DW Series Analog Inductive Proximity



M12 (12mm) Metal - Analog Output

- · Voltage or current analog output
- Metal housing
- Axial cable or M12 quick-disconnect models
- IP67 rated
- Purchase cable separately (for quick-disconnect model)
- · Lifetime warranty



DW Series M12 Analog Inductive Proximity Selection Chart								
Part Number Price Sensing Range Mounting Output Connection Wiring Dimensi							Dimensions	
DW-AD-509-M12	\$105.00		Semi-flush	0-5 VDC / 1-5 mA	2m [6.5 ft] axial cable	Diagram 1	Figure 1	
DW-AS-509-M12	\$105.00	0-6 mm	Semi-flush	0-5 VDC / 1-5 mA	M12 [12mm] quick-disconnect	Diagram 1	Figure 2	
DW-AD-509-M12-390	\$105.00	[0.236 in]	Semi-flush	0-10 VDC / 4-20 mA	2m [6.5 ft] axial cable	Diagram 1	Figure 1	
DW-AS-509-M12-390	\$105.00		Semi-flush	0-10 VDC / 4-20 mA	M12 [12mm] quick-disconnect	Diagram 1	Figure 2	

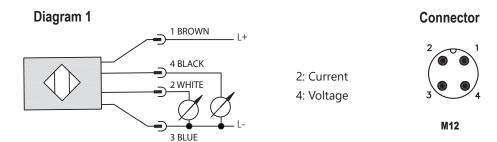
DW Series M12 Analog Inductive Proximity Specifications						
Specification	DW-Ax-509-M12	DW-Ax-509-M12-390				
Mounting Type	Semi	-flush				
Nominal Distance	0-6 mm [0.236 in]					
Operating Distance	ng Distance NA					
Material Correction Factors	See the Materia	l influence table				
Output Type	0-5 VDC / 1-5 mA	0-10 VDC / 4-20 mA				
Current Output Max. Load / Power Supply	1kΩ / 10VDC; 5 kΩ / 30VDC	0.5kΩ / 15VDC; 1 kΩ / 30VDC				
Voltage Output Min. Load	500Ω	1kΩ				
Operating Voltage	10-30 VDC	15-30 VDC				
No-load Supply Current	≤ 10mA	≤ 12mA				
Operating (Load) Current	≤ 10	DmA				
Off-state (Leakage) Current	N	A				
Voltage Drop	≤ 2	0 V				
Switching Frequency	N	A				
Differential Travel (% of Nominal Distance)	NA					
Repeat Accuracy	± 0.0	1 mm				
Ripple	≤ 2	0%				
Response Time	1r	ns				
Time Delay Before Availability (tv)	≤ 50	Oms				
Reverse Polarity Protection	Ye	*				
Short-Circuit Protection	Yes (switch auto-resets a	*				
Operating Temperature	-25 to +70°C	[-13 to 158°F]				
Protection Degree (DIN 40050)	IEC	IP67				
Indication/Switch Status	N	A				
Housing Material	Chrome-pl	ated brass				
Sensing Face Material	Polybutylene Ter	ephthalate (PBT)				
Shock/Vibration	IEC 609	947-5-2				
Tightening Torque	10 N•m [•				
Weight (cable/M12 connector)	95g [3.35 oz] <i>i</i>	/ 33g [1.16 oz]				
Connection	2m [6.5 f]) axial cable or	M12 [12mm] connector				
Agency Approvals	UL file E	239373				

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

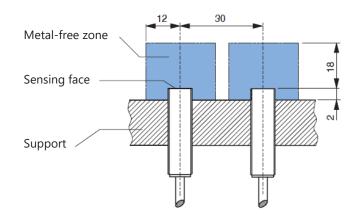
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DW Series Analog Inductive Proximity Sensors

Wiring Diagram



Installation



Dimensions

mm [inches]

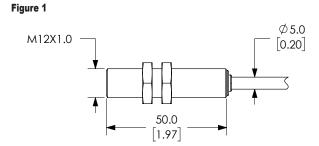
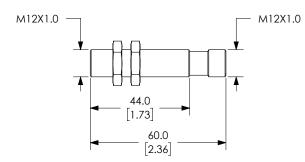


Figure 2



Accessories for 12mm Sensors

Axial Mounting Bracket

Mounting bracket, axial, available in zinc-plated steel or 316L stainless steel. For use with 12mm sensors. Has two mounting holes (use 3mm screws) and allows the rotation of an optical axis for right-angle adapter sensors. Hexagonal nuts not included.

Accessories for 12mm Sensors						
Part Number Price Description Drawing We.						
ST12A	\$2.00 Micro Detectors mounting bracket, axial, zinc For use with 12mm sensors.		<u>PDF</u>	0.03 [13.6]		
ST12A7W	\$7.25	Micro Detectors mounting bracket, axial, 316L stainless steel. For use with 12mm sensors.	<u>PDF</u>	0.03 [13.6]		



ST12A

Right-angle Mounting Bracket

Mounting bracket, right-angle, zinc-plated steel or 316L stainless steel. For use with 12mm sensors. Has two mounting holes (use 3mm screws) and allows the rotation of an optical axis for axial sensors. Hexagonal screws not included.

Accessories for 12mm Sensors						
Part Number Price Description		Drawing Link	Weight lb [g]			
ST12C	\$2.00	Micro Detectors mounting bracket, right-angle, zinc plated steel. For use with 12mm sensors.	PDF	0.03 [13.6]		
<u>ST12C7W</u>	\$7.25	Micro Detectors mounting bracket, right-angle, 316L stainless steel. For use with 12mm sensors.	<u>PDF</u>	0.03 [13.6]		



ST12C

Accessories for 12mm Sensors

Right-angle Mounting Brackets

Mounting bracket, right-angle, fixed insertion stop adjustment, plastic. For use with 12mm sensors. Available with or without fixed insertion stop.

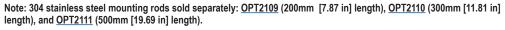
Accessories for 12mm Sensors							
Part Number	Drawing Link	Weight lb [g]					
<u>OPT2102</u>	\$8.00	Wenglor mounting bracket, right-angle, fixed insertion stop adjustment, plastic. For use with 12mm sensors.	<u>PDF</u>	0.05 [22.7]			
<u>OPT2103</u>	\$8.00	Wenglor mounting bracket, right-angle, plastic. For use with 12mm sensors.	<u>PDF</u>	0.05 [22.7]			



Right-angle Swivel Mounting Systems

Mounting bracket, right-angle swivel, 360 degree vertical and horizontal adjustment, 12mm rod mount. For use with 12mm sensors. Available in all stainless steel or with an aluminum head and stainless steel mounting plate.

	Accessories for 12mm Sensors							
Part Number	Price	Description	Mounting Head	Mounting Plate	Drawing Link	Weight Ib [g]		
<u>OPT2114</u>	\$11.50	Wenglor mounting bracket, right-angle swivel, 360 degree vertical and horizontal adjustment, aluminum, 12mm rod mount. For use with 12mm sensors.	Aluminum	Stainless steel	<u>PDF</u>	0.14 [63.5]		
<u>OPT2115</u>	\$21.00	Wenglor mounting bracket, right-angle swivel, 360 degree vertical and horizontal adjustment, 304 stainless steel, 12mm rod mount. For use with 12mm sensors.	304 Stainless steel	304 Stainless steel	<u>PDF</u>	0.27 [122.5]		





OPT2114, OPT2115

Mounting Rods and Brackets

Mounting Rods

304 Stainless steel rods for mounting swivel brackets <u>OPT2112</u> - <u>OPT2127</u> Available in three lengths: 200mm, 300mm, and 500mm. 12mm diameter.

M	Mounting Rods for OPT2112-2127 Swivel Mounting Brackets							
Part Number	Price	Description	Drawing Link	Weight lb (g)				
<u>OPT2109</u>	\$13.00	Wenglor mounting rod, 12mm diameter, 200mm length, 304 stainless steel.	PDF	0.41 [185.97]				
<u>OPT2110</u>	\$16.00	Wenglor mounting rod, 12mm diameter, 300mm length, 304 stainless steel.	PDF	0.60 [272.16]				
<u>OPT2111</u>	\$21.00	Wenglor mounting rod, 12mm diameter, 500mm length, 304 stainless steel.	<u>PDF</u>	0.98 [444.52]				



Right-angle Mounting Bracket

Mounting bracket, right-angle, nickel-plated brass. For use with 12mm mounting rods OPT2109, OPT2110 & OPT2111.

Right-angle Mounting Brackets for 12mm Sensors							
Part Number Price Description		Drawing Link	Weight Ib [g]				
<u>OPT2108</u>	\$16.00	Wenglor mounting bracket, right-angle, nickel-plated brass. For use with 12mm mounting rods OPT2109, OPT2110 & OPT2111.	<u>PDF</u>	0.07 [31.8]			



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