

Piston Flow FM-200*

Features and Benefits

- UL Listed
- DOT 4BW500 FM-200 Container supplied with a separate DOT-3AA Nitrogen Cylinder
- Designed according to NFPA 2001
- Suitable for Class A, Class B and Class C hazards
- Fast, effective fire suppression solution for critical assets
- Safe for use in occupied areas
- Can be operated electrically, pneumatically or manually
- Can address multiple hazards from a single central container bank via Selector Valves

Applications

The HYGOOD Piston Flow FM-200 Clean-Agent System uses FM-200 as the suppression agent. FM-200 can be applied in total flooding fire suppression applications in the following areas:

- Power generation
- Computer suites and data centres
- Offshore oil/gas exploration and production facilities
- Telecommunications centres
- Museums, archives and art galleries
- Gas turbine enclosures

Description

FM-200 is stored as a liquified compressed gas and is discharged into the protected area as a vapour. It is stored in approved DOT 4BW500 containers and is super-pressurised with dry nitrogen to 25 bar @ 21 °C (360 psi @ 70 °F). During discharge, a separate nitrogen container operates to increase system performance.

Systems may be activated mechanically or electrically. Mechanical manual actuation is via a manual actuator attached to the container valve. Electrical actuation is via an electrical actuator fitted to a pilot cylinder.

Approvals and Listings

- UL Listed



Specifications

Environmental data

Ozone Depletion Potential (ODP): 0

Global Warming Potential (GWP): 3220

Atmospheric Life Time (ALT): 34.2 years

Operating temperature (system): 0 °C to 54 °C

Storage temperature (system): 0 °C to 54 °C

Physical properties of FM-200

Chemical structure: $\text{CF}_3\text{CHFCF}_3$

Chemical name: Heptafluoropropane

Molecular weight: 170

Boiling point: -16.40 °C (2.4 °F)

Freezing point: -131 °C (-204 °F)

Critical temperature: 101.7 °C (214 °F)

Critical pressure: 29.1 bar (424 psi)

Critical volume: 274 cc/mole
(0.0280 ft³/lb)

Critical density: 621 kg/m³ (35.77 lb/ft³)

**Saturated vapour density:
@ 20 °C (68 °F)** 31.18 kg/m³ (1.95 lb/ft³)

Ordering Information

Part No.	Description
MFC-P100	115 litre container assembly (DOT)
MFC-P75	89 litre container assembly (DOT)
MFC-P50	63 litre container assembly (DOT)
N68-80	Nitrogen container
314.205.108	Container Label Hygood PFS
MCS-02	Container Strap
MAB-C1	Actuation box c/w Solenoid Cutter, pilot Cylinder Assy
MAC-01	1 litre Actuation cylinder
MSC-01	Solenoid Cutter 24V 1.7A
MNC=06	FM-200 Needle Cylinder
MFH-209	20 mm Flexible hose (900 mm long)
MVA-40	Adaptor
MCT-001	6 mm FM-200 Actuating Tube
MFT-320	6 mm FM-200 Interconnect Tube
MTN-500	6 mm Nitrogen Actuation Tube 500 mm long
MCT-003	6 mm Pressure Switch Actuation Tube
MPS-01	Pressure Switch
MLS-01	Container low pressure switch (optional)
MUE-501	125 mm Union Elbow 50 mm
MFH-50	50 mm Flexible hose
MCV-50	Manifold check valve
MWS-50	Manifold Welding Socket
MSV-40	40 mm Selector Valve
MSV-50	50 mm Selector Valve
MSV-65	65 mm Selector Valve
MSV-80	80 mm Selector Valve
MSV-100	100 mm Selector Valve
MSV-125	125 mm Selector Valve
MSV-150	150 mm Selector Valve
MFN-15-XX	15 mm Nozzle (specify drill size)
MFN-20-XXX	20 mm Nozzle (specify drill size)
MFN-25-XXX	25 mm Nozzle (specify drill size)
MFN-32-XXX	32 mm Nozzle (specify drill size)
MFN-40-XXX	40 mm Nozzle (specify drill size)
MFN-50-XXX	50 mm Nozzle (specify drill size)

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