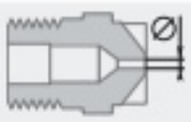
Further information about high pressure nozzles

Output in l/min depends on pressure in bar



		Pressure in bar											
		3	10	20	30	40	50	60	70	80	90	100	110
D	⌀*	⟷	⟷	⟷	⟷	⟷	⟷	⟷	⟷	⟷	⟷	⟷	⟷
01	0.59	0.4	0.7	1.0	1.3	1.4	1.6	1.7	1.8	2.0	2.1	2.2	2.3
015	0.71	0.6	1.0	1.5	1.8	2.1	2.4	2.6	2.8	3.0	3.2	3.4	3.6
02	0.84	0.8	1.4	2	2.5	2.8	3.2	3.5	3.7	4.0	4.2	4.5	4.7
025	0.94	1.0	1.6	2.5	3.1	3.5	4.0	4.3	4.7	5.0	5.3	5.6	5.9
03	1.03	1.2	2.0	3.1	3.7	4.3	4.8	5.3	5.7	6.1	6.3	6.8	7.1
035	1.10	1.4	2.5	3.6	4.2	4.9	5.5	6.0	6.5	7.0	7.4	7.8	8.2
04	1.21	1.6	2.8	4.1	5.2	5.9	6.6	7.3	7.8	8.4	8.9	9.4	9.8
045	1.26	1.8	3.1	4.5	5.5	6.4	7.1	7.8	8.4	9.0	9.6	10.2	10.5
05	1.33	2.0	3.5	5.1	6.2	7.1	8.0	8.7	9.4	10.0	10.7	11.3	11.8
055	1.39	2.1	3.9	5.6	6.8	7.8	8.7	9.6	10.3	11.1	11.8	12.4	13.0
06	1.46	2.4	4.1	6.1	7.4	8.6	9.6	10.4	11.3	12.1	12.8	13.6	14.3
065	1.52	2.6	4.5	6.6	8.0	9.3	10.4	11.3	12.3	13.2	14.0	14.7	15.4
07	1.57	2.8	5.0	7.1	8.6	10.0	11.2	12.2	13.2	14.1	15.0	15.8	16.6
075	1.63	3.0	5.3	7.6	9.3	10.7	12.0	13.1	14.2	15.2	16.1	16.9	17.7
08	1.68	3.1	5.6	8.2	9.8	11.3	12.7	14.0	15.1	16.1	17.1	18.0	18.9
085	1.73	3.3	6	8.7	10.4	12.1	13.5	14.8	16.0	17.1	18.1	19.1	20.0
09	1.78	3.5	6.5	9.2	11.1	12.8	14.3	15.7	17.0	18.0	19.2	20.2	21.2
10	1.88	3.9	7.0	10.2	12.3	14.2	16.0	17.4	18.9	20.1	21.4	22.5	23.6
11	1.96	4.3	7.8	11.2	13.4	15.5	17.3	19.0	20.5	22.0	23.3	24.5	25.7
12	2.05	4.7	8.4	12.3	14.6	16.9	18.9	20.8	22.4	24.0	25.4	26.8	28.1
13	2.13	5.1	9.5	13.3	15.9	18.3	20.5	22.5	24.3	26.0	27.5	29.0	30.4
14	2.21	5.5	10.2	14.3	17.1	19.7	22.1	24.2	26.1	28.0	29.6	31.3	32.8
15	2.30	5.9	10.8	15.3	18.5	21.3	23.9	26.1	28.3	30.2	32.1	33.8	35.3
20	2.66	7.9	14	20.5	24.7	28.5	31.9	34.9	37.8	40.3	42.7	45.1	47.2
30	3.25	11.8	21.1	30.5	37.0	42.7	47.8	52.4	56.6	60.5	64.2	67.6	70.9
40	3.76	15.6	28.0	40.5	49.4	57.0	63.7	69.8	75.4	80.7	85.5	90.2	94.6
50	4.28	19.5	35.3	50.5	61.50	71.00	79.50	87.00	94.00	101.00	107.00	112.50	118.00

Choosing the suitable nozzle is most important for output and smooth function of the high pressure cleaner:

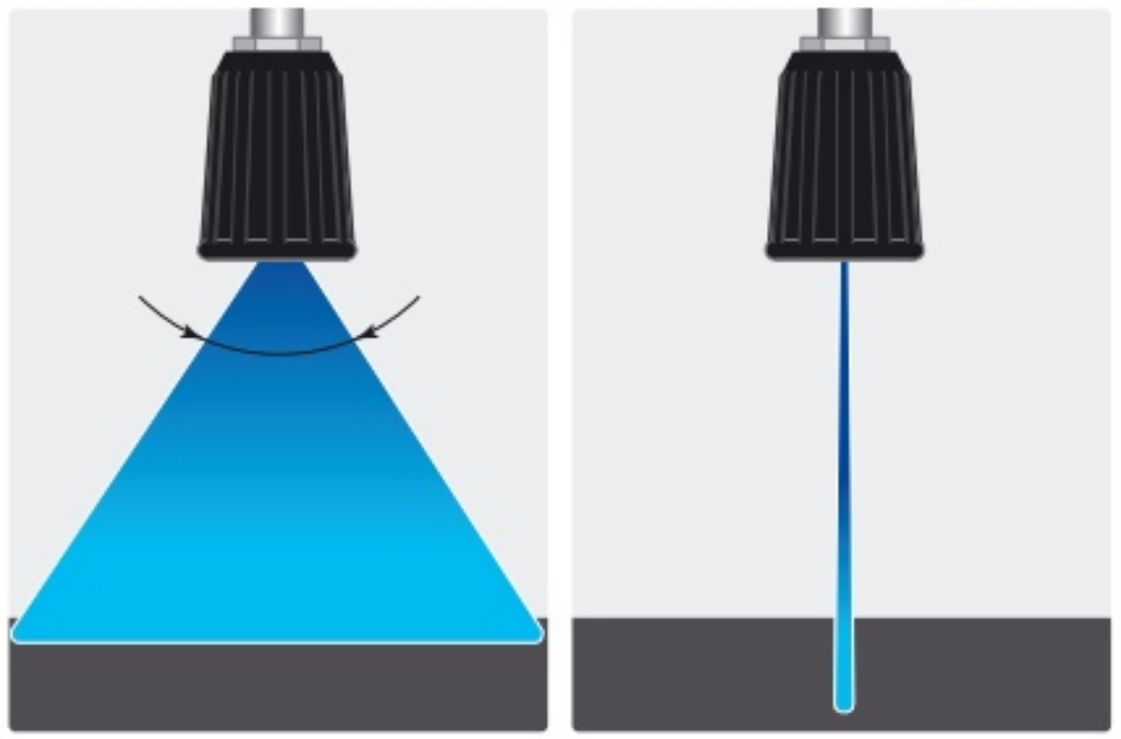
Nozzle too small = machine permanently switches into bypass or off.
Nozzle too wide = machine has a small output, lower pressure.

How to choose the suitable nozzle?
Attention: pressure and flow of the high pressure cleaner must be known
e.g. 15 l/min (900 l/h) - working pressure of 150 bar.

1. In the first line (pressure in bar) please go to column "150".
2. Follow column "150" down to find l/min: take "15.2" (nearest to 15).
3. Turn left in line "15.2" until the first column and stop at nozzle type "055".
4. The size you need is "055"

Important for excellent high pressure cleaning is the impact of the spray jet which is made up of 4 features.

water flow | water pressure | spray angle | spray distance



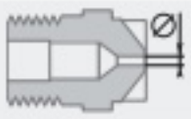
low impact = high surface efficiency

high impact = small surface efficiency

* hole diameter in mm

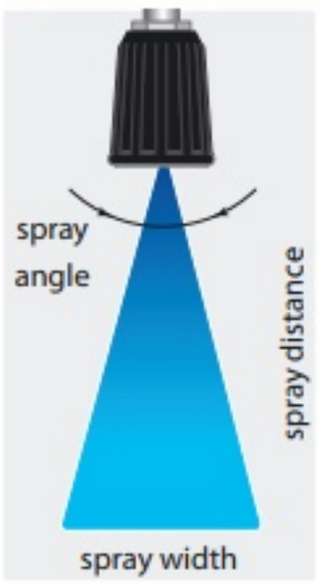
Further information about high pressure nozzles

Output in l/min depends on pressure in bar



	Pressure in bar											
	120	130	140	150	160	175	200	225	250	300	400	500
D	⌀	←	←	←	←	←	←	←	←	←	←	←	←
01	0.59	2.4	2.5	2.6	2.7	2.8	2.9	3.1	3.3	3.5	3.8	4.4	4.9
015	0.71	3.7	3.8	4.0	4.2	4.3	4.5	4.8	5.1	5.4	5.9	6.7	7.5
02	0.84	4.8	5.0	5.3	5.4	5.6	5.9	6.3	6.7	7.0	7.7	8.9	9.9
025	0.94	6.1	6.4	6.6	6.9	7.1	7.5	8.0	8.5	9.0	9.9	11.4	12.7
03	1.03	7.4	7.7	8.0	8.3	8.6	9.0	9.6	10.2	10.7	11.8	13.5	15.1
035	1.10	8.6	8.9	9.2	9.5	9.8	10.3	11.0	11.7	12.3	13.8	15.5	17.8
04	1.21	10.3	10.7	11.1	11.5	11.9	12.4	13.3	14.1	14.8	16.3	18.7	20.9
045	1.26	10.9	11.4	11.8	12.2	12.6	13.2	14.1	15.0	15.8	17.4	19.9	22.3
05	1.33	12.4	12.9	13.4	13.8	14.3	14.9	16.0	16.9	17.9	19.7	22.6	25.3
055	1.39	13.6	14.1	14.7	15.2	15.7	16.4	17.5	18.6	19.6	21.7	25.0	28.0
06	1.46	14.9	15.5	16.0	16.7	17.2	18.0	19.2	20.4	21.5	23.7	27.1	30.3
065	1.52	16.1	16.8	17.4	18.0	18.6	19.4	20.8	22.0	23.2	25.6	29.3	32.7
07	1.57	17.3	18.0	18.7	19.3	20.0	20.9	22.3	23.7	25.0	27.1	31.3	35.0
075	1.63	18.5	19.3	20.0	20.7	21.4	22.4	23.9	25.3	26.7	29.4	33.7	37.7
08	1.68	19.7	20.5	21.3	22.0	22.8	23.8	25.5	27.0	28.5	31.4	35.9	40.2
085	1.73	20.9	21.8	22.6	23.4	24.1	25.3	27.0	28.6	30.2	34.5	39.8	44.5
09	1.78	22.1	23.0	23.9	24.7	25.5	26.7	28.6	30.3	31.9	35.1	40.2	45.0
10	1.88	24.6	25.6	26.6	27.6	28.5	29.8	31.8	33.7	35.6	39.2	44.9	50.2
11	1.96	26.9	28.0	29.1	30.1	31.1	32.5	34.7	36.8	38.8	43.4	50.1	56.0
12	2.05	29.4	30.6	31.7	32.8	33.9	35.4	37.9	40.2	42.4	46.7	53.4	59.8
13	2.13	31.8	33.1	34.4	35.6	36.7	38.4	41.1	43.6	45.9	50.5	57.8	64.7
14	2.21	34.2	35.6	37.0	38.3	39.5	41.4	44.3	46.9	49.4	55.0	63.5	71.0
15	2.30	36.9	38.4	39.9	41.3	42.6	44.6	47.7	50.6	53.3	58.7	67.2	75.2
20	2.66	49.3	51.3	53.2	55.1	56.9	59.5	63.6	67.5	71.1	78.2	89.6	100.0
30	3.25	74.0	77.1	80.0	82.8	85.5	89.4	95.6	101.0	107.0	118.0	136.0	151.0
40	3.76	98.8	103.0	107.0	110.0	114.0	119.0	127.0	135.0	143.0	156.0	180.0	202.0
50	4.28	123.00	128.00	133.00	138.00	142.50	149.00	159.00	168.50	178.00	195.00	224.50	251.00

Spray width depending on spray angle and distance



Angle	Distance in cm										
°	1	2	3	5	7	10	20	30	50	70	100
5°	0.09	0.17	0.26	0.44	0.61	0.87	1.75	2.62	4.37	6.11	8.73
10°	0.17	0.35	0.52	0.87	1.22	1.75	3.50	5.25	8.75	12.25	17.50
15°	0.26	0.53	0.79	1.32	1.84	2.63	5.27	7.90	13.17	18.43	26.33
20°	0.35	0.71	1.06	1.76	2.47	3.53	7.05	10.58	17.63	24.69	35.27
25°	0.44	0.89	1.33	2.22	3.10	4.43	8.87	13.30	22.17	31.04	44.34
40°	0.73	1.46	2.18	3.64	5.10	7.28	14.56	21.84	36.40	50.96	72.79
65°	1.27	2.55	3.82	6.37	8.92	12.74	25.48	38.22	63.71	89.19	127.41
80°	1.68	3.36	5.03	8.39	11.75	16.78	33.56	50.35	83.91	117.47	167.82
110°	2.86	5.71	8.57	14.28	19.99	28.56	57.13	85.69	142.81	199.94	285.63

Symbols ⌀ diameter D nozzle ← flow