



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

Warrior 675 – 7:8 Lobe
5.0 Stage HR – 6.75” OD

General Data

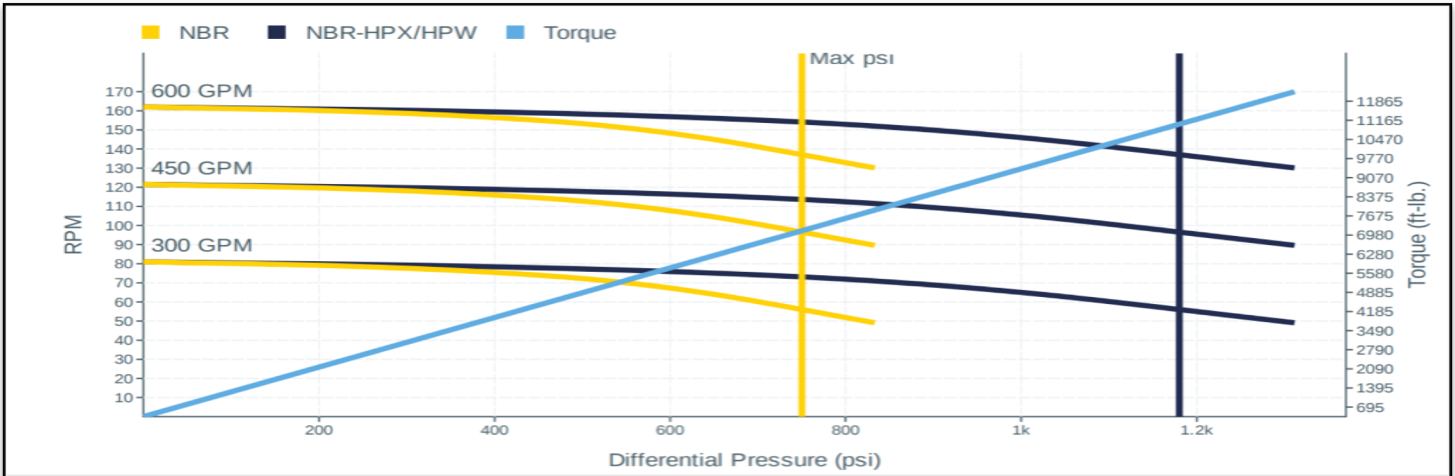
Bit Sizes	7 7/8” – 9 7/8”	Max WOB (w/flow)	110,000 lbs.
Bit Connection	4 ½ Reg	Optimum WOB (w/flow)	55,000 lbs.
Top Connection	4 ½ XH	Max WOB (w/o flow)	275,000 lbs.
Torque – Connections	25,000 ft-lb	Max Bit Pull (w/damage)	380,000 lbs.
Torque – ABH	28,500 ft-lb	Max Body Pull (w/damage)	832,000 lbs.

Physical Properties

Bit to Bend Length (ABH)	82.50 in.
Bit to Bend Length (Fixed)	64.50 in.
Nominal Length	in.
Weight	2500 lbs.

Performance Data

Flow Range	300-600 gpm
Speed Range	80-160 rpm
Speed Ratio	.27 rev/gal
Max. Differential Pressure	1180 psi
Torque Ratio	9.06 ft-lb/psi
Torque at Max Differential	10,650 ft-lb
Stall Torque	16,770 ft-lb

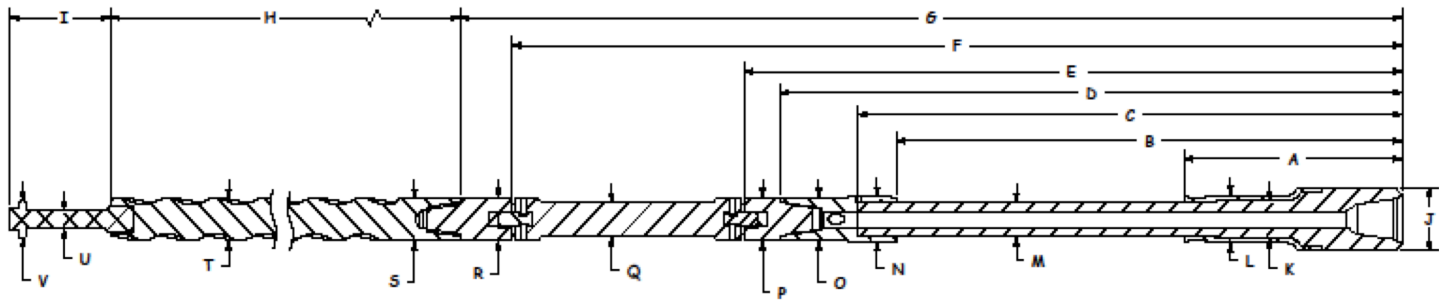


Calculated Build Up Rates – Degrees / 100 ft. (FIXED)

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

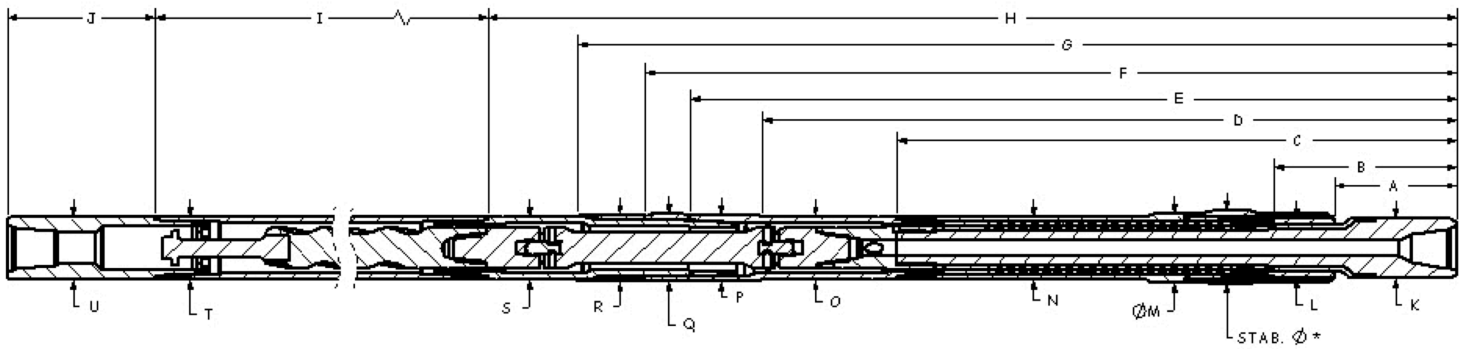
Angle (Deg)	Hole Size (in) – Slick Sleeve				Hole Size (in) – Stabilized				Angle (Deg)	Hole Size (in) Slick Sleeve				Hole Size (in) Stabilized			
	7 7/8	8 1/2	8 3/4	9 7/8	7 7/8	8 1/2	8 3/4	9 7/8		7 7/8	8 1/2	8 3/4	9 7/8	7 7/8	8 1/2	8 3/4	9 7/8
0.25	2.6	2.1	1.9		1.5	2.0	2.2	2.9	0.25	1.7	1.5	1.4		1.4	1.9	2.0	2.8
0.50	4.0	3.5	3.3		3.1	3.5	3.7	4.5	0.50	3.1	2.9	2.8		2.9	3.3	3.5	4.3
0.75	5.4	4.9	4.7	3.9	4.7	5.1	5.3	6.1	0.75	4.5	4.3	4.2	3.8	4.3	4.8	4.9	5.7
1.00	6.8	6.3	6.1	5.3	6.2	6.7	6.8	7.6	1.00	5.9	5.7	5.6	5.3	5.8	6.2	6.4	7.2
1.25	8.2	7.7	7.5	6.7	7.8	8.2	8.4	9.2	1.25	7.3	7.1	7.0	6.7	7.2	7.7	7.8	8.6
1.50	9.6	9.1	8.9	8.1	9.4	9.8	10.0	10.7	1.50	8.7	8.5	8.4	8.1	8.7	9.1	9.3	10.1
1.75	11.0	10.5	10.3	9.5	10.9	11.3	11.5	12.3	1.75	10.1	9.9	9.8	9.5	10.1	10.6	10.7	11.5
2.00	12.4	11.9	11.7	10.9	12.5	12.9	13.1	13.9	2.00	11.5	11.3	11.3	10.9	11.6	12.0	12.2	13.0
2.25	13.8	13.3	13.1	12.3	14.0	14.5	14.6	15.4	2.25	12.9	12.7	12.7	12.3	13.0	13.5	13.6	14.4
2.50	15.2	14.7	14.5	13.7	15.6	16.0	16.2	17.0	2.50	14.4	14.2	14.1	13.7	14.5	14.9	15.1	15.9
2.75	16.6	16.1	15.9	15.1	17.2	17.6	17.8	18.6	2.75	15.8	15.6	15.5	15.1	15.9	16.4	16.5	17.3
3.00	18.0	17.5	17.3	16.5	18.7	19.2	19.3	20.1	3.00	17.2	17.0	16.9	16.5	17.4	17.8	18.0	18.8

• Actual Build up Rates subject to varying factors; including formation, WOB



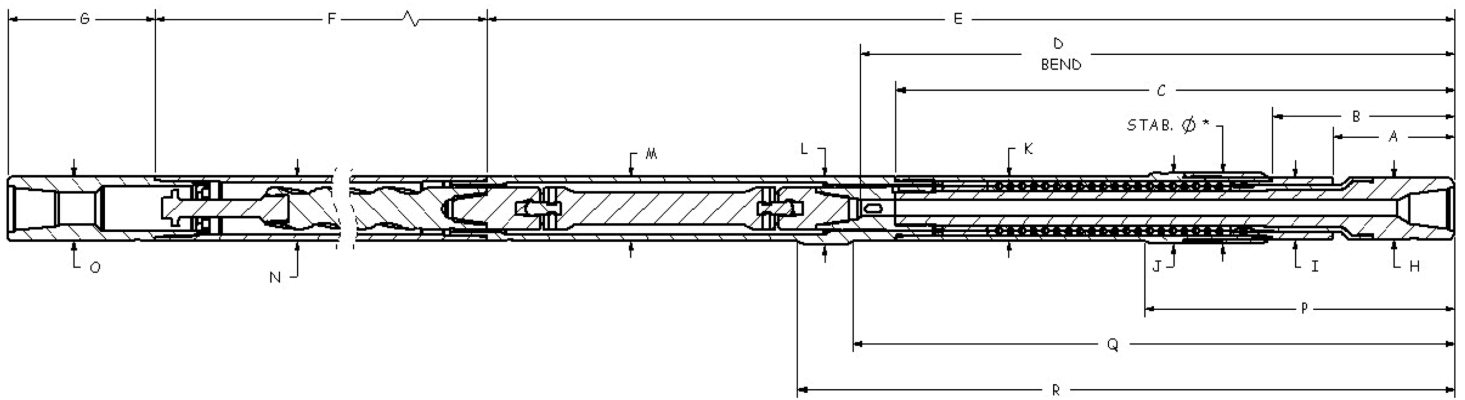
INNER FISHING DIMENSIONS

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
24.15	56.03	60.28	68.88	72.38	99.2	104.4	188	10.9	6.55	3.94	4.92	3.58	4.75	4.5	4.5	3.50	4.50	4.00	4.22	1.88	3.8



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
13.15	19.65	60.28	74.72	82.5	87.33	94.56	97.65	200	22.38	6.55	6.55	7.5	6.75	6.75	7.13	7.31	7.13	6.75	6.75	6.75



OUTER FISHING DIMENSIONS (FIXED)

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
13.15	19.65	60.28	64.25	97.65	200	22.38	6.55	6.55	7.50	6.75	7.06	6.75	6.75	6.75	33.53	64.63	69.75

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