

MOBILE FILTRATION TROLLEYS

CATALOGUE



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MPFILTRI®

PASSION TO PERFORM

MOBILE FILTRATION TROLLEYS

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MONITOR, CLEAN, PROTECT

- **PROTECTS COMPLEX SYSTEMS AND COMPONENTS**
- **REDUCES COSTS AND DOWNTIME**
- **CRITICAL EARLY WARNING SYSTEM (GRM/FTU)**
- **ENABLES LONGER SERVICE INTERVALS**
- **SPEEDS UP CLEANING TIMES**
- **COMPACT AND PORTABLE**



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System Cleaning Requirements

Typical Hydraulic Applications	Cleanliness Class Required		Outlet Filter Required	
Component Types	ISO4406	NAS1638	Type	Element Types
High-precision and laboratory servo-systems	14/12/9	3	3 Micron absolute	A03
Robotic and servo-systems	17/15/11	6	3-6 Micron absolute	A03, A06
Very sensitive high-reliability systems	18/16/13	7	10-12 Micron absolute	A10, A16
Sensitive, reliable systems	20/18/14	9	12-15 Micron absolute	A10, A16
General equipment	21/19/16	10	15-25 Micron absolute	A16, A25
Low-pressure equipment not in continuous use	23/21/18	12	25-40 Micron absolute	A25

Approximate System Cleaning Times

GRF 100								
Reservoir Capacity (litres)	100	200						
Cleaning time (mins/hours)	1hr	2hrs						
GRF 261								
Reservoir Capacity (litres)	100	200	400					
Cleaning time (mins/hours)	30mins	45mins	1hr 30mins					
GRF / GRM 302								
Reservoir Capacity (litres)	100	200	400	600				
Cleaning time (mins/hours)	20mins	40mins	1hr 20mins	2hrs				
GRF / GRM 503								
Reservoir Capacity (litres)		200	400	600	800	1000	1200	1500
Cleaning time (mins/hours)		30mins	45mins	1hr	1hr 15mins	2hrs	3hrs 30mins	4hrs 30mins

Clean-up rates based on an initial contamination rating of ISO 4406 23/21/19 (NAS 1638 Class 12) to 17/15/12 (NAS Class 6) Using MTD - Please note more than one element might be required

Filter Options

Type	Description	Nominal Water Removal Spin-on CW100	Nominal Water Removal Spin-on CW150	Nominal and Absolute Spin-on CS100	Nominal and Absolute Spin-on CS150	Absolute LMP Length 5 Element CU4005	Absolute LMP Length 1 Element CU2101
GRF100	10 Lpm hand held	•	•	•	•		
GRF261	26 Lpm hand held	•	•	•	•		
GRF/GRM302	30 Lpm sack truck	•	•	•	•		
GRF/GRM302 (L4305)	30 Lpm high DHC					•	
GRF/GRM302 (SP L4305)	30 Lpm high DHC with additional spin-ons	•	•	•	•	•	
GRF/GRM302 SW	30 Lpm sack truck - water glycol version						•
GRF/GRM503 (L4305)	50 Lpm high DHC					•	
FTU111522	FTU 80l tank, spin on and high DHC	•	•	•	•	•	

Mobile Filtration Unit

Mobile Filtration Unit

Maximum working pressure up to 5 bar

Flow rate up to 10 L/min

A highly portable oil transfer/filtration unit, 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 cartridge (supplied as an option), available in two lengths, thus increasing the dirt-holding capacity and lowering the pressure drop of the unit.

Light and compact, the GRF 100 supports a wide range of medias and micron ratings to suit multiple applications.



Available features:

- 10 L/min Flow rate
- Continuous operation at 5 bar
- Light and portable
- Compact design
- Quick and easy to set up
- High-efficiency filtration
- Easy to maintain
- Comes with MPS100 filter head filters as standard
- Water removal (optional element)
- Compatible with mineral oil
- Electric control box
- Visual indicator
- Nitrile seals

Applications:

- Filling/transferring hydraulic oils from containers to the hydraulic tank
- Filtering and cleaning hydraulic systems.

SPECIFICATION

Pump	Gear Pump
Electric Motor	0.37 Kw 110/230 Volt single phase electric motor
Flow Rate	10 L/min
Max Operating Pressure	5 bar
Viscosity Range	Min. operation 10 cSt Max. operation 120 cSt
Inlet Filter	250 µm metal mesh strainer
Outlet Filter	1/3/6/10/25 µm β>1000 flow through the element Out/In
Bypass Indicator set at 1.75bar	Visual clogging indicator gauge - pop-up manual reset.
Fluid Temperature	From 0° to +80°C
Ambient Temperature	From 0° to +45°C
Protection Class	IP 55
Seal	NBR
Fluid Compatibility	Mineral oil
Suction / pressure hose	SAE100R4 1" swaged female 2000mm hose SAE100R4 3/4" swaged female 2000mm hose
Dimensions	Weight: 18kg Dimensions: 697mm (H); 400mm (D); 215mm(W)
Equipment	N/A

How to order

GRF 100

Order example	GRF	10	0	1	M90	S
1. Model						
GRF= GRF Mobile Filtration Trolley						
2. Flow						
10= 10 L/min						
3. Electric Power						
0= 0.37kW						
4. Electric Motor						
1= 110v single phase						
2= 240v single phase						
5. Replacement Suction Element						
M90= 250µm suction strainer						
6. Filtration						
S= No filter fitted, to be ordered separately						

Spin-on Filters

Filter element - Standard length: Inorganic microfiber 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

Filter element - Standard length: Wire-mesh element

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

Filter element - Extended length: Inorganic microfiber 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

Filter element - Extended length: Wire-mesh element

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

Mobile Filtration Unit

Mobile Filtration Unit

Maximum working pressure up to 5 bar

Flow rate up to 26 L/min

GRF 261 mobile filtration units have been created for filling and refilling filtered hydraulic fluids and lubrication tanks.

The filter unit connected off-line to the tank (recommended maximum volume 400L), can be used as a support to the filtration plant on start-up for fast flushing action, or as additional filtration for systems with a high incidence of contamination.

Light and compact, the GRF 261 supports a wide range of medias and micron ratings to suit multiple applications.



Available features:

- 26 L/min Flow rate
- Continuous operation at 5 bar
- Light and portable
- Fast clean-up times
- Compact design
- Quick and easy to set up
- High-efficiency filtration
- Easy to maintain
- Comes with MPS100 filter head filters as standard
- Water removal (optional element)
- Compatible with mineral oil
- Electric control box
- Visual indicator
- Nitrile seals

Applications:

- Filling/transferring hydraulic oils from containers to the hydraulic tank
- Filtering and cleaning hydraulic systems.

SPECIFICATION

Pump	Gear Pump
Electric Motor	0.55 Kw 110/230 Volt single phase electric motor
Flow Rate	26 L/min
Max Operating Pressure	5 bar
Viscosity Range	Min. operation 10 cSt Max. operation 120 cSt
Inlet Filter	250 µm metal mesh strainer
Outlet Filter	1/3/6/10/25 µm β>1000 flow through the element Out/In
Bypass Indicator set at 1.75bar	Visual clogging indicator gauge pop-up, manual reset.
Fluid Temperature	From 0° to +80°C
Ambient Temperature	From 0° to +45°C
Protection Class	IP 55
Seal	NBR
Fluid Compatibility	Mineral oil
Suction / Pressure hose	SAE100R4 1" swaged female 2000mm hose SAE100R4 3/4" swaged female 2000mm hose
Dimensions	Weight: 18kg Dimensions: 697mm (H); 400mm (D); 215mm(W)
Equipment	N/A

How to order

GRF 261

Order example	GRF	26	1	1	M250	S
1. Model GRF= GRF Mobile Filtration Trolley						
2. Flow 26= 26 L/min						
3. Electric Power 1= 0.50kW						
4. Electric Motor 1= 110v single phase 2= 240v single phase						
5. Replacement Suction Element M250= 250um suction strainer						
6. Filtration S= No filter fitted, to be ordered seperately						

Spin-on Filters

Filter element - Standard length: Inorganic microfiber 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

Filter element - Standard length: Wire-mesh element

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

Filter element - Extended length: Inorganic microfiber 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

Filter element - Extended length: Wire-mesh element

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

GRF 302 / GRM 302

Available with ICM 2.0 In-line Contamination Monitor

Mobile Filtration Unit

Mobile Filtration Unit

Maximum working pressure up to 5 bar

Flow rate up to 30 L/min

Compact and simple to use, the GRF and GRM302 mobile filtration units enable service teams to clean oil and hydraulic fluids quickly and easily - protecting complex components, machines and systems from particulate contamination.

GRF/GRM 302 units are ideal for filling and filtering hydraulic fluids and lubrication tanks.

The unit can be connected off-line to the tank (recommended max volume of 500 L), and can be used as a support to the filtration plant on start-up for fast flushing or as an additional filtration system for highly contaminated systems.

Available features:

- 30 L/min Flow rate
- Continuous operation at 3.5 bar
- Compact size
- Comes with MPS100 filter as standard – optional LMP4305 filter
- Water removal (optional element)
- Compatible with mineral oil
- Electric control box
- Calibrated to relevant ISO standards (GRM only)
- Electric control box
- Visual electrical indicator
- Nitrile seals
- ICM included for real-time monitoring (GRM only)
- Data logging and storage of up to 4000 test results in memory (GRM only)

Applications:

- Filling and filtering hydraulic fluids and lubrication tanks.
- Filter unit can be connected off-line to the tank (recommended max volume 500 L), and can be used as a support to the filtration plant on start-up for fast flushing action - or as an additional filtration system for highly contaminated systems



SPECIFICATION

Pump	Gear Pump or Screw Pump (for diesel)
Electric Motor	0.75 Kw, 1400rpm, 110V/240V single phase, 415V three-phase
Flow Rate	30 L/min
Max Operating Pressure	3.5 bar
Viscosity Range	Maximum 150 cSt
Inlet Filter	100 mesh washable as standard
Outlet Filter	1/3/6/10/25 µm β>1000 flow through the element Out/In
Bypass Indicator set at 1.75bar	Rating 3.5 bar with bypass (LMP) 1.75 bar bypass (MPS) Visual/electrical indicator (on LMP) set at 2 bar
Fluid Temperature	From -10° to +80°C
Ambient Temperature	From 0° to +45 °C
Protection Class	IP 55
Seal	NBR
Fluid Compatibility	Mineral oil and diesel oil variants
Suction and hose	SAE100R4 1" swaged female 2000mm hose - available with lances
Dimensions	GRF - 75kg, 860mm (H); 560mm (D); 500mm(W) GRM - 80kg, 860mm (H); 560mm (D); 500mm (W)
Equipment	ICM 2.0 Version available (GRM Models)

How to order

GRF/GRM 302

Order example	GRF	30	2	1	M149	S
1. Model						
GRF= GRF Mobile Filtration Trolley						
GRM= GRM Mobile Filtration Trolley with ICM 2.0						
2. Flow						
30= 30 L/min						
3. Electric Power						
2= 0.75kW						
4. Electric Motor						
1= 110v single phase						
2= 240v single phase						
3= 415v 3 phase						
5. Replacement Suction Element						
M149= 173µm suction strainer						
6. Filtration						
S= No filter fitted, to be ordered separately						

Spin-on Filters

Filter element - Standard length: Inorganic microfiber 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

Filter element - Standard length: Wire-mesh element

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

Filter element - Extended length: Inorganic microfiber 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

Filter element - Extended length: Wire-mesh element

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

GRF 503 / GRM 503

Available with ICM 2.0 In-line Contamination Monitor

Mobile Filtration Unit

Mobile Filtration Unit

Maximum working pressure up to 3.5 bar

Flow rate up to 50 L/min

With fast cleaning times and the option of adding a state of the art ICM 2.0 particle counter, the GRF and GRM 503 mobile filtration units enable service teams to clean oil and hydraulic fluids quickly and easily - protecting complex components, machines and systems from particulate contamination.

GRF/GRM 503 units are ideal for filling and filtering hydraulic fluids and lubrication tanks. The unit can be connected off-line to the tank (recommended max volume of 1000 L), and used as a support to the filtration plant on start-up for fast flushing or as an additional filtration system for highly contaminated systems.

Available features:

- 50 L/min Flow rate
- Continuous operation at 3.5 bar
- Portable
- Water removal (optional element)
- Quick and easy to set up
- Compatible with mineral oil
- Calibrated to relevant ISO standards (GRM only)
- Wide variety of communication protocols as standard
- Electric control box w/pressure safety switch
- Indicators: Outlet filter w/electric cut-out switch
- Nitrile seals
- ICM included for real-time monitoring (GRM only)
- Data logging and storage of up to 4000 test results in memory (GRM only)

Applications:

- Filling and filtering hydraulic fluids and lubrication tanks.
- Filter unit can be connected off-line to the tank (recommended max volume 1000 L), and can be used as a support to the filtration plant on start-up for fast flushing action - or as an additional filtration system for highly contaminated systems



SPECIFICATION

Pump	Gear Pump or Screw Pump (for diesel)
Electric Motor	1.1Kw, 1400rpm, 110V/240V single phase, 415V three-phase
Flow Rate	50 L/min
Max Operating Pressure	3.5 bar
Viscosity Range	Maximum 150 cSt
Inlet Filter	250 µm Y type strainer
Outlet Filter	3/6/10/16/25 µm β>1000 flow through the element Out/In
Bypass Indicator set at 1.75bar	Rating 3.5 bar with bypass (LMP) 1.75 bar bypass (MPS) Visual/electrical indicator (on LMP) set at 2 bar
Fluid Temperature	From -10° to +80°C
Ambient Temperature	From 0° to +45 °C
Protection Class	IP 55
Seal	NBR
Fluid Compatibility	Mineral oil and diesel oil variants
Suction and pressure hose	SAE100R4 1" swaged female 2000mm hose - available with lances
Weight	GRF - 92kg, 1151mm (H); 816mm (D); 544mm(W) GRM - 97kg, 1151mm (H); 816mm (D); 544mm (W)
Equipment	ICM 2.0 Version available (GRM Models)

How to order

GRF/GRM 503

Order example

1. Model

GRF= GRF Mobile Filtration Trolley

GRM= GRM Mobile Filtration Trolley with ICM 2.0

2. Flow

50= 50 L/min

3. Electric Power

3= 1.1 kW 4hp 1400rpm

4. Electric Motor

1= 110v single phase

2= 240v single phase

3= 415v 3 phase

5. Replacement Suction Element

Y250= 250µm suction strainer

6. Filtration

S= Single Spin-on (option) plus LMP430 length 5 (standard)

SP= Double Spin-on (option) plus LMP430 length 5 (standard)

L4305= LMP4305 (standard)

GRF 50 3 3 Y250 SPL4305

Filters

Filter element - Standard length: Inorganic microfiber 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

Filter element - Standard length: Wire-mesh element

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

Filter element - Extended length: Inorganic microfiber 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

Filter element - Extended length: Wire-mesh element

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

LMP Length 5 elements - Inorganic microfibre element

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



UFM 091

Mobile filtration unit 90 l/min flow rate



INSTALLATION, SERVICE AND MAINTENANCE MANUAL AND SAFETY INSTRUCTIONS



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Description

Mobile filtration units

UFM 091 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. Recommended maximum tank volume of 1500/1800L.

Features & Benefits

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

Available in three configurations:

- configuration with start / stop differential pressure indicator - visual
- configuration with start / stop automatic motor
- cut-out from differential pressure indicator - electrical / visual
- configuration with start / stop phase inverter automatic motor
- cut-out from differential pressure indicator - electrical / visual
- in-line Particle Counter ICM



Technical data

Pump

Screw pump

Electric Motor

2.2 kW 400 V three phase 4-pole

Flow (l/min)

90 l/min - 1450 r.p.m.

Operation Pressure

Maximum: 10 bar

Viscosity range

Min. operation 10 cSt

Max. operation 800 cSt

Max. only for cold start 2000 cSt

Suction Filter

Type Y filtration 800 µm

Filtration Rating

See designation order for cartridge and filter elements

Bypass valve Δp set

Rating 3.5 bar with bypass.

The bypass can be blocked through the spigot

Fluid Temperature

From -10 °C to +80 °C

Ambient Temperature

From -20 °C to +45 °C

Weight

105 kg (231.5 lb)

Dimensions

See drawings

Protection Class

IP55

Seal

NBR

Fluid Compatibility

Mineral Oil & Synthetic Oil - Water Glycol

Suction hose

DN50 length 3000 mm

lance

DN/OD50 length 700 mm

Pressure hose

DN38 length 3000 mm

lance

DN/OD42 length 700 mm

Equipment

- Differential Clogging indicator - Visual (setting 3.0 bar $\pm 10\%$)
- Differential Clogging indicator - Electrical / Visual (setting 3.0 bar $\pm 10\%$)
- Differential Clogging indicator - Electrical / Visual - with ICM 2.0 (setting 3.0 bar $\pm 10\%$)

CE Standard

Designation & Ordering code

MOBILE FILTRATION UNIT UFM 091

Series	Configuration example:	UFM	091	T	A	2	0	2	0	P01
UFM										
Size										
091 90 l/min										
Electric motor										
T 400 V Three phase										
Seals										
A NBR										
Pressure gauges and Clogging indicators (see below)										
2 Manometer (*) + Visual differential clogging indicator										
3 Manometer (*) + Electrical diff. clogging indicator (visual indication on panel)										
Filter element										
0 Without element (for ordering, see below)										
Filtration surface										
2 Higher										
Option										
0 No options										
1 ICM 2.0 particle counter										
Option										
P01 MP Filtri standard										
Pxx Customized										

Filtration element should be ordered separately

FILTER ELEMENT

FILTRATION SURFACE - HIGHER

Inorganic microfibre	Wire mesh element
CU 400 6 A01 A N P01 01 µm	CU 400 6 M25 A N P01 25 µm
CU 400 6 A03 A N P01 03 µm	CU 400 6 M60 A N P01 60 µm
CU 400 6 A06 A N P01 06 µm	
CU 400 6 A10 A N P01 10 µm	
CU 400 6 A16 A N P01 16 µm	
CU 400 6 A25 A N P01 25 µm	
	Multi-Layer water absorber
	CU 400 6 WA025 A N P01 25 µm

CLOGGING INDICATORS

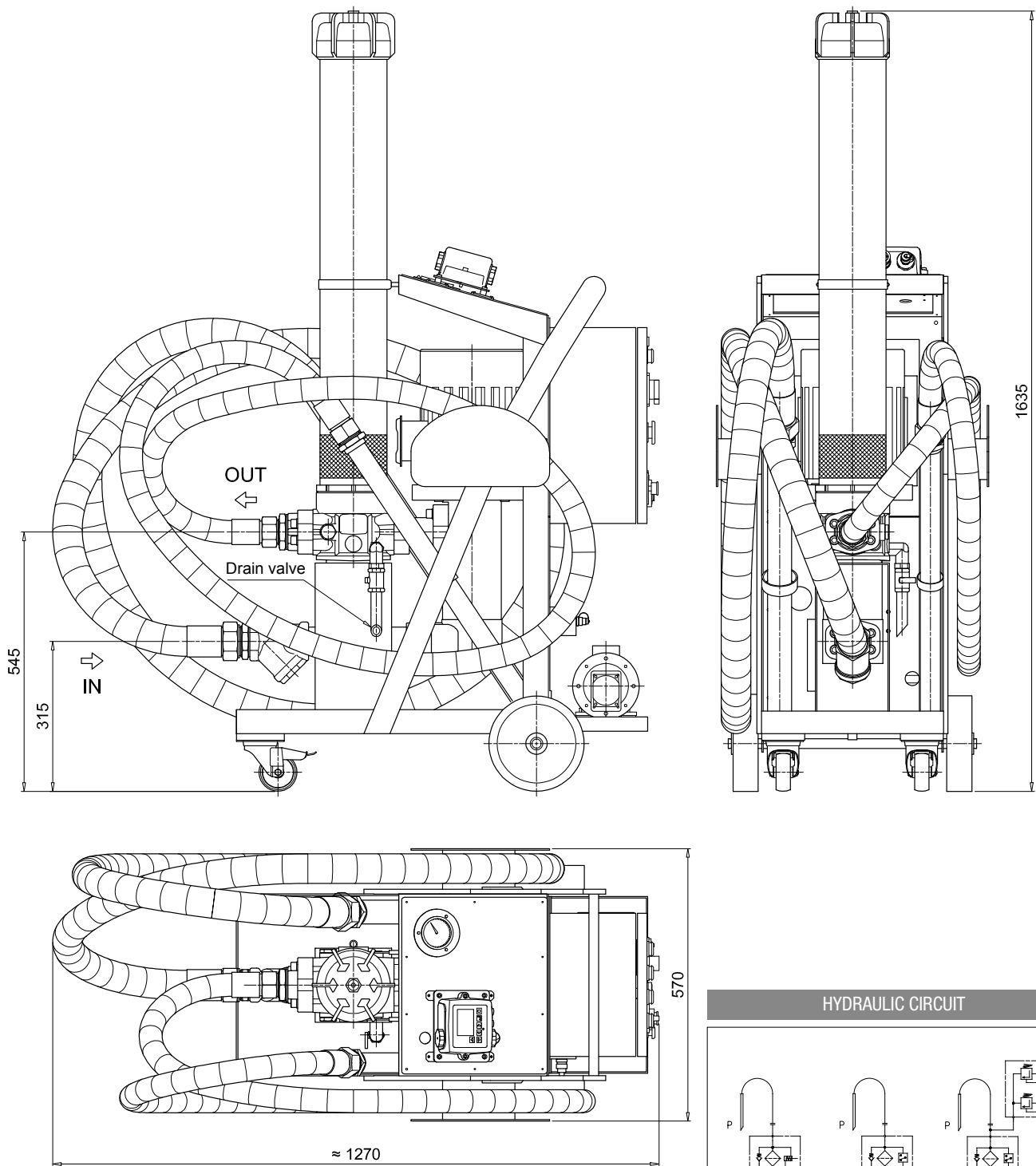
DVM Visual Differential Indicator

Settings	Ordering code
3.0 bar ±10%	DV M 30 x P01

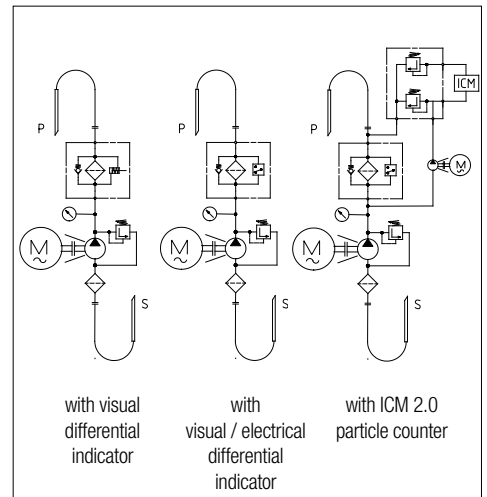
DEA Electrical Differential Indicator (visual indication on panel)

Settings	Ordering code
3.0 bar ±10%	DE A 30 x A 50 P01

Dimensions



HYDRAULIC CIRCUIT



For the complete spare part list please refer to manual



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UFM 181

Mobile filtration unit 180 l/min flow rate



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Description

Mobile filtration units

UFM 181 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. Recommended maximum tank volume of 1800/2700 L.

Features & Benefits

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

Available in two configurations:

- configuration with start / stop automatic motor
- cut-out from differential pressure indicator - electrical / visual
- configuration with start / stop phase inverter automatic motor
- cut-out from differential pressure indicator - electrical / visual
- in-line Particle Counter ICM



Technical data

Pump

Screw pump

Electric Motor

4 kW 400 V three phase 2-pole

Flow (l/min)

180 l/min - 2900 r.p.m.

Operation Pressure

Maximum: 10 bar

Viscosity range

Min. operation 10 cSt

Max. operation 800 cSt

Max. only for cold start 2000 cSt

Suction Filter

Type Y filtration 800 µm

Filtration Rating

See designation order for cartridge and filter elements

Bypass valve Δp set

Rating 3.5 bar with bypass.

The bypass can be blocked through the spigot

Fluid Temperature

From -10 °C to +80 °C

Ambient Temperature

From -20 °C to +45 °C

Weight

109 kg (240.3)

Dimensions

See drawings

Protection Class

IP55

Seal

NBR

Fluid Compatibility

Mineral Oil & Synthetic Oil - Water Glycol

Suction hose

DN50 length 3000 mm

lance

DN/OD50 length 700 mm

Pressure hose

DN38 length 3000 mm

lance

DN/OD42 length 700 mm

Equipment

- Differential Clogging indicator - Electrical / Visual (setting 3.0 bar $\pm 10\%$)

- Differential Clogging indicator - Electrical / Visual - with ICM 2.0

(setting 3.0 bar $\pm 10\%$)



UFM 181

Designation & Ordering code

MOBILE FILTRATION UNIT UFM 181

Series	Configuration example:	UFM	181	T	A	3	0	2	0	P01
UFM										
Size										
181 180 l/min										
Electric motor										
T 400 V Three phase										
Seals										
A NBR										
Pressure gauges and Clogging indicators (see below)										
3 Manometer (*) + Electrical diff. clogging indicator (visual indication on panel)										
Filter element										
0 Without element (for ordering, see below)										
Filtration surface										
2 Higher										
Option										
0 No options										
1 ICM 2.0 particle counter										
Option										
P01 MP Filtri standard										
Pxx Customized										

Filtration element should be ordered separately

FILTER ELEMENT

FILTRATION SURFACE - HIGHER

Inorganic microfibre	
CU 400 6 A01 A N P01	01 µm
CU 400 6 A03 A N P01	03 µm
CU 400 6 A06 A N P01	06 µm
CU 400 6 A10 A N P01	10 µm
CU 400 6 A16 A N P01	16 µm
CU 400 6 A25 A N P01	25 µm

Wire mesh element	
CU 400 6 M25 A N P01	25 µm
CU 400 6 M60 A N P01	60 µm

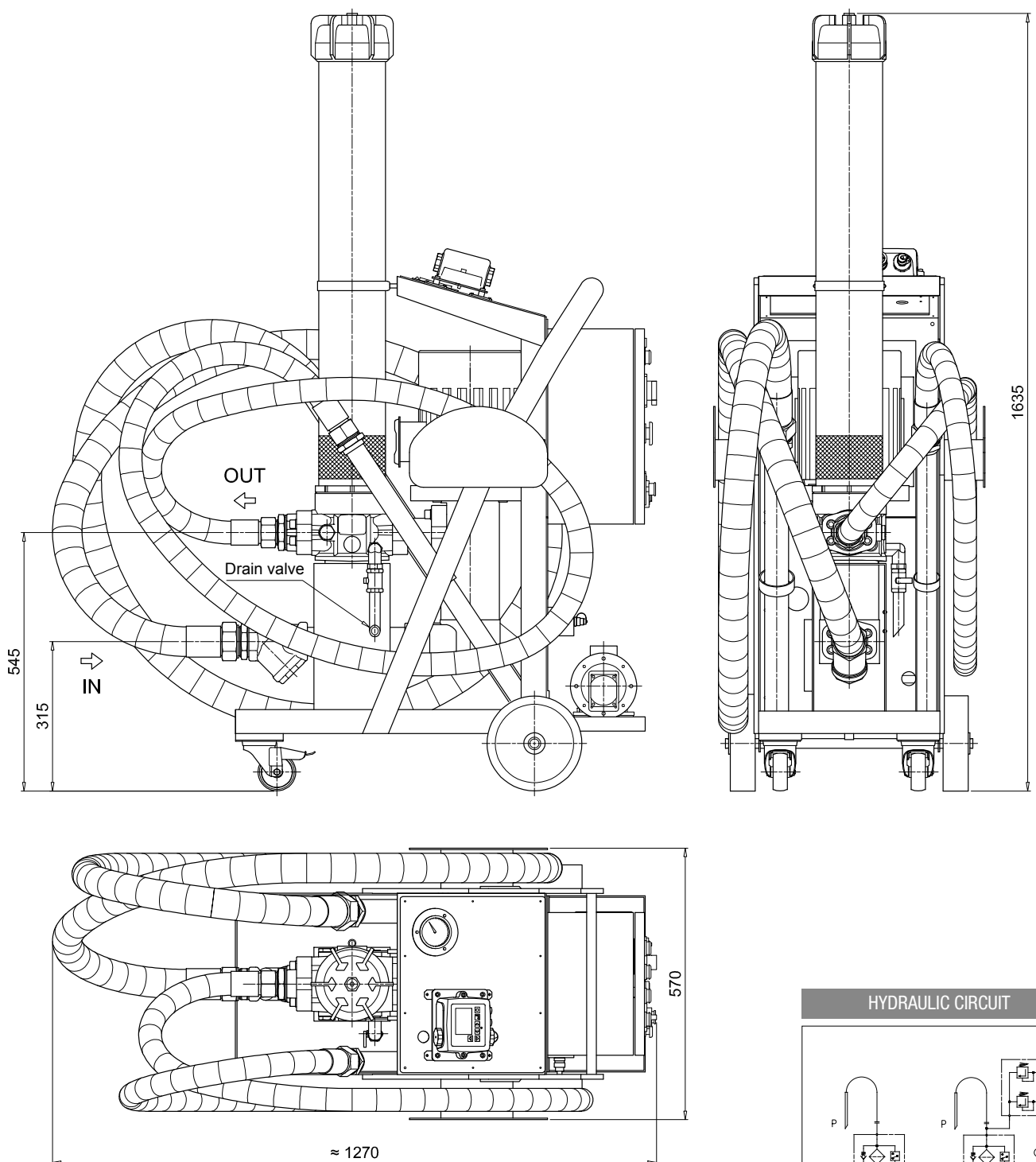
Multi-Layer water absorber	
CU 400 6 WA025 A N P01	25 µm

CLOGGING INDICATORS

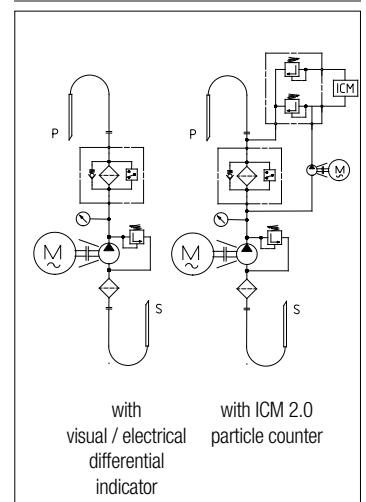
DEA Electrical Differential Indicator (visual indication on panel)

Settings	Ordering code
3.0 bar ±10%	DE A 30 x A 50 P01

Dimensions



HYDRAULIC CIRCUIT



For the complete spare part list please refer to manual



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UFM 919

Mobile filtration unit 90/180 l/min flow rate



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Description

Mobile filtration units

UFM 919 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. Two-speed electric motor with programmable flow of 90 or 180 l/min.

Features & Benefits

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

Available in two configurations:

- configuration with start / stop automatic motor
- cut-out from differential pressure indicator - electrical / visual
- configuration with start / stop phase inverter automatic motor
- cut-out from differential pressure indicator - electrical / visual
- in-line Particle Counter ICM 2.0

Possible applications

Flow rate 90 l/min:

- for filling or topping up tanks with a volume of less than 1000 liters
- for depollution of tanks with a volume of less than 1000 liters
- for the treatment of high viscosity oils
- for a cold start phase then flow rate 180 l/min after temperature rise.

Flow rate 180 l/min:

- for filling or topping up tanks with a volume greater than 2000 liters
- for the depollution of tanks with a volume of less than 2000 liters



Technical data

Pump

Screw pump

Electric Motor

3.7/5 kW 400 V three phase 2/4-pole

Flow (l/min)

90 l/min - 1450 r.p.m. / 180 l/min - 2900 r.p.m.

Operation Pressure

Maximum: 10 bar

Viscosity range

Min. operation 10 cSt

Max. operation 800 cSt

Max. only for cold start 2000 cSt

Suction Filter

Type Y filtration 800 µm

Filtration Rating

See designation order for cartridge and filter elements

Bypass valve Δp set

Rating 3.5 bar with bypass.

The bypass can be blocked through the spigot

Fluid Temperature

From -10 °C to +80 °C

Ambient Temperature

From -20 °C to +45 °C

Weight

120 kg (264.5 lb)

Dimensions

See drawings

Protection Class

IP55

Seal

NBR

DN/OD40 length 700 mm

Fluid Compatibility

Mineral Oil & Synthetic Oil - Water Glycol

Suction hose

DN50 length 3000 mm

lance

DN/OD50 length 700 mm

lance 90°

Pressure hose

DN38 length 3000 mm

lance

DN/OD42 length 700 mm

Equipment

- Differential Clogging indicator - Electrical / Visual (setting 3.0 bar $\pm 10\%$)

- Differential Clogging indicator - Electrical / Visual - with ICM 2.0

(setting 3.0 bar $\pm 10\%$)



Designation & Ordering code

MOBILE FILTRATION UNIT UFM 919

Series	Configuration example:	UFM	919	T	A	3	0	2	0	P01
UFM										
Size										
919 90-180 l/min										
Electric motor										
T 400 V Three phase - 2/4 pole										
Seals										
A NBR										
Pressure gauges and Clogging indicators (see below)										
3 Manometer (*) + Electrical diff. clogging indicator (visual indication on panel)										
Filter element										
0 Without element (for ordering, see below)										
Filtration surface										
2 Higher										
Option										
0 No options										
1 ICM 2.0 particle counter										
Option										
P01 MP Filtri standard										
Pxx Customized										

Filtration element should be ordered separately

FILTER ELEMENT

FILTRATION SURFACE - HIGHER

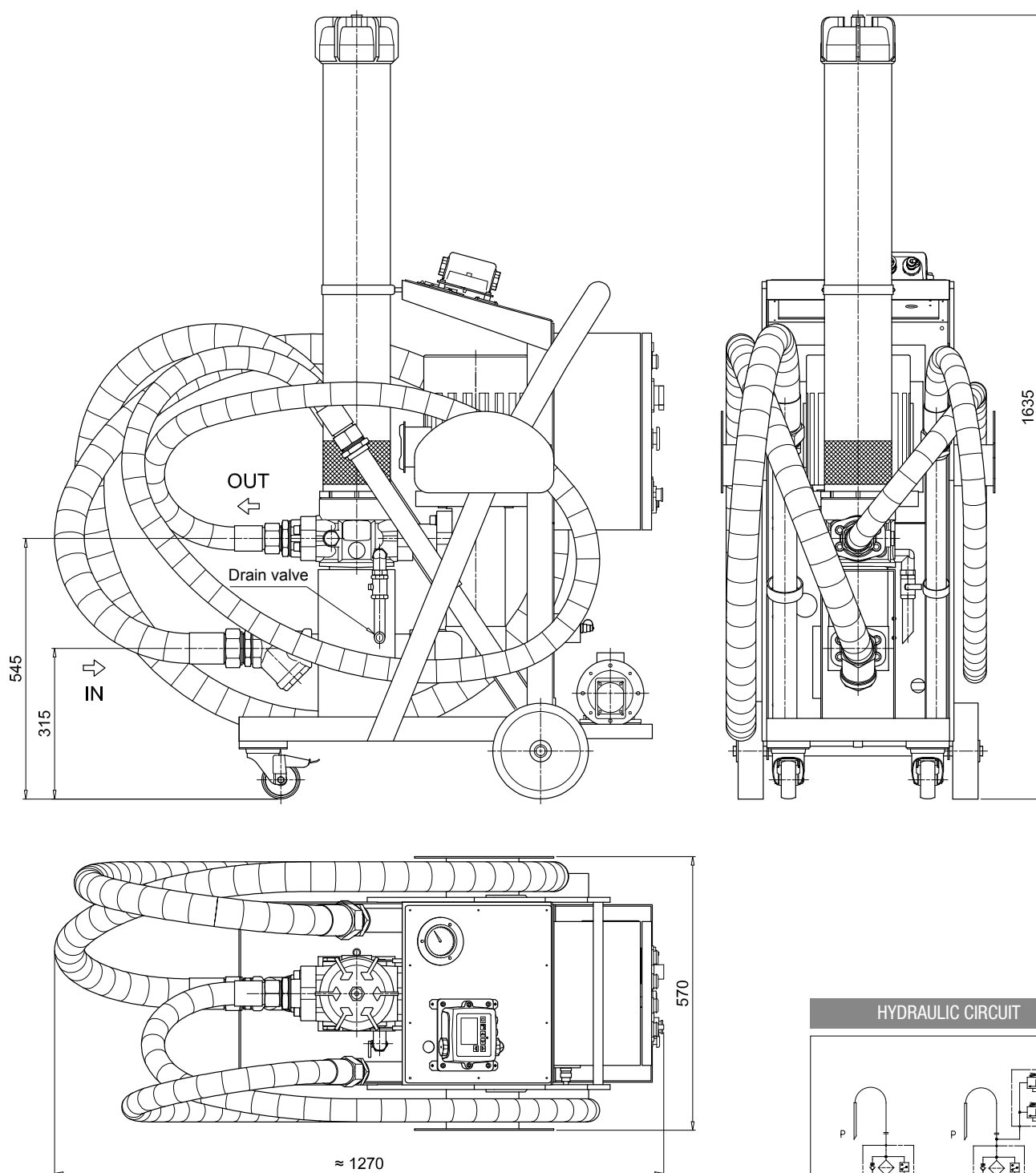
Inorganic microfibres	Wire mesh element
CU 400 6 A01 A N P01 01 µm	CU 400 6 M25 A N P01 25 µm
CU 400 6 A03 A N P01 03 µm	CU 400 6 M60 A N P01 60 µm
CU 400 6 A06 A N P01 06 µm	
CU 400 6 A10 A N P01 10 µm	
CU 400 6 A16 A N P01 16 µm	
CU 400 6 A25 A N P01 25 µm	
	Multi-Layer water absorber
	CU 400 6 WA025 A N P01 25 µm

CLOGGING INDICATORS

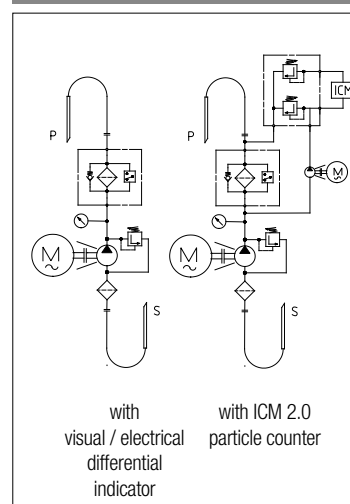
DEA Electrical Differential Indicator (visual indication on panel)

Settings	Ordering code
3.0 bar ±10%	DE A 30 x A 50 P01

Dimensions



HYDRAULIC CIRCUIT



For the complete spare part list please refer to manual



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FTU

Fluid transfer unit with ICM 2.0 / 4.0 (In-line Contamination Monitor)



Description

Fluid Transfer Unit

The FTU Fluid Transfer Unit is suitable for filling, recirculation (via the onboard reservoir), and emptying of filtered hydraulic fluids and lubrication tanks.

The FTU can be utilised either as additional filtration to a system with a high incidence of contamination, or it can be used as a standalone recirculation filtration circuit to clean fluid to a predetermined contamination level (monitored by the onboard ICM device) prior to the transfer of fluid to the system.

Features & Benefits

- Compact size
- Easy to use
- Easy maintenance
- Reliable
- Absolute filtration
- In-line Contamination monitor equipped

Possible applications

- Low flow rate for filling reservoirs
- Low-flow filtration for off-line tanks
- Pre filtration ability of fluid prior to filling of hydraulic system



Technical data

Pump

Gear pump

Electric Motor

0.75 kW 1400 rpm, 110/230 V single phase

Flow

15 l/min (3.96 gpm)

Operation Pressure

Maximum: 3.5 bar (51 psi)

Inlet

Inlet (pump protection) filtration steel 250 µm strainer

Viscosity

150 cSt maximum fluid viscosity

Suction Filter

250 µm metal mesh strainers

Bypass valve Δp set

Rating 3.5 bar (51 psi) with bypass

Filtration

Water removal "spin-on" type, bypass set at 1.75 bar (25.4 psi)

In-line filtration 3 µm absolute $\beta_{x(c)} > 1000$ element bypass set at 3.0 bar (44 psi)**Filtration rating**

See designation order for cartridge and filter elements

Control

Electrical Control Box

Indicator

Delivery line electric cut out switch

Weight

200 kg (440.9 lb)

Dimensions

See drawings

Ambient Temperature

From -10 °C to +80 °C (from -14 °F to +176 °F)

Working temperature

From 0°C to +40 °C (from 32 °F to +104°F)

Protection Class

IP55

Seal

NBR

Fluid Compatibility

Mineral oil compatible - please contact sales team for queries about other fluids

Hoses

Flexible hoses - SAE100R4 1" BSP swaged females 2 m long hose

Oil level

Sight glass and filler with integrated electric float cut out switch

Mounting

Heavy duty trolley and wheels

CE Standard

Designation & Ordering code

FLUID TRANSFER UNIT FTU									
Mobile filtration unit		Configuration example: FTU 1 1 15 2 1 M250 SL4305							
FTU Fluid Transfer Unit									
Onboard reservoir									
1	100 litres - Aluminium								
2	50 litres - Aluminium								
3	100 litres - Stainless steel								
4	50 litres - Stainless steel								
In-line contamination monitor									
1	With ICM 2.0								
2	With ICM 4.0								
Flow rate									
15	15 l/min								
Motor power									
2	0.75 kW, 1400 rpm								
Voltage									
1	110 V - 50 Hz single phase								
2	240 V - 50 Hz single phase								
Inlet filtration									
M250	250 µm suction strainer (internal of reservoir)								
Outlet filtration									
SL4305	Single spin on plus LMP length 5								

Filtration element should be ordered separately

FILTER ELEMENT

SPIN-ON FILTER - STANDARD LENGTH

Inorganic microfibre		Wire mesh element	
CS 100 A01 A P01	01 µm	CS 100 M25 A P01	25 µm
CS 100 A03 A P01	03 µm	CS 100 M60 A P01	60 µm
CS 100 A06 A P01	06 µm		
CS 100 A10 A P01	10 µm		
CS 100 A25 A P01	25 µm		

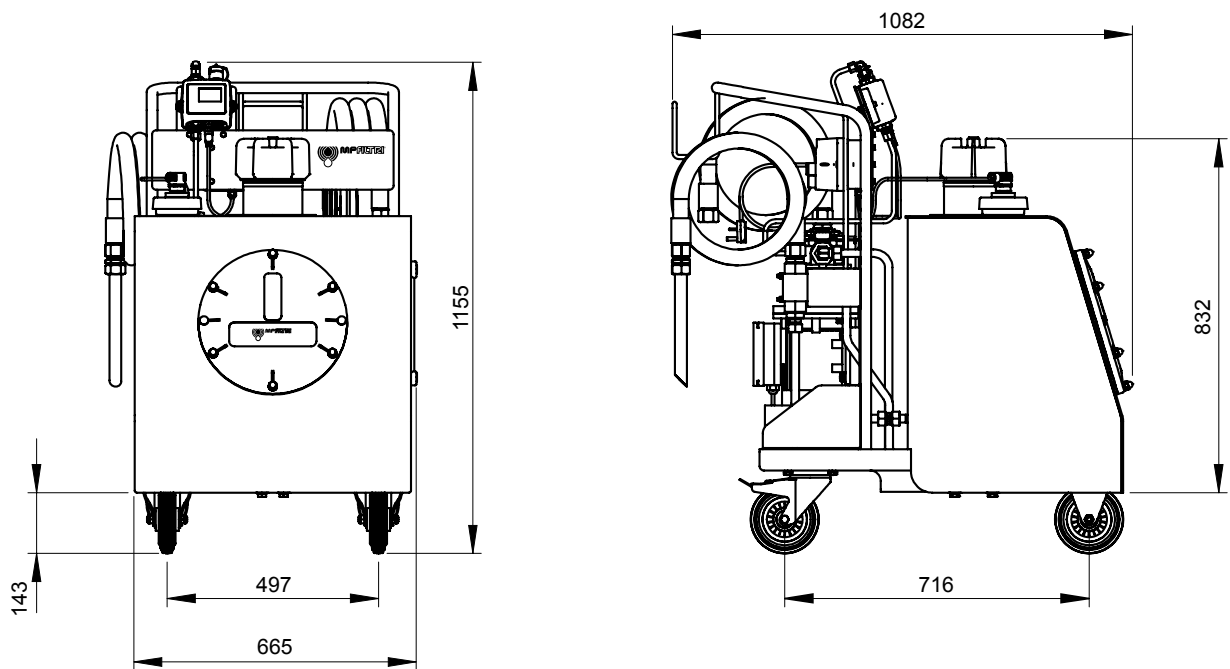
SPIN-ON FILTER - EXTENDED LENGTH

Inorganic microfibre		Wire mesh element	
CS 150 A01 A P01	01 µm	CS 150 M25 A P01	25 µm
CS 150 A03 A P01	03 µm	CS 150 M60 A P01	60 µm
CS 150 A06 A P01	06 µm		
CS 150 A10 A P01	10 µm		
CS 150 A25 A P01	25 µm		
		Multi-Layer water absorber	
		CW 150 P10 A	10 µm

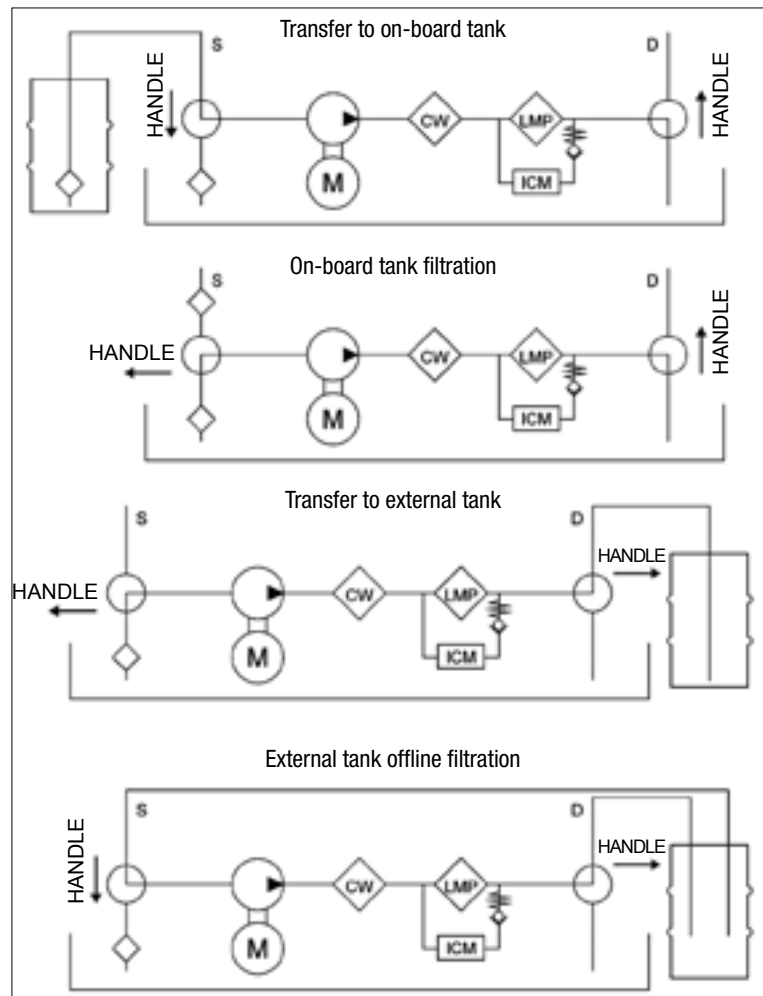
LMP FILTER ELEMENT - LENGTH 5

Inorganic microfibre	
CU 400 5 A03 A N P01	03 µm
CU 400 5 A10 A N P01	10 µm
CU 400 5 A16 A N P01	16 µm
CU 400 5 A25 A N P01	25 µm

Dimensions



HYDRAULIC CIRCUIT



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