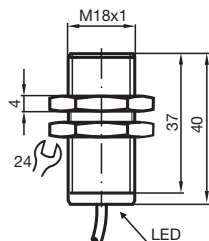


Inductive sensor  
NCB5-18GM40-N0-10M

■ Comfort series



Dimensions



Technical Data

|                            |       |                          |
|----------------------------|-------|--------------------------|
| General specifications     |       |                          |
| Switching function         |       | Normally closed (NC)     |
| Output type                |       | NAMUR                    |
| Rated operating distance   | $s_n$ | 5 mm                     |
| Installation               |       | flush                    |
| Assured operating distance | $s_a$ | 0 ... 4.05 mm            |
| Actual operating distance  | $s_r$ | 4.5 ... 5.5 mm typ. 5 mm |
| Reduction factor $r_{Al}$  |       | 0.35                     |
| Reduction factor $r_{Cu}$  |       | 0.3                      |
| Reduction factor $r_{304}$ |       | 0.74                     |
| Output type                |       | 2-wire                   |
| Nominal ratings            |       |                          |
| Nominal voltage            | $U_o$ | 8 V                      |

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0001  
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111  
fa-info@de.pepperl-fuchs.com

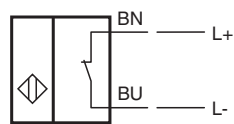
Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

**PEPPERL+FUCHS**

## Technical Data

|                                                              |   |                                                                                                                                                              |
|--------------------------------------------------------------|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Switching frequency                                          | f | 0 ... 400 Hz                                                                                                                                                 |
| Hysteresis                                                   | H | 1 ... 15 typ. 5 %                                                                                                                                            |
| Reverse polarity protection                                  |   | reverse polarity protected                                                                                                                                   |
| Short-circuit protection                                     |   | yes                                                                                                                                                          |
| Current consumption                                          |   |                                                                                                                                                              |
| Measuring plate not detected                                 |   | min. 3 mA                                                                                                                                                    |
| Measuring plate detected                                     |   | ≤ 1 mA                                                                                                                                                       |
| Switching state indicator                                    |   | all direction LED, yellow                                                                                                                                    |
| <b>Functional safety related parameters</b>                  |   |                                                                                                                                                              |
| MTTF <sub>d</sub>                                            |   | 2040 a                                                                                                                                                       |
| Mission Time (T <sub>M</sub> )                               |   | 20 a                                                                                                                                                         |
| Diagnostic Coverage (DC)                                     |   | 0 %                                                                                                                                                          |
| <b>Compliance with standards and directives</b>              |   |                                                                                                                                                              |
| Standard conformity                                          |   |                                                                                                                                                              |
| NAMUR                                                        |   | EN 60947-5-6:2000<br>IEC 60947-5-6:1999                                                                                                                      |
| Standards                                                    |   | EN 60947-5-2:2007<br>EN 60947-5-2/A1:2012<br>IEC 60947-5-2:2007<br>IEC 60947-5-2 AMD 1:2012                                                                  |
| <b>Approvals and certificates</b>                            |   |                                                                                                                                                              |
| EAC conformity                                               |   | TR CU 012/2011                                                                                                                                               |
| UL approval                                                  |   |                                                                                                                                                              |
| Ordinary Location                                            |   | E87056                                                                                                                                                       |
| Hazardous Location                                           |   | E501628                                                                                                                                                      |
| Control drawing                                              |   | 116-0452                                                                                                                                                     |
| CSA approval                                                 |   | cCSAus Listed, General Purpose                                                                                                                               |
| CCC approval                                                 |   | CCC approval / marking not required for products rated ≤36 V                                                                                                 |
| <b>Ambient conditions</b>                                    |   |                                                                                                                                                              |
| Ambient temperature                                          |   | -25 ... 100 °C (-13 ... 212 °F)                                                                                                                              |
| Storage temperature                                          |   | -40 ... 100 °C (-40 ... 212 °F)                                                                                                                              |
| <b>Mechanical specifications</b>                             |   |                                                                                                                                                              |
| Connection type                                              |   | cable PVC , 10 m                                                                                                                                             |
| Core cross-section                                           |   | 0.75 mm <sup>2</sup>                                                                                                                                         |
| Housing material                                             |   | Stainless steel 1.4305 / AISI 303                                                                                                                            |
| Sensing face                                                 |   | PBT                                                                                                                                                          |
| Degree of protection                                         |   | IP66 / IP67                                                                                                                                                  |
| Cable                                                        |   |                                                                                                                                                              |
| Cable diameter                                               |   | 6 mm ± 0.2 mm                                                                                                                                                |
| Bending radius                                               |   | > 10 x cable diameter                                                                                                                                        |
| <b>Equipment protection level Dc (tc)</b>                    |   |                                                                                                                                                              |
| <b>Special conditions</b>                                    |   |                                                                                                                                                              |
| Maximum permissible ambient temperature<br>T <sub>Umax</sub> |   | Values can be obtained from the following list, depending on the max. operating voltage U <sub>Bmax</sub> and the minimum series resistance R <sub>v</sub> . |
| <b>General information</b>                                   |   |                                                                                                                                                              |
| Use in the hazardous area                                    |   | see instruction manuals                                                                                                                                      |

Connection



Accessories

|                                                                                   |                       |                                                                |
|-----------------------------------------------------------------------------------|-----------------------|----------------------------------------------------------------|
|  | <b>EXG-18</b>         | Quick mounting bracket with dead stop                          |
|  | <b>BF 18</b>          | Mounting flange, 18 mm                                         |
|  | <b>KCD2-SR-Ex1.LB</b> | 24 V DC                                                        |
|  | <b>KCD2-E2L</b>       | Sensor output interface terminal with lead breakage monitoring |

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