

PVC Schedule 80 IPS Plastic Pipe

(1120, 1220) C=150

psi Loss per 100 Feet of Pipe (psi/100 ft.)

Sizes 1/2" through 6" Flow 1 through 600 gpm

Size	1/2"		3/4"		1"		1 1/4"		1 1/2"		2"		2 1/2"		3"		4"		6"	
O.D.	0.840		1.050		1.315		1.660		1.900		2.375		2.875		3.500		4.500		6.625	
I.D.	0.546		0.742		0.957		1.278		1.500		1.939		2.323		2.900		3.826		5.761	
Wall Thk	0.147		0.154		0.179		0.191		0.200		0.218		0.276		0.300		0.337		0.432	
Flow gpm	Velocity fps	psi Loss	Velocity fps	psi Loss	Velocity fps	psi Loss	Velocity fps	psi Loss	Velocity fps	psi Loss	Velocity fps	psi Loss	Velocity fps	psi Loss	Velocity fps	psi Loss	Velocity fps	psi Loss	Velocity fps	psi Loss
1	1.37	0.81	0.74	0.18	0.45	0.05	0.25	0.01	0.18	0.01	0.11	0.00	0.08	0.00	0.05	0.00	0.03	0.00	0.01	0.00
2	2.74	2.92	1.48	0.66	0.89	0.19	0.50	0.05	0.36	0.02	0.22	0.01	0.15	0.00	0.10	0.00	0.06	0.00	0.02	0.00
3	4.11	6.18	2.23	1.39	1.34	0.40	0.75	0.10	0.54	0.05	0.33	0.01	0.23	0.01	0.15	0.00	0.08	0.00	0.04	0.00
4	5.48	10.52	2.97	2.37	1.78	0.69	1.00	0.17	0.73	0.08	0.43	0.02	0.30	0.01	0.19	0.00	0.11	0.00	0.05	0.00
5	6.85	15.90	3.71	3.57	2.23	1.04	1.25	0.25	0.91	0.12	0.54	0.03	0.38	0.01	0.24	0.00	0.14	0.00	0.06	0.00
6	8.22	22.27	4.45	5.01	2.68	1.45	1.50	0.36	1.09	0.16	0.65	0.05	0.45	0.02	0.29	0.01	0.17	0.00	0.07	0.00
7	9.59	29.62	5.19	6.66	3.12	1.93	1.75	0.47	1.27	0.22	0.76	0.06	0.53	0.03	0.34	0.01	0.20	0.00	0.09	0.00
8	10.96	37.92	5.94	8.53	3.57	2.47	2.00	0.61	1.45	0.28	0.87	0.08	0.61	0.03	0.39	0.01	0.22	0.00	0.10	0.00
9	12.33	47.16	6.68	10.60	4.01	3.07	2.25	0.75	1.63	0.35	0.98	0.10	0.68	0.04	0.44	0.01	0.25	0.00	0.11	0.00
10	13.70	57.30	7.42	12.88	4.46	3.74	2.50	0.91	1.82	0.42	1.09	0.12	0.76	0.05	0.49	0.02	0.28	0.00	0.12	0.00
11	15.07	68.35	8.16	15.37	4.91	4.46	2.75	1.09	2.00	0.50	1.20	0.14	0.83	0.06	0.53	0.02	0.31	0.01	0.14	0.00
12	16.44	80.29	8.90	18.05	5.35	5.23	3.00	1.28	2.18	0.59	1.30	0.17	0.91	0.07	0.58	0.02	0.33	0.01	0.15	0.00
14			10.39	24.01	6.24	6.96	3.50	1.70	2.54	0.78	1.52	0.22	1.06	0.09	0.68	0.03	0.39	0.01	0.17	0.00
16			11.87	30.74	7.14	8.91	4.00	2.18	2.90	1.00	1.74	0.29	1.21	0.12	0.78	0.04	0.45	0.01	0.20	0.00
18			13.36	38.22	8.03	11.08	4.50	2.71	3.27	1.24	1.96	0.36	1.36	0.15	0.87	0.05	0.50	0.01	0.22	0.00
20			14.84	46.45	8.92	13.47	5.00	3.30	3.63	1.51	2.17	0.43	1.51	0.18	0.97	0.06	0.56	0.02	0.25	0.00
22			16.32	55.40	9.81	16.06	5.50	3.93	3.99	1.80	2.39	0.52	1.67	0.21	1.07	0.07	0.61	0.02	0.27	0.00
24			17.81	65.08	10.70	18.87	6.00	4.62	4.36	2.12	2.61	0.61	1.82	0.25	1.17	0.09	0.67	0.02	0.30	0.00
26			19.29	75.47	11.60	21.88	6.50	5.36	4.72	2.46	2.82	0.70	1.97	0.29	1.26	0.10	0.73	0.03	0.32	0.00
28					12.49	25.10	7.00	6.14	5.08	2.82	3.04	0.81	2.12	0.34	1.36	0.11	0.78	0.03	0.34	0.00
30					13.38	28.51	7.50	6.98	5.45	3.20	3.26	0.92	2.27	0.38	1.46	0.13	0.84	0.03	0.37	0.00
35					15.61	37.92	8.75	9.28	6.35	4.26	3.80	1.22	2.65	0.51	1.70	0.17	0.98	0.04	0.43	0.01
40					17.84	48.55	10.00	11.88	7.26	5.45	4.35	1.56	3.03	0.65	1.94	0.22	1.12	0.06	0.49	0.01
45							11.25	14.78	8.17	6.78	4.89	1.94	3.41	0.81	2.19	0.27	1.26	0.07	0.55	0.01
50							12.51	17.96	9.08	8.24	5.43	2.36	3.78	0.98	2.43	0.33	1.40	0.09	0.62	0.01
55							13.76	21.42	9.99	9.83	5.98	2.82	4.16	1.17	2.67	0.40	1.53	0.10	0.68	0.01
60							15.01	25.16	10.89	11.54	6.52	3.31	4.54	1.37	2.91	0.47	1.67	0.12	0.74	0.02
65							16.26	29.18	11.80	13.38	7.06	3.84	4.92	1.59	3.16	0.54	1.81	0.14	0.80	0.02
70							17.51	33.47	12.71	15.35	7.61	4.40	5.30	1.83	3.40	0.62	1.95	0.16	0.86	0.02
75							18.76	38.02	13.62	17.44	8.15	5.00	5.68	2.08	3.64	0.71	2.09	0.18	0.92	0.03
80							20.01	42.84	14.52	19.65	8.69	5.64	6.06	2.34	3.89	0.80	2.23	0.21	0.98	0.03
85									15.43	21.99	9.24	6.31	6.43	2.62	4.13	0.89	2.37	0.23	1.05	0.03
90									16.34	24.44	9.78	7.01	6.81	2.91	4.37	0.99	2.51	0.26	1.11	0.04
95									17.25	27.01	10.32	7.75	7.19	3.22	4.61	1.09	2.65	0.28	1.17	0.04
100									18.16	29.70	10.87	8.52	7.57	3.54	4.86	1.20	2.79	0.31	1.23	0.04
110									19.97	35.42	11.95	10.16	8.33	4.22	5.34	1.43	3.07	0.37	1.35	0.05
120									13.04	11.93	9.08	4.95	5.83	1.68	3.35	0.44	1.48	0.06		
130									14.12	13.84	9.84	5.74	6.31	1.95	3.63	0.51	1.60	0.07		
140									15.21	15.87	10.60	6.59	6.80	2.24	3.91	0.58	1.72	0.08		
150									16.30	18.03	11.35	7.49	7.29	2.54	4.19	0.66	1.85	0.09		
160									17.38	20.32	12.11	8.44	7.77	2.87	4.47	0.74	1.97	0.10		
170									18.47	22.73	12.87	9.44	8.26	3.21	4.74	0.83	2.09	0.11		
180									19.56	25.27	13.63	10.49	8.74	3.56	5.02	0.93	2.22	0.13		
190											14.38	11.59	9.23	3.94	5.30	1.02	2.34	0.14		
200											15.14	12.75	9.71	4.33	5.58	1.12	2.46	0.15		
225											17.03	15.85	10.93	5.39	6.28	1.40	2.77	0.19		
250											18.92	19.26	12.14	6.54	6.98	1.70	3.08	0.23		
275											20.82	22.97	13.36	7.81	7.67	2.03	3.38	0.28		
300													14.57	9.17	8.37	2.38	3.69	0.33		
325													15.79	10.63	9.07	2.76	4.00	0.38		
350													17.00	12.20	9.77	3.17	4.31	0.43		
375													18.21	13.86	10.46	3.60	4.62	0.49		
400													19.43	15.61	11.16	4.05	4.92	0.55		
425															11.86	4.54	5.23	0.62		
450															12.56	5.04	5.54	0.69		
475															13.26	5.57	5.85	0.76		
500															13.95	6.13	6.15	0.84		
550															15.35	7.31	6.77	1.00		
600															16.74	8.58	7.38	1.17		

Note: Dark shaded area of chart indicates velocities over 5' per second. Use with caution

Velocity of flow values are computed from the general equation  $V = .408 \frac{Q}{d^2}$

Friction pressure loss values are computed from the equation:  $[hf = 0.2083 \left(\frac{100}{C}\right)^{1.852} \frac{Q^{1.852}}{d^{4.866}}] \times 4.33$  for psi loss per 100' of pipe