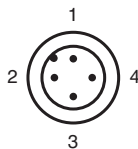
Technical Data

| | | |
|---|-------|--|
| Operating current | I_L | 200 mA |
| Off-state current | I_r | $\leq 80 \mu\text{A}$ |
| No-load supply current | I_0 | $\leq 15 \text{ mA}$ |
| Switching state indicator | | LED |
| Compliance with standards and directives | | |
| Standard conformity | | |
| Standards | | IEC / EN 60947-5-2:2004 |
| Approvals and certificates | | |
| UL approval | | cULus Listed, General Purpose |
| CCC approval | | CCC approval / marking not required for products rated $\leq 36 \text{ V}$ |
| Ambient conditions | | |
| Ambient temperature | | -25 ... 70 °C (-13 ... 158 °F) |
| Mechanical specifications | | |
| Connection type | | Cable connector M12 x 1 , 4-pin with PUR Cable, 200 mm |
| Core cross section | | 0.25 mm ² |
| Housing material | | GD-Zn |
| Sensing face | | PA 12 |
| Degree of protection | | IP67 |

Connection



Connection Assignment



Wire colors in accordance with EN 60947-5-2

| | | |
|---|----|---------|
| 1 | BN | (brown) |
| 2 | WH | (white) |
| 3 | BU | (blue) |
| 4 | BK | (black) |

Accessories

| | | |
|--|----------------------|---|
| | V1-G-OR2M-POC | Female cordset single-ended M12 straight A-coded, 4-pin, POC cable welding-bead resistant orange, suitable for robotic applications, torsion resistant, oil resistant, molecularly cross-linked |
|--|----------------------|---|

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