



TECHNICAL DATA

VERTICAL AND HORIZONTAL BLADDER TANKS MODEL VFT

The Viking Corporation, 210 N Industrial Park Drive, Hastings MI 49058

Telephone: 269-945-9501 Technical Services: 877-384-5464 Fax: 269-818-1680 Email: techsvcs@vikingcorp.com

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1. GENERAL DESCRIPTION

The Viking bladder tank together with Viking ratio controllers, form a balanced pressure proportioning system used to mix water and firefighting foam concentrate together to produce an effective extinguishing medium. The bladder tank technology is a dependable and precise mixing method that is widespread in the fixed fire protection market.

This method gives a stable water/foam ratio by adjusting automatically to the variable flow rate and pressure conditions that occur during system operation. This feature makes bladder tanks particularly suitable to fit multiple hazard systems, sprinkler systems and any other systems operating under variable, non-predictable flow and pressure conditions.

The Viking bladder tank is a carbon steel pressure vessel containing an elastomeric bladder between the water and foam concentrate. The bladder permits water pressure to be transferred to the foam concentrate without the two fluids mixing together.

This Technical Data Page is intended for trained experts. It contains basic information needed to use the product described. Legally binding is the product operation and maintenance manual which must be observed.

For further information, please contact the appropriate Viking sales office in Section 5 Availability or refer to the technical documentation.

The contents of this publication are subject to modifications without notice.



2. LISTINGS AND APPROVALS

The Viking bladder tank is FM Approved and/or UL Listed as part of a fire extinguishing system combining designated foam concentrates, Model VRC ratio controllers, Model VLF ILBP's and discharge devices. Approved and Listed system components can be found at www.approvalguide.com and www.database.UL.com



FM Approved – Low Expansion Foam Systems (FM5130)



UL Listed – Guide GFGV and GHXV (UL162)

Manufactured according to ASME Sec. VIII Div.1 or EN13445



CE marked according to the PED Directive 2014/68/EU (Europe Only)

Fire Safety Certified for Russian Federation territory CTP (formally GOST)

ASME "U" Stamp available on request with additional charge

NOTE: Other international approval certificates may be available upon request.





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3. TECHNICAL DATA

3.1 Construction Features

- Vertical tanks on legs or horizontal tanks on saddles
- Legs and saddles are provided with ground fixing holes
- Approved system design pressure of 175PSI (12.1bar) or 232PSI (16.0bar)
- 100% pressure tested according to the applied design code
- Shell and heads in ASTM A516 Gr. 70 or EN10028-3 P275NH/P355NH
- Lockable corrosion resistant nickel covered brass tank trim/service ball valves (UL Listed / FM Approved)
- Inspection flange available on left or right side of horizontal tanks (left as standard)
- Machine welded circumferential and longitudinal seams for maximum quality and durability
- Welded lifting lugs to facilitate safe handling operations
- Earth lug for electrical safety
- Safety thermal valve on water side of bladder to prevent slow overpressure and relieve thermal fluctuations
- Bladder equipped with cast rubber caps to ensure water & foam integrity under constant pressure
- Bladder specifically tested for compatibility with foams shown in FM Approval and UL Listing
- Oversized to permit concentrate thermal expansion (volume expansion allowance)
- Tank equipped with inside protection at any opening to ensure no damage to the bladder
- Internal PVC foam concentrate distribution pipe ensures optimal foam concentrate usage
- Internal water distribution channel to equalize the water pressure everywhere avoiding damage to the bladder and to drain the tank during service and maintenance
- Nameplate holder to avoid undetected corrosion on the tank's shell behind the plate
- Analog level indicator or classic sight tube (specify at point of order).
- External epoxy zinc rich primer with aliphatic polyurethane finish tested by FM and UL for corrosive atmosphere (salt fog)

3.2 Standard Materials

Table 3.2.1 - Standard Materials

| | |
|------------------------------|--|
| Tank shell and heads: | ASTM A516 Gr. 70 or P275NH to EN10028-3 or P355NH to EN10028-3 |
| Bladder: | polyester reinforced hypalon-neoprene polymers |
| Trim valves: | nickel coated brass |
| Safety thermal relief valve: | brass |
| Pressure gauges: | stainless steel |
| Level indicator: | Hydrometer: Stainless Steel or Sight Tube: PVC |
| Paint: | epoxy zinc rich primer with aliphatic polyurethane finish |
| Standard colour: | Flame Red RAL3000 |
| Flange material: | ASTM A105 |
| Flange connection: | ANSI B16.5 Class 150 |

3.3 Standard Design Specifications

Table 3.3.1 - Standard Design Specifications

| | |
|---|--|
| Design pressure: | 175PSI / 12.1bar (1.2MPa) or 232PSI / 16.0bar (1.6MPa) |
| Operating temperature range: | 35°F to 120°F (1.7°C to 49°C) |
| Capacity: | see tables |
| Empty weight: | see tables |
| Proportioning range: | see ratio controller data sheet |
| (*) Further temperature limitations come from foam concentrate and water. | |



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3.4 Ordering Information

The following information is provided to ensure that the correct design requirements are given to Viking during the order and manufacturing process. Mandatory information is required in every case. Optional information is required in case of special project or specification requirements. Pre-assembled Bladder Tank information is required when the bladder tank will be supplied pre-piped including the Model VRC Ratio Controller.

| Table 3.4.1: Ordering Information | | | |
|---|-----|----------------------------------|--|
| | Ref | Criteria | Option |
| Mandatory Information (required for quote order processing) | 1a | Configuration | a) Vertical b) Horizontal c) Twin Vertical |
| | 1b | Capacity | a) 25 to 4000 US Gallons Vertical b) 50 to 5250 US Gallons Horizontal (see tables for available sizes) |
| | 1c | Design Code | a) EN13445, b) ASME Sec. VIII Div.1 c) ASME Sec. VIII Div.1 with "U" Stamp (*) |
| | 1d | Standby Pressure Rating | a) 175PSI / 12.1bar (1.2MPa) b) 232PSI /16.0bar (1.6MPa) |
| | 1e | Inspection Flange | a) Left b) Right (required for Horizontal Tanks only) |
| | 1f | Level Indicator | a) Sight Tube b) Level gauge |
| Optional | 2a | Design Temperature | Contact technical department |
| | 2b | Corrosion Allowance | Contact technical department |
| | 2c | Radiographic test report (*) | Contact technical department |
| | 2d | Liquid penetrant test report (*) | Contact technical department |
| Pre-Assembled with Ratio Controller (*) | 3a | Ratio Controller Size(s) | 2", 2.5", 3", 4", 6", 8" |
| | 3b | Direction of flow | a) Left to right b) Right to left (direction of flow as you face the tank) |
| | 3c | Water Line Piping | a) Carbon Steel |
| | 3d | Foam Line Piping | a) Carbon Steel b) Stainless Steel |
| | 3e | Foam Concentrate Type | a) AFFF 1%S C6 b) AFFF 3%S C6 c) ARC 3X3S C6 |
| | 3f | Concentrate Control Valve | Viking Halar CCV (FM UL) or Hydraulic Ball Valve |
| (*) With additional cost | | | |

INFORMATION

Some of the available options may be not covered by the UL Listing or FM Approval. Please always make reference to the appropriate approval directory or guides or contact the appropriate Viking sales office in Section 5 Availability for further assistance.



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4. SCOPE OF DELIVERY

Ensure that all components are complete and in good condition.

The Bladder Tank is supplied in or on a suitable wooden pallet skid or shipping crate in the horizontal position.

All Bladder Tanks have lifting lugs to allow safe maneuverability on site.

Tank is supplied empty with pre-installed bladder.

Small trim valves and contents level device are supplied pre-assembled to the tank as standard.

Safety thermal relief valve supplied as standard according to design code selected.

Anchor fixing bolts are not part of our supply scope.

Table 4.1.1 - Documentation

| Standard Documentation | Optional Documentation * |
|---|--|
| Warranty Certificate | Dimensional Drawings |
| PED Declaration or Conformity | Material Certificates Type 3.1 to EN10204 |
| Safety Thermal Relief Valve Declaration of Conformity | Certificate of Conformity Type 2.1 to EN10204 |
| Hydrostatic Pressure Test Certificate | Design Structural Calculations |
| Bladder Pneumatic Test Certificate | Spot or Full Radiographic Examination with Report (when not mandatorily required by design parameters) |
| Painting Inspection Certificate | Spare Parts List |
| Final Inspection Certificate | Copy of Procedure Qualification Record (PQR) and Welding Procedure Specification (WPS) according to tank construction code |
| Operating, Filling and Maintenance Manual (English) | Operating, Filling and Maintenance Manual (Language) |

(*) Contact Viking for further information and price.

5. AVAILABILITY

Please contact your local Viking sales office for further information.

The product is available directly from Viking and official distributors only.

EMEA: Viking SA, ZI Haneboesch, L-4562 Differdange / Niederkorn, Tel.: +352 58 37 37 - 1, Fax: +352 38 37 36,

vikinglux@viking-emea.com

Americas: The Viking Corporation, 210 N. Industrial Park Drive, Hastings, Michigan 49058, Toll free phone: (800) 968-9501

APAC: The Viking Corporation (Far East) Pte. Ltd., 69 Tuas View Square, Westlink Techpark, Singapore 637621

Tel: (+65) 6 278 4061, Fax: (+65) 6 278 4609, Email: vikingsingapore@vikingcorp.com

6. PRODUCT VARIANTS

6.2 Options

- Pre-Assembled with Ratio Controller and water/foam pipe work
- Twin tank configurations
- Special coatings for salt-water applications or harsh environmental conditions
- Nameplate in corrosion resistant material
- Increased wall thickness for corrosion allowance
- 232PSI /16.0bar (1.6MPa) design pressure rating with UL Listing and FM Approval
- Other design pressure and seismic ratings
- Ladders | Work Platform | Sunshield
- Full bladder tank stainless steel construction
- Heat tracing and/or insulation
- Bladder tank pre-installed on base frame or containerized to customer requirements
- Various colors and painting cycles with UL Listing and FM Approval (120-300 microns)
- Nondestructive examinations
- Factory acceptance test, notified body or third party inspections
- Special sea freight and fumigated packaging

Please contact Viking for further details, pricing and availability

INFORMATION

Some of the available options may be not covered by the UL Listing or FM Approval. Please always make reference to the appropriate approval directory or guides or contact Viking for further assistance.



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6.2 General bladder tank layout and P&ID

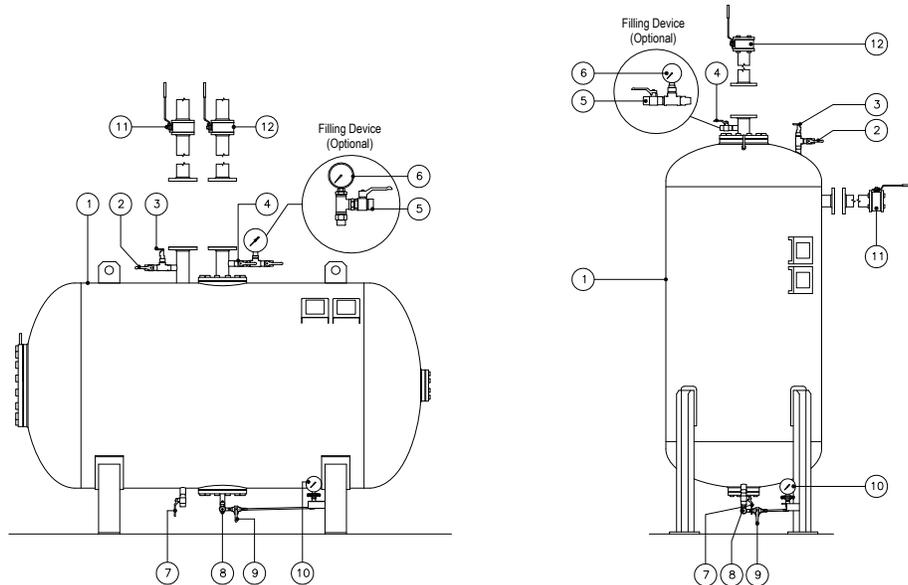


Figure 6.2.1
Vertical and Horizontal Bladder Tanks

Table 6.2.2 - General Bladder Tank Layout and P&ID

| Item | Description | Item | Description |
|------|--|------|--|
| 1 | Bladder Tank | 7 | Water Filling/Drain Valve (NPT) |
| 2 | Water Vent Valve (NPT) | 8 | Foam Concentrate Filling/Drain Valve (NPT) |
| 3 | Safety Thermal Relief Valve | 9 | Concentrate Level Indicator Drain Valve |
| 4 | Foam Concentrate Vent Valve (NPT) | 10 | Concentrate Level Indicator (alternative: sight tube) |
| 5 | Filling Vent Valve (Optional) | 11 | Water Shut Off Valve (to be ordered separately) |
| 6 | Filling Pressure Gauge 1-10 kpa (Optional) | 12 | Foam Concentrate Shut Off Valve (to be ordered separately) |

Note: Item 10 shown with Level Gauge. Sight Tube also available and connected at position 10.

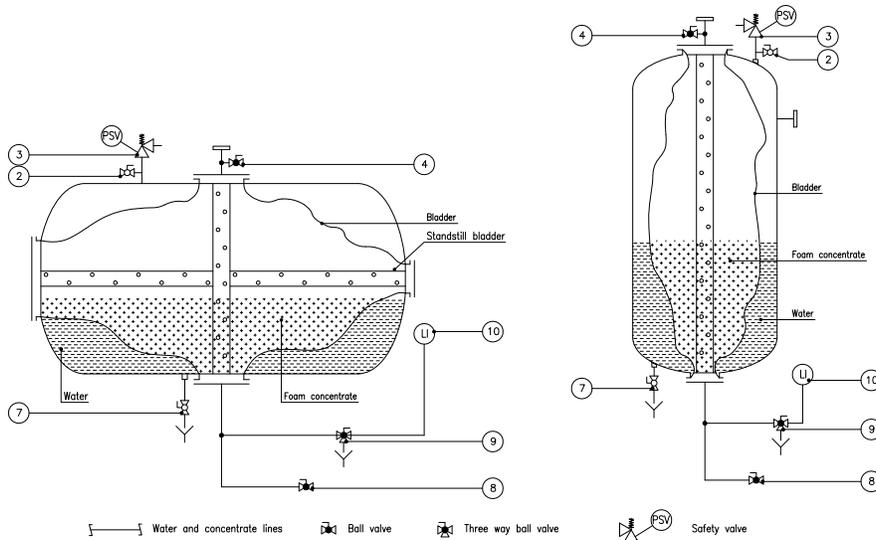


Figure 6.2.3



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6.3 Dimensions

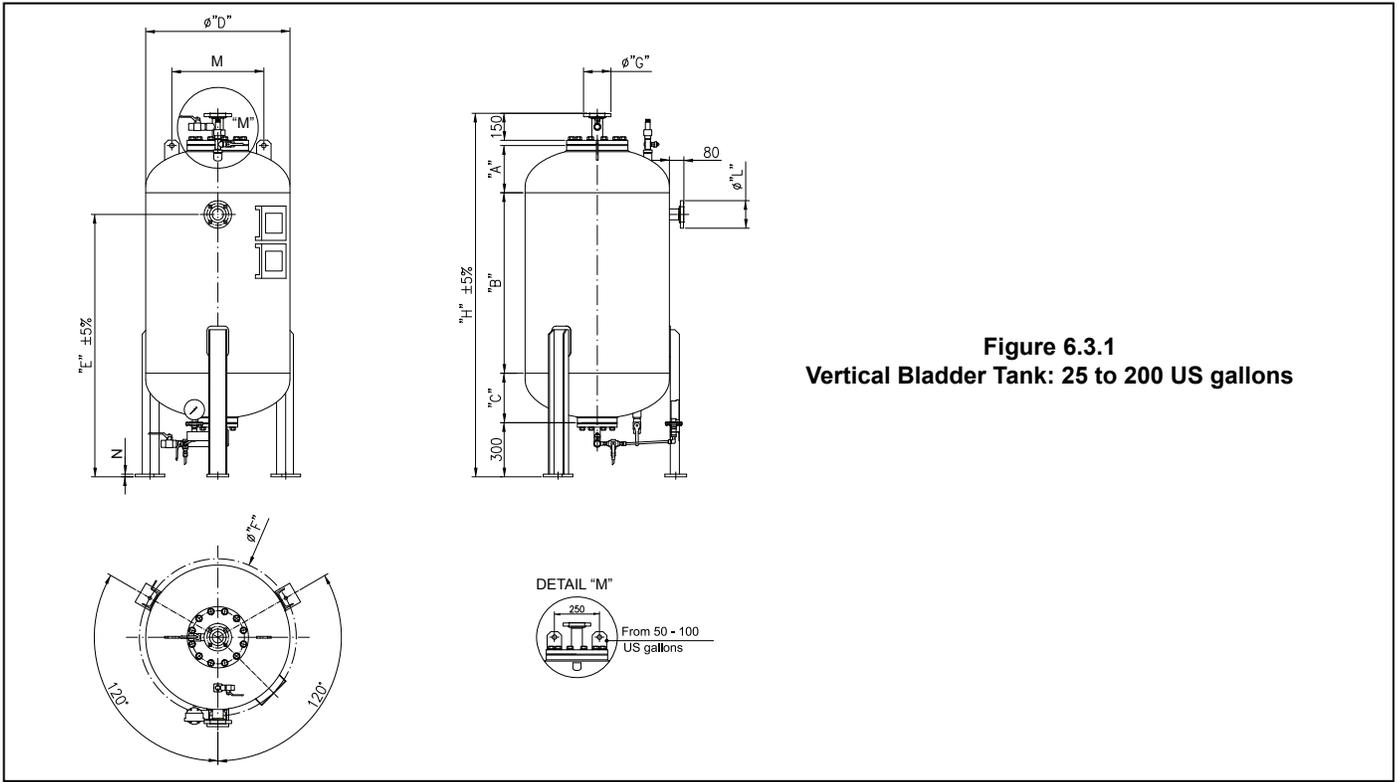


Figure 6.3.1
Vertical Bladder Tank: 25 to 200 US gallons

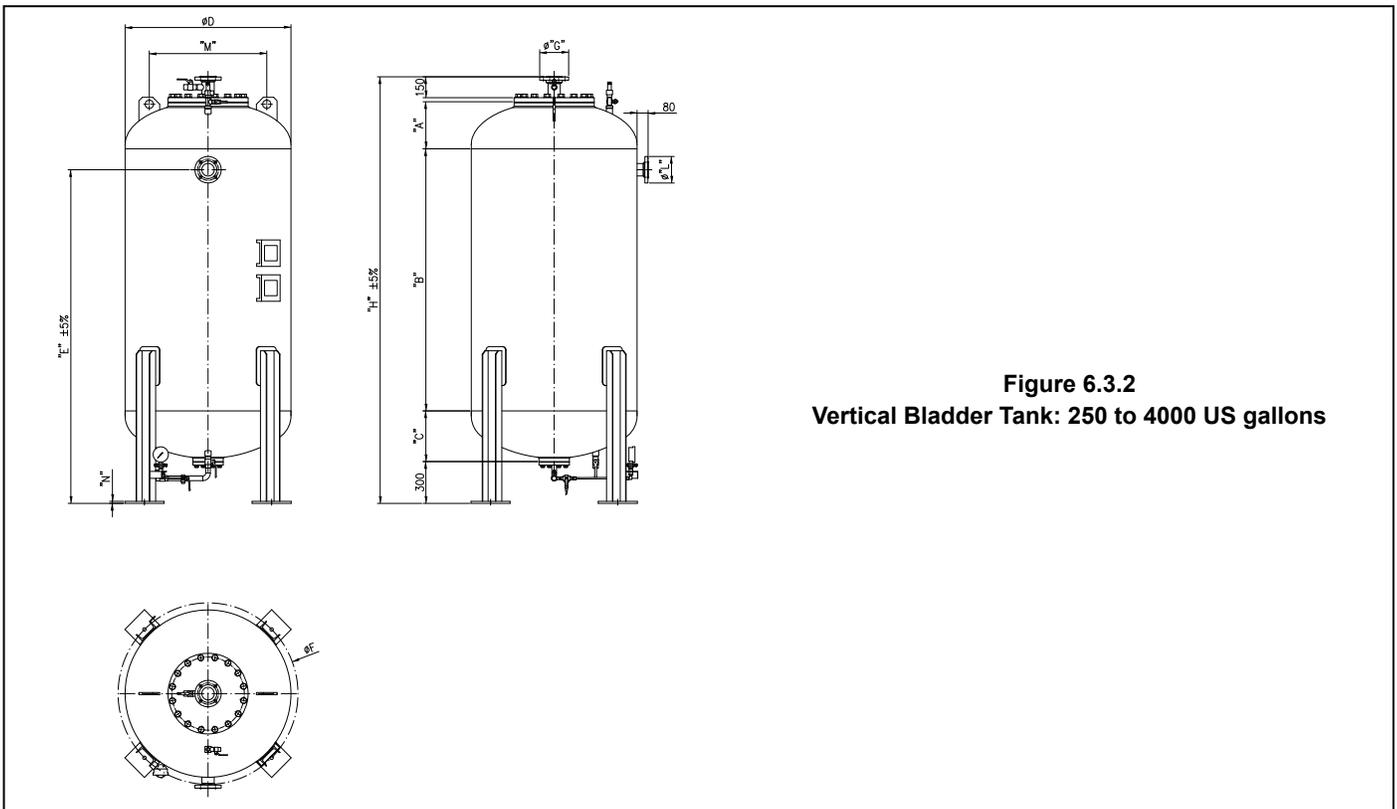


Figure 6.3.2
Vertical Bladder Tank: 250 to 4000 US gallons



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Table 6.3.3 - Vertical Bladder Tank Dimensions (EN13445 Design Code)

| Part Number EN13445 Design Code | | Capacity | | Weight | | A | B | C | ØD | E | ØF | ØG | H | ØL | M | N |
|---------------------------------|------------------|----------|--------|--------|------|------|-------|------|------|-------|------|------|-------|------|------|------|
| 175PSI / 12.1bar | 232PSI / 16.0bar | USG | Litres | LBS | KG | inch | inch | inch | inch | inch | inch | inch | inch | inch | inch | inch |
| | | | | | | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm |
| VFTV0025GF | VFTV0025GF-16 | 25 | 94 | 199 | 90 | 6.4 | 15.7 | 7.0 | 19.7 | 30.2 | 22.4 | 2 | 48.1 | 2 | 9.8 | 0.6 |
| | | | | | | 163 | 400 | 178 | 500 | 768 | 570 | 50 | 1221 | 50 | 250 | 15 |
| VFTV0036GF | VFTV0036GF-16 | 36 | 136 | 287 | 130 | 6.4 | 23.6 | 7.0 | 19.7 | 38.1 | 22.4 | 2 | 55.9 | 2 | 9.8 | 0.6 |
| | | | | | | 163 | 600 | 178 | 500 | 968 | 570 | 50 | 1421 | 50 | 250 | 15 |
| VFTV0050GF | VFTV0050GF-16 | 50 | 189 | 375 | 170 | 7.4 | 27.6 | 8.0 | 23.6 | 44.5 | 26.4 | 2 | 61.8 | 2 | 9.8 | 0.6 |
| | | | | | | 187 | 700 | 203 | 600 | 1130 | 670 | 50 | 1570 | 50 | 250 | 15 |
| VFTV0075GF | VFTV0075GF-16 | 75 | 283 | 408 | 185 | 7.4 | 35.4 | 8.0 | 23.6 | 44.5 | 26.4 | 2 | 69.7 | 2 | 9.8 | 0.6 |
| | | | | | | 187 | 900 | 203 | 600 | 1130 | 670 | 50 | 1770 | 50 | 250 | 15 |
| VFTV0100GF | VFTV0100GF-16 | 100 | 378 | 475 | 215 | 7.4 | 49.2 | 8.0 | 23.6 | 64.6 | 26.4 | 2 | 83.4 | 2 | 9.8 | 0.59 |
| | | | | | | 187 | 1250 | 203 | 600 | 1640 | 670 | 50 | 2120 | 50 | 250 | 15 |
| VFTV0150GF | VFTV0150GF-16 | 150 | 567 | 784 | 355 | 10.3 | 39.4 | 10.8 | 31.5 | 57.1 | 34.3 | 2 | 79.4 | 2 | 9.8 | 0.6 |
| | | | | | | 262 | 1000 | 274 | 800 | 1450 | 870 | 50 | 2016 | 50 | 510 | 15 |
| VFTV0200GF | VFTV0200GF-16 | 200 | 757 | 861 | 390 | 10.3 | 51.2 | 10.8 | 31.5 | 57.1 | 34.3 | 2 | 91.2 | 2 | 9.8 | 0.6 |
| | | | | | | 262 | 1300 | 274 | 800 | 1450 | 870 | 50 | 2316 | 50 | 510 | 15 |
| VFTV0250GF | VFTV0250GF-16 | 250 | 946 | 905 | 410 | 12.9 | 39.4 | 13.2 | 39.4 | 59.7 | 42.6 | 2.5 | 84.3 | 2.5 | 24.0 | 0.6 |
| | | | | | | 327 | 1000 | 336 | 1000 | 1516 | 1082 | 65 | 2142 | 65 | 610 | 15 |
| VFTV0300GF | VFTV0300GF-16 | 300 | 1135 | 1033 | 468 | 12.9 | 51.2 | 13.2 | 39.4 | 71.5 | 42.6 | 2.5 | 96.1 | 2.5 | 24.0 | 0.6 |
| | | | | | | 327 | 1300 | 336 | 1000 | 1816 | 1082 | 65 | 2442 | 65 | 610 | 15 |
| VFTV0350GF | VFTV0350GF-16 | 350 | 1324 | 1077 | 488 | 12.9 | 55.1 | 13.2 | 39.4 | 75.4 | 42.6 | 2.5 | 100.1 | 2.5 | 24.0 | 0.6 |
| | | | | | | 327 | 1400 | 336 | 1000 | 1916 | 1082 | 65 | 2542 | 65 | 610 | 15 |
| VFTV0400GF | VFTV0400GF-16 | 400 | 1514 | 1115 | 505 | 12.9 | 65.0 | 13.2 | 39.4 | 85.3 | 42.6 | 2.5 | 109.9 | 2.5 | 24.0 | 0.6 |
| | | | | | | 327 | 1650 | 336 | 1000 | 2166 | 1082 | 65 | 2792 | 65 | 610 | 15 |
| VFTV0450GF | VFTV0450GF-16 | 450 | 1703 | 1435 | 650 | 13.0 | 59.1 | 13.3 | 43.3 | 79.4 | 46.5 | 2.5 | 104.1 | 2.5 | 24.0 | 0.6 |
| | | | | | | 329 | 1500 | 337 | 1100 | 2017 | 1181 | 65 | 2645 | 65 | 610 | 15 |
| VFTV0500GF | VFTV0500GF-16 | 500 | 1892 | 1578 | 715 | 13.0 | 70.9 | 13.3 | 43.3 | 91.2 | 46.5 | 2.5 | 115.9 | 2.5 | 24.0 | 0.6 |
| | | | | | | 329 | 1800 | 337 | 1100 | 2317 | 1181 | 65 | 2945 | 65 | 610 | 15 |
| VFTV0600GF | VFTV0600GF-16 | 600 | 2271 | 1943 | 880 | 13.0 | 65.0 | 14.5 | 47.2 | 84.6 | 51.2 | 3 | 110.5 | 3 | 33.5 | 0.6 |
| | | | | | | 330 | 1650 | 368 | 1200 | 2148 | 1300 | 80 | 2807 | 80 | 850 | 15 |
| VFTV0700GF | VFTV0700GF-16 | 700 | 2649 | 2141 | 970 | 14.1 | 65.0 | 15.5 | 51.2 | 86.4 | 55.3 | 3 | 113.4 | 3 | 33.5 | 0.6 |
| | | | | | | 358 | 1650 | 394 | 1300 | 2194 | 1405 | 80 | 2881 | 80 | 850 | 15 |
| VFTV0800GF | VFTV0800GF-16 | 800 | 3028 | 2274 | 1030 | 14.1 | 78.7 | 15.5 | 51.2 | 100.2 | 55.3 | 3 | 127.2 | 3 | 33.5 | 0.6 |
| | | | | | | 358 | 2000 | 394 | 1300 | 2544 | 1405 | 80 | 3231 | 80 | 850 | 15 |
| VFTV0900GF | VFTV0900GF-16 | 900 | 3406 | 2947 | 1335 | 15.3 | 78.7 | 16.5 | 55.1 | 100.0 | 59.3 | 3 | 129.4 | 3 | 36.6 | 0.6 |
| | | | | | | 388 | 2000 | 420 | 1400 | 2540 | 1505 | 80 | 3287 | 80 | 930 | 15 |
| VFTV1000GF | VFTV1000GF-16 | 1000 | 3785 | 2837 | 1285 | 15.8 | 74.8 | 17.1 | 57.1 | 96.6 | 61.2 | 3 | 126.6 | 3 | 36.6 | 0.6 |
| | | | | | | 402 | 1900 | 434 | 1450 | 2454 | 1555 | 80 | 3215 | 80 | 930 | 15 |
| VFTV1100GF | VFTV1100GF-16 | 1100 | 4163 | 2991 | 1355 | 15.8 | 82.7 | 17.1 | 57.1 | 104.5 | 61.2 | 3 | 134.4 | 3 | 36.6 | 0.6 |
| | | | | | | 402 | 2100 | 434 | 1450 | 2654 | 1555 | 80 | 3415 | 80 | 930 | 15 |
| VFTV1200GF | VFTV1200GF-16 | 1200 | 4542 | 3223 | 1460 | 16.4 | 82.7 | 17.6 | 59.1 | 105.0 | 63.2 | 3 | 135.5 | 3 | 37.4 | 0.6 |
| | | | | | | 416 | 2100 | 447 | 1500 | 2667 | 1605 | 80 | 3442 | 80 | 950 | 15 |
| VFTV1300GF | VFTV1300GF-16 | 1300 | 4921 | 3709 | 1680 | 17.4 | 78.7 | 18.5 | 63.0 | 102.0 | 67.1 | 3 | 133.6 | 3 | 41.3 | 0.6 |
| | | | | | | 443 | 2000 | 471 | 1600 | 2591 | 1705 | 80 | 3393 | 80 | 1050 | 15 |
| VFTV1400GF | VFTV1400GF-16 | 1400 | 5299 | 3929 | 1780 | 17.4 | 88.6 | 18.5 | 63.0 | 111.9 | 67.1 | 3 | 143.4 | 3 | 41.3 | 0.6 |
| | | | | | | 443 | 2250 | 471 | 1600 | 2841 | 1705 | 80 | 3643 | 80 | 1050 | 15 |
| VFTV1500GF | VFTV1500GF-16 | 1500 | 5678 | 4437 | 2010 | 19.6 | 74.8 | 20.6 | 68.9 | 100.1 | 73.2 | 3 | 133.8 | 3 | 45.3 | 0.6 |
| | | | | | | 497 | 1900 | 522 | 1750 | 2542 | 1860 | 80 | 3398 | 80 | 1150 | 15 |
| VFTV1600GF | VFTV1600GF-16 | 1600 | 6056 | 4547 | 2060 | 19.6 | 78.7 | 20.6 | 68.9 | 104.0 | 73.2 | 3 | 137.7 | 3 | 45.3 | 0.6 |
| | | | | | | 497 | 2000 | 522 | 1750 | 2642 | 1860 | 80 | 3498 | 80 | 1150 | 15 |
| VFTV1700GF | VFTV1700GF-16 | 1700 | 6435 | 4614 | 2090 | 20.5 | 78.7 | 21.5 | 70.9 | 103.4 | 75.2 | 3 | 139.6 | 3 | 45.3 | 0.6 |
| | | | | | | 521 | 2000 | 547 | 1800 | 2627 | 1910 | 80 | 3547 | 80 | 1150 | 15 |
| VFTV1800GF | VFTV1800GF-16 | 1800 | 6813 | 4669 | 2115 | 22.6 | 59.1 | 23.5 | 78.7 | 88.5 | 83.5 | 3 | 121.3 | 3 | 51.2 | 0.8 |
| | | | | | | 575 | 1500 | 598 | 2000 | 2248 | 2120 | 80 | 3082 | 80 | 1300 | 20 |
| VFTV1900GF | VFTV1900GF-16 | 1900 | 7192 | 4801 | 2175 | 22.6 | 63.0 | 23.5 | 78.7 | 92.4 | 83.5 | 3 | 125.3 | 3 | 51.2 | 0.8 |
| | | | | | | 575 | 1600 | 598 | 2000 | 2348 | 2120 | 80 | 3182 | 80 | 1300 | 20 |
| VFTV2000GF | VFTV2000GF-16 | 2000 | 7570 | 4989 | 2260 | 22.6 | 68.9 | 23.5 | 78.7 | 98.3 | 83.5 | 3 | 131.2 | 3 | 51.2 | 0.8 |
| | | | | | | 575 | 1750 | 598 | 2000 | 2498 | 2120 | 80 | 3332 | 80 | 1300 | 20 |
| VFTV2200GF | VFTV2200GF-16 | 2200 | 8327 | 5651 | 2560 | 22.6 | 82.7 | 23.5 | 78.7 | 112.1 | 83.5 | 3 | 145.0 | 3 | 51.2 | 0.8 |
| | | | | | | 575 | 2100 | 598 | 2000 | 2848 | 2120 | 80 | 3682 | 80 | 1300 | 20 |
| VFTV2400GF | VFTV2400GF-16 | 2400 | 9084 | 5850 | 2650 | 22.6 | 88.6 | 23.5 | 78.7 | 119.2 | 83.5 | 3 | 150.9 | 3 | 51.2 | 0.8 |
| | | | | | | 575 | 2250 | 598 | 2000 | 3028 | 2120 | 80 | 3832 | 80 | 1300 | 20 |
| VFTV2600GF | VFTV2600GF-16 | 2600 | 9842 | 6038 | 2735 | 22.6 | 102.4 | 23.5 | 78.7 | 131.8 | 83.5 | 3 | 164.6 | 3 | 51.2 | 0.8 |
| | | | | | | 575 | 2600 | 598 | 2000 | 3348 | 2120 | 80 | 4182 | 80 | 1300 | 20 |
| VFTV2800GF | VFTV2800GF-16 | 2800 | 10599 | 6623 | 3000 | 22.6 | 114.2 | 23.5 | 78.7 | 143.6 | 83.5 | 3 | 176.5 | 3 | 51.2 | 0.8 |
| | | | | | | 575 | 2900 | 598 | 2000 | 3648 | 2120 | 80 | 4482 | 80 | 1300 | 20 |
| VFTV3000GF | VFTV3000GF-16 | 3000 | 11356 | 6876 | 3115 | 22.6 | 122.0 | 23.5 | 78.7 | 151.5 | 83.5 | 3 | 184.3 | 3 | 51.2 | 0.8 |
| | | | | | | 575 | 3100 | 598 | 2000 | 3848 | 2120 | 80 | 4682 | 80 | 1300 | 20 |
| VFTV3200GF | VFTV3200GF-16 | 3200 | 12113 | 7351 | 3330 | 22.6 | 133.9 | 23.5 | 78.7 | 163.3 | 83.5 | 3 | 196.1 | 3 | 51.2 | 0.8 |
| | | | | | | 575 | 3400 | 598 | 2000 | 4148 | 2120 | 80 | 4982 | 80 | 1300 | 20 |
| VFTV3400GF | VFTV3400GF-16 | 3400 | 12870 | 7726 | 3500 | 22.6 | 145.7 | 23.5 | 78.7 | 175.1 | 83.5 | 3 | 208.0 | 3 | 51.2 | 0.8 |
| | | | | | | 575 | 3700 | 598 | 2000 | 4448 | 2120 | 80 | 5282 | 80 | 1300 | 20 |
| VFTV3600GF | VFTV3600GF-16 | 3600 | 13627 | 7925 | 3590 | 22.6 | 151.6 | 23.5 | 78.7 | 181.0 | 83.5 | 3 | 213.9 | 3 | 51.2 | 0.8 |
| | | | | | | 575 | 3850 | 598 | 2000 | 4598 | 2120 | 80 | 5432 | 80 | 1300 | 20 |
| VFTV3800GF | VFTV3800GF-16 | 3800 | 14384 | 8366 | 3790 | 22.6 | 165.4 | 23.5 | 78.7 | 194.8 | 83.5 | 3 | 227.6 | 3 | 51.2 | 0.8 |
| | | | | | | 575 | 4200 | 598 | 2000 | 4948 | 2120 | 80 | 5782 | 80 | 1300 | 20 |
| VFTV4000GF | VFTV4000GF-16 | 4000 | 15141 | 8609 | 3900 | 22.6 | 173.2 | 23.5 | 78.7 | 202.7 | 83.5 | 3 | 235.5 | 3 | 51.2 | 0.8 |
| | | | | | | 575 | 4400 | 598 | 2000 | 5148 | 2120 | 80 | 5982 | 80 | 1300 | 20 |



TECHNICAL DATA

VERTICAL AND HORIZONTAL BLADDER TANKS MODEL VFT

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Table 6.3.4 - Vertical Bladder Tank Dimensions (ASME Sec VIII Design Code)

| Bladder Tank : ASME Sec VIII Design Code | | Capacity | | Weight | | A | B | C | ØD | E | ØF | ØG | H | ØL | M | N |
|--|------------------|----------|--------|--------|------|------|-------|------|------|-------|------|------|-------|------|------|------|
| 175PSI / 12.1bar | 232PSI / 16.0bar | USG | Litres | LBS | KG | inch | inch | inch | inch | inch | inch | inch | inch | inch | inch | inch |
| | | | | | | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm |
| VFTV0025GAF | VFTV0025GAF-16 | 25 | 94 | 221 | 100 | 6.4 | 15.7 | 7.0 | 19.7 | 30.2 | 22.4 | 2 | 48.1 | 2 | 9.8 | 0.6 |
| | | | | | | 163 | 400 | 178 | 500 | 768 | 570 | 50 | 1221 | 50 | 250 | 15 |
| VFTV0036GAF | VFTV0036GAF-16 | 36 | 136 | 309 | 140 | 6.4 | 23.6 | 7.0 | 19.7 | 38.1 | 22.4 | 2 | 55.9 | 2 | 9.8 | 0.6 |
| | | | | | | 163 | 600 | 178 | 500 | 968 | 570 | 50 | 1421 | 50 | 250 | 15 |
| VFTV0050GAF | VFTV0050GAF-16 | 50 | 189 | 411 | 186 | 7.4 | 27.6 | 8.0 | 23.6 | 44.5 | 26.4 | 2 | 61.8 | 2 | 9.8 | 0.6 |
| | | | | | | 187 | 700 | 203 | 600 | 1130 | 670 | 50 | 1570 | 50 | 250 | 15 |
| VFTV0075GAF | VFTV0075GAF-16 | 75 | 283 | 450 | 204 | 7.4 | 35.4 | 8.0 | 23.6 | 44.5 | 26.4 | 2 | 69.7 | 2 | 9.8 | 0.6 |
| | | | | | | 187 | 900 | 203 | 600 | 1130 | 670 | 50 | 1770 | 50 | 250 | 15 |
| VFTV0100GAF | VFTV0100GAF-16 | 100 | 378 | 528 | 239 | 7.4 | 49.2 | 8.0 | 23.6 | 64.6 | 26.4 | 2 | 83.4 | 2 | 9.8 | 0.59 |
| | | | | | | 187 | 1250 | 203 | 600 | 1640 | 670 | 50 | 2120 | 50 | 250 | 15 |
| VFTV0150GAF | VFTV0150GAF-16 | 150 | 567 | 850 | 385 | 10.3 | 39.4 | 10.8 | 31.5 | 57.1 | 34.3 | 2 | 79.4 | 2 | 9.8 | 0.6 |
| | | | | | | 262 | 1000 | 274 | 800 | 1450 | 870 | 50 | 2016 | 50 | 510 | 15 |
| VFTV0200GAF | VFTV0200GAF-16 | 200 | 757 | 938 | 425 | 10.3 | 51.2 | 10.8 | 31.5 | 57.1 | 34.3 | 2 | 91.2 | 2 | 9.8 | 0.6 |
| | | | | | | 262 | 1300 | 274 | 800 | 1450 | 870 | 50 | 2316 | 50 | 510 | 15 |
| VFTV0250GAF | VFTV0250GAF-16 | 250 | 946 | 940 | 426 | 12.9 | 39.4 | 13.2 | 39.4 | 59.7 | 42.6 | 2.5 | 84.3 | 2.5 | 24.0 | 0.6 |
| | | | | | | 327 | 1000 | 336 | 1000 | 1516 | 1082 | 65 | 2142 | 65 | 610 | 15 |
| VFTV0300GAF | VFTV0300GAF-16 | 300 | 1135 | 1091 | 494 | 12.9 | 51.2 | 13.2 | 39.4 | 71.5 | 42.6 | 2.5 | 96.1 | 2.5 | 24.0 | 0.6 |
| | | | | | | 327 | 1300 | 336 | 1000 | 1816 | 1082 | 65 | 2442 | 65 | 610 | 15 |
| VFTV0350GAF | VFTV0350GAF-16 | 350 | 1324 | 1113 | 504 | 12.9 | 55.1 | 13.2 | 39.4 | 75.4 | 42.6 | 2.5 | 100.1 | 2.5 | 24.0 | 0.6 |
| | | | | | | 327 | 1400 | 336 | 1000 | 1916 | 1082 | 65 | 2542 | 65 | 610 | 15 |
| VFTV0400GAF | VFTV0400GAF-16 | 400 | 1514 | 1150 | 521 | 12.9 | 65.0 | 13.2 | 39.4 | 85.3 | 42.6 | 2.5 | 109.9 | 2.5 | 24.0 | 0.6 |
| | | | | | | 327 | 1650 | 336 | 1000 | 2166 | 1082 | 65 | 2792 | 65 | 610 | 15 |
| VFTV0450GAF | VFTV0450GAF-16 | 450 | 1703 | 1823 | 826 | 13.0 | 59.1 | 13.3 | 43.3 | 79.4 | 46.5 | 2.5 | 104.1 | 2.5 | 24.0 | 0.6 |
| | | | | | | 329 | 1500 | 337 | 1100 | 2017 | 1181 | 65 | 2645 | 65 | 610 | 15 |
| VFTV0500GAF | VFTV0500GAF-16 | 500 | 1892 | 2004 | 908 | 13.0 | 70.9 | 13.3 | 43.3 | 91.2 | 46.5 | 2.5 | 115.9 | 2.5 | 24.0 | 0.6 |
| | | | | | | 329 | 1800 | 337 | 1100 | 2317 | 1181 | 65 | 2945 | 65 | 610 | 15 |
| VFTV0600GAF | VFTV0600GAF-16 | 600 | 2271 | 2267 | 1027 | 13.0 | 65.0 | 14.5 | 47.2 | 84.6 | 51.2 | 3 | 110.5 | 3 | 33.5 | 0.6 |
| | | | | | | 330 | 1650 | 368 | 1200 | 2148 | 1300 | 80 | 2807 | 80 | 850 | 15 |
| VFTV0700GAF | VFTV0700GAF-16 | 700 | 2649 | 2514 | 1139 | 14.1 | 65.0 | 15.5 | 51.2 | 86.4 | 55.3 | 3 | 113.4 | 3 | 33.5 | 0.6 |
| | | | | | | 358 | 1650 | 394 | 1300 | 2194 | 1405 | 80 | 2881 | 80 | 850 | 15 |
| VFTV0800GAF | VFTV0800GAF-16 | 800 | 3028 | 2695 | 1221 | 14.1 | 78.7 | 15.5 | 51.2 | 100.2 | 55.3 | 3 | 127.2 | 3 | 33.5 | 0.6 |
| | | | | | | 358 | 2000 | 394 | 1300 | 2544 | 1405 | 80 | 3231 | 80 | 850 | 15 |
| VFTV0900GAF | VFTV0900GAF-16 | 900 | 3406 | 3907 | 1770 | 15.3 | 78.7 | 16.5 | 55.1 | 100.0 | 59.3 | 3 | 129.4 | 3 | 36.6 | 0.6 |
| | | | | | | 388 | 2000 | 420 | 1400 | 2540 | 1505 | 80 | 3287 | 80 | 930 | 15 |
| VFTV1000GAF | VFTV1000GAF-16 | 1000 | 3785 | 3583 | 1623 | 15.8 | 74.8 | 17.1 | 57.1 | 96.6 | 61.2 | 3 | 126.6 | 3 | 36.6 | 0.6 |
| | | | | | | 402 | 1900 | 434 | 1450 | 2454 | 1555 | 80 | 3215 | 80 | 930 | 15 |
| VFTV1100GAF | VFTV1100GAF-16 | 1100 | 4163 | 3764 | 1705 | 15.8 | 82.7 | 17.1 | 57.1 | 104.5 | 61.2 | 3 | 134.4 | 3 | 36.6 | 0.6 |
| | | | | | | 402 | 2100 | 434 | 1450 | 2654 | 1555 | 80 | 3415 | 80 | 930 | 15 |
| VFTV1200GAF | VFTV1200GAF-16 | 1200 | 4542 | 3817 | 1729 | 16.4 | 82.7 | 17.6 | 59.1 | 105.0 | 63.2 | 3 | 135.5 | 3 | 37.4 | 0.6 |
| | | | | | | 416 | 2100 | 447 | 1500 | 2667 | 1605 | 80 | 3442 | 80 | 950 | 15 |
| VFTV1300GAF | VFTV1300GAF-16 | 1300 | 4921 | 4276 | 1937 | 17.4 | 78.7 | 18.5 | 63.0 | 102.0 | 67.1 | 3 | 133.6 | 3 | 41.3 | 0.6 |
| | | | | | | 443 | 2000 | 471 | 1600 | 2591 | 1705 | 80 | 3393 | 80 | 1050 | 15 |
| VFTV1400GAF | VFTV1400GAF-16 | 1400 | 5299 | 4358 | 1974 | 17.4 | 88.6 | 18.5 | 63.0 | 111.9 | 67.1 | 3 | 143.4 | 3 | 41.3 | 0.6 |
| | | | | | | 443 | 2250 | 471 | 1600 | 2841 | 1705 | 80 | 3643 | 80 | 1050 | 15 |
| VFTV1500GAF | VFTV1500GAF-16 | 1500 | 5678 | 4525 | 2050 | 19.6 | 74.8 | 20.6 | 68.9 | 100.1 | 73.2 | 3 | 133.8 | 3 | 45.3 | 0.6 |
| | | | | | | 497 | 1900 | 522 | 1750 | 2542 | 1860 | 80 | 3398 | 80 | 1150 | 15 |
| VFTV1600GAF | VFTV1600GAF-16 | 1600 | 6056 | 4636 | 2100 | 19.6 | 78.7 | 20.6 | 68.9 | 104.0 | 73.2 | 3 | 137.7 | 3 | 45.3 | 0.6 |
| | | | | | | 497 | 2000 | 522 | 1750 | 2642 | 1860 | 80 | 3498 | 80 | 1150 | 15 |
| VFTV1700GAF | VFTV1700GAF-16 | 1700 | 6435 | 4724 | 2140 | 20.5 | 78.7 | 21.5 | 70.9 | 103.4 | 75.2 | 3 | 139.6 | 3 | 45.3 | 0.6 |
| | | | | | | 521 | 2000 | 547 | 1800 | 2627 | 1910 | 80 | 3547 | 80 | 1150 | 15 |
| VFTV1800GAF | VFTV1800GAF-16 | 1800 | 6813 | 5347 | 2422 | 22.6 | 59.1 | 23.5 | 78.7 | 88.5 | 83.5 | 3 | 121.3 | 3 | 51.2 | 0.8 |
| | | | | | | 575 | 1500 | 598 | 2000 | 2248 | 2120 | 80 | 3082 | 80 | 1300 | 20 |
| VFTV1900GAF | VFTV1900GAF-16 | 1900 | 7192 | 5501 | 2492 | 22.6 | 63.0 | 23.5 | 78.7 | 92.4 | 83.5 | 3 | 125.3 | 3 | 51.2 | 0.8 |
| | | | | | | 575 | 1600 | 598 | 2000 | 2348 | 2120 | 80 | 3182 | 80 | 1300 | 20 |
| VFTV2000GAF | VFTV2000GAF-16 | 2000 | 7570 | 5722 | 2592 | 22.6 | 68.9 | 23.5 | 78.7 | 98.3 | 83.5 | 3 | 131.2 | 3 | 51.2 | 0.8 |
| | | | | | | 575 | 1750 | 598 | 2000 | 2498 | 2120 | 80 | 3332 | 80 | 1300 | 20 |
| VFTV2200GAF | VFTV2200GAF-16 | 2200 | 8327 | 6459 | 2926 | 22.6 | 82.7 | 23.5 | 78.7 | 112.1 | 83.5 | 3 | 145.0 | 3 | 51.2 | 0.8 |
| | | | | | | 575 | 2100 | 598 | 2000 | 2848 | 2120 | 80 | 3682 | 80 | 1300 | 20 |
| VFTV2400GAF | VFTV2400GAF-16 | 2400 | 9084 | 6691 | 3031 | 22.6 | 88.6 | 23.5 | 78.7 | 119.2 | 83.5 | 3 | 150.9 | 3 | 51.2 | 0.8 |
| | | | | | | 575 | 2250 | 598 | 2000 | 3028 | 2120 | 80 | 3832 | 80 | 1300 | 20 |
| VFTV2600GAF | VFTV2600GAF-16 | 2600 | 9842 | 6954 | 3150 | 22.6 | 102.4 | 23.5 | 78.7 | 131.8 | 83.5 | 3 | 164.6 | 3 | 51.2 | 0.8 |
| | | | | | | 575 | 2600 | 598 | 2000 | 3348 | 2120 | 80 | 4182 | 80 | 1300 | 20 |
| VFTV2800GAF | VFTV2800GAF-16 | 2800 | 10599 | 7605 | 3445 | 22.6 | 114.2 | 23.5 | 78.7 | 143.6 | 83.5 | 3 | 176.5 | 3 | 51.2 | 0.8 |
| | | | | | | 575 | 2900 | 598 | 2000 | 3648 | 2120 | 80 | 4482 | 80 | 1300 | 20 |
| VFTV3000GAF | VFTV3000GAF-16 | 3000 | 11356 | 7901 | 3579 | 22.6 | 122.0 | 23.5 | 78.7 | 151.5 | 83.5 | 3 | 184.3 | 3 | 51.2 | 0.8 |
| | | | | | | 575 | 3100 | 598 | 2000 | 3848 | 2120 | 80 | 4682 | 80 | 1300 | 20 |
| VFTV3200GAF | VFTV3200GAF-16 | 3200 | 12113 | 8442 | 3824 | 22.6 | 133.9 | 23.5 | 78.7 | 163.3 | 83.5 | 3 | 196.1 | 3 | 51.2 | 0.8 |
| | | | | | | 575 | 3400 | 598 | 2000 | 4148 | 2120 | 80 | 4982 | 80 | 1300 | 20 |
| VFTV3400GAF | VFTV3400GAF-16 | 3400 | 12870 | 8881 | 4023 | 22.6 | 145.7 | 23.5 | 78.7 | 175.1 | 83.5 | 3 | 208.0 | 3 | 51.2 | 0.8 |
| | | | | | | 575 | 3700 | 598 | 2000 | 4448 | 2120 | 80 | 5282 | 80 | 1300 | 20 |
| VFTV3600GAF | VFTV3600GAF-16 | 3600 | 13627 | 9113 | 4128 | 22.6 | 151.6 | 23.5 | 78.7 | 181.0 | 83.5 | 3 | 213.9 | 3 | 51.2 | 0.8 |
| | | | | | | 575 | 3850 | 598 | 2000 | 4598 | 2120 | 80 | 5432 | 80 | 1300 | 20 |
| VFTV3800GAF | VFTV3800GAF-16 | 3800 | 14384 | 9629 | 4362 | 22.6 | 165.4 | 23.5 | 78.7 | 194.8 | 83.5 | 3 | 227.6 | 3 | 51.2 | 0.8 |
| | | | | | | 575 | 4200 | 598 | 2000 | 4948 | 2120 | 80 | 5782 | 80 | 1300 | 20 |
| VFTV4000GAF | VFTV4000GAF-16 | 4000 | 15141 | 9916 | 4492 | 22.6 | 173.2 | 23.5 | | | | | | | | |



TECHNICAL DATA

VERTICAL AND HORIZONTAL BLADDER TANKS MODEL VFT

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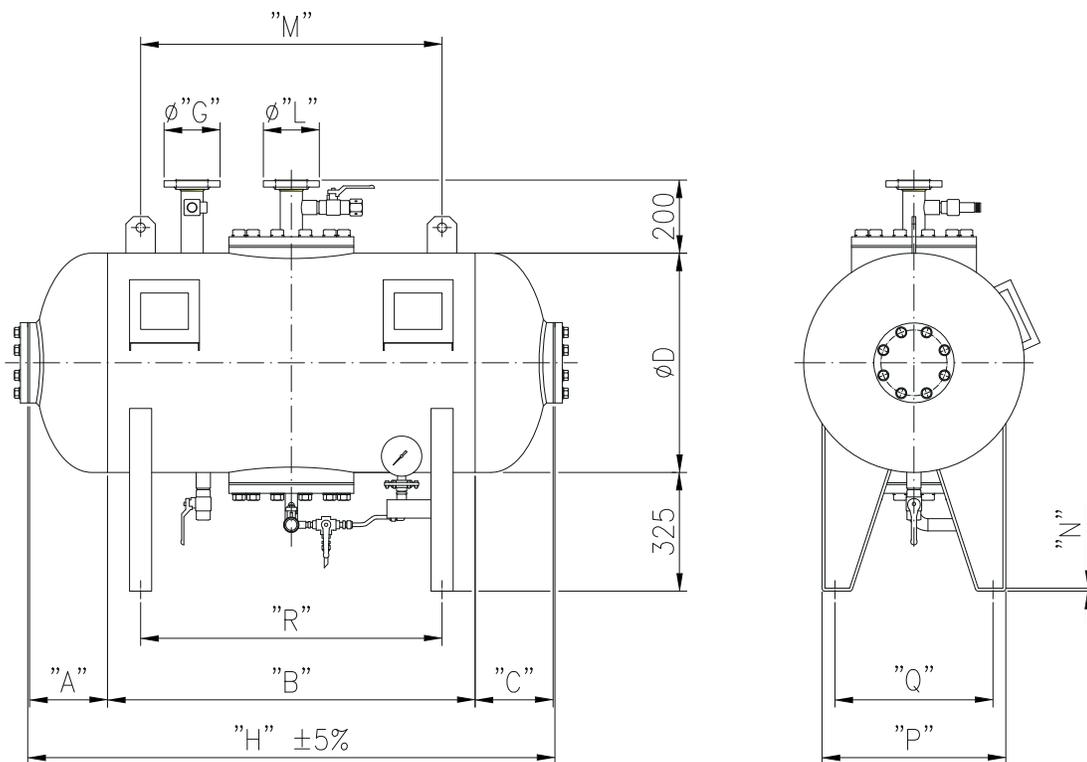


Figure 6.3.5
Horizontal Bladder Tank: 50 to 100 US Gallons

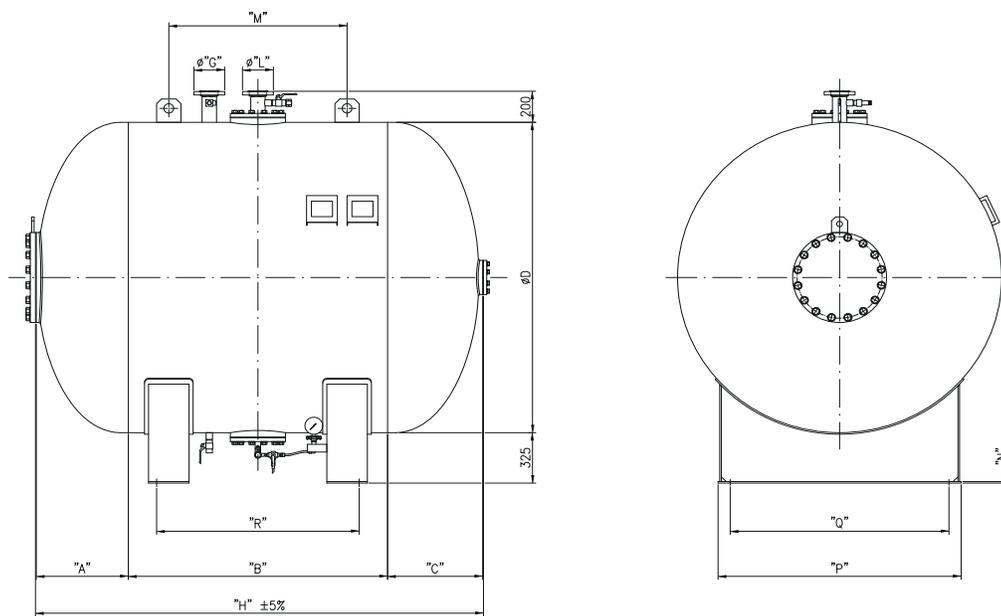


Figure 6.3.6
Horizontal Bladder Tank: 150 to 5250 US Gallons



TECHNICAL DATA

VERTICAL AND HORIZONTAL BLADDER TANKS MODEL VFT

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Table 6.3.7 - Horizontal Bladder Tank Dimensions (EN13445 Design Code)

| Bladder Tank Part Number EN13445 Design Code | | Capacity | | Weight | | A | B | C | ØD | ØG | H | ØL | M | N | O | P | Q | R |
|--|------------------|----------|--------|--------|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 175PSI / 12.1bar | 232PSI / 16.0bar | USG | Litres | LBS | KG | inch mm |
| VFTH0050GF | VFTH0050GF-16 | 50 | 189 | 541 | 245 | 8.0 | 39.4 | 8.0 | 19.7 | 2 | 55.4 | 2 | 32.3 | 0.3 | 7.9 | 15.7 | 13.8 | 32.3 |
| | | | | | | 203 | 1000 | 203 | 500 | 50 | 1406 | 50 | 820 | 8 | 200 | 400 | 350 | 820 |
| VFTH0075GF | VFTH0075GF-16 | 75 | 283 | 607 | 275 | 9.0 | 39.4 | 9.0 | 23.6 | 2 | 57.3 | 2 | 32.3 | 0.3 | 7.9 | 19.7 | 16.9 | 32.3 |
| | | | | | | 228 | 1000 | 228 | 600 | 50 | 1456 | 50 | 820 | 8 | 200 | 500 | 430 | 820 |
| VFTH0100GF | VFTH0100GF-16 | 100 | 378 | 651 | 295 | 9.0 | 49.2 | 9.0 | 23.6 | 2 | 67.2 | 2 | 42.1 | 0.3 | 7.9 | 19.7 | 16.9 | 40.2 |
| | | | | | | 228 | 1250 | 228 | 600 | 50 | 1706 | 50 | 1070 | 8 | 200 | 500 | 430 | 1020 |
| VFTH0150GF | VFTH0150GF-16 | 150 | 567 | 784 | 355 | 10.3 | 39.4 | 10.8 | 31.5 | 2 | 60.5 | 2 | 32.3 | 0.3 | 7.9 | 19.7 | 15.7 | 32.3 |
| | | | | | | 262 | 1000 | 274 | 800 | 50 | 1536 | 50 | 820 | 8 | 200 | 500 | 400 | 820 |
| VFTH0200GF | VFTH0200GF-16 | 200 | 757 | 839 | 380 | 10.3 | 51.2 | 10.8 | 31.5 | 2 | 72.3 | 2 | 44.1 | 0.3 | 7.9 | 19.7 | 15.7 | 42.1 |
| | | | | | | 262 | 1300 | 274 | 800 | 50 | 1836 | 50 | 1120 | 8 | 200 | 500 | 400 | 1070 |
| VFTH0250GF | VFTH0250GF-16 | 250 | 946 | 1214 | 550 | 11.3 | 39.4 | 13.2 | 39.4 | 2.5 | 63.9 | 2.5 | 31.5 | 0.3 | 7.9 | 27.6 | 23.6 | 32.3 |
| | | | | | | 288 | 1000 | 336 | 1000 | 65 | 1624 | 65 | 800 | 8 | 200 | 700 | 600 | 820 |
| VFTH0300GF | VFTH0300GF-16 | 300 | 1135 | 1347 | 610 | 11.3 | 51.2 | 13.2 | 39.4 | 2.5 | 75.7 | 2.5 | 39.4 | 0.3 | 7.9 | 27.6 | 23.6 | 42.1 |
| | | | | | | 288 | 1300 | 336 | 1000 | 65 | 1924 | 65 | 1000 | 8 | 200 | 700 | 600 | 1070 |
| VFTH0350GF | VFTH0350GF-16 | 350 | 1324 | 1369 | 620 | 11.3 | 55.1 | 13.2 | 39.4 | 2.5 | 79.7 | 2.5 | 39.4 | 0.3 | 7.9 | 27.6 | 23.6 | 42.1 |
| | | | | | | 288 | 1400 | 336 | 1000 | 65 | 2024 | 65 | 1000 | 8 | 200 | 700 | 600 | 1070 |
| VFTH0400GF | VFTH0400GF-16 | 400 | 1514 | 1435 | 650 | 11.3 | 65.0 | 13.2 | 39.4 | 2.5 | 89.5 | 2.5 | 51.2 | 0.3 | 5.9 | 27.6 | 23.6 | 53.5 |
| | | | | | | 288 | 1650 | 336 | 1000 | 65 | 2274 | 65 | 1300 | 8 | 150 | 700 | 600 | 1360 |
| VFTH0450GF | VFTH0450GF-16 | 450 | 1703 | 1854 | 840 | 11.6 | 59.1 | 13.2 | 43.3 | 2.5 | 83.9 | 2.5 | 45.3 | 0.3 | 5.9 | 31.5 | 27.6 | 48.0 |
| | | | | | | 294 | 1500 | 336 | 1100 | 65 | 2130 | 65 | 1150 | 8 | 150 | 800 | 700 | 1220 |
| VFTH0500GF | VFTH0500GF-16 | 500 | 1892 | 1998 | 905 | 11.6 | 70.9 | 13.2 | 43.3 | 2.5 | 95.7 | 2.5 | 57.1 | 0.3 | 5.9 | 31.5 | 27.6 | 59.8 |
| | | | | | | 294 | 1800 | 336 | 1100 | 65 | 2430 | 65 | 1450 | 8 | 150 | 800 | 700 | 1520 |
| VFTH0600GF | VFTH0600GF-16 | 600 | 2271 | 2053 | 930 | 12.7 | 65.0 | 14.2 | 47.2 | 3 | 91.9 | 3 | 58.3 | 0.3 | 5.9 | 35.4 | 31.5 | 56.3 |
| | | | | | | 322 | 1650 | 361 | 1200 | 80 | 2333 | 80 | 1480 | 8 | 150 | 900 | 800 | 1430 |
| VFTH0700GF | VFTH0700GF-16 | 700 | 2649 | 2274 | 1030 | 13.8 | 65.0 | 15.2 | 51.2 | 3 | 94.0 | 3 | 63.0 | 0.3 | 5.9 | 35.4 | 31.5 | 56.3 |
| | | | | | | 351 | 1650 | 386 | 1300 | 80 | 2387 | 80 | 1600 | 8 | 150 | 900 | 800 | 1430 |
| VFTH0800GF | VFTH0800GF-16 | 800 | 3028 | 2472 | 1120 | 13.8 | 78.7 | 15.2 | 51.2 | 3 | 107.8 | 3 | 63.0 | 0.3 | 5.9 | 35.4 | 31.5 | 66.1 |
| | | | | | | 351 | 2000 | 386 | 1300 | 80 | 2737 | 80 | 1600 | 8 | 150 | 900 | 800 | 1680 |
| VFTH0900GF | VFTH0900GF-16 | 900 | 3406 | 3201 | 1450 | 15.3 | 78.7 | 16.3 | 55.1 | 3 | 110.3 | 3 | 63.0 | 0.3 | 5.9 | 39.4 | 33.5 | 66.1 |
| | | | | | | 389 | 2000 | 413 | 1400 | 80 | 2801 | 80 | 1600 | 8 | 150 | 1000 | 850 | 1680 |
| VFTH1000GF | VFTH1000GF-16 | 1000 | 3785 | 3091 | 1400 | 15.8 | 74.8 | 16.8 | 57.1 | 3 | 107.4 | 3 | 63.0 | 0.4 | 5.9 | 39.4 | 33.5 | 62.2 |
| | | | | | | 402 | 1900 | 426 | 1450 | 80 | 2728 | 80 | 1600 | 10 | 150 | 1000 | 850 | 1580 |
| VFTH1100GF | VFTH1100GF-16 | 1100 | 4163 | 3245 | 1470 | 15.8 | 82.7 | 16.8 | 57.1 | 3 | 115.3 | 3 | 63.0 | 0.4 | 5.9 | 39.4 | 33.5 | 66.1 |
| | | | | | | 402 | 2100 | 426 | 1450 | 80 | 2928 | 80 | 1600 | 10 | 150 | 1000 | 850 | 1680 |
| VFTH1200GF | VFTH1200GF-16 | 1200 | 4542 | 3642 | 1650 | 16.5 | 82.7 | 17.3 | 59.1 | 3 | 116.4 | 3 | 66.9 | 0.4 | 5.9 | 39.4 | 33.5 | 70.1 |
| | | | | | | 418 | 2100 | 439 | 1500 | 80 | 2957 | 80 | 1700 | 10 | 150 | 1000 | 850 | 1780 |
| VFTH1300GF | VFTH1300GF-16 | 1300 | 4921 | 3797 | 1720 | 17.5 | 78.7 | 18.3 | 63.0 | 3 | 114.6 | 3 | 63.0 | 0.4 | 5.9 | 43.3 | 37.4 | 66.1 |
| | | | | | | 445 | 2000 | 465 | 1600 | 80 | 2910 | 80 | 1600 | 10 | 150 | 1100 | 950 | 1680 |
| VFTH1400GF | VFTH1400GF-16 | 1400 | 5299 | 4029 | 1825 | 17.5 | 88.6 | 18.3 | 63.0 | 3 | 124.4 | 3 | 70.9 | 0.4 | 5.9 | 43.3 | 37.4 | 75.2 |
| | | | | | | 445 | 2250 | 465 | 1600 | 80 | 3160 | 80 | 1800 | 10 | 150 | 1100 | 950 | 1910 |
| VFTH1500GF | VFTH1500GF-16 | 1500 | 5678 | 4415 | 2000 | 19.6 | 74.8 | 20.6 | 68.9 | 3 | 115.0 | 3 | 61.0 | 0.4 | 5.9 | 47.2 | 41.3 | 64.2 |
| | | | | | | 498 | 1900 | 522 | 1750 | 80 | 2920 | 80 | 1550 | 10 | 150 | 1200 | 1050 | 1630 |
| VFTH1600GF | VFTH1600GF-16 | 1600 | 6056 | 4636 | 2100 | 19.6 | 78.7 | 20.6 | 68.9 | 3 | 118.9 | 3 | 61.0 | 0.4 | 5.9 | 47.2 | 41.3 | 66.1 |
| | | | | | | 498 | 2000 | 522 | 1750 | 80 | 3020 | 80 | 1550 | 10 | 150 | 1200 | 1050 | 1680 |
| VFTH1700GF | VFTH1700GF-16 | 1700 | 6435 | 4857 | 2200 | 20.2 | 78.7 | 21.1 | 70.9 | 3 | 120.0 | 3 | 61.0 | 0.4 | 5.9 | 47.2 | 41.3 | 66.1 |
| | | | | | | 513 | 2000 | 535 | 1800 | 80 | 3047 | 80 | 1550 | 10 | 150 | 1200 | 1050 | 1680 |
| VFTH1800GF | VFTH1800GF-16 | 1800 | 6813 | 5199 | 2355 | 22.3 | 59.1 | 23.1 | 78.7 | 3 | 104.4 | 3 | 52.4 | 0.4 | 5.9 | 59.1 | 53.1 | 49.2 |
| | | | | | | 566 | 1500 | 586 | 2000 | 80 | 2652 | 80 | 1330 | 10 | 150 | 1500 | 1350 | 1250 |
| VFTH1900GF | VFTH1900GF-16 | 1900 | 7192 | 5331 | 2415 | 22.3 | 63.0 | 23.1 | 78.7 | 3 | 108.3 | 3 | 52.4 | 0.4 | 5.9 | 59.1 | 53.1 | 49.2 |
| | | | | | | 566 | 1600 | 586 | 2000 | 80 | 2752 | 80 | 1330 | 10 | 150 | 1500 | 1350 | 1250 |
| VFTH2000GF | VFTH2000GF-16 | 2000 | 7570 | 5530 | 2505 | 22.3 | 68.9 | 23.1 | 78.7 | 3 | 114.3 | 3 | 52.4 | 0.4 | 5.9 | 59.1 | 53.1 | 55.1 |
| | | | | | | 566 | 1750 | 586 | 2000 | 80 | 2902 | 80 | 1330 | 10 | 150 | 1500 | 1350 | 1400 |
| VFTH2200GF | VFTH2200GF-16 | 2200 | 8327 | 5982 | 2710 | 22.3 | 82.7 | 23.1 | 78.7 | 3 | 128.0 | 3 | 63.0 | 0.4 | 5.9 | 59.1 | 53.1 | 68.9 |
| | | | | | | 566 | 2100 | 586 | 2000 | 80 | 3252 | 80 | 1600 | 10 | 150 | 1500 | 1350 | 1750 |
| VFTH2400GF | VFTH2400GF-16 | 2400 | 9084 | 6159 | 2790 | 22.3 | 88.6 | 23.1 | 78.7 | 3 | 133.9 | 3 | 68.9 | 0.4 | 5.9 | 59.1 | 53.1 | 74.8 |
| | | | | | | 566 | 2250 | 586 | 2000 | 80 | 3402 | 80 | 1750 | 10 | 150 | 1500 | 1350 | 1900 |
| VFTH2600GF | VFTH2600GF-16 | 2600 | 9842 | 6623 | 3000 | 22.3 | 102.4 | 23.1 | 78.7 | 3 | 147.7 | 3 | 82.7 | 0.4 | 5.9 | 59.1 | 53.1 | 88.6 |
| | | | | | | 566 | 2600 | 586 | 2000 | 80 | 3752 | 80 | 2100 | 10 | 150 | 1500 | 1350 | 2250 |
| VFTH2800GF | VFTH2800GF-16 | 2800 | 10599 | 7064 | 3200 | 22.3 | 114.2 | 23.1 | 78.7 | 3 | 159.5 | 3 | 94.5 | 0.4 | 5.9 | 59.1 | 53.1 | 100.4 |
| | | | | | | 566 | 2900 | 586 | 2000 | 80 | 4052 | 80 | 2400 | 10 | 150 | 1500 | 1350 | 2550 |
| VFTH3000GF | VFTH3000GF-16 | 3000 | 11356 | 7329 | 3320 | 22.3 | 122.0 | 23.1 | 78.7 | 3 | 167.4 | 3 | 102.4 | 0.4 | 5.9 | 59.1 | 53.1 | 108.3 |
| | | | | | | 566 | 3100 | 586 | 2000 | 80 | 4252 | 80 | 2600 | 10 | 150 | 1500 | 1350 | 2750 |
| VFTH3200GF | VFTH3200GF-16 | 3200 | 12113 | 7704 | 3490 | 22.3 | 133.9 | 23.1 | 78.7 | 3 | 179.2 | 3 | 114.2 | 0.4 | 5.9 | 59.1 | 53.1 | 120.1 |
| | | | | | | 566 | 3400 | 586 | 2000 | 80 | 4552 | 80 | 2900 | 10 | 150 | 1500 | 1350 | 3050 |
| VFTH3400GF | VFTH3400GF-16 | 3400 | 12870 | 7969 | 3610 | 22.3 | 141.7 | 23.1 | 78.7 | 3 | 187.1 | 3 | 126.0 | 0.4 | 5.9 | 59.1 | 53.1 | 131.9 |
| | | | | | | 566 | 3600 | 586 | 2000 | 80 | 4752 | 80 | 3200 | 10 | 150 | 1500 | 1350 | 3350 |



TECHNICAL DATA

VERTICAL AND HORIZONTAL BLADDER TANKS MODEL VFT

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Table 6.3.7 - Horizontal Bladder Tank Dimensions (EN13445 Design Code) (cont.)

| Bladder Tank Part Number EN13445 Design Code | | Capacity | | Weight | | A | B | C | ØD | ØG | H | ØL | M | N | O | P | Q | R | |
|--|------------------|----------|--------|--------|------|------|-------|------|------|------|-------|------|-------|------|------|------|------|-------|----|
| 175PSI / 12.1bar | 232PSI / 16.0bar | USG | Litres | LBS | KG | inch | inch | inch | inch | inch | inch | inch | inch | inch | inch | inch | inch | inch | |
| | | | | | | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm |
| VFTH3600GF | VFTH3600GF-16 | 3600 | 13627 | 8300 | 3760 | 22.3 | 151.6 | 23.1 | 78.7 | 3 | 196.9 | 3 | 139.8 | 0.4 | 5.9 | 59.1 | 53.1 | 145.7 | |
| | | | | | | 566 | 3850 | 586 | 2000 | 80 | 5002 | 80 | 3550 | 10 | 150 | 1500 | 1350 | 3700 | |
| VFTH3800GF | VFTH3800GF-16 | 3800 | 14384 | 8576 | 3885 | 22.3 | 159.4 | 23.1 | 78.7 | 3 | 204.8 | 3 | 139.8 | 0.4 | 5.9 | 59.1 | 53.1 | 145.7 | |
| | | | | | | 566 | 4050 | 586 | 2000 | 80 | 5202 | 80 | 3550 | 10 | 150 | 1500 | 1350 | 3700 | |
| VFTH4000GF | VFTH4000GF-16 | 4000 | 15141 | 9040 | 4095 | 22.3 | 173.2 | 23.1 | 78.7 | 3 | 218.6 | 3 | 139.8 | 0.4 | 5.9 | 59.1 | 53.1 | 159.4 | |
| | | | | | | 566 | 4400 | 586 | 2000 | 80 | 5552 | 80 | 3550 | 10 | 150 | 1500 | 1350 | 4050 | |
| VFTH4250GF | VFTH4250GF-16 | 4250 | 16088 | 9437 | 4275 | 22.3 | 185.0 | 23.1 | 78.7 | 3 | 230.4 | 3 | 139.8 | 0.4 | 5.9 | 59.1 | 53.1 | 159.4 | |
| | | | | | | 566 | 4700 | 586 | 2000 | 80 | 5852 | 80 | 3550 | 10 | 150 | 1500 | 1350 | 4050 | |
| VFTH4500GF | VFTH4500GF-16 | 4500 | 17034 | 9834 | 4455 | 22.3 | 196.9 | 23.1 | 78.7 | 3 | 242.2 | 3 | 139.8 | 0.4 | 5.9 | 59.1 | 53.1 | 159.4 | |
| | | | | | | 566 | 5000 | 586 | 2000 | 80 | 6152 | 80 | 3550 | 10 | 150 | 1500 | 1350 | 4050 | |
| VFTH4750GF | VFTH4750GF-16 | 4750 | 17980 | 10298 | 4665 | 22.3 | 210.6 | 23.1 | 78.7 | 3 | 256.0 | 3 | 139.8 | 0.4 | 5.9 | 59.1 | 53.1 | 159.4 | |
| | | | | | | 566 | 5350 | 586 | 2000 | 80 | 6502 | 80 | 3550 | 10 | 150 | 1500 | 1350 | 4050 | |
| VFTH5000GF | VFTH5000GF-16 | 5000 | 18927 | 10695 | 4845 | 22.3 | 222.4 | 23.1 | 78.7 | 3 | 267.8 | 3 | 139.8 | 0.4 | 5.9 | 59.1 | 53.1 | 159.4 | |
| | | | | | | 566 | 5650 | 586 | 2000 | 80 | 6802 | 80 | 3550 | 10 | 150 | 1500 | 1350 | 4050 | |
| VFTH5250GF | VFTH5250GF-16 | 5250 | 19873 | 11159 | 5055 | 22.3 | 236.2 | 23.1 | 78.7 | 3 | 281.6 | 3 | 139.8 | 0.4 | 5.9 | 59.1 | 53.1 | 159.4 | |
| | | | | | | 566 | 6000 | 586 | 2000 | 80 | 7152 | 80 | 3550 | 10 | 150 | 1500 | 1350 | 4050 | |

Table 6.3.8 - Horizontal Bladder Tank Dimensions (ASME Sec VIII Design Code)

| Bladder Tank : ASME Sec VIII Design Code | | Capacity | | Weight | | A | B | C | ØD | ØG | H | ØL | M | N | O | P | Q | R | |
|--|------------------|----------|--------|--------|------|------|------|------|------|------|-------|------|------|------|------|------|------|------|----|
| 175PSI / 12.1bar | 232PSI / 16.0bar | USG | Litres | LBS | KG | inch | inch | inch | inch | inch | inch | inch | inch | inch | inch | inch | inch | inch | |
| | | | | | | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm |
| VFTH0050GAF | VFTH0050GAF-16 | 50 | 189 | 574 | 260 | 8.0 | 39.4 | 8.0 | 19.7 | 2 | 55.4 | 2 | 32.3 | 0.3 | 7.9 | 15.7 | 13.8 | 32.3 | |
| | | | | | | 203 | 1000 | 203 | 500 | 50 | 1406 | 50 | 820 | 8 | 200 | 400 | 350 | 820 | |
| VFTH0075GAF | VFTH0075GAF-16 | 75 | 283 | 640 | 290 | 9.0 | 39.4 | 9.0 | 23.6 | 2 | 57.3 | 2 | 32.3 | 0.3 | 7.9 | 19.7 | 16.9 | 32.3 | |
| | | | | | | 228 | 1000 | 228 | 600 | 50 | 1456 | 50 | 820 | 8 | 200 | 500 | 430 | 820 | |
| VFTH0100GAF | VFTH0100GAF-16 | 100 | 378 | 684 | 310 | 9.0 | 49.2 | 9.0 | 23.6 | 2 | 67.2 | 2 | 42.1 | 0.3 | 7.9 | 19.7 | 16.9 | 40.2 | |
| | | | | | | 228 | 1250 | 228 | 600 | 50 | 1706 | 50 | 1070 | 8 | 200 | 500 | 430 | 1020 | |
| VFTH0150GAF | VFTH0150GAF-16 | 150 | 567 | 828 | 375 | 10.3 | 39.4 | 10.8 | 31.5 | 2 | 60.5 | 2 | 32.3 | 0.3 | 7.9 | 19.7 | 15.7 | 32.3 | |
| | | | | | | 262 | 1000 | 274 | 800 | 50 | 1536 | 50 | 820 | 8 | 200 | 500 | 400 | 820 | |
| VFTH0200GAF | VFTH0200GAF-16 | 200 | 757 | 883 | 400 | 10.3 | 51.2 | 10.8 | 31.5 | 2 | 72.3 | 2 | 44.1 | 0.3 | 7.9 | 19.7 | 15.7 | 42.1 | |
| | | | | | | 262 | 1300 | 274 | 800 | 50 | 1836 | 50 | 1120 | 8 | 200 | 500 | 400 | 1070 | |
| VFTH0250GAF | VFTH0250GAF-16 | 250 | 946 | 1258 | 570 | 11.3 | 39.4 | 13.2 | 39.4 | 2.5 | 63.9 | 2.5 | 31.5 | 0.3 | 7.9 | 27.6 | 23.6 | 32.3 | |
| | | | | | | 288 | 1000 | 336 | 1000 | 65 | 1624 | 65 | 800 | 8 | 200 | 700 | 600 | 820 | |
| VFTH0300GAF | VFTH0300GAF-16 | 300 | 1135 | 1391 | 630 | 11.3 | 51.2 | 13.2 | 39.4 | 2.5 | 75.7 | 2.5 | 39.4 | 0.3 | 7.9 | 27.6 | 23.6 | 42.1 | |
| | | | | | | 288 | 1300 | 336 | 1000 | 65 | 1924 | 65 | 1000 | 8 | 200 | 700 | 600 | 1070 | |
| VFTH0350GAF | VFTH0350GAF-16 | 350 | 1324 | 1453 | 650 | 11.3 | 55.1 | 13.2 | 39.4 | 2.5 | 79.7 | 2.5 | 39.4 | 0.3 | 7.9 | 27.6 | 23.6 | 42.1 | |
| | | | | | | 288 | 1400 | 336 | 1000 | 65 | 2024 | 65 | 1000 | 8 | 200 | 700 | 600 | 1070 | |
| VFTH0400GAF | VFTH0400GAF-16 | 400 | 1514 | 1479 | 670 | 11.3 | 65.0 | 13.2 | 39.4 | 2.5 | 89.5 | 2.5 | 51.2 | 0.3 | 5.9 | 27.6 | 23.6 | 53.5 | |
| | | | | | | 288 | 1650 | 336 | 1000 | 65 | 2274 | 65 | 1300 | 8 | 150 | 700 | 600 | 1360 | |
| VFTH0450GAF | VFTH0450GAF-16 | 450 | 1703 | 2137 | 968 | 11.6 | 59.1 | 13.2 | 43.3 | 2.5 | 83.9 | 2.5 | 45.3 | 0.3 | 5.9 | 31.5 | 27.6 | 48.0 | |
| | | | | | | 294 | 1500 | 336 | 1100 | 65 | 2130 | 65 | 1150 | 8 | 150 | 800 | 700 | 1220 | |
| VFTH0500GAF | VFTH0500GAF-16 | 500 | 1892 | 2318 | 1050 | 11.6 | 70.9 | 13.2 | 43.3 | 2.5 | 95.7 | 2.5 | 57.1 | 0.3 | 5.9 | 31.5 | 27.6 | 59.8 | |
| | | | | | | 294 | 1800 | 336 | 1100 | 65 | 2430 | 65 | 1450 | 8 | 150 | 800 | 700 | 1520 | |
| VFTH0600GAF | VFTH0600GAFF-16 | 600 | 2271 | 2377 | 1077 | 12.7 | 65.0 | 14.2 | 47.2 | 3 | 91.9 | 3 | 58.3 | 0.3 | 5.9 | 35.4 | 31.5 | 56.3 | |
| | | | | | | 322 | 1650 | 361 | 1200 | 80 | 2333 | 80 | 1480 | 8 | 150 | 900 | 800 | 1430 | |
| VFTH0700GAF | VFTH0700GAF-16 | 700 | 2649 | 2651 | 1201 | 13.8 | 65.0 | 15.2 | 51.2 | 3 | 94.0 | 3 | 63.0 | 0.3 | 5.9 | 35.4 | 31.5 | 56.3 | |
| | | | | | | 351 | 1650 | 386 | 1300 | 80 | 2387 | 80 | 1600 | 8 | 150 | 900 | 800 | 1430 | |
| VFTH0800GAF | VFTH0800GAF-16 | 800 | 3028 | 2898 | 1313 | 13.8 | 78.7 | 15.2 | 51.2 | 3 | 107.8 | 3 | 63.0 | 0.3 | 5.9 | 35.4 | 31.5 | 66.1 | |
| | | | | | | 351 | 2000 | 386 | 1300 | 80 | 2737 | 80 | 1600 | 8 | 150 | 900 | 800 | 1680 | |
| VFTH0900GAF | VFTH0900GAF-16 | 900 | 3406 | 3680 | 1667 | 15.3 | 78.7 | 16.3 | 55.1 | 3 | 110.3 | 3 | 63.0 | 0.3 | 5.9 | 39.4 | 33.5 | 66.1 | |
| | | | | | | 389 | 2000 | 413 | 1400 | 80 | 2801 | 80 | 1600 | 8 | 150 | 1000 | 850 | 1680 | |
| VFTH1000GAF | VFTH1000GAF-16 | 1000 | 3785 | 3592 | 1627 | 15.8 | 74.8 | 16.8 | 57.1 | 3 | 107.4 | 3 | 63.0 | 0.4 | 5.9 | 39.4 | 33.5 | 62.2 | |
| | | | | | | 402 | 1900 | 426 | 1450 | 80 | 2728 | 80 | 1600 | 10 | 150 | 1000 | 850 | 1580 | |
| VFTH1100GAF | VFTH1100GAF-16 | 1100 | 4163 | 3777 | 1711 | 15.8 | 82.7 | 16.8 | 57.1 | 3 | 115.3 | 3 | 63.0 | 0.4 | 5.9 | 39.4 | 33.5 | 66.1 | |
| | | | | | | 402 | 2100 | 426 | 1450 | 80 | 2928 | 80 | 1600 | 10 | 150 | 1000 | 850 | 1680 | |
| VFTH1200GAF | VFTH1200GAF-16 | 1200 | 4542 | 4159 | 1884 | 16.5 | 82.7 | 17.3 | 59.1 | 3 | 116.4 | 3 | 66.9 | 0.4 | 5.9 | 39.4 | 33.5 | 70.1 | |
| | | | | | | 418 | 2100 | 439 | 1500 | 80 | 2957 | 80 | 1700 | 10 | 150 | 1000 | 850 | 1780 | |
| VFTH1300GAF | VFTH1300GAF-16 | 1300 | 4921 | 4355 | 1973 | 17.5 | 78.7 | 18.3 | 63.0 | 3 | 114.6 | 3 | 63.0 | 0.4 | 5.9 | 43.3 | 37.4 | 66.1 | |
| | | | | | | 445 | 2000 | 465 | 1600 | 80 | 2910 | 80 | 1600 | 10 | 150 | 1100 | 950 | 1680 | |
| VFTH1400GAF | VFTH1400GAF-16 | 1400 | 5299 | 4629 | 2097 | 17.5 | 88.6 | 18.3 | 63.0 | 3 | 124.4 | 3 | 70.9 | 0.4 | 5.9 | 43.3 | 37.4 | 75.2 | |
| | | | | | | 445 | 2250 | 465 | 1600 | 80 | 3160 | 80 | 1800 | 10 | 150 | 1100 | 950 | 1910 | |
| VFTH1500GAF | VFTH1500GAF-16 | 1500 | 5678 | 4525 | 2050 | 19.6 | 74.8 | 20.6 | 68.9 | 3 | 115.0 | 3 | 61.0 | 0.4 | 5.9 | 47.2 | 41.3 | 64.2 | |
| | | | | | | 498 | 1900 | 522 | 1750 | 80 | 2920 | 80 | 1550 | 10 | 150 | 1200 | 1050 | 1630 | |



TECHNICAL DATA

VERTICAL AND HORIZONTAL BLADDER TANKS MODEL VFT

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Table 6.3.8 - Horizontal Bladder Tank Dimensions (ASME Sec VIII Design Code) (cont.)

| Bladder Tank : ASME Sec VIII Design Code | | Capacity | | Weight | | A | B | C | ØD | ØG | H | ØL | M | N | O | P | Q | R |
|--|------------------|----------|--------|--------|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 175PSI / 12.1bar | 232PSI / 16.0bar | USG | Litres | LBS | KG | inch mm |
| VFTH1600GAF | VFTH1600GAF-16 | 1600 | 6056 | 4746 | 2150 | 19.6 | 78.7 | 20.6 | 68.9 | 3 | 118.9 | 3 | 61.0 | 0.4 | 5.9 | 47.2 | 41.3 | 66.1 |
| | | | | | | 498 | 2000 | 522 | 1750 | 80 | 3020 | 80 | 1550 | 10 | 150 | 1200 | 1050 | 1680 |
| VFTH1700GAF | VFTH1700GAF-16 | 1700 | 6435 | 4967 | 2250 | 20.2 | 78.7 | 21.1 | 70.9 | 3 | 120.0 | 3 | 61.0 | 0.4 | 5.9 | 47.2 | 41.3 | 66.1 |
| | | | | | | 513 | 2000 | 535 | 1800 | 80 | 3047 | 80 | 1550 | 10 | 150 | 1200 | 1050 | 1680 |
| VFTH1800GAF | VFTH1800GAF-16 | 1800 | 6813 | 5700 | 2582 | 22.3 | 59.1 | 23.1 | 78.7 | 3 | 104.4 | 3 | 52.4 | 0.4 | 5.9 | 59.1 | 53.1 | 49.2 |
| | | | | | | 566 | 1500 | 586 | 2000 | 80 | 2652 | 80 | 1330 | 10 | 150 | 1500 | 1350 | 1250 |
| VFTH1900GAF | VFTH1900GAF-16 | 1900 | 7192 | 5854 | 2652 | 22.3 | 63.0 | 23.1 | 78.7 | 3 | 108.3 | 3 | 52.4 | 0.4 | 5.9 | 59.1 | 53.1 | 49.2 |
| | | | | | | 566 | 1600 | 586 | 2000 | 80 | 2752 | 80 | 1330 | 10 | 150 | 1500 | 1350 | 1250 |
| VFTH2000GAF | VFTH2000GAF-16 | 2000 | 7570 | 6086 | 2757 | 22.3 | 68.9 | 23.1 | 78.7 | 3 | 114.3 | 3 | 52.4 | 0.4 | 5.9 | 59.1 | 53.1 | 55.1 |
| | | | | | | 566 | 1750 | 586 | 2000 | 80 | 2902 | 80 | 1330 | 10 | 150 | 1500 | 1350 | 1400 |
| VFTH2200GAF | VFTH2200GAF-16 | 2200 | 8327 | 6581 | 2981 | 22.3 | 82.7 | 23.1 | 78.7 | 3 | 128.0 | 3 | 63.0 | 0.4 | 5.9 | 59.1 | 53.1 | 68.9 |
| | | | | | | 566 | 2100 | 586 | 2000 | 80 | 3252 | 80 | 1600 | 10 | 150 | 1500 | 1350 | 1750 |
| VFTH2400GAF | VFTH2400GAF-16 | 2400 | 9084 | 6823 | 3091 | 22.3 | 88.6 | 23.1 | 78.7 | 3 | 133.9 | 3 | 68.9 | 0.4 | 5.9 | 59.1 | 53.1 | 74.8 |
| | | | | | | 566 | 2250 | 586 | 2000 | 80 | 3402 | 80 | 1750 | 10 | 150 | 1500 | 1350 | 1900 |
| VFTH2600GAF | VFTH2600GAF-16 | 2600 | 9842 | 7362 | 3335 | 22.3 | 102.4 | 23.1 | 78.7 | 3 | 147.7 | 3 | 82.7 | 0.4 | 5.9 | 59.1 | 53.1 | 88.6 |
| | | | | | | 566 | 2600 | 586 | 2000 | 80 | 3752 | 80 | 2100 | 10 | 150 | 1500 | 1350 | 2250 |
| VFTH2800GAF | VFTH2800GAF-16 | 2800 | 10599 | 7870 | 3565 | 22.3 | 114.2 | 23.1 | 78.7 | 3 | 159.5 | 3 | 94.5 | 0.4 | 5.9 | 59.1 | 53.1 | 100.4 |
| | | | | | | 566 | 2900 | 586 | 2000 | 80 | 4052 | 80 | 2400 | 10 | 150 | 1500 | 1350 | 2550 |
| VFTH3000GAF | VFTH3000GAF-16 | 3000 | 11356 | 8177 | 3704 | 22.3 | 122.0 | 23.1 | 78.7 | 3 | 167.4 | 3 | 102.4 | 0.4 | 5.9 | 59.1 | 53.1 | 108.3 |
| | | | | | | 566 | 3100 | 586 | 2000 | 80 | 4252 | 80 | 2600 | 10 | 150 | 1500 | 1350 | 2750 |
| VFTH3200GAF | VFTH3200GAF-16 | 3200 | 12113 | 8618 | 3904 | 22.3 | 133.9 | 23.1 | 78.7 | 3 | 179.2 | 3 | 114.2 | 0.4 | 5.9 | 59.1 | 53.1 | 120.1 |
| | | | | | | 566 | 3400 | 586 | 2000 | 80 | 4552 | 80 | 2900 | 10 | 150 | 1500 | 1350 | 3050 |
| VFTH3400GAF | VFTH3400GAF-16 | 3400 | 12870 | 8925 | 4043 | 22.3 | 141.7 | 23.1 | 78.7 | 3 | 187.1 | 3 | 126.0 | 0.4 | 5.9 | 59.1 | 53.1 | 131.9 |
| | | | | | | 566 | 3600 | 586 | 2000 | 80 | 4752 | 80 | 3200 | 10 | 150 | 1500 | 1350 | 3350 |
| VFTH3600GAF | VFTH3600GAF-16 | 3600 | 13627 | 9311 | 4218 | 22.3 | 151.6 | 23.1 | 78.7 | 3 | 196.9 | 3 | 139.8 | 0.4 | 5.9 | 59.1 | 53.1 | 145.7 |
| | | | | | | 566 | 3850 | 586 | 2000 | 80 | 5002 | 80 | 3550 | 10 | 150 | 1500 | 1350 | 3700 |
| VFTH3800GAF | VFTH3800GAF-16 | 3800 | 14384 | 9631 | 4636 | 22.3 | 159.4 | 23.1 | 78.7 | 3 | 204.8 | 3 | 139.8 | 0.4 | 5.9 | 59.1 | 53.1 | 145.7 |
| | | | | | | 566 | 4050 | 586 | 2000 | 80 | 5202 | 80 | 3550 | 10 | 150 | 1500 | 1350 | 3700 |
| VFTH4000GAF | VFTH4000GAF-16 | 4000 | 15141 | 10170 | 4607 | 22.3 | 173.2 | 23.1 | 78.7 | 3 | 218.6 | 3 | 139.8 | 0.4 | 5.9 | 59.1 | 53.1 | 159.4 |
| | | | | | | 566 | 4400 | 586 | 2000 | 80 | 5552 | 80 | 3550 | 10 | 150 | 1500 | 1350 | 4050 |
| VFTH4250GAF | VFTH4250GAF-16 | 4250 | 16088 | 10631 | 4816 | 22.3 | 185.0 | 23.1 | 78.7 | 3 | 230.4 | 3 | 139.8 | 0.4 | 5.9 | 59.1 | 53.1 | 159.4 |
| | | | | | | 566 | 4700 | 586 | 2000 | 80 | 5852 | 80 | 3550 | 10 | 150 | 1500 | 1350 | 4050 |
| VFTH4500GAF | VFTH4500GAF-16 | 4500 | 17034 | 11095 | 5026 | 22.3 | 196.9 | 23.1 | 78.7 | 3 | 242.2 | 3 | 139.8 | 0.4 | 5.9 | 59.1 | 53.1 | 159.4 |
| | | | | | | 566 | 5000 | 586 | 2000 | 80 | 6152 | 80 | 3550 | 10 | 150 | 1500 | 1350 | 4050 |
| VFTH4750GAF | VFTH4750GAF-16 | 4750 | 17980 | 11634 | 5270 | 22.3 | 210.6 | 23.1 | 78.7 | 3 | 256.0 | 3 | 139.8 | 0.4 | 5.9 | 59.1 | 53.1 | 159.4 |
| | | | | | | 566 | 5350 | 586 | 2000 | 80 | 6502 | 80 | 3550 | 10 | 150 | 1500 | 1350 | 4050 |
| VFTH5000GAF | VFTH5000GAF-16 | 5000 | 18927 | 12097 | 5480 | 22.3 | 222.4 | 23.1 | 78.7 | 3 | 267.8 | 3 | 139.8 | 0.4 | 5.9 | 59.1 | 53.1 | 159.4 |
| | | | | | | 566 | 5650 | 586 | 2000 | 80 | 6802 | 80 | 3550 | 10 | 150 | 1500 | 1350 | 4050 |
| VFTH5250GAF | VFTH5250GAF-16 | 5250 | 19873 | 12636 | 5724 | 22.3 | 236.2 | 23.1 | 78.7 | 3 | 281.6 | 3 | 139.8 | 0.4 | 5.9 | 59.1 | 53.1 | 159.4 |
| | | | | | | 566 | 6000 | 586 | 2000 | 80 | 7152 | 80 | 3550 | 10 | 150 | 1500 | 1350 | 4050 |

7. INSTALLATION

Refer to appropriate Installation Standards (i.e. NFPA, VdS, LPCB, etc.) and / or FM applicable FM Global Property Loss Prevention Data Sheets such as 4-12, Foam-Water Sprinkler Systems.

The Viking Installation, Operation and Maintenance Bladder Tank Manual shall also be referenced.

NOTICE

When designing a bladder tank into your fire protection system, please give consideration to future maintenance activities. Ensure that adequate clearance above a vertical bladder tank or at the inspection flange end of a horizontal tank is allowed. For further guidance contact Viking.



TECHNICAL DATA

VERTICAL AND HORIZONTAL BLADDER TANKS MODEL VFT

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8. OPERATION

The Viking bladder tank stores foam concentrate inside the bladder. When used in conjunction with the Viking Ratio Controller it proportions the foam concentrate accurately into the water stream. The outer shell of the bladder tank is pressurized by the system water supply then during activation; foam concentrate is squeezed out to the ratio controller. Simultaneously, as water flows through the venturi area of the ratio controller, a metered pressure drop also draws foam concentrate into the system water creating a foam solution mixed to the appropriate ratios. This solution then flows through the system pipework and out of the open sprinklers, nozzles or other discharge devices.

9. GUARANTEE

For details of warranty, refer to Viking's current list price schedule or contact Viking directly.

10. INSPECTION, TESTS AND MAINTENANCE

Refer to respective requirements, according to the relevant standards for Inspection, Testing and Maintenance.

If applicable, refer to FM Global Property Loss Prevention Datasheet 4-12 for specific test and commissioning criteria.

In addition, the "Authority Having Jurisdiction" (AHJ) may have additional maintenance, testing and inspection requirements that must be followed.

⚠ WARNING

Any system maintenance or testing that involves placing a control valve or detection system out of service may eliminate the fire protection of that system. Prior to proceeding, notify all Authorities Having Jurisdiction. Consideration should be given to employment of a fire patrol in the affected area.

11. DISPOSAL



At end of use the product described here should be disposed of via the national recycling system.

Upon request the manufacturer can take back and properly dispose of the electrical equipment and electronic devices

12. ACCESSORIES AND SPARE PARTS

- Safety Thermal Relief Valve
- Foam Level Gauge
- Replacement Bladder
- Manual Filling Pump
- Electric Filling Pump
- Filling Device
- Tank Trim Ball Valves
- Flange Bolts & Nuts

Contact the appropriate Viking sales office in **Section 5 Availability** for further assistance.

13. DECLARATION OF CONFORMITY

If required

Contact the appropriate Viking sales office in **Section 5 Availability** for further assistance.