



# PFK

## PFK1/BN-1H

**Ind.M18,NPN-NO+NC,M12 plug,Sch-STD**  
**M18 CYLINDRICAL INDUCTIVE SENSORS FOR FOOD AND BEVERAGE APPLICATIONS**

## OVERVIEW

- AISI 316L (DIN 1.4404) stainless steel housing
- LED status indicator
- IP67 – IP68 – IP69K protection degree
- ATEX models, cat. 3, available on request
- Complete protection against electrical damages
- Standard and long distance models



## TECHNICAL FEATURES

### Detection properties

|                          |                                                                      |
|--------------------------|----------------------------------------------------------------------|
| Nominal sensing distance | 5mm                                                                  |
| Operanting distance      | 0...4,05mm                                                           |
| Standard target          | 18x18mm FE360                                                        |
| Correction Factor        | copper: 0,25 / aluminium: 0,35 / brass: 0,40 / stainless steel: 0,70 |
| Thermal drift of Sr      | < 10%                                                                |

|                 |                            |
|-----------------|----------------------------|
| Repeat Accuracy | < 5% (UB 24V Ta=23°C ±5°C) |
| Hysteresis      | 1 ... 20%                  |

Application

|             |                          |
|-------------|--------------------------|
| Description | M18 standard flush mount |
| Functions   | Proximity                |

Outputs

|                     |         |
|---------------------|---------|
| Output type         | NPN     |
| Output Function     | NO + NC |
| Switching frequency | 1,5kHz  |

Electrical data

|                                |                         |
|--------------------------------|-------------------------|
| Operating Voltage              | 10...30Vdc              |
| No-Load supply current         | ≤ 15mA                  |
| Load current                   | ≤ 200mA                 |
| Leakage current                | ≤ 10µA                  |
| Output voltage drop            | ≤ 2V @200mA             |
| Max ripple content             | ≤ 10%                   |
| LED indicators                 | Yellow LED output state |
| Time delay before availability | ≤ 50ms                  |
|                                |                         |

|                                    |     |
|------------------------------------|-----|
| Short-circuit protection           | Yes |
| Reverse Polarity Protection        | Yes |
| Impulsive Overvoltage Protection   | Yes |
| Protection against inductive loads | Yes |

**Mechanical data**

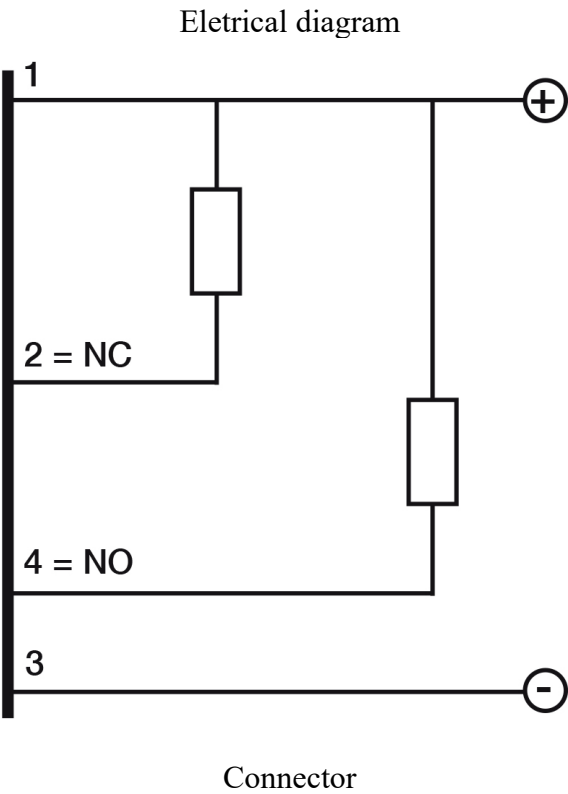
|                       |                                                                        |
|-----------------------|------------------------------------------------------------------------|
| Dimensions            | M18 x 1 / L = 63,1mm                                                   |
| Mounting              | Shielded                                                               |
| Material              | AISI316L Stainless Steel                                               |
| Housing material      | AISI316L Stainless Steel                                               |
| Weight                | 55g                                                                    |
| Connections           | M12 Plug                                                               |
| Active Head Material  | PPS                                                                    |
| Tightening torque     | 50Nm                                                                   |
| Operating temperature | -40°C...+80°C (up to 100°C for short exposure during cleaning process) |
| Diameter/Dimension    | M18                                                                    |

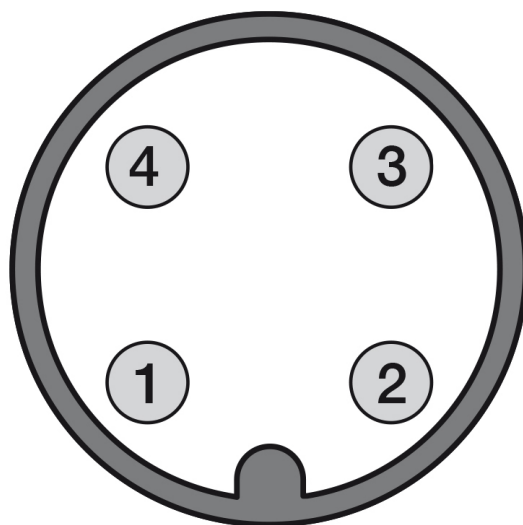
**Test/Approvals**

|                       |                                                |
|-----------------------|------------------------------------------------|
| Approvals             | CE cULus ECOLAB DIVERSY                        |
| EMC compatibility     | IEC 60947-5-2                                  |
| Shocks and vibrations | Vibration IEC 60068-2-6 / Shock IEC 60068-2-27 |

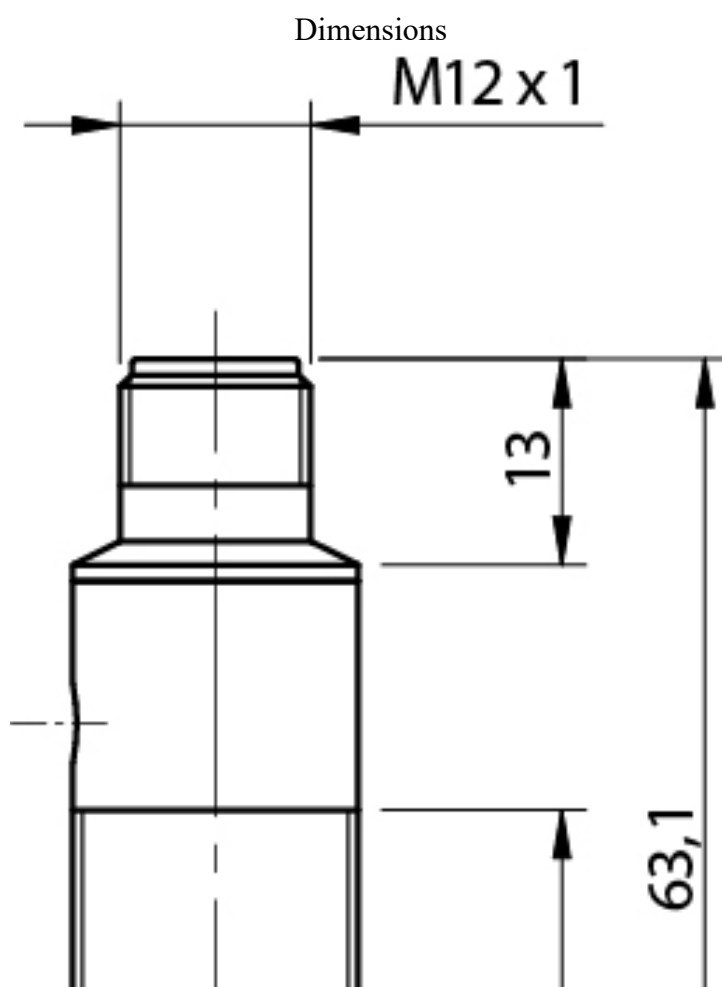
|                       |                                                                        |
|-----------------------|------------------------------------------------------------------------|
| Degree of protection  | IP68, IP69K                                                            |
| Accessories           |                                                                        |
| Supplied Accessories  | 2 nuts M18x1                                                           |
| Generical Data        |                                                                        |
| Dimensions            | M18 x 1 / L = 63,1mm                                                   |
| Operating Temperature | -40°C...+80°C (up to 100°C for short exposure during cleaning process) |
| Mechanical Protection | IP67                                                                   |

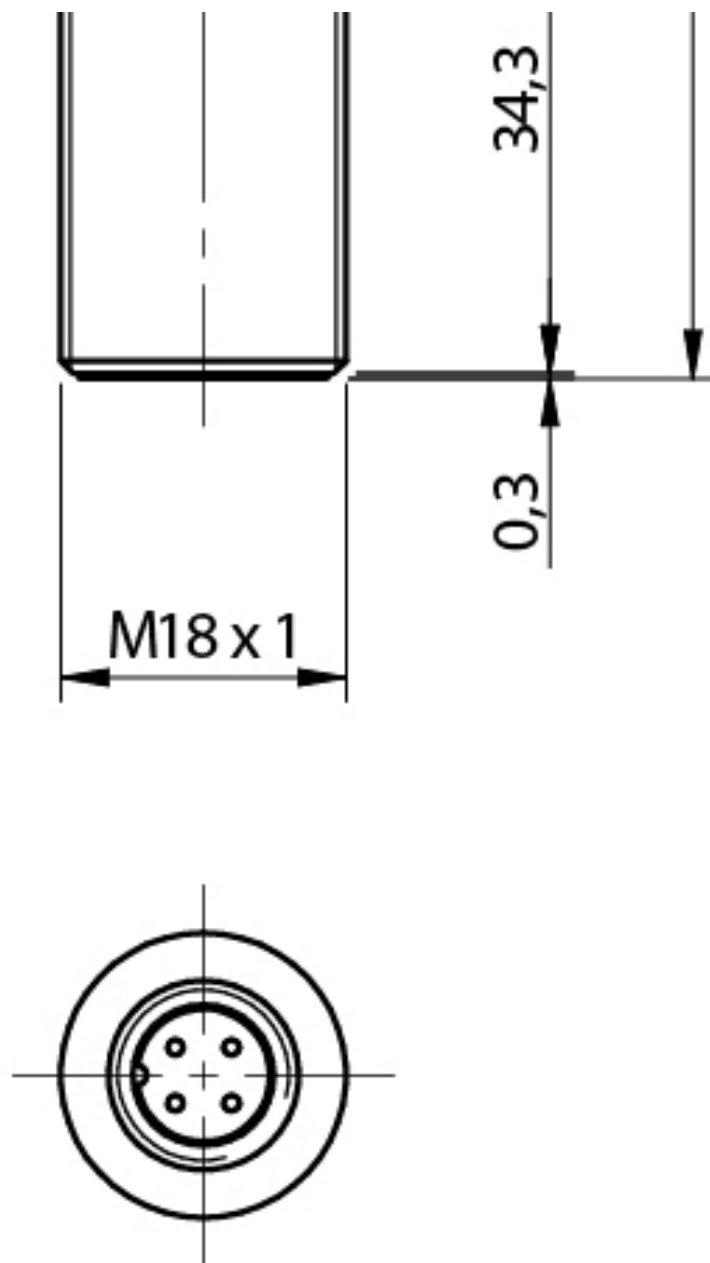
# CONNECTIONS





## OTHERS

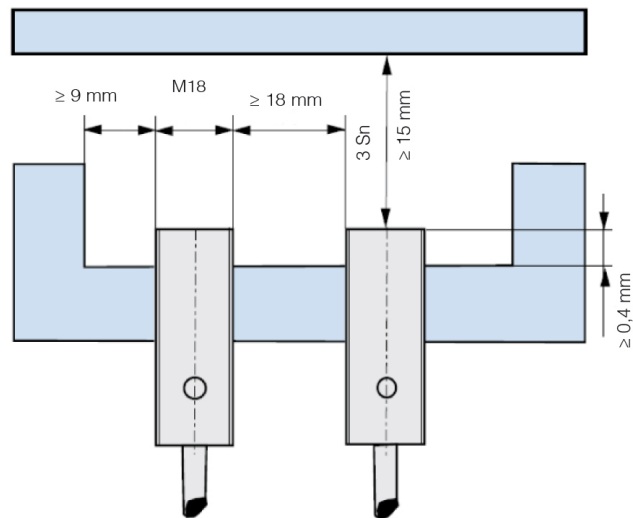




Response curves

Image:

Installation



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