AXIOM INDUSTRIES LTD.

MODEL SF100-D-P PACKAGED HYDRONIC SYSTEM FEEDER
"DUPLEX UNIT c/w ALTERNATING CONTROL PANEL"

The SF100-D-P contains everything required to feed and pressurize closed hydronic heating or cooling systems in a neat, simple package that is easy to install and operate. It is compatible with both water and water/glycol solutions.

Duplex Unit c/w Alternating control panel

FEATURES and BENEFITS

- *Two pumps for seamless and reliable operation*
- *Alternating panel with Lead/Lag pump operation, High/Low level alarm etc. See specification*
- *208 litre (55 US gallon) tank for storage and mixing*
- *Fluid level switch shuts the pump off if the storage tank level gets low*
- *Accumulator tank prevents excessive pump cycling*
- *No direct connection to potable water supply eliminates need for backflow prevention*
- *Make-up fluid stored in the feeder tank can be pre-treated*
- *Diverter valve for purging of air on initial start-up and manual agitation of solution*
- *Prevents major floods - in the event of system rupture, only the contents of the tank can be pumped into the system*
- *Provides leak detection - dropping fluid level provides immediate notice that the system has developed a leak*
- *Fluid drained for service can easily be put back into the system*
- *Flexible connection hose with system check valve makes installation easy*

Represented By:

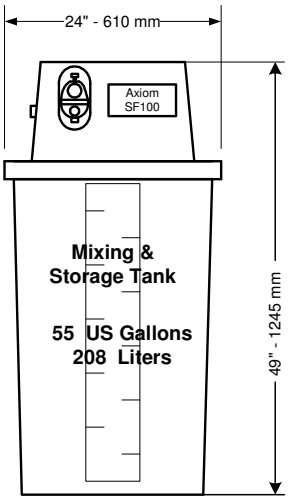
AXIOM INDUSTRIES LIMITED 2615 WENTZ AVENUE SASKATOON, SK S7K 5J1
TOLL FREE : (877) 651-1815 **PHONE :** (306) 651-1815 **FAX :** (306) 242-3373

www.axiomind.com

AXIOM INDUSTRIES LIMITED

SF100-D-P HYDRONIC DUPLEX SYSTEM FEEDER TECHNICAL INFORMATION

WEIGHT - 18 kg, 40 lbs.



PUMP ELECTRICAL

115/60/1, 0.7 amps

PUMP PERFORMANCE (2 pumps)

0.09 l/s (1.4 gpm) @ free flow
Combined Flow: 0.18 l/s (2.8 gpm)

0.06 l/s (1.0 gpm) @ 345KPa (50 psig)
Combined Flow: 0.12 l/s (2.0 gpm)

Self-priming up to 2.1 m (7 feet)
Maximum liquid temp. 77 C (170 F)

SPECIFICATION

Hydronic system feeder and Alternating panel shall be AXIOM INDUSTRIES LTD. Model SF100-D-P. System shall include 208 litre (55 US gallon) storage/mixing tank with cover; pump suction hose with inlet strainer; two pressure pumps with thermal cut-out; pump isolation valves; two integral pressure switches; integral check valve; pre-charged accumulator tank with EPDM diaphragm; manual diverter valve for purging air and agitating contents of storage tank; factory set pressure relief valve; pressure regulating valve adjustable (35 – 380 KPa; 5 – 55 psig) complete with pressure gauge; built-in check valve; union connection; 12 mm (½") x 900 mm (36") long flexible connection hose with check valve; low level pump cut-out. Pressure pumps shall be capable of running dry without damage. Power supply 115/60/1 3.8 A. Unit shall be completely pre-assembled.

ACCESSORIES

☐ **2PRV** – Second Pressure Reducing Valve, Pressure Gauge, System Connector Hose and Check Valve to allow for independent pressure supply to a second system.

LIMITED WARRANTY

The SF100-D-P is warranted against defects in materials and workmanship for one year.

Project _____ Location _____

Consultant _____ Contractor _____

Unit Tag _____ Sales Agent _____

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ALTERNATING PANEL FOR DUPLEX SYSTEM FEEDER SF100-D-P

DUPLEX ELECTRICAL PANEL

UL listed
Enclosure…… NEMA / CSA 1 ASA 61 Grey
Main disconnect switch (HP rated) c/w door interlocked handle
Overload & Short Circuit protection….. Two thermomagnetic motor protectors
Starter:…… Across the line contactors (HP rated)
Alternator……... One Electric Alternating Relay

Pump Control Panel interface includes
- 2 "Hand-Off-Auto" switches for pump control
- 1 Power Indication Light
- 2 "Run" Green Pilot Lights
- 1 "Low Level Alarm" Red Pilot Light, Dry contacts and Audible Alarm c/w Silence Button
- 1 "High Level Alarm" Red Pilot Light, Dry contacts and Audible Alarm c/w Silence Button

WEIGHT – 16Kg, 35 lbs.

Duplex Operation

Duel pressure switches internal to the system pressurisation unit maintain the internal pressure. A pressure regulator on the SF100 maintains the minimum system pressure at its set point.
The lead pump alternates each time the high-pressure switch turns on a pump. If the first pump cannot maintain the internal pressure, the second pressure switch calls on the stand-by (lag) pump.
Automatic transfer to stand-by (lag) pump in case of motor overload or short circuit.
A low-level switch will disable the pumps, activate the audio/visual alarm and close a set of Dry-Contacts (For remote indication if connected to BMS). A High-level switch will activate the audio/visual alarm and close a set of Dry-Contacts (For remote indication if connected to BMS).

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