

6.0 Sizing Tables

NATURAL GAS LOW PRESSURE

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

CAPACITY TABLES OF CSST – TABLE 1

Maximum Capacity of Pro-Flex® CSST in Cubic Feet per Hour of Gas Gas Pressure: 6 – 7 inches WC (1/4 psig) Pressure Drop: 0.5 inch WC (Based on a 0.6 Specific Gravity Gas)

Tube Size	(EHD)	Tubing Length (feet)																
		5	10	15	20	25	30	40	50	60	70	80	90	100	150	200	250	300
3/8"	15	64	45	37	32	29	26	23	20	18	17	16	15	14	12	10	9	8
1/2"	18	95	68	56	49	44	40	35	32	29	27	25	24	23	19	16	14	13
3/4"	25	283	200	163	141	126	115	100	89	81	75	70	66	63	51	44	40	36
1"	31	626	424	337	287	253	228	194	171	154	141	131	123	116	92	78	69	62
1 1/4"	37	950	671	547	474	423	386	334	299	273	252	236	222	211	172	149	133	121

*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:

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

CAPACITY TABLES OF CSST – TABLE 2

Maximum Capacity of Pro-Flex® CSST in Cubic Feet per Hour of Gas Gas Pressure: 6 – 7 inches WC (1/4 psig) Pressure Drop: 1.0 inch WC (Based on a 0.6 Specific Gravity Gas)

Tube Size	(EHD)	Tubing Length (feet)																
		5	10	15	20	25	30	40	50	60	70	80	90	100	150	200	250	300
3/8"	15	90	64	52	45	41	37	32	29	26	24	23	21	20	16	14	13	12
1/2"	18	132	95	78	68	61	56	49	44	40	37	35	33	32	26	23	20	19
3/4"	25	400	283	231	200	179	163	141	126	115	107	100	94	89	73	63	56	51
1"	31	925	626	498	424	373	337	287	253	228	209	194	181	171	136	116	102	92
1 1/4"	37	1346	950	775	671	600	547	474	423	386	357	334	315	299	244	211	188	172

*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:

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

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CAPACITY TABLES OF CSST – TABLE 3

Maximum Capacity of Pro-Flex® CSST in Cubic Feet per Hour of Gas Gas Pressure: 8 – 10 inches WC Pressure Drop: 3 inch WC (Based on a 0.6 Specific Gravity Gas)

Tube Size	(EHD)	Tubing Length (feet)																
		5	10	15	20	25	30	40	50	60	70	80	90	100	150	200	250	300
3/8"	15	156	110	90	78	70	64	55	50	45	42	39	37	35	29	25	22	20
1/2"	18	222	160	132	115	103	95	83	74	68	63	59	56	53	44	38	34	32
3/4"	25	692	490	400	346	310	283	245	219	200	185	173	163	155	126	109	98	89
1"	31	1717	1162	925	787	694	626	532	469	424	388	360	337	318	253	215	189	171
1 1/4"	37	2337	1650	1346	1165	1041	950	822	735	671	621	581	547	519	423	366	327	299

*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:

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

CAPACITY TABLES OF CSST – TABLE 4

Maximum Capacity of Pro-Flex® CSST in Cubic Feet per Hour of Gas Gas Pressure: 11 – 13 inches WC Pressure Drop: 6 inch WC (Based on a 0.6 Specific Gravity Gas)

Tube Size	(EHD)	Tubing Length (feet)																
		5	10	15	20	25	30	40	50	60	70	80	90	100	150	200	250	300
3/8"	15	220	156	127	110	99	90	78	70	64	59	55	52	50	41	35	31	29
1/2"	18	308	222	183	160	144	132	115	103	95	88	83	78	74	61	53	48	44
3/4"	25	979	692	565	490	438	400	346	310	283	262	245	231	219	179	155	138	126
1"	31	2536	1717	1366	1162	1025	925	787	694	628	574	532	498	469	373	318	280	253
1 1/4"	37	3310	2337	1906	1650	1475	1346	1165	1041	950	880	822	775	735	600	519	464	423

*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:

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

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CAPACITY TABLES OF CSST – TABLE 5

Maximum Capacity of Pro-Flex® CSST in Cubic Feet per Hour of Gas Gas Pressure: 13 – 14 inches WC Pressure Drop: 6 inch WC (Based on a 0.6 Specific Gravity Gas)

Tube Size	(EHD)	Tubing Length (feet)																
		5	10	15	20	25	30	40	50	60	70	80	90	100	150	200	250	300
3/8"	15	220	156	127	110	99	90	78	70	64	59	55	52	50	41	35	31	29
1/2"	18	308	222	183	160	144	132	115	103	95	88	83	78	74	61	53	48	44
3/4"	25	979	692	565	490	438	400	346	310	283	262	245	231	219	179	155	138	126
1"	31	2536	1717	1366	1162	1025	925	787	694	626	574	532	498	469	373	318	280	253
1 1/4"	37	3310	2337	1906	1650	1475	1346	1165	1041	950	880	822	775	735	600	519	464	423

*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:

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

CAPACITY TABLES OF CSST – TABLE 6

Maximum Capacity of Pro-Flex® CSST in Cubic Feet per Hour of Gas Gas Pressure: 2 psig Pressure Drop: 1 psig (Based on a 0.6 Specific Gravity Gas)

Tube Size	(EHD)	Tubing Length (feet)													
		10	25	30	40	50	75	80	100	150	200	250	300	400	500
3/8"	15	332	211	193	167	150	123	119	106	87	75	67	62	53	48
1/2"	18	458	297	272	238	214	176	171	154	127	111	100	91	80	72
3/4"	25	1488	941	859	744	666	544	526	471	384	333	298	272	235	210
1"	31	4065	2427	2190	1862	1642	1307	1261	1112	885	752	664	599	509	449
1 1/4"	37	5040	3181	2903	2513	2246	1833	1774	1586	1294	1120	1001	913	791	707

*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:

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

Caution: Capacities show in Table 6 may exceed maximum capacity of the regulator. With a 1 psig regulator inlet pressure and a 20 inch WC drop across the regulator (8" WC regulator outlet setting), the maximum flow capacity of a single 325-3 is 252 CFH, while the 325-5A is 587. The use of multiple parallel regulators may be required if permitted by local code.

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CAPACITY TABLES OF CSST – TABLE 7

Maximum Capacity of Pro-Flex® CSST in Cubic Feet per Hour of Gas Gas Pressure: 5 psig Pressure Drop: 3.5 psig (Based on a 0.6 Specific Gravity Gas)

Tube Size	(EHD)	Tubing Length (feet)													
		10	25	30	40	50	75	80	100	150	200	250	300	400	500
3/8"	15	617	392	359	311	279	228	221	198	162	140	126	115	99	89
1/2"	18	828	537	493	430	387	319	310	279	230	201	180	166	144	130
3/4"	25	2783	1761	1608	1393	1245	1017	985	881	719	623	557	508	440	394
1"	31	8228	4912	4433	3770	3325	2647	2552	2251	1791	1524	1344	1213	1031	909
1 1/4"	37	9452	5967	5445	4713	4213	3437	3328	2975	2427	2101	1878	1714	1483	1326

*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.

Note: Table 7 does include the effects of pressure drop across the line regulator. If regulator pressure drop exceeds 1 psig across 325-3 or 325-5A regulators, DO NOT USE THIS TABLE. Consult with Tru-Flex Metal Hose Corp. for guidance.

Caution: Capacities shown in Table 7 may exceed maximum capacity of the regulator. With a 1.5 psig regulator inlet pressure and a 1 psig pressure drop across the regulator, the maximum flow capacity of a single 325-3 is 298 CFH while the 325-5A is 695 CFH. The use of multiple parallel regulators may be required if permitted by local code.