

# Chubb 200 Systems

## Fire Systems

Prevent Fire | Detect Fire | Contain Fire | Escape Fire

### Product

## Chubb 200 Fixed Fire Fighting System



### System Benefits

Chubb 200 systems are filled with HFC227ea (heptafluoropropane) commonly known under the trade names FM200 and FE-227. It has been universally accepted as the most suitable extinguishant to supersede Halon 1301. It gives superior extinguishing performance, is an environmentally friendly agent and is safe to use in manned areas. Stopping the fire in these critical first few seconds can save thousands of pounds worth of damage to equipment and consequent loss of production.

- **Rapid fire knockdown within ten seconds**  
Chubb 200 will completely extinguish Class A, B and C Fires in ten seconds or less - before the fire can develop
- **Minimal oxygen reduction**
- **Safe in occupied and unoccupied areas**  
Personnel safety in the event of discharging the Chubb 200 system in an emergency is safeguarded as the extinguishant has a low toxicity rating.
- **Environmentally safe agent - zero ozone depletion**  
Chubb 200 extinguishant agent encompasses all the parameters of the Montreal Protocol and has zero ozone depletion rating and a short atmospheric life span.
- **Electrical, pneumatic or manual activation system**  
Activation of the Chubb 200 fire system can be carried out electrically, pneumatically, or manually with either local or remote control.
- **Clean agent**  
No particles or oily residues to damage delicate equipment
- **Can be linked in to existing detection control systems**
- **Easily installed and relocated**
- **Can be located within risk area without the need for a separate cylinder room**

# Chubb 200 Systems

## System Design

### Pre - Engineered Systems

These units are pre-engineered with one or more extinguishing nozzles.

A series of these units can be arranged in combination strategically located and operating simultaneously.

- Easily installed and relocated
- Reduction pipework costs
- Minimum cost
- Effective protection

### Engineered Systems

These systems are individually designed for each customer's requirement utilising Chubb's Approved Design Manual and Hydraulic Calculations Package.

- Individually tailored to meet exact requirements
- Efficient use of extinguishant
- Cost effective use of pipework, layout and materials
- Effective protection

## Technical Data

### Physical Properties of Chubb 200

#### Environmental Properties

Ozone Depleting Potential	0
Atmospheric Lifetime	31 - 42 years

#### Extinguishing Concentrations

Class A Hazards	5.8%
Class B Hazards	5.1% - 9.9%

Inerting Concentration (explosion sphere, 70 joules ignition energy)

Methane	8.0%
Propane	11.6%

#### Minimum Design Concentrations

Class A Hazards	7.5%
Class B Hazards	refer to BS ISO 14520.9

Cardiac Sensitation

NOAEL (No Observed Adverse Effect Level)	9%
LOAEL (Lowest Observed Adverse Effect Level)	10.5%
ALC (acute lethal concentration)	>80% at 20% O <sub>2</sub>

#### Physical Properties

Chemical Structure	CF <sub>3</sub> CHFCF <sub>3</sub>
Molecular Weight	170.3
Boiling point	-16.4°C
Freezing Point	-131°C
Vapour Pressure @ 20°C	3.91 bar
Vapour Density @ 20°C	31.176 kg/m <sup>3</sup>
Liquid Density @ 20°C	1407 kg/m <sup>3</sup>
Maximum Recommended Filling Density	1150 kg/m <sup>3</sup>

**Chubb Fire, helping you to:**  
Prevent Fire | Detect Fire | Contain Fire | Escape Fire

call **0800 32 1666** or visit **www.chubb.co.uk**

FPS128/09/03