

Pipe Sizing Between First Stage and Second Stage Regulators

(a) Outside Diameter Copper Tubing, Type K						(b) Outside Diameter Refrigeration Tubing					
Tubing	3/8 In.	½ In.	5/8 In.	¾ In.	7/8 In.	Tubing	3/8 In.	½ In.	5/8 In.	¾ In.	7/8 In.
Length	0.305	0.402	0.527	0.652	0.745	Length	0.311	0.436	0.555	0.68	0.785
Ft.						Ft.					
30	284	587	1193	2085	2959	30	299	726	1367	2329	3394
40	243	502	1021	1785	2532	40	256	621	1170	1993	2904
50	216	445	905	1582	2244	50	227	551	1037	1766	2574
60	195	403	820	1433	2033	60	206	499	939	1600	2332
70	180	371	754	1319	1871	70	189	459	864	1472	2146
80	167	345	702	3227	1740	80	176	427	804	1370	1995
90	157	374	659	1151	1633	90	165	401	754	1285	1873
100	148	306	622	1087	1542	100	156	378	713	1214	1769
150	119	246	500	873	1239	150	125	304	572	975	1421
200	102	210	428	747	1060	200	107	260	490	834	1216
250	90	186	379	662	940	250	95	230	434	739	1078
300	82	169	343	600	851	300	86	209	393	670	976
350	75	155	316	552	783	350	79	192	362	616	898
400	70	144	294	514	729	400	74	179	337	573	836
450	66	136	276	482	654	450	69	168	316	538	784
500	62	128	260	455	646	500	65	158	298	508	741
600	52	107	217	379	538	700	54	132	249	424	617
700	52	107	217	379	538	700	54	132	249	424	617
800	48	99	202	353	501	800	51	123	321	394	574
900	45	93	189	331	470	900	48	115	217	370	539
1000	43	88	179	313	444	1000	45	109	205	349	509
1500	34	71	144	251	356	1500	36	87	165	281	409
2000	29	60	123	215	305	2000	31	75	141	240	350

Notes:

1. Maximum undiluted propane capacities listed are based on a gauge pressure of 10 psi first stage setting and 1 psi pressure drop. Capacities in 1000 Btu/hr.
2. To convert to capacities at a gauge pressure of 5 psi setting with 10 percent (0.5 psi) pressure drop, multiply values by 0.606. To convert to capacities at a gauge pressure of 15 psi setting with 10 percent (1.5 psi) pressure drop, multiply values by 1.380. Reference NFPA Pamphlet 58, table 11-4.

Copper Tube Sizing Between Second Stage Regulator and Appliance

(a) Outside Diameter Copper Tubing, Type K						(b) Outside Diameter Refrigeration Tubing					
Tubing	3/8 In.	½ In.	5/8 In.	¾ In.	7/8 In.	Tubing	3/8 In.	½ In.	5/8 In.	¾ In.	7/8 In.
Length	0.305	0.402	0.527	0.652	0.745	Length	0.311	0.436	0.555	0.68	0.785
Ft.						Ft.					
10	45	93	188	329	467	10	47	115	216	368	536
20	31	64	129	226	321	20	32	79	148	253	368
30	25	51	104	182	258	30	26	63	119	203	296
40	21	44	89	156	221	40	22	54	102	174	253
50	19	39	79	138	196	50	20	48	90	154	224
60	17	35	71	125	177	60	18	43	82	139	203
80	15	30	61	107	152	80	15	37	70	119	174
100	13	27	54	95	134	100	14	33	62	106	154
125	11	24	48	84	119	125	12	29	55	94	137
150	10	21	44	76	108	150	11	26	50	85	124
200	9	18	37	65	92	200	9	23	43	73	106
250	8	16	33	58	82	250	8	20	38	64	94
300	7	15	30	52	74	300	8	18	34	58	85
350	7	14	28	48	68	350	7	17	32	54	78
400	6	13	26	45	63	400	6	16	29	50	73

Note: Maximum undiluted propane capacities listed are based on a 11" water column setting and 0.5 in water column pressure drop. Capacities in 1000 Btu/hr. Reference NFPA Pamphlet 58, table 11-5.

Copper Tube Sizing Between First Stage (High Pressure Regulator) and Second Stage (Low Pressure Regulator)											
(a) Outside Diameter Copper Tubing, Type K						(b) Outside Diameter Refrigeration Tubing					
Tubing	3/8 In.	½ In.	5/8 In.	¾ In.	7/8 In.	Tubing	3/8 In.	½ In.	5/8 In.	¾ In.	7/8 In.
Length	0.315	0.43	0.545	0.666	0.785	Length	0.315	0.43	0.545	0.666	0.785
Ft.						Ft.					
30	309	700	1303	2205	3394	350	82	185	345	584	898
40	265	599	1115	1887	2904	400	76	172	321	543	836
50	235	531	988	1672	2574	450	71	162	301	509	784
60	213	481	896	1515	2332	500	68	153	284	481	741
70	196	443	824	1394	2146	600	61	138	258	436	671
80	182	412	767	1297	1996	700	56	127	237	401	617
90	171	386	719	1217	1873	800	52	118	221	373	574
100	161	365	679	1149	1769	900	49	111	207	350	539
150	130	293	546	923	1421	1000	46	105	195	331	509
200	111	251	467	790	1216	1500	37	84	157	266	409
250	90	222	414	700	1078	2000	32	72	134	227	350
300	89	201	375	634	976						

Note: Maximum undiluted propane capacities listed are based on 10 psi first stage setting and 1 psi pressure drop. Capacities in 1000 Btu/hr. Reference NFPA Pamphlet 58, table 11-