

POWER SECTION

Model No: AT700676.5 OPTI

Revised: 8/17/2022

Rotor Specifications	
	inches
Overall Length	267.00
Contour Length	259.00
Major Diameter	4.747
Eccentricity	0.302
Head diameter	4.750
Thread Form	2.875 SLIMLINE H-90
Weight	932 lbs
Material	17-4 PH ¹

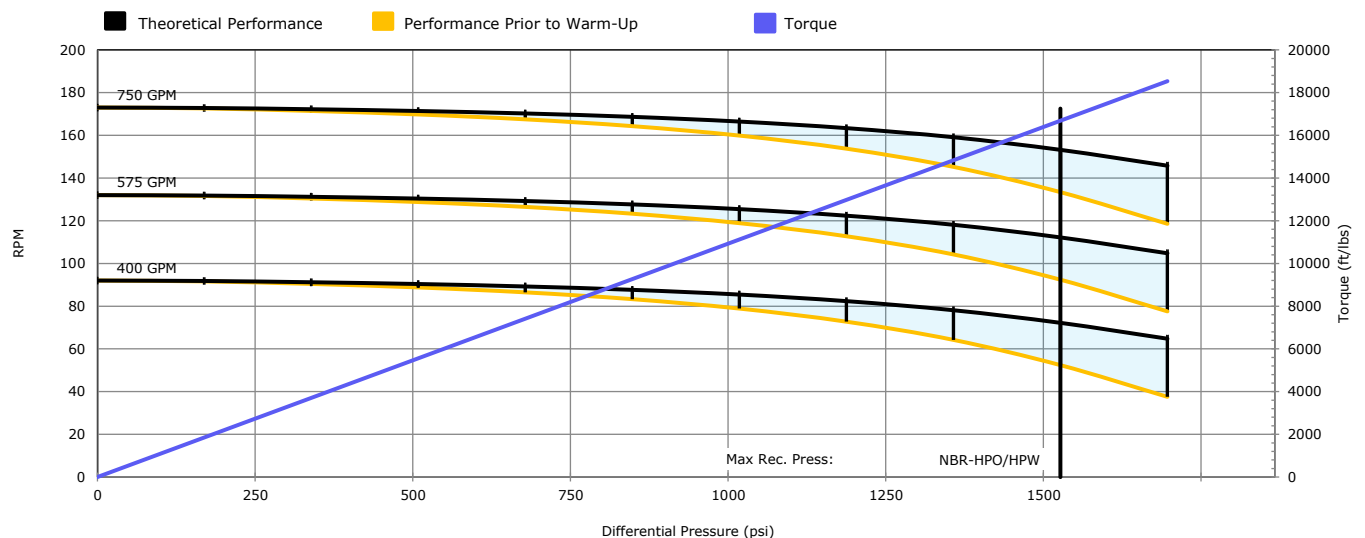
Stator Specifications	
	inches
Overall Length	275.00
Tube OD	7.00
Tube ID	5.75
Rubber Cutback Top/End	8.00 / 8.00
Weight	983 lbs
Number of Stages	6.5
Tube Material	4140/4142 Alloy Steel
Rubber Options	NBR-HPO/NBR-HPW

Performance Specifications	
Flow Range (gpm)	400 - 750
Speed Range (rpm)	90 - 170
Torque Slope (ft-lb/psi)	10.92
Rotation (rev/gal)	0.230
Off Bottom Pressure (psi)	130

Performance Details	
	NBR-HPO/NBR-HPW
Max Diff Press (psi)	1530
Stall Diff Press (psi)	2410
Max Torque (ft-lb)	16690
Stall Torque (ft-lb)	26280

Size	Minor ²	Fit @ 75°F	Stator Sizing and Fit Chart ³	
.5 US	-	-	-	Fit Not Available
STD	4.138	0.005	90°F	120°F OPTIMAL RANGE 220°F 260°F
.5 OS	4.151	-0.008	120°F	160°F OPTIMAL RANGE 260°F 300°F
1.0 OS	-	-	-	Fit Not Available
1.5 OS	4.171	-0.028	180°F	220°F OPTIMAL RANGE 320°F 360°F ³
2.0 OS	-	-	-	Fit Not Available
2.5 OS	-	-	-	Fit Not Available

Minor Diameter Change = 0.001" per 2.9 °F ΔFit = 0.00034" per 1°F



¹ Coating options of chrome or tungsten carbide are available ² Vector Gauge Readings at Room Temp 75°F (measured from the top end) 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: AT700676.5 OPTI

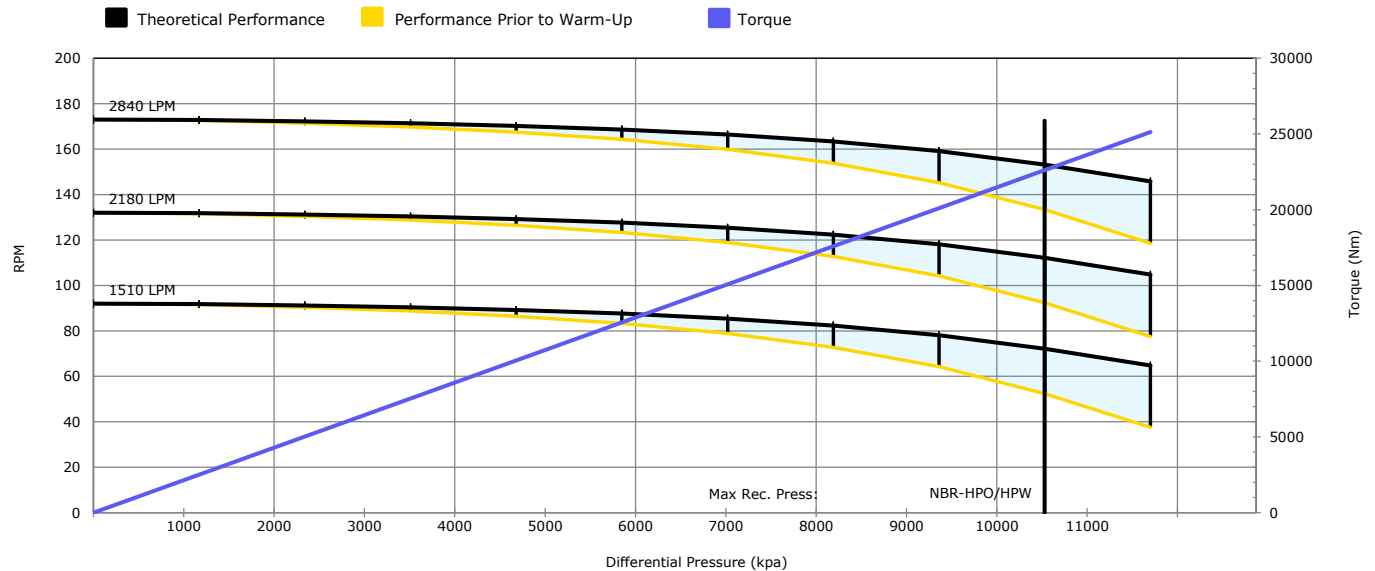
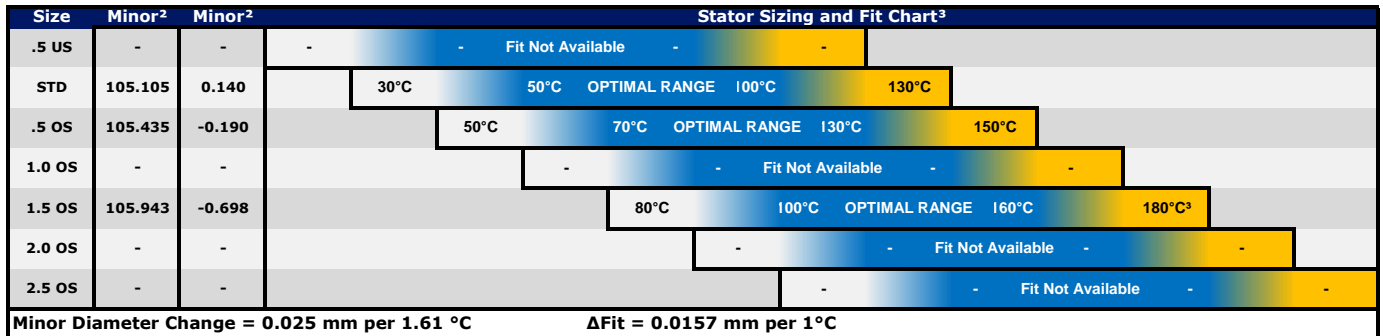
Revised: 8/17/2022

Rotor Specifications	
	mm
Overall Length	6781.8
Contour Length	6578.6
Major Diameter	120.57
Eccentricity	7.66
Head diameter	120.65
Thread Form	2.875 SLIMLINE H-90
Weight	423 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	203.0 / 203.0
Weight	446 kg
Number of Stages	6.5
Tube Material	4140/4142 Seamless Alloy Steel
Rubber Options	NBR-HPO/NBR-HPW

Performance Specifications	
Flow Range (lpm)	1510 - 2840
Speed Range (rpm)	90 - 170
Torque Slope (Nm/kpa)	2.15
Rotation (rev/Liter)	0.0608
Off Bottom Pressure (kpa)	890

Performance Details	
	NBR-HPO/NBR-HPW
Max Diff Press (kpa)	10600
Stall Diff Press (kpa)	16600
Max Torque (Nm)	22700
Stall Torque (Nm)	35700



¹ Coating options of chrome or tungsten carbide are available ² Vector Gauge Readings at Room Temp 25°C (measured from the top end) 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.

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