AES series

M8 cylindrical
miniaturized inductive sensors

features

- **Miniaturized dimensions: M8 x 20 mm (cable) / 30 mm (plug) lenght**
- **Operating voltage: 10...30 Vcc**
- **Output current: 100 mA**
- **LED output indicator**
- **Totally protected against electrical damages**
- **Cable and plug M8 output**
- **Steinless steel housing**



web contents

- **Application notes**
- **Photos**
- **Catalogue / Manuals**

code description (*)

AE S / A P - 1 F 8F

series	AE	Inductive sensor M8
housing	S	Miniaturized housing
output state	A	NO output
	C	NC output
output logic	N	NPN output
	P	PNP output
distance	1	Standard distance shielded 1.5 mm
	3	Long distance shielded 2 mm
connect.	A	Cable exit
	F	M8 connector exit
special models	8F	Models with cable in PUR

Models with plug or cable exit in PUR ⟶ certification c UL us

Models with cable exit in PVC ⟶ certification UL

(*) ATEX models available, contact our Sales Dept. for further information.

available models

diameter	installation	distance	plug	distance	PNP/NO	NPN/NO	PNP/NC	NPN/NC
M8	shielded	standard	cable	1.5 mm	AES/AP-1A	AES/AN-1A	AES/CP-1A	AES/CN-1A
			M8		AES/AP-1F	AES/AN-1F	AES/CP-1F	AES/CN-1F
		long distance	cable	2 mm	AES/AP-3A	AES/AN-3A	AES/CP-3A	AES/CN-3A
			M8		AES/AP-3F	AES/AN-3F	AES/CP-3F	AES/CN-3F

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Instrumentación | Proyectos | Servicios

technical specification

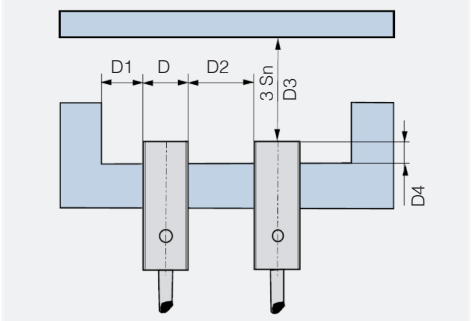
according to IEC EN 60947-5-2 / DIN 44030

	AES/**-1*	AES/**-3*
		
nominal sensing distance Sn	1,5 mm	2,0 mm
working distance	0...1.21 mm	0...1.62 mm
hysteresis	1...20%	
standard target	8 x 8 mm	
repeatibility	5% @UB=20...30 V; Ta = 23°C ±5°C	
operating voltage	10...30 Vcc	
output type	NPN or PNP - NO or NC	
ripple	≤ 10%	
output current	≤ 100 mA	
output voltage drop	≤ 1.5 V @ 100mA	
no-load supply current	≤ 10 mA	
leakage current	≤ 10 µA	
switching frequency	7 kHz	
power on delay	≤ 50 ms	
temperature range	-25°C...+70°C	
temperature drift	≤ 10%	
power supply protections	polarity reversal	
output protection	short circut (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)	
weight	30 g cable / 4g M8 connector	

correction factors

model	FE 360	copper	aluminium	brass	stainless steel
AES/**1*	1	0.15 ± 10%	0.10 ± 10%	0.15 ± 10%	0.55 ± 10%
AES/**3*			0.15 ± 10%	0.21 ± 10%	0.56 ± 10%

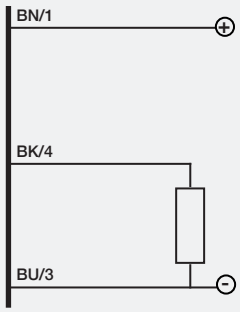
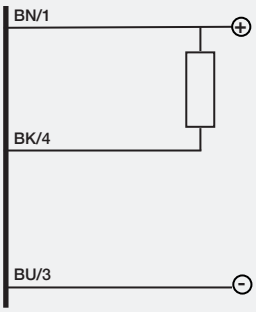
installation



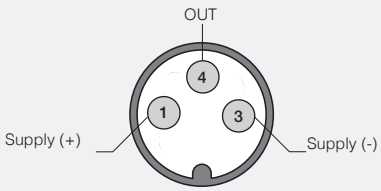
model	D4	D1	D2	D3
AES/**-1*	≥ 3 mm (1)	≥ 8 mm	≥ 8 mm	≥ 4.5 mm
AES/**-3*	≥ 3.5 mm (2)			≥ 6 mm

(1) ≥ 3.5 mm without ferro-magnetic material
(2) ≥ 4 mm without ferro-magnetic material

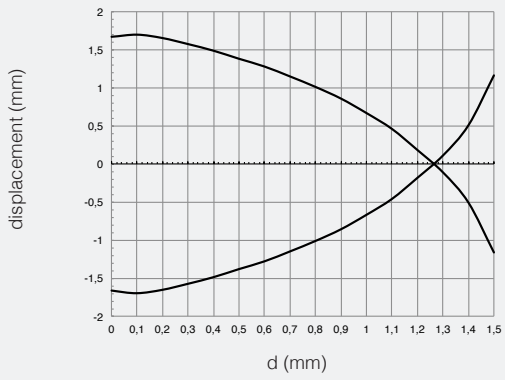
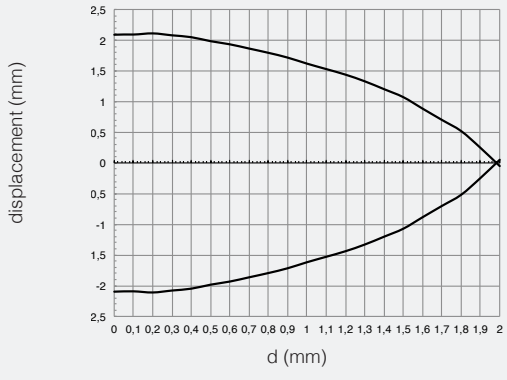
electrical diagrams of connections

PNP	NPN
	

plug

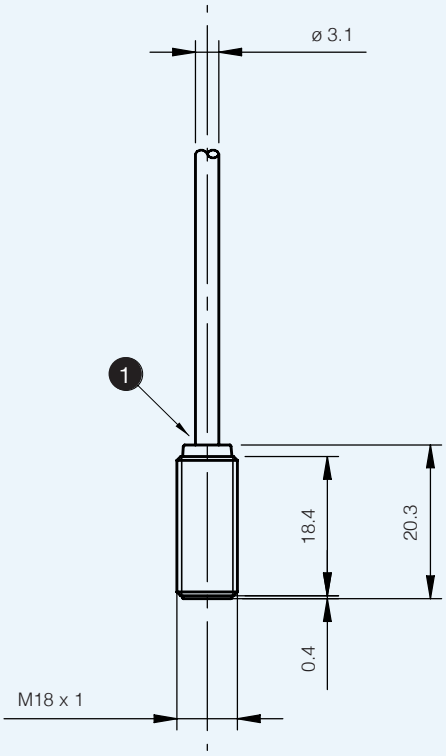
M8


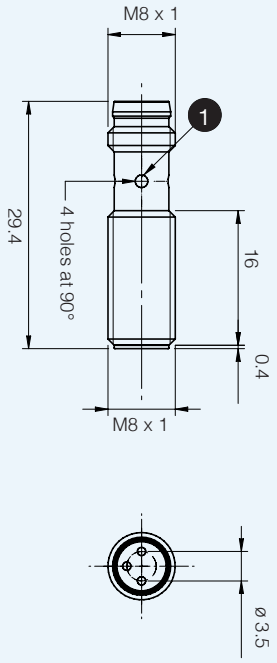
response diagram

AD1/**-1* parallel displacement	AD1/**-3* parallel displacement
	

dimensions (mm)

AES/**-*A	AES/**-*F

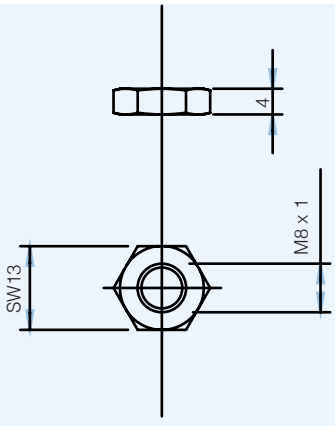




1 LED

dimensions (mm)

accessories included models



metallic
nut (2 x)