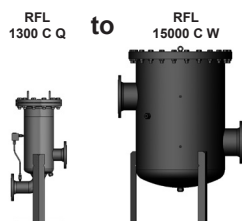




Spare Parts List Inline Filter RFL Welded Version

up to 15000 l/min, up to 16 bar



1. MAINTENANCE

1.1 GENERAL

**PLEASE FOLLOW THE
MAINTENANCE INSTRUCTIONS!**

1.2 INSTALLATION

Before fitting the filter into the system, check that the operating pressure of the system does not exceed the permitted operating pressure of the filter.

Refer to the name plate on the filter! Filters must be flexibly mounted and not fixed rigidly to the floor or used as a pipe support. When installing, ensure that system forces cannot be transferred to the filter. A filter with a stand may only be fixed to the ground if a compensator, expansion loop or similar device is fitted in the line.

1.3 COMMISSIONING

Check that the correct filter element is fitted. Switch on the hydraulic system. Loosen air bleed screw (if present) max. 1 turn and vent filter. As soon as oil begins exiting at the air bleed screw, close it again firmly. Check the filter for leakage.

1.4 TOOLS REQUIRED FOR MAINTENANCE

Size	Air bl. screw	Int. hex. AF width
All	VSTI G ½	AF width 10

Size	Cover bolt	Int. hex. AF width	Torque	
			Steel	Stainless steel
13xx	M20 x 70	AF width 30	170 Nm	80 Nm
25xx	M16 x 50	AF width 24	100 Nm	60 Nm
40xx	M16 x 60	AF width 24	100 Nm	60 Nm
52xx	M20 x 70	AF width 30	170 Nm	80 Nm
65xx	M24 x 70	AF width 36	170 Nm	140 Nm
78xx	M24 x 70	AF width 36	170 Nm	140 Nm
150xx	M24 x 90	AF width 36	170 Nm	140 Nm

1.5 TORQUE VALUES FOR CLOGGING INDICATORS

Type	Max. torque
VM	33 Nm

2. CHANGING THE ELEMENT

2.1 REMOVING THE ELEMENT

1. Switch off hydraulic system.
2. Undo the air bleed screw on the cover by a maximum of 1 rotation to release pressure.
Open oil drain plug and drain contaminated oil into a suitable container. The oil may not be reintroduced into the system unless it has been filtered and cleaned.
3. Loosen cover screws. Lift off cover and remove element holder (if present).
4. Pull out filter element with dirt retainer (if present), by the handle as applicable. Examine element surface for dirt residues and larger particles since these can be an indication of damage to components. Remove dirt retainer (if present) by turning anti-clockwise (bayonet fitting).
5. Replace or clean filter element(s) (only W/HC and V elements can be cleaned).

6. Clean housing, cover and dirt retainer (if present).

7. Examine filter, especially sealing surfaces, for mechanical damage.

8. Check O-rings – and replace if necessary

2.2 FITTING THE ELEMENT

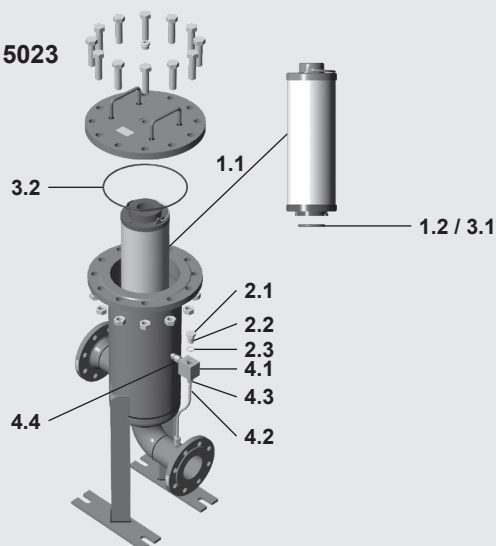
1. Lubricate the sealing surfaces on the filter housing and cover, as well as the O-ring, with clean operating fluid.
2. When fitting a new filter element, check that the designation corresponds to that of the old element.
3. Fasten dirt retainer (if present) to the filter element by turning clockwise. Place filter element carefully onto the element spigot in the housing (if applicable, observe clip position on the element).
4. Insert element holder (if present); reposition cover and screw in cover bolts by hand. Tighten alternately (see TORQUE VALUES).
5. Close the oil drain plug.
6. Switch on the hydraulic system and vent filter until oil exits from the air bleed screw.
7. Close air bleed screw and check filter for leaks.

NOTICE:

Filter elements which cannot be cleaned must be disposed of in accordance with environmental protection regulations.

3. SPARE PARTS

3.1 SPARE PARTS DRAWING RFL 1300 – 15023



3.2 SPARE PARTS LIST RFL 1300 - 15023

Item	Consists	Description	1300/3 1320/3	2500/3 2520/3	4000/3 4020/3	5200/3 5220/3	6500/3 6520/3	7800/3 7820/3	15000/3 15020/3
1.		Filter element	see Point 4. Replacement elements						
	1.1	Filter element	1 x 1300 R... or 1 x 2600 R...	3 x 0850 R... or 3 x 1700 R...	5 x 0850 R... or 5 x 1700 R...	4 x 1300 R... or 4 x 2600 R...	5 x 1300 R... or 5 x 2600 R...	6 x 1300 R... or 6 x 2600 R...	10 x 1300 R... or 10 x 2600 R...
	1.2	O-ring	97.8 x 5.33	68 x 5	68 x 5	97.8 x 5.33	97.8 x 5.33	97.8 x 5.33	97.8 x 5.33
2.		Air bleed screw or screw plug	See Point 5. Replacement clogging indicator						
	2.1	Screw plug VD 0 A.1 VD 0 A.1 /-V	00305932 00305931						
	2.2	Profile seal ring	VD ...						
	2.3	O-ring	15 x 1.5						
3.		Seal kit E RFL Seal kit E RFL /-V	01271580 01271587	01271581 01271588	01271582 01271589	01271583 01271590	01271584 01271591	01271585 01271592	01271586 01271593
	3.1	O-ring (element)	97.8x5.33	68 x 5 (3 pcs.)	68 x 5 (5 pcs.)	97.8 x 5.33 (4 pcs.)	97.8 x 5.33 (5 pcs.)	97.8 x 5.33 (6 pcs.)	97.8 x 5.33 (7 pcs.)
	3.2	O-ring (cover)	234.24x5.33	278.77x5.33	370x5	405.26x7	506.86x7	506.86x7	715x8.4

Other spare parts RFL 1300 - 15020 (steel)

4.		Pipework for clogging indicator	00418716						
	4.1	Connector for indicator	V1/4i-D-S (00286214)						
	4.2	Pipe EN10305-1	8 x 1.5						
	4.3	Straight threaded connection	Ermeto-GE 8-PSR						
	4.4	Straight screw-in connector	Ermeto-EVGE 8-PSR-ED						

Other spare parts RFL 1303 - 15023 (stainless steel)

4.		Pipework for clogging indicator	03890115						
	4.1	Connector for indicator	V1/4i-D-S (00286214)						
	4.2	Pipe DIN 2462	8 x 2						
	4.3	Straight threaded connection	Ermeto-GE 8-PSR-71						
	4.4	Straight screw-in connector	Ermeto-EVGE 8-PSR-ED-71						

Other spare parts on request

4. REPLACEMENT ELEMENT

	0850	R	010	ON	/-V
Size	0850, 1300, 1700, 2600				
Type	R				
Filtration rating	ON: 001, 003, 005, 010, 015, 020 V: 003, 005, 010, 020 ON/PO 005, 010, 020 W/HC: 025, 050, 100, 200 P/HC: 010, 020 BN4AM: 003, 010 AM: 040				
Filter material	ON, ON/PO, V, W/HC, P/HC, BN4AM, AM				
Supplementary details	V (For description see "RFL Welded Version" brochure)				

5. REPLACEMENT CLOGGING INDICATOR

	VM	2	D	X	/-L24
Type of indicator	VM differential pressure indicator up to 210 bar operating pressure				
Response pressure	2 standard 2 bar, others on request				
Type of clogging indicator	A with screw plug in indicator port B visual C electrical D visual and electrical				
Modification number	X the latest version is always supplied				
Supplementary details	L..., LED, V (for description, see "Clogging Indicators" brochure)				

6. MAINTENANCE INSTRUCTIONS

6.1 USER INSTRUCTIONS FOR FILTERS



Notice

This pressure equipment must only be put into operation in conjunction with a machine or system.



Notice

The pressure equipment must only be used as stipulated in the operating instructions of the machine or system.



Notice

This pressure equipment must only be operated using hydraulic or lubricating fluid.



Caution

The user must take appropriate action (e.g. venting) to prevent the formation of air pockets.



Caution

Repair, maintenance work and commissioning must be carried out by specialist personnel only.

Allow the pressure equipment to cool before handling.

The stipulations of the operating instructions of the machine or system must be followed.



Danger

Caution: pressure equipment! Before any work is carried out on the pressure equipment, ensure the pressure chamber concerned (filter housing) is depressurised.



Danger

On no account must any modifications (welding, drilling, opening by force etc.) be carried out on the pressure equipment.



Notice

It is the responsibility of the owner to comply with the water regulations of the country concerned.



Caution

Statutory accident prevention regulations, safety regulations and safety data sheets for fluids must be observed.



Caution

Filter housing must be earthed.



Caution

When working on, or in the vicinity of, hydraulic systems, naked flames, spark generation and smoking are forbidden.



Caution

Hydraulic oils and water-polluting fluids must not be allowed to enter the soil or watercourses or sewer systems. Please ensure safe and environmentally friendly disposal of hydraulic oils. The relevant regulations in the country concerned with regard to ground water pollution, used oil and waste must be complied with.



Caution

Whenever work is carried out on the filter, be prepared for hot oil to escape which can cause injury or scalding as a result of its high pressure or temperature.



Danger

When using electrical clogging indicators, the electrical power supply to the system must be switched off before removing the clogging indicator connector.

Customer Information in respect of Machinery Directive 2006/42/EC

Hydraulic filters are fluid power parts/ components and are therefore excluded from the scope of the Machinery Directive. They do not bear the CE mark. Before using these components, ensure compliance with the specifications provided by HYDAC Filtertechnik GmbH in this documentation.

The specifications also contain information on the relevant essential health and safety requirements (based on Machinery Directive 2006/42/EC) that are to be applied by the user.

We hereby declare that the filters are intended to be incorporated into machinery within the terms of the Machinery Directive 2006/42/EC. It is prohibited to put the filters into service until the machinery as a whole is in conformity with the provisions of the Machinery Directive. Furthermore, our Terms of Sale and Delivery are available on our website (www.hydac.com).

SERVICE ADDRESSES

HYDAC Service GmbH
Postfach 1251
66273 Sulzbach / Saar, Germany

Factory address:
Werk 13
Friedrichsthaler Str. 15
66540 Neunkirchen / Heinitz
Germany

ServiCenter:
Tel.: +49 (0) 6897 / 509-9083
Fax: +49 (0) 6897 / 509-9881

Customer service:
Tel.: +49 (0) 6897 / 509-412
Fax: +49 (0) 6897 / 509-828

6.2 MAINTENANCE, GENERAL

This section describes maintenance work which must be carried out periodically. The operational safety and life expectancy of the filter, and whether it is ready for use, depend to a large extent on regular and careful maintenance.

6.3 MAINTENANCE MEASURES

- Spare parts must fulfil the technical requirements specified by the manufacturer.
This is always ensured when using original HYDAC spare parts.
- Keep tools, working area and equipment clean.
- After disassembling the filter, clean all parts, check for damage or wear and replace parts if necessary.
- When changing a filter element, a high level of cleanliness must be observed!

6.4 INTERVAL BETWEEN ELEMENT CHANGES

In principle we recommend that the filter element is changed after 1 year of operation at the latest.

We recommend installing the filter with a clogging indicator (visual and/or electrical or electronic) to monitor the filter element.

If the clogging indicator responds, it is necessary to change or clean the filter element without delay (only W and V elements can be cleaned).

When no clogging indicator has been fitted, we recommend changing the elements at specific intervals.

(The frequency of changing the filter elements depends on the filter design and the conditions under which the filter is operated.) When filter elements are subject to high dynamic loading it may prove necessary to change them more frequently. The same applies when the hydraulic system is commissioned or repaired or when the oil is changed.

The standard clogging indicators only respond when fluid is flowing through the filter. With electrical indicators the signal can also be converted into a continuous display on the control panel. In this case the continuous display must be switched off during a cold start or after changing the element.

If the clogging indicator responds during a cold start only, it is possible that the element does not yet need to be changed.

NOTE

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

This image shows a full page of blank graph paper. The grid consists of small, equal-sized squares formed by thin black lines. There are no margins, text, or other markings on the page.