

## POWER SECTION

**Model No: AT675782.1 ESX**

Revised: 9/9/2020

Rotor Specifications	
	inches
Overall Length	221.00
Contour Length	213.00
Major Diameter	4.265
Eccentricity	0.224
Head diameter	4.000
Thread Form	2.875 API REG
Weight	743 lbs
Material	17-4 PH <sup>1</sup>

Stator Specifications	
	inches
Overall Length	230.00
Tube OD	6.75
Tube ID	5.31
Rubber Cutback Top/End	9.00 / 9.00
Weight	966 lbs
Number of Stages	2.1
Tube Material	4140/4142 Alloy Steel
Rubber Options	HNBR-HPT

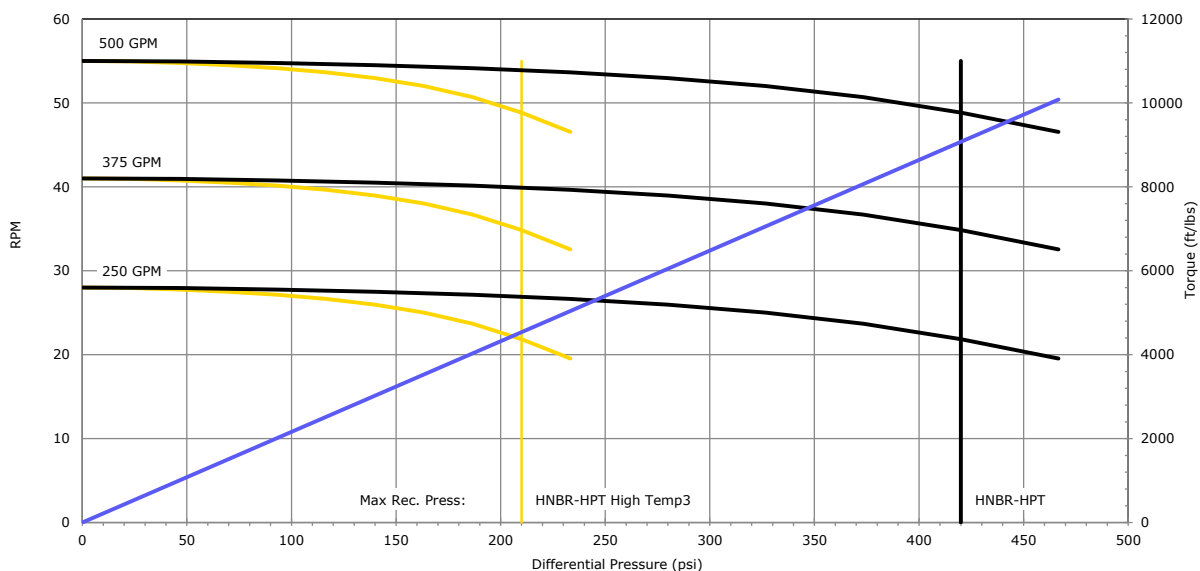
HNBR-HPT High Temp <sup>3</sup> (in)		Fits (+ Compression / - Loose)				
Size	Minor <sup>2</sup>	75 °F	125 °F	175 °F	250 °F	300 °F <sup>3</sup>
.5 US						
STD	3.834	-0.017	0.000	0.017	0.043	0.060
.5 OS	3.850	-0.033	-0.016	0.001	0.026	0.043
1.0 OS	3.860	-0.043	-0.026	-0.010	0.015	0.032
1.5 OS						
2.0 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>
.5 US						
STD	3.834	-0.017	0.000	0.017	0.043	0.060
.5 OS	3.850	-0.033	-0.016	0.001	0.026	0.043
1.0 OS	3.860	-0.043	-0.026	-0.010	0.015	0.032
1.5 OS						
2.0 OS						
2.5 OS						

Performance Specifications	
Flow Range (gpm)	250 - 500
Speed Range (rpm)	30 - 60
Torque Slope (ft-lb/psi)	21.60
Rotation (rev/gal)	0.110
Off Bottom Pressure (psi)	40

Performance Details		
	HNBR-HPT High Temp <sup>3</sup>	HNBR-HPT
Max Diff Press (psi)	210	420
Stall Diff Press (psi)	320	670
Max Torque (ft-lb)	4540	9080
Stall Torque (ft-lb)	6810	14290

■ (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: AT675782.1 ESX**

Revised: 9/9/2020

Rotor Specifications	
	mm
Overall Length	5613.4
Contour Length	5410.2
Major Diameter	108.33
Eccentricity	5.69
Head diameter	101.60
Thread Form	2.875 API REG
Weight	337 kg
Material	17-4 PH <sup>1</sup>

Stator Specifications	
	mm
Overall Length	5842.0
Tube OD	171.5
Tube ID	134.9
Rubber Cutback Top/End	229.0 / 229.0
Weight	438 kg
Number of Stages	2.1
Tube Material	4140/4142 Seamless Alloy Steel
Rubber Options	HNBR-HPT

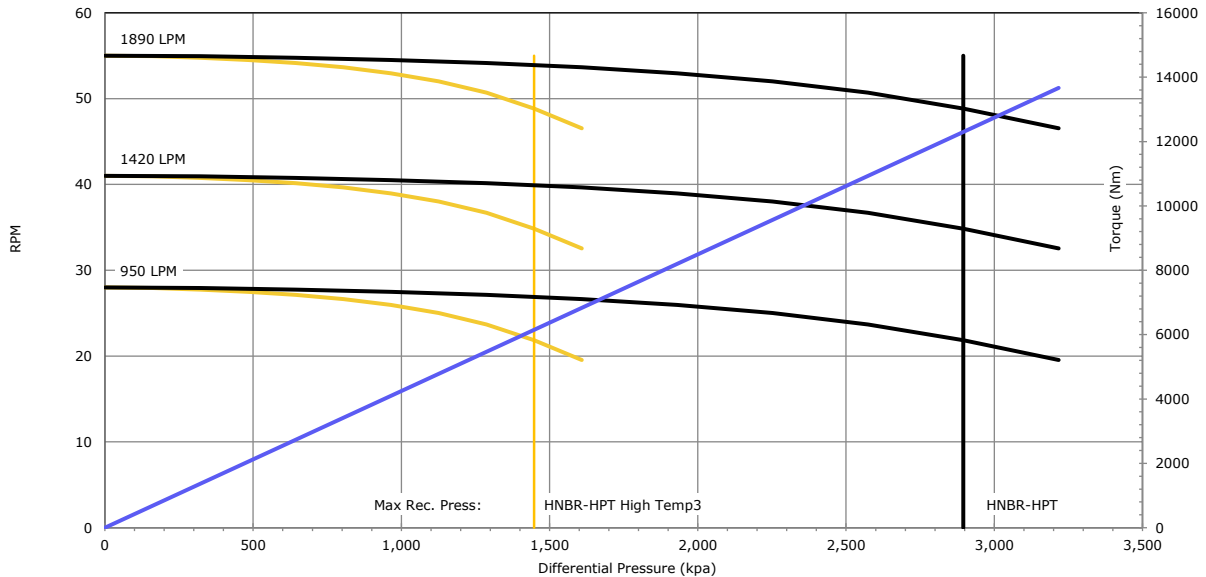
HNBR-HPT High Temp <sup>3</sup> (in)		Fits (+ Compression / - Loose)				
Size	Minor <sup>2</sup>	25 °C	75 °C	100 °C	125 °C	150 °C <sup>3</sup>
.5 US						
STD	97.38	-0.43	0.35	0.73	1.12	1.51
.5 OS	97.79	-0.84	-0.07	0.32	0.70	1.08
1.0 OS	98.04	-1.09	-0.33	0.05	0.44	0.82
1.5 OS						
2.0 OS						
2.5 OS						

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						
STD	97.38	-0.43	0.35	0.73	1.12	1.51
.5 OS	97.79	-0.84	-0.07	0.32	0.70	1.08
1.0 OS	98.04	-1.09	-0.33	0.05	0.44	0.82
1.5 OS						
2.0 OS						
2.5 OS						

Performance Specifications	
Flow Range (lpm)	950 - 1890
Speed Range (rpm)	30 - 60
Torque Slope (Nm/kpa)	4.25
Rotation (rev/Liter)	0.0291
Off Bottom Pressure (kpa)	290

Performance Details		
	HNBR-HPT High Temp <sup>3</sup>	HNBR-HPT
Max Diff Press (kpa)	1500	2900
Stall Diff Press (kpa)	2200	4600
Max Torque (Nm)	6200	12300
Stall Torque (Nm)	9300	19400

■ (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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