

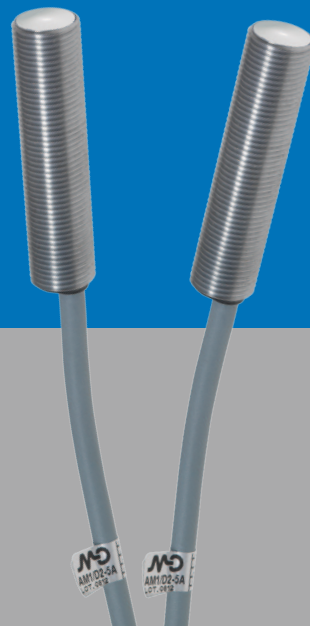


Micro Detectors

Italian Sensors Technology



M12 Inductive Sensors
AM1 series with
extended supply voltage
range 10 ÷ 48 Vdc



Proximity Sensors
Data sheet

Cod. CAT3EAM1256301

Datasheet - AM1 10-48 Vdc - english - Ed.01/2012



GENERAL DESCRIPTION

CODE STRUCTURE, ELECTRICAL DIAGRAMS OF THE CONNECTIONS

DIMENSIONS

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

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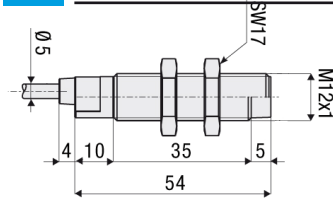
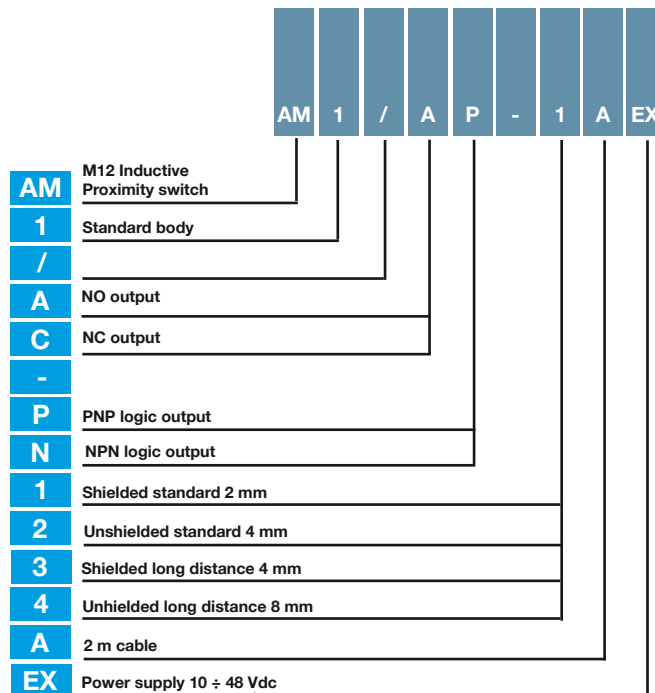
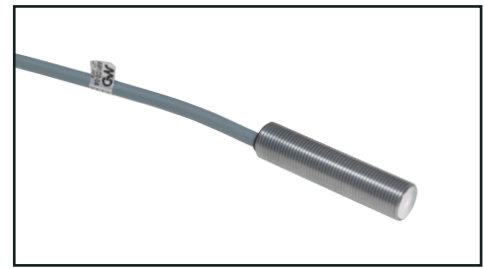
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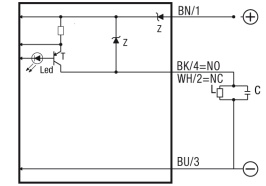


AM1 10 ÷ 48 Vdc

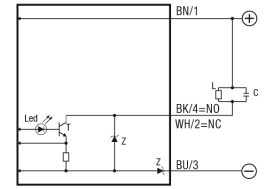
- Extended supply voltage range: 10 ÷ 48Vdc
- Protection degree IP67



Electrical diagrams of the connections: wiring diagrams PNP



Electrical diagrams of the connections: wiring diagrams NPN



Model	AM1/xx-1A	AM1/xx-2A	AM1/xx-3A	AM1/xx-4A
Nominal sensing distance (Sn)	2 mm	4 mm	4 mm	8 mm
Operating distance	0 ÷ 1,6 mm	0 ÷ 3,2 mm		0 ÷ 6,4 mm
Histeresys	1 ÷ 20%			
Standard target	12 x 12 mm FE360			
Repeatability	5% Ub 20-30V Ta=23°C±5°C			
Supply voltage range	10 ÷ 48 Vdc			
Max. ripple content	≤ 10%			
Output current	≤ 200 mA			
Output voltage drop	1,8 V @ 200 mA			
No load supply current	≤ 15 mA			
Leakage current	10 µA			
Switching frequency	2 kHz			
Response time	≤ 100 ms			
Ambient temperature range	-25°C ÷ +70°C			
Temperature drift of Sr	≤ 10%			
Short circuit protection	Yes (autoreset)			
Induction protection	Yes			
Inverted polarity protection	Yes			
Shock and vibrations	IEC En 60947-5-2 / 7.4			
Weight	≈ 70 g			
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 2 m			