

Friction Loss Characteristics

Class 160 IPS U.S. PVC Plastic Pipe

(1120,1220) C=150 SDR 26

PRESSURE LOSS PER 100 FEET OF PIPE (PSI) SIZES 1" THRU 5"

Nominal Size Pipe ID Pipe OD Wall Thick	1"	1¼"	1½"	2"	2½"	3"	4"	5"	Nominal Size Pipe ID Pipe OD Wall Thick		
Flow GPM	Velocity FPS	PSI LOSS	Velocity FPS	PSI LOSS	Velocity FPS	PSI LOSS	Velocity FPS	PSI LOSS	Velocity FPS	PSI LOSS	Flow GPM
1	0.29	0.02	0.17	0.01	0.13	0.00					1
2	0.57	0.06	0.35	0.02	0.27	0.01					2
3	0.86	0.14	0.52	0.04	0.40	0.02					3
4	1.14	0.23	0.70	0.07	0.53	0.04	0.23	0.00			4
5	1.43	0.35	0.87	0.11	0.66	0.05	0.42	0.02			5
6	1.71	0.49	1.04	0.15	0.80	0.08	0.51	0.03	0.23	0.00	6
7	2.00	0.66	1.22	0.20	0.93	0.10	0.59	0.03	0.41	0.01	7
8	2.29	0.84	1.39	0.25	1.06	0.13	0.68	0.04	0.46	0.02	8
9	2.57	1.05	1.56	0.31	1.19	0.16	0.76	0.05	0.52	0.02	9
10	2.86	1.27	1.74	0.38	1.33	0.20	0.85	0.07	0.58	0.03	10
11	3.14	1.52	1.91	0.45	1.46	0.23	0.93	0.08	0.64	0.03	11
12	3.43	1.78	2.09	0.53	1.59	0.28	1.02	0.09	0.69	0.04	12
13	3.71	2.07	2.26	0.62	1.72	0.32	1.10	0.11	0.75	0.04	13
14	4.00	2.37	2.43	0.71	1.86	0.37	1.19	0.12	0.81	0.05	14
15	4.29	2.70	2.61	0.80	1.99	0.42	1.27	0.14	0.87	0.06	15
16	4.57	3.04	2.78	0.91	2.12	0.47	1.36	0.16	0.93	0.06	16
17	4.86	3.40	2.96	1.01	2.25	0.53	1.44	0.18	0.98	0.07	17
18	5.14	3.78	3.13	1.13	2.39	0.58	1.53	0.20	1.04	0.08	18
19	5.43	4.18	3.30	1.25	2.52	0.65	1.60	0.22	1.10	0.09	19
20	5.71	4.59	3.48	1.37	2.65	0.71	1.70	0.24	1.16	0.09	20
22	6.29	5.48	3.82	1.64	2.92	0.85	1.87	0.29	1.27	0.11	22
24	6.86	6.44	4.17	1.92	3.18	0.99	2.04	0.34	1.39	0.13	24
25	7.14	6.94	4.35	2.07	3.32	1.07	2.12	0.36	1.45	0.14	25
26	7.43	7.47	4.52	2.23	3.45	1.15	2.21	0.39	1.50	0.15	26
28	8.00	8.56	4.87	2.56	3.71	1.32	2.38	0.45	1.62	0.18	28
30	8.57	9.73	5.22	2.91	3.98	1.50	2.55	0.51	1.74	0.20	30
32	9.14	10.97	5.56	3.27	4.24	1.69	2.71	0.57	1.85	0.23	32
34	9.71	12.27	5.91	3.66	4.51	1.90	2.88	0.64	1.97	0.25	34
35	10.00	12.95	6.08	3.87	4.64	2.00	2.97	0.67	2.03	0.27	35
36	10.29	13.64	6.26	4.07	4.77	2.11	3.05	0.71	2.08	0.28	36
38	10.86	15.08	6.61	4.50	5.04	2.33	3.22	0.79	2.20	0.31	38
40	11.43	16.58	6.95	4.95	5.30	2.56	3.39	0.86	2.32	0.34	40
42	12.00	18.15	7.30	5.42	5.57	2.80	3.56	0.95	2.43	0.37	42
44	12.57	19.78	7.65	5.91	5.84	3.06	3.73	1.03	2.55	0.41	44
45	12.86	20.62	7.82	6.16	5.90	3.19	3.82	1.07	2.60	0.42	45
46	13.14	21.48	8.00	6.41	6.10	3.32	3.90	1.12	2.66	0.44	46
48	13.71	23.24	8.34	6.94	6.37	3.59	4.07	1.21	2.78	0.48	48
50	14.29	25.07	8.69	7.48	6.63	3.87	4.24	1.31	2.89	0.52	50
55	15.71	29.90	9.56	8.93	7.29	4.62	4.67	1.56	3.10	0.61	55
60	17.14	35.13	10.43	10.49	7.96	5.43	5.09	1.83	3.47	0.72	60
65	18.57	40.75	11.30	12.16	8.62	6.30	5.51	2.12	3.76	0.84	65
70			12.17	13.95	9.28	7.22	5.94	2.44	4.05	0.96	70
75			13.04	15.86	9.95	8.21	6.36	2.77	4.34	1.09	75
80			13.91	17.87	10.61	9.25	6.79	3.12	4.63	1.23	80
85			14.78	19.99	11.27	10.35	7.21	3.49	4.92	1.38	85
90			15.65	22.23	11.94	11.50	7.64	3.88	5.21	1.53	90
95			16.51	24.57	12.60	12.72	8.06	4.29	5.50	1.69	95
100			17.38	27.01	13.26	13.98	8.48	4.72	5.79	1.86	100
110			19.12	32.23	14.59	16.68	9.33	5.63	6.37	2.22	110
120					15.91	19.60	10.18	6.61	6.95	2.61	120
130					17.24	22.73	11.03	7.67	7.52	3.02	130
140					18.57	26.08	11.88	8.79	8.10	3.47	140
150					19.89	29.63	12.73	9.99	8.68	3.94	150
160							13.57	11.26	9.26	4.44	160
170							14.42	12.60	9.84	4.97	170
180							15.27	14.01	10.42	5.52	180
190							16.12	15.48	11.00	6.11	190
200							16.97	17.02	11.58	6.72	200
225							19.09	21.17	13.02	8.35	225
250									14.47	10.15	250
275									15.92	12.11	275
300									17.36	14.23	300
325									18.81	16.50	325
350									13.69	7.29	350
375									14.67	8.29	375
400									15.64	9.34	400
425									16.62	10.45	425
450									17.60	11.62	450
475									18.58	12.84	475
500									11.82	4.15	500

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