

XR 80° / 110° 40" 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	2.3	2.0	1.8	1.7	1.5	1.4	1.3	1.2	1.1	1.1	1.0	1.0	0.9	0.9	0.8	0.8	0.8
	20	0.071	2.6	2.3	2.1	1.9	1.8	1.6	1.5	1.4	1.3	1.2	1.2	1.1	1.1	1.0	1.0	0.9	0.9
XR1101VS	30	0.087	3.2	2.9	2.6	2.3	2.1	2.0	1.8	1.7	1.6	1.5	1.4	1.4	1.3	1.2	1.2	1.1	1.1
	40	0.100	3.7	3.3	3.0	2.7	2.5	2.3	2.1	2.0	1.9	1.7	1.7	1.6	1.5	1.4	1.4	1.3	1.2
100 MESH ORANGE	50	0.112	4.2	3.7	3.3	3.0	2.8	2.6	2.4	2.2	2.1	2.0	1.8	1.7	1.7	1.6	1.5	1.4	1.4
	60	0.122	4.5	4.0	3.6	3.3	3.0	2.8	2.6	2.4	2.3	2.1	2.0	1.9	1.8	1.7	1.7	1.6	1.5
XR80015VS	15	0.092	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
	20	0.106	3.9	3.5	3.2	2.9	2.6	2.4	2.3	2.1	2.0	1.9	1.8	1.7	1.6	1.5	1.4	1.4	1.3
XR11015VS	30	0.130	4.8	4.3	3.9	3.5	3.2	3.0	2.8	2.6	2.4	2.3	2.1	2.0	1.9	1.8	1.8	1.7	1.6
	40	0.150	5.6	5.0	4.5	4.1	3.7	3.4	3.2	3.0	2.8	2.6	2.5	2.3	2.2	2.1	2.0	1.9	1.9
100 MESH GREEN	50	0.168	6.2	5.5	5.0	4.5	4.2	3.8	3.6	3.3	3.1	2.9	2.8	2.6	2.5	2.4	2.3	2.2	2.1
	60	0.184	6.8	6.1	5.5	5.0	4.5	4.2	3.9	3.6	3.4	3.2	3.0	2.9	2.7	2.6	2.5	2.4	2.3
XR8002VS	15	0.122	4.5	4.0	3.6	3.3	3.0	2.8	2.6	2.4	2.3	2.1	2.0	1.9	1.8	1.7	1.7	1.6	1.5
	20	0.141	5.3	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	1.8
XR1102VS	30	0.173	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	2.4	2.3	2.2	2.1
	40	0.200	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 MESH YELLOW	50	0.224	8.3	7.4	6.6	6.0	5.5	5.1	4.7	4.4	4.2	3.9	3.7	3.5	3.3	3.2	3.0	2.9	2.8
	60	0.245	9.1	8.1	7.3	6.6	6.1	5.6	5.2	4.8	4.5	4.3	4.0	3.8	3.6	3.5	3.3	3.2	3.0
XR8003VS	15	0.184	6.8	6.1	5.5	5.0	4.5	4.2	3.9	3.6	3.4	3.2	3.0	2.9	2.7	2.6	2.5	2.4	2.3
	20	0.212	7.9	7.0	6.3	5.7	5.3	4.8	4.5	4.2	3.9	3.7	3.5	3.3	3.2	3.0	2.9	2.7	2.6
XR1103VS	30	0.260	9.6	8.6	7.7	7.0	6.4	5.9	5.5	5.1	4.8	4.5	4.3	4.1	3.9	3.7	3.5	3.4	3.2
	40	0.300	11.1	9.9	8.9	8.1	7.4	6.9	6.4	5.9	5.6	5.2	5.0	4.7	4.5	4.2	4.1	3.9	3.7
50 MESH BLUE	50	0.335	12.5	11.1	10.0	9.1	8.3	7.7	7.1	6.6	6.2	5.9	5.5	5.2	5.0	4.7	4.5	4.3	4.2
	60	0.367	13.6	12.1	10.9	9.9	9.1	8.4	7.8	7.3	6.8	6.4	6.1	5.7	5.5	5.2	5.0	4.7	4.5
XR8004VS	15	0.245	9.1	8.1	7.3	6.6	6.1	5.6	5.2	4.8	4.5	4.3	4.0	3.8	3.6	3.5	3.3	3.2	3.0
	20	0.283	10.5	9.3	8.4	7.6	7.0	6.5	6.0	5.6	5.3	4.9	4.7	4.4	4.2	4.0	3.8	3.7	3.5
XR1104VS	30	0.346	12.9	11.4	10.3	9.4	8.6	7.9	7.3	6.9	6.4	6.1	5.7	5.4	5.1	4.9	4.7	4.5	4.3
	40	0.400	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 MESH RED	50	0.447	16.6	14.8	13.3	12.1	11.1	10.2	9.5	8.9	8.3	7.8	7.4	7.0	6.6	6.3	6.0	5.8	5.5
	60	0.490	18.2	16.2	14.5	13.2	12.1	11.2	10.4	9.7	9.1	8.6	8.1	7.7	7.3	6.9	6.6	6.3	6.1

XR 80° / 110° 40" 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
0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.061	15	
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	0.6	0.5	0.5	0.071	20	
1.0	1.0	1.0	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.6	0.087	30	
1.2	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	0.100	40	
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	0.9	0.8	0.112	50	
1.5	1.4	1.3	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	0.122	60	
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	0.7	0.092	15	
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	0.8	0.106	20	
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	0.130	30	
1.8	1.7	1.7	1.6	1.5	1.5	1.4	1.4	1.4	1.3	1.3	1.2	1.2	1.2	1.1	1.1	0.150	40	
2.0	1.9	1.8	1.8	1.7	1.7	1.6	1.6	1.5	1.5	1.4	1.4	1.3	1.3	1.3	1.2	0.168	50	
2.2	2.1	2.0	1.9	1.9	1.8	1.8	1.7	1.7	1.6	1.6	1.5	1.5	1.4	1.4	1.4	0.184	60	
1.5	1.4	1.3	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	0.122	15	
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	1.1	0.141	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	0.173	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	0.200	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	1.7	1.7	1.7	0.224	50	
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	1.8	0.245	60	
2.2	2.1	2.0	1.9	1.9	1.8	1.8	1.7	1.7	1.6	1.6	1.5	1.5	1.4	1.4	1.4	0.184	15	
2.5	2.4	2.3	2.3	2.2	2.1	2.0	2.0	1.9	1.9	1.8	1.8	1.7	1.7	1.6	1.6	0.212	20	
3.1	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	0.260	30	
3.6	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	0.300	40	
4.0	3.8	3.7	3.6	3.4	3.3	3.2	3.1	3.0	2.9	2.8	2.8	2.7	2.6	2.6	2.5	0.335	50	
4.4	4.2	4.0	3.9	3.8	3.6	3.5	3.4	3.3	3.2	3.1	3.0	2.9	2.9	2.8	2.7	0.367	60	
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	1.8	0.245	15	
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	0.283	20	
4.1	4.0	3.8	3.7	3.5	3.4	3.3	3.2	3.1	3.0	2.9	2.9	2.8	2.7	2.6	2.6	0.346	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	0.400	40	
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	3.3	0.447	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	0.490	60	

XR 80° / 110° 40" 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	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	0.354	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	
	30	0.433	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	0.500	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 MESH	50	0.559	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
	BROWN	60	0.612	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
XR8006VS XR1106VS	15	0.367	13.6	12.1	10.9	9.9	9.1	8.4	7.8	7.3	6.8	6.4	6.1	5.7	5.5	5.2	5.0	4.7	4.5	
	20	0.424	15.8	14.0	12.6	11.5	10.5	9.7	9.0	8.4	7.9	7.4	7.0	6.6	6.3	6.0	5.7	5.5	5.3	
	30	0.520	19.3	17.1	15.4	14.0	12.9	11.9	11.0	10.3	9.6	9.1	8.6	8.1	7.7	7.3	7.0	6.7	6.4	
	40	0.600	22.3	19.8	17.8	16.2	14.9	13.7	12.7	11.9	11.1	10.5	9.9	9.4	8.9	8.5	8.1	7.7	7.4	
	50 MESH	50	0.671	24.9	22.1	19.9	18.1	16.6	15.3	14.2	13.3	12.5	11.7	11.1	10.5	10.0	9.5	9.1	8.7	8.3
	GRAY	60	0.735	27.3	24.2	21.8	19.8	18.2	16.8	15.6	14.5	13.6	12.8	12.1	11.5	10.9	10.4	9.9	9.5	9.1
XR8008VS XR1108VS	15	0.490	18.2	16.2	14.5	13.2	12.1	11.2	10.4	9.7	9.1	8.6	8.1	7.7	7.3	6.9	6.6	6.3	6.1	
	20	0.566	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	0.693	25.7	22.9	20.6	18.7	17.1	15.8	14.7	13.7	12.9	12.1	11.4	10.8	10.3	9.8	9.4	8.9	8.6	
	40	0.800	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 MESH	50	0.894	33.2	29.5	26.6	24.1	22.1	20.4	19.0	17.7	16.6	15.6	14.8	14.0	13.3	12.6	12.1	11.5	11.1
	WHITE	60	0.980	36.4	32.3	29.1	26.5	24.2	22.4	20.8	19.4	18.2	17.1	16.2	15.3	14.5	13.9	13.2	12.7	12.1
XR8010SS XR11010SS	15	0.612	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	0.707	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	
	30	0.866	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	1.000	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 MESH	50	1.118	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	1.225	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
XR8015SS XR11015SS	15	0.919	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	1.061	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	1.299	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	1.500	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	1.677	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
		60	1.837	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

XR 80° / 110° 40" 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	
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	0.306	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	0.354	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	0.433	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	0.500	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	0.559	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	0.612	60
4.4	4.2	4.0	3.9	3.8	3.6	3.5	3.4	3.3	3.2	3.1	3.0	2.9	2.9	2.8	2.7	0.367	15
5.0	4.8	4.7	4.5	4.3	4.2	4.1	3.9	3.8	3.7	3.6	3.5	3.4	3.3	3.2	3.2	0.424	20
6.2	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	3.9	0.520	30
7.1	6.9	6.6	6.4	6.1	5.9	5.7	5.6	5.4	5.2	5.1	5.0	4.8	4.7	4.6	4.5	0.600	40
8.0	7.7	7.4	7.1	6.9	6.6	6.4	6.2	6.0	5.9	5.7	5.5	5.4	5.2	5.1	5.0	0.671	50
8.7	8.4	8.1	7.8	7.5	7.3	7.0	6.8	6.6	6.4	6.2	6.1	5.9	5.7	5.6	5.5	0.735	60
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	0.490	15
6.7	6.5	6.2	6.0	5.8	5.6	5.4	5.3	5.1	4.9	4.8	4.7	4.5	4.4	4.3	4.2	0.566	20
8.2	7.9	7.6	7.3	7.1	6.9	6.6	6.4	6.2	6.1	5.9	5.7	5.6	5.4	5.3	5.1	0.693	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	0.800	40
10.6	10.2	9.8	9.5	9.2	8.9	8.6	8.3	8.0	7.8	7.6	7.4	7.2	7.0	6.8	6.6	0.894	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	0.980	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	0.612	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	0.707	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	0.866	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	1.000	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	1.118	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	1.225	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	0.919	15
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	1.061	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	1.299	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	1.500	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	1.677	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	1.837	60