



FM-200 CLEAN AGENT FIRE SUPPRESSION CYLINDER

HFC-227ea | 24 VDC Electrical Release

The Defender Systems FM-200 Clean Agent Fire Suppression Cylinder is a pressurized fire suppression cylinder designed for use in fixed fire suppression systems protecting enclosed spaces containing electrical, electronic, and other sensitive equipment. The cylinder contains HFC-227ea clean extinguishing agent, commonly known as FM-200, and is available in 3 kg and 6 kg agent capacities (net agent weight).

The cylinder is equipped with an electrically operated release actuator. The actuator receives a 24 VDC electrical release signal from a compatible fire suppression control panel. When the release command is issued, the actuator operates the cylinder valve and allows the extinguishing agent to discharge into the connected piping and nozzle network. The cylinder is intended to be integrated into a complete engineered fire suppression system.

Key Features

3 kg 6 kg Net agent weight	HFC-227ea Clean agent (FM-200)
24 VDC Electrical release signal	Electric Actuator Mounted on valve assembly
Pressure Gauge Cylinder pressure monitoring	Vertical Cylinder Compact configuration



Image for illustration. Actual product may vary.

FM-200 Clean Agent Fire Suppression Cylinder

Technical Data

Product	FM-200 Clean Agent Fire Suppression Cylinder
Brand	DEFENDER SYSTEMS
Extinguishing Agent	HFC-227ea
Common Agent Name	FM-200
Agent Capacity (net agent weight)	3 kg / 6 kg
Release Method	Electrical Actuation
Release Voltage	24 VDC (release signal)
Actuator Type	Electric Release Actuator
Cylinder Material	Steel
Cylinder Color	Red
Pressure Monitoring	Pressure Gauge
Installation Orientation	Vertical

Product Features

- HFC-227ea clean agent
- Residue-free gaseous extinguishing agent
- 3 kg and 6 kg agent capacities
- 24 VDC electrical release
- Integrated electric release actuator
- Pressure gauge for cylinder pressure monitoring
- Compact vertical cylinder configuration
- Designed for integration with engineered fire suppression systems
- Suitable for sensitive electrical and electronic environments

Ordering Information

Model Number	Agent Weight	Description
DEF-FM200-3	3 kg	FM-200 Clean Agent Cylinder – 3 kg
DEF-FM200-6	6 kg	FM-200 Clean Agent Cylinder – 6 kg

Agent weight refers to the net weight of HFC-227ea, not the total cylinder weight.

FM-200 Clean Agent Fire Suppression Cylinder

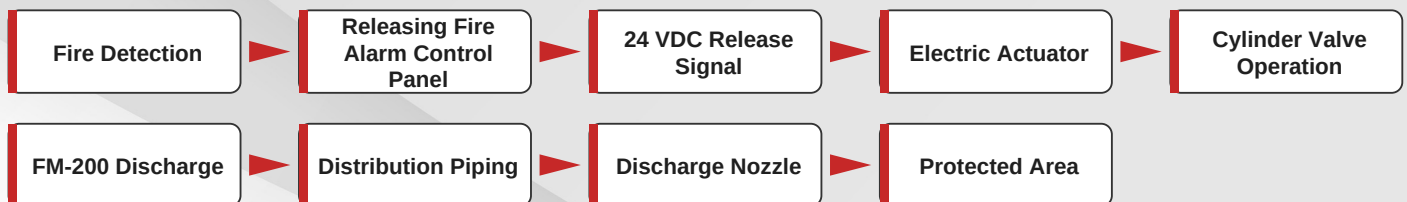
Components / Product Diagram



- 1 Electric release actuator**
Installed on the cylinder valve assembly; operates the valve when the appropriate 24 VDC electrical release signal is received.
- 2 Cylinder valve assembly**
Valve assembly of the cylinder, operated by the actuator to release the agent.
- 3 Pressure gauge**
Cylinder pressure monitoring.
- 4 Discharge outlet / piping connection**
Connection to the distribution piping.
- 5 Steel cylinder**
Storage vessel for the HFC-227ea extinguishing agent.
- 6 Product identification label**
Product identification label.
- 7 Safety pin / tag (where applicable)**
Manual / safety mechanism where applicable.
- 8 Cylinder base (where applicable)**
Cylinder mounting / base structure where applicable.

Illustration based on the product image. Actual configuration may vary.

Basic Operating Sequence



FM-200 Clean Agent Fire Suppression Cylinder

Applications

- Server rooms
- Data and IT equipment rooms
- Telecommunications rooms
- Electrical rooms
- Control rooms
- Electrical control cabinets
- Automation equipment rooms
- Sensitive electronic equipment areas
- Other enclosed spaces requiring clean-agent fire suppression

Applications listed are examples only. Suitability for each application must be assessed by a qualified fire protection designer.

System Integration

The FM-200 cylinder is a component of a complete engineered fire suppression system. It does not constitute a complete fire suppression system on its own. The complete system may include:

- Fire detection devices
- Releasing fire suppression control panel
- Audible and visual warning devices
- Manual release station
- Abort switch
- Electric cylinder actuator
- FM-200 cylinder
- Distribution piping
- Discharge nozzles
- Pressure monitoring
- Other system components as required by the system design

Safety Information

Pressurized container. Do not attempt to remove, disassemble, or service the cylinder valve or actuator while the cylinder is pressurized. Installation, inspection, maintenance, filling, and servicing must be performed by qualified personnel in accordance with the applicable installation requirements and the manufacturer's instructions.

Ensure that personnel evacuation and system safety procedures are established before automatic agent release.

Design / Engineering Disclaimer

Final cylinder quantity, agent quantity, nozzle configuration, piping arrangement, discharge characteristics, and system design shall be determined by a qualified fire protection designer based on the protected enclosure, hazard classification, design concentration, ambient conditions, and applicable standards.