DW Series Analog Inductive Proximity Sensors

M18 (18mm) Metal – Analog Output



- Voltage or current analog output
- · Metal housing
- Axial cable or M12 quick-disconnect model
- Purchase cable separately (for quick-disconnect model)
- Lifetime warranty



DW Series M18 Analog Inductive Proximity Selection Chart									
Part Number	Part Number Price Sensing Range Mounting Output Connection Wiring D								
DW-AD-509-M18-120	\$110.00	0-10 mm [0-0.393 in]	Semi-flush	0-5 VDC / 1-5 mA	2m [6.5 ft] axial cable	Diagram 1	Figure 1		
DW-AS-509-M18-120	\$110.00	0-10 mm [0-0.393 in]	Semi-flush	0-5 VDC / 1-5 mA	M12 [12mm] quick-disconnect	Diagram 1	Figure 2		
DW-AD-509-M18-320	\$110.00	0-10 mm [0-0.393 in]	Semi-flush	0-10 VDC / 4-20 mA	2m [6.5 ft] axial cable	Diagram 1	Figure 1		
DW-AS-509-M18-320	\$110.00	0-10 mm [0-0.393 in]	Semi-flush	0-10 VDC / 4-20 mA	M12 [12mm] quick-disconnect	Diagram 1	Figure 2		

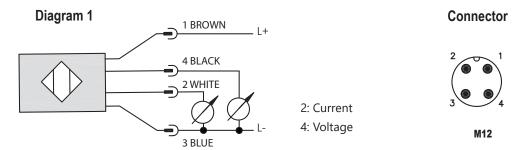
Reverse Polarity ProtectionYesShort-Circuit ProtectionYes (switch auto-resets after overload is removed)Operating Temperature-25 to +70°C [-13 to 158°F]Protection Degree (DIN 40050)IEC IP67Indication/Switch StatusNAHousing MaterialChrome-plated brassSensing Face MaterialPolybutylene Terephthalate [PBT]Shock/VibrationIEC 60947-5-2Tightening Torque30 N·m (22 lb·ft)Weight (cable/M12 connector)110g [3.88 oz] / 50g [1.76 oz]Connection2m [6.5 ft] axial cable or M12 [12mm] connector	DW Series M1	DW Series M18 Analog Inductive Proximity Specifications						
Nominal Distance 0-10 mm [0-0.393 in] Operating Distance NA Material Correction Factors See the Material influence table Output Type 0-5 VDC or 1-5 mA 0-10 VDC or 4-20mA Current Output Max. Load / Power Supply 1kΩ 10VDC; 5kΩ / 30VDC 0.5kΩ / 15VDC; 1 kΩ / 30VDC Voltage Output Min. Load 500Ω 1kΩ Operating Voltage 10-30 VDC 15-30 VDC No-load Supply Current ≤ 10mA ≤ 12mA Operating (Load) Current NA Off-state (Leakage) Current NA Voltage Drop ≤ 2.0 V Switching Frequency NA Differential Travel (% of Nominal Distance) NA Repeat Accuracy ± 0.02 mm Ripple ≤ 20% Response Time 2 ms Time Delay Before Availability (tv) ≤ 50ms Input Voltage Transient Protection Yes (switch auto-resist after overload is removed) Operating Temperature </th <th>Specification</th> <th>DW-Ax-509-M18-120</th> <th>DW-Ax-509-M18-320</th>	Specification	DW-Ax-509-M18-120	DW-Ax-509-M18-320					
Operating Distance NA Material Correction Factors See the Material influence table Output Type 0.5 VDC or 1.5 mA 0.10 VDC or 4.20mA Current Output Max. Load / Power Supply 1kΩ 100VDC; 5kΩ / 30VDC 0.5kΩ / 15VDC; 1kΩ / 30VDC Voltage Output Min. Load 5000 1kΩ Operating Voltage 10-30 VDC 15-30 VDC No-load Supply Current ≤ 10mA ≤ 12mA Operating (Load) Current NA Operating (Load) Current Off-state (Leakage) Current NA NA Voltage Drop ≤ 2.0 V Switching Frequency NA Switching Frequency NA NA Differential Travel (% of Nominal Distance) NA NA Repeat Accuracy ± 0.02 mm ≤ 20% Response Time 2ms 1mp (Voltage Transient Protection Up to 30VDC Reverse Polarity Protection Yes Short-Circuit 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) Indidication/Swit	Mounting Type	Semi-flu	ush					
Material Correction Factors See the Material influence table Output Type 0-5 VDC or 1-5 mA 0-10 VDC or 4-20mA Current Output Max. Load / Power Supply 1kΩ / 10VDC; SkΩ / 30VDC 0.5kΩ / 15VDC; 1 kΩ / 30VDC Voltage Output Min. Load 5000Ω 1kΩ Operating Voltage 10-30 VDC 15-30 VDC No-load Supply Current ≤ 10mA ≤ 12mA Operating (Load) Current NA Off-state (Leakage) Current NA Voltage Drop ≤ 2.0 V Switching Frequency NA Switching Frequency NA NA Switching Frequency NA NA Proper Accuracy ± 0.02 mm NA Repeat Accuracy ± 0.02 mm Scomm Response Time 2ms Scomm <th>Nominal Distance</th> <th>0-10 mm [0-0</th> <th>0.393 in]</th>	Nominal Distance	0-10 mm [0-0	0.393 in]					
Output Type 0.5 VDC or 1-5 mA 0-10 VDC or 4-20mA Current Output Max. Load / Power Supply 1kΩ / 10VDC; 5kΩ / 30VDC 0.5kΩ / 15VDC; 1 kΩ / 30VDC Voltage Output Min. Load 500Ω 1kΩ Operating Voltage 10-30 VDC 15-30 VDC No-load Supply Current ≤ 10mA ≤ 12mA Operating (Load) Current NA NA Off-state (Leakage) Current NA NA Voltage Drop ≤ 20 V NA Switching Frequency NA NA Differential Travel (% of Nominal Distance) NA NA Repeat Accuracy ± 0.02 mm Response Time 2ms Ripple ≤ 20% Response Time 2ms Time Delay Before Availability (tv) ≤ 50ms Input Voltage Transient Protection Up to 30VDC 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 NA NA	Operating Distance	NA						
Current Output Max. Load / Power Supply 1kΩ / 10VDC; skΩ / 30VDC 0.5kΩ / 15VDC; 1kΩ / 30VDC Voltage Output Min. Load 500Ω 1kΩ Operating Voltage 10-30 VDC 15-30 VDC No-load Supply Current ≤ 10mA ≤ 12mA Operating (Load) Current NA NA Off-state (Leakage) Current NA NA Voltage Drop ≤ 2.0 V Switching Frequency NA NA Differential Travel (% of Nominal Distance) NA NA Repeat Accuracy ± 0.02 mm Response Time 2ms Time Delay Before Availability (tv) ≤ 50ms Input Voltage Transient Protection Up to 30VDC Reverse Polarity Protection Yes Short-Circuit Protection Yes (switch auto-resets after overload is removed) Operating Temperature -25 to +70°C [-13 to 188°F] Protection Degree (DIN 40050) IEC (P67 Indication/Switch Status NA NA Housing Material Chrome-plated brass Sensing Face Material Polybutylene Temphthalate (PBT) Shock/Vibration IEC 60947-5-2 <t< th=""><th>Material Correction Factors</th><th>See the Material in</th><th>nfluence table</th></t<>	Material Correction Factors	See the Material in	nfluence table					
Voltage Output Min. Load 500Ω 1kΩ Operating Voltage 10-30 VDC 15-30 VDC No-load Supply Current ≤ 10mA ≤ 12mA Operating (Load) Current NA Off-state (Leakage) Current NA Voltage Drop ≤ 2.0 V Switching Frequency NA Differential Travel (% of Nominal Distance) NA Repeat Accuracy ± 0.02 mm Ripple ≤ 20% Response Time 2ms Time Delay Before Availability (tv) ≤ 50ms Input Voltage Transient 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 IEC 60947-5-2 Tightening Torque 30 N-m (22 b-ft) Weight (cable/M12 connector) 2m [6.5 ft] axial cable or M12 [12mm] connector	Output Type	0-5 VDC or 1-5 mA	0-10 VDC or 4-20mA					
Operating Voltage 10-30 VDC 15-30 VDC No-load Supply Current ≤ 10mA ≤ 12mA Operating (Load) Current 5 10mA ≤ 10mA Off-state (Leakage) Current NA NA Voltage Drop ≤ 2.0 V Switching Frequency NA Differential Travel (% of Nominal Distance) NA NA Repeat Accuracy ± 0.02 mm *** Repple ≤ 20% *** Response Time 2ms *** Time Delay Before Availability (tv) ≤ 50ms Input Voltage Transient Protection Yes Short-Circuit 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 Chrom-plated brass Sensing Face Material Polybutylene Terephthalate [PBT] Shock/Vibration IEC 60947-5-2 Tightening Torque 30 N-m (22 b-ft) Weight (cable/M12 con	Current Output Max. Load / Power Supply	1kΩ / 10VDC; 5kΩ / 30VDC	0.5kΩ / 15VDC; 1 kΩ / 30VDC					
No-load Supply Current ≤ 10mA ≤ 12mA Operating (Load) Current ≤ 10mA Off-state (Leakage) Current NA Voltage Drop ≤ 2.0 V Switching Frequency NA Differential Travel (% of Nominal Distance) NA Repeat Accuracy ± 0.02 mm Ripple ≤ 20% Response Time 2ms Time Delay Before Availability (tv) ≤ 50ms Input Voltage Transient 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-plate brass Sensing Face Material Polybutylene Terephthalate [PBT] Shock/Vibration IEC 60947-5-2 Tightening Torque 30 N·m (22 lb·ft)	Voltage Output Min. Load	500Ω	1kΩ					
Operating (Load) Current ≤ 10mA Off-state (Leakage) Current NA Voltage Drop ≤ 2.0 V Switching Frequency NA Differential Travel (% of Nominal Distance) NA Repeat Accuracy ± 0.02 mm Ripple ≤ 20% Response Time 2ms Time Delay Before Availability (tv) ≤ 50ms Input Voltage Transient Protection Up to 30VDC 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 IEC 60947-5-2 Tightening Torque 30 N·m (22 lb·ft) Weight (cable/M12 connector) 2m [6.5 ft] axial cable or M12 [12mm] connector	Operating Voltage	10-30 VDC	15-30 VDC					
Off-state (Leakage) Current NA Voltage Drop ≤ 2.0 V Switching Frequency NA Differential Travel (% of Nominal Distance) NA Repeat Accuracy ± 0.02 mm Ripple ≤ 20% Response Time 2ms Time Delay Before Availability (tv) ≤ 50ms Input Voltage Transient Protection Up to 30VDC 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 Terepthalate [PBT] Shock/Vibration IEC 60947-5-2 Tightening Torque 30 N·m (22 lb-ft) Weight (cable/M12 connector) 2m [6.5 ft] axial cable or M12 [12mm] connector	No-load Supply Current	≤ 10mA	≤ 12mA					
Voltage Drop ≤ 2.0 V Switching Frequency NA Differential Travel (% of Nominal Distance) NA Repeat Accuracy ± 0.02 mm Ripple ≤ 20% Response Time 2ms Time Delay Before Availability (tv) ≤ 50ms Input Voltage Transient Protection Up to 30VDC 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 IEC 60947-5-2 Tightening Torque 30 N·m (22 lb·ft) Weight (cable/M12 connector) 2m [6.5 ft] axial cable or M12 [12mm] connector	Operating (Load) Current	≤ 10m	A					
Switching Frequency NA Differential Travel (% of Nominal Distance) NA Repeat Accuracy ± 0.02 mm Ripple ≤ 20% Response Time 2ms Time Delay Before Availability (tv) ≤ 50ms Input Voltage Transient Protection Up to 30VDC 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 IEC 60947-5-2 Tightening Torque 30 N·m (22 lb·ft) Weight (cable/M12 connector) 2m [6.5 ft] axial cable or M12 [12mm] connector	Off-state (Leakage) Current	NA						
Differential Travel (% of Nominal Distance) NA Repeat Accuracy ± 0.02 mm Ripple ≤ 20% Response Time 2ms Time Delay Before Availability (tv) ≤ 50ms Input Voltage Transient Protection Up to 30VDC 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 IEC 60947-5-2 Tightening Torque 30 N·m (22 lb·ft) Weight (cable/M12 connector) 2m [6.5 ft] axial cable or M12 [12mm] connector	Voltage Drop	≤ 2.0 ′	V					
### ### #############################	Switching Frequency	NA						
Ripple ≤ 20% Response Time 2ms Time Delay Before Availability (tv) ≤ 50ms Input Voltage Transient Protection Up to 30VDC 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 IEC 60947-5-2 Tightening Torque 30 N*m (22 lb*ft) Weight (cable/M12 connector) 110g [3.88 oz] / 50g [1.76 oz] Connection 2m [6.5 ft] axial cable or M12 [12mm] connector	Differential Travel (% of Nominal Distance)	NA						
Response Time 2ms Time Delay Before Availability (tv) ≤ 50ms Input Voltage Transient Protection Up to 30VDC 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 IEC 60947-5-2 Tightening Torque 30 N·m (22 lb·ft) Weight (cable/M12 connector) 110g [3.88 oz] / 50g [1.76 oz] Connection 2m [6.5 ft] axial cable or M12 [12mm] connector	Repeat Accuracy	± 0.02 r	nm					
Time Delay Before Availability (tv) ≤ 50ms Input Voltage Transient Protection Up to 30VDC 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 IEC 60947-5-2 Tightening Torque 30 N·m (22 lb·ft) Weight (cable/M12 connector) 110g [3.88 oz] / 50g [1.76 oz] Connection 2m [6.5 ft] axial cable or M12 [12mm] connector	Ripple	≤ 20%	6					
Input Voltage Transient Protection Up to 30VDC 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 IEC 60947-5-2 Tightening Torque 30 N·m (22 lb·ft) Weight (cable/M12 connector) 110g [3.88 oz] / 50g [1.76 oz] Connection 2m [6.5 ft] axial cable or M12 [12mm] connector	Response Time	2ms						
Reverse Polarity ProtectionYesShort-Circuit ProtectionYes (switch auto-resets after overload is removed)Operating Temperature-25 to +70°C [-13 to 158°F]Protection Degree (DIN 40050)IEC IP67Indication/Switch StatusNAHousing MaterialChrome-plated brassSensing Face MaterialPolybutylene Terephthalate [PBT]Shock/VibrationIEC 60947-5-2Tightening Torque30 N·m (22 lb·ft)Weight (cable/M12 connector)110g [3.88 oz] / 50g [1.76 oz]Connection2m [6.5 ft] axial cable or M12 [12mm] connector	Time Delay Before Availability (tv)	≤ 50m	ns .					
Short-Circuit ProtectionYes (switch auto-resets after overload is removed)Operating Temperature-25 to +70°C [-13 to 158°F]Protection Degree (DIN 40050)IEC IP67Indication/Switch StatusNAHousing MaterialChrome-plated brassSensing Face MaterialPolybutylene Terephthalate [PBT]Shock/VibrationIEC 60947-5-2Tightening Torque30 N•m (22 lb•ft)Weight (cable/M12 connector)110g [3.88 oz] / 50g [1.76 oz]Connection2m [6.5 ft] axial cable or M12 [12mm] connector	Input Voltage Transient Protection	Up to 30\	VDC					
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 IEC 60947-5-2 Tightening Torque 30 N·m (22 lb·ft) Weight (cable/M12 connector) 110g [3.88 oz] / 50g [1.76 oz] Connection 2m [6.5 ft] axial cable or M12 [12mm] connector	Reverse Polarity Protection	Yes						
Protection Degree (DIN 40050) IEC IP67 Indication/Switch Status NA Housing Material Chrome-plated brass Sensing Face Material Polybutylene Terephthalate [PBT] Shock/Vibration IEC 60947-5-2 Tightening Torque 30 N⋅m (22 lb⋅ft) Weight (cable/M12 connector) 110g [3.88 oz] / 50g [1.76 oz] Connection 2m [6.5 ft] axial cable or M12 [12mm] connector	Short-Circuit Protection	Yes (switch auto-resets after	r overload is removed)					
Indication/Switch Status NA Housing Material Chrome-plated brass Sensing Face Material Polybutylene Terephthalate [PBT] Shock/Vibration IEC 60947-5-2 Tightening Torque 30 № (22 lb•ft) Weight (cable/M12 connector) 110g [3.88 oz] / 50g [1.76 oz] Connection 2m [6.5 ft] axial cable or M12 [12mm] connector	Operating Temperature	-25 to +70°C [-1	3 to 158°F]					
Housing Material Chrome-plated brass Sensing Face Material Polybutylene Terephthalate [PBT] Shock/Vibration IEC 60947-5-2 Tightening Torque 30 N⋅m (22 lb⋅ft) Weight (cable/M12 connector) 110g [3.88 oz] / 50g [1.76 oz] Connection 2m [6.5 ft] axial cable or M12 [12mm] connector	Protection Degree (DIN 40050)	IEC IPC	67					
Sensing Face Material Polybutylene Terephthalate [PBT] Shock/Vibration IEC 60947-5-2 Tightening Torque 30 N⋅m (22 lb⋅ft) Weight (cable/M12 connector) 110g [3.88 oz] / 50g [1.76 oz] Connection 2m [6.5 ft] axial cable or M12 [12mm] connector	Indication/Switch Status	NA						
Shock/Vibration IEC 60947-5-2 Tightening Torque 30 N·m (22 lb·ft) Weight (cable/M12 connector) 110g [3.88 oz] / 50g [1.76 oz] Connection 2m [6.5 ft] axial cable or M12 [12mm] connector	Housing Material	Chrome-plate	ed brass					
Tightening Torque 30 N•m (22 lb•ft) Weight (cable/M12 connector) 110g [3.88 oz] / 50g [1.76 oz] Connection 2m [6.5 ft] axial cable or M12 [12mm] connector	Sensing Face Material	Polybutylene Terep	hthalate [PBT]					
Weight (cable/M12 connector) 110g [3.88 oz] / 50g [1.76 oz] Connection 2m [6.5 ft] axial cable or M12 [12mm] connector	Shock/Vibration	IEC 6094	7-5-2					
Connection 2m [6.5 ft] axial cable or M12 [12mm] connector	Tightening Torque	30 N•m (22	2 lb•ft)					
	Weight (cable/M12 connector)	110g [3.88 oz] / 5	60g [1.76 oz]					
Agency Approvals	Connection	2m [6.5 ft] axial cable or M	112 [12mm] connector					
Agency Approvais	Agency Approvals	UL file E23	39373					

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

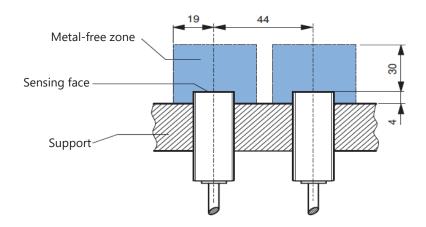
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DW Series Analog Inductive Proximity Sensors

Wiring Diagram



Installation



Dimensions

mm [inches]

Figure 1

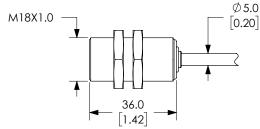
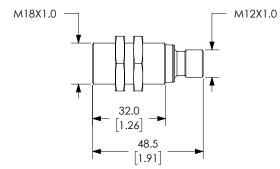


Figure 2



Accessories for 18mm Sensors

Axial Mounting Bracket

Axial mounting bracket available in zinc plated steel or 316L stainless steel. Has two mounting holes (use 4mm screws) and allows for rotation of an optical axis for right-beam-angle-adapter sensors. Hexagonal nuts not included. For use with 18mm sensors.

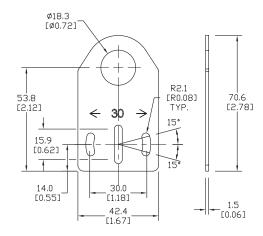
Accessories for 18mm Sensors					
Part Number Price Description					
<u>ST18A</u>	\$2.00	Micro Detectors mounting bracket, axial, zinc plated steel. For use with 18mm sensors.	0.06 [27.2]		
<u>ST18A7W</u>	\$7.25	Micro Detectors mounting bracket, axial, 316L stainless steel. For use with 18mm sensors.			



ST18A

Dimensions

mm [inches]



Right-angle Mounting Bracket

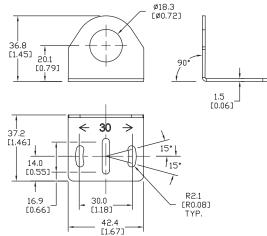
Right-angle mounting bracket for use with 18mm sensors. Has two mounting holes (use 4mm screws) and allows the rotation of an optical axis for axial sensors. Hexagonal nuts not included.

Accessories for 18mm Sensors					
Part Number	Part Number Price Description Weig				
ST18C	\$2.00	Micro Detectors mounting bracket, right-angle, zinc plated steel. For use with 18mm sensors.	0.06 [27.2]		
<u>ST18C7W</u>	\$7.25	Micro Detectors mounting bracket, right-angle, 316L stainless steel. For use with 18mm sensors.	0.06 [27.2]		



Dimensions

mm [inches]



Accessories for 18mm Sensors

Right-angle Mounting Brackets

Mounting bracket, right-angle, fixed insertion stop adjustment, plastic. For use with 18mm sensors. Available with or without fixed insertion stop.

	Accessories for 18mm Sensors								
Part Number	rt Number Price Description		Drawing Link	Weight lb [g]					
<u>OPT2104</u>	\$10.50	Wenglor mounting bracket, right-angle, fixed insertion stop adjustment, plastic. For use with 18mm sensors.	PDF	0.06 [27.2]					
<u>OPT2105</u>	\$10.50	Wenglor mounting bracket, right-angle, plastic. For use with 18mm sensors.	<u>PDF</u>	0.06 [27.2]					



OPT2104, OPT2105

Right-angle Swivel Mounting Systems

Mounting bracket, right-angle swivel, 360 degree vertical and horizontal adjustment, 12mm rod mount. For use with 18mm sensors. Available in all 304 stainless steel or with an aluminum head and a stainless steel mounting plate.

	Accessories for 18mm Sensors							
Part Number	Price	Description	Mounting Head	Mounting Plate	Drawing Link	Weight lb [g]		
<u>OPT2116</u>	\$11.50	Wenglor mounting bracket, right-angle swivel, 360 degree vertical and horizontal adjustment, aluminum, 12mm rod mount. For use with 18mm sensors.	Aluminum	304 Stainless steel	<u>PDF</u>	0.15 [68.0]		
<u>OPT2117</u>	\$21.00	Wenglor mounting bracket, right-angle swivel, 360 degree vertical and horizontal adjustment, 304 stainless steel, 12mm rod mount. For use with 18mm sensors.	304 Stainless steel	304 Stainless steel	<u>PDF</u>	0.28 [127.0]		



OPT2116, OPT2117

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

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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.

M	Mounting Rods for OPT2112-2127 Swivel Mounting Brackets							
Part Number	Price	Description	Drawing Link	Weight Ib (g)				
<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				Weight lb [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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