

Installation and maintenance guide

DAVtech

FOLLOWER PLATE PUMP FOR TANKS FROM 1 TO 10 KG PP1-10



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1 INTRODUCTION

1.1 The manual

The user guide is the document that accompanies the pump from the time of its construction and throughout the period of use, it is therefore an integral part of the valve. It requires reading the manual before taking any action involving the pump. The manual must be readily available for use by staff and maintenance of the pump. The user and the attendant use are required to know the contents of this manual.

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1.2 Warranty

The warranty is valid for a period of 12 months from the date of commissioning and no later than 15 months from the date delivery. The interventions carried out during the warranty period does not extend in any way the validity period of the guarantee. The seller is not liable for defects caused by normal wear of parts which by their nature are subject to wear.

1.3 Goods receiving

The original configuration of the pump must never be changed.

Upon receipt of the goods, check that:

- The packaging is intact
- The exact correspondence of the material ordered.

2 TECHNICAL DESCRIPTION

2.1 Safety instructions and remaining risks

It is necessary to read carefully the safety instructions regarding the risks implied by the use of a pump for spraying liquids. The user must know how the equipment works and understand clearly the dangers connected to pressurized liquids pumping. We recommend you comply with the following regulations, so as to correctly use the equipment and its accessories.



You must never exceed the working pressure maximum value allowed by the pump and the components connected to it. If in doubt, refer to the data on the pump plate.
If it necessary to replace any of the components, make sure the new ones can work at the pump maximum pressure. The pressure pump ratio times the input air pressure equals the overall output pressure (e.g.:if we have a 6 bar input pressure and a 30:1 pressure pump ratio, the total pressure acting on the product will amount to 180 bar).



At the end of the job and before performing any maintenance or cleaning operation, shut off the supply of compressed air and discharge the pressure from the pump and hoses connected to it by doing the following:

- **Make sure the valve (5) is closed**
- **Open the delivery valve on the circuit used and wait for the pressurised product to come out completely.**
- **In case the delivery valve malfunctions or the hoses become clogged (the pressurised product does not leave the valve), slowly open the recycle valve (6) and leave it open until the product has come out completely.**

Warning: if check valves have been installed on the circuit, it is impossible to discharge the pressure through the recycle valve. Complete discharge of the pressure can be achieved only by opening the circuit downstream of these valves.

NOTE: Remember to put the mobile components protections back into place after servicing or cleaning the unit.

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2.2 Chemical compatibility of materials

Check the chemical compatibility of the materials with which the pump is made, with the fluid that you are pumping. Incorrect choice could cause, in addition to premature pump and pipe damage, serious risks to people (spillage of irritating and harmful products to health) and to the environment. In case of doubt contact our technical service.

2.3 Risk of burns

Do not use chlorinated and halogenated solvents (eg, Trichlorethylene and Methylene Chloride) with equipment containing aluminum or galvanized and galvanized parts can react chemically, creating a danger Explosion. Read the rating sheet and product information that you are going to use.

2.4 Risk of fire and explosion

The high flow velocity in high pressure equipment can generate static electricity, and need to be discharged to prevent accidents. Before commissioning the pump, it must be properly grounded by attaching the appropriate clamp to an appropriate sink. When you notice static electricity, immediately stop operation and check grounding.



The equipment is not suitable for operation in an atmosphere with explosion hazard. The products used and the work environment must be such that they do not create explosive atmospheres.

2.5 Fluid leakage risk

Always make sure that the pipes connected to the pump are not worn or in poor condition. Avoid crushing and folding hoses. Carefully tighten all fittings before starting the pump.



Never try to stop or divert any leakage with your hands or other parts of the body. Do not subject the fittings, pipes, and pressure parts to violent shocks. A hose or fitting damaged are HAZARDOUS to provide for their replacement.

2.6 Toxic vapors

Some products may cause irritation or be harmful to health. Always read the rating sheets and safety and usage information carefully for the product being used and follow all recommendations.

2.7 Emergency stop

To stop the appliance immediately, close the air shut-off valve (5), thus disrupting the power supply to the engine. Properly pump priming operations to prevent them from happening to keep air bags under pressure. The pneumatic actuated pumps, even with the closed air supply, can keep all the components connected to the pump under pressure. To avoid the risk of injury, and / or damage to the environment and the environment after the pump stops, it is advisable to discharge the pressure while keeping it open or acting on the vent valve (6). If this is not possible to signal the presence of pressure in the proper way equipment.

3 OPERATION

All pumps are tested with grease to test their operation. The pump starts immediately when it is fed with compressed air. Allow the pump to operate until the grease has spilled out of the fitting. If necessary, use the air release valve. The unit is now ready to go into operation. The pump is designed to pump lubricant fluids and to feed the dosing valves. It is recommended not to keep too much distance (1-2 m max) between pump and dosing valves, otherwise pumping with different compression ratios is required.

4 PUMP COMPONENTS DESCRIPTION

1 Air supply fitting

2 Output Connector

3 Air bleed valve

4 Lifting Valve



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5 INSTALLATION

NOTE 1: To get the best operation of the pump, feed it to the line pressure at 6-8 bar, then reduce it by means of special pressure reducers.

NOTE 2: Feeding with clean air is recommended.

NOTE 3: All pumps are tested in operation before shipment. It is therefore normal for traces of grease inside them to be present.

The pump starts working just plugged into compressed air. Close the two pressure regulators 7 and 8 and connect the compressed air with an 8x6 pipe to the fitting 1. Push the valve 5 lever towards the operator very slowly to the cylinders, the pump will rise completely. Install the grease filler under the flat plate and make sure it is well centered. Open the air vent 6. It is important that the level of grease in the liner is as constant as possible, in any case avoid mixing it mechanically to avoid air bubbles 6.

Lower the pump by placing valve 5 in the center position. When the pump is completely discharged and all the air out of the tap 6 is closed, close the tap and move the valve lever 5 in the opposite direction so that the cylinders begin to push down. At this point start to gradually feed the pump up to the full filling of the connection pipes and the full bleeding of the grease already present in the pump.

Then connect the tubes to the dosing valve / dosing valves.

5.1 Replacement tank

Remove air from the pump by closing the pressure regulator 8. Open the air vent 6 and pull the cylinder control valve towards the operator. If the plate does not come out of the grease container it is possible to mount a funnel on the air vent tap and introduce compressed air. Take extreme care in the priming and replacement phases to avoid any damage to the operator and to avoid dirt, chips or anything else in the pump or grease.

6 TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
The pump motor works but does not get out of grease	Air bubbles in the pumping system or in the product tank	Open the vent and release the air
		Check if the plate is in contact with grease
	Losses	Check all connections
Exhaust grease contamination	Various shavings or particles prevent the pump from working properly	Remove the pump, clean it and reassemble it, checking that the grease does not contain foreign particles

7 OFF-LINE

Short break

For short breaks (night or weekend) turn off the air supply to the entire system (including the pump).

Long break

Follow the same directions as the short break and also unscrew the grease and air connection pipes.

Final Removal

Do the same operations as above and also clean the pump from the fat remaining inside.

8 PARTS

For spare parts for the PP1-10 flat pot pump, contact DAV Tech directly, indicating the year of purchase and any references to the order.

9 DECLARATION OF CONFORMITY

CE

Brand: DAV Tech Srl

Indirizzo: Via Ravizza, 30 - 36075 Montecchio Maggiore (VI)

DECLARES THAT
PRIMARY PLATE PUMP: PP1-10
ARE PERFORMED TO THE CE MARKET REQUIREMENTS

Any modification or tampering with the same DAV Tech download from any liability.

The legal representative
Giancarlo Grazioli



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