

# AST SERIES | PRE-CHARGED (ASME) FOR POTABLE WATER | SUBMITTAL

File No: 37.53  
Date: OCTOBER 19, 2015  
Supersedes: 37.53  
Date: MARCH 19, 2015

Job: \_\_\_\_\_ Representative: \_\_\_\_\_  
\_\_\_\_\_  
Order no.: \_\_\_\_\_ Date: \_\_\_\_\_  
Engineer: \_\_\_\_\_ Submitted by: \_\_\_\_\_ Date: \_\_\_\_\_  
Contractor: \_\_\_\_\_ Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

## DATA

Model no. ordered: \_\_\_\_\_ Qty: \_\_\_\_\_  
Tag no.: \_\_\_\_\_ Charge pressure: \_\_\_\_\_ psi/kPa  
ASME certification required:  Yes  No  
Standard factory charge is 40 psi (276 kPa) unless otherwise specified.

## MAXIMUM OPERATING CONDITIONS

**Working temperature:** 240°F (115°C)  
**Working pressure:** 150 psi (1034 kPa)

## NOTES

- For Domestic potable water systems & Draw down tanks for Pressure booster systems.
- Designed and constructed per ASME, section VIII, division.

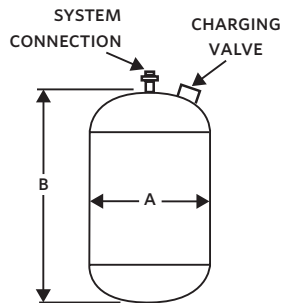
## MATERIALS OF CONSTRUCTION

**Shell:** Carbon steel  
**Liner:** Polypropylene  
**System Connection:** Stainless steel  
**Fixed Diaphragm:** Butyl - FDA approved

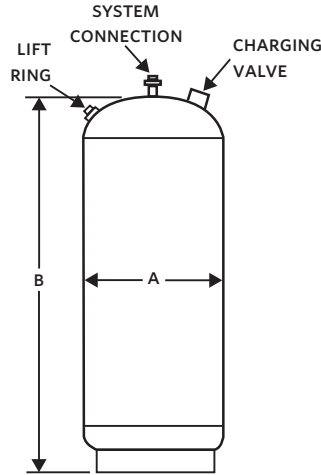
## TYPICAL SPECIFICATION

Furnish and install, as shown on the plans, Armstrong Model AST-\_\_\_\_\_ ASME pre-charged diaphragm Expansion Tank, stamped 150 psi (1034 kPa) working pressure. Each tank will be supplied with a heavy duty FDA approved butyl diaphragm. Tank sizes AST-20 to AST-210 shall be supplied with a ring base, lifting rings, and NPT system connection. An air charging valve connection (standard tire valve) shall be provided to facilitate adjusting precharge pressure to meet actual system conditions.

MODEL	TANK VOLUME	ACCEPTANCE VOLUME	A	B	SYSTEM CONNECTION NPT	SHIPPING WEIGHT
	gal.(L)	gal.(L)	inches (mm)	inches (mm)	inches (mm)	lbs.(kg)
AST-5	3.5 (13.2)	2.3 (8.7)	10 (254)	14 (356)	0.75 (19)	22 (10.0)
AST-12	5.0 (18.9)	3.3 (12.5)	12 (305)	14 (356)	0.75 (19)	28 (12.8)
AST-20	8.0 (30.3)	5.3 (20.1)	12 (305)	20 (508)	0.75 (19)	34 (15.5)
AST-30	15.0 (56.8)	10.0 (37.9)	16 (406)	23 (584)	1.00 (25)	64 (29.0)
AST-42	22.0 (83.3)	14.5 (54.9)	16 (406)	32 (813)	1.00 (25)	88 (40.0)
AST-60	26.0 (98.4)	17.5 (66.2)	16 (406)	34 (864)	1.00 (25)	93 (42.2)
AST-80	35.0 (132.5)	23.5 (89.0)	16 (406)	45 (1143)	1.00 (25)	109 (49.4)
AST-100	45.0 (170.3)	30 (113.6)	20 (508)	38 (965)	1.00 (25)	148 (67.1)
AST-125	60.0 (227.1)	40 (151.4)	20 (508)	49 (1245)	1.00 (25)	175 (79.4)
AST-160	70.0 (265.0)	47 (177.9)	24 (610)	46 (1168)	1.5 (38)	259 (117.5)
AST-180	80.0 (302.8)	53 (200.6)	24 (610)	49 (1245)	1.50 (38)	268 (121.6)
AST-210	90.0 (340.7)	60 (227.1)	24 (610)	52 (1321)	1.50 (38)	283 (128.4)



AST-5 and AST-12



AST-20 to AST-210

TORONTO  
+1 416 755 2291

BUFFALO  
+1 716 693 8813

BIRMINGHAM  
+44 (0) 8444 145 145

MANCHESTER  
+44 (0) 8444 145 145

BANGALORE  
+91 (0) 80 4906 3555

SHANGHAI  
+86 21 3756 6696