



# HFC-227ea CLEAN AGENT IMPULSE VALVE STORAGE CONTAINERS



#### Description

Fike's clean agent storage containers are painted steel containers available in various sizes and varying fill densities. Each container (expect the 150 lb. inverted) is fitted with an internal siphon tube, Fike Impulse Valve assembly, pressure gauge, container nameplate and applicable mounting hardware. Refer to page 3 for illustration of items supplied with the container.

The Impulse Valve contains a fast-acting rupture disc that retains the agent within the container until the disc is ruptured by a compatible valve actuator (ordered separately) allowing the agent to be released from the container.

Each container is factory filled with HFC-227ea fire extinguishing agent in 1 lb. (0.5 kg) increments up to their required capacity and is then super-pressurized with dry nitrogen to 360 psig at 70°F (24.8 bar at 21°C). Fill density must be specified when ordering. Containers sharing the same manifold must be equal in size and fill density.

### **Specifications**

Fill Range	40 to 70 lbs/ft <sup>3</sup> (630 to 1121 kg/m <sup>3</sup> )	
Fill Increments	1.0 lbs (0.5 kg)	
Super Pressurization Level	360 psig at 70°F (24.8 bar at 21°C) after filling with dry nitrogen	
Storage Temp Limits	32°F (0°C) minimum 130°F (54.4°C) maximum	
Construction	Carbon steel alloys	
Rating	DOT 4BW500 TC 4BWM534	
Color Options	Baked enamel finish, white (default) or red	
Actuation Methods	Electric/Pneumatic/Manual	

Note: If container pressure reaches 640 to 725 psi (44.1 to 50.0 bar), valve will open automatically. This fulfills the pressure relief valve requirements in accordance with DOT regulations.

## Reliability

Each container is manufactured in strict accordance with U.S. Department of Transportation (DOT) regulations and has successfully passed testing by Factory Mutual (FM) and Underwriters Laboratories, Inc. (UL). Each container is leak tested and pressure tested to 1000 psig (69 bar) prior to shipment.

## Approvals

Underwriters Laboratories (UL) Underwriters Laboratories of Canada (ULC) Factory Mutual (FM)

For exact certification listings, please reference the respective agency web site.

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## **Container Data**

Container		Fill Range		Valve Size	Tare Weight	Dimensions (approximate)		
Size	P/N	Minimum	Maximum			Diameter	Height	Mounting Position
Lb. (L)	P/N	lbs. (kg)	lbs. (kg)	IN (mm)	lbs. (kg)	IN (mm)	IN (mm)	
5 (2)	70-272	3 (2.0)	5 (2.5)	1 (25)	11 (5.0)	4.2 (102)	16.2 (411.5)	Upright (Valve Up)
10 (4)	70-273	6 (3.0)	10 (4.5)	1 (25)	15 (6.8)	4.2 (102)	27.24 (691.9)	Upright (Valve Up)
20 (8.5)	70-263	12 (5.5)	21 (9.5)	1 (25)	22 (10.0)	7.0 (178)	22.50 (571.5)	Upright - Horizontal
35 (15)	70-264	22 (10.0)	38 (17.0)	1 (25)	32.5 (14.7)	7.0 (178)	33.75 (857.3)	Upright - Horizontal
60 (27)	70-265	39 (18.0)	68 (30.5)	1 (25)	52.5 (23.8)	10.75 (273)	28.13 (714.4)	Upright - Horizontal
100 (44)	70-266	63 (28.5)	108 (49.0)	1 (25)	77 (34.9)	10.75 (273)	39.63 (1006.5)	Upright (Valve Up)
150/150i (61)	70-267	87 (39.5)	150 (68.0)	3 (80)	118/114 (53.5/51.7)	20.0 (508)	24.25 (616.0)	Upright/Inverted
215 (88)	70-268	124 (56.5)	216 (98.0)	3 (80)	146 (66.2)	20.0 (508)	30.13 (765.2)	Upright (Valve Up)
375 (153)	70-269	217 (98.5)	378 (171.5)	3 (80)	213 (96.6)	20.0 (508)	43.38 (1101.7)	Upright (Valve Up)
650 (267)	70-270	378 (171.5)	660 (299.0)	3 (80)	373 (169.2)	24.0 (610)	50.50 (1282.7)	Upright (Valve Up)
1000 (423)	70-271	598 (271.5)	1045 (474.0)	3 (80)	535 (242.7)	24.0 (610)	71.88 (1825.6)	Upright (Valve Up)

Container Size lb. (L)	Total Container Weight Ibs. (kg) See note 1	Container Floor Area ft <sup>2/</sup> (m <sup>2</sup> )	Container Floor Loading Ibs/ft <sup>2</sup> (kg/m <sup>2</sup> )	Container Floor Area w/ Plate 1/4: x 2' x 2' plate (6.4mm x 0.6m x 0.6m plate) ft <sup>2</sup> (m <sup>2</sup> )	Container w/ Plate Floor Loading Ibs/ft <sup>2</sup> (kg/m <sup>2</sup> ) See note 2
1000 (423)	1580 (717)	3.14 (0.29)	503 (2472)	4.0 (0.36)	401 (2020)
650 (267)	1033 (468)	3.14 (0.29)	329 (1614)	4.0 (0.36)	264 (1328)
375 (153)	591 (269)	2.18 (0.20)	271 (1345)	4.0 (0.36)	153 (776)
215 (88)	362 (164)	2.18 (0.20)	166 (820)	4.0 (0.36)	96 (484)
150 (61)	268 (122)	2.18 (0.20)	123 (610)	4.0 (0.36)	73 (367)
100 (44)	185 (84)	0.63 (0.06)	294 (1400)	4.0 (0.36)	52 (262)
60 (27)	121 (55)	0.63 (0.06)	192 (917)	4.0 (0.36)	36 (181)
35 (15)	71 (32)	0.27 (0.03)	263 (1067)	4.0 (0.36)	23 (117)
20 (8.5)	43 (20)	0.27 (0.03)	159 (667)	4.0 (0.36)	16 (84)
10 (4)	25 (12)	0.10 (0.009)	250 (1333)	4.0 (0.36)	12 (62)
5 (2)	16 (8)	0.10 (0.009)	160 (889)	4.0 (0.36)	10 (51)

Notes:

1) Total container weight is based on container tare weight + maximum fill weight

2) Total container weight + 22.5 lbs (10.2 kg) added for 1/4" x 2' x 2' (6.4mm x 0.6m x 0.6m) plate used to calculate container with plate floor loading

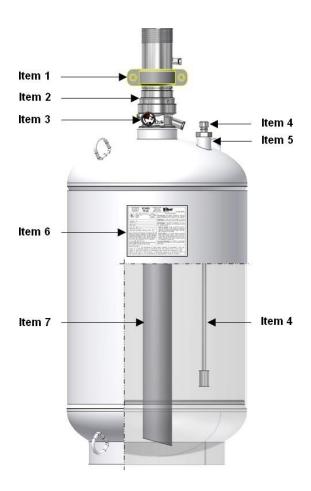
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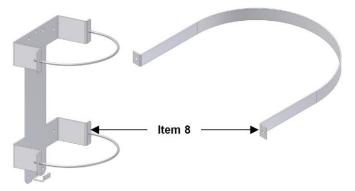
#### **Items Supplied with Container Assembly**

ltem No.	Description	Data Sheet
1	Victaulic Coupling & Nipple	n/a
2	Impulse Valve	IV.1.14.01
3	Pressure Gauge	IV.1.17.01
4	Liquid Level Indicator (optional)	IV.1.20.01
5	LLi Boss (see note 1)	n/a
6	Nameplate (see note 2)	n/a
7	Siphon Tube (see note 3)	n/a
8	Mounting Straps & Brackets	IV.1.18.01

Notes:

- 1) 100 thru 1000 lb. (44 thru 423 L) containers are equipped with an LLi boss that facilitates installation of an optional Liquid Level Indicator (LLi.)
- 2) Fike nameplate provides the information that is specific to each container: Assembly and serial number of the container, weight information: tare, gross and agent and installation, operation and safety information. All containers filled either by the factory or by an Approved Initial Fill Station are provided with a name plate bearing the UL & FM markings.
- 3) Fike Clean Agent containers [except the 150i (Inverted)] are equipped with a siphon tube. The 20, 35 & 60 lb. containers have bent siphon tubes and the 5, 10 and 100 – 1000 lb. containers have straight siphon tubes. All containers with siphon tubes can be mounted upright. The 20, 35 & 60 lb containers can also be mounted horizontally. The 150 container can only be mounted upright and the 150i can only be mounted inverted.





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