



# AB1

## AB1/AN-1A

Ind.M4,NPN-NO,Cable,Sch-STD  
M4 CYLINDRICAL MINIATURIZED INDUCTIVE SENSORS

## OVERVIEW

- Complete range of cylindrical ultraminiaturized inductive sensors M4
- IP67 protection degree



## TECHNICAL FEATURES

### Detection properties

Nominal sensing distance	0,6mm
Operanting distance	0...0,48mm
Standard target	4x4mm FE360
Correction Factor	copper: $0,23 \pm 10\%$ / aluminium: $0,26 \pm 10\%$ / brass: $0,31 \pm 10\%$ / stainless steel: $0,52 \pm 10\%$
Thermal drift of Sr	< 10%
Repeat Accuracy	< 5% (UB 24V Ta=23°C ±5°C)

Hysteresis	1 ... 20%
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## Application

Description	M4 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	3kHz
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## Electrical data

Operating Voltage	10...30Vdc
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No-Load supply current	$\leq 10\text{mA}$
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Load current	$\leq 100\text{mA}$
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Leakage current	$\leq 10\mu\text{A}$
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Output voltage drop	$\leq 1,5\text{V @}100\text{mA}$
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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	M4 x 0,5 / L = 22mm
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Mounting	Shielded
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Material	AISI303 Stainless Steel
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Housing material	AISI303 Stainless Steel
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Weight	30g
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Connections	2m PUR Cable
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Active Head Material	PBT
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Tightening torque	1,5Nm
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Operating temperature	-25°C...+70°C
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Diameter/Dimension	M4
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#### Test/Approvals

Approvals	CE UL
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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 M5x0.5
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## Generical Data

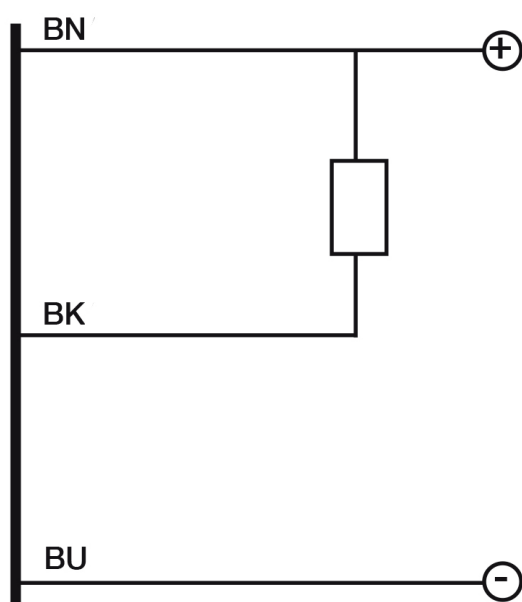
Dimensions	M4 x 0,5 / L = 22mm
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Operating Temperature	-25°C...+70°C
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Mechanical Protection	IP67
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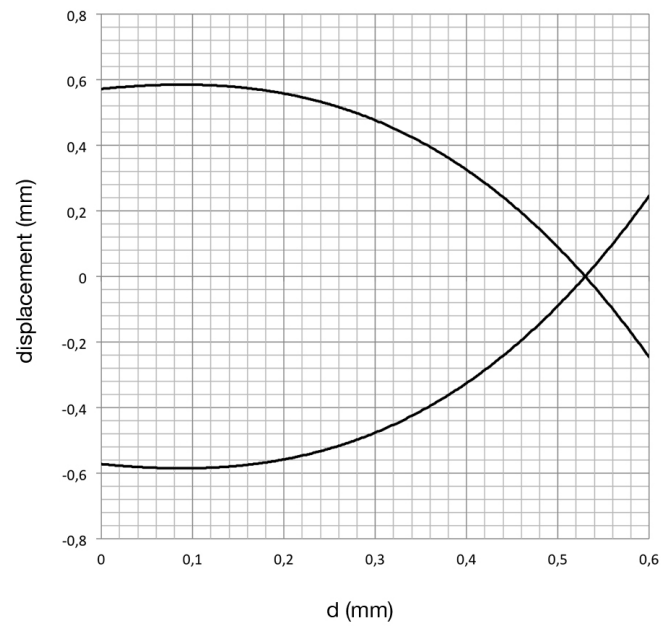
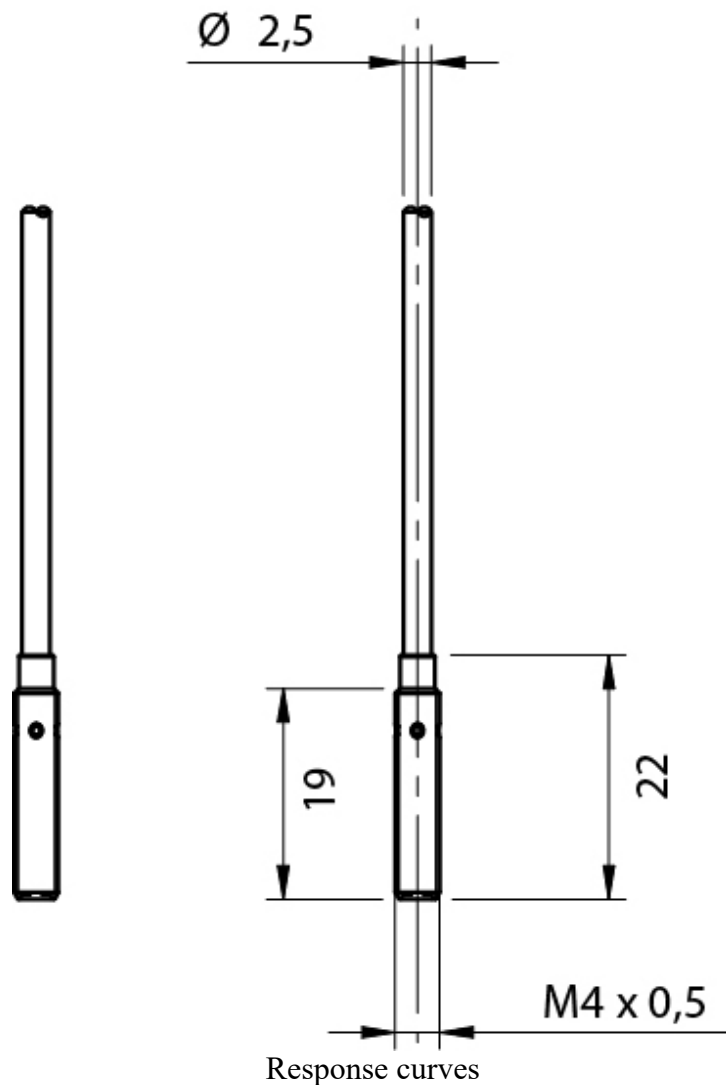
# CONNECTIONS

Electrical diagram

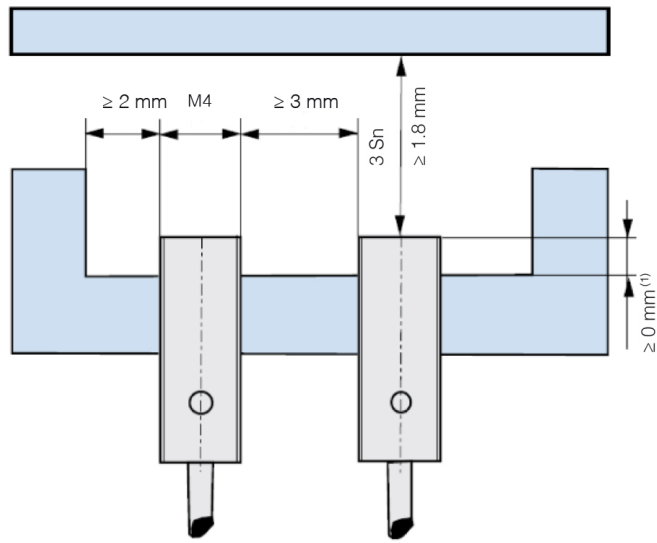


# OTHERS

Dimensions



Installation



<sup>(1)</sup>  $\geq 2.5 \text{ mm}$  without ferro-magnetic material

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