

TP 110°/ 80° 38" 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	2.8	2.5	2.2	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	0.9
	30	0.09	3.4	3.0	2.7	2.5	2.3	2.1	1.9	1.8	1.7	1.6	1.5	1.4	1.4	1.3	1.2	1.2	1.1
11001VS	40	0.10	3.9	3.5	3.1	2.8	2.6	2.4	2.2	2.1	2.0	1.8	1.7	1.6	1.6	1.5	1.4	1.4	1.3
100 MESH	50	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	1.8	1.7	1.6	1.5	1.5
ORANGE	60	0.12	4.8	4.2	3.8	3.5	3.2	2.9	2.7	2.5	2.4	2.2	2.1	2.0	1.9	1.8	1.7	1.7	1.6
80015VS	20	0.11	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
	30	0.13	5.1	4.5	4.1	3.7	3.4	3.1	2.9	2.7	2.5	2.4	2.3	2.1	2.0	1.9	1.8	1.8	1.7
110015VS	40	0.15	5.9	5.2	4.7	4.3	3.9	3.6	3.3	3.1	2.9	2.8	2.6	2.5	2.3	2.2	2.1	2.0	2.0
100 MESH	50	0.17	6.6	5.8	5.3	4.8	4.4	4.0	3.8	3.5	3.3	3.1	2.9	2.8	2.6	2.5	2.4	2.3	2.2
GREEN	60	0.18	7.2	6.4	5.8	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
8002VS	20	0.14	5.5	4.9	4.4	4.0	3.7	3.4	3.1	2.9	2.8	2.6	2.4	2.3	2.2	2.1	2.0	1.9	1.8
	30	0.17	6.8	6.0	5.4	4.9	4.5	4.2	3.9	3.6	3.4	3.2	3.0	2.8	2.7	2.6	2.5	2.4	2.3
11002VS	40	0.20	7.8	6.9	6.3	5.7	5.2	4.8	4.5	4.2	3.9	3.7	3.5	3.3	3.1	3.0	2.8	2.7	2.6
50 MESH	50	0.22	8.8	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
YELLOW	60	0.25	9.6	8.5	7.7	7.0	6.4	5.9	5.5	5.1	4.8	4.5	4.3	4.0	3.8	3.6	3.5	3.3	3.2
8003VS	20	0.21	8.3	7.4	6.6	6.0	5.5	5.1	4.7	4.4	4.1	3.9	3.7	3.5	3.3	3.2	3.0	2.9	2.8
	30	0.26	10.2	9.0	8.1	7.4	6.8	6.3	5.8	5.4	5.1	4.8	4.5	4.3	4.1	3.9	3.7	3.5	3.4
11003VS	40	0.30	11.7	10.4	9.4	8.5	7.8	7.2	6.7	6.3	5.9	5.5	5.2	4.9	4.7	4.5	4.3	4.1	3.9
50 MESH	50	0.34	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
BLUE	60	0.37	14.3	12.7	11.5	10.4	9.6	8.8	8.2	7.6	7.2	6.7	6.4	6.0	5.7	5.5	5.2	5.0	4.8
8004VS	20	0.28	11.1	9.8	8.8	8.0	7.4	6.8	6.3	5.9	5.5	5.2	4.9	4.7	4.4	4.2	4.0	3.8	3.7
	30	0.35	13.5	12.0	10.8	9.8	9.0	8.3	7.7	7.2	6.8	6.4	6.0	5.7	5.4	5.2	4.9	4.7	4.5
11004VS	40	0.40	15.6	13.9	12.5	11.4	10.4	9.6	8.9	8.3	7.8	7.4	6.9	6.6	6.3	6.0	5.7	5.4	5.2
50 MESH	50	0.45	17.5	15.5	14.0	12.7	11.6	10.7	10.0	9.3	8.7	8.2	7.8	7.4	7.0	6.7	6.4	6.1	5.8
RED	60	0.49	19.1	17.0	15.3	13.9	12.8	11.8	10.9	10.2	9.6	9.0	8.5	8.1	7.7	7.3	7.0	6.7	6.4
8005VS	20	0.35	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
	30	0.43	16.9	15.0	13.5	12.3	11.3	10.4	9.7	9.0	8.5	8.0	7.5	7.1	6.8	6.4	6.2	5.9	5.6
11005VS	40	0.50	19.5	17.4	15.6	14.2	13.0	12.0	11.2	10.4	9.8	9.2	8.7	8.2	7.8	7.4	7.1	6.8	6.5
50 MESH	50	0.56	21.8	19.4	17.5	15.9	14.6	13.4	12.5	11.7	10.9	10.3	9.7	9.2	8.7	8.3	7.9	7.6	7.3
BROWN	60	0.61	23.9	21.3	19.1	17.4	15.9	14.7	13.7	12.8	12.0	11.3	10.6	10.1	9.6	9.1	8.7	8.3	8.0

TP 110°/ 80° 38" 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	16.6	14.7	13.3	12.1	11.0	10.2	9.5	8.8	8.3	7.8	7.4	7.0	6.6	6.3	6.0	5.8	5.5
	30	0.52	20.3	18.1	16.3	14.8	13.5	12.5	11.6	10.8	10.2	9.6	9.0	8.6	8.1	7.7	7.4	7.1	6.8
11006VS	40	0.60	23.4	20.8	18.8	17.1	15.6	14.4	13.4	12.5	11.7	11.0	10.4	9.9	9.4	8.9	8.5	8.2	7.8
	50	0.67	26.2	23.3	21.0	19.1	17.5	16.1	15.0	14.0	13.1	12.3	11.7	11.0	10.5	10.0	9.5	9.1	8.7
50 MESH GRAY	60	0.74	28.7	25.5	23.0	20.9	19.1	17.7	16.4	15.3	14.4	13.5	12.8	12.1	11.5	10.9	10.4	10.0	9.6
	20	0.63	24.7	22.0	19.8	18.0	16.5	15.2	14.1	13.2	12.3	11.6	11.0	10.4	9.9	9.4	9.0	8.6	8.2
8008VS	30	0.69	27.1	24.1	21.7	19.7	18.1	16.7	15.5	14.4	13.5	12.7	12.0	11.4	10.8	10.3	9.8	9.4	9.0
	40	0.80	31.3	27.8	25.0	22.7	20.8	19.2	17.9	16.7	15.6	14.7	13.9	13.2	12.5	11.9	11.4	10.9	10.4
11008VS	50	0.89	34.9	31.1	27.9	25.4	23.3	21.5	20.0	18.6	17.5	16.4	15.5	14.7	14.0	13.3	12.7	12.2	11.6
	60	0.98	38.3	34.0	30.6	27.9	25.5	23.6	21.9	20.4	19.1	18.0	17.0	16.1	15.3	14.6	13.9	13.3	12.8
8010SS	20	0.71	27.6	24.6	22.1	20.1	18.4	17.0	15.8	14.7	13.8	13.0	12.3	11.6	11.1	10.5	10.0	9.6	9.2
	30	0.87	33.8	30.1	27.1	24.6	22.6	20.8	19.3	18.0	16.9	15.9	15.0	14.2	13.5	12.9	12.3	11.8	11.3
11010SS	40	1.00	39.1	34.7	31.3	28.4	26.1	24.0	22.3	20.8	19.5	18.4	17.4	16.5	15.6	14.9	14.2	13.6	13.0
	50	1.12	43.7	38.8	35.0	31.8	29.1	26.9	25.0	23.3	21.8	20.6	19.4	18.4	17.5	16.6	15.9	15.2	14.6
50 MESH	60	1.23	47.9	42.6	38.3	34.8	31.9	29.5	27.4	25.5	23.9	22.5	21.3	20.2	19.1	18.2	17.4	16.7	16.0
	20	1.06	41.5	36.9	33.2	30.2	27.6	25.5	23.7	22.1	20.7	19.5	18.4	17.5	16.6	15.8	15.1	14.4	13.8
8015SS	30	1.30	50.8	45.1	40.6	36.9	33.8	31.2	29.0	27.1	25.4	23.9	22.6	21.4	20.3	19.3	18.5	17.7	16.9
	40	1.50	58.6	52.1	46.9	42.6	39.1	36.1	33.5	31.3	29.3	27.6	26.1	24.7	23.4	22.3	21.3	20.4	19.5
11015SS	50	1.68	65.5	58.3	52.4	47.7	43.7	40.3	37.4	35.0	32.8	30.8	29.1	27.6	26.2	25.0	23.8	22.8	21.8
	60	1.84	71.8	63.8	57.4	52.2	47.9	44.2	41.0	38.3	35.9	33.8	31.9	30.2	28.7	27.3	26.1	25.0	23.9
8020SS	20	1.41	55.3	49.1	44.2	40.2	36.8	34.0	31.6	29.5	27.6	26.0	24.6	23.3	22.1	21.1	20.1	19.2	18.4
	30	1.73	67.7	60.2	54.1	49.2	45.1	41.7	38.7	36.1	33.8	31.9	30.1	28.5	27.1	25.8	24.6	23.5	22.6
11020SS	40	2.00	78.2	69.5	62.5	56.8	52.1	48.1	44.7	41.7	39.1	36.8	34.7	32.9	31.3	29.8	28.4	27.2	26.1
	50	2.24	87.4	77.7	69.9	63.5	58.3	53.8	49.9	46.6	43.7	41.1	38.8	36.8	35.0	33.3	31.8	30.4	29.1
50 MESH	60	2.45	95.7	85.1	76.6	69.6	63.8	58.9	54.7	51.0	47.9	45.0	42.5	40.3	38.3	36.5	34.8	33.3	31.9

TP 110°/ 80° 38" 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	
0.9	0.9	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.07	20	8001VS 11001VS	
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	0.7	0.7	0.09	30		
1.3	1.2	1.2	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	0.10	40	100 MESH ORANGE	
1.4	1.3	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	0.11	50		
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	1.0	0.12	60		
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	0.11	20	80015VS 110015VS	
1.6	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	0.13	30		
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	0.15	40	100 MESH GREEN	
2.1	2.0	1.9	1.9	1.8	1.8	1.7	1.6	1.6	1.5	1.5	1.5	1.4	1.4	1.3	1.3	0.17	50		
2.3	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	0.18	60		
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	0.14	20	8002VS 11002VS	
2.2	2.1	2.0	1.9	1.9	1.8	1.7	1.7	1.6	1.6	1.5	1.5	1.5	1.4	1.4	1.4	0.17	30		
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	1.6	1.6	1.6	0.20	40	50 MESH YELLOW	
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	1.8	0.22	50		
3.1	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	1.9	0.25	60		
2.7	2.5	2.5	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	0.21	20	8003VS 11003VS	
3.3	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	2.1	2.0	0.26	30		
3.8	3.6	3.5	3.3	3.2	3.1	3.0	2.9	2.8	2.8	2.7	2.6	2.5	2.5	2.4	2.3	0.30	40	50 MESH BLUE	
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	0.34	50		
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	2.9	2.9	0.37	60		
3.5	3.4	3.3	3.2	3.1	2.9	2.9	2.8	2.7	2.6	2.5	2.5	2.4	2.3	2.3	2.2	0.28	20	8004VS 11004VS	
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	2.8	2.8	2.7	0.35	30		
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	0.40	40	50 MESH RED	
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	0.45	50		
6.1	5.9	5.7	5.5	5.3	5.1	4.9	4.8	4.6	4.5	4.4	4.3	4.1	4.0	3.9	3.8	0.49	60		
4.4	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	2.8	2.8	0.35	20	8005VS 11005VS	
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	3.4	0.43	30		
6.3	6.0	5.8	5.6	5.4	5.2	5.0	4.9	4.7	4.6	4.5	4.3	4.2	4.1	4.0	3.9	0.50	40	50 MESH BROWN	
7.0	6.7	6.5	6.2	6.0	5.8	5.6	5.5	5.3	5.1	5.0	4.9	4.7	4.6	4.5	4.4	0.56	50		
7.7	7.4	7.1	6.8	6.6	6.4	6.2	6.0	5.8	5.6	5.5	5.3	5.2	5.0	4.9	4.8	0.61	60		

TP 110°/ 80° 38" 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	
5.3	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	0.42	20
6.5	6.3	6.0	5.8	5.6	5.4	5.2	5.1	4.9	4.8	4.6	4.5	4.4	4.3	4.2	4.1	0.52	30
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	4.9	4.8	4.7	0.60	40
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	5.2	0.67	50
9.2	8.8	8.5	8.2	7.9	7.7	7.4	7.2	7.0	6.8	6.6	6.4	6.2	6.0	5.9	5.7	0.74	60
0.57																	
7.9	7.6	7.3	7.1	6.8	6.6	6.4	6.2	6.0	5.8	5.6	5.5	5.3	5.2	5.1	4.9	0.63	20
8.7	8.3	8.0	7.7	7.5	7.2	7.0	6.8	6.6	6.4	6.2	6.0	5.9	5.7	5.6	5.4	0.69	30
10.0	9.6	9.3	8.9	8.6	8.3	8.1	7.8	7.6	7.4	7.1	6.9	6.8	6.6	6.4	6.3	0.80	40
11.2	10.7	10.4	10.0	9.6	9.3	9.0	8.7	8.5	8.2	8.0	7.8	7.6	7.4	7.2	7.0	0.89	50
12.3	11.8	11.3	10.9	10.6	10.2	9.9	9.6	9.3	9.0	8.8	8.5	8.3	8.1	7.9	7.7	0.98	60
0.57																	
8.8	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	0.71	20
10.8	10.4	10.0	9.7	9.3	9.0	8.7	8.5	8.2	8.0	7.7	7.5	7.3	7.1	6.9	6.8	0.87	30
12.5	12.0	11.6	11.2	10.8	10.4	10.1	9.8	9.5	9.2	8.9	8.7	8.4	8.2	8.0	7.8	1.00	40
14.0	13.4	12.9	12.5	12.1	11.7	11.3	10.9	10.6	10.3	10.0	9.7	9.4	9.2	9.0	8.7	1.12	50
15.3	14.7	14.2	13.7	13.2	12.8	12.4	12.0	11.6	11.3	10.9	10.6	10.4	10.1	9.8	9.6	1.23	60
0.57																	
13.3	12.8	12.3	11.8	11.4	11.1	10.7	10.4	10.1	9.8	9.5	9.2	9.0	8.7	8.5	8.3	1.06	20
16.2	15.6	15.0	14.5	14.0	13.5	13.1	12.7	12.3	11.9	11.6	11.3	11.0	10.7	10.4	10.2	1.30	30
18.8	18.0	17.4	16.7	16.2	15.6	15.1	14.7	14.2	13.8	13.4	13.0	12.7	12.3	12.0	11.7	1.50	40
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	13.4	13.1	1.68	50
23.0	22.1	21.3	20.5	19.8	19.1	18.5	17.9	17.4	16.9	16.4	16.0	15.5	15.1	14.7	14.4	1.84	60
0.57																	
17.7	17.0	16.4	15.8	15.2	14.7	14.3	13.8	13.4	13.0	12.6	12.3	11.9	11.6	11.3	11.1	1.41	20
21.7	20.8	20.1	19.3	18.7	18.0	17.5	16.9	16.4	15.9	15.5	15.0	14.6	14.2	13.9	13.5	1.73	30
25.0	24.0	23.2	22.3	21.6	20.8	20.2	19.5	18.9	18.4	17.9	17.4	16.9	16.5	16.0	15.6	2.00	40
28.0	26.9	25.9	25.0	24.1	23.3	22.5	21.8	21.2	20.6	20.0	19.4	18.9	18.4	17.9	17.5	2.24	50
30.6	29.4	28.4	27.3	26.4	25.5	24.7	23.9	23.2	22.5	21.9	21.3	20.7	20.1	19.6	19.1	2.45	60