

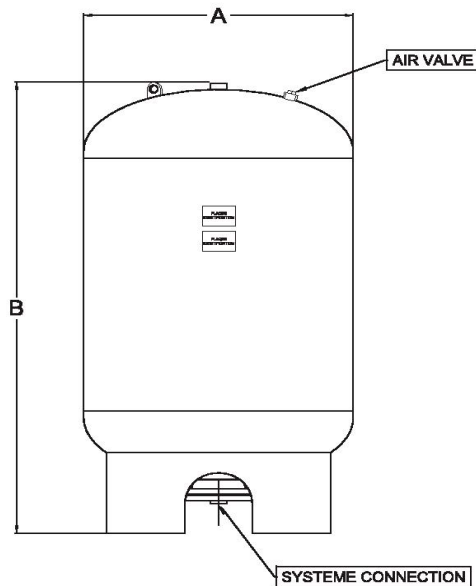
STANDARD CHARACTERISTIC

- CONSTRUCTED IN ACCORDANCE WITH THE ASME CODE, SEC VIII 2010 11a, DIV.1, PARAG. UW-12(C)
- CONSTRUCTED IN ACCORDANCE WITH CSA B.51
- DESIGNED PRESSURE : 150 PSI (1034 kPa)
- EXTERNAL FINISH : CLEANED WITH SOLVENT AND APPLICATION OF ONE COAT OF GREY PRIMER
- DESIGNED TEMPERATURE : 240 °F (115°C)
- CARBON STEEL CONSTRUCTION
- BUTYL REPLACEABLE BLADDER
- 304 STAINLESS STEEL SYSTEM CONNECTION

OPTIONS

- HORIZONTAL WITH STRAPS (CEILING MOUNTING) (suffix C)
- HORIZONTAL WITH SADDLES (FLOOR MOUNTING) (suffix F)
- ANTI-SEISMIC BRACKETS (suffix AB)
- 316 STAINLESS STEEL CONNECTION (suffix Y)
- SIGHT GLASS (suffix X)
- EXTERNAL EPOXY FINISH (suffix E)
- OTHER DESIGNED PRESSURES (suffix SPE)
- _____ PSI (_____ kPa)

DIMENSIONS



QUANTITY : _____
 MODEL: TRM- _____
 OPTIONS (suffix) : _____
 PRECHARGE : _____

MODEL	VOLUME		DIMENSIONS		SYSTEM CONNECTION		WEIGHT	
			A X B		in.	mm	lbs	kg
	gal.	lbs	in X in	mm X mm				
TRM-38V	10	38	12 X 30	305 X 762	3/4	19	81	37
TRM-50V	13,2	50	16 X 26	406 X 660	3/4	19	94	43
TRM-75V	20	75	16 X 35	406 X 889	1	25	116	53
TRM-100V	26,4	100	16 X 43	406 X 1090	1	25	138	63
TRM-140V	37	140	16 X 56	406 X 1410	1	25	172	78

PROJECT INFORMATION

REPRESENTATIVE: _____

JOB NAME: _____

TAGGING INFO: _____

ENGINEER: _____

CONTRACTOR: _____

ORDER No: _____

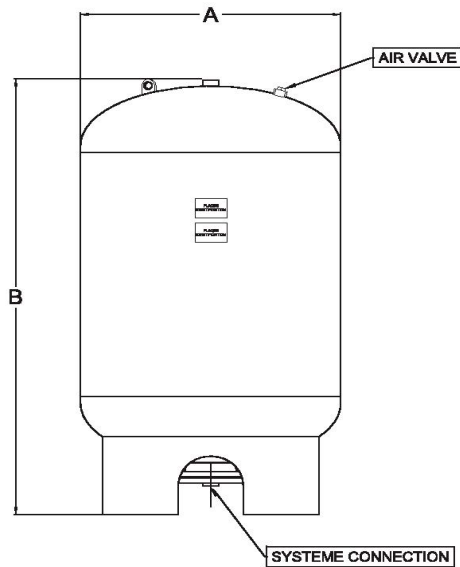
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_____ PSI (_____ kPa)

DIMENSIONS



QUANTITY : _____

MODEL: TRM- _____

OPTIONS (suffix) : _____

PRECHARGE : _____

MODEL	VOLUME		DIMENSIONS		SYSTEM CONNECTION		WEIGHT	
			A X B		in.	mm	lbs	kg
	gal.	lts	in X in	mm X mm				
TRM-200V	53	200	24 X 41	610 X 1051	1,5	38	200	91
TRM-250V	66	250	24 X 48	610 X 1229	1,5	38	225	103
TRM-300V	79	300	24X 55	610 X 1407	1,5	38	255	116
TRM-400V	106	400	24 X 69	610 X 1762	1,5	38	315	143
TRM-500V	132	500	24 X 83	610 X 2118	2	51	375	171
TRM-600V	158	600	30 X 69	762 X 1743	2	51	535	244
TRM-800V	211	800	30 X 86	762 X 2194	2	51	653	297

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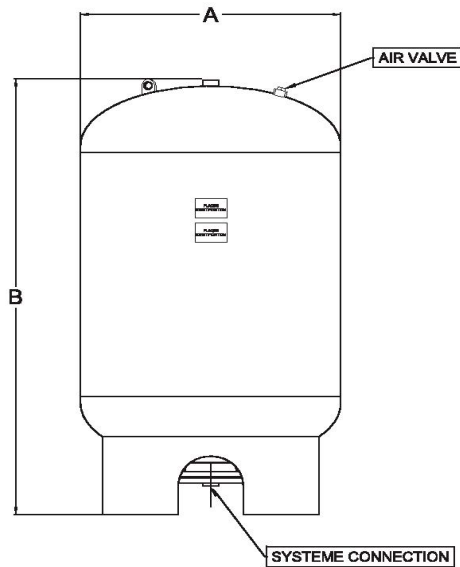
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_____ PSI (_____ kPa)

DIMENSIONS



QUANTITY : _____

MODEL: TRM- _____

OPTIONS (suffix) : _____

PRECHARGE : _____

MODEL	VOLUME		DIMENSIONS		SYSTEM CONNECTION		WEIGHT	
			A X B		in.	mm	lbs	kg
	gal.	lts	in X in	mm X mm				
TRM-1000V	264	1000	36 X 82	915 X 2083	3	76	851	387
TRM-1200V	317	1200	36 X 94	915 X 2388	3	76	953	433
TRM-1400V	370	1400	36 X 106	915 X 2692	3	76	1053	479
TRM-1600V	422	1600	48 X 78	1220 X 1981	3	76	1308	595
TRM-2000V	528	2000	48 X 92	1220 X 2337	3	76	1493	679
TRM-2500V	660	2500	48 X 111	1220 X 2819	4	102	1749	795

PROJECT INFORMATION

REPRESENTATIVE: _____

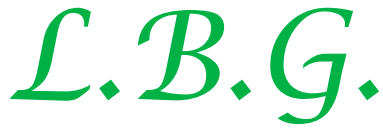
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TAGGING INFO: _____

ENGINEER: _____

CONTRACTOR: _____

ORDER No: _____



THERMAL REPLACEABLE BLADDER

EXPANSION TANK, TRM SERIES

"HOT POTABLE WATER"

SIZING OF THERMAL REPLACEABLE BLADDER EXPANSION TANKS

REQUIRED INFORMATION : | **SELECTION:**

<p>1) VOLUME OF HOT WATER TANK : _____ GALLONS _____ L</p> <p>2) MAXIMUM TEMPERATURE : _____ °F _____ °C (maximum temperature setting)</p> <p>3) MINIMUM PRESSURE : _____ PSIG _____ KPAG (minimum pressure at tank)</p> <p>4) MAXIMUM PRESSURE : _____ PSIG _____ KPAG (relief valve less 10%)</p>	<p>5) TANK VOLUME : _____ (LINE 1)</p> <p>6) EXPANSION FACTOR : _____ (SEE TABLE 1 OR 2)</p> <p>7) MULTIPLY LINE 5 BY LINE 6 : _____ (EXPANDED VOLUME)</p> <p>8) ACCEPTANCE FACTOR : _____ (SEE TABLE 3 OR 4)</p> <p>9) DIVIDE LINE 7 BY LINE 8 : _____ (TOTAL VOLUME REQUIRED)</p>
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CHOICE

LINE 9 IS THE TOTAL TANK VOLUME REQUIRED _____

LINE 3 IS THE PRECHARGE REQUIRED IN EXPANSION TANK FOR A PROPER OPERATION _____

MODEL TRM-_____V-_____ (OPTIONS IF REQUIRED) PRECHARGE _____ PSI OR KPA
(LINE 3)

TABLE 1

EXPANSION FACTOR (°F)								
120°F	130°F	140°F	150°F	160°F	170°F	180°F	190°F	200°F
0,0100	0,0124	0,015	0,0179	0,0209	0,0242	0,0276	0,0313	0,0351

TABLE 2

EXPANSION FACTOR (°C)								
50°C	55°C	60°C	65°C	70°C	75°C	80°C	85°C	90°C
0,0104	0,0126	0,015	0,0176	0,0203	0,0232	0,0262	0,0294	0,0327

TABLE 3

MAX. PRES. psig	ACCEPTANCE FACTOR																
	MINIMUM PRESSURE psig								FOR THE PRESSURES NOT SHOWN, USE FORMULA $1 - (\text{MIN. PRESSURE} + 14,7) / (\text{MAX. PRESSURE} + 14,7)$								
	5	10	12	15	20	25	30	35	40	45	50	55	60	65	70	75	80
30	0,560	0,447	0,403	0,336	0,224	0,112	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
40	0,640	0,548	0,512	0,457	0,366	0,274	0,183	0,091	-----	-----	-----	-----	-----	-----	-----	-----	-----
45	0,670	0,586	0,553	0,503	0,419	0,335	0,251	0,168	0,084	-----	-----	-----	-----	-----	-----	-----	-----
50	0,696	0,618	0,587	0,541	0,464	0,386	0,309	0,232	0,155	0,078	-----	-----	-----	-----	-----	-----	-----
60	0,736	0,669	0,643	0,602	0,536	0,469	0,402	0,335	0,268	0,201	0,134	0,067	-----	-----	-----	-----	-----
70	0,767	0,708	0,685	0,649	0,590	0,531	0,472	0,413	0,354	0,295	0,236	0,177	0,118	0,059	-----	-----	-----
75	0,780	0,725	0,702	0,669	0,613	0,558	0,502	0,446	0,390	0,333	0,279	0,223	0,167	0,117	0,056	-----	-----
80	0,792	0,739	0,718	0,686	0,634	0,581	0,528	0,475	0,422	0,370	0,317	0,264	0,211	0,158	0,106	0,053	-----
90	0,812	0,764	0,745	0,716	0,669	0,621	0,573	0,525	0,478	0,430	0,382	0,335	0,287	0,239	0,191	0,143	0,096
100	0,828	0,785	0,767	0,741	0,698	0,654	0,610	0,567	0,523	0,479	0,436	0,392	0,347	0,305	0,261	0,218	0,174
110	0,842	0,802	0,786	0,762	0,723	0,682	0,642	0,601	0,561	0,521	0,481	0,441	0,401	0,361	0,321	0,281	0,241
125	0,859	0,823	0,809	0,787	0,752	0,716	0,680	0,644	0,608	0,573	0,537	0,501	0,465	0,429	0,394	0,358	0,322

TABLE 4

MAX. PRES. kPa man.	ACCEPTANCE FACTOR																
	MINIMUM PRESSURE kPa man.								FOR THE PRESSURES NOT SHOWN, USE FORMULA $1 - (\text{MIN. PRESSURE} + 101,36) / (\text{MAX. PRESSURE} + 101,36)$								
	20	35	40	60	80	83	100	160	200	260	300	360	400	460	500	560	600
200	0,597	0,548	0,531	0,465	0,398	0,388	0,332	0,133	-----	-----	-----	-----	-----	-----	-----	-----	-----
300	0,698	0,660	0,648	0,598	0,548	0,541	0,498	0,349	0,249	0,100	-----	-----	-----	-----	-----	-----	-----
310	0,705	0,669	0,656	0,608	0,559	0,552	0,511	0,365	0,267	0,122	0,024	-----	-----	-----	-----	-----	-----
345	0,728	0,695	0,683	0,638	0,594	0,587	0,549	0,415	0,325	0,190	0,101	-----	-----	-----	-----	-----	-----
400	0,758	0,728	0,718	0,678	0,638	0,632	0,598	0,479	0,399	0,279	0,199	0,080	-----	-----	-----	-----	-----
500	0,798	0,773	0,765	0,732	0,698	0,693	0,665	0,565	0,499	0,399	0,333	0,233	0,166	0,067	-----	-----	-----
520	0,805	0,781	0,773	0,740	0,708	0,703	0,676	0,579	0,515	0,418	0,354	0,258	0,193	0,097	0,032	-----	-----
600	0,827	0,806	0,799	0,770	0,741	0,737	0,713	0,627	0,570	0,485	0,428	0,342	0,285	0,200	0,143	0,057	-----
690	0,847	0,828	0,821	0,796	0,771	0,767	0,746	0,670	0,619	0,543	0,493	0,417	0,366	0,291	0,240	0,164	0,114
700	0,849	0,830	0,824	0,799	0,774	0,770	0,749	0,674	0,624	0,549	0,499	0,424	0,374	0,300	0,250	0,175	0,125
800	0,865	0,849	0,843	0,821	0,799	0,795	0,777	0,710	0,666	0,599	0,555	0,488	0,444	0,377	0,333	0,266	0,222
862	0,874	0,858	0,853	0,833	0,812	0,809	0,791	0,729	0,687	0,625	0,583	0,521	0,480	0,417	0,376	0,313	0,272