

## POWER SECTION

**Model No: AT375564.8**

Revised: 2/4/2021

Rotor Specifications	
	inches
Overall Length	120.50
Contour Length	116.00
Major Diameter	2.432
Eccentricity	0.172
Head diameter	2.400
Thread Form	N/A
Weight	116 lbs
Material	17-4 PH <sup>1</sup>

Stator Specifications	
	inches
Overall Length	124.50
Tube OD	3.75
Tube ID	3.13
Rubber Cutback Top/End	6.00 / 6.00
Weight	138 lbs
Number of Stages	4.8
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	2.092	-0.004	0.006	0.016	0.031	0.041
.5 OS						
1.0 OS	2.106	-0.018	-0.008	0.002	0.016	0.026
1.5 OS						
2.0 OS						
2.5 OS						

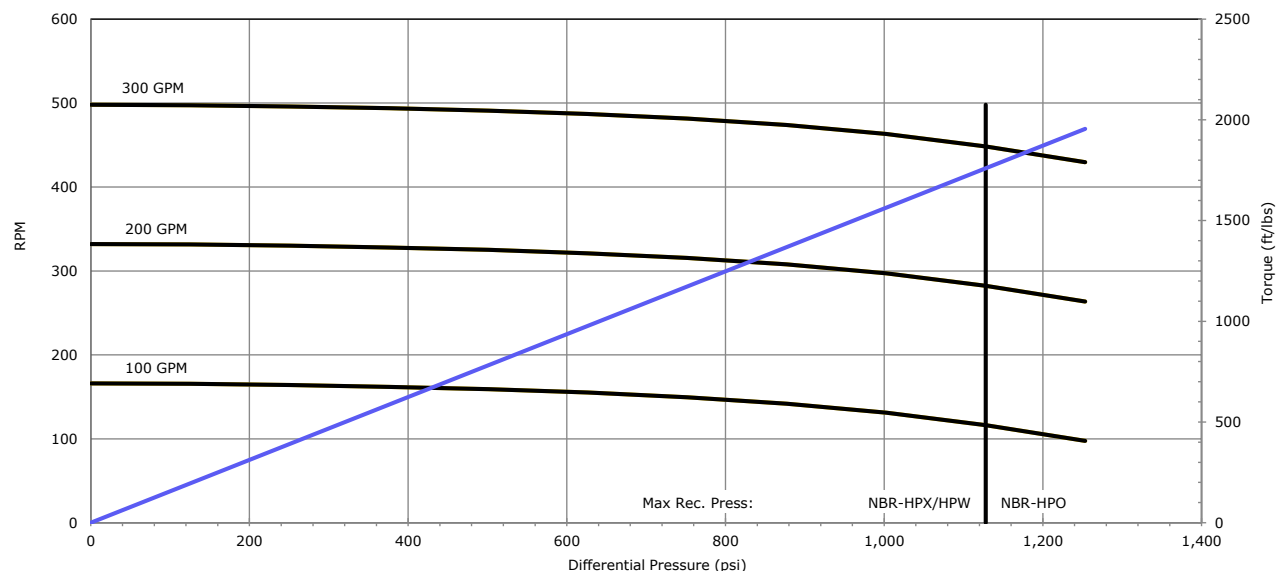
NBR-HPO (in)		Fits (+ Compression / - Loose)				
Size	Minor <sup>2</sup>	75 °F	125 °F	175 °F	250 °F	300 °F <sup>3</sup>
.5 US						
STD	2.092	-0.004	0.006	0.016	0.031	0.041
.5 OS						
1.0 OS	2.106	-0.018	-0.008	0.002	0.016	0.026
1.5 OS						
2.0 OS						
2.5 OS						

Performance Specifications	
Flow Range (gpm)	100 - 300
Speed Range (rpm)	170 - 500
Torque Slope (ft-lb/psi)	1.56
Rotation (rev/gal)	1.660
Off Bottom Pressure (psi)	110

Performance Details		
	NBR-HPX/HPW	NBR-HPO
Max Diff Press (psi)	1130	1130
Stall Diff Press (psi)	1780	1780
Max Torque (ft-lb)	1760	1760
Stall Torque (ft-lb)	2780	2780

■ (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: AT375564.8**

Revised: 2/4/2021

Rotor Specifications	
	mm
Overall Length	3060.7
Contour Length	2946.4
Major Diameter	61.77
Eccentricity	4.36
Head diameter	60.96
Thread Form	N/A
Weight	53 kg
Material	17-4 PH <sup>1</sup>

Stator Specifications	
	mm
Overall Length	3162.3
Tube OD	95.3
Tube ID	79.4
Rubber Cutback Top/End	152.0 / 152.0
Weight	63 kg
Number of Stages	4.8
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	53.14	-0.09	0.36	0.58	0.81	1.03
.5 OS						
1.0 OS	53.49	-0.44	0.00	0.22	0.44	0.66
1.5 OS						
2.0 OS						
2.5 OS						

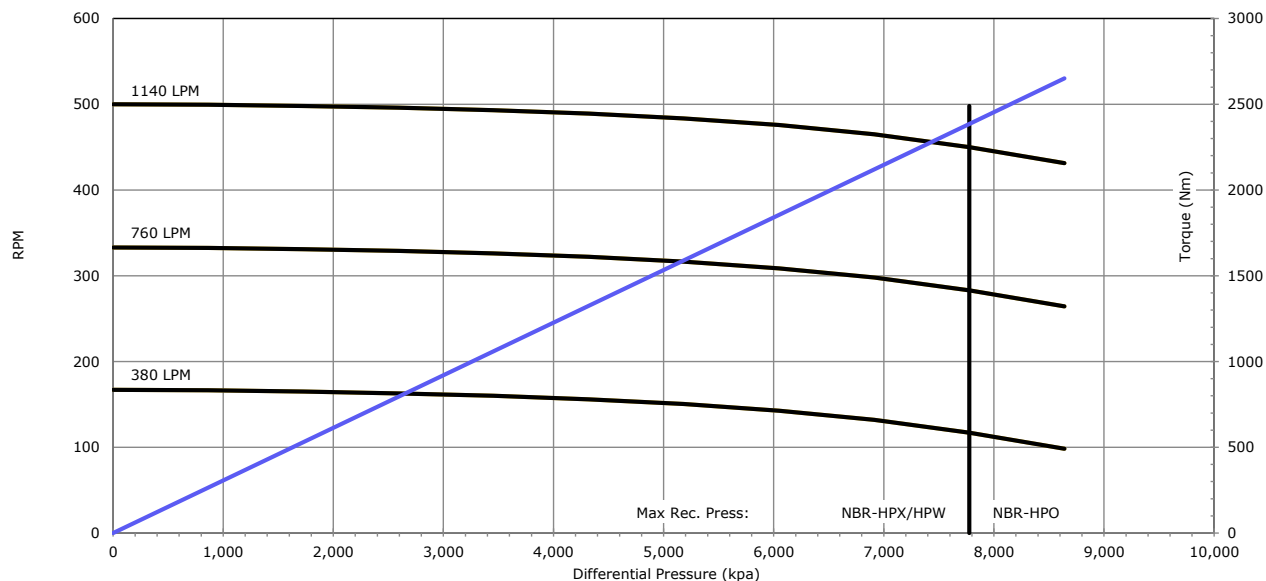
NBR-HPO (mm)		Fits (+ Compression / - Loose)				
Size	Minor <sup>2</sup>	25 °C	75 °C	100 °C	125 °C	150 °C <sup>3</sup>
.5 US						
STD	53.14	-0.09	0.36	0.58	0.81	1.03
.5 OS						
1.0 OS	53.49	-0.44	0.00	0.22	0.44	0.66
1.5 OS						
2.0 OS						
2.5 OS						

Performance Specifications	
Flow Range (lpm)	380 - 1140
Speed Range (rpm)	170 - 500
Torque Slope (Nm/kpa)	0.31
Rotation (rev/Liter)	0.4385
Off Bottom Pressure (kpa)	740

Performance Details		NBR-HPX/HPW	NBR-HPO
Max Diff Press (kpa)		7800	7800
Stall Diff Press (kpa)		12200	12300
Max Torque (Nm)		2400	2400
Stall Torque (Nm)		3800	3800

■ (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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