

## POWER SECTION

**Model No: AT700569.6 OPTI**

Revised: 4/14/2023

Rotor Specifications	
	inches
Overall Length	292.00
Contour Length	284.00
Major Diameter	4.663
Eccentricity	0.294
Head diameter	4.700
Thread Form	1.375-6 SA
Weight	1106 lbs
Material	17-4 PH <sup>1</sup>

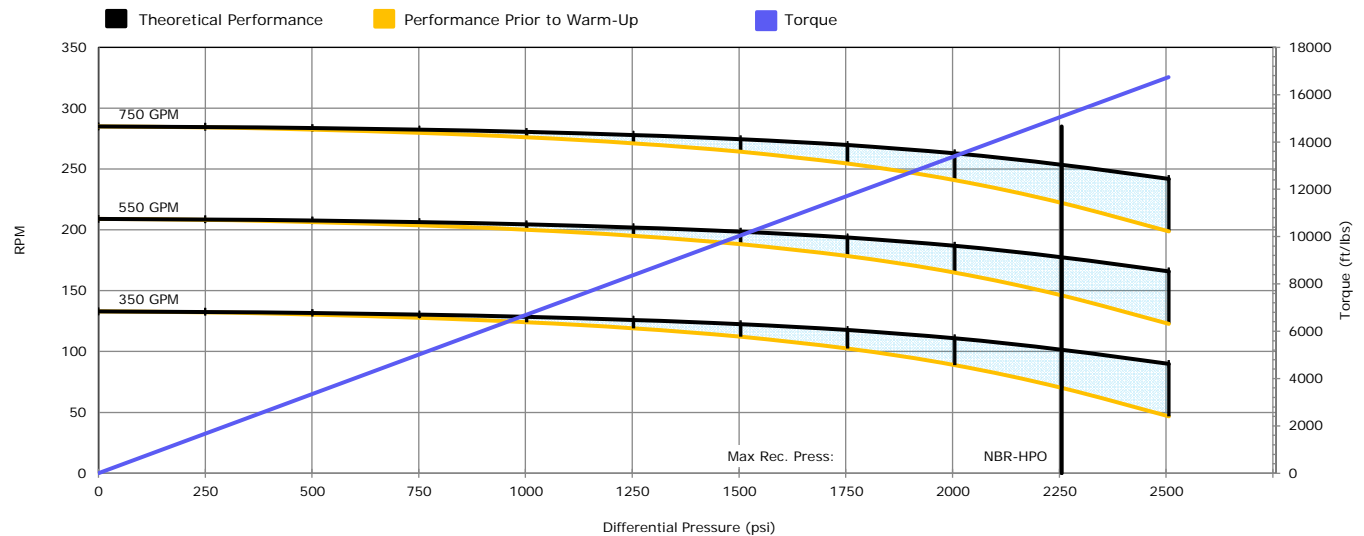
Performance Specifications	
Flow Range (gpm)	350 - 750
Speed Range (rpm)	130 - 290
Torque Slope (ft-lb/psi)	6.68
Rotation (rev/gal)	0.380
Off Bottom Pressure (psi)	190

Stator Specifications	
	inches
Overall Length	300.00
Tube OD	7.00
Tube ID	5.75
Rubber Cutback Top/End	10.00 / 10.00
Weight	1034 lbs
Number of Stages	9.6
Tube Material	4140/4142 Alloy Steel
Rubber Options	NBR-HPO

Performance Details	
	NBR-HPO
Max Diff Press (psi)	2260
Stall Diff Press (psi)	3560
Max Torque (ft-lb)	15080
Stall Torque (ft-lb)	23740

Size	Minor <sup>2</sup>	Fit @ 75°F	Stator Sizing and Fit Chart <sup>3</sup>	
.5 US	-	-	-	Fit Not Available
STD	4.068	0.008	80°F	120°F OPTIMAL RANGE 210°F 250°F
.5 OS	4.078	-0.002	110°F	150°F OPTIMAL RANGE 240°F 280°F
1.0 OS	4.098	-0.022	170°F	210°F OPTIMAL RANGE 300°F 340°F <sup>3</sup>
1.5 OS	4.110	-0.034	210°F	250°F OPTIMAL RANGE 340°F 370°F <sup>3</sup>
2.0 OS	-	-	-	Fit Not Available
2.5 OS	-	-	-	Fit Not Available

Minor Diameter Change = 0.001" per 3 °F      ΔFit = 0.00034" per 1°F



<sup>1</sup> Coating options of chrome or tungsten carbide are available <sup>2</sup> Vector Gauge Readings at Room Temp 75°F (measured from the top end) <sup>3</sup> Chart temp shows potential of the individual fit and not necessarily the elastomer. BHCT Exceeding 320°F will void warranty for NBR-HPO.   
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](http://www.AbacoDrilling.com) for the latest specification revisions.

### LOCATIONS

US: Headquarters   
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