

## POWER SECTION

**Model No: AT675783.3 HTS**

Revised: 9/9/2020

Rotor Specifications	
	inches
Overall Length	238.50
Contour Length	231.50
Major Diameter	4.5
Eccentricity	0.255
Head diameter	4.000
Thread Form	2.875 API REG
Weight	877 lbs
Material	17-4 PH <sup>1</sup>

Stator Specifications	
	inches
Overall Length	245.00
Tube OD	6.75
Tube ID	5.50
Rubber Cutback Top/End	8.00 / 8.00
Weight	918 lbs
Number of Stages	3.3
Tube Material	4140/4142 Alloy Steel
Rubber Options	HNBR-HPT

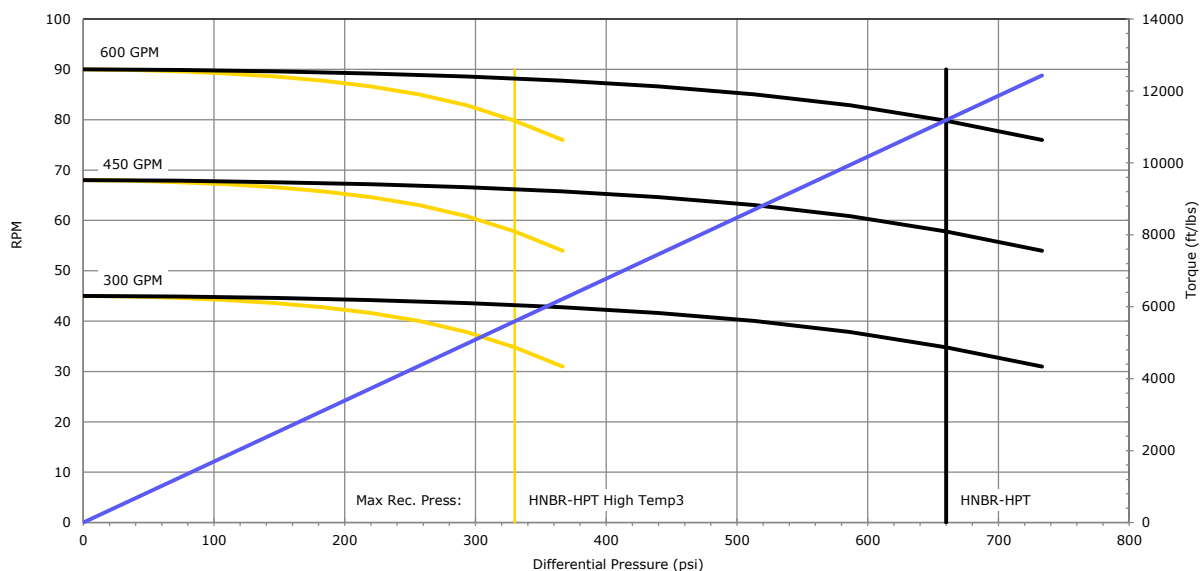
HNBR-HPT High Temp <sup>3</sup> (in)		Fits (+ Compression / - Loose)				
Size	Minor <sup>2</sup>	75 °F	125 °F	175 °F	250 °F	300 °F <sup>3</sup>
.5 US	3.990	0.000	0.015	0.030	0.052	0.067
STD	4.000	-0.010	0.005	0.020	0.042	0.057
.5 OS	4.011	-0.021	-0.006	0.008	0.031	0.045
1.0 OS	4.021	-0.031	-0.016	-0.002	0.020	0.035
1.5 OS	4.031	-0.041	-0.026	-0.012	0.010	0.024
2.0 OS						
2.5 OS						

HNBR-HPT (in)		Fits (+ Compression / - Loose)				
Size	Minor <sup>2</sup>	75 °F	125 °F	175 °F	250 °F	300 °F <sup>3</sup>
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2.0 OS						
2.5 OS						

Performance Specifications	
Flow Range (gpm)	300 - 600
Speed Range (rpm)	50 - 90
Torque Slope (ft-lb/psi)	16.95
Rotation (rev/gal)	0.150
Off Bottom Pressure (psi)	70

Performance Details		
	HNBR-HPT High Temp <sup>3</sup>	HNBR-HPT
Max Diff Press (psi)	330	660
Stall Diff Press (psi)	500	1040
Max Torque (ft-lb)	5600	11190
Stall Torque (ft-lb)	8400	17620

■ (HNBR-HPT High Temp<sup>3</sup>) ■ (HNBR-HPT) ■ 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> HPT High Temp parameters are recommended when BHCT exceeds 300°F. BHCT exceeding 430°F will void warranty. It is recommended to run stator for no more than 15 hours at BHCT above 375°F. 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

## POWER SECTION - METRIC

**Model No: AT675783.3 HTS**

Revised: 9/9/2020

Rotor Specifications	
	mm
Overall Length	6057.9
Contour Length	5880.1
Major Diameter	114.30
Eccentricity	6.48
Head diameter	101.60
Thread Form	2.875 API REG
Weight	398 kg
Material	17-4 PH <sup>1</sup>

Stator Specifications	
	mm
Overall Length	6223.0
Tube OD	171.5
Tube ID	139.7
Rubber Cutback Top/End	203.0 / 203.0
Weight	416 kg
Number of Stages	3.3
Tube Material	4140/4142 Seamless Alloy Steel
Rubber Options	HNBR-HPT

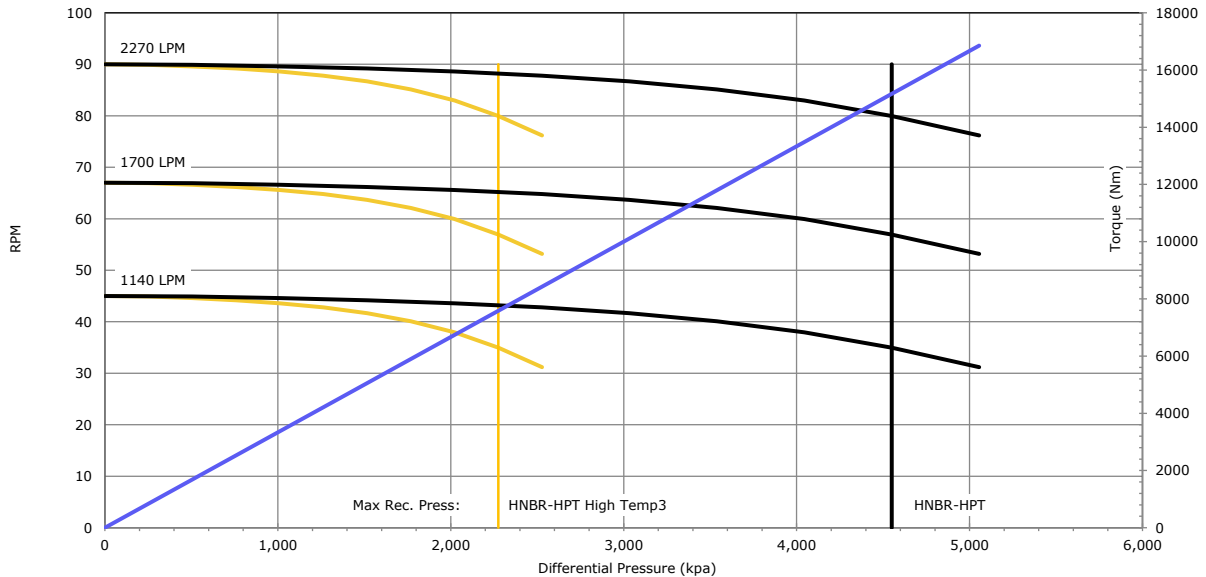
HNBR-HPT High Temp <sup>3</sup> (in)		Fits (+ Compression / - Loose)				
Size	Minor <sup>2</sup>	25 °C	75 °C	100 °C	125 °C	150 °C <sup>3</sup>
.5 US	101.35	0.00	0.68	1.03	1.37	1.71
STD	101.60	-0.25	0.42	0.76	1.10	1.44
.5 OS	101.88	-0.53	0.14	0.48	0.81	1.15
1.0 OS	102.13	-0.79	-0.12	0.22	0.55	0.89
1.5 OS	102.39	-1.04	-0.38	-0.04	0.29	0.62
2.0 OS						
2.5 OS						

HNBR-HPT (mm)		Fits (+ Compression / - Loose)				
Size	Minor <sup>2</sup>	25 °C	75 °C	100 °C	125 °C	150 °C <sup>3</sup>
.5 US	101.35	0.00	0.68	1.03	1.37	1.71
STD	101.60	-0.25	0.42	0.76	1.10	1.44
.5 OS	101.88	-0.53	0.14	0.48	0.81	1.15
1.0 OS	102.13	-0.79	-0.12	0.22	0.55	0.89
1.5 OS	102.39	-1.04	-0.38	-0.04	0.29	0.62
2.0 OS						
2.5 OS						

Performance Specifications	
Flow Range (lpm)	1140 - 2270
Speed Range (rpm)	50 - 90
Torque Slope (Nm/kpa)	3.33
Rotation (rev/Liter)	0.0396
Off Bottom Pressure (kpa)	460

Performance Details		
	HNBR-HPT High Temp <sup>3</sup>	HNBR-HPT
Max Diff Press (kpa)	2300	4600
Stall Diff Press (kpa)	3400	7200
Max Torque (Nm)	7600	15200
Stall Torque (Nm)	11400	23900

■ (HNBR-HPT High Temp<sup>3</sup>) ■ (HNBR-HPT) ■ 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> HPT High Temp parameters are recommended when BHCT exceeds 150°C. BHCT exceeding 220°C will void warranty. It is recommended to run stator for no more than 15 hours at BHCT above 190°C.

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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