

# Challenger™ SERIES



## FEATURES

- Patented CAD-2 diaphragm technology
- NSF Standard 61, CE/PED, WRAS, ACS, ISO-9001, Gost, Evrazes 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 CAD-2 diaphragm assembly. It features a chlorine resistant 100% butyl diaphragm with a precision molded copolymer polypropylene liner for superior air and water separation. The CAD-2 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.

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 steel pressure vessels in the market today and represent the best value for the investment.

## SPECIFICATIONS Challenger™ Series Models

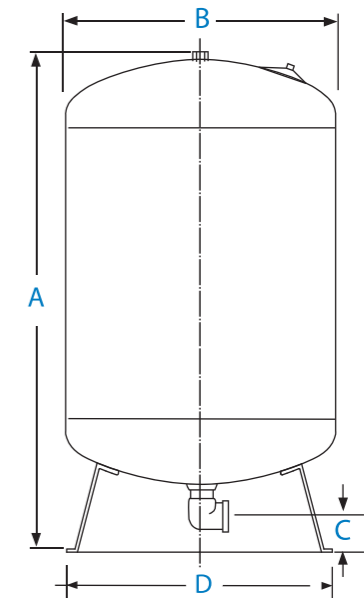
BSP	NPT	Nominal Volume		Shipping (box) Volume		Shipping (box) Weight		Dimensions							
		liter	gal	m <sup>3</sup>	ft <sup>3</sup>	kg	lbs	A		B		C		D	
								cm	inches	cm	inches	cm	inches	cm	inches
GCB-60LV	GCN-15GV	60	15	0.10	3.65	12.25	27.0	57.27	22.55	40.68	16.02	4.80	1.89	36.93	14.54
GCB-80LV	GCN-20GV	80	20	0.13	4.74	15.20	33.5	75.27	29.60	40.68	16.02	4.80	1.89	36.93	14.54
GCB-100LV	GCN-25GV	100	25	0.16	5.68	18.10	40.0	89.68	35.31	40.68	16.02	4.80	1.89	36.93	14.54
GCB-130LV	GCN-35GV	130	35	0.20	7.08	22.50	49.5	110.94	43.68	40.75	16.02	4.80	1.89	36.93	14.54
GCB-200LV	GCN-50GV	200	50	0.31	10.88	34.25	75.5	105.56	41.56	53.29	21.03	5.68	2.23	44.63	17.57
GCB-250LV	GCN-60GV	250	60	0.37	13.18	39.24	86.5	122.75	48.33	53.37	21.03	5.68	2.23	44.63	17.57
GCB-300LV	GCN-80GV	300	80	0.46	16.25	47.17	104.0	151.27	59.56	53.37	21.03	5.38	2.23	44.63	17.57
GCB-325LV	GCN-85GV	325	85	0.46	16.25	48.40	106.7	116.68	45.94	66.21	26.07	6.43	2.53	54.23	21.35
GCB-450LV	GCN-120GV	450	120	0.74	26.14	69.85	154.0	155.07	61.05	66.06	26.01	6.43	2.53	54.23	21.35

System Connection:

- Models GCB-60LV - GCB-130LV: 1" BSP stainless steel elbow
- Models GCB-200LV - GCB-500LV: 1 1/4" BSP stainless steel elbow
- Models GCN-15GV - GCN-35GV: 1" NPT stainless steel elbow
- Models GCN-50GV - GCN-133GV: 1 1/4" NPT stainless steel elbow

Note: Minor dimensional variation may occur

Please refer to tank packaging for correct factory set pre-charge information.  
Maximum working temperature 90°C / 194°F  
Maximum working pressure: GCB- 10 bar / 150 psi ; GCN- 8.6bar / 125psi



- ① Leak-Free, O-ring sealed air valve cap
- ② Carbon steel tank shell with two-part polyurethane / epoxy primed paint finish
- ③ Patented CAD-2 diaphragm design
- ④ Stainless steel water connection
- ⑤ Condensation reducing design
- ⑥ Virgin Polypropylene Liner

ISO:9001



ACS Approved

