



Technical Specifications

Table of Contents

Tubing Specifications	Page 1
Expansion Table	Page 2
Flow Calculation Chart	Page 3-4

Metric conversions performed by:





Tubing Specifications

Tubing	1/2"	5/8"	3/4"	1"
Outer Diameter (in.)	0.6299	0.7874	1.0236	1.2598
Inner Diameter (in.)	0.47244	0.62992	0.7874	1.0236
Wall Thickness (mm)	2	2	3	3
Thickness of Aluminum (mm)	0.2	0.28	0.28	0.7
Max Working Temperature (°F)	203	203	203	203
Max Working Pressure (psi)	145	145	145	145
Weight Per 100 ft. (pounds)	6.79	8.67	17.54	26.21
Water Volume (gal. per 100 ft.)	0.90986	1.6184	2.5283	4.2675



Expansion Table

Temperature Difference (ΔT)

Pipe Length (ft.)	18°F	36°F	54°F	72°F	90°F	108°F	126°F	144°F
5	0.015	0.030	0.045	0.060	0.075	0.090	0.105	0.120
10	0.030	0.060	0.090	0.120	0.150	0.180	0.210	0.240
15	0.045	0.090	0.135	0.180	0.225	0.270	0.315	0.360
20	0.060	0.120	0.180	0.240	0.300	0.360	0.420	0.480
25	0.075	0.150	0.225	0.300	0.375	0.450	0.525	0.600
30	0.090	0.180	0.270	0.360	0.450	0.540	0.630	0.720
50	0.150	0.300	0.450	0.600	0.750	0.900	1.050	1.200
100	0.300	0.600	0.900	1.200	1.500	1.800	2.100	2.400
150	0.450	0.900	1.350	1.800	2.250	2.700	3.150	3.600
200	0.600	1.200	1.800	2.400	3.000	3.600	4.200	4.800
250	0.750	1.500	2.250	3.000	3.750	4.500	5.250	6.000
500	1.500	3.000	4.500	6.000	7.500	9.000	10.500	12.000

Above expansion numbers are in inches.

NOTE: Coefficient of expansion is the same regardless of the diameter of the pipe.



Flow Calculation Chart

GPM	1/2" Henco Pex-al-Pex			5/8" Henco Pex-al-Pex			3/4" Henco Pex-al-Pex			1" Henco Pex-al-Pex		
	Velocity FT Sec	psi/100ft	Ft. HD/100ft	Velocity FT Sec	psi/100ft	Ft. HD/100ft	Velocity FT Sec	psi/100ft	Ft. HD/100ft	Velocity FT Sec	psi/100ft	Ft. HD/100ft
0.189	0.36089	0.07515	0.17335	0.19685	0.01326	0.03059	0.13123	0.00442	0.01020	0.06562	0.00000	0.00000
0.379	0.68898	0.27851	0.64242	0.39370	0.07073	0.16315	0.26247	0.02652	0.06118	0.16404	0.00442	0.01020
0.568	1.04987	0.56585	1.30523	0.59055	0.14588	0.33650	0.36089	0.04863	0.11217	0.22966	0.01326	0.03059
0.757	1.37795	0.92835	2.14139	0.78740	0.23872	0.55064	0.49213	0.08399	0.19374	0.29528	0.02210	0.05099
0.947	1.73885	1.37042	3.16110	0.98425	0.34924	0.80557	0.62336	0.12378	0.28552	0.36089	0.03537	0.08158
1.136	2.06693	1.88323	4.34396	1.18110	0.48186	1.11148	0.75459	0.16799	0.38749	0.45932	0.04863	0.11217
1.325	2.42782	2.47118	5.70018	1.37795	0.62774	1.44799	0.88583	0.21662	0.49966	0.52493	0.06189	0.14276
1.515	2.78871	3.12545	7.20935	1.57480	0.79573	1.83548	0.98425	0.27408	0.63222	0.59055	0.07957	0.18355
1.704	3.11680	3.84603	8.87148	1.77165	0.97698	2.25356	1.11549	0.34040	0.78518	0.65617	0.09726	0.22434
1.893	3.47769	4.63292	10.68656	1.93570	1.17591	2.71243	1.24672	0.40671	0.93813	0.75459	0.11936	0.27532
2.083	3.80577	5.48170	12.64440	2.13255	1.39253	3.21209	1.37795	0.48186	1.11148	0.82021	0.13704	0.31611
2.272	4.16667	6.39237	14.74501	2.32940	1.62241	3.74234	1.50919	0.56143	1.29503	0.88583	0.15915	0.36710
2.461	4.49475	7.36935	16.99856	2.52625	1.86555	4.30318	1.60761	0.64543	1.48878	0.95144	0.18567	0.42828
2.651	4.85564	8.40821	19.39488	2.72310	2.12637	4.90480	1.73885	0.73384	1.69272	1.04987	0.21219	0.48946
2.840	5.21654	9.50455	21.92376	2.91995	2.40487	5.54722	1.87008	0.83110	1.91705	1.11549	0.23872	0.55064
3.029	5.54462	10.65836	24.58521	3.11680	2.69664	6.22023	2.00131	0.92835	2.14139	1.18110	0.26524	0.61183
3.218	5.90551	11.87848	27.39961	3.31365	3.00167	6.92383	2.13255	1.03445	2.38612	1.24672	0.29619	0.68321
3.408	6.23360	13.15165	30.33637	3.51050	3.31996	7.65802	2.23097	1.14497	2.64105	1.34514	0.32713	0.75459
3.597	6.59449	14.48229	33.40570	3.70735	3.65594	8.43300	2.36220	1.25991	2.90617	1.41076	0.36250	0.83616
3.786	6.92257	15.87482	36.61778	3.90420	4.00517	9.23857	2.49344	1.37927	3.18149	1.47638	0.39344	0.90754
3.976	7.28346	17.32039	39.95223	4.10105	4.36767	10.07473	2.62467	1.50305	3.46701	1.54199	0.42881	0.98912
4.165	7.64436	18.82344	43.41925	4.29790	4.74344	10.94149	2.75591	1.63567	3.77293	1.64042	0.46860	1.08089
4.354	7.97244	20.38395	47.01882	4.49475	5.13688	11.84903	2.88714	1.76829	4.07884	1.70604	0.50396	1.16247
4.544	8.33333	21.99752	50.74076	4.69160	5.53917	12.77697	2.98556	1.90533	4.39495	1.77165	0.54375	1.25424
4.733	8.66142	23.66855	54.59527	4.88845	5.95913	13.74569	3.11680	2.05122	4.73145	1.83727	0.58796	1.35621
4.922	9.02231	25.39263	58.57214	5.08530	6.38794	14.73481	3.24803	2.19710	5.06796	1.93570	0.62774	1.44799
5.301	9.71129	29.00878	66.91336	5.44619	7.29419	16.82521	3.51050	2.50655	5.78176	2.06693	0.71616	1.65193
5.490	10.07218	30.89643	71.26753	5.64304	7.76721	17.91630	3.60892	2.67012	6.15905	2.13255	0.76036	1.75390
5.869	10.76115	34.83530	80.35314	6.03675	8.74861	20.18006	3.87139	3.00609	6.93403	2.29659	0.85762	1.97824
6.058	11.08924	36.88651	85.08459	6.23360	9.26141	21.36292	4.00262	3.17850	7.33171	2.36220	0.90625	2.09041
6.437	11.77822	41.14367	94.90440	6.62730	10.32239	23.81023	4.23228	3.54100	8.16788	2.52625	1.01235	2.33514
6.816	12.50000	45.60860	105.20347	7.02100	11.43641	26.37990	4.49475	3.92560	9.05502	2.65748	1.11844	2.57987
7.005	12.82808	47.92064	110.53655	7.21785	12.01552	27.71572	4.62598	4.12011	9.50370	2.72310	1.17591	2.71243
7.573	13.87795	55.16620	127.24960	7.80840	13.81918	31.87613	4.98688	4.73459	10.92109	2.95276	1.34832	3.11012

GPM	1/2" Henco Pex-al-Pex			5/8" Henco Pex-al-Pex			3/4" Henco Pex-al-Pex			1" Henco Pex-al-Pex		
	Velocity FT Sec	psi/100ft	Ft. HD/100ft	Velocity FT Sec	psi/100ft	Ft. HD/100ft	Velocity FT Sec	psi/100ft	Ft. HD/100ft	Velocity FT Sec	psi/100ft	Ft. HD/100ft
7.762	14.20604	57.68601	133.06195	8.00525	14.44692	33.32412	5.11811	4.95121	11.42075	3.01837	1.41021	3.25287
7.952	14.56693	60.25445	138.98646	8.20210	15.08351	34.79250	5.24934	5.16783	11.92041	3.11680	1.47210	3.39563
8.141	14.92782	62.87594	145.03334	8.39895	15.73777	36.30167	5.38058	5.39328	12.44046	3.18241	1.53399	3.53839
8.520	15.61680	68.26922	157.47380	8.79265	17.07725	39.39139	5.61024	5.84862	13.49076	3.31365	1.66219	3.83411
8.709	15.94488	71.04102	163.86738	8.98950	17.76689	40.98214	5.74147	6.08291	14.03121	3.41207	1.72850	3.98707
9.088	16.63386	76.73933	177.01144	9.35039	19.18152	44.24521	6.00394	6.56477	15.14269	3.54331	1.86555	4.30318
9.277	16.99475	79.66143	183.75172	9.54724	19.90652	45.91754	6.10236	6.81233	15.71373	3.60892	1.93628	4.46633
9.466	17.35564	82.63657	190.61437	9.74409	20.64478	47.62045	6.23360	7.06432	16.29496	3.70735	2.00701	4.62948
9.845	18.04462	88.73275	204.67617	10.13780	22.15666	51.10786	6.49606	7.58154	17.48802	3.83858	2.15289	4.96599
10.034	18.37270	91.85378	211.87532	10.33465	22.93029	52.89235	6.62730	7.84236	18.08965	3.90420	2.22804	5.13934
10.602	19.42257	101.52190	234.17638	10.92520	25.32632	58.41918	6.98819	8.66020	19.97612	4.13386	2.45792	5.66959
10.981	20.11155	108.21045	249.60459	11.31890	26.98409	62.24309	7.25066	9.22163	21.27115	4.29790	2.61707	6.03668
11.549	21.16142	118.60799	273.58817	11.90945	29.56137	68.18800	7.61155	10.10135	23.30037	4.49475	2.86463	6.60772
11.927	21.85039	125.78725	290.14826	12.30315	31.33408	72.27704	7.87402	10.70257	24.68718	4.65879	3.03704	7.00541
12.306	22.53937	133.15659	307.14682	12.66404	33.15984	76.48844	8.10367	11.32147	26.11477	4.79003	3.21387	7.41329
12.495	22.90026	92.70698	213.84336	12.86089	34.08819	78.62983	8.23491	11.63976	26.84896	4.88845	3.30228	7.61723
12.874										5.01969	3.48353	8.03531
13.253										5.18373	3.66920	8.46359
13.631										5.31496	3.85929	8.90207
14.010										5.47900	4.05380	9.35074
14.578										5.67585	4.35441	10.04414
14.957										5.83990	4.55777	10.51321
15.525										6.06955	4.87606	11.24740
15.903										6.20079	5.09267	11.74706
16.092										6.26640	5.19877	11.99179
16.471										6.43045	5.42423	12.51184
17.039										6.66010	5.76462	13.29702
17.418										6.79134	5.99892	13.83746
17.986										7.02100	6.35258	14.65323
18.554										7.25066	6.71950	15.49959
18.932										7.38189	6.97148	16.08083
19.500										7.61155	7.35166	16.95778
20.068										7.84121	7.74069	17.85512
20.447										7.97244	8.00593	18.46695
21.015										8.20210	8.41264	19.40508
21.583										8.43176	8.82818	20.36361
21.962										8.56299	9.11111	21.01622
22.529										8.79265	9.53992	22.00534
23.097										9.02231	9.98199	23.02505

Chart assumes 158°F water as fluid

Approximate additions to head pressures: Add an additional 10% head pressure for 120°F Water.
Also Add an additional 20% head pressure for 30% glycol, or add an additional 35% head pressure for 50% glycol mix.