



# HOW A FIRE EXTINGUISHER WORKS

Fire is a very rapid chemical reaction between oxygen and a combustible material, which results in the release of heat, light, flames, and smoke.

For fire to exist, the following four elements must be present at the same time:

- Enough **oxygen** to sustain combustion,
- Enough **heat** to raise the material to its ignition temperature,
- Some sort of **fuel** or combustible material, and
- The chemical reaction that is fire.



Portable fire extinguishers apply an extinguishing agent that will either cool burning fuel, displace or remove oxygen, or stop the chemical reaction so a fire cannot continue to burn. When the handle of an extinguisher is compressed, it opens an inner canister of high-pressure gas that forces the extinguishing agent from the main cylinder through a siphon tube and out the nozzle. A fire extinguisher works much like a can of hair spray.

**Fireguard** produces various types of Fire Extinguishers such as Powder, Co2, Water & Foam according to the latest EN standards

Dry chemical extinguishers put out fires by coating the fuel with a thin layer of fire retardant powder, separating the fuel from the oxygen. The powder also works to interrupt the chemical reaction, which makes these extinguishers extremely effective.

Dry chemical extinguishers are usually rated for class B and C fires and may be marked multiple purpose for use in A, B, and C fires. They contain an extinguishing agent and use a compressed, non-flammable gas as a propellant.

ABC fire extinguishers are red in color, and range in size from 1kg to 12kg.

**Applications:** Public hallways, laboratories, mechanical rooms, break rooms, chemical storage areas, offices, commercial vehicles, and other areas with flammable liquids.



Wood, Paper, Textiles, Fabric



Butane, Methane, Propane



Petrol, Diesel, Oils



Computers, Switchgear, Fax



Optional : Plastic base

Model	FGFP1	FGFP2	FGP4R	FGFP6
Capacity	1kg	2kg	4kg	6kg
Fire Rating	8A 34B	13A 55B	27A 113B	34A 183B
Test Pressure (Bar)	30	30	30	30
Working Pressure (Bar)	15	15	15	15
Temp Range	-30°C to +60°C	-30°C to +60°C	-30°C to +60°C	-30°C to +60°C
Discharge Time (Sec)	7	11	13	15
Total Weight (kg)	2.25	3.5	6.5	9.5
Height (mm)	277	306.5	359	427
Cylinder Dia (mm)	85	110	138	160
Extinguishing Agent	ABC 40 Dry Powder	ABC 40 Dry Powder	ABC 40 Dry Powder	ABC40 Dry Powder
Packing Dimensions(mm)	275x205x360/6pcs	345x260x390/6pcs	295x150x470/2pcs	170x170x535

Model	FGFP9	FGFP12
Capacity	9kg	12kg
Fire Rating	43A 183B	55A 233B
Test Pressure (Bar)	30	30
Working Pressure (Bar)	15	15
Temp Range	-30°C to +60°C	-30°C to +60°C
Discharge Time (Sec)	18	15
Total Weight (kg)	13.2	16.8
Height (mm)	453	503
Cylinder Dia (mm)	185	190
Extinguishing Agent	ABC Powder	ABC Powder
Packing Dimensions(mm)	195x190x560	200x200x610

Fireguard dry powder fire extinguishers are a highly versatile Class A, B & C fire-fighting suitable for most risks. In addition to dealing with electrical hazards, flammable liquids and gases, powder is also effective for vehicle fires. All Extinguishers are tested and certified to EN3 standards.

**Features**

- High-grade brass head assembly ensures reliability and efficiency
- Working pressure 14 bar for maximum fire fighting performance gives greater application
- Long drawn high grade rolled steel body shell for optimum strength with Argon welding process.
- 23mm diaphragm pressure gauge provides a very accurate indication of extinguisher's pressure status and suction tube is PVC made.
- Polyester external coating and oven baked adds extra protection to withstand extreme temperatures
- Simple seize and squeeze method of operation combined with controllable discharge for maximum fire-fighting performance with a safety pin.