

# WSM Series Weld-Field Immune Inductive Proximity Sensors

## M12 (12mm)



- Four models available
- Low cost/high performance
- Weld Slag resistant coating
- Inductive sensor
- Full metal housing
- Increased sensing range
- Gold-plated contacts
- Sensing range 4 mm
- Shielded mounting
- Lifetime warranty



WSM Series M12 Inductive Prox Selection Chart									
Part Number	Price	Sensing Range	Housing	Output State	Logic	Voltage	Connection	Wiring	Dimensions
WSM-AP-3H	\$35.00	4mm (0.16 in)	Shielded	NO	PNP	10 - 30 VDC	4-pin M12 quick disconnect	Diagram 1	Figure 1
WSM-AN-3H	\$50.00				NPN	10 - 36 VDC	4-pin M12 quick disconnect	Diagram 2	Figure 2
WSM-A0-3E	\$50.00				PNP/NPN		4-pin M12 with 0.3 m cable	Diagram 3	Figure 3
WSM-A0-3A	\$50.00					3m axial cable	Diagram 4		

### Wiring Diagrams

Diagram 1

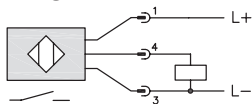


Diagram 2

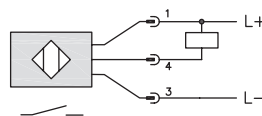


Diagram 3

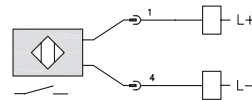
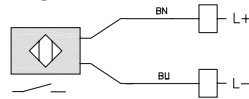


Diagram 4



### Connector

4-pin M12 NPN



4-pin M12 PNP



4-pin M12 0.3m



### Dimensions

mm [inches]

Figure 1

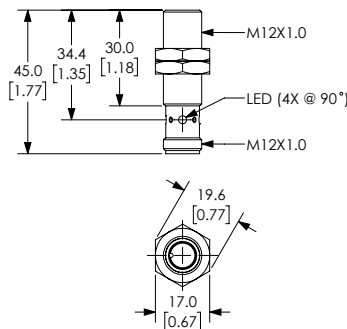


Figure 2

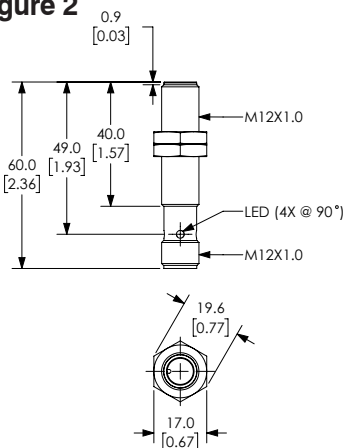
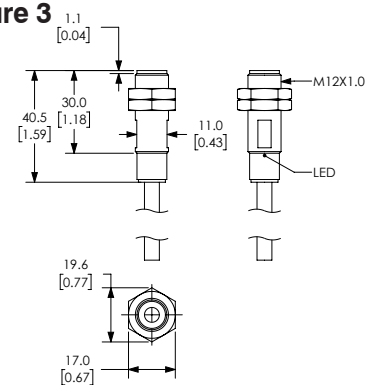


Figure 3



# WSM Series Weld-Field Immune Inductive Proximity Sensors

Specifications	M12 Models			
<b>Model</b>	WSM-AP-3H	WSM-AN-3H	WSM-A0-3E	WSM-A0-3A
<b>Mounting Type</b>	Shielded			
<b>Nominal Sensing Distance (mm)</b>	4mm (0.16 mm)			
<b>Operating Distance</b>	0 - 3.25 mm			
<b>Material Correction Factors</b>	See the <a href="#">Material Influence table</a>			
<b>Output Type</b>	NO			
<b>Operating Voltage</b>	10 to 30 VDC	10 to 36 VDC		
<b>No-load Supply Current</b>	<10 mA	<20 mA	NA	
<b>Operating (Load) Current</b>	100mA			
<b>Off-state Leakage Current</b>	NA		<0.6 mA	
<b>Voltage Drop</b>	< 2.5 V			
<b>Switching Frequency</b>	2Hz		75Hz	
<b>Differential Travel (% of Nominal Distance)</b>	3 - 15	1 - 20		
<b>Repeat Accuracy</b>	NA			
<b>Ripple</b>	NA			
<b>Time Delay Before Availability (tv)</b>	NA			
<b>Short Circuit Protection</b>	Yes	Pulsed	Yes	Pulsed
<b>Operating Temperature</b>	-40 — 85°C [-40 — 185°F]	0 - 85°C [32 — 185°F]	-25 - 70°C [-13 — 158°F]	
<b>Protection Degree (DIN 40 050)</b>	IP65 / IP66 / IP67 / IP68 / IP69K		IP67	
<b>LED Indicators</b>	Illuminated when energized			
<b>Housing Material</b>	Stainless steel 316L / 1.4404 with anti-spatter ceramic (Polytetrafluoroethylene [PTFE]) coating			
<b>Sensing Face Material</b>	active face: stainless steel 316L 1.4404 anti-spatter			
<b>Shock/Vibration</b>	See <a href="#">Proximity Sensor Terminology</a>			
<b>Weight</b>	0.28 kg	0.29 kg	0.0489 kg	0.137 kg
<b>Connection</b>	4-pin M12 quick disconnect		PUR cable/0.3 m; 2 x 0.5 mm <sup>2</sup> ; with 4-pin M12 quick disconnect	PUR cable/3m; 2 x 0.5 mm <sup>2</sup> ;
<b>Agency Approvals</b>	cULus E328811, CE			