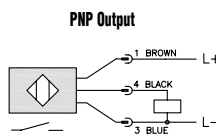
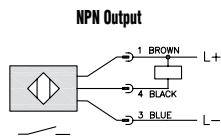


AM Series Inductive Proximity Sensors

AM Series Specifications					
Mounting Type	Standard Distance Models		Extended Distance Models		Triple Distance Models
	Shielded	Unshielded	Shielded	Unshielded	Shielded
Nominal Sensing Distance	2 mm (0.08 in)	4 mm (0.157 in)	4 mm (0.157 in)	8 mm (0.315 in)	6 mm (0.236 in)
Operating Distance	NA				
Material Correction Factors	See the Material influence table				
Output Type	NPN or PNP/NO only/3-wire				
Operating Voltage	10 to 30 VDC				
No-load Supply Current	≤20mA		≤10mA		
Operating (Load) Current	3-wire: ≤200mA / 2-wire: 3-100mA		3-wire: ≤200mA / 2-wire: 3-100mA		≤200mA
Off-state (Leakage) Current	3-wire: ≤10µA / 2-wire: ≤0.8mA		3-wire: ≤120µA / 2-wire: ≤0.8mA		≤100µA
Voltage Drop	3-wire: 1.2 volts max. / 2-wire: 2.8 volts max.				≤2.0 V
Switching Frequency	3-wire: 2kHz / 2 wire: 1.5 kHz		3-wire: 2kHz / 2 wire: 750Hz		800 Hz
Differential Travel (% of Nominal Distance)	2 to 10%		1 to 20		
Repeat Accuracy	≤2%		≤5%		
Ripple	≤10%				≤20%
Time Delay Before Availability (tv)	3-wire: 100ms / 2 wire: 50ms		100 ms		
Reverse Polarity Protection	Yes				
Short-Circuit Protection	Yes (switch auto-resets after overload is removed)				
Operating Temperature	-25° to +70°C (-13° to 158°F)				
Protection Degree (DIN 40050)	IEC IP67				
Indication/Switch Status	Yellow (output energized)				
Housing Material	Nickel-plated brass				Chrome-plated brass
Sensing Face Material	Polybutylene Terephthalate (PBT)				
Shock/Vibration	See Proximity Sensor Terminology				
Tightening Torque	10 Nm (7.37 lb-ft)				
Weight (cable/M12 connector)	70 g (2.47 oz)/30 g (1.06 oz)				96 g (3.39 oz)/34 g (1.2 oz)
Connection	2 meter PVC axial cable / M12 connector				
Agency Approvals	NA				UL file E328811

Wiring diagrams

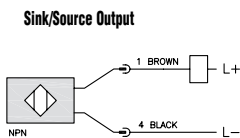
Diagram 1



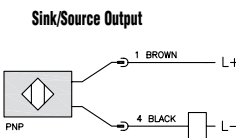
Connector



Diagram 2



Wiring diagram when sensor is wired in sinking mode used with a sourcing module.



Wiring diagram when sensor is wired in sourcing mode used with a sinking module.

Note: Negative (-) lead is Black on M12 quick disconnect cables and Blue on axial cables.

AM Series Inductive Proximity Sensors

Dimensions

mm [inches]

Figure 1

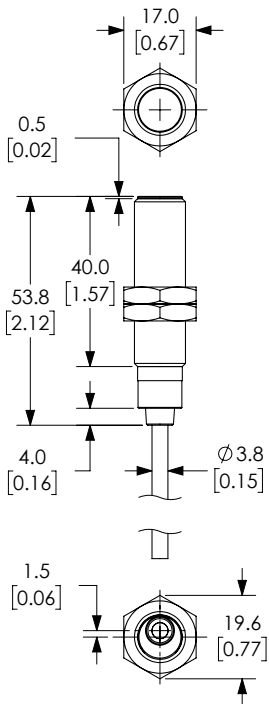


Figure 2

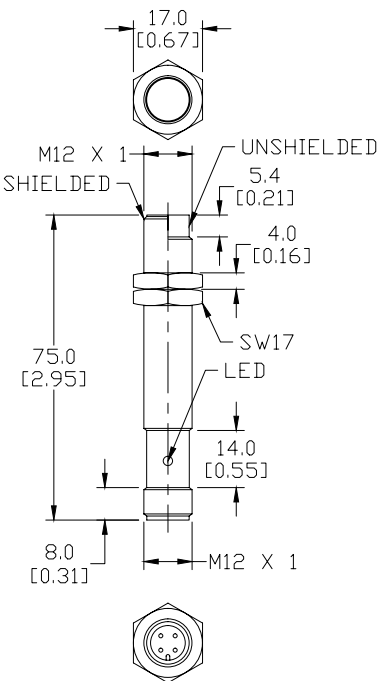


Figure 3

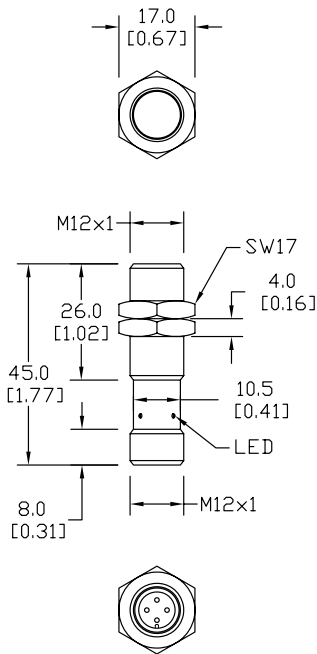
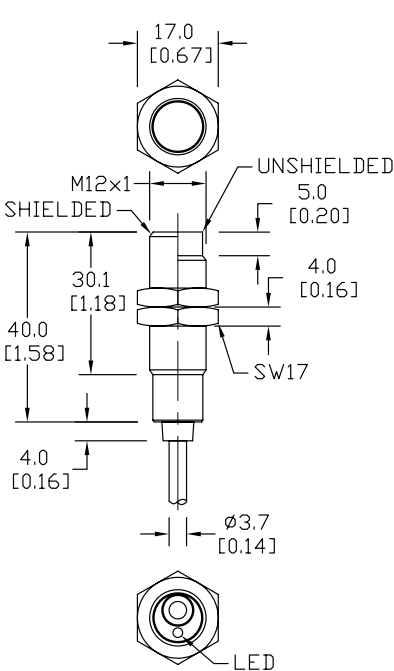


Figure 4



AM Series Inductive Proximity Sensors

Dimensions

mm [inches]

Figure 5

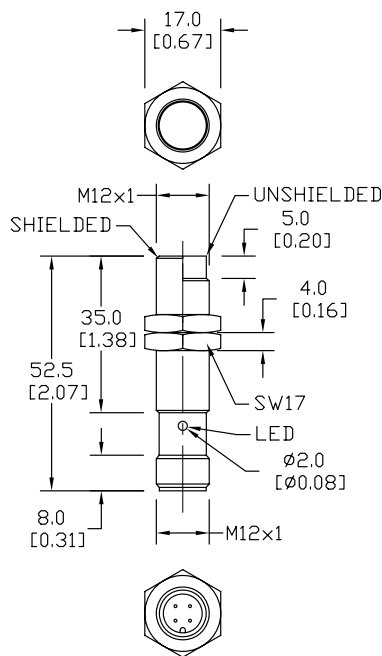


Figure 6

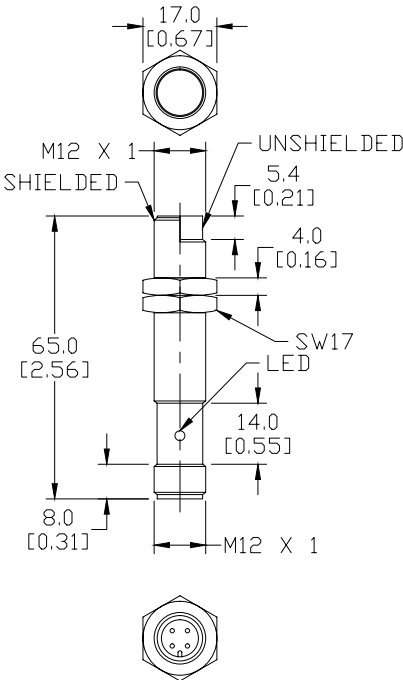


Figure 7

