CONTRINEX

DW Series 8mm Quadruple Sensing Proximity Sensors

M8 (8mm) chrome plated nickel silver – DC

- 8mm threaded Quadruple Distance proximity sensor
- Complete overload protection
- IP67 rated
- Chrome plated nickel silver construction
- LED status indicator
- Lifetime warranty

NEED CABLES?

DW Series M8 Quadruple Distance Inductive Proximity Selection Chart									
Part Number	*Price*	*Size*	*Sensing Range*	*Mounting*	*Output State*	*Logic*	*Connection*	*Wiring*	*Dimensions*
DW-AD-521-M8	$106.00			Semi-flush	N.O.	NPN	2m [6.5 ft] axial cable	Diagram 1	Figure 1
DW-AD-523-M8	$106.00			Semi-flush	N.O.	PNP	2m [6.5 ft] axial cable	Diagram 2	Figure 1
DW-AS-521-M8	$106.00			Semi-flush	N.O.	NPN	M12 quick-disconnect	Diagram 3	Figure 2
DW-AS-521-M8-001	$106.00			Semi-flush	N.O.	NPN	M8 quick-disconnect	Diagram 3	Figure 3
DW-AS-523-M8	$106.00	M8	4mm [0.158 in]	Semi-flush	N.O.	PNP	M12 quick-disconnect	Diagram 4	Figure 2
DW-AS-523-M8-001	$106.00			Semi-flush	N.O.	PNP	M8 quick-disconnect	Diagram 4	Figure 3
DW-AD-524-M8	$106.00			Semi-flush	N.C.	PNP	2m [6.5 ft] axial cable	Diagram 2	Figure 1
DW-AS-522-M8-001	$106.00			Semi-flush	N.C.	NPN	M8 quick-disconnect	Diagram 3	Figure 3
DW-AS-524-M8	$106.00			Semi-flush	N.C.	PNP	M12 quick-disconnect	Diagram 4	Figure 2
DW-AS-524-M8-001	$106.00			Semi-flush	N.C.	PNP	M8 quick-disconnect	Diagram 3	Figure 3

Wiring Diagrams

Diagram 1
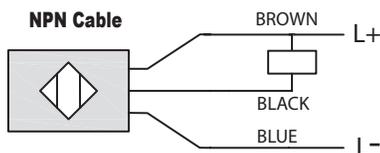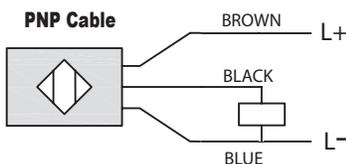
NPN Cable

BROWN — L+
BLACK
BLUE — L-

Diagram 2

PNP Cable

BROWN — L+
BLACK
BLUE — L-

Connectors

M8 connector

4
1   3

M12 connector

2   1
3   4

Diagram 3

NPN Connector

1 BROWN — L+
(2/4)
3 BLUE — L−

2 N.C. WHITE / 4 N.O. BLACK (M12)

Diagram 4

PNP Connector

1 BROWN — L+
(2/4)
3 BLUE — L−

2 N.C. WHITE / 4 N.O. BLACK (M12)
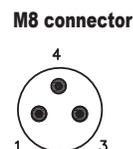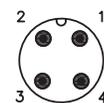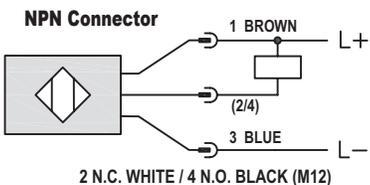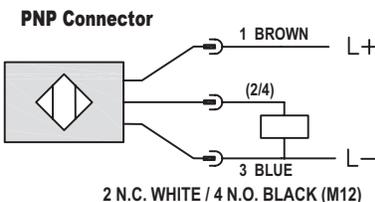
DW Series 8mm Quadruple Sensing Proximity Sensors

DW Series M8 Quadruple Distance Inductive Proximity Specifications	
Specifications	*DW-Ax-52x-M8*
Mounting Type	Semi-flush
Nominal Sensing Distance	4mm [0.158 in]
Operating Distance	–
Material Correction Factors	See the Material influence table
Output Type	NPN or PNP, N.O. or N.C.
Operating Voltage	10 to 30 VDC
No-load Supply Current	≤ 10mA
Operating (Load) Current	≤ 200mA
Off-state (Leakage) Current	≤ 0.1 mA
Voltage Drop	≤ 2 V
Switching Frequency	≤ 500Hz
Differential Travel (% of Nominal Distance)	≤ 15%
Repeat Accuracy	0.2 mm
Ripple	≤ 20%
Time Delay Before Availability (tv)	50ms
Reverse Polarity Protection	Yes
Short-Circuit Protection	Yes
Operating Temperature	-25 to 70°C [-13 to 158°F]
Protection Degree (DIN 40050)	IP67
Indication/Switch Status	Yellow LED [LED on continuously - secured operating zone]
Housing Material	Chrome plated nickel silver
Sensing Face Material	Polybutylene terephthalate
Shock/Vibration	IEC 60947-5-2/7.4
Tightening Torque	7 N•m [61.96 lb•in]
Weight	45g [1.59 oz] with cable, 20g [0.71 oz] with M12 connector, 17g [0.60 oz] with M8 connector
Connection	2m [6.5 ft] cable (PVC [polyvinyl chloride] 3 x 0.14mm² ≈ 26 AWG) with M12 connection or M8 connection
Minimum Mounting Distance (center to center)	24.0 mm [0.94 in]
IO-Link	–
Agency Approvals	CE, cULus 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 8mm Quadruple Sensing Proximity Sensors

Dimensions

mm [inches]

Figure 1

M8X1.0

45.0
[1.77]

LED

0.5
[0.02]

∅ 3.5
[0.14]

13.0
[0.51]

15.0
[0.59]

Figure 2

M8X1.0

66.0
[2.60]

LED 4X @ 90°

20.0
[0.79]

M12X1.0

13.0
[0.51]

15.0
[0.59]

Figure 3

M8X1.0

60.0
[2.36]

45.5
[1.79]

LED 4X @ 90°

8.5
[0.33]

M8X1.0

13.0
[0.51]

15.0
[0.59]
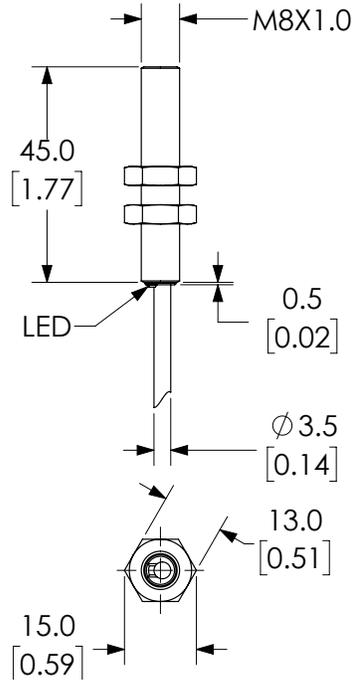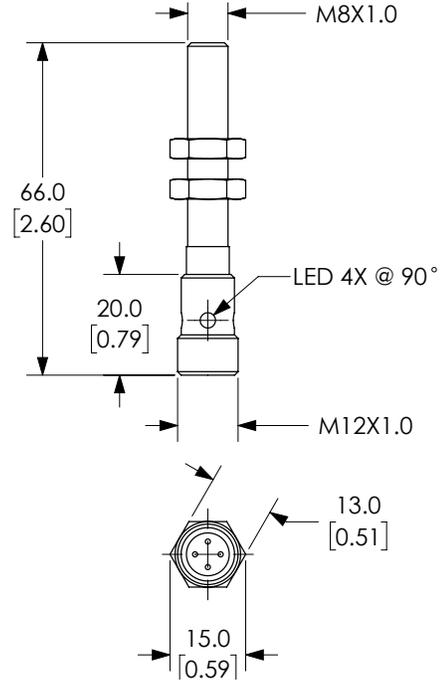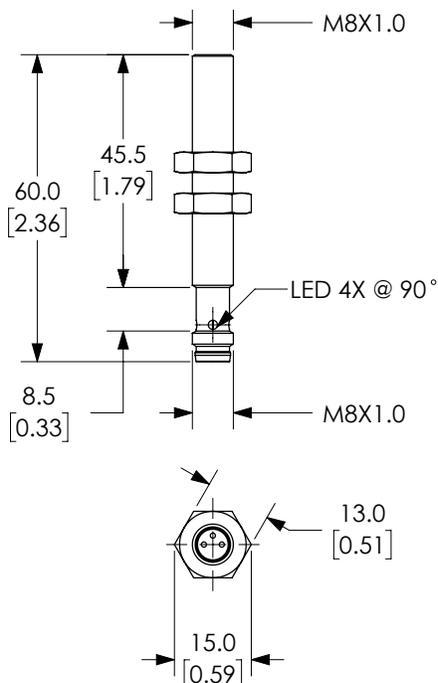
See our website www.AutomationDirect.com for complete engineering drawings.

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.

OPT2101

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

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.

OPT2112 & OPT2113

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).

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]