

Inductive sensor

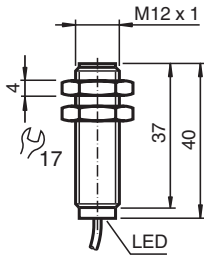
NCB4-12GM40-N0-5M



- 4 mm flush
- NAMUR output
- Stainless steel housing
- Polarity reversal protected
- 5 meter connection cable



Dimensions



Technical Data

| General specifications | | |
|--------------------------------------|-------|--------------------------------------|
| Switching function | | Normally closed (NC) |
| Output type | | NAMUR |
| Rated operating distance | s_n | 4 mm |
| Installation | | flush |
| Assured operating distance | s_a | 0 ... 3.24 mm |
| Actual operating distance | s_r | 3.6 ... 4.4 mm typ. |
| Reduction factor r_{Al} | | 0.41 |
| Reduction factor r_{Cu} | | 0.39 |
| Reduction factor r_{304} | | 0.78 |
| Output type | | 2-wire |
| Nominal ratings | | |
| Nominal voltage | U_o | 8.2 V (R_i approx. 1 k Ω) |
| Switching frequency | f | 0 ... 1500 Hz |
| Hysteresis | H | 1 ... 15 % typ. 5 % |
| Reverse polarity protection | | reverse polarity protected |
| Short-circuit protection | | yes |
| Current consumption | | |
| Measuring plate not detected | | min. 2.2 mA |
| Measuring plate detected | | \leq 1 mA |
| Switching state indicator | | all direction LED, yellow |
| Functional safety related parameters | | |
| MTTF _d | | 3010 a |

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Technical Data

| | | |
|---|---|--|
| Mission Time (T _M) | | 20 a |
| Diagnostic Coverage (DC) | | 0 % |
| Compliance with standards and directives | | |
| Standard conformity | | |
| NAMUR | | EN 60947-5-6:2000 IEC 60947-5-6:1999 |
| Electromagnetic compatibility | | NE 21:2007 |
| Standards | | EN IEC 60947-5-2 |
| Approvals and certificates | | |
| IECEX approval | | |
| Equipment protection level Ga | | IECEX PTB 11.0037X |
| Equipment protection level Gb | | IECEX PTB 11.0037X |
| Equipment protection level Da | | IECEX PTB 11.0037X |
| Equipment protection level Mb | | IECEX PTB 11.0037X |
| ATEX approval | | |
| Equipment protection level Ga | | PTB 00 ATEX 2048 X |
| Equipment protection level Gb | | PTB 00 ATEX 2048 X |
| Equipment protection level Da | | PTB 00 ATEX 2048 X |
| UL approval | | |
| Ordinary Location | | E87056 |
| Hazardous Location | | E501628 |
| Control drawing | | 116-0452 |
| CCC approval | | |
| Hazardous Location | | 2020322315002255 |
| CML approval | | on request |
| ANZEx | | 18.3018X |
| Ambient conditions | | |
| Ambient temperature | | -25 ... 100 °C (-13 ... 212 °F) |
| Storage temperature | | -40 ... 100 °C (-40 ... 212 °F) |
| Mechanical specifications | | |
| Connection type | | cable |
| Housing material | | Stainless steel 1.4305 / AISI 303 |
| Sensing face | | PBT |
| Degree of protection | | IP66 / IP67 |
| Cable | | |
| Wire end ferrules | | yes |
| Cable diameter | | 4.8 mm ± 0.2 mm |
| Bending radius | | > 10 x cable diameter |
| Material | | PVC |
| Color | | blue |
| Number of cores | | 2 |
| Core cross section | | 0.34 mm ² |
| Length | L | 5 m |
| Dimensions | | |
| Length | | 40 mm |
| Diameter | | 12 mm |
| General information | | |
| Scope of delivery | | 2 self locking nuts in scope of delivery |
| Use in the hazardous area | | see instruction manuals |

Connection



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