

Nozzle Specification Chart

Table 1: NOZZLE VOLUME (GPM) AT VARIOUS PRESSURES (PSI)

Nozzle Size	Orifice Dia. (in)	Orifice Dia. (mm)	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
2	.034	.86	.20	.32	.50	.71	.77	.80	.89	1.0	1.1	1.2	1.4	1.6	1.7	1.9	2.0
4	.052	1.32	.40	.63	1.0	1.4	1.6	1.7	1.8	2.0	2.2	2.5	2.8	3.1	3.5	3.8	4.0
4.5	.055	1.4	.45	.71	1.1	1.5	1.7	1.9	2.0	2.2	2.4	2.8	3.0	3.6	3.9	4.3	4.5
5	.057	1.45	.50	.79	1.3	1.8	1.9	2.1	2.2	2.5	2.8	3.1	3.6	4.0	4.4	4.7	5.0
5.5	.060	1.52	.55	.87	1.4	1.9	2.1	2.3	2.5	2.8	3.0	3.4	3.8	4.4	4.8	5.2	5.5
6	.062	1.57	.60	.95	1.5	2.1	2.3	2.5	2.7	3.0	3.2	3.7	4.2	4.8	5.2	5.6	6.0
6.5	.064	1.63	.65	1.0	1.7	2.3	2.5	2.7	2.9	3.3	3.6	4.0	4.6	5.2	5.7	6.0	6.5
7	.067	1.7	.70	1.1	1.8	2.5	2.7	2.9	3.1	3.5	3.8	4.3	5.0	5.6	6.1	6.6	7.0
7.5	.070	1.78	.75	1.2	1.9	2.7	2.9	3.2	3.4	3.8	4.1	4.6	5.3	6.0	6.5	7.0	7.5
8	.072	1.83	.80	1.3	2.0	2.8	3.1	3.4	3.6	4.0	4.4	5.0	5.6	6.2	7.0	7.5	8.0
8.5	.074	1.88	.85	1.3	2.2	3.0	3.3	3.6	3.8	4.3	4.6	5.3	6.0	6.7	7.4	8.0	8.5
9	.076	1.93	.90	1.4	2.3	3.2	3.5	3.8	4.0	4.5	5.0	5.5	6.4	7.1	7.8	8.5	9.0
9.5	.078	1.98	.95	1.5	2.4	3.4	3.7	4.0	4.3	4.8	5.2	5.8	6.8	7.6	8.3	9.0	9.5
10	.080	2.03	1.0	1.6	2.5	3.5	3.9	4.2	4.5	5.0	5.4	6.1	7.0	8.0	8.7	9.4	10.0
12	.087	2.21	1.2	1.9	3.0	4.2	4.6	5.0	5.4	6.0	6.4	7.3	8.4	9.5	10.4	11.2	12.0
15	.094	2.39	1.5	2.4	3.8	5.3	5.8	6.4	6.8	7.5	8.2	9.2	10.6	12.0	12.9	14.0	15.0
20	.109	2.77	2.0	3.2	5.0	7.1	7.8	8.4	9.0	10.0	10.8	12.2	14.2	16.0	17.4	18.8	20.0
30	.141	3.58	3.0	4.7	7.5	10.6	11.6	12.8	13.6	15.0	16.4	18.4	21.2	24.0	26.0	28.0	30.0
40	.156	3.96	4.0	6.3	10.0	14.2	15.6	16.8	18.0	20.0	21.6	24.4	28.4	32.0	34.8	37.6	40.0

A commonly used standard for nozzle size is the nozzle number which is equivalent to the nozzle flow capacity in gallons per minute (GPM) at 4000 pounds per square inch (PSI) pressure. The nozzle spray angle is the arc of the spray pattern, usually 0, 15, 25, or 40 degrees, in high pressure cleaning applications. The spray angle does not affect the nozzle volume.

To determine the nozzle required for your system, refer the system identification plate for the rated volume and pressure. Scan the top row of the nozzle specification chart to find the desired operating pressure. The operating pressure selected may generally be any pressure less than or equal to the maximum system operating pressure. Scan down the column with the selected operating pressure header until you reach the cell with a flow rate that is 5 to 10 percent less than the system flow rate (5 to 10 percent of flow is required through the bypass port of the unloader valve for proper operation). Finally, scan left from the selected flow rate cell to read the nozzle size in the far left cell of the row.

To order replacement nozzles, specify the nozzle size and the spray angle.