

Model Number

CJ4-12GK-N-10M

Features

- Comfort series
- 4 mm non-flush

Accessories

BF 12

Mounting flange, 12 mm

Technical Data

General specifications

| | |
|----------------------------|---------------------|
| Switching function | Normally open (NO) |
| Output type | NAMUR |
| Rated operating distance | s_n 4 mm |
| Installation | non-flush |
| Assured operating distance | s_a 0 ... 2.88 mm |
| Output type | 2-wire |

Nominal ratings

| | |
|------------------------------|------------------|
| Installation conditions | |
| A | 20 mm |
| B | 80 mm |
| C | 12 mm |
| F | 70 mm |
| Nominal voltage | U_o 8 V |
| Operating voltage | U_B 7 ... 12 V |
| Switching frequency | f 0 ... 1 Hz |
| Current consumption | |
| Measuring plate not detected | ≤ 1 mA |
| Measuring plate detected | ≥ 2.4 mA |

Functional safety related parameters

| | |
|--------------------------------|--------|
| MTTF _d | 3299 a |
| Mission Time (T _M) | 20 a |
| Diagnostic Coverage (DC) | 0 % |

Ambient conditions

| | |
|---------------------|--------------------------------|
| Ambient temperature | -25 ... 70 °C (-13 ... 158 °F) |
|---------------------|--------------------------------|

Mechanical specifications

| | |
|----------------------|-----------------------|
| Connection type | cable PVC , 10 m |
| Core cross-section | 0,34 mm ² |
| Housing material | PBT |
| Sensing face | PBT |
| Degree of protection | IP68 |
| Cable | |
| Bending radius | > 10 x cable diameter |

General information

| | |
|---------------------------|-------------------------|
| Use in the hazardous area | see instruction manuals |
| Category | 1G; 2G; 1D |

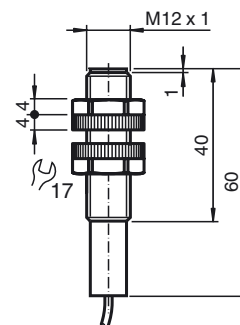
Compliance with standards and directives

| | |
|---------------------|---|
| Standard conformity | |
| NAMUR | EN 60947-5-6:2000 IEC 60947-5-6:1999 |
| Standards | |
| | EN 60947-5-2:2007 IEC 60947-5-2:2007 |

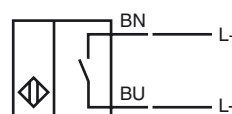
Approvals and certificates

| | |
|-----------------|--|
| 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 |

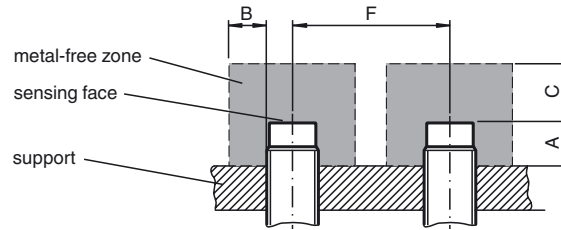
Dimensions



Electrical Connection



Installation Conditions



Equipment protection level Ga

| | | |
|---|---|--|
| CE marking | CE 0102 | |
| ATEX marking | II 1G Ex ia IIC T6...T1 Ga The Ex-related marking can also be printed on the enclosed label. | |
| Standards | EN 60079-0:2012+A11:2013, EN 60079-11:2012 Ignition protection "Intrinsic safety" Use is restricted to the following stated conditions | |
| Appropriate type | CJ4-12GK-N... | |
| Effective internal inductivity | C_i | $\leq 60 \text{ nF}$; a cable length of 10 m is considered. |
| Effective internal inductance | L_i | negligibly small A cable length of 10 m is considered. |
| Highest permissible ambient temperature | Details of the correlation between the type of circuit connected, the maximum permissible ambient temperature, the temperature class, and the effective internal reactance values can be found on the EU-type examination certificate. Note: Use the temperature table for category 1 !!! The 20 % reduction in accordance with EN 1127-1 has already been applied to the temperature table for category 1. | |

Special conditions

Equipment protection level Gb

| | | |
|---|--|--|
| CE marking | CE 0102 | |
| ATEX marking | II 1G Ex ia IIC T6...T1 Ga The Ex-related marking can also be printed on the enclosed label. | |
| Standards | EN 60079-0:2012+A11:2013, EN 60079-11:2012 Ignition protection "Intrinsic safety" Use is restricted to the following stated conditions | |
| Appropriate type | CJ4-12GK-N... | |
| Effective internal inductivity | C_i | $\leq 60 \text{ nF}$; a cable length of 10 m is considered. |
| Effective internal inductance | L_i | negligibly small A cable length of 10 m is considered. |
| Maximum permissible ambient temperature T_{amb} | Details of the correlation between the type of circuit connected, the maximum permissible ambient temperature, the temperature class, and the effective internal reactance values can be found on the EU-type examination certificate. | |

Special conditions

Equipment protection level Da

| | | |
|--------------------------------|--|--|
| CE marking | CE 0102 | |
| ATEX marking | II 1D Ex ia IIC T135°C Da The Ex-related marking can also be printed on the enclosed label. | |
| Standards | EN 60079-0:2012+A11:2013, EN 60079-11:2012 Ignition protection "Intrinsic safety" Use is restricted to the following stated conditions | |
| Appropriate type | CJ4-12GK-N... | |
| Effective internal inductivity | C_i | $\leq 60 \text{ nF}$; a cable length of 10 m is considered. |
| Effective internal inductance | L_i | negligibly small A cable length of 10 m is considered. |

Special conditions