

POWER SECTION

Model No: AT5504510.3 OPTI

Revised: 8/29/2022

Rotor Specifications	
	inches
Overall Length	269.00
Contour Length	262.00
Major Diameter	3.286
Eccentricity	0.232
Head diameter	3.300
Thread Form	1.375-6 SA
Weight	501 lbs
Material	17-4 PH ¹

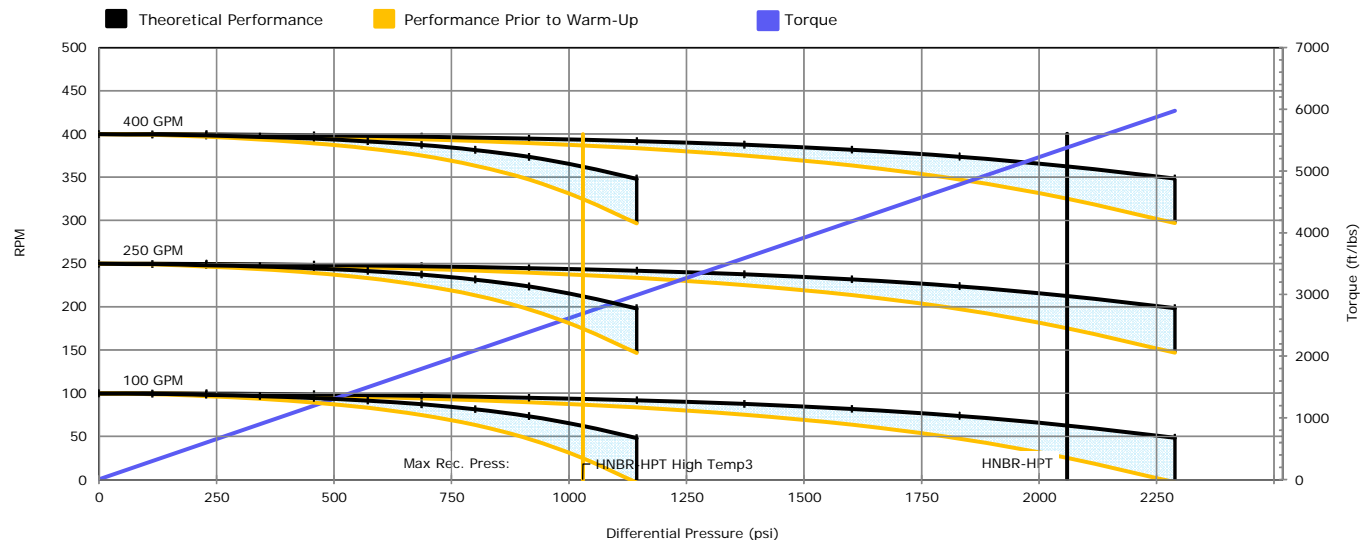
Stator Specifications	
	inches
Overall Length	275.00
Tube OD	5.50
Tube ID	4.00
Rubber Cutback Top/End	8.00 / 8.00
Weight	553 lbs
Number of Stages	10.3
Tube Material	4140/4142 Alloy Steel
Rubber Options	HNBR-HPT

Performance Specifications	
Flow Range (gpm)	100 - 400
Speed Range (rpm)	100 - 400
Torque Slope (ft-lb/psi)	2.61
Rotation (rev/gal)	1.000
Off Bottom Pressure (psi)	140

Performance Details		
	HNBR-HPT High Temp ³	HNBR-HPT
Max Diff Press (psi)	1030	2060
Stall Diff Press (psi)	1550	3250
Max Torque (ft-lb)	2690	5380
Stall Torque (ft-lb)	4040	8470

Size	Minor ²	Fit @ 75°F	Stator Sizing and Fit Chart ⁴	
.5 US	-	-	-	Fit Not Available
STD	-	-	-	Fit Not Available
.5 OS	2.840	-0.018	160°F	190°F OPTIMAL RANGE 270°F 310°F
1.0 OS	2.851	-0.029	190°F	230°F OPTIMAL RANGE 310°F 340°F
1.5 OS	2.859	-0.037	220°F	250°F OPTIMAL RANGE 330°F 370°F
2.0 OS	-	-	-	Fit Not Available
2.5 OS	-	-	-	Fit Not Available

Minor Diameter Change = 0.001" per 3.2 °F ΔFit = 0.00032" 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

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