

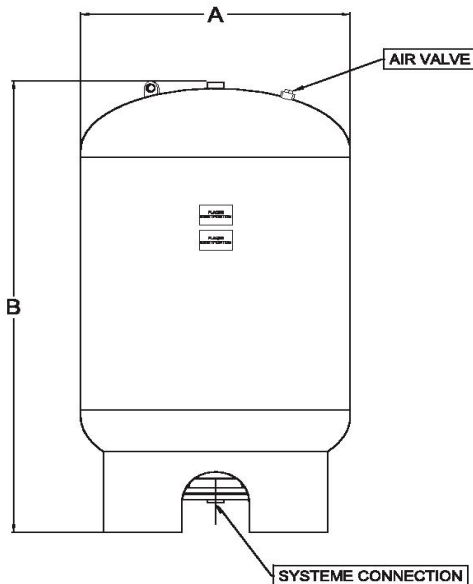
#### STANDARD CHARACTERISTIC

- 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 : 125 PSI (862 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: RMD- \_\_\_\_\_  
 OPTIONS (suffix) : \_\_\_\_\_  
 PRECHARGE : \_\_\_\_\_

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

#### PROJECT INFORMATION

REPRESENTATIVE: \_\_\_\_\_

JOB NAME: \_\_\_\_\_

TAGGING INFO: \_\_\_\_\_

ENGINEER: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_

ORDER No: \_\_\_\_\_

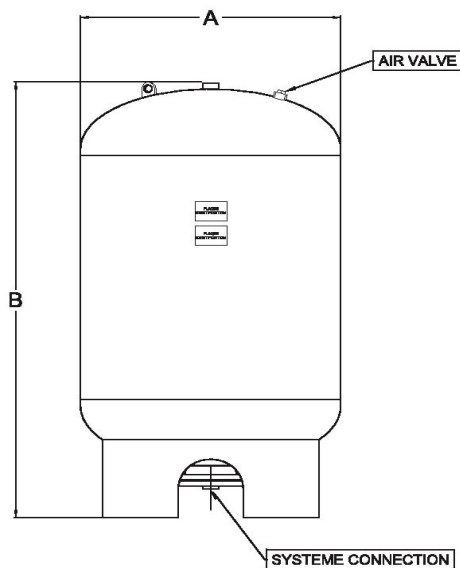
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QUANTITY : \_\_\_\_\_  
 MODEL: RMD- \_\_\_\_\_  
 OPTIONS (suffix) : \_\_\_\_\_  
 PRECHARGE : \_\_\_\_\_

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

#### PROJECT INFORMATION

REPRESENTATIVE: \_\_\_\_\_

JOB NAME: \_\_\_\_\_

TAGGING INFO: \_\_\_\_\_

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CONTRACTOR: \_\_\_\_\_

ORDER No: \_\_\_\_\_

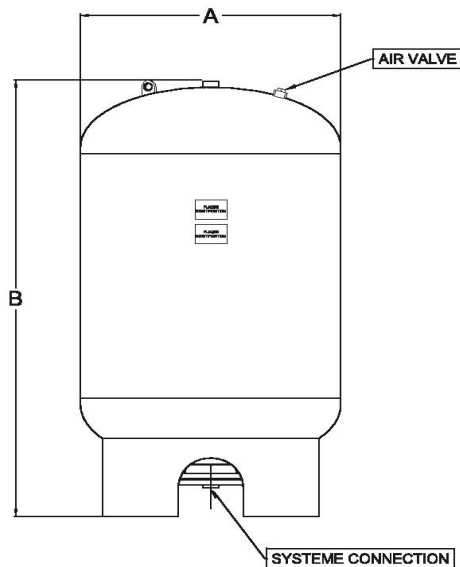
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### DIMENSIONS



QUANTITY : \_\_\_\_\_

MODEL: RMD- \_\_\_\_\_

OPTIONS (suffix) : \_\_\_\_\_

PRECHARGE : \_\_\_\_\_

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

### PROJECT INFORMATION

REPRESENTATIVE: \_\_\_\_\_

JOB NAME: \_\_\_\_\_

TAGGING INFO: \_\_\_\_\_

ENGINEER: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_

ORDER No: \_\_\_\_\_



HYDROPNEUMATIC REPLACEABLE BLADDER

EXPANSION TANK, RMD SERIES

# SIZING OF HYDRO-PNEUMATIC EXPANSION TANKS

**REQUIRED INFORMATION :** | **SELECTION:**

<p>1) DRAWDOWN (PUMP CAPACITY _____ GALLONS _____ L X MINIMUM PUMP RUNNING TIME OR REQUIRED WATER TO SUPPLY)</p> <p>2) MINIMUM PRESSURE : _____ PSIG _____ KPAG (NORMALLY PUMP TURN ON)</p> <p>3) MAXIMUM PRESSURE : _____ PSIG _____ KPAG (NORMALLY PUMP SHUT OFF)</p>	<p>4) REQUIRED DRAWDOWN : _____ (LINE 1 )</p> <p>5) ACCEPTANCE FACTOR : _____ (SEE TABLE 1 OR 2)</p> <p>7) DIVIDE LINE 5 BY LINE 6 : _____ (TOTAL VOLUME REQUIRED)</p>
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**CHOICE**

LINE 7 IS THE TOTAL TANK VOLUME REQUIRED \_\_\_\_\_

LINE 2 IS THE PRECHARGE REQUIRED IN EXPANSION TANK FOR A PROPER OPERATION \_\_\_\_\_

MODEL RMD- \_\_\_\_\_ V- \_\_\_\_\_ (OPTIONS IF REQUIRED)      PRECHARGE \_\_\_\_\_ PSI OR KPA  
(LINE 2)

**TABLE 1**

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 2**

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