



830 Winters Ave.
Grand Junction, CO 81501
(970) 424-5225

Warrior 500 – 7:8 Lobe
2.6 Stage HR – 5” OD

General Data

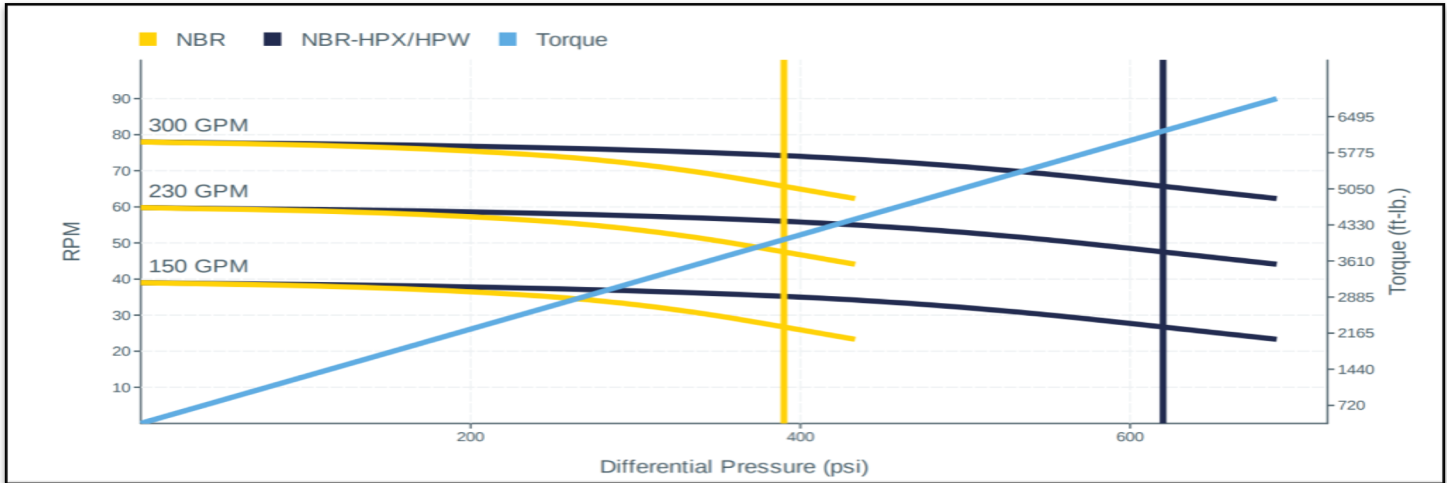
Bit Sizes	6” – 7 7/8”	Max WOB (w/flow)	40,500 lbs.
Bit Connection	3 ½ Reg	Optimum WOB (w/flow)	20,250 lbs.
Top Connection	3 ½ IF	Max WOB (w/o flow)	129,000 lbs.
Torque – Connections	9,250 ft-lb	Max Bit Pull (w/damage)	200,000 lbs.
Torque – ABH	10,000 ft-lb	Max Body Pull (w/damage)	425,000 lbs.

Physical Properties

Bit to Bend Length (ABH)	63.38 in.
Bit to Bend Length (Fixed)	52.00 in.
Nominal Length	332.30 in.
Weight	1450.00 lbs.

Performance Data

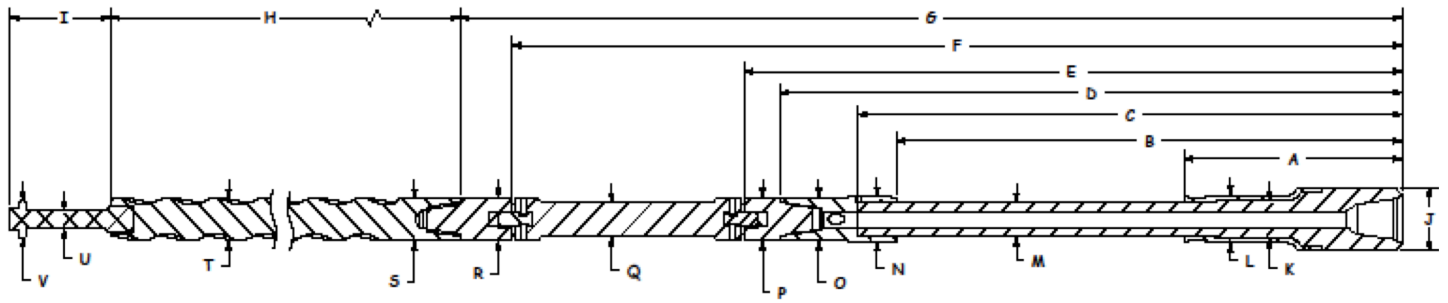
Flow Range	150-300 gpm
Speed Range	40-80 rpm
Speed Ratio	.26 rev/gal
Max. Differential Pressure	620 psi
Torque Ratio	9.44 ft-lb/psi
Torque at Max Differential	5,770 ft-16
Stall Torque	9,090 ft-lb



Calculated Build Up Rates – Degrees / 100 ft. (FIXED)

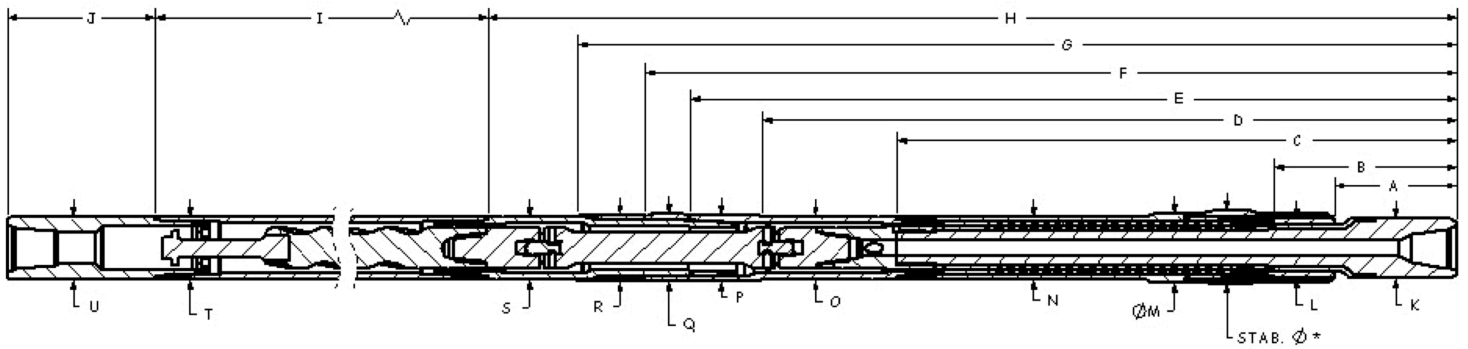
Calculated Build Up Rates – Degrees / 100 ft. (ABH)

Angle (Deg)	Hole Size (in) – Slick Sleeve				Hole Size (in) – Stabilized				Angle (Deg)	Hole Size (in) Slick Sleeve				Hole Size (in) Stabilized			
	6”	6 1/8”	6 3/4”	7 7/8”	6”	6 1/8”	6 3/4”	7 7/8”		6”	6 1/8”	6”	7 7/8”	6”	6 1/8”	6”	7 7/8”
0.25	2.7	2.5	1.7		1.2	1.3	1.7	2.3	0.25	1.3	1.1			1.2	1.3	1.6	2.3
0.50	4.0	3.8	3.0		2.7	2.8	3.2	3.8	0.50	2.6	2.4	1.8		2.7	2.7	3.1	3.8
0.75	5.3	5.1	4.3	2.7	4.3	4.3	4.7	5.3	0.75	3.9	3.7	3.1	2.1	4.1	4.2	4.6	5.2
1.00	6.6	6.4	5.5	4.0	5.8	5.8	6.2	6.8	1.00	5.2	5.0	4.4	3.4	5.6	5.6	6.0	6.7
1.25	7.8	7.7	6.8	5.3	7.3	7.3	7.7	8.3	1.25	6.5	6.3	5.7	4.7	7.0	7.1	7.5	8.1
1.50	9.1	9.0	8.1	6.6	8.8	8.8	9.2	9.8	1.50	7.8	7.6	7.0	6.0	8.5	8.6	8.9	9.6
1.75	10.4	10.2	9.4	7.9	10.3	10.3	10.7	11.3	1.75	9.1	8.9	8.3	7.3	9.9	10.0	10.4	11.0
2.00	11.7	11.5	10.7	9.2	11.8	11.8	12.2	12.8	2.00	10.4	10.2	9.6	8.6	11.4	11.5	11.8	12.5
2.25	13.0	12.8	12.0	10.5	13.3	13.3	13.7	13.7	2.25	11.7	11.5	10.9	9.9	12.9	12.9	13.3	13.9
2.50	14.3	14.1	13.3	11.8	14.8	14.9	15.2	15.8	2.50	13.0	12.8	12.2	11.2	14.3	14.4	14.7	15.4
2.75	15.6	15.4	14.6	13.0	16.3	16.4	16.7	17.4	2.75	14.3	14.1	13.5	12.4	15.8	15.8	16.2	16.9
3.00	16.8	16.7	15.8	14.3	17.8	17.9	18.2	18.9	3.00	15.6	15.4	14.8	13.7	17.2	17.3	17.7	18.3



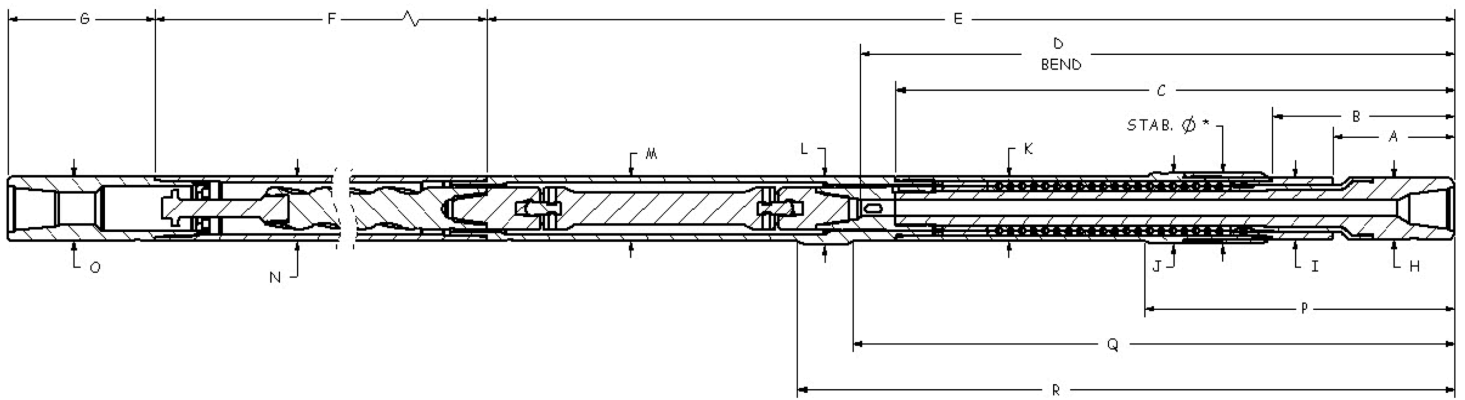
INNER FISHING DIMENSIONS

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
20.3	43.19	46.94	53.19	56.12	77.19	81.76	220	9.15	4.88	3.69	3.03	2.77	3.53	3.38	3.38	2.75	3.38	3.063	3.095	1.15	2.38



OUTER FISHING DIMENSIONS (ABH)

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
11.75	16.55	46.94	56.94	63.5	67.28	74.24	81.71	229.3	21.38	4.88	4.88	5.75	5.00	5.00	5.38	5.63	5.38	5.0	5.0	5.0



OUTER FISHING DIMENSIONS (FIXED)

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
11.75	16.55	46.94	51.13	81.71	229.3	21.38	4.88	4.88	5.75	5.0	5.31	5.0	5.0	5.0	31.51	64.92	70.92

* IF RUNNING SLICK SLEEVE THEN SAME AS BEARING HOUSING UPSET DIMENSION
 * IF RUNNING SLICK HOUSING THEN SAME AS BEARING HOUSING DIMENSION