

# AM Series Analog Inductive Proximity Sensors



## M12 (12 mm) metal – analog output

- Voltage or current analog output
- 4 models available
- Metal housing
- Axial cable or M12 quick-disconnect models
- IP67 rated

### Cables and Accessories

Cables and accessories can be found starting on page 17–48.

AM Series M12 Analog Inductive Prox Selection Chart						
Part Number		Sensing Range	Housing	Output	Connection	Dimensions
AM9-05-1A	<--->	0 to 6.0mm (0-0.27in)	Shielded	0 - 5VDC or 1-5mA	2m (6.5') axial cable	Figure 1
AM9-05-1H	<--->				M12 (12mm) connector	Figure 2
AM9-10-1A	<--->	0 to 6.0mm (0-0.27in)		0-10VDC or 4-20mA	2m (6.5') axial cable	Figure 1
AM9-10-1H	<--->				M12 (12mm) connector	Figure 2

Specifications		
	AM9-05-1*	AM9-10-1*
Output Type	0-5VDC or 1-5mA	0-10VDC or 4-20mA
Resolution	≤1μm	
Repeat Accuracy	±0.01mm	
Material Correction Factors	See Proximity Sensor Terminology	
Operating Voltage	10 -30VDC	15 -30VDC
Ripple	≤20%	
No-load Supply Current	≤10mA	≤12mA
Voltage Output Min. Load	500Ω	1kΩ
Current Output Max. Load / Power Supply	1kΩ / 10VDC; 5kΩ / 30VDC	0.5kΩ / 15VDC; 1kΩ / 30VDC
Voltage Drop	≤2.0 V	
Time Delay Before Availability	≤50ms	
Input Voltage Transient Protection	Up to 30VDC	
Input Power Polarity Reversal Protection	Yes	
Output Power Short-Circuit Protection	Yes (switch auto-resets after overload is removed)	
Temperature Range	-25° to +70° C (-13° to 158° F)	
Temperature Drift	≤10% Sr	
Protection Degree (DIN 40050)	IEC IP67	
Housing Material	Chrome-plated brass	
Sensing Face Material	PBT	
Tightening Torque	10Nm (88lb./in.)	
Weight (cable/M8 connector)	95g (3.35 oz.) / 33g (1.16 oz.)	

Figure 1

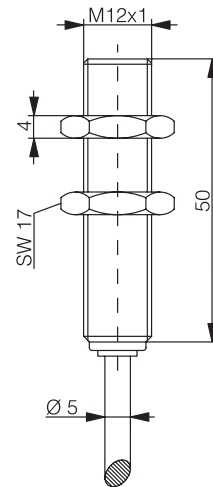
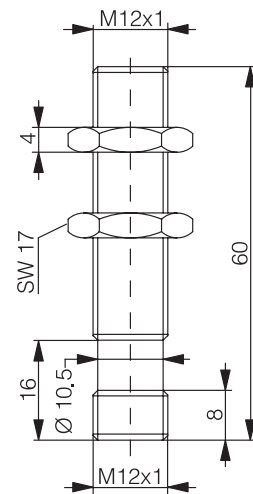
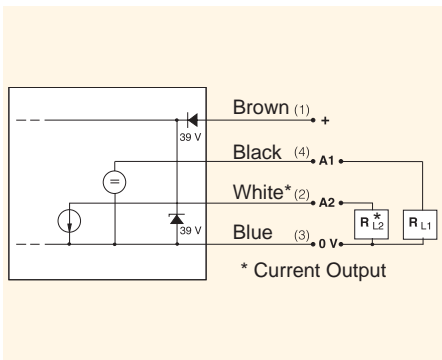


Figure 2



## Wiring diagrams



## Connector

