

TP 110°/ 80° 16" 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	6.6	5.9	5.3	4.8	4.4	4.1	3.8	3.5	3.3	3.1	2.9	2.8	2.6	2.5	2.4	2.3	2.2
	30	0.09	8.1	7.2	6.5	5.9	5.4	5.0	4.6	4.3	4.0	3.8	3.6	3.4	3.2	3.1	2.9	2.8	2.7
11001VS	40	0.10	9.3	8.3	7.4	6.8	6.2	5.7	5.3	5.0	4.6	4.4	4.1	3.9	3.7	3.5	3.4	3.2	3.1
100 MESH	50	0.11	10.4	9.2	8.3	7.6	6.9	6.4	5.9	5.5	5.2	4.9	4.6	4.4	4.2	4.0	3.8	3.6	3.5
ORANGE	60	0.12	11.3	10.1	9.1	8.2	7.5	7.0	6.5	6.0	5.7	5.3	5.0	4.8	4.5	4.3	4.1	3.9	3.8
80015VS	20	0.11	9.8	8.7	7.9	7.2	6.6	6.1	5.6	5.2	4.9	4.6	4.4	4.1	3.9	3.7	3.6	3.4	3.3
	30	0.13	12.1	10.7	9.7	8.8	8.0	7.4	6.9	6.4	6.0	5.7	5.4	5.1	4.8	4.6	4.4	4.2	4.0
110015VS	40	0.15	13.9	12.4	11.1	10.1	9.3	8.6	8.0	7.4	7.0	6.6	6.2	5.9	5.6	5.3	5.1	4.8	4.6
100 MESH	50	0.17	15.6	13.9	12.5	11.3	10.4	9.6	8.9	8.3	7.8	7.3	6.9	6.6	6.2	5.9	5.7	5.4	5.2
GREEN	60	0.18	17.1	15.2	13.7	12.4	11.4	10.5	9.8	9.1	8.5	8.0	7.6	7.2	6.8	6.5	6.2	5.9	5.7
8002VS	20	0.14	13.1	11.6	10.5	9.5	8.7	8.1	7.5	7.0	6.5	6.2	5.8	5.5	5.2	5.0	4.8	4.6	4.4
	30	0.17	16.1	14.3	12.8	11.7	10.7	9.9	9.2	8.6	8.0	7.6	7.1	6.8	6.4	6.1	5.8	5.6	5.4
11002VS	40	0.20	18.6	16.5	14.9	13.5	12.4	11.4	10.6	9.9	9.3	8.7	8.3	7.8	7.4	7.1	6.8	6.5	6.2
50 MESH	50	0.22	20.8	18.5	16.6	15.1	13.9	12.8	11.9	11.1	10.4	9.8	9.2	8.8	8.3	7.9	7.6	7.2	6.9
YELLOW	60	0.25	22.7	20.2	18.2	16.5	15.2	14.0	13.0	12.1	11.4	10.7	10.1	9.6	9.1	8.7	8.3	7.9	7.6
8003VS	20	0.21	19.7	17.5	15.7	14.3	13.1	12.1	11.2	10.5	9.8	9.3	8.7	8.3	7.9	7.5	7.2	6.8	6.6
	30	0.26	24.1	21.5	19.3	17.6	16.1	14.9	13.8	12.9	12.1	11.4	10.7	10.2	9.7	9.2	8.8	8.4	8.0
11003VS	40	0.30	27.8	24.8	22.3	20.3	18.6	17.1	15.9	14.9	13.9	13.1	12.4	11.7	11.1	10.6	10.1	9.7	9.3
50 MESH	50	0.34	31.1	27.6	24.9	22.6	20.7	19.1	17.8	16.6	15.5	14.6	13.8	13.1	12.4	11.8	11.3	10.8	10.4
BLUE	60	0.37	34.1	30.3	27.2	24.8	22.7	21.0	19.5	18.2	17.0	16.0	15.1	14.3	13.6	13.0	12.4	11.8	11.4
8004VS	20	0.28	26.3	23.3	21.0	19.1	17.5	16.2	15.0	14.0	13.1	12.4	11.7	11.1	10.5	10.0	9.6	9.1	8.8
	30	0.35	32.1	28.5	25.7	23.4	21.4	19.8	18.4	17.1	16.1	15.1	14.3	13.5	12.8	12.2	11.7	11.2	10.7
11004VS	40	0.40	37.1	33.0	29.7	27.0	24.8	22.8	21.2	19.8	18.6	17.5	16.5	15.6	14.9	14.1	13.5	12.9	12.4
50 MESH	50	0.45	41.5	36.9	33.2	30.2	27.7	25.5	23.7	22.1	20.7	19.5	18.4	17.5	16.6	15.8	15.1	14.4	13.8
RED	60	0.49	45.5	40.4	36.4	33.1	30.3	28.0	26.0	24.3	22.7	21.4	20.2	19.1	18.2	17.3	16.5	15.8	15.2
8005VS	20	0.35	32.9	29.2	26.3	23.9	21.9	20.2	18.8	17.5	16.4	15.5	14.6	13.8	13.1	12.5	11.9	11.4	11.0
	30	0.43	40.2	35.7	32.2	29.2	26.8	24.7	23.0	21.4	20.1	18.9	17.9	16.9	16.1	15.3	14.6	14.0	13.4
11005VS	40	0.50	46.4	41.3	37.1	33.8	30.9	28.6	26.5	24.8	23.2	21.8	20.6	19.5	18.6	17.7	16.9	16.1	15.5
50 MESH	50	0.56	51.9	46.1	41.5	37.7	34.6	31.9	29.6	27.7	25.9	24.4	23.1	21.8	20.8	19.8	18.9	18.0	17.3
BROWN	60	0.61	56.8	50.5	45.4	41.3	37.9	35.0	32.5	30.3	28.4	26.7	25.2	23.9	22.7	21.6	20.7	19.8	18.9

TP 110° 80° 16" TIP SPACING

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

															mph					
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			gpm	psi	
2.1	2.0	2.0	1.9	1.8	1.8	1.7	1.6	1.6	1.6	1.5	1.5	1.4	1.4	1.4	1.3	0.07	20	8001VS 11001VS 100 MESH ORANGE		
2.6	2.5	2.4	2.3	2.2	2.2	2.1	2.0	2.0	1.9	1.8	1.8	1.7	1.7	1.7	1.6	0.09	30			
3.0	2.9	2.8	2.7	2.6	2.5	2.4	2.3	2.3	2.2	2.1	2.1	2.0	2.0	1.9	1.9	0.10	40			
3.3	3.2	3.1	3.0	2.9	2.8	2.7	2.6	2.5	2.4	2.4	2.3	2.2	2.2	2.1	2.1	0.11	50			
3.6	3.5	3.4	3.2	3.1	3.0	2.9	2.8	2.7	2.7	2.6	2.5	2.4	2.4	2.3	2.3	0.12	60			
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	2.0	0.11	20	80015VS 110015VS 100 MESH GREEN		
3.9	3.7	3.6	3.4	3.3	3.2	3.1	3.0	2.9	2.8	2.8	2.7	2.6	2.5	2.5	2.4	0.13	30			
4.5	4.3	4.1	4.0	3.8	3.7	3.6	3.5	3.4	3.3	3.2	3.1	3.0	2.9	2.9	2.8	0.15	40			
5.0	4.8	4.6	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	0.17	50			
5.5	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	0.18	60			
4.2	4.0	3.9	3.7	3.6	3.5	3.4	3.3	3.2	3.1	3.0	2.9	2.8	2.8	2.7	2.6	0.14	20	8002VS 11002VS 50 MESH YELLOW		
5.1	4.9	4.8	4.6	4.4	4.3	4.1	4.0	3.9	3.8	3.7	3.6	3.5	3.4	3.3	3.2	0.17	30			
5.9	5.7	5.5	5.3	5.1	5.0	4.8	4.6	4.5	4.4	4.2	4.1	4.0	3.9	3.8	3.7	0.20	40			
6.7	6.4	6.2	5.9	5.7	5.5	5.4	5.2	5.0	4.9	4.8	4.6	4.5	4.4	4.3	4.2	0.22	50			
7.3	7.0	6.7	6.5	6.3	6.1	5.9	5.7	5.5	5.4	5.2	5.1	4.9	4.8	4.7	4.5	0.25	60			
6.3	6.1	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	3.9	0.21	20	8003VS 11003VS 50 MESH BLUE		
7.7	7.4	7.2	6.9	6.7	6.4	6.2	6.0	5.9	5.7	5.5	5.4	5.2	5.1	5.0	4.8	0.26	30			
8.9	8.6	8.3	8.0	7.7	7.4	7.2	7.0	6.8	6.6	6.4	6.2	6.0	5.9	5.7	5.6	0.30	40			
9.9	9.6	9.2	8.9	8.6	8.3	8.0	7.8	7.5	7.3	7.1	6.9	6.7	6.5	6.4	6.2	0.34	50			
10.9	10.5	10.1	9.7	9.4	9.1	8.8	8.5	8.3	8.0	7.8	7.6	7.4	7.2	7.0	6.8	0.37	60			
8.4	8.1	7.8	7.5	7.2	7.0	6.8	6.6	6.4	6.2	6.0	5.8	5.7	5.5	5.4	5.3	0.28	20	8004VS 11004VS 50 MESH RED		
10.3	9.9	9.5	9.2	8.9	8.6	8.3	8.0	7.8	7.6	7.3	7.1	6.9	6.8	6.6	6.4	0.35	30			
11.9	11.4	11.0	10.6	10.2	9.9	9.6	9.3	9.0	8.7	8.5	8.3	8.0	7.8	7.6	7.4	0.40	40			
13.3	12.8	12.3	11.9	11.4	11.1	10.7	10.4	10.1	9.8	9.5	9.2	9.0	8.7	8.5	8.3	0.45	50			
14.6	14.0	13.5	13.0	12.5	12.1	11.7	11.4	11.0	10.7	10.4	10.1	9.8	9.6	9.3	9.1	0.49	60			
10.5	10.1	9.7	9.4	9.1	8.8	8.5	8.2	8.0	7.7	7.5	7.3	7.1	6.9	6.7	6.6	0.35	20	8005VS 11005VS 50 MESH BROWN		
12.9	12.4	11.9	11.5	11.1	10.7	10.4	10.0	9.7	9.5	9.2	8.9	8.7	8.5	8.2	8.0	0.43	30			
14.9	14.3	13.8	13.3	12.8	12.4	12.0	11.6	11.3	10.9	10.6	10.3	10.0	9.8	9.5	9.3	0.50	40			
16.6	16.0	15.4	14.8	14.3	13.8	13.4	13.0	12.6	12.2	11.9	11.5	11.2	10.9	10.6	10.4	0.56	50			
18.2	17.5	16.8	16.2	15.7	15.1	14.7	14.2	13.8	13.4	13.0	12.6	12.3	12.0	11.7	11.4	0.61	60			

TP 110°/ 80° 16" 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	20	0.42	39.4	35.0	31.5	28.6	26.2	24.2	22.5	21.0	19.7	18.5	17.5	16.6	15.7	15.0	14.3	13.7	13.1
	30	0.52	48.3	42.9	38.6	35.1	32.2	29.7	27.6	25.7	24.1	22.7	21.5	20.3	19.3	18.4	17.6	16.8	16.1
11006VS	40	0.60	55.7	49.5	44.6	40.5	37.1	34.3	31.8	29.7	27.8	26.2	24.8	23.4	22.3	21.2	20.3	19.4	18.6
	50	0.67	62.3	55.4	49.8	45.3	41.5	38.3	35.6	33.2	31.1	29.3	27.7	26.2	24.9	23.7	22.6	21.7	20.8
50 MESH GRAY	60	0.74	68.2	60.6	54.6	49.6	45.5	42.0	39.0	36.4	34.1	32.1	30.3	28.7	27.3	26.0	24.8	23.7	22.7
	20	0.63	58.7	52.1	46.9	42.7	39.1	36.1	33.5	31.3	29.3	27.6	26.1	24.7	23.5	22.3	21.3	20.4	19.6
8008VS	30	0.69	64.3	57.2	51.5	46.8	42.9	39.6	36.8	34.3	32.2	30.3	28.6	27.1	25.7	24.5	23.4	22.4	21.4
	40	0.80	74.3	66.0	59.4	54.0	49.5	45.7	42.4	39.6	37.1	34.9	33.0	31.3	29.7	28.3	27.0	25.8	24.8
11008VS	50	0.89	83.0	73.8	66.4	60.3	55.3	51.1	47.4	44.3	41.5	39.0	36.9	34.9	33.2	31.6	30.2	28.9	27.7
	60	0.98	91.0	80.9	72.8	66.2	60.6	56.0	52.0	48.5	45.5	42.8	40.4	38.3	36.4	34.7	33.1	31.6	30.3
8010SS	20	0.71	65.6	58.3	52.5	47.7	43.7	40.4	37.5	35.0	32.8	30.9	29.2	27.6	26.2	25.0	23.9	22.8	21.9
	30	0.87	80.4	71.4	64.3	58.5	53.6	49.5	45.9	42.9	40.2	37.8	35.7	33.8	32.2	30.6	29.2	28.0	26.8
11010SS	40	1.00	92.8	82.5	74.3	67.5	61.9	57.1	53.0	49.5	46.4	43.7	41.3	39.1	37.1	35.4	33.8	32.3	30.9
	50	1.12	103.8	92.2	83.0	75.5	69.2	63.9	59.3	55.3	51.9	48.8	46.1	43.7	41.5	39.5	37.7	36.1	34.6
50 MESH	60	1.23	113.7	101.1	91.0	82.7	75.8	70.0	65.0	60.6	56.8	53.5	50.5	47.9	45.5	43.3	41.3	39.5	37.9
	20	1.06	98.5	87.5	78.8	71.6	65.6	60.6	56.3	52.5	49.2	46.3	43.8	41.5	39.4	37.5	35.8	34.3	32.8
8015SS	30	1.30	120.6	107.2	96.5	87.7	80.4	74.2	68.9	64.3	60.3	56.7	53.6	50.8	48.2	45.9	43.8	41.9	40.2
	40	1.50	139.2	123.8	111.4	101.3	92.8	85.7	79.6	74.3	69.6	65.5	61.9	58.6	55.7	53.0	50.6	48.4	46.4
11015SS	50	1.68	155.6	138.4	124.5	113.2	103.8	95.8	88.9	83.0	77.8	73.2	69.2	65.5	62.3	59.3	56.6	54.1	51.9
	60	1.84	170.5	151.6	136.4	124.0	113.7	104.9	97.4	90.9	85.2	80.2	75.8	71.8	68.2	65.0	62.0	59.3	56.8
8020SS	20	1.41	131.2	116.7	105.0	95.4	87.5	80.8	75.0	70.0	65.6	61.8	58.3	55.3	52.5	50.0	47.7	45.6	43.7
	30	1.73	160.8	142.9	128.6	116.9	107.2	98.9	91.9	85.7	80.4	75.6	71.4	67.7	64.3	61.2	58.5	55.9	53.6
11020SS	40	2.00	185.6	165.0	148.5	135.0	123.8	114.2	106.1	99.0	92.8	87.4	82.5	78.2	74.3	70.7	67.5	64.6	61.9
	50	2.24	207.5	184.5	166.0	150.9	138.4	127.7	118.6	110.7	103.8	97.7	92.2	87.4	83.0	79.1	75.5	72.2	69.2
50 MESH	60	2.45	227.3	202.0	181.8	165.3	151.5	139.9	129.9	121.2	113.6	107.0	101.0	95.7	90.9	86.6	82.7	79.1	75.8

TP 110°/ 80° 16" 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		
12.6	12.1	11.7	11.2	10.9	10.5	10.2	9.8	9.5	9.3	9.0	8.7	8.5	8.3	8.1	7.9	0.42	20	8006VS 11006VS 50 MESH GRAY
15.4	14.9	14.3	13.8	13.3	12.9	12.5	12.1	11.7	11.4	11.0	10.7	10.4	10.2	9.9	9.7	0.52	30	
17.8	17.1	16.5	15.9	15.4	14.9	14.4	13.9	13.5	13.1	12.7	12.4	12.0	11.7	11.4	11.1	0.60	40	
19.9	19.2	18.5	17.8	17.2	16.6	16.1	15.6	15.1	14.7	14.2	13.8	13.5	13.1	12.8	12.5	0.67	50	
21.8	21.0	20.2	19.5	18.8	18.2	17.6	17.1	16.5	16.1	15.6	15.2	14.7	14.4	14.0	13.6	0.74	60	
18.8	18.0	17.4	16.8	16.2	15.6	15.1	14.7	14.2	13.8	13.4	13.0	12.7	12.3	12.0	11.7	0.63	20	8008VS 11008VS 50 MESH WHITE
20.6	19.8	19.1	18.4	17.7	17.2	16.6	16.1	15.6	15.1	14.7	14.3	13.9	13.5	13.2	12.9	0.69	30	
23.8	22.8	22.0	21.2	20.5	19.8	19.2	18.6	18.0	17.5	17.0	16.5	16.1	15.6	15.2	14.9	0.80	40	
26.6	25.5	24.6	23.7	22.9	22.1	21.4	20.7	20.1	19.5	19.0	18.4	17.9	17.5	17.0	16.6	0.89	50	
29.1	28.0	27.0	26.0	25.1	24.3	23.5	22.7	22.1	21.4	20.8	20.2	19.7	19.1	18.7	18.2	0.98	60	
21.0	20.2	19.4	18.7	18.1	17.5	16.9	16.4	15.9	15.4	15.0	14.6	14.2	13.8	13.5	13.1	0.71	20	8010SS 11010SS 50 MESH
25.7	24.7	23.8	23.0	22.2	21.4	20.7	20.1	19.5	18.9	18.4	17.9	17.4	16.9	16.5	16.1	0.87	30	
29.7	28.6	27.5	26.5	25.6	24.8	24.0	23.2	22.5	21.8	21.2	20.6	20.1	19.5	19.0	18.6	1.00	40	
33.2	31.9	30.7	29.6	28.6	27.7	26.8	25.9	25.2	24.4	23.7	23.1	22.4	21.8	21.3	20.8	1.12	50	
36.4	35.0	33.7	32.5	31.4	30.3	29.3	28.4	27.6	26.8	26.0	25.3	24.6	23.9	23.3	22.7	1.23	60	
31.5	30.3	29.2	28.1	27.2	26.3	25.4	24.6	23.9	23.2	22.5	21.9	21.3	20.7	20.2	19.7	1.06	20	8015SS 11015SS 50 MESH
38.6	37.1	35.7	34.4	33.3	32.2	31.1	30.1	29.2	28.4	27.6	26.8	26.1	25.4	24.7	24.1	1.30	30	
44.6	42.8	41.3	39.8	38.4	37.1	35.9	34.8	33.8	32.8	31.8	30.9	30.1	29.3	28.6	27.8	1.50	40	
49.8	47.9	46.1	44.5	42.9	41.5	40.2	38.9	37.7	36.6	35.6	34.6	33.7	32.8	31.9	31.1	1.68	50	
54.6	52.5	50.5	48.7	47.0	45.5	44.0	42.6	41.3	40.1	39.0	37.9	36.9	35.9	35.0	34.1	1.84	60	
42.0	40.4	38.9	37.5	36.2	35.0	33.9	32.8	31.8	30.9	30.0	29.2	28.4	27.6	26.9	26.2	1.41	20	8020SS 11020SS 50 MESH
51.4	49.5	47.6	45.9	44.3	42.9	41.5	40.2	39.0	37.8	36.7	35.7	34.8	33.8	33.0	32.2	1.73	30	
59.4	57.1	55.0	53.0	51.2	49.5	47.9	46.4	45.0	43.7	42.4	41.3	40.1	39.1	38.1	37.1	2.00	40	
66.4	63.9	61.5	59.3	57.2	55.3	53.6	51.9	50.3	48.8	47.4	46.1	44.9	43.7	42.6	41.5	2.24	50	
72.7	69.9	67.3	64.9	62.7	60.6	58.7	56.8	55.1	53.5	52.0	50.5	49.1	47.9	46.6	45.5	2.45	60	