

## POWER SECTION

**Model No: AT287452.9 HT**

Revised: 8/26/2021

Rotor Specifications	
	inches
Overall Length	103.63
Contour Length	99.63
Major Diameter	1.863
Eccentricity	
Head diameter	1.800
Thread Form	N/A
Weight	54 lbs
Material	17-4 PH <sup>1</sup>

Stator Specifications	
	inches
Overall Length	105.63
Tube OD	2.88
Tube ID	2.38
Rubber Cutback Top/End	6.00 / 6.00
Weight	70 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 <sup>2</sup>	75 °F	125 °F	175 °F	250 °F	300 °F <sup>3</sup>
.5 US						
STD	1.493	-0.003	0.003	0.008	0.016	0.021
.5 OS						
1.0 OS						
1.5 OS						
2.0 OS						
2.5 OS						

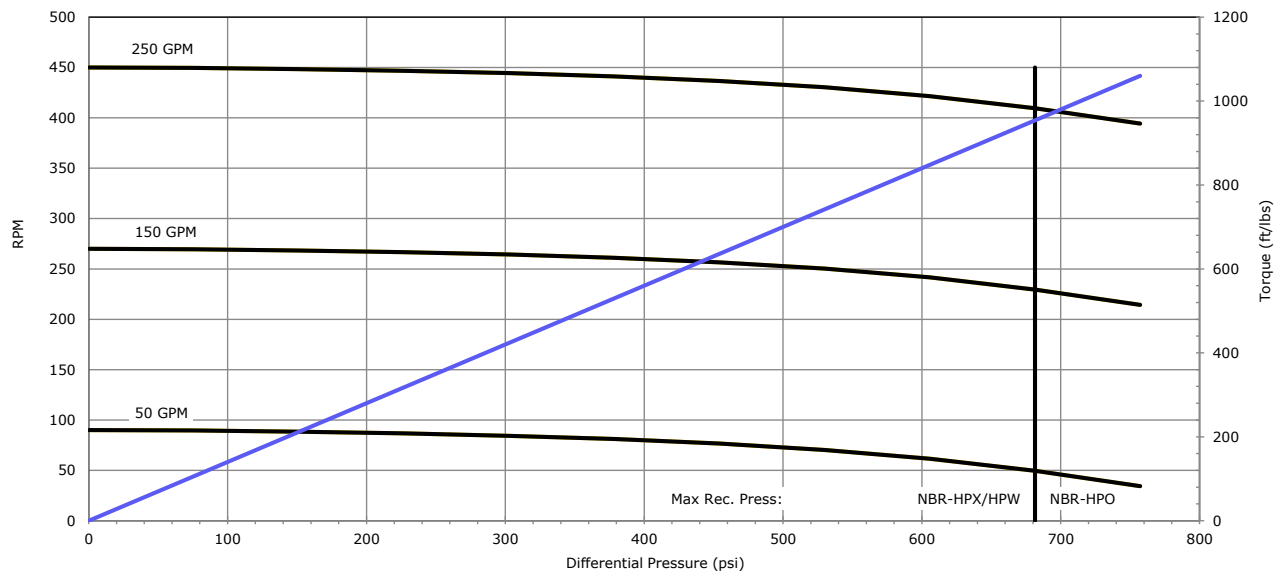
NBR-HPO (in)		Fits (+ Compression / - Loose)				
Size	Minor <sup>2</sup>	75 °F	125 °F	175 °F	250 °F	300 °F <sup>3</sup>
.5 US						
STD	1.493	-0.003	0.003	0.008	0.016	0.021
.5 OS						
1.0 OS						
1.5 OS						
2.0 OS						
2.5 OS						

Performance Specifications	
Flow Range (gpm)	50 - 250
Speed Range (rpm)	90 - 450
Torque Slope (ft-lb/psi)	1.40
Rotation (rev/gal)	1.800
Off Bottom Pressure (psi)	70

Performance Details		NBR-HPX/HPW	NBR-HPO
Max Diff Press (psi)		690	690
Stall Diff Press (psi)		1080	1080
Max Torque (ft-lb)		960	960
Stall Torque (ft-lb)		1510	1510

■ (NBR-HPX/HPW/HPO)

■ Torque



<sup>1</sup> Coating options of chrome or tungsten carbide are available <sup>2</sup> Vector Gauge Readings at Room Temp 75°F <sup>3</sup> 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](http://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: AT287452.9 HT**

Revised: 8/26/2021

Rotor Specifications	
	mm
Overall Length	2632.2
Contour Length	2530.5
Major Diameter	47.32
Eccentricity	
Head diameter	45.72
Thread Form	N/A
Weight	24 kg
Material	17-4 PH <sup>1</sup>

Stator Specifications	
	mm
Overall Length	2682.9
Tube OD	73.0
Tube ID	60.3
Rubber Cutback Top/End	152.0 / 152.0
Weight	32 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 <sup>2</sup>	25 °C	75 °C	100 °C	125 °C	150 °C <sup>3</sup>
.5 US						
STD	37.92	-0.06	0.18	0.30	0.42	0.54
.5 OS						
1.0 OS						
1.5 OS						
2.0 OS						
2.5 OS						

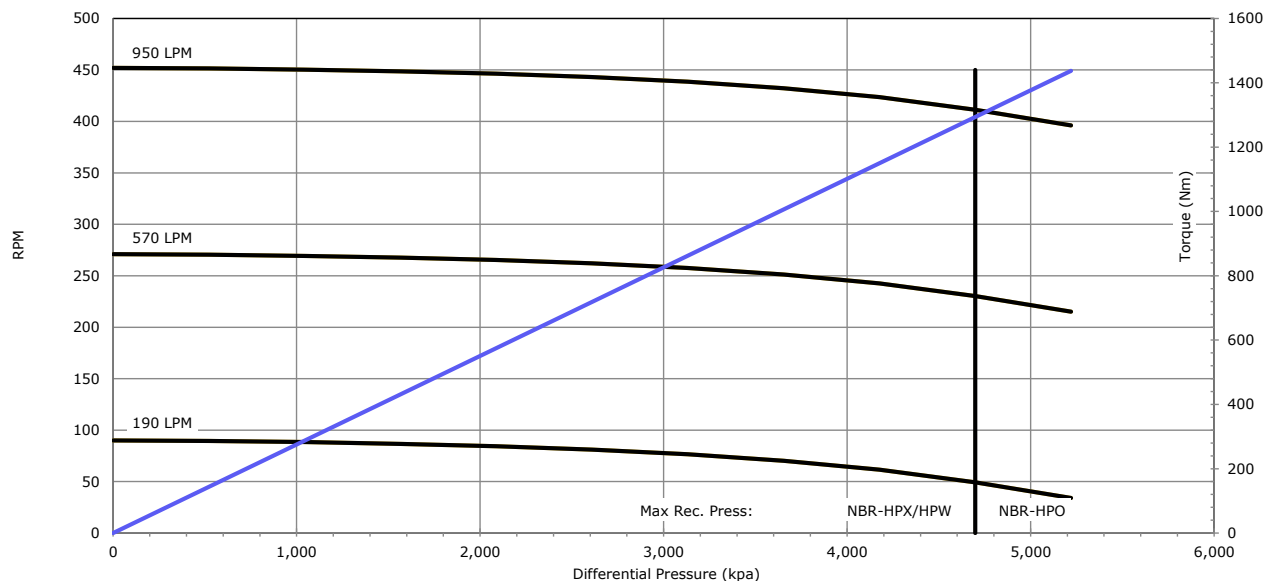
NBR-HPO (mm)		Fits (+ Compression / - Loose)				
Size	Minor <sup>2</sup>	25 °C	75 °C	100 °C	125 °C	150 °C <sup>3</sup>
.5 US						
STD	37.92	-0.06	0.18	0.30	0.42	0.54
.5 OS						
1.0 OS						
1.5 OS						
2.0 OS						
2.5 OS						

Performance Specifications	
Flow Range (lpm)	190 - 950
Speed Range (rpm)	90 - 450
Torque Slope (Nm/kpa)	0.28
Rotation (rev/Liter)	0.4755
Off Bottom Pressure (kpa)	500

Performance Details		
	NBR-HPX/HPW	NBR-HPO
Max Diff Press (kpa)	4700	4700
Stall Diff Press (kpa)	7400	7400
Max Torque (Nm)	1300	1300
Stall Torque (Nm)	2100	2100

■ (NBR-HPX/HPW/HPO)

■ Torque



<sup>1</sup> Coating options of chrome or tungsten carbide are available <sup>2</sup> Vector Gauge Readings at Room Temp 25°C <sup>3</sup> 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](http://www.AbacoDrilling.com) for the latest specification revisions.

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