



# DW Series High Pressure Proximity Sensors



## M3, M8 and M12 – DC

- High pressure resistant up to 500 bar
- IP68 rated
- Stainless steel construction with ceramic sensing face
- 10-30 VDC
- LED status indicator
- Lifetime warranty
- IO-Link v1.1 PNP models



**DW-AD-621-03E-961**  
**DW-AS-503-P12-624**



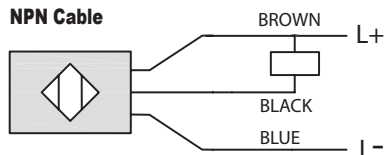
DW Series High Pressure Proximity Sensors									
Part Number	Price	Size	Sensing Distance	Mounting	Output State	Logic	Connection	Wiring Diagram	Drawing Link
<a href="#">DW-AD-621-03E-961</a>	\$163.00	M3	0.8 mm [0.03 in]	Flush	N.O.	NPN	3-wire, pigtail, 6.5 ft [2m]	1	<a href="#">PDF</a>
<a href="#">DW-AD-623-03E-961</a>	\$163.00			Flush	N.O.	PNP	3-wire, pigtail, 6.5 ft [2m]	2	<a href="#">PDF</a>
<a href="#">DW-AD-503-P8</a>	\$163.00	M8	1.5 mm [0.05 in]	Flush	N.O.	PNP	3-wire, pigtail, 6.5 ft [2m]	2	<a href="#">PDF</a>
<a href="#">DW-AS-503-P12-630</a> *	\$175.00	M12		Flush	N.O.	PNP	3-wire, 4-pin M12 quick-disconnect	3	<a href="#">PDF</a>
<a href="#">DW-AS-503-P12-624</a> *	\$175.00			Flush	N.O.	PNP	3-wire, 4-pin M12 quick-disconnect	3	<a href="#">PDF</a>
<a href="#">DW-LS-703-P12G</a>	\$225.00			Flush	N.O.	PNP	3-wire, 4-pin M12 quick-disconnect	3	<a href="#">PDF</a>

\* Mounting hardware included.

## Wiring Diagrams

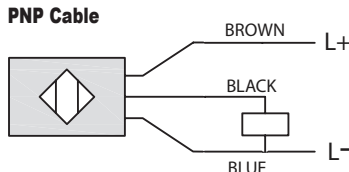
**Diagram 1**

**NPN Cable**



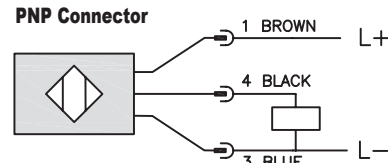
**Diagram 2**

**PNP Cable**



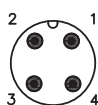
**Diagram 3**

**PNP Connector**



**Connector**

**M12 connector**





# DW Series High Pressure Proximity Sensors Specifications

DW Series High Pressure Proximity Sensors Specifications				
Sensor	DW-AD-62x-03E-961	DW-AD-503-P8	DW-Ax-50x-P12	DW-LS-703-P12G
Assured Operating Distance	0.65 mm [0.02 in]	1.22 mm [0.04 in]		
Rated Operating Distance	0.8 mm [0.03 in]	1.5 mm [0.05 in]		
Material Correction Factors	See the <a href="#">Material influence table</a>			
Output Type	NPN or PNP, N.O.	PNP, N.O.		
Operating Voltage	10 to 30 VDC			
No-load Supply Current	≤ 10mA			
Operating (Load) Current	100mA	≤ 200mA		
Off-state (Leakage) Current	≤ 0.1 mA			
Voltage Drop	≤ 2.0 VDC @100mA	≤ 2.0 VDC		
Switching Frequency	≤ 8,000Hz	800Hz	600Hz	850Hz
Differential Travel (% of Nominal Distance)	≤ 10% $s_r$	3% $S_r$ ≤ Hyst ≤ 15% $S_r$		
Repeat Accuracy	0.2 mm	≤ 0.075 mm	≤ 0.1 mm	≤ 0.06 mm
Ripple	≤ 20%			
Operating Pressure / Peak Pressure	≤ 200 bar	≤ 500 bar / ≤ 1000 bar		≤ 500 bar / ≤ 800 bar
Reverse Polarity Protection	Yes			
Short-Circuit Protection	Yes			
Operating Temperature	-25 to 70°C [-13 to 158°F]	-25 to 100°C [-13 to 212°F]		-25 to 85°C [-13 to 185°F]
Protection Degree (DIN 40050)	IP68, IP69K	IP68		IP68, IP69K
Indication/Switch Status	Yellow LED			
Housing Material	Stainless steel V2A	Stainless steel V4A	Stainless-steel DIN 1.4305 / AISI 303	Stainless steel V4A / 1.4435 / AISI 316L
Sensing Face Material	Ceramic	ZrO <sub>2</sub> [Zirconium dioxide]	ZrO <sub>2</sub> [Zirconium dioxide]	Stainless steel V4A / 1.4435 / AISI 316L
Shock/Vibration	IEC 60947-5-2 / 7.4			
Tightening Torque	N/A	12 N•m	40 N•m	50 N•m max
Weight	18g [0.63 oz]	40g [1.41 oz]	27g [0.95 oz]	137g [4.83 oz]
Connection	PUR, 3-wire, pigtail, 6.5 ft [2m]		3-wire, 4-pin M12 quick-disconnect	
IO-Link	v1.1 PNP models			
Agency Approvals	CE, cULus E239373			

Note: To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.

# Accessories for 3mm Sensors

## Right-angle Mounting Bracket

Mounting bracket, right-angle, 316L stainless steel. Package of 2.  
For use with 3mm sensors.

Accessories for 3mm Sensors				
Part Number	Price	Description	Drawing Link	Weight [lb]
<a href="#">OPT2037</a>	\$25.50	Wenglor mounting bracket, right-angle, 316L stainless steel. Package of 2. For use with 3mm sensors.	<a href="#">PDF</a>	0.02



[OPT2037](#)