

Nozzle Selection Chart

(Gallons Per Minute)

The spray nozzle is an important component of the pressure washing system. Spraying Systems Co. wash nozzles are identified by a 4 or 5 digit number designation. The first two digits denote the spray angle and this can be from 00 to 40. Wider angles are available but generally for washing 40 degree is usually the widest used with pressure washers. The 00 represents a 0 degree or straight spray stream. A 0 degree nozzle will provide the most impact, in the wrong hands it can also cause damage to the surface being cleaned while having the least amount of coverage or spray swath. A nozzle with the first two digits of 15 will deliver an approximate spray angle of 15 degrees, a spray angle that most people find suitable for most cleaning, good impact with a respectable spray swath. Remember the wider the spray angle the less the impact.

Nozzle Size	500 PSI	1000 PSI	1200 PSI	1500 PSI	2000 PSI	2500 PSI	3000 PSI	3500 PSI	4000 PSI
02.0	.71	1.0	1.1	1.2	1.4	1.6	1.7	1.87	2.00
03.0	1.0	1.5	1.6	1.84	2.1	2.3	2.5	2.81	3.00
3.5	1.24	1.75	1.92	2.14	2.47	2.77	3.03	3.27	3.50
04.0	1.4	2.0	2.2	2.5	2.8	3.1	3.5	4.00	4.00
4.5	1.5	2.2	2.4	2.8	3.0	3.6	3.9	4.50	4.50
05.0	1.8	2.5	2.8	3.1	3.6	4.0	4.4	5.00	5.00
5.5	1.9	2.8	3.0	3.4	3.8	4.4	4.8	5.50	5.50
06.0	2.1	3.0	3.2	3.7	4.2	4.8	5.2	6.00	6.00
6.5	2.3	3.3	3.6	4.0	4.6	5.2	5.7	6.50	6.50
07.0	2.5	3.5	3.8	4.3	5.0	5.6	6.1	7.00	7.00
7.5	2.7	3.8	4.1	4.6	5.3	6.0	6.5	7.50	7.50
08.0	2.8	4.0	4.4	5.0	5.6	6.2	7.0	8.00	8.00
08.5	3.0	4.3	4.6	5.3	6.0	6.7	7.4	8.50	8.50
09.0	3.2	4.5	5.0	5.5	6.4	7.1	7.8	9.00	9.00
09.5	3.4	4.8	5.2	5.8	6.8	7.6	8.3	9.50	9.50
10.0	3.5	5.0	5.4	6.1	7.0	8.0	8.7	10.00	10.00
12.0	4.2	6.0	6.4	7.3	8.4	9.5	10.4	12.00	12.00

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*Spray angle does not affect nozzle volume output

The spray nozzle size or orifice is typically the last two digits found on the nozzle. The orifice size or hole diameter will help determine the output pressure of the pumping system or pressure washer, keeping in mind the maximum rated pressure of your system. By reviewing the chart to the left you can determine the proper orifice size required for your pressure washer. To begin, first determine the pressure and GPM rating of your washer. Along the top row locate the appropriate pressure rating. Going down the column indicating the chosen pressure find the flow rate (GPM) your system is designed to deliver. Follow the row to the left, under the column heading Nozzle Size the proper orifice size is indicated.

In time as the nozzle orifice wears system pressure will drop and the nozzle will require replacement.

Useful Formulas

- ❖ $\frac{\text{GPM} \times \text{PSI}}{1460}$ = Approx. electric brake hp required to drive a positive displacement pump, (Standard 85% mechanical efficiency)
- ❖ Desired RPM = Desired GPM x $\frac{\text{Rated RPM}}{\text{Rated GPM}}$
- ❖ GPM = Pump RPM x $\frac{\text{Rated GPM}}{\text{Rated RPM}}$
- ❖ 231 cu in = 1 gallon
- ❖ 1 gal water = approx. 8.3 lbs.
- ❖ Approx. capacity of a tank in gallons = $\frac{\text{L in.} \times \text{W in.} \times \text{H in.}}{231}$



Spraying Systems Co.®



Working with high pressure systems can be extremely dangerous. This information along with other information provided on this page and the website of Sande Equipment Co. Inc. is intended for reference purposes only and requires a certain amount of technical knowledge by the user before proceeding. It is important that you analyze all aspects of your application and verify that components either meet or exceed system specification. The user, through his own analysis and research is responsible for making a final determination as to the suitability of the component or components utilized and that all safety concerns are addressed and proper precautions undertaken before placing any system in service