

POWER SECTION

Model No: AT675785.7 SX

Revised: 1/12/2021

Rotor Specifications	
	inches
Overall Length	252.00
Contour Length	245.00
Major Diameter	4.644
Eccentricity	0.246
Head diameter	4.500
Thread Form	2.875 API REG
Weight	1002 lbs
Material	17-4 PH ¹

Stator Specifications	
	inches
Overall Length	260.00
Tube OD	6.75
Tube ID	5.50
Rubber Cutback Top/End	8.00 / 8.00
Weight	856 lbs
Number of Stages	5.7
Tube Material	4140/4142 Alloy Steel
Rubber Options	HNBR-HPT

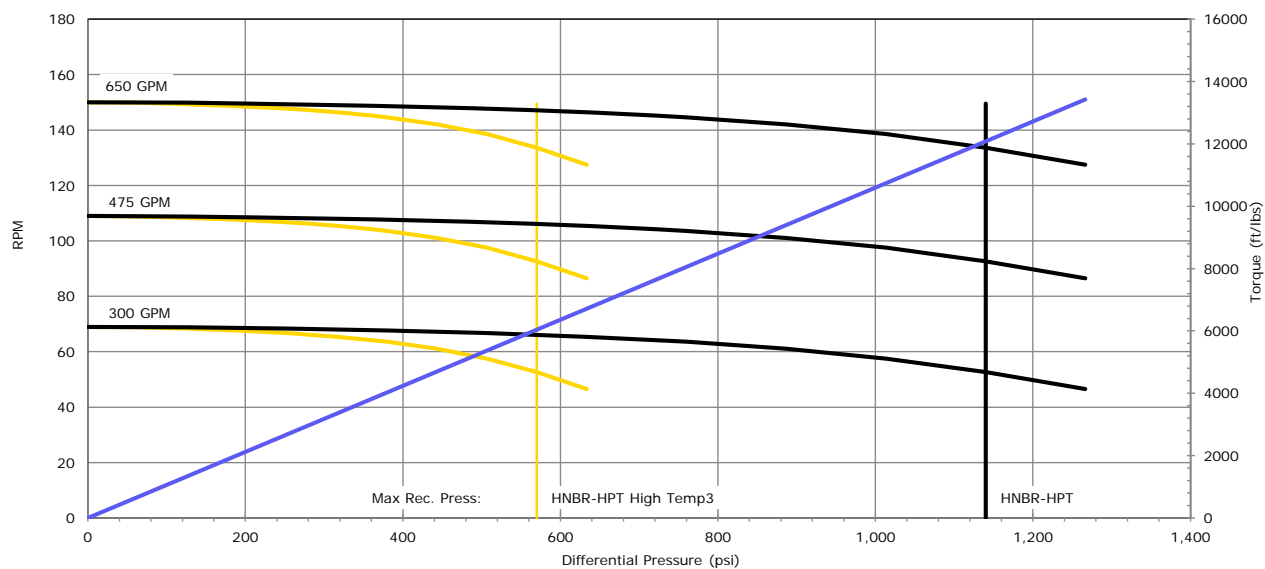
HNBR-HPT High Temp ³ (in)		Fits (+ Compression / - Loose)				
Size	Minor ²	75 °F	125 °F	175 °F	250 °F	300 °F ³
.5 US	4.147	0.005	0.022	0.040	0.066	0.084
STD	4.157	-0.005	0.012	0.030	0.056	0.073
.5 OS	4.167	-0.015	0.002	0.019	0.045	0.063
1.0 OS	4.184	-0.032	-0.015	0.002	0.028	0.045
1.5 OS	4.197	-0.045	-0.028	-0.011	0.014	0.031
2.0 OS						
2.5 OS						

HNBR-HPT (in)		Fits (+ Compression / - Loose)				
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.5 OS	4.167	-0.015	0.002	0.019	0.045	0.063
1.0 OS	4.184	-0.032	-0.015	0.002	0.028	0.045
1.5 OS	4.197	-0.045	-0.028	-0.011	0.014	0.031
2.0 OS						
2.5 OS						

Performance Specifications	
Flow Range (gpm)	300 - 650
Speed Range (rpm)	70 - 150
Torque Slope (ft-lb/psi)	10.60
Rotation (rev/gal)	0.230
Off Bottom Pressure (psi)	100

Performance Details		
	HNBR-HPT High Temp ³	HNBR-HPT
Max Diff Press (psi)	570	1140
Stall Diff Press (psi)	860	1800
Max Torque (ft-lb)	6050	12090
Stall Torque (ft-lb)	9070	19040

■ (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

Rotor Specifications	
	mm
Overall Length	6400.8
Contour Length	6223.0
Major Diameter	117.96
Eccentricity	6.25
Head diameter	114.30
Thread Form	2.875 API REG
Weight	454 kg
Material	17-4 PH ¹

Stator Specifications	
	mm
Overall Length	6604.0
Tube OD	171.5
Tube ID	139.7
Rubber Cutback Top/End	203.0 / 203.0
Weight	388 kg
Number of Stages	5.7
Tube Material	4140/4142 Seamless Alloy Steel
Rubber Options	HNBR-HPT

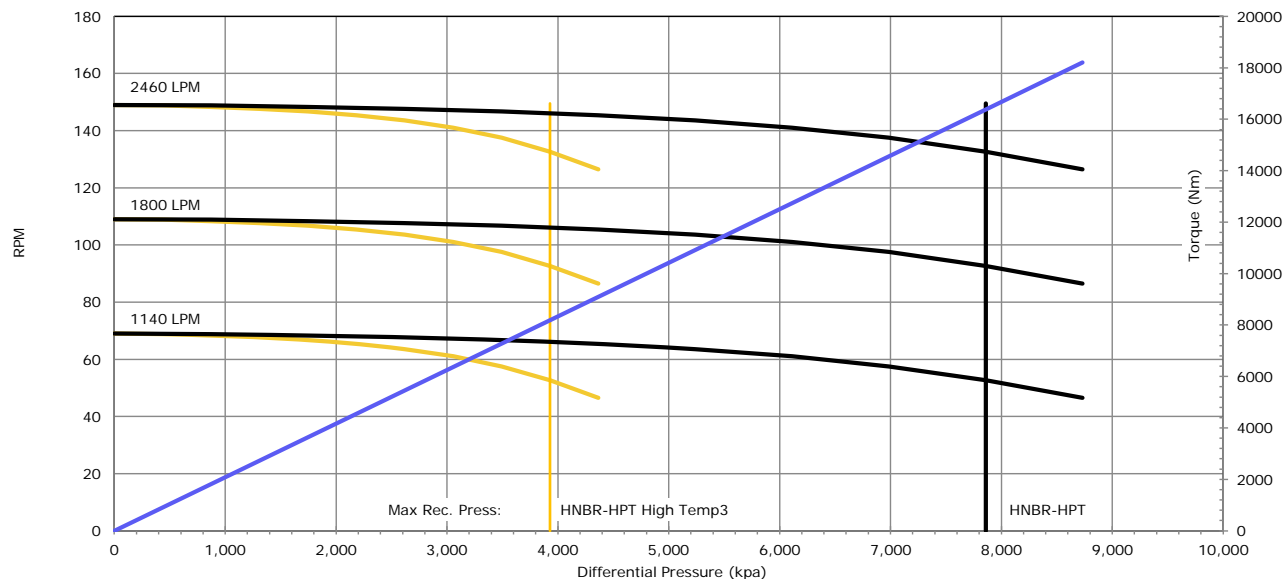
HNBR-HPT High Temp ³ (in)		Fits (+ Compression / - Loose)				
Size	Minor ²	25 °C	75 °C	100 °C	125 °C	150 °C ⁴
.5 US	105.33	0.11	0.92	1.32	1.73	2.13
STD	105.59	-0.14	0.66	1.06	1.46	1.86
.5 OS	105.84	-0.39	0.40	0.80	1.20	1.60
1.0 OS	106.27	-0.83	-0.04	0.36	0.75	1.14
1.5 OS	106.60	-1.16	-0.37	0.02	0.41	0.80
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 ⁴
.5 US	105.33	0.11	0.92	1.32	1.73	2.13
STD	105.59	-0.14	0.66	1.06	1.46	1.86
.5 OS	105.84	-0.39	0.40	0.80	1.20	1.60
1.0 OS	106.27	-0.83	-0.04	0.36	0.75	1.14
1.5 OS	106.60	-1.16	-0.37	0.02	0.41	0.80
2.0 OS						
2.5 OS						

Performance Specifications	
Flow Range (lpm)	1140 - 2460
Speed Range (rpm)	70 - 150
Torque Slope (Nm/kpa)	2.09
Rotation (rev/Liter)	0.0608
Off Bottom Pressure (kpa)	700

Performance Details		HNBR-HPT High Temp ³	HNBR-HPT
Max Diff Press (kpa)		4000	7900
Stall Diff Press (kpa)		5900	12400
Max Torque (Nm)		8200	16400
Stall Torque (Nm)		12300	25900

■ (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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