

GF 100 FILTERING UNIT



USER MANUAL “GF 100 ”

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GENERAL INFORMATION

“GF-100” filtering unit is specifically designed to make hydraulic circuit cleaning easier before starting working operations or after a maintenance service. This operation is the key factor in order to supply to the client a correctly working hydraulic system, without particles or foreign bodies that might jeopardize the operation of hydraulic and mechanical members. The new modern design allows the operator to easily control the circuit working parameters such as:

- Hydraulic oil temperature coming out from oil tank
- Pressure in the cleaning filter
- Hydraulic circuit oil flow
- Hydraulic circuit max. working pressure

Moreover, the supporting trolley, provided with a shelf for tools, allows an easy handling and moving of the whole unit in the working area.

FILTRATION GROUP

The filtering unit is provided with a pair of filters in dual configuration. The first one has a filtering degree of 120 μm and the second one 60 μm . Both filters are interchangeable cartridge type retaining the possibility to increase the filtration degree until 25 μm using different cartridges.

MAX. WORKING PRESSURE SETTING GROUP

The “GF-100” unit is equipped with a manometer reading up to 600 bar, which can be connected to the max. pressure area of the hydraulic circuit, in order to check the real load levels and eventually adjust the max. pressure valve setting.

WORKING OPERATIONS

The “GF 100” unit has been designed to perform the following operations

CIRCUIT CLEANING OR FILTERING

To correctly perform this operation, check the following procedure:

- 1) Disconnect exhaust pipe from oil tank
- 2) Connect the exhaust pipe to the inlet (IN) located on the left side of the filtering unit
- 3) Connect a new pipe from the outlet port (OUT) of the filtering unit to the exhaust port of the tank. In case a filter is fitted to the tank, remove the filtering cartridge from it to allow a free flowing to the tank of the oil filtered by the filtering unit GF 100. In any case, the maximum exhaust pressure (after the GF 100) must be lower than 5 bar.
- 4) Start up the whole installation in order to reach a complete rotation of the oil contained in the tank. The duration of the required cycle (in minutes) can be easily calculated dividing the tank capacity (in litres) by the pump displacement (litres per minute).

CHECKING THE MAX. WORKING PRESSURE

Connecting with the supplied pipe M16 the max. pressure circuit area to the inlet port of the high pressure manometer located on the left side of the filtering unit, the real working pressure of the hydraulic system can be checked. Thanks to the value indicated by the GF 100 filtering unit, you can set the maximum pressure relief valve of the circuit at the required value.

NOTE:

Before effecting this operation, it is necessary to contact with the manufacturer or distributor of the hydraulic components of the system to check the maximum value which the valve must open at.

MAXIMUM WORKING PRESSURE (PROBE)

The maximum pressure for the pipe going to the manometer is 600 bar. For safety reason, never exceed this pressure limit.

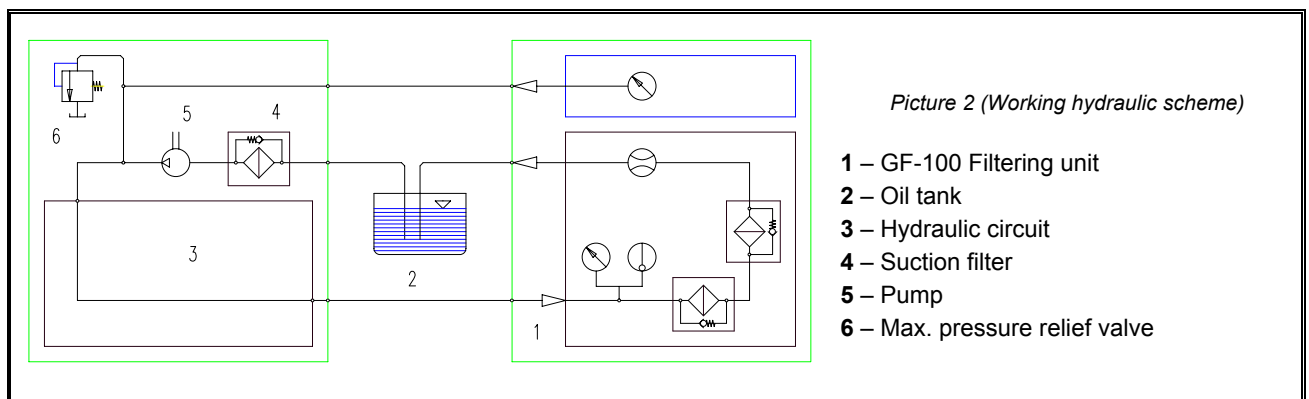
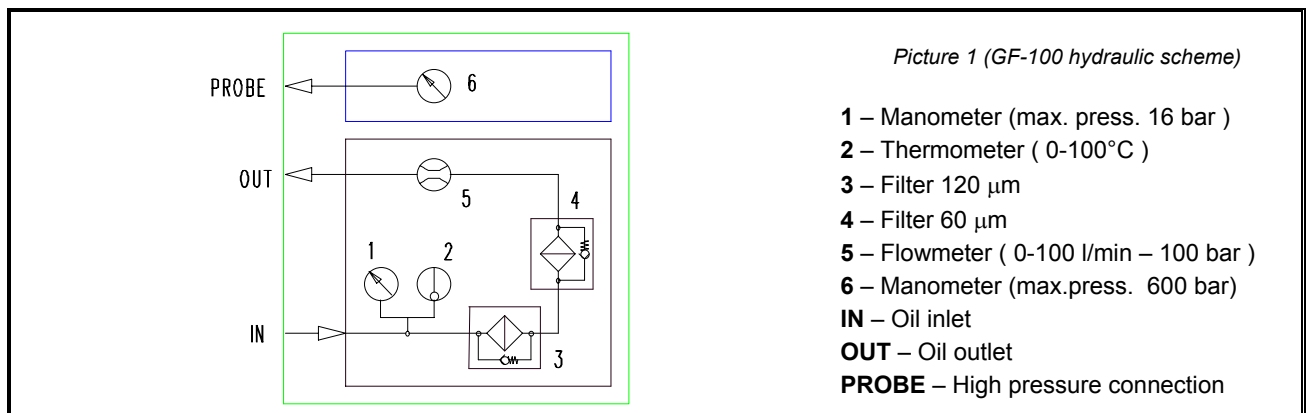
MAINTENANCE

Maintenance of the GF 100 unit consists of a periodical replacement and cleaning of filter cartridge. In order to effect this operation, simply follow the steps listed herebelow:

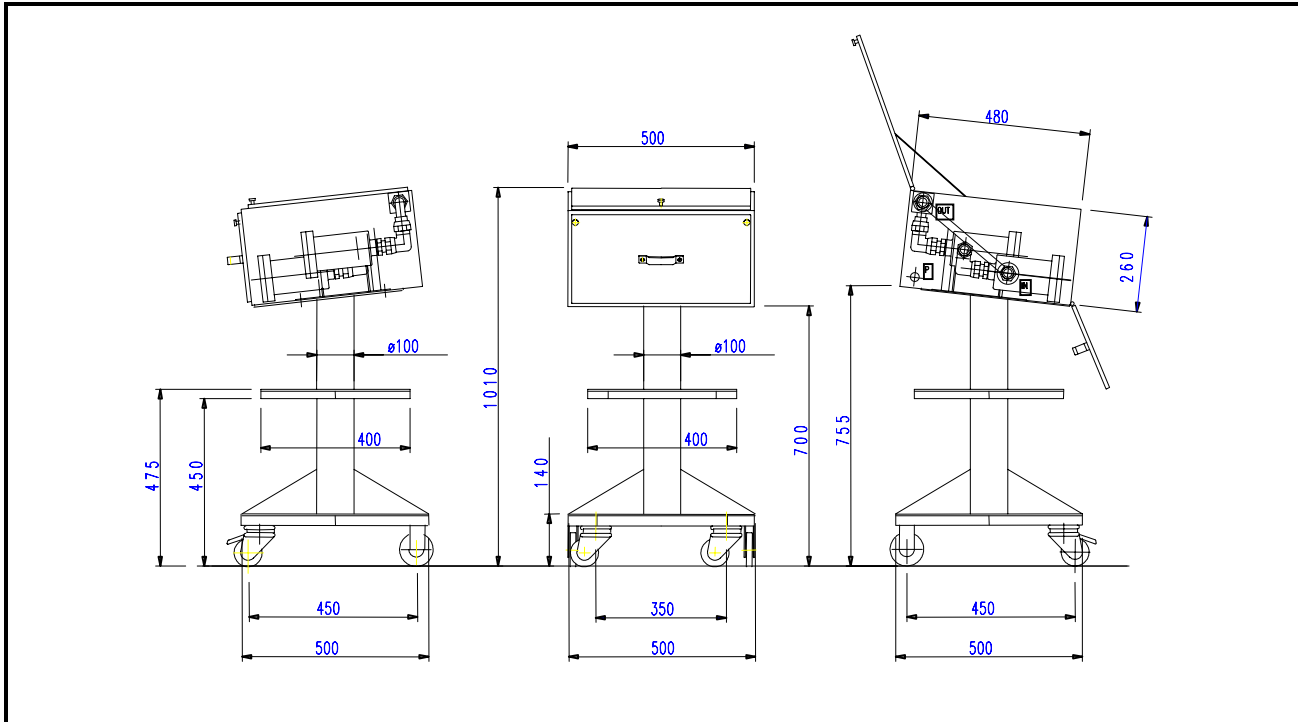
- 1) Open the front port of the GF 100
- 2) With a hexagonal wrench remove the cover screws of the first filter (the located closer to the port). Then, place under the filter cover a container to collect the oil present in the filter. When removing the screws, the spring inside the filter will push the cover away from the housing
- 3) Remove the cover and the spring
- 4) Remove the cartridge
- 5) Clean the cartridge and/or replace it (in case you have to replace it, use original cartridge only). Pay attention to the by pass valve
- 6) Insert the cartridge in the original position
- 7) Insert the spring and fit the cover back in place, paying attention that the gasket is not damaged and correctly placed
- 8) Lock the cover with the screws originally removed
- 9) Repeat the same procedure with the second filter
- 10) Close the front port of the GF 100 unit

Note:

For any further operation different from the above described, please contact the manufacturer

"GF-100" HYDRAULIC SCHEME

DIMENSIONS AND ORDERING CODES "GF-100"



Picture 3 (Overall dimensions GF-100)

"GF 100" technical specifications

Code	Description	Maximum pressure (bar)	Maximum temperature (°C)	Max. oil flow (l/min.)
7GF1000000	Filtering circuit GF-100	10	100	120
	Maximum pressure check circuit GF-100	600	-	-

Table 1 (GF-100 technical specifications)

"GF 100" spare-parts

Code	Description	Q.ty	Notes
7GF100C2000	Cartridge filtering degree 120 µm	1	By-pass valve set at 1,5 bar
7GF100C1000	Cartridge filtering degree 60 µm	1	By-pass valve set at 1,5 bar
7GF100C3000	Cartridge filtering degree 25 µm	1	By-pass valve set at 1,5 bar
7GF100C4000	Cartridge filtering degree 10 µm	1	By-pass valve set at 1,5 bar
7GF100C5000	High pressure mini-connector	1	Lenght 3 mt. – Threaded connector M16

Table 2 (GF-100 spare parts)

NOTES

This Edition of the catalogue "GF 100" cancels and replaces any previous edition. Dimensions and technical specifications of the items shown in this catalogue can undergo any modification at the discretion of our technical department and without previous information. The drawings included in this catalogue are protected by copyright. Always indicate complete codes in your order. General sales condition are mentioned in the valid list price.