Propane

PROPANE LOW PRESSURE GAS

Locate proper sizing table based on total pressure drop allowed in piping system by local utility for each installation.

<u>CAPACITY TABLES OF CSST – TABLE 8</u> Maximum Capacity of Pro-Flex® CSST in Thousands of BTU per Hour of Undiluted Liquified Petroleum Gas Gas Pressure: 11 inch WC Pressure Drop: 0.5 inch WC (Based on a 1.52 Specific Gravity Gas)

Tubing Length (feet)																	
(EHD)	5	10	15	20	25	30	40	50	60	70	80	90	100	150	200	250	300
15	101	72	59	51	46	42	36	32	29	27	25	24	23	19	16	14	13
18	150	108	89	78	70	64	56	50	46	43	40	38	36	30	26	23	21
25	447	316	258	223	200	182	158	141	129	119	111	105	100	81	70	63	57
31	990	670	533	453	400	381	307	270	244	224	207	194	183	145	124	109	98
																	192
	15 18 25	15 101 18 150 25 447 31 990	15 101 72 18 150 108 25 447 316 31 990 670	15 101 72 59 18 150 108 89 25 447 316 258 31 990 670 533	15 101 72 59 51 18 150 108 89 78 25 447 316 258 223 31 990 670 533 453	15 101 72 59 51 46 18 150 108 89 78 70 25 447 316 258 223 200 31 990 670 533 453 400	15 101 72 59 51 46 42 18 150 108 89 78 70 64 25 447 316 258 223 200 182 31 990 670 533 453 400 381	(EHD) 5 10 15 20 25 30 40 15 101 72 59 51 46 42 36 18 150 108 89 78 70 64 56 25 447 316 258 223 200 182 158 31 990 670 533 453 400 381 307	(EHD) 5 10 15 20 25 30 40 50 15 101 72 59 51 46 42 36 32 18 150 108 89 78 70 64 56 50 25 447 316 258 223 200 182 158 141 31 990 670 533 453 400 381 307 270	(EHD) 5 10 15 20 25 30 40 50 60 15 101 72 59 51 46 42 36 32 29 18 150 108 89 78 70 64 56 50 46 25 447 316 258 223 200 182 158 141 129 31 990 670 533 453 400 381 307 270 244	(EHD) 5 10 15 20 25 30 40 50 60 70 15 101 72 59 51 46 42 36 32 29 27 18 150 108 89 78 70 64 56 50 46 43 25 447 316 258 223 200 182 158 141 129 119 31 990 670 533 453 400 381 307 270 244 224	(EHD) 5 10 15 20 25 30 40 50 60 70 80 15 101 72 59 51 46 42 36 32 29 27 25 18 150 108 89 78 70 64 56 50 46 43 40 25 447 316 258 223 200 182 158 141 129 119 111 31 990 670 533 453 400 381 307 270 244 224 207	(EHD) 5 10 15 20 25 30 40 50 60 70 80 90 15 101 72 59 51 46 42 36 32 29 27 25 24 18 150 108 89 78 70 64 56 50 46 43 40 38 25 447 316 258 223 200 182 158 141 129 119 111 105 31 990 670 533 453 400 381 307 270 244 224 207 194	(EHD) 5 10 15 20 25 30 40 50 60 70 80 90 100 15 101 72 59 51 46 42 36 32 29 27 25 24 23 18 150 108 89 78 70 64 56 50 46 43 40 38 36 25 447 316 258 223 200 182 158 141 129 119 111 105 100 31 990 670 533 453 400 381 307 270 244 224 207 194 183	(EHD) 5 10 15 20 25 30 40 50 60 70 80 90 100 150 15 101 72 59 51 46 42 36 32 29 27 25 24 23 19 18 150 108 89 78 70 64 56 50 46 43 40 38 36 30 25 447 316 258 223 200 182 158 141 129 119 111 105 100 81 31 990 670 533 453 400 381 307 270 244 224 207 194 183 145	(EHD) 5 10 15 20 25 30 40 50 60 70 80 90 100 150 200 15 101 72 59 51 46 42 36 32 29 27 25 24 23 19 16 18 150 108 89 78 70 64 56 50 46 43 40 38 36 30 26 25 447 316 258 223 200 182 158 141 129 119 111 105 100 81 70 31 990 670 533 453 400 381 307 270 244 224 207 194 183 145 124	(EHD) 5 10 15 20 25 30 40 50 60 70 80 90 100 150 200 250 15 101 72 59 51 46 42 36 32 29 27 25 24 23 19 16 14 18 150 108 89 78 70 64 56 50 46 43 40 38 36 30 26 23 25 447 316 258 223 200 182 158 141 129 119 111 105 100 81 70 63 31 990 670 533 453 400 381 307 270 244 224 207 194 183 145 124 109

*Table includes losses for four 90 degree bends and two (2) end fittings. Tubing runs with larger numbers of bends and/or fitting shall be increased by an equivalent length of tubing according to the following formula:

L = 1.3 (n)

L = is the additional length (ft.) of tubing to be added to actual run.

n = is the number of additional fittings and/or bends.

<u>CAPACITY TABLES OF CSST – TABLE 9</u> Maximum Capacity of Pro-Flex® CSST in Thousands of BTU per Hour of Undiluted Liquified Petroleum Gas Gas Pressure: 13 – 14 inches WC (1/2 psig) Pressure Drop: 2.5 WC (Based on a 1.52 Specific Gravity Gas)

	Tubing Length (feet)																	
Tube Size	(EHD)	5	10	15	20	25	30	40	50	60	70	80	90	100	150	200	250	300
3/8"	15	225	160	131	113	101	93	80	72	66	61	57	54	51	42	36	32	29
1/2"	18	322	232	191	167	150	138	120	108	99	92	86	82	78	64	56	50	46
3/4"	25	1000	707	577	500	447	408	353	316	288	267	250	235	223	182	158	141	129
1"	31	2449	1658	1320	1122	990	893	760	670	604	554	514	481	453	361	307	270	244
11/4"	37	3368	2378	1940	1679	1501	1370	1186	1060	967	895	837	789	748	610	528	472	431

*Table includes losses for four 90 degree bends and two (2) end fittings. Tubing runs with larger numbers of bends and/or fitting shall be increased by an equivalent length of tubing according to the following formula:

L = 1.3 (n) L =is the additional length (ft.) of tubing to be added to actual run.

n = is the number of additional fittings and/or bends.

PROPANE LOW PRESSURE GAS

Locate proper sizing table based on total pressure drop allowed in piping system by local utility for each installation.

CAPACITY TABLES OF CSST - TABLE 10 Maximum Capacity of Pro-Flex® CSST in Thousands of BTU per Hour of Undiluted Liquified Petroleum Gas

Gas Pressure: 2 psig Pressure Drop: 1 psig (Based on a 1.52 Specific Gravity Gas)

	Tubing Length (feet)														
Tube Size	(EHD)	10	25	30	40	50	75	80	100	150	200	250	300	400	500
3/8"	15	525	334	305	265	237	194	188	161	138	119	107	98	85	76
1/2"	18	724	469	431	376	338	279	271	233	201	175	158	145	126	113
3/4"	25	2353	1488	1359	1177	1053	860	832	710	608	526	471	430	372	333
1"	31	6426	3836	3462	2944	2597	2067	1993	1666	1399	1190	1049	947	805	710
11/4"	37	7959	5025	4585	3968	3548	2894	2802	2388	2044	1769	1581	1443	1249	1116

*Table includes losses for four 90 degree bends and two (2) end fittings. Tubing runs with larger numbers of bends and/or fitting shall be increased by an equivalent length of tubing according to the following formula:

L = 1.3 (n) L = is the additional length (ft.) of tubing to be added to actual run. n = is the number of additional fittings and/or bends.

Caution: Capacities show in Table 12 may exceed maximum capacity of the regulator. With a 1 psig regulator inlet pressure and a 15 inch WC drop across the regulator (13 inch WC regulator outlet setting), the maximum flow capacity of a single 325-3 is 342,000 BTU/hr., while the 325 5A is 796,000 BTU/hr. The use of multiple parallel regulators may be required if permitted by local code.

Note: Table 12 does not include the effects of pressure drop across the line regulator. If regulator pressure drop exceeds 17 inch WC across 325-3 or 325-5A regulators, DO NOT USE THIS TABLE. Consult with Tru-Flex Metal Hose Corp. for guidance.

<u>CAPACITY TABLES OF CSST – TABLE 11</u> Maximum Capacity of Pro-Flex® CSST in Thousands of BTU per Hour of Undiluted Liquified Petroleum Gas Gas Pressure: 5 psig Pressure Drop: 3.5 psig (Based on a 1.52 Specific Gravity Gas)

	Tubing Length (feet)														
Tube Size	(EHD)	10	25	30	40	50	75	80	100	150	200	250	300	400	500
3/8"	15	976	621	567	492	441	361	349	298	256	222	199	182	157	141
1/2"	18	1310	849	779	680	612	505	490	421	364	317	286	262	229	206
3/4"	25	4400	2784	2541	2201	1969	1608	1557	1328	1137	985	881	804	695	623
1"	31	13007	7766	7008	5960	5257	4184	4035	3372	2832	2409	2124	1917	1630	1438
11/4"	37	14928	9424	8600	7443	6654	5429	5256	4479	3833	3318	2966	2707	2343	2094

*Table includes losses for four 90 degree bends and two (2) end fittings. Tubing runs with larger numbers of bends and/or fitting shall be increased by an equivalent length of tubing according to the following formula:

L = 1.3 (n) L = is the additional length (ft.) of tubing to be added to actual run. n = is the number of additional fittings and/or bends.

Caution: Capacities show in Table 13 may exceed maximum capacity of the regulator. With a 1.5 psig regulator inlet pressure and a 1 psig pressure drop across the regulator (14 inch WC regulator outlet setting), the maximum flow capacity of a single 325-3 is 467,000 BTU/hr., while the 325-5A is 1,088,000 BTU/hr. The use of multiple parallel regulators may be required if permitted by local code.

Note: Table 13 does not include the effects of pressure drop across the line regulator. If regulator pressure drop exceeds 1 psig across 325-3 or 325-5A regulators, <u>DO NOT USE THIS TABLE</u>. Consult with Tru-Flex Metal Hose Corp. for guidance.