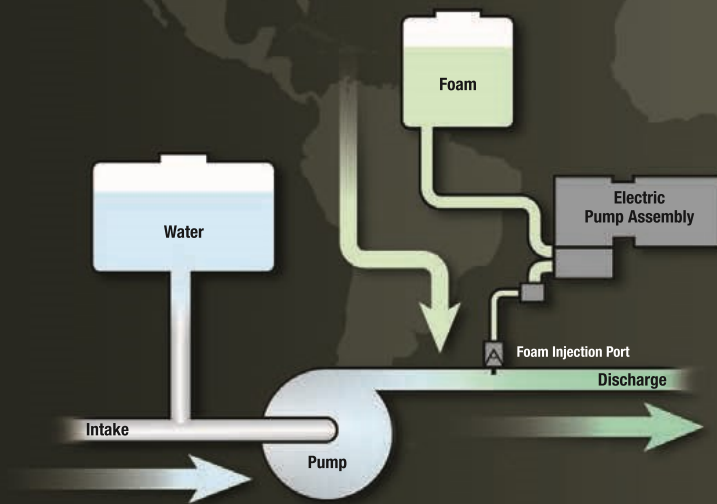


Direct Injection



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

FOAMPRO®
precision foam every time.

CLASS A FOAM



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.

SINGLE-POINT INJECTION

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 L/min) of concentrate
- Injection pressure to 400 psi (27.6 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 Contactor
- Low-Level Tank Sensor
- Remote simulated flow



Optional manifold & check valve pictured.

Series

1600

SPECIFICATIONS

1600 Series

Foam Pump:	Twin Plunger Pump
Foam Output:	1.0 gpm @ 200 psi - (3.8 L/min @ 13.8 BAR) 1601 1.7 gpm @ 200 psi - (6.4 L/min @ 13.8 BAR) 1600
Lift Capability:	3ft 1600/1601
Pump Motor:	1/3 hp (.25 Kw) 12 and 24 volt DC
Maximum Operating Pressure:	400 psi (27.6 BAR)
Maximum Operating Temperature:	160°F (71°C)
Maximum Amp Draw:	19 amps (1601) @ 12 volt DC 30 amps (1600) @ 12 volt DC 11 amps (1601) @ 24 volt DC 15 amps (1600) @ 24 volt DC

System Capacity

Foam Concentration	1601 Maximum Water Flow GPM (L/min)	1600 Maximum Water Flow GPM(L/min)
0.2%	500 (1,893)	850 (3,218)
0.5%	200 (757)	340 (1,287)
1.0%	100 (379)	170 (644)

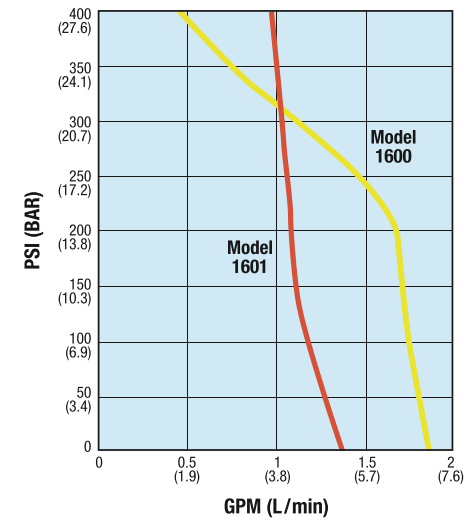
1600 Series Attack Capacity

Class A Foam Concentration	1601 Maximum Coverage per Critical Application Rate (Iowa Formula)	1600 Maximum Coverage per Critical Application Rate (Iowa Formula)
0.2%	50,000 cu. ft.	85,000 cu. ft.
0.5%	20,000 cu. ft.	34,000 cu. ft.
1.0%	10,000 cu. ft.	17,000 cu. ft.

SPECIFICATIONS

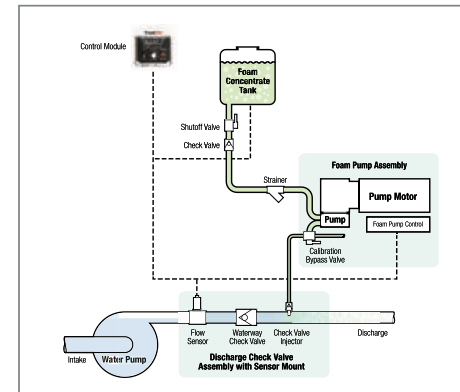
Series 1600

Performance for 1600 Series

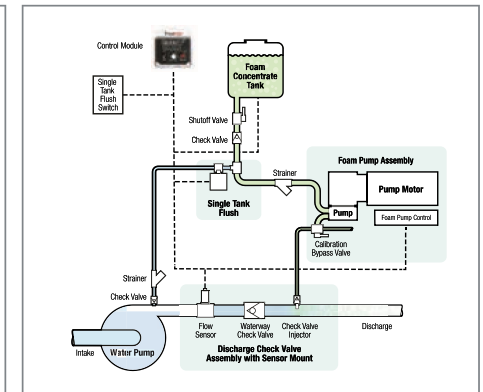


System Diagrams

1600 Series



1600 Series with Single Tank Flush



CLASS A AND/OR B FOAM



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, the 2002 at 5.0 gpm, and the 2024 (24 VDC only) at 6.3 gpm. 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.

SINGLE-POINT INJECTION

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 6.3 gpm (0.04 - 24 L/min)
- Injection pressure to 400 psi (27.6 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.

Series 2000

SPECIFICATIONS

2000 Series

Foam Pump:	Triplex Plunger Pump
Foam Output:	2.6 gpm @ 150 psi - (9.84 L/min @ 10.3 BAR) 2001 5.0 gpm @ 125 psi - (18.9 L/min @ 10.3 BAR) 2002 6.3 gpm @ 218 psi - (24 L/min @ 15 BAR) 2024 (24 VDC only)
Pump Motor:	1/2 hp (.40 Kw) 12 and 24 volt DC - 2001 3/4 hp (.56 Kw) 12 and 24 volt DC - 2002 1-1/2 hp (1.12 Kw) 24 volt DC Only - 2024
Maximum Operating Pressure:	400 psi (27.6 BAR) STD 600 psi (41.4 BAR) Optional
Maximum Operating Temperature:	160°F (71°C)
Maximum Amp Draw:	40 amps @ 12 volt DC - 2001 60 amps @ 12 volt DC - 2002 21 amps @ 24 volt DC - 2001 30 amps @ 24 volt DC - 2002 60 amps @ 24 volt DC - 2024 (24 VDC Only)

System Capacity

Foam Concentration	2001 Maximum Water Flow GPM (L/min)	2002 Maximum Water Flow GPM (L/min)	2024 Maximum Water Flow GPM (L/min)
0.2%	1,300 (4,921)	2,500 (9,464)	3,170 (12,000)
0.5%	520 (1,968)	1,000 (3,785)	1,268 (4,800)
1.0%	260 (984)	500 (1,893)	634 (2,400)
3.0%	85 (322)	166 (628)	211 (800)

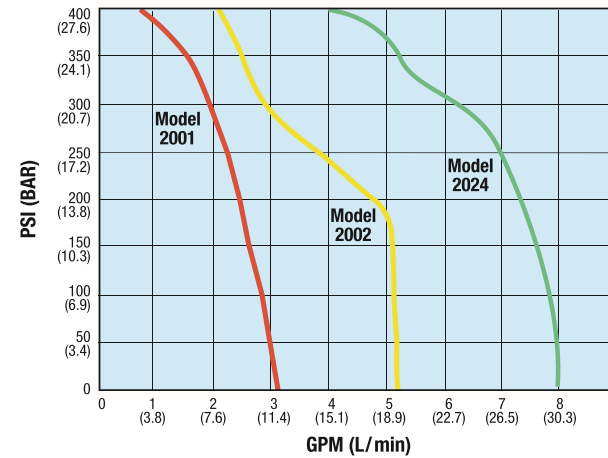
2000 Series Attack Capability

Class A Foam Concentration	2001 Maximum Coverage per Critical Application Rate cu. ft.	2002 Maximum Coverage per Critical Application Rate cu. ft.	2024 Maximum Coverage per Critical Application Rate cu. ft.
0.2%	130,000 cu. ft.	250,000 cu. ft.	317,000 cu. ft.
0.5%	52,000 cu. ft.	100,000 cu. ft.	126,800 cu. ft.
1.0%	26,000 cu. ft.	50,000 cu. ft.	63,400 cu. ft.
Class B Foam Concentration	Hydrocarbon @ 0.10 gpm/sq. ft.		
1.0%	2,600 sq. ft.	5,000 sq. ft.	6,340 sq. ft.
3.0%	850 sq. ft.	1,660 sq. ft.	2,110 sq. ft.
	Polar Solvent @ 0.20 gpm/sq. ft.		
3.0%	425 sq. ft.	830 sq. ft.	1,055 sq. ft.

SPECIFICATIONS

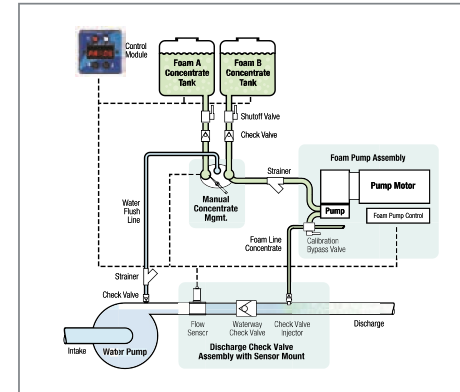
Series 2000

Performance for 2000 Series

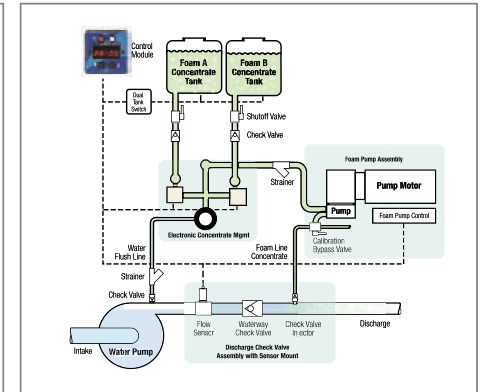


System Diagrams

2000 Series with Manual Concentrate Mgmt System



2000 Series with Electronic Concentrate Mgmt System



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, 2.6 GPM, 3.5 GPM, 5.0 GPM, 6.2 GPM, and 6.5 GPM (with 24 VDC systems only).

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.

TurboFoam

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.

6 Pump Sizes Get The Job Done

1.6GPM, 2.6GPM, 3.5GPM, 5.0GPM, 6.2GPM,
6.5*GPM *with 24 VDC systems only



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

Foam Pump Control

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

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)

Pressure Relief Valve

- Factory set for 400 PSI
- 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

SPECIFICATIONS

TurboFoam Series

Pump Sizes GPM (LPM) :	1.6 (6.06)	2.6 (9.84)	3.5 (13.25)	5.0 (18.93)	6.2 (23.47)	6.5 (24.61)
Motor Size (horsepower) :	1/3	1/2	3/4	1	1	1
DC Voltage :	12 or 24	12 or 24	12 or 24	12 or 24	12	24
Maximum Current (Amps) :	36 or 18	50 or 25	68 or 34	78 or 39	90	45

System Capacity

Foam Concentration (L/min)	TFC16 Max. Water Flow GPM	TFC26 Max. Water Flow GPM	TFC35 Max. Water Flow GPM	TFC50 Max. Water Flow GPM	TFC62 Max. Water Flow GPM	TFC65 Max. Water Flow GPM
0.2%	800 (3,028)	1,300 (4,421)	1,750 (6,624)	2,500 (9,463)	3,100 (11,734)	3,250 (12,301)
0.5%	320 (1,211)	520 (1,968)	700 (2,650)	1,000 (3,785)	1,240 (4,694)	1,300 (4,921)
1.0%	160 (606)	260 (984)	350 (1,325)	500 (1,893)	620 (2,347)	650 (2,461)
3.0%	53 (202)	87 (328)	117 (442)	166 (628)	207 (782)	217 (820)
6.0%	27 (101)	43 (164)	58 (221)	83 (315)	103 (391)	108 (410)

TurboFoam Series Attack Capability

Class A Foam Concentration						
Foam Concentration (L/min)	TFC16 Max. Water Flow GPM	TFC26 Max. Water Flow GPM	TFC35 Max. Water Flow GPM	TFC50 Max. Water Flow GPM	TFC62 Max. Water Flow GPM	TFC65 Max. Water Flow GPM
0.2%	80,000 (2,265)	130,000 (3,681)	175,000 (4,955)	250,000 (7,079)	310,000 (8,778)	325,000 (9,203)
0.5%	32,000 (906)	52,000 (1,472)	70,000 (1,82)	100,000 (2,832)	124,000 (3,511)	130,000 (3,681)
1.0%	16,000 (453)	26,000 (736)	35,000 (991)	50,000 (1,416)	62,000 (1,756)	65,000 (1,841)

Hydrocarbon @ 0.3785 LM/Sq Meter						
Class B Foam Concentration						
Foam Concentration	TFC16 Sq/Ft Cu/Meter	TFC26 Sq/Ft Cu/Meter	TFC35 Sq/Ft Cu/Meter	TFC50 Sq/Ft Cu/Meter	TFC62 Sq/Ft Cu/Meter	TFC65 Sq/Ft Cu/Meter
1.0%	1,600 (149)	2,600 (242)	3,500 (325)	5,000 (465)	6,200 (576)	6,500 (604)
3.0%	530 (49)	870 (81)	1,170 (109)	1,660 (154)	2,070 (192)	2,170 (202)
6.0%	270 (25)	430 (40)	580 (54)	830 (77)	1,030 (96)	1,080 (100)

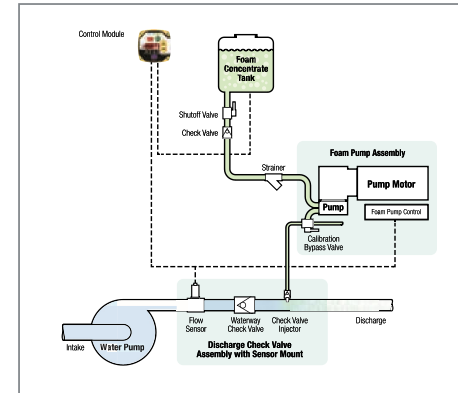
Polar Solvent @ 0.757 LM/Sq Meter						
Foam Concentration	TFC16 Sq/Ft Cu/Meter	TFC26 Sq/Ft Cu/Meter	TFC35 Sq/Ft Cu/Meter	TFC50 Sq/Ft Cu/Meter	TFC62 Sq/Ft Cu/Meter	TFC65 Sq/Ft Cu/Meter
3.0%	265 (25)	435 (40)	585 (54)	830 (77)	1,035 (96)	1,085 (100)
6.0%	135 (13)	215 (20)	290 (27)	415 (39)	515 (48)	540 (50)

SPECIFICATIONS

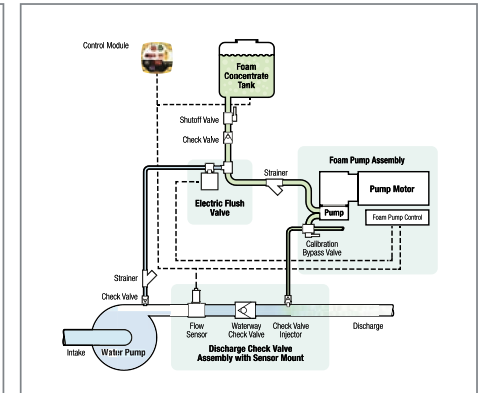
TurboFoam

Single Tank Systems

TFC100/TFC200



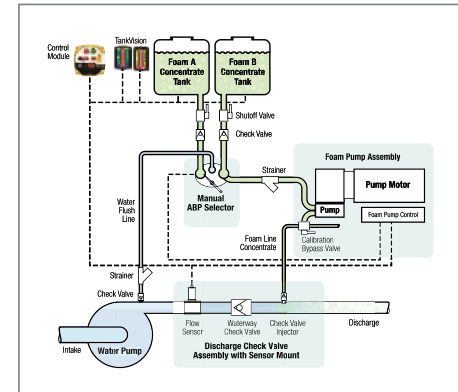
TFC100/ TFC200 /TFC300 with Electric Flush Valve



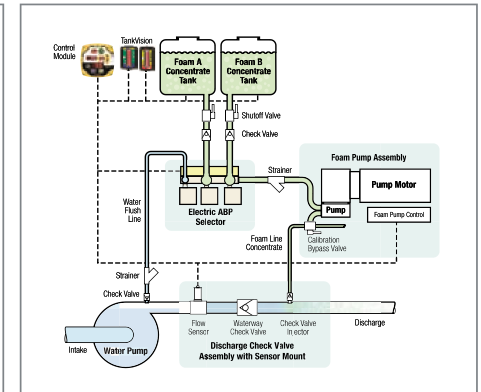
*TFC100/200 requires installation of a remote flush switch.

Dual Tank Systems

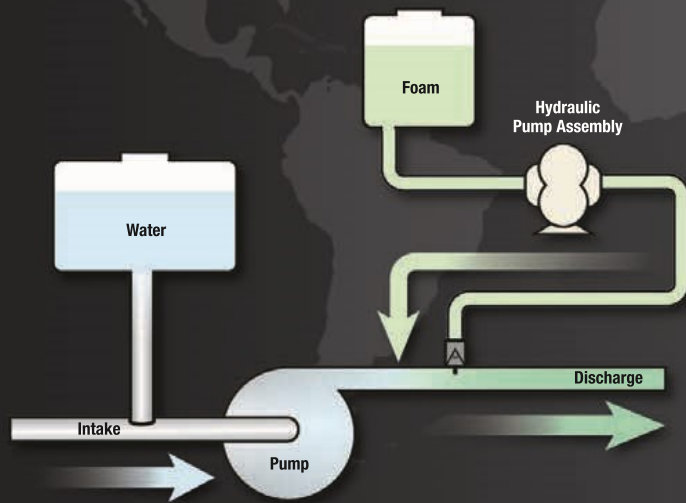
TFC200 with Manual ABF Selector



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

FOAMPRO®
precision foam every time.



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 at 0-400 psi, 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 - 45.4 L/min)
- Injection pressure to 400 psi (27.6 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 & check valve pictured.

Series
3012

SPECIFICATIONS

Model 3012

Foam Pump:	Triplex Plunger
Foam Output GPM:	0.1-12.0
(L/min) @ 200 psi:	(0.38-45.4)
Maximum Operating Pressure PSI (BAR):	400 (28)
Maximum Operating Temperature °F (°C):	160 (71)
Pump Motor:	Hydraulic
Hydraulic Supply Oil:	1,250
Pressure PSI (BAR):	(86.2)
Hydraulic Supply Oil Flow GPM (L/min):	12 (45.4)
Maximum Amp Draw:	5

System Capacity

Foam Concentration	Maximum Water Flow GPM (L/min)	Foam Concentration	Maximum Water Flow GPM (L/min)
0.2%	6,000 (22,771)	1.0%	1,200 (4,542)
0.3%	4,000 (15,140)	3.0%	400 (1,514)
0.5%	2,400 (9,084)	6.0%	200 (757)

Model 3012 Attack Capacity

Class A Foam Concentration	3012 Maximum Coverage per Critical Application Rate (Iowa Formula)
0.2%	600,000 cu. ft.
0.5%	240,000 cu. ft.
1.0%	120,000 cu. ft.
Class B Foam Concentration	Hydrocarbon @ 0.10 gpm/sq. ft.
1.0%	12,000 sq. ft.
3.0%	4,000 sq. ft.
6.0%	2,000 sq. ft.
	Polar Solvent @ 0.20 gpm/sq. ft.
3.0%	2,000 sq. ft.
6.0%	1,000 sq. ft.

SPECIFICATIONS

Series
20123

System Diagram

