

POWER SECTION

Model No: AT237784.0

Revised: 2/4/2021

Rotor Specifications	
	inches
Overall Length	79.20
Contour Length	75.00
Major Diameter	1.5
Eccentricity	0.082
Head diameter	1.500
Thread Form	N/A
Weight	32 lbs
Material	17-4 PH ¹

Stator Specifications	
	inches
Overall Length	82.00
Tube OD	2.38
Tube ID	1.88
Rubber Cutback Top/End	4.00 / 4.00
Weight	44 lbs
Number of Stages	4.0
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	1.336	0.000	0.005	0.010	0.018	0.023
.5 OS						
1.0 OS	1.348	-0.012	-0.007	-0.002	0.006	0.011
1.5 OS						
2.0 OS						
2.5 OS						

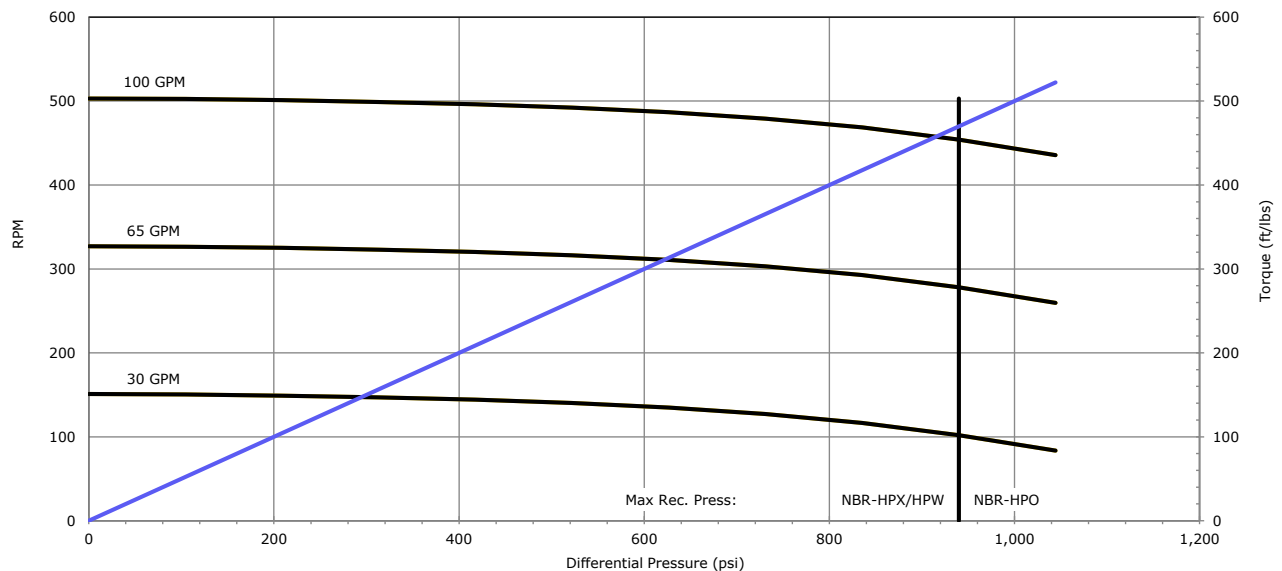
NBR-HPO (in)		Fits (+ Compression / - Loose)				
Size	Minor ²	75 °F	125 °F	175 °F	250 °F	300 °F ³
.5 US						
STD	1.336	0.000	0.005	0.010	0.018	0.023
.5 OS						
1.0 OS	1.348	-0.012	-0.007	-0.002	0.006	0.011
1.5 OS						
2.0 OS						
2.5 OS						

Performance Specifications	
Flow Range (gpm)	30 - 100
Speed Range (rpm)	150 - 500
Torque Slope (ft-lb/psi)	0.50
Rotation (rev/gal)	5.030
Off Bottom Pressure (psi)	60

Performance Details		
	NBR-HPX/HPW	NBR-HPO
Max Diff Press (psi)	940	940
Stall Diff Press (psi)	1490	1490
Max Torque (ft-lb)	470	470
Stall Torque (ft-lb)	750	750

■ (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: AT237784.0

Revised: 2/4/2021

Rotor Specifications	
	mm
Overall Length	2011.7
Contour Length	1905.0
Major Diameter	38.10
Eccentricity	2.08
Head diameter	38.10
Thread Form	N/A
Weight	15 kg
Material	17-4 PH ¹

Stator Specifications	
	mm
Overall Length	2082.8
Tube OD	60.3
Tube ID	47.6
Rubber Cutback Top/End	102.0 / 102.0
Weight	20 kg
Number of Stages	4.0
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	33.93	0.00	0.23	0.35	0.47	0.59
.5 OS						
1.0 OS	34.24	-0.30	-0.08	0.04	0.15	0.27
1.5 OS						
2.0 OS						
2.5 OS						

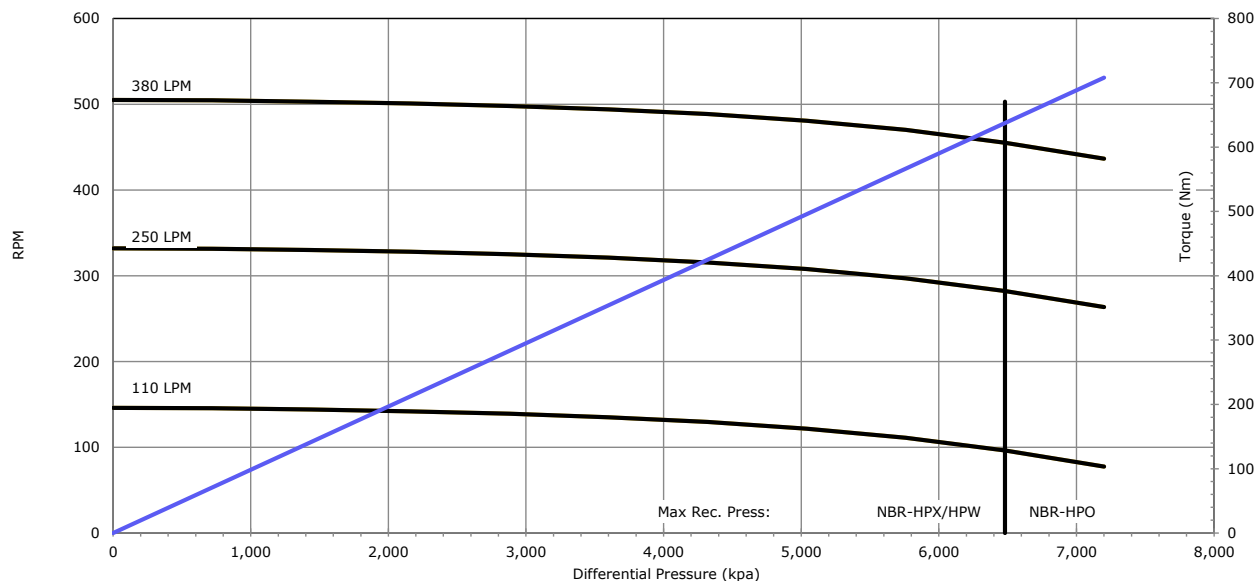
NBR-HPO (mm)		Fits (+ Compression / - Loose)				
Size	Minor ²	25 °C	75 °C	100 °C	125 °C	150 °C ³
.5 US						
STD	33.93	0.00	0.23	0.35	0.47	0.59
.5 OS						
1.0 OS	34.24	-0.30	-0.08	0.04	0.15	0.27
1.5 OS						
2.0 OS						
2.5 OS						

Performance Specifications	
Flow Range (lpm)	110 - 380
Speed Range (rpm)	150 - 500
Torque Slope (Nm/kpa)	0.10
Rotation (rev/Liter)	1.3288
Off Bottom Pressure (kpa)	400

Performance Details		NBR-HPX/HPW	NBR-HPO
Max Diff Press (kpa)		6500	6500
Stall Diff Press (kpa)		10200	10300
Max Torque (Nm)		700	700
Stall Torque (Nm)		1100	1100

■ (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

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.

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