

DW Series Analog Inductive Proximity Sensors



M30 (30 mm) Metal – Analog Output

- Voltage or current analog output
- 2 models available
- Metal housing
- M12 quick-disconnect model
- IP67 rated
- Purchase cable separately (for quick-disconnect model)
- Lifetime warranty



DW Series M30 Analog Inductive Prox Selection Chart

Part Number	Price	Sensing Range	Mounting	Output	Connection	Wiring	Dimensions
DW-AS-509-M30-120	\$107.00	0-20 mm [0-0.787 in]	Semi-flush	0-5 VDC or 1-5 mA	M12 (12mm) quick-disconnect	1	1
DW-AS-509-M30-320	\$107.00	0-20 mm [0-0.787 in]	Semi-flush	0-10 VDC or 4-20 mA	M12 (12mm) quick-disconnect	1	1

Specifications

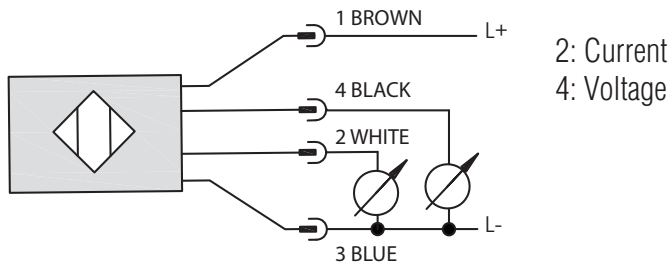
	DW-Ax-509-M30-120	DW-Ax-509-M30-320
Mounting Type	Semi-flush	Semi-flush
Nominal Distance	0-20 mm (0-0.79 in)	0-20 mm (0-0.79 in)
Operating Distance	NA	NA
Material Correction Factors	See the Material influence table	See the Material influence table
Output Type	0-5 VDC or 1-5 mA	0-10 VDC or 4-20 mA
Current Output Max. Load / Power Supply	1 k Ω / 10VDC; 5 k Ω / 30VDC	0.5 k Ω / 15VDC; 1 k Ω / 30VDC
Voltage Output Min. Load	500 Ω	1k Ω
Operating Voltage	10 to 30 VDC	15 to 30 VDC
No-load Supply Current	\leq 10mA	\leq 12mA
Operating (Load) Current	\leq 10mA	\leq 10mA
Off-state (Leakage) Current	NA	NA
Voltage Drop	\leq 2.0 V	\leq 2.0 V
Switching Frequency	NA	NA
Differential Travel (% of Nominal Distance)	NA	NA
Repeat Accuracy	\pm 0.05 mm	\pm 0.05 mm
Ripple	\leq 20%	\leq 20%
Response Time	5ms	5ms
Time Delay Before Availability (tv)	\leq 50ms	\leq 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	60 N•m (44 lb•ft)	60 N•m (44 lb•ft)
Weight (M12 connector)	135g (4.76 oz)	135g (4.76 oz)
Connection	M12 (12mm) connector	M12 (12mm) connector
Agency Approvals	UL file E239373	UL file E239373

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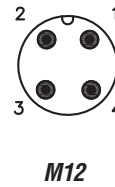
M30 (30 mm) Metal – Analog Output

Wiring diagram

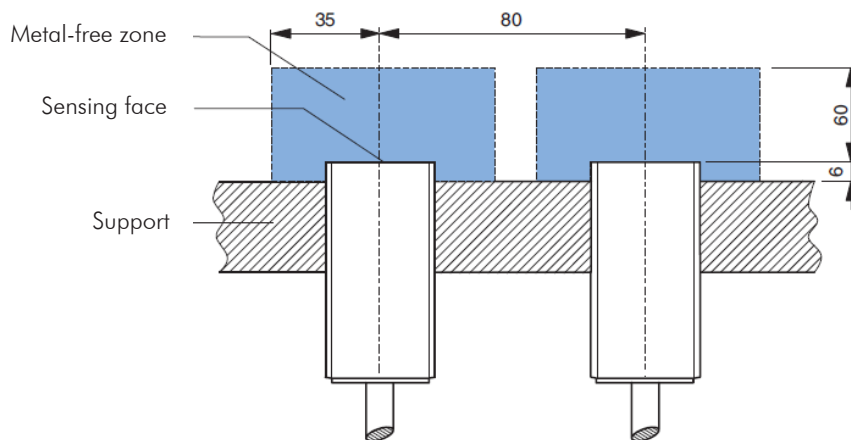
Diagram 1



Connector



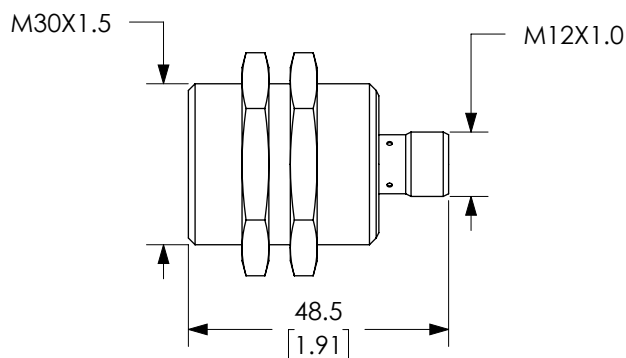
Installation



Dimensions

mm [inches]

Figure 1



Accessories for 30mm Sensors

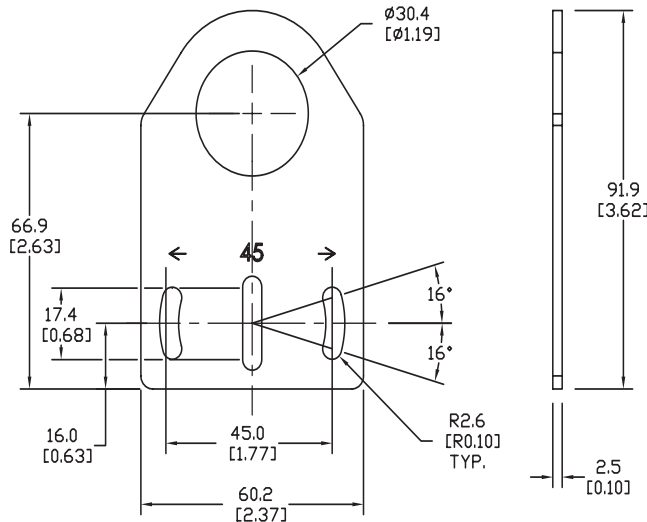
Axial Mounting Bracket

Mounting bracket, axial, zinc-plated steel. For use with 30mm sensors. Has two mounting holes (use 5mm screws) and allows the rotation of an optical axis for right-beam-angle-adapter sensors. Hexagonal nuts not included.

Accessories for 30mm Sensors			
Part Number	Price	Description	Weight lb (g)
ST30A	\$2.25	Mounting bracket, axial, zinc plated steel. For use with 30mm sensors.	0.18 (81.7 g)

Dimensions

mm [inches]



ST30A

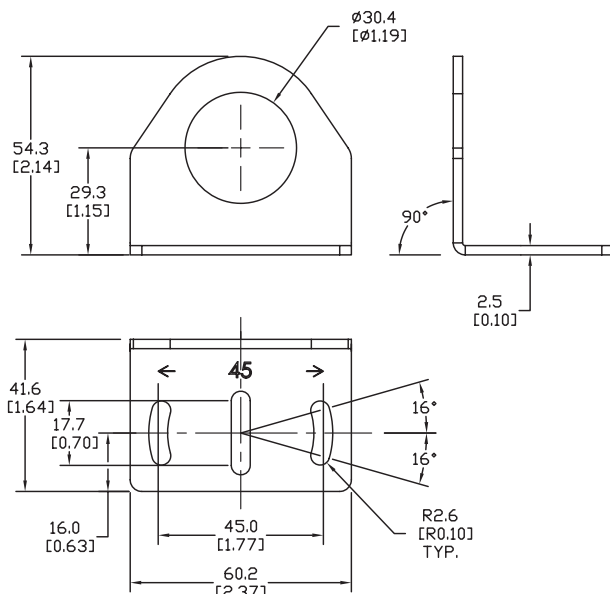
Right-angle Mounting Bracket

Mounting bracket, right-angle, zinc-plated steel. For use with 30mm sensors. Has two mounting holes (use 5mm screws) and allows the rotation of an optical axis for axial sensors. Hexagonal nuts not included.

Accessories for 30mm Sensors			
Part Number	Price	Description	Weight lb (g)
ST30C	\$2.25	Mounting bracket, right-angle, zinc plated steel. For use with 30mm sensors.	0.18 (81.7 g)

Dimensions

mm [inches]



ST30C

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for complete engineering drawings

Accessories for 30mm Sensors

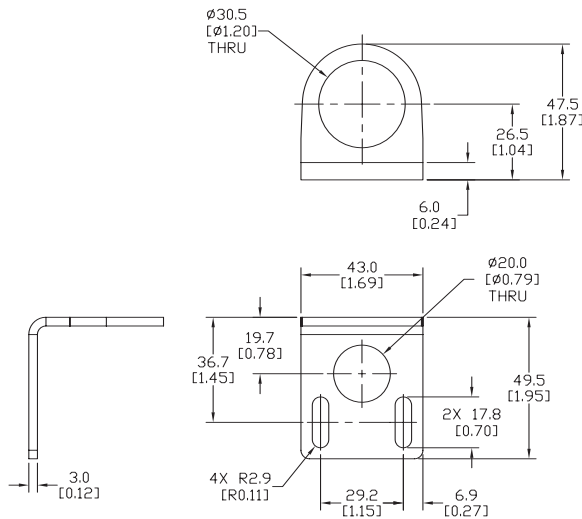
Right-angle Mounting Bracket

Mounting bracket, right-angle, 304 stainless steel. For use with 30mm sensors.

Accessories for FW Series Sensors			
Part Number	Price	Description	Weight lb (g)
ST30C6W	\$3.50	Mounting bracket, right-angle, 304 stainless steel. For use with 30mm sensors.	0.15 (68.0)

Dimensions

mm [inches]



ST30C6W

Right-angle Swivel Mounting Systems

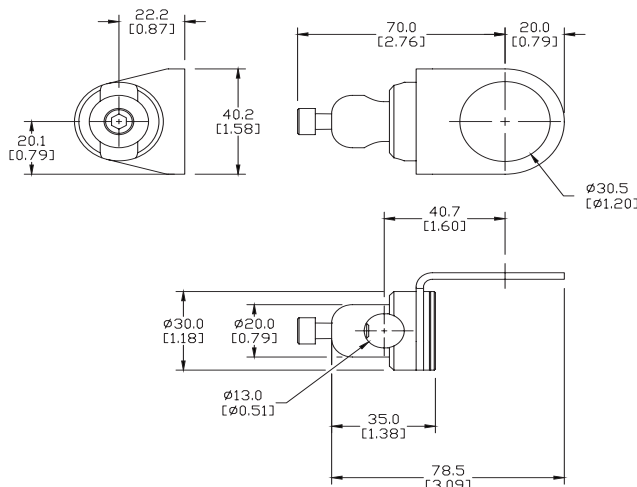
Mounting bracket, right-angle swivel, 360 degree vertical and horizontal adjustment, 12mm rod mount. For use with 30mm sensors. Available in all 304 stainless steel or with an aluminum head with a 304 stainless steel mounting plate.

Accessories for 30mm Sensors					
Part Number	Price	Description	Mounting Head	Mounting Plate	Weight lb (g)
OPT2118	\$9.75	Wenglor mounting bracket, right-angle swivel, 360 degree vertical and horizontal adjustment, aluminum, 12mm rod mount. For use with 30mm sensors.	Aluminum	304 Stainless steel	0.18
OPT2119	\$17.50	Wenglor mounting bracket, right-angle swivel, 360 degree vertical and horizontal adjustment, 304 stainless steel, 12mm rod mount. For use with 30mm sensors.	304 Stainless Steel	304 Stainless steel	0.30

Note: 304 Stainless steel mounting rods sold separately: OPT2109 (200mm [7.87 in] length), OPT2110 (300mm [11.81 in] length), and OPT2111 (500mm [19.69 in] length).

Dimensions

mm [inches]



OPT2118, OPT2119

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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.

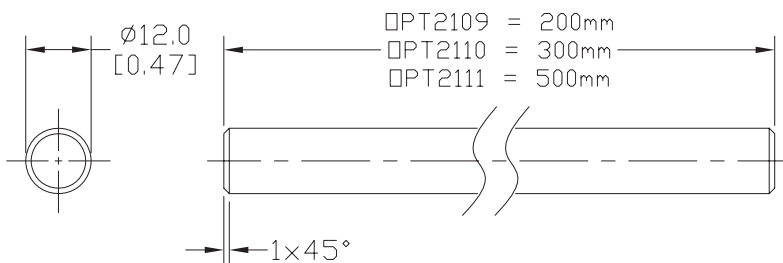
Mounting Rods for OPT2112-2127 Swivel Mounting Brackets			
Part Number	Price	Description	Weight lb (g)
OPT2109	\$11.00	Wenglor mounting rod, 12mm diameter, 200mm length, 304 stainless steel.	0.41 (185.97)
OPT2110	\$13.50	Wenglor mounting rod, 12mm diameter, 300mm length, 304 stainless steel.	0.60 (272.16)
OPT2111	\$17.50	Wenglor mounting rod, 12mm diameter, 500mm length, 304 stainless steel.	0.98 (444.52)



OPT2109, OPT2110, OPT2111

Dimensions

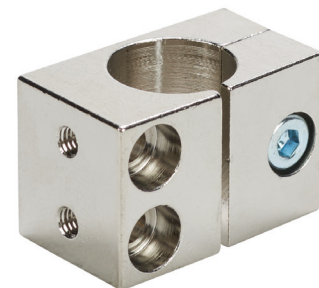
mm [inches]



Right-angle Mounting Bracket

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

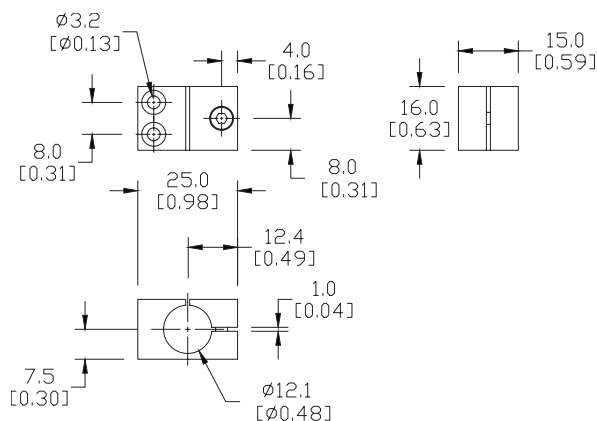
Accessories for 12mm Sensors			
Part Number	Price	Description	Weight lb (g)
OPT2108	\$13.50	Wenglor mounting bracket, right-angle, nickel plated brass. For use with 12mm mounting rods OPT2109, OPT2110 & OPT2111.	0.07 (31.8)



OPT2108

Dimensions

mm [inches]



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