

DW Series 8mm Triple Sensing Proximity Sensors

Miniature M8 (8mm) chrome plate nickel silver or chrome plated brass – DC



- Twenty-four models available
- 8mm threaded Triple Distance proximity sensor
- Complete overload protection
- IP67 rated
- Two M8 lock nuts included
- Chrome plate nickel silver or chrome plated brass construction
- LED status indicator
- Lifetime warranty



DW Series M8 Triple Distance Inductive Prox Selection Chart											
Part Number	Price	Size	Sensing Range	Housing	Output State	Logic	Connection	Wiring	Dimensions		
Triple Distance Shielded											
DW-AD-501-M8	\$52.00	M8	3mm (0.118 in)	Shielded	NO	NPN	2m (6.5') axial cable	Diagram 1	Figure 1		
DW-AD-503-M8	\$52.00					PNP		Diagram 2	Figure 1		
DW-AS-501-M8-001	\$52.00					NPN	M8 quick disconnect	Diagram 3	Figure 2		
DW-AS-503-M8-001	\$52.00					PNP		Diagram 4	Figure 2		
DW-AS-501-M8	\$52.00					NPN	M12 quick disconnect	Diagram 3	Figure 3		
DW-AS-503-M8	\$52.00					PNP		Diagram 4	Figure 3		
DW-AD-502-M8	\$52.00				NC			NPN	2m (6.5') axial cable	Diagram 1	Figure 1
DW-AD-504-M8	\$52.00							PNP		Diagram 2	Figure 1
DW-AS-502-M8-001	\$52.00							NPN	M8 quick disconnect	Diagram 3	Figure 2
DW-AS-504-M8-001	\$52.00							PNP		Diagram 4	Figure 2
DW-AS-502-M8	\$52.00							NPN	M12 quick disconnect	Diagram 3	Figure 3
DW-AS-504-M8	\$52.00							PNP		Diagram 4	Figure 3
Triple Distance Unshielded											
DW-AD-511-M8	\$56.00	M8	6mm (0.236 in)	Unshielded	NO	NPN	2m (6.5') axial cable	Diagram 1	Figure 1		
DW-AD-513-M8	\$56.00					PNP		Diagram 2	Figure 1		
DW-AS-511-M8-001	\$56.00					NPN	M8 quick disconnect	Diagram 3	Figure 2		
DW-AS-513-M8-001	\$56.00					PNP		Diagram 4	Figure 2		
DW-AS-511-M8	\$56.00					NPN	M12 quick disconnect	Diagram 3	Figure 3		
DW-AS-513-M8	\$56.00					PNP		Diagram 4	Figure 3		
DW-AD-512-M8	\$56.00				NC			NPN	2m (6.5') axial cable	Diagram 1	Figure 1
DW-AD-514-M8	\$56.00							PNP		Diagram 2	Figure 1
DW-AS-512-M8-001	\$56.00							NPN	M8 quick disconnect	Diagram 3	Figure 2
DW-AS-514-M8-001	\$56.00							PNP		Diagram 4	Figure 2
DW-AS-512-M8	\$56.00							NPN	M12 quick disconnect	Diagram 3	Figure 3
DW-AS-514-M8	\$56.00							PNP		Diagram 4	Figure 3

Note: 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 Triple Sensing Proximity Sensors

DW Series M8 Specifications		
Sensor	DW-Ax-50x-M8	DW-Ax-51x-M8
Mounting Type	shielded	unshielded
Nominal Sensing Distance	3mm	6mm
Operating Distance	-	
Material Correction Factors	See the Material influence table	
Output Type	NPN or PNP, NO or NC	
Operating Voltage	10 to 30 VDC	
No-load Supply Current	≤ 10mA	
Operating (Load) Current	≤ 100mA	
Off-state (Leakage) Current	≤ 0.1 mA	
Voltage Drop	≤ 2 V	
Switching Frequency	≤ 1kHz	≤ 500Hz
Differential Travel (% of Nominal Distance)	≤ 15%	
Repeat Accuracy	0.15 mm	0.30 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	
Housing Material	Nickel silver	Chrome plated brass
Sensing Face Material	PPS (Polyphenylene sulfide)	
Shock/Vibration	IEC 60947-5-2/7.4	
Tightening Torque	-	
Weight	45g (1.59 oz), 20g (0.71 oz), 17g (0.60 oz)	44g (1.55 oz), 19g (0.67 oz), 16g (0.56 oz)
Connection	2m cable, M12 connection, M8 connection	
IO-Link	-	
Agency Approvals	CE, cULus E239373	

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

Wiring diagrams

Diagram 1

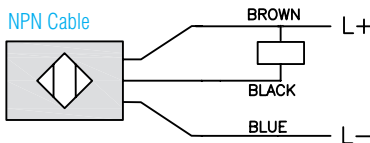


Diagram 2

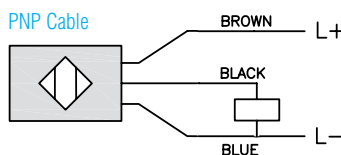


Diagram 3

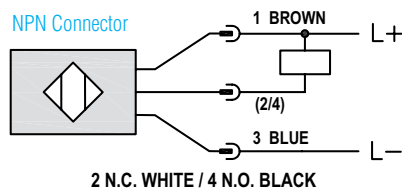
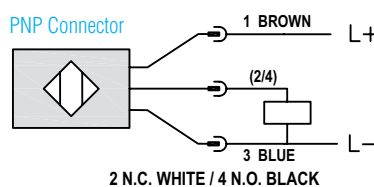
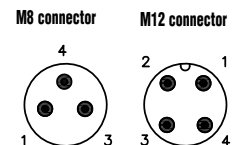


Diagram 4



Connectors



DW Series 8mm Triple Sensing Proximity Sensors

Dimensions

mm [inches]

Figure 1

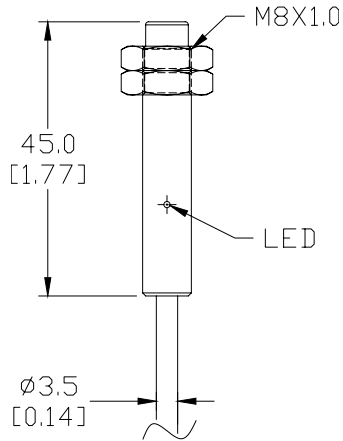


Figure 2

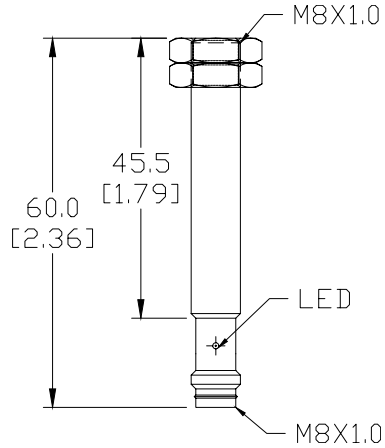
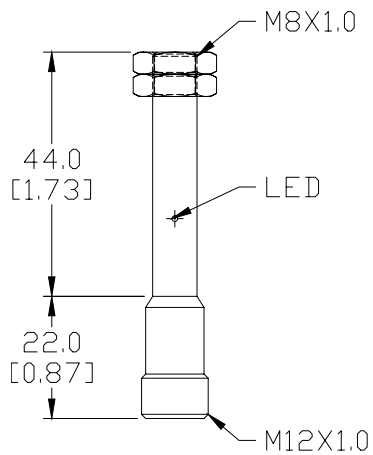


Figure 3



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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.

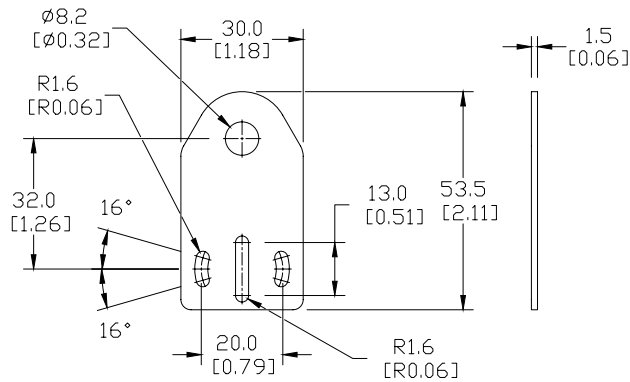


ST08A

Accessories for 8mm Sensors			
Part Number	Price	Description	Weight [lb]
ST08A	\$1.00	Mounting bracket, axial, zinc-plated steel. For use with 8mm sensors. 1/pk.	0.04

Dimensions

mm [inches]



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-adaptor sensors. Hexagonal nuts not included.

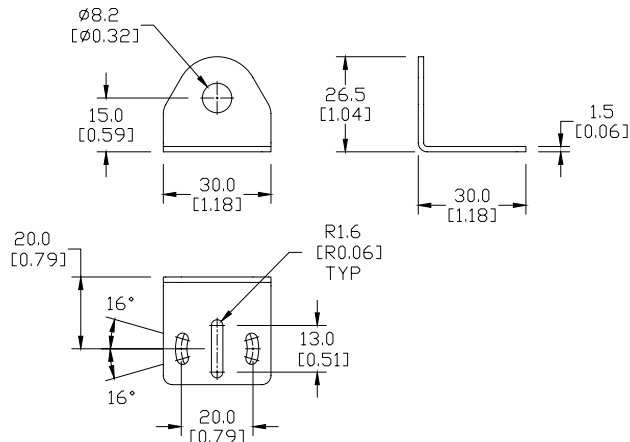


ST08C

Accessories for 8mm Sensors			
Part Number	Price	Description	Weight [lb]
ST08C	\$1.00	Mounting bracket, right angle, zinc-plated steel for 8mm sensors. 1/pk.	0.04

Dimensions

mm [inches]



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

Accessories for 8mm Sensors

Right-angle Mounting Bracket

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

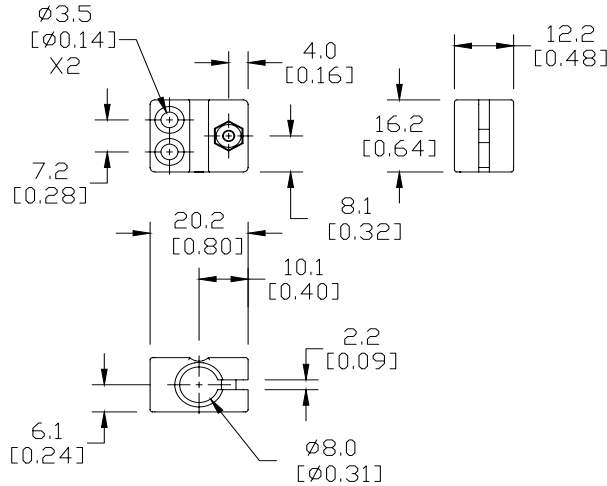
Accessories for 8mm Sensors			
Part Number	Price	Description	Weight [lb]
OPT2101	\$6.00	Mounting bracket, right-angle, plastic. For use with 8mm sensors.	0.02



OPT2101

Dimensions

mm [inches]



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.

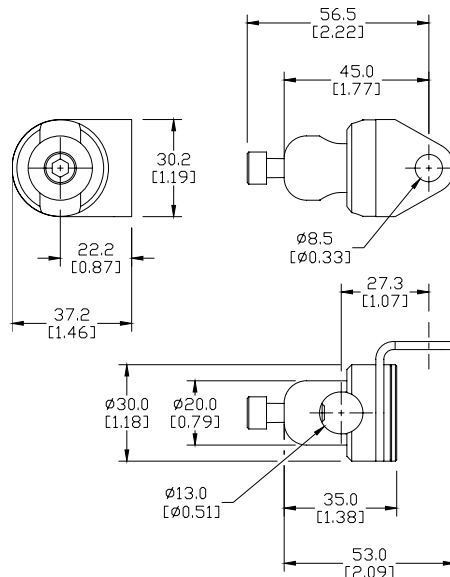
Accessories for 8mm Sensors					
Part Number	Price	Description	Mounting Head	Mounting Plate	Weight [lb]
OPT2112	\$9.00	Mounting bracket, right-angle swivel, 360 vertical and horizontal adjustment, aluminum, 12mm rod mount. For use with 8mm sensors.	Aluminum	304 Stainless Steel	0.14
OPT2113	\$16.00	Mounting bracket, right-angle swivel, 360 vertical and horizontal adjustment, 304 stainless steel, 12mm rod mount. For use with 8mm sensors.	304 Stainless Steel	304 Stainless Steel	0.26



OPT2112 & OPT2113

Dimensions

mm [inches]



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

Mounting Rods

Mounting Rods

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

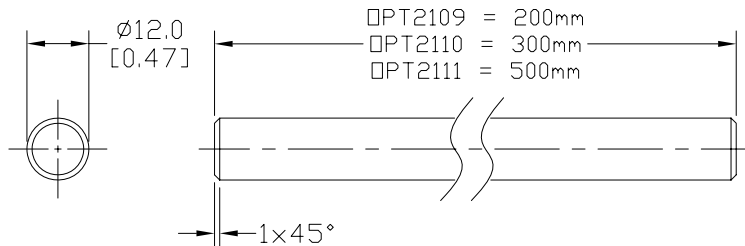
Mounting Rods for OPT2112-2127 Swivel Mounting Brackets			
Part Number	Price	Description	Weight [lb]
OPT2109	\$10.00	Mounting rod, 12mm diameter, 200mm length, 304 stainless steel.	0.41
OPT2110	\$12.00	Mounting rod, 12mm diameter, 300mm length, 304 stainless steel.	0.60
OPT2111	\$16.00	Mounting rod, 12mm diameter, 500mm length, 304 stainless steel.	0.98



OPT2109, OPT2110, OPT2111

Dimensions

mm [inches]



Right-angle Mounting Bracket

Mounting bracket, right-angle, nickel-plated brass. For use with 12mm mounting rods OPT2109, OPT2110 & OPT2111.

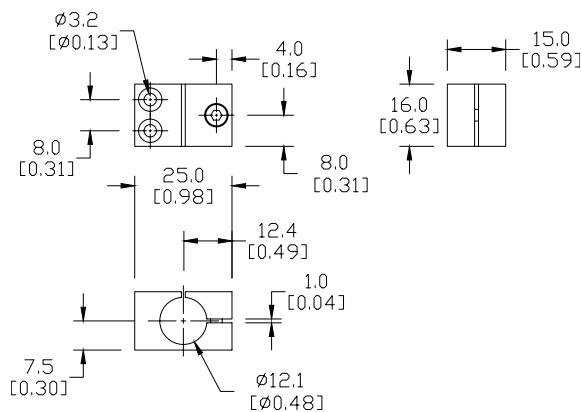
Accessories for 12mm Sensors			
Part Number	Price	Description	Weight [lb]
OPT2108	\$12.00	Mounting bracket, right-angle, nickel-plated brass. For use with 12mm mounting rods OPT2109, OPT2110 & OPT2111.	0.07



OPT2108

Dimensions

mm [inches]



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