

INTEGRATED
TOTAL QUALITY SOLUTIONS
FOR YOUR
FIRE
PROTECTION
NEEDS



Safety rules are best tools



FIGHTER
FIRE PROTECTION



Content

Introduction	04	Fire Pumps	
Fire Hose Reels & Accessories		Packaged Fire Pump Sets - FFP Series	42
Fire Hose Reel (Manual/Automatic)	06	Fire Water Booster	43
Semi-rigid Hose Reel Pipe	08	Sprinkler System	44
Lock Shield Valve	09	Pressure Reducing Valves/ Pressure Relief Valves	45
Pressure Reducing Valve / Gate Valve	09	Fire Pump Set (UL/FM Approved)	46
Hose Reel Nozzles	10	Seismic Expansion Joint	47
Fire Cabinets		Fire Doors	48
Hose Reel Cabinet	12	Fire Suppression System	49
Hose Reel Cabinet Architrave	14	Fire System Paints	50
Hose Cabinet	15		
2 & 4 Way Breeching Inlet Cabinet	16		
Field Equipment			
Fire Hydrant Valve	18		
Fire Hose Pipes	19		
Hose Rack Assembly	20		
Hose Pipe Nozzles	21		
Fire Hydrant	23		
Indicator Post With Gate Valve	26		
Underground Hydrant	26		
Fire Water Monitor	27		
Fire Extinguishers			
CO2 Portable Fire Extinguishers	30		
CO2 Mobile Fire Extinguishers	31		
ABC Dry Powder Portable Fire Extinguishers	32		
ABC Dry Powder Mobile Fire Extinguisher	33		
Water Portable Fire Extinguishers	34		
Foam Portable Fire Extinguishers	35		
Foam Mobile Fire Extinguishers	36		
Wet Chemical Fire Extinguishers	37		
Mobile Foam Fire Extinguisher On Trolley	38		
Automatic Powder Fire Extinguisher	38		
Clean Agent Fire Extinguishers	39		
Fire Extinguishers - Standard Series	40		



FIGHTER is Pakistan's leading manufacturer and supplier of top-tier fire fighting equipment, fire suppression systems, fire alarms, fire sprinkler system and fire pumps. Having a rich experience for fire protection system design & installation till expertise in testing & commissioning. FIGHTER enables you to protect your people, facilities and assets more professionally and economically by offering you RIGHT solution customized to your needs.

INTEGRATED TOTAL QUALITY SOLUTIONS FOR YOUR FIRE PROTECTION NEEDS

Today's companies recognize the importance and convenience of having multiple safety services available under one roof, a "Uni-Source Solution" for all types of fire protection systems.



Having more than 10 years experience in Fire Protection Field, our team has been associated with many projects nationwide and internationally; such as Residential & Commercial Buildings, Shopping Malls, Institutes, Hospitals, Textile Mills, Pharmaceuticals, Fertilizers, Power Plants, Oil & Gas sector and Government sector delivering comprehensive fire safety & engineering solutions.

FIGHTER is associated with globally renowned international brands in the fire protection industry such as GST, APOLLO, MINIMAX, VIKING, CLA VAL, Mueller, SK KNOWSLEY, NOHA and PATTERSON PUMP.

At FIGHTER we are committed about quality & diversified products by innovation & customized to specific requirement.

Fire Hose Reels & Accessories



PRODUCT DESCRIPTION

FIGHTER fire hose reels provide a very effective fire protection with a continuous supply of water available immediately. The construction and performance of a fire hose reel with semi-rigid hose ensures suitable installation in buildings and other construction works for use by the occupants. Fire hose reels are manufactured in both manual and automatic versions to comply with BS EN 671-1:2012 standard and semi-rigid hose complying with EN694:2001 standards.

FEATURES

- Fire hose reels are capable of rotating in one plane (fixed type) or rotating in more than one plane with respect to installation, Swinging Arm and Swinging Pipe in manual and automatic version.
- Automatic fire hose reels will open fully with in 3 Revolutions of the reel.
- Nozzle have SHUT, JET and SPRAY control settings.
- Reel discs are painted RED with printed user instructions.
- Maximum Working Pressure is 12 Bar & Test Pressure is 18 Bar.

TYPES

Fighter is offering three types of Hose Reel w.r.t their installation

• Swinging Pipe Type Hose Reel

• Fixed Type Hose Reel

• Swinging Arm Type Hose Reel

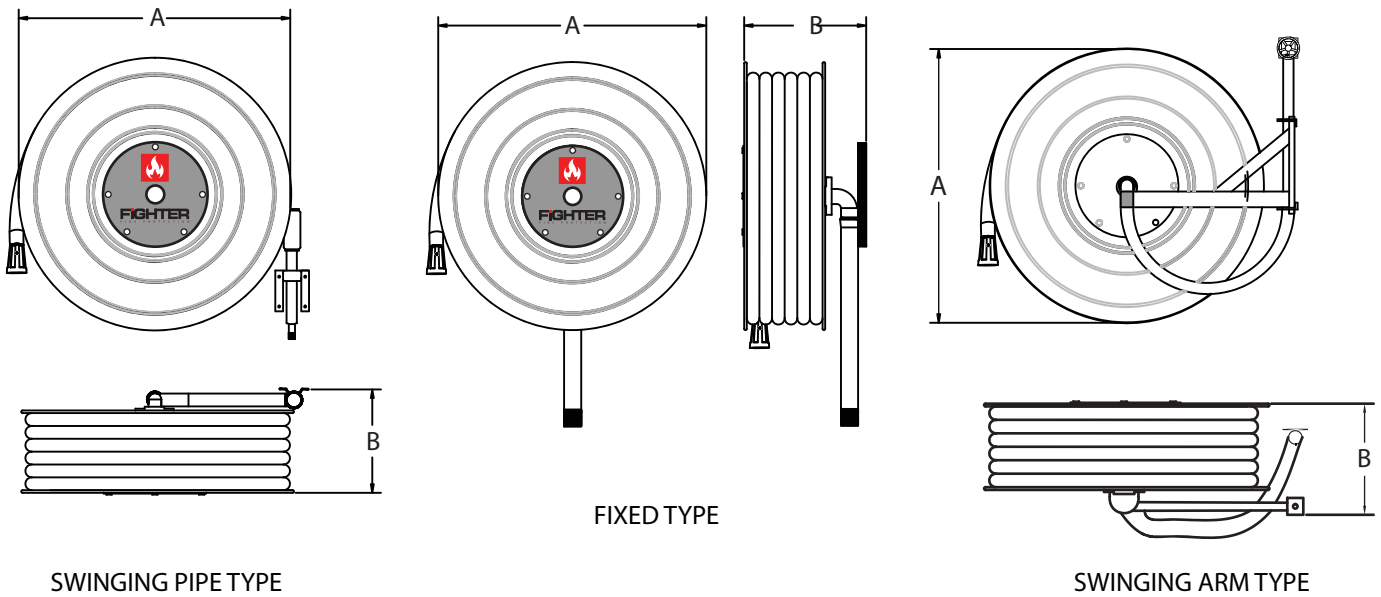
OPERATING INSTRUCTIONS

Automatic Hose Reels

- Pull out the hose and then water flow will start within 3 rotations.
- Open nozzle, adjust to spray or jet as required.
- Aim nozzle at base of fire.
- After use, close the nozzle and rewind the hose, ensuring that it is properly wound around the hose reel (not over lapping side plates). Open the nozzle to drain water from the hose and then close the nozzle on completion.

Manual Hose Reels

- Open the main valve fully.
- Pull out the hose.
- Open nozzle, adjust to spray or jet as required.
- Aim nozzle at base of fire.
- After use, turn off the main valve, close the nozzle and rewind the hose, ensuring that it is properly wound around the hose reel (not overlapping the side plates). Open the nozzle to drain water from the hose and then close the nozzle on completion.



SWINGING PIPE TYPE

FIXED TYPE

SWINGING ARM TYPE

FIGHTER FIRE HOSE REEL

Fighter fire hose reels have been tested and manufactured to EN 671-1. This range for fire hose reel has a slimmer design which can fit into smaller depth. For swing hose reel the inlet of the hose reel is fitted with a flexible hose and coupling for connection to the control valve for water supply with hydraulic punch cups to avoid leakages.

(SWING TYPE)

Code No.	Drum Size (A)	Hose Diameter x Length	Depth of Hose Reel (B)	Type
FHR101-MS-25-SPM	550mm	25mm x 30m	220mm	Swing Manual
FHR102-MS-25-SPA	550mm	25mm x 30m	220mm	Swing Automatic
FHR103-MS-25-SAM	550mm	25mm x 30m	220mm	Swing Manual
FHR104-MS-25-SAA	550mm	25mm x 30m	220mm	Swing Automatic
FHR107-SS-25-SAA	550mm	25mm x 30m	220mm	Swing Automatic
FHR108-SS-25-SPA	550mm	25mm x 30m	220mm	Swing Automatic
FHR151-MS-19-SAA	550mm	19mm x 45m	260mm	Swing Automatic
FHR152-MS-19-SAM	550mm	19mm x 45m	260mm	Swing Manual
FHR109-GI-25-SAA	550mm	25mm x 30m	220mm	Swing Automatic
FHR110-GI-25-SPA	550mm	25mm x 30m	220mm	Swing Automatic
FHR153-MS-25-SAA	550mm	25mm x 45m	300mm	Swing Automatic
FHR154-MS-25-SAM	550mm	25mm x 45m	300mm	Swing Manual

(FIXED TYPE)

Code No.	Drum Size	Hose Diameter x Length	Depth of Hose Reel (C)	Type
FHR105-MS-25-FTM	550mm	25mm x 30m	220mm	Fixed Manual
FHR106-MS-25-FTA	550mm	25mm x 30m	220mm	Fixed Automatic
FHR107-MS-19-FTM	550mm	19mm x 30m	180mm	Fixed Manual
FHR108-MS-19-FTA	550mm	19mm x 30m	180mm	Fixed Automatic

Semi-Rigid Hose Reel Pipe



FIGHTER semi-rigid hose reel pipes are suitable for use in fixed fire fighting system with FIGHTER Hose Reels. Hoses are available in sizes of 19 mm and 25 mm inside diameter. These hose reel pipes are flexible & shape keeping so that it can be rolled easily, allow quick & easy flow of water in case of any fire hazard.

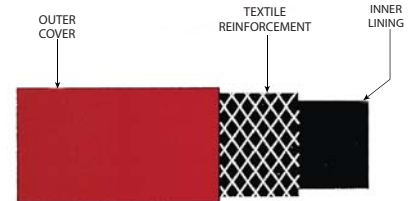
The hose are intended for use at a maximum working pressure of 12 bar (1.2 MPa) and temperature range of -20°C to +60°C at ambient temperature condition in non aggressive or non-corrosive atmosphere.

The semi-rigid hose reel pipes are manufactured to comply with BSEN 694:2001 standards.

FEATURES

- Materials for inner lining and cover of hose are plasticized PVC compound.
- High tensile textile polyester yarn is used for reinforcement of hose.

SPECIFICATION		
HOSE PIPE CLASSIFICATION	Type A, Class 2	
COLOR OF HOSE	Red/Black	
BORE	19mm	25mm
LENGTH OF HOSE	30m	
MAXIMUM WORKING PRESSURE	12 Bar	



HYDRAULIC PUNCH CUPS

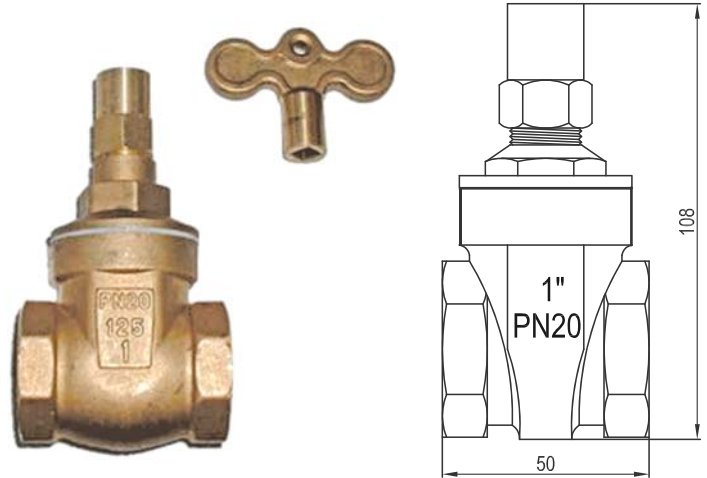
FIGHTER Hose Reels are manufactured with Unique Hydraulic Punch Cups for both Valve end and Nozzle end to provide more stability and avoid leakages in static or flow conditions.





LOCK SHIELD VALVE

FIGHTER Lock shield Valve is usually installed where unauthorized operation has to be avoided. A typical application of this valve is installing these at inlet pipe to the hose reel where it can be opened only by key while keeping the key with maintenance or fire safety department.



FEATURES

- Solid wedge, non-rising stem, screwed in bonnet.
- Valves are manufactured in accordance to BS5154 series B.
- Service temperature -10 to +66°C.
- Pressure rating is PN16 & PN20.
- End connection is BSPT threaded to BS21.
- Material: Brass

SPECIFICATION			
Model Number	Size (Inch)	Pressure Rating	Connection
FLSV-25-16	1	PN 16	1" BSPT Female Threaded
FLSV-25-20	1	PN 20	1" BSPT Female Threaded

PRESSURE REDUCING VALVE



Pressure reducing valve is required for the hose reel system to reduce the pressure at the inlet of the hose reel to the nominal working pressure.

Code No.	Size	Working Pressure	Material
FPV25	25mm (1")	Max. inlet pressure up to 20 bar (300 psi) Outlet pressure between 1 to 4 bar (14.7 to 60 psi)	Brass

GATE VALVE



As required by British Standard, stop valves should be installed at the inlet of all hose reels. FIGHTER can also provide an ingenious solution with a quick opening ball valve and nozzle locking device for Hose Reels.

Code No.	Size	Material	Working Pressure
FGV25	25mm (1") Gate Valve	Brass	15.8 Bar (230 psi)
FAV25	25mm (1") Angle Valve	Brass	
FBV25	25mm (1") Ball Valve	Brass	20 Bar (300 psi)



FIGHTER hose reel nozzles are designed to meet European Standard EN671-1. Nylon and ABS material complies to ageing test in accordance to ISO4892-2.2. Throw range position at 0.6M 30 + inclination, in accordance to EN671-1 Clause 10.4 Flow Rate meets the equivalent nozzle diameter of 6mm in accordance to EN671-1.

PLASTIC CHROME JET & SPRAY NOZZLE PLASTIC RED JET & SPRAY NOZZLE



Code No.	Setting	Material	Finishing	Inlet Size	Flowrate @ 30psi (2.0 BAR)	Throwrange @ 30psi (2.0 BAR)
FRN032-PS-020-RD	Jet / Spray	ABS/Brass	Red	3/4" (19 mm)	27L/MIN (JET)	11.0M
FRN032-PS-025-RD	Jet / Spray	ABS/Brass	Red	1" (25 mm)	35L/MIN (JET)	11.0M
FRN032-PS-020-CH	Jet / Spray	ABS/Brass	Chrome	3/4" (19 mm)	27L/MIN (JET)	11.0M
FRN032-PS-025-CH	Jet / Spray	ABS/Brass	Chrome	1" (25 mm)	35L/MIN (JET)	11.0M

PLASTIC JET & SPRAY NOZZLE EUROPEAN JET & SPRAY NOZZLE

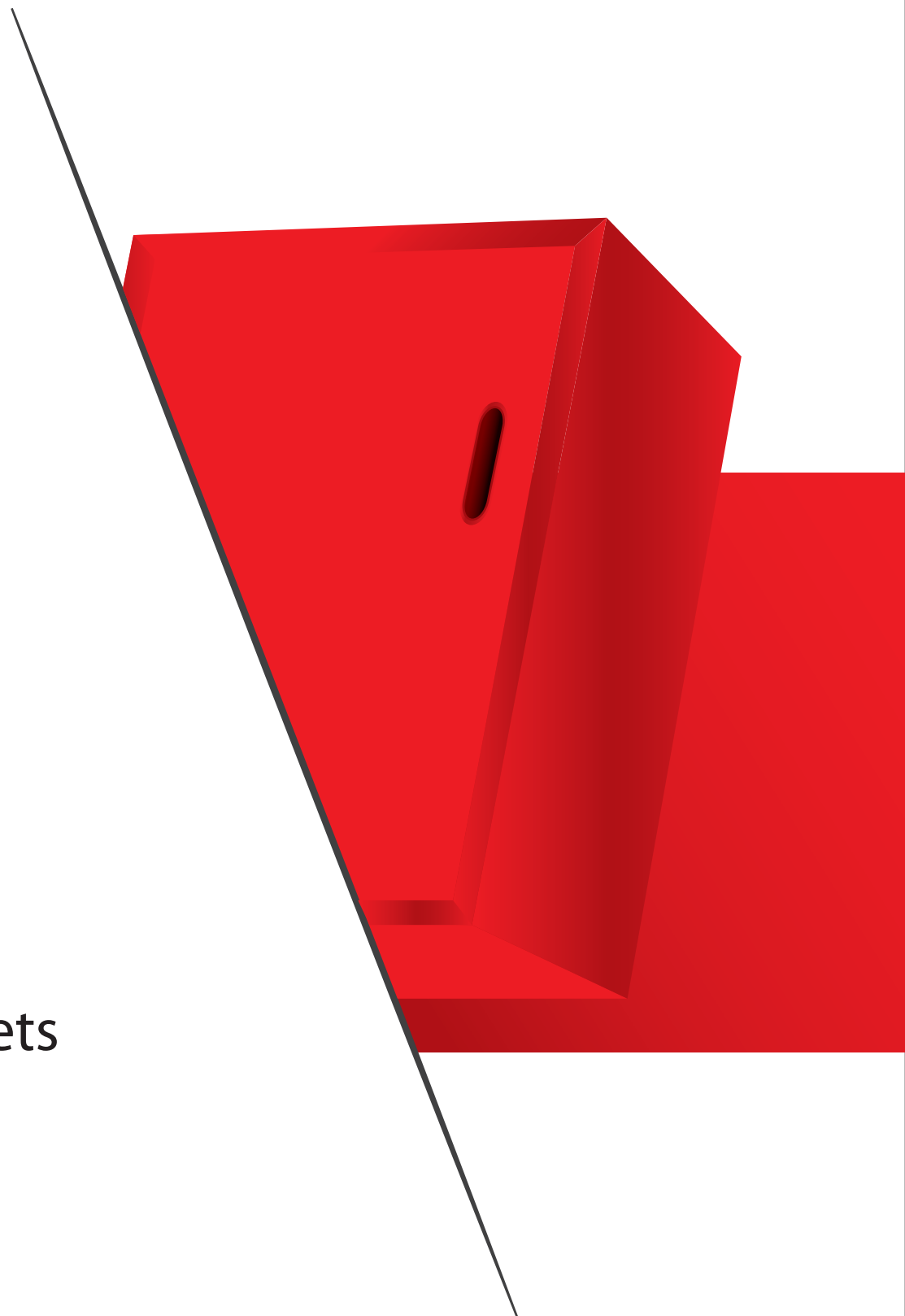


Code No.	Setting	Material	Finishing	Inlet Size	Flowrate @ 30psi (2.0 BAR)	Throwrange @ 30psi (2.0 BAR)
FRN065-GM-020-RD	Jet/Spray	Nylon/Brass	Red	3/4" (19mm)	27L/MIN (JET)	11.5M
FRN065-GM-025-RD	Jet/Spray	Nylon/Brass	Red	1" (25mm)	35L/MIN (JET)	11.5M
FRN057-PS-020-RD	Jet/Spray	Nylon	Red	3/4" (19mm)	27L/MIN (JET)	11.0M
FRN057-PS-025-RD	Jet/Spray	Nylon	Red	1" (25mm)	35L/MIN (JET)	11.0M

LEVER BALL VALVE JET & SPRAY NOZZLE



Code No.	Setting	Material	Finishing	Inlet Size	Flowrate @ 30psi (2.0 BAR)	Throwrange @ 30psi (2.0 BAR)
FRN167-GM-020-CH	Jet / Spray	Brass	Chrome	3/4" (19 mm)	27L/MIN (JET)	12M
FRN167-GM-025-CH	Jet / Spray	Brass	Chrome	1" (25 mm)	32L/MIM (JET)	12M



Fire Cabinets

Hose Reel Cabinet



FIGHTER fire hose reel cabinets are suitable to house hose reels and it's related accessories. Fire hose reels cabinets are available in different material thickness & aesthetic colors to match with the interior architecture of the building.

FEATURES

- Cabinets are made of Powder Coated MS sheet and Stainless Steel Sheet (Brush Finish and Mirror Finish)
- Cabinets are available both as surface mounted and for recessed installations.
- German Round Lock and Push Button Locks are available

MODEL A HOSE REEL CABINET (TECHNICAL SPECIFICATION)	
OVERALL DIMENSION	700mm (W) x 800mm (H) x A (D)
MATERIAL	Mild Steel
THICKNESS	1.2mm/1.5mm
INSTALLATION	Surface / Wall Mounted, Recessed
CAPACITY	Manual or Automatic Swing Type Hose Reel (22" or 19" Drum) 3/4" or 1"
PAINT FINISH	Epoxy Powder Red, minimum 70 micron.

Code No.	Dimension A (Depth) mm	Type
FRC001-MS-400-RD	400	Surface / Wall Mounted
FRC001-MS-320-RD	320	Surface / Wall Mounted
FRC001-MS-250-RD	250	Surface / Wall Mounted
FRC002-MS-400-RD	400	Recessed
FRC002-MS-320-RD	320	Recessed
FRC002-MS-250-RD	250	Recessed
FRC003-SS-400-BF	400	Recessed
FRC003-SS-320-BF	320	Recessed
FRC003-SS-250-BF	250	Recessed

**SS Mirror Finish is also available on request*



MODEL B HORIZONTAL TWIN COMPARTMENT HOSE REEL CABINET	
TECHNICAL SPECIFICATION	
OVERALL DIMENSION	1050mm (W) x 800mm (H) x A (D)
MATERIAL	Mild Steel
THICKNESS	1.2mm/1.5mm
INSTALLATION	Surface Mounted / Recessed
CAPACITY	Manual or Automatic Swing Type Hose Reel 1" or 3/4", & 1 No Fire Extinguisher 9kg or Landing Valve
PAINT FINISH	Epoxy Powder Red, minimum 70 micron.

Code No.	Dimension A (Depth) mm	Type
FHT004-MS-400-RD	400	Surface / Wall Mounted
FHT004-MS-320-RD	320	Surface / Wall Mounted
FHT004-MS-250-RD	250	Surface / Wall Mounted
FHT005-MS-400-RD	400	Recessed
FHT005-MS-320-RD	320	Recessed
FHT005-MS-250-RD	250	Recessed
FHT006-SS-400-BF	400	Recessed
FHT006-SS-320-BF	320	Recessed
FHT006-SS-250-BF	250	Recessed

**SS Mirror Finish is also available on request*



Hose Reel Cabinet



MODEL C VERTICAL TWIN COMPARTMENT HOSE REEL CABINET	
TECHNICAL SPECIFICATION	
OVERALL DIMENSION	740mm (W) x 1540mm (H) x A (D)
MATERIAL	Mild Steel / Stainless Steel
THICKNESS	1.2mm/1.5mm
INSTALLATION	Surface / Wall Mounted, Recessed
CAPACITY	Manual or Automatic swing Hose Reel 3/4" or 1" & 2pcs Fire Extinguisher and / or Landing Valve
PAINT FINISH	Epoxy Powder Red / White, minimum 70 micron.



Code No.	Dimension A (Depth) mm	Type
FVT007-MS-400-RD	400	Surface Mounted
FVT007-MS-320-RD	320	Surface Mounted
FVT007-MS-250-RD	250	Surface Mounted
FVT008-MS-400-RD	400	Recessed
FVT008-MS-320-RD	320	Recessed
FVT008-MS-250-RD	250	Recessed
FVT009-SS-400-BF	400	Front SS / Recessed
FVT009-SS-320-BF	320	Front SS / Recessed
FVT009-SS-250-BF	250	Front SS / Recessed
FVT010-SS-400-BF	400	Full SS / Surface Mounted
FVT010-SS-320-BF	320	Full SS / Surface Mounted
FVT010-SS-250-BF	250	Full SS / Surface Mounted
FVT011-SS-400-BF	400	Full SS / Recessed
FVT011-SS-320-BF	320	Full SS / Recessed
FVT011-SS-250-BF	250	Full SS / Recessed

* SS Mirror Finish is also available on request

FIRE EXTINGUISHER CABINET

TECHNICAL SPECIFICATION	
THICKNESS	1.2mm / 1.5mm
INSTALLATION	Wall Mounted / Recessed
PAINT FINISH	Epoxy Powder Red

Code No.	Capacity	Dimension (mm)	Material
FEC016-MS-710-RD	2 pc 6.0kg DCP	560 (W) X 710 (H) x 260 (D)	Mild Steel
FEC016-MS-820-RD	2 pc 5.0kg CO ₂	560 (W) X 820 (H) x 260 (D)	Mild Steel

* SS Mirror Finish is also available on request



Hose Reel Cabinet Architrave



Description

Compartment: Double Vertical

Material: Mild Steel & Stainless Steel (304)

Accessories:

Lock: German Round Lock

Hinge: SS Piano Hinges

Door: With Bracing



MODEL D VERTICAL TWIN HOSE REEL CABINET ARCHITRAVE	
TECHNICAL SPECIFICATION	
MATERIAL	Mild Steel / Stainless Steel
THICKNESS	1.2mm/1.5mm
INSTALLATION	Surface / Wall Mounted, Recessed
CAPACITY	Manual or Automatic Swing Hose Reel 3/4" or 1" & 2pcs Fire Extinguisher and/or Landing Valve and/or Hose Pipe
PAINT FINISH	Epoxy Powder Red / White, minimum 70 micron.

Code No.	Dimension (mm)	Type
FVTA012-MS-75-RD	(W)740 x (H)1540 x (D)75	Recessed
FVTA012-SS-75-BF	(W)740 x (H)1540 x (D)75	Recessed
FVTA013-MS-75-RD	(W)795 x (H)1540 x (D)75	Recessed
FVTA013-SS-75-BF	(W)795 x (H)1540 x (D)75	Recessed
FVTA014-MS-75-RD	(W)895 x (H)1700 x (D)75	Recessed
FVTA014-SS-75-BF	(W)895 x (H)1700 x (D)75	Recessed

** SS Mirror Finish is also available on request*



MODEL E HORIZONTAL TWIN HOSE REEL CABINET ARCHITRAVE	
TECHNICAL SPECIFICATION	
MATERIAL	Mild Steel / Stainless Steel
THICKNESS	1.2mm/1.5mm
INSTALLATION	Surface / Wall Mounted, Recessed
CAPACITY	Manual or Automatic Swing Hose Reel 3/4" or 1" & 1pc Fire Extinguisher and/or Landing Valve
PAINT FINISH	Epoxy Powder Red / White, minimum 70 micron.

Code No.	Dimension (mm)	Type
FHTA015-MS-75-RD	(W)1050 x (H)800 x (D)75	Recessed
FHTA015-SS-75-BF	(W)1050 x (H)800 x (D)75	Recessed

** SS Mirror Finish is also available on request*





FIGHTER Fire Hose Cabinets are suitable to house field equipment. Fire hose cabinets are available in different material thickness & surface treatment to comply with extreme weather & outdoor conditions.

FEATURES

- Cabinets are made of Powder Coated MS sheet.
- Cabinets are available both as surface mounted and floor mounted installations.
- German Round Lock and Push Button Locks are available

MODEL A HOSE CABINET	
TECHNICAL SPECIFICATION	
OVERALL DIMENSION	590.0mm (W) x 610.0mm (H) x 340.0mm (D)
MATERIAL	Mild Steel
THICKNESS	1.2mm/1.5mm
INSTALLATION	Wall Mounted
CAPACITY	2 Nos Nozzle, 2 Length of Hose 2-1/2" x 30m
PAINT FINISH	Epoxy Powder Red
CODE NO.	FHC071-MS-SM-RD



MODEL B HOSE CABINET	
TECHNICAL SPECIFICATION	
OVERALL DIMENSION	900mm (W) x 1100mm (H) x 300mm (D)
MATERIAL	Mild Steel
THICKNESS	1.2mm/1.5mm
INSTALLATION	Wall Mounted
CAPACITY	1-1/2" or 2-1/2" Hose Rack Assembly
PAINT FINISH	Epoxy Powder Red
CODE NO.	FAC087-MS-SM-RD



MODEL C HOSE CABINET	
TECHNICAL SPECIFICATION	
OVERALL DIMENSION	590mm (W) x 1200mm (H) x 340mm (D)
MATERIAL	Mild Steel
THICKNESS	1.2mm/1.5mm
INSTALLATION	Floor Mounted
CAPACITY	2 Nos Nozzle, 2 Length of Hose 2-1/2" x 30m
PAINT FINISH	Epoxy Powder Red
CODE NO.	FHC071-MS-FM-RD



2 & 4 Way Breaching Inlet Cabinet



SPECIFICATION

Body	: Cast Iron
Inlet	: BS Instantaneous Male Copper Alloy to BS 1982
Outlet	: 2 Way Breaching Inlet Flanged 4" Table E. BS 10 4 Way Breaching Inlet Flanged 6" Table E. BS 10
Working Pressure	: 10 Bar
Testing Pressure	: 20 Bar

FIGHTER breaching inlets are used to pressurize fire water network by fire brigade in an event when internal fire water reserves are fully utilized. Breaching inlets are manufactured to comply with BS 5041 Part 3:1975 with female instantaneous connection complying with BS 336:2010.



2 WAY BREECHING INLET CABINET				
Code No.	Description	Size	Outlet Size	Body Material
FBI095-CI-002-RD	2-Way Breaching Inlet	BS336 Male	4" Table E/PN 16	Cast Iron
FBI115-CI-004-RD	4-Way Breaching Inlet	BS336 Male	6" Table E/PN 16	Cast Iron
FBI095-DI-002-RD	2-Way Breaching Inlet	BS336 Male	4" Table E/PN 16	Ductile Iron
FBI115-DI-004-RD	4-Way Breaching Inlet	BS336 Male	6" Table E/PN 16	Ductile Iron

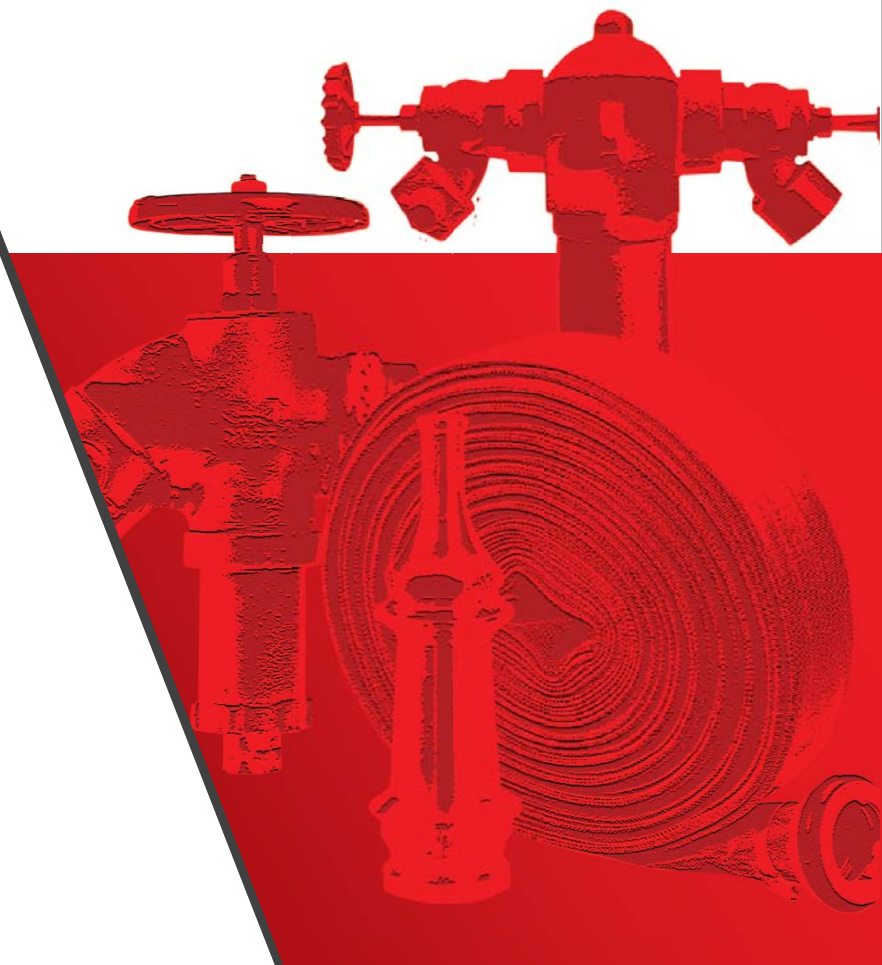
2 WAY BREECHING INLET CABINET	
TECHNICAL SPECIFICATION	
DIMENSION	595mm x 395mm x 295mm
MATERIAL	Mild Steel / Stainless Steel
THICKNESS	1.2mm / 1.5mm
GLASS	Wire Mesh Reinforcement
INSTALLATION	Recess Mounted
PAINT FINISH	Epoxy Powder Red / Brush Finish
STANDARD	BS 5041 Part 5
CODE NO	FBC096-MS-002-RD

4 WAY BREECHING INLET CABINET	
TECHNICAL SPECIFICATION	
DIMENSION	595mm x 595mm x 295mm
MATERIAL	Mild Steel / Stainless Steel
THICKNESS	1.2mm / 1.5mm
GLASS	Wire Mesh Reinforcement
INSTALLATION	Recess Mounted
PAINT FINISH	Epoxy Powder Red / Brush Finish
STANDARD	BS 5041 Part 5
CODE NO	FBC116-MS-004-RD

*SS Mirror Finish is also available on request



Field Equipment



Fire Hydrant Valve



SPECIFICATION	Body	: Copper Alloy to BS 1982
	Hand wheel	: Grey Cast Iron to BS EN 1561
	Inlet	: Flanged or BSP screw thread
	Outlet	: Female instantaneous to BS 336 and other connections
	Working Pressure	: 15 bar
	Nominal size	: DN65 (2-1/2"), DN50 (2")
	Manufacture and certified to BS 5041 Part 1*	

STRAIGHT THROUGH VALVE

Code No.	Inlet Size
FHV107-GM-65BSP*	Male BSP Thread 65mm
FHV107-GM-65NST	Female Screw 65mm-NST
FHV108-GM-65ANSI	ANSI 150 FF Flange 65mm
FHV108-GM-65PN16*	BS 4504 PN16 65mm
FHV108-GM-65TE	BS 10 Table E Flange 65mm



RIGHT ANGLE VALVE

Code No.	Inlet Size
FHV105-GM-65BSP*	Male BSP Thread 65mm
FHV106-GM-65TE	BS 10 Table E Flange 65mm
FHV106-GM-65PN16	BS 4504 PN16 65mm
FHV106-GM-UK65AB	ANSI 150 FF Flange 65mm



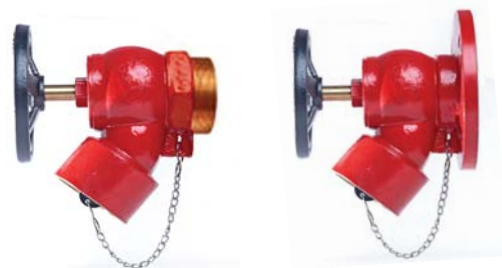
BIB NOSE VALVE

Code No.	Inlet Size
FHV109-GM-UK65AB	ANSI 150 FF Flange 65mm
FHV109-GM-UKPN16*	BS4504 PN16 65mm
FHV109-GM-UK65MB*	Male BSP Thread 65mm
FHV109-GM-UKTE	BS10 Table E Flange 65mm



OBLIQUE LANDING VALVE

Code No.	Inlet Size
FHV097-GM-65BSP*	Male BSP Thread 65mm
FHV098-GM-65ANSI	ANSI 150 FF 65mm
FHV098-GM-65PN16*	BS 4504 PN16 Flange 65mm
FHV098-GM-65TE	BS 10 Table E Flange 65mm



PRESSURE REGULATING VALVE

- Inlet pressure up to 20bar
- Outlet pressure can be set from 5 to 8 bar
- Test pressure 30 bar
- Minimum Flowrate up to 1400LPM

Code No.	Inlet Size
FHV121-GM-65BSP*	Male BSP Thread 65mm
FHV120-GM-65TE	BS 10 Table E Flange 65mm
FHV120-GM-65ANSI	ANSI 150 Flange 65mm
FHV120-GM-65PN16*	BS 4504 PN16 65mm





FIGHTER Fire Hose Pipes provide a very effective fire protection against large scale fire and with high flow demand. These flexible Hose Pipes provide flexibility and easy access to the hazard area.

Application:

- Residential & Commercial Buildings
- Industries
- Fire Brigades



FIGHTER FIRE HOSE, TYPE 1

- Internal rubber lining combined with closely woven polyester fiber.
- Direct vulcanization, high adhesion between jacket and lining.
- Standard length: 30m
- Available colour: Red or White
- Manufactured to BS6391

FIGHTER FIRE HOSE, TYPE 3

- External and internal rubber lining, with polyester fiber reinforcement.
- Resistance to oil, acids, alkaline and industrial chemicals.
- Resistance to heat, cold and ozone.
- Standard length: 30m
- Available colour: Red
- Manufactured to BS6391

TYPE-1

WORKING PRESSURE 10 BAR (145 PSI)/BURST PRESSURE 30 BAR (435 PSI)

Code No.	Size	Colour
FHP030-10-065-WH	2-1/2"(65mm)	White
FHP030-10-065-WH	2 1/2"(65mm) C/W Coupling	White
FHP030-10-050-WH	2" (50mm)	White
FHP030-10-045-WH	1 - 3/4"(45mm)	White
FHP030-10-038-WH	1 - 1/2"(38mm)	White
FHP030-10-065-RD	2 - 1/2"(65mm)	Red
FHP030-10-050-RD	2" (50mm)	Red
FHP030-10-045-RD	1 - 3/4"(45mm)	Red
FHP030-10-038-RD	1 - 1/2"(38mm)	Red

TYPE-2

WORKING PRESSURE 16 BAR (232 PSI)/BURST PRESSURE 48 BAR (696 PSI)

Code No.	Size	Colour
FHP048-16-065-WH	2 - 1/2"(65mm)	White
FHP048-16-050-WH	2" (50mm)	White
FHP048-16-045-WH	1 - 3/4"(45mm)	White
FHP048-16-038-WH	1 - 1/2"(38mm)	White
FHP048-16-065-RD	2 - 1/2"(65mm)	Red
FHP048-16-050-RD	2" (50mm)	Red
FHP048-16-045-RD	1 - 3/4"(45mm)	Red
FHP048-16-038-RD	1 - 1/2"(38mm)	Red

TYPE-3

WORKING PRESSURE 16 BAR (232 PSI)/BURST PRESSURE 50 BAR (725 PSI)

Code No.	Size	Colour
FHP050-16-065-RD	2 - 1/2"(65mm)	Red
FHP050-16-045-RD	1 - 3/4"(45mm)	Red
FHP050-16-038-RD	1 - 1/2"(38mm)	Red



PRODUCT DESCRIPTION

FIGHTER hose rack assembly is located inside buildings at the wet or dry riser outlet. It features a rack which hangs the layflat fire hose (30m). An automatic release mechanism allows water to flow through the hose after removal of the hose and nozzle. The rack is available in sizes of 1-1/2" and 2-1/2". There are two methods of mounting the hose rack. One is by using a wall bracket and the other is by fixing on to a right angle valve.

FEATURES

- Hose Rack frame is made of steel.
- Provide an immediate water source for fire suppression.
- Easy operation for fire fighters.
- High flow availability to fight with large scale fire.
- Moveable pin rack design for easy and quick operation.

Code No.	Description
FRA082-MS-038-RD	1- 1/2" Hose rack
FHV105-GM-038-BSP	1- 1/2" Hose rack right angle valve
FRA086-GM-038-NA	1- 1/2" Hose rack nipple
FRA085-MS-038-RD	1- 1/2" Hose rack wall mounting bracket
FRA083-GM-038-NA	1- 1/2" NHT ribbed tail coupling
FHP048-16-038-WH	1- 1/2" Lay flat hose 16 bar white
FHN099-AL-038	1- 1/2" Jet & spray & nozzle
FRA082-MS-065-RD	2- 1/2" Hose rack
FHV105-GM-65-BSP	2- 1/2" Hose rack right angle valve
FRA086-GM-065-NA	2- 1/2" Hose rack nipple
FRA085-MS-065-RD	2- 1/2" Hose rack wall mounting bracket
FRA079-LA-065-NA	2- 1/2" Instantaneous ribbed tail coupling
FHP048-16-065-WH	2- 1/2" Lay flat hose 16 bar white
FHN099-AL-065	2- 1/2" Jet & spray nozzle

Hosepipe Nozzles



FIGHTER fire hose pipe nozzles are suitable to use with 2.5" dia & 1.5" dia hose pipes to fight with medium & large scale fire with high water flow demands. Male instantaneous coupling complied to BS 336 enables quick assembly with hose outlets.



JET NOZZLE COMPLETE WITH BRANCHPIPE

Code No.	Material	Finishing	Inlet Size	Flowrate @ 100psi (6.8 BAR)
FHN077-AL-065	Aluminium Alloy	Natural	Male Instantaneous BS 336	210L/min (12mm dia.)
FHN077-GM-065	Copper Alloy to BS 1982			510L/min (19mm dia.)

DIFFUSER NOZZLE 500 (JET/SPRAY)



Code No.	Type	Material	Finishing	Inlet Size	Flowrate @ 100psi (6.8 BAR)	Throwrange @ 100psi (6.8 BAR)
FHN099-AL-065	Standard	Aluminium Alloy to BS 1490	Natural	Male Instantaneous BS 336	500L/min (JET) 590L/min (SPRAY)	26m (JET) 15m (SPRAY)
FHN101-AL-065	With branchpipe					
FHN099-GM-065	Standard	Copper Alloy to BS 1982				
FHN101-GM-065	With branchpipe					



DIFFUSER NOZZLE 800 (JET/SPRAY)



Code No.	Type	Material	Finishing	Intel Size	Flowrate @ 100psi (6.8 BAR)	Throwrange @ 100psi (6.8 BAR)
FHN100-AL-065	Standard	Aluminium Alloy to BS 1490	Natural	Male Instantaneous BS 336	800L/min (JET) 880L/min (SPRAY)	35m (JET) 28m (SPRAY)
FHN102-AL-065	With branchpipe					
FHN100-AL-065-PG	With pistol grip					
FHN100-GM-065	Standard	Copper Alloy to BS 1982				
FHN102-GM-065	With branchpipe					
FHN100-GM-065-PG	With pistol grip					

JET/SPRAY NOZZLE WITH CONTROL VALVE



Code No.	Type	Finishing	Intel Size	Flowrate @ 100psi (6.8 BAR)	Throwrange @ 100psi (6.8 BAR)
FHN078-AL-065-CV	Jet & Spray	Aluminium	Male BS Instantaneous	160L/min (JET)	14m (SPRAY)
FHN078-PS-065-CV	Jet & Spray	Plastic	Male BS Instantaneous	140L/min (SPRAY)	25m (JET)



FIGHTER Fire Hydrant are suitable for large scale fire fighting with high flow demands both in wet & dry barrel designs. High pressure cast iron design is complying to BS 1561.

2 WAY FIRE HYDRANT

Body Material : Cast Iron to BS 1561
 Outlet : Copper alloy BS 1982
 Test Pressure : 20 bar (300 psi)
 Working Pressure : 15 bar (217 psi)
 Finishing : Red



Code No.	Outlet Size	Inlet Size
FFH055-CI-100-RD	2 x 2 - 1/2" Control Valve with Female BS Instantaneous Outlet	4" Table E BS 10 Flange
FFH056-CI-100-RD	2 x 2 - 1/2" Bib Nose Valve with Female BS Instantaneous Outlet	4" Table E BS 10 Flange

3 WAY FIRE HYDRANT

Body Material : Cast Iron to BS 1561
 Outlet : Copper alloy BS 1982
 Test Pressure : 20 bar (300 psi)
 Working Pressure : 15 bar (217 psi)
 Finishing : Red

Model FFH057-CI-150-RD can be fitted with an underground 6" gate valve with spindle cap (sluice valve) and operated by using a hydrant key and bar.



Code No.	Outlet Size	Inlet Size
FFH057-CI-150-RD	2 x 2-1/2" Control Valve with Female BS Instantaneous Outlet & 1 x 4" Male Thread	6" Table E BS 10 Flange
FFH058-CI-150-RD	2 x 2-1/2" Bib Nose Valve with Female BS Instantaneous Outlet & 1 x 4" Male Thread	6" Table E BS 10 Flange



NFPA HYDRANT

Body Material : Carbon Steel
 Inlet : 150mm
 Outlet : Brass or Copper alloy BS 1982
 Test Pressure : 20 bar (300 psi)
 Working Pressure : 15 bar (217 psi)
 Finishing : Red



NFPA HYDRANT WITH PUMPER CONNECTION

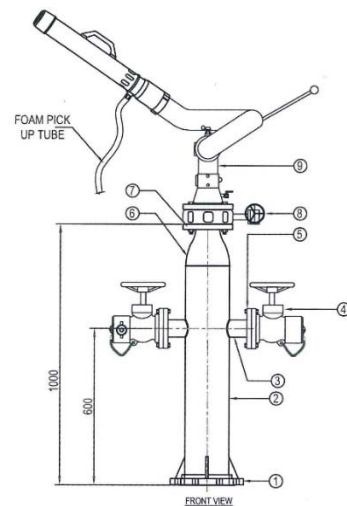
Body Material : Carbon Steel
 Inlet : 150mm
 Outlet : Brass or Copper alloy BS 1982
 Test Pressure : 20 bar (300 psi)
 Working Pressure : 15 bar (217 psi)
 Finishing : Red

Code No.	Outlet Size	Inlet Size
FFH059-CS-150-RD	2 x 2-1/2" Control Valve with Female BS Instantaneous Outlet	6" Table E BS 10 Flange
FFH060-CS-150-RD	2 x 2-1/2" Control Valve with Female BS Instantaneous Outlet & 1 x 4" Male Thread	6" Table E BS 10 Flange

FIRE HYDRANT WITH MONITOR

Body Material : Carbon Steel
 Inlet: 150mm
 Outlet : Copper alloy BS 1982
 Test Pressure : 20 bar (300 psi)
 Working Pressure : 15 bar (217 psi)
 Finishing : Red

Model FFH061-MS-150-RD and FFH062-MS-150-RD each can be fitted with FIGHTER Monitor Model No. FFM007-SS-100-RD and FFM047-GM-100-RD.



Code No.	Outlet Size	Inlet Size
FFH061-MS-150-RD	2 x 2-1/2" Gate Valve with Female BS Instantaneous Outlet with Monitor	6" Table E BS 10 Flange
FFH062-MS-150-RD	2 x 2-1/2" Gate Valve with Female BS Instantaneous Outlet & 1 x 4" Male Thread with Monitor	6" Table E BS 10 Flange



HIGH PRESSURE FIRE HYDRANT

Body Material : Model FPH071-CI-100-RD (Cast Iron to BS 1561)
 Model FPH072-CI-150-RD (Cast Iron to BS 1561)

Test Pressure : 30 bar (435 psi)

Working Pressure : 20 bar (300 psi)

Outlet Pressure Setting : 7 bar (101 psi) at static flow

Finishing : Red



Code No.	Inlet Size	Outlet Size
FPH071-CI-100-RD	2 x 2-1/2" Pressure Regulating Control Valve with Female BS Instantaneous Outlet	4" Table E BS 10 Flange
FPH072-CI-150-RD	4 x 2-1/2" Pressure Regulating Control Valve with Female BS Instantaneous Outlet	6" Table E BS 10 Flange

DRY TYPE FIRE HYDRANTS

Outlet : 4" Pumper connection of female thread coupling to BS 336 with cap and chain
 2x2.5" Straight through landing valve with cap and chain

Test Pressure : 30 bar (435 psi)

Working Pressure : 20 bar (300 psi)

Finishing : Red



FEATURES

- Dry barrel design eliminates damage to the hydrant caused by freezing or corrosion of the upper part.
- Break away design to prevent accidents to the hydrants, where only the upper part of the flange would be broken upon impact.
- Designed as per AWWA C502, which applies for the wall thickness, loss of head and hose connection plugs.
- Simple rugged construction and easy to maintain.
- Externally sand blasted for smooth finish, painted red with electrostatic powder coating on the section above the ground and double coating of black bituminous paint on the section below ground.

Model	Base Flange (Inch)	Dimension (mm) A	Dimension (mm) B	Working Pressure (Bar)
FDH081-CI-100-800	4	890	790	15
FDH082-CI-100-1200	4	1290	1190	15
FDH081-CI-150-800	6	890	790	15
FDH082-CI-150-1200	6	1290	1190	15

Indicator Post With Gate Valve



The Indicator Post with gate valve provides a means for operating a buried or otherwise inaccessible gate valve to controlled flow of water in buried pipe. A wrench is provided to fit on top of the unit for turning the gate valve open and shut.

Indicator Post readily and clearly indicates whether the gate valve buried is open or shut. It is suitable for gate valves from 4" up to 12".

The Indicator Post is manufactured to suit various buried depth, it is also easily adjusted in the field for exact depth without disassembly. It is mounted on top of the gate valve with flange for support.

Code No.	Inlet Size
FIP090-DI-100-RD	4" (100mm)
FIP090-DI-150-RD	6" (150mm)
FIP090-DI-200-RD	8" (200mm)
FIP090-DI-250-RD	10" (250mm)
FIP090-DI-300-RD	12" (300mm)



UNDERGROUND HYDRANT BS 750

SPECIFICATION	
BODY	Grey Cast Iron to BS 1561 or (Ductile iron) BS 2789
OUTLET	Copper Alloy to BS 1982 Round thread or V thread
INTEL	Universal Flange PN16 & Table E
TEST PRESSURE	24 Bar (350 psi)
WORKING PRESSURE	16 Bar (232 psi)
COLOUR	Black or Blue
CODE NO	FUH058-CI-080-BK



DUCK FOOT BEND

SPECIFICATION	
BODY	Grey Cast Iron to BS 1452
FLAGED INLET & OUTLET	4" BS 10 Table E Flange
CODE	FDB070-CI-100-BK
	FDB070-DI-100-BK



HYDRANT CHAMBER

SPECIFICATION	
BODY	Concrete
COVER	MS
Opening dimension	445mm x 330mm
Bedding dimension	560mm x 495mm
CODE	FDC072-MS-STD-NA





FIGHTER fire water monitors are an aimable controllable high-capacity water jet suitable for manual & automatic fire protection system. Fixed monitors are used whenever there are substantial Class B fire risks while portable monitors are often used to protect multiple risks by moving the monitors around the site.

HANDLE OPERATED MONITOR

- Suitable for flows up to 1000GPM
- 2 - 1/2" NHT male outlet
- 360 deg. Horizontal travel
- Vertical 135 deg. (90 deg. above to 45 deg. below)
- Locking device for horizontal & vertical position
- Stainless steel handle for horizontal and vertical position
- 3" stainless steel water way
- 4" ANSI inlet flange gun metal RF

Code No. FFM007-SS-100-RD



DOUBLE WHEEL OPERATED MONITOR

- Suitable for flows up to 1000GPM
- 2 - 1/2" NHT male outlet
- 360 deg. Horizontal travel
- Vertical 150 deg. (90 deg. above to 60 deg. below)
- Horizontal and vertical position controlled by double handwheel driven worm gear
- Material for body, gear, nozzle: Gun Metal
- Material for handle: Aluminium Alloy
- 4" ANSI inlet flange gun metal RF

Code No. FFM045-GM-100-RD



HANDLE OPERATED MONITOR

- Suitable for flows up to 1000GPM
- 2 - 1/2" NHT male outlet
- 360 deg. Horizontal travel
- Vertical 135 deg. (90 deg. above to 45 deg. below)
- Locking device for horizontal & vertical position
- Stainless steel handle for controlling horizontal and vertical position
- Material construction Gun Metal
- 4" ANSI inlet flange gun metal RF

Code No. FFM047-GM-100-RD





PORTABLE MONITOR

- Suitable for flows up to 1000GPM
- 2 - 1/2" NHT male outlet
- Inlet: Male instantaneous or female NHT
- Carrying handle
- Handwheel driven for vertical movement 70 deg. above
- 360 deg. horizontal movement with twist lock
- Inlet two 2-1/2" NHT female or with BS male instantaneous
- Material for body aluminium alloy Material for stand

Code No. FFM044-GM-100-RD

Fire Water/Foam Monitor Trailer are also available on request



OSCILLATING MONITOR

- Automatic horizontal oscillation when water pass through monitor
- Oscillation angle adjustable in 15 steps from 300 deg. to 120 deg.
- Oscillating speed adjustable from 2 to 10 per sec
- Manual movement 360 deg. horizontal
- 4" ANSI inlet flange gun metal RF
- 3" Stainless steel waterway
- Nozzle and flange in gun metal
- Oscilating mechanism: Aluminium
- Cover: Mild steel

Code No. FFM043-GM-100-RD



MONITOR NOZZLE

Code No.	Type	Setting	Flowrate GPM at 6.8 Bar (100Psi)	Effective Reach Feet at 6.8 Bar (100Psi)
FMN002-GM-350-NA	350	SS	290	140
		30 deg. Fog	350	90
FMN002-GM-500-NA	500	SS	405	130
		30 deg. Fog	500	50
FMN002-GM-1000-NA	1000	SS	780	260
		30 deg. Fog	1000	135
FMN015-GM-500-NA	500 With Foam Inductor	SS	475	162
		30 deg. Fog		80





Fire Extinguishers



FEATURES

- Carbon dioxide is a gaseous agent, colorless, odorless/Non-toxic and provides rapid knock down of industrial fire. It is capable of fighting Class B fire effectively.
- The Fire extinguishers are designed to comply with the specifications and requirements of BS EN3.
- High quality polyester paint.
- Controlled discharge.
- Brass head valve with simple squeeze operations provided with pressure relief disc.
- Rechargeable & easy to service.
- Non-conductive agent for electrical use without risk to operator.
- CO₂ gas disappears quickly leaving no residue.

TECHNICAL SPECIFICATION		
EXTINGUISHER TYPE	2kg	5kg
MATERIAL	Steel	Steel
MODEL #	FEC2	FEC5
FIRE RATING	34B	55B
OPERATING TEMPERATURE	Minus 20°C to 60°C	Minus 20°C to 60°C
OPERATING PRESSURE	70 Bar at 20°C	70 Bar at 20°C
CYLINDER SPECIFICATION	97/23/EC	97/23/EC
HEIGHT	625mm	770mm
FULL WEIGHT	8.4kg	15.8kg
EMPTY WEIGHT	6.4kg	10.8kg
DISCHARGE TIME	14 secs	15 secs
RANGE OF THROW (approx.)	4-5M	4-5M
CARTON SIZE mm	220x180x250	230x245x780



PRODUCT DESCRIPTION

FIGHTER Mobile CO₂ fire extinguishers are characterized by their high performance and simple method of operation. They are suitable for fires involving flammable liquids, gases and electrical equipment. Effective for Class B, C & E. Suitable for Class B fire risks.

- High-grade brass head valve ensures reliability and optimizes efficiency.
- Discharge outlet is controlled by high pressure ball valve.
- Externally coated by electrostatic powder painting after shot blasting ensures maximum corrosion resistance.
- Discharge nozzle designed to produce a jet of extinguishing gas.

FEATURES

- The Fire Extinguishers are designed to comply with the specifications and requirements of BS EN 1866-1.

TECHNICAL SPECIFICATION				
	FEC10M	FEC20M	FEC45M	FEC32M
CAPACITY, kg	10	20	45	32
WORKING PRESSURE, BAR	70	70	70	70
CYLINDER TEST PRESSURE, BAR	250	250	250	250
DISCHARGE HOSE (diameter/length)	1/2"Ø x 6m	1/2"Ø x 6m	1/2"Ø x 6m	1/2"Ø x 6m
OVERALL HEIGHT, mm (approx.)	-	-	1600	1420
OVERALL WIDTH, mm (approx.)	-	-	2000	2000
OVERALL DEPTH, mm (approx.)	-	-	1170	1170
MATERIAL OF CYLINDER	Chromium Molybdenum		Manganese Steel BS 5045 Part 1	
PAINT FINISH	Red		Red	
CLASS OF FIRE	B, E		B, E	



FEATURES

- Capable of fighting Class A,B,C and E fires.
- The Fire extinguishers are designed to comply with the specifications and requirements of BS EN3.
- High quality polyester paint.
- Ideal for industrial, commercial & domestic environment
- Controlled discharge.
- Unique gauge testing system.
- Unique colour coded handle and base (optional).
- Rechargeable and easy to service.
- Choice of capacity from 1 to 12Kg.

TECHNICAL SPECIFICATION							
EXTINGUISHER TYPE	1kg	2kg	4kg	6kg	6kg	9kg	12kg
	STORE PRESSURE TYPE (NITROGEN PROPELLENT)				CO ₂ CARTRIDGE		
MODEL NO.	FED1	FED2	FEC4	FED6	FED6C	FED9C	FED12C
FIRE RATING	8A, 34B	13A, 89B	21A, 113B	34A, 233B	34A, 233B	43A, 233B	55A, 233B
OPERATING TEMPREATURE	MINUS 20 DEGREE C TO 60 DEGREE C						
OPERATING PRESSURE	12 Bar	14Bar					
HEIGHT	335mm	400mm	490mm	490mm	490mm	570mm	605mm
FULL WEIGHT	2.0kg	3.3kg	7.1kg	9.1kg	10.5kg	14.2kg	19.0 kg
TEST PRESSURE	25 Bar						
DISCHARGE TIME	6-10 secs	8-12 secs	11-15 secs	17-21 secs	17-21 secs	23-27 secs	25-32 secs
RANGE OF THROW (approx)	4 - 5 M	4 - 5 M	5 - 6 M	5 - 6 M	5 - 6 M	5 - 6 M	5 - 6 M
CARTON SIZE mm	105 x 120 x 345	125 x 160 x 430	180 x 200 x 495	180 x 200 x 495	180 x 210 x 495	200 x 200 x 565	200 x 200 x 645



PRODUCT DESCRIPTION

FIGHTER Mobile stored pressure ABC Dry powder extinguishers are characterized by their high performance and simple method of operation. The ABC Dry powder mobile type extinguisher contains high performance powder and thus has achieved highest fire rating. They are suitable for multipurpose application of fires involving free burning materials, flammable liquids, flammable gases and electrical equipment. Effective for Class A,B,C & Electrical fires.

- Highest fire rating due to high performance ABC powder.
- Ready for instant use and simple to operate.
- Cart and cylinder are made of rugged steel and welded to meet extreme use conditions.
- Easily transportable & field rechargeable.
- Highly visible pressure-indicating gauge.
- Externally coated by electrostatic powder painting after shot blasting ensures maximum corrosion resistance.

FEATURES

- The fire extinguishers are designed to comply all the specification requirements of BS EN1866-1.

CODE NO.	STORE PRESSURE TYPE		CARTRIDGE TYPE	
	FED25M	FED50M	FED25MC	FED50MC
CAPACITY	25kg	50kg	25kg	50kg
PROPELLANT	Nitrogen	Nitrogen	0.28kg Nitrogen Cartridge	0.86kg Nitrogen Cartridge
FIRE RATING	A II B C	A II B C	A II B C	A II B C
OPERATING TEMPERATURE	Minus 30°C to 60°C	Minus 30°C to 60°C	Minus 30°C to 60°C	Minus 30°C to 60°C
OPERATING PRESSURE	14bar	14bar	14bar	14bar
TEST PRESSURE	25bar	25bar	25bar	25bar
APPROX. FULL WEIGHT	55kg	95kg	60kg	106kg
APPROX. SIZE (WXLXH mm)	460x550x940	560x700x1020	460x550x940	560x750x1026
APPROX. DISCHARGE TIME	18-25 secs	33-40 secs	16-24 secs	43-57 secs
APPROX. THROW RANGE	10m	10m	10m	10m



PRODUCT DESCRIPTION

FIGHTER stored pressure and cartridge type water extinguishers are characterized by their high performance, and simple method of operation ideal for tackling freely burning materials such as paper, cloth, wood and furniture. These are good general purpose fire extinguishers and widely used for their cost effectiveness.

- High quality external polyester paint.
- Thermoplastic internal coating to prevent corrosion.
- Spray nozzle to provide high fire rating.
- Controlled discharge.
- Unique gauge testing system.
- Unique colour code handle and base (Optional).
- Rechargeable and easy to service.
- Ideal use for Schools, Theaters, Apartments, Offices and Dry goods store.

FEATURES

- Water as liquid agent only recommended for fighting Class A fire.
- The fire extinguishers are designed to comply with the specifications and requirements of BS EN3.

TECHNICAL SPECIFICATION		
EXTINGUISHER TYPE	9L WATER	9L WATER
MODEL NO.	FEW9	FEW9C*
FIRE RATING	13A	13A
OPERATING TEMPREATURE	5 DEGREE C TO 60 DEGREE C	
OPERATING PRESSURE	12 Bar	
TEST PRESSURE	25 bar	
HEIGHT	625mm	630mm
FULL WEIGHT	13.5kg	14.2kg
DISCHARGE TIME	61-65 secs	88-92 secs
RANGE OF THROW (approx)	6 M	6 M
CARTON SIZE mm	200 x 200 x 645	200 x 200 x 645

* Cartridge Type



PRODUCT DESCRIPTION

FIGHTER stored pressure and cartridge operated foam extinguishers are multipurpose, ideal for fires involving volatile liquids and freely burning materials such as paper, cloth, wood and furniture. Suitable for Class A and Class B fire risks.

- Thermoplastic internal coating to prevent corrosion.
- Spray nozzle to provide high fire rating.
- Controlled discharge.
- Unique gauge testing system.
- Unique colour code handle and base (Optional).

FEATURES

- AFFF (6%) synthetic Aqueous Film - Forming Foam Agent capable of fighting Class A, B fires.
- The Fire extinguishers are designed to comply with the specifications and requirements of BS EN3.
- Rechargeable and easy to service.

TECHNICAL SPECIFICATION				
EXTINGUISHER TYPE	2L FOAM	6L FOAM	9L FOAM	9L FOAM
	STORE PRESSURE TYPE (NITROGEN PROPELLENT)			CO ₂ CARTRIDGE
MODEL NO.	FEF2	FEF6	FEF9	FEF9C
FIRE RATING	5A, 34B	13A, 144B	21A, 183B	13A, 183B
OPERATING TEMPREATURE	5 DEGREE C TO 60 DEGREE C			
OPERATING PRESSURE	12 Bar			
TEST PRESSURE	25 Bar			
HEIGHT	400mm	555mm	625mm	630mm
FULL WEIGHT	4.0kg	9.2kg	13.5kg	14.2kg
DISCHARGE TIME	10-14 secs	33-38 secs	44-49 secs	93-97 secs
RANGE OF THROW (approx)	2 M	4 - 5 M	4 - 5 M	4 - 5 M
CARTON SIZE mm	125 x 160 x 430	190 x 210 x 565	200 x 200 x 646	200 x 200 x 645



FEATURES

- The fire extinguishers are designed to comply with all the specification requirements of BS EN1866-1.
- Agent used is AFFF (6%) synthetic aqueous film forming foam for effective fire extinguishment.
- Ready for instant use and simple to operate.
- Cart and cylinder are made of rugged steel and welded to meet extreme use conditions.
- Easily transportable.
- Externally coated by electrostatic powder painting after shot blasting ensures maximum corrosion resistance.
- Internally coated by electrostatic block powder using resin for corrosion resistance.

TECHNICAL SPECIFICATION				
	STORE PRESSURE TYPE		CARTRIDGE TYPE	
CODE NO.	FEF45M	FEF135M	FEF45MC	FEF135MC
CAPACITY	45L	135L	45L	135L
PROPELLANT	Nitrogen	Nitrogen	0.6kg CO ₂ Cartridge	0.6kg CO ₂ Cartridge
FIRE RATING	A IV B C	A IV B C	A IV B C	A IV B C
OPERATING TEMPERATURE	Plus 5°C to 60°C	Plus 5°C to 60°C	Plus 5°C to 60°C	Plus 5°C to 60°C
OPERATING PRESSURE	14bar	14bar	12bar	12bar
TEST PRESSURE	25bar	25bar	25bar	25bar
APPROX. FULL WEIGHT	90kg	205kg	90kg	210kg
APPROX. SIZE (WXLXH mm)	560 x 700 x 1020	650 x 830 x 1570	560 x 700 x 1020	650 x 830 x 1570
APPROX. DISCHARGE TIME	165-185 secs	16-17 mins	180-200 secs	14-15 mins
APPROX. THROW RANGE	12m	12m	12m	12m



PRODUCT DESCRIPTION

FIGHTER stored pressure type wet chemical extinguishers are used for cooking oil or fat fires where the spray can create a flame almost immediate. Extinguishment happens while the wet chemical agent reacts with oil to form a soap like film to seal the surface of the oil and cool it down to prevent re-ignition. Suitable for Class A and F fire risks.

- High quality polyester paint.
- Internally coated by thermoplastic coating powders blend of polyolefin to prevent corrosion.
- Fire mist spray to prevent grease splashing.
- Brass nickel chrome plated head valve with simple squeeze operation.
- Unique gauge testing system.
- Unique color code handle and base (optional).
- Rechargeable and easy to service.
- Ideal use for commercial kitchens.

FEATURES

- Water as liquid agent only recommended for fighting Class F & A Fire.
- The Fire extinguishers are designed to comply with the specifications and requirements of BS EN3.

CAPACITY	2L	6L
MODEL	FEWC2	FEWC6
FIRE CLASS	AF	
FIRE RATING	5A 34B 40F	13A 75F
OPERATION TEMPERATURE	5 deg. Celsius to 30 deg. Celsius	
TEST PRESSURE	2.5MPa	
OPERATING PRESSURE @ 23 DEG C	700KPa	
Min. DISCHARGE TIME	75 Sec	



PRODUCT DESCRIPTION

The foam liquid extinguisher on trolley is highly manoeuvrable and it is suitable for outbreaks of fire that cannot be dealt with by using portable extinguishers. It is effective on flammable liquid fire. This is a self-contained foam production unit which only requires connection to suitable water supply (minimum water supply required is 180 LPM at 5 bar).

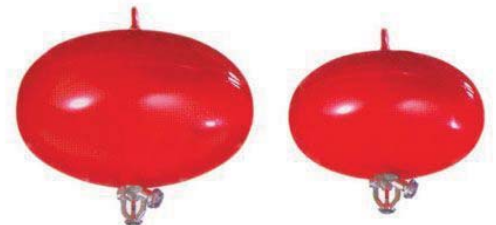
- Control valve (2" ball valve)
- 120L AFFF, foam concentrate and fibre glass tank on trolley"

Model No. FFT120					
Input Pressure at Inductor	Total Water Flow	Foam Produced	Approximate running time (min.) Inductor setting		Foam Throw from Branchpipe
Bar	Litre/Min.	Litre/Min.	3%	6%	m
5	180	1800	22	11	14
6	197	1970	20	10	
7	213	2130	18	9	17
8	228	2280	17	8.5	
10	255	2550	16	8	20

AUTOMATIC POWDER FIRE EXTINGUISHER

Ceiling suspended Automatic Dry Powder Extinguisher is a newly developed design, Dry Powder is automatically ejected through the sprinkler head, after release of the thermal safety device on reaching a temperature of 68°C.

Application area : Storage of flammable liquid / Generator Rooms
 Actuation temperature : 68°C
 Working pressure : 14 bar
 Installation : Mounting at ceiling height
 Test pressure : 25 bar
 Material : Cold roll steel
 Type of agent : Ammonium Phosphate ABC



CODE NO.	SIZE	Diameter (mm)	Height (mm)
FEA215-MS-060-RD	6 Kg	300	300
FEA215-MS-120-RD	12 Kg	340	360



PRODUCT DESCRIPTION

FIGHTER clean agent extinguishers have an effective extinguishing action, environmentally acceptable and excellent alternative for Halon 1211. Clean Agent (HFC-236fa) is a non-corrosive, electrically non-conductive and free of residue. It is ideally suited for protecting high value equipment.

FEATURES

- Safe for People: It is intended for use as a streaming agent providing a gas concentration sufficient to extinguish a fire. It is safe for use in occupied spaces.
- High quality external Polyester Paint to avoid corrosion
- Safe for Assets: It is electrically non-conductive, non-corrosive, and free of residue. As a gaseous agent, it targets the flame and extinguishes the fire. Operations can resume quickly, particularly if early detection methods are in use.
- Safe for the Environment: It does not contain chlorine or bromine, and has zero ozone depletion potential like many fluoride-based gases, HFC-236fa has some global warming potential.
- Clean Agent Hexa Fluoropropane Gas based Extinguishing Agent capable of fighting class A, B, C and Electrical fires effectively.
- Low in toxicity.
- The Fire extinguishers are designed to comply with the specifications and requirements of BS EN3.
- High Performance Extinguishing Agent.

MODEL NUMBER	FECA4	FECA6	FECA9	FECA12
EXTINGUISHER CAPACITY	4 Kg	6 Kg	9 Kg	12 Kg
PROPELLANT	95% Nitrogen + 5% Helium			
FIRE RATING	34B C	5A 55B C	5A 70B C	13A 70B C
WORKING PRESSURE	15 Bar	15 Bar	15 Bar	15 Bar
MAXIMUM OPERATING PRESSURE	21 bar @ 60°C			
TEST PRESSURE	30 Bar			
TOTAL WEIGHT	7.3 Kg	10.3 Kg	13.8 Kg	17.9 Kg
RANGE OF DISCHARGE	4 - 5 m	4 - 5 m	4 - 5 m	4 - 5 m
DURATION OF DISCHARGE	14 - 16 sec	20 - 22 sec	23 - 26 sec	38 - 40 sec
OPERATING TEMPERATURE	-20°C to 60°C			
CYLINDER MATERIAL	CRCA steel sheet			
HOSE LENGTH WITH NOZZLE	530 mm	620 mm	595 mm	685 mm
HEIGHT X DIAMETER (mm)	425 x 150	525 x 150	530 x 184	620 x 184



PORTABLE CO₂ EXTINGUISHER

Portable Carbon Dioxide Fire Extinguishers are known for its high reliable performance and ease of handling. Carbon Dioxide is discharged as a white cloud of snow which throttles a fire by eliminating the oxygen. Designed to protect areas where class B (flammable liquids and gases) or Electrical class of fires could occur.



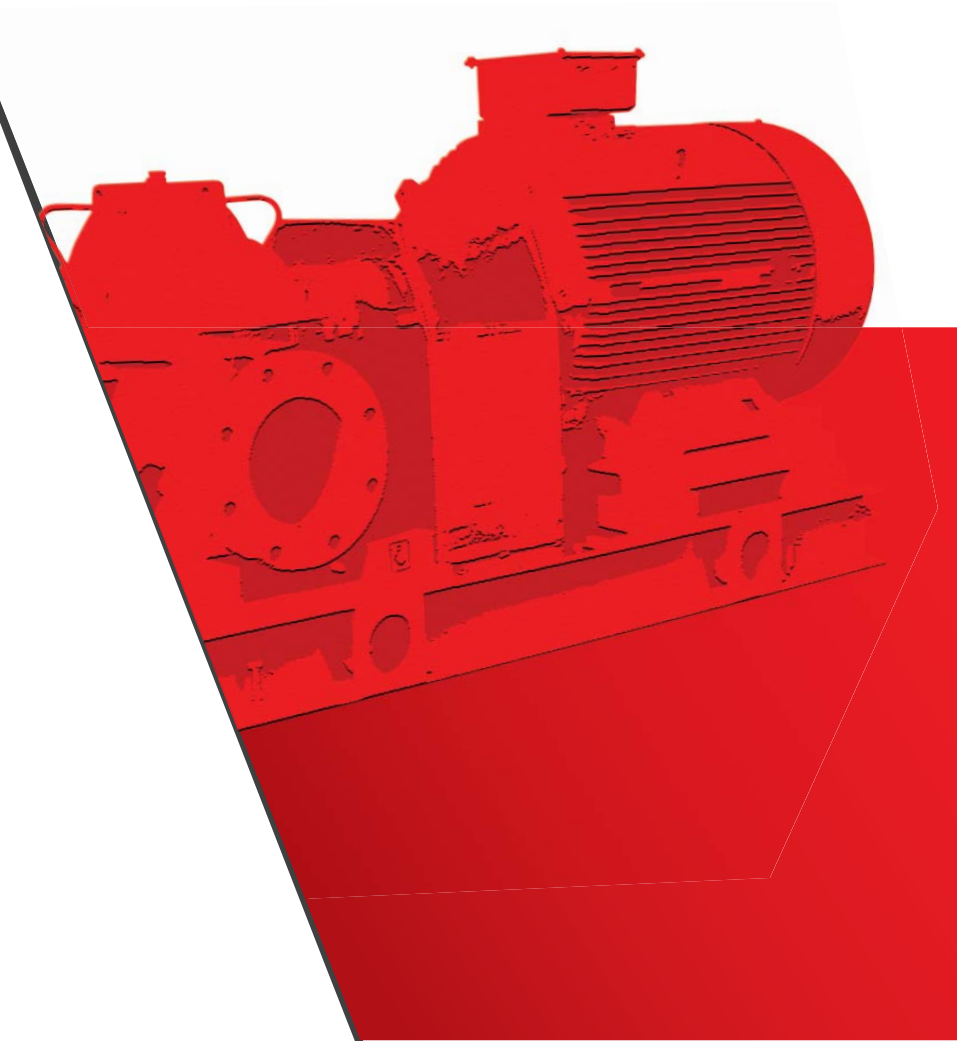
MODEL NUMBER	FECN2	FECN3	FECN5
EXTINGUISHER CAPACITY	2 Kg	3 kg	5 Kg
DIAMETER	105mm	137mm	137mm
HEIGHT	470mm	425mm	650mm
CYLINDER WEIGHT	3.8kg	5.7kg	9.4kg
WEIGHT kg	6.55kg	10kg	17.7kg
TEST PRESSURE BAR	250Bar	250Bar	250Bar
WORKING PRESSURE @ 20 Deg C Bar	166	166	166
MATERIAL	34CrMo4	34CrMo4	34CrMo4

PORTABLE DRY POWDER FIRE EXTINGUISHERS

Dry Powder extinguishers are characterized by their high performance, simple method of operation and rapid fire knock down capability. They are ideal for vehicle and marine risks. Powder extinguishers contain high performance powder and these are one of the most powerful powder extinguishers in the world. Suitable for Class A, B, C and Electrical Fires.



MODEL NUMBER	FEDN2	FEDN4	FEDN6
EXTINGUISHER CAPACITY	2 Kg	4 kg	6 Kg
HEIGHT	375mm	499mm	522mm
DIAMETER	110mm	140mm	162mm
CYLINDER WEIGHT	4.1kg	7kg	9.8kg
DISCAHRGE TIME SEC	11	15	17
TEST PRESSURE BAR	27Bar	27Bar	27Bar
FIRE RATING (85% ABC)	13A/89B/C	27A/144B/C	43A/233B/C
FIRE RATING (50% ABC)	8A/55B/C	21A/113B/C	27A/183B/C
TEMPERATURE RANGE	minus 30 deg to +60 deg C		



Fire Pumps



PACKAGED FIRE PUMP SETS - FFP SERIES

Fighter fire pumps provide you a reliable solution for your fire fighting needs.

Fighter fire pumps are available both as individual pumps & as a factory assembled & tested packaged set.

Pumps Types:

- End Suction Pumps
- Split Case Pumps
- Vertical Turbine Pumps
- Fire Water Boosters

Material:

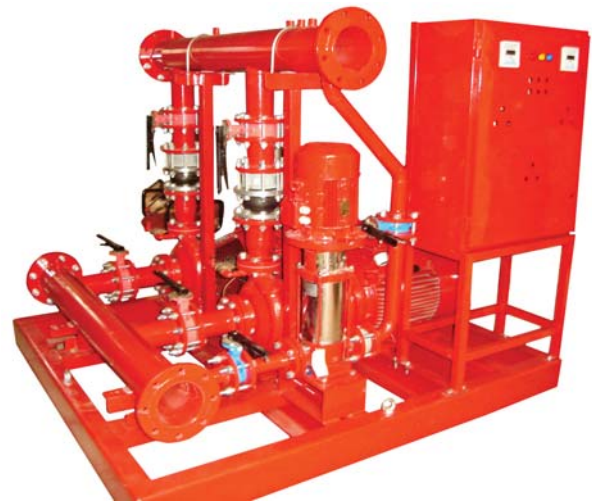
- Casing: Cast Iron
 Impeller: Cast Iron or bronze
 Shaft: Steel

Drivers:

- Available with Siemens / ABB motors
- Available with Halotop / Mega Force / Clarke Engines

Controllers:

- Pumps are available with common & separate controllers



S. No.	Code	Duty	Flange Size (SF/DF)	Motor power	Engine power	Jockey KW
			DN	KW	HP	KW
1	FFP-250/7-EDJ	250GPM @ 7 Bar 15GPM @ 7 Bar (J)	65/50	18.5	25	1.5
2	FFP-250/8-EDJ	250GPM @ 8 Bar 15GPM @ 8 Bar (J)	65/50	22.0	29	1.5
3	FFP-300/7-EDJ	300GPM @ 7 Bar 20GPM @ 7 Bar (J)	65/50	30.0	40	2.2
4	FFP-250/8-EDJ	300GPM @ 8 Bar 20GPM @ 8 Bar (J)	80/65	30.0	40	2.2
5	FFP-300/9-EDJ	300GPM @ 9 Bar 25GPM @ 9 Bar (J)	80/65	37.0	50	2.2
6	FFP-500/7-EDJ	500GPM @ 7 Bar 25GPM @ 7 Bar (J)	80/65	37.0	50	2.2
7	FFP-500/8-EDJ	500GPM @ 8 Bar 25GPM @ 8 Bar (J)	80/65	37.0	50	3.0
8	FFP-500/9-EDJ	500GPM @ 9 Bar 25GPM @ 9 Bar (J)	100/65	45.0	60	3.0
9	FFP-500/10-EDJ	500GPM @ 10 Bar 25GPM @ 10 Bar (J)	100/65	55.0	74	3.0
10	FFP-500/11-EDJ	500GPM @ 11Bar 25GPM @ 11 Bar (J)	100/65	55.0	74	4.0
11	FFP-500/12-EDJ	500GPM @ 12 Bar 25GPM @ 12 Bar (J)	100/65	75.0	101	4.0
12	FFP-750/8-EDJ	750GPM @ 8 Bar 25GPM @ 8 Bar (J)	125/100	55.0	74	3.0



S. No.	Code	Duty	Flange Size (SF/DF)	Motor power	Engine power	Jockey KW
			DN	KW	HP	KW
13	FFP-750/9-EDJ	750GPM @ 9 Bar 25GPM @ 9 Bar (J)	125/100	75.0	101	3.0
14	FFP-750/10-EDJ	750GPM @ 10 Bar 25GPM @ 10 Bar (J)	125/100	75.0	101	3.0
15	FFP-750/11-EDJ	750GPM @ 11 Bar 25GPM @ 11 Bar (J)	125/100	75.0	101	4.0
16	FFP-750/12-EDJ	750GPM @ 12 Bar 25GPM @ 12 Bar (J)	125/100	90.0	121	4.0
17	FFP-1000/8-EDJ	1000GPM @ 8 Bar 50GPM @ 8 Bar (J)	125/100	75.0	101	4.0
18	FFP-1000/9-EDJ	1000GPM @ 9 Bar 50GPM @ 9 Bar (J)	125/100	75.0	101	5.5
19	FFP-1000/10-EDJ	1000GPM @ 10 Bar 50GPM @ 10 Bar (J)	125/100	90.0	121	5.5
20	FFP-1000/11-EDJ	1000GPM @ 11 Bar 50GPM @ 11 Bar (J)	125/100	110.0	147	5.5
21	FFP-1000/12-EDJ	1000GPM @ 12 Bar 50GPM @ 12 Bar (J)	125/100	110.0	147	7.5

FIRE WATER BOOSTER

FEATURES

- A booster solution that offers domestic fire-protection up to 180 m³/h flow with vertical type pumps.
- Jockey pump solution in case of low flow demand and leakage.
- Standard audible and lighted alarm in any fault.
- It can be used both as fire-protection water booster and domestic water booster.
- Pneumatic pressure system equipped with sensitive pressure switches.
- Fighter standard Fire Water Booster sets is factory assembled and tested with suction and discharge valves and controls.
- On suction side, Butterfly valves or Ball valves are offered for isolation while on discharge side, check valves are also provided.
- Flexible connectors and strainers can be offered as optional.





SPRINKLERS (UL/FM APPROVED)

Type: Pendent, Upright, Sidewall & Concealed Sprinklers

K-factor: 2.8, 4.2, 5.6, 8, 11.2, 14, 22.4

Temperature: 57 °C, 68 °C, 79 °C, 93 °C, 141 °C

Finish: Brass & Chrome (Pendent/Upright) and Chrome & White Cover Plate (Concealed)

Response: Standard, Quick response & ESFR
Escutcheon Plate also available on request.



VIKING®



FLEXIBLE CONNECTOR FOR SPRINKLER (UL/FM APPROVED)

Size: 1" dia x 3 ft (Other sizes available on request)

Rated Pressure: 175 psig (Braided and Unbranded)



ALARM CHECK VALVE ASSEMBLY (UL/FM APPROVED)

Includes: Alarm Check Valve, Trim Assembly, Retard Chamber, Pressure switch & Water motor Alarm

Working Pressure: 300 Psi

Available in Flanged & Grooved ends.

OS&Y Gate Valve also available (Optional) with Assembly



ZONE CONTROL VALVE ASSEMBLY (UL/FM APPROVED)

Includes: Butterfly with internal Supervisory Switch or OS&Y Gate valve with external Temper Switch, Water Flow Switch, Test & Drain & Pressure Gauge

Working Pressure: 300 Psi

Available in Flanged & Grooved ends.

Swing Check valve & Pressure Reducing valve also available (Optional) with Assembly



OS&Y GATE VALVE (UL/FM APPROVED)

Sizes available (Nominal): 2"/DN50, 2½"/DN65, 3"/DN80, 4"/DN100, 5"/DN125, 6"/DN150, 8"/DN200, 10"/DN250 and 12"/DN300

Working Pressure: 300 Psi

Available in Flanged & Grooved ends.



BUTTERFLY VALVE (UL/FM APPROVED)

Sizes available (Nominal): DN65/2 1/2", DN80/3", DN100/4", DN150/6" and DN200/8"

Working Pressure: 300 Psi

Available in Flanged & Grooved ends.



CHECK VALVE (UL/FM APPROVED)

Sizes available (Nominal): DN65/2 1/2", DN80/3", DN100/4", DN150/6" and DN200/8"

Working Pressure: 300 Psi

Available in Flanged & Grooved ends.



Pressure Reducing Valves / Pressure Relief Valves



Cla-Val fire protection products provide highly accurate and reliable service in the most critical applications, such as oil platforms, FPSOs, refineries, power plants, chemical storage facilities, mines, tunnels, aviation facilities, high-rise office and residential buildings and hospitals.

90-21 Fire Protection Pressure Reducing Valve - UL, ULC

Cla-Val 90G-21 (globe) and 90A-21 (angle) Pressure Reducing Valves automatically reduce a higher inlet pressure to a steady lower outlet pressure regardless of changing flow rate and/or varying inlet pressure.

Advantages include:

Globe or Angle Pattern

Available in Cast Bronze, Ductile Iron and Cast Steel

Grooved Ends (1 1/2" - 8")



Size	Ductile Iron 150# Flanged	Ductile Iron 300# Screwed	Ductile Iron 300# Flanged	Bronze 300# Threaded	Bronze 150# Flanged	Bronze 300# Flanged	Cast Steel 300# Flanged & Grooved End	Globe Pattern Ductile Iron Grooved End	Angle Pattern Ductile Iron Grooved
1-1/2"	UL / ULC	UL / ULC	UL / ULC	UL / ULC			UL / ULC	UL / ULC	
2"	UL / ULC	UL / ULC	UL / ULC	UL / ULC	ULC	ULC	UL / ULC	UL / ULC	UL / ULC
2-1/2"	UL / ULC	UL / ULC	UL / ULC	UL / ULC	ULC	ULC	UL / ULC	UL / ULC	
3"	UL / ULC	UL / ULC	UL / ULC	UL / ULC	ULC	ULC	UL / ULC	UL / ULC	UL / ULC
4"	UL / ULC		UL / ULC		ULC	ULC	UL / ULC	UL / ULC	UL / ULC
6"	UL / ULC		UL / ULC				UL / ULC	UL / ULC	UL / ULC
8"	UL / ULC		UL / ULC					UL / ULC	
10"	ULC		ULC						

SELECTION GUIDELINES

FLOW CAPACITY TABLE

Flow Rate (GPM of Water)

Valve Size	Minimum	Minimum
1-1/2"	160	1
2"	262	1
2-1/2"	373	2
3"	576	2
4"	992	4
6"	2251	10
8"	3900	15
10"	6150	35

Sizes

See above chart

End Details

150 and 300 ANSI B16.42

Pressure Ratings

Class 150 - 250 psi Max.
Class 300 - 400 psi Max.
Water, to 180 Degree F Max.

Standard Materials

Main Valve Body & Cover
Ductile Iron ASTM A536 Grade 65-45-12"
Standard Main Valve Trim:
Bronze Seat
Stainless Steel Stem
Standard Pilot Control System:
Cast Bronze With Stainless Steel Trim

Pressure Adjustment Ranges

Pressure Class

175 lb.

300 lb.

UL

30-165

30-165

ULC

30-165

30-165

Pressure Differential

10 psi Minimum

Temperature Range

Water to 180 Degree F Maximum

50B-4KG1 & 2050B-4KG1 Pressure Relief Valve - UL, FM, ULC, ABS

The Cla-Val Model 50B-4KG1 Globe / 2050B-4KG1 Angle Pressure Relief Valve is designed specifically to automatically relieve excess pressure in fire protection pumping systems.

Advantages include:

Closes Gradually for Surge-Free Operation

Adjustable Pressure Settings, Not Affected by Pressure At Valve Discharge



Fire Pump Set (UL/FM Approved)



Patterson Pump Company is one of the World's leading suppliers of quality pumps and the foremost designers and manufacturers of: Split Case Pumps & End Suction Fire Pumps, Vertical Turbine Fire Pumps, Vertical In-Line Pumps & Engineered Packaged Systems.

It is Patterson's century-long dedication to the quality, innovation and reliability of its products that has inspired its high-quality, valued employees.

The quality and reliability of Patterson products doesn't stop at installation. Having its Head Quarter in Toccoa, Georgia USA and factories in USA & Mullingar, Ireland; Patterson is equally dedicated to providing the finest field and factory services and maintaining the best service department in the industry.

Field-Driven Innovation That Answers Change

Five values always drive Patterson product development: efficiency, flexibility, durability, maintainability and supportability. It's these values that give Patterson products your lowest cost of ownership over long life cycles.

Pumps Types:

- End Suction Pumps
- Split Case Pumps
- Vertical Turbine Pumps

Drivers:

- Available with WEG / LINCOLIN motors
- Available with CLARKE / CAT / CUMMINS Engines

Controllers:

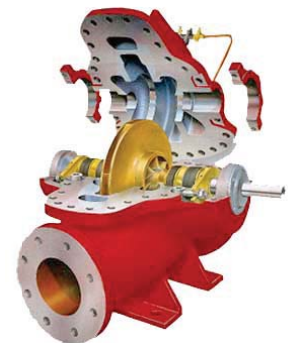
- Pumps are available with separate TORNATECH / FIRETROL controllers

Standard Accessories:

- Air Release Valve
- Casing Relief Valve
- Pressure Gauges
- Pressure Relief Valve
- Flow Meter



Vertical Turbine Pump



Horizontal Split Case Pump



End Suction Fire Pump



Vertical Inline Fire Pump



Pre-Packaged Fire Pump System

Seismic Expansion Joint



UNISAFE- U Flex and V Flex assemblies provides highly flexible and reliable connection features for fire protection lines, seismic Security areas, dilatation points and industrial application. These assemblies are used to absorb the movements caused by the potential break downs and depressions especially where the seismic movements may cause hazardous results.

UNISAFE- U Flex and V Flex assemblies that are manufactured with FM (certificates prevents structural deformation such as cracks and break down of rigid connection by the required flexibility they provide and offer easy, safe and reliable installation features for the users.

Design

UNISAFE- U Flex and V Flex assemblies are consisted of the parallel corrugated metal hose with braiding and Carbon Steel connection and direction parts likewise turns and elbows at various angles. Flexible metal hose provides high movement capacity in all directions to the assemblies and the braiding increases the pressure resistance accordingly.

Structure

- Bellow Material Stainless Steel AISI 316L/AISI 321
- Braiding Material Stainless Steel AISI 304
- Connection Types Flange, Welded End, Grooved
- Flange Material Carbon Steel St. 37.2, the material can be customized on request
- And Turn Material Carbon Steel St. 37.2, the material can be customized on request

Operation Conditions

- Temperature Range -80oC/+600oC
- Pressure Range 175 psi-350 psi
12 bar-20 bar

U-FLEX, Braided Loop Expansion Joints

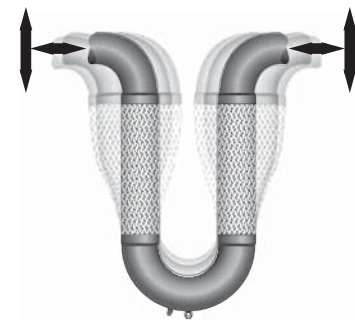
Available Types (Standard Versions)

Name	Movement Amount All Plates	Design Pressure	Definition
U-FLEX	50mm-100mm	175psi-300psi 12bar-20bar	U-type, 3D braided Loop-joint, Welded End
U-FLEX	50mm-100mm		U-type, 3D braided Loop-joint, Flanged
U-FLEX	50mm-100mm		U-type, 3D braided Loop-joint, Grooved End

U-FLEX, Braided Loop Expansion Joints

Available Types (Standard Versions)

Name	Movement Amount All Plates	Design Pressure	Definition
V-FLEX	100mm	175psi-300psi 12bar-20bar	V-type, 3D braided Loop-joint, Welded End
V-FLEX	100mm		V-type, 3D braided Loop-joint, Welded End
V-FLEX	100mm		V-type, 3D braided Loop-joint, Grooved End



Fire Doors



FIGHTER provides a wide range available with a variety of configuration and vision panel options. Fire rated doors are designed for areas where strength, stability and durability are a priority. Doors are manufactured as per BS 476 Part 22 Standards.

SIZES

Custom sizes are available.

FIRE RATING

Up to 120 minutes.

HANDING

We provide a wide selection of handing as required for your fire rated steel doors. (See Table 1 Below)

TYPES OF PRODUCTS

We will supply you with a fireproof door in strong fire frames with fire rated glass. FIGHTER can provide you following door types:

- Single Leaf Fire Doors
- Double Leaf Fire Doors
- Fire Rated Windows
- Fire Shutters

OPTIONS

- Honeycomb and Rock Wool options available
- Acoustic options available
- Available based on ANSI/UL10C (or) ANSI/UL10B

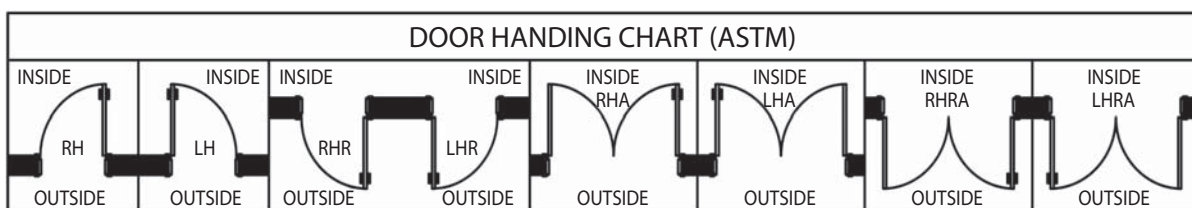
RECOMMENDED USE

- Interior applications
- Residential applications
- Commercial applications
- Labor camps
- Warehouses
- Government buildings



Hardware Accessories	
S. No.	Description
1	BB- Hinges 4"x3"x3mm
2	Door Closer
3	Lever Handle (Pair)
4	Euro Profile Sash Lock
5	Double Cylinder
6	Cylinder Escutcheon
7	Panic Bar
8	External Trim
9	Door Stopper
10	Dust Proof Socket
11	Flush Bolt

S. No.	SPECIFICATION	
1	Approved standard:	British Standard: 476 Part 22, BM TRADA Certified.
2	Door Core:	Honeycomb & Rockwool for oversized doors
3	Leaf Sheet Thick:	1.2 mm Thick GI Sheet
4	Frame Sheet Thick:	1.5 mm Thick GI Sheet
5	Frame Jamb Depth:	Up to 150 mm & Up to 200 mm, Single rebated frame
6	Vision Panel	(Optional / Wherever applicable)
7	Hardware	As per Hardware Accessories
8	Painting/ Finishing	Polyester Powder Coating (Factory Standard)
9	REMARKS	*RAL Color Code required for Customized color options



Fire Suppression System



Automatic Fire Suppression Systems control and extinguish fires for the unmanned areas, such as IT Server Rooms, Switch Gear Rooms & Control Rooms, where the wet system can effect/harm the equipment. Fire Suppression Systems can use a variety of extinguishing agents depending on the assets it is designed to protect.

FIGHTER can offer you Fire Suppression System as a TURN KEY SOLUTION complete with Design, Supply, Installation, Testing & Commissioning as per NFPA 2001 & ISO 14520 standards.



SYSTEMS OFFERED

- * Novec 1230
- * Inertec
- * FM 200
- * HFC 227
- * CO₂

APPLICATION

Telecommunications Facilities

- * Telephone Exchanges
- * Central & Remote Cellular Sites

Commercial & Institutional Facilities

- * Bank Vaults & Document Storage
- * Medical Labs
- * Aviation & Marine Applications

Data Centres & Industrial Applications

- * Computer Rooms & Electronics
- * Server Rooms & Process Control Rooms
- * Electrical Switchgears & Battery Rooms
- * Pharmaceutical / Medical Facilities
- * Military Installations

Novec™ 1230 SYSTEMS

Novec 1230 fluid will not damage electronics and leaves no residue behind. High safety margins make it extremely safe for people working in protected areas. With 0.0 ozone depletion potential, an atmospheric lifetime of just five days, and a global warming potential of 1.0, the Novec 1230 system is the long-term alternative to Halon.

INERTEC

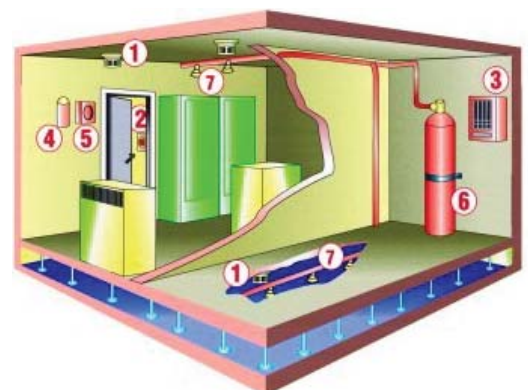
INERTEC is a gaseous clean fire suppressant comprised of 100% nitrogen which is a naturally occurring gas. As it is derived from a gas present in the atmosphere, it exhibits no ozone depleting potential, does not contribute to global warming, nor does it contribute unique chemical species with extended atmospheric lifetimes.

FM 200

Safe, proven, and dependable with no residue and low storage volume. The FM200 system with extinguishing agent FM200 or HFC-227ea is extremely effective and environmentally safe. It rapidly stops ordinary combustible, electrical, and flammable liquid fires before they can cause significant damage, and can be safely used where people are present.

CARBONDIOXIDE (CO₂)

Carbon Dioxide extinguishes fire by reducing the oxygen content of the protected space and/or local flame front to a point where it will not support combustion. Oxygen reduction below 16% by volume will extinguish most fires. Surface or "flash" type fires (oils, paints, etc.) are quickly extinguished.





PACK SIZE

Quarter – 0.91 lts. / Gallon – 3.65lts. /Drum – 14.6 lts.

COLOR RANGE

Red Oxide

FILM PROPERTIES

Chemical resistance

Resistance to mild chemical fume attack but where there is heavy attack e.g. – Actual contact with chemical special paint system may be required.

Heat resistance

Generally resistance to heat up to 90°C, but some discoloration of light color may occur at temperature above 80°C

Water resistance

Resistant to the levels of atmosphere humidity present in normal interior and exterior environments and will stand repeated washing. Not suitable for use on immersed surfaces.

COMPOSITION (NOMINAL)

Light fastness Non Lead Pigments
Binder: Long Oil Alkyd
Solvent: MTT (Mineral turpentine)

VOLUME SOLIDS

White 30% (nominal), Other color will vary

DRYING TIME

Single coat at standard film thickness.

Touch Dry:

3- 4 hrs

Recoat: 16 hrs

PRACTICAL COVERAGE

150sqft. / lts. per coat

APPLICATION

Brush / Roller / Spray

THINNING

Brush / Roller

Add up to 0.5 part of mineral turpentine to 4 parts of paints (10 – 12 %)

Conventional spray

Add up to 1 part Mineral turpentine to 4 parts of paints (20 – 25 %)

CLEANING UP

Clean all equipment with Mineral turpentine immediately after use.

SURFACE PREPARATION

Surface generally must be clean, dry, free from all defective or poorly adhering material, dirt, and grease, wax etc. Previously painted surfaces should be thoroughly rubbed down using a suitable abrasive paper and then dusted off.

Steel surfaces should be manually prepared by power of hand tool to BS7079 part A1: 1989 st3.

For optimum performance new galvanized and aluminum surfaces should be cleaned and degreased, then pre-treat with a pre-treatment primer to ensure good adhesion.

SYSTEM INFORMATION

Wood:

Appropriate primer SB (1 Coat),

Metal:

Wallac Redox primer (1-2 coat)

Masonry:

Wallac Prime seal SB (1 Coat),

Finish (2 – 3 coats)

Marvel Synthetic Matt Enamel

Evershine Synthetic Gloss Enamel

SAFETY, HEALTH AND FLAMMABLE:

ENVIRONMENT INFORMATION

In case of fire use foam, dry powder, AAF, CO2 fire extinguisher. Never use water. Keep away from sources of ignition. No smoking. Keep container tightly closed and upright to prevent leakage when not in use. Keep out of reach of children. Keep away from combustible material. CO TAINS MINERAL TURPENTINE. Work only in areas of good ventilation. Inside always keep doors and windows fully open during application and drying. Do not use on large surface areas inside or small confined spaces. IF THIS PRODUCT IS USED BY PROFESSIONAL OPERATORS it may be applied on large surfaces inside or used in small confined spaces, provided air supplied breathing apparatus is used. When applying for short periods only or rubbing down, a suitable cartridge mask should be worn provided the filter is changed regularly.



PACK SIZE

Quarter – 0.91 lts. /
Gallon – 3.65lts. /Drum – 14.6 lts.

COLOR RANGE

Red, Black (As per Shade Card)

FILM PROPERTIES

Chemical resistance

Resistance to mild chemical fume attack but where there is heavy attack e.g. – Actual contact with chemical special paint system may be required.

Heat resistance

Generally resistance to heat up to 90°C, but some discoloration of light color may occur at temperature above 80°C

Water resistance

Resistant to the levels of atmosphere humidity present in normal interior and exterior environments and will stand repeated washing. Not suitable for use on immersed surfaces.

COMPOSITION (NOMINAL)

Light fastness Non Lead Pigments
Binder: Long Oil Alkyd
Solvent: MTT (Mineral turpentine)

VOLUME SOLIDS

White 30% (nominal), Other color will vary

DRYING TIME

Single coat at standard film thickness.

Touch Dry:

3- 4 hrs

Recoat: 16 hrs

PRACTICAL COVERAGE

150sqft. / lts. per coat

APPLICATION

Brush / Roller / Spray

THINNING

Brush / Roller

Add up to 0.5 part of mineral turpentine to 4 parts of paints (10 – 12 %)

Conventional spray

Add up to 1 part Mineral turpentine to 4 parts of paints (20 – 25 %)

CLEANING UP

Clean all equipment with Mineral turpentine immediately after use.

SURFACE PREPARATION

Surface generally must be clean, dry, free from all defective or poorly adhering material, dirt, and grease, wax etc. Previously painted surfaces should be thoroughly rubbed down using a suitable abrasive paper and then dusted off.

Steel surfaces should be manually prepared by power of hand tool to BS7079 part A1: 1989 st3.

For optimum performance new galvanized and aluminum surfaces should be cleaned and degreased, then pre-treat with a pre-treatment primer to ensure good adhesion.

SYSTEM INFORMATION

Wood:

Appropriate primer SB (1 Coat),

Metal:

Wallac Redox primer (1-2 coat)

Masonry:

Wallac Prime seal SB (1 Coat),

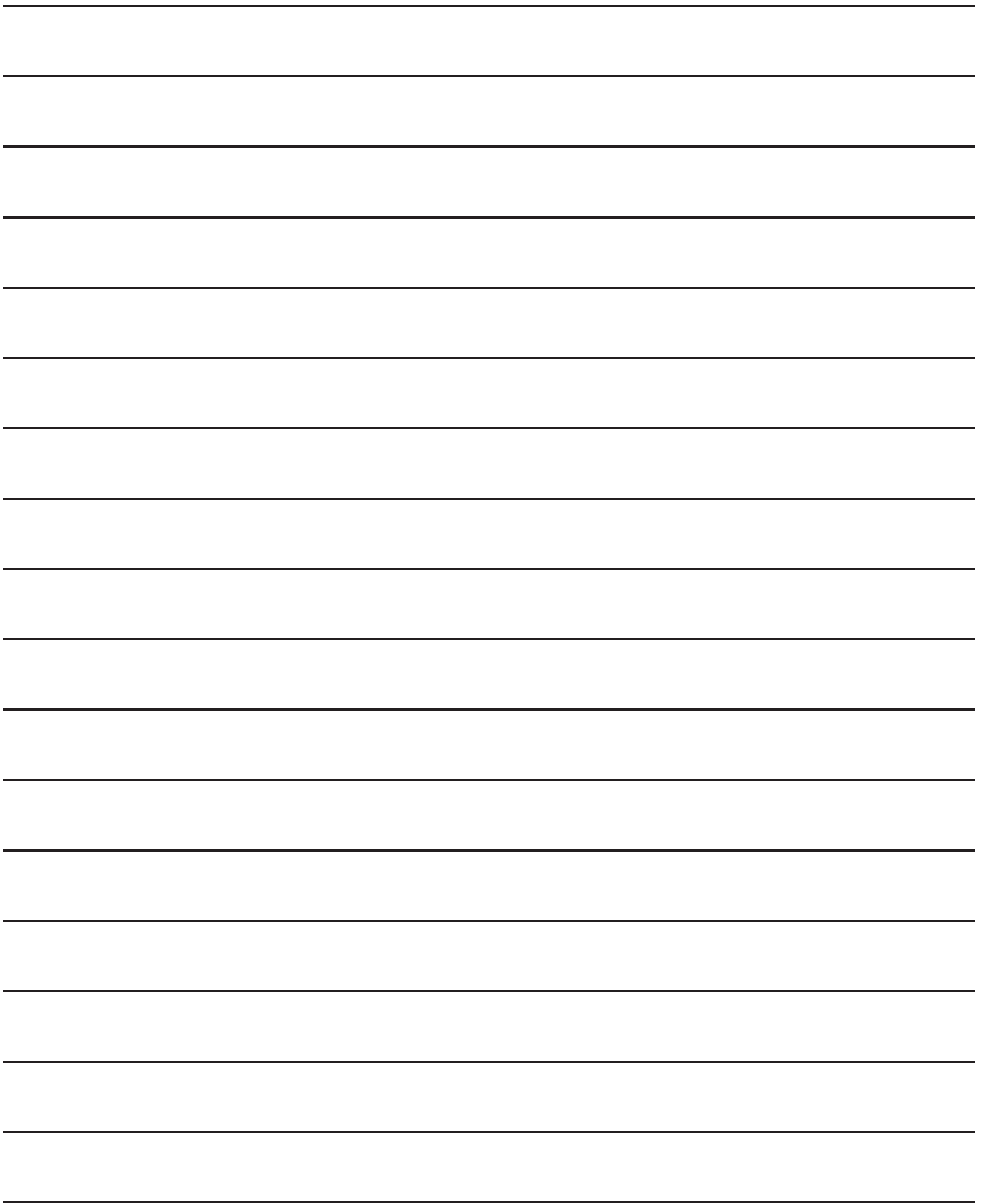
Finish (2 – 3 coats)

Evershine Synthetic Gloss Enamel

SAFETY, HEALTH AND FLAMMABLE:

ENVIRONMENT INFORMATION

In case of fire use foam, dry powder, AAAF, CO2 fire extinguisher. Never use water. Keep away from sources of ignition. No smoking. Keep container tightly closed and upright to prevent leakage when not in use. Keep out of reach of children. Keep away from combustible material. CO TAINS MINERAL TURPENTINE. Work only in areas of good ventilation. Inside always keep doors and windows fully open during application and drying. Do not use on large surface areas inside or small confined spaces. IF THIS PRODUCT IS USED BY PROFESSIONAL OPERATORS it may be applied on large surfaces inside or used in small confined spaces, provided air supplied breathing apparatus is used. When applying for short periods only or rubbing down, a suitable cartridge mask should be worn provided the filter is changed regularly.





BE SAFE. BE FIGHTER.

Head Office:

B-1, Salman Sheikh Center, Street 4, Block 6, Gulshan e Iqbal, Karachi, Pakistan.
Ph: +9221 34182128

Factory Address:

Plot # 191/28, Feroz Street, Main Samundri Road, Faisalabad, Pakistan.

In line with FIGHTER policy for continuous product development,
FIGHTER has the right to change specifications without prior notice.

Email: info@fighterfire.co
sales@fighterfire.co
Web: www.fighterfire.co