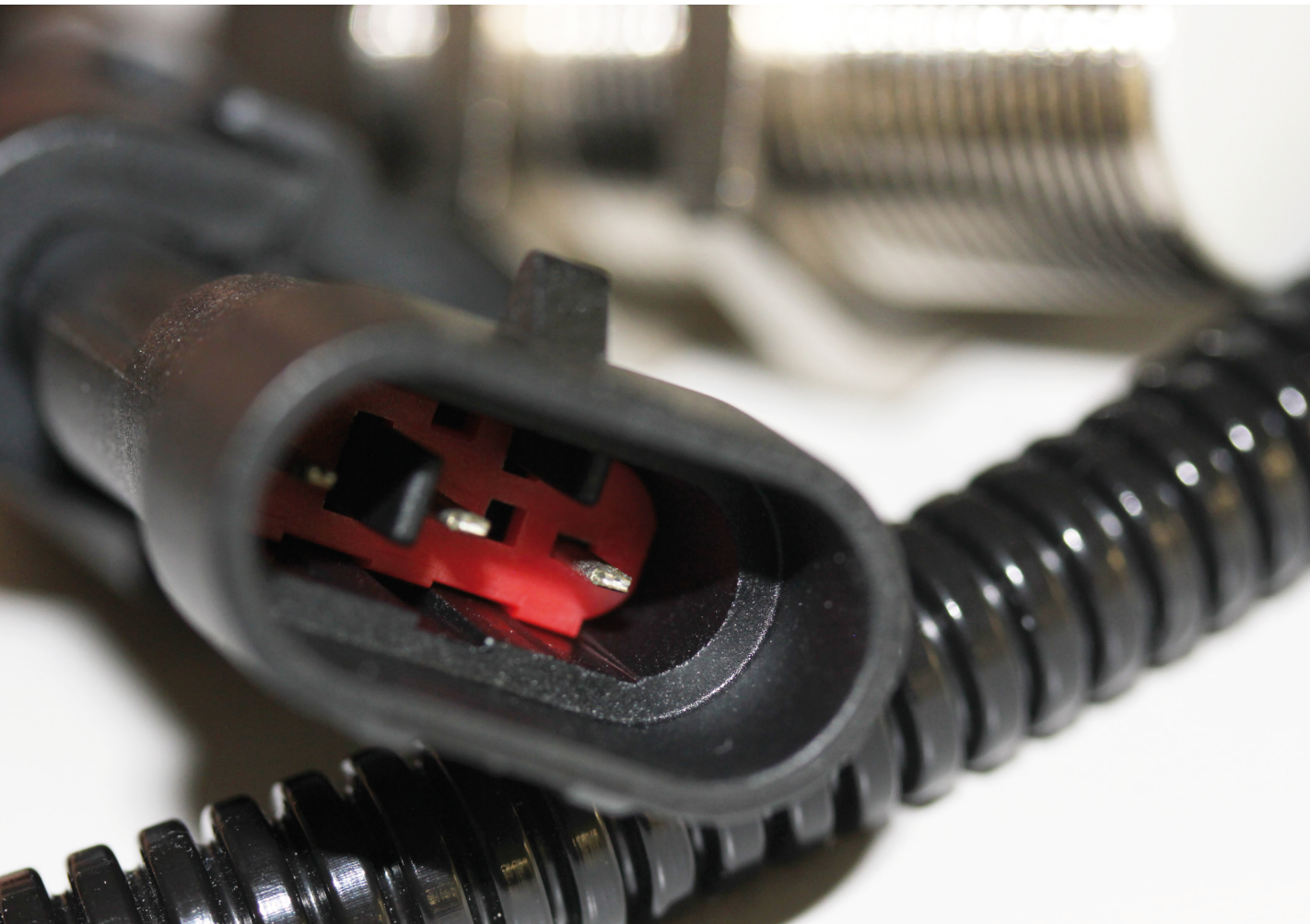




Micro Detectors

Italian Sensors Technology



M18 inductive sensors
AK1 series
with special connector
(type 7X)



Proximity Sensors

Data sheet

Cod. CAT3EAK1255701

Datasheet - AK1 7X model - english - Ed.01/2012



GENERAL DESCRIPTION

AK1 (type 7X)

- Cable length: 800mm
- Corrugated cable protective cover
- Connector: Superseal (AMP 282105-1 + 282404-1)
- Rubber connector cover: Schlemmer 7807196

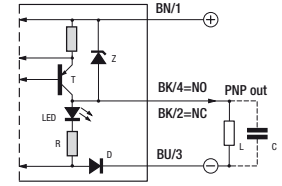


CODE STRUCTURE, ELECTRICAL DIAGRAMS OF THE CONNECTIONS

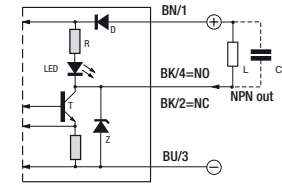
AK 1 / A P - 3 A 7X

AK	M18 inductive proximity switch
1	Standard body
/	
A	NO output
C	NC output
P	PNP logic output
N	NPN logic output
-	
1	Shielded standard 5 mm
2	Unshielded standard 8 mm
3	Shielded long distance 8 mm
4	Unshielded long distance 12 mm
A	Cable length
7X	Cable length 800 mm, connector AMP 282105-1; contacts AMP 282404-1; rubber protection cover Schlemmer 7807196

Electrical diagrams of the connections: wiring diagram PNP

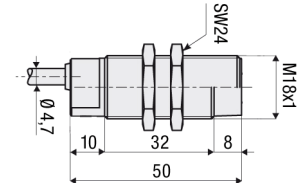
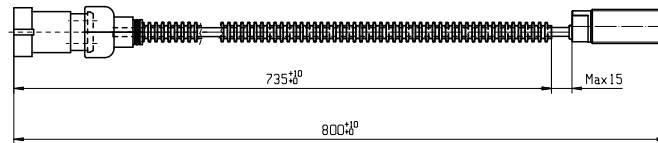


Electrical diagrams of the connections: wiring diagram NPN



Available model: **AK1/AP-3A7X**. Other models available on request

DIMENSIONS



SPECIFICATIONS (according to IEC EN60947-5-2 - DIN44030)

Model	AK1/**-1A7X	AK1/**-2A7X	AK1/**-3A7X	AK1/**-4A7X
Nominal sensing distance (Sn)	5 mm	8 mm	8 mm	12 mm
Operating distance	0 ÷ 4 mm	0 ÷ 6.5 mm	0 ÷ 6.5 mm	0 ÷ 9.7 mm
Hysteresis		1 ÷ 20%	1 ÷ 20%	1 ÷ 20%
Standard target	18 x 18 mm FE360	24 x 24 mm FE360	24 x 24 mm FE360	36 x 36 mm FE360
Repeatability		5% Ub 20-30V Ta=23°C±5°C		
Supply voltage range		10 ÷ 30 Vdc		
Max. ripple content		≤ 10%		
Output current		≤ 400 mA		
Output voltage drop		1V @ 400 mA		
No load supply current		≤ 20 mA		
Leakage current		10 µA		
Switching frequency		600 Hz		300 Hz
Response time		≤ 50 ms		
Ambient temperature range		-25°C ÷ +70°C		
Temperature drift of Sr		≤ 10%		
Short circuit protection		Yes (autoreset)		
Induction protection		Yes		
Polarity protection		Yes		
Shock and vibrations		IEC En 60947-5-2 / 7.4		
Weight		≈ 70g		
LED indicators		Yellow (output state)		
Protection degree		IP67		
EMC protection		According to IEC EN 60947-5-2		
Housing material		Nickel-plated brass		
Sensing face		PBT		
Connection		Cable		

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