



# AK

## AK6/BP-2H

Ind.M18,PNP-NO+NC,M12 Plug,Nsch-STD  
M18 CYLINDRICAL INDUCTIVE SENSORS

## OVERVIEW

- Wide range of models: standard, long distance
- Output: cable, M12 and plug cable exit
- Models with 2, 3, and 4 wires
- ATEX models, cat. 3, available on request
- Models with complementary output (NO+NC)



## TECHNICAL FEATURES

### Detection properties

|                          |                                                                      |
|--------------------------|----------------------------------------------------------------------|
| Nominal sensing distance | 8mm                                                                  |
| Operanting distance      | 0...6,48mm                                                           |
| Standard target          | 24x24mm FE360                                                        |
| Correction Factor        | copper: 0,43 / aluminium: 0,38 / brass: 0,75 / stainless steel: 0,31 |
| Thermal drift of Sr      | < 10%                                                                |

|                                |                               |
|--------------------------------|-------------------------------|
| Repeat Accuracy                | < 5% (UB 24V Ta=23°C ±5°C)    |
| Hysteresis                     | 1 ... 20%                     |
| Application                    |                               |
| Description                    | M18 short case no-flush mount |
| Functions                      | Proximity                     |
| Outputs                        |                               |
| Output type                    | PNP                           |
| Output Function                | NO + NC                       |
| Switching frequency            | 2kHz                          |
| Electrical data                |                               |
| Operating Voltage              | 10...30Vdc                    |
| No-Load supply current         | ≤ 10mA                        |
| Load current                   | ≤ 400mA                       |
| Leakage current                | ≤ 10µA                        |
| Output voltage drop            | ≤ 1,5V @400mA                 |
| 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 = 49mm  |
| Mounting              | Unshielded          |
| Material              | Nickel-plated brass |
| Housing material      | Nickel-plated brass |
| Weight                | 55g                 |
| Connections           | M12 Plug            |
| Active Head Material  | PBT                 |
| Tightening torque     | 25Nm                |
| Operating temperature | -25°C...+70°C       |
| Diameter/Dimension    | M18                 |

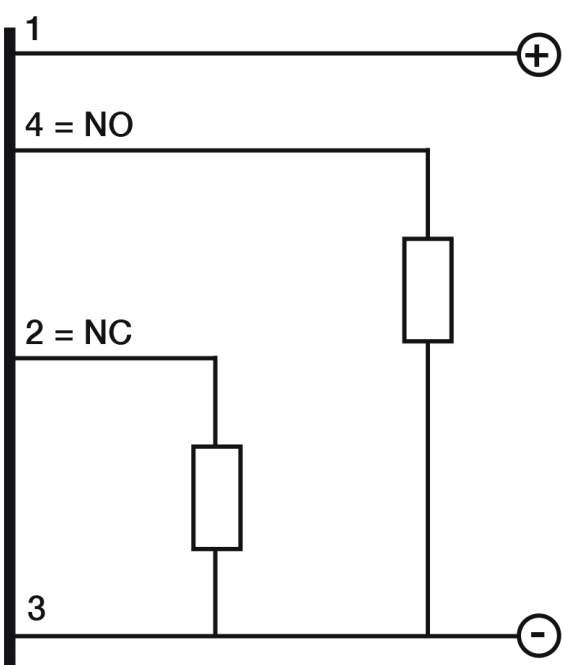
**Test/Approvals**

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

|                       |                    |
|-----------------------|--------------------|
| Degree of protection  | IP67               |
| Accessories           |                    |
| Supplied Accessories  | 2 nuts M18x1       |
| Generical Data        |                    |
| Dimensions            | M18 x 1 / L = 49mm |
| Operating Temperature | -25°C...+70°C      |
| Mechanical Protection | IP67               |

# CONNECTIONS

Eletrical diagram

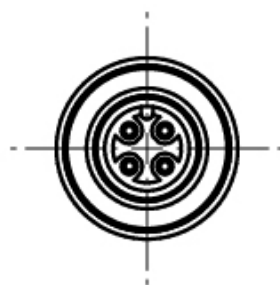
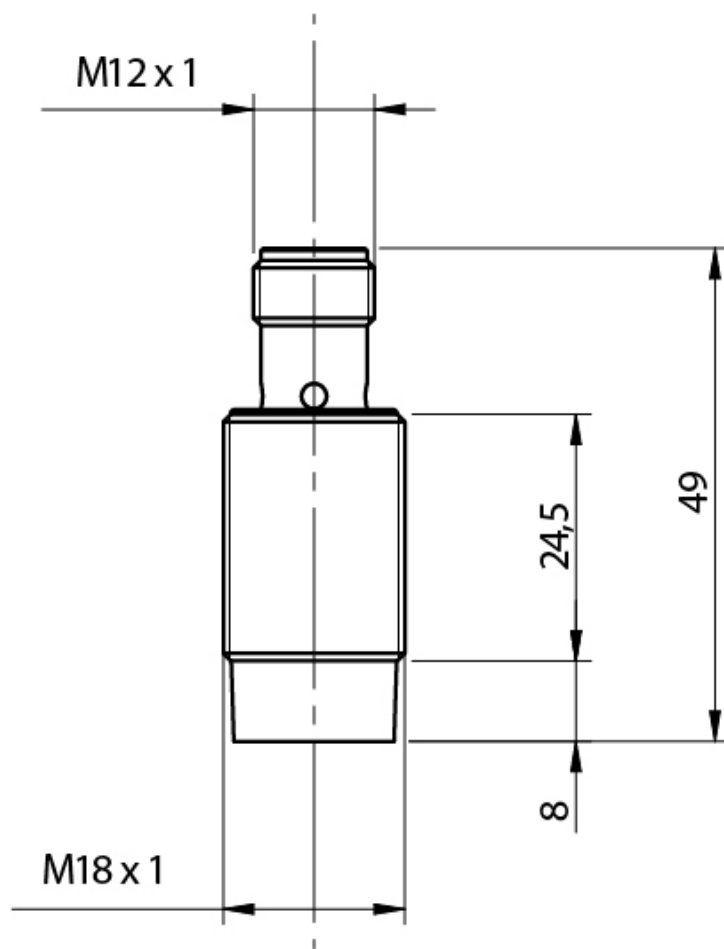


Connector

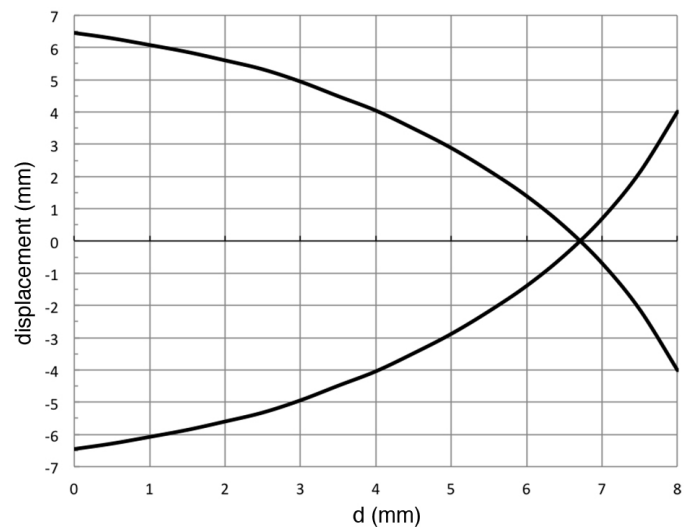


## OTHERS

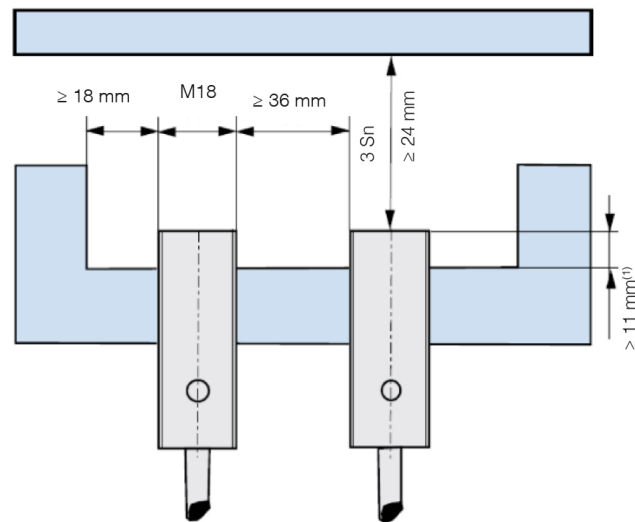
Dimensions



Response curves



### Installation



<sup>(1)</sup> ≥ 6 mm for non magnetic materials

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