

TP 110°/ 80° 30" 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	3.5	3.1	2.8	2.6	2.3	2.2	2.0	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.3	1.2	1.2
	30	0.09	4.3	3.8	3.4	3.1	2.9	2.7	2.5	2.3	2.2	2.0	1.9	1.8	1.7	1.6	1.6	1.5	1.4
11001VS	40	0.10	5.0	4.4	4.0	3.6	3.3	3.0	2.8	2.6	2.5	2.3	2.2	2.1	2.0	1.9	1.8	1.7	1.7
100 MESH	50	0.11	5.5	4.9	4.4	4.0	3.7	3.4	3.2	3.0	2.8	2.6	2.5	2.3	2.2	2.1	2.0	1.9	1.8
ORANGE	60	0.12	6.0	5.4	4.8	4.4	4.0	3.7	3.5	3.2	3.0	2.8	2.7	2.5	2.4	2.3	2.2	2.1	2.0
80015VS	20	0.11	5.2	4.7	4.2	3.8	3.5	3.2	3.0	2.8	2.6	2.5	2.3	2.2	2.1	2.0	1.9	1.8	1.7
	30	0.13	6.4	5.7	5.1	4.7	4.3	4.0	3.7	3.4	3.2	3.0	2.9	2.7	2.6	2.5	2.3	2.2	2.1
110015VS	40	0.15	7.4	6.6	5.9	5.4	5.0	4.6	4.2	4.0	3.7	3.5	3.3	3.1	3.0	2.8	2.7	2.6	2.5
100 MESH	50	0.17	8.3	7.4	6.7	6.0	5.5	5.1	4.8	4.4	4.2	3.9	3.7	3.5	3.3	3.2	3.0	2.9	2.8
GREEN	60	0.18	9.1	8.1	7.3	6.6	6.1	5.6	5.2	4.9	4.6	4.3	4.0	3.8	3.6	3.5	3.3	3.2	3.0
8002VS	20	0.14	7.0	6.2	5.6	5.1	4.7	4.3	4.0	3.7	3.5	3.3	3.1	2.9	2.8	2.7	2.5	2.4	2.3
	30	0.17	8.6	7.6	6.9	6.2	5.7	5.3	4.9	4.6	4.3	4.0	3.8	3.6	3.4	3.3	3.1	3.0	2.9
11002VS	40	0.20	9.9	8.8	7.9	7.2	6.6	6.1	5.7	5.3	5.0	4.7	4.4	4.2	4.0	3.8	3.6	3.4	3.3
50 MESH	50	0.22	11.1	9.9	8.9	8.1	7.4	6.8	6.3	5.9	5.5	5.2	4.9	4.7	4.4	4.2	4.0	3.9	3.7
YELLOW	60	0.25	12.1	10.8	9.7	8.8	8.1	7.5	6.9	6.5	6.1	5.7	5.4	5.1	4.9	4.6	4.4	4.2	4.0
8003VS	20	0.21	10.5	9.3	8.4	7.6	7.0	6.5	6.0	5.6	5.2	4.9	4.7	4.4	4.2	4.0	3.8	3.7	3.5
	30	0.26	12.9	11.4	10.3	9.4	8.6	7.9	7.4	6.9	6.4	6.1	5.7	5.4	5.1	4.9	4.7	4.5	4.3
11003VS	40	0.30	14.9	13.2	11.9	10.8	9.9	9.1	8.5	7.9	7.4	7.0	6.6	6.3	5.9	5.7	5.4	5.2	5.0
50 MESH	50	0.34	16.6	14.7	13.3	12.1	11.1	10.2	9.5	8.8	8.3	7.8	7.4	7.0	6.6	6.3	6.0	5.8	5.5
BLUE	60	0.37	18.2	16.1	14.5	13.2	12.1	11.2	10.4	9.7	9.1	8.5	8.1	7.6	7.3	6.9	6.6	6.3	6.1
8004VS	20	0.28	14.0	12.5	11.2	10.2	9.3	8.6	8.0	7.5	7.0	6.6	6.2	5.9	5.6	5.3	5.1	4.9	4.7
	30	0.35	17.1	15.2	13.7	12.5	11.4	10.5	9.8	9.1	8.6	8.1	7.6	7.2	6.9	6.5	6.2	6.0	5.7
11004VS	40	0.40	19.8	17.6	15.8	14.4	13.2	12.2	11.3	10.6	9.9	9.3	8.8	8.3	7.9	7.5	7.2	6.9	6.6
50 MESH	50	0.45	22.1	19.7	17.7	16.1	14.8	13.6	12.6	11.8	11.1	10.4	9.8	9.3	8.9	8.4	8.0	7.7	7.4
RED	60	0.49	24.3	21.6	19.4	17.6	16.2	14.9	13.9	12.9	12.1	11.4	10.8	10.2	9.7	9.2	8.8	8.4	8.1
8005VS	20	0.35	17.5	15.6	14.0	12.7	11.7	10.8	10.0	9.3	8.8	8.2	7.8	7.4	7.0	6.7	6.4	6.1	5.8
	30	0.43	21.4	19.1	17.1	15.6	14.3	13.2	12.2	11.4	10.7	10.1	9.5	9.0	8.6	8.2	7.8	7.5	7.1
11005VS	40	0.50	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	50	0.56	27.7	24.6	22.1	20.1	18.4	17.0	15.8	14.8	13.8	13.0	12.3	11.7	11.1	10.5	10.1	9.6	9.2
BROWN	60	0.61	30.3	26.9	24.2	22.0	20.2	18.6	17.3	16.2	15.1	14.3	13.5	12.8	12.1	11.5	11.0	10.5	10.1

TP 110° 80° 30" 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	
1.1	1.1	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.07	20	8001VS 11001VS 100 MESH ORANGE
1.4	1.3	1.3	1.2	1.2	1.1	1.1	1.1	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.09	30	
1.6	1.5	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	0.10	40	
1.8	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	1.1	1.1	0.11	50	
1.9	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	0.12	60	
1.7	1.6	1.6	1.5	1.4	1.4	1.4	1.3	1.3	1.2	1.2	1.2	1.1	1.1	1.1	1.0	0.11	20	80015VS 110015VS 100 MESH GREEN
2.1	2.0	1.9	1.8	1.8	1.7	1.7	1.6	1.6	1.5	1.5	1.4	1.4	1.4	1.3	1.3	0.13	30	
2.4	2.3	2.2	2.1	2.0	2.0	1.9	1.9	1.8	1.7	1.7	1.7	1.6	1.6	1.5	1.5	0.15	40	
2.7	2.6	2.5	2.4	2.3	2.2	2.1	2.1	2.0	2.0	1.9	1.8	1.8	1.8	1.7	1.7	0.17	50	
2.9	2.8	2.7	2.6	2.5	2.4	2.4	2.3	2.2	2.1	2.1	2.0	2.0	1.9	1.9	1.8	0.18	60	
2.2	2.1	2.1	2.0	1.9	1.9	1.8	1.7	1.7	1.6	1.6	1.6	1.5	1.5	1.4	1.4	0.14	20	8002VS 11002VS 50 MESH YELLOW
2.7	2.6	2.5	2.4	2.4	2.3	2.2	2.1	2.1	2.0	2.0	1.9	1.9	1.8	1.8	1.7	0.17	30	
3.2	3.0	2.9	2.8	2.7	2.6	2.6	2.5	2.4	2.3	2.3	2.2	2.1	2.1	2.0	2.0	0.20	40	
3.5	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	0.22	50	
3.9	3.7	3.6	3.5	3.3	3.2	3.1	3.0	2.9	2.9	2.8	2.7	2.6	2.6	2.5	2.4	0.25	60	
3.4	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	2.2	2.1	0.21	20	8003VS 11003VS 50 MESH BLUE
4.1	4.0	3.8	3.7	3.6	3.4	3.3	3.2	3.1	3.0	2.9	2.9	2.8	2.7	2.6	2.6	0.26	30	
4.8	4.6	4.4	4.2	4.1	4.0	3.8	3.7	3.6	3.5	3.4	3.3	3.2	3.1	3.0	3.0	0.30	40	
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	0.34	50	
5.8	5.6	5.4	5.2	5.0	4.8	4.7	4.5	4.4	4.3	4.2	4.0	3.9	3.8	3.7	3.6	0.37	60	
4.5	4.3	4.2	4.0	3.9	3.7	3.6	3.5	3.4	3.3	3.2	3.1	3.0	2.9	2.9	2.8	0.28	20	8004VS 11004VS 50 MESH RED
5.5	5.3	5.1	4.9	4.7	4.6	4.4	4.3	4.2	4.0	3.9	3.8	3.7	3.6	3.5	3.4	0.35	30	
6.3	6.1	5.9	5.7	5.5	5.3	5.1	5.0	4.8	4.7	4.5	4.4	4.3	4.2	4.1	4.0	0.40	40	
7.1	6.8	6.6	6.3	6.1	5.9	5.7	5.5	5.4	5.2	5.1	4.9	4.8	4.7	4.5	4.4	0.45	50	
7.8	7.5	7.2	6.9	6.7	6.5	6.3	6.1	5.9	5.7	5.5	5.4	5.2	5.1	5.0	4.9	0.49	60	
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	0.35	20	8005VS 11005VS 50 MESH BROWN
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	0.43	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	0.50	40	
8.9	8.5	8.2	7.9	7.6	7.4	7.1	6.9	6.7	6.5	6.3	6.1	6.0	5.8	5.7	5.5	0.56	50	
9.7	9.3	9.0	8.7	8.4	8.1	7.8	7.6	7.3	7.1	6.9	6.7	6.6	6.4	6.2	6.1	0.61	60	

TP 110°/ 80° 30" 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	21.0	18.7	16.8	15.3	14.0	12.9	12.0	11.2	10.5	9.9	9.3	8.8	8.4	8.0	7.6	7.3	7.0
	30	0.52	25.7	22.9	20.6	18.7	17.2	15.8	14.7	13.7	12.9	12.1	11.4	10.8	10.3	9.8	9.4	9.0	8.6
11006VS	40	0.60	29.7	26.4	23.8	21.6	19.8	18.3	17.0	15.8	14.9	14.0	13.2	12.5	11.9	11.3	10.8	10.3	9.9
	50	0.67	33.2	29.5	26.6	24.2	22.1	20.4	19.0	17.7	16.6	15.6	14.8	14.0	13.3	12.7	12.1	11.6	11.1
50 MESH GRAY	60	0.74	36.4	32.3	29.1	26.5	24.3	22.4	20.8	19.4	18.2	17.1	16.2	15.3	14.6	13.9	13.2	12.7	12.1
	20	0.63	31.3	27.8	25.0	22.8	20.9	19.3	17.9	16.7	15.6	14.7	13.9	13.2	12.5	11.9	11.4	10.9	10.4
8008VS	30	0.69	34.3	30.5	27.4	24.9	22.9	21.1	19.6	18.3	17.2	16.1	15.2	14.4	13.7	13.1	12.5	11.9	11.4
	40	0.80	39.6	35.2	31.7	28.8	26.4	24.4	22.6	21.1	19.8	18.6	17.6	16.7	15.8	15.1	14.4	13.8	13.2
11008VS	50	0.89	44.3	39.3	35.4	32.2	29.5	27.2	25.3	23.6	22.1	20.8	19.7	18.6	17.7	16.9	16.1	15.4	14.8
	60	0.98	48.5	43.1	38.8	35.3	32.3	29.9	27.7	25.9	24.3	22.8	21.6	20.4	19.4	18.5	17.6	16.9	16.2
8010SS	20	0.71	35.0	31.1	28.0	25.5	23.3	21.5	20.0	18.7	17.5	16.5	15.6	14.7	14.0	13.3	12.7	12.2	11.7
	30	0.87	42.9	38.1	34.3	31.2	28.6	26.4	24.5	22.9	21.4	20.2	19.1	18.0	17.1	16.3	15.6	14.9	14.3
11010SS	40	1.00	49.5	44.0	39.6	36.0	33.0	30.5	28.3	26.4	24.8	23.3	22.0	20.8	19.8	18.9	18.0	17.2	16.5
	50	1.12	55.3	49.2	44.3	40.2	36.9	34.1	31.6	29.5	27.7	26.0	24.6	23.3	22.1	21.1	20.1	19.2	18.4
50 MESH	60	1.23	60.6	53.9	48.5	44.1	40.4	37.3	34.7	32.3	30.3	28.5	27.0	25.5	24.3	23.1	22.1	21.1	20.2
	20	1.06	52.5	46.7	42.0	38.2	35.0	32.3	30.0	28.0	26.3	24.7	23.3	22.1	21.0	20.0	19.1	18.3	17.5
8015SS	30	1.30	64.3	57.2	51.4	46.8	42.9	39.6	36.7	34.3	32.2	30.3	28.6	27.1	25.7	24.5	23.4	22.4	21.4
	40	1.50	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
11015SS	50	1.68	83.0	73.8	66.4	60.4	55.3	51.1	47.4	44.3	41.5	39.1	36.9	35.0	33.2	31.6	30.2	28.9	27.7
	60	1.84	90.9	80.8	72.7	66.1	60.6	56.0	52.0	48.5	45.5	42.8	40.4	38.3	36.4	34.6	33.1	31.6	30.3
8020SS	20	1.41	70.0	62.2	56.0	50.9	46.7	43.1	40.0	37.3	35.0	32.9	31.1	29.5	28.0	26.7	25.5	24.3	23.3
	30	1.73	85.7	76.2	68.6	62.4	57.2	52.8	49.0	45.7	42.9	40.3	38.1	36.1	34.3	32.7	31.2	29.8	28.6
11020SS	40	2.00	99.0	88.0	79.2	72.0	66.0	60.9	56.6	52.8	49.5	46.6	44.0	41.7	39.6	37.7	36.0	34.4	33.0
	50	2.24	110.7	98.4	88.5	80.5	73.8	68.1	63.2	59.0	55.3	52.1	49.2	46.6	44.3	42.2	40.2	38.5	36.9
50 MESH	60	2.45	121.2	107.8	97.0	88.2	80.8	74.6	69.3	64.7	60.6	57.0	53.9	51.0	48.5	46.2	44.1	42.2	40.4

TP 110°/ 80° 30" 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			
6.7	6.5	6.2	6.0	5.8	5.6	5.4	5.2	5.1	4.9	4.8	4.7	4.5	4.4	4.3	4.2	0.42	20	8006VS	11006VS
8.2	7.9	7.6	7.4	7.1	6.9	6.6	6.4	6.2	6.1	5.9	5.7	5.6	5.4	5.3	5.1	0.52	30		
9.5	9.1	8.8	8.5	8.2	7.9	7.7	7.4	7.2	7.0	6.8	6.6	6.4	6.3	6.1	5.9	0.60	40	50 MESH	GRAY
10.6	10.2	9.8	9.5	9.2	8.9	8.6	8.3	8.1	7.8	7.6	7.4	7.2	7.0	6.8	6.6	0.67	50		
11.6	11.2	10.8	10.4	10.0	9.7	9.4	9.1	8.8	8.6	8.3	8.1	7.9	7.7	7.5	7.3	0.74	60		
0.57																			
10.0	9.6	9.3	8.9	8.6	8.3	8.1	7.8	7.6	7.4	7.2	7.0	6.8	6.6	6.4	6.3	0.63	20	8008VS	11008VS
11.0	10.6	10.2	9.8	9.5	9.1	8.9	8.6	8.3	8.1	7.8	7.6	7.4	7.2	7.0	6.9	0.69	30		
12.7	12.2	11.7	11.3	10.9	10.6	10.2	9.9	9.6	9.3	9.1	8.8	8.6	8.3	8.1	7.9	0.80	40	50 MESH	WHITE
14.2	13.6	13.1	12.6	12.2	11.8	11.4	11.1	10.7	10.4	10.1	9.8	9.6	9.3	9.1	8.9	0.89	50		
15.5	14.9	14.4	13.9	13.4	12.9	12.5	12.1	11.8	11.4	11.1	10.8	10.5	10.2	10.0	9.7	0.98	60		
11.2	10.8	10.4	10.0	9.7	9.3	9.0	8.7	8.5	8.2	8.0	7.8	7.6	7.4	7.2	7.0	0.71	20	8010SS	11010SS
13.7	13.2	12.7	12.2	11.8	11.4	11.1	10.7	10.4	10.1	9.8	9.5	9.3	9.0	8.8	8.6	0.87	30		
15.8	15.2	14.7	14.1	13.7	13.2	12.8	12.4	12.0	11.6	11.3	11.0	10.7	10.4	10.2	9.9	1.00	40	50 MESH	
17.7	17.0	16.4	15.8	15.3	14.8	14.3	13.8	13.4	13.0	12.6	12.3	12.0	11.7	11.4	11.1	1.12	50		
19.4	18.7	18.0	17.3	16.7	16.2	15.6	15.2	14.7	14.3	13.9	13.5	13.1	12.8	12.4	12.1	1.23	60		
16.8	16.2	15.6	15.0	14.5	14.0	13.6	13.1	12.7	12.4	12.0	11.7	11.4	11.1	10.8	10.5	1.06	20	8015SS	11015SS
20.6	19.8	19.1	18.4	17.7	17.1	16.6	16.1	15.6	15.1	14.7	14.3	13.9	13.5	13.2	12.9	1.30	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	1.50	40	50 MESH	
26.6	25.5	24.6	23.7	22.9	22.1	21.4	20.8	20.1	19.5	19.0	18.4	17.9	17.5	17.0	16.6	1.68	50		
29.1	28.0	26.9	26.0	25.1	24.2	23.5	22.7	22.0	21.4	20.8	20.2	19.7	19.1	18.7	18.2	1.84	60		
22.4	21.5	20.7	20.0	19.3	18.7	18.1	17.5	17.0	16.5	16.0	15.6	15.1	14.7	14.4	14.0	1.41	20	8020SS	11020SS
27.4	26.4	25.4	24.5	23.7	22.9	22.1	21.4	20.8	20.2	19.6	19.1	18.5	18.0	17.6	17.1	1.73	30		
31.7	30.5	29.3	28.3	27.3	26.4	25.5	24.8	24.0	23.3	22.6	22.0	21.4	20.8	20.3	19.8	2.00	40	50 MESH	
35.4	34.1	32.8	31.6	30.5	29.5	28.6	27.7	26.8	26.0	25.3	24.6	23.9	23.3	22.7	22.1	2.24	50		
38.8	37.3	35.9	34.6	33.4	32.3	31.3	30.3	29.4	28.5	27.7	26.9	26.2	25.5	24.9	24.2	2.45	60		