

# AK1/A0-3H

cylindrical inductive

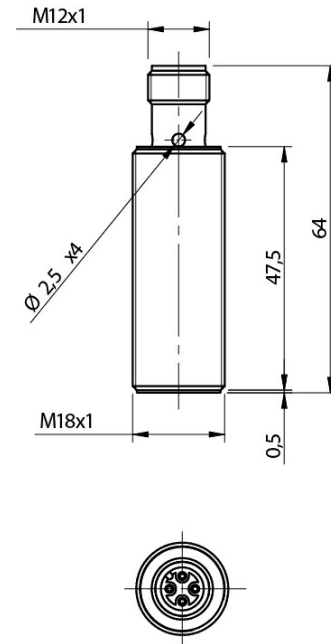


Micro Detectors

Italian Sensors Technology



Indicative image



## Detection properties

|                          |                                                                      |
|--------------------------|----------------------------------------------------------------------|
| Nominal sensing distance | 8mm                                                                  |
| Operanting distance      | 0...6,5mm                                                            |
| Standard target          | 24x24mm FE360                                                        |
| Correction Factor        | copper: 0,40 / aluminium: 0,45 / brass: 0,50 / stainless steel: 0,75 |
| Thermal drift of Sr      | < 10%                                                                |
| Repeat Accuracy          | 5% (UB 24V Ta=23°C ±5°C)                                             |
| Hysteresis               | 1 ... 20%                                                            |

## Outputs

|                     |         |
|---------------------|---------|
| Output type         | NPN/PNP |
| Output Function     | NO      |
| Switching frequency | 150Hz   |

## Electrical data

|                        |               |
|------------------------|---------------|
| Operating Voltage      | 10...30Vdc    |
| No-Load supply current | ≤ 20mA        |
| Load current           | 3...100mA     |
| Leakage current        | ≤ 0, ≤ 8mA    |
| Output voltage drop    | ≤ 2,8V @100mA |

|                                    |                         |
|------------------------------------|-------------------------|
| Max ripple content                 | ≤10%                    |
| LED indicators                     | Yellow LED output state |
| Time delay before availability     | ≤ 50ms                  |
| Short-circuit protection           | Yes                     |
| Reverse Polarity Protection        | Yes                     |
| Protection against inductive loads | Yes                     |

## Mechanical data

|                       |                     |
|-----------------------|---------------------|
| Mounting              | Shielded            |
| Dimensions            | M18 x 1 / L = 64mm  |
| Weight                | 55g                 |
| Housing Material      | Nickel-plated brass |
| 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 |
|----------------------|--------------|

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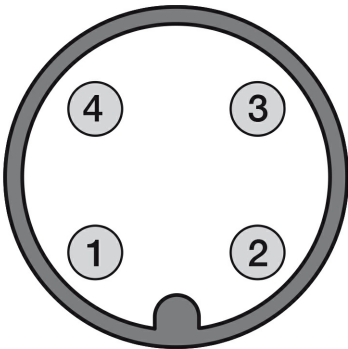
# ELECTRICAL DIAGRAMS OF THE CONNECTIONS

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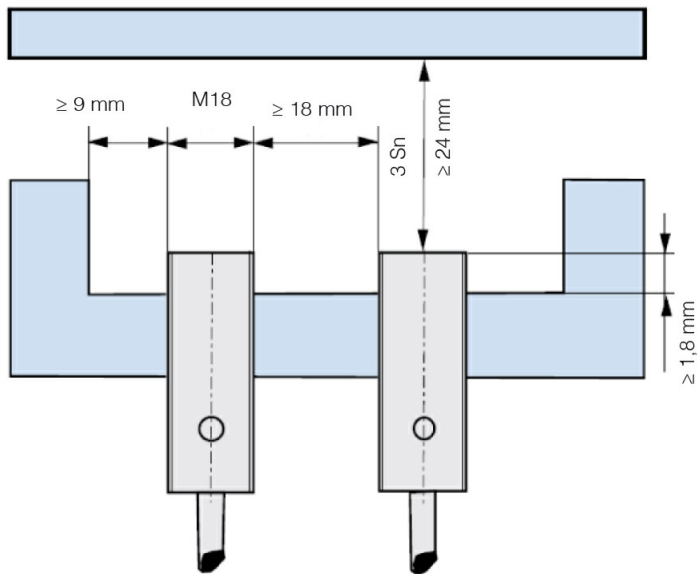
## CONNECTOR

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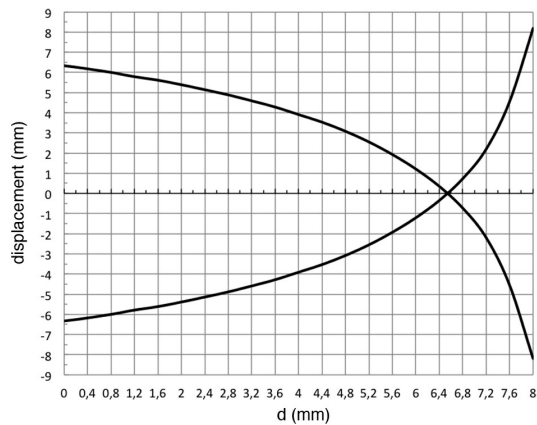
## INSTALLATION

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# RESPONSE CURVES

## Disassamento Parallelo



**M.D. Micro Detectors S.p.A.**

Strada S. Caterina, 235

41122 Modena (MO)

Tel. 059 420411

Fax 059 253973

E-mail [info@microdetectors.com](mailto:info@microdetectors.com)

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