

# AA1/AP-3A

miniaturized cylindrical inductive

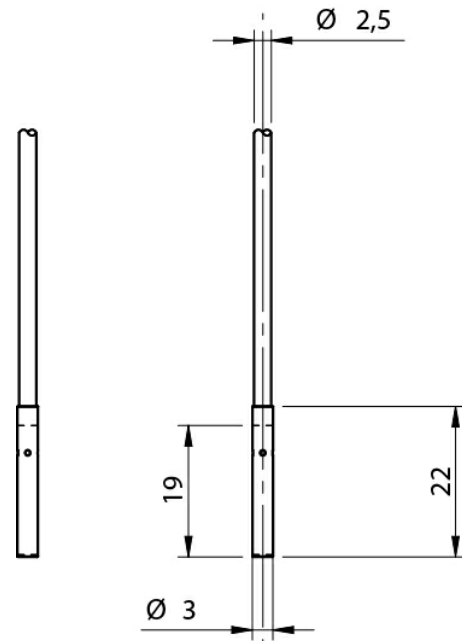


Micro Detectors

Italian Sensors Technology



Indicative image



## Detection properties

Nominal sensing distance	1mm
Operanting distance	0...0,81mm
Standard target	4x4mm FE360
Correction Factor	copper: $0,33 \pm 10\%$ / aluminium: $0,29 \pm 10\%$ / brass: $0,35 \pm 10\%$ / stainless steel: $0,71 \pm 10\%$
Thermal drift of Sr	< 10%
Repeat Accuracy	5% (UB 24V Ta=23°C ±5°C)
Hysteresis	1 ... 20%

## Outputs

Output type	PNP
Output Function	NO
Switching frequency	3,5kHz

## Electrical data

Operating Voltage	10...30Vdc
No-Load supply current	≤ 10mA
Load current	≤ 100mA
Leakage current	≤ 10μA
Output voltage drop	≤ 1,5V @100mA
Max ripple content	≤10%
LED indicators	Yellow LED output state
Time delay before availability	≤ 50ms
Short-circuit protection	Yes (auto-reset)
Reverse Polarity Protection	Yes
Protection against inductive loads	Yes

## Mechanical data

Mounting	Shielded
Dimensions	Ø3 / L = 22mm
Weight	30g
Housing Material	AISI 303 Stainless Steel
Connections	2m PUR Cable
Active Head Material	PBT
Operating temperature	-25°C...+70°C
Diameter/Dimension	Ø3

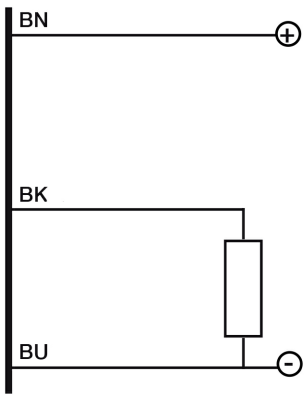
## Test/Approvals

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

---

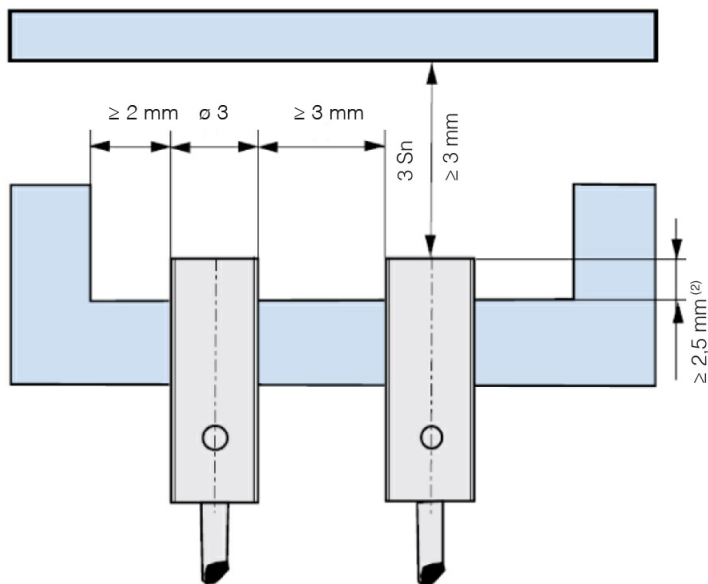
# ELECTRICAL DIAGRAMS OF THE CONNECTIONS

---



## INSTALLATION

---

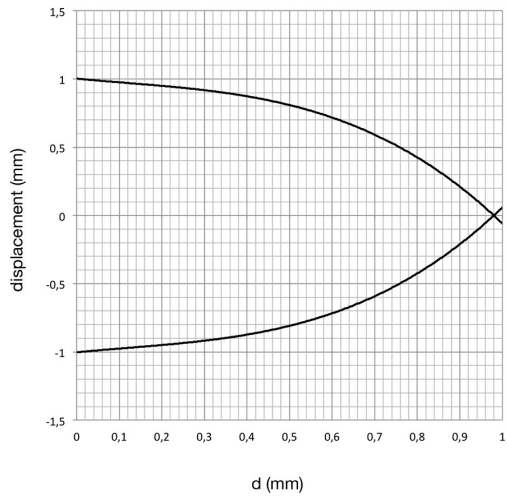


<sup>(2)</sup>  $\geq 3 \text{ mm}$  without ferro-magnetic material

## RESPONSE CURVES

---

Disassamento Parallelo



---

**M.D. Micro Detectors S.p.A.**

Strada S. Caterina, 235

41122 Modena (MO)

Tel. 059 420411

Fax 059 253973

E-mail [info@microdetectors.com](mailto:info@microdetectors.com)

**date of printing**

17/11/2020 10:33:09