

**AX-V SERIES | PRE-CHARGED (ASME)**  
**EXPANSION TANK | AX-15V TO AX-280V | SUBMITTAL**

**File No:** 37.51  
**Date:** APRIL 27, 2022  
**Supersedes:** 37.51  
**Date:** JULY 07, 2015

Job: \_\_\_\_\_ Representative: \_\_\_\_\_

\_\_\_\_\_ Order no.: \_\_\_\_\_ Date: \_\_\_\_\_

Engineer: \_\_\_\_\_ Submitted by: \_\_\_\_\_ Date: \_\_\_\_\_

Contractor: \_\_\_\_\_ Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

**PUMP DESIGN DATA**

Model no. ordered: \_\_\_\_\_ Qty: \_\_\_\_\_

Tag no.: \_\_\_\_\_ Charge pressure: \_\_\_\_\_ psi/kPa

Standard factory charge is 40 psi (276 kPa) unless otherwise specified.

**MAXIMUM OPERATING CONDITIONS**

**Working temperature:** -20°F to 240°F (-29°C to 115.5°C)

**Working pressure:**

- AX-15V to AX-60V: 150 psi (1034 kPa)
- AX-80V to AX-280V: 125 psi (862 kPa)

**NOTES**

- Not for domestic potable water systems.
- California code Sight-Glass available upon request.
- Designed and constructed per ASME section VIII, Division 1.
- Mounting clips available on request.

**MATERIALS OF CONSTRUCTION**

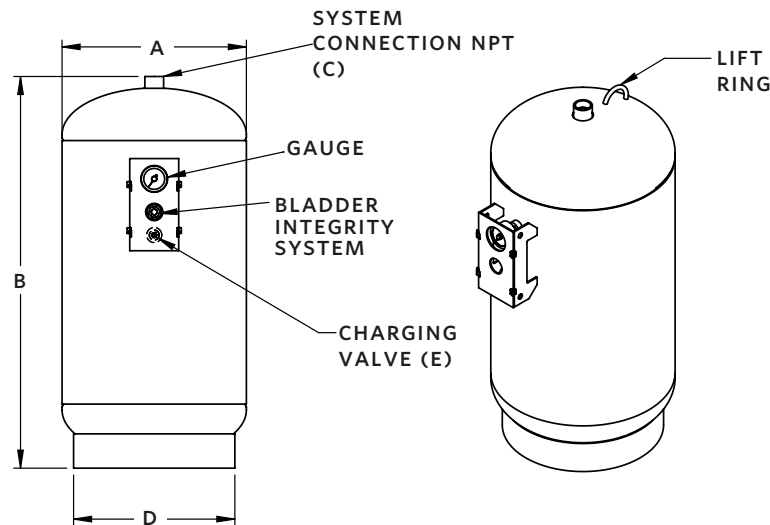
**Shell:** Steel

**Diaphragm:** Heavy duty butyl

**TYPICAL SPECIFICATION**

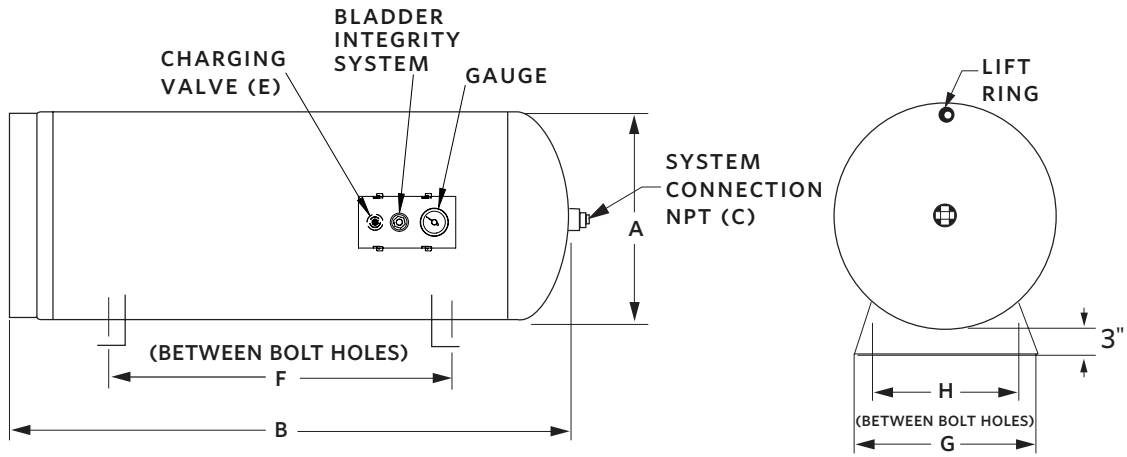
Furnish and install, as shown on the plans, Armstrong model AX-\_\_\_\_v ASME Pre-charged Diaphragm Expansion Tank, stamped \_\_\_\_\_ working pressure. Each tank will be supplied with a heavy duty butyl diaphragm. Tank shall be supplied with a ring base, lift ring, NPT system connection. An air charging valve connection (standard tire valve) shall be provided to facilitate adjusting pre-charge pressure to meet actual system conditions.

MODEL	TANK VOLUME	ACCEPTANCE VOLUME	A	B	D	SYSTEM CONNECTION NPT	CHARGING VALVE	SHIPPING WEIGHT	FOR HORIZONTAL INSTALLATION			TANK SHIPPING WEIGHT WITH SADDLES
						C	E		F	G	H	
		gal (L)	inches (mm)					lbs (kg)	inches (mm)			lbs (kg)
AX-15V	7.8 (29.5)	6.3 (23.8)	12.00 (305)	19.00 (483)	—	0.75 (19)	0.302" – 32NC	42 (20.0)	14.38 (365)	10.00 (254)	8.00 (203)	44 (21.0)
AX-20V	11.0 (41.6)	8.8 (33.3)	12.00 (305)	25.00 (635)	—	0.75 (19)		52 (23.0)	21.13 (537)	10.00 (254)	8.00 (203)	54 (26.0)
AX-40V	25.0 (94.6)	20.2 (76.5)	16.00 (406)	33.00 (838)	14.00 (356)	1.00 (25)		84 (38.0)	26.00 (660)	14.00 (356)	12.00 (305)	93 (45.0)
AX-60V	35.0 (132.5)	28.0 (106.0)	16.00 (406)	44.00 (1118)	14.00 (356)	1.00 (25)		97 (44.0)	36.13 (791)	14.00 (356)	12.00 (305)	106 (51.0)
AX-80V	45.0 (170.3)	36.0 (136.3)	20.00 (508)	38.00 (965)	18.00 (457)	1.00 (25)		148 (67.0)	31.13 (791)	18.00 (457)	14.00 (356)	164 (79.0)
AX-100V	60.0 (227.1)	48.5 (183.6)	20.00 (508)	49.00 (1245)	18.00 (457)	1.00 (25)		175 (79.0)	42.50 (1080)	18.00 (457)	14.00 (356)	191 (92.0)
AX-120V	70.0 (265.0)	56.5 (213.9)	24.00 (610)	46.00 (1168)	22.00 (558)	1.50 (38)		259 (117.0)	31.50 (800)	22.00 (558)	18.00 (457)	278 (133.0)
AX-144V	80.0 (302.8)	65.0 (246.1)	24.00 (610)	49.00 (1245)	22.00 (558)	1.50 (38)		268 (121.0)	33.38 (848)	22.00 (558)	18.00 (457)	287 (138.0)
AX-180V	90.0 (340.7)	73.0 (276.3)	24.00 (610)	52.00 (1321)	22.00 (558)	1.50 (38)		283 (128.0)	37.75 (959)	22.00 (558)	18.00 (457)	302 (145.0)
AX-200V	115.0 (435.3)	93.0 (352.0)	24.00 (610)	66.00 (1676)	22.00 (558)	1.50 (38)		325 (146.0)	51.25 (1302)	22.00 (558)	18.00 (457)	344 (165.0)
AX-240V	140.0 (530.0)	113.5 (429.6)	24.00 (610)	78.00 (1981)	22.00 (558)	1.50 (38)		362 (163.0)	59.50 (1511)	22.00 (558)	18.00 (457)	381 (183.0)
AX-260V	158.0 (598.1)	128.0 (484.5)	30.00 (762)	63.00 (1600)	28.00 (711)	1.50 (38)		591 (266.0)	46.00 (1168)	24.00 (610)	22.00 (559)	651 (312.0)
AX-280V	211.0 (798.7)	171.0 (647.3)	30.00 (762)	81.00 (2057)	28.00 (711)	1.50 (38)		752 (338.0)	64.00 (1626)	24.00 (610)	22.00 (559)	812 (390.0)



MODELS AX-15V TO AX-280V

**NOTES:** This tank can be mounted vertical or horizontal. For Horizontal mounting saddles can be provided.



**MODELS AX-15V TO AX-280V**

**TORONTO**

23 BERTRAND AVENUE  
TORONTO, ONTARIO  
CANADA, M1L 2P3  
+1 416 755 2291

**BUFFALO**

93 EAST AVENUE  
NORTH TONAWANDA, NEW YORK  
U.S.A., 14120-6594  
+1 716 693 8813

**DROITWICH SPA**

POINTON WAY,  
STONEBRIDGE CROSS BUSINESS PARK  
DROITWICH SPA, WORCESTERSHIRE  
UNITED KINGDOM, WR9 0LW  
+44 8444 145 145

**MANCHESTER**

WOLVERTON STREET  
MANCHESTER  
UNITED KINGDOM, M11 2ET  
+44 8444 145 145

**BANGALORE**

#59, FIRST FLOOR, 3RD MAIN  
MARGOSA ROAD, MALLESWARAM  
BANGALORE, INDIA, 560 003  
+91 80 4906 3555

**SHANGHAI**

UNIT 903, 888 NORTH SICHUAN RD.  
HONGKOU DISTRICT, SHANGHAI  
CHINA, 200085  
+86 21 5237 0909

**SÃO PAULO**

RUA JOSÉ SEMIÃO RODRIGUES AGOSTINHO,  
1370 GALPÃO 6 EMBU DAS ARTES  
SAO PAULO, BRAZIL  
+55 11 4785 1330

**LYON**

93 RUE DE LA VILLETTE  
LYON, 69003 FRANCE  
+33 4 26 83 78 74

**DUBAI**

JAFZA VIEW 19, OFFICE 402  
P.O.BOX 18226 JAFZA,  
DUBAI - UNITED ARAB EMIRATES  
+971 4 887 6775

**MANNHEIM**

DYNAMOSTRASSE 13  
68165 MANNHEIM  
GERMANY  
+49 621 3999 9858

**JIMBOLIA**

STR CALEA MOTILOR NR. 2C  
JIMBOLIA 305400, JUD.TIMIS  
ROMANIA  
+40 256 360 030

ARMSTRONG FLUID TECHNOLOGY  
ESTABLISHED 1934

ARMSTRONGFLUIDTECHNOLOGY.COM