

GRF41/61

Mobile oil transfer/ filtration units

■ GRF41/61 are off line oil transfer / filtration units, designed for both filling/transferring hydraulic oils either from containers to the hydraulic tank, or for filtering and cleaning hydraulic systems.

■ The units utilise standard filter elements –with large filtration area and therefore high dirt holding capacity and low pressure drop. All media and micron ratings are also available therefore to suit your specific application.

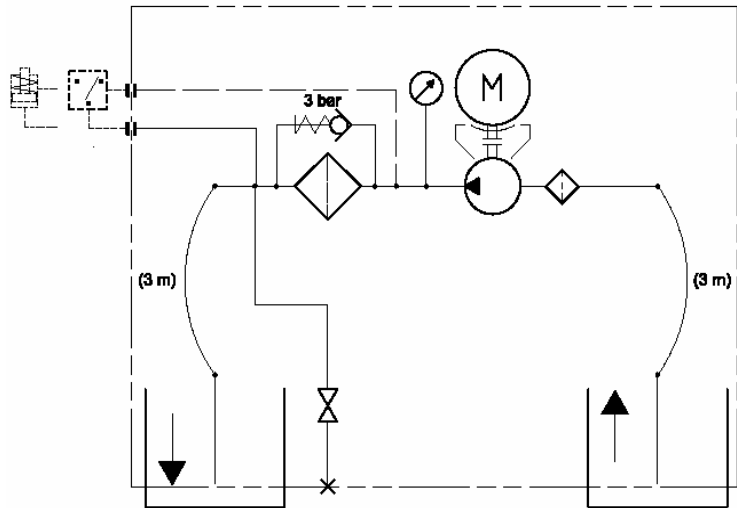
■ Compact, light-weight and portable, the units are versatile to use with any suitable application.

Typical applications :

- Hydraulic tank filling.
- Off-line filtration.
- Off-line filtration of new oils to/from drums or tanks.
- Flushing pipework – both fixed and flexible.

Technical data :

- Fluids - Hydraulic mineral oil
- Water glycol - HFC
- Esters – HFD (With viton seals)
- Fluid temperature – 80°C.
- Fluid circulation rate
 With 50Hz current supply 40 to 60 lpm
 With 60Hz current supply 48 to 73 lpm
- Fluid viscosity – from 5 to 600 mm²/sec.
- Fluid viscosity – for continuous use -
 320 c'st
- Working pressure – 6 bar max
- Inlet filtration media – 500 micron
 Max dimension:
 1000 cm H x 600 cm W x 640 cm D
 (Without flexible hoses)
 Weight – 65 kgs



Hydraulic scheme

Electric motor supply :

- Single phase - 230 V - 50 Hz 0,75 kW – 4 pole
- 3 phase - 380-420 V - 50 Hz 0,75 Kw – 4 pole
- 3 phase - 440-480 V - 60 Hz 0,75 Kw – 4 pole

- We recommend that the 3-phase motor is used for off-line continuous filtration or with coaxial lance.
- The GRF061 with 60Hz motor should only be used in **non-continuous** applications.

Flexible Hoses – See order information TAB “7”

- Code 1 - No lance version

Direct connection via hoses – this unit is supplied with safety valve on the pump and differential clogging indicators.

(Option F on TAB 6 and S on TAB 8)

- Code 2 - Standard version - fix connected lances

- 1) Inlet flexible hose DN 25 length 3 m. with fixed lance L = 700 mm.
- 2) Outlet flexible hose DN20 length 3 m. with fixed lance L = 700 mm.

- Code 3 - Coaxial lance version - Removable lances (GRF041 only)

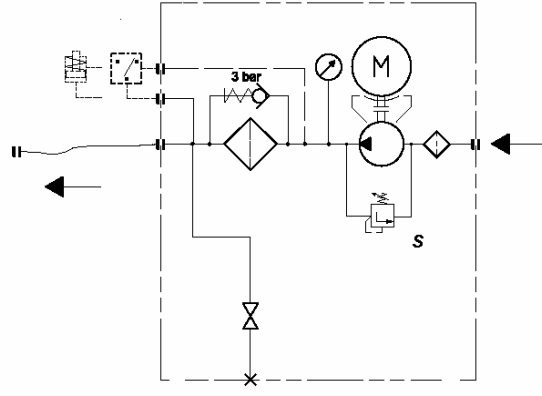
- 1) “A” Inlet flexible hose DN25 length 3m with male connection 1” BSP only.
- 2) “A” Outlet flexible hose DN20 length 3m with male connection ¾” BSP only.
- 3) “B” Inlet removable lance DN25 length 700 mm with female connection 1” BSP.
- 4) “B” Outlet removable lance DN20 length 700 mm with female connection ¾”BSP.
- 5) “C” Coaxial stainless steel removable lance length=1000 mm. Suction female connection 1” BSP, pressure female connection ¾” BSP with revolving joints .

Coaxial lance conditions required -

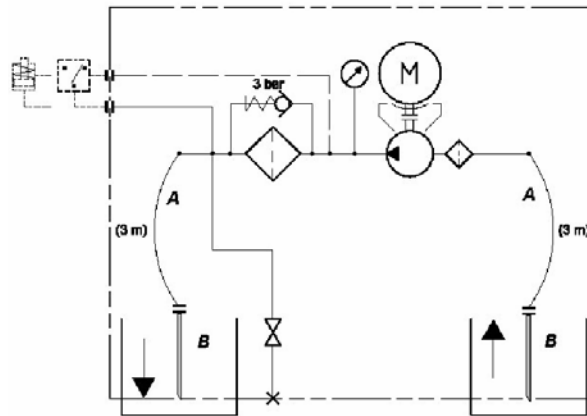
- a) Differential indicator required – fitted to differential block.
- b) Maximum oil viscosity 220 mm²/sec.
- c) Minimum tank hole dimension : 50mm.

CONNECTION SCHEMES

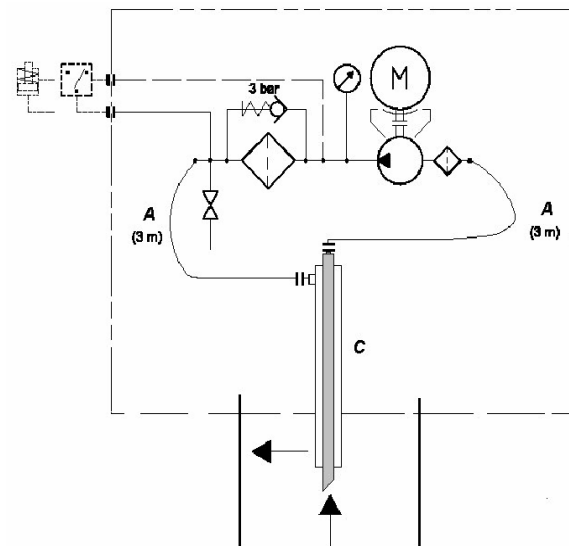
Without Hoses : **TAB 7 Opz - [1]**



Two lances : **TAB 7 Opz [2] - [3]**



Coaxial Lance : **TAB 7 Opz - [3]**



Clogging indicator

Manometer VR25

Scale 0 – 6 bar

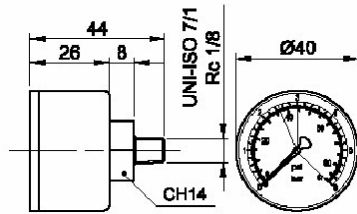
Color codes :

Green - correct working pressure

Yellow - pre-alarm situation

Red - Still filtering condition with initial by-pass opening

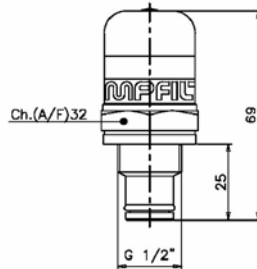
■ **In Red condition switch the pump unit “OFF” by the switch set on the engine backside and replace contaminated filter element**



Clogging indicator

Differential Optical V6

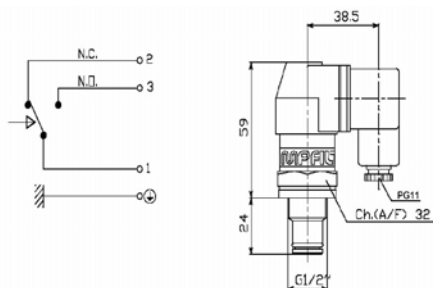
- On differential block mounted
- Setting pressure Δp 2bar



Clogging indicator

Differential Optical - Electrical E6

- On differential block mounted
- Setting pressure Δp 2bar



Differential Block

Mounted in conjunction with either the V6 or E6 differential Indicator option.

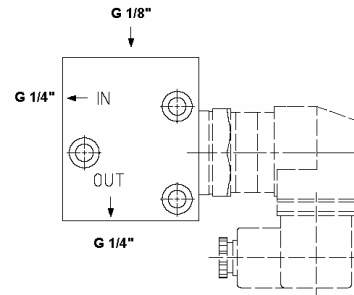
Block supplied separately.

NOTE : Supplied without connectors or tubes.

Item List :

- Aluminium anodized block
- 3 mounting screws
- 2 O-Ring seal

Kit Code: 02027007



Filter elements

Microfibre : Absolute Filtration media $\beta_{x@} > 1.000$

Cod.	MR 250 4 A03 A	3 μ
" "	MR 250 4 A06 A	6 μ
" "	MR 250 4 A10 A	10 μ
" "	MR 250 4 A16 A	10 μ
" "	MR 250 4 A25 A	25 μ

Stainless steel : Nominal Filtration media

Cod.	MR 250 4 M25 A	25 μ
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“HFC” Fluids

With HFC fluids use filter elements with “W” code end letter.

e.g. Microfibre :

Absolute filtration element 10 μ x HFC

Cod.	MR 250 4 A10 <u>W</u>	10 μ
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TAB.	1	2	3	4	5	6	7	8	9
	GRF	041	A	A10	M	M	2	0	P01

TAB. 1 Serie

GRF Mobile filtration unit

TAB. 2 Nominal Size

041 40 lpm
061 60 lpm

TAB. 3 Seals

A Buna N
V Viton

TAB. 4 Filtration

000 No filter element
A03 3µ absolute filtration
A06 6µ absolute filtration
A10 10µ absolute filtration
A16 16µ /absolute filtration
A25 25µ absolute filtration
M25 25µ wire mesh

TAB. 5 Electric motor supply

M 220 V-50 Hz Single phase
T 380-420 V-50 Hz 3 phase
440-480 V-60 Hz 3 phase
X Options

TAB. 6 Clogging indicator

M Standard with gauge
F Electrical with automatic motor shut-off switch
V Visual differential clogging indicator

TAB. 7 Connection

1 Without Hoses
2 With standard Hoses
3 With coaxial lance
(on GRF41 only)

TAB. 8 Options

0 Standard
S Security valve
(on GRF41 only)

TAB. 9 Custom release

P01 Standard MP Filtri
Pxx Customer request