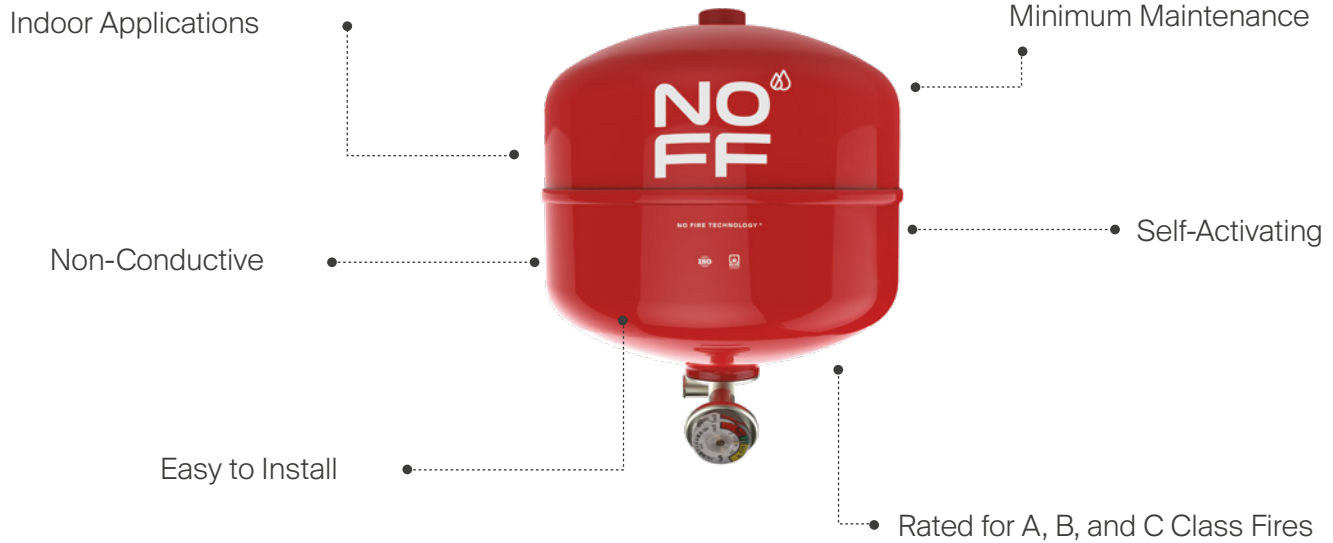


Fixed Dry Chemical Powder Stand-Alone Fire Suppression Unit

TECHNICAL DATASHEET



We protect what matters the most

OVERVIEW

Fixed Dry Chemical Powder Stand-Alone Fire Suppression Unit is an innovative fire extinguishing device designed to protect specific machinery, indoor areas, or entire enclosed spaces, which brings low-cost and easy-to-configure installations in the field because of lack of electrical connections. Fixed Dry Chemical Powder Stand-Alone Fire Suppression Unit detects and extinguishes fires in indoors, partly sheltered, or enclosed spaces, preventing the spread of fire.

Fixed Dry Powder Stand-Alone Fire Suppression Unit provides an easy, simple, and fast mean of fire protection of any area or enclosed space as it does not require an electrical current or power supply to work offering savings in other materials, therefore, it is a very versatile device that can be installed anywhere at a very low cost.

This Stand-Alone Unit makes it possible to fire-protect a full range of facilities and important machinery with a small financial investment compared to old-style water-based fire protection systems. Fixed Dry Chemical Stand-Alone Fire Suppression Unit extinguishes ABC-type fires easily utilizing a special superfine dry chemical powder formulated by NOFF that is 10 times more effective than conventional dry chemical powder utilized in traditional portable fire extinguishers.

This NOFF fire suppression unit uses a multipurpose superfine dry chemical powder as extinguishing agent that is effective on fires involving ordinary combustible (such as wood or paper, and fires involving flammable liquids), which is intended for the use in enclosed spaces or local applications. It is a highly efficient extinguishing agent that is electrically non-conductive and non-corrosive if prompt clean-up is conducted as soon as possible. The NOFF stand-alone unit uses a thermal sprinkler head as mean of activation, this technology has been in the market for more than 100 years, but it is so reliable and safe that it is still being used.



STANDARD FEATURES

- Rapid extinguishing
- Indoors application
- Easy Installation
- Stand-alone activation
- Multipurpose superfine dry chemical powder as extinguishing agent.
- Variety of models available.
- Reliable integrated heat sensitive glass bulb.
- Minimum Maintenance.
- Self-activating.
- No hazard to human health
- Electrically non-conductive
- No damage to equipment and materials.
- High-safety for people.
- 25 years Lifetime.

APPLICATIONS

Fire suppression today is an important part of a growing number of life safety installations and a mean not only to protect investments, high-tech machinery, and important equipment but also minimize business interruption saving millions of dollars in down-time and loss of production. Nowadays, building owners are looking to fire suppression as a means of protecting their property and assets. Below, you will find a list of application examples for the Fixed Dry Chemical Stand-Alone Fire Suppression Unit product line:

- Warehouses.
- Flammable and combustible liquids storage areas.
- Electrical Substations.
- Manufacturing.
- Airports.
- Telecommunications facilities.
- Workshops.
- Mechanical Rooms (HVAC, Air compressors, boilers, etc).
- Laboratories and hospitals.
- High-valued or critical machinery: CNC, Hydraulic presses, injection molding machines.
- Museums.
- Libraries.
- Colleges and Universities.
- Restaurants.
- Shopping malls.
- Stores.

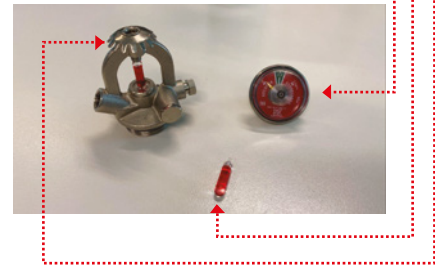
OPERATION

The Fixed Dry Chemical Stand-Alone Fire Suppression Unit is a stand-alone and self-activating device. Each unit is designed to discharge automatically by means of a thermal sprinkler head rated at 155°F (68°C). The temperature of the sprinkler head is fixed. When the temperature rises to activate the Fire Suppression unit, the sprinkler head opens automatically and dispenses the entire multipurpose superfine dry chemical powder in less than 10 seconds onto the fire and throughout the hazard area or enclosure being protected. An expellant gas is used as medium to discharge the extinguishing agent from the unit. When discharged, the superfine dry chemical acts as a layer between the oxygen and the fuel, thus suppressing the fire. It also poses no hazard to the human health.

Each Fire Suppression unit has no manual means of actuation and discharges extinguishing agent upon thermal actuation, it is intended for use in indoors: enclosed (total flooding applications) or partly sheltered open areas (Local applications: spot protection).

PARTS OF THE FIXED DRY CHEMICAL STAND-ALONE FIRE SUPPRESSION UNIT

- Pendent Spray nozzle (brass).
- Thermo bulb rated at 155°F (glass).
- Pressure gauge (metal and plastic).
- Cylinder (carbon steel).
- Superfine dry chemical powder (Extinguishing agent).



A) LOCAL APPLICATION SYSTEMS

This type of design applies to discharge dry chemical powder directly onto the hazard (fire), indoors or partly sheltered open areas. When multiple Stand-Alone Fire Suppression units are protecting the same area, the area shall be divided into sections so that each section contains a unit that does not exceed the area limitations for the unit.

B) TOTAL FLOODING SYSTEMS

This type of design applies to discharge dry chemical powder into an enclosure surrounding the hazard. When multiple Stand-Alone Fire Suppression units are protecting the same enclosure, the enclosure shall be divided into sections or modules so that each section contains a unit that does not exceed the volume limitations for the unit.

DESIGN

For design purposes, we recommend you contact the NOFF technical staff so that they can assist you in the best way. NOFF technical staff will provide you with the necessary official training seminars and tools so that you can propose solutions using The Fixed Dry Chemical Stand-Alone Fire Suppression Unit in accordance with world-wide recognized fire protection standards such as **NFPA 17, Standard for Dry Chemical Extinguishing Systems.**



WIRING

This Fixed Stand-Alone Fire Suppression Unit do not need to be fed by a power supply; therefore, an electrical current is not need it to activate the unit.

INSTALLATION

This Fixed Fire Suppression Unit should be installed only by trained personnel which have been accredited the official NOFF training seminars and courses. Before proceeding with the installation of this Fixed Fire Suppression Unit make sure the installers are using adequate personal protective equipment (PPE) and follow the safety procedures and/or guidelines published in the facility.

NOFF recommends the installers to follow the next steps:

1. The Unit must be installed at roof level, in the highest possible location.
2. The Unit must be hung vertically with the sprinkler deflector pointed downward.
3. The unit is to be used in areas where the temperature falls between 14° and 122° Fahrenheit (-10° to 50° Celsius).
4. The unit is to be mounted or attached to a secure ceiling, for example, wood, metal, or concrete. Insure there are no obstructions to the free flow operations of the sprinkler head and disbursement of the extinguishment within the enclosure.
5. Do not mount the unit on suspended ceiling or loose tiles.
6. The unit must be installed in a vertical position, at an angle of 90 °.
7. The unit must be centered within the enclosure/hazard area which it protects.
8. The tools required to install the unit are drill, open-jaw wrenches of 3/4" (19mm) or an adjustable wrench, and a 5/8" x 5" drill bit (adequate for the ceiling type: wood, concrete, metal).

For more information regarding assembly and installation, we strongly recommend you request the Fixed Dry Chemical Stand-Alone Fire Extinguishing Unit's manual to the NOFF technical staff.

ACCESSORIES

Ceiling Hook

The Unit comes with a ceiling hook provided with a 1/2"- 2-3/4" expansion bolt (M12x70mm) for concrete. A nut, and washer are also included. A metal ring is also provided to connect the device. This technique is a very good option in case of relocations because offers the advantage of a quick and easy installation.



Fixed Plate

If it is needed a more robust and secure installation to the ceiling, then you can choose for the fixed plate. The Fixed plate comes as a complete set with two 3/8"-1-15/16" expansion bolts (M10x50mm), nut, and washer.



SPECIFICATIONS

COVERAGE AREA:

a) Local Applications (spot protection): Each unit shall be installed at ceiling level and centered above the hazard which it protects (Indoor applications only).

Model	Max. Area / sq.ft. (m2)	Max. Height / ft. (m)
FZX-ACT2/1.2-GT	64.58 (6)	11.48 (3.5)
FZX-ACT4/1.2-GT	107.63 (10)	11.48 (3.5)
FZX-ACT6/1.2-GT	150.69 (14)	16.4 (5)
FZX-ACT8/1.2-GT	193.75 (18)	16.4 (5)
FZX-ACT10/1.2-GT	236.8 (22)	16.4 (5)

b) Total Flooding Applications: Each unit shall be installed at ceiling level and centered within the enclosure which it protects.

Model	Max. Volume / Cubic ft. (m3)	Max. Height / ft. (m)
FZX-ACT2/1.2-GT	565.03 (16)	11.48 (3.5)
FZX-ACT4/1.2-GT	1130.06 (32)	11.48 (3.5)
FZX-ACT6/1.2-GT	1836.36 (52)	16.4 (5)
FZX-ACT8/1.2-GT	2330.76 (66)	16.4 (5)
FZX-ACT10/1.2-GT	2648.6 (75)	16.4 (5)

PRESSURE:

Propellant	High Purity Compressed Dry
Operating pressure (21°C)	174 psi / 12 bar / 1.2 MPa
Cylinder Test Pressure	304 psi / 21 bar / 2.1 MPa

ACTIVATION TEMPERATURE: SPRINKLER TEMPERATURE CLASSIFICATION IS ORDINARY PER NFPA 13.

Celsius	Fahrenheit	Bulb Color
68°	155°	Red

Working Temperature Range:	
14°F	122°F
-10°C	50°C



EXTINGUISHING AGENT QUANTITY:

MODEL	Quantity / lb (kg)
FZX-ACT2/1.2-GT	4.4 (2)
FZX-ACT4/1.2-GT	8.8 (4)
FZX-ACT6/1.2-GT	13.2 (6)
FZX-ACT8/1.2-GT	17.6 (8)
FZX-ACT10/1.2-GT	22 (10)

PHYSICAL DIMENSIONS CYLINDER:



MODEL	Diameter / in (cm)	Height with Hook / in (cm)	Height with Plate / in (cm)
FZX-ACT2/1.2-GT	10.62 (27)	12.2 (31)	11.41 (29)
FZX-ACT4/1.2-GT	11.61 (29.5)	12.4 (31.5)	11.81 (30)
FZX-ACT6/1.2-GT	11.61 (29.5)	12.99 (33)	13.58 (34.5)
FZX-ACT8/1.2-GT	14.37 (36.5)	14.17 (36)	14.56 (37)
FZX-ACT10/1.2-GT	13.77 (35)	16.53 (42)	17.12 (43.5)

CERTIFICATIONS

a) Product Certifications:

	Organization	Underwriters Laboratories
	Organization Type	Certification Organization
	Country	International
	Reference	UL 1254 Pre-Engineering Dry & Wet Chemical Extinguishing System Units
	Status	In-Progress (Estimated for 2023)
	Organization	China Certification Center for Fire Products (CCCF)
	Organization Type	Certification Organization
	Country	CHINA
	Reference	GA 602-2013 Dry Powder Fire Extinguishing Equipment

b) Components Certifications:

	Organization	Underwriters Laboratories
	Organization Type	Certification Organization
	Country	International
	Component /Reference	Thermo-Bulb / UL-199 Automatic Sprinklers
	Component /Reference	Pressure Gauge / UL-299 Dry Chemical Fire Extinguishers
	Organization	ANCE
	Organization Type	Certification Organization
	Country	México
	Component /Reference	Pressure Gauge / NOM-045-SCFI-2010



ORDERING INFORMATION

Model	Description	Ship Weight lb (kg)
110004	Fixed Dry Chemical Stand-Alone Fire Suppression Unit 2kg	15.43 (7)
110005	Fixed Dry Chemical Stand-Alone Fire Suppression Unit 4kg	22.04 (10.0)
110006	Fixed Dry Chemical Stand-Alone Fire Suppression Unit 6kg	29.32 (13.3)
110007	Fixed Dry Chemical Stand-Alone Fire Suppression Unit 8kg	35.27 (16.0)
110008	Fixed Dry Chemical Stand-Alone Fire Suppression Unit 10kg	44.09 (20.0)

Fixed Dry Chemical Stand-Alone Fire Suppression Unit is considered a dangerous good. Compressed N2 in the cylinders is classified as a “dangerous good in limited quantities” group II as per UN 1044 Transport Hazard Class 2.2.

Contact us:

Email: noffventas@noffire.com
Web: www.noffire.com
T: +52 55-1540-9033

NOFF is a Global Lab Corp brand.
2330 Ponce de Leon Blvd,
Coral Gables, FL 33134, USA.

Global Lab Corp 2021. All rights reserved.

