

### XR 80° / 110° 36" 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	15	0.061	2.5	2.2	2.0	1.8	1.7	1.6	1.4	1.3	1.3	1.2	1.1	1.1	1.0	1.0	0.9	0.9	0.8
	20	0.071	2.9	2.6	2.3	2.1	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.2	1.1	1.1	1.0	1.0
XR1101VS	30	0.087	3.6	3.2	2.9	2.6	2.4	2.2	2.0	1.9	1.8	1.7	1.6	1.5	1.4	1.4	1.3	1.2	1.2
	40	0.100	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
100 MESH ORANGE	50	0.112	4.6	4.1	3.7	3.4	3.1	2.8	2.6	2.5	2.3	2.2	2.0	1.9	1.8	1.8	1.7	1.6	1.5
	60	0.122	5.1	4.5	4.0	3.7	3.4	3.1	2.9	2.7	2.5	2.4	2.2	2.1	2.0	1.9	1.8	1.8	1.7
XR80015VS	15	0.092	3.8	3.4	3.0	2.8	2.5	2.3	2.2	2.0	1.9	1.8	1.7	1.6	1.5	1.4	1.4	1.3	1.3
	20	0.106	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
XR11015VS	30	0.130	5.4	4.8	4.3	3.9	3.6	3.3	3.1	2.9	2.7	2.5	2.4	2.3	2.1	2.0	1.9	1.9	1.8
	40	0.150	6.2	5.5	5.0	4.5	4.1	3.8	3.5	3.3	3.1	2.9	2.8	2.6	2.5	2.4	2.3	2.2	2.1
100 MESH GREEN	50	0.168	6.9	6.1	5.5	5.0	4.6	4.3	4.0	3.7	3.5	3.3	3.1	2.9	2.8	2.6	2.5	2.4	2.3
	60	0.184	7.6	6.7	6.1	5.5	5.1	4.7	4.3	4.0	3.8	3.6	3.4	3.2	3.0	2.9	2.8	2.6	2.5
XR8002VS	15	0.122	5.1	4.5	4.0	3.7	3.4	3.1	2.9	2.7	2.5	2.4	2.2	2.1	2.0	1.9	1.8	1.8	1.7
	20	0.141	5.8	5.2	4.7	4.2	3.9	3.6	3.3	3.1	2.9	2.7	2.6	2.5	2.3	2.2	2.1	2.0	1.9
XR1102VS	30	0.173	7.1	6.4	5.7	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
	40	0.200	8.3	7.3	6.6	6.0	5.5	5.1	4.7	4.4	4.1	3.9	3.7	3.5	3.3	3.1	3.0	2.9	2.8
50 MESH YELLOW	50	0.224	9.2	8.2	7.4	6.7	6.1	5.7	5.3	4.9	4.6	4.3	4.1	3.9	3.7	3.5	3.4	3.2	3.1
	60	0.245	10.1	9.0	8.1	7.3	6.7	6.2	5.8	5.4	5.1	4.8	4.5	4.3	4.0	3.8	3.7	3.5	3.4
XR8003VS	15	0.184	7.6	6.7	6.1	5.5	5.1	4.7	4.3	4.0	3.8	3.6	3.4	3.2	3.0	2.9	2.8	2.6	2.5
	20	0.212	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
XR1103VS	30	0.260	10.7	9.5	8.6	7.8	7.1	6.6	6.1	5.7	5.4	5.0	4.8	4.5	4.3	4.1	3.9	3.7	3.6
	40	0.300	12.4	11.0	9.9	9.0	8.3	7.6	7.1	6.6	6.2	5.8	5.5	5.2	5.0	4.7	4.5	4.3	4.1
50 MESH BLUE	50	0.335	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
	60	0.367	15.2	13.5	12.1	11.0	10.1	9.3	8.7	8.1	7.6	7.1	6.7	6.4	6.1	5.8	5.5	5.3	5.1
XR8004VS	15	0.245	10.1	9.0	8.1	7.3	6.7	6.2	5.8	5.4	5.1	4.8	4.5	4.3	4.0	3.8	3.7	3.5	3.4
	20	0.283	11.7	10.4	9.3	8.5	7.8	7.2	6.7	6.2	5.8	5.5	5.2	4.9	4.7	4.4	4.2	4.1	3.9
XR1104VS	30	0.346	14.3	12.7	11.4	10.4	9.5	8.8	8.2	7.6	7.1	6.7	6.4	6.0	5.7	5.4	5.2	5.0	4.8
	40	0.400	16.5	14.7	13.2	12.0	11.0	10.2	9.4	8.8	8.3	7.8	7.3	6.9	6.6	6.3	6.0	5.7	5.5
50 MESH RED	50	0.447	18.4	16.4	14.8	13.4	12.3	11.4	10.5	9.8	9.2	8.7	8.2	7.8	7.4	7.0	6.7	6.4	6.1
	60	0.490	20.2	18.0	16.2	14.7	13.5	12.4	11.5	10.8	10.1	9.5	9.0	8.5	8.1	7.7	7.3	7.0	6.7

**XR 80° / 110° 36" 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
0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.061	15	
0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.071	20	
1.1	1.1	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	0.087	30	
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	0.100	40	
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	0.9	0.9	0.112	50	
1.6	1.6	1.5	1.4	1.4	1.3	1.3	1.3	1.2	1.2	1.2	1.1	1.1	1.1	1.0	1.0	0.122	60	
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	0.8	0.092	15	
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	0.106	20	
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	1.1	0.130	30	
2.0	1.9	1.8	1.8	1.7	1.7	1.6	1.5	1.5	1.5	1.4	1.4	1.3	1.3	1.3	1.2	0.150	40	
2.2	2.1	2.0	2.0	1.9	1.8	1.8	1.7	1.7	1.6	1.6	1.5	1.5	1.5	1.4	1.4	0.168	50	
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	1.5	0.184	60	
1.6	1.6	1.5	1.4	1.4	1.3	1.3	1.3	1.2	1.2	1.2	1.1	1.1	1.1	1.0	1.0	0.122	15	
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	0.141	20	
2.3	2.2	2.1	2.0	2.0	1.9	1.8	1.8	1.7	1.7	1.6	1.6	1.5	1.5	1.5	1.4	0.173	30	
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	1.7	0.200	40	
3.0	2.8	2.7	2.6	2.5	2.5	2.4	2.3	2.2	2.2	2.1	2.0	2.0	1.9	1.9	1.8	0.224	50	
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	2.0	0.245	60	
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	1.5	0.184	15	
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	0.212	20	
3.4	3.3	3.2	3.1	3.0	2.9	2.8	2.7	2.6	2.5	2.4	2.4	2.3	2.3	2.2	2.1	0.260	30	
4.0	3.8	3.7	3.5	3.4	3.3	3.2	3.1	3.0	2.9	2.8	2.8	2.7	2.6	2.5	2.5	0.300	40	
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	0.335	50	
4.8	4.7	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	3.0	0.367	60	
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	2.0	0.245	15	
3.7	3.6	3.5	3.3	3.2	3.1	3.0	2.9	2.8	2.7	2.7	2.6	2.5	2.5	2.4	2.3	0.283	20	
4.6	4.4	4.2	4.1	3.9	3.8	3.7	3.6	3.5	3.4	3.3	3.2	3.1	3.0	2.9	2.9	0.346	30	
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	0.400	40	
5.9	5.7	5.5	5.3	5.1	4.9	4.8	4.6	4.5	4.3	4.2	4.1	4.0	3.9	3.8	3.7	0.447	50	
6.5	6.2	6.0	5.8	5.6	5.4	5.2	5.1	4.9	4.8	4.6	4.5	4.4	4.3	4.1	4.0	0.490	60	

**XR 80° / 110° 36" 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	12.6	11.2	10.1	9.2	8.4	7.8	7.2	6.7	6.3	5.9	5.6	5.3	5.1	4.8	4.6	4.4	4.2	
	20	0.354	14.6	13.0	11.7	10.6	9.7	9.0	8.3	7.8	7.3	6.9	6.5	6.1	5.8	5.6	5.3	5.1	4.9	
	30	0.433	17.9	15.9	14.3	13.0	11.9	11.0	10.2	9.5	8.9	8.4	7.9	7.5	7.1	6.8	6.5	6.2	6.0	
	40	0.500	20.6	18.3	16.5	15.0	13.8	12.7	11.8	11.0	10.3	9.7	9.2	8.7	8.3	7.9	7.5	7.2	6.9	
	50 MESH	50	0.559	23.1	20.5	18.4	16.8	15.4	14.2	13.2	12.3	11.5	10.9	10.2	9.7	9.2	8.8	8.4	8.0	7.7
	BROWN	60	0.612	25.3	22.5	20.2	18.4	16.8	15.5	14.4	13.5	12.6	11.9	11.2	10.6	10.1	9.6	9.2	8.8	8.4
XR8006VS XR1106VS	15	0.367	15.2	13.5	12.1	11.0	10.1	9.3	8.7	8.1	7.6	7.1	6.7	6.4	6.1	5.8	5.5	5.3	5.1	
	20	0.424	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	0.520	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	0.600	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	0.671	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
	GRAY	60	0.735	30.3	26.9	24.2	22.0	20.2	18.7	17.3	16.2	15.2	14.3	13.5	12.8	12.1	11.5	11.0	10.5	10.1
XR8008VS XR1108VS	15	0.490	20.2	18.0	16.2	14.7	13.5	12.4	11.5	10.8	10.1	9.5	9.0	8.5	8.1	7.7	7.3	7.0	6.7	
	20	0.566	23.3	20.7	18.7	17.0	15.6	14.4	13.3	12.4	11.7	11.0	10.4	9.8	9.3	8.9	8.5	8.1	7.8	
	30	0.693	28.6	25.4	22.9	20.8	19.1	17.6	16.3	15.2	14.3	13.4	12.7	12.0	11.4	10.9	10.4	9.9	9.5	
	40	0.800	33.0	29.3	26.4	24.0	22.0	20.3	18.9	17.6	16.5	15.5	14.7	13.9	13.2	12.6	12.0	11.5	11.0	
	50 MESH	50	0.894	36.9	32.8	29.5	26.8	24.6	22.7	21.1	19.7	18.4	17.4	16.4	15.5	14.8	14.1	13.4	12.8	12.3
	WHITE	60	0.980	40.4	35.9	32.3	29.4	26.9	24.9	23.1	21.6	20.2	19.0	18.0	17.0	16.2	15.4	14.7	14.1	13.5
XR8010SS XR11010SS	15	0.612	25.3	22.5	20.2	18.4	16.8	15.5	14.4	13.5	12.6	11.9	11.2	10.6	10.1	9.6	9.2	8.8	8.4	
	20	0.707	29.2	25.9	23.3	21.2	19.4	17.9	16.7	15.6	14.6	13.7	13.0	12.3	11.7	11.1	10.6	10.1	9.7	
	30	0.866	35.7	31.8	28.6	26.0	23.8	22.0	20.4	19.1	17.9	16.8	15.9	15.0	14.3	13.6	13.0	12.4	11.9	
	40	1.000	41.3	36.7	33.0	30.0	27.5	25.4	23.6	22.0	20.6	19.4	18.3	17.4	16.5	15.7	15.0	14.3	13.8	
	50 MESH	50	1.118	46.1	41.0	36.9	33.5	30.7	28.4	26.4	24.6	23.1	21.7	20.5	19.4	18.4	17.6	16.8	16.0	15.4
		60	1.225	50.5	44.9	40.4	36.7	33.7	31.1	28.9	26.9	25.3	23.8	22.5	21.3	20.2	19.2	18.4	17.6	16.8
XR8015SS XR11015SS	15	0.919	37.9	33.7	30.3	27.6	25.3	23.3	21.7	20.2	18.9	17.8	16.8	16.0	15.2	14.4	13.8	13.2	12.6	
	20	1.061	43.8	38.9	35.0	31.8	29.2	26.9	25.0	23.3	21.9	20.6	19.4	18.4	17.5	16.7	15.9	15.2	14.6	
	30	1.299	53.6	47.6	42.9	39.0	35.7	33.0	30.6	28.6	26.8	25.2	23.8	22.6	21.4	20.4	19.5	18.6	17.9	
	40	1.500	61.9	55.0	49.5	45.0	41.3	38.1	35.4	33.0	30.9	29.1	27.5	26.1	24.8	23.6	22.5	21.5	20.6	
	50 MESH	50	1.677	69.2	61.5	55.3	50.3	46.1	42.6	39.5	36.9	34.6	32.6	30.7	29.1	27.7	26.4	25.2	24.1	23.1
		60	1.837	75.8	67.4	60.6	55.1	50.5	46.6	43.3	40.4	37.9	35.7	33.7	31.9	30.3	28.9	27.6	26.4	25.3

**XR 80° / 110° 36" TIP SPACING**

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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		
4.0	3.9	3.7	3.6	3.5	3.4	3.3	3.2	3.1	3.0	2.9	2.8	2.7	2.7	2.6	2.5	0.306	15	XR8005VS XR1105VS  50 MESH BROWN
4.7	4.5	4.3	4.2	4.0	3.9	3.8	3.6	3.5	3.4	3.3	3.2	3.2	3.1	3.0	2.9	0.354	20	
5.7	5.5	5.3	5.1	4.9	4.8	4.6	4.5	4.3	4.2	4.1	4.0	3.9	3.8	3.7	3.6	0.433	30	
6.6	6.3	6.1	5.9	5.7	5.5	5.3	5.2	5.0	4.9	4.7	4.6	4.5	4.3	4.2	4.1	0.500	40	
7.4	7.1	6.8	6.6	6.4	6.1	6.0	5.8	5.6	5.4	5.3	5.1	5.0	4.9	4.7	4.6	0.559	50	
8.1	7.8	7.5	7.2	7.0	6.7	6.5	6.3	6.1	5.9	5.8	5.6	5.5	5.3	5.2	5.1	0.612	60	
4.8	4.7	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	3.0	0.367	15	XR8006VS XR1106VS  50 MESH GRAY
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	0.424	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	0.520	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	0.600	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	0.671	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	0.735	60	
6.5	6.2	6.0	5.8	5.6	5.4	5.2	5.1	4.9	4.8	4.6	4.5	4.4	4.3	4.1	4.0	0.490	15	XR8008VS XR1108VS  50 MESH WHITE
7.5	7.2	6.9	6.7	6.4	6.2	6.0	5.8	5.7	5.5	5.3	5.2	5.0	4.9	4.8	4.7	0.566	20	
9.1	8.8	8.5	8.2	7.9	7.6	7.4	7.1	6.9	6.7	6.5	6.4	6.2	6.0	5.9	5.7	0.693	30	
10.6	10.2	9.8	9.4	9.1	8.8	8.5	8.3	8.0	7.8	7.5	7.3	7.1	6.9	6.8	6.6	0.800	40	
11.8	11.4	10.9	10.5	10.2	9.8	9.5	9.2	8.9	8.7	8.4	8.2	8.0	7.8	7.6	7.4	0.894	50	
12.9	12.4	12.0	11.5	11.1	10.8	10.4	10.1	9.8	9.5	9.2	9.0	8.7	8.5	8.3	8.1	0.980	60	
8.1	7.8	7.5	7.2	7.0	6.7	6.5	6.3	6.1	5.9	5.8	5.6	5.5	5.3	5.2	5.1	0.612	15	XR8010SS XR11010SS  50 MESH
9.3	9.0	8.6	8.3	8.0	7.8	7.5	7.3	7.1	6.9	6.7	6.5	6.3	6.1	6.0	5.8	0.707	20	
11.4	11.0	10.6	10.2	9.9	9.5	9.2	8.9	8.7	8.4	8.2	7.9	7.7	7.5	7.3	7.1	0.866	30	
13.2	12.7	12.2	11.8	11.4	11.0	10.6	10.3	10.0	9.7	9.4	9.2	8.9	8.7	8.5	8.3	1.000	40	
14.8	14.2	13.7	13.2	12.7	12.3	11.9	11.5	11.2	10.9	10.5	10.2	10.0	9.7	9.5	9.2	1.118	50	
16.2	15.5	15.0	14.4	13.9	13.5	13.0	12.6	12.2	11.9	11.5	11.2	10.9	10.6	10.4	10.1	1.225	60	
12.1	11.7	11.2	10.8	10.5	10.1	9.8	9.5	9.2	8.9	8.7	8.4	8.2	8.0	7.8	7.6	0.919	15	XR8015SS XR11015SS  50 MESH
14.0	13.5	13.0	12.5	12.1	11.7	11.3	10.9	10.6	10.3	10.0	9.7	9.5	9.2	9.0	8.8	1.061	20	
17.1	16.5	15.9	15.3	14.8	14.3	13.8	13.4	13.0	12.6	12.2	11.9	11.6	11.3	11.0	10.7	1.299	30	
19.8	19.0	18.3	17.7	17.1	16.5	16.0	15.5	15.0	14.6	14.1	13.8	13.4	13.0	12.7	12.4	1.500	40	
22.1	21.3	20.5	19.8	19.1	18.4	17.9	17.3	16.8	16.3	15.8	15.4	15.0	14.6	14.2	13.8	1.677	50	
24.2	23.3	22.5	21.7	20.9	20.2	19.6	18.9	18.4	17.8	17.3	16.8	16.4	16.0	15.5	15.2	1.837	60	