



# AHS

## AHS/AP-1F

**Ind.d6,5,PNP-NO,M8 plug,Sch-STD**  
**Ø 6.5 MM CYLINDRICAL MINIATURIZED INDUCTIVE SENSORS**

## OVERVIEW



## TECHNICAL FEATURES

### Detection properties

|                          |                                                                                                                  |
|--------------------------|------------------------------------------------------------------------------------------------------------------|
| Nominal sensing distance | 1,5mm                                                                                                            |
| Operanting distance      | 0...1,21mm                                                                                                       |
| Standard target          | 6,5x6,5mm FE360                                                                                                  |
| Correction Factor        | copper: $0,10 \pm 10\%$ / aluminium: $0,05 \pm 10\%$ / brass: $0,13 \pm 10\%$ / stainless steel: $0,54 \pm 10\%$ |
| Thermal drift of Sr      | < 10%                                                                                                            |
| Repeat Accuracy          | < 5% (UB 24V Ta=23°C $\pm 5^{\circ}\text{C}$ )                                                                   |
| Hysteresis               | 1 ... 20%                                                                                                        |

|                                |                         |
|--------------------------------|-------------------------|
| Application                    |                         |
| Description                    | Ø6,5 mini flush mount   |
| Functions                      | Proximity               |
| Outputs                        |                         |
| Output type                    | PNP                     |
| Output Function                | NO                      |
| Switching frequency            | 7kHz                    |
| Electrical data                |                         |
| Operating Voltage              | 10...30Vdc              |
| No-Load supply current         | ≤ 10mA                  |
| Load current                   | ≤ 100mA                 |
| Leakage current                | ≤ 10µA                  |
| Output voltage drop            | ≤ 1,5V @100mA           |
| 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            | Ø6,5 / L = 29,4mm       |
| Mounting              | Shielded                |
| Material              | AISI303 Stainless Steel |
| Housing material      | AISI303 Stainless Steel |
| Weight                | 4g                      |
| Connections           | M8 Plug                 |
| Active Head Material  | PBT                     |
| Operating temperature | -25°C...+70°C           |
| Diameter/Dimension    | Ø6,5                    |

**Test/Approvals**

|                       |                                                |
|-----------------------|------------------------------------------------|
| Approvals             | CE cULus                                       |
| EMC compatibility     | IEC 60947-5-2                                  |
| Shocks and vibrations | Vibration IEC 60068-2-6 / Shock IEC 60068-2-27 |
| Degree of protection  | IP67                                           |

**Generical Data**

|            |                   |
|------------|-------------------|
| Dimensions | Ø6,5 / L = 29,4mm |
|------------|-------------------|

Operating Temperature

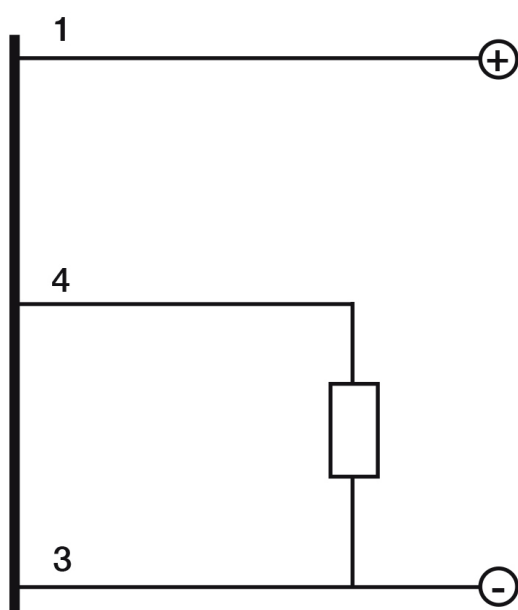
-25°C...+70°C

Mechanical Protection

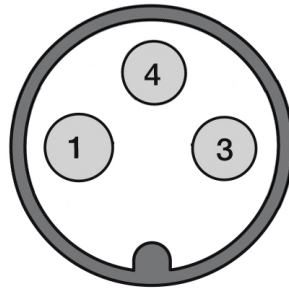
IP67

## CONNECTIONS

Electrical diagram

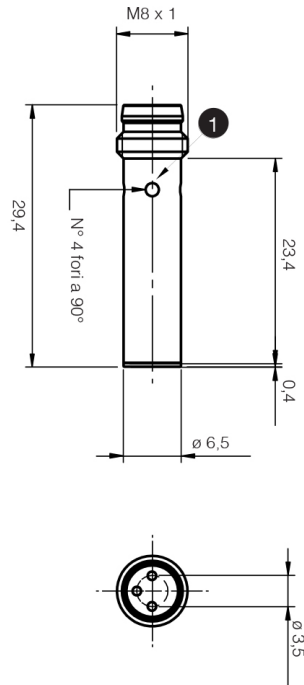


Connector

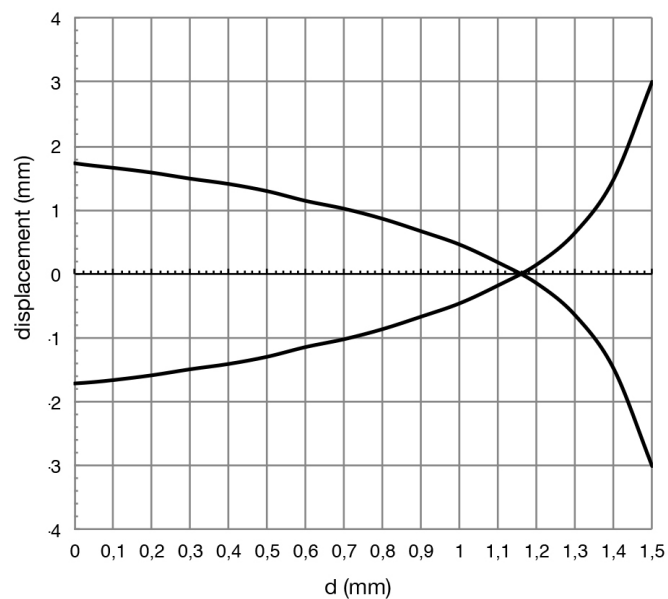


## OTHERS

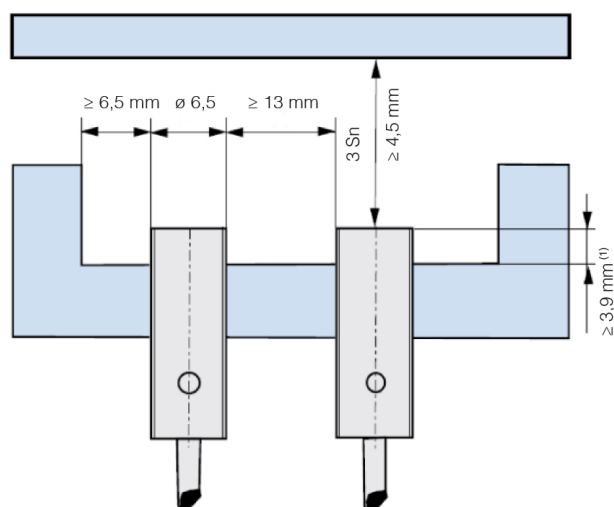
### Dimensions



### Response curves



### Installation



<sup>(1)</sup> ≥ 4 mm without ferro-magnetic material

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