

## Fire Fighting Equipment



**FOAM** 















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### An Introduction to NAFFCO

NAFFCO FZCO is among the world's leading manufacturers and suppliers of top-tier firefighting equipment, fire protection systems, fire alarms, security and safety engineering systems worldwide. Since its humble beginnings, NAFFCO has grown from its headquarters in Dubai, UAE to expand to serving over 100 countries around the world.

## One Stop Shopping for All Your Fire Safety and Security Needs

Today's companies recognize the importance and convenience of having multiple safety services available under one roof, a "one-stop shopping" source for all types of fire protection systems. As the undisputed leader in

firefighting technology and fire safety solutions, NAFFCO has worked in both the private and government sectors, as well as manufacturing plants, hospitals, stadiums, malls and other organizational projects, delivering comprehensive fire safety and engineering solutions.

NAFFCO is associated with globally renowned international companies in the fire protection industry such as Esser, Secutron, Megalights, Evax, Fike, Central, Shield, Mueller, Giacomini, RB Pumps, Bombas, Ideal Pumps, Joslyn Pumps, Peerless Pumps.

At NAFFCO we are passionate about sustaining, upgrading and improving any means of safety, by having over 2 million square foot of manufacturing space, over 450 engineers, and following all the latest technology available. We live by our passion, the passion to protect.



























### Manufacturing

NAFFCO manufacturing department has the latest technology, state-of-the-art machines (CNC machines, hydraulic shearing and bending machines, all types of welding machines - MIG, TIG, ARC etc.), and a complete machine shop that enable us to meet the needs of any production requirement.

NAFFCO has the ability to introduce the latest technological systems & equipment in the fire safety field. Our engineers and technicians are well qualified & experienced in producing quality products.

The department is equipped with full-fledged testing facilities to test the equipment as per NFPA, EN, ICAO, KKK and Civil Defense standards & requirements, and to meet the customers specifications.

Considering the above facilities and excellence in engineering capabilities, NAFFCO can meet any challenges to produce bulk quantities of fire safety materials.



### CO<sub>2</sub> PORTABLE FIRE EXTINGUISHERS (UL LISTED)

### PRODUCT DESCRIPTION

NAFFCO CO2 gas extinguishers are characterised by their high performance for fires including items at risk for electrical shorts like computer, office equipment and generators etc. Co2 is non conductive, clean and safe, ensuring minimal damage to electrical equipment and furnishings. Suitable for Class B fire risks.



- Carbon Dioxide is the trusted nonconductive agent and is most effective for cleaning with electronic equipment is suitable for use on Class B and Class C fires.
- TYPICAL USES: For protecting sensitive electronic equipment in offices, classrooms, parking garages, and hotel/motel assembly halls and guest areas. For protecting sensitive electronic equipment in businesses such as retails to res, light manufacturing facilities, research
- facilities. auto dealerships, vehicle/aircraft/marine service centers, and manufacturing processes such painting, dipping, and coating.
- Not suitable for use on fires involving cooking oil and grease. Recommended for use on sensitive electronic equipment.

MODEL NUMBER	N 05LC	N 10LC	N 15LC	N 20LC
Agent Capacity	5 lb. (2.27 Kg)	10 lb. (4.54 Kg)	15 lb. (6.8 Kg)	20 lb. (9.07 Kg)
UL Rating	5-B:C	10-B:C	10-B:C	10-B:C
Discharge Time	9 Sec	9 Sec	15 Sec	20 Sec
Range (FT/M)	4-8 / 1.2-2.4	4-8 / 1.2-2.4	4-8 / 1.2-2.4	4-8 / 1.2-2.4
Bracket	Wall	Wall	Wall	Wall
Ship Weight	13.75 lb. (6.3 Kg)	27.75 lb. (12.6 Kg)	37.75 lb. (17.1 Kg)	49 lb. (22.2 Kg)
Unit Height	17.375 in (44.1 cm)	19.75 in (50.2 cm)	26.375 in (67 cm)	26.875 in (68.2 cm)
Unit Width	8.25 in (21 cm)	12 in (30.5 cm)	12 in (30.5 cm)	13 in (33 cm)
Unit Diameter	5.25 in (13.3 cm)	6.89 in (17.5 cm)	6.89 in (17.5 cm)	8 in (20.3 cm)

### **CO2 PORTABLE FIRE EXTINGUISHERS**











### **FEATURES**

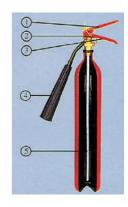
- Carbon dioxide is a gaseous agent, colourless, odourless / non-toxic and provides rapid knock down of industrial fire. It is capable of fighting Class B fire effectively.
- Kitemark / LPCB Certified to BS EN3.
- Cylinders compliant to council directive 97/23/EC (PED) and Statutory instrument 1999 No. 2001 is certified by BSI (0086).
- Certified by BSI under marine equipment directive.
- Seamless steel body (Lightweight).
- High quality polyester paint.
- Controlled discharge.

- Brass head valve with simple squeeze operations provided with pressure relieve disc.
- Rechargeable & easy to service.
- Non-conductive agent for electrical use without risk to operator.
- CO2 gas disappears quickly leaving no residue.
- Swivel horn with no freeze burn, with greater directional control of CO2 discharge through horn rotation feature.
- 2Kg is available with the 55B Fire rating as efficient as 5Kg unit.

Ideal Use: Chemical manufacturing plant, oil rigs, rail yards, warehouses, construction sites, parking garages, airport, boat and docks, and large laboratories.

MODEL NUMBER	NC2	NCS2	NCZ2	NC2A	NC5	NC5X*	NC5A	NCA5X*
Extinguisher Capacity	2 Kg	2 Kg	2 Kg	2 Kg	5 Kg	5 Kg	5 Kg	5 Kg
Propellant				Self Pro	pelling			
Fire Rating	34B	34B	55B	55B	55B	70B	55B	70B
Working Pressure				55-60 Ba	r @ 25°C			
Maximum Operating Pressure				169 Bar	@ 60°C			
Test Pressure				250	Bar			
Total Weight	8.2 Kg	8.3 Kg	8.3 Kg	4.9 Kg	17.5 Kg	17.5 Kg	12.1 Kg	12.1 Kg
Range of Discharge	4-5m	4-5m	4-5m	4-5m	5-6m	5-6m	5-6m	5-6m
Duration of Discharge	8-9 sec	8-9 sec	10-12 sec	10-12 sec	10-12 sec	12-13 sec	10-12 sec	12-13 sec
Hose Length with Nozzle	N/A	N/A	N/A	N/A	750mm	750mm	750mm	750mm
Operating Temperature	-20°C to +60°C							
Cylinder Material	Carbon Steel	Carbon Steel	Carbon Steel	Aluminium	Carbon Steel	Carbon Steel	Aluminium	Aluminium
Height x Diameter (mm)	610x101.6	610x101.6	610×101.6	572x111	760x139.7	760x139.7	698x152	698x152

<sup>\*</sup> LPCB Approval only



- 1. Valve / Extn. Lever
- 2. Safety Pin with Chain
- 3. Valve Handle
- 4. Discharge Horn
- 5. Syphon Tube



### CO<sub>2</sub> PORTABLE FIRE EXTINGUISHERS

(AS/NZS 1841.6)

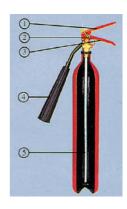
#### **FEATURES**

- Carbon dioxide is a gaseous agent, colourless, odourless / non-toxic and provides rapid knock down of industrial
- It is capable of fighting Class B fire effectively.
- · Australian & New Zealand Standard AS/NZS 1841.6, certified by Global-Mark Pty Ltd.
- Aluminum / Carbon Steel Body.
- High quality polyester paint.
- Controlled discharge.
- Brass Nickel plated head valve with simple squeeze operations provided with pressure relieve disc.
- Rechargeable & easy to service.
- Non-conductive agent for electrical use without risk to operator.
- CO2 gas disappears quickly leaving no residue.
- Swivel horn with no freeze burn, with greater directional control of CO2 discharge through horn rotation feature.



Ideal Use: Chemical manufacturing plant, oil rigs, rail yards, warehouses, construction sites, parking garages, airport, boat and docks, and large laboratories.

MODEL NUMBER	2NAC-AS	2NC-AS	2NC-ASN	2NAC-ASN	3.5NC-AF	3.5NAC-AF	5NAC-AF	5NC-AF
Extinguisher Capacity	2 Kg	2 Kg	2 Kg	2 Kg	3.5 Kg	3.5 Kg	5 Kg	5 Kg
Propellant				Self Pro	pelling			
Fire Rating	2B : E	2B : E	5B : E	5B : E	5B : E	5B : E	5B : E	5B : E
Working Pressure				55 - 60 Ba	ar @ 25°C			
Maximum Operating Pressure				174 Bar	@ 60°C			
Test Pressure				250	Bar			
Total Weight	5.8 Kg	8 Kg	8 Kg	4.9 Kg	13.7 Kg	10.5 Kg	12.1 Kg	17.1 Kg
Range of Discharge	4 - 5 Mtr.	4 - 5 Mtr.	4 - 5 Mtr.	4 - 5 Mtr.	4 - 5 Mtr.	4 - 5 Mtr.	5 - 6 Mtr.	5 - 6 Mtr.
Duration of Discharge	10 Sec.	8 Sec.	10 Sec.	10 Sec.	10.9 Sec.	10.62 Sec.	12 Sec.	12 Sec.
Hose Length with Nozzle	N/A	N/A	N/A	N/A	1050 mm	1050 mm	1050 mm	1050 mm
Operating Temperature		-20℃ to +60℃						
Cylinder Material	Aluminium	Carbon Steel	Carbon Steel	Aluminium	Carbon Steel	Aluminium	Aluminium	Carbon Steel
Height x Diameter (mm)	572 x 111	610 x 101.6	610 x 101.6	572 x 111	600 x 139.7	590 x 140	698 x 152	760 x 139.7



- 1. Valve / Extn. Lever
- 2. Safety Pin with Chain
- 3. Valve Handle
- 4. Discharge Horn
- 5. Syphon Tube



### CO<sub>2</sub> MOBILE FIRE EXTINGUISHERS

### PRODUCT DESCRIPTION

NAFFCO 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.

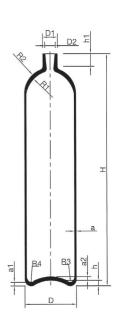




- The Fire Extinguishers are designed to comply with the specifications and requirements of BSEN 1866-1.
- Kitemark approved.
- High-grade brass head valve ensures reliability and optimizes efficiency.
- Discharge outlet is controlled by High Pressure Ball Valve.
- High gloss polyester powder painted UV stabilized
- after shot blasting ensures corrosion resistance under extreme conditions.
- Safety valve is fitted in each extinguisher for maximum safety.
- Discharge nozzle designed to produce a jet of extinguishing gas.

MODEL NUMBER	NTC 10X	NTC 30X
Extinguisher Capacity	10 Kg	30 Kg
Fire Rating	70B	113B
Working Pressure	55 - 60 Bar @ 25℃	55 - 60 Bar @ 25°C
Maximum Working Pressure	169 Bar @ 60°C	169 Bar @ 60°C
Test Pressure	250 Bar	250 Bar
Total Height & Width	1,435 x 440 mm	1,095 x 675 mm
Total Weight	52 Kg	125 Kg
Range of Discharge	6-8 m	6-8 m
Duration of Discharge	19 - 21 sec	42 - 45 sec
Operating Temperature	-20°C to +60°C	-20°C to +60°C
Propellant	Self Propellant	Self Propellant
Hose Size & Length	Bore 3/8" x 5m	Bore 3/8" x 5m
Cylinder Material	Carbon Steel	Carbon Manganese Steel

### CO<sub>2</sub> HIGH PRESSURE CYLINDERS





### **PRODUCT DESCRIPTION**

NAFFCO'S CO2 cylinders are manufactured for fire fighting extinguishers.

They are manufactured with carbon steel seamless pipes conforming to DIN 2448/1629 standards of grade ST 52.0. Made by automatic CNC forming machines to required sizes, the cylinders are designed and manufactured to comply with BS EN ISO 9809-1:2010 standards.

### **FEATURES**

- Compliance to 97/23/EC (PED) 0086 (0036) is certified by M/sTUV, Suddeutschland, Germany
- $\bullet$  The inlet thread size is made to meet BS EN3-9 standards using W 28.8 x 14 TPI tap
- Each cylinder is subjected to heat treatment to meet the design criteria for mechanical properties
- Each cylinder is shot blasted to SA 2-1/2 grade and painted in RED
- 2 kg and 5 kg capacity cylinders compliance to council directive 97/23/EC (PED) and Statutory instrument 1999 No.2001 is certified by BSI (0086)

DIMENSIONS OF CYLINDERS IN MM								
Capacity	2 Kg	3 Kg	5 Kg	6 Kg	10 Kg			
D	101.60	139.70	139.70	139.70	139.70			
D1	36.00	40.00	40.00	40.00	40.00			
D2			TAP (W 28.8x14 TPI)*					
Н	520 +10.0 -0.0	435 +10.0 -0.0	660 +10.0	740 +10.0	1155 +10.0 -0.0			
h	9.5 min	15 min	15 min	15 min	15 min			
hi	32.00	34.00	34.00	34.00	34.00			
a1	8 min	10.0 min	10.0 min	10.0 min	10.0 min			
a2	8 min	10.0 min	10.0 min	10.0 min	10.0 min			
a'	4.00	5.00	5.00	5.00	5.00			
R1	50.8	79.85	79.85	79.85	79.85			
R2	74	69.85	69.85	69.85	69.85			
R3	7 min	8.5 min	8.5 min	8.5 min	8.5 min			
R4	13.5 min	17 min	17 min	17 min	17 min			

Note: Reference Standard 97/23/EC

MECHANICAL PROPERTIES MATERIAL DATA						
Yield Strength	Re min.	450 N/mm2				
Tensile Strength	Re min.	600 N/mm2				
Tensile Strength	Rmmax.	700 N/mm2				
Elongation	A min.	14%				
Test Pressure	Ph	250 Bar				

# DRY POWDER FIRE EXTINGUISHERS (UL LISTED)

### PRODUCT DESCRIPTION

NAFFCO stored pressure type dry powder extinguishers are characterised by their high performance, simple method of operation and rapid fire knock down capability. They are suitable for tackling fires involving freely burning materials,

petrol, oil, gas and electrical equipment. They are ideal for vehicle & marine risks. NAFFCO ABC powder extinguishers contain high performance powder and are one of the most powerful powder extinguishers in the world.





- ABC Dry Chemical is a multipurpose extinguishing agent that is suitable for use on Class A, Class B and Class C fires.
- TYPICAL USES: For public areas such as offices, classrooms, parking garages, and hotel/motel assembly halls and guest areas. For businesses such as retail stores, light manufacturing facilities, research facilities, auto dealerships, vehicle/ aircraft/marine service centers, and
- manufacturing processes such as painting, dipping, and coating.
- Not suitable for use on fires involving cooking oil and grease. Not recommended for use on sensitive electronic equipment or aircraft structure.
- Dry Powder Extinguishers are USCG approved (Marine Application)

MODEL NUMBER	N 05LP	N 10LP	N 20LP
Agent Capacity	5 lb. (2.27 Kg)	10 lb. (4.54 Kg)	20 lb. (9.07 Kg)
UL Rating	2-A:20-B:C	4-A:80-B:C	10-A:120-B:C
Discharge Time	14 Sec	22 Sec	27 Sec
Range (FT/M)	12-18 / 3.7-5.5	15-21 / 4.6-6.4	15-21 / 4.6-6.4
Operating Pressure	195 psi (1344 kPa)	195 psi (1344 kPa)	195 psi (1344 kPa)
Minimum Operating Temprature	-65°F	-65°F	-65°F
Bracket	Wall	Wall	Wall
USCG Approval	Type A size II, Type B:C size I	Type A size II, Type B:C size II	Type A size II, Type B:C size III
Ship Weight	10 lb. (4.5Kg)	18.25 lb. (8.3 Kg)	33.5 lb. (15.2 Kg)
Unit Height	16.375 in (41.6 cm)	21 in (53.3 cm)	21.25 in (53.8 cm)
Unit Width	7.25 in (18.4 cm)	7.75 in (19.7 cm)	8.75 in (22.2 cm)
Unit Diameter	4.25 in (10.8 cm)	5.125 in (13 cm)	7.5 in (19.1 cm)

ABC DRY POWDER PORTABLE FIRE EXTINGUISHERS











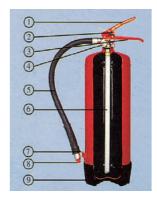
### **FEATURES**

- Monoammonium phosphate based dry chemical agent. Capable of fighting Class A, B, C and E fires.
- Kitemark / LPCB certified to BS EN3.
- Cylinders compliance to council directive 97/23/EC (PED) and Statutory instrument 1999 No.2001 is certified by BSI (0086).
- Certified by BSI under marine equipment directive.
- High quality polyester paint.
- Controlled discharge.
- Brass nickel plated head valve with simple squeeze operation.
- Unique gauge testing system.
- Unique colour coded handle and base (optional).
- Rechargeable and easy to service.
- Choice of capacity from 1 to 12 Kg.

Ideal Use: Houses, office, buildings, warehouses, farms, wood working area etc.
\*Note: Not recommended for use on expensive and delicate equipment like computers, etc.

MODEL NUMBER	NP1	NP2	NP3	NP4	NP6	NP9	NP12
Extinguisher Capacity	1Kg	2 Kg	3 Kg	4 Kg	6 Kg	9 Kg	12 Kg
Propellant			95% N	Nitrogen + 5% H	Helium		
Fire Rating	8A 34B	13A 70B	21A 89B	21A 113B	34A 183B	43A 233B	55A 233B
Working Pressure	14 Bar	14 Bar	14 Bar	15 Bar	15 Bar	15 Bar	15 Bar
Maximum Operating Pressure			1	8.5 Bar @ 60°	2		
Test Pressure				30 Bar			
Total Weight	1.8 Kg	3.7 Kg	5.8 Kg	7.5 Kg	10 Kg	14 Kg	17.8 Kg
Range of Discharge	4-5m	5-7m	6-7m	7-8m	6-8m	6-8m	6-8m
Duration of Discharge	7-9 sec	10-12 sec	11-12 sec	13-15 sec	18-20 sec	22-24 sec	28-30 sec
Hose Length with Nozzle	N/A	N/A	395mm	457mm	534mm	534mm	617mm
Operating Temperature	-20°C to +60°C						
Cylinder Material	CRCA Steel						
Height x Diameter (mm)	337 x 78	385 x 110	420 x 132	408 x 150	520 x 150	515 x 185	620 x 185

<sup>\*</sup>High Fire Rating Using Special ABC Powder



- 1. Valve / Extn. Lever
- 2. Safety Pin with Chain
- 3. Valve Handle
- 4. Pressure Gauge
- 5. Discharge Hose
- 6. Syphon Tube
- 7. Hose Holder
- 8. Discharge Nozzle
- 9. PVC Base



**ABC DRY POWDER PORTABLE FIRE** 

**EXTINGUISHERS** (AS/NZS 1841.5)

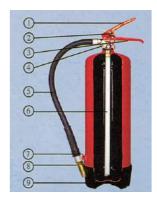
### **FEATURES**

- Monoammonium phosphate based dry chemical agent. Capable of fighting Class A, B, C and E fires.
- Australian & New Zealand Standard AS/NZS 1841.5, certified by Global-Mark Pty Ltd.
- High quality polyester paint.
- Controlled discharge.
- Brass nickel plated head valve with simple squeeze operation.
- Unique gauge testing system.
- Unique colour coded handle and base (optional).
- Rechargeable and easy to service.



Ideal Use: Houses, office, buildings, warehouses, farms, wood working area etc. \*Note: Not recommended for use on expensive and delicate equipment like computers, etc.

MODEL NUMBER	1NP-A	2.1NP-A	3NP-A	4.5NP-A	
Extinguisher Capacity	1Kg	2.1 Kg	3 Kg	4.5 Kg	
Propellant		95% Nitrogen	+ 5% Helium		
Fire Rating	1A:20B:E	2A:20B:E	3A:30B:E	4A:60B:E	
Working Pressure	10 Bar	13.5 Bar	13.5 Bar	13.5 Bar	
Maximum Operating Pressure		18.5 Bar @ 60°C			
Test Pressure		30	Bar		
Total Weight	2.5 Kg	4.3 kg	5.95 Kg	8.15 Kg	
Range of Discharge	4 - 5 Mtr.	5 - 7 Mtr.	6 - 7 Mtr.	7 - 8 Mtr.	
Duration of Discharge	8 Sec.	11 - 14 Sec.	13 -14 Sec.	16 - 18 Sec.	
Hose Length with Nozzle	N/A	365 mm	435 mm	465 mm	
Operating Temperature	-20°C to +60°C				
Cylinder Material	CRCA Steel				
Height x Diameter (mm)	337 x 78	385 x 110	420 x 132	408 x 150	



- 1. Valve / Extn. Lever
- 2. Safety Pin with Chain
- 3. Valve Handle
- 4. Pressure Gauge
- 5. Discharge Hose
- 6. Syphon Tube
- 7. Hose Holder
- 8. Discharge Nozzle
- 9. PVC Base



# ABC DRY POWDER MOBILE FIRE EXTINGUISHER

### PRODUCT DESCRIPTION

NAFFCO 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.







- The fire extinguishers are designed to comply all the specification requirements of BS EN 1866-1.
- Kitemark & LPCB approved for different capacity extinguishers.
- Highest fire rating due to high performance ABC powder.
- Ready for instant use and simple to operate.
- Fully controlled and easy operation by rust free brass valve.
- 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.
- Brass nickel plated head valve with simple lever operation.

MODEL NUMBER	NTP25	NTP50	NTP100			
Extinguisher capacity	25 Kg	50 Kg	100 Kg			
Fire Rating	IIB	IVB	IVB			
Working Pressure	18 Bar	18 Bar	18 Bar			
Maximum Working Pressure	22 Bar	22 Bar	22 Bar			
Test Pressure	32 Bar	32 Bar	32 Bar			
Total Height & Width	990 x 500 mm	1060 x 550 mm	1050 x 650 mm			
Total Weight	Approx. 63 Kg	Approx. 100 Kg	Approx. 172 Kg			
Range of Discharge	7-9m	7-9m	8-9m			
Duration of Discharge	25-30 Sec	47-55 Sec	85-90 Sec			
Operating Temperature	-20°C to +60°C	-20°C to +60°C	-20°C to +60°C			
Propellant	Nitrogen	Nitrogen	Nitrogen			
Hose size & Length	16mm x 5 mtr	16mm x 5 mtr	16mm x 7 Mtr			
Cylinder Material	Hot rolled Annealed steel plate					

### WATER PORTABLE FIRE EXTINGUISHERS

### PRODUCT DESCRIPTION

NAFFCO stored pressure and catridge operated water extinguishers are characterised 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.











### **FEATURES**

- Water, a liquid agent only recommended for fighting Class A Fire.
- Kitemark / LPCB certified to BS EN3.
- Cylinders compliance to council directive 97/23/EC (PED) and Statutory instrument 1999 No.2001 is certified by BSI
- Certified by BSI under marine equipment directive.
- High quality external polyster paint.

Ideal Use: Schools, Theaters, Apartments, Offices and Dry Goods Store.

\*Note: Water based Extinguishers are not suitable for life involving electrical risk.

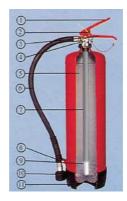
- Thermoplastic internal coating to prevent corrosion.
- Spray nozzle to provide high fire rating.
- Controlled discharge.
- Brass nickel chrome plated head valve with simple squeeze operation.
- Unique gauge testing system.
- Unique colour code handle and base (Optional).
- Rechargeable and easy to service.

### WATER FIRE EXTINGUISHER

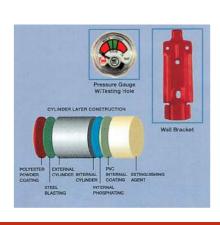
### - STORED PRESSURE / EXTERNAL CARTRIDGE TYPE

MODEL NUMBER	NW 6	NW 6X	NWNI6	NW N6	NW 9	NW N9	NWNI 9	NWA 9	NW 9X	NWC 6X*	NWC 9X*
Extinguisher Capacity	6 Ltr	6 Ltr	6 Ltr	6 Ltr	9 Ltr	9 Ltr	9 Ltr	9 Ltr	9 Ltr	6 Ltr	9 Ltr
Propellant				95% Nitr	rogen + 5%	6 Helium				C	)2
Fire Rating	13A	13A	13A	13A	21A	13A	13A	21A	21A	13A	21A
Working Pressure						14 Bar					
Maximum Operating Pressure					18.5	5 Bar @ 60	)°C				
Test Pressure						30 Bar					
Total Weight	11.5 Kg	11.5 Kg	11.5 Kg	11.5 Kg	15.5 Kg	15.5 Kg	15.5 Kg	14.5 Kg	15.5 Kg	12.5 Kg	17 Kg
Range of Discharge	6m	6m	6m	6-7m	6-7m	7-8m	7-8m	7-8m	7-8m	6m	7-8m
Duration of Discharge	22-25 sec	25-27 sec	22-25 sec	22-28 sec	30-32 sec	32-35 sec	32-35 sec	32-35 sec	35-38 sec	18-20 sec	35-40 sec
Hose Length with Nozzle						680mm					
Operating Temperature		+5°C to +60°C									
Cylinder Material					CRC	CA Steel SI	heet				
Height x Diameter (mm)	625x150	625x150	625x150	625x150	630x185	630x185	630x185	630x185	630x185	630x185	630x185

<sup>\*</sup>LPCB Approval only, External Cartridge Operated.



- 1. Valve/Extn. Lever
- 2. Safety Pin with Chain
- 3. Valve Handle
- 4. Pressure Gauge
- 5. PVC Internal Coating
- 6. Discharge Hose
- 7. Syphon Tube
- 8. Hose Holder
- 9. Filter
- 10. Discharge Nozzle
- 11. PVC Base



# WATER PORTABLE FIRE EXTINGUISHERS (AS/NZS 1841.2)

#### **FEATURES**

- Water, a liquid agent only recommended for fighting Class A Fire.
- Australian & New Zealand Standard AS/NZS 1841.2, certified by Global-Mark Pty Ltd.
- High quality external polyster paint.
- Thermoplastic internal coating to prevent corrosion.
- Spray nozzle to provide high fire rating.
- Controlled discharge.
- Brass nickel chrome plated head valve with simple squeeze operation.
- Unique gauge testing system.
- Unique colour code handle and base (Optional).
- Rechargeable and easy to service.

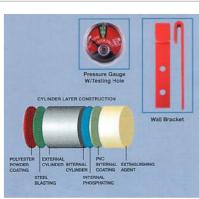


Ideal Use: Schools, Theaters, Apartments, Offices and Dry Goods Store.
\*Note: Water based Extinguishers are not suitable for life involving electrical risk.

MODEL NUMBER	9-NW-A
Extinguisher Capacity	9 Ltr
Propellant	95% Nitrogen + 5% Helium
Fire Rating	2A
Working Pressure	13.5 Bar
Maximum Operating Pressure	18.5 Bar @ 60°C
Test Pressure	30 Bar
Total Weight	11.5kg
Range of Discharge	6 -7 Mtr.
Duration of Discharge	43 Sec.
Hose Length with Nozzle	680mm
Operating Temperature	+5°C to +60°C
Cylinder Material	CRCA Steel Sheet
Height x Diameter (mm)	630x185



- 1. Valve/Extn. Lever
- 2. Safety Pin with Chain
- 3. Valve Handle
- 4. Pressure Gauge
- 5. PVC Internal Coating
- 6. Discharge Hose
- 7. Syphon Tube
- 8. Hose Holder
- 9. Filter
- 10. Discharge Nozzle
- 11. PVC Base



### FOAM PORTABLE FIRE EXTINGUISHERS

### PRODUCT DESCRIPTION

NAFFCO stored pressure and catridge operated foam extinguishers are multipurpose, ideal for fires involving

volatile liquids and freely burning materials such as paper, cloth, wood and furniture.











#### **FEATURES**

- AFFF (6%) Synthetic Aqueous Film Forming Foam Agent capable of fighting Class A, B fires.
- Kitemark / LPCB certified to BS EN3.
- Cylinders compliance to council directive 97/23/EC (PED) and Statutory instrument 1999 No.2001 is certified by BSI (0086).
- Certified by BSI under marine equipment directive.
- High quality external polyster paint.

Ideal Use: Schools, Theaters, Apartments, Offices and Dry Goods Store.
\*Note: Water based Extinguishers are not suitable for life involving electrical risk.

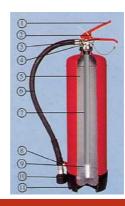
- Thermoplastic internal coating to prevent corrosion.
- Spray nozzle to provide high fire rating.
- Controlled discharge.
- Brass nickel chrome plated head valve with simple squeeze operation.
- Unique gauge testing system.
- Unique colour code handle and base (Optional).
- Rechargeable and easy to service.

### FOAM FIRE EXTINGUISHER

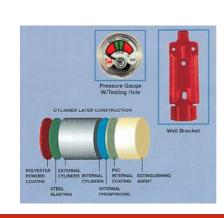
### - STORED PRESSURE / EXTERNAL CARTRIDGE TYPE

MODEL NUMBER	NF 3	NF 3X	NF 6	NFI 6	NF 6X	NF 9	NFI 9	NFA 9	NF 9X	NFC 6X*	NFC 9X*
Extinguisher Capacity	3 Ltr	3 Ltr	6 Ltr	6 Ltr	6 Ltr	9 Ltr	9 Ltr	9 Ltr	9 Ltr	6 Ltr	9 Ltr
Propellant				95% Nitr	rogen + 5%	6 Helium				CC	02
Fire Rating	8A 70B	8A 70B	21A 144B	21A 144B	21A 144B	21A 183B	21A 183B	21A 183B	27A 183B	27A 144B	34A 233B
Working Pressure						14 Bar					
Maximum Operating Pressure					18.	5 Bar @ 6	0°C				
Test Pressure						30 Bar					
Total Weight	11.5 Kg	11.5 Kg	11.5 Kg	11.5 Kg	15.5 Kg	15.5 Kg	15.5 Kg	14.5 Kg	15.5 Kg	12.5 Kg	17 Kg
Range of Discharge	6m	6m	6m	6-7m	6-7m	7-8m	7-8m	7-8m	7-8m	6m	7-8m
Duration of Discharge	22-25 sec	25-27 sec	22-25 sec	22-28 sec	30-32 sec	32-35 sec	32-35 sec	32-35 sec	35-38 sec	18-20 sec	35-40 sec
Hose Length with Nozzle						680mm					
Operating Temperature		+5°C to +60°C									
Cylinder Material		CRCA Steel Sheet									
Height x Diameter (mm)	625x150	625x150	625x150	625x150	630x185	630x185	630x185	630x185	630x185	630x185	630x185

<sup>\*</sup>LPCB Approval only, External Cartridge Operated.



- 1. Valve/Extn. Lever
- 2. Safety Pin with Chain
- 3. Valve Handle
- 4. Pressure Gauge
- 5. PVC Internal Coating
- 6. Discharge Hose
- 7. Syphon Tube
- 8. Hose Holder
- 9. Filter
- 10. Discharge Nozzle
- 11. PVC Base



# **FOAM PORTABLE FIRE EXTINGUISHERS** (AS/NZS 1841.4)

### **FEATURES**

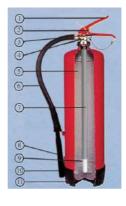
- AFFF (6%) Synthetic Aqueous Film Forming Foam Agent capable of fighting Class A, B fires.
- Australian & New Zealand Standard AS/NZS 1841.4, certified by Global-Mark Pty Ltd.
- High quality external polyster paint.
- Thermoplastic internal coating to prevent corrosion.
- Spray nozzle to provide high fire rating.
- Controlled discharge.
- Brass nickel chrome plated head valve with simple squeeze operation.
- Unique gauge testing system.
- Unique colour code handle and base (Optional).
- Rechargeable and easy to service.





Ideal Use: Schools, Theaters, Apartments, Offices and Dry Goods Store.
\*Note: Water based Extinguishers are not suitable for life involving electrical risk.

MODEL NUMBER	6-NF-A	9-NF-A			
Extinguisher Capacity	6 Ltr	9 Ltr			
Propellant	95% Nitrogen	n + 5% Helium			
Fire Rating	3A 10B	3A 20B			
Working Pressure	13.5	Bar			
Maximum Operating Pressure	18.5 Bar @ 60°C				
Test Pressure	30 Bar				
Total Weight	11.5kg	16.5 Kg			
Range of Discharge	6 Mtr.	7 - 8 Mtr.			
Duration of Discharge	18 Sec.	40 Sec.			
Hose Length with Nozzle	680	mm			
Operating Temperature	+5°C to +60°C				
Cylinder Material	CRCA Steel Sheet				
Height x Diameter (mm)	610x150	625x185			



- 1. Valve/Extn. Lever
- 2. Safety Pin with Chain
- 3. Valve Handle
- 4. Pressure Gauge
- 5. PVC Internal Coating
- 6. Discharge Hose
- 7. Syphon Tube
- 8. Hose Holder
- 9. Filter
- 10. Discharge Nozzle
- 11. PVC Base



### FOAM MOBILE FIRE EXTINGUISHERS

#### PRODUCT DESCRIPTION

NAFFCO Mobile external cartridge operated foam fire extinguishers are characterized by their high performance and simple method operation. The extinguisher contains high performance extinguishing agent 6% AFFF foam and thus has achieved the highest fire rating.

NAFFCO Mobile Foam extinguishers are most suitable for fires involving flammable liquids and freely burning materials such as paper, cloth and wood.

Effective for Class A & Class B fires.







- The fire extinguishers are designed to comply with all the specification requirements of BS EN 1866-1.
- Kitemark and LPCB approved for different capacity extinguishers.
- Agent used is AFFF (6%) Synthetic Aqueous film forming foam for effective fire extinguishment.
- Incorporated with high pressure CE approved CO2 cylinder as propelling agent.
- 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.
- · Large Brass, nickel chrome plated cap for ease during refilling the agent.
- Cylinder assemblies are designed for easy maintenance by mounting it separately on steel frame and thus can be separated by just removing the steel clamps.

MODEL NUMBER	NTFC 50X	NTFC 100X	NTFC 135X	
Extinguisher capacity	50 Ltr	100 Ltr	135 Ltr	
Fire Rating	IVB	IVB	IVB	
Propellant	CO <sub>2</sub>	CO <sub>2</sub>	CO <sub>2</sub>	
Working Pressure	14 Bar	14 Bar	14 Bar	
Test Pressure	32 Bar	32 Bar	32 Bar	
Maximum Working Pressure	18.5 Bar	18.5 Bar	18.5 Bar	
Total Weight	112.5 Kg	189 Kg	232 Kg	
Range of Discharge	6-8 Mtr	8-10 Mtr	8-10 Mtr	
Duration of Discharge	55-65 Sec	110-120 Sec	160-170 Sec	
Hose Length	3/4" x 5 Mtr	3/4" x 7 Mtr	3/4" x 7 Mtr	
Operating Temperature	+5°C to +60°C	+5°C to +60°C	+5°C to +60°C	
Cylinder Material	Hot Rolled annealed steel plate			
Extinguisher Height & Width (mm)	1065 x 550	1100 x 650	1005 x 700	

### WET CHEMICAL FIRE EXTINGUISHERS

### PRODUCT DESCRIPTION

NAFFCO stored pressure type wet chemical extinguishers are used for cooking oil or fat fires where the spray can create a flame almost immediatel. 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.

of polyolefin to prevent corrosion.

squeeze operation.

Unique gage testing system.

• Rechargeable and easy to service.

• Passed 35K electrical conductivity test.

• Fire mist spray to prevent grease splashing.

• Unique color code handle and base (optional).

• Brass nickel chrome plated head valve with simple













### **FEATURES**

- · Water, a liquid agent only recommended for fighting Class F & A Fire.
- Kitemark / LPCB certified to BS EN3.
- Cylinders compliance to council directive 97/23/EC (PED) and Statutory instrument 1999 No.2001 is certified by BSI (0086).
- Certified by BSI under marine equipment directive.
- High quality polyester paint.
- Internally coated by thermoplastic coating powders blend

Ideal Use: Commercial kitchens in connection with NAFFCO Pre-engineered Hood Systems.

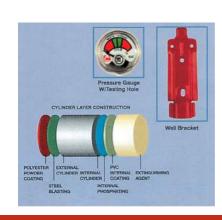
\*Caution: Don't use on electrical fire.

MODEL NUMBER	NKE 2*	NKE 3X / NKE 3	NKE 6
Extinguisher Capacity	2 Ltr	3 Ltr	6 Ltr
Propellant		95% Nitrogen + 5% Helium	
Fire Rating	5F	8A25F	13A75F
Working Pressure	10 Bar	10 Bar	10 Bar
Maximum Operating Pressure	11.5 Bar @ 60°C	11.5 Bar @ 60°C	11.5 Bar @ 60°C
Test Pressure	30 Bar	30 Bar	30 Bar
Total Weight	4.4 Kg	7.2 Kg	12.5 Kg
Range of Discharge	1m	1m	1m
Duration of Discharge	40-45 sec	30-35 sec	50-55 sec
Hose Length with Nozzle	N/A	610mm	610mm
Operating Temperature	+5°C to +60°C	+5°C to +60°C	+5°C to +60°C
Height x Diameter (mm)	420x110	505x185	420x1324
Cylinder Material		CRCA Sheet	

\*LPCB Approval only.



- 1. Valve/Extn. Lever
- 2. Discharge Hose
- 3. Safely Pin with Chain
- 4. Valve Handle
- 5. Pressure Gauge
- 6. Hose Holder
- 7. Syphon Tube
- 8. PVC Internal Coating
- 9. Filter
- 10. Discharge Nozzle
- 11. PVC Base



## WET CHEMICAL FIRE EXTINGUISHERS (AS/NZS 1841.3)

#### **FEATURES**

- Australian & New Zealand Standard AS/NZS 1841.3, certified by Global-Mark Pty Ltd.
- 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 gage testing system.
- Unique color code handle and base (optional).
- Rechargeable and easy to service.



Ideal Use: Commercial kitchens in connection with NAFFCO Pre-engineered Hood Systems. \*Caution: Don't use on electrical fire.

MODEL NUMBER	2-NKE-A	7-NKE-A		
Extinguisher Capacity	2 Ltr	7 Ltr		
Propellant	95% Nitrogen + 5% Helium	95% Nitrogen + 5% Helium		
Fire Rating	4F	4F		
Working Pressure	10 Bar	10 Bar		
Maximum Operating Pressure	11.5 Bar @ 60°C	11.5 Bar @ 60°C		
Test Pressure	30 Bar	30 Bar		
Total Weight	5 Kg	14.3 Kg		
Range of Discharge	1 Mtr.	1 Mtr.		
Duration of Discharge	35 Sec.	91 Sec.		
Hose Length with Nozzle	420 mm	797 mm		
Operating Temperature	+5°C to +60°C	+5°C to +60°C		
Height x Diameter (mm)	403x110	515x185		
Cylinder Material	CRCA Sheet			



- 1. Valve/Extn. Lever
- 2. Discharge Hose
- 3. Safely Pin with Chain
- 4. Valve Handle
- 5. Pressure Gauge
- 6. Hose Holder
- 7. Syphon Tube
- 8. PVC Internal Coating
- 9. Filter
- 10. Discharge Nozzle
- 11. PVC Base



# CLEAN AGENT FIRE EXTINGUISHERS (UL LISTED)

### PRODUCT DESCRIPTION

NAFFCO UL Listed Clean Agent fire extinguishers (HALOTRON) is a clean, non-conductive gaseous agent that is an excellent

replacement for Halon 1211 extinguishers. Clean Agent is suitable for use on Class A, Class B, and Class C fires.



- Residue-free Hydrochlorofluorocarbon gas agent pressurized with argon.
- Typically used for protecting sensitive electronic equipment in offices, classrooms, churches, parking garages and hotel/motel assembly halls and guest areas.
- Also used for protecting sensitive electronic equipment in businesses such as retail stores, light manufacturing facilities, research facilities, auto dealerships, vehicle/
- aircraft/marine service centers, and manufacturing processes such as painting, dipping, and coating.
- Not suitable for use on fires involving cooking oil and grease. Recommended for use on sensitive electronic equipment.
- Clean Agent Extinguishers are USCG Approved (Marine Application)

MODEL NUMBER	N 05L FSA*/ N 05L FSB**	N 05L HSA***	N 11L SA*/ N 11L SB**	N 15L SA*/ N 15L SB**
Agent Capacity	5 lb. (2.27 Kg)	5.5 lb. (2.49 Kg)	11 lb. (5 Kg)	15.5 lb. (7.03 Kg)
UL Rating	5-B:C	5-B:C	1-A:10-B:C	2-A:10-B:C
Discharge Time	9 Sec	9 Sec	9 Sec	13 Sec
Range (FT/M)	9-15/2.7-4.5	9-15 / 2.7-4.5	9-15 / 2.7-4.5	12-18 / 3.7-5.5
Operating Pressure	100 psi (689 kPa)	100 psi (689 kPa)	100 psi (689 kPa)	125 psi (862 kPa)
Operating Temprature Range	-40°F to +120°F	-40°F to +120°F	-40°F to +120°F	-40°F to +120°F
Bracket	Wall	Wall	Wall	Wall
USCG Approval (Marine Applivcation)	Type B:C size I	Type B:C size I	Type B:C size I	Type B:C size II
Ship Weight	9.25 lb. (4.2Kg)	10.0 lb. (4.5 Kg)	21.25 lb. (9.6 Kg)	25.75 lb. (11.75 Kg)
Unit Height	16.375 in (41.6 cm)	16.375 in (41.6 cm)	17.5 in (44.5 cm)	17.5 in (44.5 cm)
Unit Width	6.5 in (16.5 cm)	6.5 in (16.5 cm)	8.625 in (21.9 cm)	8.625 in (21.9 cm)
Unit Diameter	4.25 in (10.8 cm)	4.25 in (10.8 cm)	7 in 17.8 cm)	7 in 17.8 cm)

<sup>\*</sup> Aluminum Head valve

<sup>\*\*</sup> Brass Head valve

<sup>\*\*\*</sup> Aluminum head valve with discharge hose

### **CLEAN AGENT FIRE EXTINGUISHERS**

### PRODUCT DESCRIPTION

NAFFCO clean agent extinguishers have an effective extinguishing action, evnvironmentally 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**

- LPCB Approved for different capacity of extinguishers.
- Safe for People: It is indented for use as a streaming agent providing a gas concentration sufficient to extinguish a fire. It is safe for use in occupied spaces.
- 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 Hexafluoropropane Gas based Extinguishing Agent capable of fighting class A, B, C and Electrical fires effectively.
- Low in toxicity.
- Standard compliance BSEN3.
- High Performance Extinguishing Agent.
- High Quality external Polyester Paint to avoid corrosion
- Brass Nickel plated head valve with simple squeeze operation.
- Rechargeable & easy to service.

MODEL NUMBER	NHFC-4	NHFC-6	NHFC-9	NHFC-12		
Extinguisher Capacity	4 Kg	6 Kg	9 Kg	12 Kg		
Propellant		95% Nitrogen	n + 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 Termprature	-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		

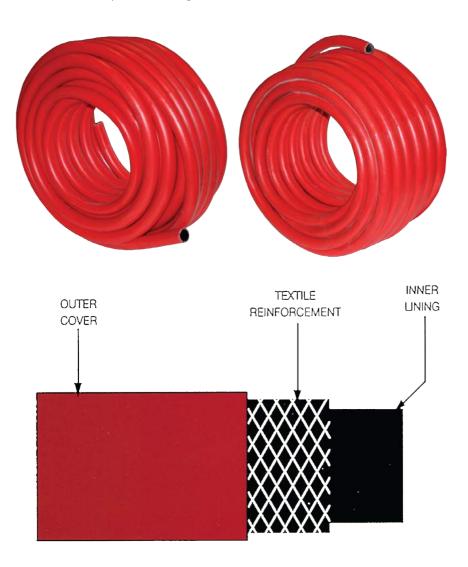
### **SEMI-RIGID REEL HOSE**

### **PRODUCT DESCRIPTION**

NAFFCO semi-rigid reel hoses are suitable for use in fixed fire fighting system. The hoses are available in sizes of 19 mm and 25 mm inside diameter. The hoses are flexible so that it can be rolled and kept on a drum.

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 aggresive or non-corrosive atmosphere.

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



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

	0DE01510451041				
SPECIFICATION					
Hose Classification	Type A	, Class 2			
Color of Hose	R	ed			
Bore	19mm	25mm			
Length of Hose	40m				
Hydrostatic Properties					
Maximum Working Pressure	12	Bar			
Proof Pressure	24 Bar				
Burst Pressure	42	Bar			

### FIRE HOSE REEL WITH SEMI-RIGID HOSE

### PRODUCT DESCRIPTION

NAFFCO fire hose reels provide a very effective fire fighting facility 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. The fire hose reels are manufactured in both manual and automatic versions to comply to BS EN 671-1:2012 standard with semi-rigid hose complying with EN 694:2001 standards.



#### **FEATURES**

- BSI Kitemark and LPCB certified.
- The fire hose reels are capable of rotating in one plane (fixed type)or rotating in more than one plane with mounting on one of the following: swinging arm, swinging pipe or swinging door in manual and automatic version.
- The automatic fire hose reels will open fully within 3 revolution of the reel.
- The nozzle have SHUT, JET and SPRAY control settings.
- The minimum flow rate of hose reels in JET and SPRAY setting is 41 L/MIN. at 0.6 MPa (6 bar) pressure and setting in chrome plated rotary nozzle is 53Lpm at 0.6 Mpa (6 bar) pressure.
- The effective throw range of discharge at 0.2 MPa (2 bar) pressure is 10 mtrs. in JET setting.
- The reel discs are painted RED with printed user instructions.

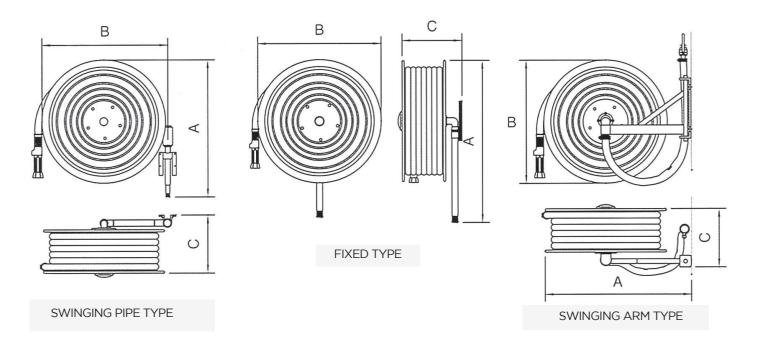
### **OPERATING INSTRUCTIONS**

### **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 overlapping 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, close the nozzle, turn off the main valve. 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.



### FIRE HOSE REEL ASSEMBLY

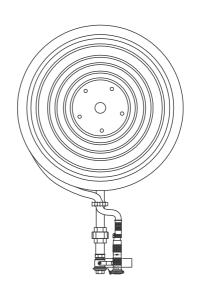
Type	Model No.	Hose Diameter & Length	Reel Height (A in mm)	Reel Width (B in mm)	Reel Depth (C in mm)		
Swinging Arm (Plastic Nozzle)	19 NFH-020M/SS	19mm (¾") & 30m	645	550	205		
Cabinet Mounted Manual (Brush / Mirror Finish)	25 NFH-020M/SS	25mm (1") & 30m	645	550	235		
Swinging Arm (Brass chrome plated rotary Nozzle)	19 NFH-020M/ SS-B	19mm (¾") & 30m	645	550	205		
Cabinet Mounted Manual (Brush / Mirror Finish)	25 NFH-020M/SS	25mm (1") & 30m	645	550	235		
Swinging Arm (Plastic Nozzle)	19 NFH-020M	19mm (¾") & 30m	645	580	205		
Cabinet Mounted Manual (Red Painted)	25 NFH-020M	25mm (1") & 30m	645	580	235		
Swinging Arm (Brass Chrome Plated Rotary Nozzle)	19 NFH-020M-B	19mm (¾") & 30m	645	580	205		
Cabinet Mounted Manual (Red Painted)	25 NFH-020M-B	25mm (1") & 30m	645	580	235		
Swinging Arm (Plastic Nozzle)	19 NFH-020A/SS	19mm (¾") & 30m	645	550	235		
Cabinet Mounted Automatic (Brush / Mirror Finish)	25 NFH-020A/SS	25mm (1") & 30m	645	550	235		
Swinging Arm (Brass Chrome Plated Rotary Nozzle)	19 NFH-020A/ SS-B	19mm (¾") & 30m	645	550	235		
Cabinet Mounted Automatic (Brush / Mirror Finish)	25 NFH-020A/ SS-B	25mm (1") & 30m	645	550	235		
Swinging Arm (Plastic Nozzle)	19 NFH-020A	19mm (¾") & 30m	645	580	235		
Cabinet Mounted Automatic (Red Painted)	25 NFH-020A	25mm (1") & 30m	645	580	235		

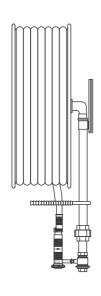
Туре	Model No.	Hose Diameter & Length	Reel Height (A in mm)	Reel Width (B in mm)	Reel Depth (C in mm)
Swinging Arm (Brass Chrome Plated Rotary Nozzle)	19 NFH-020A-B	19mm (¾") & 30m	645	580	235
Cabinet Mounted Automatic (Red Painted)	25 NFH-020A-B	25mm (1") & 30m	645	580	235
Swinging Pipe (Plastic Nozzle)	19 NFH-030M/SS	19mm (¾") & 30m	665	550	200
Wall Mounted Manual (Brush / Mirror Finish)	25 NFH-030M/SS	25mm (1") & 30m	665	550	245
Swinging Pipe (Brass Chrome Plated Rotary Nozzle)	19 NFH-030M/ SS-B	19mm (¾") & 30m	665	550	200
Wall Mounted Manual (Brush / Mirror Finish)	25 NFH-030M/ SS-B	25mm (1") & 30m	665	550	245
Swinging Pipe (Plastic Nozzle)	19 NFH-030M	19mm (¾") & 30m	665	580	200
Wall Mounted Manual (Red Painted)	25 NFH-030M	25mm (1") & 30m	665	580	245
Swinging Pipe (Brass Chrome Plated Rotary Nozzle)	19 NFH-030M-B	19mm (¾") & 30m	665	580	200
Wall Mounted Manual (Red Painted)	25 NFH-030M-B	25mm (1") & 30m	665	580	245
Swinging Pipe (Plastic Nozzle)	19 NFH-030A/SS	19mm (¾") & 30m	665	550	250
Wall Mounted Automatic (Brush / Mirror Finish)	25 NFH-030A/SS	25mm (1") & 30m	665	550	250
Swinging Pipe (Brass Chrome Plated Rotary Nozzle)	19 NFH-030A/ SS-B	19mm (¾") & 30m	665	550	250
Wall Mounted Automatic (Brush / Mirror Finish)	25 NFH-030A/ SS-B	25mm (1") & 30m	665	550	250
Swinging Pipe (Plastic Nozzle)	19 NFH-030A	19mm (¾") & 30m	665	580	250
Wall Mounted Automatic (Red Painted)	25 NFH-030A	25mm (1") & 30m	665	580	250
Swinging Pipe (Brass Chrome Plated Rotary Nozzle)	19 NFH-030A-B	19mm (¾") & 30m	665	580	250
Wall Mounted Automatic (Red Painted)	25 NFH-030A-B	25mm (1") & 30m	665	580	250
Manual (Plastic Nozzle)	19 NFH-040M/SS	19mm (¾") & 30m	625	550	220
Fixed (Brush / Mirror Finish)	25 NFH-040M/SS	25mm (1") & 30m	625	550	265
Manual (Brass Chrome Plated Rotary Nozzle)	19 NFH-040M/ SS-B	19mm (¾") & 30m	625	550	220
Fixed (Brush / Mirror Finish)	25 NFH-040M/ SS-B	25mm (1") & 30m	625	550	265
Manual (Plastic Nozzle)	19 NFH-040M	19mm (¾") & 30m	625	580	220
Fixed (Red Painted)	25 NFH-040M	25mm (1") & 30m	625	580	265
Manual (Brass Chrome Plated Rotary Nozzle)	19 NFH-040M-B	19mm (¾") & 30m	625	580	220
Fixed (Red Painted)	25 NFH-040M-B	25mm (1") & 30m	625	580	265

Туре	Model No.	Hose Diameter & Length	Reel Height (A in mm)	Reel Width (B in mm)	Reel Depth (C in mm)
Automatic (Plastic Nozzle)	19 NFH-040A/SS	19mm (¾") & 30m	625	550	220
Fixed (Brush / Mirror Finish)	25 NFH-040A/SS	25mm (1") & 30m	625	550	260
Automatic (Brass Chrome Plated Rotary Nozzle)	19 NFH-040A/ SS-B	19mm (¾") & 30m	625	550	220
Fixed (Brush / Mirror Finish)	25 NFH-040A/ SS-B	25mm (1") & 30m	625	550	260
Automatic (Plastic Nozzle)	19 NFH-040A	19mm (¾") & 30m	625	580	220
Fixed (Red Painted)	25 NFH-040A	25mm (1") & 30m	625	580	260
Automatic (Brass Chrome Plated Rotary Nozzle)	19 NFH-040A-B	19mm (¾") & 30m	625	580	220
Fixed (Red Painted)	25 NFH-040A-B	25mm (1") & 30m	625	580	260

## FIRE HOSE REEL WITH SEMI-RIGID HOSE (AS/NZS 1221)

- Australian & New Zealand Standard AS/NZS 1221, certified by Global-Mark Pty Ltd.
- The fire hose reels are capable of rotating in one plane (fixed type)or rotating in more than one plane with mounting on one of the following: swinging arm, swinging pipe or swinging door in manual and automatic version.
- The automatic fire hose reels will open fully within 3 revolution of the reel.
- The nozzle has SHUT, JET and SPRAY control settings.
- The minimum flow rate of hose reels in JET and SPRAY setting at 220 kpa pressure; for 13mm nozzle is 0.24 L/S, for 19mm nozzle is 0.45 L/S and for 25mm nozzle is 0.55 L/S.
- The effective throw range of discharge at 0.2 MPa (2 bar) pressure is 10 mtrs. in JET setting.
- The reel discs are painted RED with printed user instructions.







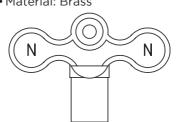
Туре	Model No.	Hose Diameter & Length
30m Cabinet Manual	NFHA-C13M	Length:30m, Diameter: 13mm, Nozzle: Metal Twist Off/Jet
30m Cabinet Automatic	NFHA-C-19A	Length:30m, Diameter: 19mm, Nozzle: Metal Twist Off/Jet/Spray
36m Cabinet Automatic	NFHA-C-19A 36	Length:36m, Diameter: 19mm, Nozzle: Metal Off/Jet/Spray
30m Cabinet Manual	NFHA-C19M	Length:30m, Diameter: 19mm, Nozzle: Metal Off/Jet/Spray
36m Cabinet Manual	NFHA-C19M 36	Length:36m, Diameter: 19mm, Nozzle: Metal Twist Off/Jet/Spray
30m Cabinet Automatic	NFHA-C25A	Length:30m, Diameter: 25mm, Nozzle: Metal Twist Off/Jet/Spray
30m Cabinet Manual	NFHA-C25M	Length:30m, Diameter: 25mm, Nozzle: Metal Twist Off/Jet/Spray
30m Fixed	NFHA-F-13M	Length:30m, Diameter: 13mm, Nozzle: Metal Twist Off/Jet
30m Automatic Fixed	NFHA-F-19A	Length:30m, Diameter: 19mm, Nozzle: Metal Twist Off/Jet/Spray
36m Automatic Fixed	NFHA-F-19A 36	Length:36m, Diameter: 19mm, Nozzle: Metal Twist Off/Jet/Spray
30m Fixed	NFHA-F-19M	Length:30m, Diameter: 19mm, Nozzle: Metal Twist Off/Jet/Spray
36m Fixed	NFHA-F-19M 36	Length:36m, Diameter: 19mm, Nozzle: Metal Twist Off/Jet/Spray
30m Automatic Fixed	NFHA-F-25A	Length:30m, Diameter: 25mm, Nozzle: Metal Twist Off/Jet/Spray
30m Fixed	NFHA-F-25M	Length:30m, Diameter: 25mm, Nozzle: Metal Twist Off/Jet/Spray
30m Swing Arm	NFHA-W-13M	Length:30m, Diameter: 13mm, Nozzle: Metal Twist Off/Jet
30m Automatic Swing Arm	NFHA-W-19A	Length:30m, Diameter: 19mm, Nozzle: Metal Off/Jet/Spray
36m Automatic Swing Arm	NFHA-W-16A 36	Length:36m, Diameter: 19mm, Nozzle: Metal Off/Jet/Spray
30m Swing Arm	NFHA-W-19M	Length:30m, Diameter: 19mm, Nozzle: Metal Twist Off/Jet
36m Swing Arm	NFHA-W-19M 36	Length:36m, Diameter: 19mm, Nozzle: Metal Twist Off/Jet/Spray
30m Autmatic Swing Arm	NFHA-W-25A	Length:30m, Diameter: 25mm, Nozzle: Metal Twist Off/Jet/Spray
30m Swing Arm	NFHA-W-25M	Length:30m, Diameter: 25mm, Nozzle: Metal Twist Off/Jet/Spray

### **LOCK SHIELD VALVE**

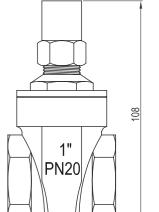
NAFFCO Lock Shield Valve is usually installed where unauthorized operation has to be avoided. A typical application of this valve is installing these at inlet pipe to the hose reel where it can be opened only by key and key kept by maintenance or fire safety department.

### **FEATURES**

- Solid Wedge, non-rising stem, screwed in bonnet.
- Valves are manufactured in accordance to BS 5154 series B.
- Service temperature -10 to +66°C.
- Pressure rating is PN 20.
- End connection is BSPT threaded to BS21.
- Material: Brass







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SPECIFICATIONS						
Model Number	Size (Inch)	Pressure Rating	Connecting			
NLSV-25	1	PN 20	1" BSPT Female Threaded			

### SINGLE JACKET HOSE

### A) UL LISTED HOSE

The single jacket fire hose consists of 100% polyester plain-woven synthetic and natural rubber linings. This fire hose has very good resistance to ageing and abrasion. The light fire hose is suitable for normal situation.

The single jacket hose made of high tenacity polyester staple and polyester filaments. Lining is natural rubber. Jacket is plain. There is a special adhesion between the jacket and the rubber.



SPECIFICATIONS									
Model Number	Diameter (inch)	Service Test Pressure (Bar/Psi)	Hydrostatic Strength Test Presure (Bar/Psi)	Standard Compliance/ Approvals					
NF-FH38	1.5	14/200	50/725	UL19,NFPA 1961 /					
NF-FH65	2.5	14/200	50/725	UL listed					

NH threaded. Storz & instantaneous coupling or other types are available upon request.

### B) KITEMARK AND LPCB APPROVED HOSE, TYPE 2

Single jacket fire hose consists of an impermeable elastomeric lining, a synthetic fibre reinforcement and externally applied elastomeric coating to the reinforcement. Delivery hoses are non-percolating lay flat type used in fire fighting purposes. Hoses are suitable for use with couplings with the requirements of BS 336:2010 standards. Hose is intended for use at working pressure not exceeding 15 bar. Delivery hose are manufactured to comply BS 6391: 2009 Standards.

#### **FEATURES**

- BSI Kitemark and LPCB Certified.
- Light weight and flexible.
- Hose belongs to Type 2 with Elastomeric lining, Synthetic fibre reinforcement and elastomeric coating on the reinforcement.

### **APPLICATIONS**

- Industrial and rural fire brigades as well as building protection.
- For general industrial, commercial and civil engineer ing applications.



- Hose provides good protection against the absorption of liquids and resistance of the reinforcement.
- Anti rot and anti twist.
- Hose with couplings are wound by Galvanized mild steel / SS wire.

### **HOSE DATA**

Hose : Type 2 Available Color : Red, White Standard Length : 25/30 Meters

SPECIFICATIONS								
Model Number	Diameter (Inch.)	Working Pressure (Bar/Psi)	Burst Pressure (Bar/Psi)	Standard Compliance/Approvals				
NF-DH2-65R	2.5	15/215	50/725	DC 6701: 2000 / Kitomark 8 L DCD				
NF-DH2-65W	2.5	15/215	30/725	BS 6391: 2009/ Kitemark&LPCB				

NH threaded. Storz & instantaneous coupling or other types are available upon request.

### C) DURALEX FIRE HOSE, UL LISTED

#### **DESCRIPTION**

#### **Outer and Inner Layers**

Specially formulated rubber, extruded through the tubular fabric. Minimum load loss thanks to its smooth liner surface. High temperature resistance.

### **Intermediate Textile Fabric Reinforcement**

Jacket manufactured with tubular weave with high-tenacity polyester thread. Free of defects such as broken threads, knots, etc.

#### **CHARACTERISTICS**

- Excellent resistance to abrasion and to intensive professional use.
- High resistance to oil, gasoline and a wide range of chemicals.
- Highly resistant to both contact and radiant heat.
- Lightweight hose, remaining flexible even at low temperatures (-30°C)



- Easy to handle and wind up thanks to its great flexibility.
- High breaking resistance thanks to its special textile construction.
- No maintenance or drying required.

#### **APPLICATIONS**

#### **Fields of Application**

- Ideal for Fire Departments and Professional Industry services.
- Refineries.
- Armed Forces.
- Airports.
- Ships and Oil Rigs.
- Heavy Industry.

#### **HOSE DATA**

- Hose: Type 3.
- Color: Red.
- Coupling: Instantaneous hose quick coupling (Aluminum/Brass).
- Standard Length: 30 Meters, other lengths available upon request.

SPECIFICATIONS										
Model Number	Diameter		Weight	Thickness	Working Pressure	Test Pressure	Burst Pressure	Standard Compliance/ Approvals		
	Inches	mm	gr/m	mm	bars	bars	bars			
Duralex 38	1 ½"	38	360	2.30	25	50	75	UL19, NFPA		
Duralex 65	2 ½"	64	575	3.60	15	30	50	1961/UL Listed		
Duralex 100	4	102	1.050	3.00	15	30	45			

NH threaded. Storz & instantaneous coupling or other types are available upon request.

### **DOUBLE JACKET FIRE HOSE**

### A) UL LISTED HOSE

#### **FEATURES**

• This durable, double jacket hose is constructed of 100% high tensile strength polyester yarns, both wrap and filler, and lined with a high-tech EPDM tube. Its engineered design guarantees minimum weight with maximum durability and flexibility. The UL Listed Double Jacket Fire Hose and its assemblies under these specifications shall be constructed with superior quality materials, manufactured in accordance with National Fire

Protection Association (NFPA) 1961 standard.

- Outstanding abrasion resistance.
- Tough, dependable and lightweight attach hose.
- A stripe of a contrasting color running the full length of the hose can be provided into the jacket to meet NFPA recommendations for pump panel.

### **HOSE DATA**

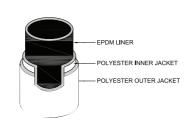
• Available colors: White & Red

### STANDARD LENGTH

• 50', 75', 100' (Other lengths available upon request.)







SPECIFICATIONS									
Model Number	Diameter (Inch.)	Service Test pressure (Bar/Psi)	Burst Pressure (Bar/Psi)	Standard Compliance/Approvals					
NF-FH38DJ	1.5	21/300	63/900	LII 10 NEDA 1061/LII Liotod					
NF-FH65DJ	2.5	21/300	63/900	UL19, NFPA 1961/UL Listed					

 $\operatorname{NH}\,$  threaded. Storz & instantaneous coupling or other type available upon request.

### **PU LINED HOSE**

### SYNTHETIC, SINGLE JACKET FIRE HOSE

(250 PSIG / 1725 kPa Service Pressure) Hose interior is all synthetic, light weight, and is UL approved.

#### **HOSE DATA**

- Available colors: Red, White.
- Standard lengths: 75ft, 100ft, 200ft, Other lengths available upon request.
- Applicable standards: UL219.

### **CONSTRUCTION AND FEATURES**

- The hose is of single jacket construction.
- The jacket is made with high tenacity filament polyester yarn in both the warp and weft directions, to provide maximum strength to weight ratio.
- The hose is resistant to chemicals and petrol products, rot & mildew, hydrolysis, and resist deterioration due to exposure UV-rays and ozone.

### **APPLICATIONS**

• Cabinet / Fire Hose Reel / Fire Hose Rack.

#### **PERFORMANCE**

- The hose, in all sizes, has minimum service, test, and burst pressures as specified in the technical chart.
- The hose has a maximum flow with minimum friction loss.
- The hose has no defects, dirt, knots, lumps or other irregularities affecting the performance of the hose.
- The hose is resistant to kinking and remain flexible to -65°F(-53°C).
- Twisting and warping exceeds NFPA standards.





SPECIFICATIONS															
Hose Model	(				(30. U	Wt. 100 Coil (30.5M) Diameter Un- coupled (30.5M)		Service Pressure		Proof Pressure		Burst Pressure		Standard Compliance/ Approvals	
	ln.	mm.	ln.	mm.	lbs.	kg.	in.	cm.	PSI	kPa	PSI	kPa	PSI	kPa	7.661.014.15
NF-FH38PU	1.5**	38**	1 11/16	43	10.4	4.7	11.5	29.2	250	1725	500	3450	750	5175	UL219,
NF-FH65PU	2.5**	64**	2 3/4	70	24.0	10.9	14.5	36.8	250	1725	500	3450	750	5175	NFPA 1961/ UL Listed

Couplings; NH threaded (1 1/2" or 2 1/2") in Brass or Aluminium Anodized.

Storz & instantaneous coupling or other type available upon request.

### FIRE HOSE RACK ASSEMBLY

NAFFCO Fire hose racks are designed for use in controlling incipient fire by building occupant use and conform to NFPA 14 standards for CLASS II service. The Fire Hose Racks are manufactured to comply UL & FM standard.

#### **FEATURES**

- Hose rack frame material made of Stainless Steel Gr. 304.
- Provides an immediate water source for fire suppression.
- Easy individual operation.
- Hose rack is designed to hold the hose with movable pins for easy & quick operation at the time of Emergency.
- An automatic release mechanism allows water to flow through the hose after removal of the hose and nozzle.
- Standard assemblies include:
  - \* Angle Valve or pressure reducing type valve (UL/FM approved).
  - \* Hose Rack frame material made of stainless steel.
  - Brush Finish
  - Mirror Finish
  - RED (RAL 3000) Painted
  - \* Hose rack frame.
  - \* Hose rack nipple.



- \* Hose coupling.
- \* Fire Hose 30 Mtr. (UL Listed).
- \* Fog nozzle. (UL and/or FM approved).
- Hose rack frames are RED (RAL 3000) Polyester powder coated, oven baked.

	SPECIFICATIONS							
Model Number	NHR 38V*	NHR 64V						
FIRE HOSE								
Fire Hose Type	Single jacket, Light weight Thermoplastic lining with high tenacity filament polyester yarn, UL listed	Single jacket, Light weight Thermoplastic lining with high tenacity filament polyester yarn, UL listed						
Size & Color	1½"x30Mtr., White	2½"x30Mtr., White						
Service Pressure	250 PSI	250 PSI						
Proof Pressure	500 PSI	500 PSI						
Burst Pressure	750 PSI	750 PSI						
	COUPLINGS							
Type	1-1½" NH Female Threaded Coupling, Brass	2-½" NH Female Threaded Coupling, Brass						
	ANGLE VALVE							
Working Pressure	300 PSI	300 PSI						
Test Pressure	600 PSI	600 PSI						
	NOZZLE							
Inlet Size	1.5" Female NST Threaded	2.5" Female NST Threaded						
Discharge rate (in full spray pattern)	130±5GPM@100PSI	205±5GPM@100PSI						

Pressure reducing valve available upon request with FM approved rack assembly.

<sup>\*</sup>UL/FM approved

### CABINET FOR FIRE HOSE REEL, FIRE EQUIPMENT AND BREECHING INLET

### **CABINETS**

#### PRODUCT DESCRIPTION

NAFFCO cabinets are designed to accommodate fire hose reel, fire fighting equipment and breeching inlet. Fire hose reel cabinets are manufactured to comply with BSEN 671-1 standard and breeching inlet cabinets are manufactured to comply to BS 5041-5 standard.

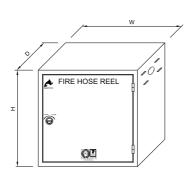
- LPCB Certified.
- Cabinet material made of Electro Galvanized sheet or Stainless Steel Sheet (Full stainless steel brush or mirror finish).
- Locking of cabinet is either key operated or round handle cam latch.
- Cabinets are available either in surface mounted or recessed mounted type.
- Cabinet door shall be solid door.
- Breeching inlet cabinets are available in horizontal or vertical version.



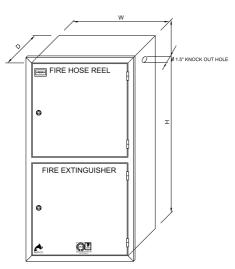












	SPECIFICATIONS					
SI. No.	Model Number	Description	Dimension In Mm (Hxwxd)			
1	NF SM 300	Single Surface Mounted	730x750x280			
2	NF RM 300	Single, Recessed Type	700x730x280			
3	NF SSB 300	Single Surface Mounted, Stainless Steel	800x750x310			
4	NF SSM 300	Single Surface Mounted, Stainless Steel	800x750x310			
5	NF RSB 300	Single Recessed Type, Stainless Steel	700x730x280			
6	NF RSM 300	Single Recessed Type, Stainless Steel	700x730x280			
7	NF SMK 300	Single Surface Mounted, Key Operated	730x750x280			
8	NF RMK 300	Single Recessed Type, Key Operated	700x730x280			
9	NF SSBK 300	Single Surface Mounted, Stainless Steel, Key Operated	800x750x310			
10	NF SSMK 300	Single Surface Mounted, Stainless Steel, Key Operated	800x750x310			
11	NF RSBK 300	Single Recessed Type, Stainless Steel, Key Operated	700x730x280			
12	NF RSMK 300	Single Recessed Type, Stainless Steel, Key Operated	700x730x280			
13	NF SM 900	Double Surface Mounted, Vertical	1520x750x280			
14	NF RM 900	Double Recessed Type, Vertical	1500x730x280			
15	NF SSB 900	Double Surface Mounted, Vertical, Stainless Steel	1550x750x310			
16	NF SSM 900	Steel Double Recessed Type, Vertical, Stainless Steel	1550x750x310			
17	NF RSB 900	Double Vertical, Recessed Type, Stainless Steel	1500x730x280			
18	NF RSM 900	Double Vertical, Surface Mounted, Stainless Steel	1500x730x280			
19	NF SMK 900	Double Vertical, Surface Mounted Vertical, Key Operated	1520x750x280			
20	NF RMK 900	Double Vertical, Recessed Vertical, Key Operated	1500x730x280			
21	NF RK 900	Double Vertical, Surface Mounted Vertical, Stainless Steel, Key Operated	1550x750x310			
22	NF SSMK 900	Double Vertical, Surface Mounted Vertical, Stainless Steel, Key Operated	1550x750x310			
23	NF RSBK 900	Double Vertical, Recessed Type Vertical, Stainless Steel, Key Operated	1500x730x280			
24	NF RSMK 900	Double Vertical, Recessed Type Vertical, Stainless Steel, Key Operated	1500x730x280			

### **BOXES FOR DRY RISER INLETS**





SI. No.	Model Number	Description	Dimension In Mm (Hxwxd)
1	NF-2WDRIC-SM	4" X 2 Way Box For Dry Riser Inlets, Surface Mounted, Horizontal	595x395x295
2	NF-4WDRIC-SM	6" X 4 Way Box For Dry Riser Inlets, Surface Mounted, Horizontal	595x595x295
3	NF-2WDRIC-SMA	4" X 2 Way Box For Dry Riser Inlets, Surface Mounted, Vertical	395x595x295
4	NF-2WDRIC-RT	4" X 2 Way Box For Dry Riser Inlets, Recessed Type	595x395x295
5	NF-4WDRIC-RT	6" X 4 Way Box For Dry Riser Inlets, Recessed Type	595x595x295
6	NF-2WDRIC-RTA	4" X 2 Way Box For Dry Riser Inlets, Recessed Type	395x595x295

# THROUGH-PENETRATION FIRESTOP SYSTEMS

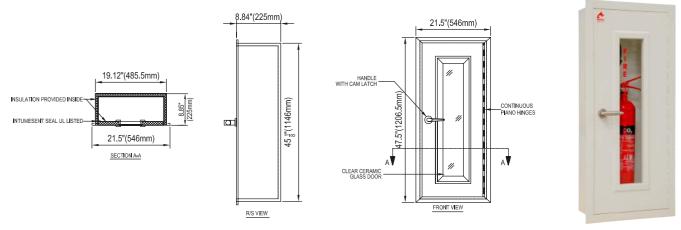
### FIRE EXTINGUISHER/VALVE CABINET

#### PRODUCT DESCRIPTION

NAFFCO proudly manufactures fire-rated cabinets for use in fire-rated assemblies. Underwriters Laboratories, Inc. has classified and listed NAFFCO fire-rated cabinets for combustibleand non-combustible wall systems. The cabinets are tested to ASTM E814 or UL1679 results in hourly rating

of 2 hour for both flame ("F") and temperature transfer("T"). The fire-rated option eliminates the costly need to line the wall opening with fire-rated material. It also provides the specified assurance in maintaining the integrity of the wall penetration and in meeting building code specifications.

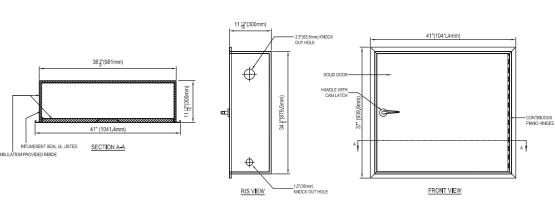




	SPECIFICATIONS				
Model	Cabinet Material	Fire Rating	Maximum Size**	Cabinet to Accomodate	Door Type
NF/500FRCG ELV Series	1.2mm E.G. Steel or 1.2mm Stainless Steel*	F-Rating: 2Hours T-Rating: 2 Hours	1146mm(H) X 485.5mm(W) X 225mm(D)	Fire Extinguisher	Clear Ceramic Glass Door

<sup>\*</sup> Brush / Mirror finish as per request.

#### **FIRE EQUIPMENT CABINET**





SPECIFICATIONS					
Model	Cabinet Material	Fire Rating	Maximum Size**	Cabinet to Accomodate	Door Type
NF/FRC600 HRE Series	1.2mm E.G. Steel or 1.2mm Stainless Steel*	F-Rating: 2Hours T-Rating: 2 Hours	879.5 mm(H) X 981 mm(W) X 300 mm(D)	Fire Hose Rack & Extinguisher or Fire Hose Reel & Extinguisher	Solid Door

<sup>\*</sup> Brush / Mirror finish as per request.

<sup>\*\*</sup> Can be reduced to accommodate different extinguisher as per the request.

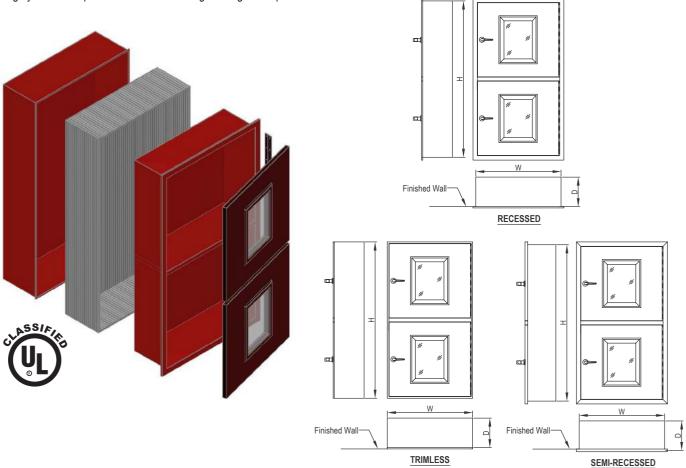
<sup>\*\*</sup> Can be reduced to accommodate different equipment as per the request.

# **DOUBLE VERTICAL CABINET**

NAFFCO proudly manufactures fire-rated cabinets for use in fire-rated assemblies. Underwriters Laboratories, Inc. has classified and listed NAFFCO fire-rated cabinets for combustible and non-combustible wall systems.

The fire-rated option eliminates the costly need to line the wall opening with fire-rated material. It also provides the specifier assurance in maintaining the

integrity of the wall penetration and in meeting building code specifications.



SPECIFICATIONS			
Model	NF/700FRCG/DV Series		
	E.G. Sheets, Red (RAL 3000) Powder Coated or Any Other Colors in RAL		
Cabinet Material	Aluminum, Red (RAL 3000) Powder Coated or Any Other Colors in RAL		
		Stainless Steel 304/316L Brush/Mirror/Titanium Gold Finish	
Type of Cabinet		Recessed Type, Trimless, Semi-Recessed & Surface Mounted	
Fire Rating		F-Rating: 2 Hours	
Fire Rating		T-Rating: 2 Hours	
	Outside	65"(H) x 35.4"(W) x 12.8"(D)	
Maximum Size		1650mm(H) x 900mm(W) x 325mm(D)	
Maximum Size	Inside	63.5"(H) x 34.2"(W) x 12.2"(D)	
	inside	1618mm(H) x 869mm(W) x 310mm(D)	
	Upper Compartment	Fire Hose Reel or Fire Hose Rack	
Cabinet to		Fire Hose	
Accomodate	Lower Compartment	Landing Valve	
		Water Branch Pipe	
		Portable Fire Extinguisher	
Door Type		Fire Rated Glass Door	
Listing	UL Classified		

# **DELIVERY HOSE COUPLING**

#### PRODUCT DESCRIPTION

NAFFCO couplings are suitable for use with delivery hose and for fire fighting purposes. The delivery hose couplings are of instantaneous pattern, pull release type with ribbed tail and are manufactured to comply to BS 336:2010 standards. The couplings are suitable for use at working pressure not exceeding 15 bar.



NFAC -65 RT (Aluminium Coupling)

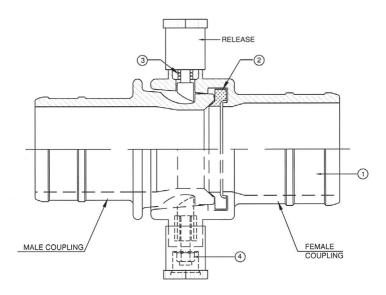


NFCC -65 RT (Copper Alloy Coupling)



- BSI Kitemark and LPCB certified.
- Castings are clean, sound and free from gross porosity.
- Machined surface is within tolerance and is in accordance with BS 1134-2.
- Coupling washers are made of natural rubber to BS1154.
- Plungers are of self-locking type.

SPECIFICATIONS		
Coupling Type	Instantaneous Male / Female coupling with pull release	
Tailed Ends	Ribbed tail type	
Test Pressure	22.5 Bar for 1 minute	



SI. No.	Description	Material
1	Body Male/Female Coupling	a. Aluminium to BS EN 1706:1998 b. Copper Alloy to BS EN 12163:2011
2	Washer	Rubber
3	Spring	Spring Steel
4	Self Locking Nut	Aluminium

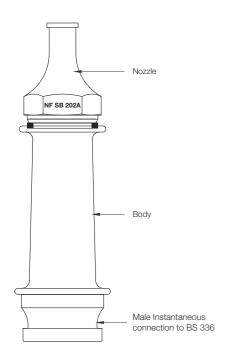
# **STANDARD BRANCH PIPE**

#### PRODUCT DESCRIPTION

NAFFCO standard branch pipe is made by metal, suitable to use with fire hose assembly for fire fighting purpose. The branch pipe has male instantaneous coupling inlet manufactured to comply with BS 336:2010 standards.

#### **FEATURES**

- BSI Kitemark.
- Metal body material made of aluminium alloy.







SPECIFICATIONS		
Model Number NF SB 202A		
Туре	Standard branch piope	
Body and Nozzle Material	Aluminium to BS EN 1706 : 2010	
Inlet Connection	Male Instantaneous Coupling to BS 336:2010	
Nozzle Hole Diameter	12.5mm	
Working Pressure	16 Bar	
Test Pressure	24 Bar	

# ANGLE HOSE VALVE

The Angle hose valve is manufactured as per NFPA 13 and most suitable for fire protection service outlet or with a hose rack assembly.

SPECIFICATIONS		
Model No	NF-AV38 1.5" Ø, Female NPT Inlet & Outlet	
Model No	NF-AV65 2.5" Ø, Female NPT Inlet & Outlet	
Angle Hose Valve Drain	1.5" & 2.5"	
Pressure Rating	300 PSI	
Material	Cast Brass	
Hand Wheel	Cast Iron	
Finish Standard	Rough Brass / Polished Brass	
Optional	Bright Chrome Plated	



# LANDING VALVES OBLIQUE VALVE, FLANGED INLET

#### PRODUCT DESCRIPTION

NAFFCO landing valves are suitable for installation on wet risers in a building for fire fighting purposes with permanently charged water from a pressurised supply.

The landing valves are oblique type with flanged inlet and are manufactured to comply to BS 5041 Part 1 standard with delivery hose connection and blank cap complying with BS 336:2010 standard.

The landing valves are classified under low pressure and are suitable for use at nominal inlet pressure up to 15 bar.

#### **FEATURES**

- BSI Kitemark and LPCB certified.
- Body material made of copper alloy to EN 1982
- Hand wheel material made of grey cast iron to BS EN 1561.
- Blank cap material made of copper alloy to EN 1982.
- Possible to replace the gland seal when under pressure



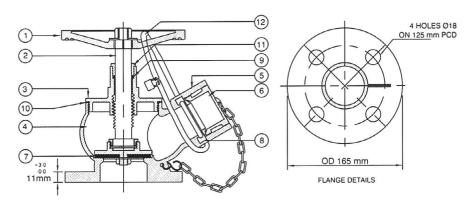




with the valve fully closed.

- Disc facing rubber is of replaceable type.
- Valves are provided with a strap and pad lock so that the hand wheel can be secured to counter unauthorized use.
- The hand wheel is BLACK painted and body to RED.

SPECIFICATIONS		
Model Number	NDR 098	
Valve Type	Oblique, Flanged Inlet	
Pressure Rating	Low Pressure Valve	
Nominal Size	DN50	
Working Pressure	15 Bar Maximum	
Test Pressure	Valve Seat Test at 16.5 Bar • Body Test at 22.5 Bar	
Flange Drilling	BS 4504 Part 2:1974 Table:16/21	
Water Flow Rate	8.5 L/S @ 4 Bar Outlet Pressure	



	BILL OF MATERIAL			
Sl.No.	Description	Material		
1	Handwheel	Grey Cast Iron to BS EN 1561		
2	Stem	Copper Alloy to BS EN 12164		
3	Bonnet	Copper Alloy to EN 1982		
4	Body	Copper Alloy to EN 1982		
5	Female Inst. Outlet	Copper Alloy to EN 1982		
6	Blank Cap	Copper Alloy to EN 1982		
7	Renewable Disk Facing	Rubber to BS 1154		
8	Washer	Rubber to BS 1154		
9	Gland Seal	Rubber to BS 1154		
10	Bonnet Seal	Teflon		
11	Gland	Copper Alloy to EN 1982		
12	Strap with Pad Lock	Strap-Leather (12mm Wide, 2mm Thick) LOCK-Non-Ferrous		

**OBLIQUE VALVE, MALE THREADED INLET** 

#### **PRODUCT DESCRIPTION**

NAFFCO landing valves are suitable for installation on wet risers in a building for fire fighting purposes, permanently charged with water from a pressurized supply.

The landing valves are oblique type with threaded inlet and are manufactured to comply to BS 5041 Part 1 standard with delivery hose connection and blank cap complying with BS 336:2010 standard.

The landing valves are classified under low pressure and are suitable for use at nominal inlet pressure up to 15 bar.

#### **FEATURES**

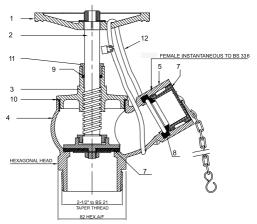
- BSI Kitemark approved.
- Body material made of copper alloy to EN 1982
- Hand wheel material made of grey cast iron to BS EN 1561.
- Blank cap material made of copper alloy to EN 1982.
- Possible to replace the gland seal when under pressure



with the valve fully closed.

- Disc facing rubber are of replaceable type.
- Valves are provided with a strap and pad lock so that the hand wheel can be secured to counter unauthorized use.
- The hand wheel is BLACK painted and body to RED.

SPECIFICATIONS		
Model Number	NDR 097	
Valve Type	Oblique, Threaded Inlet	
Pressure Rating	Low Pressure Valve	
Nominal Size	DN 21/2"	
Working Pressure	15 Bar Maximum	
Test Pressure	Valve Seat Test at 16.5 Bar • Body Test at 22.5 Bar	
Water Flow Rate	8.5 L/S @ 4 Bar Outlet Pressure	



	BILL OF MATERIAL			
Sl.No.	Description	Material		
1	Handwheel	Grey Cast Iron to BS EN 1561		
2	Stem	Copper Alloy to BS EN 12164		
3	Bonnet	Copper Alloy to EN 1982		
4	Body	Copper Alloy to EN 1982		
5	Female Inst. Outlet	Copper Alloy to EN 1982		
6	Blank Cap	Copper Alloy to EN 1982		
7	Renewable Disk Facing	Rubber to BS 1154		
8	Washer	Rubber to BS 1154		
9	Gland Seal	Rubber to BS 1154		
10	Bonnet Seal	Teflon		
11	Gland	Copper Alloy to EN 1982		
12	Strap with Pad Lock	Strap-Leather (12mm Wide, 2mm thick) LOCK-Non-Ferrous		

## PRESSURE REDUCING VALVE, **FLANGED INLET**

#### PRODUCT DESCRIPTION

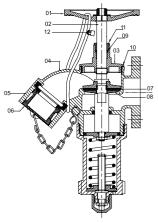
NAFFCO pressure reducing oblique landing valves are suitable for installation on wet risers in buildings for fire fighting purposes, permanently charged with water from a pressurised supply.

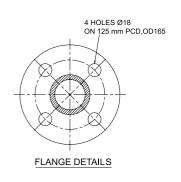
These landing valves are pressure reducing type designed to provide a range of outlet pressure (4 bar -12 bar). The Landing valves are classified under high pressure and are suitable for use at nominal inlet pressure upto 20 bar.

- BSI Kitemark approved.
- Body material made of copper alloy to EN 1982.
- Hand wheel material made of grey cast iron to BS EN 1561.
- Blank cap material made of copper alloy to EN 1982.
- Possible to replace the gland seal when under pressure with the valve fully closed.



- Disc facing rubber are of replaceable type.
- Valves are provided with a strap and pad lock so that the hand wheel can be secured to counter unauthorized use.
- The hand is painted black and the body is painted red.





SPECIFICATIONS		
Model Number	NWR 120	
Valve Type	Oblique, Pressure Reducing, Flanged Inlet	
Pressure Rating	High Pressure Valve	
Nominal Size	DN50	
Working Pressure	20 Bar Maximum	
Test Pressure	Valve Seat Test at 22 Bar • Body Test at 30 Bar	
Flange Drilling	BS4504 Part: 2 :1974Table : 16/21	
Min. Water Flow Rate	8.5 L/S @ 4 Bar Outlet Pressure	
Min. Valve Pressure Regulating	4-12 Bar	

BILL OF MATERIAL			
Sl.No.	Description	Material	
1	Handwheel	Grey Cast Iron to BS EN 1561	
2	Stem	Copper Alloy to BS EN 12164	
3	Bonnet	Copper Alloy to EN 1982	
4	Body	Copper Alloy to EN 1982	
5	Female Inst. Outlet	Copper Alloy to EN 1982	
6	Blank Cap	Copper Alloy to EN 1982	
7	Renewable Disk Facing	Rubber to BS 1154	
8	Washer	Rubber to BS 1154	
9	Gland Seal	Rubber to BS 1154	
10	Bonnet Seal	Teflon	
11	Gland	Copper Alloy to EN 1982	
12	Strap with Pad Lock	Strap-Leather (12mm Wide, 2mm Thick) LOCK-Non-Ferrous	

### 4"x2 WAY BREECHING INLET

#### PRODUCT DESCRIPTION

NAFFCO breeching inlets are suitable for installation on dry risers only, in a building for fire fighting purposes, fitted with inlet connection at fire brigade access level and outlet connection at specified points, which is normally dry but capable of being charged with water by pumping from fire service appliances.

The breeching inlets are manufactured to comply with BS 5041 PART-3:1975 standard comprising of male instantaneous connections complying with BS 336:2010, drain valves complying with BS 5154, PN16 rated and non return valves.

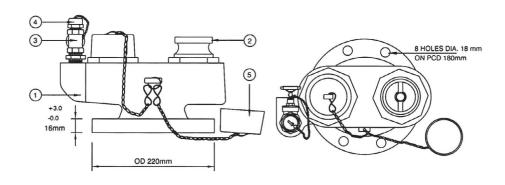
The breeching inlets and its fittings are suitable for a normal working pressure of 10 bar.

- BSI Kitemark and LPCB certified.
- Body material made of spheroidal graphite cast iron (Ductile Iron) to BS 1563:2011.
- Inlet connection and non-return valves material made of copper alloy to BS 12163:2011.



- Each inlet connections are fitted with non-return valve and are of spring loaded mushroom type.
- Each breeching inlet is painted RED internally and externally.

SPECIFICATIONS		
Model Number NDR 095		
Inlet Connection	2 Nos. Male Instantaneous Connector Complying to BS 336	
Pressure Rating	Normal Working Pressure of 10 Bar	
Nominal Size	100 mm Flanged Outlet	
Test Pressure	20 Bar	
Flange Drilling	BS 4504 Part: 2:1974 Table: 16/21	



BILL OF MATERIAL				
SI.No. Description Material		Material		
1	Body	Spheroidal Graphite Cast Iron to BS EN 1563:2011		
2	Inlet Connection & Non-Return Valves	Copper Alloy to BS EN 12163:2011		
3	Drain Valve	Copper Alloy to BS EN 12163:2011		
4	Blank Cap for Drain Valve	Copper Alloy to BS EN 12163:2011		
5	Blank Cap for Inlet Connector	Plastic		

### **6"x4 WAY BREECHING INLET**

#### PRODUCT DESCRIPTION

NAFFCO breeching inlets are suitable for installation on dry risers only, in a building for fire fighting purposes, fitted with inlet connection at fire brigade access level and outlet connection at specified points, which is normally dry but capable of being charged with water by pumping from fire service appliances.

The breeching inlets are manufactured to comply with BS 5041 PART-3:1975 standard comprising of male instantaneous connections complying with BS 336:2010, drain valves complying with BS 5154, PN16 rated and non-return valves.

The breeching inlets and its fittings are suitable for a normal working pressure of 10 bar.

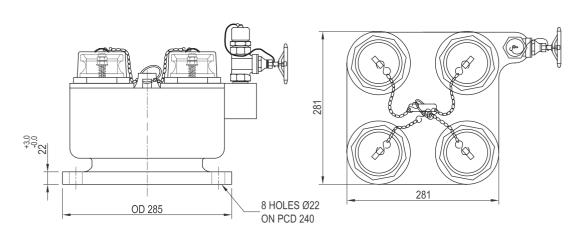


- BSI Kitemark & LPCB certified.
- Body material made of spheroidal graphite cast iron (Ductile Iron) to BS 1563:2011.
- Inlet connection and non-return valves material made of copper alloy to BS 12163:2011.



- Each inlet connection is fitted with non-return valve and of spring loaded mushroom type.
- Each breeching inlet is painted RED internally and externally.

SPECIFICATIONS		
Model Number NWR 115 & NWRX 115		
Inlet Connection	4 Nos. Male Instantaneous Connector Complying to BS 336	
Pressure Rating	Normal Working Pressure of 10 Bar	
Nominal Size	150 mm Ranged Outlet	
Test Pressure	20 Bar	
Flange Drilling	BS 4504 Part : 2 : 1974 Table : 16/21	



BILL OF MATERIAL				
Sl.No. Description Material		Material		
1	Body	Spheroidal Graphite Cast Iron to BS EN 1563:2011		
2	Inlet Connection & Non-Return Valves	Copper Alloy to BS EN 12163:2011		
3	Drain Valve	Copper Alloy to BS EN 12163: 2011		
4	Blank Cap for Drain Valve	Copper Alloy to BS EN 12163: 2011		
5	Blank Cap for Inlet Connector	Plastic		

### DRY PILLAR FIRE HYDRANTS











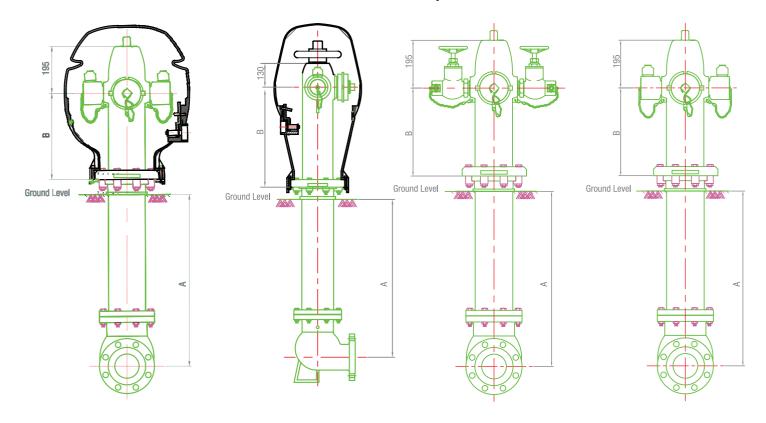


- LPCB approved
- NAFFCO Fire Hydrants are manufactured to comply BS EN 14384: 2005, BS 1074-1, BS 1074-2 & BS 1074-6 Standards.
- Dry barrel design eliminates damage to the hydrant caused by freezing of the upper part.
- NAFFCO Fire Hydrants are designed for high performance and easy to install, maintain and repair.
- Excellent and proven flow characteristics.
- •2 x ½" straight through landing valve with female instantaneous outlet to BS 336:2010.
- Body material made of spheroidal graphite cast iron (Ductile Iron) to BS 1563:2011.
- •2 x ½" Female Instantaneous quick coupling adaptor to BS 336:2010.

- •1 x 4" Male/Female BSRT pumper to BS 336:2010.
- Aluminum Hood / GRP cover is provided for protection and misusing.
- Operation threads are corrosion protected and for easy
- NAFFCO Fire Hydrants are high Pressure rating to 16 Bar.
- Drain starts automatically when hydrant is closed.
- Internal epoxy paint system gives high corrosion protection to hydrants.
- Hydrant protective covers with handle for easy handling.

#### **NFHQC & NHC SERIES**

### NFHV, NFHQ & NFHQS-CD SERIES



GENERAL DIMENSIONAL DETAILS					
SL.No.	.No. Model No. Inlet Flange		Dimensions in mm		Working
SL.NO.	Model No.	Size in inch (DN)	A**	В	Pressure
NHC Serie	S				
1	100 NHC-800	4 (100)	800	450	16
2	100 NHC-1200	4 (100)	1200	450	16
NFHV Seri	es				
1	100 NFHV-800	4 (100)	800	350	16
2	100 NFHV-1200	4 (100)	1200	350	16
3	150 NFHV-800	6 (150)	800	400	16
4	150 NFHV-1200	6 (150)	1200	400	16
NFHQ Seri	es				
1	100 NFHQ-800	4 (100)	800	400	16
2	100 NFHQ-1200	4 (100)	1200	400	16
3	150 NFHQ-800	6 (150)	800	400	16
4	150 NFHQ-1200	6 (150)	1200	400	16
NFHQC Se	eries				
1	100 NFHQC-800	4 (100)	800	350	16
2	100 NFHQC-1200	4 (100)	1200	350	16
3	150 NFHQC-800	6 (150)	800	400	16
4	150 NFHQC-1200	6 (150)	1200	400	16
NFHQS-C	) Series				
1	100 NFHQS-CD 800	4 (100)	800	350	16
2	100 NFHQS-CD 1200	4 (100)	1200	350	16
3	150 NFHQS-CD 800	6 (150)	800	400	16
4	150 NFHQS-CD 1200	6 (150)	1200	400	16

<sup>\*</sup>Flanged to BS EN 1092-2.
\*\* Extended length provided as per customer requirement

## **UNDER GROUND HYDRANT**

#### PRODUCT DESCRIPTION

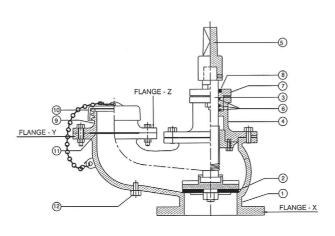
NAFFCO under ground fire hydrants are valves of screw down type and are suitable for a maximum working pressure of 16 bar.

The underground fire hydrants are manufactured to comply to BS 750:2012 and EN 14339:2005 standards with screwed outlet threaded to BS 336:2010 standard.

- BSI Kitemark certified.
- Body material made of grey cast iron to BS EN1561.
- Material of spindle and threaded part of valves which engages with it is made of stainless steel to BS 10088-1.
- Material for the screwed outlet is made of high tensile brass to BS 12163:2011.
- Spindle sealings (two seals) is of the toroidal sealing ring ('0' ring) type and are capable of changing while the valve is under pressure and fully closed.
- A wiper ring is positioned above the spindle sealing's to prevent the ingress of foreign matter.
- Each hydrant shot is blasted (inside and outside) to SA 2 1/2 std.
- All cast iron parts are thoroughly cleaned and painted.

Model Number	NHYD058	
Valve Type	Screw down (type 2C)	
Nominal Size & Flange Drilling	Flange-X Flange-Y Flange-Z	PN16, DN80, BS EN 1092-2 PN16, DN80, BS EN 1092-2 PN16, DN80, BS EN 1092-3
Working Pressure		16 Bar maximum
Test Pressure (Body)	Body	25 Bar
	Seat	20 Bar
Flange Drilling	BS 4504 Part : 2 : 1974 Table : 16/21	





BILL OF MATERIAL				
Sl.No. Description Material		Material		
1	Body	Grey Cast Iron(C.I) to BS EN 1561		
2	Body Seating Seal	Rubber to BS 1154		
3	Spindle	High Tensile Brass to BS EN 10088-1		
4	Bonnet	Grey Cast Iron(C.I) to BS EN 1561		
5	Spindle Cap	Grey Cast Iron to BS EN 1561		
6	Spindle (Stem) Seal	Rubber to BS 1154		
7	Gland	Grey Cast Iron to BS EN 1561		
8	Gland Wiper Ring	Teflon		
9	Outlet	High Tensile Brass to BS 12163:2011		
10	Outlet Cap	Grey Cast Iron to BS EN 1561		
11	Outlet Gasket	Rubber to BS 1154		
12	Drain Bolt	Forged Steel		

## FIRE BLANKET



#### **PRODUCT DESCRIPTION**

Fire blankets are made of fire resistant glass fiber fabric with silicone coating. It is primarily intended for extinguishing cooking oil fires in the kitchen.

#### **FEATURES**

- NAFFCO's blankets are electrical resistant not less than 1M to ensure that in the event of use where live electrical equipment is concerned, the potential for an electrical shock is minimised
- NAFFCO's fire blanket can be released and can be covered

on the flame in LESS THAN FIVE SECONDS

• It is an excellent fire extinguisher in a car, boat, caravan or holiday home and we recommend that each family have at least one for fire safety purpose. Fire blankets can be used to extinguish fires in electrical appliances (toaster, coffee maker, etc.) rubbish bins, clothes and table top fires caused by candles or fat pan fires. Fire blankets can also be used to wrap around a person whose clothing is on fire.

Model Number	NFB 4.4	NFB 4.6	NFB 6.6
Size	1.2m x 1.2m	1.2m x 1.8m	1.8m x 1.8m
Material	Fiberglass with Silicone Coating		
Weight	480g/m2	480g/m2	480g/m2
Temperature	550°C	550°C	550°C
Packing	Covered in Nylon Bags and Packed in Flat Hard PVC Red Pack		

#### STANDARD COMPLIANCE

NAFFCO's fire blankets confirm to the requirements of BS EN 1869:1997

### FIRE FIGHTING PUMPS

NAFFCO's UL listed and FM approved fire pumps provide you a reliable solution for your fire fighting pump needs by combining the stringent quality measures of UL, FM and NFPA standards with our proven experience in the fire protection field.

We can offer you a complete package of services starting from engineering assistance to field start-up and periodic maintenance.

Each pump sets is tested in our factory, prior to dispatch, as per UL, FM and NFPA standards. These pumps are covered by a warranty of one year subject to standard terms and conditions.

### HORIZONTAL **END SUCTION PUMPS**

#### **FEATURES**

- Performance characteristics as per NFPA 20
- Complete unit responsiveness.
- Complete in-house fabrication capabilities.
- Hydrostatic strength testing facilities.
- Operation run test as per NFPA 20, UL 448 and FM 1319 requirements.
- End suction models for capacities from 50 to 500 US GPM at 2900 rpm and 3550rpm
- Drivers: Electric motor drive or diesel engine drive.
- Electrical testing capabilities for motors and controllers as per NFPA standards.
- Capable to supply additional accessories wherever required.
- Capable to supply single skid mounted fire pump set.



The casing is designed for back pull-out which permits the removal of complete rotor unit without removing suction and discharge pipe. The cast iron volute casing is of robust design with integrally cast feet, vertical top centerline discharge with axial suction incorporating cast inlet vane to give best flow to impeller eye.

#### **BEARINGS**

Driven end / non-driven end bearings are grease lubricated deep groove ball bearings.

#### **IMPELLER**



Impeller is double shrouded type. It is hydraulically balanced and positively driven by shaft key and axially locked between sleeve and impeller nut.

#### SHAFT SEAL

Soft-packed stuffing box. Graphite impregnated type gland packing.

### HORIZONTAL SPLIT CASE PUMPS

#### **FEATURES**

- Performance characteristics as per NFPA 20
- Complete unit responsiveness.
- Complete in-house fabrication capabilities.
- Hydrostatic testing facilities.
- Operation run test as per NFPA 20, UL 448 and FM 1311 requirements.
- Horizontal Split case pumps for capacities from 500 to 1500 US GPM at 3550 rpm and 750 to 1500 US GPM at
- Drivers: Electric motor drive or diesel engine drive.
- Electrical testing capabilities for motors and controllers as per NFPA standards.
- Capable to supply additional accessories wherever required.

PUMP CASING: The casing is axially split, which permits removal of the complete rotor without moving either piping or motor. Pumps generating high heads have double volutes to reduce radial forces, ensuring minimal shaft deflection and low bearing loads. Replaceable wear rings protect the casing at the impeller running clearances.

**IMPELLER:** The closed impeller have double curved vanes. The double suction design gives practically zero axial forces. Each impeller is dynamically balanced according to ISO 1940-1 standard.

**BEARINGS:** On both sides grease lubricated deep groove ball bearings.



SHAFT SEAL: Soft-packed stuffing box. Cooling lines are provided for additional cooling of the graphite impregnated type gland packing.

#### CERTIFIED HORIZONTAL FIRE PUMPS RATING

#### **RATED SPEED - 2900 RPM**

RATED SPEED - 2900 RPM			
Rated Capacity (GPM)	Rated Pressure Range (PSI)		
50	50 - 139		
100	53 - 139		
150	56 - 139		
200	92 - 216		
250	89 - 211		
300	87 - 213		
350	91 - 211		
400	84 - 209		
450	81 - 207		
500	79 - 203		
750	108 - 280		
1000	101 - 273		
1250	134 - 263		
1500	121 - 256		

#### **RATED SPEED - 3500 RPM**

Rated Capacity (GPM)	Rated Pressure Range (PSI)
50	72 - 128
100	62 - 136
150	60 - 131
200	84 - 161
300	75 - 212
400	76 - 210
450	75 - 207
500	118 - 239
750	114 - 236
1000	111 - 234
1250	127 - 214
1500	126 - 211

### VERTICAL TURBINE PUMPS

#### **FEATURES**

- Complete unit responsiveness.
- Complete in-house fabrication capabilities.
- Hydrostatic strength testing facilities.
- Operation run test as per NFPA 20, UL 448 requirements.
- Vertical turbine models for capacities from 50 to 1500 US GPM.
- Drivers: Electric motor drive or diesel engine drive.
- Electrical testing capabilities for motors and controllers as per NFPA standards.
- Capable to supply additional accessories wherever required.
- Rugged construction for longer service life.
- Specifically designed for fire fighting applications as per NFPA 20.
- Excellent mechanical and hydraulic design characteristics for efficient performance.

#### **SUCTION ASSEMBLY**

Suction bell is furnished with an extra long bearing that strengthens and provides rigid support for the lower end of the pump shaft. Suction bell provides efficient flow into the eye of the first stage impeller.

#### **DISCHARGE HEAD**

The rugged pump discharge head assembly is made of close- grained cast iron. It has smooth passageways that ensures efficient overall operation and provides an above ground connection to the discharge piping.

#### **BOWL**

The pump bowls have vanes cast integrally in them. These vanes are designed to match accurately with the impeller, and are smoothly contoured to guide the flow to next stage with maximum efficiency.

#### **IMPELLER**

Impellers are enclosed type, made of bronze / SS 304 and matched to the pump bowls. Each impeller is statically / dynamically balanced as per ISO 1940-1 to insure highest efficiency and vibration free operation.

#### **COLUMN**

Pump column pipe shall be in sections not longer than 10.ft each. Column pipe is flanged type. Flanged connections are accurately machined to accept bearing retainers and are bolted together securely for proper sealing.

#### **RATED SPEED - 1450 RPM**

Rated Capacity (GPM)	Rated Pressure Range (PSI)
300	69 - 86
300	92 - 230
400	66 - 82
400	88 -221
500	63 - 80
500	84 - 215
750	84 - 108
750	112 - 288
	81 - 99
1000	108 - 132
	135 - 265
1250	105 - 283
1500	108 - 135
1500	144 - 270





#### **SHAFT SEAL**

The shaft sealing is gland packing type. A lantern ring is furnished between the packing and it relieves pump pressure from the upper packing rings by bypassing the high pressure water through its relief ports.

#### **RATED SPEED - 2900 RPM**

Rated Capacity (GPM)	Rated Pressure Range (PSI)
50	42 - 188
100	52 - 173
150	87 - 254
200	84 - 246
250	50 - 235

# **PRE-PIPED VERTICAL & HORIZONTAL BLADDER TANK**



#### **DESCRIPTION**

The NAFFCO Pre-piped Bladder tank is an integral component of balanced pressure proportioning system. Its operation requires no external power other than a pressurized water system. NAFFCO bladder tank, with an appropriate proportioner, injects foam concentrate into the water supply of a fire protection system and automatically proportions at wide range of flows and pressures.

NAFFCO Pre-piped Foam bladder tank is a steel pressure vessel fitted with an Internal Elastomeric bladder that stores foam concentrate. During operation, the concentrate is discharged by incoming water pressure to the bladder tank until the concentrate is depleted. The bladder tank discharges foam concentrate at approximately the same pressure as the water supplied at the water inlet connection to the tank. Since the bladder tank is pressurized, the bladder should not be refilled during operation.

#### **APPLICATIONS**

The NAFFCO Pre-piped Bladder tank is a complete balanced pressure proportioning system frequently used in;



Aircraft Hangars



Loading Racks



Sprinkler Systems



Offshore Platforms

#### **FEATURES**

- UL listed
- Pre-piped bladder tank offers the foam system designer fixed dimensions and eliminates uncertainty during sizing of foam equipment room and piping layout.
- Pre-fabricated foam bladder proportioning system eliminates loose components and simplifies the installation.
- Bladder is manufactured of a vinyl based polymer as per ASTM D-412 with a Tensile strength of at least 3000psi and ASTM D-624 with tear strength of at least 420lbs/in.
- Tanks are supplied with Brass trim valves and Teflon seats.
- All valves are labeled with working position and function.

#### **TECHNICAL SPECIFICATIONS**

NAFFCO Foam bladder tank system is a complete selfcontained proportioning system consisting of a bladder tank, ratio controller, and assembled piping. The bladder tank shall be constructed in accordance to ASME code Section VIII, for unfired pressure vessels with a working pressure of 175psi (12bar) and tested to at least 228psi (15.7bar).

The tanks are fabricated to nominal capacity and overall dimensions are indicated in corresponding data sheet. The tank shall be constructed of steel complying with ASME code having a Tensile strength of not less than 70,000psi (4827bar). The tank contain a flexible bladder manufactured of vinyl based polymer as per ASTM D-412 with a Tensile strength of at least 3000psi and ASTM D-624 with tear strength of at least 420lbs/in.

The bladder material is tested by Underwriter's Laboratory for compatibility with the agent to be used. This Bladder separates the foam concentrate from the incoming water. The tank can be supplied in Horizontal and Vertical configuration and shall be mounted on permanently attached saddle supports with holes for mounting bolts.

The tank shall has perforated PVC schedule 80 center discharge piping, located within the bladder, to ensure that foam concentrate flows to the bottom discharge. A section of 1-inch I.D. rubber hose installed between the bladder and tank shell, shall extend from the water vent to the water drain connection, preventing bladder obstruction at these openings.

The ratio controller (RC) is a flanged style for mounting in Schedule 40 pipe between two 150 # flat or raised flanges of the same nominal size as the RC. The RC is cast bronze or Stainless Steel and shall be rated for a Working pressure of 175psi (12 bar). A ¼" (6.35 mm) female NPT port for sensing water pressure at the inlet to the ratio controller water orifice shall be incorporated into the casting. Each ratio Controller is automatically proportions over the range indicated on flow range chart without any manual adjustment. The foam concentrate inlet shall

- Permanently welded lifting lugs for easy tank movement and positioning.
- Designed for Maximum agent discharge
- Tanks are oversized to allow thermal expansion of foam concentrate if any
- Tanks are supplied with label identifying foam concentrate type, percentage ratio and tank size
- Tanks are Externally RED enamel coated and Internally Coal tar Epoxy coated.



contains a calculated foam concentrate metering orifice allowing for proper proportioning. The ratio controller is pre-piped to the bladder tank.

All external piping shall be Schedule 40, and is St. Steel for foam concentrate and Carbon steel for water. Brass or bronze ball valves is supplied, and is complete with identification labels on the handles. Tank includes all necessary drain and vent valves, pressure relief valve, and tank content/identification labels. External surfaces of tank and piping are coated with RED Enamel finish.

#### MATERIALS OF CONSTRUCTION

Tank	Carbon steel, ASME code
Bladder	Vinyl based polymer
Internal Piping	Perforated PVC, Sch. 80
External Piping	
Water Side	Carbon Steel, Sch.40
Foam Concentrate Side	Stainless steel, Sch. 40
Valves	Ball valve type Brass body, and S. Steel or brass chrome plated brass ball

# HORIZONTAL FOAM BLADDER TANK

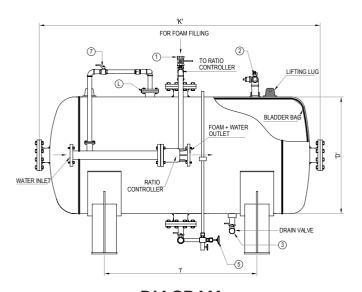
### **TECHNICAL DATA**

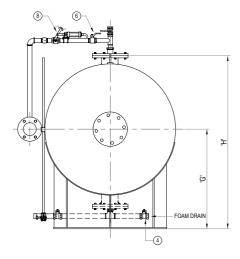
Tank Mounting Type		Horizontal			
Concentrate Storage Capacity		50 - 3200 Gln.	50 - 3200 Gln.		
Foam Concentrate Type		AFFF,3%, NAF	FFCO		
Max. Working Pressure		12.09 Bar (175	Psi)		
Factory Test Pressure		15.69 Bar ( 227	7 Psi)		
Pressure Vessel Construction		Carbon Steel,	SA 516 Gr. 70		
Pressure Relief Valve (Optional)	)	Brass Constru	ction with Set Pressure @15 Bar		
Bladder		Vinyl based po	olymer		
Size of Ratio Controller		3", 4"& 6"	3", 4"& 6"		
Foam Concentrate Proportioning Orifice		3%	3%		
		Size	Flow Rate @ 7Bar		
		80 NB	270-3000 LPM		
Datia Flavy Cantuallay Cina and	Flavo Data	00110	2,000001		
Ratio Flow Controller Size and	Flow Rate	100 NB	650-5700 LPM		
Ratio Flow Controller Size and	Flow Rate				
Ratio Flow Controller Size and Standard Piping Material For Pi		100 NB	650-5700 LPM		
		100 NB	650-5700 LPM 1200-9500 LPM		
Standard Piping Material For Pi		100 NB 150 NB	650-5700 LPM 1200-9500 LPM		
Standard Piping Material For Pi Foam Concentrate Lines		100 NB 150 NB Stainless Steel	650-5700 LPM 1200-9500 LPM		
Standard Piping Material For Proam Concentrate Lines Water Pressurization Lines		100 NB 150 NB Stainless Steel Carbon Steel,S Brass/Bronze	650-5700 LPM 1200-9500 LPM		
Standard Piping Material For Program Concentrate Lines Water Pressurization Lines Vent/Drain/Nrv Valves		100 NB 150 NB  Stainless Steel Carbon Steel,S Brass/Bronze Sight Guage V	650-5700 LPM 1200-9500 LPM 1,316L Sch 40		
Standard Piping Material For Program Concentrate Lines Water Pressurization Lines Vent/Drain/Nrv Valves Sight Glass Valve	repiped Tanks	Stainless Steel Carbon Steel,S Brass/Bronze Sight Guage V Zinc rich prime	650-5700 LPM 1200-9500 LPM I,316L Sch 40 Vith Shut Off & Drain Valve		

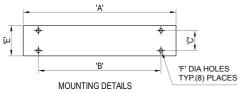
<sup>\*</sup>Optional painting available for marine applications.



VALVE TYPE AND POSITION						
Valve no.	Description	Normal Position				
1	Concentrate vent / fill	Closed				
2	Tank water vent	Closed				
3	Water drain / fill	Closed				
4	Concentrate drain / fill	Closed				
5	Sight glass valve	Closed				
6	Concentrate outlet	Open				
7	Water inlet	Open				
8	Water powered ball valve(optional)					







### **DIAGRAM**

#### DIMENSIONAL DATA

BLADDER TANK CAPACITY (GAL)	A	В	С	D (OUTER DIA)	E	F	G	Н	I	J INLET FLANGE TO TANK	K
50	468	378	80	524	170	26	559	921	661	3"	1751
100	556	466	80	626	170	26	616	1029	708	3"	1928
150	688	598	80	778	170	26	692	1181	654	3"	1950
200	688	598	80	778	170	26	692	1181	1064	3"	2560
300	819	729	80	930	170	26	760	1325	1054	3"	2619
400	959	785	140	1083	250	26	848	1490	1042	3"	2691
500	959	785	140	1083	250	26	851	1493	1246	3"	2894
600	959	785	140	1083	250	26	851	1493	1652	3"	3300
700	1095	875	140	1239	250	26	1025	1745	1459	3"	3088
800	1095	875	140	1239	250	26	1025	1745	1639	3"	3368
900	1095	875	140	1239	250	26	1024	1744	2071	3"	3800
1000	1095	875	140	1239	250	26	1018	1738	2503	3"	4232
1100	1095	875	140	1239	250	26	1025	1745	2808	3"	4537
1200	1370	1150	140	1548	250	26	1168	2042	1398	3"	3183
1300	1370	1150	140	1548	250	26	1168	2042	1448	3"	3333
1400	1370	1150	140	1548	250	26	1168	2042	1868	3"	3757
1500	1370	1150	140	1548	250	26	1168	2042	2173	3"	4062
1600	1640	1380	140	1863	250	26	1321	2353	1137	3"	3080
1800	1640	1380	140	1863	250	26	1321	2353	1442	3"	3385
2000	1640	1380	140	1863	250	26	1321	2353	1647	3"	3690
2200	1640	1380	140	1863	250	26	1321	2353	1952	3"	3995
2400	1640	1380	140	1863	250	26	1321	2353	2256	3"	4299
2600	1640	1380	140	1863	250	26	1321	2353	2561	3"	4604
2800	1640	1380	140	1863	250	26	1321	2353	2866	3"	4909
3000	1640	1380	140	1863	250	26	1321	2353	3170	3"	5213
3200	1640	1380	140	1863	250	26	1321	2353	3476	3"	5519

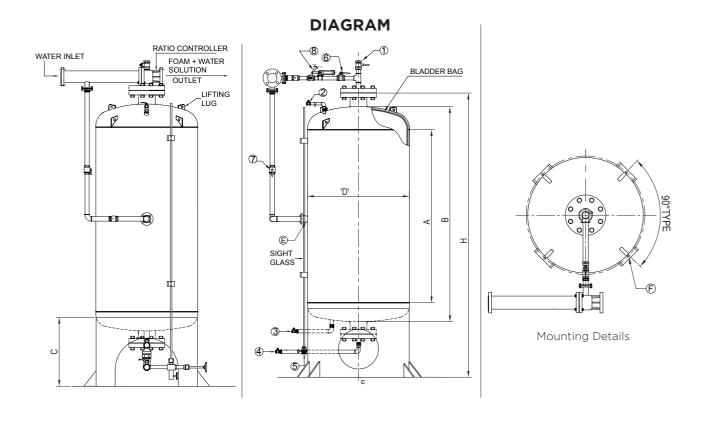
# **VERTICAL FOAM BLADDER TANK**

#### **TECHNICAL DATA**

Tank Mounting Type		Vertical	Vertical		
Concentrate Storage Capa	city	50 - 1200 Gln.	50 - 1200 Gln.		
Foam Concentrate Type		AFFF, 3%, NAF	AFFF, 3%, NAFFCO		
Max. Working Pressure		12.09 Bar (175	12.09 Bar (175 Psi)		
Factory Test Pressure		15.69 Bar ( 227	<sup>7</sup> Psi)		
Pressure Vessel Constructi	on	Carbon Steel, S	Sa 516 Gr. 70		
Pressure Relief Valve (Opti	onal)	Brass Construc	ction with Set Pvressure @15 Bar		
Bladder		Vinyl based po	olymer		
Size of Ratio Controller		3", 4"& 6"			
Foam Concentrate Propoti	oning Orifice	3%	3%		
		Size	Flow Rate @ 7Bar		
Datia Flaw Cantuallas Cina	and Flaw Data	80 NB	270-3000 LPM		
Ratio Flow Controller Size	and Flow Rate	100 NB	650-5700 LPM		
		150 NB	1200-9500 LPM		
Standard Piping Material F	or Prepiped Tanks				
Foam Concentrate Lines		Stainless Steel	Stainless Steel,316L		
Water Pressurization Lines		Carbon Steel,S	Carbon Steel,SCH 40		
Vent/Drain/Nrv Valves		Brass/Bronze	Brass/Bronze		
Sight Glass Valve		Sight Guage W	Sight Guage With Shut Off & Drain Valve		
Painting*	External	Zinc rich prime	er with red enamel finish		
	Internal		Zinc rich primer with coal tar epoxy paint		

<sup>\*</sup>Optional painting available for sea water applications.





### DIMENSIONAL DATA

SL No.	BLADDER TANK CAPACITY	A	В	С	D	E (INLET FLANGE) TO TANK	F	н
1	50 GALLON	900	1276	420	536	3"	Ø19 HOLE 4Nos. ON PCD 690	1665
2	100 GALLON	1143	1571	480	640	3"	Ø19 HOLE 4Nos. ON PCD 770	1985
3	150 GALLON	1200	1728	510	840	3"	Ø19 HOLE 4Nos. ON PCD 980	2135
4	200 GALLON	1200	1728	510	840	3"	Ø19 HOLE 4Nos. ON PCD 980	2135
5	300 GALLON	1160	1788	565	1040	3"	Ø19 HOLE 4Nos. ON PCD 1190	2226
6	400 GALLON	1400	2050	575	1083	3"	Ø19 HOLE 4Nos. ON PCD 1253	2475
7	500 GALLON	1865	2515	575	1083	3"	Ø19 HOLE 4Nos. ON PCD 1253	2940
8	600 GALLON	1650	2380	700	1239	3"	Ø19 HOLE 4Nos. ON PCD 1390	2910
9	700 GALLON	1900	2630	700	1239	3"	Ø19 HOLE 4Nos. ON PCD 1390	3160
10	800 GALLON	2200	2930	700	1239	3"	Ø19 HOLE 4Nos. ON PCD 1390	3460
11	900 GALLON	1338	2258	940	1620	3"	Ø19 HOLE 4Nos. ON PCD 1750	2930
12	1000 GALLON	1428	2348	940	1620	3"	Ø19 HOLE 4Nos. ON PCD 1750	3020
13	1100 GALLON	1578	2498	940	1620	3"	Ø19 HOLE 4Nos. ON PCD 1750	3170
14	1200 GALLON	1910	2830	940	1620	3"	Ø19 HOLE 4Nos. ON PCD 1750	3502

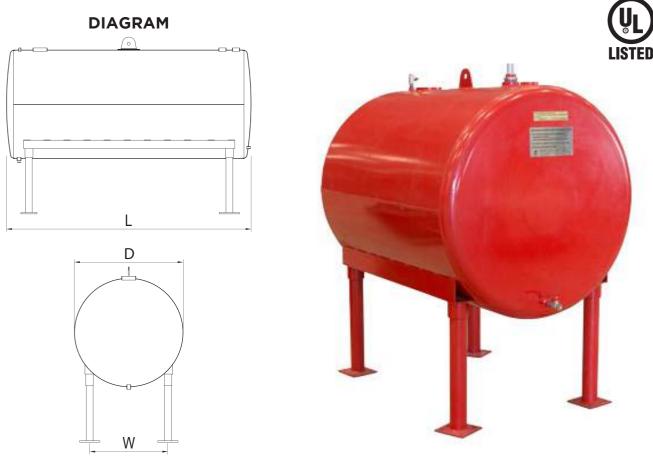
# **ABOVE GROUND STORAGE TANK**

NAFFCO's Above Ground Storage Tank is designed for performance, durability, and reliability. The lightweight NAFFCO tank is performance engineered for safety and long service life. It is UL listed (manufacturing accordance UL 142) and has easily passed all tests for 100% primary containment.

These tanks are intended for installation and use in accordance with the flammable and combustible liquids code NFPA 30.

The basic features of primary containment tanks covered under this category include all containment spaces and their respective openings (vents, liquid fill/withdraw, level indicator, drain and other functional openings) with connection threaded fittings.

All tank-containment compartments have been factory leak-tested by the NAFFCO before shipping.



	TANK DIMENSION							
Tank Capacity (Gallon)	Diameter (D)	Length (L)	Width (W)					
70	600	1050	430					
150	800	1250	575					
250	1000	1325	720					
310	1070	1450	768.5					

BILL OF MATERIALS				
Description	Material			
Shell	ASTM A36			
Leg	ASTM A53			
Lift Lug	ASTM A36			
Liquid Level Indicator				

### FIRE RATED DOORS

NAFFCO manufactures ANSI and BS standard fire rated doors. Fire rating does not depend on property of construction, but on the performance of complete elements of structure, which is composed of a number of materials. NAFFCO fire rated doors are designed to get optimal performance from a number of materials combined to perform for high degree of fire protection.

The design of NAFFCO fire rated doors evolved from actual testing as per NFPA and BSEN standards, which deal with methods of determination of resistance to fire of non load bearing element construction.

NAFFCO fire rated doors satisfy these criteria for the required period. These doors also satisfy the criteria of insulation where the mean and minimum temperature is required to be below specific figures as per standards.

Design and construction of NAFFCO fire rated door assemblies are in accordance with NFPA 80, UL10B, UL 10C, BS 476 Part 22 and other international standards.

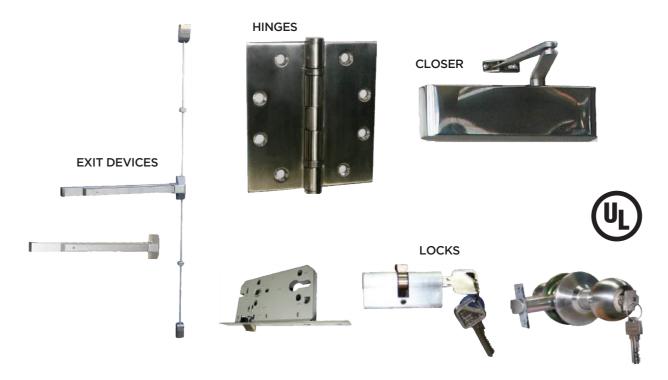
NAFFCO UL classified doors are tested and certified with 2 hours fire rating. BS standard doors maintains certification till 2 hours for Honeycomb door and 3 hours for glazed door.







#### NAFFCO FIRE CERTIFIED HARDWARE



May it be fire rated, normal, classic, traditional or modern, we have a vast collection of hardware to suit your design needs. From lock case, lever handles, cylinders and deadlocks, we have it all in different finishes like satin finish, gold finish, bronze finish and silver finish.

You will never go wrong with the selection of your preferred hardware since NAFFCO offers only the finest quality brands.





Serving Over 100 Countries Worldwide

