

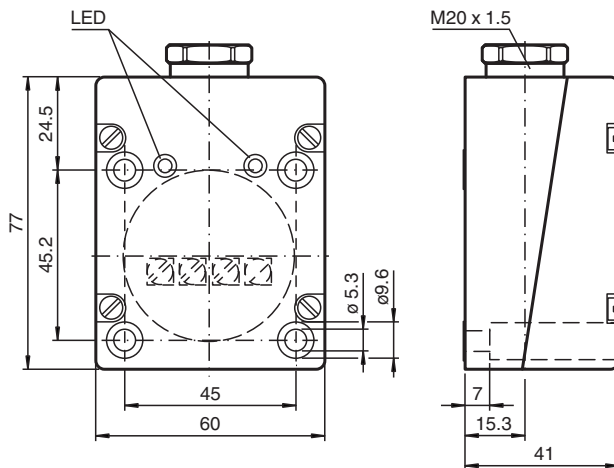


Inductive sensor NBN30-FPS-A2

- 30 mm non-flush
- 4-wire DC



Dimensions



Technical Data

| General specifications | | |
|------------------------------|-------|---|
| Switching function | | complementary |
| Output type | | PNP |
| Rated operating distance | s_n | 30 mm |
| Installation | | non-flush |
| Output polarity | | DC |
| Assured operating distance | s_a | 0 ... 24.3 mm |
| Actuating element | | mild steel, e. g. 1.0037, SR235JR (formerly St37-2) 90 mm x 90 mm x 1 mm |
| Reduction factor r_{Al} | | 0.2 |
| Reduction factor r_{Cu} | | 0.1 |
| Reduction factor r_{304} | | 0.5 |
| Reduction factor r_{Brass} | | 0.2 |
| Output type | | 4-wire |
| Nominal ratings | | |
| Operating voltage | U_B | 10 ... 30 V DC |
| Switching frequency | f | 0 ... 50 Hz |
| Hysteresis | H | 0.05 ... 7.26 mm |

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

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 PEPPERL+FUCHS

Technical Data

| | | |
|---|-------|---|
| Reverse polarity protection | | yes |
| Short-circuit protection | | yes |
| Overload resistance | | yes |
| Wire breakage protection | | yes |
| Inductive overvoltage protection | | yes |
| Surge suppression | | yes |
| Ripple | | 10 % |
| Voltage drop | U_d | $\leq 2.5 \text{ V}$ |
| Repeat accuracy | R | 0.75 mm |
| Operating current | I_L | 0 ... 200 mA |
| Off-state current | I_r | $\leq 0.01 \text{ mA}$ |
| No-load supply current | I_0 | $\leq 20 \text{ mA}$ |
| Time delay before availability | t_v | $\leq 100 \text{ ms}$ |
| Operating voltage indicator | | LED, green |
| Switching state indicator | | LED, yellow |
| Functional safety related parameters | | |
| MTTF _d | | 1430 a |
| Mission Time (T _M) | | 20 a |
| Diagnostic Coverage (DC) | | 0 % |
| Compliance with standards and directives | | |
| Standard conformity | | |
| Standards | | EN 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012 |
| Approvals and certificates | | |
| CCC approval | | CCC approval / marking not required for products rated $\leq 36 \text{ V}$ |
| Ambient conditions | | |
| Ambient temperature | | -25 ... 85 °C (-13 ... 185 °F) |
| Storage temperature | | -40 ... 85 °C (-40 ... 185 °F) |
| Mechanical specifications | | |
| Connection type | | screw terminals |
| Core cross section | | up to 2.5 mm ² |
| Housing material | | PBT |
| Sensing face | | PBT |
| Housing base | | PBT |
| Degree of protection | | IP65 |
| Mass | | 270 g |

Connection

