



Micro Detectors

Italian Sensors Technology



Miniaturized cylindrical
inductive sensor Ø 6,5 AHS



Proximity Sensors
Catalogue

Cod. CAT3EAH1374601

Datasheet - AHS - english - Ed.01/2013





Products

inductive
miniaturized

Series AHS

inductive miniaturized



download area

- catalogues
- high resolution pictures
- installation manuals

<http://www.microdetectors.com/ita/prodotti/dettaglioiserie.aspx?idserie=65>

market sectors and applications

plastic industry
robot industry
wood industry
textile industry
automatic machines
packaging industry
electronic components production
printing industry
sorting mail machine



features

Miniaturized dimensions: Ø 6,5 x 20 mm (cable) / 30 mm (plug) lenght

Operating voltage: 10 ÷30 Vdc

Output current: 100 mA

LED output indicator

Totally protected against electrical damages

Cable and plug M8 output

Stainless steel housing

approvals



protection degree

IP67





Products

inductive
miniaturized

cylindrical inductive sensors Ø6,5 AHS

Inductive proximity sensors AHS have a smooth stainless steel housing, Ø6,5 diameter. Yellow output LED 360° visible. Available 2 m PVC cable models or M8 connector models. The sensors have a **IP 67 protection degree**.

pack content

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additional commercial and technical documents available

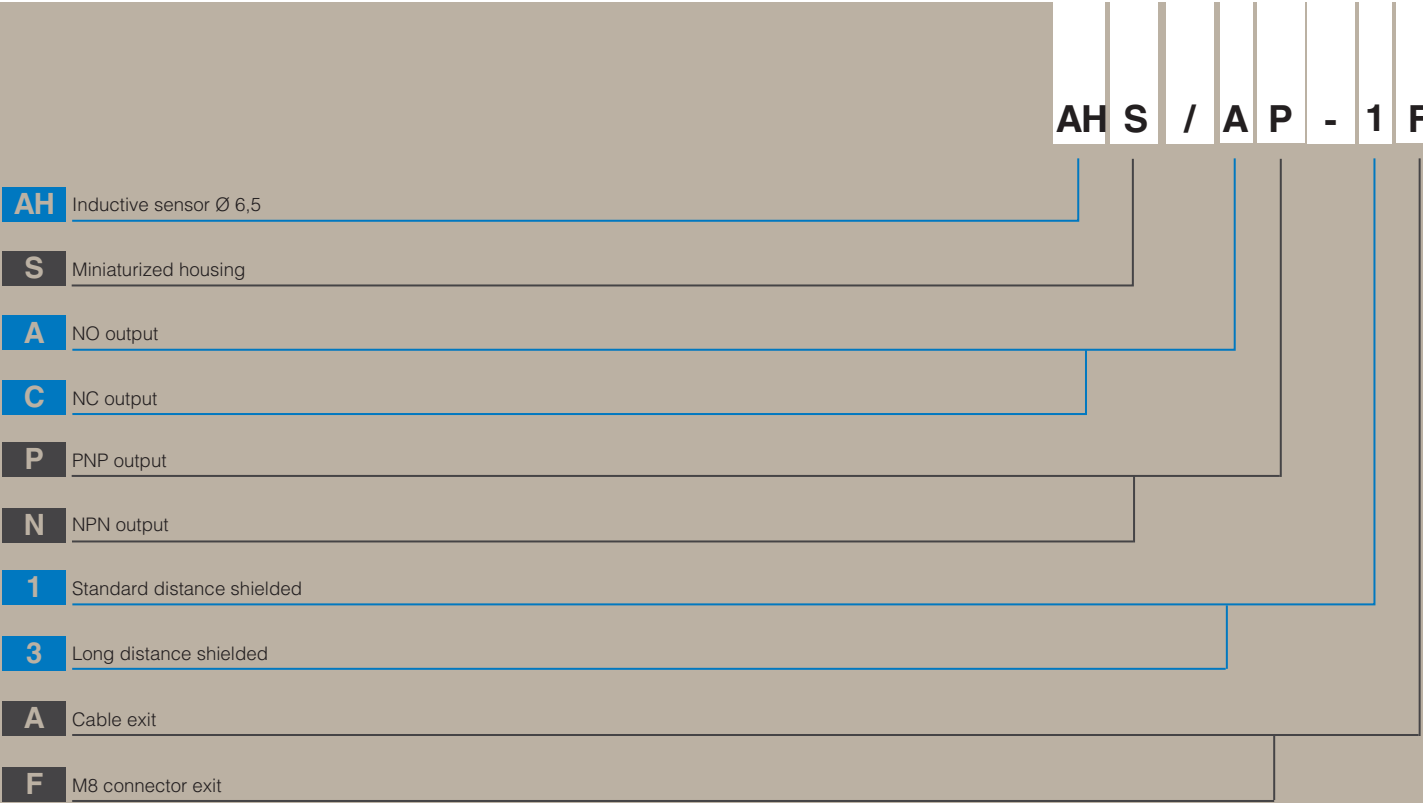
High resolution photos

customizations already tested

-

minimum order quantity

1 piece



available models

diameter	installation	distance	connection	distance	PNP - NO	NPN - NO	PNP - NC	NPN - NC
Ø 6,5	shielded	standard distance	cable	1,5 mm	AHS/AP-1A	AHS/AN-1A	AHS/CP-1A	AHS/CN-1A
			M8 connector		AHS/AP-1F	AHS/AN-1F	AHS/CP-1F	AHS/CN-1F
		long distance	cable	2 mm	AHS/AP-3A	AHS/AN-3A	AHS/CP-3A	AHS/CN-3A
			M8 connector		AHS/AP-3F	AHS/AN-3F	AHS/CP-3F	AHS/CN-3F

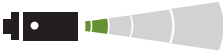


Products

inductive
miniaturized

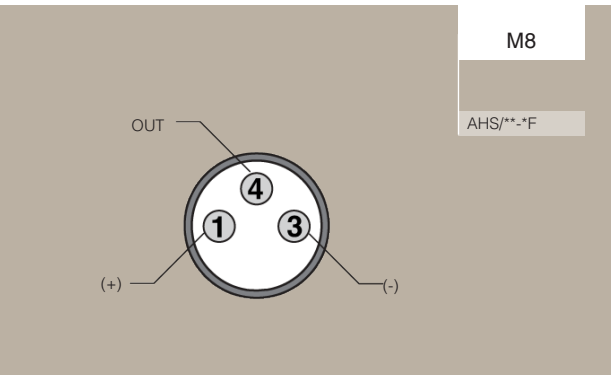
technical specifications

according to IEC EN 60947-5-2 and IEC EN 60947-5-7

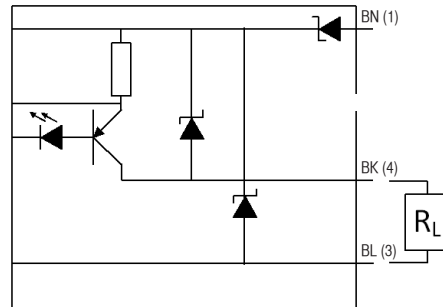
		
models	AHS/**-1*	AHS/**-3*
		
nominal sensing distance S_n	1,5 mm	2,0 mm
hysteresis	1 ÷ 20%	
standard target	6,5 x 6,5 mm	
repeatability	5% @ $U_B = 20 \div 30$ V; $T_a = 23^\circ\text{C} \pm 5^\circ\text{C}$	
operating voltage	10 ÷ 30 V _{cc}	
ripple	≤ 10 %	
output current	≤ 100 mA	
output voltage drop	≤ 1,5 V @ 100mA	
no-load current	≤ 10 mA	
leakage current	≤ 10 µA	
switching frequency	7 kHz	
time delay before availability	≤ 50 ms	
temperature range	-25°C ÷ +70°C	
thermal drift	≤ 10%	
supply electrical protection	polarity reversal	
output electrical protection	short circuit (auto reset), overvoltage pulses	
EMC compatibility	compliant to EC Directive 2004/108/EC requirements according to EN60947-5-2	
protection degree	IP67	
housing material	stainless steel AISI 303	
active head material	PBT	
reduction factor	see table	
LED indicators	on (yellow LED)	
weight	30 g (cable version); 4g (M8 connector version)	

BN brown
BL blue
BK black

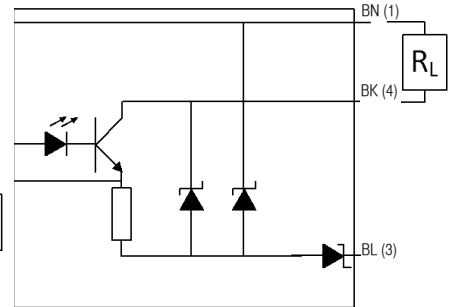
electrical connections



PNP models

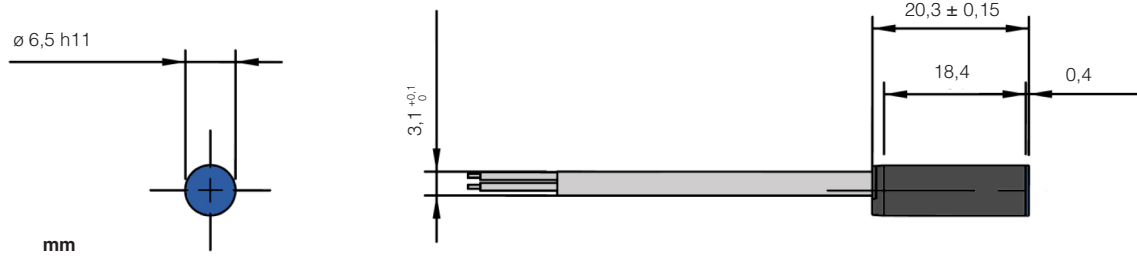


NPN models

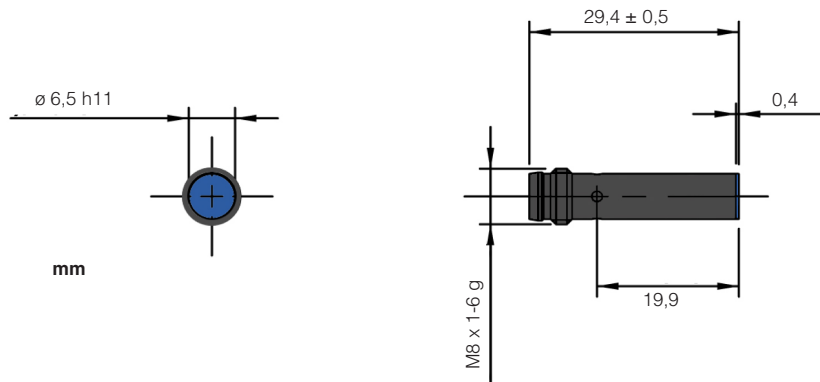


dimensions

AHS/**-A



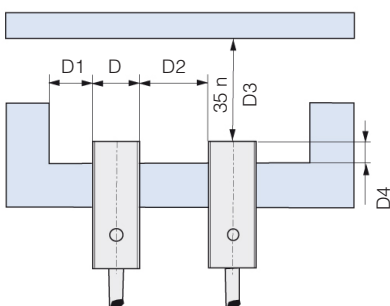
AHS/**-F



correction factors

model	FE360	copper	aluminium	brass	stainless steel
AHS/xx-1x	1	0,10 ± 10%	0,05 ± 10%	0,13 ± 10%	0,54 ± 10%
AHS/xx-3x	1	0,05 ± 10%	0,05 ± 10%	0,10 ± 10%	0,50 ± 10%

installation



model	D4	D1	D2	D3
AHS/xx-1x	≥ 0 mm ⁽¹⁾	≥ 6,5 mm	≥ 13 mm	≥ 4,5 mm
AHS/xx-3x	≥ 0,5 mm ⁽²⁾	≥ 6,5 mm	≥ 13 mm	≥ 6 mm

⁽¹⁾ ≥ 3 mm without ferro-magnetic material
⁽²⁾ ≥ 4 mm without ferro-magnetic material



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