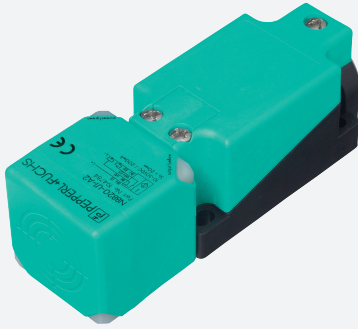


Inductive sensor

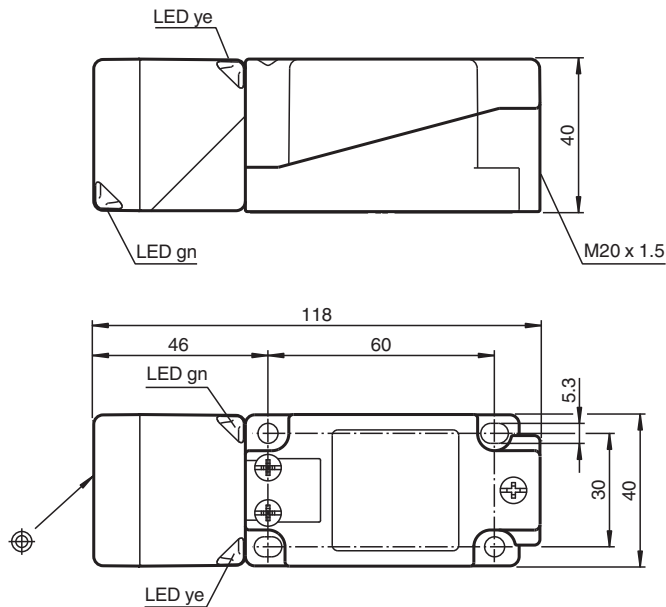
NBB20-U1-A0-T



- Sensor head bidirectional and rotatable
- 20 mm flush
- 4-wire DC
- 4 LEDs indicator for 360° visibility
- Temperature range
-25 ... 100 °C (-13 ... 212 °F)



Dimensions



Technical Data

| General specifications | | | |
|------------------------------|-------|--|----------------|
| Rated operating distance | s_n | | 20 mm |
| Installation | | | flush |
| Output polarity | | | DC |
| Assured operating distance | s_a | | 0 ... 16.2 mm |
| Reduction factor r_{Al} | | | 0.33 |
| Reduction factor r_{Cu} | | | 0.31 |
| Reduction factor r_{304} | | | 0.74 |
| Reduction factor r_{Brass} | | | 0.41 |
| Output type | | | 4-wire |
| Nominal ratings | | | |
| Operating voltage | U_B | | 10 ... 30 V DC |
| Switching frequency | f | | 0 ... 440 Hz |

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Technical Data

| | | |
|-------------------------------------------------|-------|-----------------------------------------------------------------------------------|
| Hysteresis | H | typ. 5 % |
| Reverse polarity protection | | reverse polarity protected |
| Short-circuit protection | | pulsing |
| Voltage drop | U_d | ≤ 2 V |
| Operating current | I_L | 0 ... 200 mA |
| Off-state current | I_r | 0 ... 0.5 mA |
| No-load supply current | I_0 | ≤ 20 mA |
| Time delay before availability | t_v | 80 ms |
| Operating voltage indicator | | LED, green |
| Switching state indicator | | LED, yellow |
| Functional safety related parameters | | |
| MTTF _d | | 1230 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, General Purpose |
| CCC approval | | CCC approval / marking not required for products rated ≤ 36 V |
| Ambient conditions | | |
| Ambient temperature | | -25 ... 100 °C (-13 ... 212 °F) |
| Mechanical specifications | | |
| Connection type | | screw terminals |
| Core cross section | | max. 2.5 mm ² |
| Housing material | | PA/metal with epoxy powder coating |
| Sensing face | | PA |
| Housing base | | plastic |
| Degree of protection | | IP68 / IP69K |
| Mass | | 225 g |
| Dimensions | | |
| Height | | 40 mm |
| Width | | 40 mm |
| Length | | 118 mm |
| Note | | Tightening torque: 1.8 Nm (housing) Tightening torque: 1.0 Nm (Screw terminal) |

Connection

