Propane Pipe Sizing Chart

Propane pipe sizing chart, steel, 0.5 in. w.c. drop

Sizing equation for low-pressure systems: $D = Q^{0.381} \div (19.17 \times (\Delta H \div (Cr \times L))^{0.206})$, where D is inside diameter in inches, Q is flow in cubic feet per hour, ΔH is the pressure drop in inches of water column, L is the pipe length in feet and Cr is 0.6094 for natural gas or 1.2462 for propane. Capacities below invert the same equation and are shown in thousands of BTU per hour. Natural gas is taken at 1,000 BTU per cubic foot and propane at 2,516.

Propane, Schedule 40 steel, MBH

Pipe length	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"
10 ft	296	619	1,166	2,394	3,588	6,914	11,023	19,493	39,778
20 ft	203	425	801	1,646	2,467	4,753	7,577	13,400	27,345
30 ft	163	342	644	1,322	1,981	3,817	6,086	10,762	21,962
40 ft	140	292	551	1,132	1,696	3,267	5,209	9,212	18,798
50 ft	124	259	488	1,003	1,503	2,896	4,617	8,165	16,662
60 ft	112	235	442	909	1,362	2,624	4,184	7,399	15,098
80 ft	96	201	379	778	1,166	2,246	3,581	6,333	12,923
100 ft	85	178	336	689	1,033	1,991	3,174	5,613	11,454
125 ft	75	158	298	611	916	1,765	2,813	4,975	10,152
150 ft	68	143	270	554	830	1,599	2,549	4,508	9,199
200 ft	59	122	231	474	710	1,369	2,182	3,859	7,874

Propane, type K copper tube, 0.5 in. w.c. drop

Propane, type K copper tube, MBH

Pipe length	3/8"	1/2"	5/8"	3/4"	1"	1-1/4"	1-1/2"	2"
10 ft	94	191	335	475	1,015	1,827	2,882	6,005

Pipe length	3/8"	1/2"	5/8"	3/4"	1"	1-1/4"	1-1/2"	2"
20 ft	65	132	230	326	698	1,256	1,981	4,128
30 ft	52	106	185	262	560	1,009	1,591	3,316
40 ft	44	90	158	224	480	864	1,362	2,838
50 ft	39	80	140	199	425	765	1,207	2,515
60 ft	36	73	127	180	385	694	1,094	2,279
80 ft	31	62	109	154	330	594	936	1,951
100 ft	27	55	96	137	292	526	830	1,729
125 ft	24	49	85	121	259	466	736	1,533
150 ft	22	44	77	110	235	423	667	1,389
200 ft	19	38	66	94	201	362	570	1,189

Propane, Schedule 40 steel, 1.0 in. w.c. drop

Propane, Schedule 40 steel, 1.0 in. w.c., MBH

Pipe length	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"
10 ft	430	900	1,696	3,483	5,220	10,057	16,034	28,356	57,863
20 ft	296	619	1,166	2,394	3,588	6,914	11,023	19,493	39,778
30 ft	237	497	936	1,923	2,882	5,553	8,853	15,656	31,947
40 ft	203	425	801	1,646	2,467	4,753	7,577	13,400	27,345
50 ft	180	377	710	1,459	2,186	4,213	6,716	11,877	24,237
60 ft	163	342	644	1,322	1,981	3,817	6,086	10,762	21,962
80 ft	140	292	551	1,132	1,696	3,267	5,209	9,212	18,798
100 ft	124	259	488	1,003	1,503	2,896	4,617	8,165	16,662
125 ft	110	230	433	889	1,332	2,567	4,092	7,237	14,768
150 ft	99	208	392	805	1,207	2,326	3,708	6,558	13,382
200 ft	85	178	336	689	1,033	1,991	3,174	5,613	11,454

Disclaimer. Estimate only. Gas piping must be sized, installed and inspected by a licensed professional under your local code and the appliance maker's instructions. Charts & Specs is an independent reference site. It is not affiliated with any manufacturer, standards body or code organization, and it uses brand and standard names only to identify what a value applies to.
