



## 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
- "California" Sight Glass Available

Bell & Gossett®



**ITT Industries**  
*Engineered for life*

# 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)

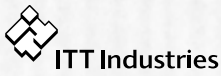
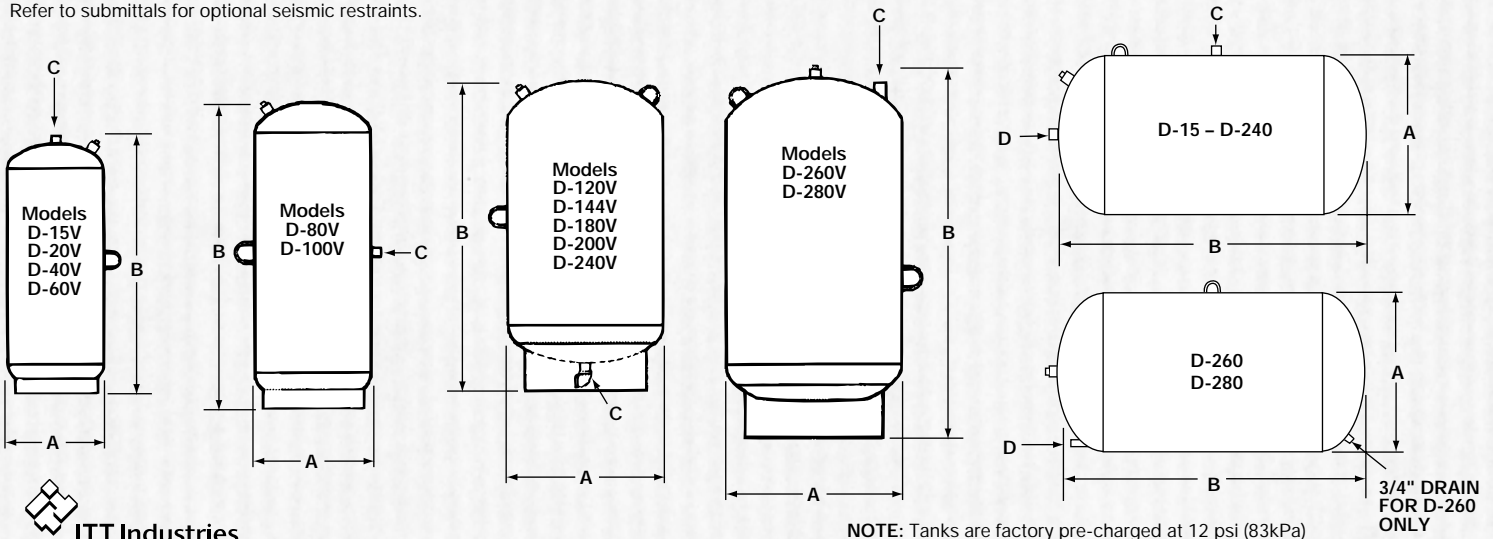
## MATERIALS OF CONSTRUCTION

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 <sup>1</sup> / <sub>4</sub> (489)	N/A	1/2 NPTM	37 (17)	102 (46)
116501	D-20	10.9 (41)			26 <sup>1</sup> / <sub>4</sub> (667)			46 (21)	137 (62)
116502	D-40	21.7 (82)	11.3 (43)	16 <sup>1</sup> / <sub>4</sub> (412)	29 (737)	N/A	1/2 NPTM	82 (37)	263 (119)
116503	D-60	33.6 (127)			42 <sup>1</sup> / <sub>4</sub> (1073)			103 (47)	383 (174)
116504	D-80	44.4 (168)	22.6 (85)	16 <sup>1</sup> / <sub>4</sub> (412)	56 <sup>7</sup> / <sub>8</sub> (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 <sup>7</sup> / <sub>8</sub> (1013)	N/A	1 NPTM	210 (95)	778 (353)
116507	D-144	77 (291)			44 <sup>3</sup> / <sub>4</sub> (1137)			240 (109)	883 (401)
116508	D-180	90 (341)	46 (174)	30 (762)	52 <sup>1</sup> / <sub>8</sub> (1324)	N/A	1 NPTM	242 (110)	993 (450)
116509	D-200	110 (416)			62 <sup>5</sup> / <sub>8</sub> (1591)			275 (125)	1193 (541)
116510	D-240	132 (500)	56 (212)	30 (762)	49 <sup>5</sup> / <sub>8</sub> (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 <sup>3</sup> / <sub>4</sub> (1924)	700 (318)	2461 (1119)			
116491	D-15V	8.0 (30)	2.4 (9)	12 (305)	19 <sup>1</sup> / <sub>2</sub> (305)	1/2 NPTM	N/A	43 (20)	110 (50)
116492	D-20V	10.9 (41)			26 <sup>1</sup> / <sub>2</sub> (673)			45 (21)	136 (62)
116493	D-40V	21.7 (82)	11.3 (43)	16 <sup>1</sup> / <sub>4</sub> (412)	29 <sup>1</sup> / <sub>2</sub> (749)	1/2 NPTM	N/A	90 (41)	271 (123)
116525	D-60V	33.6 (127)			45 <sup>1</sup> / <sub>8</sub> (1149)			110 (50)	390 (177)
116526	D-80V	44.4 (168)	22.6 (85)	16 <sup>1</sup> / <sub>4</sub> (412)	56 (1442)	1/2 NPTM	N/A	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 <sup>7</sup> / <sub>8</sub> (1114)	1 NPTF	N/A	224 (102)	791 (359)
116529	D-144V	77 (291)			48 <sup>3</sup> / <sub>4</sub> (1238)			244 (111)	887 (402)
116530	D-180V	90 (341)	46 (174)	30 (762)	56 <sup>1</sup> / <sub>8</sub> (1426)	1 NPTF	N/A	266 (121)	977 (443)
116531	D-200V	110 (416)			62 <sup>5</sup> / <sub>8</sub> (1591)			296 (134)	1214 (551)
116532	D-240V	132 (500)	56 (212)	30 (762)	53 <sup>1</sup> / <sub>2</sub> (1357)	1 1/4 NPTM	N/A	427 (194)	1529 (693)
116780	D-260V	159 (600)			60 <sup>1</sup> / <sub>2</sub> (1537)			476 (216)	1803 (818)
116781	D-280V	211 (800)	84 (318)	78 <sup>1</sup> / <sub>4</sub> (1989)	745 (338)	2506 (1137)			

Dimensions subject to change. Not to be used for construction purposes. \*Approximate weight 100% full occurs if bag fails or if air charge is lost. Refer to submittals for optional seismic restraints.



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