

AH

Ø 6,5 MM PROXIMITY INDUCTIVE SENSORS

Installation manual - 826001360 Rev. A - ENG - Created: 08/11/2022

SUPPLIED MATERIAL

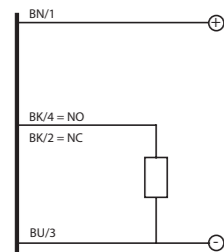
- Installation manual
- Safety instructions for dangerous areas
- Declaration of Conformity CE
- Label ATEX marked

GENERAL DESCRIPTION

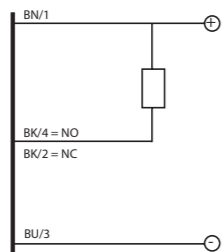
- Extremely reduced measure
- Metal housing
- LED status indicator 360° visible
- IP 67 protection degree
- Complete protection against electrical damages
- Standard and long distance models
- Standard and short body housing
- CE Mark
- ATEX certified

ELECTRICAL DIAGRAMS OF THE CONNECTIONS

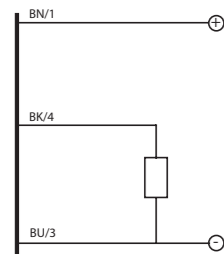
M12 PNP



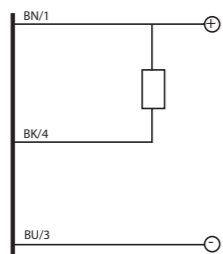
M12 NPN



M8 PNP



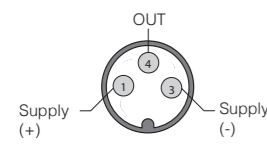
M8 NPN



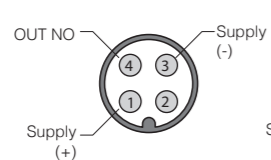
KEY:
BN = brown;
BK = black;
BU = blue;
WH = white.

CONNECTORS

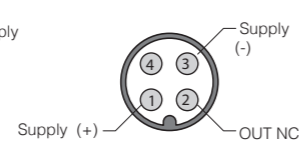
M8



M12 - NO

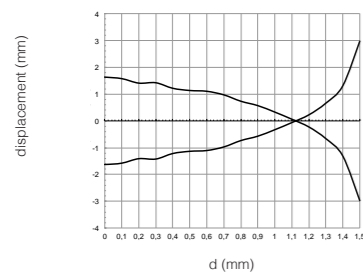


M12 - NC

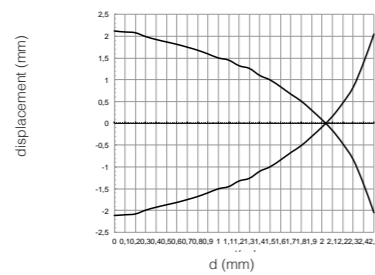


RESPONSE DIAGRAMS

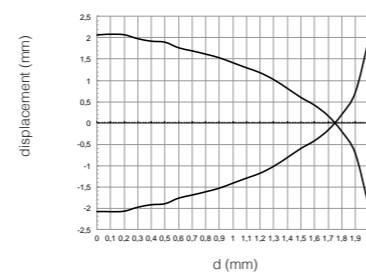
AH*/** -1* parallel displacement



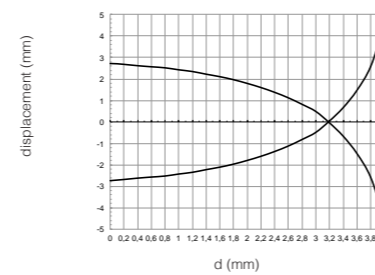
AH*/** -2* parallel displacement



AH*/** -3* parallel displacement



AH*/** -4* parallel displacement



SPECIFICATIONS

Models	AH*/** -1*	AH*/** -2*	AH*/** -3*	AH*/** -4*
nominal sensing	1.5 mm	2.5 mm	2 mm	4 mm
working distance	0...1.21 mm	0...2.02 mm	0...1.62 mm	0...3.24 mm
hysteresis	1...20% Sr			
standard target	8 x 8 mm FE360		12 x 12 mm FE360	
repeat accuracy	5 %			
supply voltage range	10...30 Vcc			
max ripple content	≤ 10 %			
output current	≤ 200 mA			
output voltage drop	≤ 1,8 V @ 200 mA			
no load supply current	10 mA			
leakage current	≤ 10 µA			
switching frequency	5 kHz			
time delay before availability	50 ms			
ambient temperature range	-25...+70 °C			
temperature drift of Sr	10%			
short-circuit protection	•			
voltage reversal protection	•			
induction protection	•			
shocks and vibrations	IEC 60947-5-2			
weight	7 g plug M8 version - 10 g plug M12 version - 35 g cable version			
LED indicators	yellow LED output state			
degree of protection	IP 67 (EN60529)			
EMC	conforming to EMC Directive requirements according to IEC 60947-5-2			
housing material	stainless steel			
sensing face	PBT			
connection	cable 2 m PVC / plug M8 or M12			

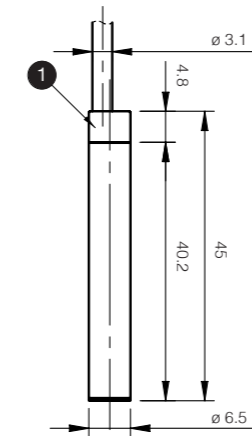
CODE DESCRIPTION

series	AE	M8 inductive proximity switch
housing	1	Standard body
	6	Short body
output state	A	NO output state
	C	NC output state
output logic	N	NPN logic output
	P	PNP logic output
distance	1	Shielded standard 1.5 mm
	2	Unshielded standard 2.5 mm
	3	Long distance shielded 2 mm
	4	Unshielded long distance 4 mm
connect.	A	Axial cable exit
	F	M8 plug cable exit
	H	M12 plug cable exit
	AN	With ATEX Certificate

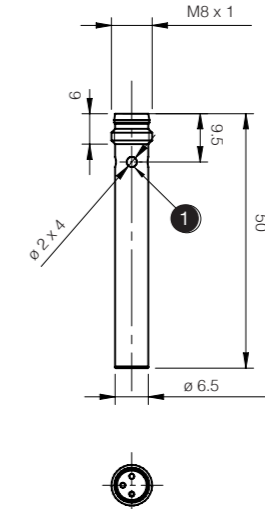
AE 1 / A P - 1 A AN

DIMENSIONS (mm)

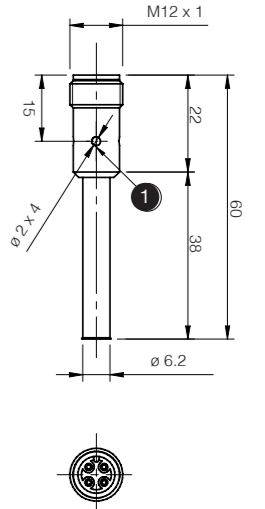
AH1 /** -A



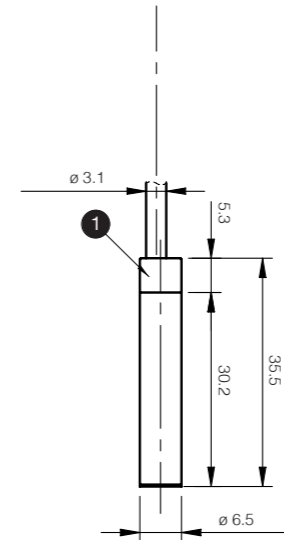
AH1 /** -F



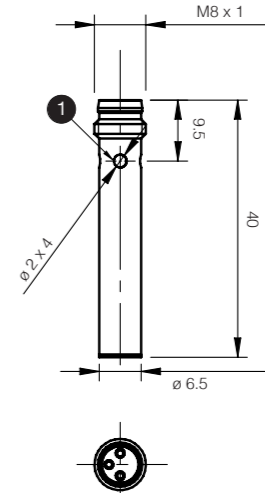
AH1 /** -H



AH6 /** -A

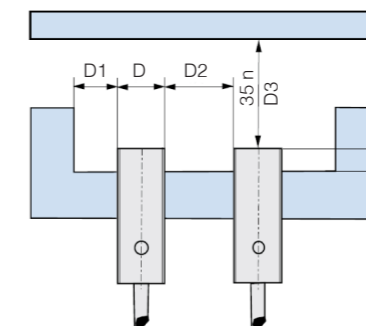


AH6 /** -F



1 LED

INSTALLATION



code	D4	D1	D2	D3
AH*/** -1*	≥ 3.9 mm	≥ 3.25 mm	≥ 6.5 mm	≥ 4.5 mm
AH*/** -2*	≥ 4 mm ⁽¹⁾	≥ 6.5 mm	≥ 13 mm	≥ 7.5 mm
AH*/** -3*	≥ 3.9 mm	≥ 3.75 mm	> 7 mm	≥ 6 mm
AH*/** -4*	≥ 6 mm	≥ 6.5 mm	> 15 mm	≥ 12 mm

(1) ≥ 2.6 mm for non magnetic materials



Micro Detectors
Italian Sensors Technology

CE
Ex
Model AH
II 3G Ex nA IIC T5 Gc
II 3D Ex tc IIIB T90°C Dc
Certificate N° : 0802003X

WARNING These products are NOT safety sensors and are NOT suitable for use in personal safety application.
For ATEX models read carefully safety instruction before installation.

Declaration of conformity
Datsensing S.r.l. declares under our sole responsibility that these products are in conformity with the EMC directive.

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