

# Duraflex Joule Expansion Tanks

Edition 2.0



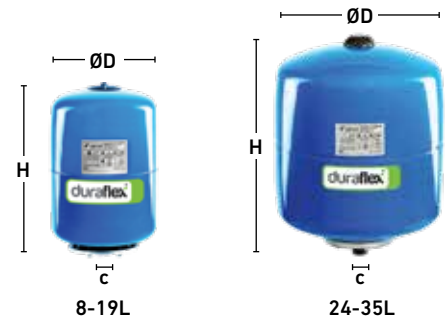
# Duraflex Joule

## 10, 16, 25 Bar Rated

**BLADDER TYPE**

The Duraflex Joule series are designed for heating, chilled and condenser closed circuit applications

- Suitable for glycol mixture up to 50%
- Replaceable EPDM Bladder
- Pressure gauge fitted (100L and above)
- Electrostatic powder coat finish
- Factory pre-pressurised gas chamber (nitrogen)
- Max operating temperature -10°C / 70°C
- Wall mount bracket available (8-25L)



### 8-35L

Model	Volume (lt)	Ø D mm	H mm	c mm	Weight kg	Pre-Charge P. (bar)
<b>10 Bar</b>						
DJ008-10	8	220	296	1" M	2.9	2
DJ012-10	12	220	410	1" M	3.5	2
DJ019-10	19	280	434	1" M	4.5	2
DJ024-10	24	280	484	1" M	4.9	2
DJ035-10	35	354	465	1" M	6.0	2
<b>16 Bar</b>						
DJ019-16	19	280	420	1" M	7.5	2
DJ024-16	24	280	484	1" M	7.7	2
<b>25 Bar</b>						
DJ019-25	19	280	426	1" M	11	2
DJ024-25	24	280	476	1" M	13	2
DJ035-25	35	354	451	1" M	17	2



### Wall-hung Bracket

- For vessels 8 - 25 litres
- Holder with multiple connections

**Product No.**  
DWB825

**BLADDER TYPE**



**50-1000L**

Model	Volume (lt)	Ø D mm	H mm	c mm	h mm	Weight kg	Pre-Charge P. (bar)
<b>10 Bar</b>							
DJ050-10	50	410	650	1" M	130	9.2	2
DJ080-10	80	480	791	1" M	170	15	4
DJ100-10	100	480	899	1" M	170	17	4
DJ140-10	140	480	1137	1" M	170	24	4
DJ200-10	200	634	1008	1½" F	150	36	4
DJ250-10	250	634	1123	1½" F	150	41	4
DJ300-10	300	634	1296	1½" F	150	45	4
DJ400-10	400	740	1427	1½" F	185	65	4
DJ500-10	500	740	1563	1½" F	185	70	4
DJ750-10	750	848	1736	2" F	185	122	4
DJ1000-10	1000	848	2187	2" F	185	156	4
<b>16 Bar</b>							
DJ050-16	50	410	650	1" M	125	15	2
DJ080-16	80	480	791	1" M	160	22	4
DJ100-16	100	480	899	1" M	160	25	4
DJ140-16	140	480	1137	1" M	160	31	4
DJ200-16	200	634	1008	1½" F	145	56	4
DJ300-16	300	634	1296	1½" F	145	71	4
DJ400-16	400	740	1427	1½" F	180	154	4
DJ500-16	500	740	1563	1½" F	180	166	4
DJ750-16	750	800	1981	2" F	180	223	4
DJ1000-16	1000	800	2500	2" F	180	285	4
<b>25 Bar</b>							
DJ050-25	50	410	600	3"	140	28	4
DJ080-25	80	450	615	3"	160	39	4
DJ100-25	100	450	949	3"	160	43	5
DJ140-25	140	500	1104	3"	160	56	5
DJ200-25	200	600	1015	1½" F	140	115	5
DJ300-25	300	640	1305	1½" F	140	127	5
DJ500-25	500	750	1498	1½" F	185	172	5
DJ750-25	750	750	1945	2" F	175	300	5
DJ1000-25	1000	800	2498	2" F	210	330	5

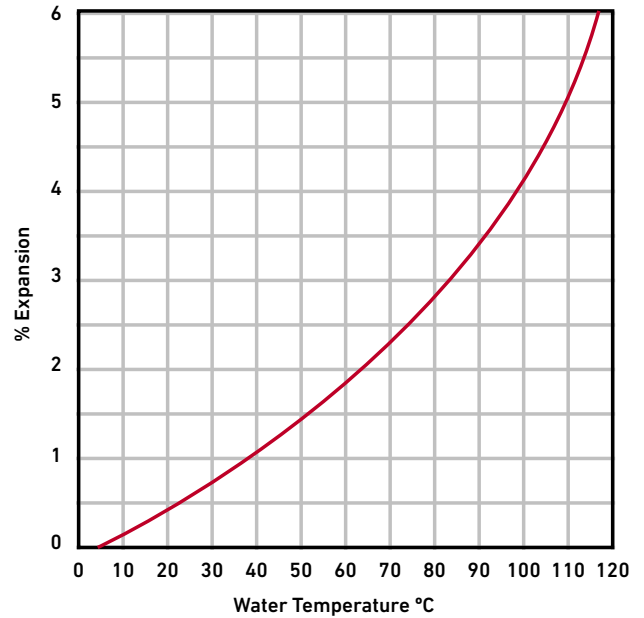
## Sizing an Expansion Tank

Careful calculation of the expansion tank size is critical to the correct functioning of the system.

### Expansion Coefficient

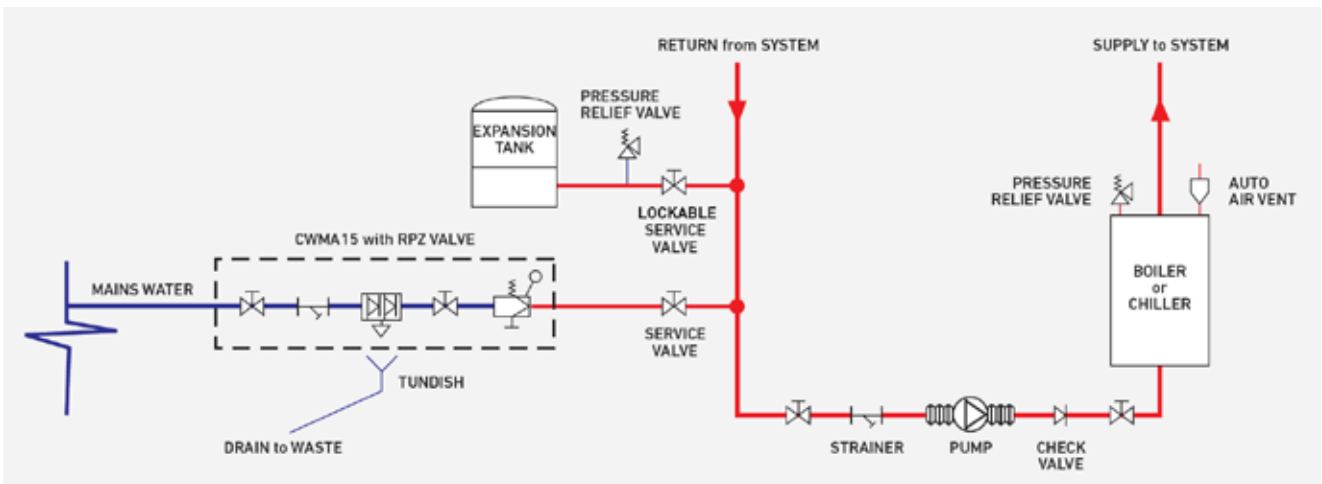
Calculate the expansion coefficient for your system by calculating the difference between the cold system water temperature (heating off) and the max working temperature.

°C	Coefficient
0	0.00013
10	0.00025
20	0.00174
30	0.00426
40	0.00782
50	0.01207
60	0.0145
65	0.01704
70	0.0198
75	0.02269
80	0.0258
85	0.02899
90	0.0324
95	0.0396
100	0.04343



## Piping Diagram

The below diagram illustrates the typical piping configuration and preferred placement for expansion tanks. Locating the expansion tank on the return flow side of the boiler helps ensure the expansion tank is not exposed to hot water temperatures in excess of its specified limits.



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