



# AK

## AK1/A0-1H

Ind.M18,2 wires DC-NO,M12 plug,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)

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/PNP
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Output Function	NO
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Switching frequency	300Hz
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## Electrical data

Operating Voltage	10...30Vdc
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No-Load supply current	$\leq 20\text{mA}$
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Load current	3...100mA
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Leakage current	$\leq 0, \leq 8\text{mA}$
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Output voltage drop	$\leq 2,8\text{V @}100\text{mA}$
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Max ripple content	$\leq 10\%$
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LED indicators	Yellow LED output state
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Time delay before availability	$\leq 50\text{ms}$
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Short-circuit protection	Yes
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Reverse Polarity Protection	Yes
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Impulsive Overvoltage Protection	Yes
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Protection against inductive loads	Yes
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#### Mechanical data

Dimensions	M18 x 1 / L = 64mm
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Mounting	Shielded
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Material	Nickel-plated brass
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Housing material	Nickel-plated brass
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Weight	55g
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Connections	M12 Plug
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Active Head Material	PBT
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Tightening torque	25Nm
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Operating temperature	-25°C...+70°C
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Diameter/Dimension	M18
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#### Test/Approvals

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

Supplied Accessories	2 nuts M18x1
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## Generical Data

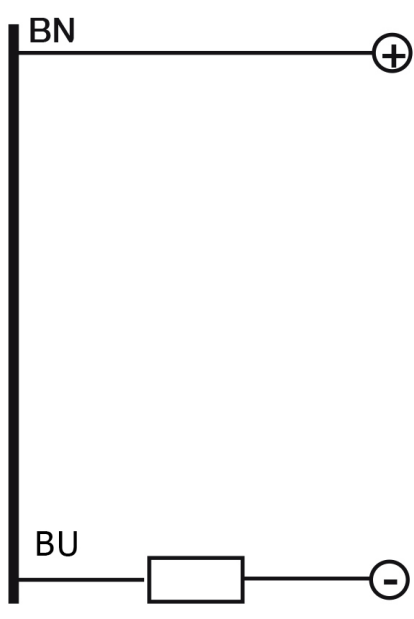
Dimensions	M18 x 1 / L = 64mm
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Operating Temperature	-25°C...+70°C
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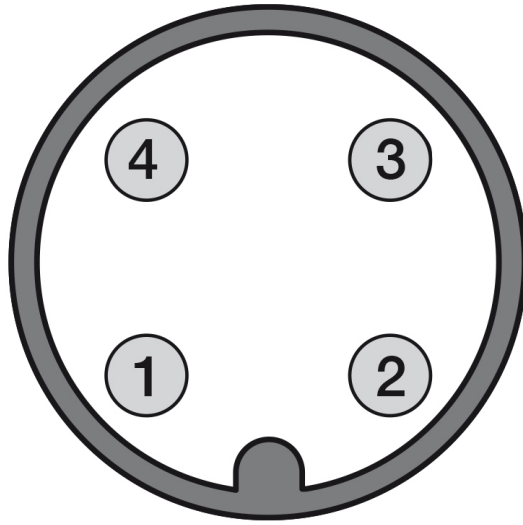
Mechanical Protection	IP67
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# CONNECTIONS

Electrical diagram

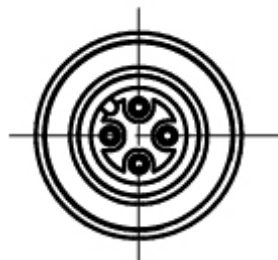
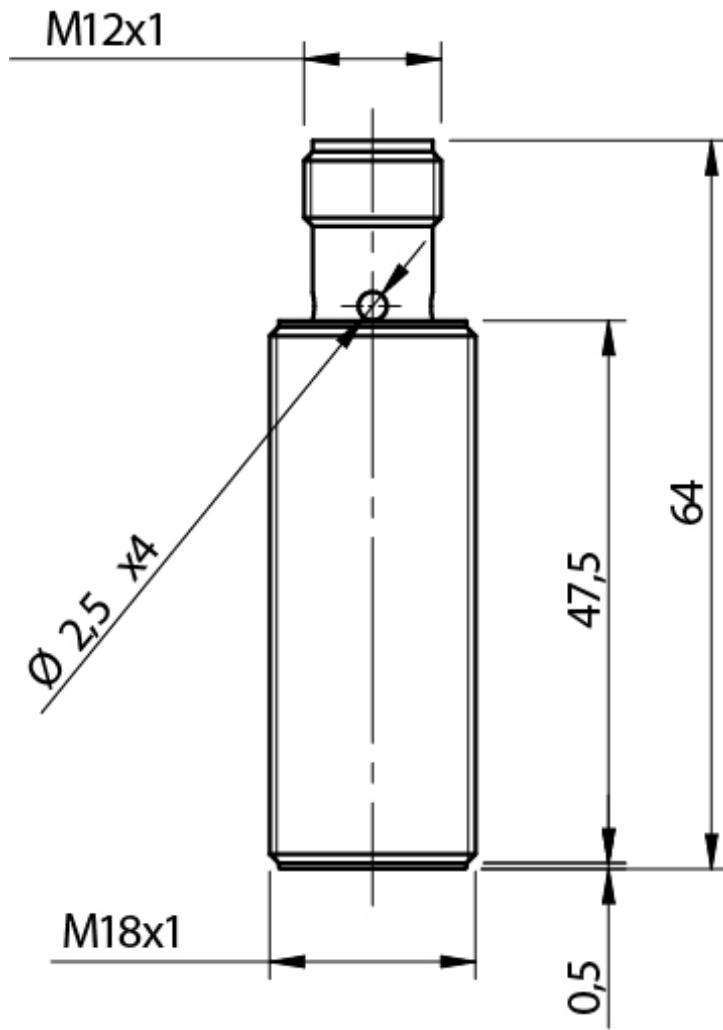


Connector

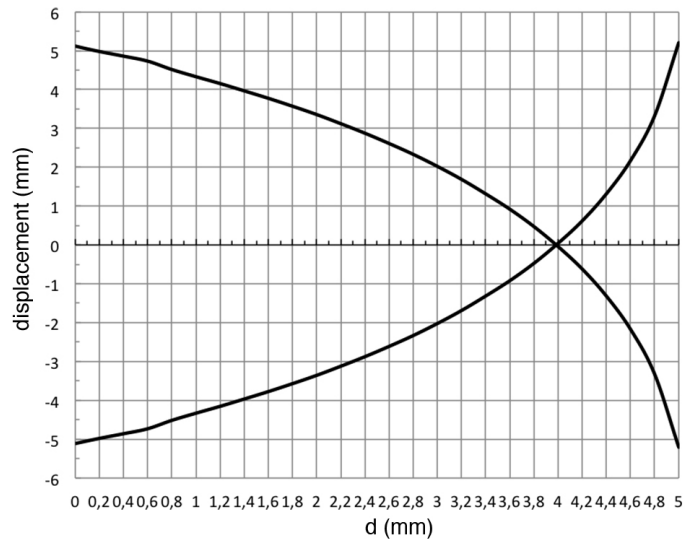


# OTHERS

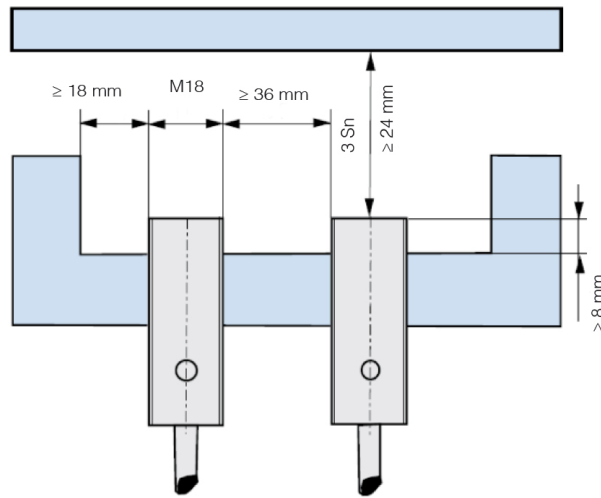
Dimensions



Response curves



### Installation



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

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**date of  
 printing**  
 19/06/2026  
 20:03:17