# DARIT®

Original Equipment Manufacturer (OEM)
Safety Solutions



## What is a Fire Extinguisher?

Fire extinguishers are used to extinguish or control small fires. They are not meant to fight large or growing fires. Only attempt to fight a fire if the flames are shorter than you, and if the flames are contained in a small space.

There are two types of fire extinguishers: those with internal stored pressure and those where a cartridge system is used to deliver pressure.

Both variants work on the basic principle, when activated the extinguishing agent is released in a rapid burst, removing any of the three basic elements needed for combustion—oxygen, heat or fuel.

Portable fire extinguishers can be carried by a person to the fire and are widely used in buildings. Mobile units are significantly larger and mounted on a trolley with wheels. They are used for Industrial and outdoor applications.

## Why do Buildings have Fire Extinguishers?

National Building Code of India Part 4 detail the mandatory requirement for fire extinguishers to be provided in various classes of buildings.

## **Types of Fire Fuel**

Fuels are divided into six classes. This method of categorising fuels into classes assists you to identify of the type of extinguishing agent required to extinguish a particular class of fire.

Class A: Combustible materials.

Class B: Flammable liquids.

Class C: Flammable gases.

Class D: Flammable metals.

Class E: Electrically energised equipment. Class F: Cooking oil and fats (kitchen fires).

## **Types of Fire Extinguishers**

#### **Carbon Dioxide**

CO2 extinguishes fire by displacing oxygen. They are referred to as clean agents because they do not leave any residue after discharge.

## **Dry Chemical Powder**

This is a powder-based agent that extinguishes by separating the three elements of fire. It prevents the chemical reactions involving heat, fuel, and oxygen (combustion).

#### **Foams**

Applied to fuel fires as either an aspirated (mixed and expanded with air in a branch pipe) or nonaspirated form to create a frothy blanket or seal over the fuel, preventing oxygen reaching it.

#### Water

Cools burning material, very effective against fires in furniture, fabrics, etc. Can be safely used only in the absence of electricity.

#### Water Mist

Water mist extinguishers discharge de-ionised water in a super fine spray to form a mist jet.

#### Wet Chemical

Wet chemical extinguishes the fire by forming an air-excluding soapy foam blanket over the burning oil.



# Multipurpose Dry Powder Extinguisher

(Stored Pressure)

ABC Powder extinguishers are the most widely used type of extinguisher. They discharge a fine powder that absorbs fuel molecules, depriving the fire of a fuel source. These extinguishers are available in a range of sizes, from a 1.0 kg model to a 9.0 kg model suitable for industrial applications. ABC Powder Extinguishers are suitable for Class A, B, C and E types of fires.

### Fire Class - ABC







Agent Capacity	1kg	2kg	4kg	6kg	9kg
Tare Weight	0.7kg	1.1kg	1.5kg	1.8kg	2.6kg
Full Weight	1.7kg	3.1kg	5.5kg	7.8kg	11.6kg
Propellant Gas			Nitrogen		
Fire Rating (MAP 50%)	1A 21B	2A 55B	3A 89B	4A 144B	6A 183B
Fire Rating (MAP 90%)	1A 34B	3A 55B	4A 144B	4A 183B	6A 233B
Approvals	IS 15683				
Discharge time	9 sec	14 sec	18 sec	24 sec	31 sec
Effective Range	2 m	2.5 m	3 m	5 m	6 m
Dimensions -Height -Diameter	250mm 85 mm	290mm 110mm	400mm 130mm	405mm 150mm	495mm 175mm
Cylinder Test Pressure			35 bar		
Charge Pressure	15 bar				
Min Bursting Pressure			55 bar		
Product Code	DFEA1-50 DFEA1-90	DFEA2-50 DFEA2-90	DFEA4-50 DFEA4-90	DFEA6-50 DFEA6-90	DFEA9-50 DFEA9-90



# **Clean Agent**

Clean agent type fire extinguisher is nonconductive and suitable for all classes of fire A, B, C and E. It does not leave any residue after discharge hence it is environment friendly and suitable for electrical equipment.

# Fire Class - ABCE



Agent Capacity	2kg	4kg	6kg
Tare Weight	1.1kg	1.5kg	1.8kg
Full Weight	3.1kg	5.5kg	7.8kg
Propellant Gas		Dry Nitrogen	
Fire Rating	1A 21B	1A 34B	2A 55B
Approvals	IS 15683		
Discharge time	9 sec	14 sec	22 sec
Effective Range	3m	3.5m	4m
Dimensions -Height -Diameter	290mm 110mm	400mm 130mm	405mm 150mm
Cylinder Test Pressure	35 bar		
Charge Pressure	15 bar		
Min Bursting Pressure	55 bar		
Product Code	DFECA2	DFECA4	DFECA6



# M/Foam (AFFF) Type **Fire Extinguisher**

(Stored Pressure)

Foam fire extinguishers work by covering a burning flammable liquid with a blanket of foam, cutting off the fire's air supply and preventing the release of flammable vapours. Foam extinguishers are suitable for Class A and B fires.

## Fire Class - AB





Agent Capacity	6ltr 9ltr	
Tare Weight	2.6kg 4.9kg	
Full Weight	11.6kg	13.9kg
Propellant Gas	Nitro	gen
Fire Rating	4A 14	44B
Approvals	IS 15683	
Discharge Time	22 sec 35 sec	
Effective Range	4m	6m
Dimensions -Height -Diameter	405mm 150mm	495mm 175mm
Cylinder Test Pressure	35 bar	
Charge Pressure	12 bar	
Min Bursting Pressure	55 bar	
Product Code	DFEFM6 DFEFM9	



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Agent Capacity	6ltr	9ltr
Tare Weight	1.8kg	2.6kg
Full Weight	7.8kg	11.6kg
Propellant Gas	Nitro	ogen
Fire Rating	2A	3A
Approvals	IS 15683	
Discharge Time	22 sec	35 sec
Effective Range	5m	6m
Dimensions -Height -Diameter	405mm 150mm	495mm 175mm
Cylinder Test Pressure	35 bar	
Charge Pressure	12 bar	
Min Bursting Pressure	55 bar	
Product Code	DFEW6	DFEW9



# **Water Mist**

Water mist extinguishers discharge de-ionised water in a super fine spray to form a mist jet. They have a broader fire-fighting capability than powder, foam or wet chemical extinguishers.

## Fire Class - ABC





Agent Capacity	6ltr 9ltr	
Tare Weight	1.8kg	2.6kg
Full Weight	7.8kg	11.6kg
Propellant Gas	Nitro	ogen
Fire Rating	2A 89B 25F	3A 113B 75F
Approvals	IS 15683	
Discharge Time	13 sec	16 sec
Effective Range	2m	3m
Dimensions -Height -Diameter	405mm 150mm	495mm 175mm
Cylinder Test Pressure	35	bar
Charge Pressure	15 bar	
Min Bursting Pressure	55 bar	
Product Code	DFEWM6	DFEWM9



Agent Capacity	2kg	3kg	4.5kg
Tare Weight	7kg	9.5kg	12.5kg
Full Weight	9.5kg	13kg	18.5kg
Fire Rating	21B	34B	55B
Approvals	IS 15683		
Discharge Time	9 sec	10 sec	12 sec
Effective Range	2m	2m	2m
Dimensions -Height -Diameter	580mm 108mm	545m 140m	700mm 140mm
Cylinder Test Pressure	250 bar		
Charge Pressure	50 bar		
Min Bursting Pressure	337.5 bar		
Product Code	DFEC2	DFEC3	DFEC4.5



# **Wet Chemical**

Wet chemical extinguishers employ an agent that reacts with burning cooking oil or fat to form a suds-like blanket across the fuel surface, cutting off the fire's air supply and preventing the release of flammable vapours. Wet Chemical extinguishers are suitable for Class A and F fires.

## **Fire Class - AF**





Agent Capacity	6ltr	9ltr	
Tare Weight	1.8kg 2.6kg		
Full Weight	7.8kg	11.6kg	
Propellant Gas	Nitr	ogen	
Fire Rating	25F	75F	
Approvals	IS 15683		
Discharge Time	20 sec	30 sec	
Effective Range	3m	3m	
Dimensions -Height -Diameter	405mm 150mm	495mm 175mm	
Cylinder Pressure Test	35	bar	
Periodic Test Pressure	12 bar		
Operating Pressure	55 bar		
Product Code	DFEF6	DFEF9	



## BC Powder – 25kg, 50kg, 75kg, 150kg

Agent Capacity	25kg	50kg	75kg	150kg
Tare Weight	59kg	70kg	75kg	110kg
Full Weight	84kg	120kg	150kg	260kg
Propellant Gas		Nit	crogen	
Fire Rating	233B	233B	233B	233B
Approvals	IS 16018			
Discharge Time	30 sec	50 sec	60 sec	80sec
Effective Range	6m	8m	10m	12m
Product Code	DFTBC25	DFTBC50	DFTBC75	DFTBC150





# CO2 – 6.5kg, 9kg, 22.5kg

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Agent Capacity	6.5kg	9kg	22.5kg
Tare Weight	16.5kg	25kg	61.5kg
Full Weight	25kg	36kg	86kg
Fire Rating	55B	55B	89B
Approvals	IS 16018		
Discharge Time	30 sec	35 sec	60 sec
Effective Range	3m	3m	3m
Product Code	DFTC6.5	DFTC9	DFTC22.5

# **Trolley Type**



## Foam - 45ltr, 60ltr

Agent Capacity	45ltr	60ltr	
Tare Weight	40kg	48kg	
Full Weight	85kg	108kg	
Propellant Gas	Carbon Dioxide		
Fire Rating	20A 233B	20A 233B	
Approvals	IS 16018		
Discharge time	Min. 30 sec	Min. 30 sec	
Effective Range	9m	9m	
Product code	DFTF45	DFTF60	

## Water 45ltr, 60ltr

Agent Capacity	45ltr	60ltr	
Tare Weight	40kg	48kg	
Full Weight	85kg	108kg	
Propellant Gas	Carbon Dioxide		
Fire Rating	20A	20A	
Approvals	IS 16018		
Discharge Time	Min. 30 sec	Min. 30 sec	
Effective Range	9m	9m	
Product Code	DFTW45	DFTW60	



# **Equipments for Fire Hydrant System**

## Single Hydrant Valve

Material: Gunmetal/ Stainless stee Size: 63mm Female single outlet





## **Double Hydrant Valve**

Material: Gunmetal/ Stainless steel Size: 63mm

## **Coupling**

Material: Gunmetal/ Stainless steel / Aluminium





# **Branch Pipe**

Material: Gunmetal/ Stainless steel / Aluminium



# Two Way Fire Brigade Connection

Material: Gunmetal/ Stainless steel Size: 63mm dia





# Three Way Fire Brigade Connection

Material: Gunmetal/ Stainless steel Size: 63mm dia

# Four Way Fire Brigade Connection

Material: Gunmetal/ Stainless steel Size: 63mm dia





Modular type fire extinguishers activate automatically, spraying the extinguishing agent with maximum force, ensuring that the fire is brought under control rapidly and efficiently.



# **Hose Reel Drum**

Fire hose reels provide an accessible and controlled supply of water to combat a potential Class A fire risk. Various types of reels are available to meet specific needs.\*
Standard Hose Reel range also available in 50M

#### Features:

- Corrosion, Leakage and Rust free
- Less space required to store
- ABS & GM Nozzles Available

ISI and Malaysian type Available



#### **RRL Type A**

RRL Type A (Reinforced Rubber Lined) Hose has excellent durability. It is made of 100% synthetic yarn. The hose also has excellent heat and abrasion resistance. This hose meets the requirements of IS 363 – Type A.





## **RRL Type B**

RRL Type B (Reinforced Rubber Lined) Hose has excellent durability. The overall construction is of high tenacity synthetic fiber circular woven seamless reinforcement, totally encapsulated in all synthetic special polymers.

Both are available in 15m & 30m Nozzle available in GM or SS

# **Fire Box**

# **Single Door** Material: MS



## **Double Door**

Material: MS



customisation available

## **Fire Bucket and Stand**

- Two bucket
- Four bucket



Available With or Without Canopy



Designed, Manufactured and Marketed by



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