

TP 40°/65°/80°/95° EVEN 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																	
4001ESS 6501ESS 8001EVS 9501EVS	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
	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
	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
40015ESS 65015ESS 80015EVS 95015EVS	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
	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
	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
4002ESS 6502ESS 8002EVS 9502EVS	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
	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	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
4003ESS 6503ESS 8003EVS 9503EVS	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
	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	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
4004ESS 6504ESS 8004EVS 9504EVS	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
	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	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
4005ESS 6505ESS 8005EVS 9505EVS	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
	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	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
4006ESS 6506ESS 8006EVS 9506EVS	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
	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
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
6508ESS 8008EVS 9508EVS	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
	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
	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
WHITE	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
4010ESS 6510ESS 8010ESS 9510ESS	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
	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
4015ESS 6515ESS 8015ESS 9515ESS	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
	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
	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
50 MESH	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
4001ESS 6501ESS 8001EVS 9501EVS	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
	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 40°/65°/80°/95° EVEN 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	
																	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
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
																	4001ESS 6501ESS 8001EVS 9501EVS 100 MESH ORANGE
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
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
																	4001ESS 6501ESS 8001EVS 9501EVS 100 MESH GREEN
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
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
																	4002ESS 6502ESS 8002EVS 9502EVS 50 MESH YELLOW
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
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
																	4003ESS 6503ESS 8003EVS 9503EVS 50 MESH BLUE
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
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
																	4004ESS 6504ESS 8004EVS 9504EVS 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	0.35	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	0.43	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
																	4005ESS 6505ESS 8005EVS 9505EVS 50 MESH BROWN
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
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
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
																	4006ESS 6506ESS 8006EVS 9506EVS 50 MESH GRAY
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
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
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
																	6508ESS 8008EVS 9508EVS 50 MESH WHITE
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
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
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
																	4010ESS 6510ESS 8010ESS 9510ESS 50 MESH
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
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
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
																	4015ESS 6515ESS 8015ESS 9515ESS 50 MESH
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
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
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
																	4001ESS 6501ESS 8001EVS 9501EVS 50 MESH