



BLADDER TANKS – HORIZONTAL & VERTICAL

HARDWARE

Features

UL Listed with Solberg foam concentrates

FM Approved with RE-HEALING™ RF3, 3% and ARCTIC 3x3% ATC™ Foam Concentrates

Accurate concentrate proportioning permits operation over a wide range of flow rates

Design simplicity minimizes system failure due to mechanical issues

Ease of operation, requires no outside source of power

Ease of retrofit into existing water-based extinguishing systems

Fully automatic or manual systems available

Minimized installation costs compared to other proportioning methods

Uses existing water pressure for delivery of foam solution to the discharge devices

Description

SOLBERG® Bladder Tanks are the main component in a balanced pressure proportioning bladder tank system, which require no outside power source other than an adequate water supply.

The SOLBERG Bladder Tank is a carbon steel pressure vessel with a nylon reinforced neoprene rubber bladder that stores the foam concentrate. During operation the foam concentrate is discharged from the tank by water supply pressure, which collapses the bladder around the central perforated tube until the concentrate is depleted. SOLBERG Bladder Tanks are available in both vertical and horizontal versions in multiple sizes.

Application

SOLBERG Bladder Tanks can be used in multiple high hazard, high risk applications including aircraft hangars, foam-water sprinkler systems, helipads and truck loading racks.

Specifications

Vertical and horizontal bladder tanks are manufactured in compliance with ASME Code Section VIII Division 1 with design working pressure of 175 psi (12 bar) and tested to 263 psi (18 bar), —1.5 times the working pressure. The tank is constructed out of SA 516 Grade 70 carbon steel with a nylon reinforced neoprene rubber bladder. It has a perforated centre tube, and a 9 mm (0.37") water channel between the water inlet and



water drain valve, which creates a water path between the bladder and tank shell. Openings that are greater than 25 mm (1") will be divided to prevent bladder damage.

Vertical bladder tank construction shall be mounted on a full skirt with four tabs drilled for anchoring.

Horizontal bladder tank construction shall be mounted on four legs permanently welded and drilled for anchoring.

Solberg is a member of THE AMEREX GROUP, an alliance of independent companies with a singular purpose: revolutionize the course of fire suppression technology with safer, more effective, and more sustainable solutions. Together, we are Moving Industries Forward by Redefining Fire Suppression. www.solbergfoam.com

All bladder tanks are furnished with lifting lugs, an ASME welded nameplate, and 1" (25 mm) bronze trim locking handle valves, to be in accordance with NFPA Standard 11, and the Solberg Operation and Maintenance Manual.

The exterior of all bladder tanks will be prepared and finished with Solberg standard blue or red enamel finish.

Options

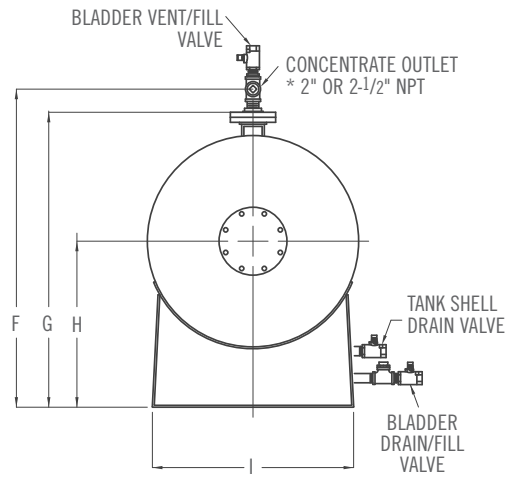
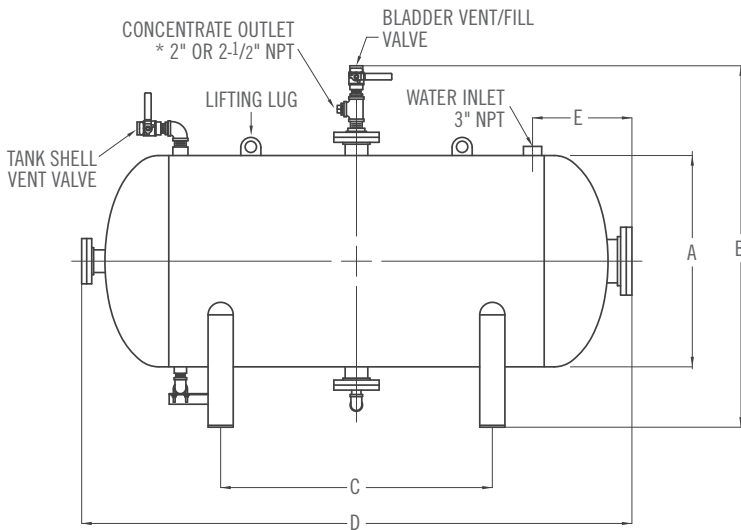
- 100% X-Ray design
- Carbon or stainless steel construction
- Custom tank size and dimensions
- Epoxy or coal tar inner liner
- Inspection service
- National board registration
- Pressure relief valve*
- Seismic calculations
- Sight gauge assembly
- Start-up and commissioning service

Certifications

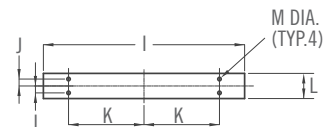
American Society of Mechanical Engineers (ASME), Underwriters Laboratories, Inc. (UL) Listed – Standard 162, FM Approved per Approval Standard 5130.

**Not Part of FM Approval*

Dimensional Information – Horizontal



* 2" NPT ON TANKS 757 L (200 US gal) OR LESS
 * 2-1/2" NPT ON TANKS OVER 757 L (200 US gal)



Dimensional Information – Horizontal

APPROXIMATE DIMENSIONS millimetres (inches)

CAPACITY litre (US gal)	A	B	C	D	E	F	G
189 (50)	508 (20)	1194 (47)	356 (14)	1410 (55.5)	488 (19.1875)	1055 (41.5)	915 (36)
379 (100)	610 (24)	1296 (51)	559 (22)	1829 (72)	513 (20.1875)	1156 (45.5)	1016 (40)
568 (150)	762 (30)	1448 (57)	915 (36)	1804 (71)	551 (21.6875)	1309 (51.5)	1169 (46)
757 (200)	762 (30)	1448 (57)	864 (34)	2261 (89)	551 (21.6875)	1309 (51.5)	1169 (46)
1136 (300)	915 (36)	1626 (64)	915 (36)	2363 (93)	589 (23.1875)	1474 (58)	1321 (52)
1514 (400)	1067 (42)	1778 (70)	1270 (50)	2363 (93)	628 (24.6875)	1626 (64)	1474 (58)
1893 (500)	1067 (42)	1778 (70)	1220 (48)	2845 (112)	628 (24.6875)	1626 (64)	1474 (58)
2271 (600)	1067 (42)	1778 (70)	1524 (60)	3328 (131)	628 (24.6875)	1626 (64)	1474 (58)
2650 (700)	1220 (48)	2032 (80)	1270 (50)	3023 (119)	666 (26.1875)	1880 (74)	1728 (68)
3028 (800)	1220 (48)	2032 (80)	1524 (60)	3404 (134)	666 (26.1875)	1880 (74)	1728 (68)
3407 (900)	1220 (48)	2032 (80)	1778 (70)	3760 (148)	666 (26.1875)	1880 (74)	1728 (68)
3785 (1000)	1220 (48)	2032 (80)	2388 (94)	4141 (163)	666 (26.1875)	1880 (74)	1728 (68)
4164 (1100)	1220 (48)	2032 (80)	2540 (100)	4496 (177)	666 (26.1875)	1880 (74)	1728 (68)
4542 (1200)	1524 (60)	2337 (92)	1474 (58)	3328 (131)	743 (29.25)	2185 (86)	2032 (80)
4921 (1300)	1524 (60)	2337 (92)	1524 (60)	3582 (141)	743 (29.25)	2185 (86)	2032 (80)
5299 (1400)	1524 (60)	2337 (92)	1931 (76)	3836 (151)	743 (29.25)	2185 (86)	2032 (80)
5678 (1500)	1524 (60)	2337 (92)	2032 (80)	4039 (159)	743 (29.25)	2185 (86)	2032 (80)
6056 (1600)	1829 (72)	2591 (102)	1118 (44)	3175 (125)	820 (32.25)	2439 (96)	2286 (90)
6813 (1800)	1829 (72)	2591 (102)	1423 (56)	3506 (138)	820 (32.25)	2439 (96)	2286 (90)
7192 (1900)	1829 (72)	2591 (102)	1524 (60)	3658 (144)	820 (32.25)	2439 (96)	2286 (90)
7570 (2000)	1829 (72)	2591 (102)	1778 (70)	3836 (151)	820 (32.25)	2439 (96)	2286 (90)
8327 (2200)	1829 (72)	2591 (102)	2032 (80)	4166 (164)	820 (32.25)	2439 (96)	2286 (90)
9084 (2400)	1829 (72)	2591 (102)	2032 (80)	4496 (177)	820 (32.25)	2439 (96)	2286 (90)
9841 (2600)	1829 (72)	2591 (102)	2540 (100)	4801 (189)	820 (32.25)	2439 (96)	2286 (90)
10598 (2800)	1829 (72)	2591 (102)	2540 (100)	5131 (202)	820 (32.25)	2439 (96)	2286 (90)
11355 (3000)	1829 (72)	2591 (102)	3048 (120)	5461 (215)	820 (32.25)	2439 (96)	2286 (90)
12112 (3200)	1829 (72)	2591 (102)	3048 (120)	5792 (228)	820 (32.25)	2439 (96)	2286 (90)
12491 (3300)	1829 (72)	2591 (102)	3048 (120)	5944 (234)	820 (32.25)	2439 (96)	2286 (90)



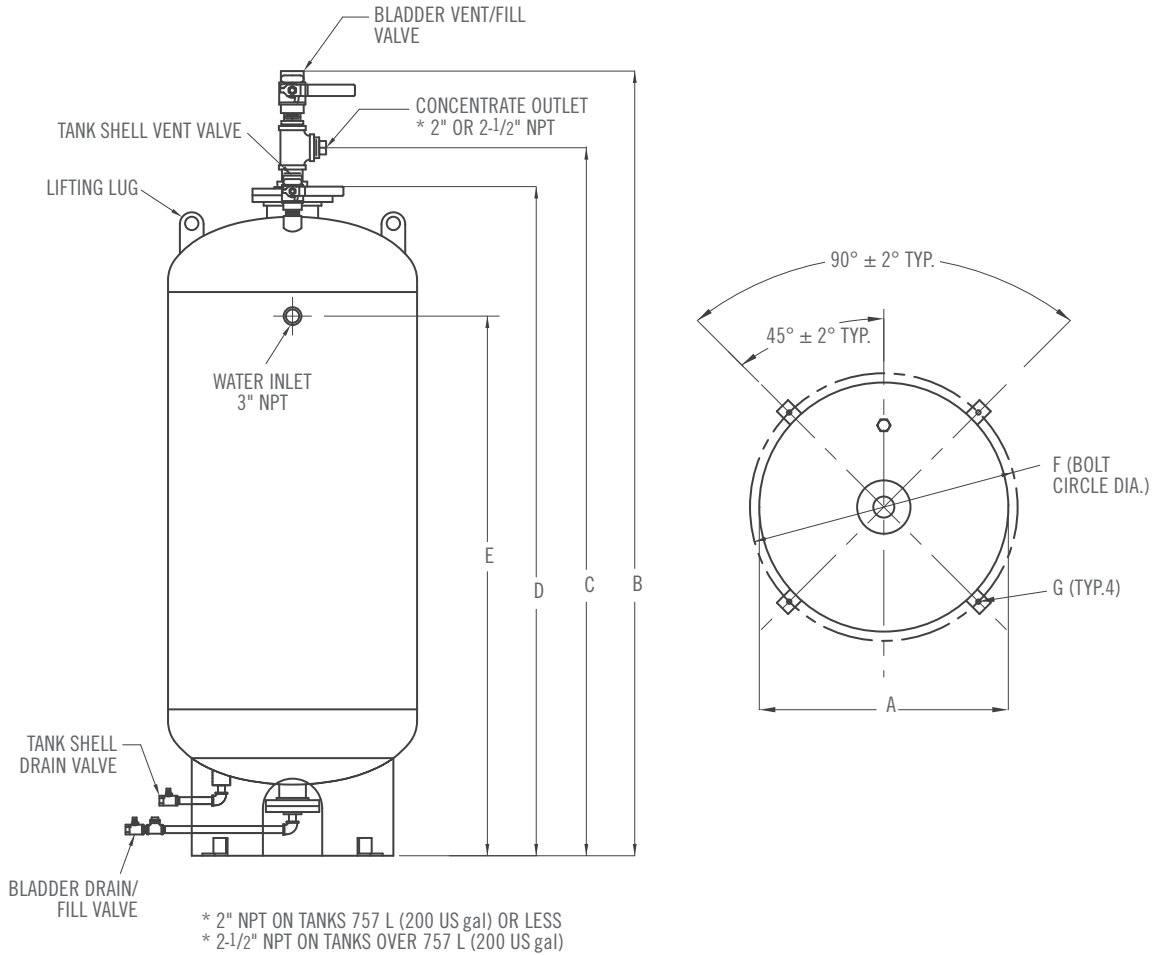
Dimensional Information – Horizontal

APPROXIMATE DIMENSIONS millimetres (inches)

CAPACITY litre (US gal)	H	I	J	K	L	M
189 (50)	559 (22)	508 (20)	23 (0.875)	178 (7)	77 (3)	15 (0.5625)
379 (100)	610 (24)	610 (24)	23 (0.875)	229 (9)	77 (3)	15 (0.5625)
568 (150)	686 (27)	762 (30)	29 (1.125)	280 (11)	102 (4)	15 (0.5625)
757 (200)	686 (27)	762 (30)	29 (1.125)	280 (11)	102 (4)	15 (0.5625)
1136 (300)	762 (30)	864 (34)	29 (1.125)	331 (13)	102 (4)	15 (0.5625)
1514 (400)	839 (33)	1016 (40)	35 (1.375)	381 (15)	127 (5)	18 (0.6875)
1893 (500)	839 (33)	1016 (40)	35 (1.375)	381 (15)	127 (5)	18 (0.6875)
2271 (600)	839 (33)	1016 (40)	35 (1.375)	381 (15)	127 (5)	18 (0.6875)
2650 (700)	1016 (40)	1118 (44)	35 (1.375)	432 (17)	127 (5)	18 (0.6875)
3028 (800)	1016 (40)	1118 (44)	35 (1.375)	432 (17)	127 (5)	18 (0.6875)
3407 (900)	1016 (40)	1118 (44)	35 (1.375)	432 (17)	127 (5)	18 (0.6875)
3785 (1000)	1016 (40)	1118 (44)	35 (1.375)	432 (17)	127 (5)	18 (0.6875)
4164 (1100)	1016 (40)	1118 (44)	35 (1.375)	432 (17)	127 (5)	18 (0.6875)
4542 (1200)	1169 (46)	1372 (54)	45 (1.75)	559 (22)	153 (6)	18 (0.6875)
4921 (1300)	1169 (46)	1372 (54)	45 (1.75)	559 (22)	153 (6)	18 (0.6875)
5299 (1400)	1169 (46)	1372 (54)	45 (1.75)	559 (22)	153 (6)	18 (0.6875)
5678 (1500)	1169 (46)	1372 (54)	45 (1.75)	559 (22)	153 (6)	18 (0.6875)
6056 (1600)	1270 (50)	1626 (64)	70 (2.75)	712 (28)	204 (8)	27 (1.0625)
6813 (1800)	1270 (50)	1626 (64)	70 (2.75)	712 (28)	204 (8)	27 (1.0625)
7192 (1900)	1270 (50)	1626 (64)	70 (2.75)	712 (28)	204 (8)	27 (1.0625)
7570 (2000)	1270 (50)	1626 (64)	70 (2.75)	712 (28)	204 (8)	27 (1.0625)
8327 (2200)	1270 (50)	1626 (64)	70 (2.75)	712 (28)	204 (8)	27 (1.0625)
9084 (2400)	1270 (50)	1626 (64)	70 (2.75)	712 (28)	204 (8)	27 (1.0625)
9841 (2600)	1270 (50)	1626 (64)	70 (2.75)	712 (28)	204 (8)	27 (1.0625)
10598 (2800)	1270 (50)	1626 (64)	70 (2.75)	712 (28)	204 (8)	27 (1.0625)
11355 (3000)	1270 (50)	1626 (64)	70 (2.75)	712 (28)	204 (8)	27 (1.0625)
12112 (3200)	1270 (50)	1626 (64)	70 (2.75)	712 (28)	204 (8)	27 (1.0625)
12491 (3300)	1270 (50)	1626 (64)	70 (2.75)	712 (28)	204 (8)	27 (1.0625)



Dimensional Information – Vertical



Dimensional Information – Vertical

APPROXIMATE DIMENSIONS millimetres (inches)

CAPACITY litre (US gal)	A	B	C	D	E	F	G
136 (36)	610 (24)	1321 (52)	1182 (46.5)	1042 (41)	686 (27)	680 (26.75)	15 (0.5625)
189 (50)	610 (24)	1524 (60)	1385 (54.5)	1245 (49)	889 (35)	680 (26.75)	15 (0.5625)
379 (100)	610 (24)	2261 (89)	2121 (83.5)	1982 (78)	1626 (64)	680 (26.75)	15 (0.5625)
568 (150)	762 (30)	2236 (88)	2096 (82.5)	1956 (77)	1499 (59)	705 (27.75)	15 (0.5625)
757 (200)	762 (30)	2718 (107)	2566 (101)	2413 (95)	1956 (77)	705 (27.75)	15 (0.5625)
1136 (300)	915 (36)	2820 (111)	2667 (105)	2515 (99)	2032 (80)	832 (32.75)	15 (0.5625)
1514 (400)	1067 (42)	3073 (121)	2921 (115)	2769 (109)	2235 (88)	933 (36.75)	18 (0.6875)
1893 (500)	1067 (42)	3302 (130)	3150 (124)	2997 (118)	2464 (97)	933 (36.75)	18 (0.6875)
2271 (600)	1220 (48)	3125 (123)	2972 (117)	2820 (111)	2236 (88)	1055 (41.5)	18 (0.6875)
2650 (700)	1220 (48)	3480 (137)	3328 (131)	3175 (125)	2591 (102)	1055 (41.5)	18 (0.6875)
3028 (800)	1220 (48)	3937 (155)	3785 (149)	3633 (143)	2972 (117)	1309 (51.5)	18 (0.6875)
3407 (900)	1524 (60)	3175 (125)	3023 (119)	2871 (113)	2210 (87)	1309 (51.5)	18 (0.6875)
3785 (1000)	1524 (60)	3429 (135)	3277 (129)	3125 (123)	2464 (97)	1309 (51.5)	21 (0.8125)
4164 (1100)	1524 (60)	3658 (144)	3506 (138)	3353 (132)	2693 (106)	1309 (51.5)	21 (0.8125)
4542 (1200)	1524 (60)	3887 (153)	3734 (147)	3582 (141)	2921 (115)	1309 (51.5)	21 (0.8125)
4921 (1300)	1524 (60)	4141 (163)	3988 (157)	3836 (151)	3175 (125)	1309 (51.5)	21 (0.8125)
5299 (1400)	1524 (60)	4369 (172)	4217 (166)	4064 (160)	3404 (134)	1309 (51.5)	21 (0.8125)
5678 (1500)	1524 (60)	4598 (181)	4445 (175)	4293 (169)	3633 (143)	1309 (51.5)	21 (0.8125)
6056 (1600)	1829 (72)	3734 (147)	3582 (141)	3429 (135)	2693 (106)	1461 (57.5)	21 (0.8125)
6435 (1700)	1829 (72)	3887 (153)	3734 (147)	3582 (141)	2845 (112)	1461 (57.5)	21 (0.8125)



Ordering Information

HORIZONTAL BLADDER TANKS		APPROXIMATE SHIPPING WEIGHT	
PART NO.	DESCRIPTION	kg	lb
22001	Bladder Tank – Horizontal, 189 litre (50 US gal), Blue Enamel Finish	164	360
22002	Bladder Tank – Horizontal, 379 litre (100 US gal), Blue Enamel Finish	296	651
22003	Bladder Tank – Horizontal, 568 litre (150 US gal), Blue Enamel Finish	427	940
22004	Bladder Tank – Horizontal, 757 litre (200 US gal), Blue Enamel Finish	516	1137
22005	Bladder Tank – Horizontal, 1136 litre (300 US gal), Blue Enamel Finish	705	1554
22006	Bladder Tank – Horizontal, 1514 litre (400 US gal), Blue Enamel Finish	849	1870
22007	Bladder Tank – Horizontal, 1893 litre (500 US gal), Blue Enamel Finish	967	2130
22008	Bladder Tank – Horizontal, 2271 litre (600 US gal), Blue Enamel Finish	1015	2237
22009	Bladder Tank – Horizontal, 2650 litre (700 US gal), Blue Enamel Finish	1200	2644
22010	Bladder Tank – Horizontal, 3028 litre (800 US gal), Blue Enamel Finish	1496	3298
22011	Bladder Tank – Horizontal, 3407 litre (900 US gal), Blue Enamel Finish	1658	3655
22012	Bladder Tank – Horizontal, 3785 litre (1000 US gal), Blue Enamel Finish	1757	3872
22013	Bladder Tank – Horizontal, 4164 litre (1100 US gal), Blue Enamel Finish	1931	4256
22014	Bladder Tank – Horizontal, 4542 litre (1200 US gal), Blue Enamel Finish	1961	4323
22015	Bladder Tank – Horizontal, 4921 litre (1300 US gal), Blue Enamel Finish	2099	4626
22016	Bladder Tank – Horizontal, 5300 litre (1400 US gal), Blue Enamel Finish	2229	4913
22017	Bladder Tank – Horizontal, 5678 litre (1500 US gal), Blue Enamel Finish	2402	5294
22018	Bladder Tank – Horizontal, 6057 litre (1600 US gal), Blue Enamel Finish	2128	4691
22019	Bladder Tank – Horizontal, 6814 litre (1800 US gal), Blue Enamel Finish	2293	5054
22020	Bladder Tank – Horizontal, 7192 litre (1900 US gal), Blue Enamel Finish	2395	5279
22021	Bladder Tank – Horizontal, 7571 litre (2000 US gal), Blue Enamel Finish	2497	5504
22022	Bladder Tank – Horizontal, 8328 litre (2200 US gal), Blue Enamel Finish	2671	5887
22023	Bladder Tank – Horizontal, 9085 litre (2400 US gal), Blue Enamel Finish	2858	6299
22024	Bladder Tank – Horizontal, 9842 litre (2600 US gal), Blue Enamel Finish	3039	6699
22025	Bladder Tank – Horizontal, 10 599 litre (2800 US gal), Blue Enamel Finish	3211	7078
22026	Bladder Tank – Horizontal, 11 356 litre (3000 US gal), Blue Enamel Finish	3392	7478
22027	Bladder Tank – Horizontal, 12 113 litre (3200 US gal), Blue Enamel Finish	3575	7880
22028	Bladder Tank – Horizontal, 12 492 litre (3300 US gal), Blue Enamel Finish	3675	8100



Ordering Information

VERTICAL BLADDER TANKS		APPROXIMATE SHIPPING WEIGHT	
		kg	lb
PART NO.	DESCRIPTION		
22400	Bladder Tank – Vertical, 136 litre (36 US gal), Blue Enamel Finish	105	230
22401	Bladder Tank – Vertical, 189 litre (50 US gal), Blue Enamel Finish	107	235
22402	Bladder Tank – Vertical, 379 litre (100 US gal), Blue Enamel Finish	175	385
22403	Bladder Tank – Vertical, 568 litre (150 US gal), Blue Enamel Finish	245	540
22404	Bladder Tank – Vertical, 757 litre (200 US gal), Blue Enamel Finish	302	665
22405	Bladder Tank – Vertical, 1136 litre (300 US gal), Blue Enamel Finish	456	1005
22406	Bladder Tank – Vertical, 1514 litre (400 US gal), Blue Enamel Finish	638	1405
22407	Bladder Tank – Vertical, 1893 litre (500 US gal), Blue Enamel Finish	660	1455
22408	Bladder Tank – Vertical, 2271 litre (600 US gal), Blue Enamel Finish	704	1550
22409	Bladder Tank – Vertical, 2650 litre (700 US gal), Blue Enamel Finish	763	1680
22410	Bladder Tank – Vertical, 3028 litre (800 US gal), Blue Enamel Finish	853	1880
22411	Bladder Tank – Vertical, 3407 litre (900 US gal), Blue Enamel Finish	998	2200
22412	Bladder Tank – Vertical, 3785 litre (1000 US gal), Blue Enamel Finish	1180	2600
22413	Bladder Tank – Vertical, 4164 litre (1100 US gal), Blue Enamel Finish	1343	2960
22414	Bladder Tank – Vertical, 4542 litre (1200 US gal), Blue Enamel Finish	1395	3075
22415	Bladder Tank – Vertical, 4921 litre (1300 US gal), Blue Enamel Finish	1441	3175
22416	Bladder Tank – Vertical, 5300 litre (1400 US gal), Blue Enamel Finish	1502	3310
22417	Bladder Tank – Vertical, 5678 litre (1500 US gal), Blue Enamel Finish	1520	3350
22418	Bladder Tank – Vertical, 6057 litre (1600 US gal), Blue Enamel Finish	1588	3500
22419	Bladder Tank – Vertical, 6435 litre (1700 US gal), Blue Enamel Finish	1645	3625