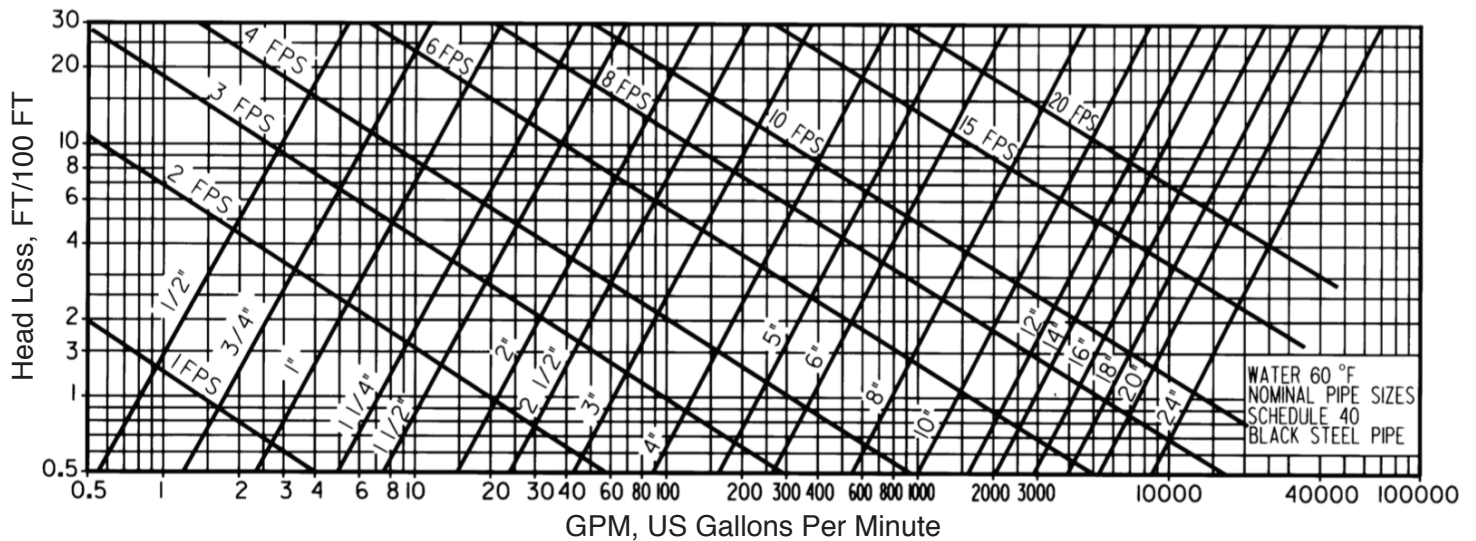
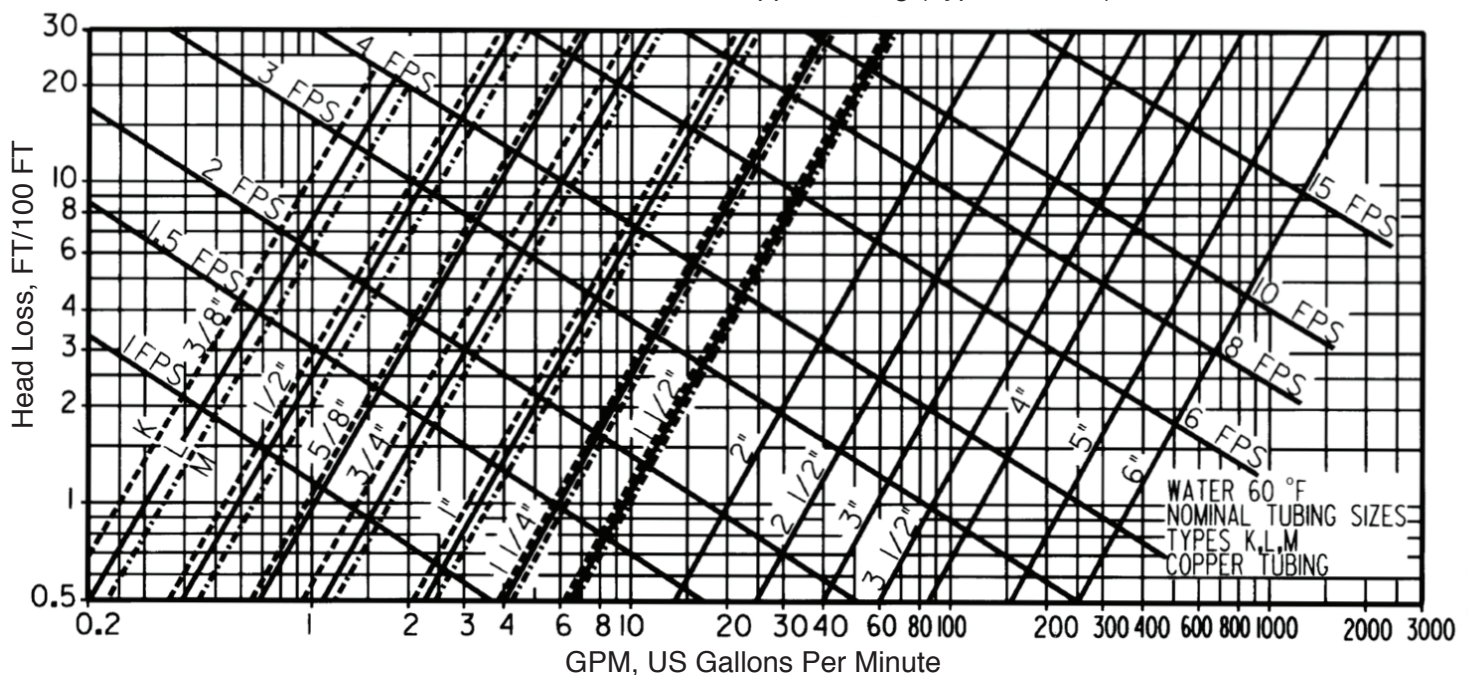


Hot and Chilled Water Pipe Sizing

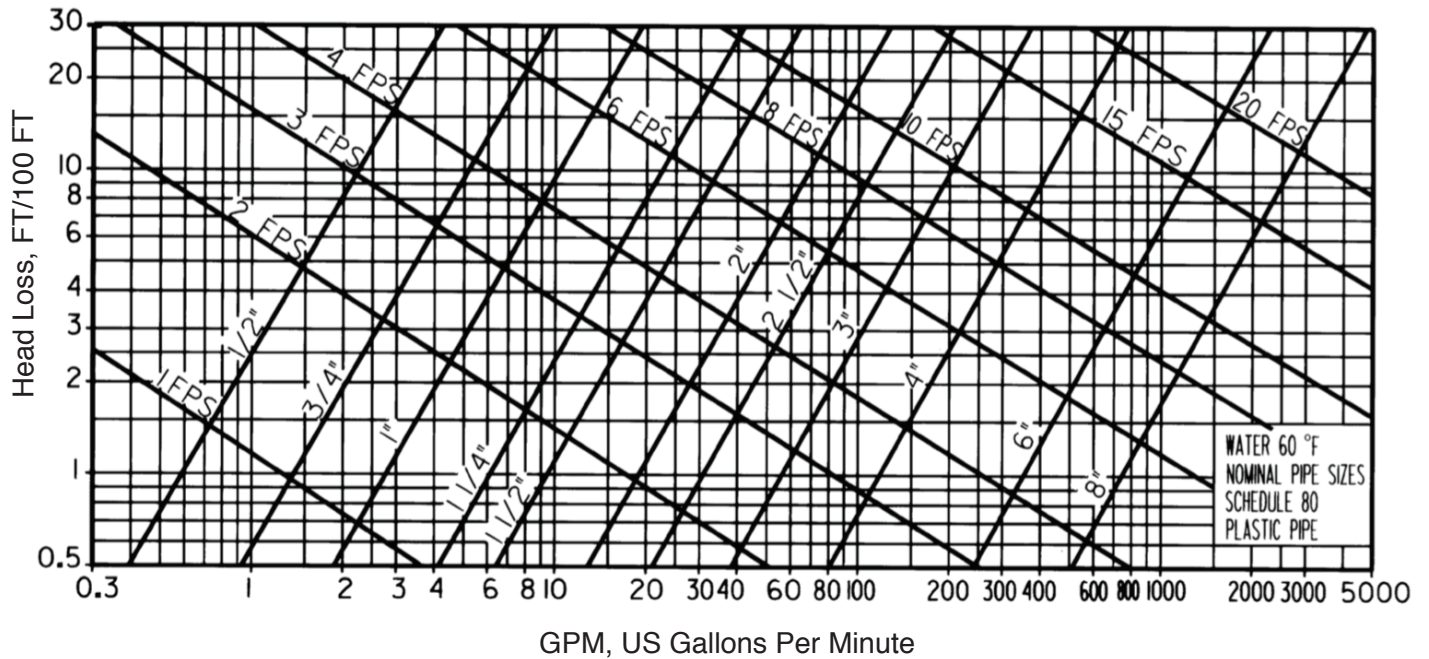
Friction Loss for Water in Commercial Steel Pipe (Schedule 40)



Friction Loss for Water in Copper Tubing (Types K, L, M)



Friction Loss for Water in Plastic Pipe (Schedule 80)



Pipe Sizing Chart

			Standard Steel Pipe				Type L Copper Tube			
Nominal Pipe Size		Schedule No.	Inside Diameter		Volume		Inside Diameter		Volume	
in.	(mm)		in.	(mm)	gal/ft	(L/m)	in.	(mm)	gal/ft	(L/m)
3/8	(10)	—	—	—	—	—	0.430	(1.09)	0.0075	(0.09)
1/2	(15)	40	0.622	(1.58)	0.0157	(0.19)	0.545	(1.38)	0.0121	(0.15)
5/8	(16)	—	—	—	—	—	0.666	(1.69)	0.0181	(0.22)
3/4	(20)	40	0.824	(2.09)	0.0277	(0.34)	0.785	(1.99)	0.0251	(0.31)
1	(25)	40	1.049	(2.66)	0.0449	(0.56)	1.025	(2.60)	0.0429	(0.53)
1 1/4	(32)	40	1.380	(3.50)	0.0779	(0.97)	1.265	(3.21)	0.0653	(0.81)
1 1/2	(40)	40	1.610	(4.09)	0.106	(1.32)	1.505	(3.82)	0.0924	(1.15)
2	(50)	40	2.067	(5.25)	0.174	(2.16)	1.985	(5.04)	0.161	(2.00)
2 1/2	(65)	40	2.469	(6.27)	0.249	(3.09)	2.465	(6.26)	0.248	(3.08)
3	(80)	40	3.068	(7.79)	0.384	(4.77)	2.945	(7.48)	0.354	(4.40)
3 1/2	(90)	40	3.548	(9.01)	0.514	(6.38)	3.425	(8.70)	0.479	(5.95)
4	(100)	40	4.026	(10.23)	0.661	(8.21)	3.905	(9.92)	0.622	(7.73)
5	(125)	40	5.047	(12.82)	1.04	(12.92)	4.875	(12.38)	0.970	(12.05)
6	(150)	40	6.065	(15.41)	1.50	(18.63)	5.845	(14.85)	1.39	(17.26)
8	(200)	30	8.071	(20.50)	2.66	(33.03)	7.725	(19.62)	2.43	(30.18)
10	(250)	30	10.136	(25.75)	4.19	(52.04)	9.625	(24.45)	3.78	(46.95)
12	(300)	30	12.090	(30.71)	5.96	(74.02)	11.565	(29.38)	5.46	(67.81)

All information is taken from the ASHRAE HVAC Systems and Equipment handbooks. For manufacturer news and HVAC and plumbing topics, follow our blog at heattransfersales.com

