

Friction Loss Characteristics

Schedule 80 IPS PVC Plastic Pipe

(1120,1220) C=150
 PRESSURE LOSS PER 100 FEET OF PIPE (PSI) SIZES ½" THRU 3"

Nominal Size	½"	¾"	1"	1¼"	1½"	2"	2½"	3"	Nominal Size								
Pipe ID	0.546	0.742	0.957	1.278	1.500	1.939	2.323	2.900	Pipe ID								
Pipe OD	0.840	1.050	1.315	1.660	1.900	2.375	2.875	3.500	Pipe OD								
Wall Thick	0.147	0.154	0.179	0.191	0.200	0.218	0.176	0.300	Wall Thick								
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	Flow GPM				
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	1				
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	2				
3	4.11	6.19	2.22	1.39	1.34	0.40	0.75	0.10	0.54	0.05	0.33	0.01	3				
4	5.47	10.54	2.96	2.37	1.78	0.69	1.00	0.17	0.73	0.08	0.43	0.02	4				
5	6.84	15.94	3.71	3.58	2.23	1.04	1.25	0.25	0.91	0.12	0.54	0.03	5				
6	8.21	22.34	4.45	5.02	2.67	1.46	1.50	0.36	1.09	0.16	0.65	0.05	6				
7	9.58	29.72	5.19	6.68	3.12	1.94	1.75	0.47	1.27	0.22	0.76	0.06	7				
8	10.95	38.05	5.93	8.55	3.56	2.48	2.00	0.61	1.45	0.28	0.87	0.08	8				
9	12.32	47.33	6.67	10.64	4.01	3.08	2.25	0.75	1.63	0.35	0.98	0.10	9				
10	13.69	57.53	7.41	12.93	4.45	3.75	2.50	0.92	1.81	0.42	1.09	0.12	10				
11	15.05	68.63	8.15	15.43	4.90	4.47	2.75	1.09	1.99	0.50	1.19	0.14	11				
12	16.42	80.63	8.89	18.13	5.35	5.26	3.00	1.29	2.18	0.59	1.30	0.17	12				
13	17.79	93.52	9.63	21.02	5.79	6.09	3.25	1.49	2.36	0.68	1.41	0.20	13				
14	19.16	107.3	10.37	24.12	6.24	6.99	3.50	1.71	2.54	0.78	1.52	0.23	14				
15			11.12	27.40	6.68	7.94	3.75	1.94	2.72	0.89	1.63	0.26	15				
16			11.86	30.88	7.13	8.95	4.00	2.19	2.90	1.01	1.74	0.29	16				
17			12.60	34.55	7.57	10.02	4.25	2.45	3.08	1.12	1.84	0.32	17				
18			13.34	38.41	8.02	11.14	4.50	2.73	3.26	1.25	1.95	0.36	18				
19			14.08	42.45	8.46	12.31	4.75	3.01	3.45	1.38	2.06	0.40	19				
20			14.82	46.69	8.91	13.53	5.00	3.31	3.63	1.52	2.17	0.44	20				
22			16.30	55.70	9.80	16.15	5.50	3.95	3.99	1.81	2.39	0.52	22				
24			17.79	65.44	10.69	18.97	6.00	4.64	4.35	2.13	2.60	0.61	24				
25			18.53	70.58	11.14	20.46	6.25	5.01	4.53	2.30	2.71	0.66	25				
26					11.58	22.00	6.49	5.39	4.71	2.47	2.82	0.71	26				
28					12.47	25.24	6.99	6.18	5.08	2.83	3.04	0.81	28				
30					13.36	28.68	7.49	7.02	5.44	3.22	3.26	0.92	30				
32					14.26	32.32	7.99	7.91	5.80	3.63	3.47	1.04	32				
34					15.15	36.16	8.49	8.85	6.17	4.06	3.69	1.16	34				
35					15.59	38.16	8.74	9.34	6.35	4.28	3.80	1.23	35				
36					16.04	40.20	8.99	9.84	6.53	4.51	3.91	1.29	36				
38					16.93	44.43	9.49	10.88	6.89	4.99	4.12	1.43	38				
40					17.82	48.86	9.99	11.96	7.25	5.49	4.34	1.57	40				
42					18.71	53.48	10.49	13.09	7.62	6.00	4.56	1.72	42				
44							10.99	14.27	7.98	6.54	4.77	1.88	44				
45							11.24	14.87	8.16	6.82	4.88	1.96	45				
46							11.49	15.49	8.34	7.11	4.99	2.04	46				
48							11.99	16.76	8.70	7.69	5.21	2.20	48				
50							12.49	18.08	9.07	8.29	5.43	2.38	50				
55							13.74	21.57	9.97	9.89	5.97	2.84	55				
60							14.99	25.34	10.88	11.62	6.51	3.33	60				
65							16.24	29.39	11.79	13.48	7.05	3.87	65				
70							17.49	33.71	12.69	15.46	7.60	4.43	70				
75							18.74	38.31	13.60	17.57	8.14	5.04	75				
80									14.51	19.80	8.68	5.68	80				
85									15.41	22.16	9.22	6.35	85				
90									16.32	24.63	9.77	7.06	90				
95									17.23	27.22	10.31	7.81	95				
100									18.13	29.94	10.85	8.58	100				
110											11.94	10.24	8.32	4.25	5.34	1.44	110
120											13.02	12.03	9.07	4.99	5.82	1.70	120
130											14.11	13.95	9.83	5.79	6.31	1.97	130
140											15.19	16.01	10.58	6.64	6.79	2.26	140
150											16.28	18.19	11.34	7.55	7.28	2.57	150
160											17.36	20.50	12.10	8.51	7.76	2.89	160
170											18.45	22.93	12.85	9.52	8.25	3.23	170
180													13.61	10.58	8.73	3.60	180
190													14.37	11.70	9.22	3.97	190
200													15.12	12.86	9.70	4.37	200
225													17.01	16.00	10.92	5.44	225
250													18.90	19.45	12.13	6.61	250
275															13.34	7.88	275
300															14.55	9.26	300
325															15.77	10.74	325
350															16.98	12.32	350
375															18.19	14.00	375

Shaded area represents velocities over 5 fps. Use with caution where water hammer is a concern.