

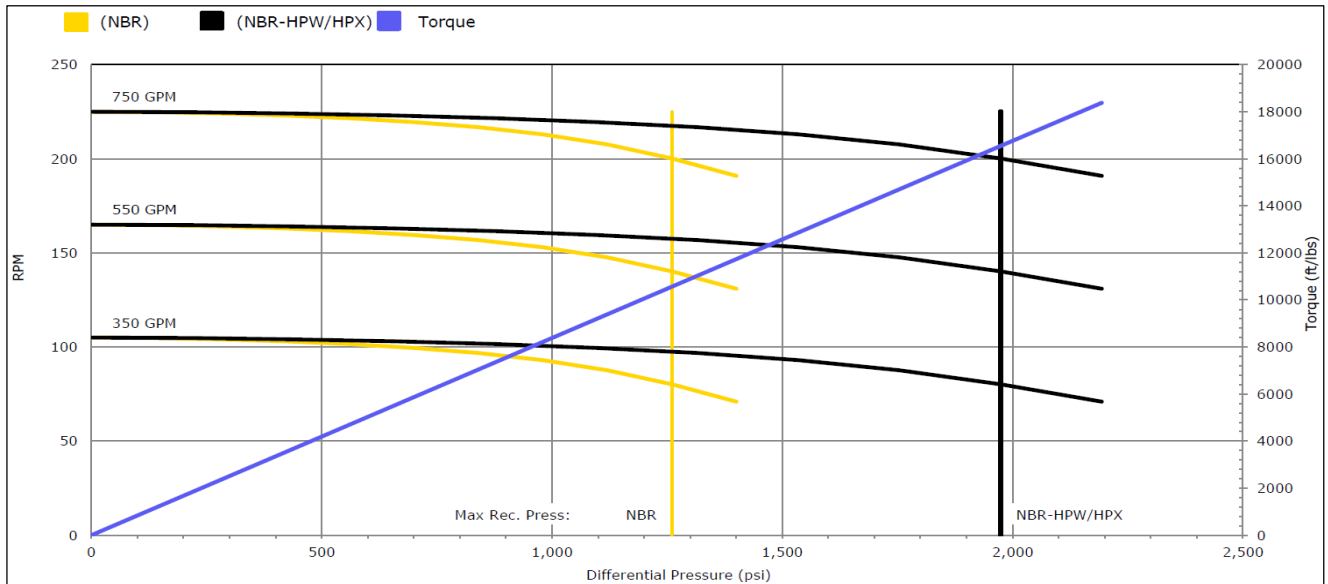


PANTHER

7.00" 6/7 Lobes 8.4 Stages

POWER SECTION

PERFORMANCE SPECIFICATIONS		PERFORMANCE DETAILS		
		NBR		NBR-HPW/HPX
Torque Slope	8.38 ft-lb/psi	Max Diff Pressure psi	1,260	1,980
Flow Range	350 - 750 GPM	Max Torque ft-lb	10,560	16,550
Rotation	.300 rev/gal	Stall Diff Press psi	1,890	3,110
Speed Range	110 - 230 RPM	Stall Torque ft-lb (Nm)	15,840	26,060
Off Bottom Pressure	160 psi	Max Recommended HP	402	630



Build Rate (°/100')													
PANTHER	Housing Type	Fixed Bend (48" Bit to Bend)				Fixed Bend (Ti Flex Shaft)				Adjustable (65" Bit to Bend)			
	Hole Size	8.5	8.75	9.875	NA	8.5	8.75	9.875	NA	8.5	8.75	9.875	NA
	Motor Bend Angle	0.25	2.06	2.00	1.77	NA	NA	NA	NA	NA	1.60	1.56	1.38
0.50	4.12	4.00	3.54	NA	NA	NA	NA	NA	3.21	3.12	2.76	NA	
0.75	6.18	6.00	5.32	NA	NA	NA	NA	NA	4.81	4.68	4.14	NA	
1.00	8.24	8.00	7.09	NA	NA	NA	NA	NA	6.42	6.23	5.52	NA	
1.25	10.29	10.00	8.86	NA	NA	NA	NA	NA	8.02	7.79	6.90	NA	
1.50	12.35	12.00	10.63	NA	NA	NA	NA	NA	9.63	9.35	8.29	NA	
1.75	14.41	14.00	12.41	NA	NA	NA	NA	NA	11.23	10.91	9.67	NA	
2.00	16.47	16.00	14.18	NA	NA	NA	NA	NA	12.83	12.47	11.05	NA	
2.25	18.53	18.00	15.95	NA	NA	NA	NA	NA	14.44	14.03	12.43	NA	
2.50	20.59	20.00	17.72	NA	NA	NA	NA	NA	16.04	15.58	13.81	NA	
2.75	22.65	22.00	19.49	NA	NA	NA	NA	NA	17.65	17.14	15.19	NA	
3.00	24.71	24.00	21.27	NA	NA	NA	NA	NA	19.25	18.70	16.57	NA	

MOTOR ROTARY ANGLES													
Maximum Recommended Fixed Bend Angle for Rotary Speeds Up to 80 RPM													
Motor O.D.		Slick			Partially Stabilized			Fully Stabilized					
7"	Hole Size		8 1/2"	8 3/4"	9 7/8"		8 1/2"	8 3/4"	9 7/8"		8 1/2"	8 3/4"	9 7/8"
	Max. Bend		1.75°	1.75°	2.00°		1.75°	1.75°	2.00°		1.50°	1.50°	1.50°
Maximum Recommended Adjustable Bend Angle for Rotary Speeds Up to 80 RPM													
Motor O.D.		Slick			Partially Stabilized			Fully Stabilized					
7"	Hole Size		8 1/2"	8 3/4"	9 7/8"		8 1/2"	8 3/4"	9 7/8"		8 1/2"	8 3/4"	9 7/8"
	Max. Bend		1.50°	1.50°	1.75°		1.50°	1.75°	1.75°		1.25°	1.25°	1.25°

- Partially Stabilized motor has to be a 1/8" undergauge near bit stabilizer.
- Fully Stabilized motor has a 1/8" undergauge near-bit stabilizer and a 1/8" undergauge top stabilizer located immediately above the motor.
- The above values are not valid if a bit cross-over is used.
- Aggressive rotation of the motor should be avoided if the dogleg severity exceeds 10°/100ft (Fixed Bend Motor) & exceeds 8°/100ft. (Adjustable Bend Motor)
- For every 0.125° above values listed in chart reduce rotation by 20 rpm.

GENERAL INFORMATION			
Standard Bit Connection (1)	4 1/2" Reg.	Max Bit Pull (3)	400,000 lbs.
Standard Top Connection (1)	4 1/2" XH	Max Body Pull (3)	975,000 lbs.
Max Weight on Bit (Operating)	85,000 lbs.	Max Axial Play for Re-run	0.235 in.
Max Weight on Bit (Continuous) (2)	48,000 lbs.		

(1) Other connections available upon request.
 (2) Optimal motor life.
 (3) Exceeding these values may cause motor components to remain in hole.