

DW Series Analog Inductive Proximity Sensors



8x8mm Rectangular Metal – Analog Output

- Compact 8mm x 8mm [0.31 in x 0.31 in] metal housing
- Axial cable or M8 quick-disconnect models
- IP67 rated
- Purchase cables separately (for quick-disconnect model)
- Lifetime warranty



DW Series C8 Analog Inductive Proximity Selection Chart

Part Number	Price	Sensing Range	Mounting	Output	Connection	Wiring	Dimensions
DW-AD-509-C8-390	\$169.00	0-4 mm [0-0.157 in]	Semi-flush	0-10 VDC	2m [6.5 ft] axial cable	Diagram 1	1
DW-AS-509-C8-390	\$169.00	0-4 mm [0-0.157 in]	Semi-flush	0-10 VDC	M8 [8mm] quick-disconnect	Diagram 1	2

DW Series C8 Analog Inductive Proximity Specifications

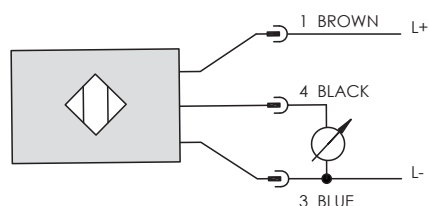
Specification	DW-AD-509-C8-390	DW-AS-509-C8-390
Mounting Type	Semi-flush	Semi-flush
Nominal Distance	0-4 mm [0-0.157 in]	0-4 mm [0-0.157 in]
Operating Distance	NA	NA
Material Correction Factors	See the Material influence table	See the Material influence table
Output Type	0-10 VDC	0-10 VDC
Operating Voltage	15-30 VDC	15-30 VDC
No-load Supply Current	≤ 10mA	≤ 10mA
Operating (Load) Current	≤ 10mA	≤ 10mA
Off-state (Leakage) Current	NA	NA
Voltage Drop	≤ 2.0 V	≤ 2.0 V
Switching Frequency	NA	NA
Differential Travel (% of Nominal Distance)	NA	NA
Repeat Accuracy	± 0.01 mm	± 0.01 mm
Ripple	≤ 20%	≤ 20%
Response Time	0.6 ms	0.6 ms
Time Delay Before Availability (tv)	≤ 50ms	≤ 50ms
Reverse Polarity Protection	Yes	Yes
Short-Circuit Protection	Yes (switch auto-resets after overload is removed)	Yes (switch auto-resets after overload is removed)
Operating Temperature	-25 to +70°C [-13 to 158°F]	-25 to +70°C [-13 to 158°F]
Protection Degree (DIN 40050)	IEC IP67	IEC IP67
Indication/Switch Status	NA	NA
Housing Material	Chrome-plated brass	Chrome-plated brass
Sensing Face Material	Polybutylene Terephthalate [PBT]	Polybutylene Terephthalate [PBT]
Shock/Vibration	IEC 60947-5-2	IEC 60947-5-2
Tightening Torque	4 N•m [2.95 lb•ft]	4 N•m [2.95 lb•ft]
Weight (cable/M8 connector)	50g [1.76 oz] / 20g [0.71 oz]	50g [1.76 oz] / 20g [0.71 oz]
Connection	2m [6.5 ft] axial cable	M8 [8mm] connector
Agency Approvals	UL file E239373	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.

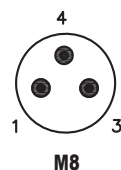
DW Series Analog Inductive Proximity Sensors

Wiring Diagram

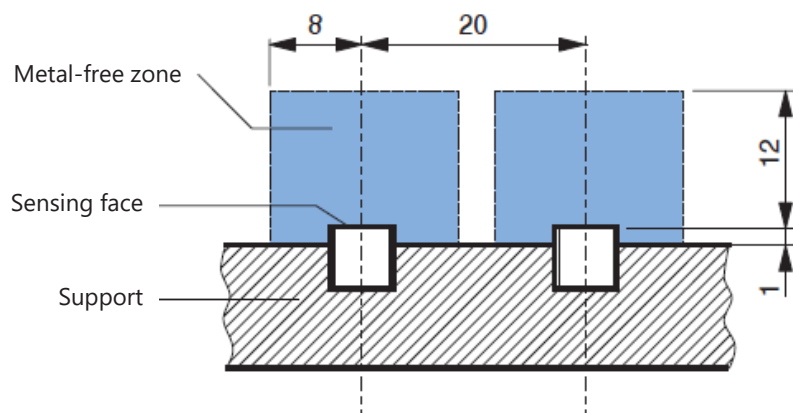
Diagram 1



Connector



Installation



Dimensions

mm [inches]

Figure 1

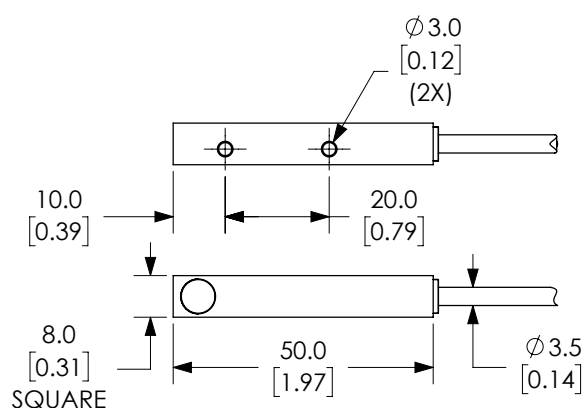


Figure 2

