Inductive sensor NBB5-F33-E0


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Model Number
NBB5-F33-E0

Features
- 5 mm embeddable
- 3-wire DC

Connection

Dimensions

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<thead>
<tr>
<th>Dimensions</th>
<th>20</th>
<th>10</th>
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<tbody>
<tr>
<td>15</td>
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<td>50</td>
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Technical Data

General specifications
- Switching element function: NPN NO
- Rated operating distance: s_n = 5 mm
- Installation: embeddable
- Output polarity: DC
- Assured operating distance: s_a = 0 ... 4.05 mm
- Reduction factor r_A = 0.3
- Reduction factor r_Cu = 0.2
- Reduction factor r_{303} = 0.6

Nominal ratings
- Operating voltage: U_B = 10 ... 30 V DC
- Switching frequency: f = 0 ... 500 Hz
- Hysteresis: H typ. 5 %
- Reverse polarity protected: reverse polarity protected
- Short-circuit protection: pulsing
- Voltage drop: U_d ≤ 3 V
- Operating current: I_L = 0 ... 200 mA
- Off-state current: I_R = 0 ... 0.5 mA typ. 0.1 µA
- No-load supply current: I_0 ≤ 15 mA

Functional safety related parameters
- MTTF_d = 730 a
- Mission Time (T_M) = 20 a
- Diagnostic Coverage (DC) = 0 %

Ambient conditions
- Ambient temperature: -25 ... 70 °C (-13 ... 158 °F)

Mechanical specifications
- Connection type: cable PVC, 2 m
- Core cross-section: 0.34 mm²
- Housing material: PBT
- Sensing face: PBT
- Protection degree: IP67

Compliance with standards and directives
- Standard conformity
- Standards
  - EN 60947-5-2:2007
  - IEC 60947-5-2:2007
- Approvals and certificates
  - UL approval: cULus Listed, General Purpose
  - CSA approval: cCSAus Listed, General Purpose
  - CCC approval: Products with a maximum operating voltage of ≤36 V do not bear a CCC marking because they do not require approval.