



Model Number

NEB12-18GM50-E2-5M

Features

- Increased operating distance
- 12 mm quasi flush

Accessories

BF 18

Mounting flange, 18 mm

Technical Data

General specifications

| | | |
|------------------------------|-------|---|
| Switching element function | PNP | NO |
| Rated operating distance | s_n | 12 mm |
| Installation | | quasi flush |
| Output polarity | | DC |
| Assured operating distance | s_a | 0 ... 9.72 mm |
| Actuating element | | mild steel, e. g. 1.0037, SR235JR (formerly St37-2) 36 mm x 36 mm x 1 mm |
| Reduction factor r_{Al} | | 0.26 |
| Reduction factor r_{Cu} | | 0.2 |
| Reduction factor r_{304} | | 0.63 |
| Reduction factor r_{Brass} | | 0.33 |

Nominal ratings

Installation conditions

| | |
|---|------------------------------|
| A | in steel 1.0037 (St37): 4 mm |
| B | 14 mm |
| C | 36 mm |
| F | 36 mm |

| | | |
|----------------------------------|-------|-------------------|
| Operating voltage | U_B | 10 ... 30 V |
| Switching frequency | f | 0 ... 500 Hz |
| Hysteresis | H | 0.12 ... 1.8 mm |
| Reverse polarity protection | | yes |
| Short-circuit protection | | pulsing |
| Overload resistance | | yes |
| Wire breakage protection | | yes |
| Inductive overvoltage protection | | yes |
| Surge suppression | | yes |
| Ripple | | 10 % |
| Voltage drop | U_d | ≤ 2 V |
| Repeat accuracy | R | 0.6 mm |
| Operating current | I_L | 0 ... 200 mA |
| Off-state current | I_r | ≤ 10 μ A |
| No-load supply current | I_0 | ≤ 11 mA |
| Time delay before availability | t_v | ≤ 50 ms |
| Switching state indicator | | LED, yellow |

Functional safety related parameters

| | |
|--------------------------|--------|
| MTTF _d | 2650 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, 5 m |
| Core cross-section | 0.34 mm ² |
| Housing material | brass, nickel-plated |
| Sensing face | PBT |
| Degree of protection | IP67 |
| Mass | 100 g |

Compliance with standards and directives

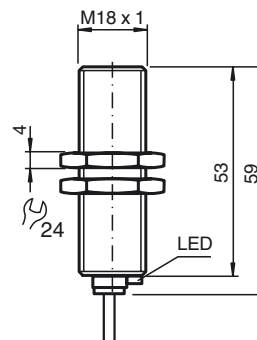
Standard conformity

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

Approvals and certificates

| | |
|----------------|--|
| EAC conformity | TR CU 020/2011 |
| UL approval | cULus Listed, General Purpose |
| CCC approval | CCC approval / marking not required for products rated ≤ 36 V |

Dimensions



Electrical Connection



Installation Conditions

