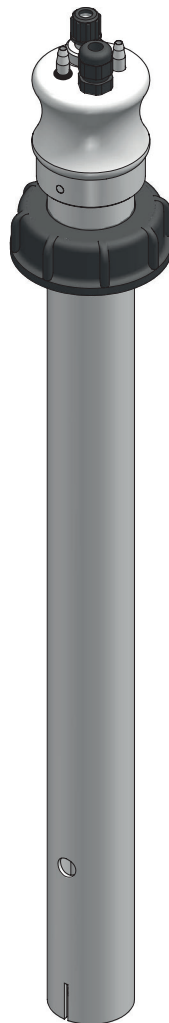


PVC GF-2 suction line Operating instructions



Read the operating manual!

The user is responsible for installation and operation related mistakes!

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1 Notes for the Reader

This operating manual contains information and behaviour rules for the safe and designated operation of the unit.

Observe the following principles:

- Read the entire operating manual prior to starting-up the unit.
- Ensure that everyone who works with or on the unit has read the operating instructions and follows them.
- Keep the operating instructions for the entire service life of the unit.
- Pass on the operating instructions to any subsequent owner of the unit.

1.1 General non-discrimination

In this operating manual, only the male gender is used where grammar allows gender allocation. The purpose of this is to make the text easy to read. Men and women are always referred to equally. We would like to ask female readers for understanding of this text simplification.

1.2 Explanation of the signal words

Different signal words in combination with warning signs are used in this operating manual. Signal words illustrate the gravity of possible injuries if the risk is ignored:

Signal word	Meaning
DANGER!	Refers to imminent danger. Ignoring this sign may lead to death or the most serious injuries.
WARNING!!	Refers to a potentially hazardous situation. Failure to follow this instruction may lead to death or severe injuries.
CAUTION	Refers to a potentially hazardous situation. Failure to follow this instruction may lead to minor injury or damage to property.
<i>Note</i>	Refers to a danger which, if ignored, may lead to risk to the machine and its function.

Table 1: Explanation of the signal words

1.3 Explanation of the warning signs

Warning signs represent the type and source of a danger:

Warning sign	Type of danger
	General danger zone

Table 2: Explanation of the warning signs

Warning sign	Type of danger
	Danger of caustic or other burns
	Danger of damage or functional influences

Table 2: Explanation of the warning signs

1.4 Identification of warnings

Warnings are intended to help you recognise risks and avoid negative consequences.

This is how warnings are identified:

Warning sign	SIGNAL WORD
	<p>Description of danger.</p> <p>Consequences if ignored.</p> <p>⇒ The arrow signals a safety precaution to be taken to eliminate the danger.</p>

1.5 Instruction for action identification

This is how pre-conditions for action are identified:

- ✓ Pre-condition for action which must be met before taking action.


This is how instructions for action are identified:

➔ Separate step with no follow-up action.

1. First step in a series of steps.
2. Second step in a series of steps.
 - ▶ Result of the above action.

- ✓ **Action completed, aim achieved.**

1.6 General safety precautions

	WARNING!!
<p>Chemical burns or other burns through dosing medium!</p> <p>You may come into contact with dosing equipment when working on the filler unit.</p> <ul style="list-style-type: none"> ⇒ Wear appropriate personal protective equipment, especially for the protection of eyes and skin. ⇒ Avoid skin contact with the dosing medium. ⇒ Check that all the screw connections have been tightened correctly and are leak-proof. ⇒ Never look into open ends of plugged hoses and valves. 	

2 General

The PVC GF-2 suction line serves the removal of a dosing medium from a packaging.

The suction line is fitted with a backflow valve which prevents the backflow of dosing medium taken up. This assists exact dosing using the dosing pump.

The suction line is fitted with a level monitoring system which automatically stops the dosing pump as soon as the filling level of the packaging is too low.

Personal protective equipment

Based on the degree of risk posed by the dosing medium and the type of work you are carrying out, you must use corresponding protective equipment. Information regarding the protective equipment required is provided in the regulations of the insurance provider, generally-accepted technical regulations, the operating instructions and the safety data sheets of the dosing medium.

As a minimum, the following protective equipment is recommended:



Protective clothing



Protective gloves



Goggles



Safety shoes

Corresponding protective equipment must be used during these tasks:

- Installation
- Operation

3 Intended use

The PVC GF-2 suction line serves the safe removal of the dosing medium from a delivery package, level monitoring of the packaging and the safe return of the dosing medium, should the safety equipment be activated automatically.

Intended purpose

The PVC GF-2 suction line serves the removal of a dosing medium from a delivery package. It was developed for use together with dosing pumps.

4 Product description

4.1 Scope of delivery

Please compare the delivery note with the scope of delivery. The following items are part of the scope of delivery:

- Suction line inc. K60x6 cover
- Hose (5 m)

4.2 Design

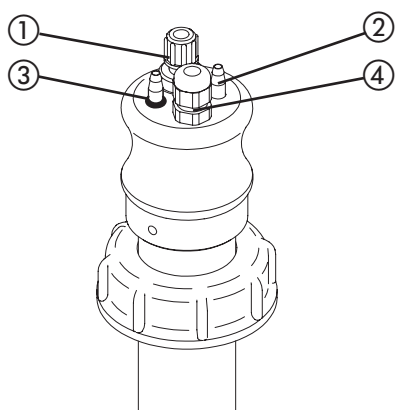


Fig. 1: Design

Item	Description
1	Suction connection
2	Connection spout 1
3	Connection spout 2 (with O-ring)
4	Cable connection

Table 3: Item numbers

5 Technical data

Description	Value		
Material:	PVC		
Nominal diameter:	DN 4		
Capacity:	up to 25 l/h		
Hose:	Ø 4 mm		
Max. ambient temperature:	5 - 40 °C		
Max. temperature of the medium	35 °C		
Electrical load capacity of the level monitoring	U _{max} : 50 V DC; 50 V AC I _{max} : 0.5 A P _{max} : 12 VA		
Short version for 25 L packaging:	Length: 460 mm	Thread: K60x6	Part No.: 12200982
Long version for 60 L packaging:	Length: 630 mm	Thread: K60x6	Part No.: 12200983

Table 4: Technical data

6 Installation

The installation of the GF-2 suction line is performed in two steps. Chapter 6.1 „Pump-side installation“ on page 10 described the installation on the dosing pump, which is to be performed once. Chapter 6.2 „Packaging side installation“ on page 10 describes the installation on the packaging which must be performed following every replacement of the packaging.

6.1 Pump-side installation



Note

No return with MAGDOS LDp 10 and 15!

A back-pressure valve is used when using the dosing pumps LDp 10 and 15. The back-pressure valve does not involve any automatic backflow of the dosing medium. The installation of a backflow hose is not required when a back-pressure valve is used.

Precondition for action:

- ✓ The dosing pump is not connected to the external power supply and is thus deactivated.
- ✓ The operating instructions of the dosing pump is at hand.
- ✓ A cutting tool is at hand.

Perform the following working steps:

1. Cut the hose (included) into three sections. Select the lengths in accordance with the distance between the dosing pump and the delivery packaging. Ensure that the cutting edges are straight.
 - ▶ Three fitting hose pieces are available for the connection of the suction line and the dosing pump.
 2. Connect the suction connection (pos. 1) with the "valve and connection suction side" of the dosing pump and tighten all union nuts by hand.
 3. Connect the connecting spout 2 (pos. 3) with the "air connection" of the dosing pump.
 4. Connect the connecting spout 1 (pos. 2) with the "safety valve" of the PENTABLOC.
This step is not required when using a back-pressure valve on the dosing pumps MAGDOS LDp 10 and 15. The installation of a backflow hose is unnecessary.
 5. Connect the cable connection (pos. 4) with the "connection ports" on the fore side of the dosing pump and tighten all union nuts by hand.
 6. Check whether all connections have been made correctly and improve if necessary.
- ✓ **The GF-2 suction line was successfully installed on the dosing pump.**

6.2 Packaging side installation

Precondition for action:

- ✓ The safety equipment in accordance with chapter „Personal protective equipment“ on page 6 is used.
- ✓ The dosing pump is not connected to the external power supply and is thus deactivated.
- ✓ Chapter 6.1 „Pump-side installation“ on page 10 was performed successfully.

Perform the following working steps:

1. Open the sealing cover of the packaging and slide the suction line into the packaging until it lies on the undissolved granulate and does not get stuck in the granulate.
 2. Fix the suction line on the cover using the two O-rings.
 3. Tighten the K60x6 cover hand tight.
- ✓ **The GF-2 suction line was installed in the packaging successfully.**

7 Operation

The GF-2 suction line can be operated after installation without any further settings.

The suction line performs the automatic level monitoring of the packaging during operation.

Level monitoring



Note

No alarm upon being triggered.

No visual or acoustic alarm is triggered if the suction line level monitoring system GF-2 is triggered. If the dosing pump is stopped by the level monitoring system, this can only be read on the dosing pump display.

The GF-2 suction line serves as level monitor during operation. This protects the dosing pump from running empty.

The filling level is displayed on the dosing pump display by a fill level display. If the level monitoring system notifies an empty packaging, the conveying of the dosing pump is stopped automatically. Further information is available in the operating instructions "MAGDOS LDp" in the chapter "Explanation of the menu symbols".

8 Maintenance

Maintenance work to be carried out	Frequency
Visual inspection	With use, daily

Table 5: Maintenance intervals

9 Declaration of no objection

Please copy this declaration, stick it to the outside of the packaging and return it with the unit.

Declaration of no objection

Please fill out a separate form for each appliance!

We forward the following device for repairs:

Device and device type: Part-no.:

Order No.: Date of delivery:

Reason for repair:
.....
.....

Dosing medium

Description: Irritating: Yes No

Properties: Corrosive: Yes No

We hereby certify, that the product has been cleaned thoroughly inside and outside before returning, that it is free from hazardous material (i.e. chemical, biological, toxic, flammable, and radioactive material) and that the lubricant has been drained.

If the manufacturer finds it necessary to carry out further cleaning work, we accept the charge will be made to us.

We assure that the aforementioned information is correct and complete and that the unit is dispatched according to the legal requirements.

Company / address: Phone:

..... Fax:

..... Email:

Customer No.: Contact person:

Date, Signature:

10 Warranty claim

Warranty claim

Please copy and send it back with the unit!

If the device breaks down within the period of warranty, please return it in a cleaned condition with the complete warranty claim.

Sender

Company: Phone: Date:

Address:

Contact person:

Manufacturer order no.: Date of delivery:

Device type: Serial number:

Nominal capacity / nominal pressure:

Description of fault:.....

.....

.....

.....

.....

.....

.....

.....

Service conditions of the device

Point of use / system designation:.....

.....

.....

Accessories used (suction line etc.):.....

.....

.....

.....

Commissioning (date):

Duty period (approx. operating hours):

Please describe the specific installation and enclose a simple drawing or picture of the chemical feed system, showing materials of construction, diameters, lengths and heights of suction and discharge lines.

