

POWER SECTION

Model No: AT212452.1

Revised: 11/11/2022

Rotor Specifications	
	inches
Overall Length	82.31
Contour Length	77.50
Major Diameter	1.279
Eccentricity	0.116
Head diameter	1.375
Thread Form	N/A
Weight	22 lbs
Material	17-4 PH ¹

Stator Specifications	
	inches
Overall Length	92.00
Tube OD	2.13
Tube ID	1.75
Rubber Cutback Top/End	4.00 / 10.25
Weight	34 lbs
Number of Stages	2.1
Tube Material	4140/4142 Alloy Steel
Rubber Options	NBR-HPX/HPW & NBR-HPO

VBR-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	1.060	-0.013	-0.008	-0.004	0.003	0.008
1.5 OS						
2.0 OS						
2.5 OS						

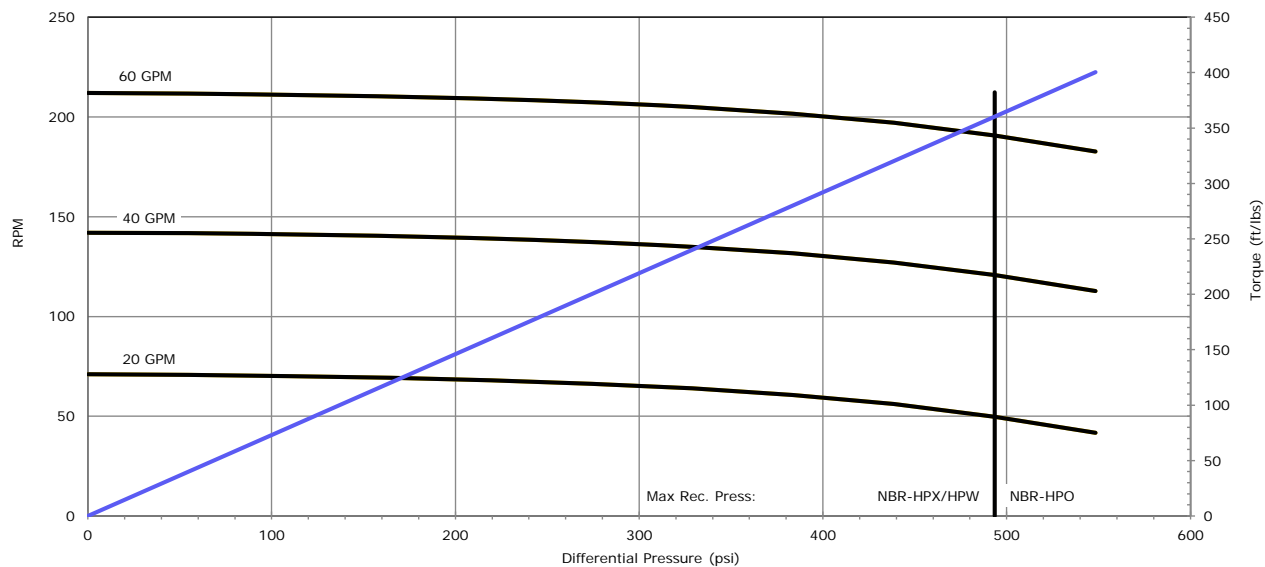
NBR-HPO (in)		Fits (+ Compression / - Loose)				
Size	Minor ²	75 °F	125 °F	175 °F	250 °F	300 °F ³
.5 US						
STD						
.5 OS						
1.0 OS	1.060	-0.013	-0.008	-0.004	0.003	0.008
1.5 OS						
2.0 OS						
2.5 OS						

Performance Specifications	
Flow Range (gpm)	20 - 60
Speed Range (rpm)	70 - 210
Torque Slope (ft-lb/psi)	0.73
Rotation (rev/gal)	3.540
Off Bottom Pressure (psi)	30

Performance Details		
	NBR-HPX/HPW	NBR-HPO
Max Diff Press (psi)	500	500
Stall Diff Press (psi)	780	780
Max Torque (ft-lb)	370	370
Stall Torque (ft-lb)	570	570

■ (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
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: AT212452.1

Revised: 11/11/2022

Rotor Specifications	
	mm
Overall Length	2090.7
Contour Length	1968.5
Major Diameter	32.49
Eccentricity	2.95
Head diameter	34.93
Thread Form	N/A
Weight	10 kg
Material	17-4 PH ¹

Stator Specifications	
	mm
Overall Length	2336.8
Tube OD	54.1
Tube ID	44.5
Rubber Cutback Top/End	102.0 / 260.0
Weight	15 kg
Number of Stages	2.1
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	26.92	-0.33	-0.12	-0.02	0.09	0.19
1.5 OS						
2.0 OS						
2.5 OS						

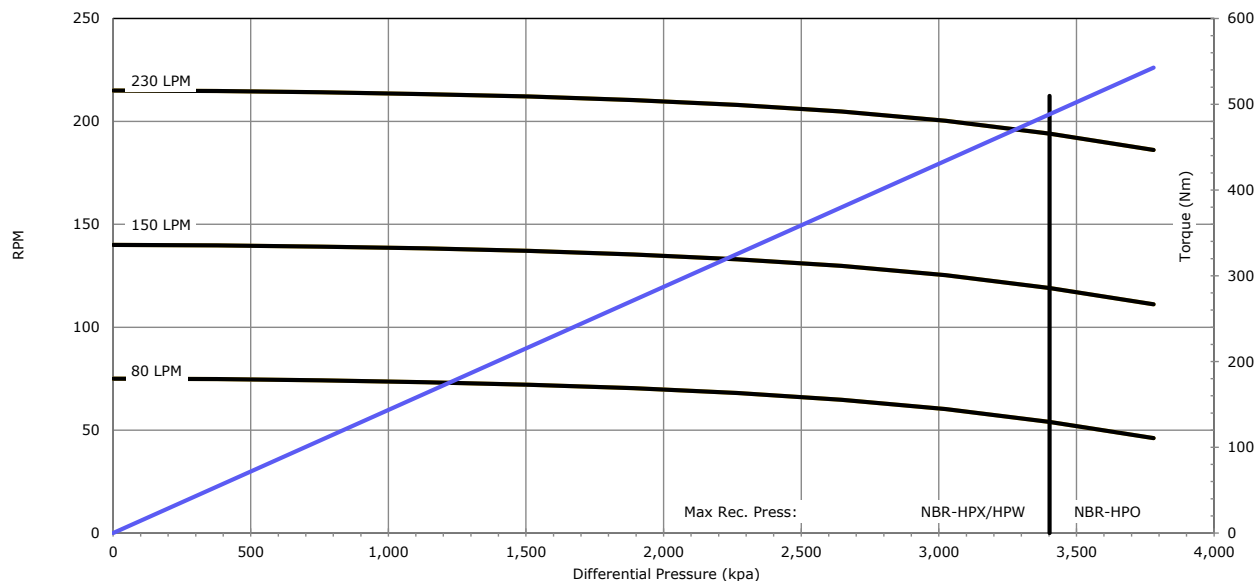
NBR-HPO (mm)		Fits (+ Compression / - Loose)				
Size	Minor ²	25 °C	75 °C	100 °C	125 °C	150 °C ³
.5 US						
STD						
.5 OS						
1.0 OS	26.92	-0.33	-0.12	-0.02	0.09	0.19
1.5 OS						
2.0 OS						
2.5 OS						

Performance Specifications	
Flow Range (lpm)	80 - 230
Speed Range (rpm)	70 - 210
Torque Slope (Nm/kpa)	0.14
Rotation (rev/Liter)	0.9352
Off Bottom Pressure (kpa)	170

Performance Details		
	NBR-HPX/HPW	NBR-HPO
Max Diff Press (kpa)	3500	3500
Stall Diff Press (kpa)	5400	5400
Max Torque (Nm)	500	500
Stall Torque (Nm)	800	800

■ (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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