

Pressure Washer PSI, GPM & Nozzle Reference

A quick field sheet for comparing cleaning power, estimating horsepower, selecting a nozzle and checking hose pressure loss.

CLEANING UNITS	NOZZLE SIZE	MINIMUM HORSEPOWER
PSI x GPM Example: 3,000 x 2.5 = 7,500 CU	GPM x sqrt(4,000 / PSI) Choose the nearest suitable standard nozzle size.	Electric: (PSI x GPM) / 1,460 Gas: (PSI x GPM) / 1,100

Quick nozzle-size chart

Nozzle	2,000 PSI	3,000 PSI	4,000 PSI	5,000 PSI
2	1.4 GPM	1.7 GPM	2.0 GPM	2.2 GPM
3	2.1 GPM	2.6 GPM	3.0 GPM	3.4 GPM
3.5	2.5 GPM	3.0 GPM	3.5 GPM	3.9 GPM
4	2.8 GPM	3.5 GPM	4.0 GPM	4.5 GPM
4.5	3.2 GPM	3.9 GPM	4.5 GPM	5.0 GPM
5	3.5 GPM	4.3 GPM	5.0 GPM	5.6 GPM
5.5	3.9 GPM	4.8 GPM	5.5 GPM	6.1 GPM
6	4.2 GPM	5.2 GPM	6.0 GPM	6.7 GPM
7	4.9 GPM	6.1 GPM	7.0 GPM	7.8 GPM
8	5.7 GPM	6.9 GPM	8.0 GPM	8.9 GPM

Chart values are approximate flow at the stated pressure. Verify the equipment maker's nozzle requirements before use.

3/8-inch hose pressure loss

Flow	100 ft	200 ft	300 ft
2 GPM	25 PSI	50 PSI	75 PSI
3 GPM	50 PSI	100 PSI	150 PSI
4 GPM	90 PSI	180 PSI	270 PSI
5 GPM	130 PSI	260 PSI	390 PSI
6 GPM	220 PSI	440 PSI	660 PSI
7 GPM	300 PSI	600 PSI	900 PSI

Water-use shortcut

Rated flow	15 minutes	30 minutes
1.5 GPM	22.5 gal	45 gal
2.5 GPM	37.5 gal	75 gal
4.0 GPM	60 gal	120 gal
5.0 GPM	75 gal	150 gal

SAFETY REMINDERS

Start with lower pressure and a wide fan pattern. Test a hidden area. Keep clear of people, animals, electrical equipment and damaged surfaces. Use appropriate eye, hearing, hand and foot protection. Never rely on this sheet as a substitute for the pressure-washer, nozzle or surface manufacturer's instructions.

Use the interactive calculator

heavydutypr.com/pressure-washer-psi-gpm-calculator/

Compare two machines, calculate cleaning units and estimate minimum horsepower.

Method and source: formulas, nozzle-volume relationships and 3/8-inch hose-loss examples are based on Hydro Tek's 'Handy Charts and Formulas for the Pressure Washer Professional' (hydrotek.us/charts/). Values are comparison estimates; actual output and losses vary by equipment, fittings, hose condition, water supply and operating conditions.