

POWER SECTION

Model No: AT287783.5

Revised: 2/4/2021

Rotor Specifications	
	inches
Overall Length	73.70
Contour Length	68.70
Major Diameter	1.882
Eccentricity	0.091
Head diameter	1.800
Thread Form	N/A
Weight	49 lbs
Material	17-4 PH ¹

Stator Specifications	
	inches
Overall Length	80.00
Tube OD	2.88
Tube ID	2.38
Rubber Cutback Top/End	6.40 / 6.40
Weight	53 lbs
Number of Stages	3.5
Tube Material	4140/4142 Alloy Steel
Rubber Options	NBR-HPX/HPW & NBR-HPO

NBR-HPX/HPW (in)		Fits (+ Compression / - Loose)				
Size	Minor ²	75 °F	125 °F	175 °F	250 °F	300 °F ³
.5 US						
STD						
.5 OS						
1.0 OS	1.709	-0.009	-0.004	0.001	0.008	0.013
1.5 OS						
2.0 OS						
2.5 OS						

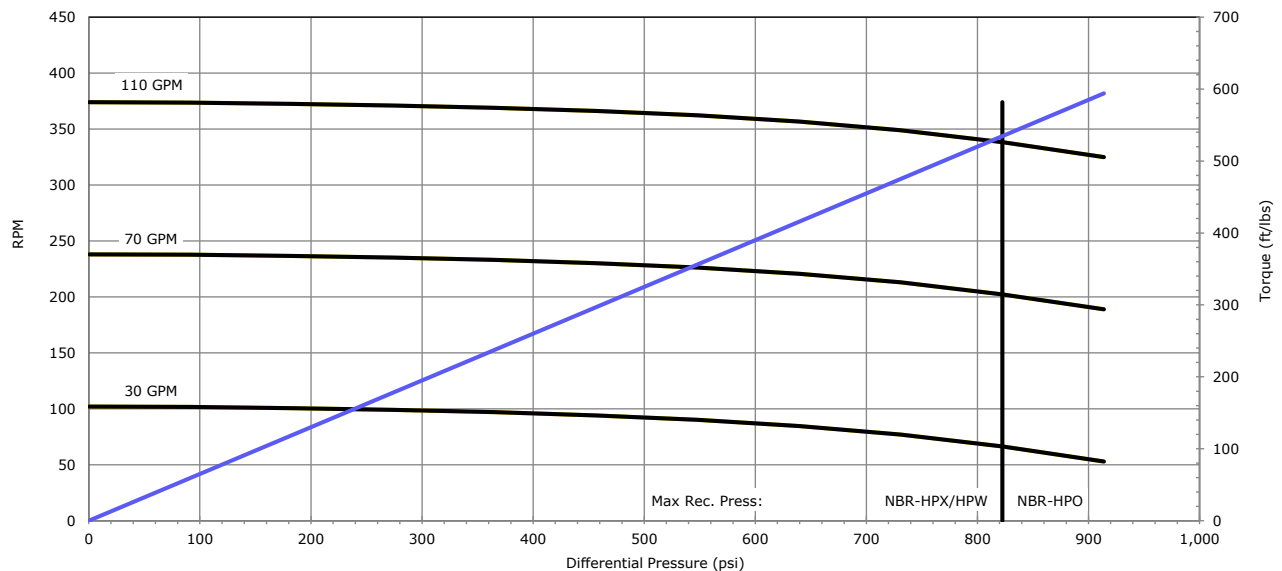
NBR-HPO (in)		Fits (+ Compression / - Loose)				
Size	Minor ²	75 °F	125 °F	175 °F	250 °F	300 °F ³
.5 US						
STD						
.5 OS						
1.0 OS	1.709	-0.009	-0.004	0.001	0.008	0.013
1.5 OS						
2.0 OS						
2.5 OS						

Performance Specifications	
Flow Range (gpm)	30 - 110
Speed Range (rpm)	100 - 370
Torque Slope (ft-lb/psi)	0.65
Rotation (rev/gal)	3.400
Off Bottom Pressure (psi)	50

Performance Details		
	NBR-HPX/HPW	NBR-HPO
Max Diff Press (psi)	830	830
Stall Diff Press (psi)	1300	1300
Max Torque (ft-lb)	540	540
Stall Torque (ft-lb)	850	850

■ (NBR-HPX/HPW/HPO)

■ Torque



¹ Coating options of chrome or tungsten carbide are available ² Vector Gauge Readings at Room Temp 75°F ³ BHCT Exceeding 320°F will void warranty for NBR-HPX/HPW/HPO
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 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
DUBAI UAE: Stator Manufacturing Oilfields Supply Center B#57, Jebel Ali, Dubai UAE, P.O. Box 19909 - Tel: 971-4-870-8600

POWER SECTION - METRIC

Model No: AT287783.5

Revised: 2/4/2021

Rotor Specifications	
	mm
Overall Length	1872.0
Contour Length	1745.0
Major Diameter	47.80
Eccentricity	2.31
Head diameter	45.72
Thread Form	N/A
Weight	22 kg
Material	17-4 PH ¹

Stator Specifications	
	mm
Overall Length	2032.0
Tube OD	73.0
Tube ID	60.3
Rubber Cutback Top/End	163.0 / 163.0
Weight	24 kg
Number of Stages	3.5
Tube Material	4140/4142 Seamless Alloy Steel
Rubber Options	NBR-HPX/HPW & NBR-HPO

BR-HPX/HPW (mm)		Fits (+ Compression / - Loose)				
Size	Minor ²	25 °C	75 °C	100 °C	125 °C	150 °C ³
.5 US						
STD						
.5 OS						
1.0 OS	43.41	-0.23	0.00	0.11	0.23	0.34
1.5 OS						
2.0 OS						
2.5 OS						

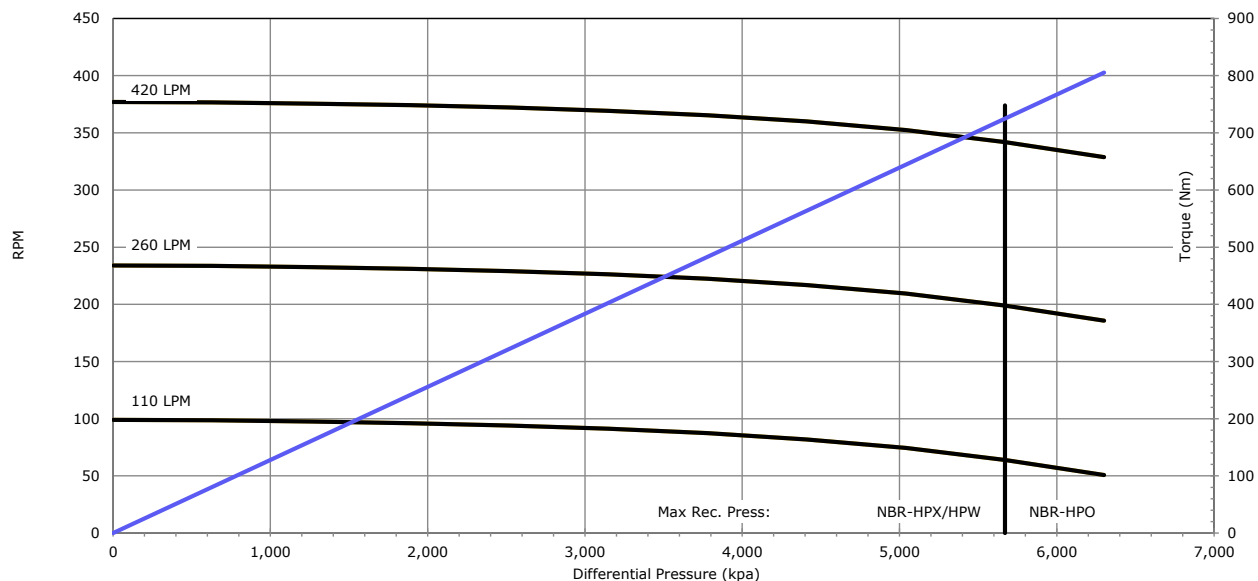
NBR-HPO (mm)		Fits (+ Compression / - Loose)				
Size	Minor ²	25 °C	75 °C	100 °C	125 °C	150 °C ³
.5 US						
STD						
.5 OS						
1.0 OS	43.41	-0.23	0.00	0.11	0.23	0.34
1.5 OS						
2.0 OS						
2.5 OS						

Performance Specifications	
Flow Range (lpm)	110 - 420
Speed Range (rpm)	100 - 370
Torque Slope (Nm/kpa)	0.13
Rotation (rev/Liter)	0.8982
Off Bottom Pressure (kpa)	340

Performance Details		NBR-HPX/HPW	NBR-HPO
Max Diff Press (kpa)		5700	5700
Stall Diff Press (kpa)		8900	9000
Max Torque (Nm)		800	800
Stall Torque (Nm)		1200	1200

■ (NBR-HPX/HPW/HPO)

■ Torque



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

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