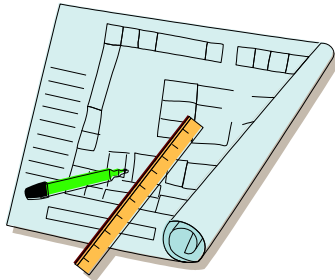


Technical Documentation Special Version



Installation notes / spare parts

Customer: HYDAC COOLING
Order-no.: 4502961782
Hydac-Kom.-no.: 1874442

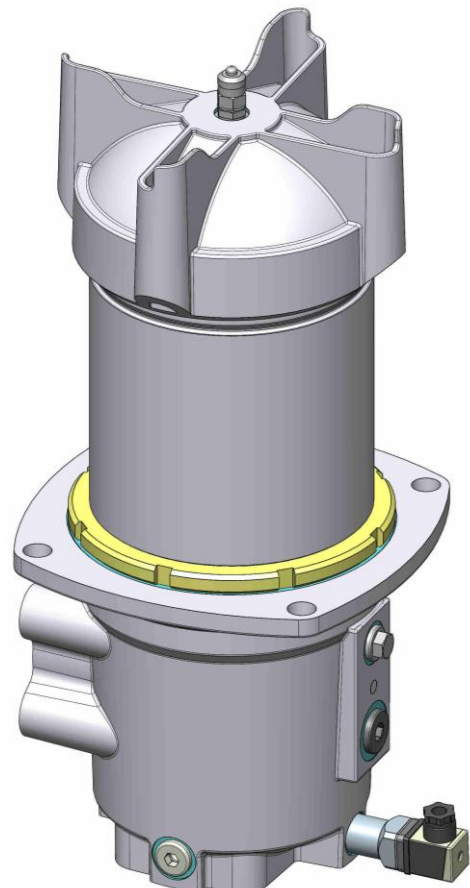
Low Pressure Filter

Filter type: NF BN/HX 1340 D P 10 D 2.0 /-L24-KE50-SO562
Material-no.: 01303348

The warranty offered pursuant to our Terms of Sale and Delivery is applicable only in the event that original HYDAC components are used and work is carried out solely by properly trained and qualified personnel.

INDEX

- 1. Maintenance instructions**
 - 1.1 Instructions for use of filter
 - 1.2 Installation
 - 1.3 Commissioning
 - 1.4 Equipment required for changing the element
 - 1.5 Torque ratings for clogging indicators
- 2. Maintenance**
 - 2.1 General
 - 2.2 Maintenance procedures
 - 2.3 Interval between changing elements
- 3. Changing the element**
 - 3.1 Removing the element
 - 3.2 Fitting the element
- 4. Spare parts**
 - 4.1 Spare parts drawing
 - 4.2 Spare parts dist



1. Maintenance instructions

1.1 Instructions for Use of Filter



This pressure vessel must only be commissioned in conjunction with a machine or system.



Under the provisions the pressure vessel must only be used according to the operating instructions of the machine or system.



This pressure unit has to be used with hydraulic- or lubrication fluid only.



The user must ensure appropriate actions to avoid air formation (e.g. venting)



Repairs, maintenance and commissioning must only be carried out by specialist staff. Do not touch the pressure vessel until cool. Carry out the directions in the operating instructions of the machine or system.



Attention pressure vessel: please ensure for all works at the pressure vessel that the referring side of the pressure vessel (filter housing) is released of pressure.



No modifications may be made to the pressure vessel (welding, drilling, forced opening..).



The operator/owner is to ensure adherence to the National Water Resources Act as well as local water resources laws and other related regulations.



Adherence is to be maintained to statutory accident prevention regulations, safety regulations and safety data sheets for fluids.



When working directly on or in the vicinity of hydraulic systems, there is to be no smoking or open flames/fire, with every effort being taken to prevent the generation of sparks.



Hydraulic media and water-polluting fluids must not be allowed to soak into the soil, seep into bodies of water or the sewage system. Ensure that hydraulic media and fluids are disposed of in an environmentally safe manner. Adherence is to be maintained to pertinent national and local regulations pertaining to groundwater protection, disposal of waste/spent oil and (hazardous) waste.



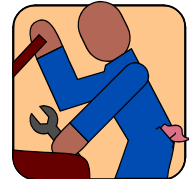
Work on filters may involve leaking hot oil which may cause injury and scalding as result of its high pressure and/or temperature.



During transport and storage, attention has to be paid to avoid damages, since otherwise the filtration performance can worsen.

1.2 Installation

Before installing the filter in the hydraulic system check to see whether the permissible operating pressure of the system corresponds to the value indicated on the rating plate.



1.3 Commissioning

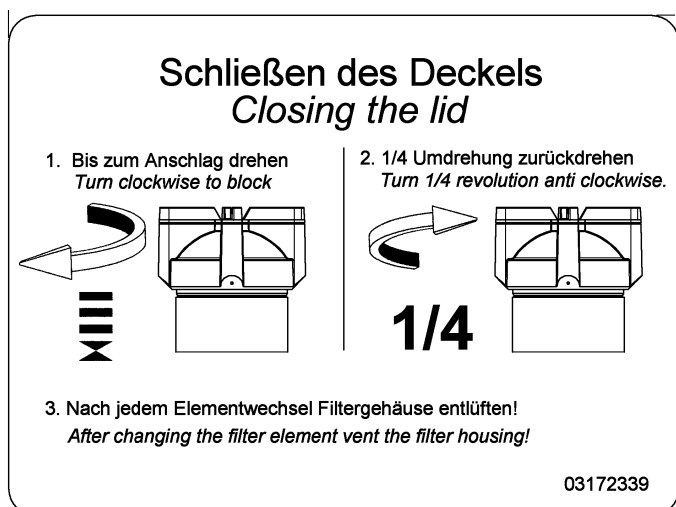
Check that the correct filter element is fitted. Screw in cover plate again (the sealing effect will not be improved by overtightening).
Switch on hydraulic system and fill the filter via system. Vent filter at an appropriate point in the system. Check filter for leakage.

1.4 Tools Required for Maintenance Work

Size	Key for VD 0 A.1	Key for VR 0 A.0
NF 2610	SW 27	SW 19

1.5 Torque Ratings For Clogging Indicators

TYPE	max. Moment
VD...	25 Nm
VR...	25 Nm



2. MAINTENANCE

2.1 General

This section contains a description of the periodical maintenance work to be done. The operational readiness, reliability and lifetime life of the filter essentially depend on careful and regular maintenance.

2.2 Maintenance procedures

- Spare parts are to conform to 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 dismantling the filter clean all components, check for damage or wear, and replace, if necessary.
- When replacing a filter element make sure that everything is kept as clean and dirt-free as possible in order to prevent the filter from being contaminated.

2.3 Element change interval

We generally recommend to change the filter element at least once a year.

If no clogging indicator is fitted, we recommend that the filter elements are changed at pre-defined intervals, however at least once a year (the element change frequency depends on the filter design and the conditions to which the filter is subjected). When the filter element is subjected to high dynamic loading it may prove necessary to change the element more frequently. The same applies to commissioning, repair work, oil changes etc. in the hydraulic system.

Standard clogging indicators only indicate when there is flow through the filter. With electrical clogging indicators, the signal can also be processed and indicated as a continuous warning on the control panel. In this case it is necessary to delete the warning at cold start or after changing the filter element.

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3. CHANGING THE ELEMENT

3.1 Removing The Element



1. Switch off hydraulic system and release filter pressure.
2. Remove oil drain plug. Collect oil in a container.
3. Unscrew the cover plate.
4. Pull out the filter element (1) by handle (Examine the surface of the filter element for contamination residue and large-sized particles. There may be an indication of damage to components).
5. Remove contamination retainer (6). Replace the filter element.
6. Clean the housing, contamination retainer and cover plate as may be necessary.
7. Check the filter for mechanical damage/wear, paying special attention to the appearance of sealing surfaces.
8. Check the o-rings. If necessary, change them.

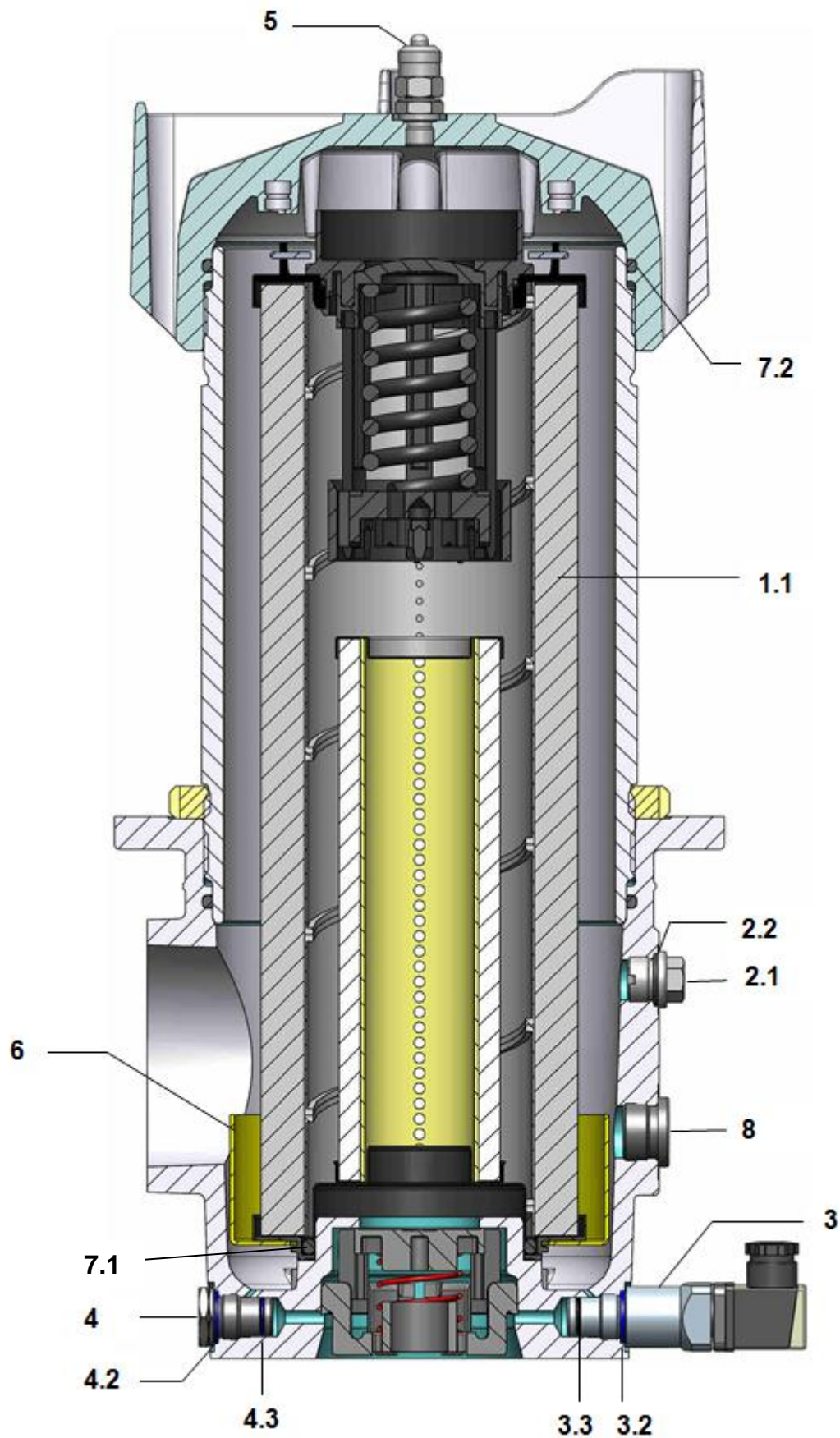
3.2 Fitting The Element

1. Moisten the sealing surfaces on the filter housing and the cover plate including the seals with clean hydraulic medium as needed.
2. When fitting a new filter element check that the designation of the new filter element corresponds to that of the old element.
3. Fit contamination retainer (6) by turning clockwise.
4. Carefully mount the filter element (1) with contamination retainer carefully onto the filter element spigot.
5. Screw on cover plate (hand-tight) and turn back a quarter.
6. Screw in oil drain plug.
7. Switch on the hydraulic system, Vent filter at an appropriate point in the system.
8. Check filter for leakage.

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

4. SPARE PARTS

4.1 Spare parts drawing NF BN/HX 1340 D P 10 D 2.0 /-L24-KE50-SO562



4.2 Spare parts list NF BN/HX 1340 D P 10 D 2.0 /-L24-KE50-SO562

Item	Cons. of	Designation	Qty.	NF 1340
1.		Filter element 1300 R 010 BN4HX /-KE50-SO562	1	01303356
	1.1	Filter element	1	1300 R...
	1.2	O-ring	1	96 x 6
2.		Locking screw VR 0 A.0 /-ZN8B-SO562	1	01303370
	2.1	Locking screw	1	VR...
	2.2	O-ring	1	18 x 2,5
3.		Clogging indicator VM 3 D.0 /-L24-SO135-SO562	1	01303368
	3.1	Clogging indicator	1	VM...
	3.2	Profile seal ring	1	VD/VM...
	3.3	O-ring	1	15 x 1,5
4.		Locking screw VD 0 A.1 /-SO562	1	01303369
	4.1	Locking screw	1	VD...
	4.2	Profile sealing ring	1	VD/VM...
	4.3	O-ring	1	15 x 1,5
5.		Coupling (venting)	1	06112677
6.		Contamination retainer RF...950/1300 HC	1	01204141
7.		Seal kit-E NF..1310 F 2.0	1	*)
	7.1	O-ring (element)	1	96 x 6
	7.2	O-ring (cover)	1	189,87 x 5,33
8.		Locking screw VSTI G 3/4	1	06112675

*) the article-no. will be fixed if necessary.

- Other spare parts on request.

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.

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

Hydraulic filters are defined as fluid power parts / components and are therefore excluded from the scope of the EC Machinery Directive, sections 1.4.1 - 1.4.3. They will not bear the CE mark!

Before using these components, ensure compliance with the specifications provided by HYDAC-Filtertechnik. The specifications also contain information on the relevant essential health and safety requirements (based on Machinery Directive 2006/42/EC).

We hereby declare that the filters are intended to be incorporated into machinery within the meaning of the Directive 2006/42/EC.

It is prohibited to put the filter into service until the machinery as a whole is in conformity with the provisions of the Machinery Directive.