# Efficient and Safe Marine CO2 Fire Extinguishers — Protecting Your Vessel and Crew Safety

Our Product Introduction

## Basic Information

- Place of Origin: Guangzhou,Guangdong,China
- Brand Name: RUIGANG
- Certification: CCS BV
- Model Number: RG-68/40/20/12/10/8
- Minimum Order Quantity: 1set
- Price: negotiable
- Packaging Details: Plywood outer box with bubble bag or paper
- Delivery Time: 15~20 worke days
- Payment Terms: T/T,L/C
- Supply Ability: 500 sets/ month


## Product Specification

- Actuating Method: Pneumatic,manual
- Nominal Pressure: 14.7MPa
- The CO2 Cylinder Volume: 8L/10L/12L/20L/40L/68L
- N2 Pilot Cylinder: 4L
- The CO2 Cylinder Filling Rate: ≤0.67KG/L
- Hydraulic Test Pressure: 24.5MPa
- Propellant Gas: N2
- Activation Gas Source Pressure: 5.9MPa
- Discharge Delay Time: 20~40s
- Diaphragm Burst Pressure: 18.6±1MPa
- Highlight: **Efficient Marine CO2 Fire Extinguishers**, **Safe Marine CO2 Fire Extinguishers**, **Vessel Marine CO2 Fire Extinguishers**



Our Product Introduc

## Product Description

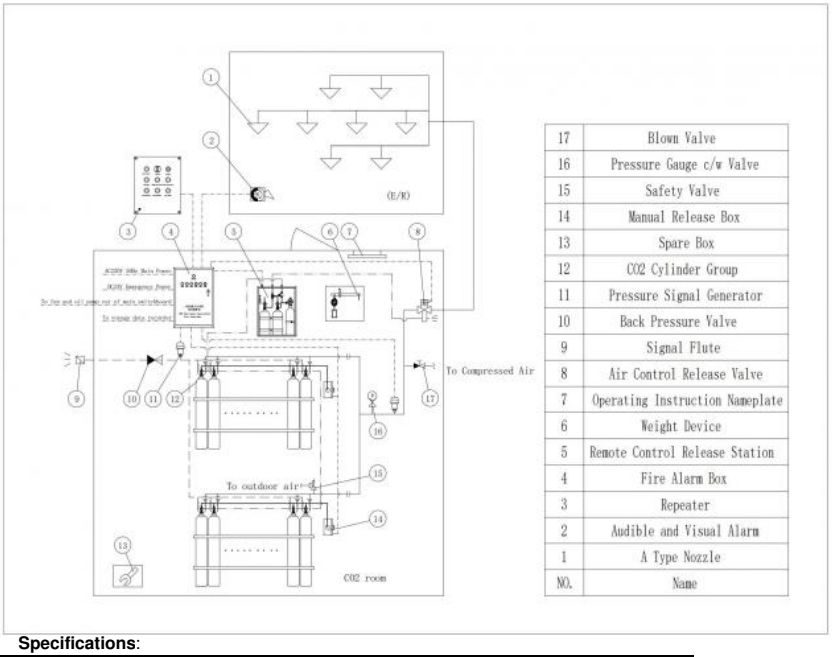
**Marine $CO_2$ Fire Extinguishing System Product Introduction**

The shipboard $CO_2$ fire extinguishing system is a common and effective firefighting device widely used in critical areas of ships, such as engine rooms, cargo holds, and electronic rooms. This system works by releasing carbon dioxide gas to reduce the oxygen concentration in the fire-affected area, thereby extinguishing the fire. Since $CO_2$ can quickly and efficiently suppress flames without leaving any residue, it is widely used in enclosed spaces for fire suppression.

1. **System Principle**:The $CO_2$ fire extinguishing system rapidly releases high - pressure liquid $CO_2$ to create a high - concentration gas environment in the protected area, reducing oxygen levels (asphyxiation) and absorbing heat (cooling), thereby interrupting the combustion process. Its non - conductive and residue - free properties make it ideal for enclosed spaces or areas with sensitive equipment.

2. **System Components**:

1. **$CO_2$ Cylinders**: Store high - pressure liquid $CO_2$, with a capacity of 8L - 68L and a pressure resistance of 24.5MPa.
2. **Cylinder Valve & Discharge Valve**: Control the release of $CO_2$, supporting both pneumatic and manual activation.
3. **Remote Control Station**: Contains a nitrogen - driven bottle (4L, 5.9MPa), pressure gauge, timer, etc., enabling precise area control.
4. **Fire Alarm Controller**: Interacts with smoke/temperature detectors to trigger automatic fire extinguishing.
5. **Distribution Pipes & Nozzles**: Optimally designed to ensure uniform coverage of the protected area by $CO_2$.




3.**Technical Specifications**:

| | | |
|---|---|---|
| Model | RG-68/40/20/12/10/8 | RGM-68/40/20/12/10/8 |
| Actuating Method | Pneumatic or Manual | Manual |
| Nominal Pressure | 14.7 MPa | |
| Cylinder Capacity | CO2 Cylinder 8L/10L/12L/20L/40L/68L | |
| N2 Pilot Cylinder | 4L | / |
| CO2 Cylinder Filling Rate | ≤0.67 kg/l | |
| Hydraulic Test Pressure | 24.5 MPa | |
| Diaphragm Burst Pressure | 18.6±1 MPa | |
| Discharge Delay Time | Pneumatic: 20~40s | Manual: 20~40s |
| Propellant Gas | Gas: N2 | |
| Gas Pressure | 5.9MPa | |

## Remote control release box


| Technical Parameters | | | | |
|---|---|---|---|---|
| **Volume per cylinder** | **The number of cylinder** | **Filling gas** | **Filling pressure** | **Time delay** |
| 4L | 2 | N2 | 5.9MPa | 20~40s |

## Air control discharge valve

| Technical Parameters | | | |
|---|---|---|---|
| **The connection form** | **Nomimnal pressure (MPa)** | **Nominnal diameter (mm)** | **Applicable medium** |
| Thread,flange | 14.7 | DN25~DN32 | $CO_2$ |
| The flange | 14.7 | DN40~DN125 | $CO_2$ |

Discharge valve

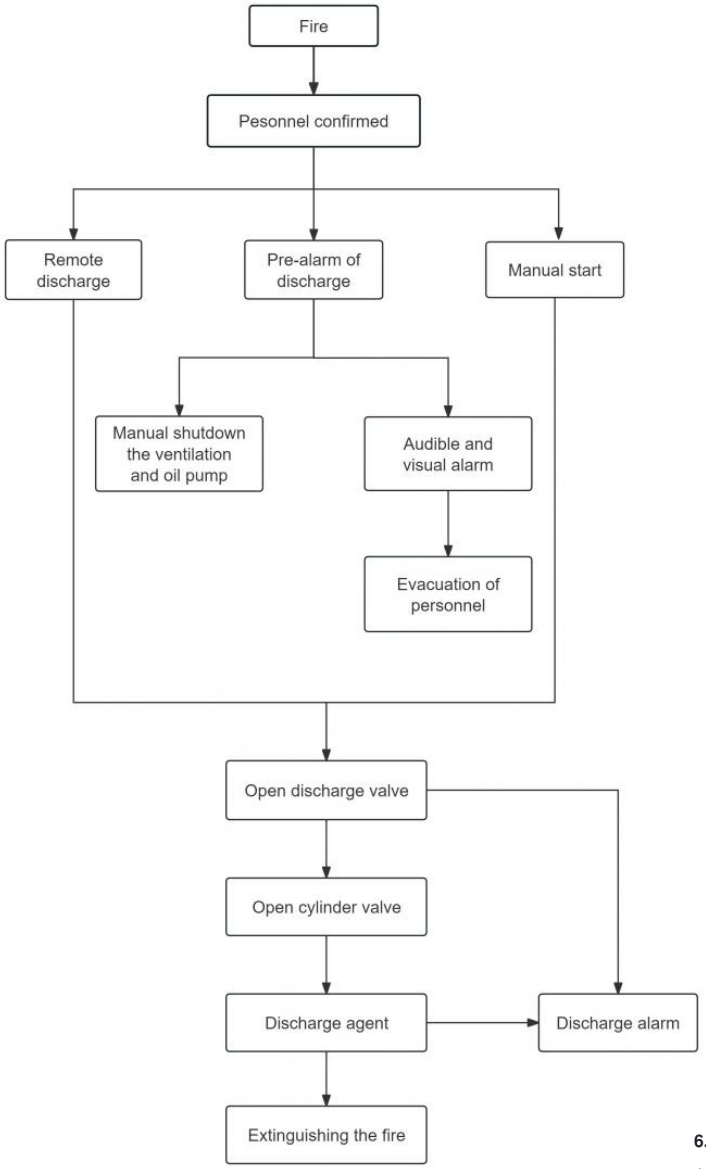
| Technical Parameters | | |
|---|---|---|
| **Nomimnal pressure (MPa)** | **Nominnal diameter (mm)** | **Applicable medium** |
| 14.7 | DN15~DN65 | $CO_2$ |

**4. Applications**:

1. Engine Rooms & Equipment Spaces
2. Cargo Tanks & Pump Rooms
3. Paint Rooms & Generator Rooms
4. Offshore Platform Enclosed Areas

**5. Workflow** :

5. Fire alarm triggers the system.
6. Remote station activates delay (20 - 40s) with evacuation alarms.
7. $N_2$ pilot gas opens $CO_2$ cylinders, releasing atomized $CO_2$.
8. Fire suppression within 10 - 60s, preventing reignition.




**6. Key Advantages**:

**1. High Efficiency**: Rapid flame suppression with minimal thermal damage.

**2. Zero Residue**: Safe for sensitive equipment and eco - friendly.

**3. Cost - Effective**: Low maintenance, lifespan >15 years.

**4. Modular Design**: Independent control for multiple zones.

**7. Manufacturing Standards**:

9. China Classification Society (CCS) "Rules for the Classification of Sea-going Steel Ships" (2021) and its amendments, Chapter 2, Chapter 6
10. Chapter 5 of the International Code for Fire Safety Systems, as amended by MSC.206(81), MSC.339(91)
11. Maritime Safety Administration of the People's Republic of China "Technical Rules for the Statutory Survey of Domestic Sea-going Vessels" (2020), Chapter 4, Section 2-2
12. Maritime Safety Administration of the People's Republic of China "Technical Rules for Statutory Inspection of Inland River Vessels" (2019), Chapter 5, Section 3
13. Maritime Safety Administration of the People's Republic of China "Technical Rules for Statutory Inspection of Ocean-going Vessels" (2019), Chapter 9, Section 6
14. CB/T 3294-2020 Marine CO2 Fire Extinguishing Equipment

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

+86 18124226119

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

18124226119@139.com