# **(HYDAC)** INTERNATIONAL



## 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 and the direction of flow!

## Important:

When using filters without bypass valve and at operating pressures above 20 bar, robust filter elements of the type B<u>H</u>4HC must be used for safety reasons.

Under extreme conditions (e.g. cold start), bypass valves will allow a partial flow past the element for a short time.

## **1.3 COMMISSIONING**

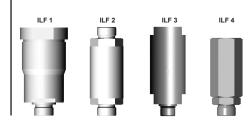
Check that the correct filter element is fitted. Screw in housing again fully. Switch on the hydraulic system and check filter for leakage.

Vent filter at an appropriate point in the system.

## 1.4 TOOLS REQUIRED FOR MAINTENANCE

Size	Spanner for cover	Key for housing	Torque value
ILF 1	AF width 55	AF width 41	100 Nm
ILF 2	AF width 36	AF width 36	150 Nm
ILF 3	AF width 42	AF width 42	80 Nm
ILF 4	AF width 32	AF width 36	90 Nm

## Spare Parts List Inline Filter ILF up to 120 I/min, up to 350 bar



## 2. CHANGING THE ELEMENT 2.1 REMOVING THE ELEMENT

- 1.Switch off hydraulic system; release filter pressure and remove filter.
- 2. Unscrew filter housing (drain fluid into a suitable container and clean or dispose of it in accordance with environmental regulations).
- 3. Remove filter element. Examine element surface for dirt residues and larger particles since these can be an indication of damage to components (replacement element for ILF 4 available on request).
- 4. Replace or clean filter element (only W elements can be cleaned).
- 5. Clean filter housing and filter cover; particular attention must be given to the threads!
- 6.Examine filter, especially sealing surfaces, for mechanical damage.
- 7. Check O-rings and replace if necessary

## 2.2 FITTING THE ELEMENT

1.<u>ILF 1-3:</u> Lubricate the sealing surfaces and thread on the filter housing and cover, as well as the O-ring/Teflon seal, with clean operating fluid.

#### <u>ILF 4:</u>

Lubricate the O-ring with clean operating fluid. Apply aluminium paste or another suitable lubricant to threads.

- 2. When fitting a new filter element, check that the designation corresponds to that of the old element.
- 3. Install filter element.
- Screw in filter housing fully (see point.
   1.4 "Torque value") and install in the system.
- 5. Switch on hydraulic system and vent filter at a suitable point in the system.
- 6. Check the filter for leakage.

## NOTICE:

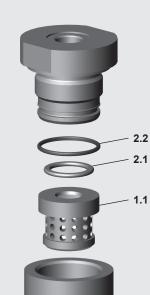
Contamination or incomplete pressure release on disassembly can lead to seizing of the bowl thread.

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

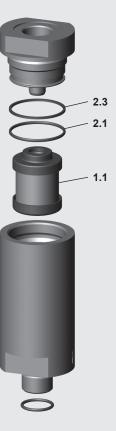
## 3. SPARE PARTS

## 3.1 SPARE PARTS DRAWING ILF









ILF 3

## 3.2 SPARE PARTS LIST ILF

ltem	Con- sists	Description	ILF 1	ILF 2	ILF 3
1.		Filter element	see Point 4. Replacement elements		
	1.1	Filter element	HE 1468	HE 03119932	0015 R 0015 D
2.		Seal kit ILF Seal kit ILF /-V	01294601 01294602	Element can be changed	01292623 01294600
	2.1	O-ring (cover)	25 x 3.53	up to 10x without a new seal being required! (Teflon seal PTFE)	36 x 2
	2.2	O-ring (cover)	34 x 2.5		_
	2.3	Back-up ring	_		ILF (3239288)

Other spare parts on request

Notice: replacement element for ILF 4 available on request!

4. REPLACEMENT ELEM	<b>IENT</b> <sup>1)</sup> <u>HE03119932</u> <u>100</u> -W/-V				
Size           0015 R <sup>2)</sup> only ILF 3           0015 D <sup>2)</sup> only ILF 1           HE1468         only ILF 1           HE03119932         only ILF 2					
Filtration ratingON, BH4HC: 010, 020 (only ILF 3)W: 40, 100, 200 (others on request)					
Filter material ON, BH4HC, W					
Supplementary details V (For description see "ILF" brochure)					
<ol> <li><sup>1)</sup> Replacement element for ILF 4 a</li> <li><sup>2)</sup> Replacement element 0015 R( or 0015 D (version without byp</li> </ol>	(bypass version)				

## 6. MAINTENANCE INSTRUCTIONS

## **6.1 USER INSTRUCTIONS FOR FILTERS**



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



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

or system.



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



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



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.



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



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



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



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



Filter housing must be earthed.



vicinity of, hydraulic systems, naked flames, Caution spark generation and smoking are forbidden.

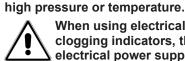


Hydraulic oils and waterpolluting fluids must not be allowed to enter the soil or watercourses or sewer

When working on, or in the

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.

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



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

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#### **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.

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.