

## Reliable Marine Fire Safety: Fast & Effective HFC-227ea Solutions

### Our Product Introduction

#### Basic Information

- Place of Origin: Guangzhou, China
- Brand Name: RUIGANG
- Certification: CCS/BV/ISO
- Model Number: QMQ4.2/XXN-RG
- Minimum Order Quantity: 1 set
- Price: Negotiable
- Packaging Details: Plywood outer box with bubble bag or paper
- Delivery Time: 10~15 working days
- Payment Terms: T/T, L/C
- Supply Ability: 500 set per month



#### Product Specification

- Color: Red
- Cylinder Volume: 2/4/8/10/20/30/40/70/90/120/150/180 (L)
- Filling Density:  $\leq 0.95\text{kg/L}$  Welding Cylinders  
 $\leq 1.12\text{kg/L}$  Seamless Cylinders
- Min Operating Pressure (at 3.6 MPa 0°C):
- Max Operating Pressure (at 5.3 MPa Welding Cylinders / 6.7 MPa +50°C): Seamless Cylinders
- Storage Pressure: 4.2 MPa
- System Activation: Electric, Pneumatic, Emergency Manual
- Design Concentration (Volume):  $\leq 10\%$
- Highlight: **Reliable Marine Fire Safety,**  
**Fast Marine Fire Safety,**  
**Effective Marine Fire Safety**

## Product Description

### Marine HFC-227ea Fire Suppression System

#### 1. Scope of Application

The Marine HFC-227ea Fire Suppression System is designed to combat the following types of fires:

##### Electrical Fires

##### Liquid Fires or Fires Involving Meltable Solids

##### Surface Fires on Solids

This system is primarily used in areas on board ships that are prone to fire, such as engine rooms, boiler rooms, battery rooms, and electrical equipment compartments.

#### 2. Features

The Marine HFC-227ea Fire Suppression System is a fully integrated fire protection device that features a pipeline network.

Key characteristics include:

##### Comprehensive functionality

##### Reliable and accurate operation

##### Good sealing performance

The system offers three modes of operation: **pneumatic**, **electrical**, and **emergency manual control**.

#### 3. Main Technical Parameters

Model	QMQ2.5/XXN-RG	QMQ4.2/XXN-RG	QMQ5.6/XXN-RG
Storage Pressure	2.5 MPa	4.2 MPa	5.6 MPa
Max Operating Pressure (at +50°C)	4.2 MPa	5.3 MPa	6.7 MPa
Min Operating Pressure (at 0°C)	2.0 MPa	3.6 MPa	4.6 MPa
Filling Density	≤1.12 kg/L	≤0.95 kg/L	≤1.12 kg/L
Cylinder Volume	HFC-227ea Cylinders (L): 2/4/8/10/20/30/40/70/90/120/150/180	Nitrogen Starting Cylinder (L): 4	
Design Concentration (Volume)	≤10%		
System Activation	Electric, Pneumatic, Emergency Manual		
Notes	"XX" in the model indicates the cylinder volume		

#### 4. System Components and Working Principle

##### 4.1 Components

The HFC-227ea Fire Suppression System consists of the following key components:

Cylinders  
Cylinder Valves  
Discharge Hoses  
One-Way Liquid Valve  
Collection Pipes  
Pneumatic Control Valves  
Remote Discharge Stations  
Pipeline and Nozzles  
Electrical Alarm Boxes  
Visual and Audio Alarms

The system can be activated using either pneumatic or electrical methods, with emergency manual control as a backup.

##### 4.2 Working Principle

The system operates by releasing HFC-227ea, a clean, efficient fire extinguishing agent, to suppress fires. The release can be triggered through either pneumatic or electrical means, ensuring the system is versatile and responsive. Once activated, the system discharges the fire suppressant via strategically placed nozzles, targeting the source of the fire with high precision.

#### 5. HFC-227ea Cylinders

The HFC-227ea cylinders are pressure vessels designed to store the fire extinguishing agent. These cylinders are available in various volumes and are engineered for high performance under pressure.

Cylinder Volume (L)	Cylinder Type	Max Operating Pressure	Thread Connection
2	Seamless Steel	8 MPa	PZ27.8
4	Seamless Steel	8 MPa	PZ27.8
8	Seamless Steel	8 MPa	PZ27.8
10	Seamless Steel	8 MPa	PZ39
20	Seamless Steel	8 MPa	PZ39
30	Seamless Steel	8 MPa	PZ39
40	Seamless Steel	8 MPa	PZ39
70	Seamless Steel	8 MPa	PZ56
90	Welded Steel	5.6 MPa	PZ56
120	Welded Steel	5.6 MPa	M64X2
150	Welded Steel	5.6 MPa	M80X2

Cylinder Volume (L)	Cylinder Type	Max Operating Pressure	Thread Connection
180	Welded Steel	5.6 MPa	M80X2

This system ensures high safety standards for fire protection in marine environments, offering advanced technology and versatility to effectively suppress fires and minimize damage to critical onboard areas.



**Guangzhou Ruigang Fire-Fighting Equipment Co., Ltd.**



+86 18124226119



18124226119@139.com



firefm200.com

No. 2, Zhongwei Road, Dongyong Town, Nansha District, Guangzhou