

Applicator unit for forage harvesters, loader wagons and balers

Simple and reliable silage success



# At a glance

- suitable for many machines
- simple self-assembly
- dosing quantity 2 40 l/h
- · cooling tank for fit bacteria
- includes accessory set consisting of cool box (19 litres), mix ball, cool packs and whisk
- detailed instructions with dosing table

# vario pro



## Dosing made easy with the vario pro

- robust and weatherproof thanks to the stainless steel socle
- solid integrated diaphragm pump (12 V) with pressure switch
- resistant suction strainer
- continuously adjustable flow rate
- electric control unit
- pick-up sensor with switch
- non-return valve prevents backflow and dripping
- sturdy cup filter
- 2 nozzle holders
- 3 different nozzle sets included

# Lactic acid bacteria are alive – and don't like high temperatures

Our cooling tank offers the little helpers optimum conditions, even in warm weather

- Mix shortly as possible before use.
- Do not underestimate the waste heat from the machines – uninsulated or permanently installed tanks heat up quickly and damage the bacteria.
- The insulated tank keeps the lactic acid bacteria fit for longer: low temperatures slow down the metabolism

   the sugar from the carrier lasts longer.



There must be 2.5 metres of hose between the diaphragm pump and the non-return valve to ensure smooth operation.

# Holder and flow meter (2 - 40 I)

The holder with the flow meter should be assembled vertically, preferably within the machine operator's sight area. It makes easy to remove the flow meter and holds it securely in place.

Lay the cables so that they are neither pinched nor chafed!

# **Cooling tank**

The **insulated tank** protects the bacteria from heat. It holds 19 litres and its lid is secured with expander loops. It is attached to the machine individually in the frame.

### vario cool set

The **mixing ball** ensures a permanent mixing process in the tank due to the constant movement of the machine.

The vario cool box with two cool packs is used to keep the silage bags cool during transport. These can also be placed in the tank at warm temperatures. A whisk and dosing plan complete the set.

# Weatherproof stainless steel socle

Robust holder for the cooling tank, the pump and an additional 10 A fuse. It can be mounted variably on the machine.

### **Sturdy suction strainer**

The sturdy design prevents foreign particles from entering the mechanics.

### **Electric control 12 V**

The flow rate is continuously variable for precise dosing. It can also be used to switch the pump on and off. The control unit can be easily mounted in the driver's cab thanks to its magnet.

# insulated tank 12 V diaphragm pump mixball control unit with power access underside of frame underside of frame

### 2 nozzle holders (nozzle set included)

One or both can be connected as required. This makes it suitable for many different appliances. The hose length can be customised.

#### Nozzles:

- brass (2 8 l/h)
- orange (8 20 l/h)
- green (20 40 l/h)

# Pick-up sensor

This sensor interrupts the dispensing process while the pick-up is lifted.

**Robust non-return valve** 

Prevents backflow and dripping.

It is connected with a plug and works via a magnetic field (3 magnets included for attachment). The control unit automatically recognises whether a sensor is connected or not.

# 12-volt diaphragm pump

The pump is integrated in the frame. It has a pressure switch and switches off in the event of overpressure to prevent damage.

### 10 A fuse

In the event of an overload or short circuit, a fuse protects the appliance and the lines. It can be easily replaced by unscrewing the plastic cover.

Clean with clean water – ideally after every use!

This prevents persistent biofilm from forming and the appliance is ready for the next use.

## **Accessory set included!**

- mixball ensures constant mixing in the tank
- cooling box for storing the silage additive bags
- 2 cool packs maintain the temperature in the box and can also be placed directly in the cooling tank if the outside temperature is particularly high
- whisk ideal for mixing the silage additive

# **Dosing**

The flow rate is set on the control panel and checked on the flow meter. If it is not reached at the highest setting and the pressure switch turns off the pump, the selected nozzle is too small.

If no spray pattern is achieved at low flow rates, use smaller nozzle inserts!

Nozzle colour	Number	Quantity range I/h (water solution) from to		Remark
			30 111	
brass	65050	2	8	with 2 nozzles
orange	11001	8	20	with 2 nozzles
orange	11001	· ·	20	WICH 2 HOZZICS
green	110015	20	40	with 2 nozzles

### **Calculation:**

- 1. determine/estimate silage output (t/h) (example: 25 t/h)
- 2. determine quantity of **silage additive** mixed **(ml/t)** (example: 150 ml/t) (example calculation flow rate: 25 t/h x 150 ml = 3.75 l/h)
- 3. select suitable nozzles, set the mark on the flow meter (example: 3.75 I)
- 4. check: run appliance with water for 20 min, collect water

  (example: [3.75 | /60 min = 0.0625 |/min] x 20 min = 1.25 | water in the bucket)
- 5. estimate the tonnage to be treated (example: 380 t) and calculate the required silage additive solution:

(example:  $380 \text{ t } \times 150 \text{ ml/t} = 57 \text{ l silage additive solution})$ (The tank holds 19 l, so a total of 3 tank fillings are required.) Caution!
Do not operate
the appliance with
a constantly switching
pressure switch, but
select the next largest
nozzle and check the
spray pattern.



joachim behrens scheessel gmbh Milchstraße 1

D-27374 Visselhövede

Tel.: +49 4262 - 20 74 -913 int@jbs-agrar.com jbs-agrar.com