



DW Series 18mm Stainless Steel Triple Sensing Proximity Sensors



M18 (18mm) stainless steel – DC

- 18mm threaded triple distance proximity sensor
- 20mm sensing
- Complete overload protection
- IP68/IP69k rated
- Two M18 lock nuts included
- Stainless steel construction
- One-piece for harsh duty applications
- LED status indicator
- Lifetime warranty



DW Series 18mm Stainless Steel Triple Distance Inductive Proximity Selection Chart

Part Number	Price	Size	Sensing Range	Mounting	Output State	Logic	Connection	Wiring	Dimensions
Triple Distance									
<u>DW-AD-711-M18</u>	\$109.00	M18	20mm [0.787 in]	Non-flush	N.O.	NPN	2m [6.5 ft] axial cable	Diagram 1	Figure 1
<u>DW-AD-713-M18 *</u>	\$109.00				N.O.	PNP	2m [6.5 ft] axial cable	Diagram 2	Figure 1
<u>DW-AS-711-M18-002</u>	\$109.00				N.O.	NPN	M12 quick-disconnect	Diagram 3	Figure 2
<u>DW-AS-713-M18-002 *</u>	\$109.00				N.O.	PNP	M12 quick-disconnect	Diagram 4	Figure 2
<u>DW-AD-712-M18</u>	\$109.00				N.C.	NPN	2m [6.5 ft] axial cable	Diagram 1	Figure 1
<u>DW-AD-714-M18</u>	\$109.00				N.C.	PNP	2m [6.5 ft] axial cable	Diagram 2	Figure 1
<u>DW-AS-714-M18-002</u>	\$109.00				N.C.	PNP	M12 quick-disconnect	Diagram 4	Figure 2

*IO-Link model

Wiring Diagrams

Diagram 1

NPN Cable

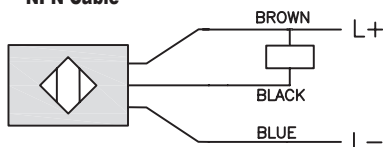


Diagram 2

PNP Cable

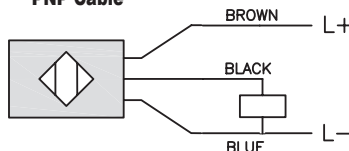


Diagram 3

NPN Connector

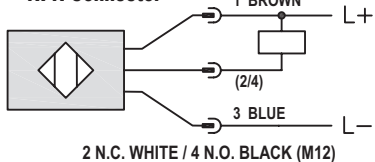
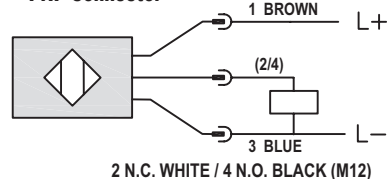


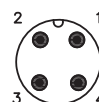
Diagram 4

PNP Connector



Connectors

M12 connector



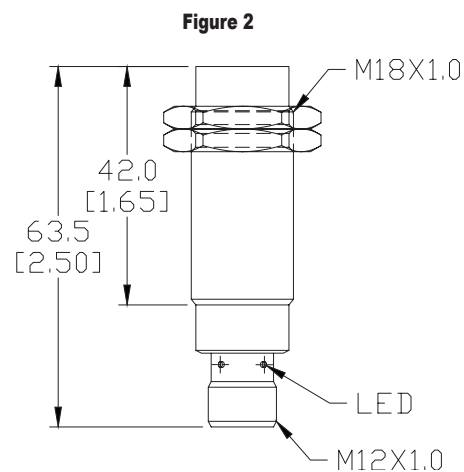
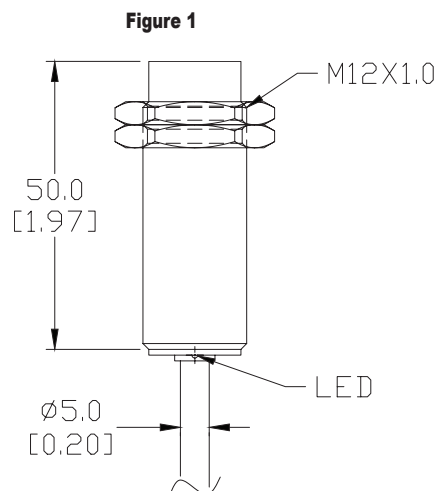
DW Series 18mm Stainless Steel Triple Sensing Proximity Sensors

DW Series 18mm Stainless Steel Triple Distance Inductive Proximity Specifications	
Specifications	DW-Ax-71x-M18
Mounting Type	Non-flush
Nominal Sensing Distance	20mm [0.787 in]
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	≤ 10mA
Operating (Load) Current	≤ 200mA
Off-state (Leakage) Current	≤ 0.1 mA
Voltage Drop	≤ 2 V
Switching Frequency	≤ 200 Hz
Differential Travel (% of Nominal Distance)	≤ 10%
Repeat Accuracy	0.60 mm
Ripple	≤ 20%
Time Delay Before Availability (tv)	≤ 15ms
Reverse Polarity Protection	Yes
Short-Circuit Protection	Yes
Operating Temperature	-25 to 85°C [-13 to 185°F]
Protection Degree (DIN 40050)	IP68, IP69K
Indication/Switch Status	Yellow LED
Housing Material	Stainless steel
Sensing Face Material	Stainless steel
Shock/Vibration	IEC 60947-5-2/7.4
Tightening Torque	—
Weight	112g [3.95 oz], 51g [1.80 oz]
Connection	2m [6.5 ft] cable, M12 connection
IO-Link	PNP/N.O. version only
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.

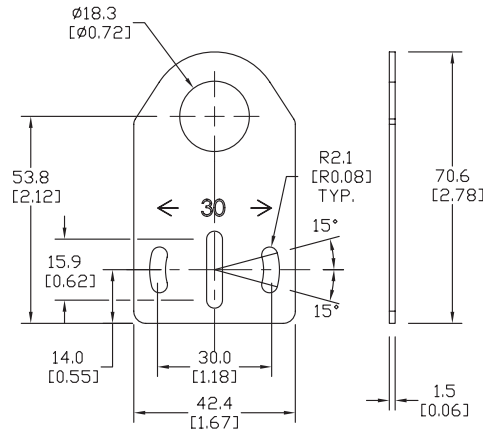
Axial Mounting Bracket



ST18A

Accessories for 18mm Sensors			
Part Number	Price	Description	Weight lb [g]
<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.	0.06 [27.2]

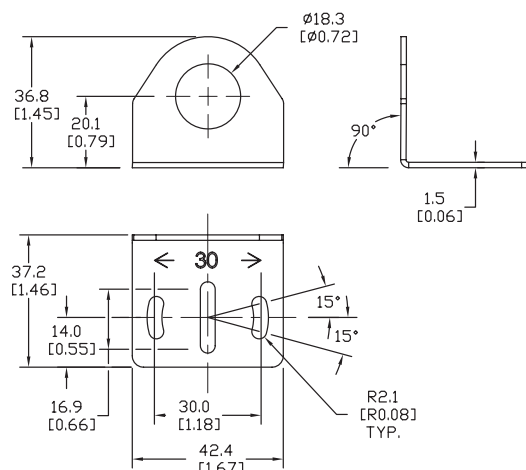
mm [inches]



ST18C

Accessories for 18mm Sensors			
Part Number	Price	Description	Weight lb [g]
<u>ST18C</u>	\$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]

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	Price	Description	Drawing Link	Weight lb [g]
OPT2104	\$10.50	Wenglor mounting bracket, right-angle, fixed insertion stop adjustment, plastic. For use with 18mm sensors.	PDF	0.06 [27.2]
OPT2105	\$10.50	Wenglor mounting bracket, right-angle, plastic. For use with 18mm sensors.	PDF	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]
OPT2116	\$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	PDF	0.15 [68.0]
OPT2117	\$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	PDF	0.28 [127.0]



[OPT2116](#), [OPT2117](#)

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).

Mounting Rods and Brackets

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	Drawing Link	Weight lb (g)
OPT2109	\$13.00	Wenglor mounting rod, 12mm diameter, 200mm length, 304 stainless steel.	PDF	0.41 [185.97]
OPT2110	\$16.00	Wenglor mounting rod, 12mm diameter, 300mm length, 304 stainless steel.	PDF	0.60 [272.16]
OPT2111	\$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 lb [g]
OPT2108	\$16.00	Wenglor mounting bracket, right-angle, nickel-plated brass. For use with 12mm mounting rods OPT2109, OPT2110 & OPT2111.	PDF	0.07 [31.8]

