

POWER SECTION

Model No: AT700568.6 OPTI

Revised: 8/17/2022

Rotor Specifications	
	inches
Overall Length	267.00
Contour Length	254.50
Major Diameter	4.703
Eccentricity	0.324
Head diameter	4.380
Thread Form	1.375-6 SA
Weight	910 lbs
Material	17-4 PH ¹

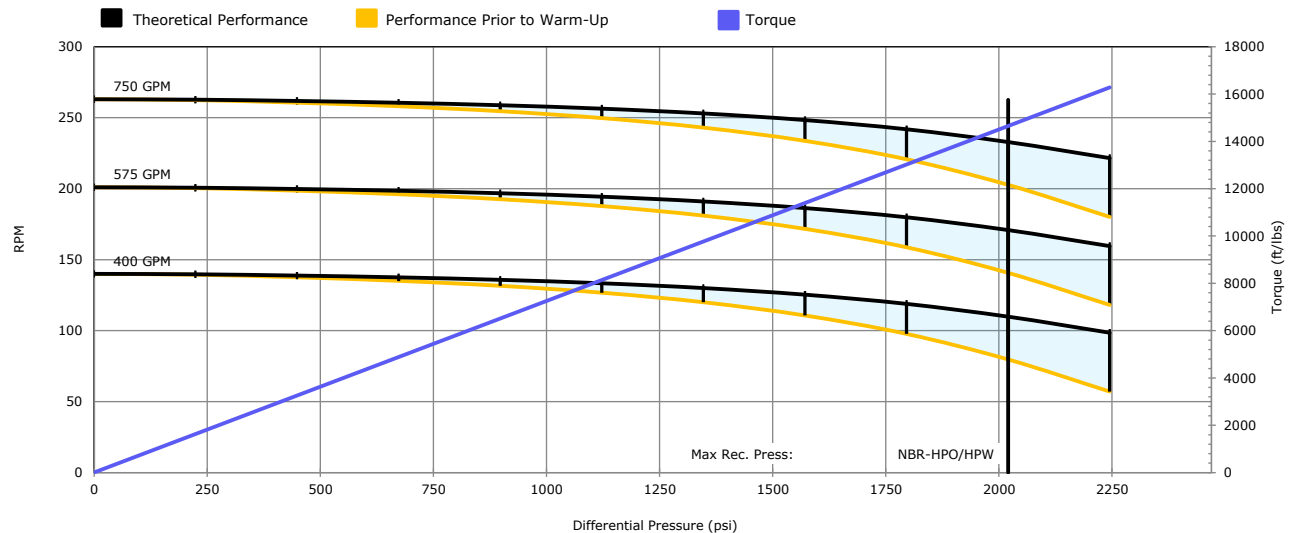
Stator Specifications	
	inches
Overall Length	275.00
Tube OD	7.00
Tube ID	5.75
Rubber Cutback Top/End	10.00 / 10.00
Weight	982 lbs
Number of Stages	8.6
Tube Material	4140/4142 Alloy Steel
Rubber Options	NBR-HPO/NBR-HPW

Performance Specifications	
Flow Range (gpm)	400 - 750
Speed Range (rpm)	140 - 260
Torque Slope (ft-lb/psi)	7.25
Rotation (rev/gal)	0.350
Off Bottom Pressure (psi)	180

Performance Details	
	NBR-HPO/NBR-HPW
Max Diff Press (psi)	2030
Stall Diff Press (psi)	3190
Max Torque (ft-lb)	14660
Stall Torque (ft-lb)	23080

Size	Minor ²	Fit @ 75°F	Stator Sizing and Fit Chart ³	
.5 US	-	-	-	Fit Not Available
STD	-	-	-	Fit Not Available
.5 OS	4.056	0.000	110°F	150°F OPTIMAL RANGE 230°F 270°F
1.0 OS	4.075	-0.019	160°F	200°F OPTIMAL RANGE 290°F 320°F
1.5 OS	4.085	-0.029	190°F	230°F OPTIMAL RANGE 320°F 350°F ³
2.0 OS	-	-	-	Fit Not Available
2.5 OS	-	-	-	Fit Not Available

Minor Diameter Change = 0.001" per 2.7 °F ΔFit = 0.00037" per 1°F



¹ Coating options of chrome or tungsten carbide are available ² Vector Gauge Readings at Room Temp 75°F ³ Chart temp shows potential of the individual fit and not necessarily the elastomer. BHCT Exceeding 320°F will void warranty for NBR-HPO/NBR-HPW.

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
US: Sales & Distribution
CANADA: Stator Manufacturing
DUBAI UAE: Stator Manufacturing

713 Northpark Central Dr., #400 Houston, TX 77073 - Tel: (281) 869-0700 - Fax: (281) 869-0701
11308 West Interstate 20 East, Odessa, TX 79765 - Tel: (432) 248-1814
6303-39th Street Leduc, Alberta T9E 0Z3 Canada - Tel: (780) 986-8947 - Fax: (780) 986-8842
Oilfields Supply Center B#57, Jebel Ali, Dubai UAE, P.O. Box 19909 - Tel: 971-4-870-8600

POWER SECTION - METRIC

Model No: AT700568.6 OPTI

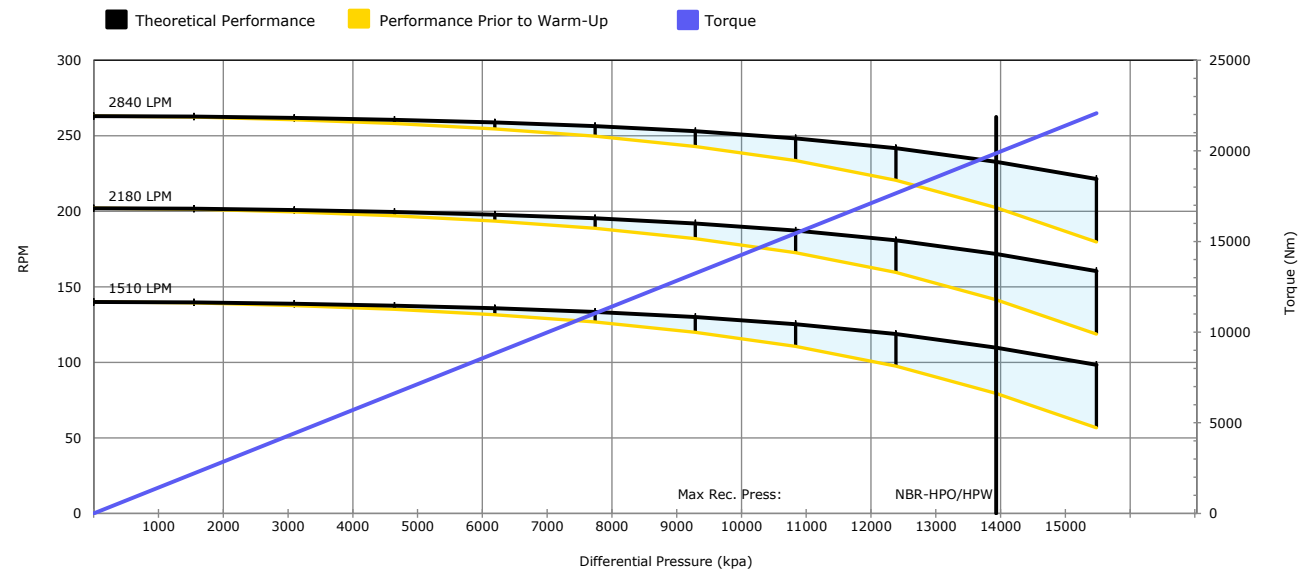
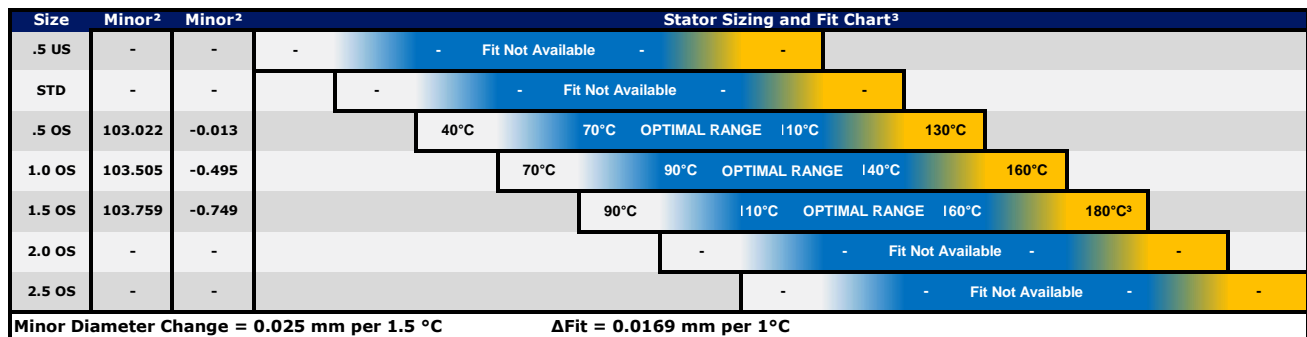
Revised: 8/17/2022

Rotor Specifications	
	mm
Overall Length	6781.8
Contour Length	6464.3
Major Diameter	119.46
Eccentricity	8.22
Head diameter	111.25
Thread Form	1.375-6 SA
Weight	413 kg
Material	17-4 PH ¹

Stator Specifications	
	mm
Overall Length	6985.0
Tube OD	177.8
Tube ID	146.1
Rubber Cutback Top/End	254.0 / 254.0
Weight	445 kg
Number of Stages	8.6
Tube Material	4140/4142 Seamless Alloy Steel
Rubber Options	NBR-HPO/NBR-HPW

Performance Specifications	
Flow Range (lpm)	1510 - 2840
Speed Range (rpm)	140 - 260
Torque Slope (Nm/kpa)	1.43
Rotation (rev/Liter)	0.0925
Off Bottom Pressure (kpa)	1230

Performance Details	
	NBR-HPO/NBR-HPW
Max Diff Press (kpa)	14000
Stall Diff Press (kpa)	22000
Max Torque (Nm)	19900
Stall Torque (Nm)	31300



¹ Coating options of chrome or tungsten carbide are available ² Vector Gauge Readings at Room Temp 25°C ³ Chart temp shows potential of the individual fit and not necessarily the elastomer. BHCT Exceeding 160°C will void warranty for NBR-HPO/NBR-HPW. 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

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