

## POWER SECTION

**Model No: AT337782.5**

Revised: 12/8/2020

Rotor Specifications	
	inches
Overall Length	93.00
Contour Length	86.50
Major Diameter	2.12
Eccentricity	0.122
Head diameter	2.060
Thread Form	N/A
Weight	75 lbs
Material	17-4 PH <sup>1</sup>

Stator Specifications	
	inches
Overall Length	99.88
Tube OD	3.375
Tube ID	2.63
Rubber Cutback Top/End	7.00 / 7.00
Weight	74 lbs
Number of Stages	2.5
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	1.882	-0.006	-0.001	0.004	0.011	0.016
.5 OS						
1.0 OS	1.893	-0.017	-0.012	-0.007	0.000	0.004
1.5 OS						
2.0 OS						
2.5 OS						

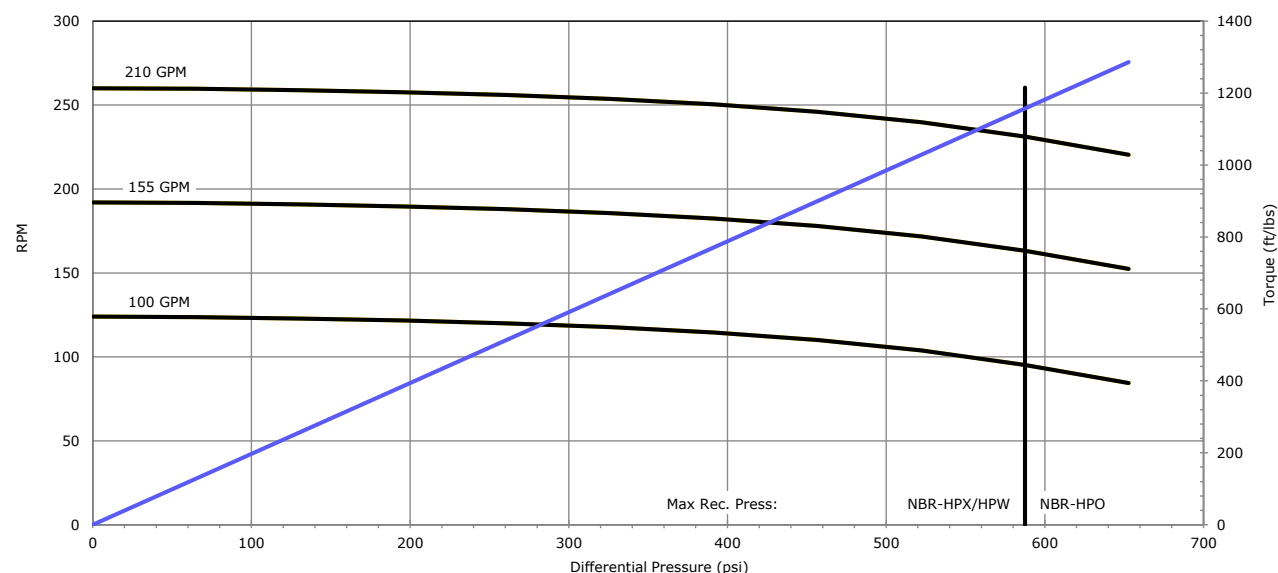
NBR-HPO (in)		Fits (+ Compression / - Loose)				
Size	Minor <sup>2</sup>	75 °F	125 °F	175 °F	250 °F	300 °F <sup>3</sup>
.5 US						
STD	1.880	-0.004	0.001	0.006	0.013	0.018
.5 OS						
1.0 OS	1.891	-0.015	-0.010	-0.005	0.002	0.006
1.5 OS						
2.0 OS						
2.5 OS						

Performance Specifications	
Flow Range (gpm)	100 - 210
Speed Range (rpm)	120 - 260
Torque Slope (ft-lb/psi)	1.97
Rotation (rev/gal)	1.240
Off Bottom Pressure (psi)	60

Performance Details		
	NBR-HPX/HPW	NBR-HPO
Max Diff Press (psi)	590	590
Stall Diff Press (psi)	930	930
Max Torque (ft-lb)	1160	1160
Stall Torque (ft-lb)	1830	1830

■ (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: AT337782.5**

Revised: 12/8/2020

Rotor Specifications	
	mm
Overall Length	2362.2
Contour Length	2197.1
Major Diameter	53.85
Eccentricity	3.10
Head diameter	52.32
Thread Form	N/A
Weight	34 kg
Material	17-4 PH <sup>1</sup>

Stator Specifications	
	mm
Overall Length	2536.8
Tube OD	85.72
Tube ID	66.7
Rubber Cutback Top/End	178.0 / 178.0
Weight	34 kg
Number of Stages	2.5
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	47.80	-0.15	0.07	0.18	0.29	0.40
.5 OS						
1.0 OS	48.08	-0.43	-0.21	-0.11	0.00	0.11
1.5 OS						
2.0 OS						
2.5 OS						

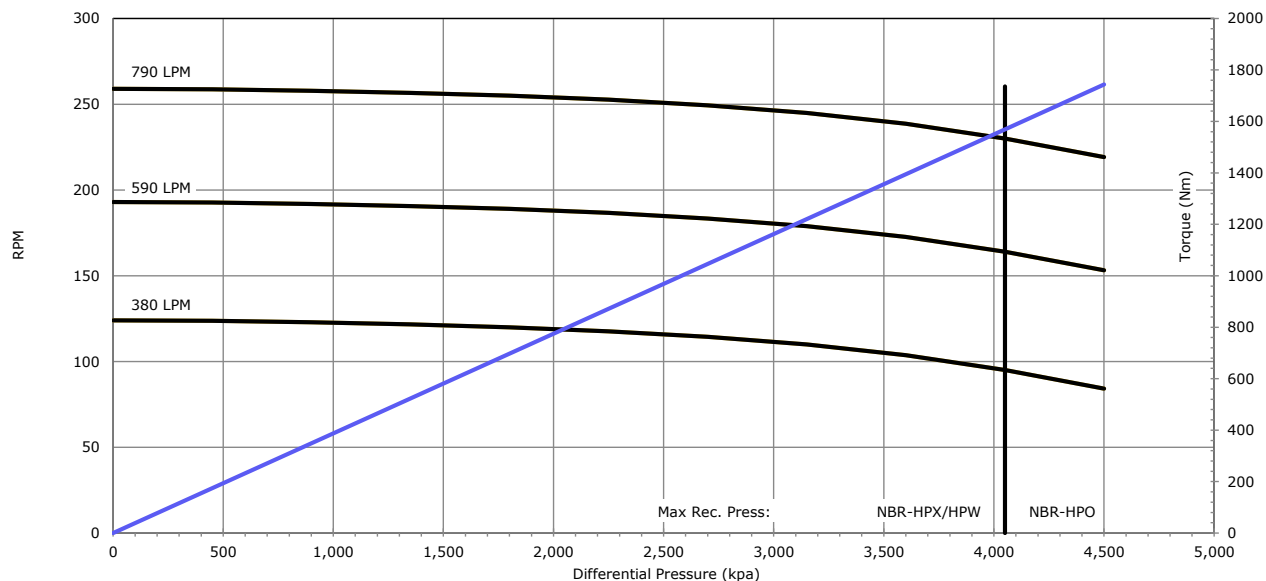
NBR-HPO (mm)		Fits (+ Compression / - Loose)				
Size	Minor <sup>2</sup>	25 °C	75 °C	100 °C	125 °C	150 °C <sup>3</sup>
.5 US						
STD	47.75	-0.10	0.12	0.23	0.34	0.45
.5 OS						
1.0 OS	48.03	-0.38	-0.16	-0.05	0.06	0.16
1.5 OS						
2.0 OS						
2.5 OS						

Performance Specifications	
Flow Range (lpm)	380 - 790
Speed Range (rpm)	120 - 260
Torque Slope (Nm/kpa)	0.39
Rotation (rev/Liter)	0.3276
Off Bottom Pressure (kpa)	420

Performance Details		NBR-HPX/HPW	NBR-HPO
Max Diff Press (kpa)		4100	4100
Stall Diff Press (kpa)		6400	6400
Max Torque (Nm)		1600	1600
Stall Torque (Nm)		2500	2500

■ (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.

### 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