

FM-200® BOTTOM DISCHARGE AGENT STORAGE CONTAINER

Effective: August 1999

P/N 93-19204X-00X

93.1920.0

FENWAL®

FEATURES

- 150-350 AND 240-560 LB. CAPACITIES
- ELECTRIC INITIATOR ACTUATION
- 3" DISCHARGE VALVE
- LIQUID LEVEL MEASUREMENT DEVICE
- LOW PRESSURE SUPERVISORY SWITCH
- UL LISTED
- FMRC APPROVED

DESCRIPTION

FENWAL FM-200 Bottom Discharge agent storage containers store FM-200 superpressurized with dry nitrogen to 360 psig at 70°F. They are equipped with a 3 inch burst disc type discharge valve, a replaceable initiator well, a screen assembly, pressure gauge, supervisory pressure switch with cable assembly, fill port, overpressure relief valve, safety cap, liquid level measuring device (optional) and lifting lugs. A 3" Flex Hose (P/N 29-117134-002) is available to facilitate piping connections. **Initiator assemblies P/N 93-191001-001 must be ordered for each container. See FENWAL Data Sheet 93.1932.0 for information.**

OPERATION

The agent storage container discharges when it's initiator is actuated causing the burst disc valve to rupture.

INSTALLATION

The container is installed in a vertical position with the valve assembly pointing up. Interconnection for discharge piping is 3 inch NPT. A 3 inch Flex Hose is available to facilitate connection between container and discharge piping. A 3 inch 300 lb. malleable iron threaded pipe union manufactured per ANSI B16.39 is required to mate the tank discharge port to the flex hose assembly.

The container is secured in place by mounting brackets which are bolted together around the container and affixed to a solid wall or a strut assembly. Two 1/2 inch diameter bolts are required to secure the mounting brackets to a vertical surface and two 1/2 inch diameter 9 inch long threaded rods are needed to hold the two mounting brackets together.

After the container is securely mounted, it is connected to discharge piping per the system drawings.

NOTE: Retain the safety cap for use when reconditioning the container or whenever a filled container is removed from discharge piping.

After discharge piping is connected, install initiator assembly.



MAINTENANCE

According to NFPA standards the following inspection and/or maintenance procedure must be scheduled as listed below and performed upon the occurrence of any event which might affect the reliability of the system.

A. Quarterly Inspection

1. Check the pressure gauges of each agent storage container. If the pressure is less than 325 psig at 70°F (22.9kg/cm² at 21°C), the container should be removed and carefully inspected by certified personnel. It should then be reconditioned, recharged or replaced as it's condition indicates. Pressure varies with temperature. In the range of 55 to 85°F (12.8 to 29.4°C) change is approximately 3 psi per degree F (0.397kg/cm² per degree C).
2. Check all component supporting hardware and tighten, repair, or replace as required.
3. Visually check all components for evidence of physical abuse and take whatever action is required. Replace any component if at all in doubt of its ability to perform properly.

B. Semi-Annual Inspection

Qualified personnel are to determine the amount of agent in all containers. The optional liquid level indicator may be used to measure agent supply and compare it to the original net weight which is marked on the container label. If the measured net weight is less than 95% of the original charged net weight the container should be tested for leakage, recharged and reinstalled.

Inspect all piping, fittings and nozzles for looseness, dirt or other damage. All outlet piping must be clean and free of dirt, chips, fillings and other foreign material that may cause the system to become inoperative or ineffective at the time of discharge.

NOTE: Replace safety cap on agent storage container when it is disconnected from discharge piping.

RECONDITIONING

After a system has been discharged, it is recommended that the local authorized Fenwal distributor be contacted to recondition the system.

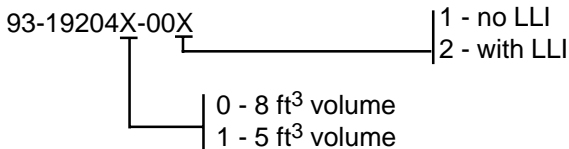
The Reconditioning Kit for this container is P/N 31-193017-001. This does not include the initiator, which must be ordered separately.

SPECIFICATIONS

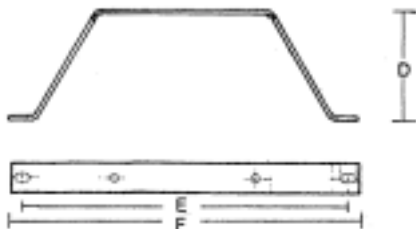
AGENT STORAGE CONTAINERS

Catalog No.:	93-1920040-00X	93-192041-00X
Fill Range:	240-560 lbs.	150-350 lbs.
Height:	58.5"	57"
Diameter:	20"	16"
Internal Volume:	8 ft ³	5ft ³
Empty Weight:	350 lbs.	250 lbs.
Max. Static Load:	910 lbs.	600 lbs.
Temperature Range:	32 to 130°F	
Safety Relief Burst Range:	850 to 1000 psig (burst disc)	
Construction Specification:	DOT-4BW500	
Pressure Switch		
Contact Rating:	2A @ 24VDC	

ORDERING INFORMATION



	8 ft ³	5 ft ³
A	58.5"	57"
B	14.5"	14.5"
C	20"	16"
D	7.25"	5.625"
E	22"	19.25"
F	23.5"	17.75"



MOUNTING BRACKETS

MOUNTING BRACKETS

(Two Required per Cylinder)

29-232334-002 for 8 ft³ cylinders

29-232334-004 for 5 ft³ cylinders

ARCHITECT/ENGINEERING SPECIFICATIONS

The FM-200 shall be stored in vertically mounted cylindrical containers with a 3 inch burst disc type discharge valve. Containers shall be superpressurized with dry nitrogen to 360 psig at 70°F. This container shall be Fenwal P/N 93-19204X-00X.

Containers shall be U.L. Listed and FMRC Approved.

Each agent storage container shall have a fill range of (240 to 560) (150 to 350) lbs. and be of a construction that complies with DOT-4BW500.

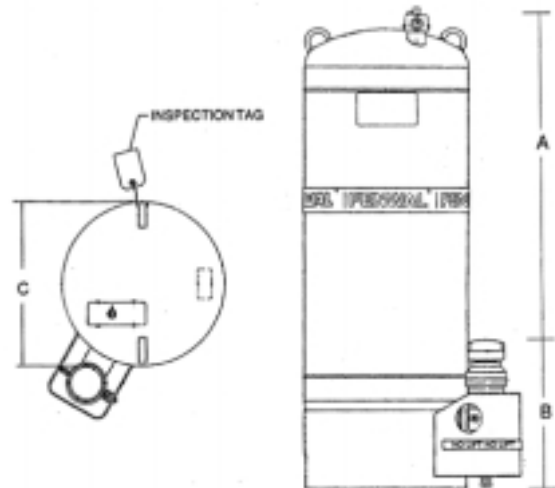
The agent storage container shall incorporate lifting lugs, and overpressure relief, a burst disc type 3" discharge valve, fill port, cable assembly, a pressure gauge, a supervisory Electrical devices connecting leads shall be completely supervised.

A compatible Flex Hose shall be available to facilitate installation and connection to discharge piping.

The container shall be secured in place by two opposing steel mounting brackets. These brackets shall be Fenwal P/N 29-232334-00X.

! WARNING

THE SAFETY CAP SHIPPED WITH THIS CONTAINER SHOULD BE RETAINED AND SECURED TO THE CONTAINER WHENEVER THE DISCHARGE PIPING IS REMOVED FROM A CHARGED CONTAINER.



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