

## POWER SECTION

**Model No: AT312565.0**

Revised: 2/4/2021

Rotor Specifications	
	inches
Overall Length	101.50
Contour Length	97.00
Major Diameter	2.073
Eccentricity	0.148
Head diameter	1.850
Thread Form	N/A
Weight	74 lbs
Material	17-4 PH <sup>1</sup>

Stator Specifications	
	inches
Overall Length	106.00
Tube OD	3.13
Tube ID	2.63
Rubber Cutback Top/End	5.63 / 5.63
Weight	79 lbs
Number of Stages	5.0
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	1.780	-0.003	0.002	0.008	0.016	0.022
.5 OS						
1.0 OS	1.790	-0.013	-0.008	-0.002	0.006	0.011
1.5 OS						
2.0 OS						
2.5 OS						

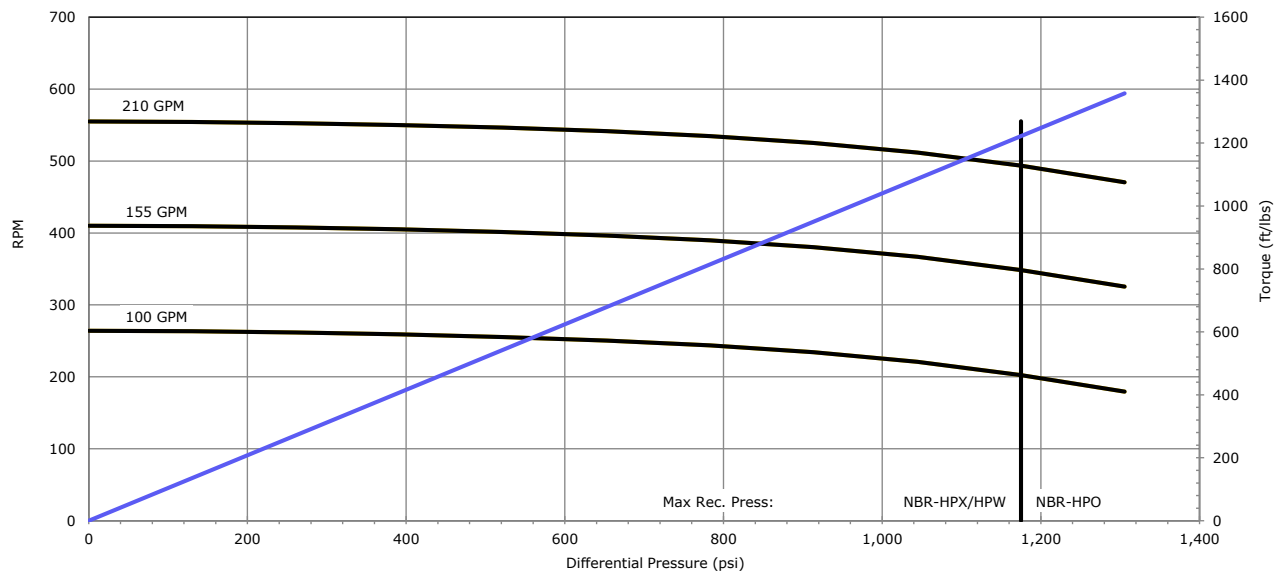
NBR-HPO (in)		Fits (+ Compression / - Loose)				
Size	Minor <sup>2</sup>	75 °F	125 °F	175 °F	250 °F	300 °F <sup>3</sup>
.5 US						
STD	1.780	-0.003	0.002	0.008	0.016	0.022
.5 OS						
1.0 OS	1.790	-0.013	-0.008	-0.002	0.006	0.011
1.5 OS						
2.0 OS						
2.5 OS						

Performance Specifications	
Flow Range (gpm)	100 - 210
Speed Range (rpm)	260 - 560
Torque Slope (ft-lb/psi)	1.04
Rotation (rev/gal)	2.644
Off Bottom Pressure (psi)	110

Performance Details		
	NBR-HPX/HPW	NBR-HPO
Max Diff Press (psi)	1180	1180
Stall Diff Press (psi)	1860	1860
Max Torque (ft-lb)	1230	1230
Stall Torque (ft-lb)	1930	1930

■ (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: AT312565.0**

Revised: 2/4/2021

Rotor Specifications	
	mm
Overall Length	2578.1
Contour Length	2463.8
Major Diameter	52.65
Eccentricity	3.76
Head diameter	46.99
Thread Form	N/A
Weight	34 kg
Material	17-4 PH <sup>1</sup>

Stator Specifications	
	mm
Overall Length	2692.4
Tube OD	79.4
Tube ID	66.7
Rubber Cutback Top/End	143.0 / 143.0
Weight	36 kg
Number of Stages	5.0
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	45.21	-0.08	0.17	0.30	0.43	0.55
.5 OS						
1.0 OS	45.47	-0.33	-0.08	0.04	0.17	0.29
1.5 OS						
2.0 OS						
2.5 OS						

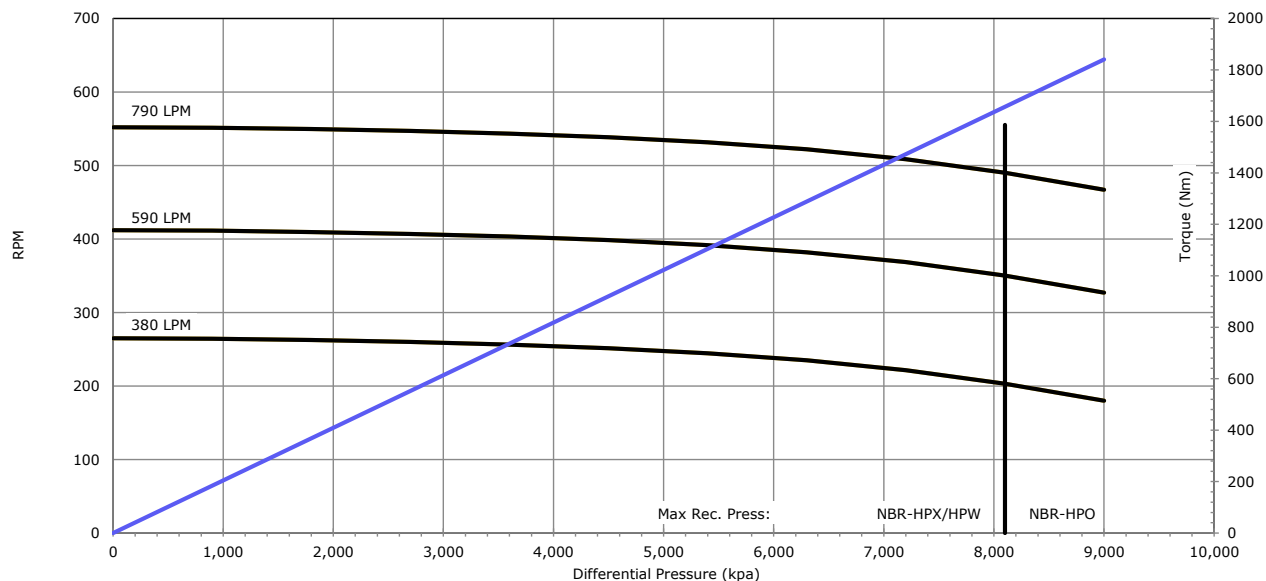
NBR-HPO (mm)		Fits (+ Compression / - Loose)				
Size	Minor <sup>2</sup>	25 °C	75 °C	100 °C	125 °C	150 °C <sup>3</sup>
.5 US						
STD	45.21	-0.08	0.17	0.30	0.43	0.55
.5 OS						
1.0 OS	45.47	-0.33	-0.08	0.04	0.17	0.29
1.5 OS						
2.0 OS						
2.5 OS						

Performance Specifications	
Flow Range (lpm)	380 - 790
Speed Range (rpm)	260 - 560
Torque Slope (Nm/kpa)	0.21
Rotation (rev/Liter)	0.6985
Off Bottom Pressure (kpa)	740

Performance Details		
	NBR-HPX/HPW	NBR-HPO
Max Diff Press (kpa)	8200	8200
Stall Diff Press (kpa)	12800	12800
Max Torque (Nm)	1700	1700
Stall Torque (Nm)	2700	2700

■ (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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