

Line Size/Pressure Drop Chart

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REFERENCE

Description: This chart shows the flow capacity listed in air for various sizes of pipe and tubing. This would need to be converted to the specific gas. See our conversion program under calculators for this.

The pressure drop is not exact as it is for straight runs of pipe or tubing and you need to allow for any change in direction, a typical factor of 50% should be used, and you should allow for future expansion of your gas requirements.

Capacity of Distribution Lines in SCFH (NL/m) of Air @ 60°F (16°C)

Inlet Pressure Psig (bar)	Pressure Drop per 100' (30.4 m) psig (bar)	Line Size					
		1/8"	1/4"	3/8"	1/2"	3/4"	1"
50 (3)	1 (0.07)	20 (9)	180 (84)	405 (191)	760 (358)	1,610 (759)	3,040 (1,433)
	5 (0.3)	49 (24)	400 (188)	910 (429)	1,700 (801)	3,600 (1,687)	6,800 (3,206)
	10 (0.7)	70 (33)	580 (273)	1,300 (613)	2,410 (1,136)	5,100 (2,404)	9,720 (4,582)
100 (7)	1 (0.07)	28 (13)	245 (116)	550 (259)	1,020 (481)	2,160 (1,018)	4,070 (1,919)
	5 (0.3)	65 (31)	545 (257)	1,230 (580)	2,280 (1,075)	4,820 (2,272)	9,100 (4,290)
	10 (0.7)	90 (42)	775 (365)	1,750 (825)	3,240 (1,527)	6,820 (3,215)	12,970 (6,114)
150 (10)	1 (0.07)	32 (15)	290 (137)	660 (311)	1,220 (575)	2,580 (1,216)	4,870 (2,296)
	5 (0.3)	74 (34)	650 (306)	1,470 (693)	2,730 (1,287)	5,775 (2,722)	10,900 (5,138)
	10 (0.7)	110 (52)	930 (438)	2,100 (990)	3,880 (1,829)	8,170 (3,852)	15,540 (7,326)
200 (14)	5 (0.3)	85 (41)	745 (351)	1,680 (792)	3,120 (1,471)	6,590 (3,107)	12,450 (5,869)
	10 (0.7)	125 (59)	1,060 (500)	2,390 (1,127)	4,430 (2,088)	9,330 (4,392)	17,750 (8,368)
300 (21)	5 (0.3)	105 (50)	900 (424)	2,040 (962)	3,780 (1,782)	7,980 (3,762)	15,070 (7,104)
	10 (0.7)	150 (71)	1,280 (605)	2,900 (1,367)	5,370 (2,532)	11,300 (5,327)	21,480 (10,126)
400 (28)	5 (0.3)	125 (59)	1,040 (490)	2,340 (1,103)	4,340 (2,046)	9,160 (4,318)	17,300 (8,156)
	10 (0.7)	175 (83)	1,470 (693)	3,330 (1,570)	6,160 (2,904)	12,970 (6,114)	24,660 (11,625)
500 (35)	5 (0.3)	130 (61)	1,180 (556)	2,660 (1,254)	4,940 (2,329)	10,440 (4,922)	19,700 (9,287)
	10 (0.7)	190 (87)	1,680 (792)	3,790 (1,787)	7,020 (3,309)	14,770 (6,963)	28,100 (13,247)
1,000 (69)	5 (0.3)	190 (90)	2,030 (957)	3,920 (1,848)	7,270 (3,427)	15,360 (7,241)	29,000 (13,671)
	10 (0.7)	270 (127)	2,470 (1,164)	5,580 (2,630)	10,330 (4,870)	21,740 (10,249)	41,300 (19,470)
1,500 (103)	5 (0.3)	230 (108)	2,030 (957)	4,570 (2,154)	8,470 (3,993)	17,900 (8,438)	33,800 (15,934)
	10 (0.7)	330 (156)	2,880 (1,357)	6,500 (3,064)	12,040 (5,676)	25,350 (11,951)	48,200 (22,723)
2,000 (138)	5 (0.3)	265 (125)	2,340 (1,103)	5,270 (2,489)	9,770 (4,606)	20,650 (9,735)	39,000 (18,380)
	10 (0.7)	380 (179)	3,320 (1,565)	7,500 (3,536)	13,890 (6,548)	29,200 (13,766)	55,600 (26,211)
2,500 (172)	5 (0.3)	300 (142)	2,610 (1,230)	5,890 (2,777)	10,920 (5,148)	23,100 (10,890)	43,550 (20,531)
	10 (0.7)	427 (201)	3,710 (1,749)	8,380 (3,950)	15,510 (7,312)	32,650 (15,392)	62,100 (29,276)