

AE Series Analog Inductive Proximity Sensors



M8 (8 mm) metal – analog output

- 2 models available
- Compact metal housing
- Axial cable or M8 quick-disconnect models
- IP67 rated
- Purchase cables separately (for quick-disconnect model)
- Lifetime warranty

AE Series M8 Analog Inductive Prox Selection Chart

Part Number	Price	Sensing Range	Housing	Output	Connection	Wiring	Dimensions
AE9-10-1A	\$129.00	0 to 4 mm (0-0.157 in)	Shielded	0-10VDC	2m (6.5') axial cable	Diagram 1	Figure 1
AE9-10-1F	\$129.00				M8 (8 mm) connector	Diagram 1	Figure 2

Specifications

	AE9-10-1*
Mounting Type	Shielded
Nominal Distance	0 to 4 mm (0-0.157 in)
Operating Distance	NA
Material Correction Factors	See the Material influence table
Output Type	0-10 VDC
Operating Voltage	15-30 VDC
No-load Supply Current	≤10 mA
Operating (Load) Current	1 kΩ
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 mc
Time Delay Before Availability (tv)	≤50 ms
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	See Proximity Sensor Terminology
Tightening Torque	4 Nm (2.95 lb.-ft.)
Weight (cable/M8 connector)	50 g (1.76 oz.) / 20 g (0.71 oz.)
Connection	2 m (6.5') axial cable or M8 (8 mm) connector
Agency Approvals	UL file E328811

Dimensions

mm [inches]

Figure 1

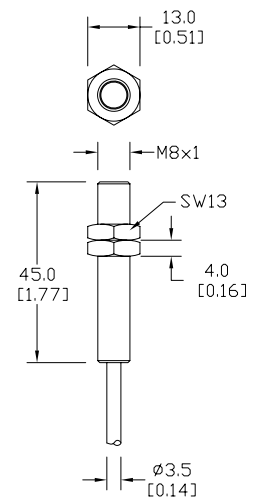
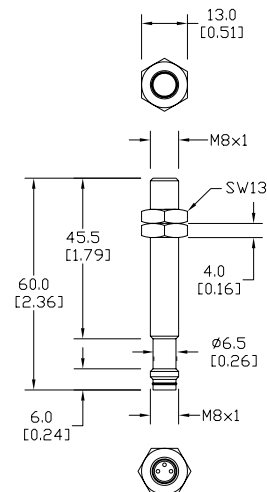
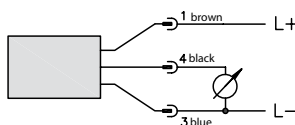


Figure 2

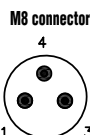


Wiring diagram

Diagram 1



Connector



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.

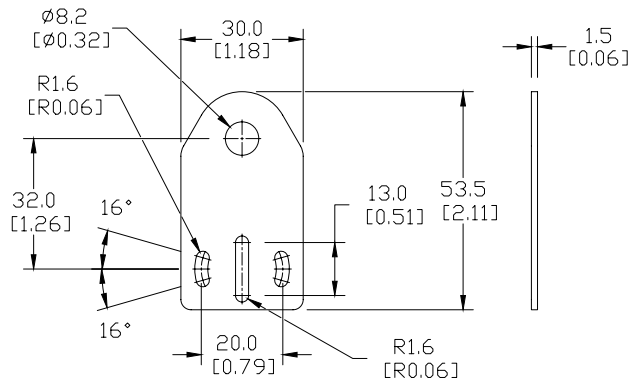


ST08A

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.

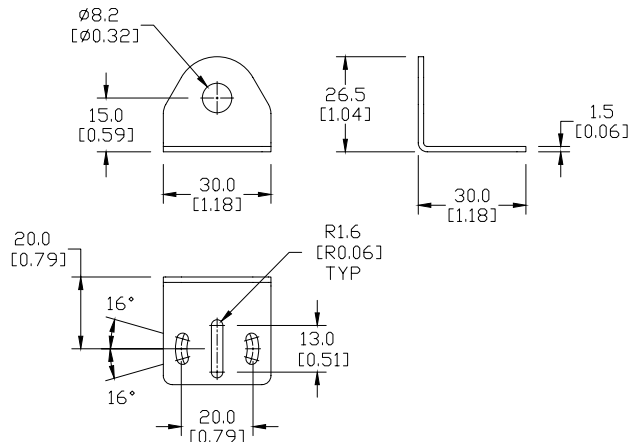


ST08C

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.

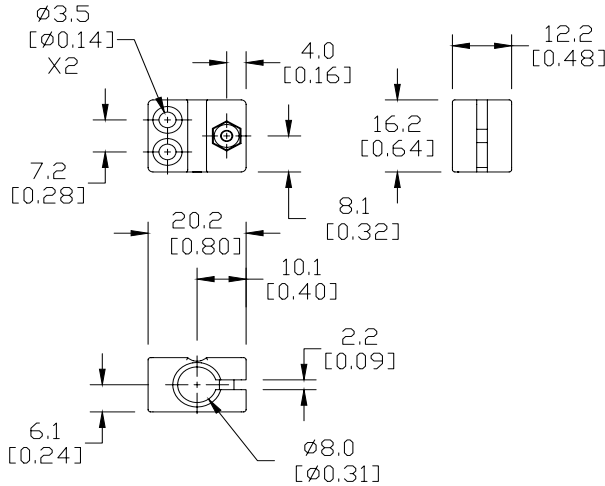
Accessories for 8mm Sensors			
Part Number	Price	Description	Weight [lb]
OPT2101	\$6.00	Mounting bracket, right-angle, plastic. For use with 8mm sensors.	0.02



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

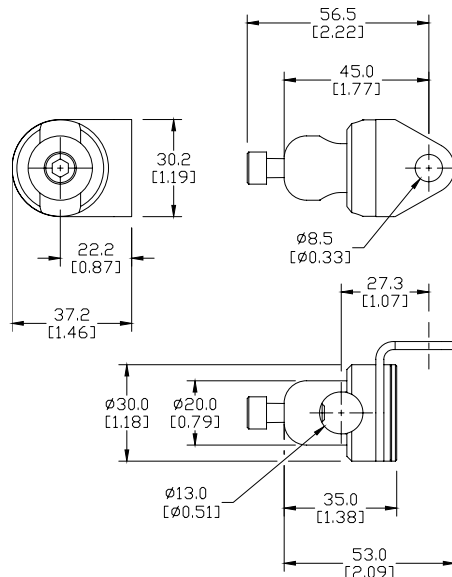
Note: 304 Stainless steel mounting rods sold separately: OPT2109 (200mm length), OPT2110 (300mm length), and OPT2111 (500mm length).



OPT2112 & OPT2113

Dimensions

mm [inches]



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Mounting Rods

Mounting Rods

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

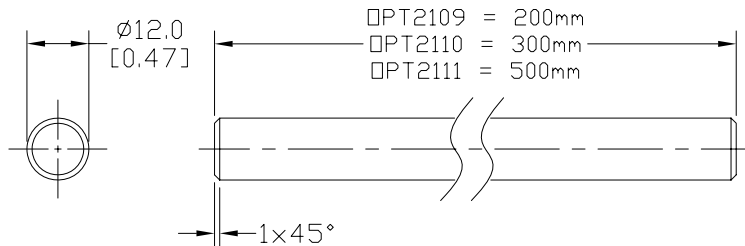
Mounting Rods for OPT2112-2127 Swivel Mounting Brackets			
Part Number	Price	Description	Weight [lb]
OPT2109	\$10.00	Mounting rod, 12mm diameter, 200mm length, 304 stainless steel.	0.41
OPT2110	\$12.00	Mounting rod, 12mm diameter, 300mm length, 304 stainless steel.	0.60
OPT2111	\$16.00	Mounting rod,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

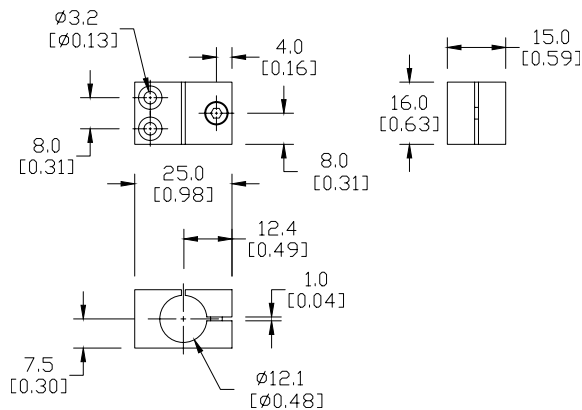
Accessories for 12mm Sensors			
Part Number	Price	Description	Weight [lb]
OPT2108	\$12.00	Mounting bracket, right-angle, nickel-plated brass. For use with 12mm mounting rods OPT2109, OPT2110 & OPT2111.	0.07



OPT2108

Dimensions

mm [inches]



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