Abaco DRILLING TECHNOLOGIES

POWER SECTION

Model No: AT500783.8

Revised: 9/11/2019

Rotor Specification	
Overall Length	178.00 in.
Contour Length	172.25 in.
Major Diameter	2.945 in.
Eccentricity	0.163 in.
Head Diameter	2.750 in.
Thread Form	2.375 HEF Modified
Weight	283 lbs.
Material	17-4 PH[1]

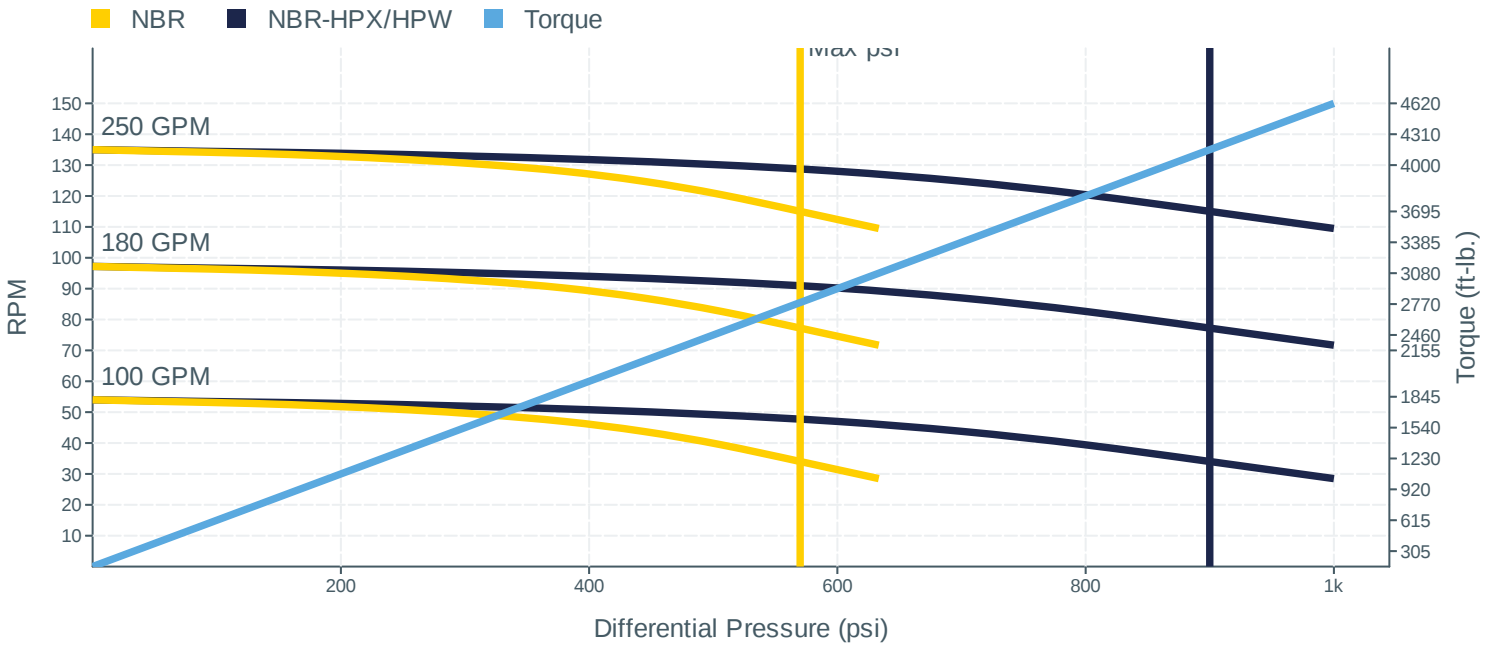
Stator Specification	
Overall Length	187.00 in.
Tube OD	5.00 in.
Tube ID	3.75 in.
Rubber Cutback Top/End	8/8 in.
Weight	489 lbs.
Number of Stages	3.8 in.
Tube Material	4140/4142 Alloy Steel
Rubber Options	NBR, NBR-HPX/HPW

NBR (in.)		Fits (+Compression / -Loose)				
Size	Minor[2]	75°F	125°F	175°F	250°F	300°F[3]
0.5 US	--	--	--	--	--	--
STD	2.603	0.016	0.028	0.041	0.059	0.071
0.5 OS	2.613	0.006	0.018	0.030	0.049	0.061
1 OS	2.623	-0.004	0.008	0.020	0.038	0.050
1.5 OS	2.634	-0.015	-0.003	0.009	0.027	0.039
2 OS	2.654	-0.035	-0.023	-0.012	0.006	0.018
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	2.600	0.019	0.031	0.044	0.062	0.074
0.5 OS	2.610	0.009	0.021	0.033	0.052	0.064
1 OS	2.620	-0.001	0.011	0.023	0.041	0.053
1.5 OS	2.631	-0.012	0.000	0.012	0.030	0.042
2 OS	2.651	-0.032	-0.020	-0.008	0.009	0.021
2.5 OS	--	--	--	--	--	--

Performance Specifications	
Flow Range	100 - 250 GPM
Speed Range	50 - 140 RPM
Torque Slope	4.62 ft-lb./psi
Rotation	0.540 rev/gal
Off Bottom Pressure	50 psi

Performance Details		
	NBR	NBR-HPX/HPW
Max Diff. Press.	570 psi	900 psi
Stall Diff. Press.	860 psi	1410 psi
Max Torque	2640 ft-lb.	4130 ft-lb.
Stall Torque	3950 ft-lb.	6500 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: AT500783.8

Revised: 9/11/2019

Rotor Specification	
Overall Length	4521.2 mm
Contour Length	4375.2 mm
Major Diameter	74.80 mm
Eccentricity	4.10 mm
Head Diameter	69.90 mm
Thread Form	2.375 HEF Modified
Weight	128 kgs
Material	17-4 PH[1]

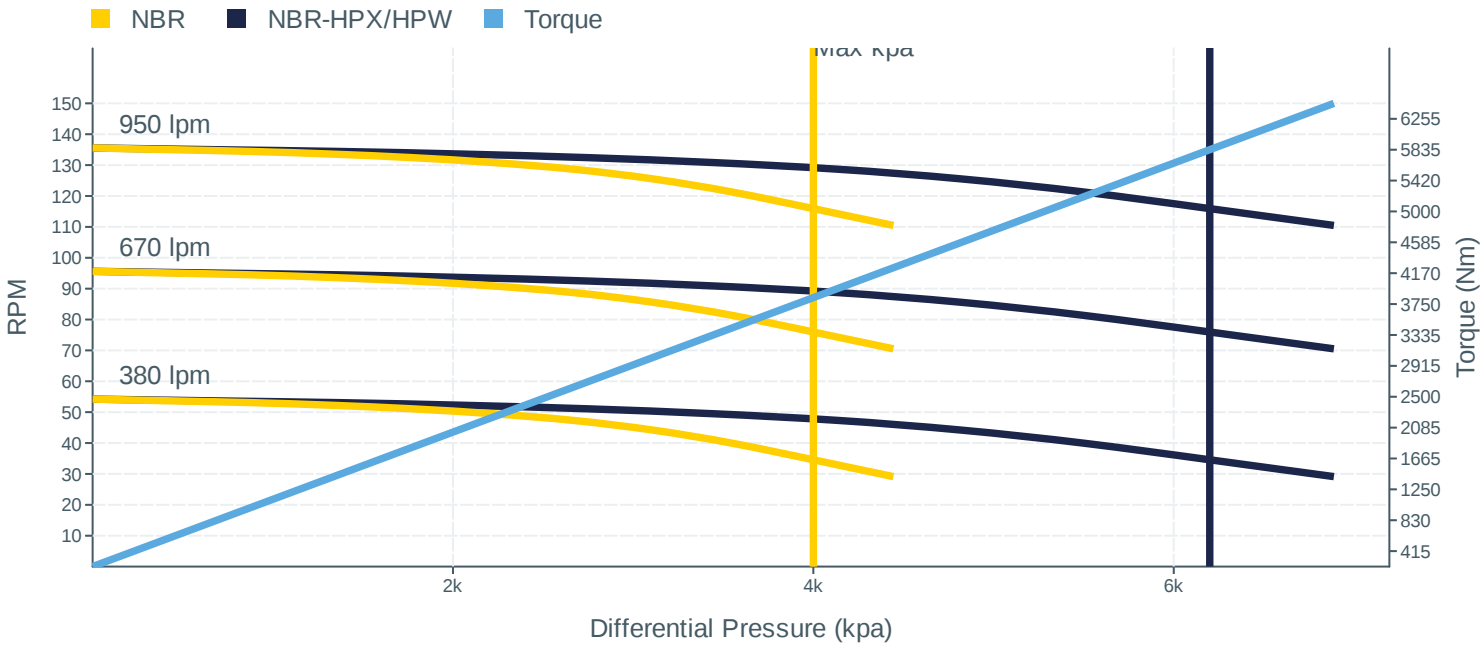
Stator Specification	
Overall Length	4749.8 mm
Tube OD	127.0 mm
Tube ID	95.3 mm
Rubber Cutback Top/End	203.2/203.2 mm
Weight	222 kgs
Number of Stages	3.8 mm
Tube Material	4140/4142 Alloy Steel
Rubber Options	NBR, NBR-HPX/HPW

NBR (mm)		Fits (+Compression / -Loose)				
Size	Minor[2]	24°C	52°C	79°C	121°C	149°C[3]
0.5 US	--	--	--	--	--	--
STD	66.12	0.41	0.71	1.04	1.50	1.80
0.5 OS	66.37	0.15	0.46	0.76	1.24	1.55
1 OS	66.62	-0.10	0.20	0.51	0.97	1.27
1.5 OS	66.90	-0.38	-0.08	0.23	0.69	0.99
2 OS	67.41	-0.89	-0.58	-0.30	0.15	0.46
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	66.04	0.48	0.79	1.12	1.57	1.88
0.5 OS	66.29	0.23	0.53	0.84	1.32	1.63
1 OS	66.55	-0.03	0.28	0.58	1.04	1.35
1.5 OS	66.83	-0.30	0.00	0.30	0.76	1.07
2 OS	67.34	-0.81	-0.51	-0.20	0.23	0.53
2.5 OS	--	--	--	--	--	--

Performance Specifications	
Flow Range	380 - 950 lpm
Speed Range	50 - 140 RPM
Torque Slope	0.91 Nm/kpa
Rotation	0.1427 rev/liter
Off Bottom Pressure	350 kpa

Performance Details		
	NBR	NBR-HPX/HPW
Max Diff. Press.	4000 kpa	6200 kpa
Stall Diff. Press.	5900 kpa	9700 kpa
Max Torque	3600 Nm	5600 Nm
Stall Torque	5400 Nm	8900 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)

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.

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