



# Operation Manual

for

**Main Circuit Filter**

**01/2008**

BAE-50000-20-Coversheet-02.doc

## Description

The main circuit filter is applied to draw a flush flow from the flow, filter it and use it for cooling and lubricating the magnet drive centrifugal pump.

## Construction

The main circuit filter comprises the main circuit filter housing, the filter insert and a flange connection for the flush flow. The filter insert is installed into the pipework between housing and pipework flange. A gasket fitted between housing and filter insert ensures the sealing of the system.

## Constructional Length

The constructional length conforms to EN 558-1.

## Fitting Dimensions and Design of Pressure Stage

Fitting dimensions conform to DIN 2501-1 and ASME B 16.5 (ANSI B 16.5).

Design of strength / pressure stage for individual sizes according to the following table.

Nominal Diameter		Pressure Stage
ANSI	DIN	
1"	DN 25	PN 40
1 ¼"	DN 32	
1 ½"	DN 40	
2"	DN 50	
2 ½"	DN 65	
3"	DN 80	
4"	DN 100	PN 25
5"	DN 125	
6"	DN 150	PN 16
8"	DN 200	

### Installation into the Pipework

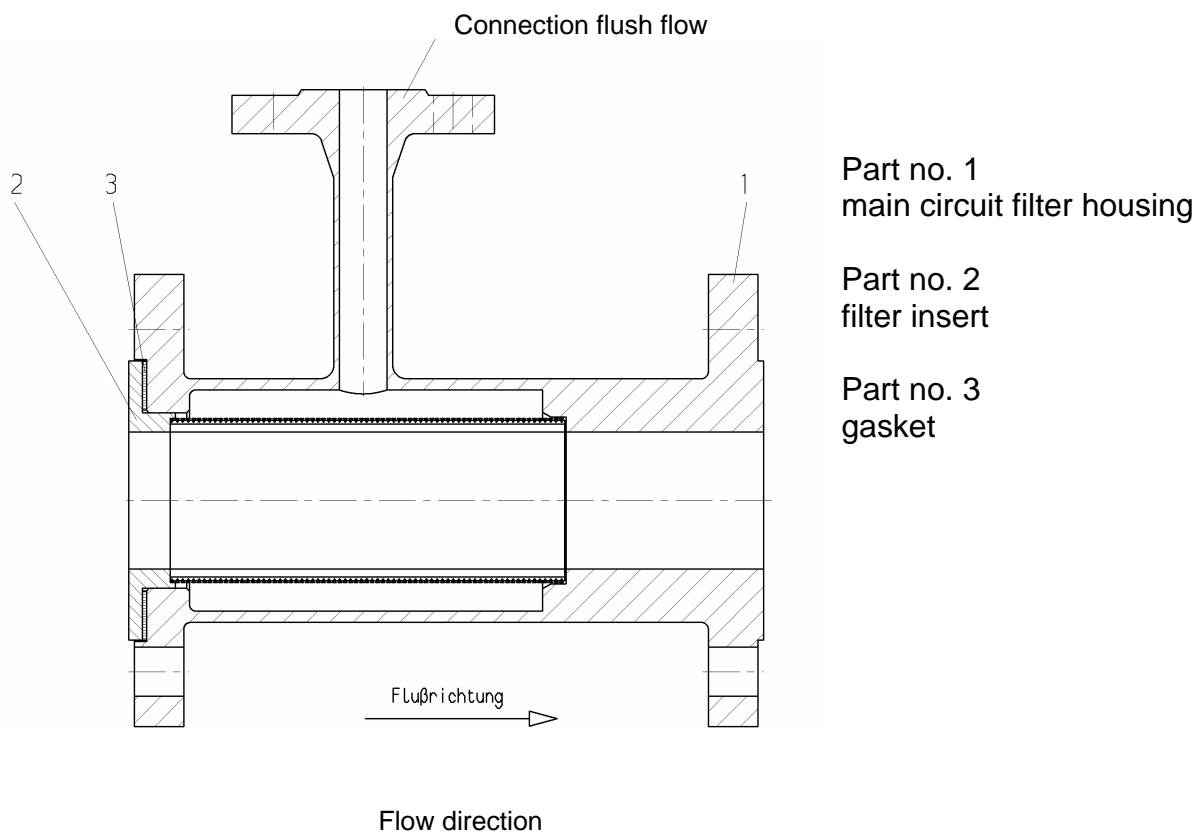
The main circuit filter is installed into the discharge pipework of the pump, preferably on the discharge nozzle of the pump. Observe the direction of the flow indicated by an arrow of direction when installing the filter.

Prior to installation make sure the pipework is free from impurities of any kind, welding beads, etc. When connecting the pipework to the filter make sure that as little tension as possible occurs. The sealing surfaces of the connection flanges must be clean and without any defects.

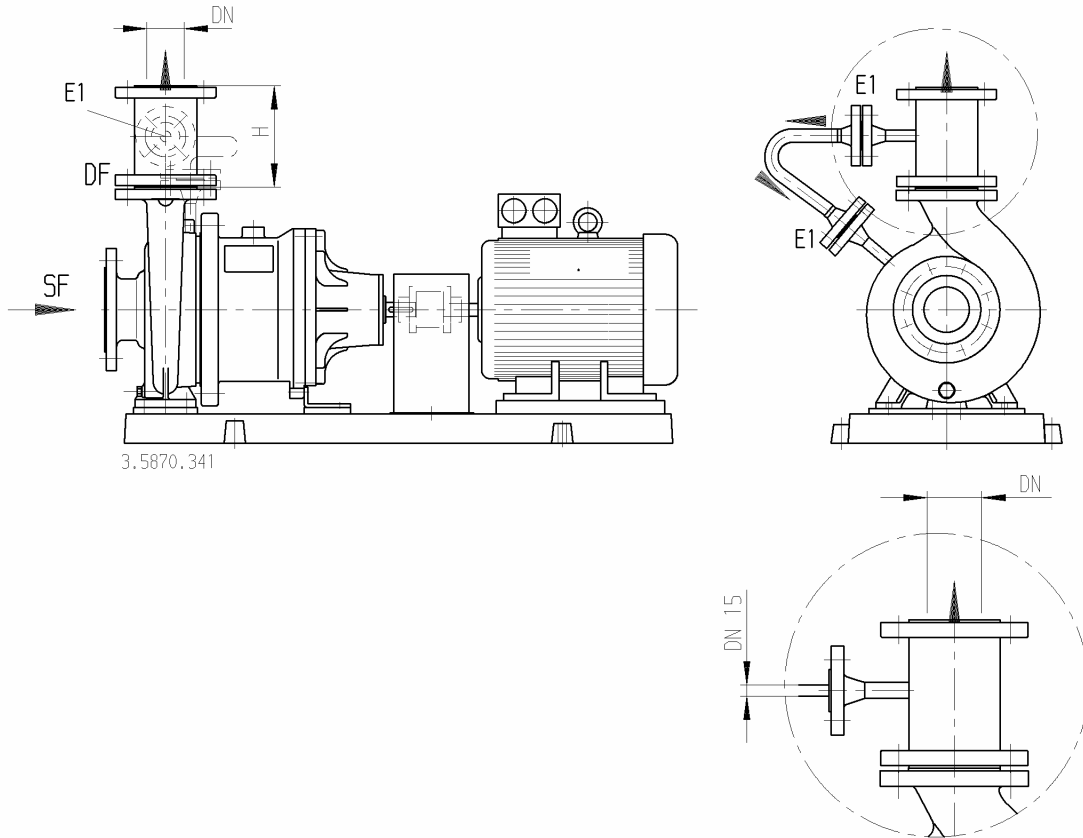
The screws shall be tightened crosswise, gradually and steadily at the circumference.

### Maintenance and Malfunctions

Thanks to its design, the main circuit filter is self-cleaning. However, it cannot be entirely excluded that due to unfavourable characteristics of the liquid the filtering surface is gradually clogged. This condition can be detected by preferably measuring the differential pressure between the pressure in the main flow and the pressure in the flush flow conduit behind the filter. Clogging of the filter will be indicated by a gradually falling differential pressure during a certain period of time with the process conditions still being the same.



## Dimensions



Discharge Flange	Filter-Construction Height H [mm]
DN 25	160
DN 32	180
DN 40	200
DN 50	230
DN 65	290
DN 80	310
DN 100	350
DN 125	400
DN 150	400
DN 200	400