FOAMPRO®

A Safe Fleet Brand

FOAM SOLUTIONS



FOAM SYSTEMS CATALOG

PROPORTIONING & REFILL SYSTEMS FOR MUNICIPAL, MARINE & WILDLAND

SAFE FLEET

Driving Safety Forward™

FOAM SOLUTIONS

Choose the industry leader!

Regardless of the additive, FoamPro offers the ultimate proportioning systems for your new or retrofit apparatus. Numerous models incorporating direct injection or around-the-pump technologies are available to meet unique requirements for municipal, wildland, marine, industrial, ARFF, and CAFS applications. In addition, hundreds of options and accessories have been engineered to provide customized solutions for your specific requirements.

As the worldwide leader, FoamPro systems provide fully-automatic foam proportioning with operator-friendly controls. With concentrate capacities to 300 gpm (1135 LPM) and choices of single/multi-point direct injection or budget friendly around-the-pump systems, FoamPro has the ultimate foam management system for all of your applications. See our AccuMax brochure for single and multi-point injection systems with foam capacities greater than 12 gpm (45 LPM).

Specify Top Performance.

Ease of use – less training
At the push of a button or turn of a dial, FoamPro is hands-down, the easiest system to use. Controls incorporate functions that are similar across the product line and intuitive to the operator; requiring less training. Automatic type systems utilize advanced microprocessor technology to manage the complete system by supplying exact amounts of foam – automatically and on demand. In the heat of a battle, it is one less thing to monitor.

Unsurpassed Features
No other proportioner delivers foam as easily and accurately as FoamPro. System designs incorporate the latest technological advancements to meet the rigorous demands of firefighting. FoamPro offers the greatest choice of models, capacities, options, and accessories to meet your specific operation and requirements from proportioning to foam cell refill.

Unmatched Accuracy – Cost Savings
FoamPro brand systems are the most accurate proportioners on the market, to within 5% or less! Unlike other proportioning technologies, FoamPro's patented automated controls assure unmatched accuracy across the full performance range, eliminating needless waste of concentrate and money. FoamPro automatic systems incorporate advanced microprocessor control technology that provides extremely accurate water flow measurement and precise foam solution. This pinpoint accuracy is maintained from minimum to maximum discharge, greatly reducing concentrate usage, cost, and logistical operations to re-supply.

System Reliability
Renowned for its reliability, FoamPro has proven itself since 1989 in the harshest conditions on fire grounds worldwide. We continually develop new and improved high-tech proportioning systems by incorporating ideas and suggestions from the field. To assure quality and compliance, only FoamPro requires system designs to be subjected to intense third-party testing. Stringent electronic emission control is verified according to MIL-STD 461E. Designs are then put to grueling SAE and US military specifications by independent evaluators for heavy-use, off road mobile apparatus. All FoamPro systems meet or exceed National Fire Protection Association (NFPA) standards.

Operator Interface
Automatic system designs incorporate ultra-bright LED digital displays providing the operator with real-time solution flow, injection percentage, and percentage concentrate used during operation. Other proportioning options include straight-forward controls operated by a turn of a dial or throw of a switch.

System Testing – Environmentally Green
FoamPro direct injection systems can be tested and calibrated without consuming foam concentrate or putting the environment at risk. Using the calibrate/inject valve, the system is run with the concentrate measured and directed either back to the foam cell or to a separate holding tank.

Customer Support
FoamPro systems are backed by a dedicated sales and support team averaging more than 25 years of fire industry experience. We are a great resource and happy to provide system type, sizing, or usage guidance. Please feel free to contact your local regional sales manager or our technical team with any questions for assistance.











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THE FOAM ADVANTAGE

BETTER WATER

For years, fire departments have been utilizing chemicals to improve the effectiveness of water, thereby creating greater knockdown efficiency and increased firefighter safety. The additives in this water are sold in high concentration and require mixing to form a solution at percentages dictated by the application, or as recommended by the manufacturer. Hundreds of these concentrates are available today, but the majority fall into four basic categories: Class A Foam, Class B Foam, Emulsifiers and Gels. Here's an overview of what each one does for you.

CLASS A

Fire departments only recently are fully embracing the use of Class A foam. Designed for use on any Class A fire or three-dimensional fuel, Class A foam solution is a far superior firefighting agent than plain water… up to 3 to 4 times more effective! A look at the fire triangle will help explain why (Fig. 1 next page).

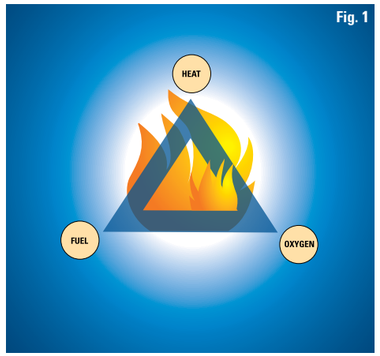
WATER

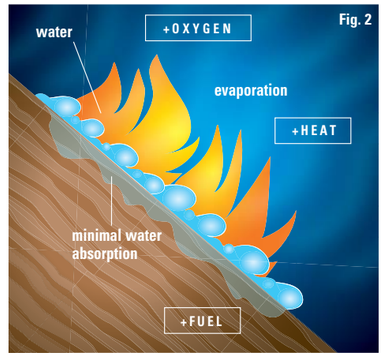
By absorbing heat, water attacks one leg of the triangle. A natural characteristic of water called surface tension "holds" water together resulting in larger droplets. This limits heat absorption for a given volume of water as a small percentage (outer 10% of droplet) actually removes heat while the majority (inner 90% of droplet) runs off the fuel source and "out the front door" (Fig. 2 next page).

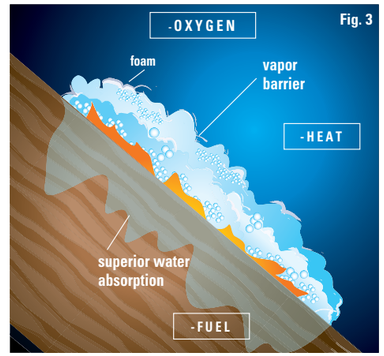
WATER + FOAM

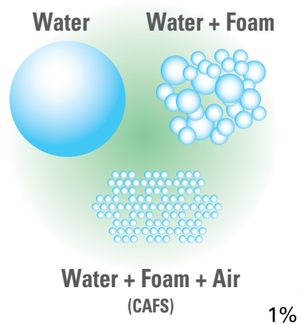
Class A concentrate is simply a surfactant, similar to dish-washing soap, that reduces surface tension. When added to water, the resulting foam solution consists of many smaller droplets with much more surface area, allowing faster heat absorption. An example would be like cooling a glass of water with a single ice cube rather than crushed ice of the same volume. The crushed ice would cool it faster. In addition to creating smaller droplets, reducing the surface tension allows water to penetrate the fuel faster and deeper, dramatically raising the moisture content (Fig. 3 next page). This isolates the fuel leg of the triangle, increasing the resistance to burn. Finally, foam solution separates the fuel from oxygen with a vapor-securing barrier that provides excellent protection.

The proportion of Class A foam concentrate to water is dictated by use. A common rate for initial attack is 0.5%; overhaul 0.2% and exposure protection 1.0%. Application of the final solution can be achieved through a number of different mediums, including your standard nozzles, or specifically-designed aspirating nozzles.









WATER + FOAM + AIR (CAFS)

Compressed Air Foam Systems (CAFS) is another technology making Class A foam even better. By injecting air into the solution, "bublets", consisting of air surrounded by foam solution, are formed, which delivers a more efficient fire stream. The bubble structure is also much stronger and the additional energy from the air increases stream reach.

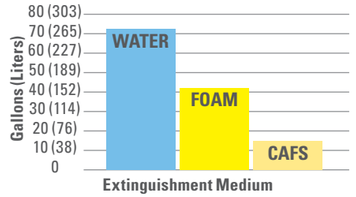
CLASS B

Designed for use on Class B-type fires or two-dimensional fuels, it forms a film over a contained fuel to extinguish and prevent re-ignition. Unlike Class A foam, manufacturers of Class B recommend the percentage of foam concentrate to water mixture based on the fuel to which it is applied. The most common proportioning rates are 1%, 3% and 6%. Some brands offer dual-usage concentrate, which may be applied on hydrocarbon and polar solvent fuels. Typically these will indicate two proportioning rates such as 1% x 3%, 3% x 3% or 3% x 6%. Since high volumes of water and concentrate are typically utilized; cost, storage and logistical requirements are important to evaluate. The newer 1% versions may cost more per gallon of concentrate, but less per gallon of solution. They also require very accurate proportioning systems.

OTHER CONCENTRATES

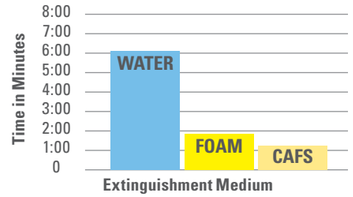
Emulsifiers are another type of additive used to provide long-term vapor suppression and aid in hydrocarbon recovery. Gels have proven to be excellent insulators and provide long-term exposure protection. Mixture rates for these can vary depending on application.

Gallons (liters) required for knockdown. Class A foam 40% better than water.



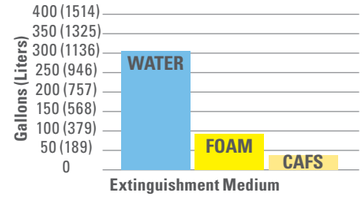
Water: 73 gallons (276 liters)
Foam: 44 gallons (167 liters)
CAFS: 16 gallons (61 liters)
79% better than water
64% better than foam

Time to cool: 600° F to 200° F (316° C to 93 C) Class A foam 17% better than water.



Water: 6:03 minutes
Foam: 1:45 minutes
CAFS: 1:28 minutes
76% better than water
17% better than foam

Total gallons (liters) Used Class A foam 71% better than water.

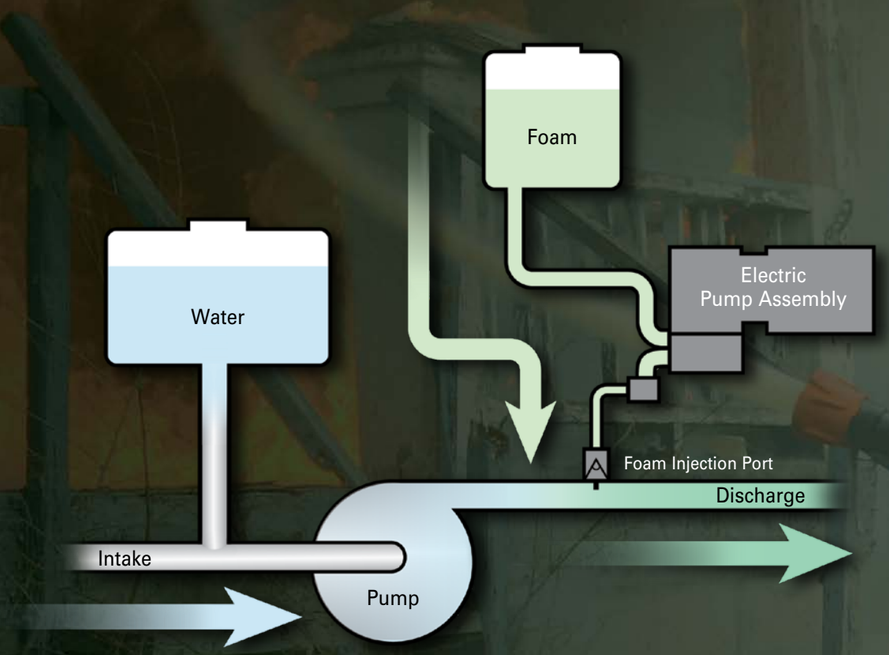


Water: 320 gallons (1211 liters)*
Foam: 95 gallons (360 liters)
CAFS: 45 gallons (170 liters)
86% better than water
53% better than foam

* After 225 gallons (852 liters), IC ordered foam to aid overhaul

Comparison tests performed by Los Angeles County Fire Department on three identical 1100 sq./ft. homes demonstrate the powerful results of CAFS and Class A foam solution versus plain water.

DIRECT INJECTION



Direct injection foam proportioning systems add the foam concentrate downstream of the water pump. In this system, flushing of the water pump is not necessary.

Electric Systems





Leading off the FoamPro line, the 1600 series proportioning systems are specifically designed for Class A foam operations. The compact system features fully automatic foam proportioning, regardless of changes in flow or pressure, and delivers unmatched accuracy over the entire flow range. Proportioning is continuous with no need to stop for foam tank refill. The panel-mounted control module provides simple operation at the flip of a switch and offers easy selection of foam percentage. Foam concentrate is delivered by a twin plunger pump coupled to a 1/3 HP motor (12 or 24 VDC). Also included is a flow sensor (choice of 1-1/2" with 1" bore, 1-1/2" or 2"), strainer, foam injection check valve, complete shielded cable set, and RFI/EMI suppression kit. The 1600 Model is engineered for greater capacity while the 1601 Model is specifically designed for extended ultra-low flow applications.

1600 SERIES

(Class A Foam Only)

Ideal for use on:

- Brush rigs/skid units
- Fast attack/wildland vehicles
- Municipal apparatus
- Compressed Air Foam Systems

System features and benefits:

- 3' Lift Capability
- Fully automatic-on demand
- Discharge side injection
- No in-line restrictions, greater flow
- Unmatched accuracy over the widest range of flow
- Smoothest proportioning available at ultra-low flow
- Leading the industry in proven reliability
- For use with all Class A concentrates
- Delivers 0.1 to 1.7 gpm (.38 to 6.4 LPM) of concentrate
- Injection pressure to 400 psi (28 BAR)
- Installs easily in new or existing apparatus

Control module features:

- Improved control head design
- Injection percentage from 0.1% to 1.0%
- On/Off control
- Foam percentage selector
- Low concentrate warning indicator
- No concentrate warning indicator
- Simulated flow - auto disengage

Options:

- Remote Start/Stop for in-cab control
- Check valves
- Flow sensor/check valve manifold
- Solid state cont actor
- Low-Level Tank Sensor
- Remote simulated flow



Optional manifold & check valve pictured.

1600 Series

Foam Pump:	Twin Plunger Pump
Foam Output:	1.0 gpm @ 200 psi - (3.8 LPM @ 14 BAR) 1601 1.7 gpm @ 200 psi - (6.4 LPM @ 14 BAR) 1600
Lift Capability:	3 ft 1600/1601
Pump Motor:	1/3 hp (.25 Kw) 12 and 24 volt DC
Maximum Operating Pressure:	400 psi (28 BAR)
Maximum Operating Temperature:	160°F (71°C)
Maximum Amp Draw:	32 amps (1601) @ 12 volt DC 32 amps (1600) @ 12 volt DC 16 amps (1601) @ 24 volt DC 16 amps (1600) @ 24 volt DC

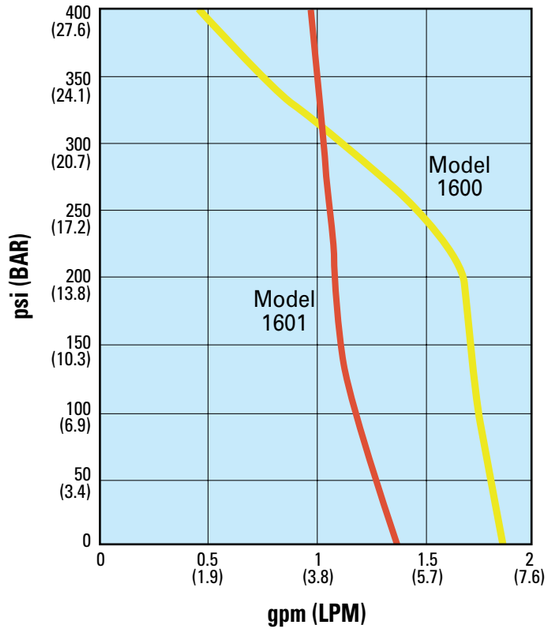
System Capacity

Foam Concentration	1601 Maximum Water Flow gpm (LPM)	1600 Maximum Water Flow gpm (LPM)
0.2%	500 (1893)	850 (3218)
0.5%	200 (757)	340 (1287)
1.0%	100 (379)	170 (644)

1600 Series Attack Capability

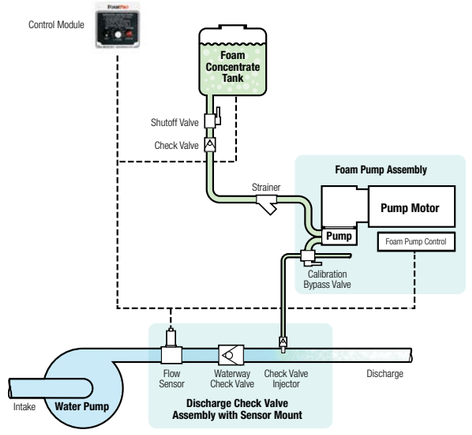
Class A Foam Concentration	1601 Maximum Coverage per Critical Application Rate (Iowa Formula) cu. ft (cu. m)	1600 Maximum Coverage per Critical Application Rate (Iowa Formula) cu. ft (cu. m)
0.2%	50000 (1415)	85000 (2406)
0.5%	20000 (566)	34000 (962)
1.0%	10000 (283)	17000 (481)

Performance for 1600 Series

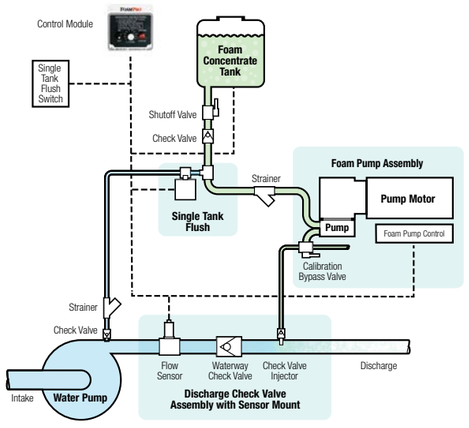


System Diagrams

1600 Series



1600 Series with Single Tank Flush





Designed for Class A and Class B foam applications, the 2000 series of proportioners delivers greater flow capabilities than the 1600 series. In addition, the panel-mounted digital control module offers easy to use, push button control. Real time flow and proportioning performance information is displayed by ultra-bright LED readouts. The system features fully automatic foam proportioning, regardless of changes in flow or pressure, and delivers unmatched accuracy over the entire flow range. Proportioning is continuous with no need to stop for foam tank refill. Three models are available, differing in concentrate capacity: the 2001 at 2.6 gpm (9.8 LPM), the 2002 at 5.0 gpm (19 LPM). Foam concentrate is delivered by a triplex plunger pump and motor (12 or 24 VDC) assembly. The optional advanced feature controller offers “auto-on” programming.

2000 SERIES

(Class A and/or B Foam)

Ideal for use on:

- Municipal pumpers
- Fast attack/wildland vehicles
- Marine and shipboard system
- Compressed Air Foam Systems

System features and benefits:

- Fully automatic-on demand
- Discharge side injection
- No in-line restrictions, greater flow
- Unmatched accuracy over the widest range of flow
- Smoothest proportioning available at ultra-low flow
- Leading the industry in proven reliability
- Proportions continuously, with no stopping to refill
- Delivers 0.01 to 5.0 gpm (0.38 - 19 LPM)
- Injection pressure to 400 psi (28 BAR)
- Achieves full pump capacity with all known Class A, Class B, AFFF, and most Class B AR-AFFF
- Installs easily in new or existing apparatus

Control module features:

- Ultra-bright LED digital readout
- Injection percentage from 0.1% to 10.0%
- Display following information:
  - Low concentrate/ No concentrate warning
  - Water flow rate
  - Total water used
  - Injection percentage
  - Total concentrate used
- Dual-tank capability and calibration
- Displays separate totals for each tank
- Calibrate for each concentrate

Options:

- Concentrate Management Systems
- Advanced Feature Controller - Auto On
- MultiFlo
- Remote Start/Stop for pump and roll applications
- Dual-Injection Selector
- Solid State Contactor
- Flow sensors, check valves, manifolds
- Low-Level Sensors



Low-level sensor, flow sensor & check valve pictured.

2000 Series

Foam Pump	Triplex Plunger Pump
Foam Output	2.6 gpm @ 150 psi - (9.8 LPM @ 10 BAR) 2001 5.0 gpm @ 125 psi - (19 LPM @ 9 BAR) 2002
Pump Motor	1/2 hp (.40 Kw) 12 and 24 volt DC - 2001 3/4 hp (.56 Kw) 12 and 24 volt DC - 2002
Maximum Operating Pressure	400 psi (28 BAR) STD 600 psi (40 BAR) Optional
Maximum Operating Temperature	160°F (71°C)
Maximum Amp Draw	41 amps @ 12 volt DC - 2001 60 amps @ 12 volt DC - 2002 22 amps @ 24 volt DC - 2001 30 amps @ 24 volt DC - 2002

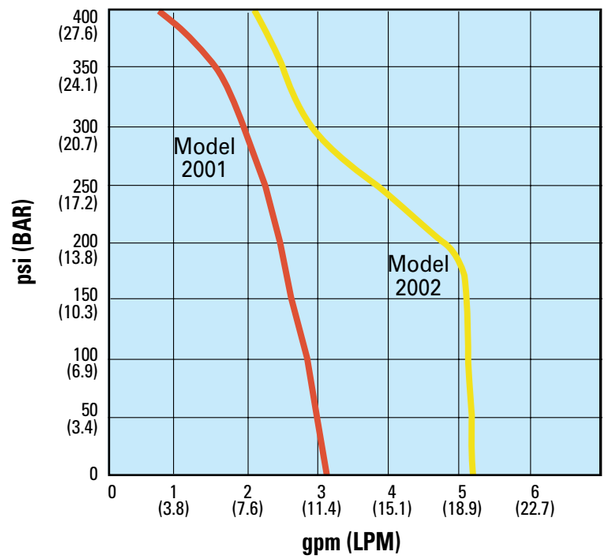
System Capacity

Foam Concentration	2001 Maximum Water Flow gpm (LPM)	2002 Maximum Water Flow gpm (LPM)
0.2%	1300 (4921)	2500 (9464)
0.5%	520 (1968)	1000 (3785)
1.0%	260 (984)	500 (1893)
3.0%	85 (322)	166 (628)

2000 Series Attack Capability

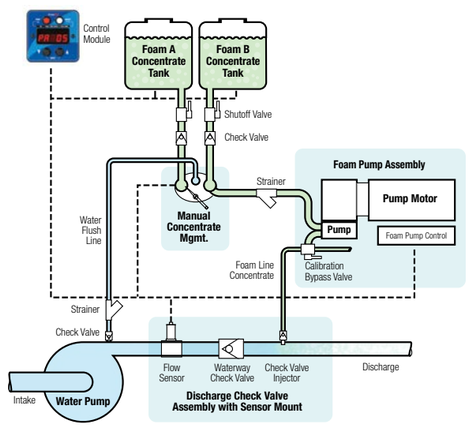
Class A Foam Concentration cu.ft. (cu.m)	2001 Maximum Coverage per Critical Application Rate cu.ft. (cu.m)	2002 Maximum Coverage per Critical Application Rate cu.ft. (cu.m)
0.2%	130000 (3681)	250000 (7079)
0.5%	52000 (1472)	100000 (2831)
1.0%	26000 (736)	50000 (1415)
Class B Foam Concentration	**Hydrocarbon @ 0.10 gpm/sq.ft. (0.37854 LPM/sq.m) sq. ft (sq. m)**	
1.0%	2600 (241)	5000 (464)
3.0%	850 sq. (78)	1660 (154)
	Polar Solvent @ 0.20 gpm/sq.ft. (0.757 LPM/sq.m)	
3.0%	425 (39)	830 (77)

Performance for 2000 Series

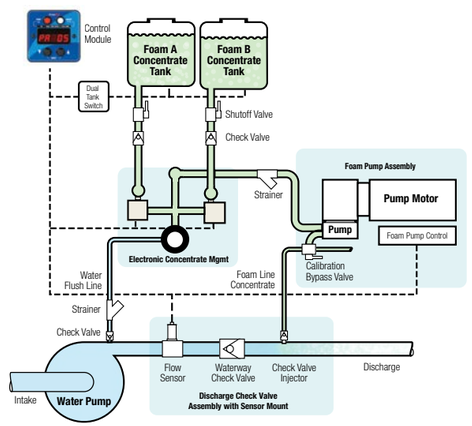


System Diagrams

2000 Series with Manual Concentrate Mgmt System



2000 Series with Electronic Concentrate Mgmt System



CLASS A AND/OR B FOAM

THE ULTIMATE IN FOAM TECHNOLOGY



TurboFoam is a direct injection foam proportioning system that is available in several models with a variety of features, options, and accessories. With accurate foam proportioning for both Class A and/or Class B applications, TurboFoam provides an all-in-one design for complete foam management. The unique preset feature allows for simple foam operation while the integrated digital displays and smart features provide greater versatility. The foam pump assembly includes the pump and electric motor along with the foam pump control box. Six pump sizes are available: 1.6 gpm (6 LPM), 2.6 gpm (9.8 LPM), 5.0 gpm (19.0 LPM), 6.2 gpm (23.5 LPM), and 6.5 gpm (25.0 LPM) (with 24 VDC systems only).

SINGLE-POINT INJECTION

TurboFoam

TURBOFOAM™ SERIES

(Class A and/or B Foam)

Ideal for use on:

- Municipal fire
- Brush fire
- Forestry fire fighting apparatus

System features and benefits:

- LED digital readout
- USB port interface
- Over 30 programmable codes
- Service reminders
- Pump pressure relief valve
- Foam tank low and empty warnings
- Time remaining for operation at current concentrate usage display

Control module features:

- On/Off button with LED indicator
- Flow rate display
- Electronic flush (TFC300/400 Only)
- Preset foam percent
- Foam percent display
- Push button control
- Dual tank selector (TFC 400 only)

Options:

- Manual ABF selector
- TankVision or tank float switch
- Discharge check valve assembly
- Remote ON/OFF switch
- Paddle wheel flow sensors



Optional TankVision & Manual ABF Selector pictured.

A SOLUTION FOR ALL FOAM APPLICATIONS



TFC100

The simplest system, this control is for use with a single foam tank. A single 4-digit display and four LED indicators provide system information to the operator. A mode button is used to toggle the display to view foam percent, water flow, or flow totaling.





TFC200

Flexible programming allows this control to be used with a single foam tank or in a two foam tank system when the manual ABF selector option is installed.





TFC300

This control is for use with a single foam tank and includes an electric valve to provide electronic flush control. A flush button with an LED indicator on the control module operates the flush valve.





TFC400

This control is for use with two foam tanks and includes the 3-valve electric ABF selector to provide automatic electronic flush control. A flush button with LED indicator and an A/B button with foam A and foam B indicator LEDs on the control module operate the ABF selector.

5 Pump Sizes Get The Job Done

1.6 gpm (6.0 LPM), 2.6 gpm (9.8 LPM), 5.0 gpm (19.0 LPM), 6.2 gpm (23.5 LPM), 6.5 gpm (25.0 LPM) with 24 VDC systems only



TurboFoam

FOAM INNOVATIONS

The foam pump assembly includes the pump and electric motor along with the foam pump control box. The calibration bypass valve and a pressure relief valve are included as part of this assembly.

Triplex Plunger Pump

- Viton seals
- Die cast bodies
- Forged brass heads
- Solid ceramic plungers
- Oil level sight glass
- Oil reservoir vented cap/dip stick
- Oversized roller bearings
- Anodized cast cooling fins

Electric Motor

- Designed for use in wet environment
- Moisture-resistant interior components
- Durable white epoxy coating
- Endshield drains
- RPM sensor
- Stainless steel shaft
- Built-in cooling fan (3/4 & 1 HP motors only)

Foam Pump Control

- Motor power input terminals
- Motor speed control circuits
- RPM sensor input
- System interface
- Sealed against water infiltration

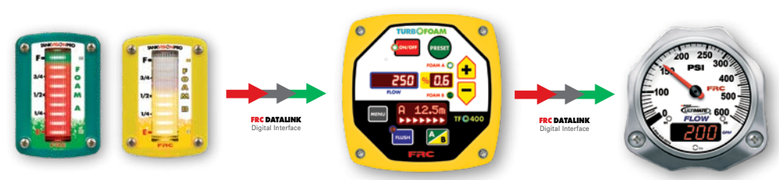
Pressure Relief Valve

- Factory set for 400 psi (28 BAR)
- Adjustable when required

Calibration Bypass Valve

- Calibrated using operational concentrate
- Concentrate is returned to system, no waste

TurboFoam Interfaces with TankVision and Insight Ultimate via Datalink.



- Provides accurate monitoring of foam tank volume
- Displays low foam tank warning
- Supplies tank empty information
- Displays time remaining for operation at current concentrate usage
- Capable of dual tank monitoring

TurboFoam Series

Pump Sizes gpm (LPM)	1.6 (6.0)	2.6 (9.8)	5.0 (19)	6.2 (23.5)	6.5 (25)
Motor Size (horsepower)	1/3	1/2	1	1	1
DC Voltage	12 or 24	12 or 24	12 or 24	12	24
Maximum Current (Amps)	36 or 18	50 or 25	78 or 39	90	45
Maximum Operating Pressure psi (BAR)	400 (28)	400 (28)	400 (28)	400 (28)	400 (28)

System Capacity

Foam Concentration	TFC16 Max. Water Flow gpm (LPM)	TFC26 Max. Water Flow gpm (LPM)	TFC50 Max. Water Flow gpm (LPM)	TFC62 Max. Water Flow gpm (LPM)	TFC65 Max. Water Flow gpm (LPM)
0.2%	800 (3028)	1300 (4421)	2500 (9463)	3100 (11734)	3250 (12301)
0.5%	320 (1211)	520 (1968)	1000 (3785)	1240 (4694)	1300 (4921)
1.0%	160 (606)	260 (984)	500 (1893)	620 (2347)	650 (2461)
3.0%	53 (202)	87 (328)	166 (628)	207 (782)	217 (820)
6.0%	27 (101)	43 (164)	83 (315)	103 (391)	108 (410)

TurboFoam Series Attack Capability

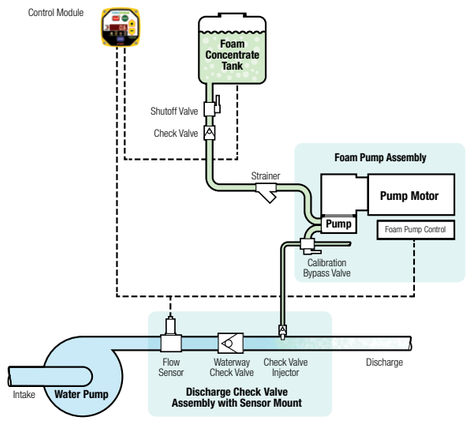
Class A Foam Concentration					
Maximum Coverage per Critical Application Rate (Iowa Formula)					
Foam Concentration	**TFC16 Max. Water Flow cu. ft (cu. m)**	**TFC26 Max. Water Flow cu. ft (cu. m)**	**TFC50 Max. Water Flow cu. ft (cu. m)**	**TFC62 Max. Water Flow cu. ft (cu. m)**	**TFC65 Max. Water Flow cu. ft (cu. m)**
0.2%	80,000 (2265)	130000 (3681)	250000 (7079)	310000 (8778)	325000 (9203)
0.5%	32000 (906)	52000 (1472)	100000 (2832)	124000 (3511)	130000 (3681)
1.0%	16000 (453)	26000 (736)	50000 (1416)	62000 (1756)	65000 (1841)

Class B Foam Concentration					
Hydrocarbon @ 0.10 gpm/sq.ft (0.37854 LPM/sq.m)					
Foam Concentration	**TFC16 sq. ft (sq. m)**	**TFC26 sq. ft (sq. m)**	**TFC50 sq. ft (sq. m)**	**TFC62 sq. ft (sq. m)**	**TFC65 sq. ft (sq. m)**
1.0%	1600 (149)	2600 (242)	5000 (465)	6200 (576)	6500 (604)
3.0%	530 (49)	870 (81)	1660 (154)	2070 (192)	2170 (202)
6.0%	270 (25)	430 (40)	830 (77)	1030 (96)	1080 (100)
Polar Solvent @0.20 gpm/sq.ft (0.757 LPM/sq.m)					
3.0%	265 (25)	435 (40)	830 (77)	1035 (96)	1085 (100)
6.0%	135 (13)	215 (20)	415 (39)	515 (48)	540 (50)

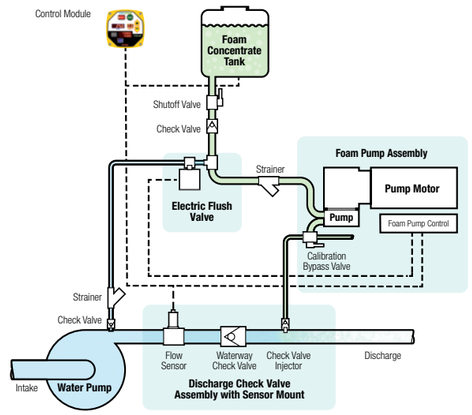
TURBOFOAM

Single Tank Systems

TFC100/TFC200



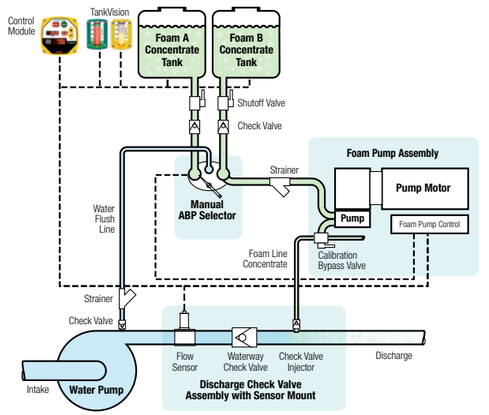
TFC100/TFC200/TFC300 with Electric Flush Valve



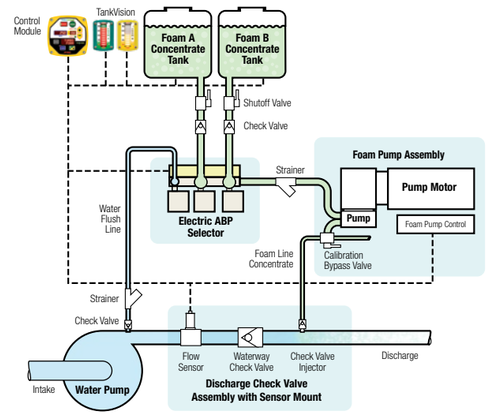
*TFC100/200 requires installation of a remote flush switch.

Dual Tank Systems

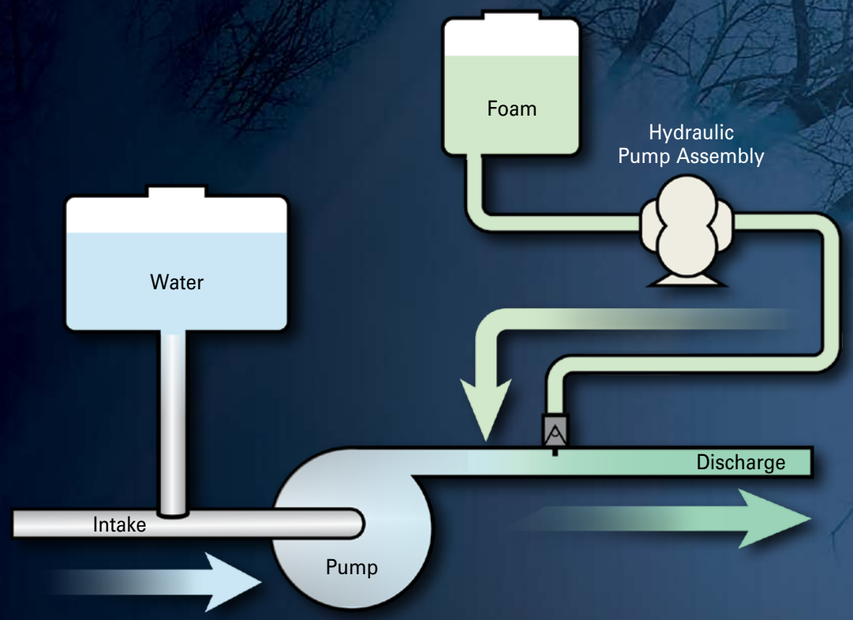
TFC200 with Manual ABF Selector



TFC400 with Electric ABF Selector



DIRECT INJECTION



Direct injection foam proportioning systems add the foam concentrate downstream of the water pump. In this system, flushing of the water pump is not necessary.



Hydraulic Systems



Greater Class A and Class B firefighting power is at your fingertips with the FoamPro Model 3012 proportioner. This versatile system delivers unmatched, supercharged performance with concentrate flow from 0.1 to 12.0 gpm (.38 to 45.0 LPM) at 0-400 psi (0-28 BAR), all from a single pump. High drafting capabilities allow off-board pickup for foam operations or tank refill, which is crucial for higher flow demands or when changing concentrates. Unlike other pump designs that may pause in flow during operation, FoamPro's triplex plungers are timed to discharge one after the other delivering smooth, continuous injection. The hydraulic pump drive and microprocessor control technology delivers extremely accurate concentrate injection from minimum flow to full capacity. The system includes the same industry-proven, ultra-bright LED digital display/control module used on FoamPro 2000 series proportioning systems.

3012 SERIES

(Class A and/or B Foam)

Ideal for use on:

- Municipal pumpers
- Aerials
- Marine and shipboard systems
- Compressed Air Foam Systems

System features and benefits:

- Fully automatic-on demand
- Discharge side injection
- No in-line restrictions, greater flow
- Unmatched accuracy over the widest range of flow
- Smoothest proportioning available at ultra-low flow
- Leading the industry in proven reliability
- Proportions continuously, with no stopping to refill
- Industry's highest capacity Class A/B system
- Variable displacement hydraulic pump
- Delivers 0.1 to 12.0 gpm (0.38 - 45.0 LPM)
- Injection pressure to 400 psi (28 BAR)
- Achieves full pump capacity with all known Class A, Class B AFFF and most Class B AR-AFFF
- Installs easily in new or existing apparatus

Control module features:

- Ultra-bright LED digital readout
- Injection percentage from 0.1% to 10.0%
- Display following information:
  - Low concentrate/ No concentrate warning
  - Water flow rate
  - Total water used
  - Injection percentage
  - Total concentrate used
- Dual-tank capability
- Displays separate totals for each tank
- Calibrate for each concentrate

Options:

- Concentrate management systems
- Advanced feature controller - auto on
- MultiFlo
- Remote start/stop for pump and roll applications
- Dual-Injection selector
- Solid state contactor
- Flow sensors, check valves, manifolds
- Low-Level sensors
- Manual Override
- Single tank and off-board pickup



Low-level sensor, flow sensor and check valve pictured.

Model 3012

Foam Pump	Triplex Plunger
Foam Output gpm (LPM) @ 200 psi	0.1-12.0 (0.38-45.0)
Maximum Operating Pressure psi (BAR)	400 (28)
Maximum Operating Temperature °F (°C)	160 (71)
Pump Motor	Hydraulic
Hydraulic Supply Oil Pressure psi (BAR)	1250 (86.2)
Hydraulic Supply Oil Flow gpm (LPM)	12 (45.0)
Maximum Amp Draw	5

System Capacity

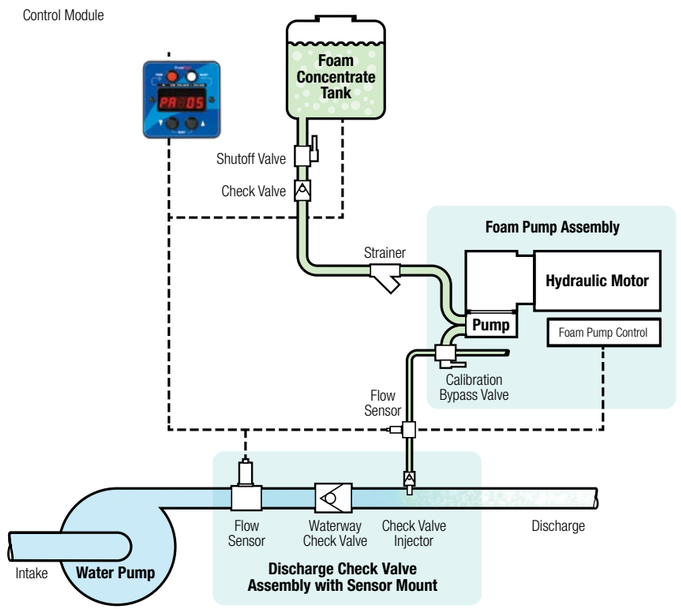
Foam Concentration	Maximum Water Flow gpm (LPM)	Foam Concentration	Maximum Water Flow gpm (LPM)
0.2%	6000 (22771)	1.0%	1200 (4542)
0.3%	4000 (15140)	3.0%	400 (1514)
0.5%	2400 (9084)	6.0%	200 (757)

Model 3012 Attack Capacity

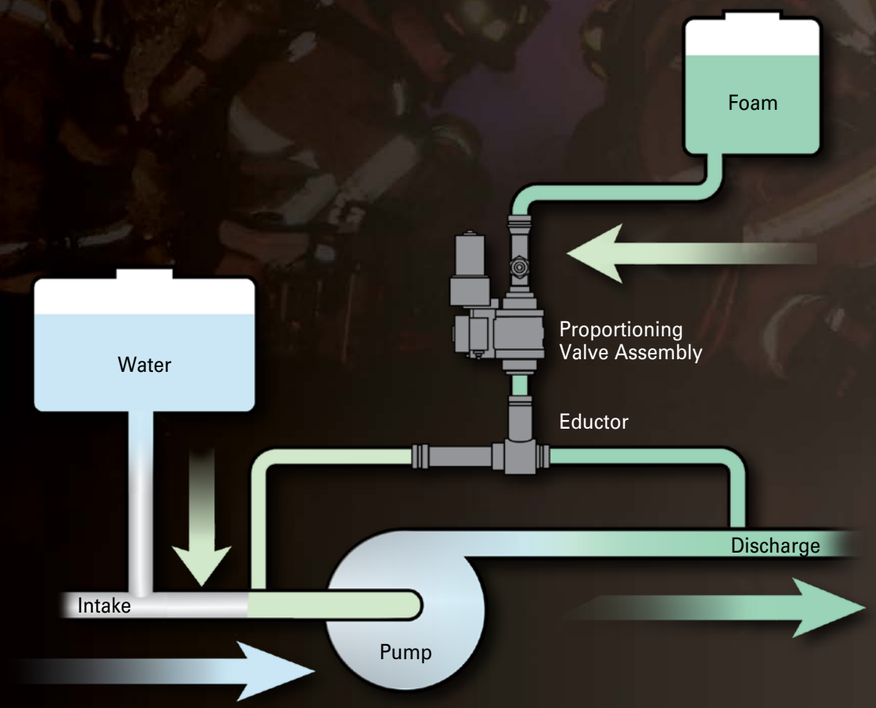
Class A Foam Concentration	3012 Maximum Coverage per Critical Application Rate (Iowa Formula) cu. ft (cu. m)
0.2%	600000 (16990)
0.5%	240000 (6796)
1.0%	120000 (3398)

Class B Foam Concentration	Hydrocarbon @ 0.10 gpm/sq.ft (0.37854 LPM/sq.m) sq. ft (sq. m)
1.0%	12000 (1114)
3.0%	4000 (371)
6.0%	2000 (185)
	Polar Solvent @ 0.20 gpm /sq.ft. (0.757 LPM/sq.m)
3.0%	2000 (185)
6.0%	1000 (92)

System Diagram



AROUND THE PUMP



These systems do not require a foam concentrate pump, which will reduce maintenance over the life of the vehicle. When the foam system is activated, the foam concentrate will be drawn into the suction side of the pump, allowing the solution to be discharged. Around the Pump systems allow for very large foam discharge rates at a more economical cost.

Automatic/
Manual Systems







Foam Output

Foam Concentration	FSB015	FSB030	FSB060	FSB120	FSB240
Max. flow rate in gpm (LPM)	15 (60 LPM)	30 (115 LPM)	60 (230 LPM)	120 (460 LPM)	240 (910 LPM)

System Capacity

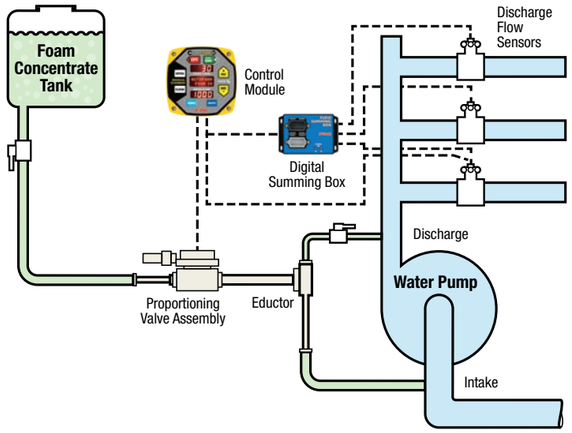
Foam Concentration	FSB015 Maximum Water Flow gpm (LPM)	FSB030 Maximum Water Flow gpm (LPM)	FSB060 Maximum Water Flow gpm (LPM)	FSB120 Maximum Water Flow gpm (LPM)	FSB240 Maximum Water Flow gpm (LPM)
1.0%	1500 (5678)	3000 (11355)	6000 (22710)	12000 (45420)	24000 (90840)
3.0%	500 (1893)	1000 (3785)	2000 (7570)	4000 (15141)	8000 (30283)
6.0%	250 (946)	500 (1892)	1000 (3785)	2000 (7570)	4000 (15141)

AutoFoam SC Attack Capability

Class B Foam Concentration					
Hydrocarbon @ 0.10 gpm/sq. ft (0.37854 LPM/sq. m)					
Foam Concentration	**FSB 015 sq. ft (sq. m)**	**FSB030 sq. ft (sq. m)**	**FSB060 sq. ft (sq. m)**	**FSB120 sq. ft (sq. m)**	**FSB240 sq. ft (sq. m)**
1.0%	15000 (1394)	30000 (2787)	60000 (5574)	120000 (11148)	240000 (22297)
3.0%	5000 (465)	10000 (929)	20000 (1858)	40000 (3716)	80000 (7432)
6.0%	2500 (232)	5000 (465)	10000 (929)	20000 (1858)	40000 (3716)

Class B Foam Concentration					
Polar Solvent @ 0.10 gpm/sq.ft (0.757 LPM/sq.m)					
Foam Concentration	**FSB 015 sq. ft (sq. m)**	**FSB030 sq. ft (sq. m)**	**FSB060 sq. ft (sq. m)**	**FSB120 sq. ft (sq. m)**	**FSB240 sq. ft (sq. m)**
3.0%	2500 (232)	5000 (465)	10000 (929)	20000 (1858)	40000 (3716)
6.0%	1250 (116)	2500 (232)	5000 (465)	10000 (929)	20000 (1858)

System Diagram



AUTOFOAM SERIES

Complete automatic proportioning for Class B foam

Ideal for use on:

- Municipal Fire Apparatus
- Airport Rescue and Fire Fighting Apparatus
- Industrial Fire Apparatus
- Compressed Air Foam Systems

The AutoFoam around-the-pump system provides complete automatic proportioning for Class B foam. The operator selects a foam percent mixture and the solution provides a consistent foam solution at all discharges regardless of water flow fluctuations. A microprocessor controls the proportioning valve to automatically maintain accurate control over foam concentrate flow rates. The operator can override automatic operation by using the manual override buttons to control the proportioning valve. All operations, programming, and calibration are accomplished using the control module. Calibration for the system is stored in memory on each of the major components. This allows for the replacement of components without recalibration of the system.

System features

- Push button control
- Flow totaling for both foam concentrate and water
- Powers-up at the previous proportioning percent
- Manual override
- Remote Auto/Off switch (Optional)
- Built-in diagnostics

Control module features

- Current water flow
- Total amount of foam concentrate flow
- Foam concentrate left in tank (input required from TankVision display)
- Percent the valve is open
- Stored faults with date and time using the INC and DEC buttons to scroll

Options

- Multiple discharge sensors
- Flow rates displayed in LPM
- Remote Auto/Off switch





System Capacity

Foam Concentration	MFA200 Maximum Water Flow gpm (LPM)	MFA201 Maximum Water Flow gpm (LPM)	MFA220 Maximum Water Flow gpm (LPM)		MFA315 Maximum Water Flow gpm (LPM)	MFA342 Maximum Water Flow gpm (LPM)	MFA320 Maximum Water Flow gpm (LPM)	
Concentration	Class A	Class B	Class A	Class B	Class A	Class B	Class A	Class B
0.25%	2000 (7570)	N/A	2000 (7570)	N/A	N/A	N/A	N/A	N/A
0.5%	1000 (3785)	N/A	1000 (3785)	N/A	3000 (11356)	N/A	3000 (11356)	N/A
1.0%	500 (1892)	N/A	500 (1892)	N/A	1500 (5678)	N/A	1500 (5678)	N/A
3.0%	N/A	1000 (3785)	N/A	1000 (3785)	N/A	1400 (5299)	N/A	1400 (5299)
6.0%	N/A	500 (1892)	N/A	500 (1892)	N/A	700 (2649)	N/A	700 (2649)

Class A Foam Concentration

Maximum Coverage per Critical Application Rate (Iowa Formula)

Foam Concentration	MFA201 Max. Water Flow cu. ft (cu. m)	MFA220 Max. Water Flow cu. ft (cu. m)	MFA342 Max. Water Flow cu. ft (cu. m)	MFA320 Max. Water Flow cu. ft (cu. m)
0.25%	200000 (5663)	200000 (5663)	N/A	N/A
0.5%	100000 (2831)	100000 (2831)	300000 (8495)	300000 (8495)
1.0%	50000 (1415)	50000 (1415)	150000 (4247)	150000 (4247)

Class B Foam Concentration

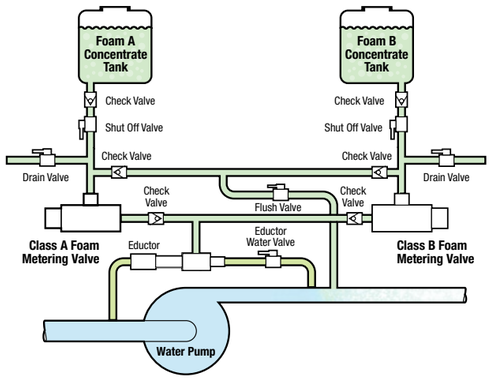
Hydrocarbon @ 0.10 gpm/sq. ft (0.37854 LPM/sq. m)

Foam Concentration	MFA201 sq. ft (sq. m)	MFA220 sq. ft (sq. m)	MFA342 sq. ft (sq. m)	MFA320 sq. ft (sq. m)
3.0%	10000 (929)	10000 (929)	14000 (1300)	14000 (1300)
6.0%	5000 (465)	5000 (465)	7000 (650)	7000 (650)

Polar Solvent @ 0.20 gpm/sq.ft (0.757 LPM/sq.m)

3.0%	5000 (465)	5000 (465)	7000 (650)	7000 (650)
6.0%	2500 (232)	2500 (232)	3500 (325)	3500 (325)

System Diagram



MANUAL FOAM SERIES

Manual proportioning for Class A or B foam

Many departments may not be able to justify the cost of a complicated electronic foam system. A simple and cost effective way to provide your fire fighting vehicles with Class A and/or Class B foam is with an around-the-pump, manual foam system like this. Specially engineered, highly efficient eductors and laser cut metering valve orifices are the key to these high performance systems. Many manual systems on the market today can't deliver foam at these rates.

System Features

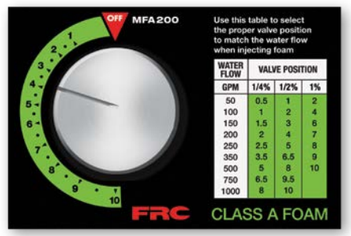
- Economical foam system provides the most foam for the lowest cost
- Operator selected setting for correct foam flow in seconds
- Adjusts foam up or down quickly for all situations
- Wide operating range
- Proven reliable for high flow operations

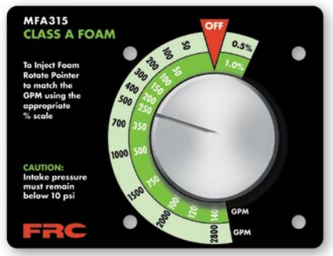
MFA200 Series Panel features

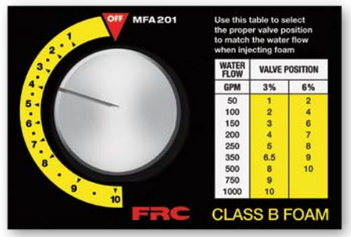
- Printed table on the face of the unit helps determine the required value setting
- Class A Foam System metering valve provides foam proportioning of 1/4%, 1/2%, and 1%.
- Class B Foam System metering valve provides foam proportioning of 3% and 6%.

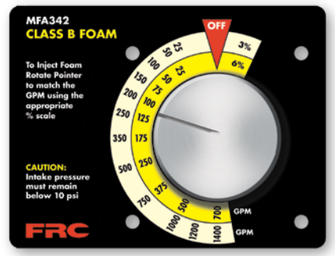
MFA300 Series Panel features

- The required valve setting is simply set by adjusting the control knob to the discharge water flow (no table to reference).
- Class A Foam System metering valve provides foam proportioning of 1/2%, and 1%.
- Class B Foam System metering valve provides foam proportioning of 3% and 6%.









SPECIALTY FOAM



Mobile/Fill Systems



Compact and self-contained, the Turbo Stream produces high energy firefighting power with ease and precision. Available with PowerPro™ brand, or Honda gas engine drives. While other systems use inaccurate suction side eductors, Turbo Stream incorporates a patented foam concentrate injector system. The control module allows the operator to choose injection rates, from 0.3% to 3.0%, with unmatched accuracy, exceeding NFPA 1900 requirements.

TURBO STREAM®

Ideal for use on:

- Brush rigs
- ATV/RTV utility apparatus
- Fast attack vehicles
- Wildland trucks

Combined Features and Benefits:

- Delivers 8 gpm (30 LPM) of solution @ 1400 psi (96.5 BAR)
- Triplex plunger pump provides dependability and high pressure performance
- Ideal for use with all Class A concentrates
- Adjustable control provides unmatched accuracy over the widest range of flow
- Dual-action spray gun delivers foam solution over 45 feet (13 meters)
- Thermal relief valve prevents overheating during extended idle
- Installs easily in new or existing apparatus
- Capable of drafting water up to 6' (1.8M) and foam to 3' (.9M)

System Includes:

- Dual-Action spray gun
- PowerPro™ electric start or Honda electric start
- Triplex plunger pump
- Precision foam control 0.3% - 3.0%
- Concentrate injector
- Intake check valve
- Over-Pressure protection
- Low-Oil sensor

Control Module Features:

- Foam percentage selector
- Injection percentage from 0.3% to 3.0%
- Visual foam flow confirmation

Options:

- Foam tanks available in 8, 12, 20 gallons (30, 45, 75 liters)
- Low pressure gun tips
- Custom flows and pressures

Drive Options:

- PowerPro™ electric-start gas engine
- Honda electric-start gas engine





FoamPro, the industry leader, offers two refill systems, truck-mounted (12 or 24 VDC/240) and a portable 110/240 AC, that perfectly complement foam operations on your apparatus. Power-Fill is an electronically-controlled, pre-plumbed, self-priming, concentrate refill system that will save you time and increase the safety of your firefighters. With the simple push of a button or switch, our refill systems quickly reload on-board foam cells without messy spillage. Most importantly, Power-Fill safely eliminates awkward and strenuous lifting of concentrate containers and allows easier transfer from totes. These systems will fill even the largest tanks quickly and efficiently. The high drafting, non-corrosive pump, is compatible with all concentrates and viscosities currently used.

POWER-FILL™

Truck-Mounted System
12 or 24 VDC. Capable to 11 gpm (41 LPM)

The system operates by attaching a suction hose to a pre-plumbed panel connection using a cam-lock fitting. The pick-up wand is then placed in the concentrate container. The operator simply pushes a button to engage the pumping system, which automatically fills and stops when the tank is full. An indicator light notifies the operator that the operation is complete. Even though the system recognizes a full cell, the manual override feature will engage the concentrate pump momentarily, allowing the operator to fully empty the container. System is equipped with fresh water-flush capabilities.

System includes:

- High-capacity concentrate pump
- Continuous-duty 12 or 24 VDC motor
- Electronic microprocessor control
- Flush valve and panel plate
- 1" concentrate pick-up wand and 6' (1.8 M) suction hose

Portable System AC systems
110/240 AC capable of up to 18 gpm (68 LPM) for station use

The portable system is a remote operation that utilizes pre-plumbed, on-board piping. Connection of the discharge hose to the foam inlet is made with a cam-lock fitting. The pick-up wand on the suction side of the pump is placed in the concentrate container. To initiate refill, operator depresses momentary switch to engage the 110/240 AC pump. The tank is automatically filled and provides visual indication when complete. Carrying handle allows ease of transportation within the station or in the field.

System includes:

- High-capacity concentrate pump
- Continuous duty 110/240 AC motor with carrying handle
- GFI electrical cord with momentary switch
- Panel plate
- Indicator light
- Stainless fittings and cap
- 1" concentrate pick-up wand and 6' (1.8 M) suction hose

Combined Features and Benefits:

- Increased firefighter safety
- Saves time for team members
- Indicators provide system status
- Conveniently-mounted connections and controls
- Easily handles all concentrates
- Automatic system incorporates flush mode
- Compatible with all size totes and containers
- System reliability from a proven industry leader
- Up to 10' (3M) lift capability



Note: To avoid contamination, apparatus with multiple concentrate cells require a pumping system for each tank.

DESIGNING A SYSTEM

Specifying a 1600, 2000, or 3012 System

Your maximum and minimum flows and pressures for all discharges supplied with foam.	Example: Maximum: One deck gun: 500 gpm (1893 LPM) at 150 psi (10 BAR) Minimum: One 1-1/2 line flowing 35 gpm (132.5 LPM) (mop-up), = 35 gpm (132.5 LPM) at 100 psi (7 BAR)
Determine the maximum and minimum foam concentrate levels that must be provided.	Example: Maximum: 1.0% AFFF Minimum: 0.5% Class A
Determine the size of the proportioner needed.	Example: Maximum Concentrate Requirement = maximum flow x maximum concentration 500 gpm (1893 LPM) x 1.0% = 5.0 gpm (19 LPM) Example: Minimum Concentrate Requirement = minimum flow x minimum concentration 35 gpm (132.5 LPM) x 0.5% = 0.18 gpm (.68 LPM) Therefore, the FoamPro system must be capable of delivering 0.18 to 5.0 gpm (.68 - 19 LPM) of concentrate. According to the performance curve, the Model 2002 will meet these requirements.
Determine if the flow sensor and flow sensor tee for the plumbing size being used will cover the range of flows in the first step.	Example: A 3 diameter pipe will be used to supply these discharges. The 3 flow sensor will accurately read between 30 gpm (113.6 LPM) and 1,150 gpm (4,353 LPM). The required range is 35 gpm to 500 gpm (132.5 - 1,893 LPM). Therefore, one flow sensor in a 3 tee will handle the requirements. If the flows should exceed the capacity of the flow sensor tee, then the installation would require two or more appropriate size flow sensors and a MultiFlo.

Flow Sensor Tee



UNRESTRICTED FLOW

Assy. Part Number	Size Tee (NPT)	Maximum Accuracy Flow Range	Maximum Operating Flow Range
2660-0030*	1-1/2"	5-110 gpm (19-416 LPM)	3-145 gpm (11.4-549 LPM)
2660-0031	1-1/2"	10-320 gpm (37.9-1,211 LPM)	3-380 gpm (11.4-1,438 LPM)
2660-0032	2"	15-520 gpm (56.8-1,968 LPM)	5-625 gpm (19-2,366 LPM)
2660-0033	2-1/2"	20-750 gpm (75.7-2,839 LPM)	8-900 gpm (30.3-3,407 LPM)
2660-0034	3"	30-1150 gpm (113.6-4,353 LPM)	12-1380 gpm (45.4-5,224 LPM)
2660-0035	4"	55-1980 gpm (208.2-7,495 LPM)	20-2380 gpm (75.7-9,009 LPM)

*1" I.D. bore

Manifold w/Check Valve



Assy. Part Number	Size Tee (NPT)	Maximum Accuracy Flow Range	Maximum Operating Flow Range
2660-0051	1-1/2"	10-320 gpm (38-1,211 LPM)	3-380 gpm (11-1,438 LPM)
2660-0052	2"	15-520 gpm (57-1,968 LPM)	5-625 gpm (19-2,366 LPM)
2660-0053	2-1/2"	20-750 gpm (76-2,839 LPM)	8-900 gpm (30.3-3,407 LPM
2660-0054	3"	30-1150 gpm (114-4,353 LPM)	12-1380 gpm (45-5,224 LPM)
2660-0055	4"	55-1980 gpm (208-7,495 LPM)	20-2380 gpm (75-9,010 LPM)

NOTE: FoamPro systems will pump all known Class A and Class B Aqueous Film Forming Foam (AFFF) to capacity. Many brands of Alcohol Resistant-Aqueous Film Forming Foam (AR-AFFF) exhibit higher viscosity characteristics due to chemical composition and polymers. As viscosity increases, diminished flow may affect pump performance. Because of numerous variables, including pump design, foam cell configuration, inlet piping/components, and system layout; please contact FoamPro for application-specific recommendations when foam viscosities of 2000 cps or higher are used.

Standard Components/Options

MODEL	1600	1601	2001	2002	3012
Dual Injector Selector (Requires MultiFlo)			o	o	o
Electric Concentrate Management System			o	o	o
Manual Concentrate Management System			o	o	
Remote Start/Stop	o	o	o	o	o
MultiFlo Interface			o	o	o
Advanced Feature Controller			o	o	o
System Schematic and Rating Placards	o	o	o	o	o
Flow Sensor and Tee	s	s	o	o	o
Main Waterway Check Valve	o	o	o	o	o
Low-Level Tank Sensor (Required)	o	o	o	o	o
Manifold Assembly	o	o	o	o	o
Concentrate Cell	o	o	o	o	
Solid State Contractor	o	o	o	o	o
Off-Board Pickup Kit				o	o
Remote Simulated Flow	o	o			

s = Standard **o** = Optional



Dual Injector Selector (Requires MultiFlo)

Allows choice of two different concentrate injection points. Ideal for high/low pressure fire pumps or high-flow (aerial/deluge), low-flow applications.

Available for models:

1600 Series	2000 Series	3012
	X	X



Electronic Concentrate Management System

Electronically-operated valve allows choice between two different concentrates. Flush mode prevents mixing, and interface with control head provides calibration and storage of performance results of each concentrate.

Available for models:

1600 Series	2000 Series	3012
	X	X



Manual Concentrate Management System

Manually-operated valve allows choice between two different concentrates. Flush mode prevents mixing, and interface with control head provides calibration and storage of performance results of each concentrate.

Available for models:

1600 Series	2000 Series	3012
	X	



Remote Start/Stop

Separately-mounted switch interfaces with digital control head allowing remote activation of the proportioner. Designed for in-cab pump & roll operations.

Available for models:

1600 Series	2000 Series	3012
X	X	X

Select Accessories and Options



MultiFlo Interface

Provides calibration and flow totals for up to four different discharges.

Available for models:

1600 Series	2000 Series	3012
X	X	X



Advanced Feature Controller

Provides programmable choice of activation of proportioning manually by push of ON button or automatically-ON with engagement of fire pump. Ideal for CAFS and SOP's directing foam use.

Available for models:

1600 Series	2000 Series	3012
X	X	X





System Schematic and Rating Placards

Attractive placard designed for the operator's panel, listing system ratings or system schematics.

Available for models:

1600 Series	2000 Series	3012
X	X	X



Flow Sensor and Tee

(Required 2000, 3000)

Paddlewheel flow sensor reads fire pump discharge flow without restricting performance. Thread sizes (NPT & BSP) available: 1-1/2", 2", 2-1/2", 3" and 4". Also machined for Victaulic coupling. An insertion paddlewheel flow sensor is available for pipe sizes larger than 4". Magnetic flow sensors are available upon request.

Available for models:

1600 Series	2000 Series	3012
Standard	X	X



Main Waterway Check Valve

Prevents backflow to fire pump. Stainless Steel components and construction, rated for 450 psi (31 BAR) with NPT thread size or victaulic grooves for 1-1/2", 2", 2-1/2", 3" and 4". Includes tapped injection and drain ports.

Available for models:

1600 Series	2000 Series	3012
X	X	X



Manifold Assembly

All stainless steel manifold incorporating flow sensor, check valve, injection and drain ports. Victaulic connections in 1-1/2", 2", 2-1/2", 3" and 4" reduce installation time.

Available for models:

1600 Series	2000 Series	3012
X	X	X

Select Accessories and Options

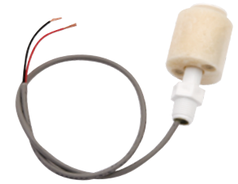


Concentrate Cell

Polypropylene concentrate tanks with one-way vented cap available in 8, 12, or 20 gallon (30, 45 or 70 liter) capacities.

Available for models:

1600 Series	2000 Series	3012
X	X	X



Low-Level Tank Sensor (Required)

Provides signal to display, notifying operator of low concentrate condition in foam cell. Available in top/bottom (shown above) or side mount.

Available for models:

1600 Series	2000 Series	3012
X	X	X



Solid State Contactor

Electronically-controlled DC power switch superior to mechanical solenoids. Longer life and remote start/stop capability.

Available for models:

1600 Series	2000 Series	3012
X	X	X



3012 Manual Override

Disengages automatic proportioning, allowing manual proportioning operation.

Available for models:

1600 Series	2000 Series	3012
		X



Off-Board Pickup Kit

Allows automatic on-demand selection of an on-board foam source or an off-board foam source. Provides automatic flushing when switching sources. Available in both a 1" for the 2002 and 1 1/2" for the 3012 system.

Available for models:

1600 Series	2000 Series	3012
	X*	X

*For 2002 model only.



Remote Simulated Flow

Separately mounted switch provides location flexibility for 1600 series simulated flow switch.

Available for models:

1600 Series	2000 Series	3012
X		

Specifying a TurboFoam System

Indicate TFC for TurboFoam	TFC _ _ _ - _ _ _ - _ _ _		Example
Select a Model	1 for 100 2 for 200	3 for 300 4 for 400	**TFC-4** _ _ - _ _ _ - _ _ _
Select a Pump Size	16 for 1.6 gpm (6.0 LPM) 26 for 2.6 gpm (9.8 LPM) 50 for 5.0 gpm (19 LPM)	62 for 6.2 gpm (23.5 LPM) 65 for 6.5 gpm (25.0 LPM)	**TFC-435 -** _ _ _ - _ _ _
Select a Power Supply & Unit of Measure	0 for 12 VDC & gpm 1 for 12 VDC & LPM	2 for 24 VDC & gpm 3 for 24 VDC & LPM	**TFC-435-0** _ _ - _ _ _
Select a Discharge Pipe Size	10 for 1.0" 15 for 1.5" 20 for 2.0" 25 for 2.5"	30 for 3.0" 35 for 3.5" 40 for 4.0" 50 for 5.0"	**TFC-435-025 -** _ _ _
Select Options	AB1 - Manual ABF EF0 - Electric Flush Valve FL1 - 1" Foam Tank Check Valve FM1 - Discharge Check Valve Assembly FM2 - Discharge Check Valve Assembly w/Sensor Mount FS2 - Tank Float Switch RS0 - Remote ON/OFF Switch AL1, PT1, SC1, SS1, ST1 - Flow Sensor Mount		**TFC-435-025-FM2RS0**

TurboFoam Standard Components/Options

MODEL	TFC116	TFC126	TFC150	TFC162	TFC165	TFC216	TFC226	TFC250	TFC262	TFC265	TFC316	TFC326	TFC350	TFC362	TFC365	TFC416	TFC426	TFC450	TFC462	TFC465
Manual ABF Selector						o	o	o	o	o										
Electric ABF Selector																s	s	s	s	s
Flow Sensor with Mount	s	s	s	s	s	s	s	s	s	s	s	s	s	s	s	s	s	s	s	s
Foam Tank Check Valve 3/4"	s	s				s	s													
Foam Tank Check Valve 1"	o	o	s	s	s	o	o	s	s	s	s	s	s	s	s	s	s	s	s	s
Foam Pump Input Strainer 3/4"	s	s				s	s													
Foam Pump Input Strainer 1"	o	o	s	s	s	o	o	s	s	s	s	s	s	s	s	s	s	s	s	s
Check Valve Injector 1/2"	s	s	s	s	s	s	s	s	s	s	s	s	s	s	s	s	s	s	s	s
Flush Line Strainer 1/2" 1	o	o	o	o	o	o	o	o	o	o	s	s	s	s	s	s	s	s	s	s
Flush Line Check Valve 1/2" 1	o	o	o	o	o	o	o	o	o	o	s	s	s	s	s	s	s	s	s	s
Electric Flush Valve	o	o	o	o	o	o	o	o	o	o	s	s	s	s	s					
Summing Box						o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
Discharge Check Valve Assy	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
Discharge Check Valve Assy with Flow Sensor Mount	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
Remote ON/OFF Switch	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
Tank Float Switch	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
BSP Fittings	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
B Foam Program Active 2	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o

s = Standard **o** = Optional

Notes: 1 The flush line strainer and check valve are standard when the Manual ABF Selector or B Foam Program options are included.
2 The standard control module is factory set with the A foam program active.

Select Accessories and Options



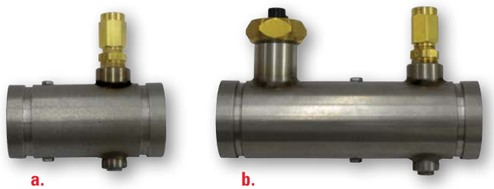
Electric ABF Selector

The electric ABF selector is standard on the TFC400 models. It allows the operator to select Class A foam, Class B foam, or flushing operations from the push buttons on the control module. The selector is installed between the foam tanks and the foam pump assembly intake and has an input for flush water. The electric model is made up of three electric valves mounted on a manifold that controls the flow of foam concentrate or flush water into the system. On each of the valve covers there is a dial indicator to show the valve position and an allen head screw that allows for manual adjustment of the valve position.

Remote ON/OFF Switch & Indicator

The remote switch and indicator mirrors the control module ON/OFF button and LED on the control module.





a. b.

a. Includes a water way check valve, check valve injector port, and a drain.

b. Includes a flow sensor mount, water way check valve, check valve injector port, and a drain.

Information Placards



These helpful informational reference placards provide capacity specifications, plumbing schematics, and operator instructions.



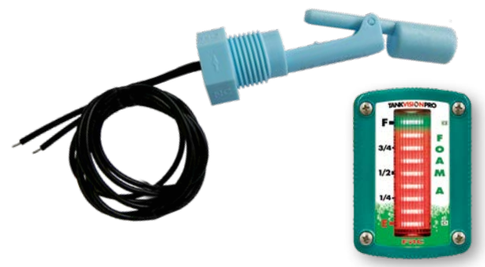
Manual ABF Selector

The manual ABF selector is an option with the TFC200 models. It allows the operator to select Class A foam, Class B foam, or Flushing operations by rotating the ABF selector handle. The selector is connected between the foam tanks and the foam pump assembly intake and has an input for flush water. Two check valves are included with this option that must be installed between the foam tanks and the selector.



Electric Flush Valve

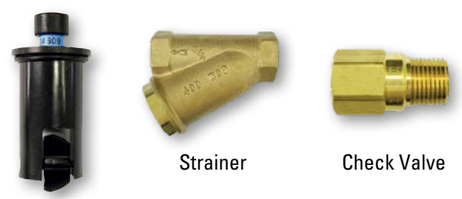
The electric valve is standard on the TFC300 models and an option with the TFC100/200 single tank systems. It is used to provide flush or prime capabilities for the concentrate pump.



TankVision or Tank Float Switch

A TankVision sensor or tank float switch is required to be installed in the foam tank to provide the tank empty signal to the control module. The TankVision is connected to the control module on the datalink and provides tank volume data. If a tank float switch is installed, it is connected to the tank empty inputs on the control module.

Plumbing Components



Strainer Check Valve

Paddlewheel Discharge Flow Sensor

Specifying an AutoFoam System

Kit Numbers	Description
FSB015-XXX	0.5 to 15 gpm (2 to 60 LPM) foam concentrate flow rate
FSB030-XXX	0.5 to 30 gpm (2 to 115 LPM) foam concentrate flow rate
FSB060-XXX	1.5 to 60 gpm (6 to 230 LPM) foam concentrate flow rate
FSB120-XXX	2.0 to 120 gpm ((7.5 to 460 LPM) foam concentrate flow rate
FSB240-XXX	10.0 to 240 gpm (38 to 910 LPM) foam concentrate flow rate

Standard Kit includes: control module, proportioning valve assembly, eductor, discharge flow sensor with mount, and cables.
For a kit with multiple discharges: XXX = Number of Discharges (002 to 008). The mount type and pipe diameter must be specified for each discharge.
For a kit with a single discharge: XXX = Pipe Diameter. Available diameter varies with mount type.

Select System Options

Flow Rates Displayed in LPM.
Discharge flow sensor mount pipe diameters (in inches) 01.0, 01.5, 02.0, 02.5, 03.0, 03.5, 04.0, 05.0, 06.0, 08.0
Discharge Flow Sensor Mounts

Kit Numbers	Description
-ST1	Saddle Clamp
-ST1	Weldment, Steel
-SS1	Weldment, Stainless
-AL1	Weldment, Aluminum
-PT1	Pipe Tee

To order a sensor mount with a flow conditioner, change the 1 to a 2. Example: -SC2 Saddle Clamp with flow conditioner.
Custom Spacer: Available, contact factory.

Select Flow Sensor Mounting Options

A. Saddle Clamps are the standard mountings for 2" through 6" pipe sizes.
B. Weldment fittings are available in aluminum, steel, and stainless steel.
C. Pipe Tee fittings are NPT threaded, ranging from 1" through 4" for applications where standard pipe fittings are the easiest solution


A.


B.


C.

Specifying a Manual Foam System

200 System Kit Numbers	300 System Kit Numbers	Description
MFA200	MFA315	Manual Foam System, Class A
MFA201	MFA342	Manual Foam System, Class B
MFA220	MFA320	Manual Foam System, Class A & B

Specifying a Turbo Stream® System

Model Number	Capacity gpm (LPM)	Pressure psi (BAR)	Drive Source	Fuel Type
S108-4008	8 (30)	1400 (96)	PowerPro™ 13 HP (9.7 kw)	Gas
S108-4008H	8 (30)	1400 (96)	Honda GX390 13 HP	Gas

System components include: PowerPro or Honda gas engine with electric and recoil start or hydraulic motor, triplex plunger pump, foam proportioner, pressure and thermal relief valves, and spray gun.

Specifying a Power-Fill™ Foam Refill System

Part Number	Description	Voltage
3435-0134	12 VDC Powered, On-board mounting	12
3435-0135	24 VDC Powered, On-board mounting	24
3435-0118	120 AC Powered, Complete portable	120
3435-0187	240 AC Powered, Complete portable	240
3435-0120	Panel Kit, Portable plumbing kit only	–

DC powered system components include: Concentrate pump and motor, panel-mount operator control unit, check valves, side-mount low-level sensor, panel-mount flush valve, placard and camlok intake connection, stainless steel pick-up wand with 6 foot suction hose, camlok fittings and cap.
AC powered system components include: Portable pump and motor with carrying handle, 25 foot electrical cord with GFI protection and control switch, check-valve, side-mount low-level sensor, panel-mount placard and camlok intake connection, stainless steel pick wand with 6 foot suction hose, camlok fittings, and cap.
Panel Kit includes: Check-valve, side-mount low-level sensor, panel-mount placard and camlok intake connection, and cap.



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