

POWER SECTION

Model No: AT287454.0

Revised: 9/14/2020

Rotor Specifications	
	inches
Overall Length	103.63
Contour Length	99.63
Major Diameter	1.843
Eccentricity	0.156
Head diameter	1.800
Thread Form	N/A
Weight	56 lbs
Material	17-4 PH ¹

Stator Specifications	
	inches
Overall Length	105.63
Tube OD	2.88
Tube ID	2.38
Rubber Cutback Top/End	4.00 / 4.00
Weight	72 lbs
Number of Stages	4.0
Tube Material	4140/4142 Alloy Steel
Rubber Options	HNBR-HPT

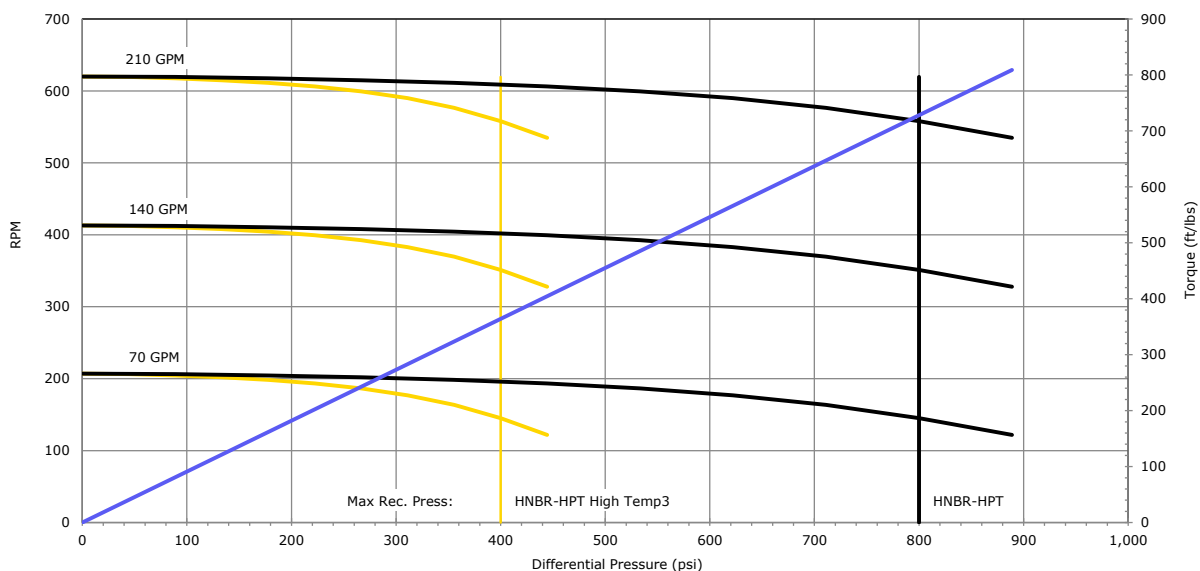
HNBR-HPT High Temp ³ (in)		Fits (+ Compression / - Loose)				
Size	Minor ²	75 °F	125 °F	175 °F	250 °F	300 °F ³
.5 US						
STD	1.527	0.004	0.009	0.015	0.023	0.029
.5 OS	1.535	-0.004	0.001	0.007	0.015	0.020
1.0 OS	1.548	-0.018	-0.012	-0.007	0.002	0.007
1.5 OS						
2.0 OS						
2.5 OS						

HNBR-HPT (in)		Fits (+ Compression / - Loose)				
Size	Minor ²	75 °F	125 °F	175 °F	250 °F	300 °F ³
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STD	1.527	0.004	0.009	0.015	0.023	0.029
.5 OS	1.535	-0.004	0.001	0.007	0.015	0.020
1.0 OS	1.548	-0.018	-0.012	-0.007	0.002	0.007
1.5 OS						
2.0 OS						
2.5 OS						

Performance Specifications	
Flow Range (gpm)	70 - 210
Speed Range (rpm)	210 - 620
Torque Slope (ft-lb/psi)	0.91
Rotation (rev/gal)	2.950
Off Bottom Pressure (psi)	100

Performance Details		
	HNBR-HPT High Temp ³	HNBR-HPT
Max Diff Press (psi)	400	800
Stall Diff Press (psi)	600	1260
Max Torque (ft-lb)	370	730
Stall Torque (ft-lb)	550	1150

■ (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: AT287454.0

Revised: 9/14/2020

Rotor Specifications	
	mm
Overall Length	2632.2
Contour Length	2530.5
Major Diameter	46.81
Eccentricity	3.97
Head diameter	45.72
Thread Form	N/A
Weight	25 kg
Material	17-4 PH ¹

Stator Specifications	
	mm
Overall Length	2682.9
Tube OD	73.0
Tube ID	60.3
Rubber Cutback Top/End	102.0 / 102.0
Weight	33 kg
Number of Stages	4.0
Tube Material	4140/4142 Seamless Alloy Steel
Rubber Options	HNBR-HPT

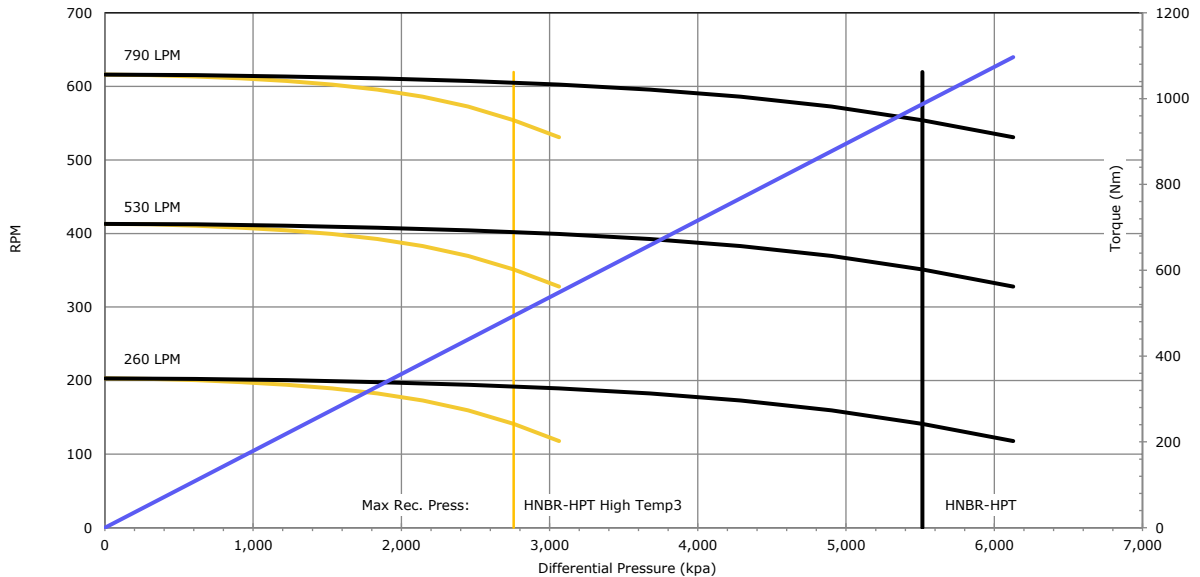
HNBR-HPT High Temp ³ (in)		Fits (+ Compression / - Loose)				
Size	Minor ²	25 °C	75 °C	100 °C	125 °C	150 °C ³
.5 US						
STD	38.79	0.09	0.34	0.47	0.60	0.73
.5 OS	38.99	-0.11	0.14	0.27	0.39	0.52
1.0 OS	39.32	-0.44	-0.19	-0.07	0.05	0.18
1.5 OS						
2.0 OS						
2.5 OS						

HNBR-HPT (mm)		Fits (+ Compression / - Loose)				
Size	Minor ²	25 °C	75 °C	100 °C	125 °C	150 °C ³
.5 US						
STD	38.79	0.09	0.34	0.47	0.60	0.73
.5 OS	38.99	-0.11	0.14	0.27	0.39	0.52
1.0 OS	39.32	-0.44	-0.19	-0.07	0.05	0.18
1.5 OS						
2.0 OS						
2.5 OS						

Performance Specifications	
Flow Range (lpm)	260 - 790
Speed Range (rpm)	210 - 620
Torque Slope (Nm/kpa)	0.18
Rotation (rev/Liter)	0.7793
Off Bottom Pressure (kpa)	650

Performance Details		
	HNBR-HPT High Temp ³	HNBR-HPT
Max Diff Press (kpa)	2800	5600
Stall Diff Press (kpa)	4100	8700
Max Torque (Nm)	500	1000
Stall Torque (Nm)	800	1600

■ (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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