

Meter Pressure PSIG	#175 Capacity SCFH	#240 Capacity SCFH	#250 Capacity SCFH	#400 Capacity SCFH	#675 Capacity SCFH	#800 Capacity SCFH	#1000 Capacity SCFH	Differential Pressure "W.C.	Index Factor
14.73	460	540	610	860	1325	1540	2040	2.00	1.000
1	470	560	630	890	1370	1630	2110	2.04	0.989
2	500	585	660	930	1435	1720	2210	2.10	0.974
3	520	610	690	970	1500	1805	2310	2.17	0.960
4	540	635	720	1015	1565	1890	2410	2.22	0.945
5	565	660	750	1055	1625	1970	2505	2.28	0.932
6	To find the actual index rate or speed at any pressure, multiply the index rate factor for the pressure times the 2" W.C. rating of the meter. Example: The maximum capacity of a #675 meter at 15 psig is 2220 SCFH. The maximum allowable index rate to produce that flow is $.841 \times 1325 = 1114$ ACFH with 2.78 " w.c. at delta P.			1095	1690	2055	2600	2.32	0.921
7				1135	1750	2135	2695	2.38	0.909
8				1175	1810	2215	2790	2.43	0.900
9				1215	1870	2295	2885	2.49	0.890
10				1255	1930	2370	2975	2.54	0.881
11				1290	1980	2400	3065	2.60	0.874
12				1330	2050	2475	3155	2.64	0.865
13				1365	2110	2550	3245	2.68	0.855
14				1405	2165	2630	3335	2.73	0.849
15				1440	2220	2705	3425	2.78	0.841
16				1480	2280	2775	3510	2.82	0.834
17				1515	2335	2850	3595	2.87	0.827
18				1550	2390	2925	3680	2.90	0.820
19				1585	2445	2995	3765	2.95	0.815
20	1620	2500	3070	3850	2.98	0.808			
21	1655	2555	3090	3935	3.03	0.803			
22	1695	2610	3160	4020	3.07	0.797			
23	1725	2665	3230	4100	3.11	0.791			
24	1760	2715	3300	4185	3.15	0.786			
25	1795	2770	3370	4265	3.20	0.782			
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14.4	14.73	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	
1	1.045	1.052	1.059	1.066	1.073	1.079	1.086	1.093	1.168	1.107	1
2	1.113	1.120	1.127	1.134	1.141	1.147	1.154	1.161	1.168	1.174	2
3	1.181	1.188	1.195	1.202	1.208	1.215	1.222	1.229	1.168	1.242	3
4	1.249	1.256	1.263	1.270	1.276	1.283	1.290	1.297	1.168	1.310	4
5	1.317	1.324	1.331	1.337	1.344	1.351	1.358	1.365	1.168	1.378	5
6	1.385	1.392	1.399	1.405	1.412	1.419	1.426	1.432	1.168	1.446	6
7	1.453	1.460	1.466	1.473	1.480	1.487	1.494	1.500	1.168	1.514	7
8	1.521	1.527	1.534	1.541	1.548	1.555	1.561	1.568	1.168	1.582	8
9	1.589	1.595	1.602	1.609	1.616	1.623	1.629	1.636	1.168	1.650	9
10	1.656	1.663	1.670	1.677	1.684	1.690	1.697	1.704	1.168	1.718	10
11	1.724	1.731	1.738	1.745	1.752	1.758	1.765	1.772	1.168	1.785	11
12	1.792	1.799	1.806	1.813	1.819	1.826	1.833	1.840	1.168	1.853	12
13	1.860	1.867	1.874	1.881	1.887	1.894	1.901	1.908	1.168	1.921	13
14	1.928	1.935	1.942	1.948	1.955	1.962	1.969	1.976	1.168	1.989	14
15	1.996	2.003	2.010	2.016	2.023	2.030	2.037	2.043	1.168	2.057	15
16	2.064	2.071	2.077	2.084	2.091	2.098	2.105	2.111	1.168	2.125	16
17	2.132	2.138	2.145	2.152	2.159	2.166	2.172	2.179	1.168	2.193	17
18	2.200	2.206	2.213	2.220	2.227	2.234	2.240	2.247	1.168	2.261	18
19	2.267	2.274	2.281	2.288	2.295	2.301	2.308	2.315	1.168	2.329	19
20	2.335	2.342	2.349	2.356	2.363	2.369	2.376	2.383	1.168	2.396	20
21	2.403	2.410	2.417	2.424	2.430	2.437	2.444	2.451	1.168	2.464	21
22	2.471	2.478	2.485	2.492	2.498	2.505	2.512	2.519	1.168	2.532	22
23	2.539	2.546	2.553	2.559	2.566	2.573	2.580	2.587	1.168	2.600	23
24	2.607	2.614	2.621	2.627	2.634	2.641	2.648	2.654	1.168	2.668	24
25	2.675	2.682	2.688	2.695	2.702	2.709	2.716	2.722	1.168	2.736	25
26	2.743	2.749	2.756	2.763	2.770	2.777	2.783	2.790	1.168	2.804	26
27	2.811	2.817	2.824	2.831	2.838	2.845	2.851	2.858	1.168	2.872	27
28	2.878	2.885	2.892	2.899	2.906	2.912	2.919	2.926	1.168	2.940	28
29	2.946	2.953	2.960	2.967	2.974	2.980	2.987	2.994	1.168	3.007	29
30	3.014	3.021	3.028	3.035	3.041	3.048	3.055	3.062	1.168	3.075	30
31	3.082	3.089	3.096	3.103	3.109	3.116	3.123	3.130	1.168	3.143	31
32	3.150	3.157	3.164	3.170	3.177	3.184	3.191	3.198	1.168	3.211	32
33	3.218	3.225	3.232	3.238	3.245	3.252	3.259	3.265	1.168	3.279	33
34	3.286	3.293	3.299	3.306	3.313	3.320	3.327	3.333	1.168	3.347	34
35	3.354	3.360	3.367	3.374	3.381	3.388	3.394	3.401	1.168	3.415	35
36	3.422	3.428	3.435	3.442	3.449	3.456	3.462	3.469	1.168	3.483	36
37	3.489	3.496	3.503	3.510	3.517	3.523	3.530	3.537	1.168	3.551	37
38	3.557	3.564	3.571	3.578	3.585	3.591	3.598	3.605	1.168	3.618	38
39	3.625	3.632	3.639	3.646	3.652	3.659	3.666	3.673	1.168	3.686	39
40	3.693	3.700	3.707	3.714	3.720	3.727	3.734	3.741	1.168	3.754	40
41	3.761	3.768	3.775	3.781	3.788	3.795	3.802	3.809	1.168	3.822	41
42	3.829	3.836	3.842	3.849	3.856	3.863	3.870	3.876	1.168	3.890	42
43	3.897	3.904	3.910	3.917	3.924	3.931	3.938	3.944	1.168	3.958	43
44	3.965	3.971	3.978	3.985	3.992	3.999	4.005	4.012	1.168	4.026	44
45	4.033	4.039	4.046	4.053	4.060	4.067	4.073	4.080	1.168	4.094	45
46	4.100	4.107	4.114	4.121	4.128	4.134	4.141	4.148	1.168	4.162	46
47	4.168	4.175	4.182	4.189	4.196	4.202	4.209	4.216	1.168	4.229	47
48	4.236	4.243	4.250	4.257	4.263	4.270	4.277	4.284	1.168	4.297	48
49	4.304	4.311	4.318	4.325	4.331	4.338	4.345	4.352	1.168	4.365	49
50	4.372	4.379	4.386	4.392	4.399	4.406	4.413	4.420	1.168	4.433	50
51	4.440	4.447	4.453	4.460	4.467	4.474	4.481	4.487	1.168	4.501	51
52	4.508	4.515	4.521	4.528	4.535	4.542	4.549	4.555	1.168	4.569	52
53	4.576	4.582	4.589	4.596	4.603	4.610	4.616	4.623	1.168	4.637	53
54	4.644	4.650	4.657	4.664	4.671	4.678	4.684	4.691	1.168	4.705	54
55	4.711	4.718	4.725	4.732	4.739	4.745	4.752	4.759	1.168	4.773	55
56	4.779	4.786	4.793	4.800	4.807	4.813	4.820	4.827	1.168	4.840	56
57	4.847	4.854	4.861	4.868	4.874	4.881	4.888	4.895	1.168	4.908	57

Altitude Above Sea level in Feet	Atmospheric Pressure PSIA	Barometer Reading Inches HG
Sea Level	14.69	29.92
250	14.56	29.64
500	14.42	29.38
750	14.29	29.09
1,000	14.16	28.86
1,250	14.04	28.59
1,500	13.91	28.33
1,750	13.79	28.08
2,000	13.66	27.82
2,500	13.41	27.31
3,000	13.16	26.81
3,500	12.92	26.32
4,000	12.68	25.84
4,500	12.45	25.36
5,000	12.22	24.89
6,000	11.77	23.98
7,000	11.33	23.09
8,000	10.91	22.22
9,000	10.50	21.38
10,000	10.10	20.58
11,000	9.71	19.75
12,000	9.34	19.03
13,000	8.97	18.29
14,000	8.62	17.57

14.4
14.73 Contract Number in Gas Specs.

31	1.0591	1.0588	1.0586	1.0584	1.0582	1.0580	1.0578	1.0576	1.0573	1.0571	-20
32	1.0569	1.0567	1.0565	1.0563	1.0561	1.0558	1.0556	1.0554	1.0552	1.0550	-20
33	1.0548	1.0546	1.0543	1.0541	1.0539	1.0537	1.0535	1.0533	1.0531	1.0528	-20
34	1.0526	1.0524	1.0522	1.0520	1.0518	1.0516	1.0514	1.0511	1.0509	1.0507	-20
35	1.0505	1.0503	1.0501	1.0499	1.0497	1.0494	1.0492	1.0490	1.0488	1.0486	-20
36	1.0484	1.0482	1.0480	1.0478	1.0475	1.0473	1.0471	1.0469	1.0467	1.0465	-20
37	1.0463	1.0461	1.0459	1.0456	1.0454	1.0452	1.0450	1.0448	1.0446	1.0444	-20
38	1.0442	1.0440	1.0438	1.0435	1.0433	1.0431	1.0429	1.0427	1.0425	1.0423	-20
39	1.0421	1.0419	1.0417	1.0415	1.0412	1.0410	1.0408	1.0406	1.0404	1.0402	-20
40	1.0400	1.0398	1.0396	1.0394	1.0392	1.0390	1.0388	1.0385	1.0383	1.0381	-20
41	1.0379	1.0377	1.0375	1.0373	1.0371	1.0369	1.0367	1.0365	1.0363	1.0361	-20
42	1.0359	1.0357	1.0354	1.0352	1.0350	1.0348	1.0346	1.0344	1.0342	1.0340	-20
43	1.0338	1.0336	1.0334	1.0332	1.0330	1.0328	1.0326	1.0324	1.0322	1.0320	-20
44	1.0317	1.0315	1.0313	1.0311	1.0309	1.0307	1.0305	1.0303	1.0301	1.0299	-20
45	1.0297	1.0295	1.0293	1.0291	1.0289	1.0287	1.0285	1.0283	1.0281	1.0279	-20
46	1.0277	1.0275	1.0273	1.0271	1.0269	1.0267	1.0265	1.0262	1.0260	1.0258	-20
47	1.0256	1.0254	1.0252	1.0250	1.0248	1.0246	1.0244	1.0242	1.0240	1.0238	-20
48	1.0236	1.0234	1.0232	1.0230	1.0228	1.0226	1.0224	1.0222	1.0220	1.0218	-20
49	1.0216	1.0214	1.0212	1.0210	1.0208	1.0206	1.0204	1.0202	1.0200	1.0198	-20
50	1.0196	1.0194	1.0192	1.0190	1.0188	1.0186	1.0184	1.0182	1.0180	1.0178	-20
51	1.0176	1.0174	1.0172	1.0170	1.0168	1.0166	1.0164	1.0162	1.0160	1.0158	-20
52	1.0156	1.0154	1.0152	1.0150	1.0148	1.0146	1.0144	1.0142	1.0140	1.0138	-20
53	1.0136	1.0134	1.0133	1.0131	1.0129	1.0127	1.0125	1.0123	1.0121	1.0119	-20
54	1.0117	1.0115	1.0113	1.0111	1.0109	1.0107	1.0105	1.0103	1.0101	1.0099	-20
55	1.0097	1.0095	1.0093	1.0091	1.0089	1.0087	1.0085	1.0083	1.0081	1.0079	-20
56	1.0078	1.0076	1.0074	1.0072	1.0070	1.0068	1.0066	1.0064	1.0062	1.0060	-20
57	1.0058	1.0056	1.0054	1.0052	1.0050	1.0048	1.0046	1.0044	1.0042	1.0041	-20
58	1.0039	1.0037	1.0035	1.0033	1.0031	1.0029	1.0027	1.0025	1.0023	1.0021	-20
59	1.0019	1.0017	1.0015	1.0013	1.0012	1.0010	1.0008	1.0006	1.0004	1.0002	-20
60	1.0000	0.9998	0.9996	0.9994	0.9992	0.9990	0.9988	0.9987	0.9985	0.9983	-20
61	0.9981	0.9979	0.9977	0.9975	0.9973	0.9971	0.9969	0.9967	0.9966	0.9964	-20
62	0.9962	0.9960	0.9958	0.9956	0.9954	0.9952	0.9950	0.9948	0.9946	0.9945	-20
63	0.9943	0.9941	0.9939	0.9937	0.9935	0.9933	0.9931	0.9929	0.9927	0.9926	-20
64	0.9924	0.9922	0.9920	0.9918	0.9916	0.9914	0.9912	0.9910	0.9909	0.9907	-20
65	0.9905	0.9903	0.9901	0.9899	0.9897	0.9895	0.9893	0.9892	0.9890	0.9888	-20
66	0.9886	0.9884	0.9882	0.9880	0.9878	0.9877	0.9875	0.9873	0.9871	0.9869	-20
67	0.9867	0.9865	0.9863	0.9862	0.9860	0.9858	0.9856	0.9854	0.9852	0.9850	-20
68	0.9848	0.9847	0.9845	0.9843	0.9841	0.9839	0.9837	0.9835	0.9834	0.9832	-20
69	0.9830	0.9828	0.9826	0.9824	0.9822	0.9821	0.9819	0.9817	0.9815	0.9813	-20
70	0.9811	0.9809	0.9808	0.9806	0.9804	0.9802	0.9800	0.9798	0.9797	0.9795	-20
71	0.9793	0.9791	0.9789	0.9787	0.9785	0.9784	0.9782	0.9780	0.9778	0.9776	-20
72	0.9774	0.9773	0.9771	0.9769	0.9767	0.9765	0.9763	0.9762	0.9760	0.9758	-20
73	0.9756	0.9754	0.9752	0.9751	0.9749	0.9747	0.9745	0.9743	0.9741	0.9740	-20
74	0.9738	0.9736	0.9734	0.9732	0.9731	0.9729	0.9727	0.9725	0.9723	0.9721	-20
75	0.9720	0.9718	0.9716	0.9714	0.9712	0.9711	0.9709	0.9707	0.9705	0.9703	-20
76	0.9701	0.9700	0.9698	0.9696	0.9694	0.9692	0.9691	0.9689	0.9687	0.9685	-20
77	0.9683	0.9682	0.9680	0.9678	0.9676	0.9674	0.9673	0.9671	0.9669	0.9667	-20
78	0.9665	0.9664	0.9662	0.9660	0.9658	0.9656	0.9655	0.9653	0.9651	0.9649	-20
79	0.9647	0.9646	0.9644	0.9642	0.9640	0.9639	0.9637	0.9635	0.9633	0.9631	-20
80	0.9630	0.9628	0.9626	0.9624	0.9623	0.9621	0.9619	0.9617	0.9615	0.9614	-20
81	0.9612	0.9610	0.9608	0.9607	0.9605	0.9603	0.9601	0.9599	0.9598	0.9596	-20

CONVERSION FORMULA

TO USE THE NATURAL GAS SELECTION CHARTS FOR A DIFFERENT GAS, USE THE FOLLOWING FORMULA TO GET THE CONVERSION FACTOR.

NATURAL GAS HAS A SPECIFIC GRAVITY OF .60

NITROGEN HAS A SPECIFIC GRAVITY OF .971

PROPANE GAS HAS A SPECIFIC GRAVITY OF 1.53

CONVERSION FACTOR =

$$\sqrt{\frac{1}{\frac{\text{NATURAL GAS SG} = .60}{\text{NEW GAS SG} = ?}}}$$

EXAMPLE FOR NITROGEN GAS

CONVERSION FACTOR =

$$\sqrt{\frac{1}{\frac{.60}{.971}}}$$

CONVERSION FACTOR =

$$\sqrt{\frac{1}{0.6179}}$$

CONVERSION FACTOR =

$$\frac{1}{0.78607}$$

CONVERSION FACTOR =

1.272

15,723 SCFH OF NITROGEN X 1.272 = 20,000 SCFH ON THE NATURAL GAS CHARTS

20 PSI INLET PRESSURE AND 2 PSI OUTLET PRESSURE

THE CORRECT SELECTION IS----- CL34-2, 7/8" ORIFICE, ONCO #CL3427BG20

SCHLUMBERGER GAS

- #1) 1" W.C. = .0361 PSI
- #2) 1 PSI = 27.67 INCHES W.C.
- #3) 1" W.C. = .5776 OZ.
- #4) 7" W.C. = 4.043 OZ. OR .2527 PSI
- #5) 14" W.C. = 8.086 OZ. OR .5054 PSI
- #6) 1 GRAM = .0353 OZ.
- #7) 1" W.C. = .0735 INCHES OF MERCURY
- #8) 0.6 SP. GR. NATURAL GAS = 1000 BTU/CU FT
- #9) 1.53 SP. GR. PROPANE GAS = 2500 BTU/CU FT
- #10) .971 SP. GR. NITROGEN GAS
- #11) 1.00 SP.GR. OF AIR
- #12) FOR EVER 15 PSI DROP ACROSS A REGULATOR THE TEMP WILL DROP 1 DEG F.

SCFH X 1.597 =
CONVERSION FACTOR

SCFH X 1.272 =
CONVERSION FACTOR

SCFH X 1.291 =
CONVERSION FACTOR

GAS CONVERSION EXAMPLE

15,723 SCFH OF NITROGEN X 1.272 = 20,000 SCFH ON THE NATURAL GAS CHARTS
20 PSI INLET PRESSURE AND 2 PSI OUTLET PRESSURE
THE CORRECT SELECTION IS----- CL34-2, 7/8" ORIFICE, ONCO #CL3427BG20