

PRODUCT RANGE

Delta Fire is a world class British company supplying fire fighting equipment to over 40 countries around the world. Dynamic and client orientated, Delta Fire is still small enough to react quickly to clients.

Delta Fire manufacture and supply a complete range of advanced operational fire fighting equipment.

1.) **Fire Nozzles**

Delta Fire is the UK's leading manufacturer of Fire Brigade Nozzles. H500 & H500ST Hose Reel Nozzles, Javelin, Mid Range, DM600 Mainline, Attack Select & Constant Flow, C.A.F Nozzle, Smooth Bore, Shockless Nozzle.



2.) **Layflat Fire Hoses to BS 6391**

Nova, Starflex Coated, Starflex Uncoated, Aquastar Drinking Water, Ultraflex and Phoenix Hoses.



3.) **Hose Reel Equipment**

Full range of BS EN 671-1 Approved Hose Reels.



4.) **Foam Concentrates**

Complete range covering all flammable liquid risks and specials.



5.) **Portable Foam Equipment**

Low & Medium Expansion Foam Branchpipes, Fast Attack, In-line Variable Inductors, High Expansion Foam Generators, Mobile Foam Units, Prima Foam Units, Monitors, Foam Cannons.



6.) **Marine & Waterway Equipment**

Complete range of International Couplings, Adaptors and Marine fittings. Standpipes, Nozzles, Globe Hydrant Valves & Pressure Regulating Valves.



7.) **Foam Test Service**

Facilities used to guarantee foam and all Delta Fire products



8.) **Fixed Foam Equipment**

Fixed In-line Inductors, Foam Top Pourer, Rimseal Pourer, Round the Pump Proportioner, Balanced Pressure Foam Proportioner, High Back Pressure Proportioners, Helimixer Foam Proportioner, MX Bund Foam Pourers.



9.) **Fixed Systems & Skid Packages**

Delta Fire design a complete range of Foam Systems from Floating Roof Tanks Rimseal Foam Injector Systems to Mud Drilling Tank Foam Systems.



H500

AUTOMATIC HOSE REEL NOZZLE



Made in UK Under ISO 9001 Quality System

- Conforms to EN15182 & NFPA 1964
- Automatic Pressure Control
- Stainless Steel Slide Valve
- Effortless On/Off Control
- Rapid Pulsing Facility
- Ten Year Guarantee



LX500 Low Expansion Foam Attachment

GENERAL DESCRIPTION

The Delta Automatic represents the state of the art of hose reel design providing a combination of automatic pressure and flow controls and effortless high pressure use.

Exceptional performance and rugged construction are combined with very low maintenance.

FEATURES

AUTOMATIC PRESSURE CONTROL

The hydrodynamically assisted slide valve provides effortless opening and shut off even at 40 bar pressures. The Delta Automatic stabilises varying pressures to give constant tip pressure, which always make maximum use of water, without the need for constant adjustment.

LOW MAINTENANCE AND RUGGED CONSTRUCTION

The slide valve design means only minimal maintenance and the wide flush setting help prevent any obstruction of the water flow in use.

POWERFUL FOG PATTERN

Excellent for general fire fighting. Very fine central water droplets are carried by heavier outside droplets.

WIDE FLOW RANGE 40 TO 500 L/Min

Efficient with all hose lines, from ¾", 1" and 1¼". Ideal for use with layflat hose when fitted with instantaneous couplings.

NARROW ANGLE CLICK SPRAY SETTING

Position setting easily found in 'blind' active fire conditions and holding its position in operation.

ON/OFF PULSING

The Delta Automatic nozzle can be rapidly switched on and off and the water spray 'pulsed' with virtually no pressure surge or water hammer effect.

FLOW VOLUME CONTROL AT THE NOZZLE

Control is in the hands of the nozzle operator. He can instantly change the volume of flow to match changing conditions without significant changes in jet length and spray pattern.

TEN YEAR GUARANTEE

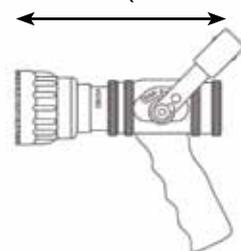
Manufactured in the United Kingdom under an ISO 9001 Quality System. Every Delta Automatic nozzle is statically pressure tested to 60 bar.

SPECIFICATION

Model Ref	Description
H500-19 H500-25	Nozzle With ¾" or 1" BSP Female Swivel Inlet
H500-38	Nozzle With 1.5" BSP Female Swivel Inlet

Weight:	H500 - 1.3kg	
Main Body/Barrel:	Hard Anodised Aluminum	LOW & MEDIUM EXPANSION
Slide Valve:	Stainless Steel	FOAM ATTACHMENTS
Front Bumper:	Shockproof Polyurethane	AVAILABLE

H500 235mm (max overall)



H500ST

STAINLESS STEEL AUTOMATIC HOSE REEL NOZZLE



Made in UK Under ISO 9001 Quality System

- Conforms to EN15182 & NFPA 1964
- Automatic Pressure Control
- Stainless Steel Slide Valve
- Effortless On/Off Control
- Rapid Pulsing Facility
- Ten Year Guarantee
- Stainless Steel Spinning Teeth



LX500 Low Expansion Foam Attachment

GENERAL DESCRIPTION

The New Delta Automatic Hose Reel Nozzle complete with Stainless Steel Spinning Teeth, incorporates all the design features which has made it the number one hose reel branch for the UK Fire Brigades.

The new stainless steel spinning teeth produces uniform dense spray with optimum droplet size for heat absorption.

The state of the art hose reel design provides a combination of automatic pressure and flow controls for effortless high pressure use.

FEATURES

STAINLESS STEEL SPINNING TEETH

The new stainless steel spinning teeth produces uniform dense spray with optimum droplet size for heat adsorption. These new stainless steel teeth are not only extremely efficient in generating these high performance uniform sprays, but are virtually indestructible, reducing maintenance and down time significantly over the life of the nozzle.

AUTOMATIC PRESSURE CONTROL

The hydrodynamically assisted slide valve provides effortless opening and shut off even at 40 bar pressures. The Delta Automatic stabilises varying pressures to give constant tip pressure, which always makes maximum use of water, without the need for constant adjustment.

LOW MAINTENANCE AND RUGGED CONSTRUCTION

The slide valve design means only minimal maintenance and the wide flush setting helps prevent any obstruction of the water flow in use.

NARROW ANGLE CLICK SPRAY SETTING

Position setting easily found in 'blind' active fire conditions and holding its position in operation. Click position can be set to any angle depending on Fire Brigade requirement.

ON/OFF PULSING

The Delta Automatic Nozzle can be rapidly switched on and off, and the water spray 'pulsed' with virtually no pressure surge or water hammer effect.

FLOW VOLUME CONTROL AT THE NOZZLE

Control is in the hands of the operator. The operator can instantly change the volume of flow to match changing conditions without significant changes in the jet length and spray pattern.

TEN YEAR GUARANTEE

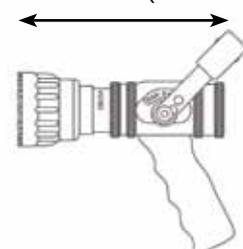
Manufactured in the UK under an ISO 9001 Quality System. Every Delta nozzle is statically pressure tested to 60 bar.

SPECIFICATION

Model Ref	Description
H500ST-19	Nozzle With ¾" or 1"
H500ST-25	BSP Female Swivel Inlet Spinning Teeth

Weight: H500ST - 1.3kg
 Main Body/Barrel: Hard Anodised Aluminum
 Slide Valve & Teeth: Stainless Steel
 Front Bumper: Shockproof Rubber

H500ST 240mm (max overall)



JAVELIN 100, 500 & 500C

NOZZLE



Made in UK Under ISO 9001 Quality System

- Conforms to EN15182 & NFPA 1964
- Select or Constant Flow
- Stainless Steel Slide Valve
- Stainless Steel Spinning Teeth
- Effortless On/Off Control
- Rapid Pulsing Facility
- Ten Year Guarantee



Javelin 500 Select Flow Mainline Branch

GENERAL DESCRIPTION

The Javelin 100, 500 and 500C is the latest in Delta's successful range of nozzles utilizing the proven Delta Slide Valve Technology for effortless pulsing and fire control. Powerful stainless steel spinning turbine teeth produce outstanding fog/spray patterns.

Exceptional performance and rugged construction are combined with very low maintenance. The narrow angle 'click' setting is an instant guide to provide optimum spray angle against flashovers in confined space fires.

FEATURES

SLIDE VALVE CONTROL

The hydrodynamically assisted slide valve provides effortless opening and closing even at 40 bar pressures allowing rapid flashover pulsing with minimal jet reaction or water hammer.

LOW MAINTENANCE AND RUGGED CONSTRUCTION

The Delta slide valve design provides years of trouble free service with low maintenance.

POWERFUL FOG PATTERN - STAINLESS STEEL SPINNING TEETH

Computer designed stainless steel turbine spinning teeth produce an extremely dense fog pattern, giving excellent fire fighting capability and higher degrees of personal protection.

FLOW RANGE

The standard model has a fixed flow and dial flush. An optional dual flow version is available. Efficient with all hose lines, from 3/4", 1" and 1 1/4". Ideal for use with layflat hose when fitted with 2 1/2" instantaneous couplings.

NARROW ANGLE CLICK SPRAY SETTING

Positive setting easily found in 'blind' active fire conditions and holding its position in operation.

TEN YEAR GUARANTEE

Manufactured in the United Kingdom under an ISO 9001 Quality System. Delta Automatic branch are designed to withstand a static pressure test of 60 bar.

SPECIFICATION

Model Ref	Description
J100-19 J100-25	Nozzle With 3/4" or 1" BSP Female Swivel Inlet Spinning Teeth, Hose Reel
J500-65	Nozzle With 2 1/2" Male Instantaneous Swivel Inlet Spinning Teeth, Select Flow
J500C-65	Nozzle With 2 1/2" Male Instantaneous Swivel Inlet Spinning Teeth, Constant Flow

Weight:	J100 - 1.3kg J500 & J500C - 1.8kg
Main Body/Barrel:	Hard Anodised Aluminum
Slide Valve:	Stainless Steel
Front Bumper:	Shockproof Rubber

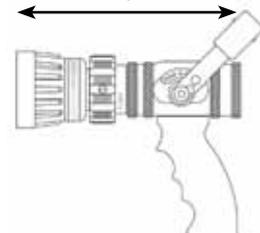
J500C 325mm (max overall)



J500 325mm (max overall)



J100 235mm (max overall)



H500 - 65

AUTOMATIC MID-RANGE MAINLINE NOZZLE



Made in UK Under ISO 9001 Quality System

- Conforms to EN15182 & NFPA 1964
- Powerful Spray/Jet Patterns
- Automatic Pressure Control
- Effortless On/Off Control
- Low Reaction Pulsing Facility
- Ten Year Guarantee



LX500 Low Expansion Foam Attachment

GENERAL DESCRIPTION

The Delta Automatic H500 Mid-range represents the state of the art mainline nozzle design, providing a powerful, long range main jet with a coherent stream pattern, combined with high performance water spray patterns.

FEATURES

WIDE FLOW RANGE OF 50 TO 500 L/MIN

Cohesive jet and dense water spray pattern at each flow setting. Normal operating range 5 to 8 bar.

POWERFUL FOG PATTERN

The fog pattern is extremely dense, giving excellent fire fighting capability and higher degrees of personal protection.

FLOW VOLUME CONTROL AT THE NOZZLE

Control is in the hands of the nozzle operator. He can instantly change the volume of flow to match changing conditions without significant changes in jet length and spray pattern.

NARROW ANGLE CLICK SPRAY SETTING

Positive setting easily found in 'blind' active fire conditions and holding its position in operation.

ON/OFF PULSING

The Delta Mid-Range nozzle can be rapidly switched on and off and the water spray 'pulsed' with minimal pressure surge or water hammer effect.

LOW MAINTENANCE AND RUGGED CONSTRUCTION

The slide valve design means only minimal maintenance. The stainless steel mesh filter and wide flush setting stop any obstruction of the water flow in use.

PRESSURE CONTROL

Nozzle automatically makes maximum use of available water flow.

TEN YEAR GUARANTEE

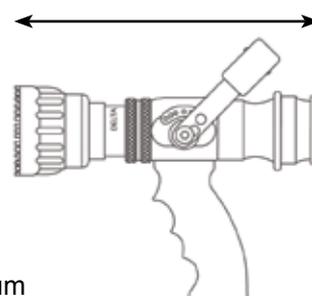
Designed and manufactured in the United Kingdom under an ISO 9001 Quality System. Every Delta Mid-Range nozzle is subjected to rigorous quality controls and guaranteed against any manufacturing defect for ten years.

SPECIFICATION

Model Ref	Description
H500-65	Nozzle With 2½" Male Instantaneous Swivel Inlet Fixed Rubber Teeth
H500ST-65	Nozzle With 2½" Male Instantaneous Swivel Inlet Spinning Teeth

Weight:	1.73kg
Main Body/Barrel:	Hard Anodised Aluminum
Slide Valve:	Stainless Steel
Front Bumper:	Shockproof Rubber

H500-65 325mm (max overall)



LOW & MEDIUM EXPANSION FOAM ATTACHMENTS AVAILABLE

H500 - SL

AUTOMATIC MID RANGE NOZZLE WITH SAFETY SPRAY LOCKING LEVER



Made in UK Under ISO 9001 Quality System

- Conforms to EN15182 & NFPA 1964
- Safety Locking Lever for Spray Only
- Automatic Pressure Control
- Stainless Steel Slide Valve
- Effortless On/Off Control
- Ten Year Guarantee
- Military Spec Option. MIL-A-8625F



LX500 Low Expansion Foam Attachment

GENERAL DESCRIPTION

The Delta Automatic represents the state of the art nozzle design providing a combination of automatic pressure and flow controls combined with a safety locking lever which assists in accidentally opening or moving into jet.

Exceptional performance and rugged construction are combined with very low maintenance and this versatile safety feature.

FEATURES

AUTOMATIC PRESSURE CONTROL

The hydrodynamically assisted slide valve provides effortless opening and shut. The Delta Automatic stabilises varying pressures to give constant tip pressure, which always make maximum use of water, without the need for constant adjustment.

LOCKING LEVER FOR SPRAY ONLY

The locking lever allows the operator to stay in the spray position, but can adjust from narrow to wide angle spray. The spring clip can then be released to flush or change to jet.

LOW MAINTENANCE AND RUGGED CONSTRUCTION

The slide valve design means only minimal maintenance and the wide flush setting help prevent any obstruction of the water flow in use.

POWERFUL FOG PATTERN

Excellent for general fire fighting. Very fine central water droplets are carried by heavier outside droplets.

WIDE FLOW RANGE 30 TO 430 L/Min

Efficient with all hose lines, Flow control on 6 detent positions.

ON/OFF PULSING

The Delta Automatic nozzle can be rapidly switched on and off and the water spray 'pulsed' with virtually no pressure surge or water hammer effect.

FLOW VOLUME CONTROL AT THE NOZZLE

Control is in the hands of the nozzle operator. He can instantly change the volume of flow to match changing conditions without significant changes in jet length and spray pattern.

TEN YEAR GUARANTEE

Manufactured in the United Kingdom under an ISO 9001 Quality System. Guaranteed against any manufacturing defect.

SPECIFICATION

Series	Flow Range		Nominal Pressure		Standard Pressure
	GPM	L/MIN	PSI	Bar	
H500-SL Low Pressure	10-100	40-400	75	5	1", 1.5" NH or 1.5" NPSH
H500-SL Standard	10-125	40-500	100	7	1", 1.5" NH or 1.5" NPSH

Operating Range Low Pressure H500 3 to 8 Bar
 Operating Range Standard Pressure H500 4 to 10 Bar

Front Bumper: Shockproof Rubber Weight: H500SL - 1.5kg
 Main Body/Barrel: Hard Anodised Aluminum Slide Valve: Stainless Steel

DM600

AUTOMATIC MAINLINE NOZZLE



Made in UK Under ISO 9001 Quality System

- Conforms to EN15182 & NFPA 1964
- Consistent and Reliable Spray Patterns
- Automatic Pressure Control
- Effortless On/Off Control
- Rapid Low Reaction Pulsing Facility
- Ten Year Guarantee



Alternative Threaded BSP Female Swivel Inlet

N O Z Z L E S / B R A N C H E S

GENERAL DESCRIPTION

The Delta Automatic represents the state of the art of mainline nozzle design providing a powerful, long range main jet with a coherent stream pattern, combined with high performance water spray patterns.

FEATURES

LONG THROW MAIN JET

The high volume of coherent flow ensures that the maximum volume of water reaches the end of the flow with minimum water 'drop out'.

LOW MAINTENANCE AND RUGGED CONSTRUCTION

The slide valve design means only minimal maintenance and wide flush setting stop any obstruction of the water flow in use.

FLOW VOLUME CONTROL AT THE NOZZLE

Control is in the hands of the branch operator. He can instantly change the volume of flow to match changing conditions without significant changes in jet length and spray pattern.

WIDE FLOW RANGE 50 TO 700 L/Min

Cohesive jet and dense water spray pattern at each flow setting. Normal operating range 5 to 8 bar.

POWERFUL FOG PATTERN

The fog pattern is extremely dense, giving excellent fire fighting capability and higher degrees of personal protection.

NARROW ANGLE CLICK SPRAY SETTING

Positive setting easily found in 'blind' active fire conditions and holding its position in operation.

ON/OFF PULSING

The Delta Mainline nozzle can be rapidly switched on and off and the water spray 'pulsed' with virtually no pressure surge or water hammer effect.

AUTOMATIC PRESSURE CONTROL

Nozzle automatically makes maximum use of available water flow.

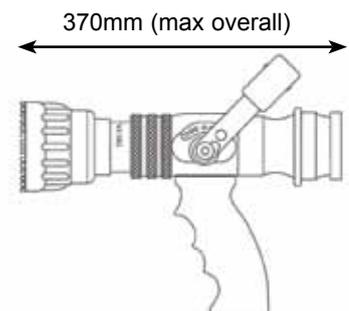
TEN YEAR GUARANTEE

Designed and manufactured in the United Kingdom under an ISO 9001 Quality System. Every Delta Automatic nozzle is statically pressure tested to 20 bar and guaranteed against any manufacturing defect for ten years.

SPECIFICATION

Model Ref	Description
DM600-65	Nozzle With 2½" Male Instantaneous Swivel Inlet Fixed Rubber Teeth

Weight:	2.5kg
Main Body/Barrel:	Hard Anodised Aluminum
Slide Valve:	Stainless Steel
Front Bumper:	Shockproof Rubber



LOW & MEDIUM EXPANSION FOAM ATTACHMENTS AVAILABLE

ATTACK PRO SERIES

SELECT FLOW NOZZLES



Attack 100 Pro
High Pressure
Hose Reel Nozzle



Attack 500 Pro
Mainline Nozzle

- Conforms to EN15182 & NFPA 1964
- M.E.D Approved 
- Stainless Steel Spinning Teeth
- Dense Wide Angle Fog Pattern
- Variable Flow Rates
- Colours Options Available
- 30% Lighter than Most Comparable Nozzles



New Lazer Marking Options

NOZZLES / BRANCHES

GENERAL DESCRIPTION

Delta's new Attack Pro-Series nozzle range combines tried and tested flow engineering technologies with subtle design and performance enhancements providing the very best in modern-day hand-held fire nozzles.

The Attack 100 Pro is perfectly suited for use with 19mm and 22mm high pressure hosereels and the Attack 500 Pro is designed for use with low pressure mainline hoses. Both models are available in a variety of flow options. As used by professional Fire & Rescue Services throughout the UK and abroad including London Fire Brigade and the Royal Navy.

FEATURES

SELECTABLE FLOW RANGE (AT 6 BAR)

Various Flow Options Cohesive jet and dense water spray pattern at each flow setting. Normal operating range 5 to 8 bar, but fully operational at pressures as low as 3.5 bar

POWERFUL FOG PATTERN - STAINLESS STEEL SPINNING TEETH

Computer designed stainless steel turbine spinning teeth produce an extremely dense fog pattern, giving excellent fire fighting capability and higher degrees of personal protection. Plastic teeth are available as a lower cost option.

NARROW ANGLE CLICK SETTING

The nozzle jet / spray pattern has a single narrow angle click position, which is positive enough to hold the setting in operational use and is easily identifiable in 'blind' fire scenarios.

LOW MAINTENANCE AND RUGGED CONSTRUCTION

The stainless steel ball valve design means only minimal maintenance. An optional stainless steel mesh filter and wide flush setting stop any obstruction of the water flow in use.

A gunmetal version is also available.

TEN YEAR GUARANTEE

Designed and manufactured in the United Kingdom under an ISO 9001 Quality System. Every Delta Attack nozzle is subjected to rigorous quality controls and guaranteed against any manufacturing defect for ten years.

SPECIFICATION

Model Ref	Description
A100-19 A100-25	Nozzle With ¾" or 1" BSP Female Swivel Inlet
A500-65	Nozzle With 2½" Male Instantaneous Swivel Inlet
A750-65	Nozzle With 2½" Male Instantaneous Swivel Inlet

Weight: Attack 100 - 1.6kg
Attack 500 - 1.8kg
Attack 750 - 2.4kg

Main Body/Barrel: Hard Anodised Aluminum
Ball Valve: Stainless Steel
Front Bumper: Shockproof Rubber

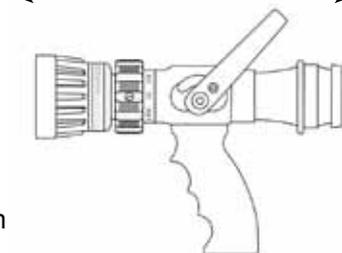
A100-25 230mm (max overall)



A500-65 325mm (max overall)



A750-65 340mm (max overall)



ATTACK 100, 500 & 750

SELECT FLOW NOZZLES



Attack 100



Attack 750



Attack 500

DESIGNED FOR GENERAL FIRE FIGHTING WITH EXCELLENT HIGH RISE PERFORMANCE

- Conforms to EN15182 & NFPA 1964
- Stainless Steel Spinning Teeth
- Long Range Penetrating Jet
- Dense Wide Angle Fog Pattern
- Variable Flow Rates
- Colours Options Available
- 30% Lighter than Most Comparable Nozzles



Stainless Steel Spinning Turbine Teeth

NOZZLES / BRANCHES

GENERAL DESCRIPTION

The Delta Attack 100, 500 and 750 represents the state of the art mainline nozzle design, providing a powerful, long range main jet with a coherent stream pattern, combined with high performance water spray patterns.

The computer designed waterway maximises hydraulic efficiency and combines it with the lightest most compact design in its class.

FEATURES

SELECTABLE FLOW RANGE (AT 6 BAR)

Attack 100 = 60, 95, 150 & 250 L/Min (Alternative Flows Available)

Attack 500 = 125, 250, 375 & 500 L/Min

Attack 750 = 285, 460, 600 & 750 L/Min

Cohesive jet and dense water spray pattern at each flow setting. Normal operating range 5 to 8 bar, but fully operational at pressures as low as 3.5 bar

POWERFUL FOG PATTERN - STAINLESS STEEL SPINNING TEETH

Computer designed stainless steel turbine spinning teeth produce an extremely dense fog pattern, giving excellent fire fighting capability and higher degrees of personal protection. Plastic teeth are available as a lower cost option.

NARROW ANGLE CLICK SETTING

The nozzle jet / spray pattern has a single narrow angle click position, which is positive enough to hold the setting in operational use and is easily identifiable in 'blind' fire scenarios.

LOW MAINTENANCE AND RUGGED CONSTRUCTION

The stainless steel ball valve design means only minimal maintenance. An optional stainless steel mesh filter and wide flush setting stop any obstruction of the water flow in use.

A gunmetal version is also available.



Gunmetal Version

TEN YEAR GUARANTEE

Designed and manufactured in the United Kingdom under an ISO 9001 Quality System. Every Delta Attack nozzle is subjected to rigorous quality controls and guaranteed against any manufacturing defect for ten years.

SPECIFICATION

Model Ref	Description
A100-19	Nozzle With 3/4" or 1" BSP Female Swivel Inlet
A100-25	
A500-65	Nozzle With 2 1/2" Male Instantaneous Swivel Inlet
A750-65	Nozzle With 2 1/2" Male Instantaneous Swivel Inlet

Weight: Attack 100 - 1.6kg
Attack 500 - 1.8kg
Attack 750 - 2.4kg

Main Body/Barrel: Hard Anodised Aluminum
Ball Valve: Stainless Steel
Front Bumper: Shockproof Rubber

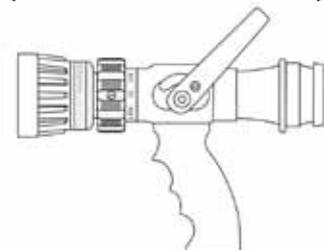
A100-25 230mm (max overall)



A500-65 325mm (max overall)



A750-65 340mm (max overall)



ATTACK 100C, 500C & 750C

CONSTANT FLOW NOZZLES



Attack 100



Attack 750C



Attack 500C

- Conforms to EN15182 & NFPA 1964
- Stainless Steel Spinning Teeth
- Long Range Penetrating Jet
- Dense Wide Angle Fog Pattern
- Constant Fixed Flow Rates
- Colours Options Available
- 30% Lighter than Most Comparable Branches



Stainless Steel Spinning Turbine Teeth

NOZZLES / BRANCHES

GENERAL DESCRIPTION

The Delta Attack 100C, 500C and 750C represents the state of the art nozzle design, providing a powerful, long range main jet with a coherent stream pattern, combined with high performance water spray patterns.

The computer designed waterway maximises hydraulic efficiency and combines it with the lightest most compact design in its class.

FEATURES

CONSTANT FIXED FLOW RANGE (AT 6 BAR)

Attack 100C = 60 or, 95 or, 150 or, 250 L/Min (Alternative Fixed Flows Available)

Attack 500C = 125 or 250 or 375 or & 500 L/Min

Attack 750C = 285 or 460 or 600 or 750 L/Min

Cohesive jet and dense water spray pattern at one of the above flow setting.

Normal operating range 5 to 8 bar, but fully operational at pressures as low as 3.5 bar

POWERFUL FOG PATTERN - STAINLESS STEEL SPINNING TEETH

Computer designed stainless steel turbine spinning teeth produce an extremely dense fog pattern, giving excellent fire fighting capability and higher degrees of personal protection. Plastic teeth are available as a lower cost option.

NARROW ANGLE CLICK SETTING

The nozzle jet / spray pattern has a single narrow angle click position, which is positive enough to hold the setting in operational use and is easily identifiable in 'blind' fire scenarios.

LOW MAINTENANCE AND RUGGED CONSTRUCTION

The stainless steel ball valve design means only minimal maintenance. An optional stainless steel mesh filter and wide flush setting stop any obstruction of the water flow in use.

TEN YEAR GUARANTEE

Designed and manufactured in the United Kingdom under an ISO 9001 Quality System. Every Delta Attack nozzle is subjected to rigorous quality controls and guaranteed against any manufacturing defect for ten years.

SPECIFICATION

Model Ref	Description
A100C-19	Nozzle With 3/4" or 1"
A100C-25	BSP Female Swivel Inlet
A500C-65	Nozzle With 2 1/2" Male Instantaneous Swivel Inlet
A750C-65	Nozzle With 2 1/2" Male Instantaneous Swivel Inlet

Weight: Attack 100C - 1.6kg
Attack 500C - 1.8kg
Attack 750C - 2.4kg

Main Body/Barrel: Hard Anodised Aluminum

Ball Valve: Stainless Steel

Front Bumper: Shockproof Rubber

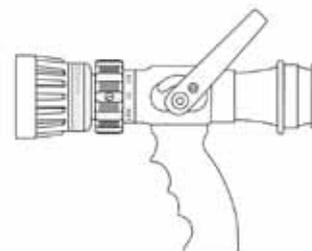
A100C-25 230mm (max overall)



A500C-65 325mm (max overall)



A750C-65 340mm (max overall)



CAF NOZZLE



Attack 500 C.A.F Branch
c/w Silencer
Storz C (KA66mm) Inlet

- Longer Jet Reach
- Hard Anodised Light Alloy
- Stainless Steel Ball Valve
- Most Inlets Available
- Optional Foam Lance
- Low Maintenance



Optional C.A.F Foam Lance Attachment

GENERAL DESCRIPTION

The Delta C.A.F nozzle is a Compressed Air Foam nozzle used for CAF systems. The nozzle is a pistol grip style and has a controlled on/off handle. The nozzle is fully hard anodised for corrosion protection along with stainless steel 316 ball valve and fittings. This nozzle has a fixed stream jet barrel and silencer and has the option of an easily detachable special foam lance applicator.

FEATURES

FLOW RATES

Typical flow rate of the Delta C.A.F Nozzle is up to a maximum of 500L/Min.

DISCHARGE OPTIONS

Standard discharge for the C.A.F nozzle is a jet barrel which is has a specially designed outlet barrel to reduce noise level particularly at start up.

A special foam lance is also available as well as the standard jet barrel. This is approx a 1.5 metres lance with a multi directional tip which can be fitted to the branch to enable the foam to be penetrated into inaccessible areas such as roof spaces, skips, etc.



Stainless Steel Tip

ADVANTAGES

Designed to achieve longer jet reach and manufacture using a stainless steel ball valve means safe and positive operation. The nozzle also requires no lubrication.

LOW MAINTENANCE AND RUGGED CONSTRUCTION

The stainless steel ball valve design means only minimal maintenance.

TEN YEAR GUARANTEE

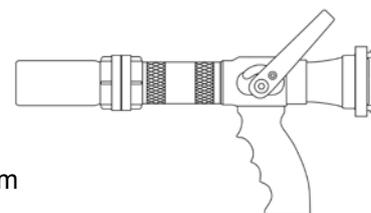
Designed and manufactured in the United Kingdom under an ISO 9001 Quality System. Every Delta C.A.F nozzle is subjected to rigorous quality controls and guaranteed against any manufacturing defect for ten years.

SPECIFICATION

The Delta C.A.F nozzle is for Compressed Air Foam Systems.

Model Ref	Description
CAF/1	Delta CAF Hand Controlled Nozzle
CAF/2	Delta CAF Hand Controlled Nozzle & Detachable Foam Lance

440mm (Standard)
1590mm (c/w lance) not shown



Main Body/Barrel: Hard Anodised Aluminum
Ball Valve: Stainless Steel 316
Inlets: 2.5" Inst. Male Swivel, 2" BSP female or most international fittings

SHOCKLESS NOZZLE



Shockless Nozzle
2.5" Inst Male Inlet
Gunmetal/Bronze

- Safer Opening / Closing
- Low Force Opening Reaction
- Hard Anodised Light Alloy or Gunmetal
- Stainless Steel Turbine Teeth
- All International Inlets Available
- Outstanding Performance



All International inlet fittings available

N O Z Z L E S / B R A N C H E S

GENERAL DESCRIPTION

The Delta 'Shockless' Nozzle is designed to effortlessly open and close in the SPRAY position with a minimal near zero reaction making it safer for use especially when using hydrants with higher than average water pressures. Jet reactions are of course normal when the nozzle is fully open. Manufactured in gunmetal and bronze makes the Shockless Nozzle suitable for continuous use with salt water, ideal for the marine market, hard anodized aluminium versions are available.

The Delta Shockless Nozzle is also available with all major international fittings and BSP male or female inlet swivel connections.

Maximum recommended operating pressure is 16 bar.

FEATURES

FLOW RATE

Standard flow rate of the Delta Shockless Nozzle is 450L/Min @ 7 bar. Other flow rates are available on request.

ADVANTAGES

Designed to effortlessly open and close in the SPRAY position eliminating jet reaction for safer use. The gunmetal version is ideal for the marine and offshore market. Optionally available Nickel Plated or alternatively in hard anodised aluminium.

STAINLESS STEEL SPINNING TEETH

Computer designed stainless steel turbine spinning teeth produce an extremely dense fog pattern, giving excellent fire fighting capability and higher degrees of personal protection.

LOW MAINTENANCE AND RUGGED CONSTRUCTION

Quality design and excellent engineering means only minimal maintenance.

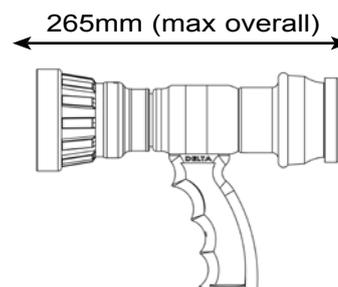
TEN YEAR GUARANTEE

Designed and manufactured in the United Kingdom under an ISO 9001 Quality System. Every Delta Shockless Nozzle is subjected to rigorous quality controls and guaranteed against any manufacturing defects for ten years.

SPECIFICATION

Model Ref	Description / Inlet
DSN450B -65	2.5" Inst Male
DSN4508B-50M/F -38M/F	2" BSP Male / Female 1.5" BSP Male / Female
DSN450B -65NH -38NH	2.5" NH Female 1.5" NH Female

Main Body/Barrel: Gunmetal / Bronze
 Weight: (DSN4008-65) 4.0kg (DSN4008-38M) 3.2kg
 Inlets: 2.5" Inst. Male Swivel, BSP or NH male or most international fittings



SMOOTH BORE NOZZLE WITH STACKING TIPS



Smooth Bore
2.5" Inst Male Inlet
19mm & 24mm
Stacking Tips

Made in UK Under ISO 9001 Quality System

- Different Size Stacking Tips
- Stainless Steel Ball Valve
- Long Throws
- Effortless On/Off Control
- Low Maintenance
- Ten Year Guarantee



Smooth Bore 19mm & 24mm Stacking Tips

GENERAL DESCRIPTION

The Delta Smooth Bore Nozzle enables Fire Fighters to project large volumes of water at relatively low pressure. It has been designed for use in High Rise Buildings where water pressures at the nozzle, via Dry Riser Main Systems, can be less than 4 bar make the Delta Smooth Bore Nozzle idea for these situations. The Straight through waterway greatly reduces problems with blockages due to debris in some fire mains.

FEATURES

STAINLESS STEEL BALL VALVE CONTROL

The specially designed stainless steel profiled ball valve allows ease of opening and closing.

QUICK RELEASE STACKING TIPS

The Delta Smooth Bore Nozzle has a variety of different stacking tips to suit individual applications. The stacked tips available are 15mm & 19mm or 19mm & 24mm (other are available on request). The stacked tips are designed for quick release by unscrewing them until the required size.

QUICK RELEASE JET/SPRAY

The Delta Smooth Bore Nozzle also has the option of removing the stacked tips and fitting a jet/spray attachment if required.

LOW MAINTENANCE AND RUGGED CONSTRUCTION

The stainless steel ball valve design means only minimal maintenance.

TEN YEAR GUARANTEE

Designed and manufactured in the United Kingdom under an ISO 9001 Quality System. Every Delta Smooth Bore nozzle is subjected to rigorous quality controls and guaranteed against any manufacturing defects for ten years.

PERFORMANCE

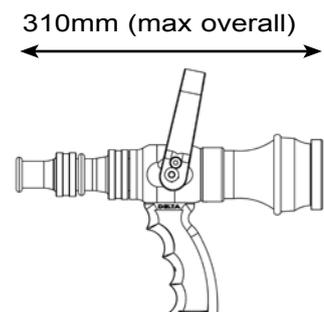
Tip Size	Pressure	Flow	Throw (m)
15mm	3 bar	260L/min	27.5mtrs
	5 bar	320L/min	35mtrs
	7 bar	380L/min	42mtrs
19mm	3 bar	400L/min	30.5mtrs
	5 bar	515L/min	38.5mtrs
	7 bar	615L/min	44.5mtrs
24mm	3 bar	625L/min	34.5mtrs
	5 bar	815L/min	42mtrs
	7 bar	965L/min	55mtrs

SPECIFICATION

Model Ref	Description
NFA080102	Nozzle With 2½" Male Instantaneous Swivel Inlet 15mm & 19mm Stacking Tips
NFA080202	Nozzle With 2½" Male Instantaneous Swivel Inlet 19mm & 24mm Stacking Tips
NFA080002	Nozzle With 2½" Male Instantaneous Swivel Inlet Jet/Spray Attachment

Weight: NFA080102 - 1.3kg
NFA080202 - 1.3kg

Main Body & Tips: Hard Anodised Aluminum
Ball Valve: Stainless Steel 316



NOVA

PREMIUM QUALITY FIRE HOSE



- For Professional Firefighters
- Petrochemical
- Civil Defence
- Major Industrial
- Marine and Aviation
- B.S. 6391 Type 3 Fire Hose



Available with All International Fittings

L A Y F L A T F I R E H O S E

GENERAL DESCRIPTION

NOVA is a high quality fire hose for use by Professional Fire Fighters in the most demanding situations. It is constructed with an all synthetic woven textile reinforcement encased in high tensile PVC / Nitrile rubber forming a unified lining and cover. NOVA exceeds the requirements of BS 6391 for type 3 fire hose.

FEATURES

OIL & CHEMICAL RESISTANCE

Nova's construction and unique PVC / Nitrile rubber blend provide excellent resistance to a wide range of chemicals and oil.

HEAT RESISTANCE

Nova has excellent heat resistance against accidental contact with hot embers.

ABRASION RESISTANCE

Nova's strong PVC Nitrile cover provides a tough external coat ensuring excellent abrasion resistance.

MAINTENANCE FREE

No drying is required and cleaning is quick and easy.

WEATHER RESISTANCE

Nova has excellent ozone and weather resistance and is suitable for the most demanding environmental conditions.

TECHNICAL DATA

Internal Diameter	mm inches	25 1"	38 1½"	45 1¾"	52 2"	64 2½"	70 2¾"	75 3"	100 4"
Short Length Burst Pressure	Bar	60	50	50	50	50	45	45	35
Maximum Use Pressure	Bar	30	25	25	25	25	22	22	17

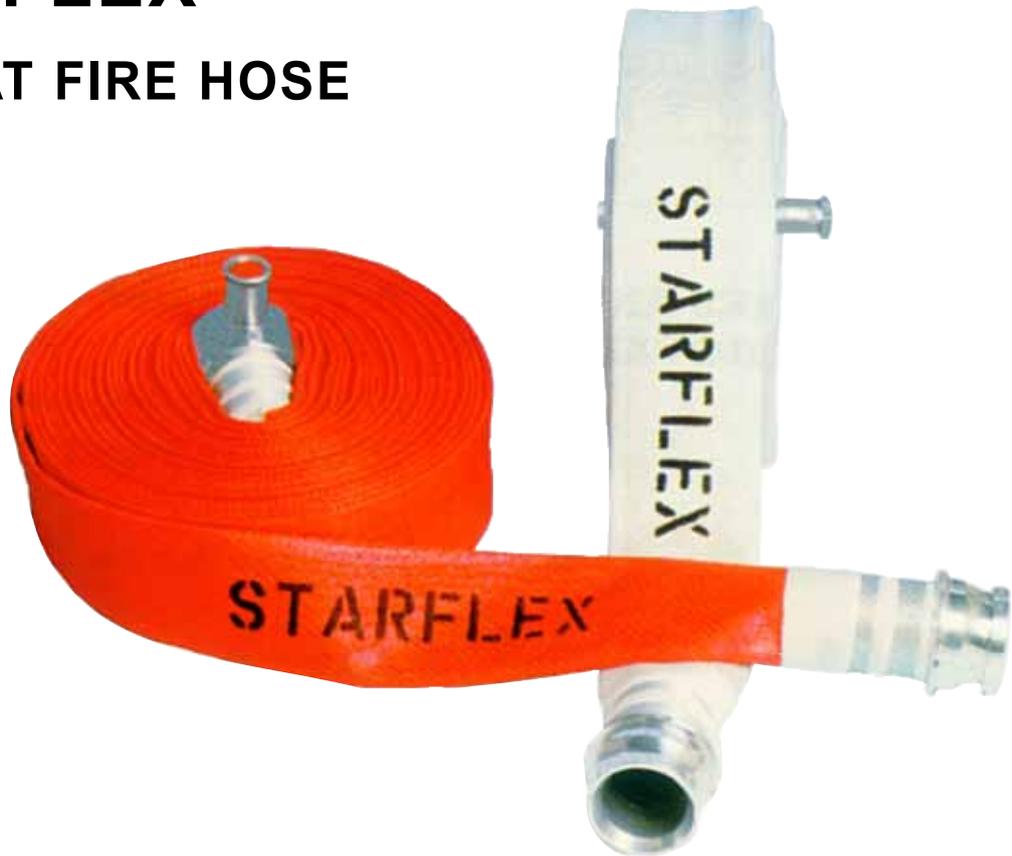
Temperature Range: -40°C up to +100°C

SHIPPING SPECIFICATION

Internal Diameter	mm inches	25 1"	38 1½"	45 1¾"	52 2"	64 2½"	70 2¾"	75 3"	100 4"
Coil Diameter (25 meters)	cms	35	38	39	41	43	44	46	50
Weight	gm/M	210	230	280	360	500	580	640	1050

STARFLEX

LAYFLAT FIRE HOSE



Starflex Standard - White Uncoated Jacket

Starflex Coated - Red Elastomeric Coating

- Lightweight
- All Synthetic
- Durable and Flexible
- Available in Alternative Colours
- With All International Couplings
- Ultra Lightweight Version for Competition Use



Available with All International Fittings

GENERAL DESCRIPTION

Starflex Fire Hoses are high quality hoses widely used by fire brigades and industrial users. Manufactured with an all synthetic Woven Polyester Jacket for light weight and strength, and a smooth black low friction-loss synthetic rubber lining, they are tough, hard-wearing and yet still flexible and easy to handle. The all synthetic construction makes Starflex rot proof and easy to clean.

FEATURES AND APPROVALS

Available with a High Abrasion Resistant Red Elastomeric Coat.

Meets the requirements of BS 6391 for Type 1 and Type 2 Hose.

Suitable for Sea Water, Brackish Water, etc.

All Synthetic Rot Proof construction immune to mildew, bacteria and the like. Withstands the toughest climactic conditions. Lightweight, easy to handle and easy to clean.

TECHNICAL DATA

Internal Diameter mm		38	45	52	64	70	75	100
inches		1½"	1¾"	2"	2½"	2¾"	3"	4"
Burst Pressure								
	Bar	45	45	45	45	45	45	36
	PSI	630	630	630	630	630	630	500
Working Pressure								
	Bar	15	15	15	15	15	15	12
	PSI	210	210	210	210	210	210	170
Coil Diameter								
30 Meters	cm	38	39	41	43	44	46	50
100 Feet	inches	15"	15½"	16¼"	17"	17½"	18¼"	19¾"
Weight								
Uncoated	gm/M	230	240	300	350	420	530	660
coated	gm/M	240	250	315	365	440	555	690

Temperature Range: -40°C up to +100°C

COMPETITION HOSE OPTION

An ultra lightweight hose comprising white polyester jacket with polyurethane film lining, available in 64mm (2½") diameter.

Weight 230gm/M

AQUASTAR

DRINKING WATER FIRE HOSE

WRAS (WRC) APPROVED TO BS 6920-1:2000



- For All Fresh Water Applications
- WRAS Approved to BS 6920-1:2000
- Public / Local Water Supply
- Filling of Fresh Water Tanks
- Marine and Emergency Transfer
- Suitable for Food Grade Applications
- Highly Abrasion Resistant



Available with Most International Fittings

L A Y F L A T F I R E H O S E

GENERAL DESCRIPTION

Aquastar is a high quality flexible potable drinking water hose for all fresh water delivery applications. Thus making it ideal for public water supply, filling of fresh water tanks and the food industry. Aquastar is constructed with a circular woven jacket in 100% high tenacity polyester yarn with a Thermoplastic Polyurethane liner and cover. The Aquastar has also been tested and approved by WRAS.

FEATURES

WRAS (WRC) APPROVED TO BS6920-1:2000

Aquastar has been tested and approved by WRAS to BS 6920-1:2000 for all fresh water / Drinking Water delivery applications. It is also listed in the materials Directory, (hose & tubing) Section 5140.

MAINTENANCE FREE

No drying is required and cleaning is quick and easy. It also has a long life expectancy and is resistant to mechanical damage and microbiological attack.

WEATHER RESISTANCE

Aquastar has excellent ozone and weather resistance and is suitable for the most demanding environmental conditions.

COUPLINGS

Aquastar is available with most international fittings such as 2.5" Instantaneous, Storz, Nakajima, NOR etc. Also available in Light Alloy or Gunmetal material.

TECHNICAL DATA

DIAMETER	:	1" to 14"
COLOUR	:	Blue
LENGTHS	:	15m, 18m, 20m, 23m, 25m, 30m, 60m Others available on request upto 300m

SIZE	WEIGHT / METER	WALL THICKNESS	BURST PRESSURE	WORKING PRESSURE	TENSILE STRENGTH
1" (25mm)	160g	1.7mm	50 bar	17 bar	1200 bar
2" (52mm)	475g	2.6mm	50 bar	17 bar	5500 bar
2.5" (64mm)	580g	2.7mm	50 bar	17 bar	6800 bar
3" (76mm)	780g	2.9mm	50 bar	17 bar	8400 bar
4" (100mm)	1350g	3.0mm	40 bar	14 bar	10250 bar
6" (150mm)	1940g	3.0mm	30 bar	12 bar	15000 bar
8" (200mm)	2315g	3.0mm	24 bar	10 bar	18500 bar
10" (250mm)	2990g	3.2mm	8 bar	8 bar	23500 bar
12" (300mm)	4620g	3.3mm	6 bar	6 bar	38000 bar
14" (350mm)	7392g (approx)	3.4mm (approx)	4 bar (approx)	4 bar (approx)	45000 bar (approx)

NOVA ULTRAFLEX

NYLON FIRE HOSE



- For Professional Firefighters
- Kink Resistant
- Civil Defence
- Petrochemical & Marine
- Low Friction Loss
- B.S. 6391 Type 3 Fire Hose
- High Abrasion Resistance



Available with All International Fittings

L A Y F L A T F I R E H O S E

GENERAL DESCRIPTION

NOVA Ultraflex is a high quality fire hose for use by Professional Fire Fighters in the most demanding situations. It is constructed with a 100% synthetic reinforcement nylon making it kink resistant, ideal for low pressures. ULTRAFLEX exceeds the requirements of BS 6391 for type 3 fire hose.

FEATURES

KINK RESISTANT

Nova Ultraflex provides excellent kink resistance and is ideally suited to low pressure use such as high-rise firefighting. The construction process ensures a smooth, kink-free shape when charged delivering maximum flow and minimal friction loss at all times.

HEAT RESISTANCE

Nova Ultraflex has excellent resistance to heat thanks to a superior quality construction incorporating high tenacity multi-ply fibres.

ABRASION RESISTANCE

Nova Ultraflex is extremely resilient to abrasion and is designed to maintain performance even in extreme, harsh environments.

OIL & CHEMICAL RESISTANT

Superior quality manufacturing processes provide excellent resistance to a wide range of chemicals and oils.

MAINTENANCE FREE

Nova Ultraflex is completely maintenance free. Cleaning is quick and easy and no drying is required.

WEATHER RESISTANCE

Nova Ultraflex is highly resistant to the effects of weather, ozone and UV and provides excellent storage and usage life.

COUPLINGS

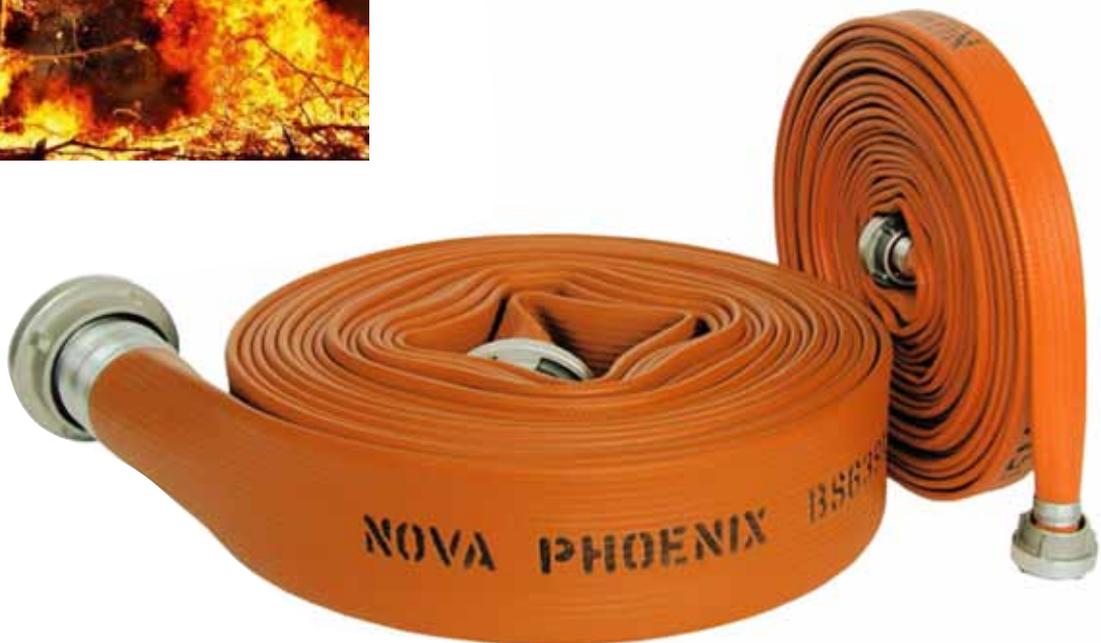
Available with 2½" Instantaneous couplings in light alloy or gunmetal or a range of International fittings.

TECHNICAL DATA

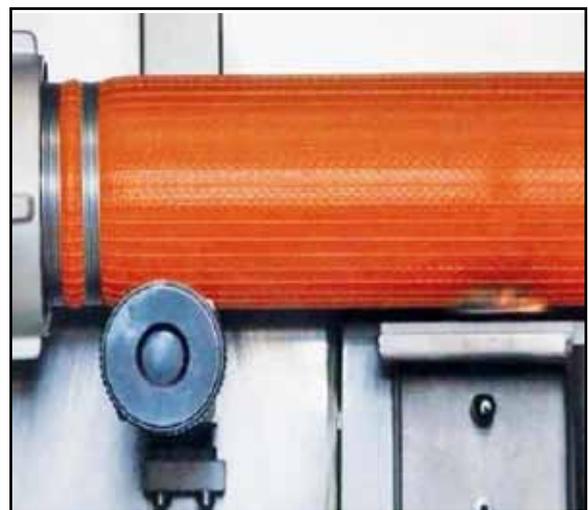
Internal Diameter	mm	25	38	45	52	64	70	75	100
	inches	1"	1½"	1¾"	2"	2½"	2¾"	3"	4"
Short Length Burst Pressure	Bar	48	48	48	48	48	48	48	48
Test Pressure	Bar	41	41	41	34	34	27	27	27

NOVA PHOENIX

HIGH FLAME RESISTANT INSIDE & OUT RUBBERLINED LAYFLAT FIRE HOSE



- For Professional Firefighters
- Excellent Heat & Flame Resistant
- Perfect for fighting Forest Fires
- Petrochemical & Marine
- Low Friction Loss
- B.S. 6391 Type 3 Fire Hose
- High Abrasion Resistance



Excellent Heat and Flame Resistant

L A Y F L A T F I R E H O S E

GENERAL DESCRIPTION

Nova Phoenix is a type 3 layflat fire hose with excellent heat and flame resistant properties. In tests this hose has lasted more than 1 hour at 900 deg C without bursting which makes it ideal for forest fires or high temperature fires. Rubberlined inside and out it also has high abrasion resistance and is very durable.

FEATURES

OIL & CHEMICAL RESISTANCE

The construction and unique PVC / Nitrile rubber blend provide excellent resistance to a wide range of chemicals and oil. Suitable for sea water, hot water.

HEAT RESISTANCE

This hose has excellent flame and heat resistance (more than 1 hour with 900 deg C without burst).

ABRASION RESISTANCE

Nova Phoenix strong PVC Nitrile cover provides a tough external coat ensuring excellent abrasion resistance and durability.

MAINTENANCE FREE

No drying is required and cleaning is quick and easy.

WEATHER RESISTANCE

Nova Phoenix has extreme resistance to aging, ozone and UV and is suitable for the most demanding environmental conditions.

COUPLINGS

Available with 2 1/2" Instantaneous couplings in light alloy or gunmetal or a range of International fittings.

TECHNICAL DATA

DIAMETER	:	1" to 3"
COLOUR	:	Orange
LENGTHS	:	15m, 18m, 20m, 23m, 25m, 30m, 60m Others available on request

SIZE	WEIGHT / METER	WALL THICKNESS	BURST PRESSURE	WORKING PRESSURE	TENSILE STRENGTH
1" (25mm)	270g	2.4mm	50 bar	16 bar	2.300bar
1.5" (38mm)	370g	2.4mm	50 bar	16 bar	3.000bar
1.75" (45mm)	420g	2.6mm	50 bar	16 bar	3.300bar
2" (52mm)	455g	2.6mm	50 bar	16 bar	3.800 bar
2.5" (64mm)	610g	2.8mm	50 bar	16 bar	5.100 bar
2.75" (70mm)	725g	2.8mm	50 bar	16 bar	5.700bar
3" (75mm)	815g	3.0mm	50bar	16 bar	6.900bar

The above bursting pressure and working pressure refer to hose only and without couplings fitted.

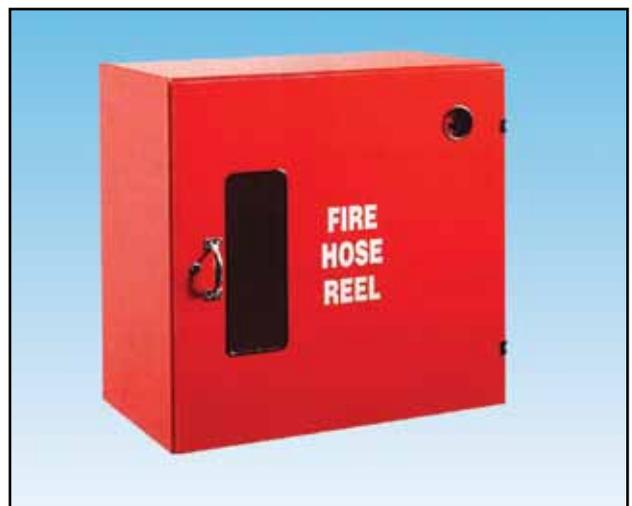
In line with our policy of continuous improvement we reserve the right to amend any specification without notice.

FIRE HOSE REELS



British Standard Institution Approved Fire Hose Reels

- Approved to B.S. EN 671-1
- Fixed or Swinging
- Manual or Automatic
- 19mm or 25mm Hose
- Full Range of Hose Reel Cabinets



Fire Hose Reel Cabinet

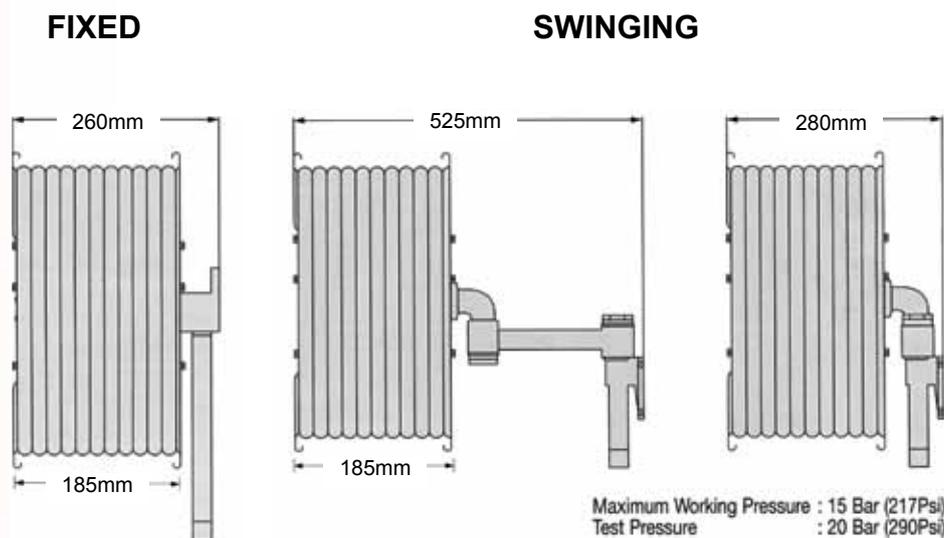
GENERAL DESCRIPTION

Delta Fire hose reels are manufactured and approved to British Standard (European standard) BS EN 671-1. Compliance to the stringent test required by the above standard guarantees excellent durability and performance. Hose reel side plates are protected with a polyester powder coating that complies to salt spray test requirement which is specified in ISO 9227 for 240 hours. Delta Fire hose reels have been designed to provide a flow rate of 27 L/min for ¾" and 35 L/min for 1" at 0.2 Mpa.

Delta Fire provides a complete range of hose reels, which includes manual, automatic, swinging and fixed type in ¾" or 1" diameter. Automatic hose reels are available with an internal valve built into the hose reel unit. The internal valve will open fully after three revolutions of the hose reel as the hose is pulled out. The automatic hose reel valve will close when the hose is wound back onto the reel.

Delta Fire hose reels are available with a quick installation mounting bracket which allows installation to be completed by one person.

TECHINCAL DATA



AUTOMATIC

Swinging Code	Fixed Code	Drum Capacity	Side Plate Dia.
FHR120030	FHR110030	¾" Ø x 30m Hose	558 (22")
FHR140030	FHR130030	1" Ø x 30m Hose	558 (22")

MANUAL

Swinging Code	Fixed Code	Drum Capacity	Side Plate Dia.
FHR115030	FHR105030	¾" Ø x 30m Hose	558 (22")
FHR135030	FHR125030	1" Ø x 30m Hose	558 (22")

FIRE FIGHTING FOAMS

Delta Foam Concentrates

Delta Foam Concentrates are formulated for high performance, minimal environmental impact and cost effective usage.

A complete range is available to cover all flammable liquid risk and certain special application such as Class A wetting agents and oil and fat extinguishment.

FOAM TYPE	REFERENCE CODE
Protein 3%	DFC 103
Protein 6%	DFC 106
Fluoroprotein 3%	DFC 203
Fluoroprotein 6%	DFC 206
Film Forming Foam (FFFP) 3%	DFC 303
Film Forming Foam (FFFP) 6%	DFC 306
High Expansion	DFC 403
AFFF 1%	DFC 501
AFFF 3%	DFC 503
AFFF 6%	DFC 506
Alcohol Type Concentrate	DFC 603
Alcohol Type Concentrate 3/3	DFC 633
Alcohol Type Concentrate 6/3	DFC 663
Alcohol Type Concentrate LV	DFC 633LV
Training-U	DFC 703
Training-N	DFC 706
Fett-Ex (Special Foams for oil & fat)	DFC 801
Wetting Agents N (Special Foams)	DFC 802
Wetting Agent-H 1% (Special Foams)	DFC 803
Mousseal-S / -SF (Special Foams)	DFC 804



F O A M C O N C E N T R A T E S

Delta Fire also manufacture a comprehensive range of quality fixed and portable foam equipment.

HV SERIES

LOW EXPANSION BRANCHPIPES



Self Inducing Version with
Optional Ball Valve
Storz C Inlet

HV225 - 200/225 Litre/Min

HV450 - 400/450 Litre/Min

HV900 - 800/900 Litre/Min

- Long Throw
- Self Inducing Models
- Designed for All New Technology Foams
- All International Inlets
- Lloyds Certified
- Various Flow Models Available



HV225

HV450

HV900

GENERAL DESCRIPTION

Delta's 'HV' range of foam branchpipes are designed for the foams of the New Millennium, Fluoroproteins, All Purpose Alcohol Resistant, FFFP and AFFF Foams.

This new style branchpipe is designed to first expand the foam and then accelerate it to high velocity, producing long throws beyond the capability of many older designs.

Delta's branchpipes are designed to match Delta Variable Inline Foam Inductors or equivalent types.

Options available:- On/Off ball valve.
316 Stainless Steel versions for marine use. ('S' series)

APPROVALS

Delta HV Foam Branchpipes are Lloyds certified and M.C.A. approved for marine use. Complies with the requirement of SOLAS 1974 (as amended.)

CONSTRUCTION

	Standard	Marine (S)
Body:	Light Alloy (Internally & Externally Powder Coated)	316 Stainless Steel
Finish:	Epoxy Polyester International Orange	Natural
Nozzle:	Light Alloy	Gunmetal LG2
Inlet:	HV225 - 2" BSP Male HV450 - 2" BSP Male HV900 - 2½" BSP Male	S200 - 2" BSP Male S400 - 2" BSP Male S900 - 2½" BSP Male
A wide range of international fittings are available as an option.		

Note: Carrying Handles are fitted to the 450 and 900 Models.

Self Inducing Models are supplied with quick release pick-up and stainless steel drum piercer.

PERFORMANCE

Standard Model Self Inducing	HV225 HV225S	HV450 HV450S	HV900 HV900S
Nominal Flow (L/Min) 5 Bar 7 Bar	200 225	400 450	800 900
Foam Expansion	6-10	6-10	6-10
Range (meters) at 7 Bar *	18-22	20-24	22-26
Length (mm)	740	880	1010
Weight (kg)	2.2	2.6	3.0

* Effective range in still air conditions.

MX SERIES

MEDIUM EXPANSION FOAM BRANCHPIPES



M225 - 225 Litres/Minute

M450 - 450 Litres/Minute

M900 - 900 Litres/Minute

- Long Throw
- Stable Foam
- Compact and Lightweight
- Stainless Steel Body
- Optional Pressure Gauge
- Fixed Version Available
- Various Flow Models Available



Medium Expansion Branchpipe In Use

FOAM EQUIPMENT

GENERAL DESCRIPTION

Delta Medium Expansion Foam Branchpipes produce long throw coherent flows of stable medium expansion foam over a wide pressure range. The branchpipes are strong, lightweight and compact and are matched for use with Delta Inline Foam Inductors.

Delta Medium Expansion Branchpipes are ideal for fire situations requiring rapid foam cover with low water usage. They are also the choice branchpipe for use with many of the new hazard material vapour suppression foams.

Perfect powerful jets of medium expansion foam are produced even at low branchpipe inlet pressures. The optimum inlet pressure range is 2 to 7 bar depending on the foam type.

APPLICATIONS

Rapid coverage of flammable liquid spills

Hazmat vapour suppression

Extinguishment of fires with difficult access

Total flooding of cellars, cable ducts and small enclosures

Extinguishment of fires in bund wall enclosures and dyked areas*

*fixed system version available for this application in bronze and stainless steel

CONSTRUCTION

Body: Stainless Steel Epoxy Powder coated International Orange or Natural Finish

Nozzle Holder: Light Alloy Black Epoxy Powder coated
Optional Bronze in fixed version

Handle: Black Epoxy Polyester Coated Light Alloy

Inlet: 2" BSP Male - M225 and M450 Models
2½" BSP Male M900 Model

Fittings: 2½" British Instantaneous Male or any International fitting as required

PERFORMANCE

Model	M225		M450		M900	
Operating Pressure (Bar)	3	4	3	4	3	4
Nominal Flow (L/Min)	200	225	400	450	800	900
Foam Expansion (Typical)	50		50		50	
Maximum Throw (M)	8		10		12	
Length (mm)	385		465		745	
Diameter (mm)	198		235		340	
Weight (kg)	3.5		4.5		8.0	

FAST ATTACK FOAM BRANCHPIPES



DFA 225 - 225 Litres/Minute

DFA 450 - 450 Litres/Minute

- Fast Knockdown
- On/Off Squeeze Trigger Action
- Lightweight
- Maneuverable
- Swivel Coupling Option
- Stainless Steel Foam Barrel



Fast Attack In Use

GENERAL DESCRIPTION

In emergency situations the Delta Fast Attack Foam Branchpipes provide maximum operator fire control and the means to move effortlessly from jet to spray/fan foam application in a split second. The On/Off squeeze trigger grip provides instant control conserving foam supplies and facilitating movement in the operational area.

APPLICATIONS

Ideal for Rapid Intervention vehicles for aircraft crash protection or helicopter landing areas, the Delta Fast Attack Foam Branchpipes are also suitable for high risk areas such as fuel loading bays, where substantial spill fires may occur. The Fast Attack Foam Branchpipes are matched to Delta Z225 and Z450 Variable Inline Foam Inductors. They can also be supplied fitted to the Delta DF130 Mobile Foam Unit which only requires a pressurised water supply to produce foam for approximately 20 minutes (DFA 225 model) when filled with 130 Litres of 3% foam concentrate.

CONSTRUCTION

Body: Stainless Steel

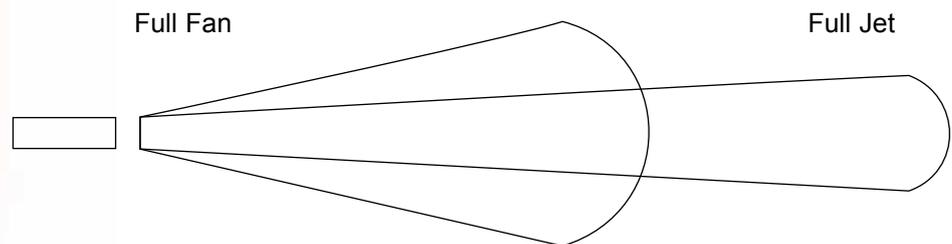
Spreaders: Stainless Steel

Pistol Grip: Epoxy Coated Aluminum

Inlet Options: Standard 1½" BSP Male
2½" Instantaneous Male, Fixed or Swivel
Any International Inlet Adapter as required
Gunmetal or Light Alloy

PERFORMANCE

Approximate Foam Footprints



Any spread available between the two as required by the operator.

Model	Inlet Pressure	Flow Rate	Full Jet		Full Fan	
			Throw	Spread	Throw	Spread
DFA225	7 Bar	225L/Min	16M	1.5M	7M	4.5M
DFA450	7 Bar	450 L/Min	19M	1.5M	9M	5M

DIMENSIONS

Size: 220mm x 140mm x 750mm

Weight: 5kg

Z SERIES

VARIABLE INLINE FOAM INDUCTORS



Z225 - 200/225 Litres/Minute

Z450 - 400/450 Litres/Minute

Z900 - 800/900 Litres/Minute

- Simple to Use
- Portable
- Variable 1% to 6%
- All International Fittings
- M.C.A / Lloyds Certified
- Harsh Environment Marine Versions



Harsh Environment Marine Model

GENERAL DESCRIPTION

Delta Variable Inline Foam Inductors provide a simple, cost effective means of introducing foam concentrates into the water stream. They are calibrated to pick up between 1% to 6% foam concentrate.

The standard unit is manufactured in corrosion resistant materials. A fully marinised unit is available for continuous use with sea water in particularly harsh marine environments.

Delta Inductors are designed to match Delta Low and Medium Expansion Foam Branchpipes or equivalent types.

APPROVALS

Delta standard Variable Inline Foam Inductors are Lloyds certified and M.S.A. (D.O.T.) approved for marine use.

CONSTRUCTION

	Standard	Marine (M)
Body:	Aluminium or Gunmetal LG4	Gunmetal LG4
Outlet:	Light Alloy (Anodised)	Gunmetal LG4
Nozzle:	316 Stainless Steel	316 Stainless Steel
Bypass:	Gunmetal LG4	Gunmetal LG4
Filter:	Stainless Steel	Stainless Steel
Venturi:	High Strength Nylon	High Strength Nylon
Dial:	Anodised Light Alloy	Bronze
Finish:	Epoxy Polyester Coated	Natural / Body Epoxy Polyester Coated
Inlet/Outlet	2" BSP Male	2" BSP Male

A wide range of International fittings are available. The units are supplied complete with foam pick up tube and optional stainless steel piercer.

PERFORMANCE

Model	Flow L/Min		Foam Pick-up	Pressure Range (Bar)	Weight Kg	Length mm
	8 Bar	10 Bar				
Z225	200	225	1% to 6%	5-16	5.7	350
Z450	400	450	1% to 6%	5-16	5.7	350
Z900	800	900	1% to 6%	5-16	5.8	390

Note: Fully marinised models weigh 1.5kg extra

FIXED VERSIONS

Fixed versions of all the above inductors are available with the percentage foam pick up pre-set and locked to suit customer requirements. Flange end connectors are available also on these models.



MINI EXCEL

HIGH EXPANSION FOAM GENERATOR



Self Inducing Mini Excel Model

- Super Lightweight (15kg)
- High Output
- Easy One Man Operation
- Bronze Pelton Wheel Drive
- Corrosion Resistant GRP Body
- Optional Self Inducing Model
- Smoke Extraction Option



Fixed Net Model

FOAM EQUIPMENT

GENERAL DESCRIPTION

The Delta Mini Excel is a true lightweight, one man portable, High Expansion Foam Generator capable of producing large volumes of high expansion foam. The foam output is unmatched for a unit weighing less than 15kg.

Manufactured in corrosion resistant materials, the Mini Excel is powered by a bronze pelton wheel and thus only requires a pressurised water supply for it's operation.

The Mini Excel can be used with 30mtrs of clear polythene foam trucking for remote application of the foam. (Optional extra)

The Mini Excel also can be used as a smoke extractor which has a 6mtr length of red smoke ducting supplied as an optional extra.

The unit is available in the following versions:-

- Standard
- Fixed with 316 Stainless Steel Cone Net
- Self Inducing Complete with Foam Pick-Up Tube
- Stainless steel body
- Smoke Extraction

CONSTRUCTION

Body:	GRP
Pipework:	Copper and Bronze
Pelton Wheel:	Gunmetal
Inlet:	1½" BSP Male (All International Adaptors Available)
Standard:	Requires a Z225 Inductor
Self Inducing:	Complete with built in Inductor and foam pick-up tube
Stainless Steel:	For harsh environments
Smoke Extraction:	Mini Excel is available with 6m length of red reinforced smoke ducting
Polythene Foam Trunking:	30mtrs of clear polythene trucking (optional extra)

PERFORMANCE

Inlet Pressure Bar	Water Flow L/Min	Foam Usage L/Min	%	Foam Expansion	Foam Output m ³
5	225	4.5	2	400	90
6	247	4.9	2	425	105
7	265	5.3	2	450	119

Note:

Foam performance may vary with the concentrate used and air temperature

DIMENSIONS

Length: 390mm Width: 570mm Height: 660mm
Weight: 15kg

COMPACT HIGH EXPANSION FOAM GENERATOR



- High Output and Small Size
- Stainless Steel Body and Pipework
- Powerful Bronze Turbine
- Easy One Man Operation
- Smoke Extraction Option
- Fixed Version Option with Stainless Steel Foam Net



Fixed Net Model Working

FOAM EQUIPMENT

GENERAL DESCRIPTION

The Compact is manufactured in corrosion resistant 316 stainless steel with a bronze nozzle and powerful bronze water turbine. The Compact Excel produces a large output of high expansion foam, even against significant back pressures, and it's performance is unsurpassed for it's size.

The Compact Excel can be used with 30mtrs of clear polythene foam trucking for remote application of the foam. (Optional extra)

The Compact Excel can be used as a powerful smoke extractor and a 7.5m length of red smoke ducting is supplied as an optional extra.

The unit is available in the following versions:-

- Standard
- Fixed version with metal net
- Smoke Extraction version.

CONSTRUCTION

Body:	316 Stainless Steel
Pipework:	316 Stainless Steel
Turbine:	LG2 Gunmetal
Nozzle:	LB4 Bronze
Net:	Nylon
Fixed Net:	316 Stainless Steel
Inlet:	2" BSP Male (All International Adaptors Available)
Standard:	Requires a Z225 Inductor
Smoke Extraction:	The Compact is available with 7.5m length of red reinforced smoke ducting (optional extra)
Polythene Foam Trucking:	30mtrs of clear polythene trucking (optional extra)

PERFORMANCE

Inlet Pressure Bar	Water Flow L/Min	Foam Usage L/Min	%	Foam Expansion	Foam Output m ³
5	249	4.9	2	540:1	130
6	275	5.4	2	560:1	154
7	296	5.8	2	565:1	167

Note:

Foam performance may vary with the concentrate used and air temperature

DIMENSIONS

Length: 300mm Width: 600mm Height: 640mm
Weight: 30kg

EXCEL

HIGH EXPANSION FOAM GENERATOR



- Water Turbine Powered
- High Output
- By-Pass System
- Built In Foam Induction
- Smoke Extraction Option
- Lightweight and Portable
- Fixed Version Available



Excel Complete with Net

FOAM EQUIPMENT

GENERAL DESCRIPTION

The Excel is a lightweight High Expansion Foam Generator powered by a water turbine and capable of producing very large volumes of High Expansion Foam with the minimum of operational difficulty. The Excel has its own built in foam induction system and thus only requires a pressurised water supply and synthetic foam concentrate supply to operate.

An additional feature is a water by-pass system which permits control of the expansion rate allowing performance to be maintained at high back pressures. The Excel is capable of ducting foam to heights in excess of 15 meters.

CONSTRUCTION

Manufactured with an International Orange glass reinforced fibre case, corrosion resistant pipework and fittings with an LG2 gunmetal maintenance free turbine and all nylon foam net. Each unit is supplied with 30m of expendable polythene for ducting foam.

OPTIONS

Smoke Extraction Unit	Dual purpose version identical to the standard unit but with the added capability of extraction of smoke at 285M ³ /min. A 7.5 metre length of smoke extraction ducting is supplied with this unit.
Fixed Unit	With either stainless steel or carbon steel, polyester powder coated, net.
Wheeled Version	Both the standard and smoke extraction units can be supplied as wheeled versions enabling easy one man transportation. Two wheels are permanently fixed to one end of the body with a handle at the other. These wheels lock off the ground during use for complete stability.

APPLICATIONS

The Excel is designed for all High Expansion total flood applications such as found in warehouses, ships holds, cable ducting, machinery spaces etc. Water damage is minimised through expanding foam between five hundred and one thousand times with air, producing effective and rapid extinction. Increasing concern for the environment has resulted in the fixed version replacing Halon Gas in certain specialist installations including computer suites and electronic data producing areas. The Excel is powered by a water driven turbine making it ideal for use in hazardous areas such as found in chemical process plants and mines. Many specialised applications also exist such as the vapour suppression of hazardous materials spills, blanketing LNG spill fires, and tank inerting

By-Pass Control	Water Pressure Bars	Total Water L/Min	By-Pass Flow L/Min	Flow to Nozzles L/Min	Foam Prod. m ³ Min	Foam Expansion
Open	4	205	60	145	100	750
	7	285	90	195	156	to
	10	330	105	225	220	1200
Closed	4	190	nil	190	85	450
	7	260	nil	260	145	to
	10	310	nil	310	200	850

Note: Pressures are measured at the water inlet. Performance may vary according to ambient temperature and foam concentrate used.

DIMENSIONS

Length: 350mm Width: 500mm Height: 650mm
Weight: 15kg

DF130

MOBILE FOAM UNIT



High Capacity Foam Station for Major Risks

- 130 Litre Capacity
- Highly Mobile
- One Man Operation
- Long Running Times
- M.C.A. Approved
- Lloyds Certified
- Suitable for All Foam Compounds



MKII Model with Harsh Environment Marine Equipment

FOAM EQUIPMENT

GENERAL DESCRIPTION

The DF130 Mobile Foam Unit, ideal for protecting oil storage and loading terminals, paint and solvent stores, boiler engine rooms and other high risk areas, is ergonomically designed for rapid one man deployment. The unit requires connection to a suitable pressurised water supply. Filled with 3% foam concentrate, the DF130 will give running times in excess of 20 minutes, with a foam output of over 34,000 Litres of finished low expansion foam.

CONSTRUCTION

Foam Tank: 130L Capacity Chemically Resistant International Orange GRP tank suitable for all foam types including Synthetic, Protein, Fluoroprotein, AFFF, FFFP and Alcohol Resistant

Chassis: Corrosion Resistant Plastic coated steel frame

Wheels: 400mm Diameter, solid rubber tyres

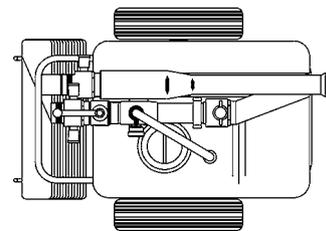
FITTINGS

Standard: HV225 Low Expansion Foam Branchpipe
Z225 Variable Inline Foam Inductor with On/Off ballvalve
2 x 15m x 45mm Nova Fire Hoses to BS 6391 Type 3
2½" Instantaneous Light Alloy fitting to BS 336

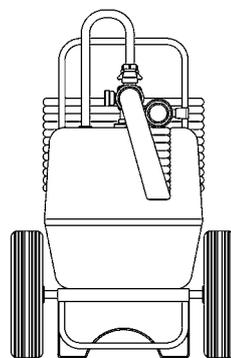
MODELS

Any of the range of Delta Foam Branchpipes with matching Inductor may be specified including all Delta Low and Medium Expansion Branchpipes. Flows 225, 450 and 900 Litres/Min.

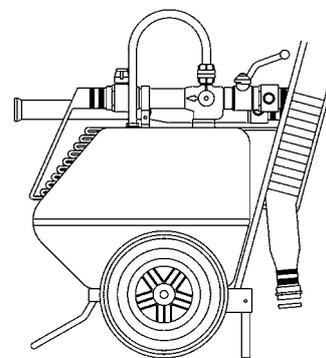
Alternative fittings:
Storz, American NST or any other International fittings and couplings may be specified
Light Alloy or Gunmetal



910mm



710mm



1020mm

Size:- 1020mm (H) x 910mm (L) x 710mm (W) (Overall)
Weight:- 70kg (Empty)

PRIMA

FOAM UNITS



**EQUIVALENT FIRE
POWER OF 40
STANDARD FOAM
EXTINGUISHERS**

LX-Prima - Low Expansion Model

MX-Prima - Medium Expansion Model

- Long Throws
- Rapid Response
- Fire Extinguishment Control
- Vapour Control
- Use with Fire Hydrants
- Use with Hose Reels and Hose Racks



Medium Expansion Model

GENERAL DESCRIPTION

In many flammable liquid spill situations, portable foam or powder extinguishers are just not adequate. Low application rates and short running times mean the fire can be out of control before help arrives. Delta Prima Foam Making units are hand held appliances, delivering the output of forty, 9 litre foam extinguishers when filled with a 3% foam concentrate.

PRINCIPLE OF OPERATION

Delta Prima Foam units require a pressurised water supply for use. Typically this could be a standard fire hose reel or a fire hydrant. Remarkably low pressures are required, in fact as little as 2 bar. At only 3.5 bar (50psi), the LX Prima has a throw of 6.5 meters.

The unit is filled with 12 litres of foam concentrate and is fitted with an on/off ball valve to provide complete operator control. When this ball valve is opened, water passes through the foam mixing head drawing up the concentrate at a preset 3% or 6% admixing rate.

APPLICATIONS

Virtually any situation, where flammable liquid spills can occur and where there is a water supply available, requires a Prima Foam Unit.

Typical areas of use are as follows: Car Ferry Decks, Flammable Liquid Stores, Fuel Loading Racks, Boiler Rooms, Ships' Engine Rooms, Paint and Solvent Stores.

The LX Prima is ideal for all fire control situations and can be used with any foam concentrate. The MX Prima is designed for both fire extinguishment and the blanketing of flammable liquid spills and vapour suppression.

TECHNICAL DATA

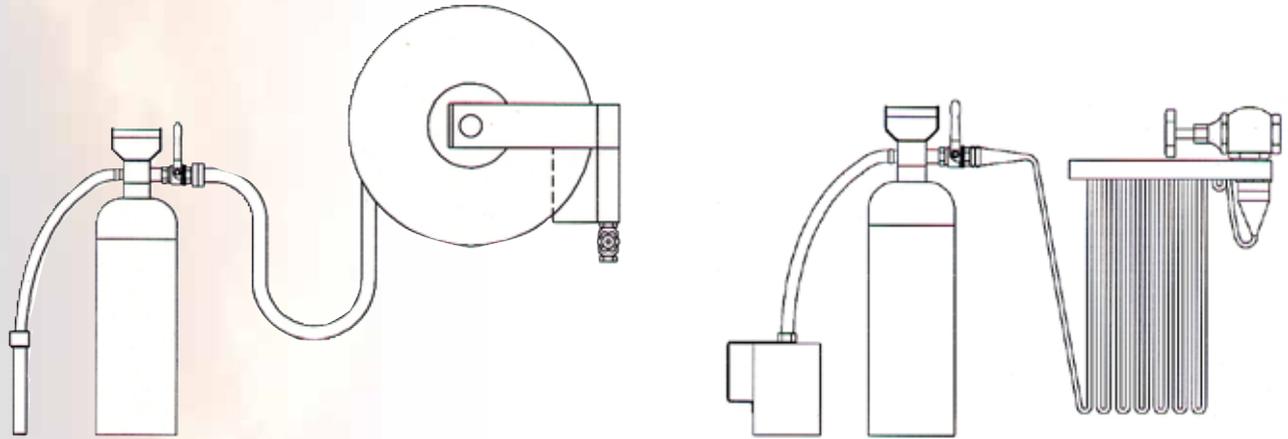
Model	LX Prima	MX Prima
Total Flow	45L/Min at 4 Bar	45L/Min at 4 Bar
Operating Pressure Range	3-10 Bar	2-10 Bar*
Foam Concentrate Capacity	12 Litres	12 Litres
Discharge Time 3%	9 Minutes	9 Minutes
Discharge Time 6%	4.5 Minutes	4.5 Minutes
Inlet	1" BSP Female	1" BSP Female
Empty Weight	4.0kg	4.5kg
Full Weight	16.0kg	16.5kg

*Depending on the foam concentrate used.

Inlet Adaptors: A comprehensive range is available, including 19mm and 25mm hose tail, quick release Storz D, instantaneous.

See Technical Data Sheet for further details.

PRIMA FOAM UNITS



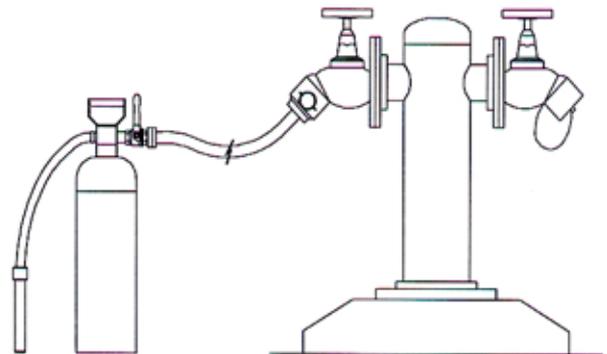
Fire Hose Reel

Hose Reel 19mm or 25mm

The Prima Foam Unit only requires a pressurised water supply to provide up to 10 minutes of continuous foam production.

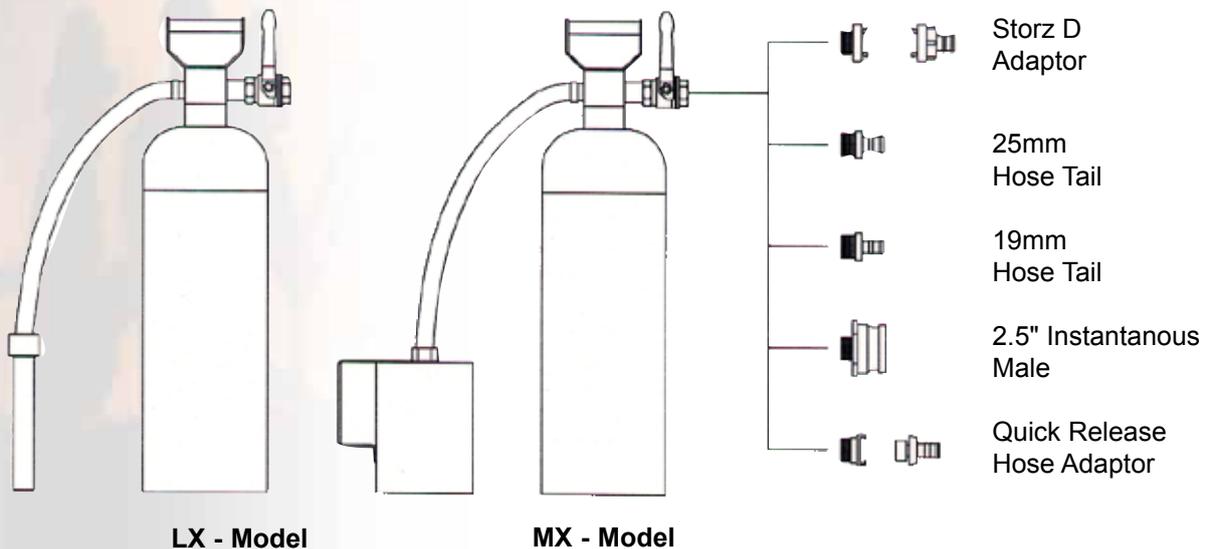
The diagrams show several common methods of connecting to a water supply. However many alternative methods can be employed.

The Prima is extremely versatile and can be supplied with virtually any International connection. The supply hose can be either 19mm or 25mm Hose Reel Tubing or Layflat fire hose.



Fire Hydrant

Some examples of different connections are shown below.



LX - Model

MX - Model

STATION MONITORS

FOAM & WATER



DF4500 Lever Operated Monitor
c/w DNB2600 Jet/Spray Nozzle

DF4500 Station Monitor - Lever or Gear Operated

- Suitable for Foam and Water
- Bronze Corrosion Resistant
- 3" Waterways
- 360° Rotation
- Lever or Geared Operated
- 3" or 4" Flanges Available



DF4500 Geared Operated Monitor c/w DN4500 Nozzle

FOAM EQUIPMENT

GENERAL DESCRIPTION

DF4500 LEVER MONITOR

The Delta DF4500 Lever Operated Station Monitor is manufactured in corrosion resistant bronze and is designed for flows up to 4500 Litres/Minute. It can be used with Delta AFFF/Water Jet Spray Nozzles or Delta 316 Stainless Steel Foam Cannons.

Easily operated under pressure, the lever controls permit rapid movement and targeting. Vertical and horizontal quick action locks allow the operator to fix the monitor swiftly to any position. Grease fittings on the rotation joints provide easy lubrication and maintenance.

FEATURES

Bronze Corrosion Resistant Body
Rotation Bearings Stainless Steel
Finish Red Enamel Paint

Inlet: 3" or 4", ANSI 150lb FF Flange as standard
or 2½" ANSI 150lb FF Flange, 3" NPT Male

Outlet: 2½" BSP Male as standard or 2½" NPT Male

TECHNICAL DATA

Maximum Flow	Elevation	Rotation	Width	Depth	Height	Weight
4500 Litres/Min	+90°to-60°	360°	310mm	360mm	440mm	32kg

GENERAL DESCRIPTION

DF4500 GEARED MONITOR

The Delta DF4500 Geared Elevation Monitor is manufactured in corrosion resistant bronze and is designed for flows up to 4500 Litres/Minute. It can be used with Delta AFFF/Water Jet Spray Nozzles or Delta 316 Stainless Steel Foam Cannons.

The cast ball joints are fitted with Stainless Steel ball bearings and lubricated with a grease nipple for easy maintenance.

Easily operated even under high pressure the geared elevation mechanism is fully enclosed for environmental protection.

FEATURES

Bronze Corrosion Resistant Body
Rotation Bearings Stainless Steel
Finish Red Enamel Paint

Inlet: 3" or 4", ANSI 150lb Flange as standard
or 2½" NPT Male

Outlet: 2½" BSP Male as standard or 2½" NPT Male

TECHNICAL DATA

Maximum Flow	Elevation	Rotation	Width	Depth	Height	Weight
4500 Litres/Min	+70°to-70°	360°	358mm	358mm	385mm	24kg

OSCILLATOR

FOAM & WATER

Full Marine and Offshore Specification



FOAM EQUIPMENT

Made in UK Under ISO 9001 Quality System

- Water Driven
- Adjustable Sweep Angle
- Variable Speed Control
- Easy Operation with Manual Override
- 3" or 4" Inlet Flanges
- Bronze Gearbox
- Gunmetal Pelton Wheel Drive



Oscillator and 3" Bronze Monitor

GENERAL DESCRIPTION

Manufactured in the UK to the highest engineering standard the Delta Oscillator is fabricated in bronze and 316 stainless steel and designed for use in harsh environments as found in Marine and Offshore installations.

The unit can be supplied to convert an existing manual monitor or along with a Delta 3" Bronze monitor to provide foam fire protection or water cooling high risk areas.

Both speed of oscillation and sweep angle can be easily pre-set.

Typical installations include:-

Offshore Platforms, Helidecks, Tank Farms, Petrochemical plants, Aircraft hangers, Loading areas and LNG/LPG production units.

FEATURES

Flow:

- Flow Rate: Max 10000 LPM
- Pressure Loss: 0.2 bar @ 6000 LPM

Pelton Wheel:

- Flow Rate: 40 LPM
- Speed: 1700 RPM

Sweep:

- Total Sweep Angle: 125° (adjustable)

Speed:

- Oscillation Speed: 5.5 cycles/min. (adjustable)

Mounting:

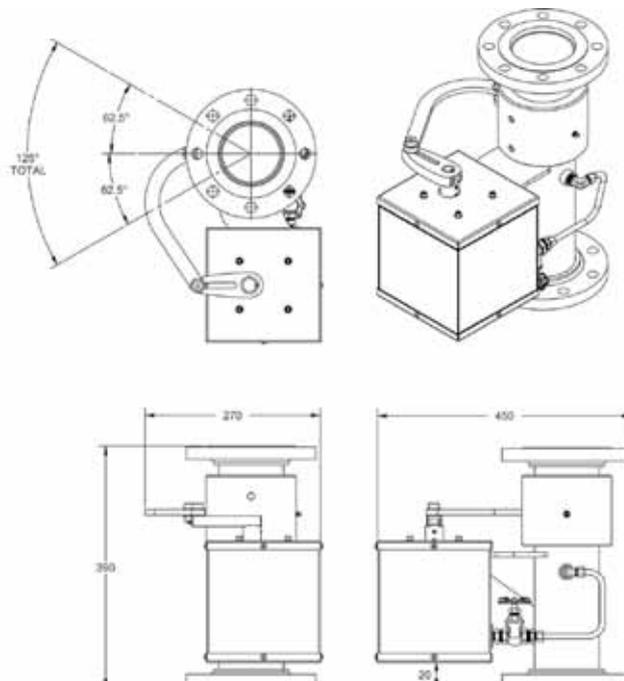
- Inlet/Outlet: 3" or 4" 150# RF Flange

Materials:

- Waterway: 316 Stainless Steel
- Flanges: 316 Stainless
- Pelton Wheel: Gunmetal
- Swivels: Aluminum Bronze
- Cover Ass'y: 316 Stainless Steel
- Gearbox: Fully Marinized Bronze

Unit Weight:

- Approx. 35kg



DPM1900

PERSONAL MONITOR



- Simple & Quick Operation
- Highly Manoeuvrable
- Unmanned Operation
- Compact & Light Weight
- Adjustable Elevation & Rotation
- Ball Shut Off with Locking Handle



Nozzle Options Available for DPM1900 Monitor

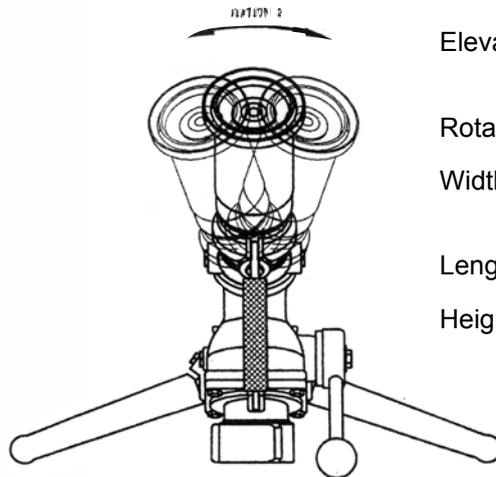
F O A M E Q U I P M E N T

GENERAL DESCRIPTION

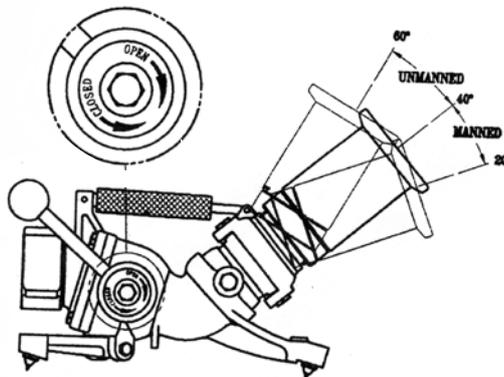
The Delta DPM1900 Personal Monitor is a high manoeuvrable and light weight monitor. A compact and low profile design makes it stable in operation for single person use. The DPM1900 is also able to be used unmanned at the scene of the fire to help save on man power.

This monitor is ideal for quick attack operations with flow rates up to 1900L/Min, adjustable elevation between 30° to 60° unmanned down to 20° when manned. Also horizontal rotation is adjustable 20° either side of the center and large handle allowing the monitor to be carried easily.

FEATURES



Elevation:	30° to 60° Unmanned, Down to 20° Manned
Rotation:	20° either side of center
Width:	Deployed - 610mm, Folded - 200mm
Length:	380mm
Height:	230mm



TECHNICAL DATA

Maximum Flow:	1900L/Min
Maximum Safe Operation:	10bar (150PSI)
Material:	Monitor Body Hard Coated Anodized Aluminum and Tough Powder Coating Carbide Tip Spikes
Weight:	7kg
Inlet:	2½" BSP Female Swivel or Most International Fittings
Outlet:	2½ BSP Male

DPOM1900

PORTABLE OSCILLATING MONITOR



- Automatic Oscillation
- Simple & Quick Operation
- Highly Manoeuvrable
- Unmanned Operation
- Compact & Light Weight
- Adjustable Elevation & Rotation
- Ball Shut Off with Locking Handle



Compact & Light Weight for easy storage

GENERAL DESCRIPTION

The Delta DPOM1900 Portable Oscillating Monitor is a high manoeuvrable and light weight monitor. A compact and low profile design makes it stable in operation for single person use. The DPOM1900 is also able to be used unmanned at the scene of the fire to help save on man power.

This monitor is ideal for quick attack operations with flow rate up to 1900L/Min and manual adjustable elevation between 30° to 60°. The monitor has a water driven motor which sweeps the nozzle side to side automatically at 20°, 30° or 40° sweeps. This can be disengaged easily and quickly by the on/off control knob to allow a wider sweep range.

FEATURES

Water Driven Motor

Automatic Oscillation at 20°, 30° or 40°

Built in Pressure Gauge

Oscillating Speed (with straight jet nozzle)

Cycles Per Minute	LPM
8	660
11	850
22	1325
27	1900

TECHNICAL DATA

Maximum Flow:	1900L/Min
Maximum Safe Operation:	10bar (150PSI)
Material:	Monitor Body Hard Coated Anodized Aluminum Carbide Tip Spikes
Weight:	13kg
Inlet:	2½" BSP Female Swivel or Most International Fittings
Outlet:	2½ BSP Male

DP3000

PORTABLE MONITOR



DP3000 Portable Monitor
c/w DNA2600 Jet/Spray Constant Flow Nozzle

- Lightweight Aluminum
- Compact Folding Base
- 3000 Litres/Minute
- For Water or Foam Application
- Geared Vertical Movement
- Converts to Deck Monitor
- Built in Pressure Gauge



Deck Monitor (Fixed)

GENERAL DESCRIPTION

The Delta DP3000 Portable Monitor is manufactured in lightweight aluminum and is designed for flows up to 3000 Litres/Minute. It can be used with AFFF Foam/Water Jet Spray Nozzles or Foam Cannons.

It has two inlets which can be fitted with a wide range of international fitting such as 2½" Instantaneous male BS 336, Storz, etc. It is also available as a fixed deck version.

The base folds compactly for storage and the quick locking system comprises simple, heavy-duty, dual spring loaded lock pins for quick and easy assembly and positive locking. Vertical movement is by fully enclosed gearing and a safety stop is incorporated.

FEATURES

The Monitor is convertible to a Deck Monitor by using the top mount flange provided with increased flow to 4500 Litres/Minute.

TECHNICAL DATA

	Portable	Fixed
Maximum Flow	3000L/Min	4500L/Min
Rotation	180°	360°
Elevation	12° to 75°	12° to 75°
Dimensions in mm	(W) 680 (D) 740 (H) 410	(W) 382 (D) 480 (H) 380
Weight	15kg	12kg
Inlet	2 x 2½" BSP Female	3" or 4" ANSI 150lb Flange
Outlet	2½" BSP Male	

NOZZLES

The following jet/spray nozzles are available in durable lightweight alloy.

Model	Type	Flow Litres/Minute
DN-A-2600	Single Flow Adjustable	1900L/Min (or 1140, 2660)
DN-A-2400	Select Flow	1200-1600-2000-2400L/Min
DN-A-2000	Multi Constant Flow	500-1000-1500-2000L/Min
DN-A-1900S	Self Inducing	1900L/Min
DN-A-3800A	Automatic	1135-3785L/Min
DN-A-4500	Select Flow	1900-2800-3800-4800L/Min

DF3000 SERIES WHEELED MONITORS



- Flow up to 3000 L/Min
- 360° Horizontal Rotation
- Optional 2.5" or 3" Monitors
- Horizontal and Vertical Locks
- Non Return Valve Inlets
- Optional Hose Racks
- Long Reach Jet/Fog Nozzles



DF2800 2.5" Monitor Shown

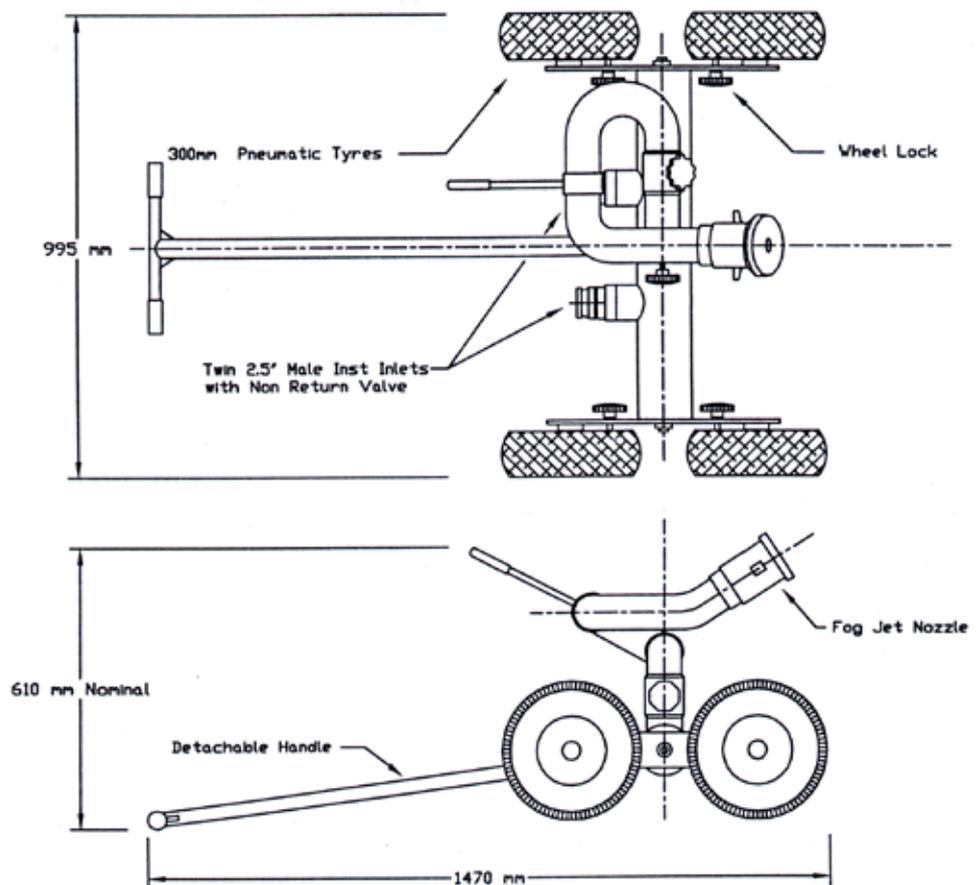
F O A M E Q U I P M E N T

GENERAL DESCRIPTION

The Delta Fire DF3000 Mobile Monitor incorporates all the advantages of one low friction single waterway monitor with the added benefit of wheeled manoeuvrability.

Manufactured in corrosion resistant materials the unit is ideal for petro-chemical refinery use and other high risk situations.

TECHNICAL DATA



FOAM MONITOR CANNONS

DFC-A & DFC-M



DFC-A-1500 Foam Cannon

- Long Throws
- DFC-M Models With or Without Stainless Steel Foam Spreader
- Corrosion Resistant
- Self Inducing Option
- Fire Standard Models
- Optional Flow Engineered to Clients Requirements



Optional Spreader on DFC-M Stainless Version Only

FOAM EQUIPMENT

GENERAL DESCRIPTION

Delta Foam Monitor Cannons are available in six standard flow rates, but can also be ordered to suit the exact flow requirement for the application. Delta Foam Cannons are available as the following:- Aluminium (DFC-A) or Stainless Steel (DFC-M), Standard or Self Inducing (S) and an optional foam spreader for stainless steel versions only. (DFC-M)

The Delta Foam Cannons have excellent performance characteristics which enable them to project over long distances. The DFC-M models can be fitted with lever operated foam spreaders which flatten and widen the foam stream, resulting in a more rapid coverage of spill fires. When the spreaders are fully open the performance is the same as the standard foam barrel.

The DFC-A version Foam Cannons are only available without the Foam spreader.

TECHNICAL DATA

Model	Flow @ 7 bar (L/Min)	Barrel Length (mm)	Barrel Diameter (mm)	Max Range (m)
DFC 1000	1000	1010	76	30
DFC 1500	1500	1010	76	35
DFC 2000	2000	1150	100	40
DFC 3000	3000	1150	100	44
DFC 4000	4000	1150	100	52
DFC 7000	7000	1150	140	73

Other flow rates on request.

SPECIFICATION

Materials		DFC-A	DFC-M
Foam Barrel	-	Aluminium	316 Stainless Steel
Foam Spreader	-	N/A	316 Stainless Steel
Foam Nozzle	-	Anodised Aluminium	Bronze
Inlet	-	Threaded BSP Female or Flanged on request	

Self Inducing Versions (DFC-A-1000S etc) comes with a foam pick up tube and have the option of different pick ups (1%, 3% or 6%)

REMOTE CONTROLLED MONITORS



- Electric drives and circuit box are Waterproof
- 2" Waterway
- Compact, Lightweight Alloy Construction
- 12v and 24v Versions
- Electronic Controls with Manual Override
- Wireless Versions Available



Wireless Remote Controlled Monitor

F O A M E Q U I P M E N T

GENERAL DESCRIPTION

- Compact, Lightweight, ally-constructed monitor with rugged and durable design
- Suitable across various operations, including wildland fire fighting etc
- Designed for water, foam and CAF applications
- 2" waterway with turning vane
- Flow rate of up to 1525L/min
- Vertical movement of 135 deg (+90 deg and -45 deg)
- Waterproof electric drives and circuit box
- Gear motors totally enclosed and sealed to withstand harsh environments
- Current limit switch for pattern control, horizontal & vertical travel and open/close of electric valve.
- Electronic controls with manual override

FEATURES & OPTIONS

- Max Flow: 1525L/min
 Material: Alloy
 Finish: Red Powder Coating
 Inlet: 2" BSP Female or 2.5", ANSI 150lb FF Flange
 Outlet: 1½" BSP Male as standard or 1½" NH (American) Male
 Control: Electric
 Friction Loss: 15 psi @ 400gpm, 12psi @ 350gpm
- Please Specify:** 12volt or 24volt, Inlet Type, Horizontal Travel Degree

NOZZLES

- 3 Nozzle Options: 56, 115, 170L/min
 230, 360, 475L/min
 750,950, 1325L/min

TECHNICAL DATA

Maximum Flow	Elevation	Rotation	Width	Depth	Height	Weight
1525 Litres/Min	+90°to-45°	300°	279mm	304mm	340mm	7kg

GENERAL DESCRIPTION - WIRELESS VERSION

- Compact, Lightweight, ally-constructed monitor with rugged and durable design
- Suitable across various operations, including wildland fire fighting etc
- Designed for water, foam and CAF applications
- 2" waterway with turning vane
- Flow rate of up to 1525L/min
- Vertical movement of 135 deg (+90 deg and -45 deg)
- Waterproof electric drives and circuit box
- Gear motors totally enclosed and sealed to withstand harsh environments
- Current limit switch for pattern control, horizontal & vertical travel and open/close of electric valve.
- Electronic controls with manual override

FEATURES & OPTIONS

- Max Flow: 2900L/min
 Material: Alloy
 Finish: Red Powder Coating
 Inlet: 3" BSP Female or 3", 4 ANSI 150lb FF Flange
 Outlet: 2½" BSP Male as standard or 2½" NH (American) Male
 Control: Electric
 Friction Loss: 15 psi @ 750gpm, 12psi @ 500gpm
- Please Specify:** 12volt or 24volt, Inlet Type, Horizontal Travel Degree

NOZZLES

- 3 Nozzle Options: 56, 115, 170L/min
 230, 360, 475L/min
 750,950, 1325L/min

TECHNICAL DATA

Maximum Flow	Elevation	Rotation	Width	Depth	Height	Weight
2900 Litres/Min	+90°to-45°	300°	279mm	304mm	340mm	12kg

REMOTE CONTROLLED MONITOR NOZZLES

DNA2900E,

DNA170E, DNA475E, DNA1325E



DNA2900E Electrically Controlled
Monitor Nozzle

- Switch From Solid Bore to Fog Without Shutting Down
- Hard Anodised Aluminum
- Constant Flow Nozzle Type
- 12v and 24v Versions
- Manual Override When Power Fails
- Fixed Teeth & Spinning Teeth



DNA170E , DNA475E & DNA1325E

GENERAL DESCRIPTION

- Electrically operated pattern control for use in remote control application
- Easily change from solid bore to fog flow stream with a flick of the switch
- Switch from solid bore to fog without shutting down
- Constant flow nozzle type
- Spring loaded baffle enables flow rate selection
- Motor (standard 24V or 12V DC on request) totally enclosed and sealed
- Standard manual override when electrical power fails
- Hardcoat anodised aluminum for maximum resistance to corrosion and wear
- Used in conjunction with Delta remote controlled monitors
- Equipped with fixed teeth

Please Specify: 12volt or 24volt

TECHNICAL DATA

Model	Material	Pattern	Flow @ 7 bar	Teeth	Inlet	Weight
DNA2900E	Alloy	Electric	950,1525, 2100,2900	Fixed	2.5"	3.8kg

GENERAL DESCRIPTION
- DNA170E,
DNA475E &
DNA1325E

- Electrically operated pattern control for use in remote control application
- Easily change from solid bore to fog flow stream with a flick of the switch
- Switch from solid bore to fog without shutting down
- Constant flow nozzle type
- Spring loaded baffle enables flow rate selection
- Motor (standard 24V or 12V DC on request) totally enclosed and sealed
- Hardcoat anodised aluminum for maximum resistance to corrosion and wear
- Used in conjunction with Delta remote controlled monitors
- Equipped with spinning teeth.

Please Specify: 12volt or 24volt

TECHNICAL DATA

Model	Material	Pattern	Flow @ 7 bar	Teeth	Inlet	Weight
DNA170E	Alloy	Electric	60,115,170	Spinning	1.5"	3.2kg
DNA475E	Alloy	Electric	60,115,170	Spinning	1.5"	3.2kg
DNA1325E	Alloy	Electric	60,115,170	Spinning	1.5"	3.2kg

MARINE FIRE FIGHTING EQUIPMENT

Delta Fire manufacture and supply a comprehensive range of Marine Fire Fighting Equipment.

The recent acquisition of the Foundrite range of international couplings, fittings and hydrants has enabled Delta Fire to offer the most comprehensive range of Marine Fire Fighting Equipment in the UK today.

This range includes the following equipment.

NOZZLES

DO5 - Short Pattern Nozzles
Unifire Nozzles
Branchpipe & Jet Nozzle



Unifire Nozzles with international Fittings



Branchpipe & Jet



DO5 - Short Pattern Jet/Spray Diffuser Nozzle with International fittings

LAYFLAT FIRE HOSE

Nova Type 3
Starflex Coated Type 2
Starflex Uncoated Type 2
Drinking Water Hose



Nova Layflat Fire Hose (Type 3, Red)



Starflex Layflat Fire Hoses (Type 1 & 2)

FIRE HYDRANTS

Flanged, Threaded, Available with all Major International Outlets



Bib Nose Hydrant
Thread Inlet, Storz Outlet



Oblique Hydrant
Flange Inlet, NOR Outlet



Right Angle Hydrant
Flange Inlet, Instantaneous Outlet

FOAM

Protein
Fluoroprotein
AFFF
FFFP
High Expansion
Alcohol Type Concentrates
Training Foam



Full Range of Foam Concentrates

PORTABLE FOAM EQUIPMENT

Branchpipes
Inductors
High Expansion Foam Generators



Z225M Marine Inline Variable Foam Inductor



HV225S Low Expansion Foam Branchpipe

FIXED FOAM EQUIPMENT

Foam Sprinklers
High Expansion Foam Generators
Bladder Tanks
Fixed Inline Inductors



Foam Sprinkler



Electric Monitor



Foam Bladder Tank

BRITISH INSTANTANEOUS COUPLINGS & ADAPTORS

The following gunmetal instantaneous fittings are a section from our comprehensive range of instantaneous adaptors and hose couplings to BS 336.

Full details of all fittings are shown in our marine equipment catalogue.

Most fittings are also available in light alloy.



2 1/2" Instantaneous Hose Coupling
Gunmetal: All Sizes



2 1/2" Instantaneous Female x
Male & Female Threads



2 1/2" Instantaneous Male x
Male & Female Threads



Double Female
Inst. Adaptor



Double Male
Inst. Adaptor



2 1/2" Instantaneous Flanges
Male & Female x All Flange Sizes



2 1/2" Instantaneous Blank Caps & Plugs
Gunmetal / Plastic: Most Sizes Manufactured



2 1/2" Instantaneous Cross Adaptors
Storz, Nor, Nakajima, Etc

FIRE FITTINGS

WATERWAY EQUIPMENT



Right Angle Hydrant Valve
Inlet Flanged. Outlet 2.5" Inst Female



Straight Through Hydrant Valve
Inlet Flanged. Outlet 2.5" NH (American) Male



2, 4, 6 Way Collecting/Dividing Manifolds
Available with all major international fittings



Bib Nose Hydrant Valve
Thread x Storz 65



Oblique Hydrant Valve
Flange x NOR 1



Dividing/Collecting Breechings
Available with international fittings



Standpipes to BS 336
Aluminium and Copper Alloy

STANDPIPES AND KEYS & BARS



Double Headed Standpipe

Single Headed Standpipe c/w Twin Check Valve

Key & Bar

- Single Headed Swivel
- Double Headed Swivel
- Single Headed Swivel c/w Twin Check Valve
- Double Headed Swivel c/w Twin Check Valve
- Contractors Standpipes
- Keys & Bars



Twin Check Valve available in most Standpipes

FIRE FITTINGS

GENERAL DESCRIPTION

Delta Fire Standpipes are used to connect to the mains water supply by screwing the standpipes into a underground hydrant valve. The standpipes can come in 5 main types, single and double headed, with and without twin check valves and a contractors standpipe with twin check valve. The use of a standpipe key and bar is also required with the standpipes to open the valve on the underground hydrants.

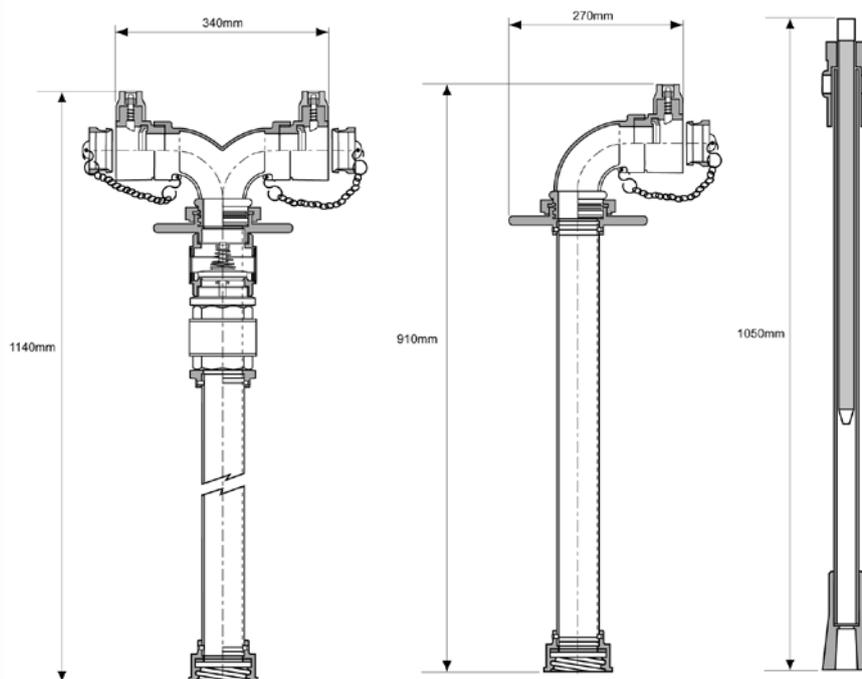
The standard standpipe comes with a 2½” British Round Thread Female inlet and a 2½” Instantaneous Female single twist outlet or outlets to BS 336.

Special standpipes are available with alternative inlets and materials.

TECHNICAL DATA

Product Code	Type	Inlet	Outlet
WEA300100	Single	2½” BSRT	Single Headed 2½” Inst. Female
WEA300200	Double	2½” BSRT	Double Headed 2½” Inst. Female
WEA300300	Single c/w Twin Check	2½” BSRT	Single Headed 2½” Inst. Female
WEA300400	Double c/w Twin Check	2½” BSRT	Double Headed 2½” Inst. Female
WEAM00001	Contractors Twin Check	2½” BSRT	Single Headed Bib Nose Tap
WEA250100	Key & Bar	Square Drive	N/A

SPECIFICATIONS



Designed in compliance with BS 336 : 1989
Test Pressure : 250 PSI (17.2 Bar)

INTERNATIONAL FITTINGS

Delta Fire manufacture a comprehensive range of all types of gunmetal international couplings and adaptors.

A selection can be seen below.



Storz Couplings & Adaptors



Nunan & Stove (N+S) Couplings & Adaptors



NOR Couplings & Adaptors



BSP Couplings



NPT Couplings



NH (American) Couplings & Adaptors



Machino Couplings & Adaptors



Nakajima (JIS) Couplings & Adaptors

FIRE FITTINGS



Barcelona Couplings & Adaptors



SMS Couplings & Adaptors



London V Thread Couplings & Adaptors



Round Thread Couplings & Adaptors



Rotta Couplings & Adaptors



GOST Couplings & Adaptors



Guillimin Symetrique Couplings & Adaptors



Special Flanges & Blank Caps

NOZZLES

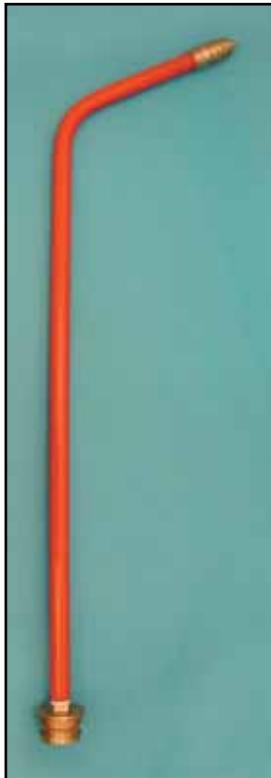
Delta Fire manufacture and supply a comprehensive range of all types of branchpipes and nozzles for marine, industrial and public fire brigade use.

Fittings and nozzles are generally available in light alloy.

All nozzles can be supplied with all the major international inlet adaptors



DO5 - Short Pattern Jet/Spray Diffuser Nozzles
Inlet: 2.5" Instantaneous Male to BS 336



Fog Applicator



Jet Only & Branchpipe Nozzle



Lash in Nozzles



Jet/Spray & Branchpipe Diffuser Nozzle



Fire Brigade Nozzles



Unifire Jet/Spray Nozzles with International Fittings



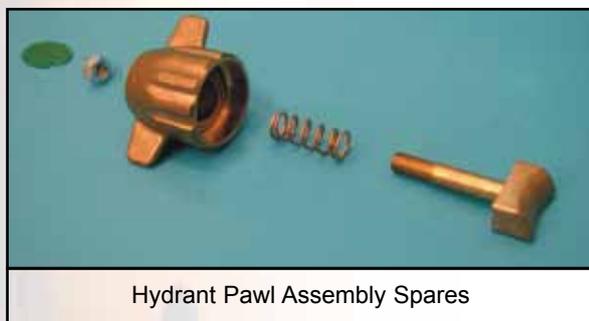
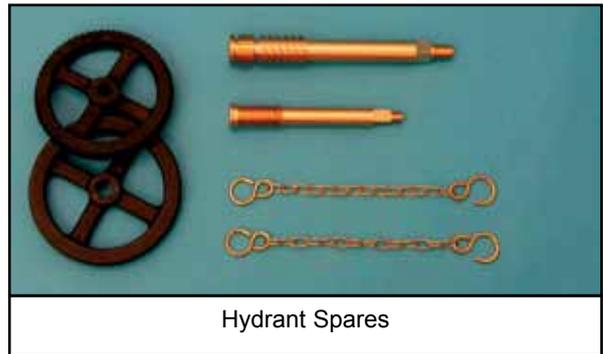
No.1 & D46 Lever Operated Jet/Spray & Branchpipe Nozzle. Gunmetal & Light Alloy

FIRE FITTINGS

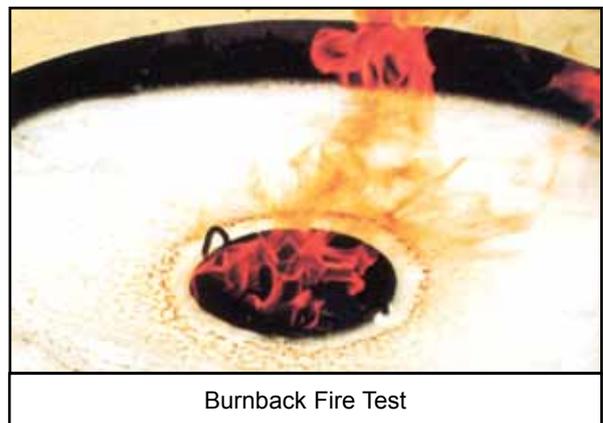
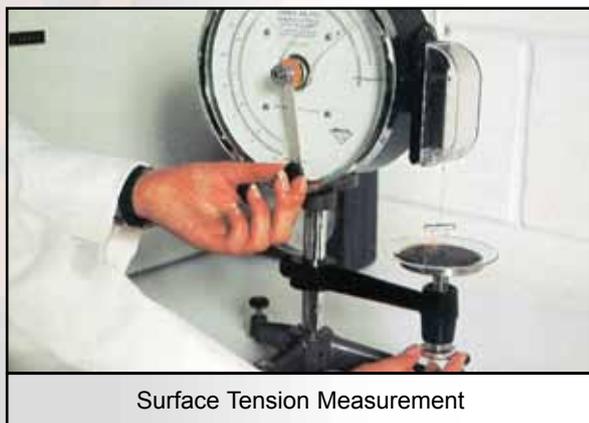
SPARE EQUIPMENT

Delta Fire have a wide range of hydrant and coupling spare parts which are generally available immediate ex-stock. This includes both British Instantaneous and International fittings.

The company is also able to test both foam concentrates and pre-mix foams in an ISO 9001 laboratory.

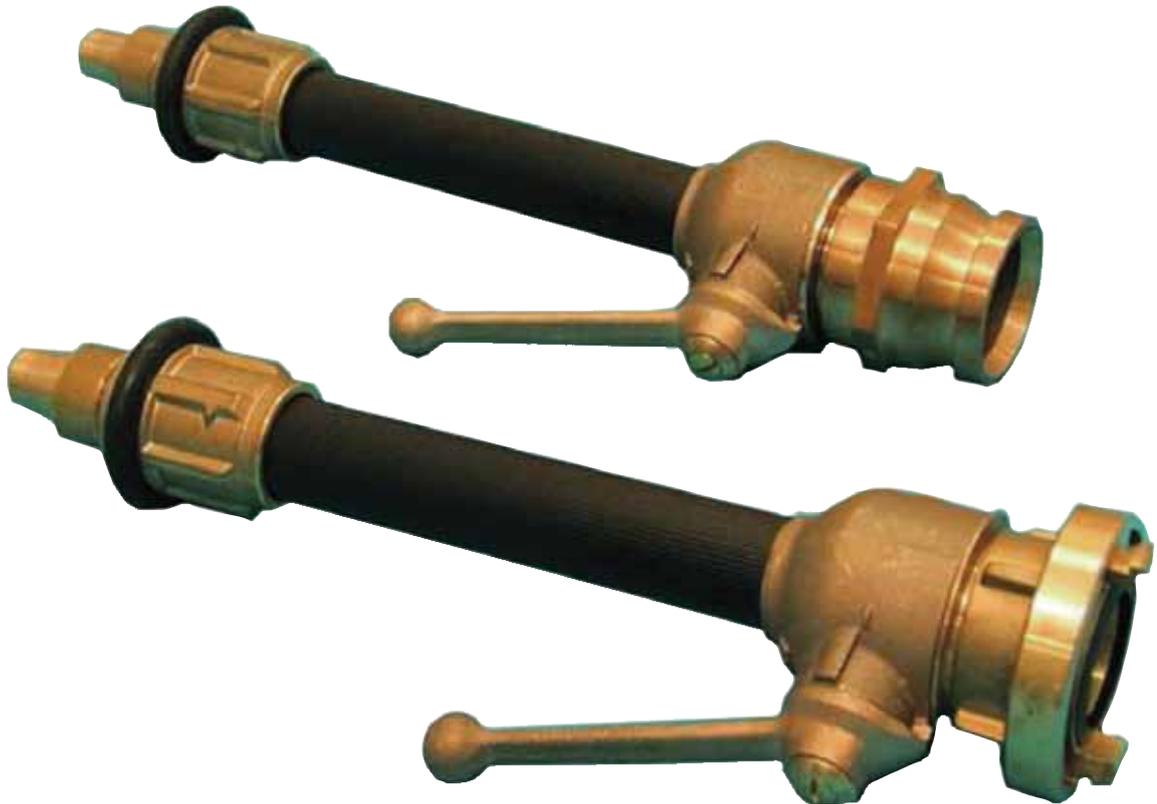


FOAM TESTING SERVICE



D46

LEVER OPERATED JET/SPRAY NOZZLE



- Independent Water Curtain
- Jet/Spray
- Gunmetal Nozzle
- Lever Operated
- Various Tip Sizes



Variable angle Independent Water Curtain 0° to 160°

GENERAL DESCRIPTION

The D46 Nozzle is specially designed for Marine use. Fire fighting jet / spray is controlled by the 3 position lever which also controls the nozzle shut off. The totally independent water curtain allows heat shield protection to the fire fighter whilst fire fighting continues with the jet / spray nozzle discharge.

Manufactured principally in LG2 gunmetal and copper alloy. The inlet base connection is 2" BSP male allowing any international connection adaptor to be used.

FEATURES

TIP SIZES

D46 - 12	(12mm equivalent Jet Size)
D46 - 16	(16mm equivalent Jet Size)
D46 - 20	(20mm equivalent Jet Size)

MATERIAL

Body	LG2 Gunmetal to BS 1400 / Copper Alloy
Bumper	Nitrile Front Bumper

FLOW

3 Position (Off / Jet / Spray)

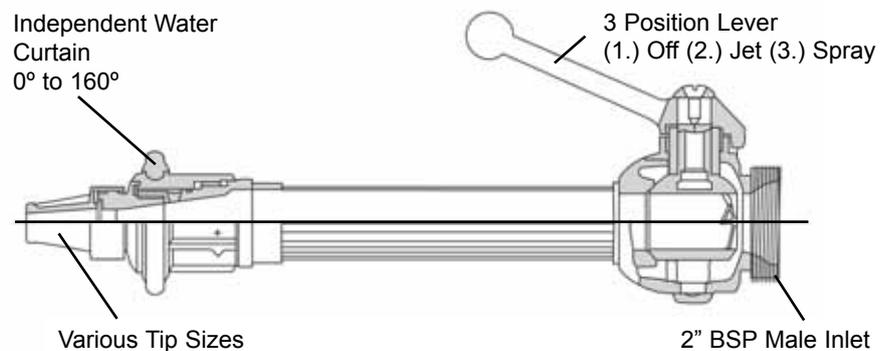
INDEPENDENT ENHANCED WATER HEAT SHIELD

This protects the firemen when holding the branchpipe close to heat and smoke. The water curtain angle can be varied between 0° and 160°

INLET OPTIONS

2" BSP Male

Full range of UK and International adaptors available.



UNIFIRE

V12, V16 & V20 JET/SPRAY NOZZLE



- Multi Purpose
- Chrome Plated Brass
- Various Sizes
- Jet/Spray
- Very Reliable
- Low Maintenance



Available with All International Fittings

FIRE FITTINGS

GENERAL DESCRIPTION

The Unifire V- nozzles are a multi purpose jet / spray nozzle which has a good performance for both jet and spray. These nozzles are very reliable and designed for heavy professional use with little or no maintenance required. They can deliver a constant flow regardless of spray angle. Also these nozzles are M.C.A approved for marine use (previously D.O.T).

FEATURES

SIZES

V12 Unifire (12mm equivalent Jet Size)
 V16 Unifire (16mm equivalent Jet Size)
 V20Unifire (20mm equivalent Jet Size)

MATERIAL

Body Chrome Plated Brass, Orange Plastic Cover
 Stainless Steel Screws and Silicone Oil Lubrication

Bumper Nitrile Front Bumper

FLOW

Stepless Adjustable from Shut-Off via Jet to 90° by turning the nozzle head.

INLET OPTIONS

2" BSP Male
 Full range of UK and International adaptors available.

SPECIFICATIONS

Recommended Operating Pressure: 2 - 10 bar

Max. Pressure: 15 bar

Length: 330mm
 Weight: 1.6kg
 Nozzle Ø: 80mm

PERFORMANCE

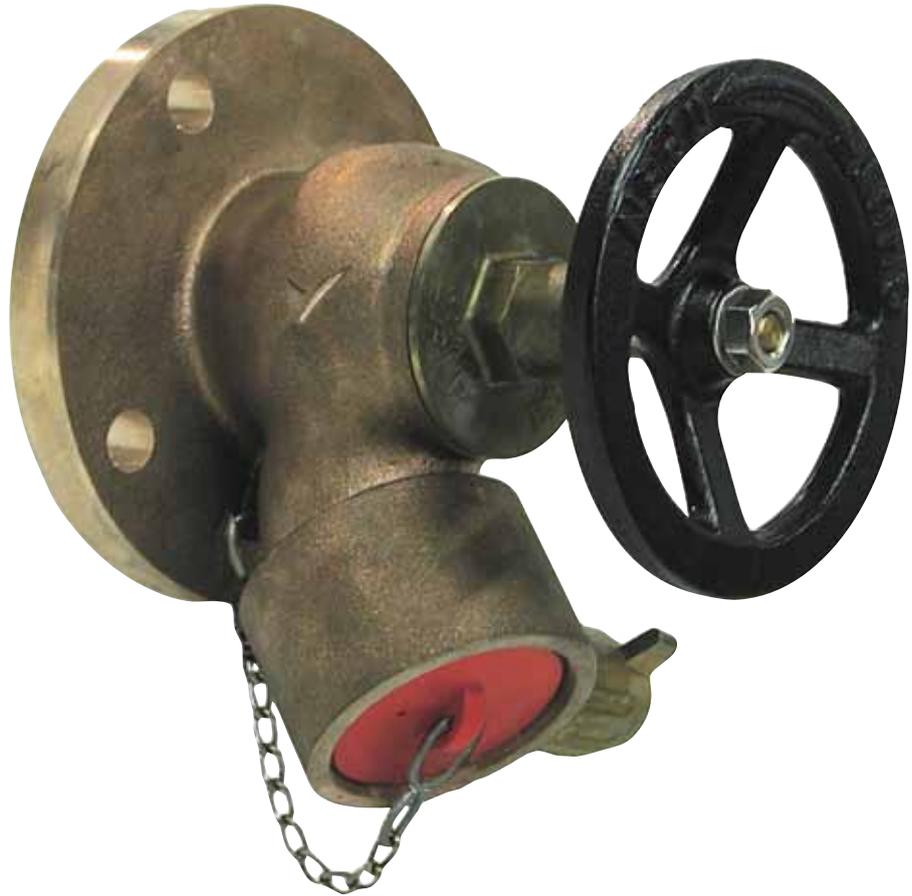
Flow Rates

Model	Inlet Pressure Bar	90° Spray		Jet	
		L/Min	Mtrs	L/Min	Mtrs
V12	2	184	10	134	22
	6	325	13	233	32
	10	400	14	302	37
V16	2	204	10	205	26
	6	408	13	356	34
	10	550	14	462	40

GLOBE HYDRANT VALVES

BS 5041 PT 1

- Horizontal**
- Right Angle**
- Oblique**
- Bib Nose**



- Dual Seat Type
- For Marine & On-shore Applications
- Inlet: Flanged or Threaded
- Outlet: 2½" Inst. Female
- Other International Outlets Available: Storz, NOR, JIS, N&S, NH etc



Full Range of International Hydrant Valves Available

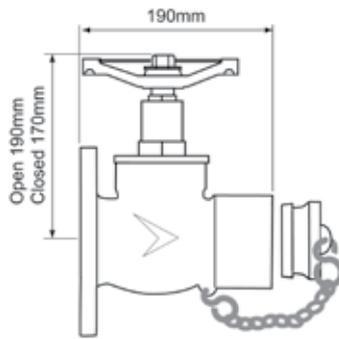
GENERAL DESCRIPTION

Delta Fire hydrant valves are suitable for both offshore and onshore application. They are manufactured to BS 5154 and BS 5041 part 1.

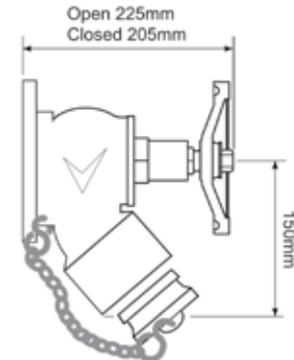
The valves are manufactured in corrosion resistant materials with an LG2 gunmetal body and are available with both British Instantaneous female outlet to BS 336 and a wide range of International outlets.

FEATURES

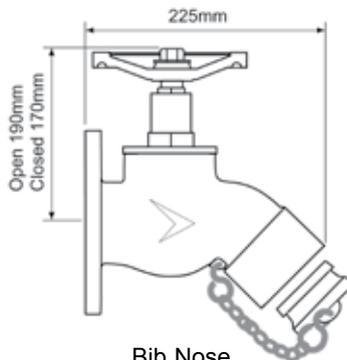
All Delta Fire hydrant valves are dual seat type. The primary valve seat is hard rubber with an additional secondary metal to metal seat.



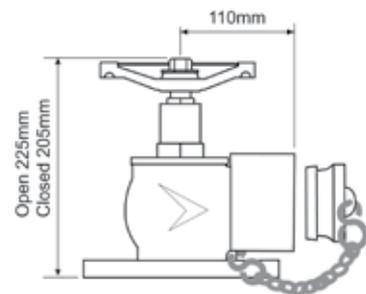
Horizontal



Oblique



Bib Nose



Right Angle

TECHNICAL DATA

Flanged Inlet	PN16 1½"	PN16 2"	PN16 2½"	TABLE D/E 2½"	TABLE D/E 3"	ANSI 2½"	ANSI 3"
Diameter (mm)	150	165	185	165	184	178	191
PCD (mm)	110	125	145	127	146	140	152

Also available with alternative flanged and BSP, NPT threaded inlets.

WEIGHTS

Valve Type (Instantaneous)	Right Angle	Horizontal	Oblique	Bib Nose
Weight: Flanged Inlet	9Kg	9Kg	9Kg	9Kg
Threaded Inlet	8Kg	8Kg	8Kg	8Kg

PRESSURE REGULATING VALVES

BS 5041 PT 1

INLETS:

PN16

BS10

ANSI

JIS

Custom Flange

BSP / NPT Thread



- Suitable for Wet Riser Systems
- Suitable for Fire Mains
- On and Offshore Applications
- Other International Outlets
Available Storz, NOR, JIS, NH etc



BSP Threaded Inlet Pressure Regulating Valve

GENERAL DESCRIPTION

The Delta Pressure Regulating Valve has been designed to maintain a uniform fire fighting pressure in fire mains. The valve can be used in high-rise buildings where the pressure will be constant irrespective of the location. It can also be used in ring mains where normal pressures may exceed the safe operating limit for portable fire fighting equipment.

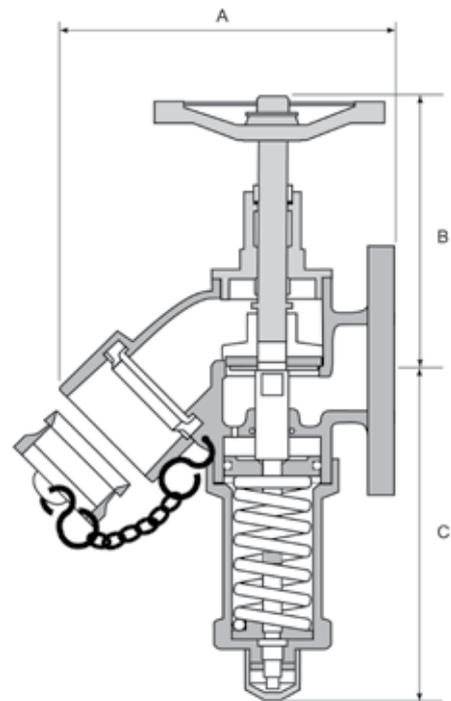
FEATURES

The valves are manufactured in gunmetal BS 1400 LG2 and are suitable for marine use.

Standard outlet is 2½" Instantaneous female. Other International fittings are also available. eg. Storz, Symetrique, NOR, NH etc.

Inlet flange 2½" ANSI 150 / PN16 and BS10 (other flanges and threads available to order).

	Screwed	Flanged
A	235mm	225mm
B	Open 178mm Closed 158mm	
C	230mm	230mm



TECHNICAL DATA

The static outlet pressure of the spring can be set between the following parameters. The normal factory setting is set at 7 bar, but this is adjustable.

Inlet Pressure:	5 bar to 20 bar
Outlet Pressure:	5 bar to 9 bar (Adjustable)
Working Pressure:	20 bar (290 psi) at 0 - 38°C
Seat Test:	22 bar (319 psi)
Body Test:	30 bar (435 psi)
Weight:	12 kg

FOAM TESTING

ALL TYPES OF FOAM

Protein & Fluoroprotein Concentrates

Film Forming Fluoroproteins (FFFP)

Aqueous Film Forming Foams (AFFF)

Alcohol Resistant Types

Synthetic Detergent Foams
(Low, Medium & High Expansion Grades)

Pre-mix Solutions any of the above.



Foam Properties Test



Burnback Fire Test

- Comprehensive
- All Types of Foam
- 72 Hour Standard Service
- 24 Hour Rush Results
- Expert Advice
- Independent of Any Foam Manufacturer



Surface Tension Measurement

GENERAL

All Foam stocks should be annually checked to be sure that reasonable Fire Fighting performance can be expected in an emergency, and it is a requirement of British Standard BS 5306 that foam concentrates or foam solutions in fixed foam systems are tested annually for any changes in constitution, specification or characteristics. This is particularly important in case of older stocks and stocks held in extreme climactic conditions.

INTRODUCTION

Delta Fire is the UK's leading Independent Foam Test House. The Foam Test service is totally independent of any foam manufacturer. Results are normally faxed or posted within three working days for the standard service, or the next day on the rush service.

TEST METHODS

The tests are performed generally in accordance with the methods as prescribed by the UK Foam Defence Standards 42-21, 42-22 and 42-24 where they are appropriate. Other tests not covered by these standards are performed in accordance with other International recognised specifications such as Mil-F 24385.

SAMPLE REQUIREMENTS

A one litre sample is preferred but 500ml of the foam concentrate is adequate for all the tests to be performed.

This sample should be drawn from the middle of the storage tank or container. Alternatively, if taken from a bottom outlet, then sufficient foam should be run off first to remove any accumulated sludge. This run off foam concentrate can be returned to the top of the tank.

FOAM TEST DETAILS

The standard foam property tests are performed using the UK Government Defence Standard Branchpipe (5 litres per minute at 6.9 bar). All samples are screened for the following properties.

25% Foam Drainage Time

Foam Expansion Ratio

pH Value at 20°C

Specific Gravity

Undissolved Solids % V/V

Additional test are performed according to foam type. For Example:-

AFFF and FFFP foams are tested for the ability to film-foam on Cyclohexane.

Alcohol Resistant Types are tested for stability on a polar solvent such as Methanol or Methyl Ethyl Ketone.

LIVE FIRE TESTING

Full laboratory Fire Tests in accordance with UK Foam Defence Standards can also be performed on request. Such tests measure 90% fire control times, extinguishment times and the burnback resistance of the foam. Live fire testing is not normally required in routine annual screening of foam stocks but only when there is a special need for an in-depth analysis. These tests are made with either fresh water or sea water as required.

FIXED INLINE INDUCTORS

DFI SERIES



DFI-150 Stainless Steel Inductor

DFI-50 Stainless Steel Inductor

- Flow Engineered to Suit Client
- Stainless Steel Option
- Fixed or Variable Foam Pick-Up
- Flows 50 L/Min to 14,000 L/Min
- Reliable Economic Foam Proportioning



Special Fixed Inductors Available to Meet Clients Needs in Stainless Steel 316

GENERAL DESCRIPTION

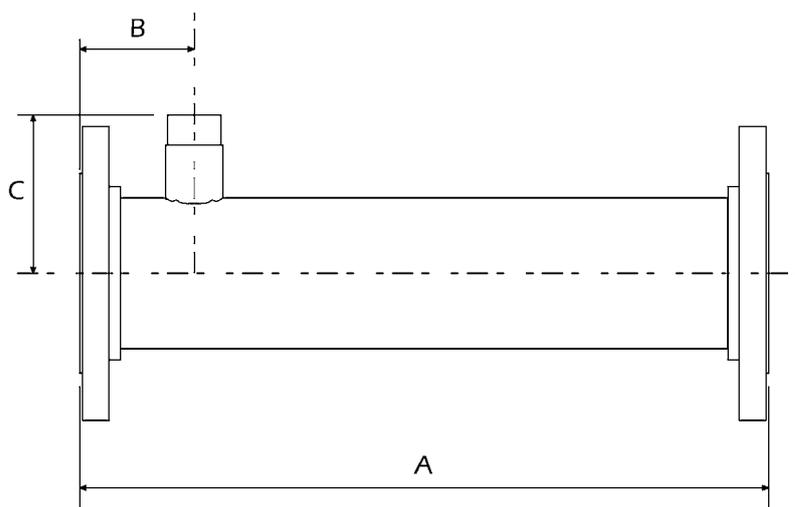
Delta Fixed Inline Inductors are designed to accurately proportion foam concentrate into a pressurised water supply providing an economical means of foam proportioning for systems requiring a fixed flow rate.

The range comprises of seven basic models with a flow rates from 50 to 14,000 litres a minute. Each Inductor is factory calibrated to match the systems flow and pressure requirements. The proportioning rate can be accurately set at 1% to 6%. Up to 65% of the inlet pressure is available to supply the downstream foam discharge devices and overcome pressure losses. The Operating Pressure Range is 3.5 bar to 16 bar.

CONSTRUCTION

Delta Inline Inductors are available with epoxy powder coated carbon steel bodies with corrosion resistant internals or 316 stainless steel construction for excellent corrosion resistance in especially demanding environments.

TECHNICAL DATA



Model	DFI-40	DFI-50	DFI-65	DFI-80	DFI-100	DFI-150	DFI-200
Dimension A	175	310	360	465	532	690	900
Dimension B	50	72	76	80	90	102	150
Dimension C	65	65	80	105	125	145	190
Foam Inlet	1" BSP Male	1" BSP Male	1 1/4" BSP Male	1 1/4" BSP Male	1 1/2" BSP Male	2" BSP Male	2" BSP Male
Connections Inlet & Outlet	1 1/2" BSP Male	2" BSP Male	2 1/2" ASA RF Flange	3" ASA RF Flange	4" ASA RF Flange	6" ASA RF Flange	8" ASA RF Flange
Flow Range (L/Min) @ 10 Bar	50 to 400	150 to 600	300 to 1400	600 to 2000	1000 to 4000	2000 to 8000	4000 to 14000

Models DFI-40 to DFI-50 are supplied as standard with BSP Male screwed ends but optional NPT screwed ends or flanged connections are available.

PN16 Flanges are an alternative option for models DFI-65 to DFI-200.

FOAM TOP POURER



Factory Calibrated for
Optimum Performance

- Single Integral Unit
- Foam Maker
- Vapour Seal Box
- Foam Pourer
- Optional Shell Fixing Kit
- Flow 120 to 3600 Litres/Min



Foam Top Pourer

FOAM EQUIPMENT

GENERAL DESCRIPTION

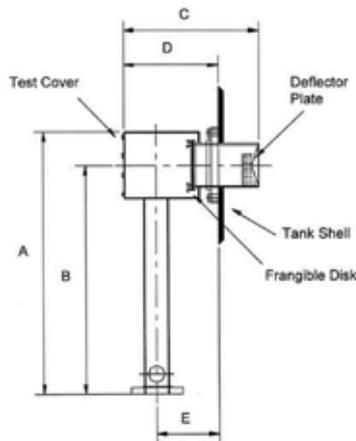
Delta Foam Top pourers are integrated units designed for use in foam systems for flammable liquid storage protection and offer a combined foam maker, vapour seal box and pourer. The sets come in 4 sizes with individual capacities from 120 to 3600 Litres/Min. Individual units are pre-engineered and factory calibrated to give precise flow and pressure characteristics. Such flows rates will be optimised to give the correct minimum application rate to the hazard being protected. The units have a frangible glass seal which breaks under pressure from the foam that is then deflected onto the tank shell cooling it and pouring it gently onto the fuel surface. The Foam Pourer Sets all have an easily removable cover allowing testing of the system without breaking the seal and facilitating inspection and maintenance of the glass seal itself.

PERFORMANCE

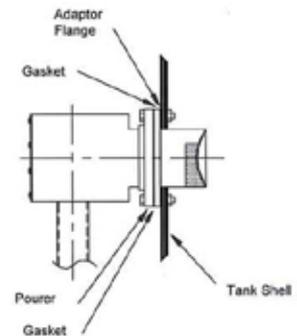
Individual performance curves are available on request for each of the four Delta Top Pourer Sets. Each unit is factory calibrated to produce an optimized flow / pressure characteristic.

DIMENSIONS

Model	Flow Rate L/Min	Dim A	Dim B	Dim C	Dim D	Dim E	Inlet Flange	Outlet Flange
DFPS2	120 - 350	900	800	550	350	230	2"	4"
DFPS4	225 - 1200	1000	875	550	350	230	3"	6"
DFPS8	850 - 2500	1300	1120	675	450	275	4"	8"
DFPS16	1500 - 3600	1600	1400	800	520	300	6"	10"



All dimensions in mm and all flanges standard ANSI 150lb RF.



OPTIONAL FIXING KIT

A special adapter fixing kit is available in order for the Foam Top Pourer Set to be easily fixed from outside the tank. This kit consists of a special flange adapter with fixed threaded studs. An appropriate ANSI 150lb Flange size hole is cut into the tank shell and the adapter is bolted into place. The Foam Pourer Set Flange can then easily be offered up to the locating studs and fastened in position. All nuts and washers and gaskets are provided.

SPARES

Spare Burst Disc Assembly (Part No)	BD - 02	BD - 04	BD - 08	BD - 16
Fixing Kit (Part No)	FK - 02	FK - 04	FK - 08	FK - 16

MATERIALS

Body:	Carbon Steel
Orifice Plate:	Stainless Steel 316
Frangible Disc:	Glass
Finish:	Red Oxide Primer or Red Polyester Powder Coated

RIMSEAL FOAM POURER SETS

RFG - 2 & RFG - 3

Floating Roof Tank And Other
Foam Pourer Applications



- Two Sizes Available
- Uniform High Quality Foam Production
- Flow Range 50 - 712L/min
- Rugged Construction
- Harsh Environment Versions Available



Rimseal Generator

F O A M E Q U I P M E N T

GENERAL DESCRIPTION

Delta Rimseal Foam Sets are used for protecting open floating roof storage tanks. The Equipment set consists of two elements, the Foam Generator which produces expanded foam and the Pourer which helps develop optimum foam properties and deliver the foam gently down the tank shell into the rimseal area. These units are normally purchased together as an integral set.

Two Foam Generator sizes are available, 2" and 3", covering a flow range of 50L/min to 712 L/min.

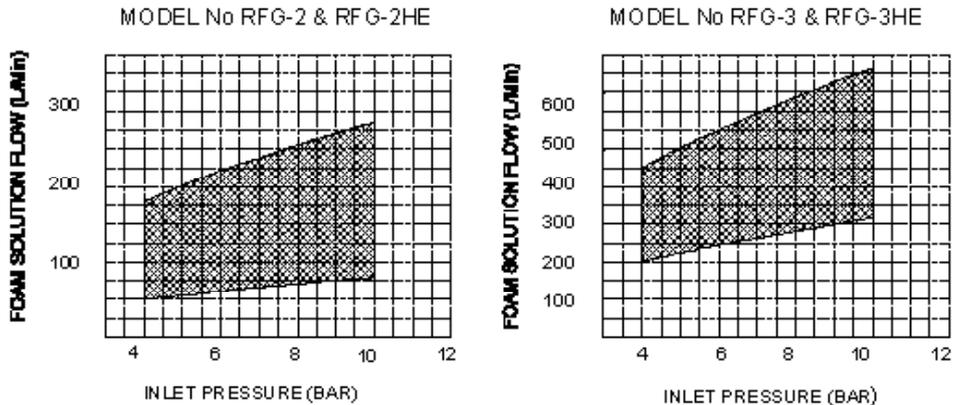
FEATURES

The Foam Pourer has a stainless steel mesh in the foam exit which prevents nesting birds or insects blocking the foam flow. The foam generator has 316 stainless steel internals which are engineered to provide the exact solution flow required for the system.

TECHNICAL DATA

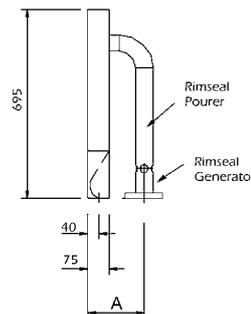
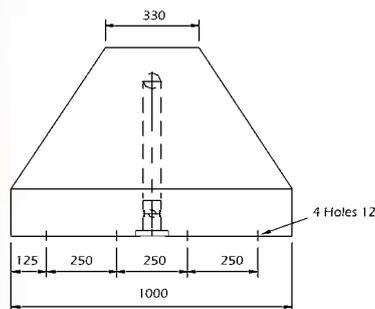
Delta Rimseal Foam Equipment is suitable for use with all good quality low expansion foam concentrates. Delta Rimseal Foam Equipment is designed to provide exactly the correct flow at the system design pressure.

PRESSURE FLOW GRAPH



SPECIFICATIONS

Component Part		Standard Models RFG-2 & RFG-3	Harsh Environ. Models RFG-2HE & RFG-3HE
Rimseal Generator	Body Internals	Cast Iron 420/12 Stainless Steel 316	LG2 Gunmetal Stainless Steel 316
Rimseal Pourer	Body Fasteners	Carbon Steel Stainless Steel A2	Stainless Steel 316 Stainless Steel A4
Paint Finish	Mesh Generator & Pourer	Stainless Steel 304 Red or Yellow Epoxy Powder Coat	Stainless Steel 304 Red or Yellow Epoxy Powder Coat
Weight	Generator & Pourer	RFG-2 - 35Kg RFG-3 - 40Kg	RFG-2HE - 37Kg RFG-3HE - 42Kg



Dimensions	-A-
RFG-2 RFG-2HE	200
RFG-3 RFG-3HE	235

Fixing holes:
Inlet:

All models
RFG-2 & RFG-2HE
RFG-3 & RFG-3HE

Ø12mm.
2" ANSI RF Flange.
3" ANSI RF Flange.

VARIABLE ROUND THE PUMP PROPORTIONER



- Variable induction rate
- Wide operating pressure range
- Compact and robust
- High corrosion resistance
- Rotating hand grip induction setting
- Suitable for bypass operation



Available with All International Fittings

GENERAL DESCRIPTION

This inductor produces premix solution for one or more foam making branchpipes. It is a compact and robust unit able to be fitted to a fire pump as a temporary or permanent feature. The inductor has an induction flow range of 0 to 90 L/min, calibrated in steps of 9 L/min. The inductor may also be used in a bypass type system. It is supplied complete with left hand and right hand labels together with a general label. the latter has no scale so that the inductor may be calibrated to suit the customer's requirement. The required calibration setting within a range is selected by rotating a knurled twist grip handle. The inductor is made of corrosion resistant material throughout. Although normally used in a fixed pipework system various ancillary components are available to enable it to be used as a temporary installation on the majority of fire appliances.

TECHNICAL DATA

Water Requirement	193 L/min. at 7 bar (4.2 gal/min. at 100 lbf/in ²)
Operating Pressure Range	3 to 14.0 bar (45 to 200 lbf/in ²)
Recommended Operating Pressure	7 bar (100 lbf/in ²)
Foam Liquid	P, FP, FFFP, AFFF, AR
Inlet to Back Pressure Ratio	1 to 3 maximum
Induction Rate	90 L/min
Calibration Labels	Left, right hand & blank, self adhesive

Couplings

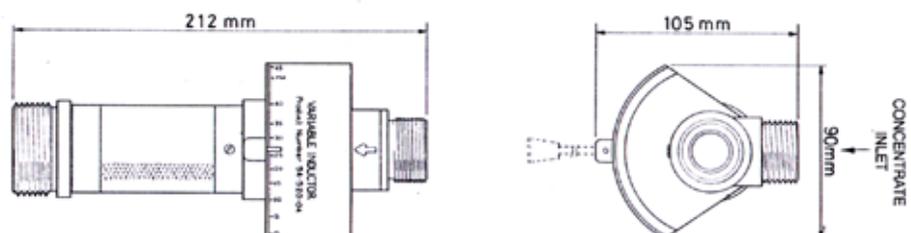
Inlet	25 mm (1")	BSP (M)
Foam Pick-Up	25 mm (1")	BSP (M)
Outlet	40 mm (1½")	BSP (M)

Material

Body	Bronze
Jet and Throat	Brass
Sleeve	Bronze
Weight	2.7 kg (5.9lbs)
Finish	Natural

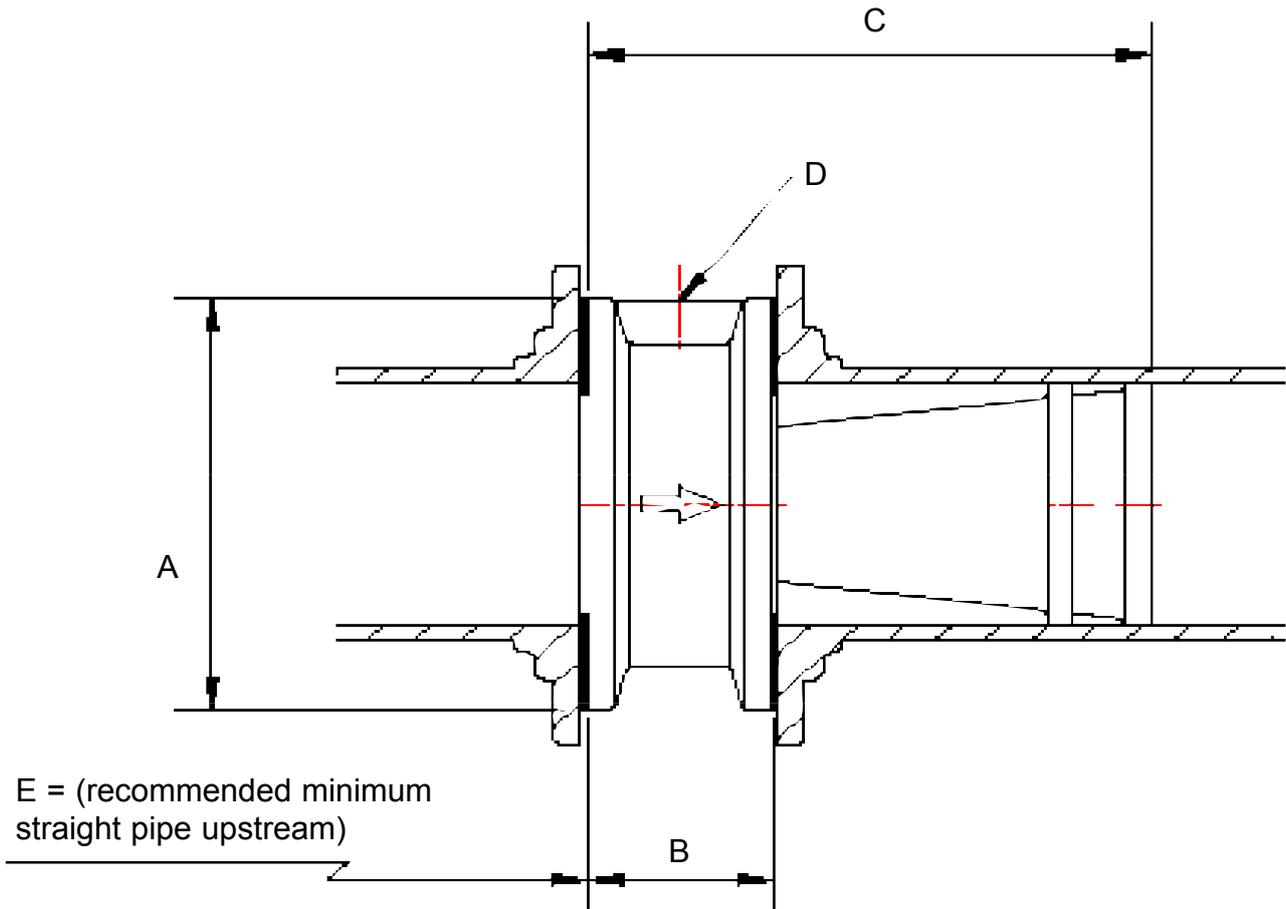
Note:

Performance figures are based on equipment using the appropriate Foam liquid with clean water 15°C (59°F) at an atmospheric Pressure of 1 bar (15.4 lbf/in²).



BALANCED PRESSURE

FOAM PROPORTIONERS



- For use with Delta Bag Tank Module or Pressure Balancing Valve
- Operates over a 10:1 Flow Range
- Fits between Standard ANSI RF Flanges
- Corrosion Resistant Bronze & Stainless Steel
- Low Pressure Drop

GENERAL DESCRIPTION

Delta Balanced Pressure Foam Proportioners (DBPPs) are designed for use in fixed systems to introduce foam concentrate at a pre-set rate, typically 1%, 2%, 3% or 6%, into the fire-water supply, over a varying range of foam solution demands. For example, where a number of discharge outlets may be required to operate individually or simultaneously.

The DBPP introduces the foam into the water supply with very little pressure loss and fits between standard ANSI RF Flanges. Typical applications include flammable liquid storage tanks, loading racks, aircraft hangars, heliports, and anywhere flammable liquids are used, stored, processed, or transported.

TECHNICAL SPECIFICATION

There are four basic models with flow capacities from 220 litres/min to 20,000 litres/min. Each unit is factory-calibrated to suit proportioning rates of 1%, 2%, 3% or 6% of a specified foam concentrate. A trimming screw facility on the foam inlet permits adjustment during commissioning for exceptional operational accuracy and system adjustment.

The upper performance limit is defined as the flow at which the maximum specified pressure drop of 1.25 bar is reached. An inbuilt pressure recovery improver reduces pressure losses at high flows and accurate foam proportioning is achieved over an approximate 10 :1 flow range.

In order to ensure accurate proportioning, the foam concentrate must be supplied to the unit at exactly the same pressure as that at the inlet. This can be achieved by using the proportioner in conjunction with either a Delta Balance Valve or a Delta Bag Tank Module and it must be stated at the time of order which will be used.

RANGE

Model No.	Proportioner Size	Dim-A-	Dim-B-	Dim-C-	Dim-D-	Dim-E-
DBPP-3	3"	135	635	152	1 ¼" NPT	380
DBPP-4	4"	173	645	203	1 ½" NPT	510
DBPP-6	6"	218	826	305	2" NPT	760
DBPP-8	8"	279	904	305	2 ½" NPT	1020

MATERIAL OF CONSTRUCTION

Body	:	Bronze
Jet	:	Stainless Steel 316 L
Foam Flow Orifice	:	Stainless Steel 316 L
Retaining Ring	:	Stainless Steel 316 L

At the time of order the following information must be specified :-

1. Proportioner size and design flow rate.
2. Type of foam concentrate to be used.
3. Percentage Proportioning - either 1%, 2%, 3% or 6%.
4. If a Delta Foam Bag Tank Module or a Delta Pressure Balancing Valve is to be used in conjunction with the Balance Pressure Unit.

BALANCED PRESSURE PROPORTIONER

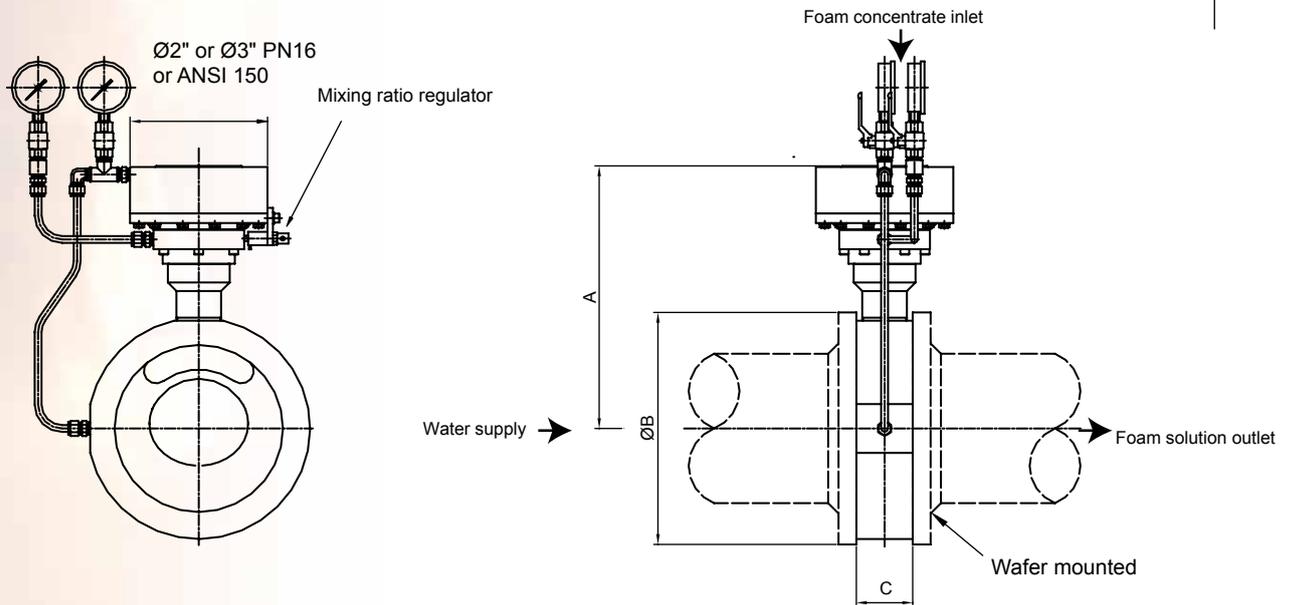


- Accurate Variable Proportioning
- Wide Range 10 : 1 Flow Ratio
- Corrosion Resistance
- Suitable for Marine Use

GENERAL DESCRIPTION

The Delta BPP is a balanced proportioning device suitable for foam pumps and bladder tanks, when the latter are installed far away from the mixer. It is made by two parts : a top balancing valve and a lower proportioning body. The former equalises the water and foam pressure, making the proportioning independent of the foam pumping pressure. In order to ensure under any condition an accurate mixing, foam pressure at the BPP inlet must be at least 1- 1.5 bar higher than water pressure. The lower variable body - ensures mixing accuracy within a ratio between the min and max flow rate of 1:10.

TECHNICAL DATA



- Body Material : Bronze (Standard) or Stainless Steel (Optional)
- Internals : Stainless Steel
- Minimum Foam Water Pressure Difference : 1 - 1.5 bar
- Max Working Pressure : 20 bar

TYPE	A mm	B Ø	C mm	D Ø	FLOWRATE				WEIGHT Kg	FOAM	Bar ⁽²⁾
					Min.		Max. ⁽¹⁾				
					l/min	USG/m	l/min	USG/m			
STANDARD VERSION(Bronze)											
DBPP-100/50	259	4"	70	2"	400	106	4000	1057	30	All Foam	1.8
DBPP-150/50	291	6"	70	2"	840	222	8400	2219	30	All Foam	2.0
DBPP-200/80	361	8"	82	3"	1600	423	16000	4227	54	All Foam	0.8
DBPP-250/80	393	10"	82	3"	2500	660	25000	6605	62	All Foam	1.0

(1) The DBPP can work at higher flow rates with larger pressure drop

(2) The pressure drop at the minimum flowrate is approx 0.3 bar

HIGH BACK PRESSURE FIXED FOAM GENERATORS



Designed for sub surface foam injection to protect hydrocarbon risks in fixed roof tanks.

- High Performance 40% Back Pressure
- Fixed Flange & Treaded Models
- Flow Engineered to Client Requirements
- Harsh Environment Models
- Optional Inlet/Outlet Pressure Gauges

F O A M E Q U I P M E N T

GENERAL DESCRIPTION

Delta High Back Pressure Foam Generators are designed for use in Base Injection Foam Systems. They are primarily used in the protection of hydrocarbon risks in fixed roof tanks.

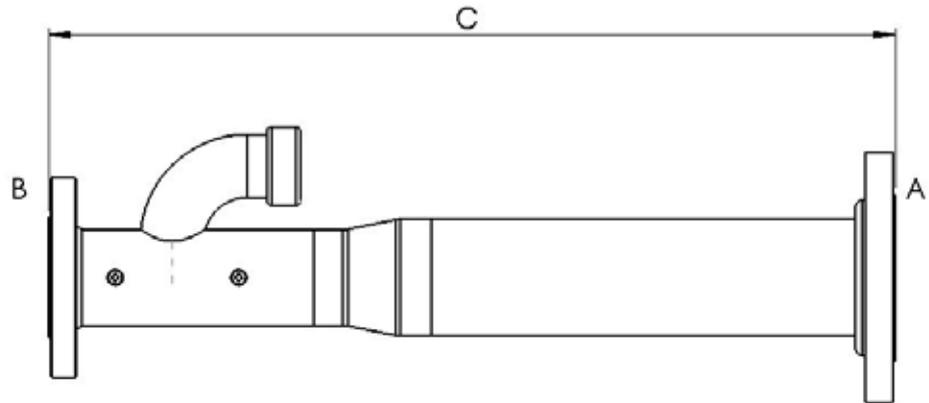
Delta High Back Pressure Foam Generators produce low expansion foam with an expansion around 4 : 1 and can operate against a back pressure of up to 40 % of the foam solution inlet pressure.

Foam flow rates can be pre-engineered to give precise application rates to suit individual risks. The table below shows standard unit flow rates at 5 bar.

FLANGES : ANSI 150 LB (or as customer requirements)

MATERIAL : Carbon Steel Red .Oxide Paint Finish.

TECHNICAL DATA

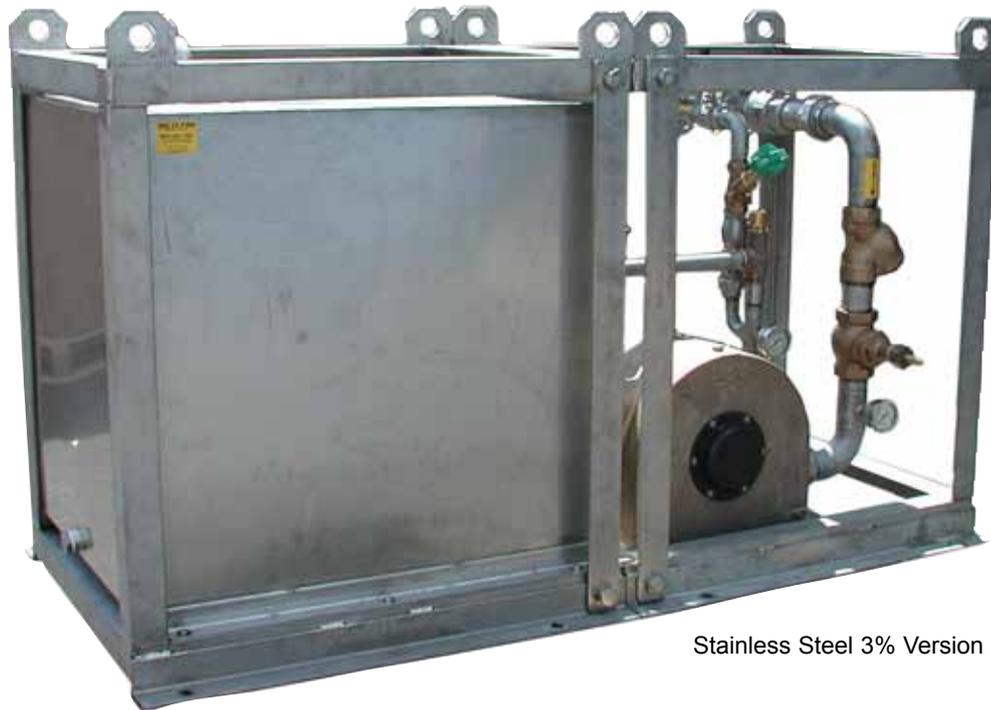


Flanged Model

MODEL No.	DIA -A-	DIA -B-	DIM -C-	FLOW LPM	WEIGHT KG
DHBPG 6	2"	3"	650	600	13
DHBPG 8	3"	4"	650	800	16
DHBPG 10	3"	4"	650	1000	16
DHBPG 12	4"	6"	1000	1200	33
DHBPG 16	4"	6"	1000	1600	33
DHBPG 20	4"	6"	1000	2000	33

HELMIXER

FOAM PROPORTIONING SYSTEMS



Stainless Steel 3% Version

- Self Contained
- Corrosion Resistant
- Requires Only a Pressurised Water Supply
- Provides Fixed Percentage Foam Concentrate



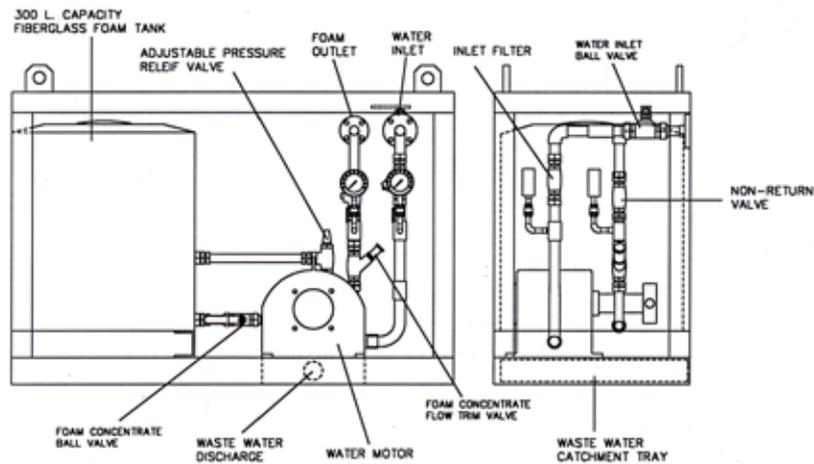
Stainless Steel 1% Version

FOAM EQUIPMENT

GENERAL DESCRIPTION

The Delta Helimixer is a foam induction system which is completely self contained and is a skid mounted unit. Included in the Helimixer is a foam tank, pelton wheel, foam pump and all inter-connecting pipework. It only requires a pressurised water supply to operate it and it provides a fixed percentage foam concentrate injection into a fire protection system. The Helimixer is available in 316 stainless steel and cupro nickel versions with a range of flow rates and tank sizes normally for 1% or 3% induction.

OPERATING DATA



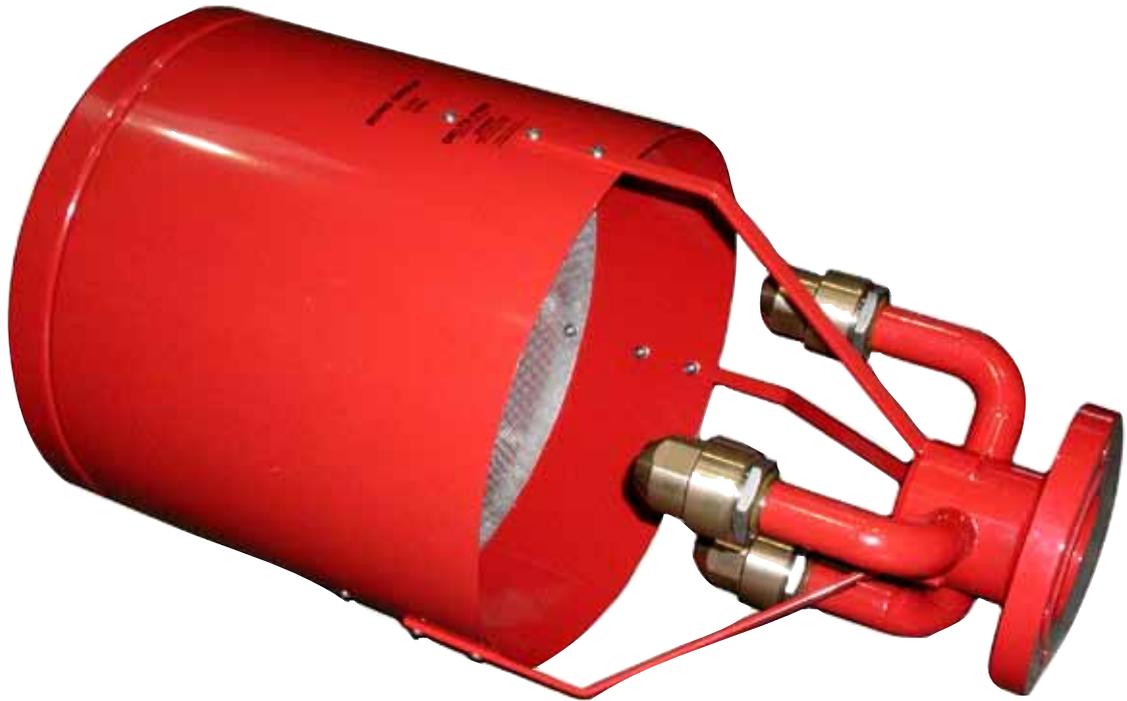
Operating Range:	5 bar to 15 bar
Foam Tank Capacity:	300 Litres (Typical)
Flow Rate @ 7 bar:	1800 Litres per minute (or as client requirements)
Induction Rate:	1% or 3%
Operating Temperature: Range	-15°C to 50°C ambient
Connections:	Water Inlet: 1.5" RF 150lb Flange Foam Concentrate Outlet: 1" RF 150lb Flange

SPECIFICATION

Foam Tank:	Stainless Steel or Glass fibre reinforced polyester resin
Foam Pump:	Casing: Gunmetal LG2 to BS 1400 Rotors: Phosphor Bronze PB2C to BS 1400 Shafts: Stainless Steel
Valves:	316 Stainless Steel
Fittings:	316 Stainless Steel or 90/10 Copper Nickel to BS 2871 and Gunmetal LG2 to BS 1400
Pipework:	316 Stainless Steel or 90/10 Copper Nickel to BS 2871
Skid Framework:	316 Stainless Steel or Structural Steel to BS 4360
Finish:	Blast cleaned, zinc silicate primed, one coat of epoxy sealer, two coats of epoxy high build. Final coat, polyurethane two pack to match BS 381c538
Dimensions:	1500mm x 800mm x 1025mm

MX FOAM BUND POURERS

MX600 - MX1200 - MX1800



MX600 Flanged Version

- High Output MX Foam
- Corrosion Resistant
- Pre-Engineered Flows to Clients Specific Requirements
- Rugged Construction
- 3 Standard Flows



MX1800 Version

FOAM EQUIPMENT

GENERAL DESCRIPTION

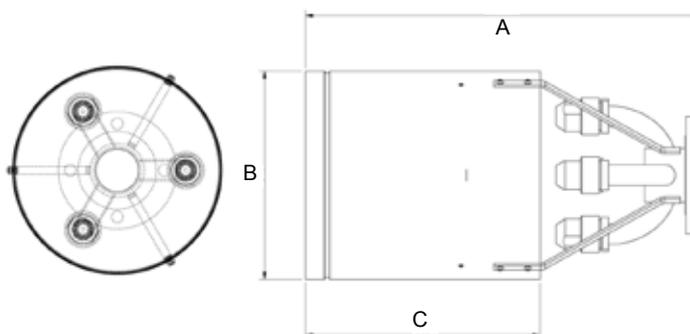
Delta Medium Expansion (MX) Bund Pourers are designed for both fire protection systems and vapour suppression in bunded or diked areas surrounding flammable liquid or toxic chemical storage tanks. They are also ideally suited for other applications where large volumes of free flowing foam are required. Such as process areas, warehouses, cable ducting etc.

A fire in a bund area can seriously escalate if not quickly controlled and soon involve one or even all of the contained storage vessels.

A leak of un-ignited fuel from a faulty valve, cracked pipe or an overfill can threaten the full installation very quickly. Delta MX Foam Pourers produce large volumes of medium expansion foam, quickly securing the bund. Similarly toxic vapours can be suppressed.

The Delta MX Bund Pourer range comprises of three lightweight, compact and robust units. Nominal Flows are 600, 1200 and 1800 L/min but can be flow engineered to precise requirements to give the correct application rate and optimum system cost.

SPECIFICATION



Model		MX600	MX1200	MX1800
Nozzle Quantity		3	6	9
Dims	A (mm)	640	900	920
	B (mm)	305	420	520
	C (mm)	380	570	648
Inlet (Flanged Option)		2" BSP Male	2.5" BSP Male	3" BSP Male
Materials	Pipework Spider	Carbon Steel - International Orange Powder Coated		
	Nozzles	Brass / Gunmetal Natural Finish		
	Pourer Tube	Stainless Steel 316		
	Internals	Stainless Steel 316		
	Screws, Nuts Washers	Stainless Steel 316		
Approx Weight		8.5 Kg	16.5 Kg	24.5 Kg

PERFORMANCE DATA

Model	MX600	MX1200	MX1800
K Factor *	380	759	1138
Operating Pressure Range	1.5 - 3 bar.g		
Optimum Flow Rate @ 2.5 bar g. Inlet Pressure	600L/min	1200L/min	1800L/min
Typical Expansion Ratio	50:1		
Typical Foam Output @ 2.5 bar g.	30 M ³ /Min	60 M ³ /Min	90 M ³ /Min

* Flow (Litres/Min) = $K\sqrt{P}$ where P = Pressure in bar g.

In line with our policy of continuous improvement we reserve the right to amend any specification without notice.

RAMFAN 2000 (WF20)

WATER POWERED BLOWER AND DUCTING

ROYAL NAVY

Marine Specification:

Fan:-

NSN:0565/4140-99-051-5733

Ducting:-

NSN:0565/4130-99-930-5937



- Powerful Portable Ventilator
- Used by the UK Royal Navy for 20 years
- Corrosion Resistant
- Intrinsically Safe Around Flammable Gases
- Military Specification Flexible Ducting for both Blowing & Suction operations



5m Low Magnetic Permeability Flexible Ducting in Yellow Carrying Case

GENERAL DESCRIPTION

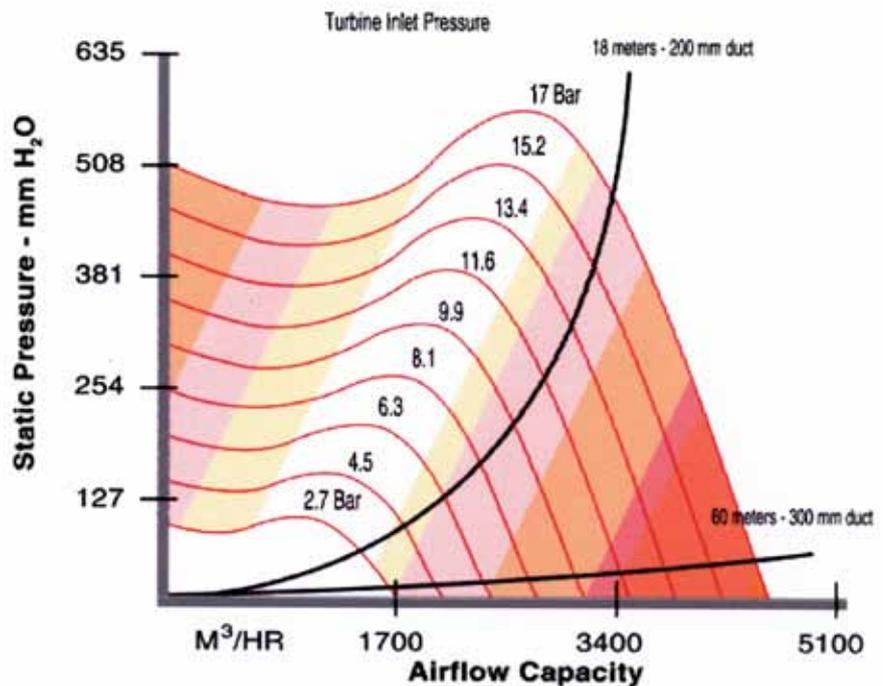
The Ramfan 2000 is a powerful water turbine driven blower which can be used in confined spaces for both blowing / smoke and fume clearance and in suction mode. This make the Ramfan 2000 ideal for the Navy and other military services. The Ramfan comes complete with a 200mm diameter turbine assembly which is fitted with a 8 bladed impeller. This impeller is driven by the high power water turbine moving large volumes of air from a small operational unit.

TECHNICAL INFORMATION

Capacity:	Total Airflow:	Blower Only:	4,300m ³ /hr
Power:	Ramfan 2000	Water Turbine Pressure/Flow	6.0 kW @17 bar Motor Min: 2.7 bar/110 lpm Max: 17 bar/280 lpm
Connections:	Standard 2½" Instantaneous Male, but other International Fittings available.		
Dimensions:	Blower:	41H x 31L x 31 cm	
Weight:	Blower:	17kg	

AIRFLOW CAPACITY

Diagram of Airflow Capacity



RAMFAN EX50Li

BATTERY POWERED MULTI-PURPOSE PPV SMOKE REMOVAL FAN

KEY USERS:

- Fire & Rescue Services
- Naval / Defence
- Marine / Offshore
- Aviation
- Petrochemical
- Industrial
- Mining



- Hi-Power Lithium Batteries
- 45 Minutes+ Run Time
- Fast Re-Charge Times
- Compact Design
- Easily Stowed & Transported
- Powerful Performance
- Hi-Power LED Scene Lights
- Flexible Ducting Available



Optional Door Bar Hanger Kit

GENERAL DESCRIPTION

The Ramfan EX50Li Battery PPV heralds a major breakthrough in smoke removal fans. Boasting 2 x interchangeable powerful Lithium batteries this compact, high performance, multi-purpose fan can run for in excess of 45 minutes without dependence on hard-wiring or fuel. Designed for ease of storage on modern day appliances the EX50Li is incredibly versatile and easy to transport.

As used by many Fire & Rescue Services are specified by the Royal Navy for use on their new and existing fleet.

TECHNICAL INFORMATION

EX50Li	
Product Code:	MIS040010
Impeller:	447mm, 5 Blade
Weight:	< 25kg
Dimensions: (h/w/d)	560mm x 530mm x 300mm
Motor:	0.6 kW
IP Rating (Motor/Battery System/Controller)	IP66/IP66/IP66
Battery System:	40V Lithium-ion, 432Wh
Runtime @ Max Speed	-40 Minutes
AC Input (Universal)	85-264 V, 1Ø
Amps (Start/240V Consumption)	<8A/3.5A
LED Scene Lights	240 Lumens
Approvals	CE

