



Model Number

NBB0,8-F141-E0

Features

- Basic series
- 0.8 mm flush
- 3-wire DC
- Extremely high switching frequency
- Metal housing
- Increased immunity

Technical Data

General specifications

| | | | |
|------------------------------|-------|---|----|
| Switching element function | | NPN | NO |
| Rated operating distance | s_n | 0.8 mm | |
| Installation | | flush | |
| Output polarity | | DC | |
| Assured operating distance | s_a | 0 ... 0.648 mm | |
| Actuating element | | mild steel, e. g. 1.0037, SR235JR (formerly St37-2) 5 mm x 5 mm x 1 mm | |
| Reduction factor r_{Al} | | 0.6 | |
| Reduction factor r_{Cu} | | 0.45 | |
| Reduction factor r_{304} | | 0.85 | |
| Reduction factor r_{Brass} | | 0.6 | |

Nominal ratings

| | | | |
|----------------------------------|-------|----------------------------|--|
| Operating voltage | U_B | 10 ... 30 V DC | |
| Switching frequency | f | 0 ... 10000 Hz | |
| Hysteresis | H | 0.01 ... 0.1 | |
| Reverse polarity protection | | reverse polarity protected | |
| Short-circuit protection | | pulsing | |
| Overload resistance | | yes | |
| Wire breakage protection | | yes | |
| Inductive overvoltage protection | | yes | |
| Surge suppression | | yes | |
| Ripple | | ≤ 10 % | |
| Voltage drop | U_d | ≤ 1.5 V | |
| Repeat accuracy | R | 0.01 mm | |
| Operating current | I_L | 0 ... 200 mA | |
| Off-state current | I_r | 0 ... 0.1 mA | |
| No-load supply current | I_0 | ≤ 5 mA | |
| Time delay before availability | t_v | ≤ 1 ms | |
| Switching state indicator | | LED, yellow | |

Functional safety related parameters

| | |
|--------------------------------|--------|
| MTTF _d | 1354 a |
| Mission Time (T _M) | 20 a |
| Diagnostic Coverage (DC) | 0 % |

Ambient conditions

| | |
|---------------------|--------------------------------|
| Ambient temperature | -25 ... 85 °C (-13 ... 185 °F) |
| Storage temperature | -40 ... 85 °C (-40 ... 185 °F) |

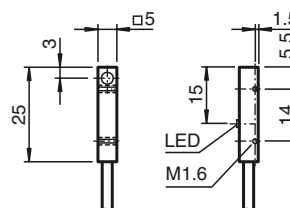
Mechanical specifications

| | |
|----------------------|----------------------|
| Connection type | cable PUR, 2 m |
| Core cross-section | 0.14 mm ² |
| Housing material | brass, nickel-plated |
| Sensing face | POM |
| Degree of protection | IP67 |
| Mass | 40 g |

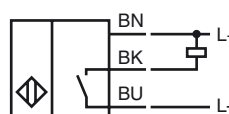
Compliance with standards and directives

| | |
|---------------------|---|
| Standard conformity | |
| Standards | EN 60947-5-2:2007 IEC 60947-5-2:2007 |

Dimensions



Electrical Connection





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