



# AK

## AK1/AN-1A

Ind.M18,NPN-NO,Cable,Sch-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	5mm
Operanting distance	0...4,05mm
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)
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Hysteresis	1 ... 20%
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### Application

Description	M18 standard flush mount
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Functions	Proximity
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### Outputs

Output type	NPN
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Output Function	NO
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Switching frequency	600Hz
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### Electrical data

Operating Voltage	10...30Vdc
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No-Load supply current	≤ 20mA
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Load current	≤ 400mA
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Leakage current	≤ 10μA
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Output voltage drop	≤ 1V @400mA
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Max ripple content	≤ 10%
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LED indicators	Yellow LED output state
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Time delay before availability	≤ 50ms
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Short-circuit protection	Yes
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Reverse Polarity Protection	Yes
Impulsive Overvoltage Protection	Yes
Protection against inductive loads	Yes

#### Mechanical data

Dimensions	M18 x 1 / L = 50mm
Mounting	Shielded
Material	Nickel-plated brass
Housing material	Nickel-plated brass
Weight	130g
Connections	2m PVC Cable
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

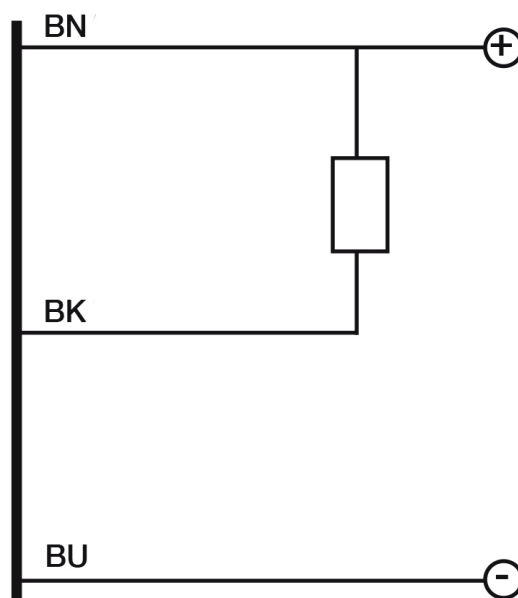
-25°C...+70°C

Mechanical Protection

IP67

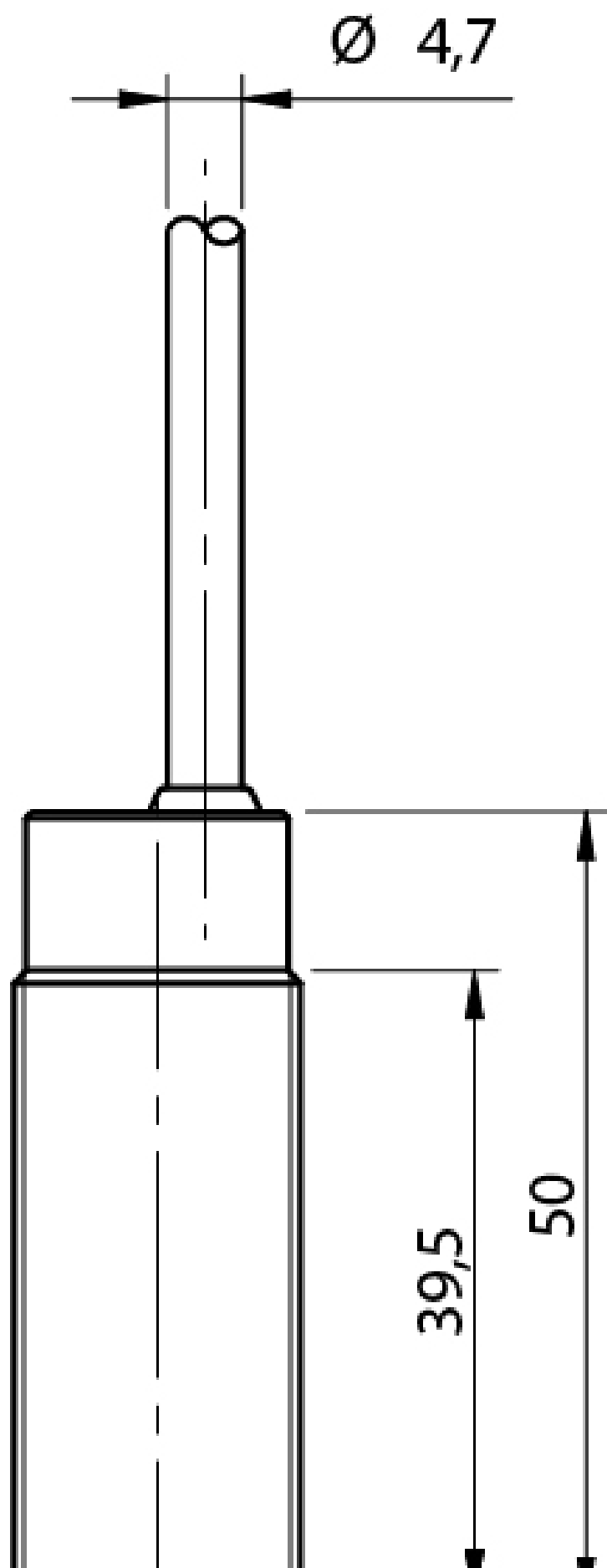
# CONNECTIONS

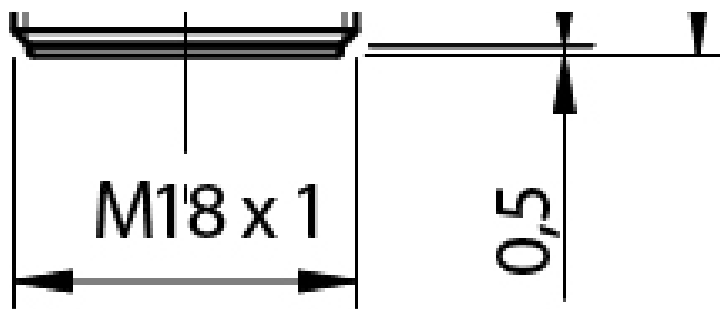
Electrical diagram



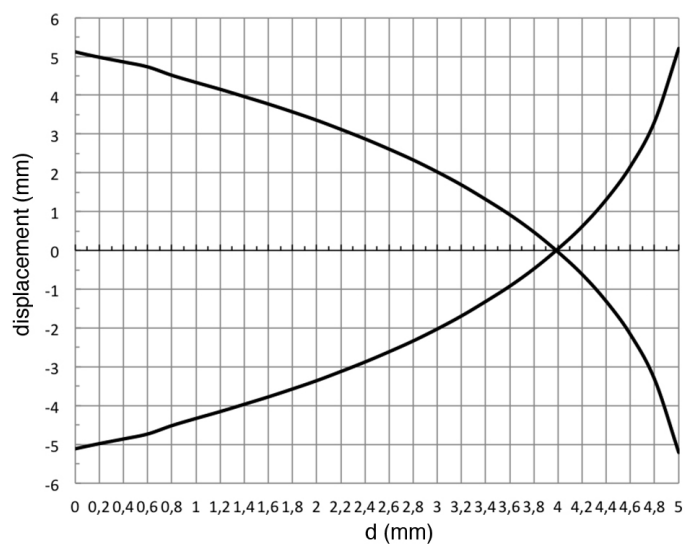
# OTHERS

Dimensions

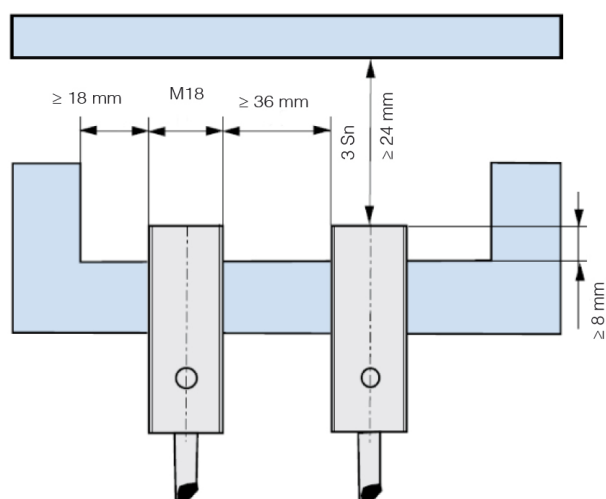




Response curves



### Installation



<sup>(1)</sup>  $\geq 3,6$  mm for non magnetic materials

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