



# AK

## AK1/AP-4H

Ind.M18,PNP-NO,M12 Plug,Nsch-LD  
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	12mm
Operanting distance	0...9,7mm
Standard target	36x36mm FE360
Correction Factor	copper: 0,45 / aluminium: 0,53 / brass: 0,56 / stainless steel: 0,77
Thermal drift of Sr	< 10%

Repeat Accuracy	< 5% (UB 24V Ta=23°C ±5°C)
-----------------	----------------------------

Hysteresis	1 ... 20%
------------	-----------

### Application

Description	M18 standard no-flush mount
-------------	-----------------------------

Functions	Proximity
-----------	-----------

### Outputs

Output type	PNP
-------------	-----

Output Function	NO
-----------------	----

Switching frequency	300Hz
---------------------	-------

### 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
Impulsive Overvoltage Protection	Yes
Protection against inductive loads	Yes

#### Mechanical data

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

## Generical Data

Dimensions

M18 x 1 / L = 64mm

Operating Temperature

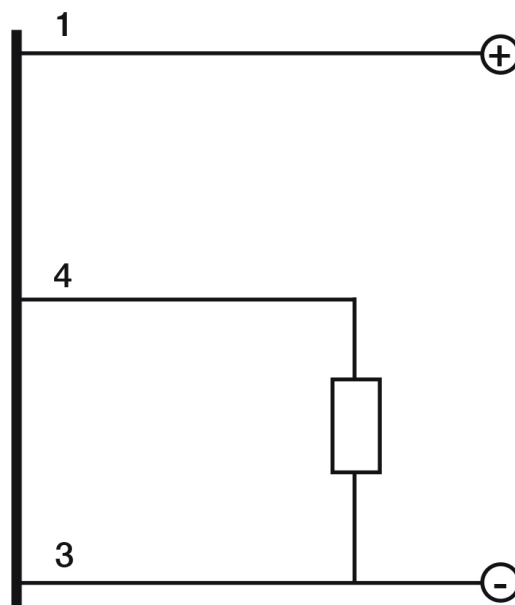
-25°C...+70°C

Mechanical Protection

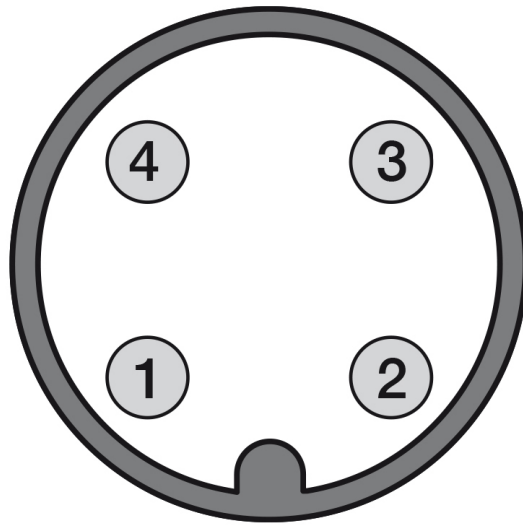
IP67

# CONNECTIONS

Electrical diagram

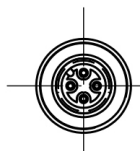
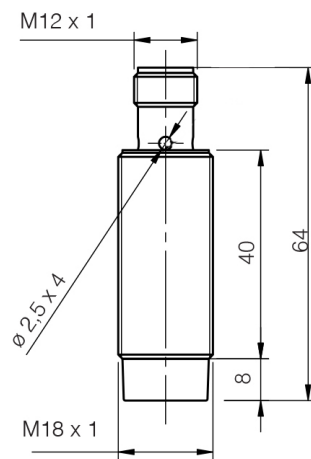


Connector

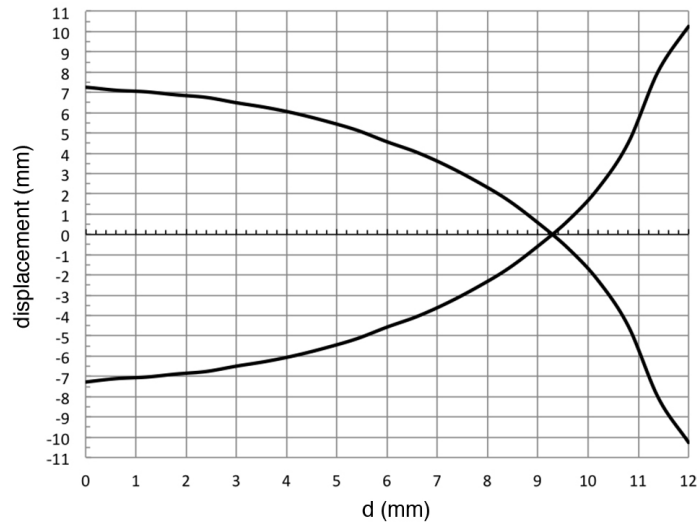


## OTHERS

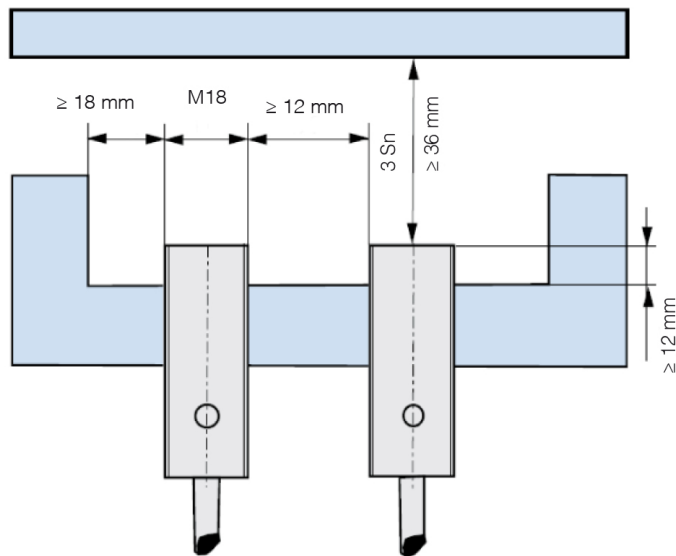
### Dimensions



### Response curves



### Installation



### 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**  
13/06/2026  
11:44:53