

## Pressure Loss of Water Due to Friction in Types K, L and M Copper Tube (psi per linear foot of tube)

### (Part 1: ¼ through 2)

Table 6 is divided into 2 parts:

Part 1: ¼ through 2 | [Part 2: 2½ through 12](#) | [Notes](#)

Flow GPM	Nominal or standard size, inches																							
	¼			3/8			½			¾			1			1¼			1½			2		
	K	L	M	K	L	M	K	L	M	K	L	M	K	L	M	K	L	M	K	L	M	K	L	M
1	0.138	0.118	N/A	0.036	0.023	0.021	0.010	0.008	0.007	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2			N/A	0.130	0.084	0.075	0.035	0.030	0.024	0.006	0.005	0.004	0.002	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3			N/A	0.275	0.177	0.159	0.074	0.062	0.051	0.014	0.011	0.009	0.003	0.003	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
4			N/A				0.125	0.106	0.086	0.023	0.018	0.015	0.006	0.005	0.004	0.002	0.002	0.002	0.001	0.001	0.001	0.000	0.000	0.000
5			N/A				0.189	0.161	0.130	0.035	0.027	0.023	0.009	0.007	0.006	0.003	0.003	0.002	0.001	0.001	0.001	0.000	0.000	0.000
10			N/A							0.126	0.098	0.084	0.031	0.027	0.023	0.010	0.010	0.009	0.004	0.004	0.004	0.001	0.001	0.001
15			N/A										0.065	0.057	0.049	0.022	0.020	0.018	0.009	0.009	0.008	0.008	0.002	0.002
20			N/A											0.096	0.084	0.037	0.035	0.031	0.016	0.015	0.014	0.004	0.004	0.004
25			N/A													0.057	0.052	0.047	0.024	0.022	0.021	0.006	0.006	0.005
30			N/A													0.079	0.073	0.066	0.034	0.031	0.029	0.009	0.008	0.008
35			N/A																0.045	0.042	0.039	0.012	0.011	0.010
40			N/A																0.058	0.054	0.050	0.015	0.014	0.013
45			N/A																	0.062	0.018	0.017	0.016	
50			N/A																			0.022	0.021	0.020
60			N/A																			0.031	0.029	0.028
70			N/A																			0.042	0.039	0.037
80- 2000			N/A																					

#### NOTE:

- 1) Fluid velocities in excess of 5-8 feet per second are not recommended.
- 2) Friction loss values shown are for the flow rates that do not exceed a velocity of 8 feet per second.
- 3) Highlighted friction loss values indicate flow rates that are between 5 feet and 8 feet per second.
- 4) Table 6 is based on the Hazen-Williams formula:

$$P = \frac{4.52Q^{1.85}}{C^{1.85}d^{4.87}}$$

Where:

P=Friction loss, psi per linear foot

Q=Flow, g.p.m.

d=Average I.D., in inches

C=Constant, 150