

# AST SERIES | DOMESTIC HOT WATER EXPANSION TANKS | AST-5 TO AST-210 | SUBMITTAL

File No: 37.53

Date: APRIL 05, 2022

Supersedes: 37.53

Date: OCTOBER 19, 2015

| JOD:  | kepresentative:               |                                       |  |  |  |
|---|-------------------------------|---------------------------------------|--|--|--|
|   | Order no.:                    |                                       |  |  |  |
| Engineer:   | Submitted by:                 |                                       |  |  |  |
| Contractor:   | Approved by:                  | Date:                                 |  |  |  |
|   |                               |                                       |  |  |  |
| DATA  | MATERIALS OF CO               | NSTRUCTION                            |  |  |  |
| Model no. ordered: Qty:   | Shell: Carbon steel           |                                       |  |  |  |
| Tag no.: Charge pressure: psi/                                    | Liner: Polypropylene          | Liner: Polypropylene                  |  |  |  |
| rag no psi/   |                               | System Connection: Stainless steel    |  |  |  |
| Standard factory charge is 40 psi (276 kPa) unless otherwise spec | ified. Fixed Diaphragm: Butyl | Fixed Diaphragm: Butyl - FDA approved |  |  |  |
|   | Complies with NSF/ANS         | Complies with NSF/ANSI Standard 61    |  |  |  |

#### **MAXIMUM OPERATING CONDITIONS**

Working temperature:  $-20^{\circ}F$  to  $240^{\circ}F$  ( $-29^{\circ}C$  to  $115.5^{\circ}C$ )

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
- California code-sight glass is available upon request.
- Mounting clips are available on request

# 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<br>VOLUME | ACCEPTANCE<br>VOLUME | А           | В            | SYSTEM CONNECTION NPT C | CHARGING<br>VALVE<br>E | APPROX. SHIPPING WEIGHT |
|---------|----------------|----------------------|-------------|--------------|-------------------------|------------------------|-------------------------|
|         | gal.(L)        |                      | inches (mm) |              |                         | -                      | lbs.(kg)                |
| AST-5   | 3.5 (13.2)     | 2.3 (8.7)            | 10.00 (254) | 14.00 (356)  | 0.75 (19)               | 0.302"<br>32NC         | 22 (10.0)               |
| AST-12  | 5.0 (18.9)     | 3.3 (12.5)           | 12.00 (305) | 14.00 (356)  | 0.75 (19)               |                        | 28 (12.8)               |
| AST-20  | 8.0 (30.3)     | 5.3 (20.1)           | 12.00 (305) | 20.00 (508)  | 0.75 (19)               |                        | 34 (15.5)               |
| AST-30  | 15.0 (56.8)    | 10.0 (37.9)          | 16.00 (406) | 24.00 (610)  | 1.00 (25)               |                        | 50 (22.68)              |
| AST-42  | 22.0 (83.3)    | 14.5 (54.9)          | 16.00 (406) | 31.00 (787)  | 1.00 (25)               |                        | 57 (25.85)              |
| AST-60  | 26.0 (98.4)    | 17.5 (66.2)          | 16.00 (406) | 34.00 (864)  | 1.00 (25)               |                        | 62 (28.12)              |
| AST-80  | 35.0 (132.5)   | 23.5 (89.0)          | 16.00 (406) | 45.00 (1143) | 1.00 (25)               |                        | 80 (36.29)              |
| AST-100 | 45.0 (170.3)   | 30 (113.6)           | 20.00 (508) | 39.00 (991)  | 1.00 (25)               |                        | 110 (49.89)             |
| AST-125 | 60.0 (227.1)   | 40 (151.4)           | 20.00 (508) | 50.00 (1270) | 1.00 (25)               |                        | 134 (60.78)             |
| AST-160 | 70.0 (265.0)   | 47 (177.9)           | 24.00 (610) | 47.00 (1194) | 1.50 (38)               |                        | 177 (80.28)             |
| AST-180 | 80.0 (302.8)   | 53 (200.6)           | 24.00 (610) | 50.00 (1270) | 1.50 (38)               |                        | 184 (83.46)             |
| AST-210 | 90.0 (340.7)   | 60 (227.1)           | 24.00 (610) | 53.00 (1346) | 1.50 (38)               |                        | 193 (87.54)             |

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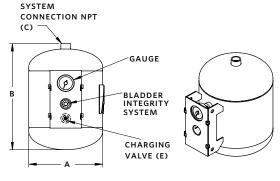
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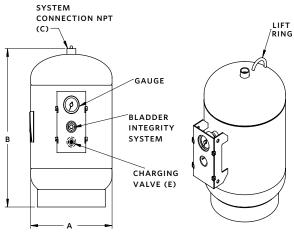
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MODELS AST-5 AND AST-12



MODELS AST-20 TO AST-210

ARMSTRONG FLUID TECHNOLOGY ESTABLISHED 1934

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