

1. Fields of Applications

The coarse filter with change-over valve, type DGFK are designed for filtration of operating fluids according to the technical parameters of the data sheets 3106 and 3109 (or in case of special design the corresponding data sheet).

2. Installation

The filter is supplied and delivered ready to be installed. The fitting position of the filter is vertical. The filter has to be fitted with fastening screws in size and amount according to the corresponding fastening bore holes of the filter housings. The fitting of the filter has to be carried out in the way that the least possible transmission of tensile forces on the filter housing and the change-over valve is given. The connection of the pipework has to be made with flanges for pipework according to DIN 2633 (or in case of special design with specific flanges).

Ensure upon assembling that

- no dirt and no impurities of foreign fluids penetrate the filter
- the connections for input and output are correctly connected to the pipe system
- the pipe system is connected with the filter; as stress-free as possible
- the extension to demount and the accessibility to the service elements is guaranteed

Filter with electrical respectively electronical clogging indicators have to be installed according to the unit specific conditions and according to the technical parameters of the corresponding data sheets.

3. Commissioning

Before commissioning the completeness of the filter (strainer basket and seals) and the cleanness have to be controlled.

Air bleeding of the controlled filter has to be carried out to the following instructions:

- The positioning pin of the selector shaft has to be located in the middle position
- Opening of the air-bleed screws or air-bleed connections (air-bleed connections according to data sheet 1651 and connection of suitable airbleeding tubes with collecting pan for the flow out of the operating fluid)
- Connection of the unit volume flow (reduced volume flow; from 10 to 50 l/min) until bubble-free operating fluid flows out of both airbleeding tubes
- Disconnection of the unit volume flow
- Remove the airbleeding tubes and close the air-bleed bore holes or air-bleed connections (air-bleed connections according to data sheet 1651)
- Connection to the required filter side at the positioning pin of the selector shaft

The positioning pin of the selector shaft shows always in direction to the operating filter side.

4. Maintenance

The cleaning of the strainer basket is necessary when reaching the unit specific pressure difference respectively reaching the maximum pressure difference given by the clogging indicator.

This has to be carried out as follows:

- Opening of the pressure balance valve
- Switching over the positioning pin from the operating side through the other side
- Closing the pressure balance valve
- Connect the air-bleed and the drain plug of filter side to be maintained with suitable pipes and place a collecting pan for the operating fluid flowing out
- Opening of the air-bleed and drain plugs of the filter side to be maintained until no more operating fluid flows out
- Release of the screws of the lid of the filter side to be maintained and remove the filterlid
- Unscrew the screw plugs of the strainer basket and pull it vertically out of the filter housing
- Dip the strainer basket in a cleaning fluid and wash it off. The cleaning can also be carried out by use of steam or compressed air. The compressed air has to be blown through the strainer basket from the outside to the inside.
- Controlling of the integrity of the filter wire mesh. Damged or no more cleanable strainer basket have to be replaced by new strainer baskets
- Damage control of the lid seal, and is to be replaced if necessary
- The serviced strainer basket is lowered into the filter housing and the screw plugs have to be tightened
- Fixing the filter lid into the filter housing and tightening the screw plugs. The screws have to be tightened over cross and have to be tightened again after the first pressure load
- Closing of the drain plugs
- Opening of the pressure balance valve until bubble-free operating fluid flows out of the air-bleed connection
- Close the pressure balance valve and the air-bleeder

Now, the serviced filter side is ready for operation.

For a short time the unit volume flow should be switched over to the serviced filter side to control the efficacy of the service.

The pressure difference has not to exceed the specified pressure difference of new strainer baskets. After this function control the screws of the filter lid have to be tightened.

5. Pressure Difference Measuring

In case of filters installed with clogging indicators a permanent measuring of the pressure difference takes place. The indication corresponds to the kind of clogging indicators; either visual or visual and electrical respectively electronical.

Additionally the measuring connections G 1/4" could be installed on the selector shaft to be used for external pressure gauges.

Recommended are the measuring connections according to data sheet 1650.