Dultmeier Sales

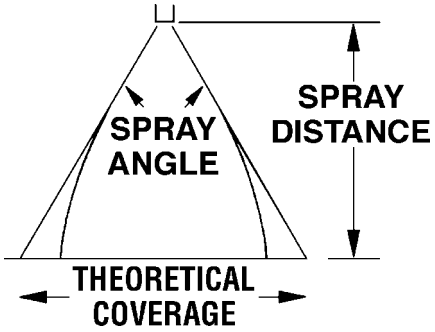
Nozzle Volume (GPM) at Various Pressures (PSI)

Nozzle Size	Orifice Dia.	40 PSI	100 PSI	250 PSI	500 PSI	600 PSI	700 PSI	800 PSI	1000 PSI	1200 PSI	1500 PSI	2000 PSI	2500 PSI	3000 PSI	3500 PSI	4000 PSI	5000 PSI
2	.034	.20	.32	.50	.71	.77	.84	.89	1.00	1.10	1.22	1.41	1.58	1.73	1.87	2.00	2.24
2.5	.039	.25	.40	.63	.88	.97	1.05	1.12	1.25	1.37	1.53	1.77	1.98	2.17	2.34	2.50	2.80
3	.043	.30	.47	.75	1.06	1.16	1.25	1.34	1.50	1.64	1.84	2.12	2.37	2.60	2.81	3.00	3.35
3.5	.048	.35	.55	.88	1.24	1.36	1.46	1.57	1.75	1.92	2.14	2.47	2.77	3.03	3.27	3.50	3.91
4	.052	.40	.63	1.00	1.41	1.55	1.67	1.79	2.00	2.19	2.45	2.83	3.16	3.46	3.74	4.00	4.47
4.5	.055	.45	.71	1.13	1.59	1.74	1.88	2.01	2.25	2.46	2.76	3.18	3.56	3.90	4.21	4.50	5.03
5	.057	.50	.79	1.25	1.77	1.94	2.09	2.24	2.50	2.74	3.06	3.54	3.95	4.33	4.68	5.00	5.59
5.5	.060	.55	.87	1.38	1.94	2.13	2.30	2.46	2.75	3.01	3.37	3.89	4.35	4.76	5.14	5.50	6.15
6	.062	.60	.95	1.50	2.12	2.32	2.51	2.68	3.00	3.29	3.67	4.24	4.74	5.20	5.61	6.00	6.71
6.5	.064	.65	1.03	1.63	2.30	2.52	2.72	2.91	3.25	3.56	3.98	4.60	5.14	5.63	6.08	6.50	7.27
7	.067	.70	1.11	1.75	2.47	2.71	2.93	3.13	3.50	3.83	4.29	4.95	5.53	6.06	6.55	7.00	7.83
7.5	.070	.75	1.19	1.88	2.65	2.90	3.14	3.35	3.75	4.11	4.59	5.30	5.93	6.50	7.02	7.50	8.39
8	.072	.80	1.26	2.00	2.83	3.10	3.35	3.58	4.00	4.38	4.90	5.66	6.32	6.93	7.48	8.00	8.94
8.5	.074	.85	1.34	2.13	3.01	3.29	3.56	3.80	4.25	4.66	5.21	6.01	6.72	7.36	7.95	8.50	9.50
9	.076	.90	1.42	2.25	3.18	3.49	3.76	4.02	4.50	4.93	5.51	6.36	7.12	7.79	8.42	9.00	10.06
9.5	.078	.95	1.50	2.38	3.36	3.68	3.97	4.25	4.75	5.20	5.82	6.72	7.51	8.23	8.89	9.50	10.62
10	.080	1.00	1.58	2.50	3.54	3.87	4.18	4.47	5.00	5.48	6.12	7.07	7.91	8.66	9.35	10.00	11.18
11	.083	1.10	1.74	2.75	3.89	4.26	4.60	4.92	5.50	6.02	6.74	7.78	8.70	9.53	10.29	11.00	12.30
12	.087	1.20	1.90	3.00	4.24	4.65	5.02	5.37	6.00	6.57	7.35	8.49	9.49	10.39	11.22	12.00	13.42
12.5	.089	1.25	1.98	3.13	4.42	4.84	5.23	5.59	6.25	6.85	7.65	8.84	9.88	10.83	11.69	12.50	13.98
13	.091	1.30	2.06	3.25	4.60	5.03	5.44	5.81	6.50	7.12	7.96	9.19	10.28	11.26	12.16	13.00	14.53
14	.093	1.40	2.21	3.50	4.95	5.42	5.86	6.26	7.00	7.67	8.57	9.90	11.07	12.12	13.10	14.00	15.65
15	.096	1.50	2.37	3.75	5.30	5.81	6.27	6.71	7.50	8.22	9.19	10.61	11.86	12.99	14.03	15.00	16.77
20	.109	2.00	3.16	5.00	7.07	7.75	8.37	8.94	10.00	10.95	12.25	14.14	15.81	17.32	18.71	20.00	22.36
25	.125	2.50	3.95	6.25	8.84	9.68	10.46	11.18	12.50	13.69	15.31	17.68	19.76	21.65	23.39	25.00	27.95
30	.141	3.00	4.74	7.50	10.61	11.62	12.55	13.42	15.00	16.43	18.37	21.12	23.72	25.98	28.06	30.00	33.54
40	.156	4.00	6.32	10.00	14.14	15.49	16.73	17.89	20.00	21.91	24.49	28.28	31.62	34.64	37.42	40.00	44.72
50	.172	5.00	7.91	12.50	17.68	19.36	20.92	22.36	25.00	27.39	30.62	35.36	39.53	43.30	46.77	50.00	55.90
60	.188	6.00	9.49	15.00	21.21	23.24	25.10	26.83	30.00	32.86	36.74	42.43	47.43	51.96	56.12	60.00	67.08

***** A commonly used standard for nozzle size is the “nozzle number” which is equivalent to the nozzle capacity in GPM at 4000 PSI. Spray angle does not affect nozzle volume.

Nozzle Pattern Chart

Included Spray Angle	THEORETICAL COVERAGE AT VARIOUS DISTANCES (IN INCHES) FROM NOZZLE ORIFICE											
	2”	4”	6”	8”	10”	12”	15”	18”	24”	30”	36”	48”
5˚	0.2	0.4	0.5	0.7	0.9	1.1	1.3	1.6	2.1	2.6	3.1	4.2
10˚	0.4	0.7	1.1	1.4	1.8	2.1	2.6	3.1	4.2	5.2	6.3	8.4
15˚	0.5	1.1	1.6	2.1	2.6	3.2	3.9	4.7	6.3	7.9	9.5	12.6
20˚	0.7	1.4	2.1	2.8	3.5	4.2	5.3	6.4	8.5	10.6	12.7	16.9
25˚	0.9	1.8	2.7	3.5	4.4	5.3	6.6	8.0	10.6	13.3	15.9	21.2
30˚	1.1	2.1	3.2	4.3	5.4	6.4	8.1	9.7	12.8	16.1	19.3	25.7
35˚	1.3	2.5	3.8	5.0	6.3	7.6	9.5	11.3	15.5	18.9	22.7	30.3
40˚	1.5	2.9	4.4	5.8	7.3	8.7	10.9	13.1	17.5	21.8	26.2	34.9
45˚	1.7	3.3	5.0	6.6	8.3	9.9	12.4	14.9	19.9	24.8	29.8	39.7
50˚	1.9	3.7	5.6	7.5	9.3	11.2	14.0	16.8	22.4	28.0	33.6	44.8
55˚	2.1	4.2	6.3	8.3	10.3	12.5	15.6	18.7	25.0	31.2	37.5	50.0
60˚	2.3	4.6	6.9	9.2	11.5	13.8	17.3	20.6	27.7	34.6	41.6	55.4
65˚	2.5	5.1	7.6	10.2	12.7	15.3	19.2	22.9	30.5	38.2	45.8	61.2
70˚	2.8	5.6	8.4	11.2	14.0	16.8	21.0	25.2	33.6	42.0	50.4	67.2
75˚	3.1	6.1	9.2	12.3	15.3	18.4	23.0	27.6	36.8	46.0	55.2	73.6
80˚	3.4	6.7	10.1	13.4	16.8	20.2	25.2	30.3	40.3	50.4	60.4	80.6
85˚	3.7	7.3	11.0	14.7	18.3	22.0	27.5	33.0	44.0	55.0	66.0	88.0
90˚	4.0	8.0	12.0	16.0	20.0	24.0	30.0	36.0	48.0	60.0	72.0	96.0
95˚	4.4	8.7	13.1	17.5	21.8	26.2	32.8	39.3	52.4	65.5	78.6	105
100˚	4.8	9.5	14.3	19.1	23.8	28.6	35.8	43.0	57.2	71.6	85.9	114
110˚	5.7	11.4	17.1	22.8	28.5	34.3	42.8	51.4	68.5	85.6	103	
120˚	6.9	13.9	20.8	27.7	34.6	41.6	52.0	62.4	83.2	104		
130˚	8.6	17.2	25.7	34.3	42.9	51.5	64.4	77.3	103			
140˚	10.9	21.9	32.9	43.8	54.8	65.7	82.2	98.6				
150˚	14.9	29.8	44.7	59.6	74.5	89.5	112					
160˚	22.7	45.4	68.0	90.6	113							
170˚	45.8	91.6										



Nozzles

Nozzle# =	GPM	x	$\sqrt{\frac{4000}{PSI}}$
GPM =	Nozzle#	x	$\sqrt{\frac{PSI}{4000}}$
PSI =	$\left(\frac{GPM}{Nozzle}\right)^2$	x	4000