

POWER SECTION

Model No: AT287783.5

Revised: 9/14/2020

Rotor Specifications	
	inches
Overall Length	73.70
Contour Length	68.70
Major Diameter	1.882
Eccentricity	0.091
Head diameter	1.800
Thread Form	N/A
Weight	49 lbs
Material	17-4 PH ¹

Stator Specifications	
	inches
Overall Length	80.00
Tube OD	2.88
Tube ID	2.38
Rubber Cutback Top/End	6.40 / 6.40
Weight	53 lbs
Number of Stages	3.5
Tube Material	4140/4142 Alloy Steel
Rubber Options	HNBR-HPT

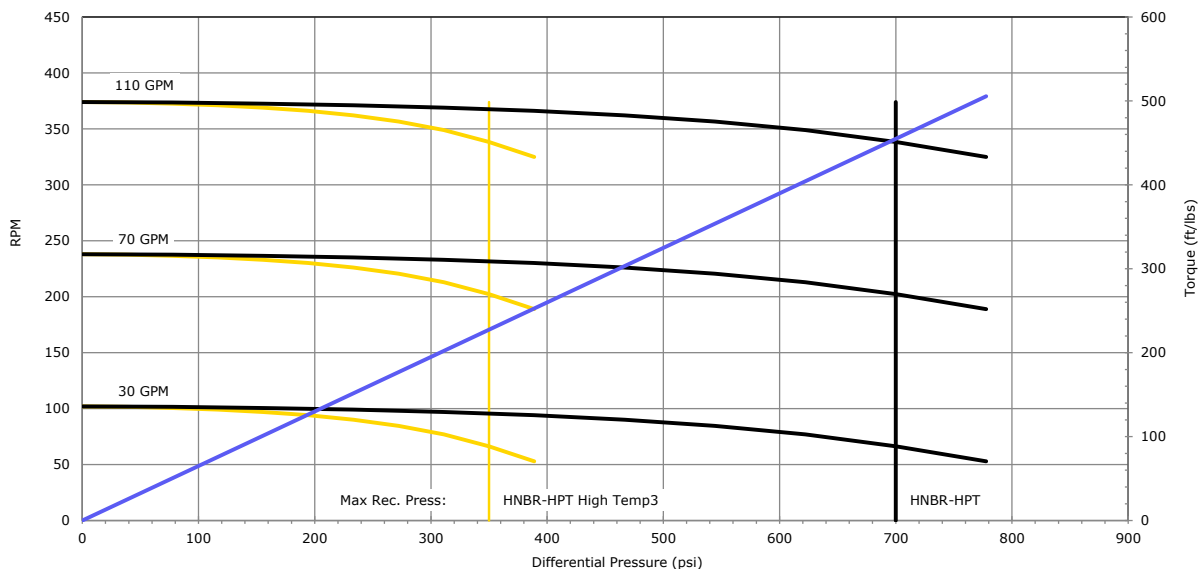
HNBR-HPT High Temp ³ (in)		Fits (+ Compression / - Loose)				
Size	Minor ²	75 °F	125 °F	175 °F	250 °F	300 °F ³
.5 US						
STD						
.5 OS						
1.0 OS	1.719	-0.019	-0.014	-0.008	0.000	0.005
1.5 OS						
2.0 OS						
2.5 OS						

HNBR-HPT (in)		Fits (+ Compression / - Loose)				
Size	Minor ²	75 °F	125 °F	175 °F	250 °F	300 °F ³
.5 US						
STD						
.5 OS						
1.0 OS	1.719	-0.019	-0.014	-0.008	0.000	0.005
1.5 OS						
2.0 OS						
2.5 OS						

Performance Specifications	
Flow Range (gpm)	30 - 110
Speed Range (rpm)	100 - 370
Torque Slope (ft-lb/psi)	0.65
Rotation (rev/gal)	3.400
Off Bottom Pressure (psi)	50

Performance Details		
	HNBR-HPT High Temp ³	HNBR-HPT
Max Diff Press (psi)	350	700
Stall Diff Press (psi)	530	1110
Max Torque (ft-lb)	230	460
Stall Torque (ft-lb)	350	720

■ (HNBR-HPT High Temp³) ■ (HNBR-HPT) ■ Torque



¹ Coating options of chrome or tungsten carbide are available. ² Vector Gauge Readings at Room Temp 75°F. ³ 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 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: AT287783.5

Revised: 9/14/2020

Rotor Specifications	
	mm
Overall Length	1872.0
Contour Length	1745.0
Major Diameter	47.80
Eccentricity	2.31
Head diameter	45.72
Thread Form	N/A
Weight	22 kg
Material	17-4 PH ¹

Stator Specifications	
	mm
Overall Length	2032.0
Tube OD	73.0
Tube ID	60.3
Rubber Cutback Top/End	163.0 / 163.0
Weight	24 kg
Number of Stages	3.5
Tube Material	4140/4142 Seamless Alloy Steel
Rubber Options	HNBR-HPT

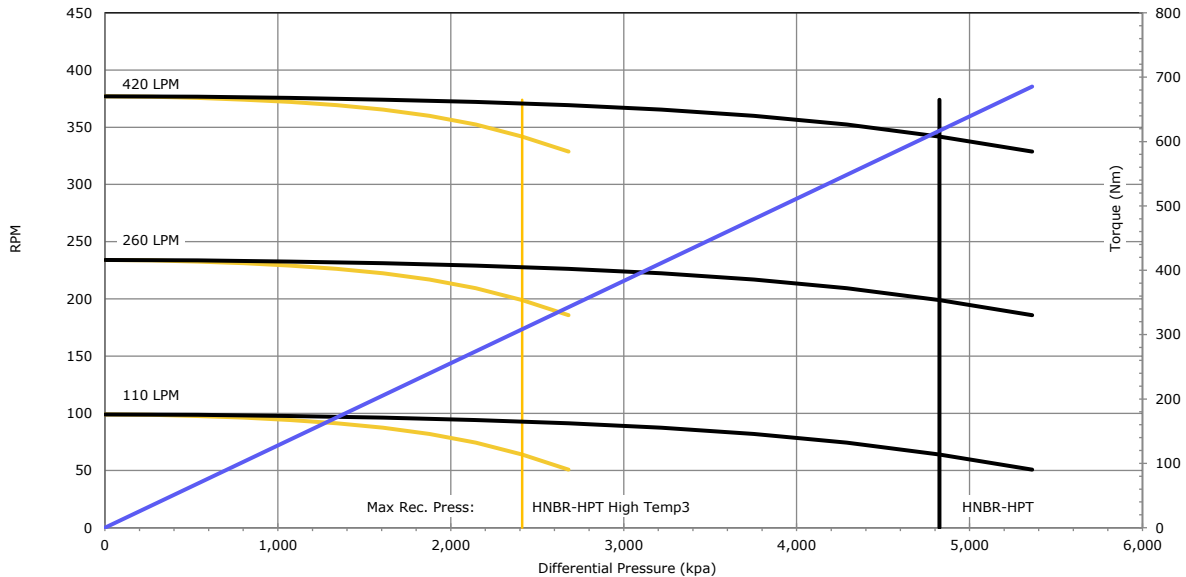
HNBR-HPT High Temp ³ (in)		Fits (+ Compression / - Loose)				
Size	Minor ²	25 °C	75 °C	100 °C	125 °C	150 °C ³
.5 US						
STD						
.5 OS						
1.0 OS	43.66	-0.48	-0.24	-0.11	0.01	0.14
1.5 OS						
2.0 OS						
2.5 OS						

HNBR-HPT (mm)		Fits (+ Compression / - Loose)				
Size	Minor ²	25 °C	75 °C	100 °C	125 °C	150 °C ³
.5 US						
STD						
.5 OS						
1.0 OS	43.66	-0.48	-0.24	-0.11	0.01	0.14
1.5 OS						
2.0 OS						
2.5 OS						

Performance Specifications	
Flow Range (lpm)	110 - 420
Speed Range (rpm)	100 - 370
Torque Slope (Nm/kpa)	0.13
Rotation (rev/Liter)	0.8982
Off Bottom Pressure (kpa)	340

Performance Details		
	HNBR-HPT High Temp ³	HNBR-HPT
Max Diff Press (kpa)	2500	4900
Stall Diff Press (kpa)	3600	7700
Max Torque (Nm)	400	700
Stall Torque (Nm)	500	1000

■ (HNBR-HPT High Temp³) ■ (HNBR-HPT) ■ Torque



¹ Coating options of chrome or tungsten carbide are available. ² Vector Gauge Readings at Room Temp 25°C. ³ 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 for the latest specification revisions.

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