



ASME Expansion Tanks Series "D" Pre-Charged Diaphragm Tanks

- Increases System Performance
- Reduces Oxygen Corrosion
- Prevents Waterlogging
- Tank Sizes: 8-211 gallons
- Horizontal and Vertical Designs
- Meets ASME Section VIII, Division 1 Standards
- 125 PSI Maximum Working Pressure
- Maximum Operating Temperature 240°F
- Seismic Restraints Available
- Sight Glass Available



Series "D" Diaphragm Tanks

DESCRIPTION

Series "D" expansion tanks are ASME rated pre-charged diaphragm-type pressure vessels. The Series "D" tank is designed to absorb the expansion forces of heating/cooling system water while maintaining proper system pressurization under varying operating conditions. The heavy duty diaphragm separates system water from the tank air charge thereby eliminating waterlogging problems.

OPERATING DATA

Maximum working pressure 125 PSI (862kPa)
 Maximum operating temperature 240°F (115°C)

MATERIALS OF CONSTRUCTION

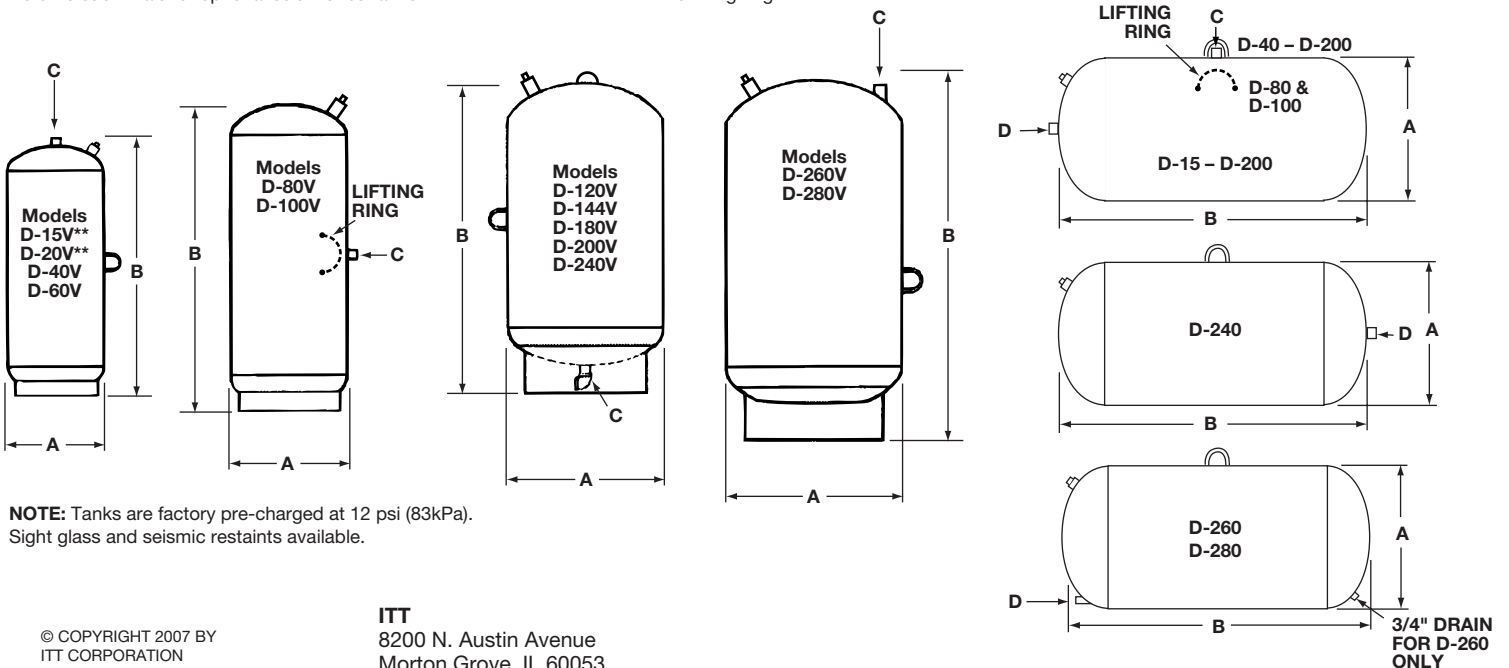
Shell: Carbon Steel
 Diaphragm: Heavy Duty Butyl Rubber
 System Connection: Forged Steel
 Designed and Constructed per ASME Section VIII, Division 1

Dimensions: Gallons (Ltrs.) Inches (mm), Weights: LBS. (KG)

| PART NUMBER | MODEL NUMBER | TANK VOLUME | ACCEPTANCE VOLUME | A | B | C | D | APPROX. SHPG. WT. | APPROX. WT. 100% FULL* |
|-------------|--------------|-------------|-------------------|---------------------------------------|---------------------------------------|-------------|------------|-------------------|------------------------|
| 116500 | D-15** | 8.0 (30) | 2.4 (9) | 12 (305) | 19 ¹ / ₄ (489) | N/A | 1/2 NPTM | 37 (17) | 102 (46) |
| 116501 | D-20** | 10.9 (41) | | | 26 ¹ / ₄ (667) | | | 46 (21) | 137 (62) |
| 116502 | D-40 | 21.7 (82) | 11.3 (43) | 16 ¹ / ₄ (412) | 29 (737) | N/A | 1/2 NPTM | 82 (37) | 263 (119) |
| 116503 | D-60 | 33.6 (127) | | | 42 ¹ / ₄ (1073) | | | 103 (47) | 383 (174) |
| 116504 | D-80 | 44.4 (168) | 22.6 (85) | 16 ¹ / ₄ (412) | 56 ⁷ / ₈ (1445) | 1/2 NPTM | N/A | 145 (66) | 516 (234) |
| 116505 | D-100 | 55.7 (212) | | | 69 (1753) | | | 167 (76) | 632 (287) |
| 116506 | D-120 | 68 (257) | 34 (129) | 24 (610) | 39 ⁷ / ₈ (1013) | N/A | 1 NPTM | 210 (95) | 778 (353) |
| 116507 | D-144 | 77 (291) | | | 44 ³ / ₄ (1137) | | | 240 (109) | 883 (401) |
| 116508 | D-180 | 90 (341) | 46 (174) | 30 (762) | 52 ¹ / ₈ (1324) | N/A | 1 NPTM | 242 (110) | 993 (450) |
| 116509 | D-200 | 110 (416) | | | 62 ⁵ / ₈ (1591) | | | 275 (125) | 1193 (541) |
| 116510 | D-240 | 132 (500) | 56 (212) | 30 (762) | 49 ⁵ / ₈ (1260) | N/A | 1 1/4 NPTM | 398 (181) | 1500 (680) |
| 116778 | D-260 | 159 (600) | | | 58 (1473) | | | 550 (250) | 1869 (850) |
| 116779 | D-280 | 211 (800) | 84 (318) | 75 ³ / ₄ (1924) | 700 (318) | 2461 (1119) | | | |
| 116491 | D-15V** | 8.0 (30) | 2.4 (9) | 12 (305) | 19 ¹ / ₂ (305) | 1/2 NPTM | N/A | 43 (20) | 110 (50) |
| 116492 | D-20V** | 10.9 (41) | | | 26 ¹ / ₂ (673) | | | 45 (21) | 136 (62) |
| 116493 | D-40V | 21.7 (82) | 11.3 (43) | 16 ¹ / ₄ (412) | 29 ¹ / ₂ (749) | 1/2 NPTM | N/A | 90 (41) | 271 (123) |
| 116525 | D-60V | 33.6 (127) | | | 45 ¹ / ₈ (1149) | | | 110 (50) | 390 (177) |
| 116526 | D-80V | 44.4 (168) | 22.6 (85) | 16 ¹ / ₄ (412) | 56 (1442) | N/A | 1 NPTF | 146 (66) | 517 (234) |
| 116527 | D-100V | 55.7 (212) | | | 69 (1753) | | | 167 (76) | 632 (287) |
| 116528 | D-120V | 68 (257) | 34 (129) | 24 (610) | 43 ⁷ / ₈ (1114) | N/A | 1 NPTF | 224 (102) | 791 (359) |
| 116529 | D-144V | 77 (291) | | | 48 ³ / ₄ (1238) | | | 244 (111) | 887 (402) |
| 116530 | D-180V | 90 (341) | 46 (174) | 30 (762) | 56 ¹ / ₈ (1426) | N/A | 1 1/4 NPTM | 266 (121) | 977 (443) |
| 116531 | D-200V | 110 (416) | | | 62 ⁵ / ₈ (1591) | | | 296 (134) | 1214 (551) |
| 116532 | D-240V | 132 (500) | 56 (212) | 53 ¹ / ₂ (1357) | 427 (194) | 1529 (693) | | | |
| 116780 | D-260V | 159 (600) | 84 (318) | 60 ¹ / ₂ (1537) | 476 (216) | 1803 (818) | | | |
| 116781 | D-280V | 211 (800) | 84 (318) | 78 ¹ / ₄ (1989) | 745 (338) | 2506 (1137) | | | |

Dimensions subject to change. Not to be used for construction purposes. Refer to submittals for optional seismic restraints.

*Approximate weight 100% full occurs if bag fails or if air charge is lost.
 **No lifting ring.



NOTE: Tanks are factory pre-charged at 12 psi (83kPa).
 Sight glass and seismic restraints available.

© COPYRIGHT 2007 BY
 ITT CORPORATION
 PRINTED IN U.S.A. 6-07

THE ITT ENGINEERED BLOCKS SYMBOL AND
 ENGINEERED FOR LIFE ARE REGISTERED
 TRADEMARKS OF ITT CORPORATION

ITT
 8200 N. Austin Avenue
 Morton Grove, IL 60053
 Phone: (847) 966-3700
 Fax: (847) 966-9052
 www.bellgossett.com

3/4" DRAIN
 FOR D-260
 ONLY