TP 40°/65°/80°/95° EVEN 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																	
4001ESS	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
6501ESS 8001EVS	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
9501EVS	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
40015ESS	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
65015ESS	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
80015EVS	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
95015EVS	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
100 MESH	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
GREEN																			
4002ESS	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
6502ESS 8002EVS	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
9502EVS	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
4003ESS	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
6503ESS 8003EVS	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
9503EVS	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
4004ESS	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
6504ESS 8004EVS	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
9504EVS	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
4005ESS	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
6505ESS 8005EVS	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
9505EVS	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
4006ESS	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
6506ESS 8006EVS	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
9506EVS	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 MESH	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
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
6508ESS 8008EVS	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
9508EVS	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
50 MESH	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
WHITE	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
4010ESS	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
6510ESS	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
8010ESS	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
9510ESS	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
4015ESS	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
6515ESS	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
8015ESS	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
9515ESS	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
50 MESH	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
4001ESS	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
6501ESS 8001EVS	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
9501EVS	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 MESH	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
	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 40°/65°/80°/95° EVEN 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		
																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	4001ESS
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	6501ESS 8001EVS
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	9501EVS
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	100 MESH
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	ORANGE
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	40015ESS
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	65015ESS 80015EVS
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	95015EVS
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	100 MESH
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	GREEN
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	4002ESS
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	6502ESS 8002EVS
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	9502EVS
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	50 MESH
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	YELLOW
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	4003ESS
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	6503ESS 8003EVS
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	9503EVS
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	50 MESH
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	BLUE
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	4004ESS
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	6504ESS 8004EVS
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	9504EVS
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	50 MESH
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	RED
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	4005ESS
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	6505ESS 8005EVS
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	9505EVS
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	50 MESH
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	BROWN
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	4006ESS
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	6506ESS 8006EVS
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	9506EVS
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	50 MESH
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	GRAY
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	6508ESS 8008EVS
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	9508EVS
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	50 MESH
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	WHITE
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	4010ESS
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	6510ESS 8010ESS
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	9510ESS
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	50 MESH
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	
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	4015ESS
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	6515ESS 8015ESS
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	9515ESS
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	50 MESH
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	
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	4001ESS
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	6501ESS 8001EVS
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	9501EVS
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	50 MESH
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	