

## POWER SECTION

**Model No: AT962783.9**

Revised: 9/24/2020

Rotor Specifications	
	inches
Overall Length	290.00
Contour Length	281.00
Major Diameter	6.515
Eccentricity	0.368
Head diameter	5.500
Thread Form	4.00 API FH
Weight	1905 lbs
Material	17-4 PH <sup>1</sup>

Stator Specifications	
	inches
Overall Length	300.00
Tube OD	9.63
Tube ID	7.88
Rubber Cutback Top/End	10.00 / 10.00
Weight	2294 lbs
Number of Stages	3.9
Tube Material	4140/4142 Alloy Steel
Rubber Options	NBR-HPW & NBR-HPO

NBR-HPW (in)		Fits (+ Compression / - Loose)				
Size	Minor <sup>2</sup>	75 °F	125 °F	175 °F	250 °F	300 °F <sup>3</sup>
.5 US						
STD	5.776	0.003	0.023	0.043	0.073	0.093
.5 OS						
1.0 OS						
1.5 OS						
2.0 OS						
2.5 OS						

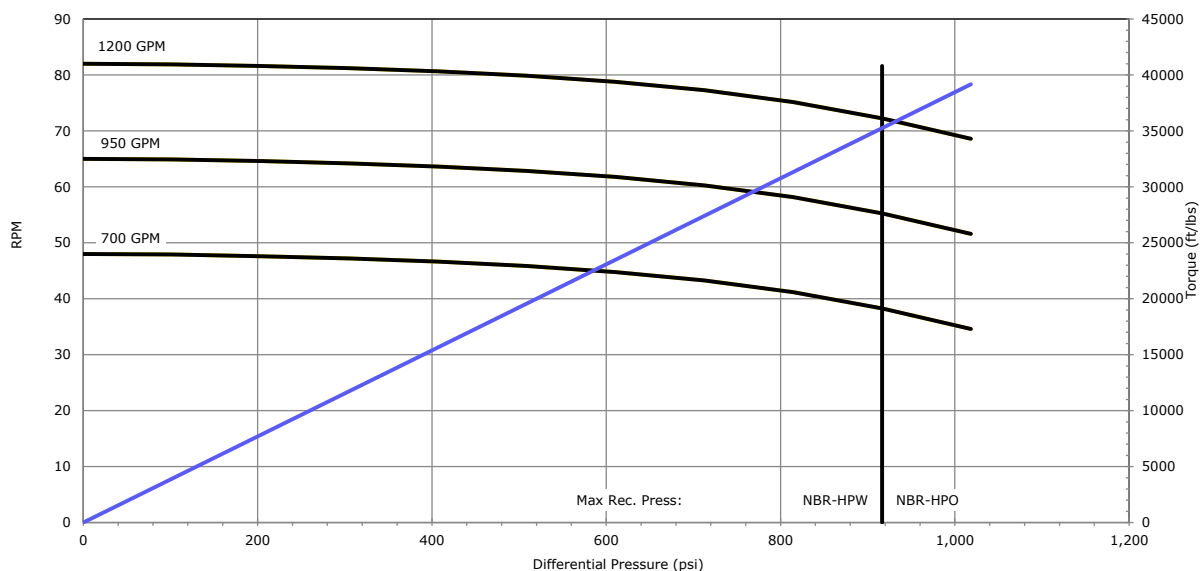
NBR-HPO (in)		Fits (+ Compression / - Loose)				
Size	Minor <sup>2</sup>	75 °F	125 °F	175 °F	250 °F	300 °F <sup>3</sup>
.5 US						
STD	5.776	0.003	0.023	0.043	0.073	0.093
.5 OS						
1.0 OS						
1.5 OS						
2.0 OS						
2.5 OS						

Performance Specifications	
Flow Range (gpm)	700 - 1200
Speed Range (rpm)	50 - 80
Torque Slope (ft-lb/psi)	38.46
Rotation (rev/gal)	0.068
Off Bottom Pressure (psi)	100

Performance Details		NBR-HPW	NBR-HPO
Max Diff Press (psi)		920	920
Stall Diff Press (psi)		1450	1450
Max Torque (ft-lb)		35250	35250
Stall Torque (ft-lb)		55520	55520

■ (NBR-HPW/HPO)

■ Torque



<sup>1</sup> Coating options of chrome or tungsten carbide are available <sup>2</sup> Vector Gauge Readings at Room Temp 75°F <sup>3</sup> 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](http://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

Rotor Specifications	
	mm
Overall Length	7366.0
Contour Length	7137.4
Major Diameter	165.48
Eccentricity	9.35
Head diameter	139.70
Thread Form	4.00 API FH
Weight	864 kg
Material	17-4 PH <sup>1</sup>

Stator Specifications	
	mm
Overall Length	7620.0
Tube OD	244.5
Tube ID	200.2
Rubber Cutback Top/End	254.0 / 254.0
Weight	1040 kg
Number of Stages	3.9
Tube Material	4140/4142 Seamless Alloy Steel
Rubber Options	NBR-HPW & NBR-HPO

NBR-HPW (mm)		Fits (+ Compression / - Loose)				
Size	Minor <sup>2</sup>	25 °C	75 °C	100 °C	125 °C	150 °C <sup>3</sup>
.5 US						
STD	146.71	0.08	0.99	1.45	1.90	2.36
.5 OS						
1.0 OS						
1.5 OS						
2.0 OS						
2.5 OS						

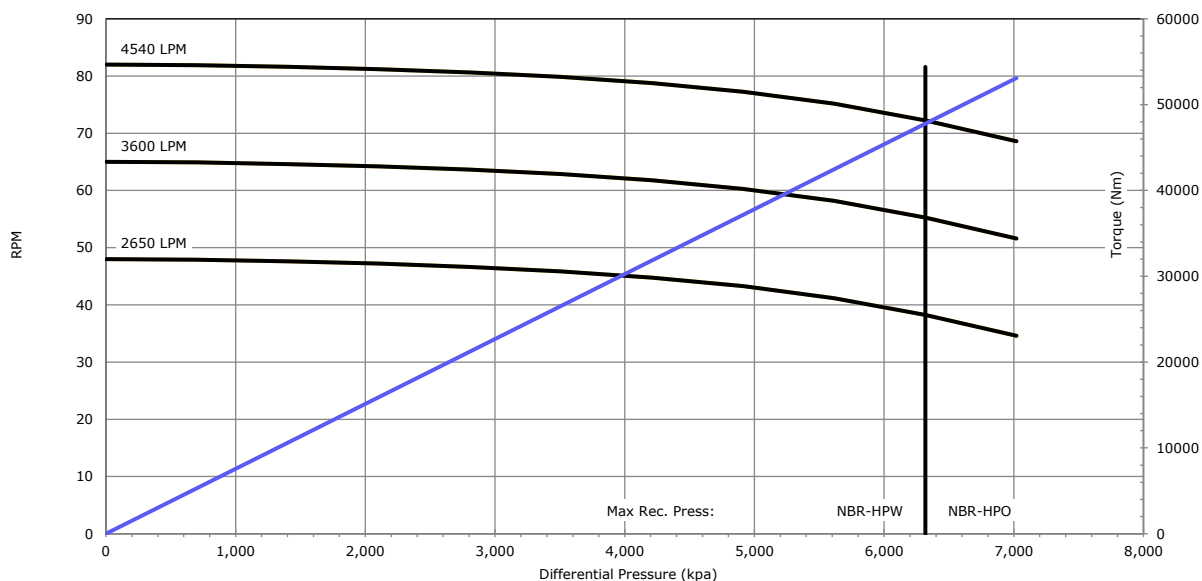
NBR-HPO (mm)		Fits (+ Compression / - Loose)				
Size	Minor <sup>2</sup>	25 °C	75 °C	100 °C	125 °C	150 °C <sup>3</sup>
.5 US						
STD	146.71	0.08	0.99	1.45	1.90	2.36
.5 OS						
1.0 OS						
1.5 OS						
2.0 OS						
2.5 OS						

Performance Specifications	
Flow Range (lpm)	2650 - 4540
Speed Range (rpm)	50 - 80
Torque Slope (Nm/kpa)	7.56
Rotation (rev/Liter)	0.0180
Off Bottom Pressure (kpa)	680

Performance Details		
	NBR-HPW	NBR-HPO
Max Diff Press (kpa)	6400	6400
Stall Diff Press (kpa)	10000	10000
Max Torque (Nm)	47800	47800
Stall Torque (Nm)	75300	75300

■ (NBR-HPW/HPO)

■ Torque



<sup>1</sup> Coating options of chrome or tungsten carbide are available <sup>2</sup> Vector Gauge Readings at Room Temp 25°C <sup>3</sup> BHCT Exceeding 160°C 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](http://www.AbacoDrilling.com) for the latest specification revisions.

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