



ABS 1000 A-LKW
ABM 1000 LKW

28 260
28 261



ABS 1000-LKW

OPERATION MANUAL

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1. Safety instructions



Please observe: This operation manual contains all necessary information. Please read carefully to avoid damages and faults. All Rapid pieces of equipment are checked carefully before delivery for their perfect composition and function. In case of improper use all rights to claim under guarantee are void.



Make sure that only skilled staff is working with this device in order to prevent damages and accidents caused by improper use.



Environmental conditions i.e. humidity, low temperatures, sunlight and contamination may damage device.



Before using the device make sure that it is not contaminated to prevent any injury. Avoid any contamination of device as well as of environment. In case of any contamination during operation of device take care that it is immediately and professionally removed.



Always wear safety cloths respecting the applicable regulations for accident prevention



Only use this device conforming to its purpose and function. Improper use can cause severe injuries.



Caution – moving parts, sharp edges, hot machine parts or exhausting steam can cause severe injuries.



Before use always check the device for damages and leaks. In case of any damage or leak make sure that it is repaired professionally before use. Operation of defect device may cause severe injuries.



In case of any sign of damage or malfunction during operation of device stop device immediately to prevent injuries. Before next use make sure that the device professionally repaired.



Take care that in case of an accident all emergency measures are on hand

2. Operating conditions

2.1 Environmental conditions

TEMPERATURE: Min. -10°C (14°F) / Max. +60°C(140°F)

RELATIVE HUMIDITY: Max. 90%



ATTENTION!

THE MOTORS ARE NOT OF AN ANTI-EXPLOSIVE TYPE.



ATTENTION!

It is the installer's responsibility to use tubing with adequate characteristics.



ATTENTION!

The temperature limits shown apply to the pump components and must be respected to avoid possible damage or malfunction.



2.2 Electrical power supply

Depending on the model, the pump must be supplied by a single-phase alternating current line whose nominal values are shown in the table in Paragraph B1 – ELECTRICAL SPECIFICATIONS.

The maximum acceptable variations from the electrical parameters are:

Voltage: +/-5% of the nominal value

Frequency: +/-2% of the nominal value



ATTENTION!

Power from lines with values outside the indicated limits can damage the electrical components.

2.3 Working cycle

The pumps are designed for continuous use under maximum back pressure.



ATTENTION!

Functioning under by-pass conditions is only allowed for brief periods of time (2-3minutes maximum).

2.4 Fluids permitted

- Chemical products: Urea, weak acid & weak alkaline fluid etc.
- Water

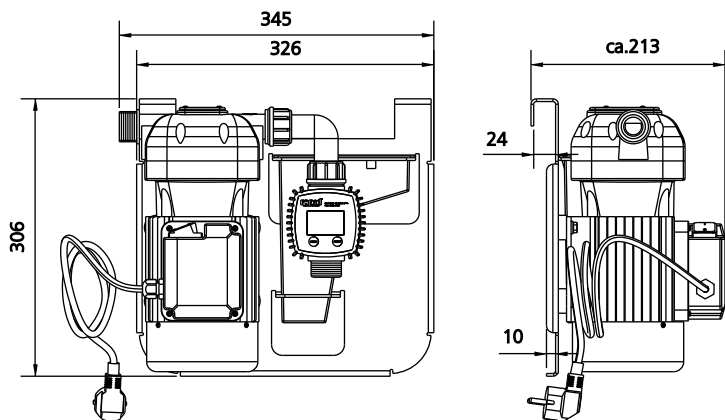
Moving and transport

Given the limited weight and size of the pumps (see overall dimensions), moving the pumps do not require the use of lifting devices.

The pumps were carefully packed before shipment. Check the packing material on delivery and store in the dry place.

3. Technical data

| | |
|---|-----------------|
| Dimensions(LxBxH) (mm) | 326x205x306 |
| Suction line | G1" /DN 19/1,5m |
| Dispensing line | G1" /DN 19/6m |
| Weight (kg) | 15 |
| Sound level (db) with 1m distance to device | <80 |
| Suction capacity (l/min) | 25 |
| Voltage (V) | 230 (50Hz) |
| Power input (kW) | 0,37 |



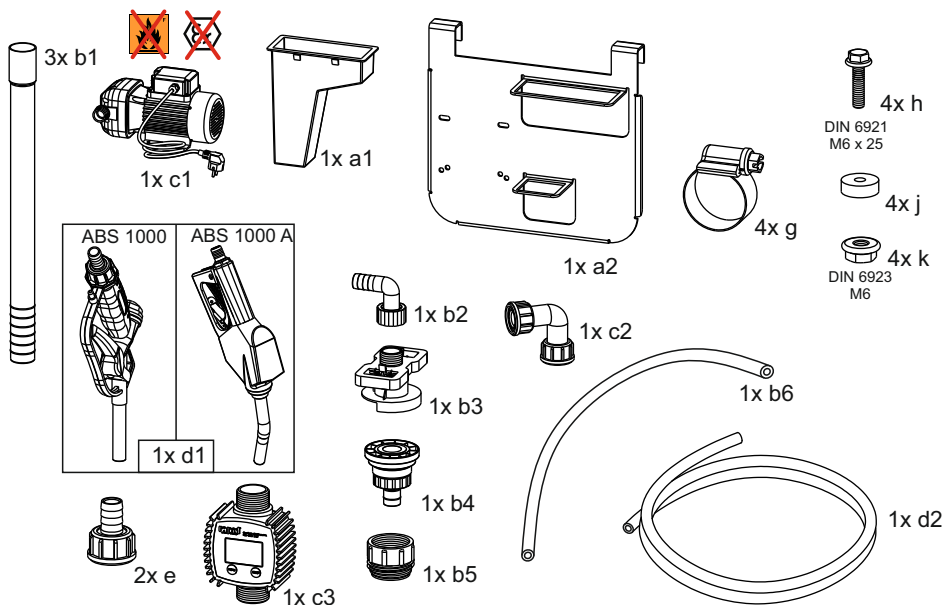
4. Description

Pump: Self-priming, volumetric, diaphragm pump, equipped with by-pass valve.

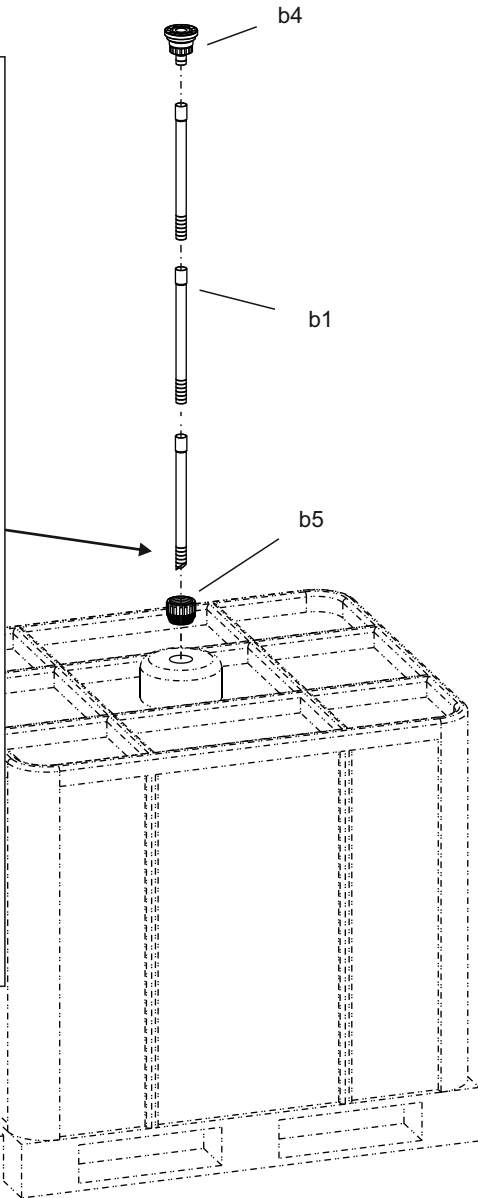
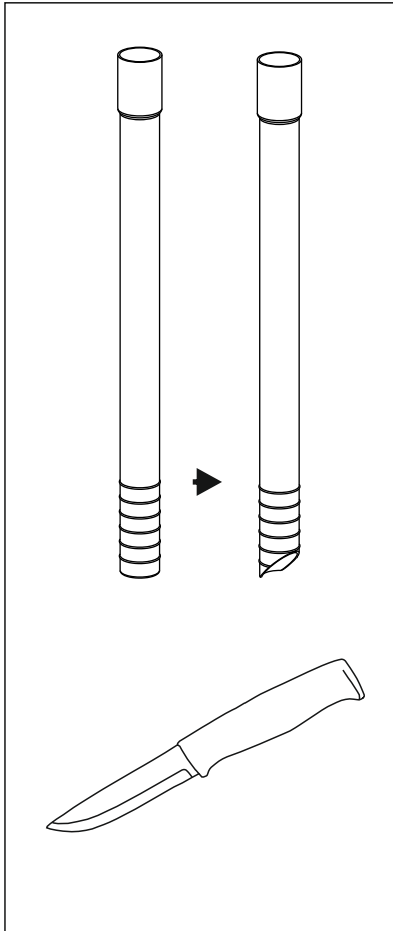
Motor: Asynchronous motor, single-phase, 2 pole, closed type (protection class IP55 in conformance with EN 60034-5-86 regulations), self-ventilated.

| Item No. | Pump model | Nozzle | Flow meter |
|----------|------------|--------|------------|
| 28 260 | ABS 1000 A | auto | + |
| 28 261 | ABS 1000 | manual | + |

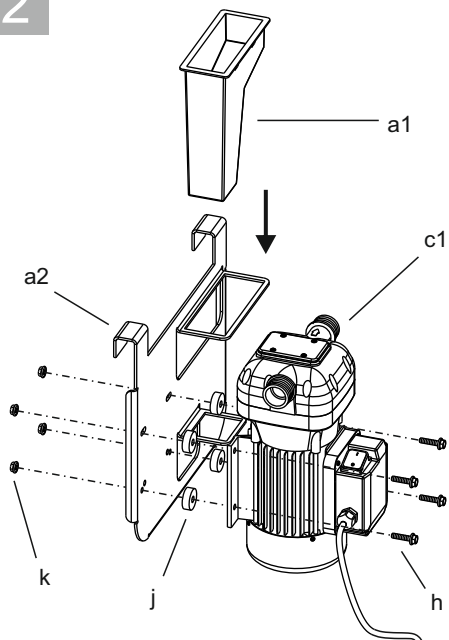
5. Assembling / Installation



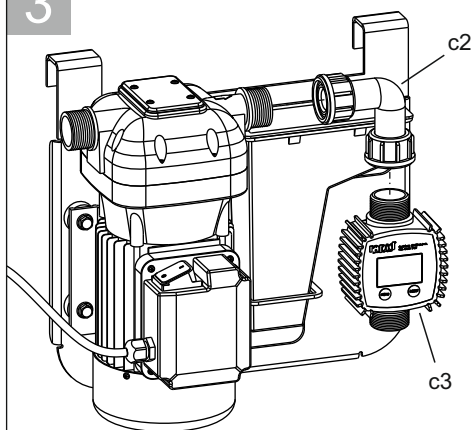
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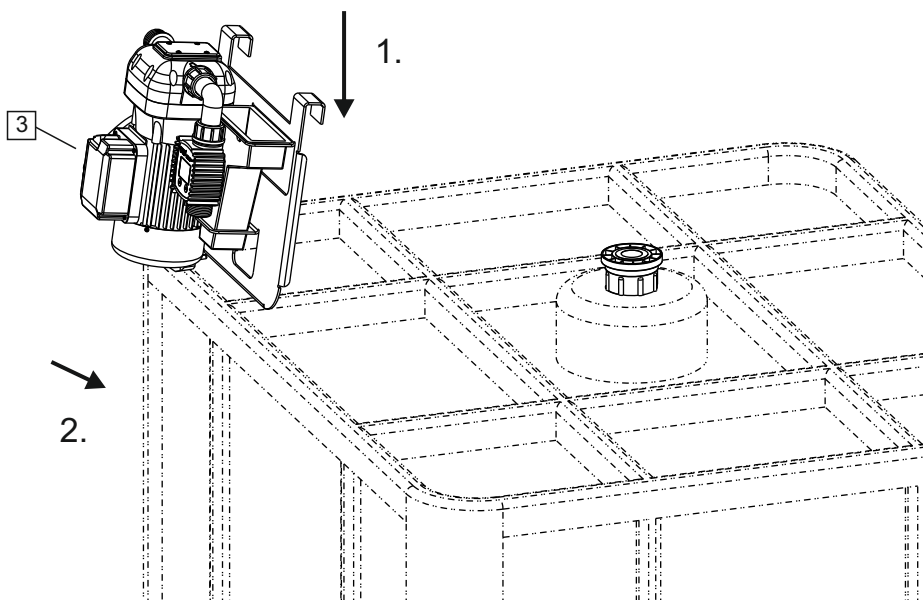
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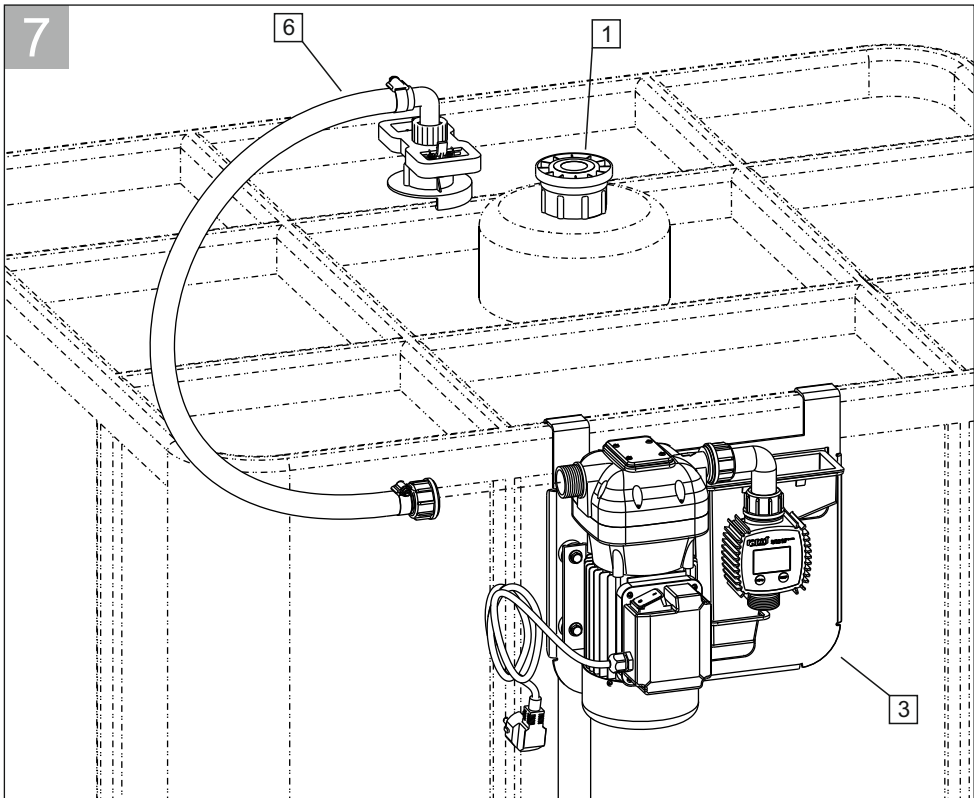
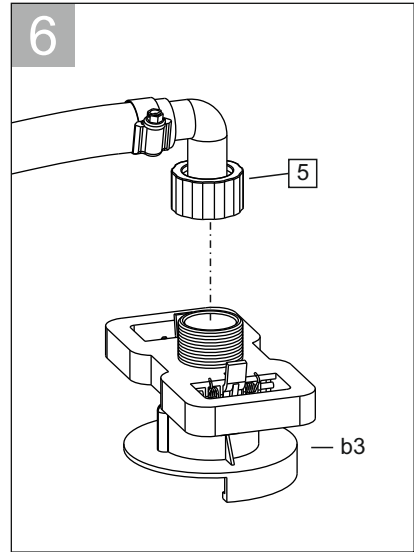
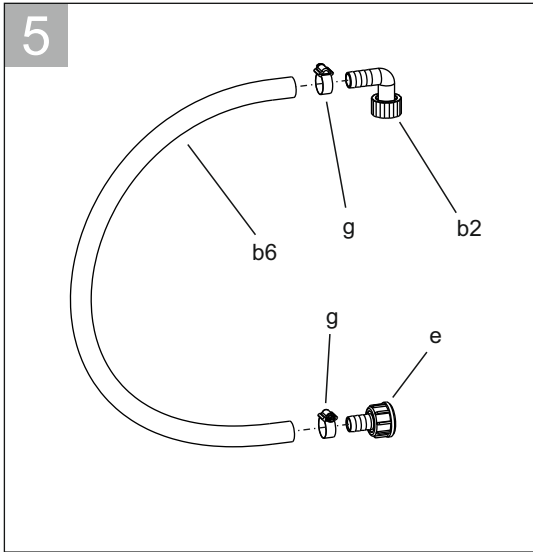


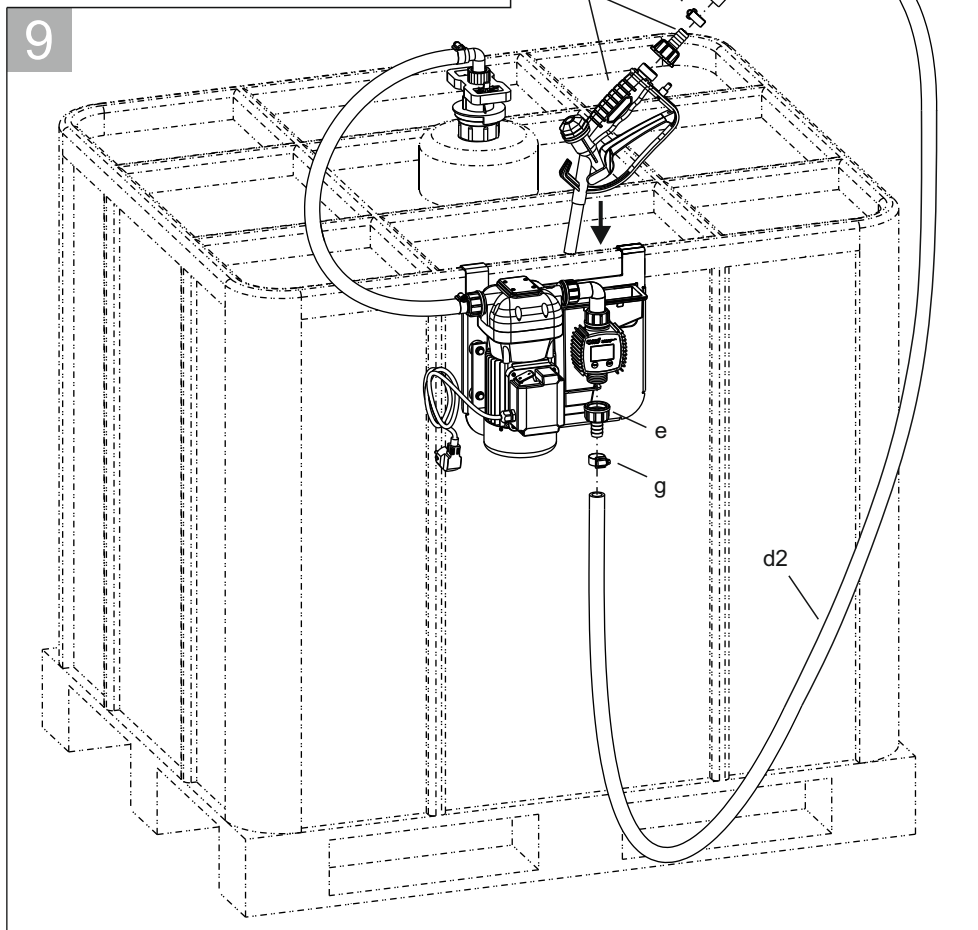
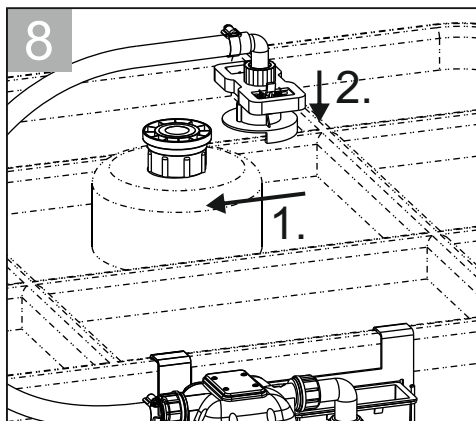
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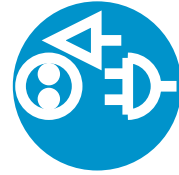
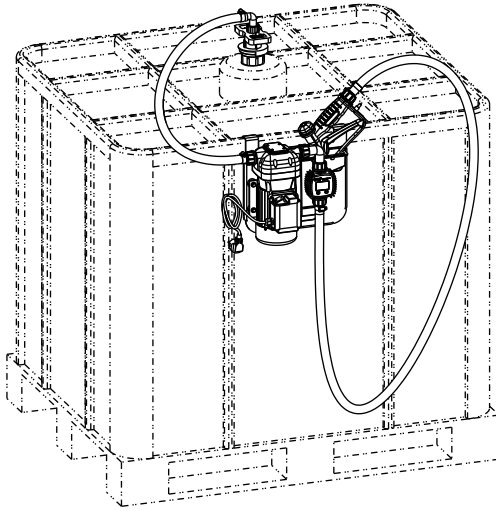
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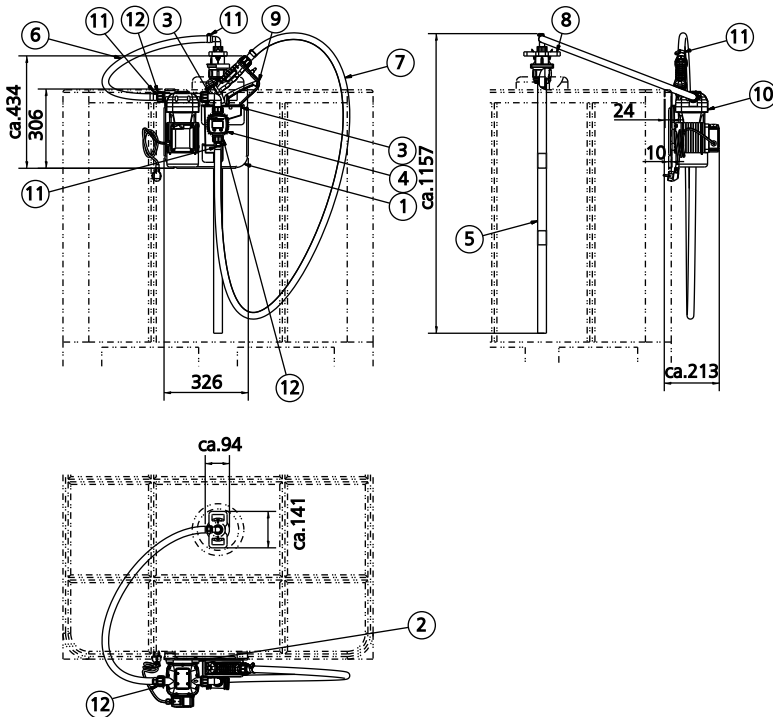




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6. Spare parts and accessories



| No. | Description | Qty. | No. | Description | Qty. |
|-----|-----------------------------|------|-----|---------------------|------|
| 1 | Mounting plate | 1 | 8 | SEC-AB (# 28 272) | 1 |
| 2 | Mounting set pump (12 pts.) | 1 | 9 | ZP 12 AB (# 28 257) | 1 |
| 3 | Elbow | 1 | 9 | ZPA-AB (# 28 256) | 1 |
| 4 | AB-Z (# 21 015) | 1 | 10 | ABP 35 (# 28 264) | 1 |
| 5 | CDS-AB (# 28 271) | 1 | 11 | Clamp set (4 pts.) | 1 |
| 6 | Suction connection hose | 1,5m | 12 | Hose nipple | 2 |
| 7 | Delivery hose | 6,5m | | | |

7. Operation

- 6.1 If using flexible tubing, attach the ends of the tubing to the tanks. In the absence of an appropriate slot, solidly grasp the delivery tube before beginning dispensing.
- 6.2 Before starting the pump, make sure that the delivery valve is closed (dispensing nozzle or line valve).
- 6.3 Turn the ON/OFF switch to ON. The by-pass valve allows functioning with the delivery closed only for brief periods.
- 6.4 Open the delivery valve, solidly grasping the end of the tubing.
- 6.5 Close the delivery valve to stop dispensing.
- 6.6 When dispensing is finished, turn off the pump.



ATTENTION!

Function with the delivery closed is only allowed for brief periods (2-3 minutes maximum).
After using, make sure the pump is turned off.

8. Maintenance and trouble shooting

All models are designed and constructed to require a minimum of maintenance.

In any case always bear in mind the following basic recommendations for a good functioning of the pump:

- On a weekly basis, check that the tubing joints have not loosened, to avoid any leakage.
- On a monthly basis, check the pump body and keep it clean of any impurities.
- On a weekly basis, check and keep clean the line suction filter.
- On a monthly basis, check that the electric power supply cables are in good condition.

| Problem | Possible cause | Correctiv action |
|--------------------------------------|--|--|
| the motor is not turning | lack of electrical power | check the electrical connection |
| | motor problems | contact the service department |
| the motor turns slowly when starting | low voltage in the electric power line | bring the voltage back within the anticipated limits |

8. Maintenance and trouble shooting

| Problem | Possible cause | Correctiv action |
|---------------------|---|--|
| low or no ow rate | low level in the suction tank | rell the tank |
| | filter dogged | clean the filter |
| | excessive suction pressure | lower the pump with respect to the level of the tank or increase the cross-section of the tubing |
| | high loss of head in the delivery circuit (working with the by-pass open) | use shorter tubing or of greater diameter |
| | air entering the pump or suction tubing | check the seals of the connections |
| | a narrow in the suction tubing | use tubing suitable for working under suction pressure |
| | the suction tubing is resting on the bottom of the tank | raise the tubing |
| | Nozzle dogged | Clean nozzle with warm water |
| increase pump noise | cavitation occuring | reduce suction pressure |
| | irregular functioning of the by-pass | dispense fluid until air is purged from the by-pass system |
| Leaks inside system | Immediately switch off pump and/or disconnect from power | Immediately switch off pump and/or disconnect from power |

9. Disposal

In the event of maintenance or demolition of the machine, do not disperse contaminated parts into the environment.

Refer to local regulations for their proper disposal.



10. Liability and Guarantee

10.1 In case of insufficient maintenance, faults on operation, use of not adequate spare parts or attachments all liabilities and rights of claim under guarantee are void.

10.2 The manufacturer is not liable for improper use of the container or ignoring the safety instructions.

10.3 Technical modifications are subject to change without announcement.

