

Inductive sensor

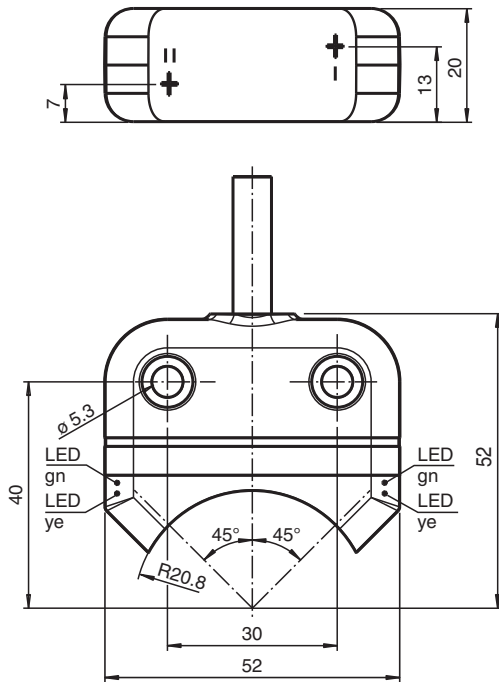
NBN4-F25-E8-5M



- Direct mounting on standard actuators
- Small construction with sturdy plastic housing of protection class IP 67
- LED for power on



Dimensions



Technical Data

General specifications

| | | |
|----------------------------|-------|------------------------|
| Switching function | | 2 x normally open (NO) |
| Output type | | PNP |
| Rated operating distance | s_n | 4 mm |
| Installation | | flush mountable |
| Output polarity | | DC |
| Assured operating distance | s_a | 0 ... 3.24 mm |
| Actual operating distance | s_r | 3.6 ... 4.4 mm typ. |
| Reduction factor r_{Al} | | 0.5 |
| Reduction factor r_{Cu} | | 0.4 |
| Reduction factor r_{304} | | 1 |

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

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Technical Data

| | | |
|---|-------|--|
| Reduction factor r_{S137} | | 1.1 |
| Output type | | 3-wire |
| Nominal ratings | | |
| Operating voltage | U_B | 10 ... 30 V DC |
| Switching frequency | f | 0 ... 1000 Hz |
| Hysteresis | H | typ. 5 % |
| Reverse polarity protection | | reverse polarity protected |
| Short-circuit protection | | pulsing |
| Voltage drop | U_d | ≤ 2.5 V |
| Operating current | I_L | 0 ... 200 mA |
| Off-state current | I_r | 0 ... 0.5 mA typ. 0.1 μ A at 25 °C |
| No-load supply current | I_o | ≤ 22.5 mA |
| Time delay before availability | t_v | ≤ 100 ms |
| Operating voltage indicator | | LED, green |
| Switching state indicator | | LED, yellow |
| Functional safety related parameters | | |
| MTTF _d | | 860 a |
| Mission Time (T_M) | | 20 a |
| Diagnostic Coverage (DC) | | 0 % |
| Compliance with standards and directives | | |
| Standard conformity | | |
| Standards | | EN IEC 60947-5-2 |
| Approvals and certificates | | |
| UL approval | | cULus Listed |
| CCC approval | | CCC approval / marking not required for products rated ≤ 36 V |
| Ambient conditions | | |
| Ambient temperature | | -25 ... 70 °C (-13 ... 158 °F) |
| Storage temperature | | -40 ... 85 °C (-40 ... 185 °F) |
| Mechanical specifications | | |
| Connection type | | cable |
| Housing material | | PBT |
| Sensing face | | PC |
| Degree of protection | | IP67 |
| Cable | | |
| Wire end ferrules | | yes |
| Cable diameter | | 6.8 mm \pm 0.2 mm |
| Bending radius | | > 10 x cable diameter |
| Material | | PVC |
| Color | | grey |
| Number of cores | | 4 |
| Core cross section | | 0.75 mm ² |
| Length | L | 5 m |
| Mass | | 420 g |
| Tightening torque, fastening screws | | M5 x 25 : ≤ 2.7 Nm |
| Dimensions | | |
| Height | | 20 mm |
| Width | | 52 mm |
| Length | | 52 mm |
| Note | | Mounted on mechanical drive |

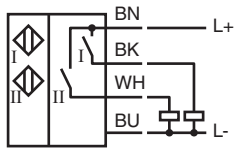
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Connection



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