

Product Instruction Data (FORM NO. 12RD SN PIS)

Installation & Operating Instructions for Sanitary, 12 Rd. T-Style (SN1E) or In-Line (SN2E) Filter Housing

1. RECEIPT OF EQUIPMENT

The housing and any optional equipment are packed individually for assembly by the customer. Carefully unpack and check each item received against the packing invoice. DO NOT DISCARD ANY PACKING MATERIAL UNTIL THE HOUSING AND FILTERS ARE INSTALLED AND OPERATING PROPERLY.

2. INSTALLATION

CAUTION: PROPER SAFETY EQUIPMENT SHOULD BE WORN AT ALL TIMES INCLUDING GOGGLES, PROTECTIVE CLOTHING, STEEL TOED FOOTWEAR, PROTECTIVE GLOVES AND APPLICABLE BREATHING RESPIRATOR OR DEVICE.

Housings are supplied without cartridges installed. Refer to cartridge manufacturer installation instructions for cartridge installation or replacement.

INSTRUCTIONS FOR MOUNTING:

Refer to filter housing assembly drawing listed on specification page for parts labeling and orientation instructions.

2.1 Bolt housing legs to a permanent base to provide stability during pipework installation and filter cartridge replacement. Install housing to pipework allowing clearance for installation and removal of cartridges. (See specification page for minimum clearance dimensions).

By-pass lines (if installed) should be closed unless fluid is needed during the filter replacement.

2.2 **IMPORTANT:** Install the housing to the pipework making certain that the fluid flow agrees with the flow direction indicated on the housing Inlet and Outlet.

3. INSTALLING or REPLACING CARTRIDGES

CAUTION: Do not at any time loosen or remove swing bolt closure mechanism before venting. Failure to open vent can result in pressurized fluid trapped in the vessel. Fluid under pressure may escape when closure mechanism is loosened or removed causing personal injury or damage to equipment.

For identification and a list of replaceable housing spare parts, refer to Recommended Spare Parts Price List, 12 Round T-Style (SN1E) or In-Line (SN2E) Sanitary Housing. When cartridge replacement becomes necessary and before the limiting differential pressure is reached, (refer to cartridge manufacturer's literature for maximum allowable cartridge differential pressure), proceed as follows:

- 3.1. Close valve located immediately downstream of filter assembly.
- 3.2. Close valve located immediately upstream of filter assembly.
- 3.3. Do not stand over the assembly while opening Vent Valve/Clamp to depressurize filter assembly. Open the Drain Valve/Clamp to release any remaining liquid. Be prepared to catch, contain and/or drain off this liquid.
- 3.4. Unloosen Hex Nuts on Swing Bolts and lay Swing Bolt assemblies back off of lugs. Remove Shell assembly with Lift Handles or Lifting Eyes and place in a secure place taking care not to damage O-Ring sealing surface. (**NOTE:** Lifting Eyes are standard on 7 round and larger housings. Use proper lifting precautions or proper lifting device).
- 3.5. Lift Hold Down Plate and Spring off of filter cartridges and place in a secure place.
- 3.6. Remove filter cartridges by first securing Removable Tubesheet with one hand or alternate assistance and grasping lower end of cartridge and pulling away from the cartridge sockets in the Removable Tubesheet with a twisting motion. 226 (Code 7) cartridges will require rotating counterclockwise until the locking tabs are fully visible prior to applying final twisting/lifting motion. Utilize the Universal Cartridge Removal/Installation Tool if necessary.
- 3.7. Remove O-Ring from ring groove on Removable Tubesheet and lay in a secure place. Lift Removable Tubesheet off of Base Assembly and lay in a secure place taking care not to damage O-Ring sealing grooves. Remove O-Ring from Inlet stem and lay in a secure place (T-Style only). Remove O-Ring from Base Assembly and lay in a secure place.
- 3.8. Wipe all parts of the filter housing clean with a clean cloth. Inspect all parts of the filter housing, particularly the housing O-Rings (Qty 3 on T-Style, Qty 2 on In-Line), for possible damage and/or excessive wear and corrosion. Replace any damaged or worn parts.
- 3.9. Wet all Housing O-rings with fluid to be filtered or a compatible lubricant. Replace O-Ring into groove in Base Assembly. Replace O-Ring onto Inlet stem (T-Style only). Replace Removable Tubesheet onto Base Assembly and over Inlet Stem (T-Style only) ensuring underside of Tubesheet contacts O-Ring on Base Assembly. Replace O-Ring in top Tubesheet groove.
- 3.10. For 222 (Code 8) or 226 (Code 7) connections, wet cartridge O-rings with fluid to be filtered or a compatible lubricant. Position cartridges into cartridge socket by

- applying a simultaneous downward force and twisting motion until cartridge is fully seated per cartridge manufacturer installation instructions. Utilize the Universal Cartridge Removal/Installation Tool if necessary. Place Hold Down Plate back on top of cartridges aligning fins into holes, if applicable. Place Spring in center of Holddown plate.
- 3.11. Replace Shell with Lift Handles and/or Lifting Eyes using proper lifting precautions or proper lifting device while aligning lugs on Shell with Swing Bolt assemblies on Base Assembly. Do not attempt to turn Shell while resting atop of Base Assembly. This may result in damaging the O-Rings. If Swing Bolts are not aligned with lugs on Shell, repeat lifting procedure for Shell until proper alignment is ensured. Position Swing Bolts into lugs on Shell and ensure Flat Washer is between Hex Nut and top of lugs on Shell. Tighten Hex Nuts in a star pattern to a maximum of 63 ft-lbs. of torque. Tightening the Hex Nuts above the maximum recommended torque may result in damaging the closure mechanism and may result in the Housing not sealing properly.
 - 3.12. Close Drain Valve or replace Drain Cap/Clamp and tighten securely. Leave Vent Valve or Cap/Clamp removed.
 - 3.13. Open valve located immediately upstream of filter assembly.
 - 3.14. When liquid is expelled from the Vent, ensuring all air has been removed from the housing, securely tighten Vent Valve or Cap/Clamp.
 - 3.15. Open valve(s) located immediately downstream of filter assembly.
 - 3.16. Operate the system for five minutes. Check for leaks at all flanged connections and at O-Rings between Shell and Base Assembly. Tighten connections as required.
 - 3.17. Do not exceed maximum pressure rating without contacting the factory for special instructions and approval. [150 psi (10.3 bar) @ 200°F (93°C)]

Call the factory or contact your local distributor for spare parts and for genuine replacement elements.