Abaco DRILLING TECHNOLOGIES

POWER SECTION

Model No: AT650784.8

Revised: 9/11/2019

Rotor Specification	
Overall Length	194.25 in.
Contour Length	187.75 in.
Major Diameter	3.980 in.
Eccentricity	0.226 in.
Head Diameter	3.500 in.
Thread Form	2.375 API REG
Weight	554 lbs.
Material	17-4 PH[1]

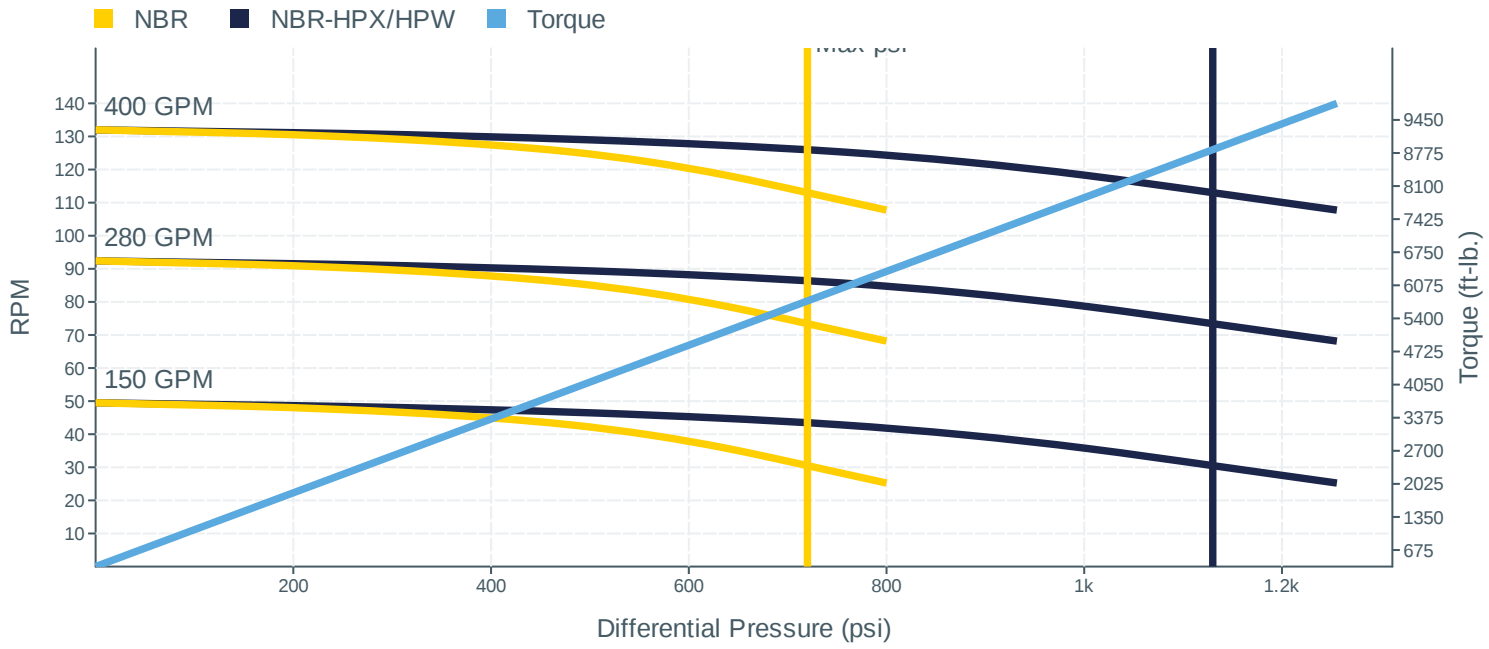
Stator Specification	
Overall Length	203.50 in.
Tube OD	6.50 in.
Tube ID	5.00 in.
Rubber Cutback Top/End	8/8 in.
Weight	844 lbs.
Number of Stages	4.8 in.
Tube Material	4140/4142 Alloy Steel
Rubber Options	NBR, NBR-HPX/HPW

NBR (in.)		Fits (+Compression / -Loose)				
Size	Minor[2]	75°F	125°F	175°F	250°F	300°F[3]
0.5 US	--	--	--	--	--	--
STD	3.518	0.010	0.025	0.040	0.062	0.077
0.5 OS	3.531	-0.003	0.012	0.026	0.048	0.063
1 OS	3.547	-0.019	-0.004	0.010	0.032	0.046
1.5 OS	3.556	-0.028	-0.014	0.001	0.023	0.037
2 OS	--	--	--	--	--	--
2.5 OS	--	--	--	--	--	--

NBR-HPX/HPW (in.)		Fits (+Compression / -Loose)				
Size	Minor[2]	75°F	125°F	175°F	250°F	300°F[3]
0.5 US	--	--	--	--	--	--
STD	3.516	0.012	0.027	0.042	0.064	0.079
0.5 OS	3.529	-0.001	0.014	0.028	0.050	0.065
1 OS	3.545	-0.017	-0.002	0.012	0.034	0.048
1.5 OS	3.554	-0.026	-0.012	0.003	0.025	0.039
2 OS	--	--	--	--	--	--
2.5 OS	--	--	--	--	--	--

Performance Specifications	
Flow Range	150 - 400 GPM
Speed Range	50 - 130 RPM
Torque Slope	7.53 ft-lb./psi
Rotation	0.330 rev/gal
Off Bottom Pressure	70 psi

Performance Details		
	NBR	NBR-HPX/HPW
Max Diff. Press.	720 psi	1130 psi
Stall Diff. Press.	1080 psi	1780 psi
Max Torque	5430 ft-lb.	8500 ft-lb.
Stall Torque	8140 ft-lb.	13380 ft-lb.



[1] Coating options of chrome or tungsten carbide are available [2] Vector Gauge Readings at Room Temp 75°F [3] BHCT Exceeding 275°F will void warranty for NBR (320°F for HPW/HPX)

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 abacodrilling.com for the latest specification revisions.

LOCATIONS

US	Headquarters	713 Northpark Central Dr., #400 Houston, TX 77073 - Tel: (281) 869-0700 - Fax: (281) 869-0701
US	Sales & Distribution	11308 West Interstate 20 East, Odessa, TX 79765 - Tel: (432) 248-1814
CANADA	Stator Manufacturing	6303-39th Street Leduc, Alberta T9E 0Z3 Canada - Tel: (780) 986-8947 - Fax: (780) 986-8842
UAE	Sales & Distribution	Building #57 Oilfield Supply Center, PO Box 191909, JAFZA, Dubai, UAE - Tel: +971 4 8708600

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Abaco DRILLING TECHNOLOGIES

POWER SECTION – METRIC

Model No: AT650784.8

Revised: 9/11/2019

Rotor Specification	
Overall Length	4934.0 mm
Contour Length	4768.8 mm
Major Diameter	101.10 mm
Eccentricity	5.70 mm
Head Diameter	88.90 mm
Thread Form	2.375 API REG
Weight	251 kgs
Material	17-4 PH[1]

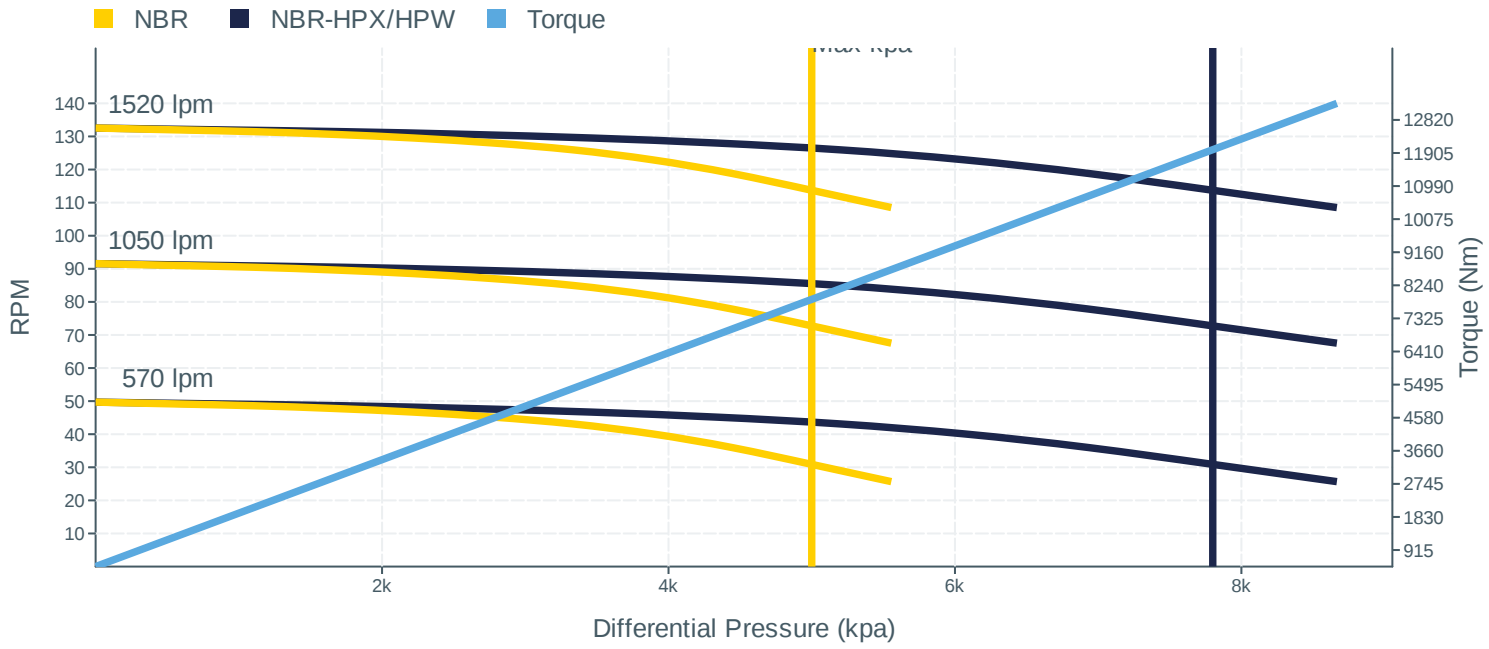
Stator Specification	
Overall Length	5168.9 mm
Tube OD	165.1 mm
Tube ID	127.0 mm
Rubber Cutback Top/End	203.2/203.2 mm
Weight	383 kgs
Number of Stages	4.8 mm
Tube Material	4140/4142 Alloy Steel
Rubber Options	NBR, NBR-HPX/HPW

NBR (mm)		Fits (+Compression / -Loose)				
Size	Minor[2]	24°C	52°C	79°C	121°C	149°C[3]
0.5 US	--	--	--	--	--	--
STD	89.36	0.25	0.64	1.02	1.57	1.96
0.5 OS	89.69	-0.08	0.30	0.66	1.22	1.60
1 OS	90.09	-0.48	-0.10	0.25	0.81	1.17
1.5 OS	90.32	-0.71	-0.36	0.03	0.58	0.94
2 OS	--	--	--	--	--	--
2.5 OS	--	--	--	--	--	--

NBR-HPX/HPW (mm)		Fits (+Compression / -Loose)				
Size	Minor[2]	24°C	52°C	79°C	121°C	149°C[3]
0.5 US	--	--	--	--	--	--
STD	89.31	0.30	0.69	1.07	1.63	2.01
0.5 OS	89.64	-0.03	0.36	0.71	1.27	1.65
1 OS	90.04	-0.43	-0.05	0.30	0.86	1.22
1.5 OS	90.27	-0.66	-0.30	0.08	0.64	0.99
2 OS	--	--	--	--	--	--
2.5 OS	--	--	--	--	--	--

Performance Specifications	
Flow Range	570 - 1520 lpm
Speed Range	50 - 130 RPM
Torque Slope	1.48 Nm/kpa
Rotation	0.0872 rev/liter
Off Bottom Pressure	490 kpa

Performance Details		
	NBR	NBR-HPX/HPW
Max Diff. Press.	5000 kpa	7800 kpa
Stall Diff. Press.	7500 kpa	12300 kpa
Max Torque	7400 Nm	11600 Nm
Stall Torque	11100 Nm	18200 Nm



[1] Coating options of chrome or tungsten carbide are available [2] Vector Gauge Readings at Room Temp 25°C [3] BHCT Exceeding 135°C will void warranty for NBR (160°C for HPW/HPX)

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