

# WSM Series Weld Slag Resistant Inductive Proximity Sensors



## M12 (12mm)

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



WSM Series M12 Inductive Proximity Selection Chart									
Part Number	Price	Sensing Range	Mounting	Output State	Logic	Voltage	Connection	Wiring	Dimensions
<a href="#">WSM-AP-3H</a>	\$42.50	4mm [0.16 in]	Flush	N.O.	PNP	10 - 30 VDC	4-pin M12 quick-disconnect	Diagram 1	Figure 1
<a href="#">WSM-A0-3E</a>	\$60.00				PNP/NPN	10 - 36 VDC	4-pin M12 with 0.3 m cable	Diagram 2	Figure 3

## Wiring Diagrams

Diagram 1

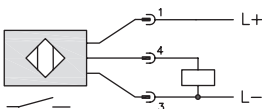


Diagram 2

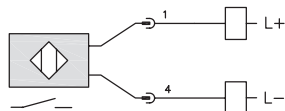
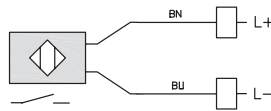


Diagram 3



## Connectors

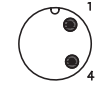
4-pin M12 NPN



4-pin M12 PNP



4-pin M12 0.3m



## Dimensions

mm [inches]

Figure 1

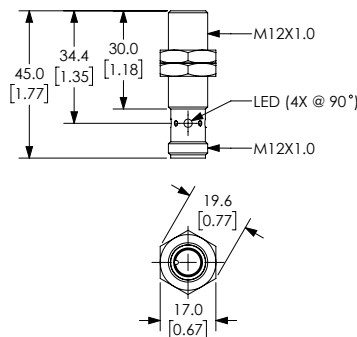


Figure 2

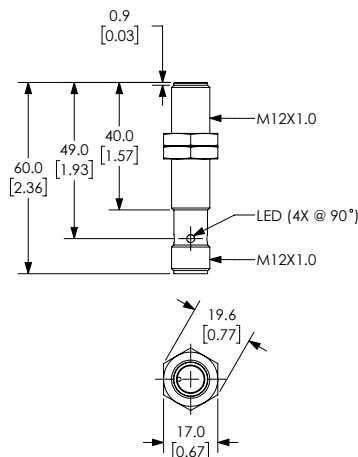
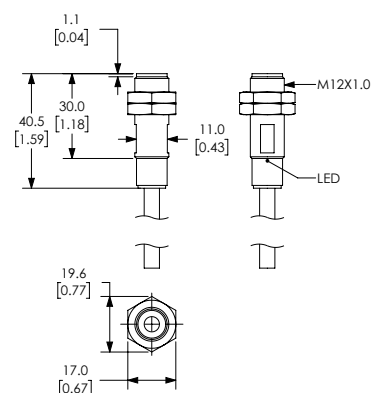


Figure 3



# WSM Series Weld Slag Resistant Inductive Proximity Sensors

WSM Series M12 Inductive Proximity Specifications		
Model	<u>WSM-AP-3H</u>	<u>WSM-A0-3E</u>
<b>Mounting Type</b>	Flush	
<b>Nominal Sensing Distance</b>	4mm [0.16 in]	
<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>	N.O.	
<b>Operating Voltage</b>	10 to 30 VDC	10 to 36 VDC
<b>No-load Supply Current</b>	< 10mA	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	Yes
<b>Operating Temperature</b>	-40 to 85°C [-40 to 185°F]	-25 to 70°C [-13 to 158°F]
<b>Protection Degree (DIN 40050)</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	0.0489 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
<b>Agency Approvals</b>	cULus E328811, CE	

To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page.