

Tech Bulletin

Friction Loss In Water Hose PSI Per 100 Foot Length Straight – Smooth Bore

Flow in U.S. Gal. Per Min.	Internal Diameter Of Hose In Inches														
	1/2	5/8	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6	8	10	12
1	1.41														
2	5.09	1.72	0.71												
5	27.7	9.36	3.85	0.95	0.32	0.13									
10	100.0	33.7	13.9	3.42	1.15	0.45	0.12								
15		71.4	29.4	7.24	2.44	1.0	0.25	0.08							
20		122.0	50.0	12.3	4.16	1.71	0.42	0.14							
25			75.6	18.6	6.28	2.59	0.64	0.21							
30			106.0	26.1	8.8	3.62	0.89	0.30	0.12						
35			141.0	34.7	11.7	4.82	1.19	0.40	0.16						
40				44.4	15.0	6.17	1.52	0.51	0.21						
45				55.3	18.6	7.67	1.89	0.64	0.26						
50				67.1	22.7	9.32	2.3	0.77	0.32						
60				94.1	31.7	13.1	3.22	1.09	0.45						
70				125.0	42.2	17.4	4.28	1.44	0.59						
80					54.0	22.2	5.48	1.85	0.76						
90					67.2	27.7	6.81	2.3	0.95	0.23					
100					81.7	33.6	8.28	2.79	1.15	0.28					
125					123.0	50.8	12.5	4.22	1.74	0.43					
150						71.1	17.5	5.91	2.43	0.60	0.20				
175						94.6	23.3	7.86	3.24	0.80	0.27				
200						121.0	29.8	10.1	4.14	1.02	0.34				
225							37.1	12.5	5.15	1.27	0.43				
250							45.1	15.2	6.26	1.54	0.52				
275							53.8	18.1	7.47	1.84	0.62				
300							63.2	21.3	8.77	2.16	0.73	0.30			
350							84.0	28.3	11.7	2.87	0.97	0.40			
400							108.0	36.3	14.9	3.68	1.24	0.51			
450								45.1	18.6	4.57	1.54	0.64			
500								54.8	22.6	5.56	1.88	0.77	0.19		
600								76.8	31.6	7.79	2.63	1.08	0.27		
700								102.0	42.1	10.4	3.49	1.44	0.35	0.12	
800								131.0	53.8	13.3	4.47	1.84	0.45	0.15	
1000									81.4	20.0	6.76	2.78	0.69	0.23	0.1

Note: Friction loss can vary by 20% due to temperature. Bends can increase loss by 50%.

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