

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 6" THRU 12"

Nominal Size Pipe ID Pipe OD Wall Thick	6"		8"		10"		12"		Nominal Size Pipe ID Pipe OD Wall Thick	8"		10"		12"	
	6.115		7.961		9.924		11.770		7.961		9.924		11.770		
	6.625		8.625		10.750		12.750		8.625		10.750		12.750		
	0.225		0.332		0.413		0.490		0.332		0.413		0.490		
Flow GPM	Velocity FPS	PSI LOSS	Velocity FPS	PSI LOSS	Velocity FPS	PSI LOSS	Velocity FPS	PSI LOSS	Flow GPM	Velocity FPS	PSI LOSS	Velocity FPS	PSI LOSS	Velocity FPS	PSI LOSS
40	0.44	0.01							1850	11.91	1.98	7.66	0.68	5.45	0.29
45	0.49	0.01							1900	12.23	2.08	7.87	0.71	5.60	0.31
50	0.55	0.01							1950	12.55	2.18	8.08	0.75	5.74	0.32
55	0.60	0.01							2000	12.88	2.28	8.29	0.78	5.89	0.34
60	0.65	0.01							2050	13.20	2.39	8.49	0.82	6.04	0.36
65	0.71	0.01							2100	13.52	2.50	8.70	0.85	6.18	0.37
70	0.76	0.02	0.45	0.00					2150	13.84	2.61	8.91	0.89	6.33	0.39
75	0.82	0.02	0.48	0.01					2200	14.16	2.72	9.11	0.93	6.48	0.41
80	0.87	0.02	0.52	0.01					2250	14.48	2.84	9.32	0.97	6.63	0.42
85	0.93	0.02	0.55	0.01					2300	14.81	2.96	9.53	1.01	6.77	0.44
90	0.98	0.03	0.58	0.01					2350	15.13	3.08	9.74	1.05	6.92	0.46
95	1.04	0.03	0.61	0.01					2400	15.45	3.20	9.94	1.09	7.07	0.48
100	1.09	0.03	0.64	0.01					2450	15.77	3.32	10.15	1.14	7.22	0.50
110	1.20	0.04	0.71	0.01					2500	16.09	3.45	10.36	1.18	7.36	0.51
120	1.31	0.04	0.77	0.01					2550	16.42	3.58	10.56	1.22	7.51	0.53
130	1.42	0.05	0.84	0.01	0.54	0.00			2600	16.74	3.71	10.77	1.27	7.66	0.55
140	1.53	0.06	0.90	0.02	0.58	0.01			2650	17.06	3.84	10.98	1.32	7.80	0.57
150	1.64	0.07	0.97	0.02	0.62	0.01			2700	17.38	3.98	11.19	1.36	7.95	0.59
160	1.75	0.08	1.03	0.02	0.66	0.01			2750	17.70	4.12	11.39	1.41	8.10	0.61
170	1.85	0.09	1.09	0.02	0.70	0.01			2800	18.03	4.26	11.60	1.46	8.25	0.64
180	1.96	0.10	1.16	0.03	0.75	0.01			2850	18.35	4.40	11.81	1.51	8.39	0.66
190	2.07	0.11	1.22	0.03	0.79	0.01			2900	18.67	4.54	12.01	1.55	8.54	0.68
200	2.18	0.12	1.29	0.03	0.83	0.01	0.59	0.00	2950	18.99	4.69	12.22	1.60	8.69	0.70
225	2.45	0.14	1.45	0.04	0.93	0.01	0.66	0.01	3000	19.31	4.84	12.43	1.66	8.84	0.72
250	2.73	0.18	1.61	0.05	1.04	0.02	0.74	0.01	3050	19.63	4.99	12.64	1.71	8.98	0.74
275	3.00	0.21	1.77	0.06	1.14	0.02	0.81	0.01	3100	19.96	5.14	12.84	1.76	9.13	0.77
300	3.27	0.25	1.93	0.07	1.24	0.02	0.88	0.01	3150			13.05	1.81	9.28	0.79
325	3.55	0.28	2.09	0.08	1.35	0.03	0.96	0.01	3200			13.26	1.87	9.42	0.81
350	3.82	0.33	2.25	0.09	1.45	0.03	1.03	0.01	3250			13.46	1.92	9.57	0.84
375	4.09	0.37	2.41	0.10	1.55	0.04	1.10	0.02	3300			13.67	1.97	9.72	0.86
400	4.36	0.42	2.58	0.12	1.66	0.04	1.18	0.02	3350			13.88	2.03	9.87	0.89
425	4.64	0.47	2.74	0.13	1.76	0.04	1.25	0.02	3400			14.09	2.09	10.01	0.91
450	4.91	0.52	2.90	0.14	1.86	0.05	1.33	0.02	3450			14.29	2.14	10.16	0.93
475	5.18	0.58	3.06	0.16	1.97	0.05	1.40	0.02	3500			14.50	2.20	10.31	0.96
500	5.46	0.63	3.22	0.18	2.07	0.06	1.47	0.03	3550			14.71	2.26	10.46	0.99
550	6.00	0.75	3.54	0.21	2.28	0.07	1.62	0.03	3600			14.91	2.32	10.60	1.01
600	6.55	0.89	3.86	0.25	2.49	0.08	1.77	0.04	3700			15.33	2.44	10.90	1.06
650	7.09	1.03	4.18	0.28	2.69	0.10	1.91	0.04	3800			15.74	2.56	11.19	1.12
700	7.64	1.18	4.51	0.33	2.90	0.11	2.06	0.05	3900			16.16	2.69	11.49	1.17
750	8.18	1.34	4.83	0.37	3.11	0.13	2.21	0.06	4000			16.57	2.82	11.78	1.23
800	8.73	1.51	5.15	0.42	3.31	0.14	2.36	0.06	4100			16.99	2.95	12.08	1.29
850	9.27	1.69	5.47	0.47	3.52	0.16	2.50	0.07	4200			17.40	3.09	12.37	1.35
900	9.82	1.88	5.79	0.52	3.73	0.18	2.65	0.08	4300			17.81	3.22	12.66	1.41
1000	10.91	2.28	6.44	0.63	4.14	0.22	2.95	0.09	4400			18.23	3.36	12.96	1.47
1050	11.46	2.50	6.76	0.69	4.35	0.24	3.09	0.10	4500			18.64	3.51	13.25	1.53
1100	12.00	2.72	7.08	0.75	4.56	0.26	3.24	0.11	4600			19.06	3.65	13.55	1.59
1150	12.55	2.96	7.40	0.82	4.76	0.28	3.39	0.12	4700			19.47	3.80	13.84	1.66
1200	13.09	3.20	7.73	0.89	4.97	0.30	3.53	0.13	4800			19.89	3.95	14.14	1.72
1250	13.64	3.45	8.05	0.96	5.18	0.33	3.68	0.14	4900					14.43	1.79
1300	14.18	3.71	8.37	1.03	5.39	0.35	3.83	0.15	5000					14.73	1.86
1350	14.73	3.98	8.69	1.10	5.59	0.38	3.98	0.16	5100					15.02	1.93
1400	15.28	4.26	9.01	1.18	5.80	0.40	4.12	0.18	5200					15.31	2.00
1450	15.82	4.54	9.33	1.26	6.01	0.43	4.27	0.19	5300					15.61	2.07
1500	16.37	4.84	9.66	1.34	6.21	0.46	4.42	0.20	5400					15.90	2.14
1550	16.91	5.14	9.98	1.42	6.42	0.49	4.56	0.21	5600					16.49	2.29
1600	17.46	5.45	10.30	1.51	6.63	0.52	4.71	0.23	5800					17.08	2.45
1650	18.00	5.77	10.62	1.60	6.84	0.55	4.86	0.24	6000					17.67	2.60
1700	18.55	6.10	10.94	1.69	7.04	0.58	5.01	0.25	6200					18.26	2.77
1750	19.09	6.44	11.27	1.78	7.25	0.61	5.15	0.27	6400					18.85	2.94
1800	19.64	6.78	11.59	1.88	7.46	0.64	5.30	0.28	6600					19.44	3.11

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