USER MANUAL

MODEL NUMBER:
FI-WL
FI-WLK
FI-WLV
FI-WL-AP
FI-WL-ST
AND RELATED UNITS

Pre-Mix Wall Mount Foam Equipment

English (Original Instructions)

READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

⚠ WARNING

Read this manual completely and understand the machine before operating or servicing it.

- Read all instructions before installing or operating unit.

- Always wear appropriate personal protective equipment (PPE) when operating or servicing unit.

- Always follow all chemical safety precautions and handling instructions provided by the chemical manufacturer and Material Safety Data Sheet (MSDS).

- If this unit is modified or serviced with parts not listed in this manual, the unit may not operate correctly.

- Never point the discharge wand at yourself, another person, or any object you do not want covered in chemical.

- Always depressurize unit after use (as described in the After Use Instructions). Always store unit depressurized, with the discharge ball valve in the closed position.

- Do not exceed an incoming air pressure of 100 psi (6.9 bar).

- Do not exceed a fluid temperature of 100˚F (37.8˚C).

- Always flush the unit with fresh water thoroughly when switching from an alkaline to an acid or an acid to an alkaline.

- Only use clean and dry air. Air must be filtered and free of moisture or pump life will be diminished. If needed, install an air dryer before unit.

- Do not use an air lubricator before the unit.

PROTECT THE ENVIRONMENT
Please dispose of packaging materials, old machine components, and hazardous fluids in an environmentally safe way according to local waste disposal regulations.

♺ Always remember to recycle.

*Specifications and parts are subject to change without notice.

Specifications:
Hose ....50 feet reinforced hose, 3/4 inch inside diameter
(15.2 meters reinforced hose, 19 mm inside diameter)
Foam Output................................... 20 to 45 gallons/minute
(75.7 to 170.3 liters/minute)
Foaming Distance ....25 to 30 feet (7.6 to 9.1 meters)

Requirements:
Compressed Air Pressure Requirements: Air regulator factory set at 50 psi (3.4 bar). Operating range is 40 to 80 psi (2.8 to 5.5 bar) with 5 to 10 CFM (141.6 to 283.2 l/min)

Liquid Temperature .... 40˚F to 100˚F (4.4˚C to 37.8˚C)

Chemical Requirements: Follow all instructions from chemical manufacturer and Material Safety Data Sheet (MSDS).

Air Operated Double Diaphragm Pump Models Offered:

P56: Polypropylene body with Santoprene diaphragm

P56V: Polypropylene body with Viton diaphragm

P56K: Polypropylene body with Kalrez diaphragm

Acceptable Products:

Alkaline cleaners, Caustic cleaners, Sanitizers, and Acids

* D-Limonene may only be used with Kalrez pump

* Chlorine may only be used with Viton or Kalrez pump

DO NOT USE: All hydrocarbons

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This unit is available with several different configuration options. Use the following chart and example item numbers to identify specific configurations and item numbers.

ITEM NUMBER	Acid-Proof Fittings?		Pump Seal Material			Discharge Wand Tip	
	No	Yes	Santoprene	Viton	Kalrez	Foam zero tip	Foam fan tip
	(standard)	*(AP)*	*(standard)*	*(V)*	*(K)*	*(standard)*	*(ST)*
EXAMPLES:	-	-	-	-	-	-	-
FI-WL	x		x			x	
FI-WLV-AP		x		x		x	
FI-WL-ST	x		x				x
FI-WLK-AP		x			x	x	
MY UNIT IS:	-	-	-	-	-	-	-

Installation Instructions:

1. Remove all components from packaging.

2. Select desired area to mount the control box.
   Note: We recommend mounting the control box at a height of 6 feet or less. The chemical suction line must reach the bottom of the chemical container. The bottom of the chemical container should not be positioned higher than the bottom of the control box.

3. Attach the control box mounting feet to the back of the control box, using the four screws provided in the parts package.

4. Mount the control box to the wall using four of the screws and plastic anchors provided in the parts package.
   Note: To drill holes for the plastic anchors, use a ⁵⁄₁₆ inch drill bit.

5. Mount the hose hanger in a convenient location using the remaining two screws and anchors provided in the parts package.

6. Attach the discharge hose assembly to the discharge hose barb and secure it with the larger hose clamp provided in the parts package.

7. Connect the air inlet hose barb provided in the parts package to the air inlet valve located on the side of the control box. Then attach a ⅜ inch I.D. air line from your air compressor to the air inlet hose barb, and secure it with the smaller hose clamp provided in the parts package.

Operation Instructions:

1. Follow all instructions from chemical manufacturer. Place the chemical suction line into a container of pre-mixed chemical solution.

2. With the discharge ball valve in the closed position, open the air inlet valve.

3. Slowly open the discharge ball valve to begin foaming. The discharge ball valve should be completely open while foaming.

4. While the unit is running and discharging product, adjust the needle valve, located inside the control box, as needed to regulate the wetness or dryness of the foam following the steps below:
   a. Close needle valve completely in clockwise direction.
   b. Open needle valve in counter-clockwise direction 3 complete turns.
   c. Continue to open needle valve in ¼ turn increments, allowing 30 seconds between adjustments, until desired consistency of foam is achieved.

READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

After Use Instructions:

We recommend flushing the discharge hose and depressurizing the unit after each use.

1. Place the chemical suction line into a container of water.

2. With the unit running, open the discharge ball valve, and allow the unit to be flushed with fresh water thoroughly until all chemical has been discharged from the system.

3. Shut off the air supply to the unit by closing the air inlet valve.

4. Open the discharge ball valve to relieve any pressure remaining in the unit.

Close the discharge ball valve after all pressure has been relieved from the unit. Store the unit with the discharge ball valve in the closed position.

Maintenance Instructions:

To keep your foam unit operating properly, periodically perform the following maintenance procedures:

Note: Before performing any maintenance, ensure that the unit has been disconnected from the air supply and depressurized according to the "After Use Instructions" above.

- Inspect the pump for wear and leaks.

- Inspect all hoses for leaks or excessive wear. Make sure all hose clamps are in good condition and properly secured.

- Replace the filter located within the air regulator as needed. Clean by unthreading the air regulator bowl from the air regulator.

- Check the chemical suction line and strainer for debris and clean as needed.

Drain your air compressor tank on a regular basis to help extend pump life. An air source with a high moisture content will accelerate pump wear.

Note: If your air source has a high moisture content, you may wish to install a water separator (sold separately) before the unit.
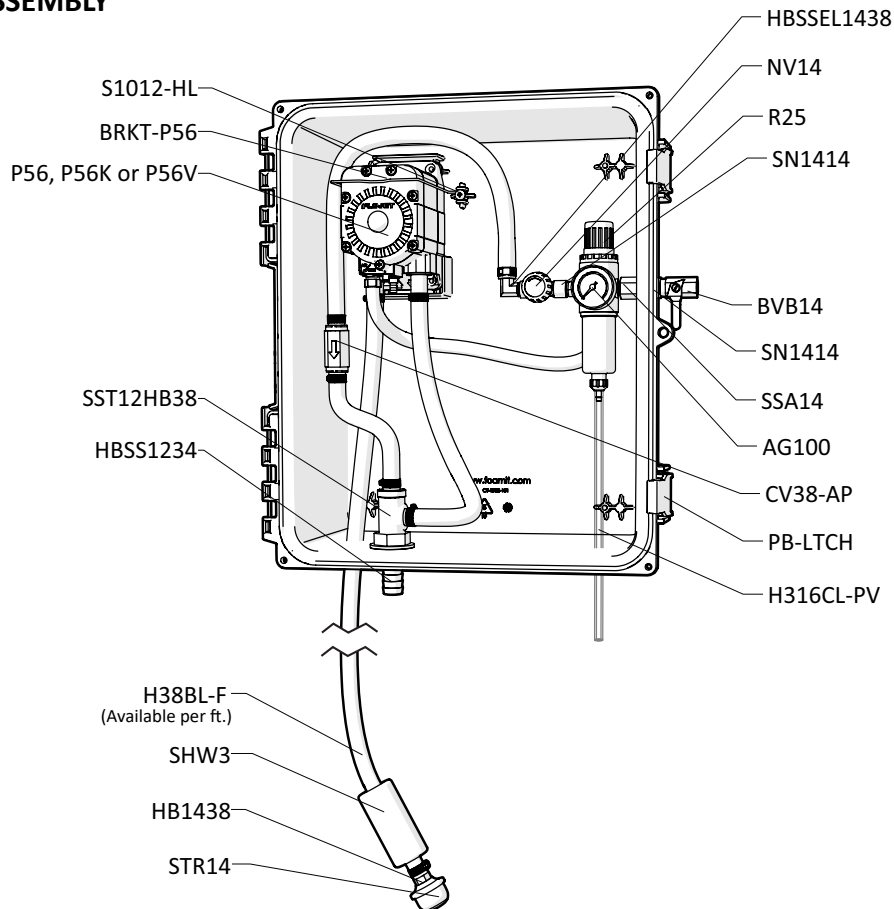
Troubleshooting Instructions:

- Check to ensure that the discharge hose is uncoiled properly, and that there are no kinks that could obstruct fluid flow.

- Check the air regulator bowl and air filter for debris such as water, oil, or rust particles. Clean by unthreading the air regulator bowl from the air regulator.

- If the needle valve is open too far, the pump may cycle improperly due to lack of air pressure. If this occurs, close and readjust the needle valve as described in Operation Instruction #4.

- Make sure proper foaming chemical and concentration are being used.

- If air passes through the pump without cycling, the pump needs to be replaced.

- If solution backs up into the air regulator bowl, the check valve needs to be replaced.

- If foam comes out wet, no matter where the needle valve is positioned, the check valve may need to be replaced.

- Check for proper air pressure on the air gauge. The air regulator is factory set at 50 psi (3.4 bar). Operating range is 40 to 80 psi (2.8 to 5.5 bar) with 5 to 10 CFM (141.6 to 283.2 l/min).

- If the unit operates at a reduced pressure:
  - Check the air compressor supplying the unit. If the pressure is less than 40 psi (2.8 bar), turn the unit off until the compressor can catch up.
  - If the air supply is 50 psi (3.4 bar) or above, check the air gauge, which should read near 50 psi (3.4 bar). If the air gauge reads more or less than 50 psi (3.4 bar), adjust the pressure by turning the knob on the top of the air regulator.

- Check the chemical suction line and strainer for debris or damage. Clean or replace as needed. To prevent damage to the unit, the strainer must always be used.
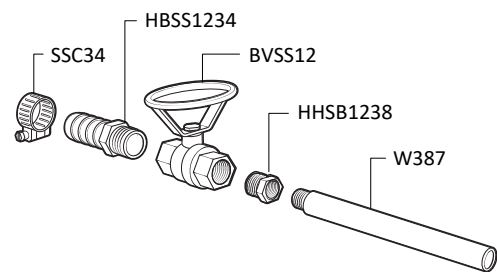
READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

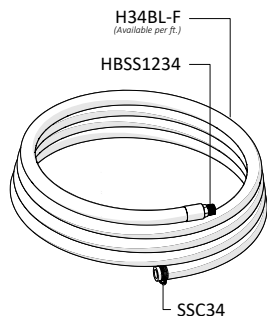## PARTS DIAGRAMS - UNITS WITH STANDARD FITTINGS

CONTROL BOX ASSEMBLY

HBSSEL1438
NV14
R25
SN1414
S1012-HL
BRKT-P56
P56, P56K or P56V
BVB14
SN1414
SSA14
SST12HB38
AG100
HBSS1234
CV38-AP
PB-LTCH
H316CL-PV

H38BL-F
(Available per ft.)
SHW3
HB1438
STR14

HOSE AND ZERO TIP FOAM WAND ASSEMBLY
ITEM NUMBER: SSWA347-HA34BL-50

ZERO TIP FOAM WAND ASSEMBLY
ITEM NUMBER: SSWA347

SSC34
HBSS1234
BVSS12
HHSB1238
W387

50 ft (15 m) HOSE ASSEMBLY
ITEM NUMBER: HA34BL-50

H34BL-F
(Available per ft.)
HBSS1234
SSC34

FAN TIP FOAM WAND ASSEMBLY
ITEM NUMBER: PWA3410-ST

SSC34
HBSS1234
BVSS12
SN1212
PW12F10
ST80200SS
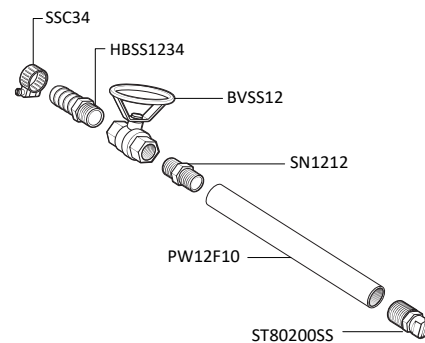
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PARTS DIAGRAMS - UNITS WITH ACID-PROOF FITTINGS

CONTROL BOX ASSEMBLY
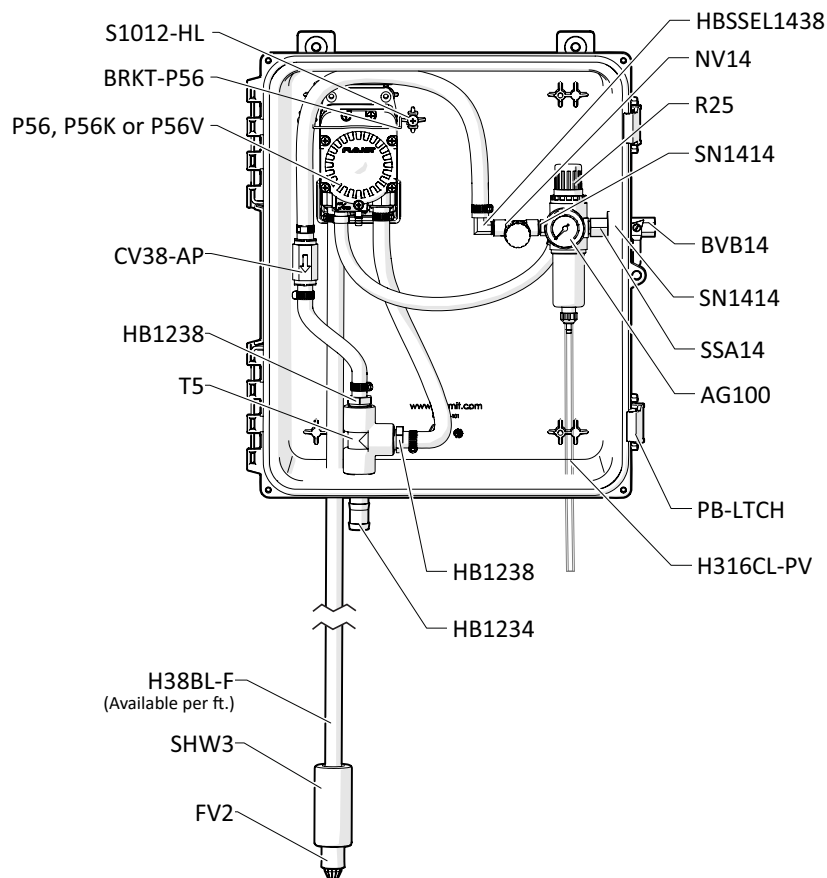
HOSE AND ZERO TIP FOAM WAND ASSEMBLY

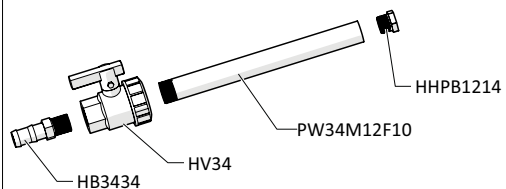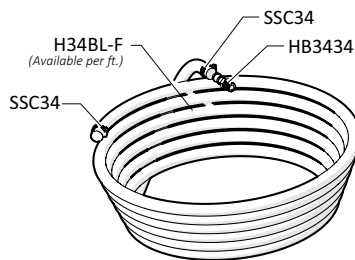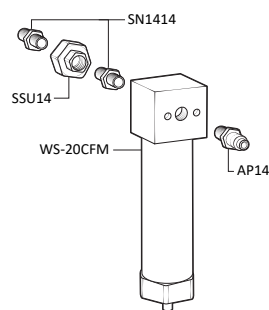ZERO TIP ACID-PROOF FOAM WAND ASSEMBLY
ITEM NUMBER: PWA3410-AP

50 ft. (15 m) ACID-PROOF HOSE ASSEMBLY
ITEM NUMBER: HA34BL-50-AP

OPTIONAL COMPONENTS

WATER SEPARATOR ASSEMBLY
ITEM NUMBER: WSA-20CFM

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ITEM NUMBER	DESCRIPTION
AG100	AIR GAUGE - 1/8IN NPT - 0-100 PSI MARKINGS - DRY MODEL
AKSS34	SS ANTI-KINK SPRING FOR 3/4 INCH HOSE
BRKT-P56	PUMP BRACKET- STAINLESS STEEL
BVB14	BALL VALVE - BRASS - NICKEL PLATED - AIR INLET VALVE - 1/4IN FPT X 1/4IN FPT
BVSS12	STAINLESS BALL VALVE-1/2IN NPT
CV38-AP	CHECK VALVE-3/8IN BARBS-PVC BODY-HASTELLOY SPRING-TEFLON BALL-WHITE
EC14	EAR CLAMP - OETIKER - STAINLESS STEEL - FOR 1/4IN HOSE
F34SS	FERRULE FOR 3/8IN HOSE - STAINLESS STEEL
FVPP-V	FOOT VALVE - POLYPROPYLENE BODY - NOT CUT TO SIZE - VITON CHECK VALVE - BLACK
FW14NPT	FLAT WASHER FOR ¼ IN. NPT - STAINLESS - 0.57 IN. ID X 1.28 IN. OD X 0.08 IN. THK
FW12NPT	FLAT WASHER FOR 1/2IN NPT - STAINLESS - 0.88IN ID X 1.5IN OD X 0.05IN THK
FW12NPT-THK	FLAT WASHER FOR 1/2IN NPT - THICK - STAINLESS - 0.88IN ID X 1.5IN OD X 0.12IN THK
H316CL-PV	3/16IN ID 5/16IN OD CLEAR HOSE - PVC - AVAILABLE PER FT
H14BL-F	1/4IN ID BLUE HOSE-HYBRID TPE-AVAILABLE PER FT
H34BL-F	3/4IN ID BLUE HOSE-HYBRID TPE-AVAILABLE PER FT
H38BL-F	3/8IN ID BLUE HOSE-HYBRID TPE-AVAILABLE PER FT
HB1234	1/2in MPT X 3/4in HOSE BARB
HB1238	1/2in MPT X 3/8in HOSE BARB
HB1438	1/4in MPT X 3/8in HOSE BARB (PLASTIC)
HB3434	HOSE BARB - POLYPROPYLENE - STRAIGHT - 3/4IN MPT X 3/4IN BARB
HBSS1234	HOSE BARB - STAINLESS STEEL - STRAIGHT - 1/2IN MPT X 3/4IN BARB
HBSS1438	HOSE BARB - STAINLESS STEEL - 1/4IN MPT X 3/8IN BARB
HBSSEL1438	HOSE BARB - STAINLESS STEEL - ELBOW - 1/4IN MPT X 3/8IN BARB
HBSSEL1814	HOSE BARB - STAINLESS STEEL - ELBOW - 1/8IN MPT X 1/4IN BARB
HHPB1214	HEX HEAD POLY BUSHING - 1/2IN MPT X 1/4IN FPT
HHSB1238	HEX HEAD STAINLESS BUSHING 1/2 MPT X 3/8 FPT
HV34	3/4in POLY BALL VALVE - EPDM SEALS
NV14	NEEDLE VALVE-1/4IN NPT-INCLUDES BLACK KNOB
NV14-HNDL	BLACK KNOB FOR NEEDLE VALVE
P56	PUMP WITH SANTOPRENE SEALS - INCLUDES HOSE BARBS, AIR FITTING, AND EXHAUST BARB
P56K	PUMP WITH KALREZ SEALS - INCLUDES HOSE BARBS, AIR FITTING, AND EXHAUST BARB
P56V	PUMP WITH VITON SEALS - INCLUDES HOSE BARBS, AIR FITTING, AND EXHAUST BARB
HBB14P	1/4IN HOSE BARB-BRASS-FOR G57/P56 AIR FITTING WITH O-RING
HB5638	HOSE BARB FOR P56 PUMP
HB5638K	HOSE BARB FOR P56K PUMP
HB5638V	HOSE BARB FOR P56V PUMP
PBA-16138	POLY BOX ASSEMBLY - 16IN X 13IN X 8IN - GRAY POLYPROPYLENE - INCLUDES BRAND LABEL AND MOUNTING HARDWARE
PB16138-LID	POLY BOX LID - GRAY POLYPROPYLENE - FOR PBA-16138 - INCLUDES PB-GSKT ROPE SEAL
PB16138-BOX	POLY BOX - GRAY POLYPROPYLENE - FOR PBA-16138
PB-FT	POLY BOX FOOT - GRAY POLYPROPYLENE - FOR PBA-12117 AND PBA-16138
PB-LTCH	POLY BOX LATCH - GRAY POLYPROPYLENE - TWO PIECES ASSEMBLED - FOR PBA-12117 AND PBA-16138
PB-PIN	STAINLESS STEEL HINGE PIN FOR PB16138 AND PB12117
PW12F10	1/2IN FNPT AND 1/2IN FNPT WAND - BLACK POLYPROPYLENE - 10IN LONG
PW34M12F10	3/4IN NPT AND 1/2IN FNPT WAND - BLACK POLYPROPYLENE - 10IN LONG
R25	REGULATOR - AIR - 2X 1/4IN FPT AND 2X 1/8IN FPT PORTS WITH BOWL AND FILTER - NO GAUGE
AFR25	AIR FILTER for R25
ABR25	METAL AIR BOWL for R25
S1012-HL	SCREW - #10 X 1/2IN - STAINLESS STEEL - ROUND HEAD PHILLIPS - HILO THREAD
S1034-FH-HL	SCREW - #10 X 3/4IN - STAINLESS STEEL - FLAT HEAD PHILLIPS - HILO THREAD
SHW3	SUCTION HOSE WEIGHT - 15/16IN ID X 1 1/2IN OD X 3 1/4IN LONG - PVC COATED STAINLESS
SN1212	1/2in HEX STAINLESS STEEL NIPPLE
SN1414	STAINLESS HEX NIPPLE 1/4 MPT X 1/4 MPT
SSA14	STAINLESS ADAPTOR 1/4 MPT X 1/4 FPT
SSC34	SCREW BAND CLAMP - STAINLESS STEEL - FOR 3/4IN HOSE
SSC38	SCREW BAND CLAMP - STAINLESS STEEL - FOR 3/8IN HOSE
SST12HB38	STAINLESS TEE 1/2 FPT 3/8 BARB - NO MIXING MATERIAL
ST80200SS	SPRAY TIP-80 DEGREE-20.0 GPM-STAINLESS-1/2 MPT
STR14	40 MESH SUCTION LINE STRAINER 1/4 FNPT
T5	1/2 POLY TEE
W387	3/8IN NPT PIPE WAND - POLISHED STAINLESS - 7IN LONG - THREADED ONE END ONLY
WMA-HH	WALL MOUNT BRACKET ASSEMBLY - HOSE HANGER - INCLUDES MOUNTING HARDWARE
WMS14	WALL MOUNT SCREW - #14 X 1 1/4IN - STAINLESS STEEL - HEX HEAD SLOTTED
WMS14A	WALL MOUNT SCREW ANCHOR -#14 X 1 1/4IN - PLASTIC - 5/16IN DRILL SIZE
WSA-20CFM	WATER SEPARATOR ASSEMBLY-20CFM-1/4IN FPT PORTS- INCLUDES AIR PLUG, UNION FITTINGS