



Low Pressure Flow of Natural Gas in DriscoPlex[®] Pipe

Inlet Pressure: 1 psi or less
 Pressure Drop: 0.5 in. w.c.

Length (ft)	Calculated Flow (Natural Gas) (Cubic Feet of Gas Per Hour)								
	CTS			IPS					
Nom OD	1/2	1	3/4	1	1-1/4	1-1/2	2	3	4
DR	7	11.5	11	11	10	11	11	11.5	11.5
ID	0.436	0.918	0.848	1.062	1.308	1.534	1.917	2.855	3.670
10	69	488	396	716	1241	1886	3391	9661	18710
20	47	336	273	493	853	1297	2332	6645	12868
30	38	270	219	396	685	1042	1874	5338	10338
40	33	231	187	339	587	892	1604	4570	8851
50	29	205	166	300	520	791	1422	4051	7846
60	26	186	151	272	471	717	1289	3671	7110
70	24	171	139	250	434	659	1186	3378	6542
80	22	159	129	233	404	613	1103	3143	6087
90	21	149	121	219	379	576	1035	2949	5712
100	20	141	114	207	358	544	978	2786	5396
125	18	125	101	183	317	482	867	2470	4784
150	16	113	92	166	287	437	786	2238	4335
175	15	104	84	153	264	402	723	2060	3989
200	14	97	79	142	246	374	673	1916	3711
250	12	86	70	126	218	332	596	1699	3290
300	11	78	63	114	198	300	540	1540	2982
350	10	72	58	105	182	276	497	1417	2743
400	9	67	54	98	169	257	463	1318	2553
450	9	63	51	92	159	241	434	1237	2395
500	8	59	48	87	150	228	410	1168	2263

1. Average ID used in all calculations. It equals the nominal OD minus 2.12 times the minimum wall thickness.
2. For flow in BTU/hr at sea level multiply flow by 1000. Heat value of Natural Gas is 1000 BTU/scf at sea level.
3. Calculations used low pressure (< 1.5 psi) equation from Chapter 12, National Fuel Gas Code (2002).

$$Q := \frac{2362D^{2.63}}{C_R^{0.540}} \cdot \left(\frac{\Delta H}{L} \right)^{0.540}$$

Q = Flow (cubic ft per hr), D = ID (in), Cr = 0.6094 (natural gas), ΔH = pressure drop (in w.c.),
 L = equivalent length (ft)

NOTICE. This publication is for informational purposes and is intended for use as a reference guide. It should not be used in place of the advice of a professional engineer. This publication does not contain or confer any warranty or guarantee of any kind. Performance Pipe has made every reasonable effort towards the accuracy of the information contained in this publication, but it may not provide all necessary information, particularly with respect to special or unusual applications. This publication may be changed from time to time without notice. Contact Performance Pipe to ensure that you have the most current edition.