Boiler Expansion Tank Sizing

Boiler		Expansion Tank Calculations				Expansion Tank Selections								
		Plain Steel Method		Diaphragm Method		Diaphragm Type Standard Non ASME Type			Plain Steel Type Standard Non ASME Type			Plain Steel Type Optional ASME Type		
Model	Capacity Gallons	ASME Min.Gal.	Amtrol Min. Gal.	ASME Min. Gal.	Amtrol Min. Gal.	Gallons	Size	Part #	Gallons	Size	Part #	Gallons	Size	Part #
AB90	33	7.79	7.72	2.57	2.55				12	12 x 24	28940	15	12 x 33	28943
AB120	40	9.44	9.36	3.12	3.09				12	12 x 24	28940	15	12 x 33	28943
AB150	48	11.33	11.23	3.74	3.71				18	12 x 36	28941	15	12 x 33	28943
AB200	61	14.39	14.27	4.75	4.71				18	12 x 36	28941	24	12 x 51	28944
AB250	73	17.23	17.08	5.69	5.64				24	12 x 48	28942	24	12 x 51	28944
AB300	100	23.60	23.40	7.79	7.72				24	12 x 48	28942	24	12 x 51	28944
CL90	*30*	*7.08*	*7.02*	*2.34*	*2.32*				*12*	*12 x 24*	*28940*	*15*	*12 x 33*	*28943*
CLM120	38	8.97	8.89	2.96	2.93				12	13 x 24	28940	15	12 x 33	28943
CLM150	47	11.09	11.00	3.66	3.63				18	12 x 36	28941	15	12 x 33	28943
CLM180	55	12.98	12.87	4.28	4.25				18	12 x 36	28941	15	12 x 33	28943
CLM210	63	14.87	14.74	4.91	4.86				18	12 x 36	28941	24	12 x 51	28944
CLM240	71	16.75	16.61	5.53	5.48				24	12 x 48	28942	24	12 x 51	28944
CLM270	80	18.88	18.72	6.23	6.18				24	12 x 48	28942	24	12 x 51	28944
CLM300	88	20.77	20.59	6.85	6.80				24	12 x 48	28942	24	12 x 51	28944
DR250	20	4.72	4.68	1.56	1.54	2	109 Extrol	28958	12	12 x 24	28940	15	12 x 33	28943
DR350	20	4.72	4.68	1.56	1.54	2	109 Extrol	28958	12	12 x 24	28940	15	12 x 33	28943
DR450	20	4.72	4.68	1.56	1.54	2	109 Extrol	28958	12	12 x 24	28940	15	12 x 33	28943
DR650	30	7.08	7.02	2.34	2.32				12	12 x 24	28940	15	12 x 33	28943
DR850	30	7.08	7.02	2.34	2.32				12	12 x 24	28940	15	12 x 33	28943
F350	10	2.36	2.34	0.78	0.77	2	109 Extrol	28958	12	12 x 24	28940	15	12 x 33	28943
F450	12	2.83	2.81	0.93	0.93	2	109 Extrol	28958	12	12 x 24	28940	15	12 x 33	28943
F650	16	3.78	3.74	1.25	1.24	2	109 Extrol	28958	12	12 x 24	28940	15	12 x 33	28943
F850	20	4.72	4.68	1.56	1.54	2	109 Extrol	28958	12	12 x 24	28940	15	12 x 33	28943
K250	108	25.49	25.27	8.41	8.34							30	14 x 48	28945
K300	127	29.97	29.71	9.89	9.81							40	14 x 63	28946
K350	146	34.45	34.16	11.37	11.27							40	14 x 63	28946
K400	160	37.76	37.44	12.46	12.36							40	14 x 63	28946
K450	179	42.24	41.88	13.94	13.82							60	16 x72	28947
K500	198	46.72	46.33	15.42	15.29							60	16 x72	28947
K550	217	51.21	50.77	16.90	16.76							60	16 x72	28947
K600	232	54.75	54.28	18.07	17.92							60	16 x72	28947
K650	251	59.23	58.73	19.55	19.38							80	20 x 62	SO
RV200	*96*	*22.65*	*22.46*	*7.48*	*7.41*							*24*	*12 x 51*	*28944*
RV250	*111*	*26.19*	*25.97*	*8.64*	*8.57*							*30*	*14 x 48*	*28945*
RV300	*133*	*31.38*	*31.12*	*10.36*	*10.27*							*40*	*14 x 63*	*28946*
RV350	140	33.04	32.76	10.90	10.81							40	14 x 63	28946
RV400	169	39.88	39.54	13.16	13.05							60	16 x72	28947
RV450	181	42.71	42.35	14.10	13.98							60	16 x72	28947
RV500	200	47.19	46.79	15.58	15.44							60	16 x72	28947
RV550	216	50.97	50.54	16.82	16.68							60	16 x72	28947
RV600	236	55.69	55.22	18.38	18.22							60	16 x72	28947
RV700	278	65.60	65.04	21.65	21.47							80	20 x 62	SO
RV800	309	72.92	72.30	24.06	23.86							80	20 x 62	SO

Obsolete Models

Calculation Parameters

Average Operating Temperature	200	°F
Initial Fill Temperature	40	°F
Initial Fill Pressure	12	PSIG
Operating Pressure Maximum	22	PSIG

Notice:

Sizings provided above cover the water volume content of the boiler only.