

HYDAC INTERNATIONAL

Filters



SFW60412 Series Service and Parts

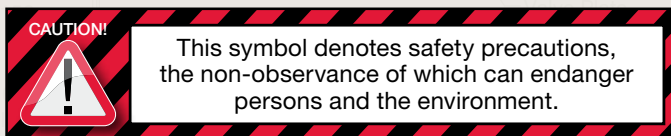
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This symbol is followed by user tips and particularly useful information.

- This pressure unit is for use with hydraulic power or lube systems only.
- All repair, maintenance, installation and commissioning work must be carried out by trained personnel.
- Operate this pressure unit in accordance with hydraulic power or lube system operating instructions.
- Ensure the pressure unit is sufficiently cool before handling.
- This pressure unit is suitable for use with hydraulic or lubricating fluids only.
- It is the responsibility of the operator to comply with local water regulations.



CAUTION!

This symbol denotes safety precautions, the non-observance of which can endanger persons and the environment.

- Filter bowl may be full of hot hydraulic fluid. Collect oil in a suitable container and dispose of properly.
- Observe proper venting procedures to avoid the formation of air pockets.
- Caution: Pressurized unit. Purge system pressure before performing any work on the pressure unit.
- Under no circumstances must any modifications (*welding, drilling, or opening by force...*) be carried out on the pressure unit. Any modifications will void the warranty.
- Statutory accident prevention regulations, safety regulations and safety data sheets for fluids must be observed.
- When working on or near hydraulic systems, avoid exposure to open flames and spark generating equipment. Do not smoke near equipment.
- Comply with all regulations with regard to the disposal of used oil and waste.
- Wear proper protective clothing and guards to avoid injury or scalding due to high pressure or high temperature oil.
- Filter housing must be grounded.
- Disconnect all electrical power to the system and other electrical components, prior to working on filter clogging indicators.

FILTER MAINTENANCE

1. General

1.1 Commitment to Quality

HYDAC demonstrates its commitment to quality through the implementation of an ISO 9001: 2008 program, which encompasses not only product design and manufacturing but service and delivery as well.

1.2. Installation

- Before installing the filter in the system, check that the operating pressure of the system does not exceed the maximum allowable operating pressure of the filter.
- Observe type code label on the filter.
- Important: When operating filters without bypass valve above 20 bar (290 psid), high collapse BH/HC type filter elements must be used to ensure safe operation.

1.3. Commissioning

Unscrew lid and check that the correct filter element is installed. Screw in lid again fully. Switch on hydraulic system and check filter for leakage. Vent filter at an appropriate point in the system.

1.4. Maintenance Tools

Size	Wrench size for filter lid	Wrench size for indicator plug
12	1 3/8"	1/4"

1.5. Torque Values

Type	Max. Torque
VMF all clogging indicators	11 ft-lb
Oil Drain Plug	N/A
Lid	Do not Torque (See 1.3 and 2.2)

2. Maintenance

2.1. General

This section describes periodic maintenance requirements. Periodic and thorough maintenance will ensure operator safety and the life of the filter.

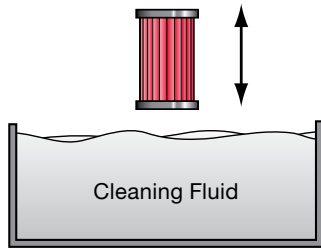
2.2. Maintenance Procedures

- Only high quality spare parts meeting the technical requirements specified by the manufacturer should be used, quality is always guaranteed with HYDAC original spare parts.
- Keep tools, working area and equipment clean.
- After disassembling the filter, clean all parts and check for damage or wear. Replace parts as required.
- When changing filter elements, a high level of cleanliness must be observed!
- Ultrasonic cleaning is used for cleaning Metal Fiber (V) and Wire Screen (W/HC) elements.

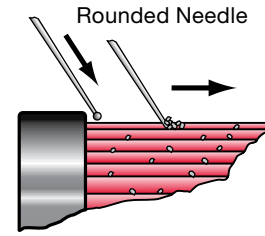
2.3. Interval Between Changing Elements

- To ensure optimum performance, HYDAC recommends replacing filter elements every 6 months or upon indication, whichever occurs first.
- HYDAC recommends installing the filter with a clogging indicator (*visual and/or electric or electronic*) to monitor for excessive filter element pressure drop.
- If the clogging indicator trips, immediately change or clean the filter element. (*Only wire mesh and metal fiber elements can be cleaned*).
- If no clogging indicator is installed, HYDAC recommends changing elements at specified intervals (*depends on filter sizing and conditions*). Higher dynamic loads across the element might necessitate shorter intervals between changes. Shorter intervals can also be expected during commissioning, repairs, oil changes, etc. of the hydraulic system.

2.4. Manual Cleanaing (Wire Screen Element)



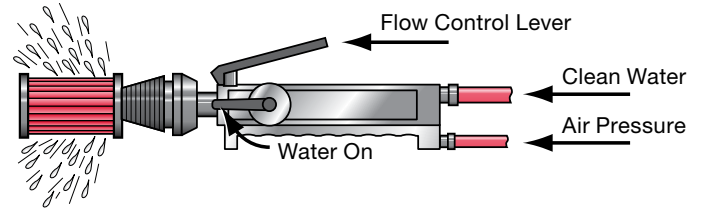
1. Remove external build-up of contamination with cleaning fluid in separate tank.



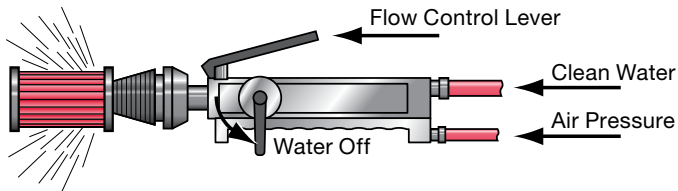
2. Remove large particles in the pleats using a rounded needle or tweezers.



3. Immerse the element for 30 minutes in high quality cleaning fluid.



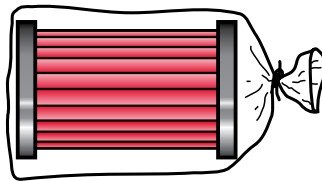
4. Flush from the inside with air-water pistol.



5. Turn off water and blow from inside with air only.



6. Immerse in Isopropyl Alcohol to remove the remaining water particles.



7. Allow element to dry, then pack element in air tight plastic bag for future use.

8. Refer to Section 3.2 for proper element installation.

FILTER MAINTENANCE

3. Element Replacement

3.1. Element Removal

(Refer to Replacement Parts drawing on Page 5.)

1. Shut off system.
2. Close inlet valve by turning hex nut counterclockwise until it stops.
3. Drain system if filter is at a low point in the system.
4. Remove lid by unscrewing using the hex on the lid.
Caution: Do not use hex nut. Housing is full of oil. Collect oil in suitable container and dispose of properly.
5. Clean magnets with clean cloth.
6. Inspect the lid o-ring for damage and replace if necessary.
7. Remove filter element, Item 1.1.
8. Inspect lid O-ring, Item 3.3 for damage. Replace if necessary.
9. Clean and degrease the cleanable filter element, (W), per Section 2.4.

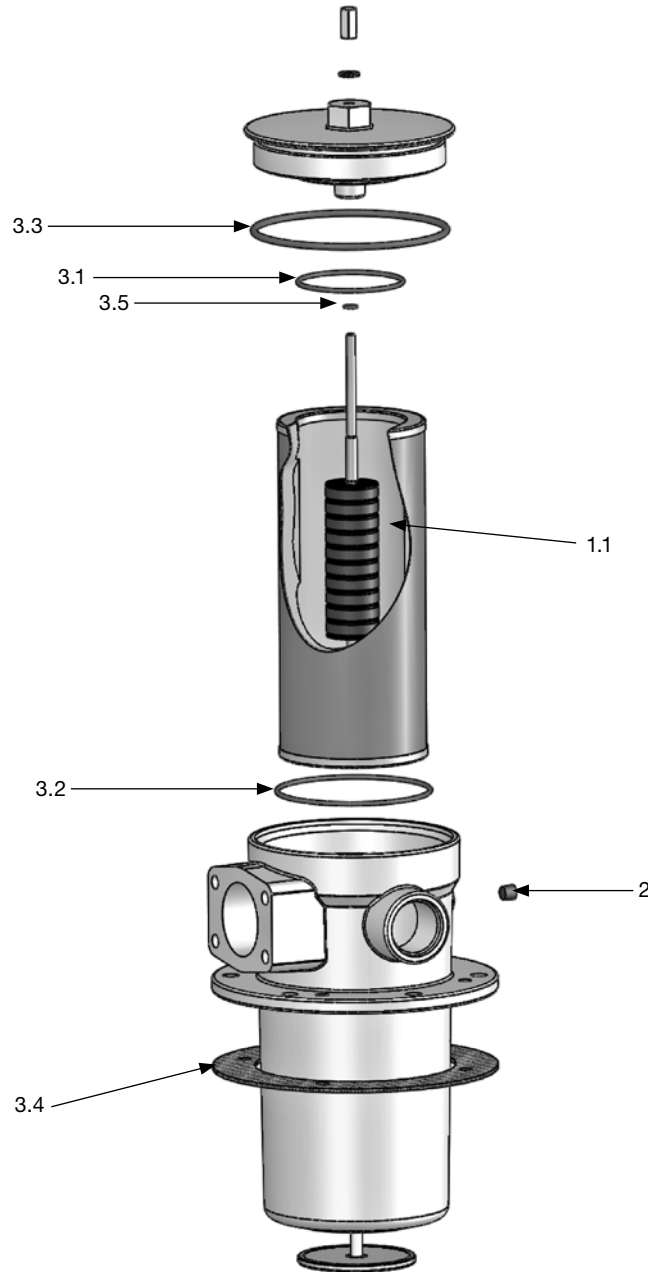
See Maintenance Procedures for details.

3.2. Element Installation

1. Lubricate the new filter element O-ring, Item 3.1, and lid o-ring, Item 3.3, with system fluid or silicone O-ring grease.
2. Install the filter element, Item 1.1 onto the filter lid. Use a twisting action to avoid damaging the O-ring.
3. Screw lid into housing. Avoid damaging the o-ring.
4. Open the inlet valve fully by turning the hex clockwise until it stops.
5. Start system and check for leaks.

Note: Contamination or incomplete pressure release on disassembly can lead to seizing of the bowl thread. Filter elements which cannot be cleaned must be disposed of in accordance with environmental regulations.

4. Replacement Parts Drawing: 4.1. SF60412



Item	Consists of	Designation	12
1.		Filter element	See point 5 Replacement elements
	1.1	Filter element	According to order
2.		Clogging indicator or indicator plug Indicator Plug 1/8" NPT	See Filter Clogging Indicator brochure 2700386
3.		SEAL KIT-ELAST SF... 1.0	02096506
		SEAL KIT-ELAST SF... 1.0 /-V	02096507
	3.1	O-ring (<i>element</i>) upper	85.32 x 3.53 (AS568A-237)
	3.2	O-ring (<i>element</i>) lower	126.59 x 3.53 (AS568A-250)
	3.3	O-ring (<i>lid</i>)	158.12 X 5.33 (AS568A-362)
	3.4	Gasket Reservoir	2093165
	3.5	O-ring (<i>shaft</i>)	9.25 X 1.78 (AS568A-012)

Other spare parts available on request
Bold items can be ordered.

-O-Ring durometer can range from 70-80Sh. EPR Seal Kits available on request. (minimum order may apply)

FILTER MAINTENANCE

5. Replacement Element Model Code

6 . 04 . 12 D 125 W

Length _____
12

Filtration Rating (micron) _____
74, 125

Element Media _____
W = Wire Mesh

6. Clogging Indicator Model Code

VMF 2 UE . X / 3

Indicator Prefix _____
VMF = Return Filters

Trip Pressure _____
0.2 = 3 psid (0.2 bar)

Type of Indicator _____
A = Indicator port (1/8" NPT), plugged - no indicator
UE = Vacuum gauge
UF = Vacuum switch

Modification Number _____

Supplementary Details _____

Seals _____
(omit) = Nitrile rubber (NBR) (standard)
V = Fluorocarbon elastomer (FKM)

Connection _____
3 = 1/8" NPT

(For additional details and options, see Section G - Clogging Indicators.)

7. NOTE

The information in this brochure relates to the operating conditions and applications described.
For applications or operating conditions not described, please contact the relevant technical department.
Subject to technical modifications.

Notes

Large grid area for notes.



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