

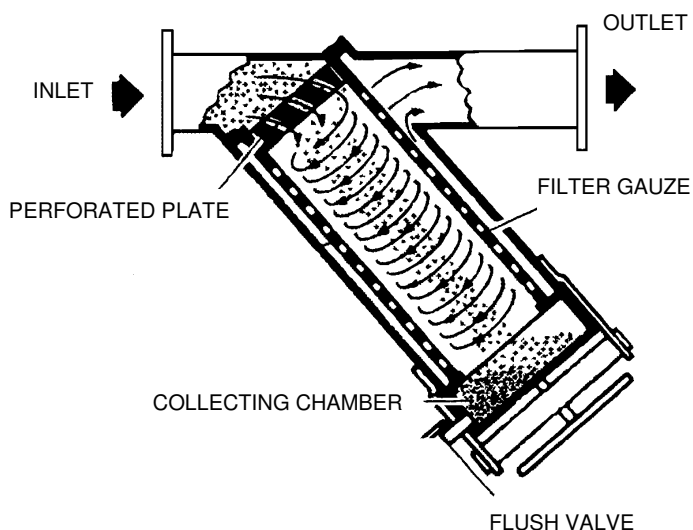
Instruction Manual

Circulation Filter Series 3000



General instructions:

This filter has been designed and made to meet the highest requirements as to quality and finish. The uniqueness of this filter resides in the fact that the filter element is cleaning itself constantly, the deposit being collected in a built-in chamber. The collecting chamber can be emptied during operation by automatic activation of the flush valve.



Working:

The drawing shows the principle of operation of the UDI® circulation filter. The water passes a perforated plate with 6 obliquely drilled-in holes. This results in the circular water movement which brings about a constant cleaning of the filter gauze. Impurities are carried in the direction of the flush valve. For this reason the filter body must be installed pointing downwards. The collected dirt can be discharged through a – manual or automatic – (3/4") drain valve.

Installation:

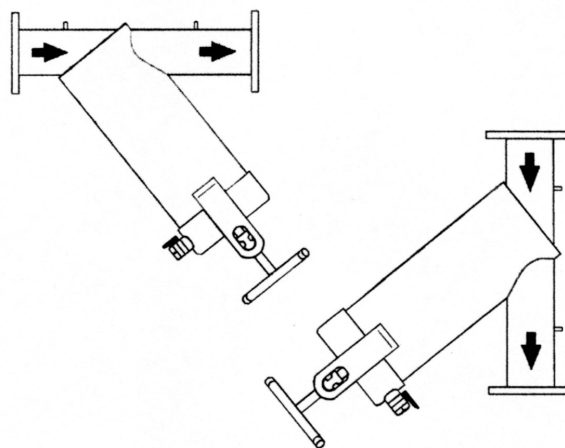
When installing the filter, pay particular attention to the correct direction of the water flow (inlet/outlet) as indicated by the arrow on the filter. The filter body points downwards; if this position is not possible, the filter body may be placed at an angle of up to 45°. The flush valve must be located on the underside of the filter.

If there is a risk of water flowing back, install a quick-acting (mechanical) check valve.

A pressure relief valve must be installed before the filter if the pressure is not sufficiently under control.

When installing more than one filter, allow enough room between the units for easier maintenance.

The maximum working pressure is up to 8 bar. The filter is designed to withstand a maximum pressure of 10 bar.



Filter body position and direction of flow



Instruction Manual

Circulation Filter Series 3000

Flow-rate adjustment:

The holes in the whirl plate can be closed by inserting rubber plugs. The table below shows the recommended number of openings at different flow rates. The table is based on a pressure differential within the ideal working range of 0.3-0.5 bar.

Operation:

Optimal filtration is achieved at the proper flow velocity when the differential pressure between inlet and outlet is 0.3-0.5 bar. Measure the differential pressure across the filter during operation by inserting a pressure gauge (with needle) into the pressure-measuring points (18) in the inlet and outlet.

If the differential pressure is too low, close off another hole in the whirl plate with the rubber plug supplied.

Do not open the cover and do not tighten it while the filter is in operation or under pressure.

Flushing:

Draining off has to take place at regular intervals as determined by the working conditions and water quality.

Draining off can be achieved in 3 ways:

1. Manually: by opening the valve (09).
 2. Automatically: using a timer. In this case a hydraulic or electric valve instead of a manual valve is to be mounted. The connection of the operating pressure to the valve must be located before the filter.

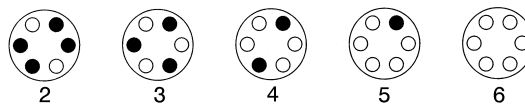
Adjust the flushing program according to the recommended time intervals:

- flushing time: 10-25 seconds.
 - flushing intervals: 30-120 minutes
3. Continuously: by connecting a (Ø 10-20mm) hose to the valve. The hose must be straight, not rolled up or twisted. If dirt tends to accumulate, shorten the hose.

If quantities of residue are becoming too large, shorten the time intervals between flushing operations.

Check to ensure the flushing operation is working properly by activating it manually. If the filter is getting clogged too often, check the draining system and/or close off an opening in the whirl plate.

Type	Unit	3015	3020	3030	3040	3060
Connection	Inch	1.5"	2"	3"	4"	6"
Capacity	m ³ /h	3.5-11	11-30	12-40	25-65	45-150
Number of holes	2	3.5-4.3	11-14	12-16	20-28	45-63
	3	4.4-5.8	14-18	16-21	28-38	63-92
	4	5.9-7.5	18-22	21-27	38-44	82-106
	5	7.5-9.2	22-27	27-33	44-53	101-130
	6	9.0-11.2	27-31	33-40	53-66	118-150



Number of holes in whirl plate

Instruction Manual Circulation Filter Series 3000



Periodic cleaning:

Check and clean the filter element (06) every 2-3 weeks, at the end of the season or when soiled due to improper control.

Stop the flow to the filter.

Open the flush valve (09) by hand to let the pressure escape and drain the filter. Carefully remove the cover (03), the filter element (06) and the inner rubber (04).

Thoroughly clean the filter and the filter element with clean water and a brush to remove particles (NEVER USE A STEEL WIRE BRUSH!).

Check to ensure the filter element is intact and not damaged.

Assembly:

Place the whirl plate (07) in its position on the element.

Close off the correct number of holes in the whirl plate.

Place the inner rubber (04) on the element on the side of the whirl plate.

Place the cover rubber (05) at the other end of the element.

Carefully insert the element into the housing (13) and fit the cover rubber (05) snugly onto the filter body.

Place the cover (03).

Check whether the flush valve (09) has been placed correctly at the lowest point.

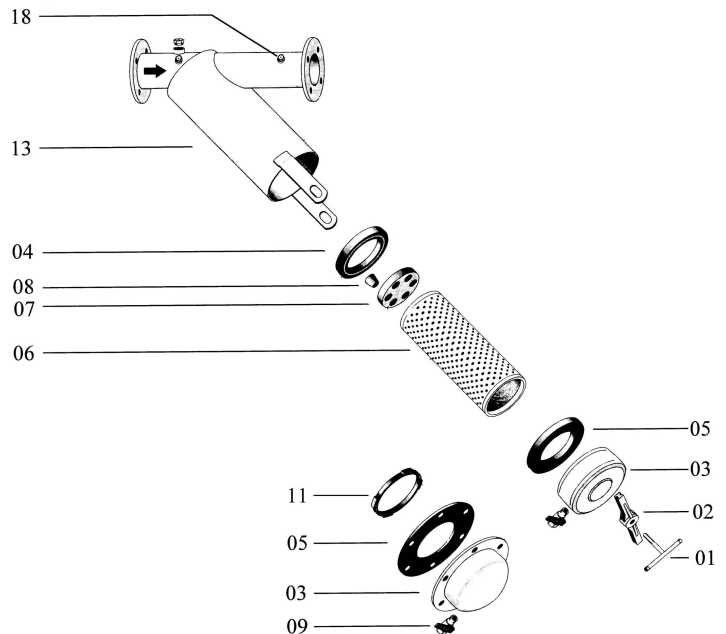
Place the handle + tightening bracket (01+02) and tighten properly or place the bolts and tighten them crosswise.

Notes:

It is possible to drain automatically using one filter or several filters simultaneously. The discharge capacity is not affected by draining.

Do not backwash – the gauze in the element will then be torn!

If the dirt particles cannot be removed from the element with a hair-fibre brush, dip the element into an acid/alkaline solution. Wait a few minutes for the solution to have its effect and then thoroughly clean the element.



Maintenance:

Each filter comes with these maintenance, installation and operating instructions.

Check the element every 2-3 weeks for damage; if damaged, replace it immediately.

Apply a film of grease on the thread of the spindle of the handle or on the bolts.

Any damage to the protective coating must be repaired immediately.

Before applying the protective paint, the damaged spot must be cleaned thoroughly using a steel wire brush.

Parts drawing:

When ordering, state the number of microns.

Model 3060 (6") is provided with a bolted cover.

In view of ongoing improvements, we reserve the right to change specifications without prior notice.