

## POWER SECTION

**Model No: AT962784.8**

Revised: 6/15/2022

Rotor Specifications	
	inches
Overall Length	235.50
Contour Length	226.50
Major Diameter	6.374
Eccentricity	0.355
Head diameter	6.000
Thread Form	4.50 API REG
Weight	1733 lbs
Material	17-4 PH <sup>1</sup>

Stator Specifications	
	inches
Overall Length	251.50
Tube OD	9.63
Tube ID	7.88
Rubber Cutback Top/End	12.50 / 12.50
Weight	1943 lbs
Number of Stages	4.8
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	5.635	0.029	0.050	0.072	0.104	0.125
.5 OS	5.665	-0.001	0.020	0.041	0.073	0.094
1.0 OS						
1.5 OS						
2.0 OS						
2.5 OS						

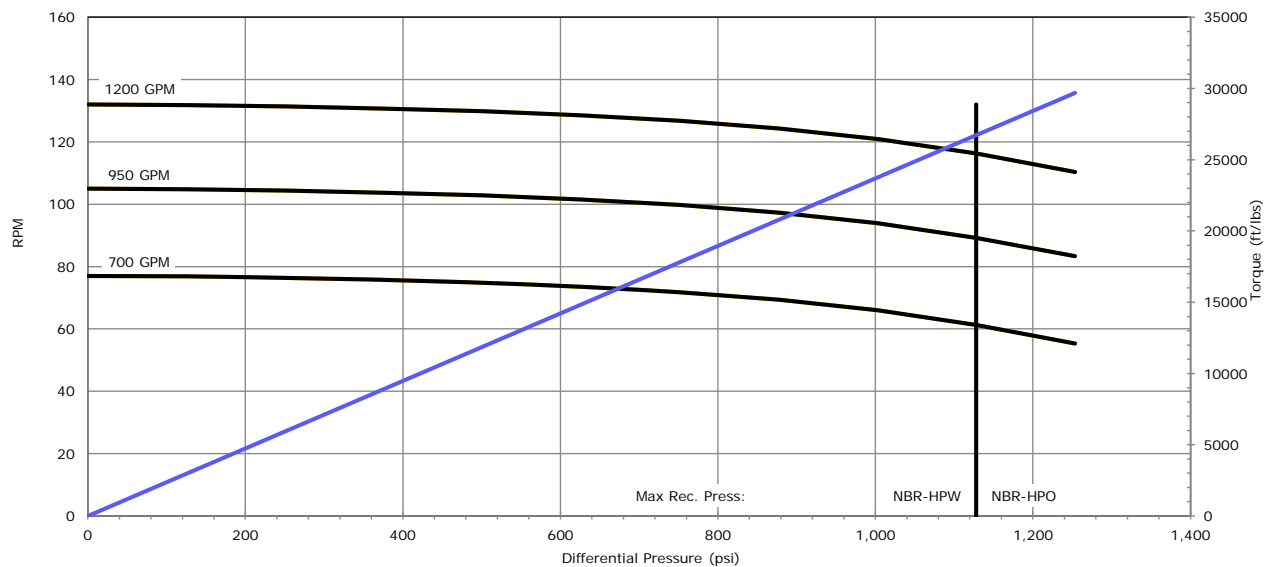
NBR-HPO (in)		Fits (+ Compression / - Loose)				
Size	Minor <sup>2</sup>	75 °F	125 °F	175 °F	250 °F	300 °F <sup>3</sup>
.5 US						
STD	5.635	0.029	0.050	0.072	0.104	0.125
.5 OS	5.665	-0.001	0.020	0.041	0.073	0.094
1.0 OS						
1.5 OS						
2.0 OS						
2.5 OS						

Performance Specifications	
Flow Range (gpm)	700 - 1200
Speed Range (rpm)	80 - 130
Torque Slope (ft-lb/psi)	23.69
Rotation (rev/gal)	0.110
Off Bottom Pressure (psi)	130

Performance Details		
	NBR-HPW	NBR-HPO
Max Diff Press (psi)	1130	1130
Stall Diff Press (psi)	1780	1780
Max Torque (ft-lb)	26730	26730
Stall Torque (ft-lb)	42090	42090

■ (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  
US: Sales & Distribution  
CANADA: Stator Manufacturing  
DUBAI UAE: Stator Manufacturing

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

## POWER SECTION - METRIC

**Model No: AT962784.8**

Revised: 6/15/2022

Rotor Specifications	
	mm
Overall Length	5981.7
Contour Length	5753.1
Major Diameter	161.90
Eccentricity	9.02
Head diameter	152.40
Thread Form	4.50 API REG
Weight	786 kg
Material	17-4 PH <sup>1</sup>

Stator Specifications	
	mm
Overall Length	6388.1
Tube OD	244.5
Tube ID	200.2
Rubber Cutback Top/End	318.0 / 318.0
Weight	881 kg
Number of Stages	4.8
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	143.13	0.74	1.71	2.20	2.69	3.17
.5 OS	143.89	-0.03	0.94	1.42	1.90	2.38
1.0 OS						
1.5 OS						
2.0 OS						
2.5 OS						

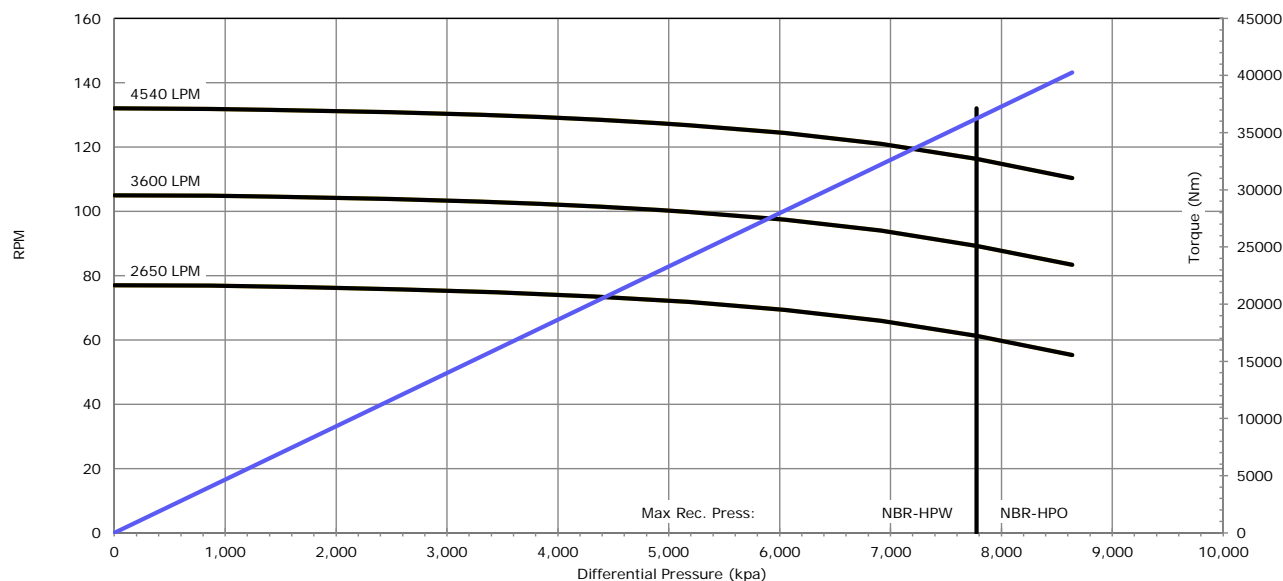
NBR-HPO (mm)		Fits (+ Compression / - Loose)				
Size	Minor <sup>2</sup>	25 °C	75 °C	100 °C	125 °C	150 °C <sup>3</sup>
.5 US						
STD	143.13	0.74	1.71	2.20	2.69	3.17
.5 OS	143.89	-0.03	0.94	1.42	1.90	2.38
1.0 OS						
1.5 OS						
2.0 OS						
2.5 OS						

Performance Specifications	
Flow Range (lpm)	2650 - 4540
Speed Range (rpm)	80 - 130
Torque Slope (Nm/kpa)	4.66
Rotation (rev/Liter)	0.0291
Off Bottom Pressure (kpa)	910

Performance Details		NBR-HPW	NBR-HPO
Max Diff Press (kpa)		7800	7800
Stall Diff Press (kpa)		12200	12300
Max Torque (Nm)		36300	36300
Stall Torque (Nm)		57100	57100

■ (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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