



# AA series

Ø 3 cylindrical miniaturized inductive sensors



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## features

- Complete range of cylindrical ultraminiaturized inductive sensors Ø 3
- IP67 protection degree



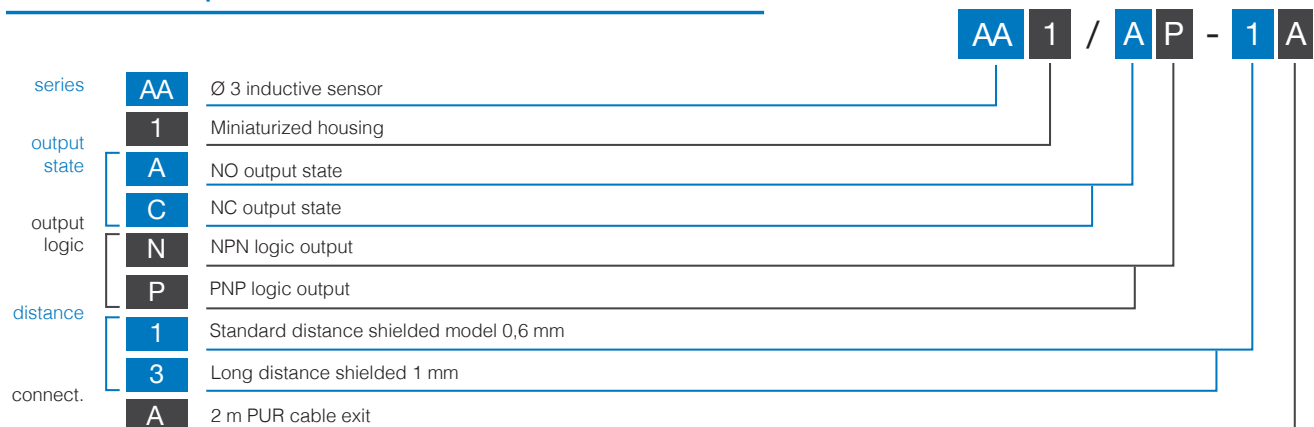
## web contents



- Application notes
- Photos
- Catalogue / Manuals





## code description



## available models

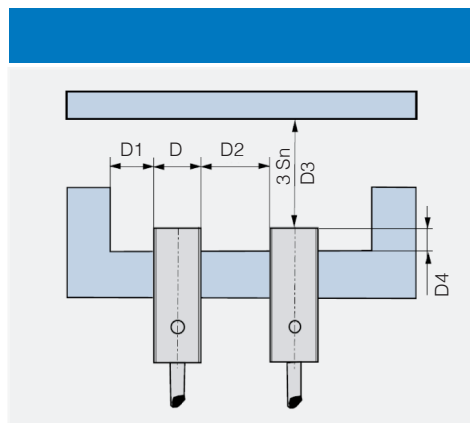
model	installation	sensing	plug	distance (mm)	PNP/NO	NPN/NO	PNP/NC	NPN/NC
Ø 3	shielded	standard	cable	0.6 mm	AA1/AP-1A	AA1/AN-1A	AA1/CP-1A	AA1/CN-1A
		long distance		1 mm	AA1/AP-3A	AA1/AN-3A	AA1/CP-3A	AA1/CN-3A

	AA1/**-1*	AA1/**-3*
		
nominal sensing distance Sn	0.6 mm	1 mm
operating distance	0...0.48 mm	0...0.81 mm
hysteresis	1...20%	
standard target	3x3 mm FE360	
repeatability	5% @UB=20...30 V; Ta = 23°C ±5°C	
operating voltage	10...30 Vdc	
ripple	≤ 10%	
output type	NPN or PNP - NO or NC	
output current	≤ 100 mA	
output voltage drop	≤ 1.5 V @ 100mA	
no-load supply current	≤ 10 mA	
leakage current	≤ 10 µA	
switching frequency	3 kHz	3.5 kHz
power on delay	≤ 50 ms	
temperature range	-25°C...+70°C	
temperature drift	10%	
power supply protections	polarity reversal	
output protection	short circuit (auto reset), overvoltage pulses	
EMC	in conformity with the EMC Directive according to IEC 60947-5-2	
shock and vibration	IEC 60947-5-2	
protection degree	IP67	
housing material	stainless steel AISI 303	
active head material	PBT	
reduction factor	see table	
LEDs	on (yellow LED)	
connection	2m PUR cable	

## correction factors

model	FE 360	copper	aluminium	brass	stainless steel
AA1/**-**	1	0.32 ± 10%	0.24 ± 10%	0.39 ± 10%	0.57 ± 10%
AA1/**-3*	1	0.33 ± 10%	0.29 ± 10%	0.35 ± 10%	0.71 ± 10%

## installation



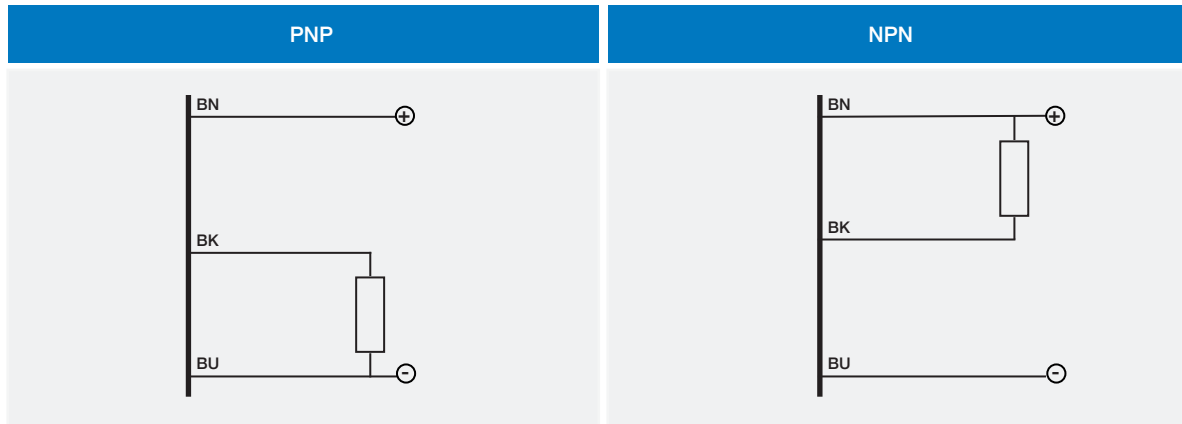
model	D4	D1	D2	D3
AA1/**-1*	≥ 0 mm <sup>(1)</sup>	≥ 2 mm	≥ 3 mm	≥ 1.8 mm
AA1/**-3*	≥ 2.5 mm <sup>(2)</sup>	≥ 2 mm	≥ 3 mm	≥ 3 mm

<sup>(1)</sup> ≥ 3 mm without ferro-magnetic material  
<sup>(2)</sup> ≥ 3 mm without ferro-magnetic material

# electrical diagrams of connections

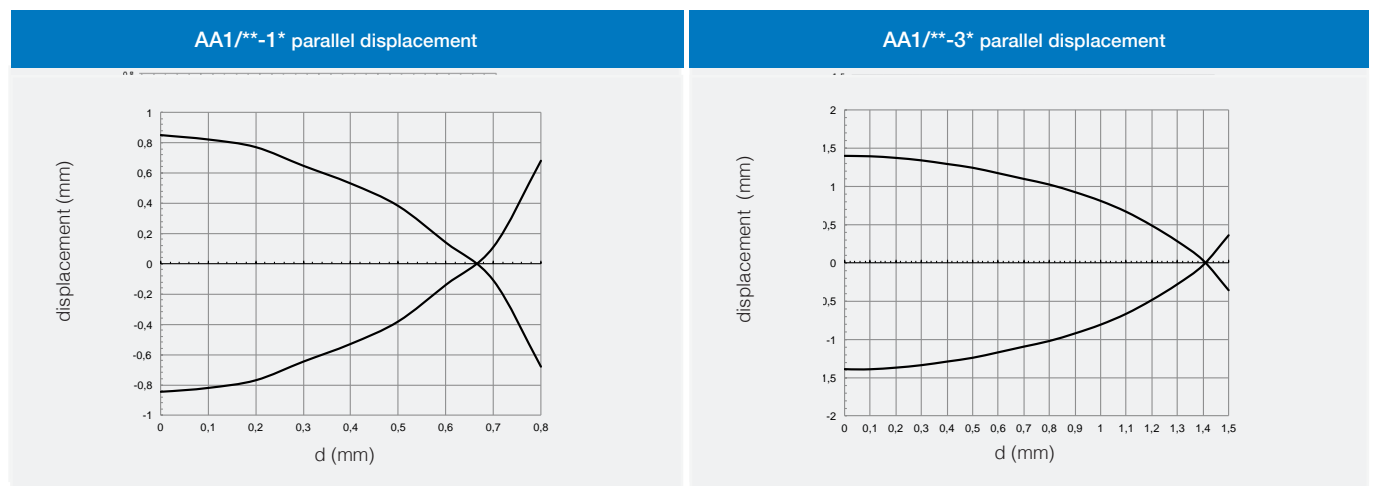


Ø 3 cylindrical  
miniaturized



- BN brown
- BU blue
- BK black
- WH white

# response diagram



AA\*/\*\*\_\*\*

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