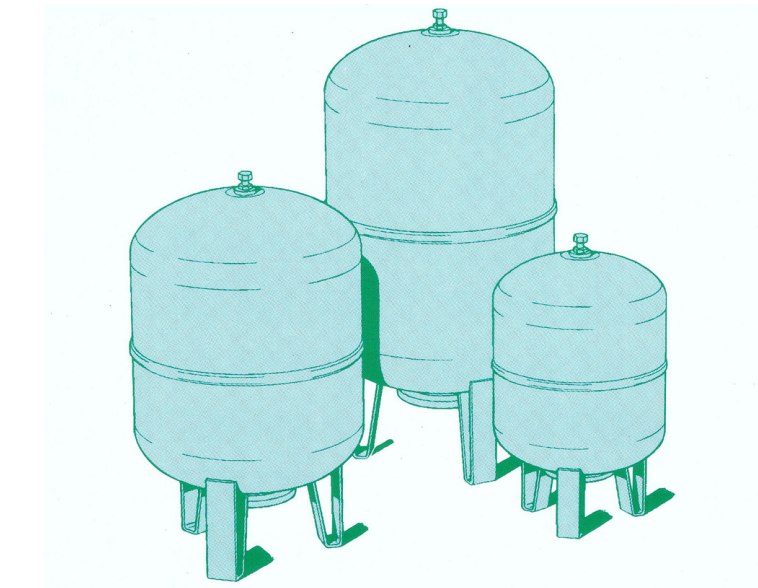


THERMOFLO DA

EXPANSION VESSELS



THERMOFLO EXPANSION VESSELS FOR HEATING, COOLING AND HOT WATER SUPPLY SYSTEMS

Thermoflo expansion vessels use an internal diaphragm, of the 'water in the bag' design, to contain the increased system volume resulting from an increase in temperature within a sealed water system.

CONSTRUCTION

- All welded steel construction, incorporating system water connection, bolted access flange and schraeder gas filling valve.
- The replaceable 'bag' diaphragm accommodates the expansion water, whilst preventing contact between the expansion water and vessel shell.
- A rechargeable gas cushion charge, of Nitrogen or clean dry compressed air, is segregated between the diaphragm and shell.
- The diaphragm maintains separation between the expanding water and gas cushion which in consequence becomes compressed - the resultant increase in system pressure is maintained between set limits, in accordance with the vessel selection parameters.
- Thermoflo vessels may also be used in cold water booster systems to control the booster pump running cycle.

DESIGN CONSIDERATIONS

Operating limits

TYPE CODE	DA
Water temperature range - °C at diaphragm	Minus 10 to +70
Maximum pressure - bar sealed systems BS4814:1990	6 (BS4814 limit)
Maximum pressure - bar water supply BS6144:1990	7
Optional pressure ratings - bar water supply	10/16

Materials of construction

TYPE CODE	DA
Vessel Shell and Ends	Carbon Steel - Mechanised Welded
Water connection	Galvanised Steel
Diaphragm	EPDM/SBR

Vessel coding example

TYPE CODE	TOTAL VESSEL VOLUME - LITRES	GAS CUSHION PRECHARGE PRESSURE - BAR
DA	200 -	2.5

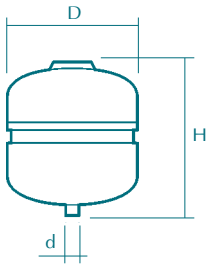
FLUID
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for better fluid handling

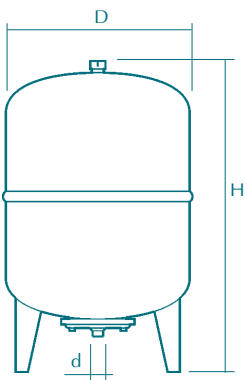
THERMOFLO DA

EXPANSION VESSELS

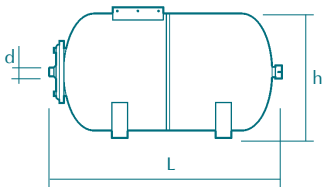
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2



3



DIMENSIONS & DATA

VESSEL MODEL	TOTAL VOLUME LITRES	DIAGRAM REFERENCE			DIMENSIONS in mm's					MAX PRESSURE BAR	DRY WEIGHT kg	
		1	2	3	D	H	L	h	d"			
DA2	2	●			160	170				Rp1/2	10	1.0
DA5	5	●			160	315				Rp3/4	10	2.5
DA8	8	●			200	330				Rp3/4	10	3.0
DA20	20	●		○	250	500	500	250		Rp3/4	10	6.0
DA60	60		●	○	380	860	680	415		Rp1	10	17
DA80	80		●	○	450	800	640	460		RP1	10	20
DA100	100		●	○	450	960	780	490		Rp1	10	26
DA200	200		●	○	550	1280	1080	555		Rp1 1/2	10	46
DA300	300		●	○	630	1430	1237	635		Rp1 1/2	10	59
DA500	500		●		750	1610				Rp1 1/2	10	114
DA750	750		●		750	2270				Rp1 1/2	10	162
DA1000	1000		●		900	2110				Rp2	10	214

● Standard vertical version ○ Optional horizontal version

DESIGN CONSIDERATIONS

Operating limits

TYPE CODE	DA
Water temperature range - °C at diaphragm	Minus 10 to +70
Maximum pressure - bar sealed systems BS4814:1990	6 (BS4814 limit)
Maximum pressure - bar water supply BS6144:1990	7
Optional pressure ratings - bar water supply	10/16

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