

SERIES 718 STEEL FILTER CHAMBERS

OPERATION AND SERVICE GUIDE O-1580A APRIL 1997

MODEL	PRICE CODE NO.
S1(718)-1	79-0901-1
S1(718)-1 S2(718)-1½	79-0901-2

Refer to Bulletin C-401 and Parts List P-3976.

A SAFETY PRECAUTIONS BEFORE STARTING

- 1. Read operating instructions and instructions supplied with chemicals to be used.
- 2. Refer to Chemical Resistance Data Chart for compatibility of chamber and gasket materials.
- 3. Note temperature and pressure limitations in catalog or bulletin.
- 4. Personnel operating filter should always wear suitable protective clothing: face mask or goggles, apronand gloves.
- 5. All piping must be supported and aligned independently of the filter.
- Always close valves slowly to avoid hydraulic shock.
- Ensure that all fittings and connections are properly tightened.

A BEFORE CHANGING APPLICATION OR PERFORMING MAINTENANCE

- Wear protective clothing as described in Item 4 above.
- 2. Flush chamber thoroughly with a neutralizing solution to prevent possible harm to personnel.
- 3. Verify compatibility of materials as stated in Item 2 above.
- 4. Shut off power to motor at disconnect switch.

INSTALLATION OF CHAMBER

- 1. Note identification of INLET, OUTLET, VENT and DRAIN. Maximum operating pressure 75 PSI.
- Using wall mounting bracket or floor mounting leg assembly install chamber in a secure position, with consideration for direction of INLET and OUTLET.
- 3. Complete supply and discharge piping using proper thread lubricant for a pressure tight seal.
- 4. Inlet, outlet, drain and vent valves may be installed for user convenience.
- Install a 0 150 PSI pressure gauge assembly on inlet tee or on vent tee. It is a helpful instrument to assist in determining when filter cartridge needs replacement.

INSTALLATION OF FILTER CARTRIDGE AND START-UP

- 1. Loosen and remove V-band clamp assembly.
- Remove cover by turning 5° clockwise to stop, lift to remove.
- 3. Unscrew cartridge lock nut.
- 4. Install one (or two) nominal 4" or 7" diameter by 18" long cartridge(s) over stand pipe, and verify that stand pipe is at center of cartridge I.D.
- 5. Replace lock nut and secure into position by tightening against cartridge.
- 6. Clean and replace cover 'O'-ring.
- 7. Replace cover and turn 5° counterclockwise to activate safety feature.

- 8. Install V-clamp assembly and tighten lock screw against lock nut.
- Slowly open INLET valve to allow solution to enterchamber. Release air via vent valve or plug in cover while slowly opening OUTLET valve. When solution appears at vent, close vent valve or replace vent plug.
- 10. Open OUTLET valve fully.
- 11. Note and record inlet pressure using clean cartridge and full flow of solution.
- 12. When flow through filter chamber reaches the acceptable minimum, record gauge pressure and replace filter cartridge.

SHUT DOWN AND COVER REMOVAL

WARNING: Do not attempt to open this filter while

inlet or outlet valves are open or while unit contains pressure.

- Inlet or pressure side valve should always be closed first.
- 2. Next, close outlet or discharge side.
- 3. Any pressure which may be in the filter after inlet and outlet valves have been closed should be vented before attempting to open chamber. Care should be taken to keep face and hands protected and clear of filter chamber while venting.

CAUTION: Do not, at any time, remove or loosen cover clamp before draining. Failure to open drain and vent can result in pressurized liquid being trapped in vessel. Liquid could spray out when cover clamp is loosened causing personal injury or damage to equipment.

- 4. Open drain.
- 5. Open vent to allow vessel to drain properly.
- 6. Loosen and remove V-band clamp bolt and the V- clamp. The clamp joint with the round head bolt does not have to be loosened.
- Remove cover from vessel by turning 5° clockwise.

CARTRIDGE REPLACEMENT

- 1. Vessel interior and all components should be examined for corrosion or other damage each time cartridge is replaced.
- 2. Unscrew cartridge lock nut.
- 3. Remove filter cartridge and discard. Bottom cartridge of two cartridge assembly can be easily removed at I.D. with a hook formed from wire.
- 4. Replace new cartridge and follow instructions for "INSTALLATION OF FILTER CARTRIDGE AND START-UP"

COVER REPLACEMENT AND START-UP **PROCEDURES**

- 1. Clean and inspect gasket seating surfaces.
- 2. Clean and inspect gasket for damage. Replace if necessary.
- 3. Reposition cover to chamber body, turn counterclockwise 5° to engage safety feature.
- 4. Reposition V-band clamp to chamber.

CAUTION: Inspect V-band clamp and bolts for wear. Also, inspect vessel for dents, corrosion, or other damage. Damaged components might cause malfunction during operation, causing personal injury and damage to equipment.

5. Reinstall bolt and tighten clamp to a point where joints are properly closed.

CAUTION: Do not exceed 10½ ft. lb. of torque. Overtightening can damage equipment. The use of a torque wrench is recommended.

6. Leave vent cock open.



CAUTION: Be sure to leave vent open. Failure to open vent when starting fluid flow will allow air to become entrapped and compressed in upper portion of vessel. Compressed air might rupture vessel resulting in personal injury and damage to equipment.

- 7. Close drain.
- 8. Open inlet valve and allow vessel to fill slowly.
- 9. When air is expelled from the vessel and liquid begins to bleed from vent, close the vent cock.
- 10. Open outlet valve.

CAUTION: Do not attempt to adjust V-band clamp while filter vessel is pressurized.

11. If filter leaks, repeat shut down and start-up procedures with a new gasket and clean gasket seating surfaces. Do not overtighten V-clamp bolt.

REPLACEMENT FILTER CARTRIDGES

Refer to filter model number and original order when requesting replacement cartridges, parts or information.

REPLACEMENT FILTER MEDIA

DESCRIPTION	MICRON RETENTION	PRICE CODE NUMBER	DESCRIPTION	MICRON RETENTION	PRICE CODE NUMBER
4" x 18" depth wound cotton filter cartridges on 304 stainless steel core (see Bulletin M-109)	1	1B18A4	Aller 4 Oll oller tender on an	.5	PL418-½-6A
	3	3B18A4		1	PL418 -1-6A
	5	5B18A4		2	PL418-2
	10	10B18A4		3	PL418-3-1A
	20	20B18A4		3	PL418-3-2A
	30	30B18A4		5	PL418-5
7" x 18" pleated paper cartridges (see Bulletin M-206)	1	PL718-1	4" x 18" pleated paper cartridges	5	PL418-5-1A
	5	PL718-5		5	PL418-5-6A
	10	PL718-10		5	PL418-5-14
	20	PL718-20		10	PL418-10
	30			10	PL418-10-1A
		PL718-30		10	PL418-10-12
Fuller's Earth cartridges 7" x 19¼" (cotton bag) 6¾" x 18¼" (cotton bag) 6¾" x 18 "(metal canister)				25	PL418-25
		F718 F718-4 F718-C	4" x 36½" pleated paper cartridges [for S2(718)-1½ chambers only. See Bulletin M-206-2]	2	PL436-2-4
			6¾" x 18" spun-wound cotton cartridges on stainless steel core	10	C718

