

TP 110°/ 80° 36" TIP SPACING

ALL VALUES BASED ON WATER FOR OTHER LIQUIDS SEE USEFUL FORMULAS AND CONVERSIONS

mph		4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0	
psi gpm																			
8001VS	20	0.07	2.9	2.6	2.3	2.1	2.0	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.2	1.1	1.1	1.0	1.0
	30	0.09	3.6	3.2	2.9	2.6	2.4	2.2	2.1	1.9	1.8	1.7	1.6	1.5	1.4	1.4	1.3	1.2	1.2
11001VS	40	0.10	4.1	3.7	3.3	3.0	2.8	2.5	2.4	2.2	2.1	1.9	1.8	1.7	1.7	1.6	1.5	1.4	1.4
100 MESH	50	0.11	4.6	4.1	3.7	3.4	3.1	2.8	2.6	2.5	2.3	2.2	2.1	1.9	1.8	1.8	1.7	1.6	1.5
ORANGE	60	0.12	5.0	4.5	4.0	3.7	3.4	3.1	2.9	2.7	2.5	2.4	2.2	2.1	2.0	1.9	1.8	1.8	1.7
80015VS	20	0.11	4.4	3.9	3.5	3.2	2.9	2.7	2.5	2.3	2.2	2.1	1.9	1.8	1.7	1.7	1.6	1.5	1.5
	30	0.13	5.4	4.8	4.3	3.9	3.6	3.3	3.1	2.9	2.7	2.5	2.4	2.3	2.1	2.0	2.0	1.9	1.8
110015VS	40	0.15	6.2	5.5	5.0	4.5	4.1	3.8	3.5	3.3	3.1	2.9	2.8	2.6	2.5	2.4	2.3	2.2	2.1
100 MESH	50	0.17	6.9	6.2	5.5	5.0	4.6	4.3	4.0	3.7	3.5	3.3	3.1	2.9	2.8	2.6	2.5	2.4	2.3
GREEN	60	0.18	7.6	6.7	6.1	5.5	5.1	4.7	4.3	4.0	3.8	3.6	3.4	3.2	3.0	2.9	2.8	2.6	2.5
8002VS	20	0.14	5.8	5.2	4.7	4.2	3.9	3.6	3.3	3.1	2.9	2.7	2.6	2.4	2.3	2.2	2.1	2.0	1.9
	30	0.17	7.1	6.3	5.7	5.2	4.8	4.4	4.1	3.8	3.6	3.4	3.2	3.0	2.9	2.7	2.6	2.5	2.4
11002VS	40	0.20	8.3	7.3	6.6	6.0	5.5	5.1	4.7	4.4	4.1	3.9	3.7	3.5	3.3	3.1	3.0	2.9	2.8
50 MESH	50	0.22	9.2	8.2	7.4	6.7	6.2	5.7	5.3	4.9	4.6	4.3	4.1	3.9	3.7	3.5	3.4	3.2	3.1
YELLOW	60	0.25	10.1	9.0	8.1	7.4	6.7	6.2	5.8	5.4	5.1	4.8	4.5	4.3	4.0	3.9	3.7	3.5	3.4
8003VS	20	0.21	8.7	7.8	7.0	6.4	5.8	5.4	5.0	4.7	4.4	4.1	3.9	3.7	3.5	3.3	3.2	3.0	2.9
	30	0.26	10.7	9.5	8.6	7.8	7.2	6.6	6.1	5.7	5.4	5.0	4.8	4.5	4.3	4.1	3.9	3.7	3.6
11003VS	40	0.30	12.4	11.0	9.9	9.0	8.3	7.6	7.1	6.6	6.2	5.8	5.5	5.2	5.0	4.7	4.5	4.3	4.1
50 MESH	50	0.34	13.8	12.3	11.1	10.1	9.2	8.5	7.9	7.4	6.9	6.5	6.1	5.8	5.5	5.3	5.0	4.8	4.6
BLUE	60	0.37	15.1	13.5	12.1	11.0	10.1	9.3	8.7	8.1	7.6	7.1	6.7	6.4	6.1	5.8	5.5	5.3	5.0
8004VS	20	0.28	11.7	10.4	9.3	8.5	7.8	7.2	6.7	6.2	5.8	5.5	5.2	4.9	4.7	4.4	4.2	4.1	3.9
	30	0.35	14.3	12.7	11.4	10.4	9.5	8.8	8.2	7.6	7.1	6.7	6.3	6.0	5.7	5.4	5.2	5.0	4.8
11004VS	40	0.40	16.5	14.7	13.2	12.0	11.0	10.2	9.4	8.8	8.3	7.8	7.3	6.9	6.6	6.3	6.0	5.7	5.5
50 MESH	50	0.45	18.4	16.4	14.8	13.4	12.3	11.3	10.5	9.8	9.2	8.7	8.2	7.8	7.4	7.0	6.7	6.4	6.1
RED	60	0.49	20.2	18.0	16.2	14.7	13.5	12.4	11.6	10.8	10.1	9.5	9.0	8.5	8.1	7.7	7.4	7.0	6.7
8005VS	20	0.35	14.6	13.0	11.7	10.6	9.7	9.0	8.3	7.8	7.3	6.9	6.5	6.1	5.8	5.6	5.3	5.1	4.9
	30	0.43	17.9	15.9	14.3	13.0	11.9	11.0	10.2	9.5	8.9	8.4	7.9	7.5	7.1	6.8	6.5	6.2	6.0
11005VS	40	0.50	20.6	18.3	16.5	15.0	13.8	12.7	11.8	11.0	10.3	9.7	9.2	8.7	8.3	7.9	7.5	7.2	6.9
50 MESH	50	0.56	23.1	20.5	18.4	16.8	15.4	14.2	13.2	12.3	11.5	10.9	10.2	9.7	9.2	8.8	8.4	8.0	7.7
BROWN	60	0.61	25.2	22.4	20.2	18.4	16.8	15.5	14.4	13.5	12.6	11.9	11.2	10.6	10.1	9.6	9.2	8.8	8.4

TP 110°/ 80°36" TIP SPACING

ALL VALUES BASED ON WATER FOR OTHER LIQUIDS SEE USEFUL FORMULAS AND CONVERSIONS

12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	mph		
																	gpm	psi
0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.07	20	8001VS
1.1	1.1	1.1	1.0	1.0	1.0	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.09	30	11001VS
1.3	1.3	1.2	1.2	1.1	1.1	1.1	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.8	0.8	0.10	40	100 MESH
1.5	1.4	1.4	1.3	1.3	1.2	1.2	1.2	1.1	1.1	1.1	1.0	1.0	1.0	0.9	0.9	0.11	50	ORANGE
1.6	1.5	1.5	1.4	1.4	1.3	1.3	1.3	1.2	1.2	1.2	1.1	1.1	1.1	1.0	1.0	0.12	60	
1.4	1.3	1.3	1.2	1.2	1.2	1.1	1.1	1.1	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.11	20	80015VS
1.7	1.7	1.6	1.5	1.5	1.4	1.4	1.3	1.3	1.3	1.2	1.2	1.2	1.1	1.1	1.1	0.13	30	110015VS
2.0	1.9	1.8	1.8	1.7	1.7	1.6	1.5	1.5	1.5	1.4	1.4	1.3	1.3	1.3	1.2	0.15	40	100 MESH
2.2	2.1	2.1	2.0	1.9	1.8	1.8	1.7	1.7	1.6	1.6	1.5	1.5	1.5	1.4	1.4	0.17	50	GREEN
2.4	2.3	2.2	2.2	2.1	2.0	2.0	1.9	1.8	1.8	1.7	1.7	1.6	1.6	1.6	1.5	0.18	60	
1.9	1.8	1.7	1.7	1.6	1.6	1.5	1.5	1.4	1.4	1.3	1.3	1.3	1.2	1.2	1.2	0.14	20	8002VS
2.3	2.2	2.1	2.0	2.0	1.9	1.8	1.8	1.7	1.7	1.6	1.6	1.5	1.5	1.5	1.4	0.17	30	11002VS
2.6	2.5	2.4	2.4	2.3	2.2	2.1	2.1	2.0	1.9	1.9	1.8	1.8	1.7	1.7	1.7	0.20	40	50 MESH
3.0	2.8	2.7	2.6	2.5	2.5	2.4	2.3	2.2	2.2	2.1	2.1	2.0	1.9	1.9	1.8	0.22	50	YELLOW
3.2	3.1	3.0	2.9	2.8	2.7	2.6	2.5	2.5	2.4	2.3	2.2	2.2	2.1	2.1	2.0	0.25	60	
2.8	2.7	2.6	2.5	2.4	2.3	2.3	2.2	2.1	2.1	2.0	1.9	1.9	1.8	1.8	1.7	0.21	20	8003VS
3.4	3.3	3.2	3.1	3.0	2.9	2.8	2.7	2.6	2.5	2.5	2.4	2.3	2.3	2.2	2.1	0.26	30	11003VS
4.0	3.8	3.7	3.5	3.4	3.3	3.2	3.1	3.0	2.9	2.8	2.8	2.7	2.6	2.5	2.5	0.30	40	50 MESH
4.4	4.3	4.1	3.9	3.8	3.7	3.6	3.5	3.4	3.3	3.2	3.1	3.0	2.9	2.8	2.8	0.34	50	BLUE
4.8	4.7	4.5	4.3	4.2	4.0	3.9	3.8	3.7	3.6	3.5	3.4	3.3	3.2	3.1	3.0	0.37	60	
3.7	3.6	3.5	3.3	3.2	3.1	3.0	2.9	2.8	2.7	2.7	2.6	2.5	2.5	2.4	2.3	0.28	20	8004VS
4.6	4.4	4.2	4.1	3.9	3.8	3.7	3.6	3.5	3.4	3.3	3.2	3.1	3.0	2.9	2.9	0.35	30	11004VS
5.3	5.1	4.9	4.7	4.6	4.4	4.3	4.1	4.0	3.9	3.8	3.7	3.6	3.5	3.4	3.3	0.40	40	50 MESH
5.9	5.7	5.5	5.3	5.1	4.9	4.8	4.6	4.5	4.3	4.2	4.1	4.0	3.9	3.8	3.7	0.45	50	RED
6.5	6.2	6.0	5.8	5.6	5.4	5.2	5.1	4.9	4.8	4.6	4.5	4.4	4.3	4.1	4.0	0.49	60	
4.7	4.5	4.3	4.2	4.0	3.9	3.8	3.7	3.5	3.4	3.3	3.2	3.2	3.1	3.0	2.9	0.35	20	8005VS
5.7	5.5	5.3	5.1	4.9	4.8	4.6	4.5	4.3	4.2	4.1	4.0	3.9	3.8	3.7	3.6	0.43	30	11005VS
6.6	6.3	6.1	5.9	5.7	5.5	5.3	5.2	5.0	4.9	4.7	4.6	4.5	4.3	4.2	4.1	0.50	40	50 MESH
7.4	7.1	6.8	6.6	6.4	6.1	6.0	5.8	5.6	5.4	5.3	5.1	5.0	4.9	4.7	4.6	0.56	50	BROWN
8.1	7.8	7.5	7.2	7.0	6.7	6.5	6.3	6.1	5.9	5.8	5.6	5.5	5.3	5.2	5.0	0.61	60	

TP 110°/ 80° 36" TIP SPACING

ALL VALUES BASED ON WATER FOR OTHER LIQUIDS SEE USEFUL FORMULAS AND CONVERSIONS

mph		4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0	
8006VS 11006VS	20	0.42	17.5	15.5	14.0	12.7	11.7	10.8	10.0	9.3	8.7	8.2	7.8	7.4	7.0	6.7	6.4	6.1	5.8
	30	0.52	21.5	19.1	17.2	15.6	14.3	13.2	12.3	11.4	10.7	10.1	9.5	9.0	8.6	8.2	7.8	7.5	7.2
	40	0.60	24.8	22.0	19.8	18.0	16.5	15.2	14.1	13.2	12.4	11.6	11.0	10.4	9.9	9.4	9.0	8.6	8.3
	50 MESH GRAY	0.67	27.7	24.6	22.1	20.1	18.5	17.0	15.8	14.8	13.8	13.0	12.3	11.7	11.1	10.5	10.1	9.6	9.2
8008VS 11008VS	20	0.63	26.1	23.2	20.9	19.0	17.4	16.0	14.9	13.9	13.0	12.3	11.6	11.0	10.4	9.9	9.5	9.1	8.7
	30	0.69	28.6	25.4	22.9	20.8	19.1	17.6	16.3	15.2	14.3	13.5	12.7	12.0	11.4	10.9	10.4	9.9	9.5
	40	0.80	33.0	29.3	26.4	24.0	22.0	20.3	18.9	17.6	16.5	15.5	14.7	13.9	13.2	12.6	12.0	11.5	11.0
	50 MESH WHITE	0.89	36.9	32.8	29.5	26.8	24.6	22.7	21.1	19.7	18.4	17.4	16.4	15.5	14.8	14.0	13.4	12.8	12.3
8010SS 11010SS	20	0.71	29.2	25.9	23.3	21.2	19.4	17.9	16.7	15.6	14.6	13.7	13.0	12.3	11.7	11.1	10.6	10.1	9.7
	30	0.87	35.7	31.8	28.6	26.0	23.8	22.0	20.4	19.1	17.9	16.8	15.9	15.0	14.3	13.6	13.0	12.4	11.9
	40	1.00	41.3	36.7	33.0	30.0	27.5	25.4	23.6	22.0	20.6	19.4	18.3	17.4	16.5	15.7	15.0	14.3	13.8
	50 MESH	1.12	46.1	41.0	36.9	33.5	30.7	28.4	26.4	24.6	23.1	21.7	20.5	19.4	18.4	17.6	16.8	16.0	15.4
8015SS 11015SS	20	1.06	43.8	38.9	35.0	31.8	29.2	26.9	25.0	23.3	21.9	20.6	19.5	18.4	17.5	16.7	15.9	15.2	14.6
	30	1.30	53.6	47.6	42.9	39.0	35.7	33.0	30.6	28.6	26.8	25.2	23.8	22.6	21.4	20.4	19.5	18.6	17.9
	40	1.50	61.9	55.0	49.5	45.0	41.3	38.1	35.4	33.0	30.9	29.1	27.5	26.1	24.8	23.6	22.5	21.5	20.6
	50 MESH	1.68	69.2	61.5	55.3	50.3	46.1	42.6	39.5	36.9	34.6	32.6	30.7	29.1	27.7	26.4	25.2	24.1	23.1
8020SS 11020SS	20	1.41	58.3	51.8	46.7	42.4	38.9	35.9	33.3	31.1	29.2	27.4	25.9	24.6	23.3	22.2	21.2	20.3	19.4
	30	1.73	71.4	63.5	57.2	52.0	47.6	44.0	40.8	38.1	35.7	33.6	31.8	30.1	28.6	27.2	26.0	24.9	23.8
	40	2.00	82.5	73.3	66.0	60.0	55.0	50.8	47.1	44.0	41.3	38.8	36.7	34.7	33.0	31.4	30.0	28.7	27.5
	50 MESH	2.24	92.2	82.0	73.8	67.1	61.5	56.8	52.7	49.2	46.1	43.4	41.0	38.8	36.9	35.1	33.5	32.1	30.7
	60	2.45	101.0	89.8	80.8	73.5	67.3	62.2	57.7	53.9	50.5	47.5	44.9	42.5	40.4	38.5	36.7	35.1	33.7

TP 110°/ 80°36" TIP SPACING

ALL VALUES BASED ON WATER FOR OTHER LIQUIDS SEE USEFUL FORMULAS AND CONVERSIONS

12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	mph	
5.6	5.4	5.2	5.0	4.8	4.7	4.5	4.4	4.2	4.1	4.0	3.9	3.8	3.7	3.6	3.5	0.42	20
6.9	6.6	6.4	6.1	5.9	5.7	5.5	5.4	5.2	5.0	4.9	4.8	4.6	4.5	4.4	4.3	0.52	30
7.9	7.6	7.3	7.1	6.8	6.6	6.4	6.2	6.0	5.8	5.7	5.5	5.4	5.2	5.1	5.0	0.60	40
8.9	8.5	8.2	7.9	7.6	7.4	7.1	6.9	6.7	6.5	6.3	6.2	6.0	5.8	5.7	5.5	0.67	50
9.7	9.3	9.0	8.7	8.4	8.1	7.8	7.6	7.4	7.1	6.9	6.7	6.6	6.4	6.2	6.1	0.74	60
0.57																	
8.3	8.0	7.7	7.4	7.2	7.0	6.7	6.5	6.3	6.1	6.0	5.8	5.6	5.5	5.3	5.2	0.63	20
9.1	8.8	8.5	8.2	7.9	7.6	7.4	7.1	6.9	6.7	6.5	6.4	6.2	6.0	5.9	5.7	0.69	30
10.6	10.2	9.8	9.4	9.1	8.8	8.5	8.3	8.0	7.8	7.5	7.3	7.1	6.9	6.8	6.6	0.80	40
11.8	11.3	10.9	10.5	10.2	9.8	9.5	9.2	8.9	8.7	8.4	8.2	8.0	7.8	7.6	7.4	0.89	50
12.9	12.4	12.0	11.6	11.2	10.8	10.4	10.1	9.8	9.5	9.2	9.0	8.7	8.5	8.3	8.1	0.98	60
0.57																	
9.3	9.0	8.6	8.3	8.0	7.8	7.5	7.3	7.1	6.9	6.7	6.5	6.3	6.1	6.0	5.8	0.71	20
11.4	11.0	10.6	10.2	9.9	9.5	9.2	8.9	8.7	8.4	8.2	7.9	7.7	7.5	7.3	7.1	0.87	30
13.2	12.7	12.2	11.8	11.4	11.0	10.6	10.3	10.0	9.7	9.4	9.2	8.9	8.7	8.5	8.3	1.00	40
14.8	14.2	13.7	13.2	12.7	12.3	11.9	11.5	11.2	10.9	10.5	10.2	10.0	9.7	9.5	9.2	1.12	50
16.2	15.5	15.0	14.4	13.9	13.5	13.0	12.6	12.3	11.9	11.6	11.2	10.9	10.6	10.4	10.1	1.23	60
0.57																	
14.0	13.5	13.0	12.5	12.1	11.7	11.3	10.9	10.6	10.3	10.0	9.7	9.5	9.2	9.0	8.8	1.06	20
17.1	16.5	15.9	15.3	14.8	14.3	13.8	13.4	13.0	12.6	12.2	11.9	11.6	11.3	11.0	10.7	1.30	30
19.8	19.0	18.3	17.7	17.1	16.5	16.0	15.5	15.0	14.6	14.1	13.8	13.4	13.0	12.7	12.4	1.50	40
22.1	21.3	20.5	19.8	19.1	18.4	17.9	17.3	16.8	16.3	15.8	15.4	15.0	14.6	14.2	13.8	1.68	50
24.2	23.3	22.5	21.7	20.9	20.2	19.6	18.9	18.4	17.8	17.3	16.8	16.4	16.0	15.5	15.2	1.84	60
0.57																	
18.7	17.9	17.3	16.7	16.1	15.6	15.1	14.6	14.1	13.7	13.3	13.0	12.6	12.3	12.0	11.7	1.41	20
22.9	22.0	21.2	20.4	19.7	19.1	18.4	17.9	17.3	16.8	16.3	15.9	15.4	15.0	14.7	14.3	1.73	30
26.4	25.4	24.4	23.6	22.8	22.0	21.3	20.6	20.0	19.4	18.9	18.3	17.8	17.4	16.9	16.5	2.00	40
29.5	28.4	27.3	26.4	25.4	24.6	23.8	23.1	22.4	21.7	21.1	20.5	19.9	19.4	18.9	18.4	2.24	50
32.3	31.1	29.9	28.9	27.9	26.9	26.1	25.3	24.5	23.8	23.1	22.4	21.8	21.3	20.7	20.2	2.45	60