

Friction Loss Characteristics

Class 315 IPS PVC Plastic Pipe

(1120,1220) C=150 SDR 13.5
 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	0.716	0.894	1.121	1.414	1.618	2.023	2.449	2.982	Pipe ID				
Pipe OD	0.840	1.050	1.315	1.660	1.900	2.375	2.875	3.500	Pipe OD				
Wall Thick	0.062	0.078	0.097	0.123	0.141	0.176	0.213	0.259	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	0.80	0.22	0.51	0.07	0.32	0.02	0.20	0.01	0.16	0.00			1
2	1.59	0.78	1.02	0.27	0.65	0.09	0.41	0.03	0.31	0.01	0.20	0.00	2
3	2.39	1.65	1.53	0.56	0.97	0.19	0.61	0.06	0.47	0.03	0.30	0.01	3
4	3.18	2.82	2.04	0.96	1.30	0.32	0.82	0.10	0.62	0.05	0.40	0.02	4
5	3.98	4.26	2.55	1.45	1.62	0.48	1.02	0.16	0.78	0.08	0.50	0.03	5
6	4.78	5.97	3.06	2.03	1.95	0.67	1.22	0.22	0.94	0.11	0.60	0.04	6
7	5.57	7.95	3.57	2.70	2.27	0.90	1.43	0.29	1.09	0.15	0.70	0.05	7
8	6.37	10.18	4.08	3.45	2.60	1.15	1.63	0.37	1.25	0.19	0.80	0.06	8
9	7.16	12.66	4.59	4.30	2.92	1.43	1.84	0.46	1.40	0.24	0.90	0.08	9
10	7.96	15.38	5.10	5.22	3.25	1.74	2.04	0.56	1.56	0.29	1.00	0.10	10
11	8.75	18.35	5.62	6.23	3.57	2.07	2.24	0.67	1.71	0.35	1.10	0.12	11
12	9.55	21.56	6.13	7.32	3.90	2.43	2.45	0.79	1.87	0.41	1.20	0.14	12
13	10.35	25.01	6.64	8.49	4.22	2.82	2.65	0.91	2.03	0.47	1.30	0.16	13
14	11.14	28.69	7.15	9.74	4.55	3.24	2.86	1.05	2.18	0.54	1.40	0.18	14
15	11.94	32.60	7.66	11.07	4.87	3.68	3.06	1.19	2.34	0.62	1.50	0.21	15
16	12.73	36.73	8.17	12.47	5.19	4.15	3.26	1.34	2.49	0.70	1.60	0.23	16
17	13.53	41.10	8.68	13.95	5.52	4.64	3.47	1.50	2.65	0.78	1.69	0.26	17
18	14.33	45.69	9.19	15.51	5.84	5.16	3.67	1.67	2.81	0.86	1.79	0.29	18
19	15.12	50.50	9.70	17.14	6.17	5.70	3.88	1.84	2.96	0.96	1.89	0.32	19
20	15.92	55.53	10.21	18.85	6.49	6.27	4.08	2.03	3.12	1.05	1.99	0.35	20
22	17.51	66.25	11.23	22.49	7.14	7.48	4.49	2.42	3.43	1.25	2.19	0.42	22
24	19.10	77.84	12.25	26.42	7.79	8.79	4.90	2.84	3.74	1.47	2.39	0.50	24
25			12.76	28.50	8.12	9.48	5.10	3.06	3.90	1.59	2.49	0.54	25
26			13.27	30.65	8.44	10.19	5.31	3.29	4.05	1.71	2.59	0.58	26
28			14.29	35.15	9.09	11.69	5.71	3.78	4.36	1.96	2.79	0.66	28
30			15.31	39.95	9.74	13.28	6.12	4.29	4.68	2.23	2.99	0.75	30
32			16.34	45.02	10.39	14.97	6.53	4.84	4.99	2.51	3.19	0.85	32
34			17.36	50.37	11.04	16.75	6.94	5.41	5.30	2.81	3.39	0.95	34
35			17.87	53.14	11.36	17.67	7.14	5.71	5.45	2.96	3.49	1.00	35
36			18.38	55.99	11.69	18.62	7.35	6.02	5.61	3.12	3.59	1.05	36
38			19.40	61.89	12.34	20.58	7.75	6.65	5.92	3.45	3.79	1.16	38
40					12.99	22.63	8.16	7.31	6.23	3.79	3.99	1.28	40
42					13.64	24.77	8.57	8.00	6.55	4.15	4.19	1.40	42
44					14.29	27.00	8.98	8.72	6.86	4.53	4.39	1.53	44
45					14.61	28.15	9.18	9.09	7.01	4.72	4.49	1.59	45
46					14.94	29.32	9.39	9.47	7.17	4.92	4.59	1.66	46
48					15.58	31.72	9.79	10.25	7.48	5.32	4.79	1.79	48
50					16.23	34.21	10.20	11.05	7.79	5.74	4.98	1.93	50
55					17.86	40.82	11.22	13.19	8.57	6.84	5.48	2.31	55
60					19.48	47.95	12.24	15.49	9.35	8.04	5.98	2.71	60
65							13.26	17.97	10.13	9.33	6.48	3.14	65
70							14.28	20.61	10.91	10.70	6.98	3.61	70
75							15.30	23.42	11.69	12.16	7.48	4.10	75
80							16.32	26.39	12.47	13.70	7.98	4.62	80
85							17.35	29.53	13.25	15.33	8.47	5.17	85
90							18.37	32.83	14.03	17.04	8.97	5.75	90
95							19.39	36.28	14.81	18.83	9.47	6.35	95
100									15.58	20.71	9.97	6.98	100
110									17.14	24.71	10.97	8.33	110
120									18.70	29.03	11.96	9.79	120
130									12.96	11.35	8.84	4.48	130
140									13.96	13.02	9.52	5.14	140
150									14.95	14.80	10.20	5.84	150
175									17.45	19.69	11.90	7.77	175
200									19.94	25.21	13.61	9.95	200
225											15.31	12.37	225
250											17.01	15.04	250
275											18.71	17.94	275
300													300
325													325
350													350
400													400

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