



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

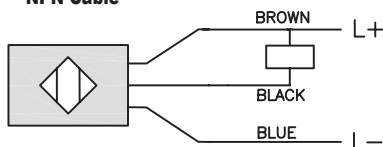
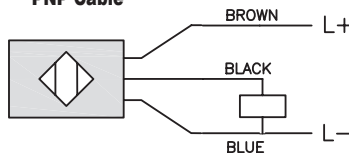


Diagram 2

PNP Cable



Connectors

M12 connector

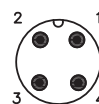


Diagram 3

NPN Connector

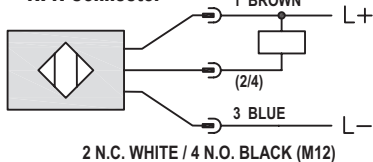
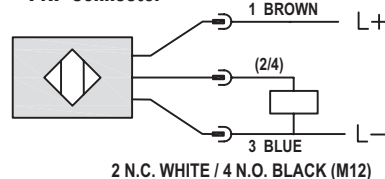


Diagram 4

PNP Connector



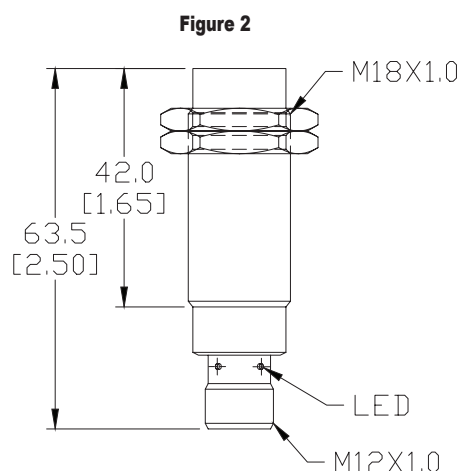
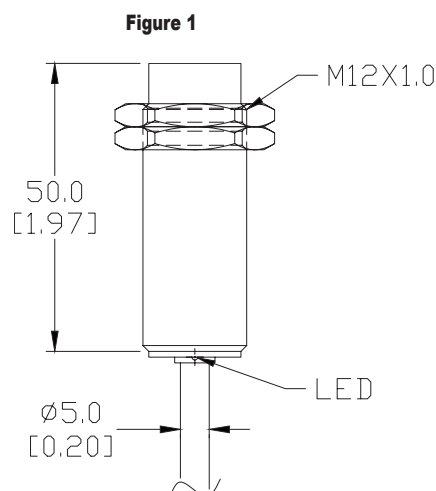
DW Series 18mm Stainless Steel Triple Sensing Proximity Sensors

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

Dimensions

The technical drawing shows two views of a mechanical component:

- Front View (Left):** A symmetrical part with a semi-circular top. Key features include:
 - A central circular hole with diameter $\varnothing 18.3$ [0.72].
 - A total height of 53.8 [2.12].
 - A horizontal slot with a width of 30.0 [1.18] and a depth of 15.9 [0.62]. The slot has rounded ends with a radius of R2.01 [R0.08] TYP.
 - Two angled slots at the bottom corners, each with a 15° angle.
 - A base width of 42.4 [1.67].
 - A distance of 14.0 [0.55] from the bottom edge to the start of the vertical section.
- Side View (Right):** Shows the profile of the part with a total height of 70.6 [2.78] and a thickness of 1.5 [0.06].

ST18C

Dimensions

Technical drawing of a mechanical part, showing three views: front view, side view, and top view.

Front View:

- Overall height: 36.8 [1.45]
- Height of the base: 20.1 [0.79]
- Top flange thickness: 1.5 [0.06]
- Central hole diameter: $\varnothing 18.3$ [$\varnothing 0.72$]

Side View:

- Corner angle: 90°
- Thickness: 1.5 [0.06]

Top View:

- Overall width: 42.4 [1.67]
- Overall height: 37.2 [1.46]
- Distance from top edge to the first slot: 14.0 [0.55]
- Distance between the first and second slots: 16.9 [0.66]
- Distance between the second and third slots: 30.0 [1.18]
- Slot width: 3.0 [0.12]
- Slot depth: 15.0 [0.59]
- Slot angle: 15°
- Radius: R2.1 [R0.08] TYP.

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]

