

POWER SECTION

Model No: AT312452.9 HT

Revised: 8/26/2021

Rotor Specifications	
	inches
Overall Length	102.00
Contour Length	98.00
Major Diameter	2.054
Eccentricity	
Head diameter	2.125
Thread Form	N/A
Weight	64 lbs
Material	17-4 PH ¹

Stator Specifications	
	inches
Overall Length	106.00
Tube OD	3.13
Tube ID	2.63
Rubber Cutback Top/End	6.00 / 6.00
Weight	79 lbs
Number of Stages	2.9
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	1.646	-0.002	0.004	0.010	0.020	0.026
.5 OS						
1.0 OS						
1.5 OS						
2.0 OS						
2.5 OS						

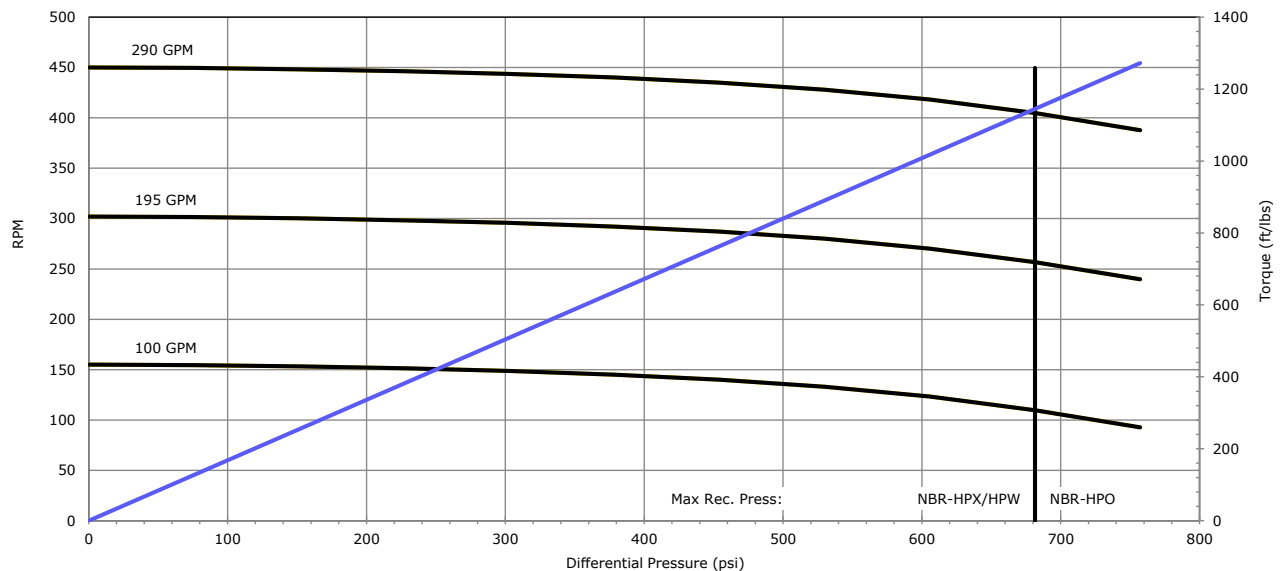
NBR-HPO (in)		Fits (+ Compression / - Loose)				
Size	Minor ²	75 °F	125 °F	175 °F	250 °F	300 °F ³
.5 US						
STD	1.646	-0.002	0.004	0.010	0.020	0.026
.5 OS						
1.0 OS						
1.5 OS						
2.0 OS						
2.5 OS						

Performance Specifications	
Flow Range (gpm)	100 - 290
Speed Range (rpm)	160 - 450
Torque Slope (ft-lb/psi)	1.68
Rotation (rev/gal)	1.550
Off Bottom Pressure (psi)	90

Performance Details		
	NBR-HPX/HPW	NBR-HPO
Max Diff Press (psi)	690	690
Stall Diff Press (psi)	1080	1080
Max Torque (ft-lb)	1150	1150
Stall Torque (ft-lb)	1810	1810

■ (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: 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: AT312452.9 HT

Revised: 8/26/2021

Rotor Specifications	
	mm
Overall Length	2590.8
Contour Length	2489.2
Major Diameter	52.17
Eccentricity	
Head diameter	53.98
Thread Form	N/A
Weight	29 kg
Material	17-4 PH ¹

Stator Specifications	
	mm
Overall Length	2692.4
Tube OD	79.4
Tube ID	66.7
Rubber Cutback Top/End	152.0 / 152.0
Weight	36 kg
Number of Stages	2.9
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	41.81	-0.06	0.23	0.37	0.52	0.66
.5 OS						
1.0 OS						
1.5 OS						
2.0 OS						
2.5 OS						

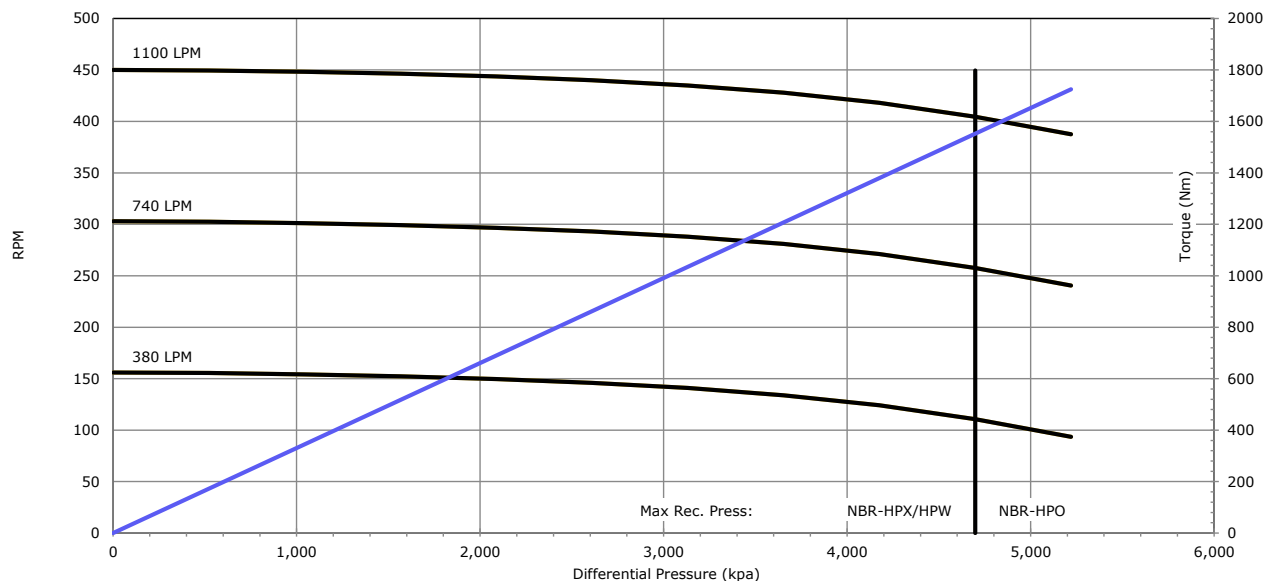
NBR-HPO (mm)		Fits (+ Compression / - Loose)				
Size	Minor ²	25 °C	75 °C	100 °C	125 °C	150 °C ³
.5 US						
STD	41.81	-0.06	0.23	0.37	0.52	0.66
.5 OS						
1.0 OS						
1.5 OS						
2.0 OS						
2.5 OS						

Performance Specifications	
Flow Range (lpm)	380 - 1100
Speed Range (rpm)	160 - 450
Torque Slope (Nm/kpa)	0.33
Rotation (rev/Liter)	0.4095
Off Bottom Pressure (kpa)	610

Performance Details		
	NBR-HPX/HPW	NBR-HPO
Max Diff Press (kpa)	4700	4700
Stall Diff Press (kpa)	7400	7400
Max Torque (Nm)	1600	1600
Stall Torque (Nm)	2500	2500

■ (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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