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	*Price*	*Sensing Range*	*Mounting*	*Output*	*Connection*	*Wiring*	*Dimensions*
DW-AD-509-M8	$150.00	0-4 mm [0-0.157 in]	Semi-flush	0-5 VDC	2m [6.5 ft] axial cable	Diagram 1	Figure 1
DW-AS-509-M8-001	$150.00		Semi-flush	0-5 VDC	M8 [8mm] quick-disconnect	Diagram 1	Figure 2
DW-AD-509-M8-390	$150.00		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

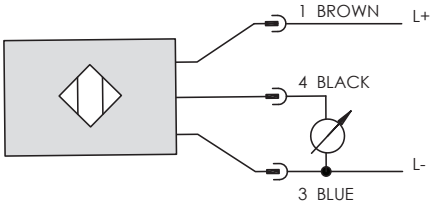
DW Series M8 Analog Inductive Proximity Specifications		
Specification	*DW-Ax-509-M8*	*DW-Ax-509-M8-390*
Mounting Type	Semi-flush	
Nominal Distance	0-4 mm [0-0.157 in]	
Operating Distance	NA	
Material Correction Factors	See the Material influence table	
Output Type	0-5 VDC	0-10 VDC
Operating Voltage	10-30 VDC	15-30 VDC
No-load Supply Current	≤ 10mA	
Operating (Load) Current	≤ 10mA	
Off-state (Leakage) Current	NA	
Voltage Drop	≤ 2.0 V	
Switching Frequency	NA	
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	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	NA	
Housing Material	Chrome-plated brass	
Sensing Face Material	Polybutylene Terephthalate (PBT)	
Shock/Vibration	IEC 60947-5-2	
Tightening Torque	4 N•m (2.95 lb•ft)	
Weight (cable/M8 connector)	50g [1.76 oz] / 20g [0.71 oz]	
Connection	2m [6.5 ft] axial cable or 3-pin M8 (8mm) connector	
Agency Approvals	UL file E239373	

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

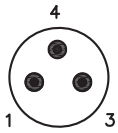
DW Series Analog Inductive Proximity Sensors

Wiring Diagram

Diagram 1

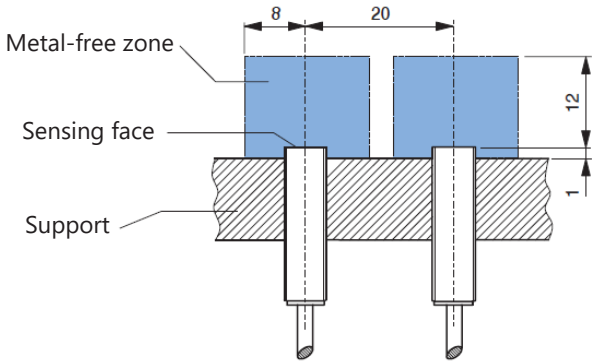


Connector



M8

Installation



Dimensions

mm [inches]

Figure 1

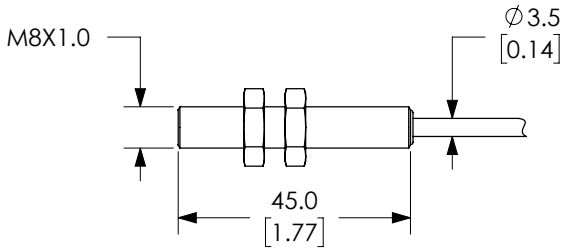
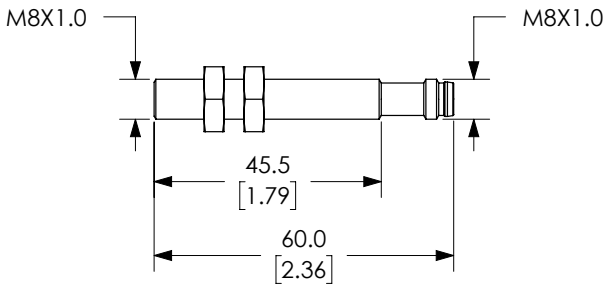


Figure 2



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***	***Drawing Link***	***Weight [lb]***
ST08C	$2.00	Micro Detectors mounting bracket, right-angle, zinc plated steel. For use with 8mm sensors.	PDF	0.04

ST08C

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	Drawing Link	Weight [lb]
OPT2101	$8.00	Wenglor mounting bracket, right-angle, plastic. For use with 8mm sensors.	PDF	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]
OPT2112	$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	PDF	0.14
OPT2113	$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	PDF	0.26

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

OPT2112 & OPT2113

Mounting Rods and Brackets

Mounting Rods

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

Mounting Rods for OPT2112-2127 Swivel Mounting Brackets				
Part Number	*Price*	*Description*	*Drawing Link*	*Weight lb (g)*
OPT2109	$13.00	Wenglor mounting rod, 12mm diameter, 200mm length, 304 stainless steel.	PDF	0.41 [185.97]
OPT2110	$16.00	Wenglor mounting rod, 12mm diameter, 300mm length, 304 stainless steel.	PDF	0.60 [272.16]
OPT2111	$21.00	Wenglor mounting rod, 12mm diameter, 500mm length, 304 stainless steel.	PDF	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 lb [g]*
OPT2108	$16.00	Wenglor mounting bracket, right-angle, nickel plated brass. For use with 12mm mounting rods OPT2109, OPT2110 & OPT2111.	PDF	0.07 [31.8]