

POWER SECTION

Model No: AT775782.5 SLOW

Revised: 9/24/2020

Rotor Specifications	
	inches
Overall Length	246.00
Contour Length	239.00
Major Diameter	5.141
Eccentricity	0.300
Head diameter	4.630
Thread Form	3.50 API REG
Weight	1157 lbs
Material	17-4 PH ¹

Stator Specifications	
	inches
Overall Length	254.00
Tube OD	7.75
Tube ID	6.25
Rubber Cutback Top/End	8.00 / 8.00
Weight	1334 lbs
Number of Stages	2.5
Tube Material	4140/4142 Alloy Steel
Rubber Options	NBR-HPW & NBR-HPO

NBR-HPW (in)		Fits (+ Compression / - Loose)				
Size	Minor ²	75 °F	125 °F	175 °F	250 °F	300 °F ³
.5 US						
STD	4.530	0.011	0.029	0.046	0.072	0.089
.5 OS	4.545	-0.003	0.014	0.031	0.056	0.073
1.0 OS	4.560	-0.018	-0.002	0.015	0.041	0.058
1.5 OS	4.575	-0.034	-0.017	0.000	0.025	0.042
2.0 OS	4.590	-0.048	-0.032	-0.015	0.010	0.026
2.5 OS						

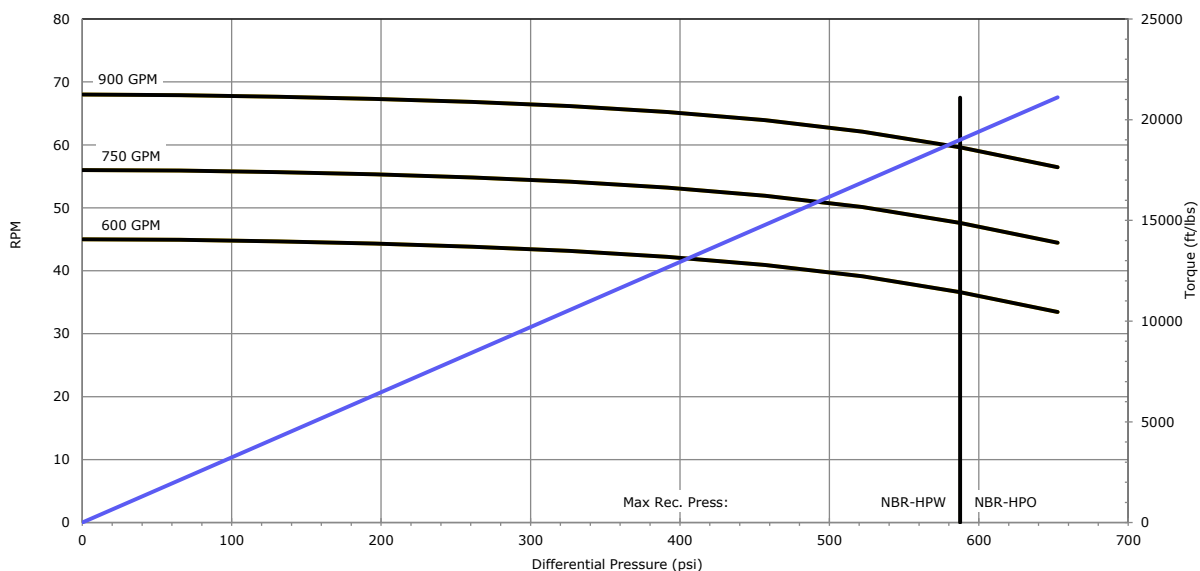
NBR-HPO (in)		Fits (+ Compression / - Loose)				
Size	Minor ²	75 °F	125 °F	175 °F	250 °F	300 °F ³
.5 US						
STD	4.530	0.011	0.029	0.046	0.072	0.089
.5 OS	4.545	-0.003	0.014	0.031	0.056	0.073
1.0 OS	4.560	-0.018	-0.002	0.015	0.041	0.058
1.5 OS	4.575	-0.034	-0.017	0.000	0.025	0.042
2.0 OS	4.590	-0.048	-0.032	-0.015	0.010	0.026
2.5 OS						

Performance Specifications	
Flow Range (gpm)	600 - 900
Speed Range (rpm)	50 - 70
Torque Slope (ft-lb/psi)	32.34
Rotation (rev/gal)	0.075
Off Bottom Pressure (psi)	70

Performance Details		NBR-HPW	NBR-HPO
Max Diff Press (psi)		590	590
Stall Diff Press (psi)		930	930
Max Torque (ft-lb)		19000	19000
Stall Torque (ft-lb)		29930	29930

■ (NBR-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-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: AT775782.5 SLOW

Revised: 9/24/2020

Rotor Specifications	
	mm
Overall Length	6248.4
Contour Length	6070.6
Major Diameter	130.58
Eccentricity	7.61
Head diameter	117.60
Thread Form	3.50 API REG
Weight	525 kg
Material	17-4 PH ¹

Stator Specifications	
	mm
Overall Length	6451.6
Tube OD	196.9
Tube ID	158.8
Rubber Cutback Top/End	203.0 / 203.0
Weight	605 kg
Number of Stages	2.5
Tube Material	4140/4142 Seamless Alloy Steel
Rubber Options	NBR-HPW & NBR-HPO

NBR-HPW (mm)		Fits (+ Compression / - Loose)				
Size	Minor ²	25 °C	75 °C	100 °C	125 °C	150 °C ³
.5 US						
STD	115.06	0.29	1.08	1.47	1.86	2.26
.5 OS	115.44	-0.09	0.69	1.08	1.47	1.86
1.0 OS	115.82	-0.47	0.30	0.69	1.08	1.46
1.5 OS	116.21	-0.85	-0.09	0.30	0.68	1.06
2.0 OS	116.59	-1.23	-0.47	-0.09	0.29	0.67
2.5 OS						

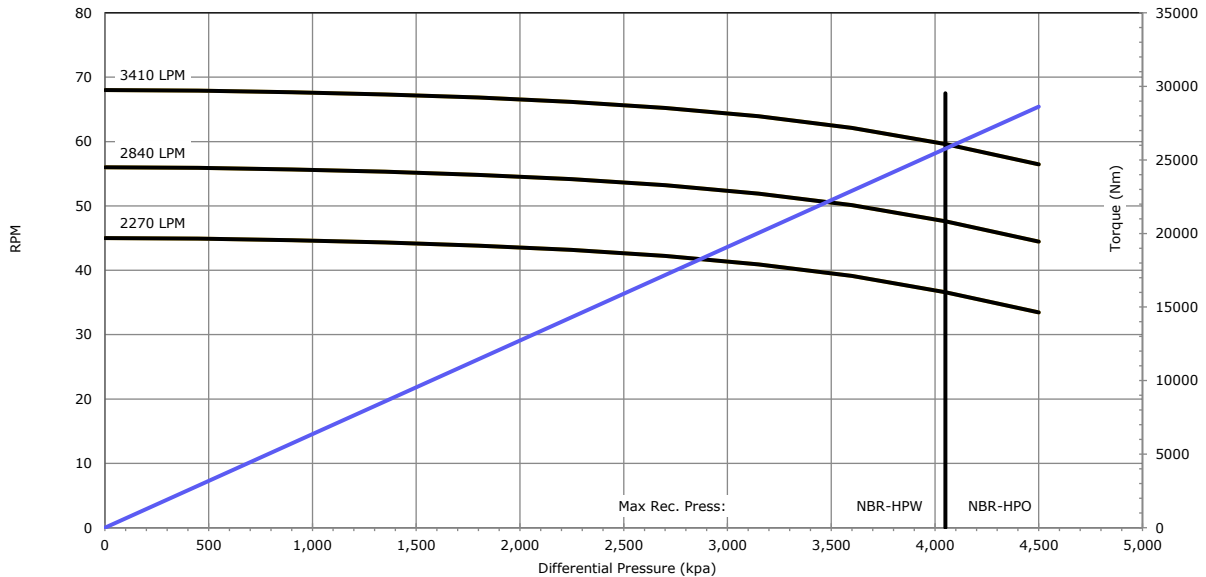
NBR-HPO (mm)		Fits (+ Compression / - Loose)				
Size	Minor ²	25 °C	75 °C	100 °C	125 °C	150 °C ³
.5 US						
STD	115.06	0.29	1.08	1.47	1.86	2.26
.5 OS	115.44	-0.09	0.69	1.08	1.47	1.86
1.0 OS	115.82	-0.47	0.30	0.69	1.08	1.46
1.5 OS	116.21	-0.85	-0.09	0.30	0.68	1.06
2.0 OS	116.59	-1.23	-0.47	-0.09	0.29	0.67
2.5 OS						

Performance Specifications	
Flow Range (lpm)	2270 - 3410
Speed Range (rpm)	50 - 70
Torque Slope (Nm/kpa)	6.36
Rotation (rev/Liter)	0.0198
Off Bottom Pressure (kpa)	500

Performance Details		
	NBR-HPW	NBR-HPO
Max Diff Press (kpa)	4100	4100
Stall Diff Press (kpa)	6400	6400
Max Torque (Nm)	25800	25800
Stall Torque (Nm)	40600	40600

■ (NBR-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-HPW/HPO.

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