

POWER SECTION

Model No: AT287564.7

Revised: 2/4/2021

Rotor Specifications	
	inches
Overall Length	92.00
Contour Length	88.00
Major Diameter	1.909
Eccentricity	0.136
Head diameter	1.880
Thread Form	N/A
Weight	58 lbs
Material	17-4 PH ¹

Stator Specifications	
	inches
Overall Length	105.63
Tube OD	2.88
Tube ID	2.38
Rubber Cutback Top/End	4.00 / 16.00
Weight	70 lbs
Number of Stages	4.7
Tube Material	4140/4142 Alloy Steel
Rubber Options	NBR-HPX/HPW & NBR-HPO

NBR-HPX/HPW (in)		Fits (+ Compression / - Loose)				
Size	Minor ²	75 °F	125 °F	175 °F	250 °F	300 °F ³
.5 US						
STD	1.636	0.001	0.006	0.010	0.017	0.022
.5 OS						
1.0 OS	1.646	-0.009	-0.004	0.000	0.007	0.012
1.5 OS	1.668	-0.031	-0.027	-0.022	-0.016	-0.011
2.0 OS						
2.5 OS						

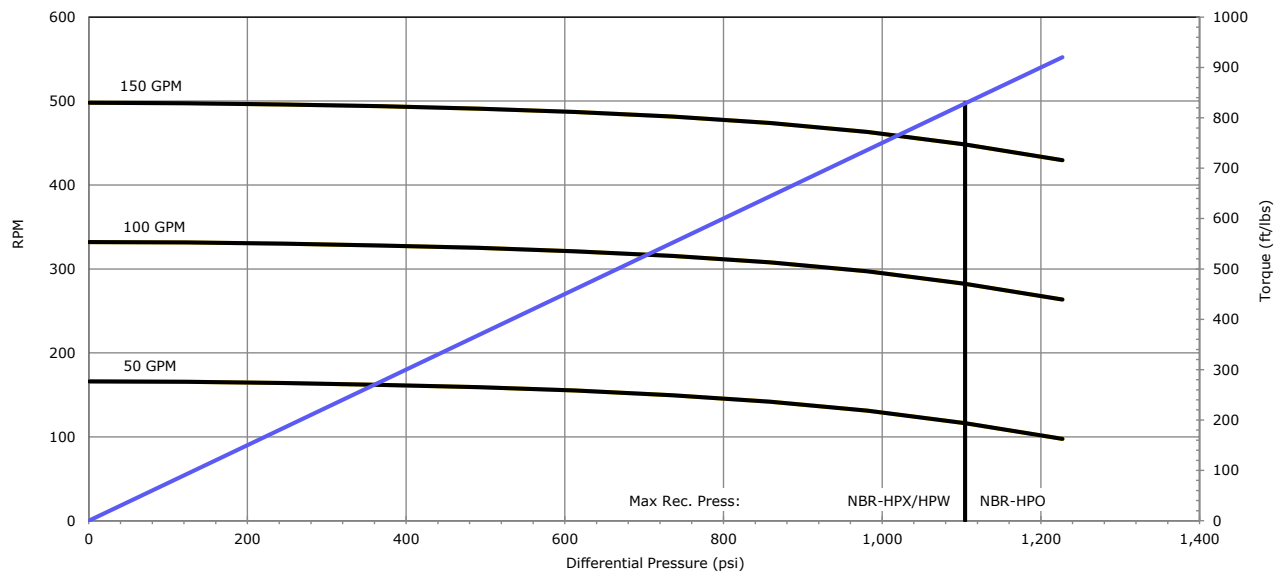
NBR-HPO (in)		Fits (+ Compression / - Loose)				
Size	Minor ²	75 °F	125 °F	175 °F	250 °F	300 °F ³
.5 US						
STD	1.636	0.001	0.006	0.010	0.017	0.022
.5 OS						
1.0 OS	1.646	-0.009	-0.004	0.000	0.007	0.012
1.5 OS	1.668	-0.031	-0.027	-0.022	-0.016	-0.011
2.0 OS						
2.5 OS						

Performance Specifications	
Flow Range (gpm)	50 - 150
Speed Range (rpm)	170 - 500
Torque Slope (ft-lb/psi)	0.75
Rotation (rev/gal)	3.320
Off Bottom Pressure (psi)	80

Performance Details		
	NBR-HPX/HPW	NBR-HPO
Max Diff Press (psi)	1110	1110
Stall Diff Press (psi)	1740	1740
Max Torque (ft-lb)	830	830
Stall Torque (ft-lb)	1310	1310

■ (NBR-HPX/HPW/HPO)

■ Torque



¹ Coating options of chrome or tungsten carbide are available ² Vector Gauge Readings at Room Temp 75°F ³ BHCT Exceeding 320°F will void warranty for NBR-HPX/HPW/HPO
Performance curves are based on new rotor and stator dimensions and for reference only. Actual performance may vary depending on fit and drilling conditions. The stall torque may exceed that specified for the connected components. Operating over the recommended limits may result in damage to the power section and connected components. Please visit www.AbacoDrilling.com for the latest specification revisions.

LOCATIONS

US: Headquarters 713 Northpark Central Dr., #400 Houston, TX 77073 - Tel: (281) 869-0700 - Fax: (281) 869-0701
US: Sales & Distribution 11308 West Interstate 20 East, Odessa, TX 79765 - Tel: (432) 248-1814
CANADA: Stator Manufacturing 6303-39th Street Leduc, Alberta T9E 0Z3 Canada - Tel: (780) 986-8947 - Fax: (780) 986-8842
DUBAI UAE: Stator Manufacturing Oilfields Supply Center B#57, Jebel Ali, Dubai UAE, P.O. Box 19909 - Tel: 971-4-870-8600

POWER SECTION - METRIC

Model No: AT287564.7

Revised: 2/4/2021

Rotor Specifications	
	mm
Overall Length	2336.8
Contour Length	2235.2
Major Diameter	48.49
Eccentricity	3.45
Head diameter	47.75
Thread Form	N/A
Weight	26 kg
Material	17-4 PH ¹

Stator Specifications	
	mm
Overall Length	2683.0
Tube OD	73.0
Tube ID	60.3
Rubber Cutback Top/End	102.0 / 406.0
Weight	32 kg
Number of Stages	4.7
Tube Material	4140/4142 Seamless Alloy Steel
Rubber Options	NBR-HPX/HPW & NBR-HPO

BR-HPX/HPW (mm)		Fits (+ Compression / - Loose)				
Size	Minor ²	25 °C	75 °C	100 °C	125 °C	150 °C ³
.5 US						
STD	41.55	0.03	0.24	0.34	0.45	0.55
.5 OS						
1.0 OS	41.81	-0.23	-0.02	0.08	0.19	0.29
1.5 OS	42.37	-0.79	-0.59	-0.48	-0.38	-0.28
2.0 OS						
2.5 OS						

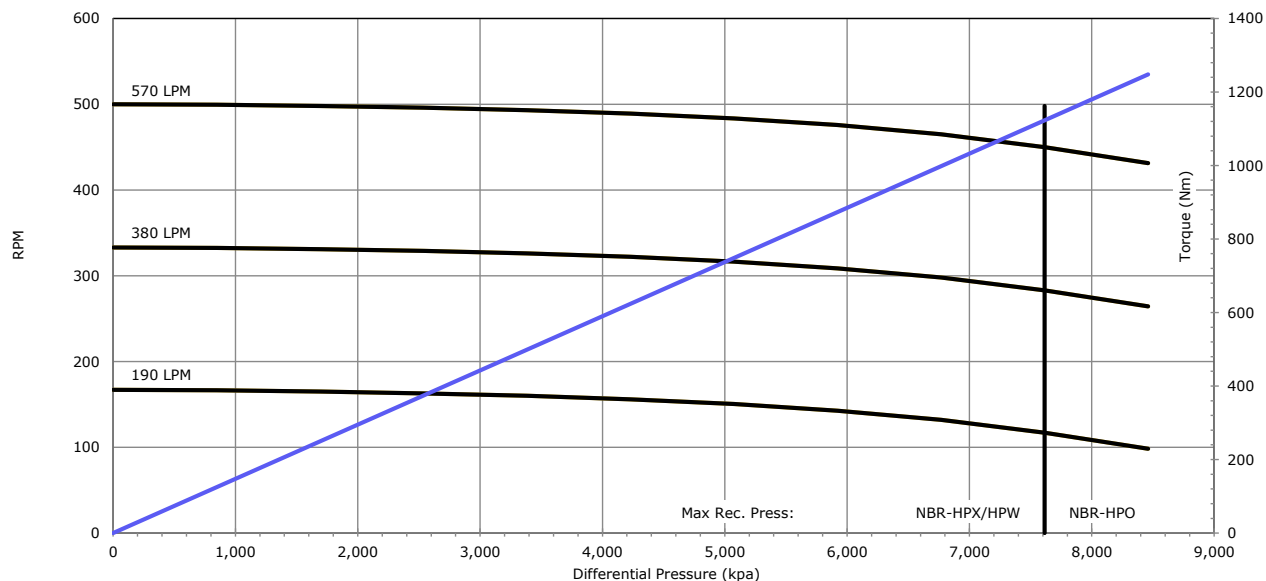
NBR-HPO (mm)		Fits (+ Compression / - Loose)				
Size	Minor ²	25 °C	75 °C	100 °C	125 °C	150 °C ³
.5 US						
STD	41.55	0.03	0.24	0.34	0.45	0.55
.5 OS						
1.0 OS	41.81	-0.23	-0.02	0.08	0.19	0.29
1.5 OS	42.37	-0.79	-0.59	-0.48	-0.38	-0.28
2.0 OS						
2.5 OS						

Performance Specifications	
Flow Range (lpm)	190 - 570
Speed Range (rpm)	170 - 500
Torque Slope (Nm/kpa)	0.15
Rotation (rev/Liter)	0.8771
Off Bottom Pressure (kpa)	520

Performance Details		NBR-HPX/HPW	NBR-HPO
Max Diff Press (kpa)		7700	7700
Stall Diff Press (kpa)		12000	12000
Max Torque (Nm)		1200	1200
Stall Torque (Nm)		1800	1800

■ (NBR-HPX/HPW/HPO)

■ Torque



¹ Coating options of chrome or tungsten carbide are available ² Vector Gauge Readings at Room Temp 25°C ³ BHCT Exceeding 160°C will void warranty for NBR-HPX/HPW/HPO

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