# **DW Series Analog Inductive Proximity Sensors**



#### M8 (8mm) Metal – Analog Output

- · Compact metal housing
- Axial cable or M8 quick-disconnect models
- IP67 rated
- Purchase cables separately (for quick-disconnect model)
- Lifetime warranty



DW Series M8 Analog Inductive Proximity Selection Chart								
Part Number	Part Number Price Sensing Range Mounting Output Connection Wiring Dimensions							
DW-AD-509-M8	\$150.00		Semi-flush	0-5 VDC	2m [6.5 ft] axial cable	Diagram 1	Figure 1	
DW-AS-509-M8-001	\$150.00	0-4 mm	Semi-flush	0-5 VDC	M8 [8mm] quick-disconnect	Diagram 1	Figure 2	
DW-AD-509-M8-390	\$150.00	[0-0.157 in]	Semi-flush	0-10 VDC	2m [6.5 ft] axial cable	Diagram 1	Figure 1	
DW-AS-509-M8-390	\$150.00		Semi-flush	0-10 VDC	M8 [8mm] quick-disconnect	Diagram 1	Figure 2	

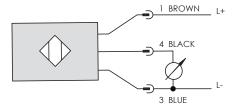
DW Series M8 Analog Inductive Proximity Specifications						
Specification	DW-Ax-509-M8	DW-Ax-509-M8-390				
Mounting Type	Semi-	flush				
Nominal Distance	0-4 mm [0-0.157 in]					
Operating Distance	NA					
Material Correction Factors	See the Material	influence table				
Output Type	0-5 VDC	0-10 VDC				
Operating Voltage	10-30 VDC	15-30 VDC				
No-load Supply Current	≤ 10	lmA				
Operating (Load) Current	≤ 10	lmA				
Off-state (Leakage) Current	N.	A				
Voltage Drop	≤ 2.	0 V				
Switching Frequency	N.	A				
Differential Travel (% of Nominal Distance)	NA					
Repeat Accuracy	±0.01 mm					
Ripple	≤ 20%					
Response Time	0.6 ms					
Time Delay Before Availability (tv)	≤ 50ms					
Reverse Polarity Protection	Ye	es				
Short-Circuit Protection	Yes (switch auto-resets at	fter overload is removed)				
Operating Temperature	-25 to +70°C [-13 to 158°F]					
Protection Degree (DIN 40050)	IEC IP67					
Indication/Switch Status	N.	A				
Housing Material	Chrome-pla	ated brass				
Sensing Face Material	Polybutylene Tere	ephthalate (PBT)				
Shock/Vibration	IEC 609	047-5-2				
Tightening Torque	4 N•m (2	.95 lb•ft)				
Weight (cable/M8 connector)	50g [1.76 oz] / 20g [0.71 oz]					
Connection						
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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### **Wiring Diagram**

#### Diagram 1

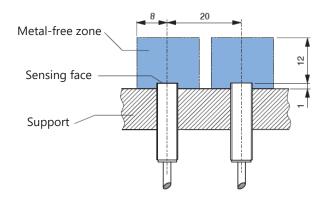


#### Connector



M8

#### Installation



#### **Dimensions**

mm [inches]

Figure 1

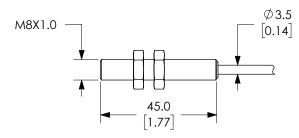
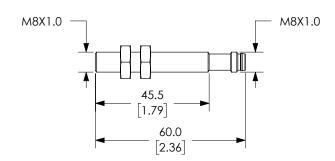


Figure 2



## **Accessories for 8mm Sensors**

#### **Axial Mounting Bracket**

Mounting bracket, axial, zinc-plated steel. For use with 8mm sensors. Has two mounting holes (use 3 mm screws) and allows the rotation of an optical axis for axial sensors. Hexagonal nuts not included.

Accessories for 8mm Sensors							
Part Number	Price	Description	Drawing Link	Weight [lb]			
ST08A	\$2.00	Micro Detectors mounting bracket, axial, zinc plated steel. For use with 8mm sensors.	PDF	0.04			



ST08A

#### **Right-angle Mounting Bracket**

Mounting bracket, right-angle, zinc-plated steel. For use with 8mm sensors. Has two mounting holes (use 3mm screws) and allows the rotation of an optical axis for right-beam-angle-adapter sensors. Hexagonal nuts not included.

Accessories for 8mm Sensors							
Part Number Price Description Dr		Drawing Link	Weight [lb]				
<u>ST08C</u>	\$2.00	Micro Detectors mounting bracket, right-angle, zinc plated steel. For use with 8mm sensors.	PDF	0.04			



ST08C

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## **Accessories for 8mm Sensors**

### **Right-angle Mounting Bracket**

Mounting bracket, right-angle, plastic. For use with 8mm sensors.

Accessories for 8mm Sensors						
Part Number Price Description Di		Drawing Link	Weight [lb]			
<u>OPT2101</u>	\$8.00	Wenglor mounting bracket, right-angle, plastic. For use with 8mm sensors.	<u>PDF</u>	0.02		



**OPT2101** 

#### **Right-angle Swivel Mounting Systems**

Mounting bracket, right-angle swivel, 360 degree vertical and horizontal adjustment. For use with 8mm sensors. Available in all stainless steel or with an aluminum head and stainless steel mounting plate.

	Accessories for 8mm Sensors								
Part Number	Price	Description	Mounting Head	Mounting Plate	Drawing Link	Weight [lb]			
<u>OPT2112</u>	\$11.50	Wenglor mounting bracket, right-angle swivel, 360 degree vertical and horizontal adjustment, aluminum, 12mm rod mount. For use with 8mm sensors.	Aluminum	304 Stainless Steel	<u>PDF</u>	0.14			
<u>OPT2113</u>	\$21.00	Wenglor mounting bracket, right-angle swivel, 360 degree vertical and horizontal adjustment, 304 stainless steel, 12mm rod mount. For use with 8mm sensors.	304 Stainless Steel	304 Stainless Steel	<u>PDF</u>	0.26			



OPT2112 & OPT2113

Note: 304 Stainless steel mounting rods sold separately: <u>OPT2109</u> (200mm length), <u>OPT2110</u> (300mm length), and <u>OPT2111</u> (500mm length).

## **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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