

Table F.10 — Natural gas — Flow through — Copper pipe, (AS 1432 Type B) (MJ/h) (Pressure drop of 0.12 kPa; suitable for supply pressures around 1.25 kPa)

Nom. diam	Length of straight pipe, in metres								
	2	4	6	8	10	12	14	16	18
6	—	—	—	—	—	—	—	—	—
8	16	—	—	—	—	—	—	—	—
10	25	16	11	—	—	—	—	—	—
15	61	43	35	30	27	23	19	17	15
20	215	143	113	95	85	78	72	67	63
25	490	328	259	218	192	172	157	145	135
32	962	646	511	433	380	342	312	289	269
40	1648	1110	879	745	655	589	539	499	465
50	3884	2625	2085	1770	1558	1403	1284	1189	1111
65	7301	4947	3935	3344	2946	2656	2432	2254	2107
80	11722	7957	6336	5387	4749	4283	3925	3638	3403
DN	20	25	30	35	40	45	50	55	60
15	14	11	—	—	—	—	—	—	—
20	60	54	49	45	42	37	34	31	28
25	128	114	104	96	90	85	80	77	73
32	253	222	199	182	168	158	150	143	137
40	438	384	345	315	291	272	255	241	229
50	1046	919	827	756	700	653	614	581	552
65	1984	1746	1572	1439	1332	1244	1171	1108	1054
80	3205	2822	2543	2328	2157	2016	1897	1796	1708
100	7253	6393	5766	5283	4898	4580	4314	4086	3888
125	13497	11907	10745	9851	9136	8548	8053	7630	7263
150	21942	19366	17485	16036	14876	13923	13121	12435	11839
DN	65	70	75	80	85	90	100	120	140
15	—	—	—	—	—	—	—	—	—
20	26	24	22	21	—	—	—	—	—
25	71	68	66	64	62	60	56	47	40
32	131	127	122	118	115	112	106	97	89
40	219	209	201	195	189	183	174	159	147
50	527	505	485	467	450	435	409	367	335
65	1006	963	925	891	860	832	783	704	643
80	1631	1563	1502	1447	1397	1352	1272	1144	1046
100	3714	3560	3423	3299	3186	3083	2903	2614	2392
125	6941	6655	6399	6169	5960	5769	5434	4897	4485
150	11317	10853	10438	10064	9725	9415	8870	7998	7328
DN	160	180	200	220	240	260	280	300	320
15	—	—	—	—	—	—	—	—	—
20	—	—	—	—	—	—	—	—	—
25	35	31	—	—	—	—	—	—	—
32	84	79	75	69	63	58	54	50	47
40	137	130	123	117	112	108	104	100	97
50	310	289	273	259	248	239	230	222	215
65	594	554	521	493	468	446	427	410	395
80	968	903	849	803	763	728	697	669	644
100	2215	2070	1947	1843	1752	1673	1602	1539	1483
125	4155	3884	3656	3462	3293	3145	3013	2896	2790
150	6792	6351	5981	5664	5390	5149	4935	4744	4572

NOTE Use of values printed in shaded areas is not recommended and require professional advice. Refer to [Clause F.1.6](#) where

Table F.11 — Natural gas — Flow through — Copper pipe (AS 1432 Type B) (MJ/h) (Pressure drop of 0.25 kPa; suitable for supply pressures within the range 1.5–2.5 kPa)

Nom diam	Length of straight pipe, in metres								
	2	4	6	8	10	12	14	16	18
6	11	—	—	—	—	—	—	—	—
8	24	17	12	—	—	—	—	—	—
10	36	25	21	17	14	11	10	—	—
15	94	63	51	44	39	36	33	31	29
20	329	220	174	147	129	115	105	98	91
25	746	501	397	336	295	265	242	224	209
32	1462	985	781	662	582	524	479	443	414
40	2497	1687	1340	1137	1000	901	824	763	713
50	5864	3976	3163	2688	2368	2135	1955	1812	1694
65	10994	7472	5954	5064	4466	4029	3692	3423	3202
80	17617	11996	9567	8144	7185	6485	5946	5515	5160
DN	20	25	30	35	40	45	50	55	60
15	28	23	19	16	14	13	11	10	—
20	87	78	71	66	61	58	55	52	50
25	196	172	154	141	131	123	116	111	106
32	389	342	307	281	259	242	227	215	204
40	671	589	530	485	448	419	394	372	354
50	1595	1404	1264	1157	1071	1001	942	891	847
65	3016	2656	2394	2193	2031	1899	1788	1692	1610
80	4862	4285	3864	3540	3281	3068	2890	2737	2604
100	10966	9675	8731	8005	7424	6946	6545	6201	5903
125	20363	17976	16233	14890	13815	12931	12187	11551	10999
150	33048	29189	26369	24196	22456	21025	19821	18791	17896
DN	65	70	75	80	85	90	100	120	140
15	—	—	—	—	—	—	—	—	—
20	48	46	45	43	41	39	35	29	25
25	102	98	95	92	89	87	82	75	69
32	195	186	179	172	166	161	153	140	129
40	337	323	310	299	288	278	262	235	215
50	809	775	744	717	692	669	630	566	517
65	1538	1473	1416	1364	1317	1275	1199	1079	987
80	2487	2384	2292	2209	2133	2064	1943	1750	1601
100	5641	5409	5201	5014	4844	4690	4417	3981	3646
125	10514	10084	9699	9352	9037	8750	8244	7436	6813
150	17110	16413	15790	15227	14717	14251	13431	12120	11110
DN	160	180	200	220	240	260	280	300	320
15	—	—	—	—	—	—	—	—	—
20	—	—	—	—	—	—	—	—	—
25	65	61	58	53	49	45	42	39	36
32	121	114	108	103	99	95	91	88	85
40	199	187	177	169	162	156	150	145	140
50	478	446	419	396	376	359	344	330	317
65	913	853	802	758	721	688	659	632	609
80	1482	1384	1303	1233	1172	1119	1071	1029	991
100	3378	3158	2973	2814	2677	2557	2450	2355	2269
125	6316	5907	5563	5269	5014	4791	4592	4415	4255
150	10303	9639	9080	8603	8189	7825	7503	7214	6954

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Table F.12 — Natural gas — Flow through — Copper pipe (AS 1432 Type B) (MJ/h) (Pressure drop of 0.75 kPa; suitable for supply pressures within the range 2.75–5 kPa)

Nom diam	Length of straight pipe, in metres								
	2	4	6	8	10	12	14	16	18
6	20	14	11	—	—	—	—	—	—
8	42	29	24	21	18	17	15	13	12
10	67	44	36	31	28	25	24	22	21
15	179	120	94	80	70	63	58	54	51
20	619	417	330	279	245	221	202	186	174
25	1394	942	747	634	558	502	459	425	397
32	2718	1842	1464	1244	1095	987	904	837	782
40	4624	3141	2501	2126	1874	1690	1548	1435	1341
50	10790	7359	5872	4999	4411	3981	3650	3385	3167
65	20135	13776	11009	9382	8285	7483	6864	6369	5962
80	32142	22049	17641	15046	13294	12012	11023	10232	9580
DN	20	25	30	35	40	45	50	55	60
15	48	43	39	36	34	32	30	29	28
20	164	143	129	118	109	101	95	91	87
25	374	328	295	270	249	233	219	207	197
32	736	648	583	533	494	461	434	410	390
40	1263	1112	1001	917	849	793	746	706	672
50	2984	2630	2371	2172	2013	1883	1773	1679	1597
65	5619	4956	4472	4099	3801	3556	3349	3173	3020
80	9032	7971	7195	6598	6120	5727	5397	5114	4869
100	20279	17913	16182	14848	13781	12902	12163	11530	10981
125	37534	33175	29987	27527	25558	23937	22572	21404	20390
150	60766	53738	48593	44622	41443	38824	36619	34732	33092
DN	65	70	75	80	85	90	100	120	140
15	26	24	23	21	20	—	—	—	—
20	83	80	78	75	73	71	67	61	57
25	188	179	172	166	160	155	145	131	120
32	372	356	342	330	318	308	289	260	237
40	641	614	590	569	549	531	499	449	410
50	1526	1462	1406	1355	1308	1266	1191	1073	981
65	2886	2767	2660	2564	2477	2398	2258	2034	1862
80	4653	4462	4291	4137	3997	3870	3645	3286	3010
100	10499	10071	9688	9343	9029	8743	8240	7434	6815
125	19499	18708	18001	17363	16784	16255	15323	13834	12687
150	31652	30373	29229	28197	27260	26405	24898	22487	20630
DN	160	180	200	220	240	260	280	300	320
15	—	—	—	—	—	—	—	—	—
20	53	50	48	45	43	41	38	35	33
25	113	106	101	96	92	88	85	82	80
32	219	204	192	182	173	165	158	153	148
40	379	354	333	315	299	285	273	262	252
50	908	849	798	755	718	685	656	630	607
65	1725	1612	1517	1436	1366	1304	1250	1201	1157
80	2789	2608	2455	2325	2212	2112	2024	1946	1875
100	6319	5911	5569	5275	5021	4798	4600	4423	4263
125	11769	11014	10379	9836	9365	8951	8584	8256	7960
150	19143	17921	16892	16012	15248	14577	13982	13449	12969

NOTE Use of values printed in shaded areas is not recommended and require professional advice. Refer to [Clause F.1.6](#) where further detailed explanation is provided on these values and the use of the tables in general.

Table F.13 — Natural gas — Flow through — Copper pipe (AS 1432 Type B) (MJ/h) (Pressure drop of 1.5 kPa; suitable for supply pressures within the range 5–10 kPa)

Nom diam	Length of straight pipe ,in metres								
	2	4	6	8	10	12	14	16	18
6	28	20	16	14	12	11	—	—	—
8	64	42	34	29	26	24	22	21	19
10	101	67	53	45	39	36	33	31	29
15	268	179	142	120	105	94	86	80	74
20	919	621	492	418	367	331	302	280	261
25	2060	1397	1111	944	831	749	686	635	594
32	4001	2723	2170	1845	1627	1467	1344	1246	1165
40	6787	4633	3697	3147	2777	2506	2297	2130	1993
50	15755	10812	8649	7374	6514	5884	5398	5009	4689
65	29267	20176	16171	13805	12204	11032	10127	9402	8805
80	46537	32208	25855	22094	19545	17677	16234	15077	14124
DN	20	25	30	35	40	45	50	55	60
15	70	61	56	52	48	46	43	41	39
20	246	216	194	177	164	153	144	136	129
25	559	491	442	405	374	350	329	311	296
32	1097	966	870	797	738	690	649	614	584
40	1878	1654	1491	1366	1266	1183	1114	1055	1004
50	4420	3899	3518	3225	2990	2798	2635	2497	2376
65	8302	7329	6617	6069	5631	5270	4966	4706	4481
80	13321	11766	10629	9752	9050	8473	7987	7571	7210
100	29823	26367	23837	21884	20321	19033	17949	17021	16215
125	55075	48729	44078	40487	37610	35239	33243	31533	30047
150	89006	78798	71312	65527	60889	57066	53846	51088	48691
DN	65	70	75	80	85	90	100	120	140
15	38	36	35	34	33	32	31	28	24
20	123	118	113	109	105	102	96	87	81
25	282	270	260	250	241	233	219	197	180
32	558	534	513	495	477	462	434	391	357
40	959	919	883	851	821	795	748	673	616
50	2271	2177	2093	2018	1949	1887	1776	1601	1465
65	4283	4107	3950	3809	3680	3563	3356	3026	2772
80	6893	6612	6360	6133	5927	5739	5408	4879	4471
100	15507	14879	14316	13809	13349	12929	12188	11004	10091
125	28742	27583	26546	25610	24761	23985	22618	20432	18747
150	46584	44713	43038	41527	40155	38902	36694	33160	30435
DN	160	180	200	220	240	260	280	300	320
15	—	—	—	—	—	—	—	—	—
20	75	71	67	64	62	59	57	55	53
25	166	155	146	138	131	125	121	117	113
32	330	308	290	274	260	248	238	228	220
40	570	532	500	473	450	429	411	395	380
50	1357	1269	1194	1130	1075	1026	983	945	910
65	2569	2403	2262	2142	2038	1947	1866	1794	1729
80	4145	3878	3652	3460	3293	3146	3016	2900	2795
100	9362	8761	8257	7825	7450	7121	6829	6567	6332
125	17398	16288	15355	14556	13862	13253	12713	12229	11793
150	28254	26459	24948	23655	22533	21547	20672	19889	19183

NOTE Use of values printed in shaded areas is not recommended and require professional advice. Refer to [Clause F.1.6](#) where further, detailed explanation is provided on these values and the use of the tables in general.

Table F.14 — Natural gas — Flow through—Copper pipe (AS 1432 Type B) (MJ/h) (Pressure drop of 10.0 kPa; suitable for supply pressures around 70 kPa)

Nom diam	Length of straight pipe, in metres								
	2	4	6	8	10	12	14	16	18
15	1022	696	554	471	415	374	342	317	296
20	3430	2355	1883	1605	1417	1279	1173	1088	1018
25	7562	5231	4195	3582	3166	2861	2626	2438	2283
32	14467	10081	8109	6935	6138	5552	5099	4736	4437
40	24206	16986	13701	11736	10397	9413	8650	8038	7533
50	54744	38957	31591	27141	24092	21841	20094	18689	17528
65	99352	71616	58366	50280	44710	40583	37372	34784	32643
80	154814	112862	92392	79785	71057	64568	59508	55423	52038
100	326928	243829	201464	174860	156235	142289	131359	122502	115142
125	572706	435904	363305	316857	283984	259196	239669	223787	210551
150	883152	684090	574655	503425	452498	413835	383233	358253	337378
DN	20	25	30	35	40	45	50	55	60
15	279	246	221	202	187	175	164	156	148
20	959	845	762	698	647	605	570	540	513
25	2152	1899	1714	1571	1457	1363	1284	1217	1158
32	4185	3696	3338	3062	2842	2660	2507	2376	2263
40	7108	6282	5678	5211	4837	4530	4271	4049	3856
50	16548	14644	13247	12168	11303	10589	9989	9474	9028
65	30834	27313	24727	22726	21120	19796	18680	17724	16893
80	49175	43597	39493	36314	33762	31655	29880	28357	27033
100	108903	96710	87710	80726	75107	70464	66546	63184	60258
125	199306	177265	160944	148249	138021	129558	122408	116268	110921
150	319603	284663	258712	238484	222160	208637	197202	187373	178809
DN	65	70	75	80	85	90	100	120	140
15	141	135	130	125	121	117	110	99	90
20	490	470	452	435	420	407	383	345	315
25	1107	1061	1021	984	950	920	866	781	715
32	2163	2074	1995	1924	1859	1800	1696	1529	1401
40	3687	3537	3403	3282	3172	3071	2895	2612	2394
50	8635	8286	7974	7692	7436	7203	6792	6133	5626
65	16162	15513	14932	14407	13931	13496	12730	11503	10557
80	25869	24834	23908	23072	22313	21619	20396	18438	16927
100	57683	55394	53343	51492	49810	48273	45561	41216	37861
125	106213	102026	98272	94882	91801	88985	84014	76043	69885
150	171263	164549	158527	153086	148140	143619	135633	122821	112916
DN	160	180	200	220	240	260	280	300	320
15	83	78	73	69	65	63	60	58	56
20	292	273	256	243	231	220	211	202	195
25	662	619	583	551	525	501	480	461	444
32	1299	1214	1144	1083	1031	985	944	907	874
40	2220	2077	1957	1854	1764	1686	1616	1554	1498
50	5220	4886	4606	4365	4157	3973	3811	3665	3534
65	9799	9176	8651	8202	7812	7470	7166	6894	6649
80	15717	14721	13883	13165	12542	11994	11508	11073	10681
100	35173	32958	31093	29496	28109	26889	25807	24837	23963
125	64948	60878	57450	54513	51961	49717	47725	45941	44332
150	104970	98417	92897	88165	84053	80437	77225	74349	71754

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