

GRF 015

Mobile filtration unit



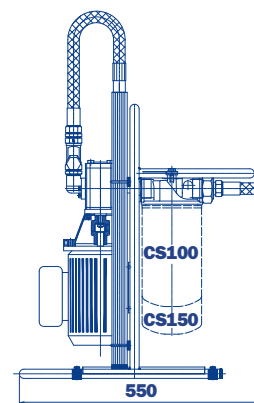
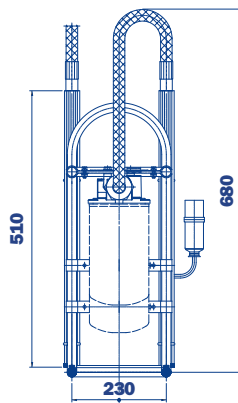
The GRF 015 is a portable oil transfer/filtration unit, specifically designed for both filling/transferring hydraulic oils from containers to the hydraulic tank as well as filtering and cleaning hydraulic systems.

The unit utilises Spin-On standard filters elements, available in two lengths, thus increasing the dirt holding capacity and lowering pressure drop of the unit.

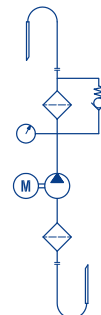
The unit has the flexibility in being able to offer a wide range of medias and micro ratings to suit any application.

The unit is very compact and lightweight.

- **Handle size**
- **Light**
- **Easy to use**
- **Easy maintenance**
- **Reliable**
- **Absolute filtration**



Symbol



Technical data

Pump	Gear pump
Electric Motor	0,18 Kw 230 Volt single phase electric motor
Flow (l/min)	15 l/min
Max. Operation Pressure	5 bar
Viscosity range	Min. operation 10 cSt Max. operation 200 cSt Max. only for cold start 400 cSt
Suction Filter	Type Y filtration 300 µm
Filtration Rating	1/3/6/10/25 µm β>1000 flow through the element In/Out
By-Pass valve	Rating 2,5 bar
Fluid Temperature	From -10° to +80 °C
Ambient Temperature	From -20° to +45 °C
Protection Class	IP 55
Seal	NBR
Fluid Compatibility	Mineral Oil - Other on request
Suction hose	3/4" length 2500 mm - DN18 length 400 mm
Pressure hose	3/4" length 2500 mm - DN18 length 400 mm
Weight	14,8 kg.
Equipment	Visual clogging indicator (gauge)

Spare parts

Filter element - Standard length

Inorganic microfibre element

CS 100 A01 A P01	1 µm absolute
CS 100 A03 A P01	3 µm absolute
CS 100 A06 A P01	6 µm absolute
CS 100 A10 A P01	10 µm absolute
CS 100 A25 A P01	25 µm absolute

Wire mesh element

CS 100 M25 A P01	25 µm
CS 100 M60 A P01	60 µm

Filter element - Extended length

Inorganic microfibre element

CS 150 A01 A P01	1 µm absolute
CS 150 A03 A P01	3 µm absolute
CS 150 A06 A P01	6 µm absolute
CS 150 A10 A P01	10 µm absolute
CS 150 A25 A P01	25 µm absolute

Wire mesh element

CS 150 M25 A P01	25 µm
CS 150 M60 A P01	60 µm

Ordering information

GRF 015 1 A M M 1 M 1

- **Mobile filtration unit without filter element**
- **Filtration elements should be ordered separately**

UFM 040

Mobile filtration unit



- **Compact size**
- **Light**
- **Easy to use**
- **Easy maintenance**
- **Reliable**
- **Absolute filtration**

UFM 040 mobile filtration units suitable for filling and refilling of filtered hydraulic fluids and lubrication tanks.

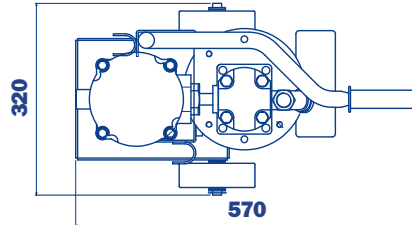
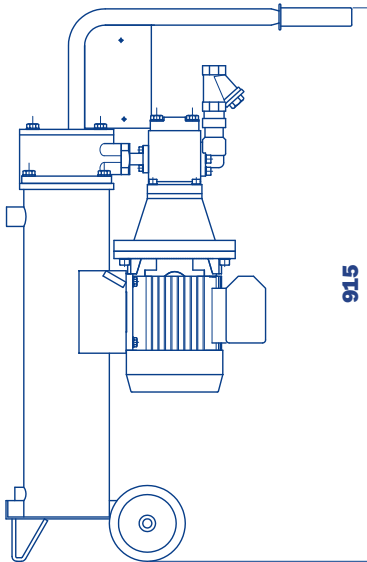
The filter unit connected to off-line to the tank (recommended maximum volume of 350/500 L.), can be used as a support to the filtration plant on start-up for fast flushing action, either as additional filtration systems with a high incidence of contamination.

Continued use is recommended for the version with three phase electric motor.

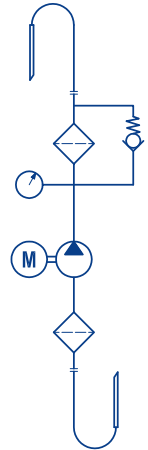
Technical data

Pump	Gear pump
Electric Motor	0,75 Kw 230 Volt single phase electric motor 0,75 Kw 400/230 Volt three phase electric motor
Flow (l/min)	33 l/min
Max. Operation Pressure	5 bar
Viscosity range	Min. operation 10 cSt Max. operation 200 cSt Max. only for cold start 800 cSt
Suction Filter	Type Y filtration 300 µm
Filtration Rating	1/3/6/10/16/25 µm β>1000 flow through the element In/Out
By-Pass valve	Rating 2,5 bar
Fluid Temperature	From -10° to +80 °C
Ambient Temperature	From -20° to +45 °C
Protection Class	IP 55
Seal	NBR
Fluid Compatibility	Mineral Oil - Other on request
Suction hose - with lance	1" length 2500 mm - DN35 length 700 mm
Pressure hose - with lance	3/4" length 3000 mm - DN28 length 700 mm
Weight	45 kg.
Equipment	Visual clogging indicator (gauge)

Dimensions



Symbol



Spare parts

Filter element

Inorganic microfibre element

MR 250 4 A01 A P01	1 µm absolute
MR 250 4 A03 A P01	3 µm absolute
MR 250 4 A06 A P01	6 µm absolute
MR 250 4 A10 A P01	10 µm absolute
MR 250 4 A16 A P01	16 µm absolute
MR 250 4 A25 A P01	25 µm absolute

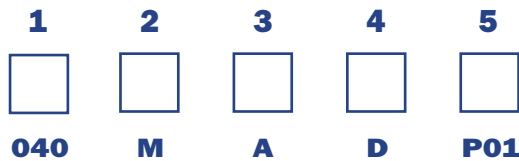
Wire mesh element

MR 250 4 M25 A P01	25 µm
MR 250 4 M60 A P01	60 µm

Ordering information

UFM

Example: UFM



1 - Flow

040 33 l/min

2 - Electric motor

M Single phase 220 V
T Three phase 380 V

3 - Seals

A NBR

4 - Filter elements

S Without element
D 1 µm absolute
E 3 µm absolute
F 6 µm absolute
G 10 µm absolute
H 16 µm absolute
L 25 µm absolute
M 25 µm wire mesh
N 60 µm wire mesh

5 - Option

P01 Standard MP Filtri

UFM 050

Mobile filtration unit



Available in three configurations

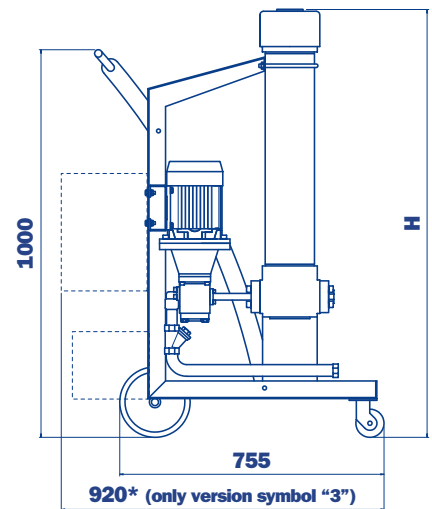
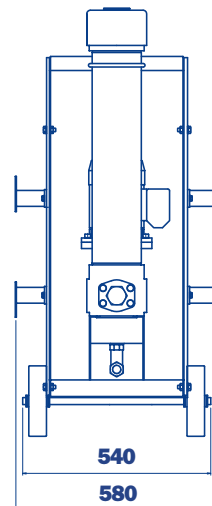
- A configuration with start / stop differential pressure indicator - visual
- B configuration with start / stop automatic motor cut-out from differential pressure indicator - electrical/visual
- C configuration with start / stop phase inverter automatic motor cut-out from differential pressure indicator - electrical/visual
In Line Particle Counter ICM

UFM 050 mobile filtration units suitable for filling and refilling of filtered hydraulic fluids and lubrication tanks.

The filter unit connected to off-line to the tank (recommended maximum volume of 500/750 L.), can be used as a support to the filtration plant on start-up for fast flushing action, either as additional filtration systems with a high incidence of contamination.

Continued use is recommended for the version with three phase electric motor.

Dimensions



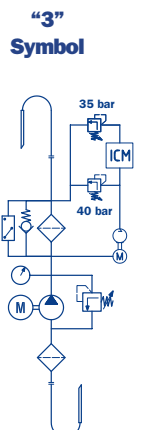
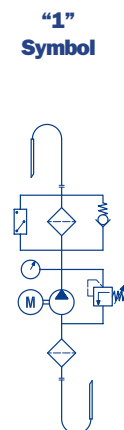
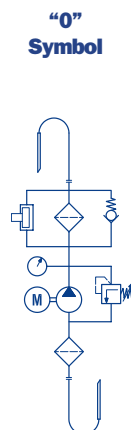
UFM 050

Length filter body
(see ordering information)

Length Filter	H mm
5	1230 Standard
6	1530 Special

- **Compact size**
- **Continue Operation Pressure 10 bar**
- **Easy to use**
- **Easy maintenance**
- **Reliable**
- **Absolute filtration**
- **In Line Contamination Monitor**

Symbols (see ordering information)



Pump	Gear pump
Electric Motor	1,5 Kw 230 Volt single phase electric motor 1,5 Kw 400/230 Volt three phase electric motor
Flow (l/min)	50 l/min
Max. Operation Pressure	10 bar
Viscosity range	Min. operation 10 cSt Max. operation 300 cSt Max. only for cold start 800 cSt
Suction Filter	Type Y filtration 400 µm
Filtration Rating	1/3/6/10/16/25 µm β>1000 flow through the element Out/In
By-Pass valve	Rating 3,5 bar (no by-pass valve in request)
Fluid Temperature	From -10° to +80° C
Ambient Temperature	From -20° to +45° C
Protection Class	IP 55
Seal	NBR
Fluid Compatibility	Mineral Oil - Other on request
Suction hose - with lance	1 1/4" length 3000 mm - DN35 length 700 mm
Pressure hose - with lance	1" length 3000 mm - DN30 length 700 mm
Weight	70 kg.
Equipment	<ul style="list-style-type: none"> Differential Clogging indicator - Visual Differential Clogging indicator - Electrical/Visual In line Particle Counter ICM + Differential Clogging indicator - Electrical/Visual

Filter element length 5 Standard

Inorganic microfibre element

CU 400 5 A01 A N P01	1 µm absolute
CU 400 5 A03 A N P01	3 µm absolute
CU 400 5 A06 A N P01	6 µm absolute
CU 400 5 A10 A N P01	10 µm absolute
CU 400 5 A16 A N P01	16 µm absolute
CU 400 5 A25 A N P01	25 µm absolute

Wire mesh element

CU 400 5 M25 A N P01	25 µm
CU 400 5 M60 A N P01	60 µm

Filter element length 6 Special

Inorganic microfibre element

CU 400 6 A01 A N P01	1 µm absolute
CU 400 6 A03 A N P01	3 µm absolute
CU 400 6 A06 A N P01	6 µm absolute
CU 400 6 A10 A N P01	10 µm absolute
CU 400 6 A16 A N P01	16 µm absolute
CU 400 6 A25 A N P01	25 µm absolute

Wire mesh element

CU 400 6 M25 A N P01	25 µm
CU 400 6 M60 A N P01	60 µm

Ordering information

UFM

Example: UFM

1	2	3	4	5	6	7
<input type="text" value="050"/>	<input type="text" value="T"/>	<input type="text" value="A"/>	<input type="text" value="2"/>	<input type="text" value="E"/>	<input type="text" value="5"/>	<input type="text" value="P01"/>
050	T	A	2	E	5	P01

1 - Flow

50 l/min

2 - Electric motor

Single phase 220 V
 Three phase 380 V

3 - Seals

NBR

4 - Automatic motor cut-out from differential pressure indicator

Without
 With
 Automatic motor cut-out from differential pressure indicator
Phase inverter
ICM Contamination Monitor
Only with electric motor three phase

5 - Filter elements

Without element
 1 µm absolute
 3 µm absolute
 6 µm absolute
 10 µm absolute
 16 µm absolute
 25 µm absolute
 25 µm wire mesh
 60 µm wire mesh

6 - Length filter body

Standard
 Special

7 - Option

Standard MP Filtri

UFM 090 + 180 + 918

Mobile Filtration Units with Inline Contamination Monitor



Available in three configurations

- A configuration with start / stop differential pressure indicator - visual
- B configuration with start / stop automatic motor cut-out from differential pressure indicator - electrical/visual
- C configuration with start / stop phase inverter automatic motor cut-out from differential pressure indicator - electrical/visual
In Line Contamination Monitor ICM

UFM 90 – 180 mobile filtration units suitable for filling and refilling of filtered hydraulic fluids and lubrication tanks.

The filter unit connected to off-line to the tank, can be used as a support to the filtration plant on start-up for fast flushing action, either as additional filtration systems with a high incidence of contamination.

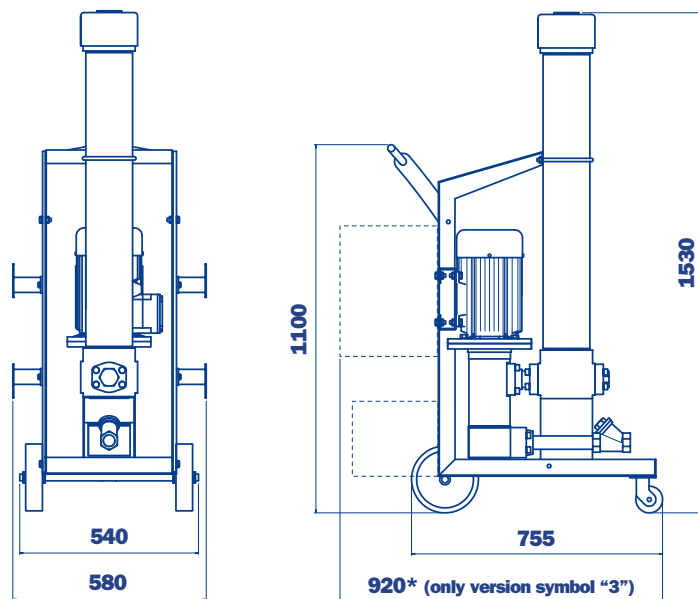
UFM 090 recommended maximum tank volume of 900/1300 L.
UFM 180 recommended maximum tank volume of 1800/2700 L.
UFM 918 two-speed electric motor with programmable flow of 90 or 180 l/min.

Possible applications:

- Low flow rate for filling and refilling of reservoirs with volume less than 1000 liters
- Low-flow filtration for off-line tanks with a volume less than 1000 liters
- Low-flow filtration of oils with high viscosity at low temperatures
- Low flow during start-up for filtration of oils with high viscosity at low temperatures, high flow rate with subsequent increases in temperature increase and viscosity reduction
- High flow rate for filling and refilling tanks with volume greater than 2000 liters
- High flow filter off-line reservoirs with volume greater than 2000 liters

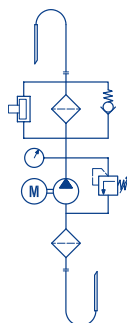
- **Compact size**
- **High flow**
- **Continue Operation Pressure 10 bar**
- **Easy to use**
- **Easy maintenance**
- **Reliable**
- **Absolute filtration**
- **In Line Contamination Monitor**

Dimensions

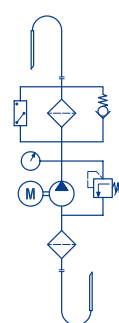


Symbols (see ordering information)

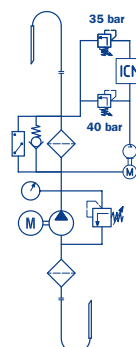
“0”
Symbol



“1”
Symbol



“3”
Symbol



Technical data

	UFM 090	UFM 180	UFM 918
Pump	Screw pump	Screw pump	Screw pump
Electric Motor	3.7/5 kW 400/230 V three phase 2/4-pole	3.7/5 kW 400/230 V three phase 2/4-pole	3.7/5 kW 400/230 V three phase 2/4-pole
Flow (l/min)	90 l/min	180 l/min	90/180 l/min
Max. Operation Pressure	10 bar	10 bar	10 bar
Viscosity range	Min. operation 10 cSt Max. operation 600 cSt Max. only for cold start 2000 cSt	Min. operation 10 cSt Max. operation 600 cSt Max. only for cold start 2000 cSt	Min. operation 10 cSt Max. operation 600 cSt Max. only for cold start 2000 cSt
Suction Filter	Type Y filtration 400 µm	Type Y filtration 400 µm	Type Y filtration 400 µm
Filtration Rating	1/3/6/10/16/25 µm β>1000 flow through the element Out/In	1/3/6/10/16/25 µm β>1000 flow through the element Out/In	1/3/6/10/16/25 µm β>1000 flow through the element Out/In
By-Pass valve	Rating 3,5 bar (no by-pass valve in request)	Rating 3,5 bar (no by-pass valve in request)	Rating 3,5 bar (no by-pass valve in request)
Fluid Temperature	From -10° to +80° C	From -10° to +80° C	From -10° to +80° C
Ambient Temperature	From -20° to +45° C	From -20° to +45° C	From -20° to +45° C
Protection Class	IP 55	IP 55	IP 55
Seal	NBR	NBR	NBR
Fluid Compatibility	Mineral Oil - Other on request	Mineral Oil - Other on request	Mineral Oil - Other on request
Suction hose - with lance	1.1/4" length 3000 mm - DN35 length 700 mm	1.1/2" length 3000 mm - DN42 length 700 mm	1.1/2" length 3000 mm - DN42 length 700 mm
Pressure hose - with lance	1.1/4" length 3000 mm - DN35 length 700 mm	1.1/4" length 3000 mm - DN35 length 700 mm	1.1/4" length 3000 mm - DN35 length 700 mm
Weight	105 kg.	109 kg.	120 kg.
Equipment	<ul style="list-style-type: none"> Differential Clogging indicator - Visual Differential Clogging indicator Electrical/Visual In line Contamination Monitor ICM + Differential clogging indicator - Electrical/Visual 	<ul style="list-style-type: none"> Differential Clogging indicator - Visual Differential Clogging indicator Electrical/Visual In line Contamination Monitor ICM + Differential clogging indicator - Electrical/Visual 	<ul style="list-style-type: none"> Differential Clogging indicator - Visual Differential Clogging indicator Electrical/Visual In line Contamination Monitor ICM + Differential clogging indicator - Electrical/Visual

Spare parts

Filter element

Inorganic microfibre element

CU 400 6 A01 A N P01	1 µm absolute	CU 400 6 A10 A N P01	10 µm absolute
CU 400 6 A03 A N P01	3 µm absolute	CU 400 6 A16 A N P01	16 µm absolute
CU 400 6 A06 A N P01	6 µm absolute	CU 400 6 A25 A N P01	25 µm absolute

Wire mesh element

CU 400 6 M25 A N P01	25 µm absolute
CU 400 6 M60 A N P01	60 µm absolute

Ordering information

UFM	1	2	3	4	5	6	7
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Example: UFM	180	T	A	3	E	6	P01

1 - Flow

090	090 l/min
180	180 l/min
918	090/180 l/min

2 - Electric motor

T	Three phase 380 V
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3 - Seals

A	NBR
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4 - Automatic motor cut-out from differential pressure indicator

0	Without (only for UFM 090)
1	With
3	Automatic motor cut-out from differential pressure indicator Phase inverter ICM In-Line Contamination Monitor

5 - Filter elements

S	Without element
D	1 µm absolute
E	3 µm absolute
F	6 µm absolute
G	10 µm absolute
H	16 µm absolute
L	25 µm absolute
M	25 µm wire mesh
N	60 µm wire mesh

6 - Length filter body

6	Standard
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7 - Option

P01	Standard MP Filtri
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