# AK1/CP-1C

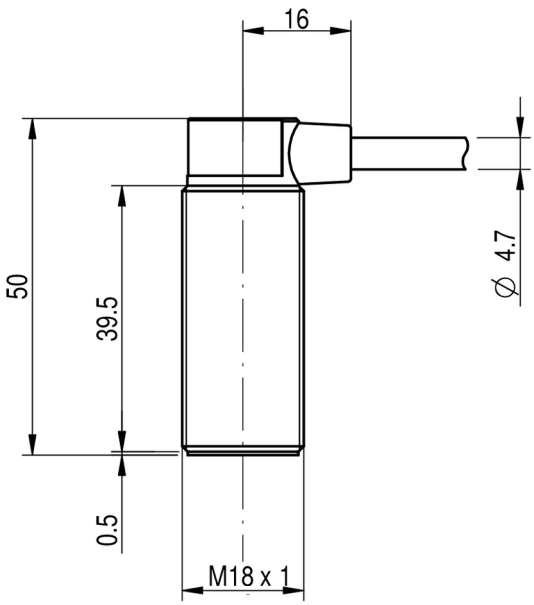
AK




Indicative image

**M18 CYLINDRICAL INDUCTIVE SENSORS**

- 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)




## Detection properties

| | |
|---|---|
| Nominal sensing distance | 5mm |
| Operanting distance | 0...4mm |
| Standard target | 18x18mm FE360 |
| Correction Factor | copper: 0,40 / aluminium: 0,48 / brass: 0,50 / stainless steel: 0,86 |
| Thermal drift of Sr | < 10% |
| Repeat Accuracy | 5% (UB 24V Ta=23°C ±5°C) |
| Hysteresis | 1 ... 20% |

## Outputs

| | |
|---|---|
| Output type | PNP |
| Output Function | NC |
| Switching frequency | 600Hz |

## Electrical data

| | |
|---|---|
| Operating Voltage | 10...30Vdc |
| No-Load supply current | ≤ 20mA |

| | |
|---|---|
| Load current | ≤ 400mA |
| Leakage current | ≤ 10µA |
| Output voltage drop | ≤ 1V @400mA |
| 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 = 50mm |
| Weight | 130g |
| Housing Material | Nickel-plated brass |
| Connections | 2m PVC Cable - 90° Output |
| 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 |

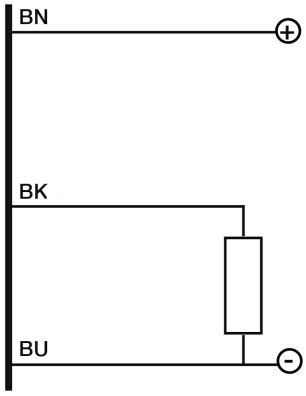
### Accessories

| | |
|---|---|
| Supplied Accessories | 2 nuts M18x1 |

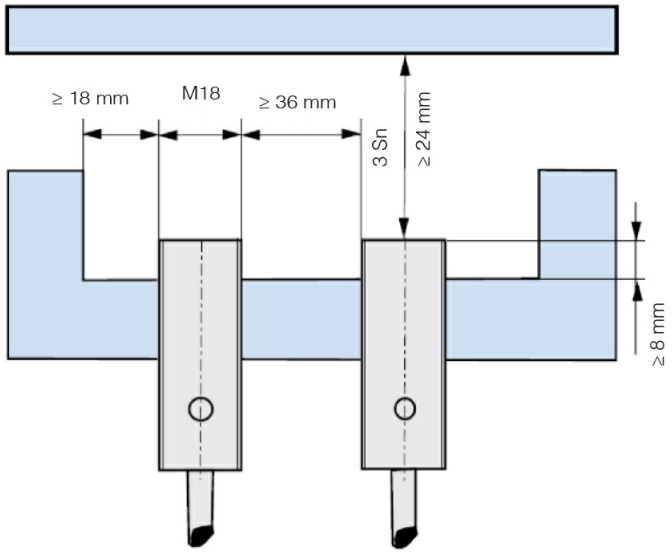
### Generical Data

| | |
|---|---|
| Dimensions | M18 x 1 / L = 50mm |
| Operating Temperature | -25°C...+70°C |
| Mechanical Protection | IP67 |

## ELECTRICAL DIAGRAMS OF THE CONNECTIONS



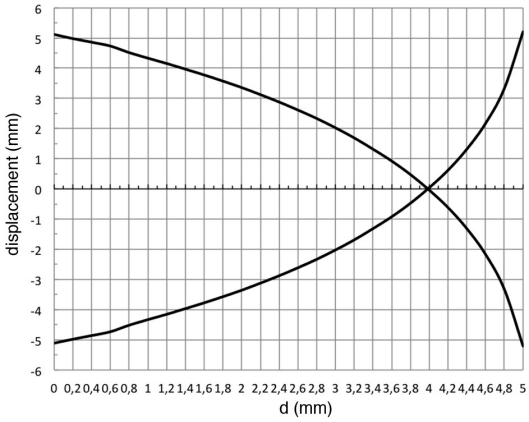

## INSTALLATION




(1) ≥ 3,6 mm for non magnetic materials

## RESPONSE CURVES

**Parallel offset**




**Datasensing S.r.l.**
Strada S.Caterina, 235
41122 Modena (MO)
Tel. 059 420411
Fax 059 253973
E-mail info@datasensing.com

**date of printing**
29/04/2022 05:20:03