Approximate Natural Gas Pressure Loss Data in (Mbar / m) in Copper Tube

Input Gross	Input Net	GAS RATE M3/HR	Pressure loss / m 8mm	Pressure loss / m 10mm	Pressure loss / m 12mm	Pressure loss / m 15mm	Pressure loss / m 22mm	Pressure loss / m 28mm	Pressure loss / m 35mm
1.08	0.98	**0.1**	0.0627	0.0170	0.0062	0.0019	0.0004	0.0001	0.0000
2.16	1.96	**0.2**	0.1868	0.0498	0.0180	0.0054	0.0010	0.0003	0.0001
3.24	2.95	**0.3**	0.3600	0.0952	0.0341	0.0102	0.0018	0.0005	0.0002
4.32	3.93	**0.4**	0.5773	0.1519	0.0541	0.0162	0.0028	0.0008	0.0003
5.40	4.91	**0.5**	0.8353	0.2190	0.0778	0.0231	0.0040	0.0012	0.0004
6.48	5.89	**0.6**		0.2959	0.1048	0.0311	0.0054	0.0015	0.0005
7.56	6.88	**0.7**		0.3822	0.1351	0.0400	0.0069	0.0020	0.0006
8.64	7.86	**0.8**		0.4776	0.1686	0.0497	0.0086	0.0024	0.0008
9.72	8.84	**0.9**		0.5817	0.2051	0.0604	0.0104	0.0029	0.0009
10.81	9.82	**1**	2.6757	0.6943	0.2445	0.0719	0.0123	0.0035	0.0011
11.89	10.81	**1.1**		0.8153	0.2868	0.0842	0.0144	0.0040	0.0013
12.97	11.79	**1.2**		0.9444	0.3319	0.0974	0.0166	0.0047	0.0015
14.05	12.77	**1.3**			0.3798	0.1113	0.0190	0.0053	0.0017
15.13	13.75	**1.4**			0.4303	0.1260	0.0214	0.0060	0.0019
16.21	14.73	**1.5**			0.4835	0.1414	0.0240	0.0067	0.0021
17.29	15.72	**1.6**			0.5393	0.1576	0.0268	0.0075	0.0024
18.37	16.70	**1.7**			0.5977	0.1746	0.0296	0.0082	0.0026
19.45	17.68	**1.8**			0.6586	0.1922	0.0326	0.0091	0.0029
20.53	18.66	**1.9**			0.7220	0.2106	0.0356	0.0099	0.0031
21.61	19.65	**2**	8.7533	2.2528	0.7879	0.2297	0.0388	0.0108	0.0034
22.69	20.63	**2.1**			0.8562	0.2495	0.0422	0.0117	0.0037
23.77	21.61	**2.2**			0.9270	0.2700	0.0456	0.0126	0.0040
24.85	22.59	**2.3**				0.2911	0.0491	0.0136	0.0043
25.93	23.58	**2.4**				0.3130	0.0528	0.0146	0.0046
27.01	24.56	**2.5**				0.3355	0.0565	0.0156	0.0049
28.09	25.54	**2.6**				0.3586	0.0604	0.0167	0.0053
29.17	26.52	**2.7**				0.3825	0.0643	0.0178	0.0056
30.25	27.50	**2.8**				0.4069	0.0684	0.0189	0.0060
31.33	28.49	**2.9**				0.4321	0.0726	0.0201	0.0063
32.42	29.47	**3**	17.6536	4.5248	1.5771	0.4578	0.0769	0.0212	0.0067
33.50	30.45	**3.1**				0.4842	0.0813	0.0224	0.0071
34.58	31.43	**3.2**				0.5113	0.0858	0.0237	0.0075
35.66	32.42	**3.3**				0.5389	0.0904	0.0249	0.0079
36.74	33.40	**3.4**				0.5672	0.0951	0.0262	0.0083
37.82	34.38	**3.5**				0.5961	0.0999	0.0275	0.0087
38.90	35.36	**3.6**				0.6256	0.1048	0.0289	0.0091
39.98	36.35	**3.7**				0.6558	0.1098	0.0303	0.0095
41.06	37.33	**3.8**				0.6865	0.1149	0.0316	0.0100
42.14	38.31	**3.9**				0.7179	0.1201	0.0331	0.0104
43.22	39.29	**4**	29.1343	7.4476	2.5901	0.7498	0.1254	0.0345	0.0108
44.30	40.27	**4.1**				0.7823	0.1308	0.0360	0.0113
45.38	41.26	**4.2**				0.8155	0.1363	0.0375	0.0118
46.46	42.24	**4.3**				0.8492	0.1418	0.0390	0.0123
47.54	43.22	**4.4**				0.8835	0.1475	0.0406	0.0127
48.62	44.20	**4.5**				0.9184	0.1533	0.0422	0.0132
49.70	45.19	**4.6**				0.9539	0.1592	0.0438	0.0137
50.78	46.17	**4.7**				0.9900	0.1651	0.0454	0.0142
51.86	47.15	**4.8**					0.1712	0.0470	0.0148
52.94	48.13	**4.9**					0.1774	0.0487	0.0153
54.03	49.12	**5**	43.0442	[illegible]	[illegible]	1.1016	0.1836	0.0504	0.0158
55.11	50.10	**5.1**					0.1900	0.0522	0.0164
56.19	51.08	**5.2**					0.1964	0.0539	0.0169
57.27	52.06	**5.3**					0.2029	0.0557	0.0175
58.35	53.04	**5.4**					0.2095	0.0575	0.0180
59.43	54.03	**5.5**					0.2162	0.0593	0.0186
60.51	55.01	**5.6**					0.2230	0.0612	0.0192
61.59	55.99	**5.7**					0.2299	0.0631	0.0197
62.67	56.97	**5.8**					0.2369	0.0650	0.0203

Approximate Natural Gas Pressure Loss Data in (Mbar / m) in Copper Tube

Input Gross	Input Net	**GAS RATE M3/HR**	Pressure loss / m 8mm	Pressure loss / m 10mm	Pressure loss / m 12mm	Pressure loss / m 15mm	Pressure loss / m 22mm	Pressure loss / m 28mm	Pressure loss / m 35mm
63.75	57.96	**5.9**					0.2440	0.0669	0.0209
64.83	58.94	**6**	59.2752	15.1002	5.2366	1.5105	0.2511	0.0688	0.0215
67.53	61.39	**6.25**					0.2694	0.0738	0.0231
70.23	63.85	**6.5**					0.2883	0.0790	0.0247
72.93	66.31	**6.75**					0.3077	0.0842	0.0263
75.64	68.76	**7**	77.7442	19.7809	6.8528	1.9742	0.3276	0.0897	0.0280
78.34	71.22	**7.25**					0.3481	0.0952	0.0297
81.04	73.67	**7.5**					0.3691	0.1009	0.0315
83.74	76.13	**7.75**					0.3906	0.1068	0.0333
86.44	78.58	**8**	98.3844	25.0067	8.6559	2.4910	0.4127	0.1128	0.0352
89.14	81.04	**8.25**					0.4353	0.1189	0.0371
91.84	83.50	**8.5**					0.4584	0.1252	0.0391
94.54	85.95	**8.75**					0.4820	0.1316	0.0410
97.25	88.41	**9**	121.1403	30.7635	10.6408	3.0595	0.5061	0.1382	0.0431
99.95	90.86	**9.25**					0.5308	0.1449	0.0452
102.65	93.32	**9.5**					0.5559	0.1517	0.0473
105.35	95.77	**9.75**					0.5816	0.1587	0.0494
108.05	98.23	**10**	145.9646	37.0392	12.8034	3.6784	0.6078	0.1658	0.0516
110.75	100.69	**10.25**					0.6344	0.1730	0.0539
113.45	103.14	**10.5**					0.6616	0.1804	0.0562
116.15	105.60	**10.75**					0.6893	0.1879	0.0585
118.86	108.05	**11**	172.8163	43.8231	15.1400	4.3467	0.7174	0.1955	0.0608
121.56	110.51	**11.25**					0.7460	0.2033	0.0632
124.26	112.96	**11.5**					0.7752	0.2112	0.0657
126.96	115.42	**11.75**					0.8048	0.2192	0.0682
129.66	117.88	**12**	201.6592	51.1061	17.6473	5.0634	0.8349	0.2273	0.0707
132.36	120.33	**12.25**					0.8655	0.2356	0.0733
135.06	122.79	**12.5**					0.8965	0.2440	0.0759
137.76	125.24	**12.75**					0.9280	0.2526	0.0785
140.47	127.70	**13**	232.4614	58.8798	20.3225	5.8277	0.9601	0.2613	0.0812
143.17	130.15	**13.25**					0.9925	0.2700	0.0839
145.87	132.61	**13.5**						0.2790	0.0867
148.57	135.07	**13.75**						0.2880	0.0895
151.27	137.52	**14**	265.1937	67.1369	23.1629	6.6388	1.0928	0.2972	0.0923
153.97	139.98	**14.25**						0.3065	0.0952
156.67	142.43	**14.5**						0.3159	0.0981
159.37	144.89	**14.75**						0.3255	0.1010
162.08	147.35	**15**	[illegible]	[illegible]	26.1663	7.4962	1.2330	0.3351	0.1040
164.78	149.80	**15.25**						0.3449	0.1071
167.48	152.26	**15.5**						0.3549	0.1101
170.18	154.71	**15.75**						0.3649	0.1132
172.88	157.17	**16**	336.3464	85.0750	29.3305	8.3990	1.3806	0.3751	0.1164