

CONTRINEX DW Series 12mm Triple Sensing **Proximity Sensors**



M12 chrome plated brass – DC

- 12mm threaded triple distance proximity sensor
- 6mm and 10mm sensing
- Complete overload protection
- IP67 rated

- Two M12 lock nuts included
- Chrome plated brass construction
- LED status indicator
- · Lifetime warranty



DW Series M12 Triple Distance Inductive Proximity Selection Chart									
Part Number	Price	Size	Sensing Range	Mounting	Output State	Logic	Connection	Wiring	Dimensions
Triple Distance Semi-flush									
DW-AD-501-M12	\$65.00				N.O.	NPN	2m [6.5 ft] axial cable	Diagram 1	Figure 1
DW-AD-503-M12	\$65.00		6mm [0.236 in]		N.O.	PNP	2m [6.5 ft] axial cable	Diagram 2	Figure 1
DW-AS-501-M12	\$65.00	M40		Comi fluch	N.O.	NPN	M12 quick-disconnect	Diagram 3	Figure 3
DW-AS-503-M12	\$65.00	M12		Semi-flush	N.O.	PNP	M12 quick-disconnect	Diagram 4	Figure 3
DW-AS-502-M12	\$65.00				N.C.	NPN	M12 quick-disconnect	Diagram 3	Figure 3
DW-AS-504-M12	\$65.00				N.C.	PNP	M12 quick-disconnect	Diagram 4	Figure 3
Triple Distance Non-flush									
DW-AD-511-M12	\$69.00			Non-flush	N.O.	NPN	2m [6.5 ft] axial cable	Diagram 1	Figure 2
<u>DW-AD-513-M12</u>	\$69.00				N.O.	PNP	2m [6.5 ft] axial cable	Diagram 2	Figure 2
DW-AS-511-M12	\$69.00				N.O.	NPN	M12 quick-disconnect	Diagram 3	Figure 4
DW-AS-513-M12	\$69.00	M12	10mm [0.393 in]		N.O.	PNP	M12 quick-disconnect	Diagram 4	Figure 4
<u>DW-AD-514-M12</u>	\$69.00				N.C.	PNP	2m [6.5 ft] axial cable	Diagram 2	Figure 2
<u>DW-AS-512-M12</u>	\$69.00				N.C.	NPN	M12 quick-disconnect	Diagram 3	Figure 4
DW-AS-514-M12	\$69.00				N.C.	PNP	M12 quick-disconnect	Diagram 4	Figure 4

Wiring Diagrams

Diagram 1

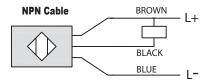
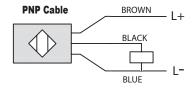


Diagram 2



Connectors

M12 connector



Diagram 3

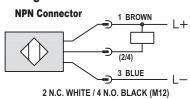
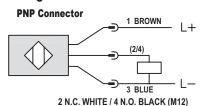


Diagram 4



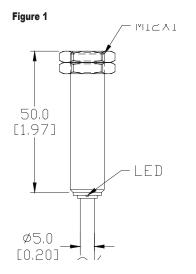
DW Series 12mm Triple Sensing Proximity Sensors

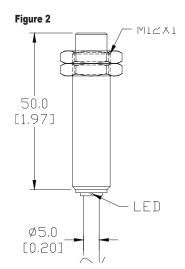
DW Series M	12 Triple Distance Inductive Proxir	nity Specifications
Specifications	DW-Ax-50x-M12	DW-Ax-51x-M12
Mounting Type	Semi-flush	Non-flush
Nominal Sensing Distance	6mm	10mm
Operating Distance	-	
Material Correction Factors	See the Material	influence table
Output Type	NPN or PNP,	N.O. or N.C.
Operating Voltage	10 to 30) VDC
No-load Supply Current	≤ 10	mA
Operating (Load) Current	≤ 200)mA
Off-state (Leakage) Current	≤ 0.1	mA
Voltage Drop	≤ 2	V
Switching Frequency	≤ 800Hz	≤ 400Hz
Differential Travel (% of Nominal Distance)	≤1()%
Repeat Accuracy	0.15 mm	0.30 mm
Ripple	≤ 20	0%
Time Delay Before Availability (tv)	≤ 50	ms
Reverse Polarity Protection	Ye	S
Short-Circuit Protection	Ye	s
Operating Temperature	-25 to 70°C [-	13 to 158°F]
Protection Degree (DIN 40050)	IP6	57
Indication/Switch Status	Yellow	LED
Housing Material	Chrome-pla	ated brass
Sensing Face Material	PPS [Polypher	ylene sulfide]
Shock/Vibration	IEC 6094	7-5-2/7.4
Tightening Torque	_	
Weight	92g [3.25 oz], 26g [0.92 oz]	90g [3.17 oz], 25g [0.88 oz]
Connection	2m [6.5 ft] cable,	M12 connection
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.

Dimensions

mm [inches]





See our website www.AutomationDirect.com for complete engineering drawings.

DW Series 12mm Triple Sensing Proximity Sensors

Dimensions

mm [inches]

Figure 3

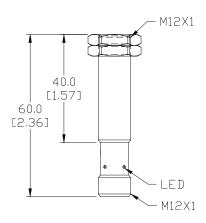
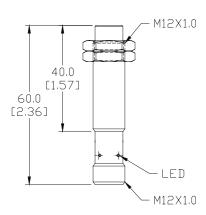


Figure 4



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 Link	Weight lb [g]			
ST12A	\$2.00	Micro Detectors mounting bracket, axial, zinc plated steel. For use with 12mm sensors.	<u>PDF</u>	0.03 [13.6]			
<u>ST12A7W</u>	\$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.		0.03 [13.6]			
ST12C7W	\$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.

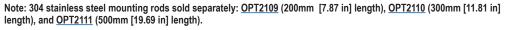
Accessories for 12mm Sensors							
Part Number Price Description		Drawing Link	Weight lb [g]				
<u>OPT2102</u>	\$8.00	Wenglor mounting bracket, right-angle, fixed insertion stop adjustment, plastic. For use with 12mm sensors.	<u>PDF</u>	0.05 [22.7]			
<u>OPT2103</u>	\$8.00	Wenglor mounting bracket,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

Mounting Rods for OPT2112-2127 Swivel Mounting Brackets								
Part Number	Number Price Description							
<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.	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 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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