



# The Challenger™ Series

## Features

- Patented double diaphragm
- NSF Standard 61, CE/PED, WRAS approved
- Stainless steel water connection
- Condensation reducing design
- Two part polyurethane, epoxy primed paint finish
- Leak free air valve cap sealed with closed cell foam
- Comprehensive testing
- No maintenance

Challenger™ tanks are ideally suited for a wide range of applications, including, booster systems, thermal expansion, heating expansion, irrigation systems, and hydraulic hammer arresting.

Water Chamber; Patented Controlled Action Design:

Efficient and cost effective, Challenger™ tanks are designed with a patented controlled action double diaphragm assembly. The double diaphragm assembly is clenched together with a positive lock internal clench ring which contains drawdown water in a pre charged air atmosphere, thus providing separation between the diaphragm and tank wall. This "air buffer" design means few problems with condensation. Constructed with an FDA approved high grade butyl, the diaphragm assembly seals water in a true non-corrosive chamber.

The stainless steel port diffuser and system connection directs water into the tank agitating it as it enters, in order to suspend debris and solids to prevent clogging the port.

On the exterior, the almond colored two part polyurethane paint finish over an epoxy undercoating provides hundreds of hours of UV and salt spray protection.

The air chamber is sealed with a fixed o-ring and closed cell foam and will provide many years of leak free and service free life.

Challenger™ tanks are quality tested at several stages on the production line to insure the structural integrity of every tank.

Challenger™ tanks are the best pressure vessels available in the market today and represent the best value for the investment.



Challenger

Model #'s		Dimensions								Volume		Shipping (box)		Shipping (box)	
		A		B		C		D				Volume		Weight	
BSP	NPT	cm	inches	cm	inches	cm	inches	cm	inches	liter	gal	cu. M	cu. ft	kilos	lbs
GC60	115	57.1	22.5	40.6	16	4.8	1.9	32.4	12.75	60	14	0.1	3.65	12.46	27.5
GC80	120	74.9	29.5	40.6	16	4.8	1.9	32.4	12.75	80	20	0.14	4.74	15.4	34
GC100	125	88.9	35	40.6	16	4.8	1.9	32.4	12.75	100	26	0.16	5.68	18.57	41
GC130	135	110.5	43.5	40.6	16	4.8	1.9	32.4	12.75	130	33	0.2	7.08	23.1	51
GC170	145	93.9	37	53.3	21	5.59	2.2	43.1	17	170	44	0.29	10.14	29.9	66
GC240	160	121.2	47.8	53.3	21	5.59	2.2	43.1	17	240	62	0.37	13.18	36.47	80.5
GC310	180	150	59.1	53.3	21	5.59	2.2	43.1	17	310	81	0.46	16.25	45.4	100
GC325	185	114.3	45	66	26	5.59	2.2	54	21.25	325	85	0.53	18.93	53.45	118
GC450	1120	152.9	60.2	66	26	5.59	2.2	54	21.25	450	119	0.7	26.14	69.31	153

## System Connection:

Models GC60 - GC450: 1" B.S.P. stainless steel elbow

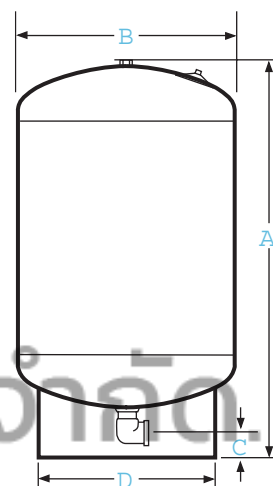
Models 115 - 135: 1" N.P.T. stainless steel elbow

Models 145 - 1120: 1 1/4" N.P.T. stainless steel elbow

Standard Precharge: 38 psi/2.6 bar

Maximum working temperature 200° F/ 90° C

Maximum working pressure 146 psi/ 10bar

Leak-free o-ring sealed  
air valve capPatented double  
diaphragmTwo-part polyurethane/  
epoxy primed paint finishStainless steel water  
connectionCondensation  
reducing resin**Taiwan Facility**

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