

POWER SECTION

Model No: AT800785.9 OPTI

Revised: 12/10/2020

Rotor Specifications	
	inches
Overall Length	284.50
Contour Length	276.50
Major Diameter	5.186
Eccentricity	0.293
Head diameter	4.750
Thread Form	3.50 API REG
Weight	1388 lbs
Material	17-4 PH ¹

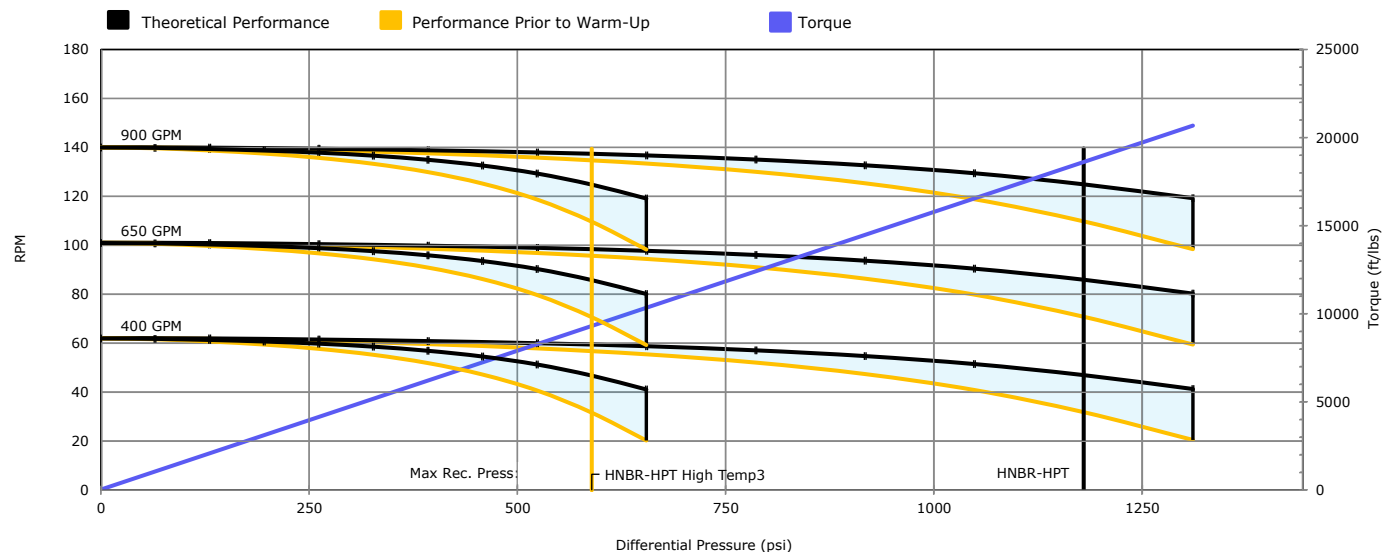
Performance Specifications	
Flow Range (gpm)	400 - 900
Speed Range (rpm)	60 - 140
Torque Slope (ft-lb/psi)	15.77
Rotation (rev/gal)	0.155
Off Bottom Pressure (psi)	120

Stator Specifications	
	inches
Overall Length	300.00
Tube OD	8.00
Tube ID	6.25
Rubber Cutback Top/End	8.00 / 15.50
Weight	1790 lbs
Number of Stages	5.9
Tube Material	4140/4142 Alloy Steel
Rubber Options	HNBR-HPT

Performance Details		
	HNBR-HPT High Temp ³	HNBR-HPT
Max Diff Press (psi)	590	1180
Stall Diff Press (psi)	890	1860
Max Torque (ft-lb)	9310	18610
Stall Torque (ft-lb)	13960	29310

Size	Minor ²	Fit @ 75°F	Stator Sizing and Fit Chart ⁴				
.5 US	-	-	-	-	Fit Not Available	-	-
STD	4.597	0.003	90°F	120°F	OPTIMAL RANGE	210°F	250°F
.5 OS	-	-	-	-	Fit Not Available	-	-
1.0 OS	-	-	-	-	Fit Not Available	-	-
1.5 OS	-	-	-	-	Fit Not Available	-	-
2.0 OS	-	-	-	-	Fit Not Available	-	-
2.5 OS	-	-	-	-	Fit Not Available	-	-

Minor Diameter Change = 0.001" per 2.6 °F ΔFit = 0.00038" per 1°F



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. It is recommended to run stator for no more than 15 hours at BHCT above 375°F. ⁴ Chart temp shows potential of the individual fit and not necessarily the elastomer. BHCT exceeding 430°F will void warranty. 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: **AT800785.9 OPTI**

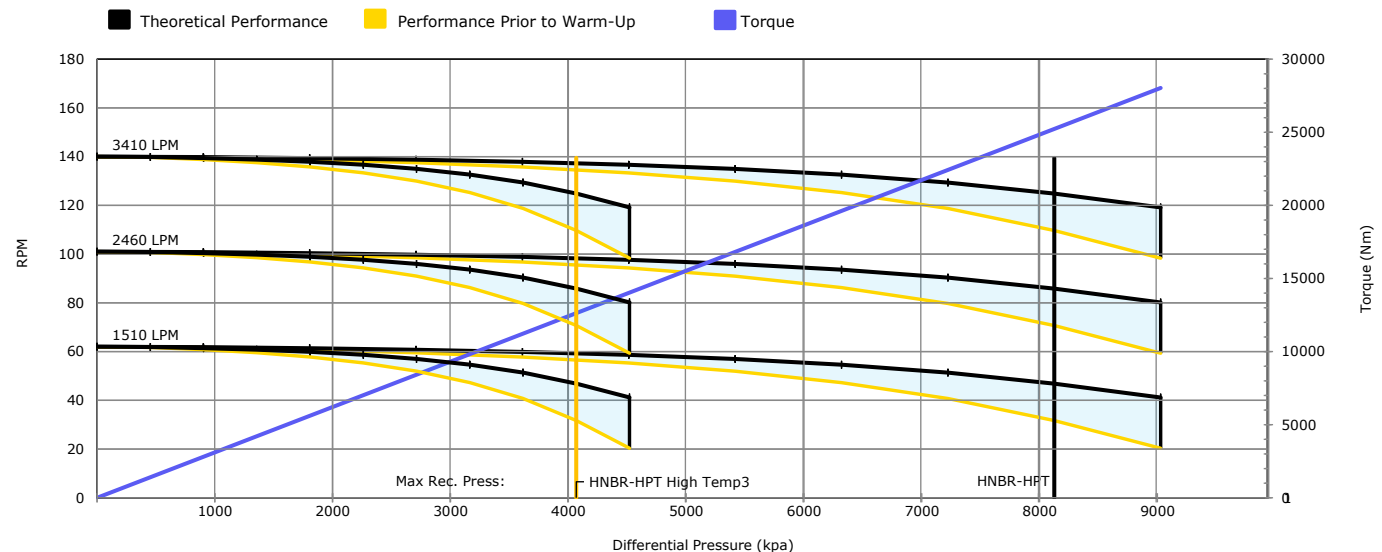
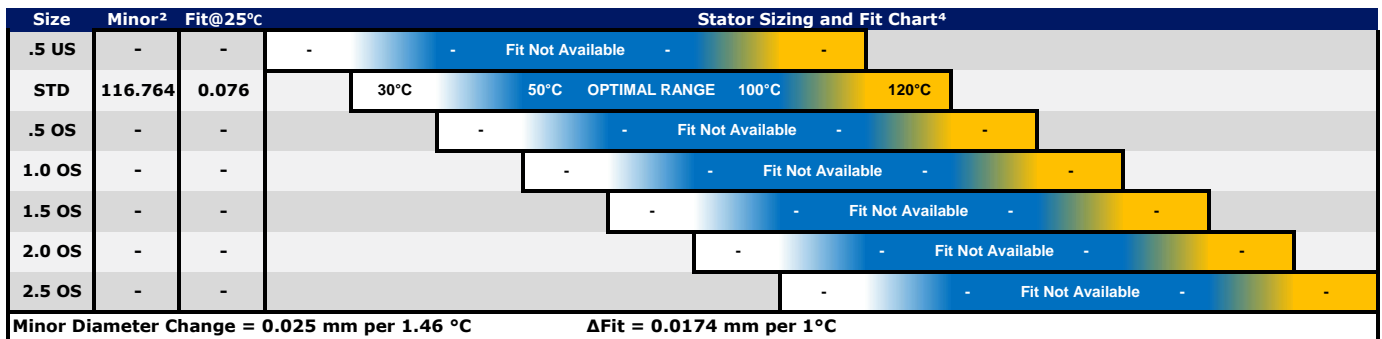
Revised: 12/10/2020

Rotor Specifications	
	mm
Overall Length	7226.3
Contour Length	7023.1
Major Diameter	131.72
Eccentricity	7.44
Head diameter	120.65
Thread Form	3.50 API REG
Weight	629 kg
Material	17-4 PH ¹

Stator Specifications	
	mm
Overall Length	7620.0
Tube OD	203.2
Tube ID	158.8
Rubber Cutback Top/End	203.0 / 394.0
Weight	812 kg
Number of Stages	5.9
Tube Material	4140/4142 Seamless Alloy Steel
Rubber Options	HNBR-HPT

Performance Specifications	
Flow Range (lpm)	1510 - 3410
Speed Range (rpm)	60 - 140
Torque Slope (Nm/kpa)	3.10
Rotation (rev/Liter)	0.0409
Off Bottom Pressure (kpa)	790

Performance Details		
	HNBR-HPT High Temp ³	HNBR-HPT
Max Diff Press (kpa)	4100	8200
Stall Diff Press (kpa)	6200	12900
Max Torque (Nm)	12700	25300
Stall Torque (Nm)	19000	39800



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. It is recommended to run stator for no more than 15 hours at BHCT above 190°C. ⁴ Chart temp shows potential of the individual fit and not necessarily the elastomer. BHCT exceeding 220°C will void warranty. 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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