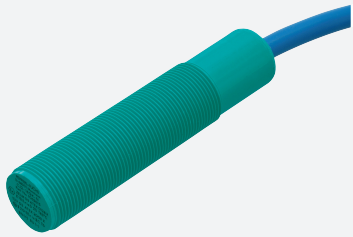


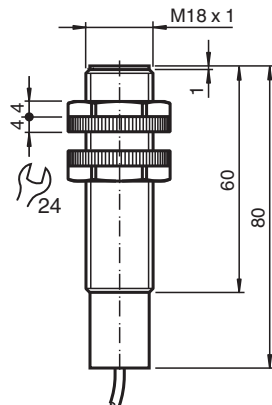
# Capacitive sensor

## CJ2-18GK-N

■ 2 mm non-flush



### Dimensions



### Technical Data

#### General specifications

|                            |       |                    |
|----------------------------|-------|--------------------|
| Switching function         |       | Normally open (NO) |
| Output type                |       | NAMUR              |
| Rated operating distance   | $S_n$ | 2 mm               |
| Installation               |       | non-flush          |
| Assured operating distance | $S_a$ | 0 ... 1.44 mm      |
| Output type                |       | 2-wire             |

#### Nominal ratings

|                         |       |                                      |
|-------------------------|-------|--------------------------------------|
| Installation conditions |       |                                      |
| A                       |       | 15 mm                                |
| B                       |       | 30 mm                                |
| C                       |       | 20 mm                                |
| F                       |       | 120 mm                               |
| Nominal voltage         | $U_o$ | 8.2 V ( $R_i$ approx. 1 k $\Omega$ ) |
| Operating voltage       | $U_B$ | 7 ... 12 V                           |
| Switching frequency     | f     | 0 ... 1 Hz                           |

Release date: 2020-05-26 Date of issue: 2020-05-26 Filename: 106261\_eng.pdf

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

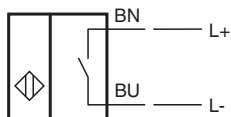
Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

**PEPPERL+FUCHS**

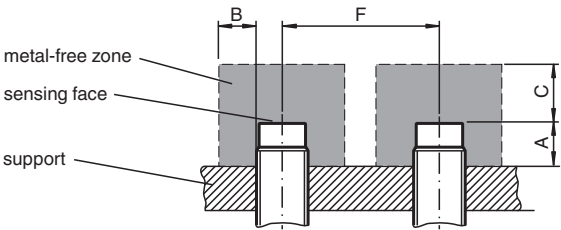
## Technical Data

|                                                 |  |                                                                                             |
|-------------------------------------------------|--|---------------------------------------------------------------------------------------------|
| Current consumption                             |  |                                                                                             |
| Measuring plate not detected                    |  | ≤ 1 mA                                                                                      |
| Measuring plate detected                        |  | ≥ 2.4 mA                                                                                    |
| <b>Functional safety related parameters</b>     |  |                                                                                             |
| MTTF <sub>d</sub>                               |  | 5030 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>               |  |                                                                                             |
| ATEX approval                                   |  |                                                                                             |
| Equipment protection level Ga                   |  | TÜV 03 ATEX 2003 X                                                                          |
| Equipment protection level Gb                   |  | TÜV 03 ATEX 2003 X                                                                          |
| Equipment protection level Da                   |  | TÜV 03 ATEX 2003 X                                                                          |
| FM approval                                     |  |                                                                                             |
| Control drawing                                 |  | 116-0165                                                                                    |
| UL approval                                     |  | cULus Listed, General Purpose                                                               |
| 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 ... 70 °C (-13 ... 158 °F)                                                              |
| <b>Mechanical specifications</b>                |  |                                                                                             |
| Connection type                                 |  | cable PVC , 2 m                                                                             |
| Core cross-section                              |  | 0.75 mm <sup>2</sup>                                                                        |
| Housing material                                |  | PBT                                                                                         |
| Sensing face                                    |  | PBT                                                                                         |
| Degree of protection                            |  | IP68                                                                                        |
| Cable                                           |  |                                                                                             |
| Bending radius                                  |  | > 10 x cable diameter                                                                       |
| <b>General information</b>                      |  |                                                                                             |
| Use in the hazardous area                       |  | see instruction manuals                                                                     |

## Connection



Installation



Accessories



**BF 18**

Mounting flange, 18 mm