

POWER SECTION

Model No: AT725789.3 OPTI

Revised: 1/19/2023

Rotor Specifications	
	inches
Overall Length	292.00
Contour Length	284.00
Major Diameter	5.105
Eccentricity	0.297
Head diameter	5.100
Thread Form	1.375-6 SA
Weight	0 lbs
Material	17-4 PH ¹

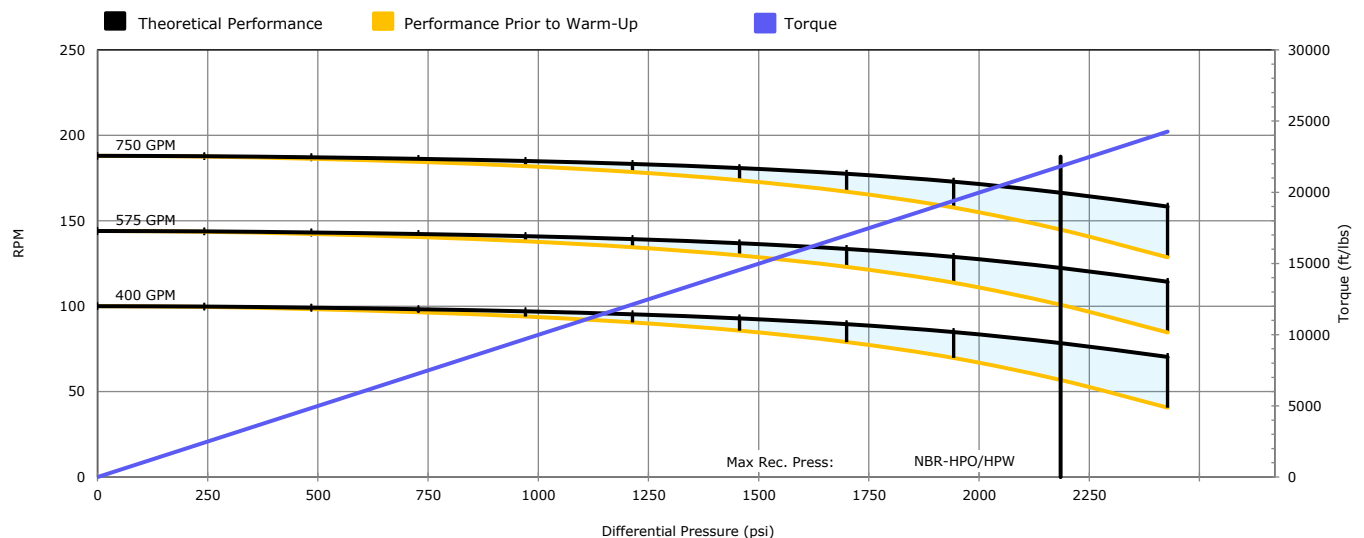
Stator Specifications	
	inches
Overall Length	300.00
Tube OD	7.25
Tube ID	6.00
Rubber Cutback Top/End	10.00 / 10.00
Weight	1101 lbs
Number of Stages	9.3
Tube Material	4140/4142 Alloy Steel
Rubber Options	NBR-HPO/NBR-HPW

Performance Specifications	
Flow Range (gpm)	400 - 750
Speed Range (rpm)	100 - 190
Torque Slope (ft-lb/psi)	9.99
Rotation (rev/gal)	0.250
Off Bottom Pressure (psi)	160

Performance Details	
	NBR-HPO/NBR-HPW
Max Diff Press (psi)	2190
Stall Diff Press (psi)	3450
Max Torque (ft-lb)	21840
Stall Torque (ft-lb)	34390

Size	Minor ²	Fit @ 75°F	Stator Sizing and Fit Chart ³				
.5 US	-	-	-	-	Fit Not Available	-	-
STD	4.509	0.002	90°F	130°F	OPTIMAL RANGE	220°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 3.3 °F ΔFit = 0.0003" 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: AT725789.3 OPTI

Revised: 1/19/2023

Rotor Specifications	
	mm
Overall Length	7416.8
Contour Length	7213.6
Major Diameter	129.67
Eccentricity	7.55
Head diameter	129.54
Thread Form	1.375-6 SA
Weight	0 kg
Material	17-4 PH ¹

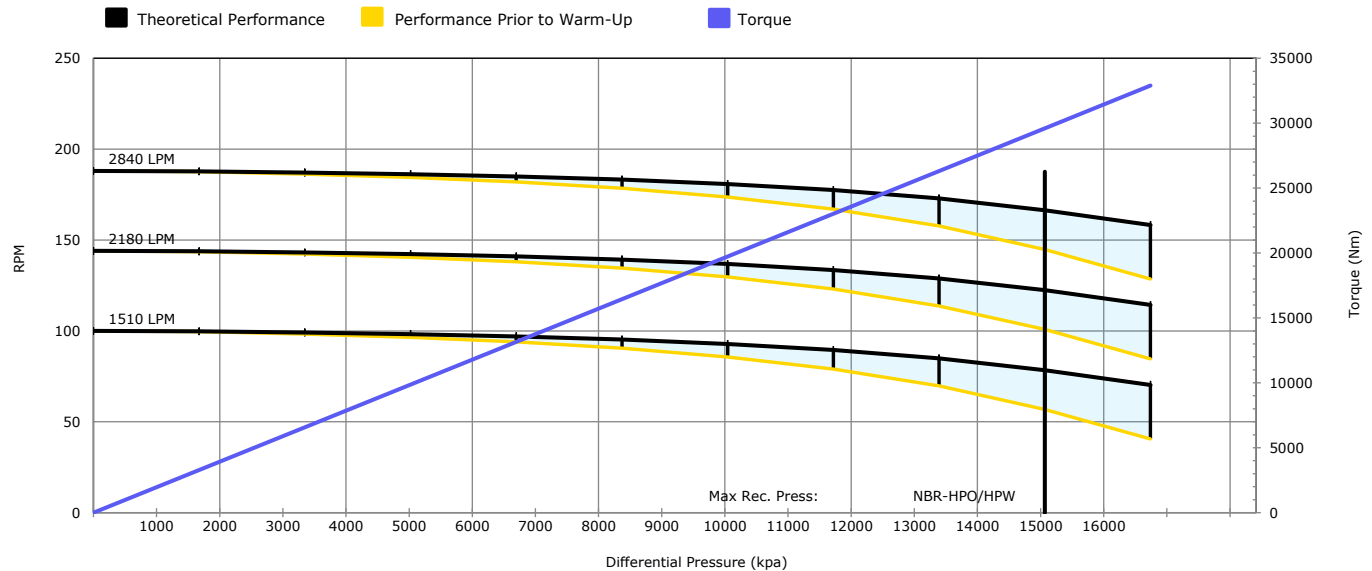
Stator Specifications	
	mm
Overall Length	7620.0
Tube OD	184.2
Tube ID	152.4
Rubber Cutback Top/End	254.0 / 254.0
Weight	499 kg
Number of Stages	9.3
Tube Material	4140/4142 Seamless Alloy Steel
Rubber Options	NBR-HPO/NBR-HPW

Performance Specifications	
Flow Range (lpm)	1510 - 2840
Speed Range (rpm)	100 - 190
Torque Slope (Nm/kpa)	1.97
Rotation (rev/Liter)	0.0660
Off Bottom Pressure (kpa)	1090

Performance Details	
	NBR-HPO/NBR-HPW
Max Diff Press (kpa)	15100
Stall Diff Press (kpa)	23800
Max Torque (Nm)	29700
Stall Torque (Nm)	46700

Size	Minor ²	Minor ²	Stator Sizing and Fit Chart ³	
.5 US	-	-	-	Fit Not Available
STD	114.529	0.038	30°C	50°C OPTIMAL RANGE 100°C 120°C
.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 = 0.025 mm per 1.83 °C ΔFit = 0.0139 mm per 1°C



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.

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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