



USER AND MAINTENANCE MANUAL



MODEL

UOW022M00255DXX

PART NUMBER **K1010785413**

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INDEX

A. SAFETY STANDARDS	3
B. TECHNICAL CHARACTERISTICS	3
C. TECHNICAL DATA	4
D. OVERALL DIMENSIONS	4
E. ELECTRICAL DIAGRAM	5
F. HYDRAULIC DIAGRAM AND BILL OF MATERIALS	5
G. OPERATING AND COMMISSIONING INSTRUCTIONS	6
H. ROUTINE AND PLANNED MAINTENANCE	7
I. SPARE FILTER ELEMENTS	9
J. OPERATING LIMITS	9
K. RULES TO BE FOLLOWED IN THE EVENT OF ANOMALIES	9
L. WARRANTY	9
ANNEX 1 - DECLARATION OF CONFORMITY	10

USER AND MAINTENANCE MANUAL

A. SAFETY STANDARDS



DO NOT USE the equipment without first reading this user manual and **UNDERSTANDING ITS CONTENTS.**

1. WARNING! Equipment can be dangerous if used incorrectly.
2. Transfer and filtration operations are safe if the following rules are followed.
3. WARNING! It is essential that all operations are carried out by a single authorised and trained operator.
4. Transfer and filtering operations are safe if the following rules are followed.
5. This manual must be given to the operator and retained. The owner of the equipment is responsible for it. The operator is also responsible.
6. Before connecting to the mains, check that there is adequate protection against overloads and short circuits upstream of the mains socket.
7. Check that the supply voltage and frequency are as indicated on the machine's rating plate.
8. Only use cables, plugs and extension cords that comply with CEI standards. Use only cables, plugs and extension cords that comply with the regulations in force in the country of use.
9. Always disconnect the power supply before working on the machine.
10. Maintenance and repairs must be carried out by qualified personnel.
11. Only competent adults should use the trolley.
12. Use original spare parts to maintain the original characteristics and validity of the certification.
13. Do not attempt to operate the machine above the allowable working pressures as this could result in serious injury to the operator.

The manufacturer accepts no liability for damage caused by negligence.

B. TECHNICAL CHARACTERISTICS

The mobile unit is used to transfer and filter hydraulic oil in hydraulic systems. It is equipped with two filters: one installed on the suction line and one installed on the delivery line. The pressure filter is equipped with a visual clogging indicator.

Transfer function

- from drums to tanks
- for refilling from barrels to tanks

Filtration function

- off-line filtration in tanks
- additional off-line filtration in tanks
- off-line filtration of new oil in drums or tanks

The unit consists of

- Support frame with handle.
- Motor-pump unit connected to suction and discharge piping to ensure suction and discharge of the fluid.
The piping consists of
Suction: flexible hose Ø20 L=2000mm + lance L400mm
Delivery: flexible hose Ø16 L=2000mm + lance L400mm
- The filtration consists of two filters:
 1. On the suction side, a Y filter to protect the pump from large impurities.
 2. At the outlet, an FPG31 series filter with visual indicator for fine filtration.

The unit is supplied as standard without a filter element, which must be ordered separately. The inlet filter uses fibre filter elements with a degree of filtration between $5\text{ }\mu\text{m(c)}$ $\beta>1,000$ and $21\text{ }\mu\text{m(c)}$ $\beta>1,000$.

The filter is equipped with a bypass valve set at 3.5 bar to prevent filtration if the filter element is blocked. For safety reasons, the unit is equipped with a clogging indicator that gives a visual signal (at 2.5 bar) when the filter element is clogged.

- Safety systems against risks arising from the use of the machine, consisting of a circuit breaker with protection against overloads and short circuits; also equipped with a release coil that prevents the motor from starting in the event of a power failure and sudden return of power (so that the motor can only start if the start button is pressed voluntarily).
- Start/stop switch installed directly on the electric motor terminal board.
- The equipment is suitable for use in environments with the presence of dust or liquids with an IP55 degree of protection. **It is NOT suitable for use in potentially explosive atmospheres (see ATEX Directive).**

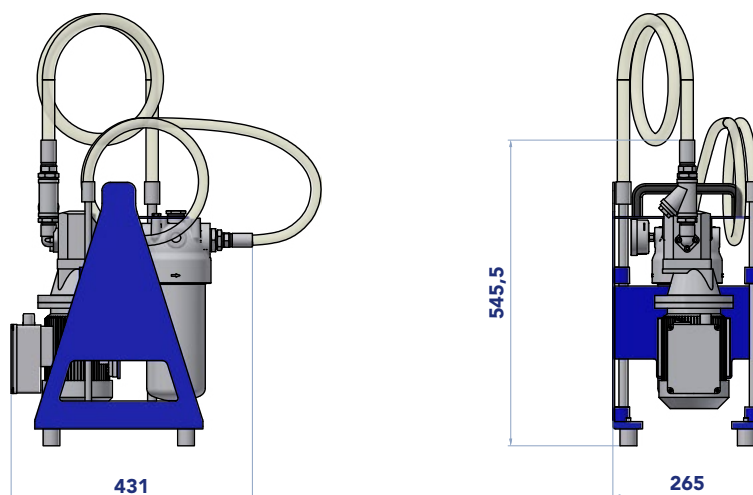


USER AND MAINTENANCE MANUAL

C. TECHNICAL AND DIMENSIONAL DATA DATA

DESCRIPTION	SPECIFICATIONS
Power	0,25 Kw
Drive	Electric
Power supply voltage	230V - 50Hz single phase
Electricl motors	2 poles, type B3B5
Overall dimensions (WxDxH)	See chapt. D
Weight	~17 Kg
Max operating pressure	5 bar
Maximum pump flow rate	Q = 22 lt/min
Hydraulic fluid	Table ISO Cat. H
Hydraulic oil viscosity	From 30 Cst to 150 Cst
Noise intensity level	77.9 Db(A)

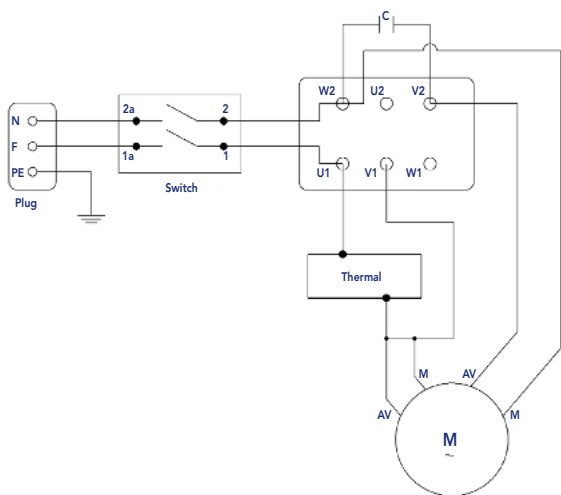
D. OVERALL DIMENSIONS



USER AND MAINTENANCE MANUAL

E. ELECTRICAL SCHEME

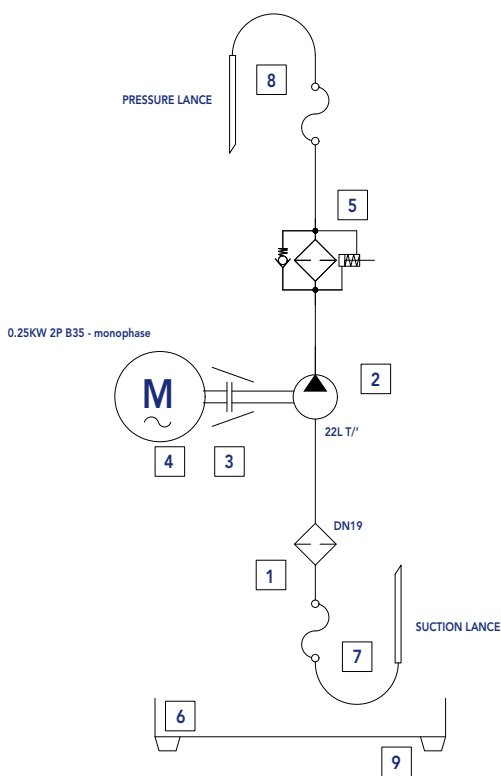
The trolley is supplied with a 2m electric cable and a 3-pin CE plug.



Electric pump on/off button



F. HYDRAULIC DIAGRAM AND BILL OF MATERIALS



Pos.	Description	Specifications
1	Y suction filter	400µm
2	Gear pump	ALP1-D-11
3	Pump motor connection	ACCOPP. GR.1 GR63
4	Electrical motor	0,25kW 2P-B3/B5 single phase
5	Filter + visual clogging indicator	BPG31B12DN5DCX
	Filter element *	EPG31N--
6	Structure + handle	DC10785410
7	Flexible suction hose	ARMOVIN Ø20 - L=2000
	Lance	Ø20 - L=400 cut at 45°
8	Flexible pressure hose	ARMOVIN Ø16 - L=2000
	Lance	Ø16 - L=400 cut at 45°
9	Vibration absorbers	M.643/200 B-M10

* The unit is supplied without a filter element as standard, which must be ordered separately (see section I)



USER AND MAINTENANCE MANUAL

G. OPERATING AND COMMISSIONING INSTRUCTIONS

1. Before use, the unit must be placed in a location that will ensure its stability during use.
The unit is supplied without a filter element. Before use, insert the original UFI FILTERS filter element intended for this unit, see sections H and I.
2. Check that the power supply has the required voltage and frequency and plug in.
3. During operation, make sure that oil always flows through the suction pipe, that it is directed towards the pump and that there are no obstructions to the suction.
The suction pipe has the largest diameter (DN20).

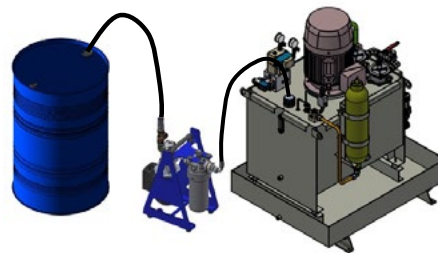


Do not switch on the filter unit without the filter element correctly installed

Before switching on the filtration unit, always check that there are no accidental pipe constrictions due to crushing or foreign bodies and that the drain is clear. It is not permitted to install taps on either pipe or components that could obstruct or diminish the flow of fluid.

Transfer operation

Insert the suction hose into the oil to be sucked in (tank or drum). Place the delivery hose in the tank of the oil system to be filled or in another drum.



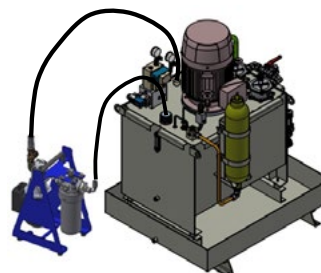
Filtration operations

In the drum: To clean the transfer oil (even new oil), it is recommended to filter the oil inside the drum several times before transferring it.

In this case, insert and position the suction and delivery lances in the oil drum to be filtered.



In the tank: To clean the oil in a tank, it is advisable to filter the oil in the tank several times. To do this, insert and position the suction and pressure lances in the tank. If possible, it is advisable to filter with the system running so that the oil outside the tank can also be recirculated and filtered: pipes, valve blocks, cylinders, hydraulic motors, etc.



USER AND MAINTENANCE MANUAL



CAUTION:

- Ensure that the lances always remain below the oil level
- Space the ends of the two lances as far apart as possible
- Properly secure the pipes fitted with lances
- If the two lances are close together (small drums or tanks), fix them at different heights

These operations must be carried out in order to recirculate all the fluid contained and to avoid emulsions, foam and cavitations. Usually in cases where there is only one inlet 'port', and the diameter allows this, insert both lances and position them in an X-shape.

Once these operations have been carried out, the filtration unit can be started by turning on the 'green' ignition switch 'I'. Make sure that the suction pipe is always crossed by the oil and that its direction is towards the pump and that there are no suction problems.



When operations are completed, switch off the filtration unit using the 'O' switch and disconnect the electrical connection plug.

Put the lances back into their housings, taking care that there is no oil inside the hoses.



H. ROUTINE AND SCHEDULED MAINTENANCE



BEFORE PERFORMING ANY MAINTENANCE

Ensure that the filter unit is unplugged from the wall outlet.

Check that the tubes are placed in the correct housings.

Always operate above a collection tank to avoid spillage of the fluid.

Collect any oil in the filter housing, suction and discharge pipes and the replaced filter element in a container. Dispose of in accordance with the regulations in force (refer to the safety data sheet of the treated fluid).

Avoid direct contact with hot oil, the filter unit and its installed components. Take care when handling the pipework

Before replacing the filter elements, it is recommended to drain the residual oil in the filter housing (FPG31) as it is normally not clean

It is a good practice to check the condition of both tubes before each use. Check that the filter elements are properly seated and that the filter covers/containers are tight. Periodically check the tightness of the hydraulic connections and the tightness of the electrical terminals in the engine terminal box. Oil leaks can occur at pipe and fitting connections if a fitting or screw is loosened, in which case we recommend checking for correct tightness. In order to maintain the functionality of the hoses, it is recommended to store the unit in a suitable place and to avoid prolonged exposure to sunlight or temperatures below 0°C.

CLOGGING OF THE FILTER ELEMENTS

The filtration unit is fitted with

- A 400µm suction Y-filter. The filter must be regularly cleaned of accumulated macro impurities to prevent pump cavitation, or replaced if necessary.
- An FPG31 series return filter equipped with a by-pass valve with an opening pressure set at 3.5 bar and a visual clogging indicator. When the differential pressure of 2.5 bar is reached, the red alarm piston of the visual indicator will be visible. At this point the filter element must be replaced immediately.



USER AND MAINTENANCE MANUAL

SUCTION FILTER - Replacement and/or cleaning



Suction filter



Unscrew the nut



Remove the filter element and insert the clean or new filter element



Screw the nut

PRESSURE FILTER - Element replacement



Pressure filter



Unscrew the container



Drain the residual oil inside the container



Remove the filter element



Insert the new filter element



Screw the container



USER AND MAINTENANCE MANUAL

I. SPARE FILTER ELEMENTS

E	P	G	FILTER ELEMENT
	3	1	SIZE & LENGHT
		N	SEALS
			N = NBR Nitrile
			FormulaUFI MEDIA
			FA = FormulaUFI.MICRON 5 $\mu\text{m(c)}$ $\beta > 1.000$
			FB = FormulaUFI.MICRON 7 $\mu\text{m(c)}$ $\beta > 1.000$
			FC = FormulaUFI.MICRON 12 $\mu\text{m(c)}$ $\beta > 1.000$
			FD = FormulaUFI.MICRON 21 $\mu\text{m(c)}$ $\beta > 1.000$
			WR = FormulaUFI.H2O

We recommend the use of original UFI FILTERS HYDRAULICS filter elements only.

J. OPERATING LIMITS

The filtration unit is designed to operate at a maximum pressure of 5 bar.

The electric motor is designed to operate according to the nameplate data.

For use in very cold or very hot environments, refer to the technical data in section C. Technical and dimensional data.

K. RULES TO BE FOLLOWED IN CASE OF ANOMALIES

1. The customer must inform the manufacturer of the problem or defects found.
2. The Customer may only carry out the intervention if authorised by the Manufacturer and in accordance with the Manufacturer's instructions.
3. THE WARRANTY WILL BE VOID if any work is carried out on the equipment that has not been authorised by the manufacturer.
4. THE WARRANTY WILL BE VOID if tampering with or modification of the machine's devices is detected by the manufacturer.
5. THE WARRANTY WILL BE VOID in the event of faults caused by carelessness, negligence or inexperience on the part of the operator. The manufacturer declines all responsibility for tampered machines and for accidents caused by improvised and uninformed operators.

L. WARRANTY

- Machines are tested before despatch.
- Under normal use and maintenance, the machine is guaranteed for one year from the date of delivery.
- Electrical components are not covered by the warranty and any faults are not our responsibility.



USER AND MAINTENANCE MANUAL



WARNING!



N.B.

BEFORE USING OF THE MOBILE
TRANSFER AND FILTRATION
UNIT, CAREFULLY READ THE
AFOREMENTIONED MANUAL OF
USE AND MAINTENANCE



ALLEGATO 1 - DICHIARAZIONE DI CONFORMITÀ



DICHIARAZIONE CE DI CONFORMITÀ DI UNA MACCHINA DECLARATION CE OF CONFORMITY OF THE MACHINERY

☒ DICHIARAZIONE IN LINGUA ORIGINALE - Ai sensi dell'allegato II.A della Direttiva 2006/42/CE e di altre Direttive applicabili

† TRADUZIONE DELLA DICHIARAZIONE IN LINGUA ORIGINALE - Ai sensi dell'allegato II.A della Direttiva 2006/42/CE e di altre Direttive applicabili

La ditta:

The company:

ARelle Componenti Oleodinamici s.r.l.
Via del Lavoro n. 62
20874 - Busnago (MB) - ITALIA

in qualità di fabbricante, dichiara che la macchina:

as the manufacturer, states that the product:

Denominazione <i>Denomination</i>	Unità mobile di travaso e filtrazione
Codice / Modello <i>Code / Model</i>	K101.0785413
Impianto / Tipo <i>Plant / Type</i>	UOW0025M0255DXX

al quale questa dichiarazione si riferisce, è conforme a tutte le disposizioni pertinenti della:
to which this declaration relates, conforms to all the provisions to:

Direttiva dell'Unione Europea 2006/42/CE sulla sicurezza delle Macchine

Inoltre il fascicolo tecnico è stato compilato in conformità dell'allegato VII parte A.

The technical fascicle is compiled in accordance with Annex VII Part A.

La macchina è anche conforme alle disposizioni delle seguenti norme armonizzate:

The product is also nearly conforms to the following harmonized standards:

UNI EN ISO 12100:2010

UNI EN ISO 13857:2020

UNI EN ISO 13732-1:2009

UNI EN ISO 4413:2012

Sicurezza del macchinario – Concetti fondamentali, principi generali di progettazione

Sicurezza del macchinario – Distanze di sicurezza per impedire il raggiungimento di zone pericolose con gli arti superiori e inferiori

Ergonomia degli ambienti termici – Metodi per la valutazione della risposta dell'uomo al contatto con le superfici

Oleoidraulica – Regole generali e requisiti di sicurezza per i sistemi e i loro componenti

Si dichiara inoltre che la persona autorizzata a costituire il fascicolo tecnico è il Sig.:

We further certify that the person authorized to compile the technical fascicle is Mr.:

Giovanni Pirola
Via del Lavoro, 62
20874 - Busnago (MB) - ITALIA

Busnago, li 12/09/2024



Amministratore Delegato
Administrator Delegate