

POWER SECTION

Model No: AT350453.2

Revised: 9/14/2020

Rotor Specifications	
	inches
Overall Length	97.00
Contour Length	91.00
Major Diameter	2.245
Eccentricity	0.185
Head diameter	2.250
Thread Form	N/A
Weight	78 lbs
Material	17-4 PH ¹

Stator Specifications	
	inches
Overall Length	100.00
Tube OD	3.50
Tube ID	2.88
Rubber Cutback Top/End	6.00 / 6.00
Weight	101 lbs
Number of Stages	3.2
Tube Material	4140/4142 Alloy Steel
Rubber Options	HNBR-HPT

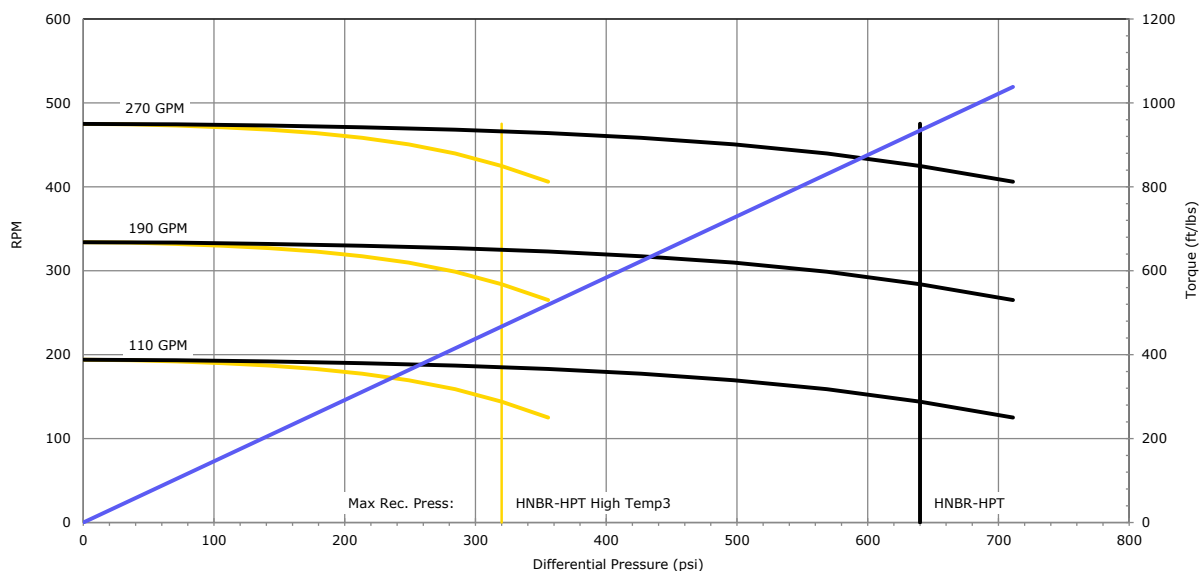
HNBR-HPT High Temp ³ (in)		Fits (+ Compression / - Loose)				
Size	Minor ²	75 °F	125 °F	175 °F	250 °F	300 °F ³
.5 US						
STD	1.882	-0.006	0.004	0.014	0.030	0.040
.5 OS						
1.0 OS	1.892	-0.016	-0.006	0.004	0.019	0.030
1.5 OS						
2.0 OS						
2.5 OS						

HNBR-HPT (in)		Fits (+ Compression / - Loose)				
Size	Minor ²	75 °F	125 °F	175 °F	250 °F	300 °F ³
.5 US						
STD	1.882	-0.006	0.004	0.014	0.030	0.040
.5 OS						
1.0 OS	1.892	-0.016	-0.006	0.004	0.019	0.030
1.5 OS						
2.0 OS						
2.5 OS						

Performance Specifications	
Flow Range (gpm)	110 - 270
Speed Range (rpm)	190 - 480
Torque Slope (ft-lb/psi)	1.46
Rotation (rev/gal)	1.760
Off Bottom Pressure (psi)	90

Performance Details		
	HNBR-HPT High Temp ³	HNBR-HPT
Max Diff Press (psi)	320	640
Stall Diff Press (psi)	480	1010
Max Torque (ft-lb)	470	940
Stall Torque (ft-lb)	710	1480

■ (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: AT350453.2

Revised: 9/14/2020

Rotor Specifications	
	mm
Overall Length	2463.8
Contour Length	2311.4
Major Diameter	57.02
Eccentricity	4.69
Head diameter	57.15
Thread Form	N/A
Weight	35 kg
Material	17-4 PH ¹

Stator Specifications	
	mm
Overall Length	2540.0
Tube OD	88.9
Tube ID	73.0
Rubber Cutback Top/End	152.0 / 152.0
Weight	46 kg
Number of Stages	3.2
Tube Material	4140/4142 Seamless Alloy Steel
Rubber Options	HNBR-HPT

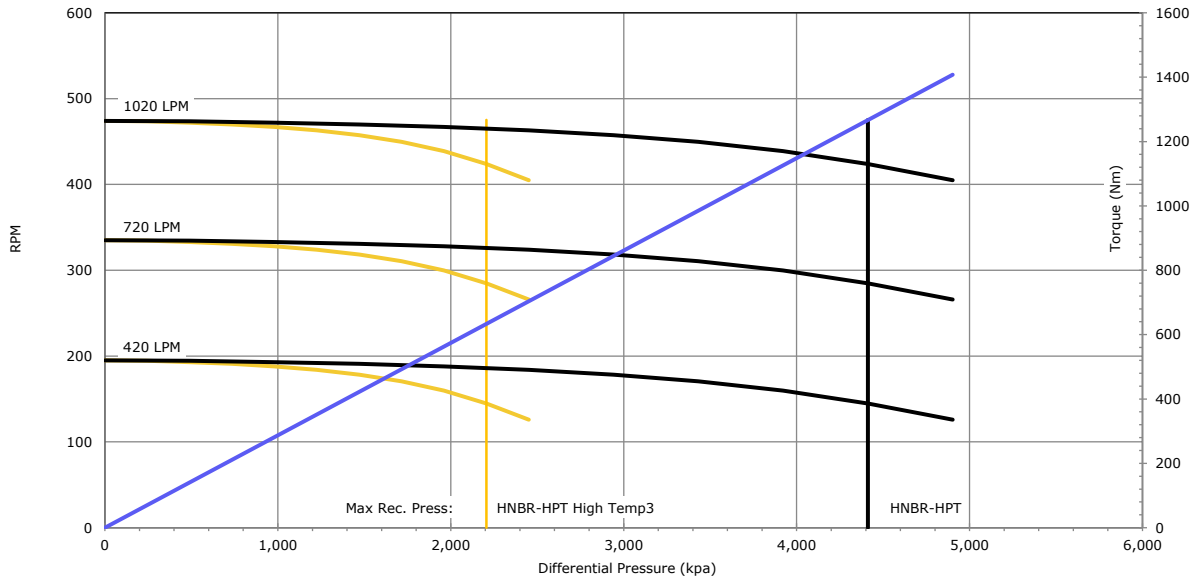
HNBR-HPT High Temp ³ (in)		Fits (+ Compression / - Loose)				
Size	Minor ²	25 °C	75 °C	100 °C	125 °C	150 °C ³
.5 US						
STD	47.80	-0.17	0.31	0.55	0.78	1.02
.5 OS						
1.0 OS	48.06	-0.42	0.05	0.29	0.52	0.76
1.5 OS						
2.0 OS						
2.5 OS						

HNBR-HPT (mm)		Fits (+ Compression / - Loose)				
Size	Minor ²	25 °C	75 °C	100 °C	125 °C	150 °C ³
.5 US						
STD	47.80	-0.17	0.31	0.55	0.78	1.02
.5 OS						
1.0 OS	48.06	-0.42	0.05	0.29	0.52	0.76
1.5 OS						
2.0 OS						
2.5 OS						

Performance Specifications	
Flow Range (lpm)	420 - 1020
Speed Range (rpm)	190 - 480
Torque Slope (Nm/kpa)	0.29
Rotation (rev/Liter)	0.4649
Off Bottom Pressure (kpa)	640

Performance Details		
	HNBR-HPT High Temp ³	HNBR-HPT
Max Diff Press (kpa)	2300	4500
Stall Diff Press (kpa)	3300	7000
Max Torque (Nm)	700	1300
Stall Torque (Nm)	1000	2000

■ (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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