



## Piston Flow Fire System Clean Gas Fire Extinguisher Device IG541

### Our Product Introduction

#### Basic Information

- Place of Origin: China
- Brand Name: Guangzhou Xinlin Firefighting Equipment Co., Ltd.
- Certification: ISO9001, CE, QMS, CCCF, CNAS
- Model Number: DMP80/20-XL-304
- Minimum Order Quantity: 5 set system
- Price: negotiation
- Packaging Details: Plywood outer box with bubble bag or paper
- Delivery Time: 10-15 working days after payment or receipt of L/C
- Payment Terms: L/C, D/A, D/P, T/T, Western Union, MoneyGram
- Supply Ability: 150000 sets per week



#### Product Specification

- Starting Mode: Automatic, Electrical Manual, Mechanical Emergency
- Feature: Clean Gas And Environmental Friendly
- Body Material: Steel Cylinder
- Pressure: 20MPa
- Type: Automatic Fire Extinguisher
- Object: Class A, B, C, E Fires
- High Light: DMP80/20-XL-304 Fire Suppression Equipment
- Highlight: **IG541 Piston Flow Fire System, clean gas Piston Flow Fire System, Device Piston Flow Fire System**

## Product Description

### Piston Flow Fire System clean gas fire extinguisher Device IG541

#### Product description

The IG541 gas fire extinguishing system is an efficient, environmentally friendly and relatively safe fire extinguishing system for the human body. It is widely used in the protection areas of various important facilities and high-value assets. This system occupies an important position in the field of modern fire safety with its unique fire extinguishing mechanism and excellent environmental protection characteristics.

#### Fire extinguishing agent composition and characteristics

IG541 fire extinguishing agent is a mixture of three natural gases present in the atmosphere - nitrogen (N<sub>2</sub>), argon (Ar) and carbon dioxide (CO<sub>2</sub>) in precise proportions of 52%, 40% and 8%. This mixed gas has the following salient features:

1. Colorless, odorless, non-toxic and non-conductive\*\*, ensuring that the impact on personal safety and sensitive equipment is minimized during the fire extinguishing process.
2. It has excellent environmental protection performance because its ozone depletion potential (ODP) is zero and greenhouse effect potential (GWP) is also zero, and it is harmless to the atmospheric environment after release.
3. Fire extinguishing principle: The IG541 fire extinguishing system mainly relies on the suffocation fire extinguishing principle. By reducing the oxygen concentration in the protective zone to about 12.5%, the fire source cannot obtain enough oxygen to support combustion, thereby extinguishing the fire.

#### System composition

The IG541 gas fire extinguishing system mainly consists of two parts: alarm control subsystem and pipe network subsystem. The alarm control subsystem includes gas fire extinguishing controller, emergency start and stop button, manual automatic transfer switch, fire sound and light alarm, gas release alarm and various fire detectors (such as smoke and temperature detectors, etc.). To monitor fire conditions and trigger fire extinguishing procedures.

The pipe network subsystem\*\* consists of fire extinguishing agent containers, mechanical and automatic starting devices, high-pressure hoses, manifolds, safety valves, check valves, selector valves, pressure switches, pipes and nozzles, etc. to ensure that the fire extinguishing agent can quickly and effectively transport it to the designated protection area when a fire occurs.

#### Working principle and control method

Once the fire is sensed by the detector, the system starts the response program according to the preset control method:

**Automatic control:** After the system receives the fire alarm signal, after a certain delay (usually 30 seconds to provide time for personnel to evacuate), the system automatically activates the corresponding fire extinguishing device and releases IG541 fire extinguishing agent to the protective area.

**Manual control:** In an emergency, the system can be manually started to extinguish the fire through the gas fire extinguishing controller or the emergency start button at the entrance to the protective zone.

**Mechanical emergency operation\*\*:** If the electronic control system fails, emergency fire extinguishing can also be started mechanically.

#### Scenes to be used

Due to the safety and environmental friendliness of the IG541 gas fire extinguishing system, it is suitable for a variety of scenarios:

1. Data centers, communication equipment rooms, libraries, archives and other places that have strict protection requirements for precision electronic equipment and important paper documents.
2. Storage areas for precious artworks and historical relics such as museums and art exhibition halls.
3. Important fire prevention areas in distribution rooms, generator rooms and other electrical facilities.
4. Medical and scientific research laboratories and other places that have high requirements for clean environment and personnel safety.
5. Other special areas where it is not suitable to use water to extinguish fires or where the spread of fire must be quickly suppressed and damage to the surrounding environment caused by the fire extinguishing process must be minimized.

In short, the IG541 gas fire extinguishing system has become an ideal fire extinguishing solution for many key facilities and important places with its efficient fire extinguishing capabilities, good environmental protection characteristics and low risk to personnel.

#### Technical parameter

Model	DMP80/20-XL-304
Agent	N <sub>2</sub> , Ar, CO <sub>2</sub> (proportion 52%, 40%, 8%)
Executive standards	GB25972-2010
Working pressure (20°C)	15MPa

Working pressure temperature	0~50°C
Filling density (20°C)	211.15kg/M <sup>3</sup>
Maximum working pressure(50°C)	17.2MPa
Fire extinguishing methods	Total flooding fire extinguishing
Starting Method	Automatic, pneumatic, and mechanical emergency operations
Spraying time	≤60S
Drive bottle group pressure	6Mpa
Application place	Computer room, communication room, control room, valuable equipment room.cultural relics collection library and archive room, data storage room, generator room, transformer room, substation circuit breaker, circulating equipment hydraulic equipment, drying equipment, dust removal equipment painting production line.etc

### Company profile

Guangzhou Xinlin Firefighting Equipment Co., Ltd. is located in Guangzhou, a vital city connecting China to the world, characterized by its convenient transportation and picturesque environment. We are a manufacturing company with a professional and seasoned team of employees, consisting of solution design experts, technical installation specialists, quality inspection professionals, and after-sales service teams, dedicated to the research and development of HFC-227ea (FM200), IG541, IG100, and Novec 1230 products.

Currently, we offer a range of commonly used fire suppression systems, including FM200 fire suppression systems, cabinet-style FM200 fire suppression systems, fully automatic fire extinguisher (hanging), portable fire extinguisher, IG541 fire suppression systems, IG100 fire suppression systems, fire detection tube fire suppression systems, as well as automatic fire extinguishing pipelines.

With high quality products, perfect service and good reputation, the company has won wide praise from customers at home and abroad.

### Why choose us

- Efficient management system
- More than 10 years of experience in gas fire fighting industry
- Advanced equipment and professional engineers
- We provide 8×6 hr technical support and after-sales service

### Frequently Asked Questions

Q1: Are you a manufacturer or a trading company?

A1: We are the manufacturer.

Q2: Do you have OEM orders?

A2: Yes, according to the customer's requirements.

Q3: Where is your factory located? How do I get there?

A3: Our factory is located in Dongzhou Industrial Park, Xintang Town, Zengcheng District, Guangzhou City, Guangdong Province, China.  
You are very welcome to visit our factory.



**Guangzhou Xinlin Fire Fighting Equipment Co., Ltd.**



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