

### XR 80° / 110° 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																			
XR8001VS XR1101VS	15	0.061	5.7	5.1	4.5	4.1	3.8	3.5	3.2	3.0	2.8	2.7	2.5	2.4	2.3	2.2	2.1	2.0	1.9
	20	0.071	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 ORANGE	30	0.087	8.0	7.1	6.4	5.8	5.4	4.9	4.6	4.3	4.0	3.8	3.6	3.4	3.2	3.1	2.9	2.8	2.7
	40	0.100	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
	50	0.112	10.4	9.2	8.3	7.5	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
	60	0.122	11.4	10.1	9.1	8.3	7.6	7.0	6.5	6.1	5.7	5.3	5.1	4.8	4.5	4.3	4.1	4.0	3.8
XR80015VS XR11015VS	15	0.092	8.5	7.6	6.8	6.2	5.7	5.2	4.9	4.5	4.3	4.0	3.8	3.6	3.4	3.2	3.1	3.0	2.8
	20	0.106	9.8	8.8	7.9	7.2	6.6	6.1	5.6	5.3	4.9	4.6	4.4	4.1	3.9	3.8	3.6	3.4	3.3
100 MESH GREEN	30	0.130	12.1	10.7	9.6	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
	40	0.150	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
	50	0.168	15.6	13.8	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
	60	0.184	17.1	15.2	13.6	12.4	11.4	10.5	9.7	9.1	8.5	8.0	7.6	7.2	6.8	6.5	6.2	5.9	5.7
XR8002VS XR1102VS	15	0.122	11.4	10.1	9.1	8.3	7.6	7.0	6.5	6.1	5.7	5.3	5.1	4.8	4.5	4.3	4.1	4.0	3.8
	20	0.141	13.1	11.7	10.5	9.5	8.8	8.1	7.5	7.0	6.6	6.2	5.8	5.5	5.3	5.0	4.8	4.6	4.4
50 MESH YELLOW	30	0.173	16.1	14.3	12.9	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
	40	0.200	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	0.224	20.8	18.4	16.6	15.1	13.8	12.8	11.9	11.1	10.4	9.8	9.2	8.7	8.3	7.9	7.5	7.2	6.9
	60	0.245	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
XR8003VS XR1103VS	15	0.184	17.1	15.2	13.6	12.4	11.4	10.5	9.7	9.1	8.5	8.0	7.6	7.2	6.8	6.5	6.2	5.9	5.7
	20	0.212	19.7	17.5	15.8	14.3	13.1	12.1	11.3	10.5	9.8	9.3	8.8	8.3	7.9	7.5	7.2	6.8	6.6
50 MESH BLUE	30	0.260	24.1	21.4	19.3	17.5	16.1	14.8	13.8	12.9	12.1	11.3	10.7	10.2	9.6	9.2	8.8	8.4	8.0
	40	0.300	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	0.335	31.1	27.7	24.9	22.6	20.8	19.2	17.8	16.6	15.6	14.6	13.8	13.1	12.5	11.9	11.3	10.8	10.4
	60	0.367	34.1	30.3	27.3	24.8	22.7	21.0	19.5	18.2	17.1	16.0	15.2	14.4	13.6	13.0	12.4	11.9	11.4
XR8004VS XR1104VS	15	0.245	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
	20	0.283	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	9.5	9.1	8.8
50 MESH RED	30	0.346	32.2	28.6	25.7	23.4	21.4	19.8	18.4	17.1	16.1	15.1	14.3	13.5	12.9	12.2	11.7	11.2	10.7
	40	0.400	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	0.447	41.5	36.9	33.2	30.2	27.7	25.5	23.7	22.1	20.8	19.5	18.4	17.5	16.6	15.8	15.1	14.4	13.8
	60	0.490	45.5	40.4	36.4	33.1	30.3	28.0	26.0	24.2	22.7	21.4	20.2	19.1	18.2	17.3	16.5	15.8	15.2

**XR 80° / 110° 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		
																	gpm	psi
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	1.1	0.061	15	
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	0.071	20	
2.6	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	1.6	1.6	0.087	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	0.100	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	0.112	50	
3.6	3.5	3.4	3.2	3.1	3.0	2.9	2.8	2.8	2.7	2.6	2.5	2.5	2.4	2.3	2.3	0.122	60	
2.7	2.6	2.5	2.4	2.4	2.3	2.2	2.1	2.1	2.0	1.9	1.9	1.8	1.8	1.7	1.7	0.092	15	
3.2	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	2.0	0.106	20	
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	0.130	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	0.150	40	
5.0	4.8	4.6	4.4	4.3	4.2	4.0	3.9	3.8	3.7	3.6	3.5	3.4	3.3	3.2	3.1	0.168	50	
5.5	5.2	5.1	4.9	4.7	4.5	4.4	4.3	4.1	4.0	3.9	3.8	3.7	3.6	3.5	3.4	0.184	60	
3.6	3.5	3.4	3.2	3.1	3.0	2.9	2.8	2.8	2.7	2.6	2.5	2.5	2.4	2.3	2.3	0.122	15	
4.2	4.0	3.9	3.8	3.6	3.5	3.4	3.3	3.2	3.1	3.0	2.9	2.8	2.8	2.7	2.6	0.141	20	
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	0.173	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	0.200	40	
6.6	6.4	6.1	5.9	5.7	5.5	5.4	5.2	5.0	4.9	4.7	4.6	4.5	4.4	4.3	4.2	0.224	50	
7.3	7.0	6.7	6.5	6.3	6.1	5.9	5.7	5.5	5.3	5.2	5.1	4.9	4.8	4.7	4.5	0.245	60	
5.5	5.2	5.1	4.9	4.7	4.5	4.4	4.3	4.1	4.0	3.9	3.8	3.7	3.6	3.5	3.4	0.184	15	
6.3	6.1	5.8	5.6	5.4	5.3	5.1	4.9	4.8	4.6	4.5	4.4	4.3	4.1	4.0	3.9	0.212	20	
7.7	7.4	7.1	6.9	6.7	6.4	6.2	6.0	5.8	5.7	5.5	5.4	5.2	5.1	4.9	4.8	0.260	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	0.300	40	
10.0	9.6	9.2	8.9	8.6	8.3	8.0	7.8	7.5	7.3	7.1	6.9	6.7	6.6	6.4	6.2	0.335	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	0.367	60	
7.3	7.0	6.7	6.5	6.3	6.1	5.9	5.7	5.5	5.3	5.2	5.1	4.9	4.8	4.7	4.5	0.245	15	
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	0.283	20	
10.3	9.9	9.5	9.2	8.9	8.6	8.3	8.0	7.8	7.6	7.3	7.1	7.0	6.8	6.6	6.4	0.346	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	0.400	40	
13.3	12.8	12.3	11.9	11.5	11.1	10.7	10.4	10.1	9.8	9.5	9.2	9.0	8.7	8.5	8.3	0.447	50	
14.5	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	0.490	60	

**XR 80° / 110° 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		
XR8005VS XR1105VS	15	0.306	28.4	25.3	22.7	20.7	18.9	17.5	16.2	15.2	14.2	13.4	12.6	12.0	11.4	10.8	10.3	9.9	9.5	
	20	0.354	32.8	29.2	26.3	23.9	21.9	20.2	18.8	17.5	16.4	15.4	14.6	13.8	13.1	12.5	11.9	11.4	10.9	
	30	0.433	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	
	40	0.500	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	0.559	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	0.612	56.8	50.5	45.5	41.3	37.9	35.0	32.5	30.3	28.4	26.7	25.3	23.9	22.7	21.7	20.7	19.8	18.9
XR8006VS XR1106VS	15	0.367	34.1	30.3	27.3	24.8	22.7	21.0	19.5	18.2	17.1	16.0	15.2	14.4	13.6	13.0	12.4	11.9	11.4	
	20	0.424	39.4	35.0	31.5	28.6	26.3	24.2	22.5	21.0	19.7	18.5	17.5	16.6	15.8	15.0	14.3	13.7	13.1	
	30	0.520	48.2	42.9	38.6	35.1	32.2	29.7	27.6	25.7	24.1	22.7	21.4	20.3	19.3	18.4	17.5	16.8	16.1	
	40	0.600	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 MESH	50	0.671	62.3	55.3	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
	GRAY	60	0.735	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
XR8008VS XR1108VS	15	0.490	45.5	40.4	36.4	33.1	30.3	28.0	26.0	24.2	22.7	21.4	20.2	19.1	18.2	17.3	16.5	15.8	15.2	
	20	0.566	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	0.693	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	0.800	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 MESH	50	0.894	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
	WHITE	60	0.980	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
XR8010SS XR11010SS	15	0.612	56.8	50.5	45.5	41.3	37.9	35.0	32.5	30.3	28.4	26.7	25.3	23.9	22.7	21.7	20.7	19.8	18.9	
	20	0.707	65.6	58.3	52.5	47.7	43.8	40.4	37.5	35.0	32.8	30.9	29.2	27.6	26.3	25.0	23.9	22.8	21.9	
	30	0.866	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	
	40	1.000	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 MESH	50	1.118	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
		60	1.225	113.7	101.0	90.9	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
XR8015SS XR11015SS	15	0.919	85.3	75.8	68.2	62.0	56.8	52.5	48.7	45.5	42.6	40.1	37.9	35.9	34.1	32.5	31.0	29.7	28.4	
	20	1.061	98.4	87.5	78.8	71.6	65.6	60.6	56.3	52.5	49.2	46.3	43.8	41.4	39.4	37.5	35.8	34.2	32.8	
	30	1.299	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	1.500	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	
	50 MESH	50	1.677	155.7	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	1.837	170.5	151.6	136.4	124.0	113.7	104.9	97.4	90.9	85.3	80.2	75.8	71.8	68.2	65.0	62.0	59.3	56.8

**XR 80° / 110° 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		
9.1	8.7	8.4	8.1	7.8	7.6	7.3	7.1	6.9	6.7	6.5	6.3	6.1	6.0	5.8	5.7	0.306	15	XR8005VS XR1105VS  50 MESH BROWN
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	0.354	20	
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	0.433	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	0.500	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	0.559	50	
18.2	17.5	16.8	16.2	15.7	15.2	14.7	14.2	13.8	13.4	13.0	12.6	12.3	12.0	11.7	11.4	0.612	60	
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	0.367	15	XR8006VS XR1106VS  50 MESH GRAY
12.6	12.1	11.7	11.3	10.9	10.5	10.2	9.8	9.5	9.3	9.0	8.8	8.5	8.3	8.1	7.9	0.424	20	
15.4	14.8	14.3	13.8	13.3	12.9	12.4	12.1	11.7	11.3	11.0	10.7	10.4	10.2	9.9	9.6	0.520	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	0.600	40	
19.9	19.2	18.4	17.8	17.2	16.6	16.1	15.6	15.1	14.6	14.2	13.8	13.5	13.1	12.8	12.5	0.671	50	
21.8	21.0	20.2	19.5	18.8	18.2	17.6	17.1	16.5	16.0	15.6	15.2	14.7	14.4	14.0	13.6	0.735	60	
14.5	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	0.490	15	XR8008VS XR1108VS  50 MESH WHITE
16.8	16.2	15.6	15.0	14.5	14.0	13.5	13.1	12.7	12.4	12.0	11.7	11.4	11.1	10.8	10.5	0.566	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	0.693	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	0.800	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	0.894	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	0.980	60	
18.2	17.5	16.8	16.2	15.7	15.2	14.7	14.2	13.8	13.4	13.0	12.6	12.3	12.0	11.7	11.4	0.612	15	XR8010SS XR11010SS  50 MESH
21.0	20.2	19.4	18.8	18.1	17.5	16.9	16.4	15.9	15.4	15.0	14.6	14.2	13.8	13.5	13.1	0.707	20	
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	0.866	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	1.000	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	1.118	50	
36.4	35.0	33.7	32.5	31.4	30.3	29.3	28.4	27.6	26.7	26.0	25.3	24.6	23.9	23.3	22.7	1.225	60	
27.3	26.2	25.3	24.4	23.5	22.7	22.0	21.3	20.7	20.1	19.5	18.9	18.4	17.9	17.5	17.1	0.919	15	XR8015SS XR11015SS  50 MESH
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	1.061	20	
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	1.299	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	1.500	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	1.677	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	1.837	60	