HYDAC INTERNATIONAL

Filters

RKT Series
Spare Parts List

up to 225 gpm (850 lpm), up to 145 psi (10 bar)

1. Maintenance

1.1 General

Please follow the maintenance instructions.

1.2 Installation

In the top part of the reservoir, there is an inlet chamber which holds the tank flange and the housing tube. The filter element is plugged into housing pipe in the hydraulic tank. This is accessed via the tank opening. Before installing the filter into the system, check that the operating pressure of the system does not exceed the maximum operating pressure of the filter. Please observe the removal height of the filter element. Refer to the type code label on the filter.

1.3 Commissioning

Check that the correct filter element is installed. Place the cover and tighten cover bolts alternately. Switch on hydraulic system and vent filter at a suitable point in the system. Check the filter for leakage.

1.4 Maintenance Tools

RKT	Cover Nut / Screws	Int. hex. Allen Key	Torque Value In Steel
0170, 0230, 0300, 0400	M10	AF width 16	25 Nm 18.5 ft-lbs
0310, 0410, 0500	M12	AF width 18	30 Nm 22 ft-lbs
0600, 0800, 1200	M12	AF width 18	30 Nm 22 ft-lbs

2. Element Replacement

2.1 Element Removal

1. Switch off hydraulic system and release filter pressure (if necessary, release the pressure in the tank).
2. Loosen the cover screws and remove the cover in a vertical upward movement.
3. For series 0170 – 0400:
   Pull element from the valve seat with the clamp. Let the residual oil drip into the filter housing. Remove the clamp from the element with an counter-clockwise rotary movement.
   For the series 0310 – 0500:
   Remove clamp from bayonet lock with a clockwise rotary movement and pull vertically from the housing tube. Pull element out of the housing tube. Let the residual oil drip into the filter housing.
   For series 0600 – 2400:
   Here, the clamp is connected to the cover. After removing the cover, lift the filter element from the filter housing and let the residual oil drip into the filter housing.
4. Examine element surface and magnetic core for dirt residues and larger particles since these can be an indication of damage to components.
5. Replace or clean filter element (only WPI elements can be cleaned).
6. Clean housing and magentic core.
7. Examine filter, especially sealing surfaces, for mechanical damage.
8. Check O-rings – and replace if necessary.

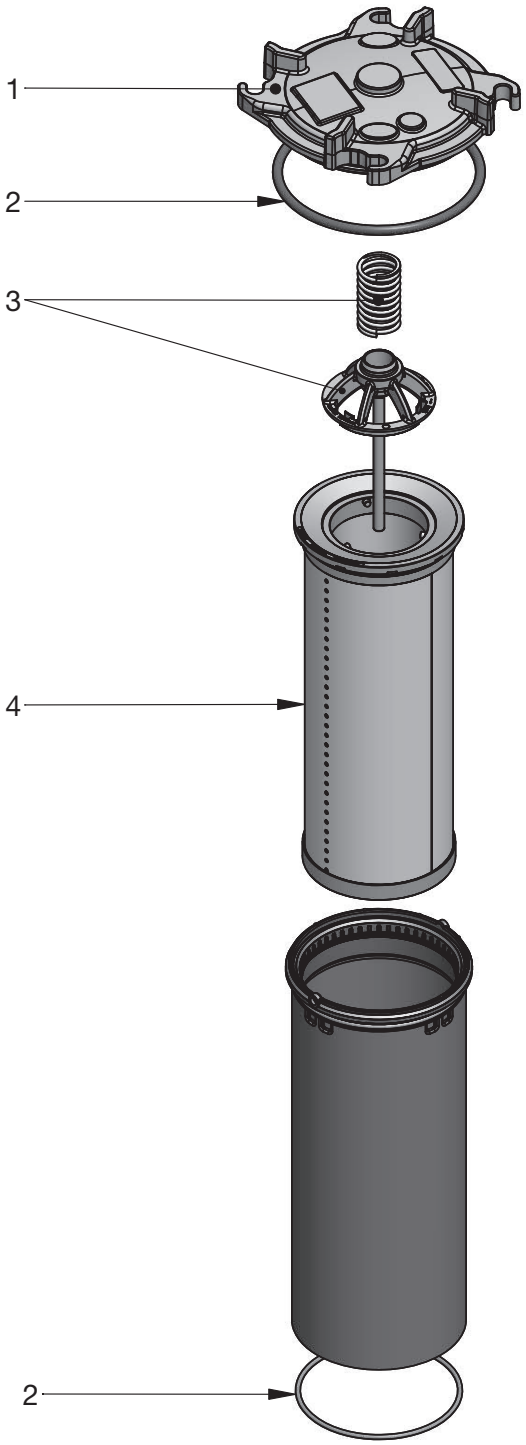
2.2 Element Installation

1. Lubricate the sealing surfaces on the filter housing and cover, as well as the O-ring, with clean operating fluid.
2. When installing a new filter element, check that the designation corresponds to that of the old element.
   For series 0170 – 0400:
   Snap the clamp with spring into place at the element with a clockwise rotary movement. Insert the filter element into the filter housing and press into the O-ring flap.
   For series 0310 – 0500:
   Insert filter element into the housing tube. With a rotating movement, make sure that the element and springnut connection is in place and fully in contact with the base. Fit clamp with spring and lock bajonet in anticlockwise direction.
   For series 0600 – 2400: Insert the filter element into the filter housing and press into the O-ring flap.
3. Fit cover with magnetic core. For series 0600 – 1200: Fit covers with a rotary movement, so that the polygon shape of the clamp is in the counter piece of the element. Then, align the screw drill holes on the cover to the threaded holes in the flange. Tighten cover screws / nuts by hand. Then tighten alternately and observe the torques specified by the machine manufacturer.
4. If necessary, refill hydraulic oil.
5. Switch on hydraulic system and vent filter at a suitable point in the system.
6. Check the filter for leakage.

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

3. Spare Parts

3.1 Spare Parts Drawing RKT 0170, 0230, 0300, 0400

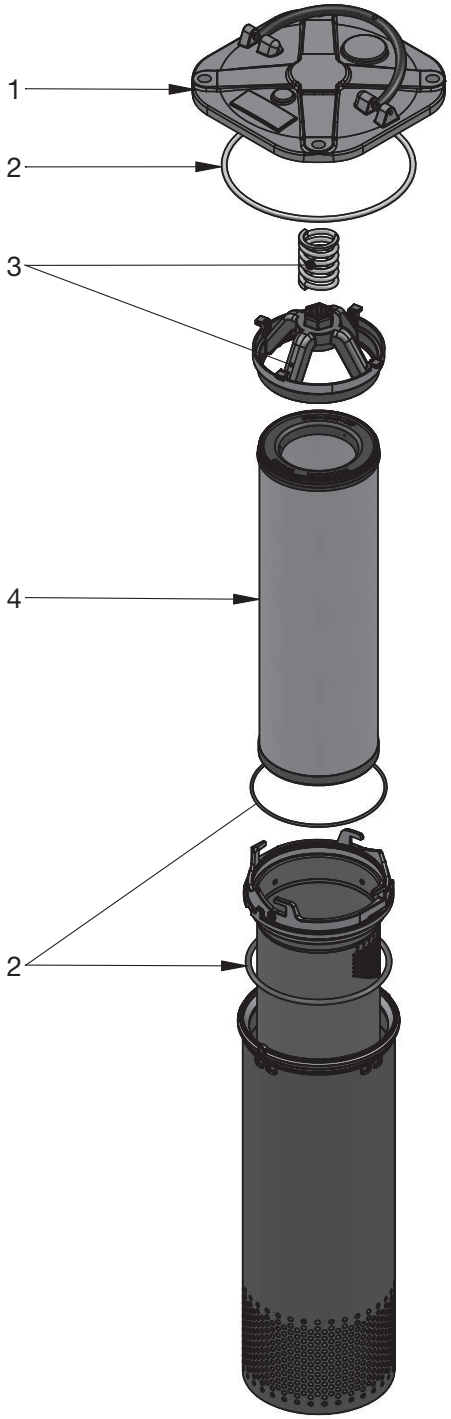


Item	RKT 0170	RKT 0230	RKT 0300	RKT 0400
1.	RKT cover kpl 0170 – 0400 (Material no: 200132)			
2.	RKT seal kit kpl 0170 – 0400 (Material no: 200133) Cover: O-ring ISO3601-1-142x7-N-NBR-Sh70			
3.	RKT clamp with magnetic core kpl 0170 – 0400 (Material no.: 200134) RKT clamp without magnetic core kpl 0170 – 0400 (Material no.: 200135)			
4.	Filter element ULP-00xx-117-X509-S-N-RT UMC-00xx-117-X509-S-N-RT WPI-00xx-117-X509-S-N-RT	Filter element ULP-00xx-117-X512-S-N-RT UMC-00xx-117-X512-S-N-RT WPI-00xx-117-X512-S-N-RT	Filter element ULP-00xx-117-X516-S-N-RT UMC-00xx-117-X516-S-N-RT WPI-00xx-117-X516-S-N-RT	Filter element ULP-00xx-117-X520-S-N-RT UMC-00xx-117-X520-S-N-RT WPI-00xx-117-X520-S-N-RT
	xx = filtration rating			

For special model FKM seal, please contact our sales

3. Spare Parts

3.1 Spare Parts Drawing RKT 0310, 0410, 0500



Item	RKT 0310	RKT 0410	RKT 0500
1.	RKT cover kpl 0310 – 0500 (Material no: 200136)		
2.	RKT seal kit kpl 0310 – 0500 (Material no: 200107) Cover: O-ring ISO3601-1-183.52x5.33-NBR-Sh70 Clamp: O-ring ISO 3601-1-133x2.62-NBR-Sh70 Housing pipe: O-ring ISO 3601-1-145.64x3.53-NBR-Sh70		
3.	RKT clamp with magnetic core kpl 0310 – 0500 (Material no.: 200137) RKT clamp without magnetic core kpl 0310 – 0500 (Material no.: 200138)		
4.	Filter element ULP-00xx-120-XZ11-Q-P-RT UMC-00xx-120-XZ11-Q-P-RT WPI-00xx-120-XZ11-Q-P-RT	Filter element ULP-00xx-120-XZ14-Q-P-RT UMC-00xx-120-XZ14-Q-P-RT WPI-00xx-120-XZ14-Q-P-RT	Filter element ULP-00xx-120-XZ18-Q-P-RT UMC-00xx-120-XZ18-Q-P-RT WPI-00xx-120-XZ18-Q-P-RT
	xx = filtration rating		

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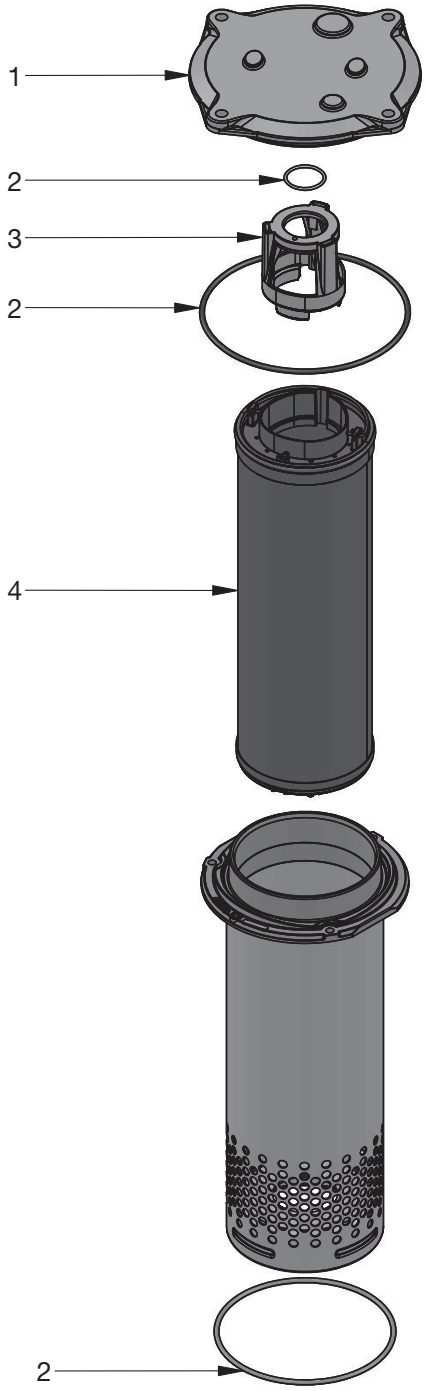
3. Spare Parts

3.1 Spare Parts Drawing RKT 0600, 0800, 1200



Item	RKT 0600	RKT 0800	RKT 1200
1.	RKT cover with magnetic core kpl 0600 – 1200 (Material no.: 200139) RKT cover without magnetic core kpl 0600 – 1200 (Material no.: 200140)		
2.	RKT seal kit kpl 0600 – 1200 (Material no: 200141) Cover: O-ring-ISO3601-1-372A-221.62x5.33-N-NB-70Sh Clamp: O-ring 40.0x3.0-NBR-70Sh Cover: O-ring-ISO3601-1-367A-189.87x5.33-N-NBR-70Sh		
3.	RFT clamp kpl 0600 – 1200 (Mat.no.: 200150)		
4.	Filter element ULP-00xx-152-X218-S-N-RT UMC-00xx-152-X218-S-N-RT WPI-00xx-152-X218-S-N-RT	Filter element ULP-00xx-152-X225-S-N-RT UMC-00xx-152-X225-S-N-RT WPI-00xx-152-X225-S-N-RT	Filter element ULP-00xx-152-X231-S-N-RT UMC-00xx-152-X231-S-N-RT WPI-00xx-152-X231-S-N-RT
	xx = filtration rating		

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4. Maintenance Instructions

4.1 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.
- It is the responsibility of the operator to comply with the water regulations of the country concerned.

CAUTION

- The user must take appropriate action (e.g. venting) to prevent the formation of air pockets.
- Repairs, maintenance work and commissioning must only be carried out by trained personnel.
- Allow the pressure equipment to cool before handling.
- The stipulations of the operating instructions of the machine or the system must be followed.
- Statutory accident prevention regulations, safety regulations and safety data sheets for fluids must be observed.
- Filter housing must be grounded.
- When working on, or in the vicinity of, hydraulic systems, open flames, sparks and smoking are forbidden.
- 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.
- 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.
- Filters with switching valve are designed to have a permissible leakage depending on the operating medium. This is independent of the operating medium.

DANGER!

- Caution: pressure equipment! Before any work is carried out on the pressure equipment, ensure the pressure chamber concerned (filter housing) is depressurized.
- On no account must any modifications (welding, drilling, opening by force...) be carried out on the pressure equipment.
- When using electrical clogging indicators, the electrical power supply to the system must be switched off before removing the clogging indicator connector.

4.2 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.

4.3 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.

4.4 Interval Between Element Changes

In principle we recommend that the filter element is changed every 6 months or upon indication, whichever occurs first.

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

When no clogging indicator has been installed, 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, 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.

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 Machinery Directive, sections 1.4.1 - 1.4.3. They do not bear the CE mark.

Before using these components, ensure compliance with the specifications provided by HYDAC Technology Corporation. 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 terms of the 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.

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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.

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