

Designed to be installed in less than ideal environments.

Installed outside in the harshest sunlight, tucked away in the dampest, darkest corner of the basement, Challenger “I” series can take whatever is thrown at it!

Its specially formulated two-part almond paint and epoxy undercoating offers the best defense possible against Mother Nature.



16 - gauge solid steel tank, finished with highest quality urethane paint to stand up to the toughest conditions.

Water chamber is independent of tank walls, allowing diaphragms to be sized properly for each tank.

CAD-2 CAD-2 diaphragm technology: strong, 100% butyl diaphragm and copolymer polypropylene lower water chamber for maximum water and air separation.

Steel clench ring regulates movement and prevents diaphragm from rubbing against tank wall.

Condensation-reducing design virtually eliminates external corrosion.

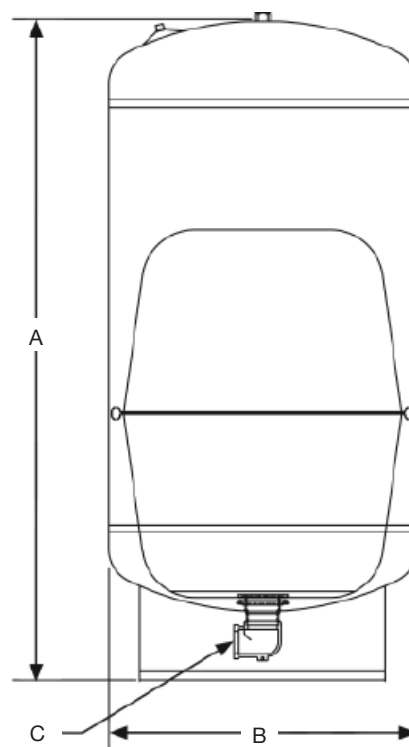




"I" SERIES/ CAD-2

MATERIALS OF CONSTRUCTION

- **Tank:** 16-gauge cold rolled steel
- **Finish:** Epoxy undercoated, appliance-quality paint for indoor or outdoor installation
- **Water chambers:** Top chamber is 100% butyl rubber, lower water chamber is copolymer polypropylene
- **Connection:** Welded stainless steel NPT thread
- **Air valve:** Brass valve with O-ring seal
- **Testing:** High pressure, seam weld, helium, final precharge check
- **Warranty:** 5 year



DIMENSIONS & CAPACITIES

Model	Total Tank Volume		A Height		B Diameter		C Connection	Total Weight	
	gal	liters	in	cm	in	cm		lbs	kilos
I15-PC 44	14	60	22	55.88	16	40.64	1" NPT	28.0	12.7
I20-PC 66	20	80	29	73.66	16	40.64	1" NPT	36.0	16.3
I25-PC 88	26	100	34.5	87.63	16	40.64	1" NPT	41.0	18.6
I30-PC 111	32	120	27.75	70.48	21	53.34	1 1/4" NPT	54.0	24.5
I35-PC 122	33.4	130	42.75	108.58	16	40.64	1" NPT	49.0	22.2
I45-PC 144	44	170	36.25	92.07	21	53.34	1 1/4" NPT	67.0	30.4
I60-PC 211	62	240	48	121.92	21	53.34	1 1/4" NPT	82.0	37.2
I80-PC 244	81	310	62	157.48	21	53.34	1 1/4" NPT	99.0	44.9
I85-PC 266	85	325	44.5	113.03	26	66.04	1 1/4" NPT	121.0	54.9
I120-PC 366	119	450	59.75	151.76	26	66.04	1 1/4" NPT	153.0	69.5

Maximum working pressure 125 psig. Maximum working temperature, internal & external 140° F. Tank pre-charge 38 psig.

QUICK SIZING CHART

Model	Total Tank Volume		Total Drawdown*					
	gal	liters	20/40		30/50		40/60	
	gal	liters	gal	liters	gal	liters	gal	liters
I15-PC 44	14	60	5.6	21.4	4.8	18.1	4.1	15.6
I20-PC 66	20	80	8.1	30.5	6.8	25.8	5.9	22.3
I25-PC 88	26	100	10.5	39.7	8.9	33.6	7.7	29.0
I30-PC 111	32	120	12.9	48.8	10.9	41.3	9.4	35.7
I35-PC 122	33.4	130	13.3	50.3	11.3	42.6	9.7	36.8
I45-PC 144	44	170	17.7	67.1	15.0	56.8	13.0	49.1
I60-PC 211	62	240	25.0	94.6	21.1	80.0	18.3	69.2
I80-PC 244	81	310	32.6	123.6	27.6	104.5	23.9	90.4
I85-PC 266	85	325	34.3	129.7	29.0	109.7	25.1	94.9
I120-PC 366	119	450	48.0	181.5	40.6	153.6	35.1	132.9

*Total drawdown assumes tank pre-charge set at 2 psi below cut-in pressure. Drawdown can be affected by many factors, including temperature, pressure, and elevation.

