Bypass/Filter Feeder
Operations & Maintenance Manual

This **"QUICK START"** manual is supplied as a guideline for installation; please visit **www.aquaphoenixsci.com** for complete instruction manual, assembly drawings and installation diagrams.

GENERAL INFORMATION

MODEL:			**SERIAL:**
STYLE:	☐ "NF" Non Filter	☐ "FB" Flat Bottom	☐ "DB" Dome Bottom
GALLONS:	☐ 2	☐ 5	
CAP/FILL:	☐ Standard Cap	☐ Quick Closure	☐ High Pressure w/funnel
FITTINGS:	☐ 3/4"NPT	☐ 1"NPT	☐ Other
ACCESSORIES:	☐ Pleated Filter	☐ Sock Filter	☐ Air Release
	☐ Valve Package	☐ Hose Kit	☐ Sight Level Indicator
	☐ PE Fill Funnel	☐ Pressure Gauge	☐ Sight Flow Indicator
	☐ Mounting Tabs	☐ Wall Mount Straps	☐

***** WARNING – BEFORE YOU GET STARTED *****

1) All fasteners & fittings should be inspected and secured before operation as they may be loosened in transit
2) Personnel safety practices should always apply
3) Safety glasses or face shields and gloves should be worn
4) Do not service glycol feed package without disconnecting power
5) Close isolation valve and release pressure before servicing any components on the system
6) All liquids in system should be drained before servicing

1.0 INTRODUCTION Thank you for choosing AquaPhoenix's Industrial Bypass & Filter Feeders. In this document, we explain the basics for locating, installing and operating your bypass & filter feeder. For further information, please visit www.aquaphoenixsci.com or contact customer service.

2.0 WARRANTY AquaPhoenix Scientific Bypass & Filter Feeders are guaranteed for one year from the shipment against manufacturing defects in material and workmanship that develop in the service for which they are designed. We will repair or replace a defective part of this system when returned to our factory with freight prepaid; providing that the part is found to be defective upon inspection. We assume no liability for labor and/or other expenses in making repairs or adjustments.

3.0 UNPACKING Upon receipt of order, inspect package thoroughly. In the event there was damage incurred in transit you must notify the freight company within 3-5 days of receipt of order. Once feeder is inspected for damage and received in good condition, store indoors until installing.

4.0 LOCATION AND ENVIROMENT Although there are no power requirements, bypass/filter feeders should not be exposed to direct elements. In the case there is no dry location that is convenient to install the bypass/filter feeder, a shelter, awning or shed should be installed to extend product life and validate warranty.

5.0 INSTALLATION Once location is decided on, bypass/filter feeder needs to be securely mounted. Be sure that flat bottom feeders are strapped to secure surface and dome bottom feeders (with legs included) are secured with local building codes. In accordance, outlet piping should be supported within 12 inches of feeder. System vibrations should be minimal.

5.1 CONNECTING TO THE SYSTEM Feeder bypass flow rate (In GPM) shall not exceed volume of feeder (In Gallons). Flow rates in excess of feeder volume, (two gallon feeder flow rate should be 2GPM) dramatically reduces feeder / filter life. Flow control valves should be installed on discharge side of feeder. AquaPhoenix's feeder pressure and temperature limitations are designated on product label. Be sure the feeder meets or exceeds your systems requirements. AquaPhoenix Scientific suggests the installation of air release valve, if not already supplied.

5.1a PLUMBING DIRECTION (Standard "NF" non-filter feeders) Flat bypass feeders come standard with 2 side fittings. Lower side fitting is the inlet, and the upper side fitting is the discharge. Dome bottom feeders come standard with 3 fittings. Lower side fitting is the inlet, upper side fittings is the discharge, and the bottom dome fitting is for the drain.

5.1b PLUMBING DIRECTION (Filter ready bypass feeders & with Pleated Filter installed) Flat filter feeders come standard with 2 side fittings. Lower side fitting is the inlet, and the upper neck fitting is the discharge. Dome bottom feeders come standard with 3 fittings. Lower side fitting is the inlet, upper side fittings is the discharge, and the bottom dome fitting is for the drain.

5.1c PLUMBING DIRECTION (with Sock Filter installed) Flat filter feeders come standard with 2 fittings. Lower side fitting is the outlet and the upper neck fitting is the inlet. "DB" Dome bottom feeders come standard with 3 fittings. Lower side fitting is the outlet, upper neck fittings are the inlet and the bottom dome fitting is for the drain. **5.2a LID REMOVAL/INSTALLATION (Standard Victaulic or Bolted Closure)**

1) Close feeder isolation valves and relieve pressure from feeder with valve in lid
2) Loosen bolts and remove bolts (15/16" wrench) and remove half couplings
3) Loosen and remove gasket/end cap and filter (if any) and fill feeder to top, leaving no air gap.
4) When reassembling, it is easiest to put gasket on end cap before placing on neck of feeder.
5) Add half couplings, align with groove on neck and pinch together by hand. **Be sure not to pinch gasket in coupling as tightened.**
6) Add bolts and tighten till snug. Close pressure relief valve and slowly open isolation valves. **Victaulic Caps will rise and seat, once pressure is applied.**

5.2b LID REMOVAL/INSTALLATION ("QC" Quick Closure)

1) Close feeder isolation valves, relieve pressure from feeder and remove filter (if any)
2) Quarter turn closure and inspect O-ring for wear and proper alignment in pressure plate groove.
3) Fill feeder to top to ensure no air gap.
4) Fit lid and three prong tabs to neck ring grooves. Press lid down and turn until tight. **Note: If lid does not fit, contact factory for assistance. DO NOT HIT WITH HAMMER OR MALLET TO CLOSURE**

5.2c HP FILL/INSTALLATION (Fill Funnel and Valve)

1) Close feeder isolation valves and relieve pressure from feeder.
2) Open fill valve under fill funnel and fill feeder to top, being sure to remove all air.
3) Close fill valve and return isolation valves to open position.

5.3 PLEATED FILTER INSTALLATION / INSPECTION

1) Isolate feeder and release pressure from feeder. Remove lid assembly and remove pleated filter assembly.
2) Rinse pleated filter assembly and inspect for damage.
3) Place filter assembly through neck opening in feeder and reinstall lid.

5.4 SOCK FILTER INSTALLATION / INSPECTION

1) Isolate feeder and release pressure from feeder. Remove lid assembly and remove sock filter assembly.
2) Rinse sock filter assembly and inspect for damage and rinse filter.
3) Collapse sock filter and insert through handle assembly until Ring is just above retaining plate
4) Reinsert sock filter assembly into feeder opening.
5) Reinstall feeder closure and resume flow. Flow will expand filter sock to perforated basket.

6.0 PRESSURE AND TEMPERATURE LIMITATIONS Standard Bypass Feeders maximum operating perimeters are 300PSI @ 200F. Some optional fittings may change limitations, contact factory for assistance.

MATERIAL	MAXIMUM SHORT-TERM TEMPERATURE	MAXIMUM OPERATING TEMPERATURE	MAXIMUM OPERATING PRESSURE
Polyethylene (PE)	160°F/69°C	85°F/36°C	N/A
Polyvinylchloride (PVC)	140°F/60°C	85°F/36°C	100PSI/6.9BAR
Chlorinated Polyvinylchloride (CPVC)	180°F/77°C	120°F/49°C	100PSI/6.9BAR
Polypropylene (PP)	180°F/77°C	120°F/49°C	100PSI/6.9BAR
Teflon (PTFE)	200°F/93°C	200°F/93°C	N/A
Carbon Steel (CS)	200°F/93°C	200°F/93°C	150PSI/10.3BAR
Cast Iron (CI)	200°F/93°C	200°F/93°C	150PSI/10.3BAR
Brass (BR)	200°F/93°C	200°F/93°C	150PSI/10.3BAR
Stainless Steel (SS)	200°F/93°C	200°F/93°C	150PSI/10.3BAR

Note: Minimum Fluid Temperature is 50°F/10°C.

7.0 ROUTINE MAINTENANCE Routine maintenance in this section is referred to as checking a feeder once a month until a maintenance schedule can be determined, filter models may need frequent cleaning on start-up of new closed loop systems. All fasteners should be check for proper operations. Maintenance and care will depend upon the usage and environment in which the feeder is subject to.

8.0 PARTS LISTING The following tables itemize parts that may be replaced in the field. If further breakdown is needed, consult manufacturer's operations manual or call us for assistance.

9.0 TROUBLE SHOOTING

PROBLEM	POSSIBLE CAUSE / ACTION
Low flow rate	Filters or strainers are dirty or fouled
	Discharge piping is restricted or undersized
	Inlet piping is restricted or undersized
Lid is leaking	Closure is not aligned properly
	Hardware is not tight
	Gasket is fouled or needs to be replaced
Body is leaking	Chemical attack, consult factory
	Damaged in shipment, consult factory

If you are still having trouble, contact us at info@aquaphoenixsci.com, or you can call us at the number on the front of the Instruction manual.

Manufacturing: Bypass & Filter Feeders, Glycol Feed Packages, Separators & Separator Systems, Tanks, Tank Stands, Chemical Batch Mixers, Corrosion Coupon Racks, Packaged Feed Systems and Custom Systems

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