

vario basic assembly



vario basic set includes:

- 12-Volt immersion pump
- bag filter
- flow meter
- manual power switch
(if an electric control unit is not needed)
- single nozzle carrier (incl. nozzles)

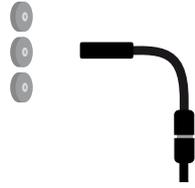
Available on request

- electric control unit
(instead of a manual power switch)
- pick-up sensor
- wider nozzle bar for balers / forage wagons
- **vario cool** set

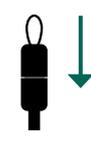
Pick-up sensor (opener)

The pick-up sensor ensures that the application is interrupted as soon as the pick-up is lifted (if the harvester turns or drives on a road).

Attach the **magnetic switch** for the pick-up at **one of the connections**. Install the 3 magnets opposite the magnetic switch on the pick-up. When the pick-up is down, the magnetic field makes contact and the pump runs. It will take about 5 seconds for the application to steady.



→ **Magnet**
= power connection
if pick-up is down
= **pump is running**

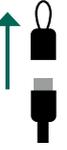


→ **cap = bridge**
= bypassing the pick-up sensor
= **permanent pumping**

The **other connection** should be placed in a position which is **easily accessible** – it is essential for the **bridge** (cap included in scope of delivery). If the bridge is attached, the pick-up sensor will not work and the pump will run continuously.

If a pick-up magnetic switch is connected, remove the **cap with the bypassing cable loop!**

Includes 3 metre hose, 3 magnets, screws, flat plugs and flat bar (300 mm) for installation.



vario cool set

The **insulated tank** protects the lactic acid bacteria from heat. It holds 19 litres, its lid is secured with elastic loops. It is individually installed on the harvester. Throw the **mixing ball** into the

tank. The constant movement of the harvester will swirl the ball in the solution, thus ensuring continuous mixing.

Our **vario cool box** includes **two thermal packs** to ensure that the silage additive pouches can be transported well-cooled. You might want to throw one of the thermal packs into the tank after mixing the silage additive solution.

A **wire whisk** and an **application schedule** complete the set.

Tank

Any clean container may be used as a tank. We recommend using **vario cool**.

(To ensure that the tank is emptied completely, make sure that the pump reaches the bottom.)

12-Volt immersion pump

The pump is to be connected to the switch (resp. the control unit). It has a forced ventilation and cannot run dry (10 - 15 min).

As mechanical force may break the hose-vent connection, it should be handled with care. Make sure that the pump reaches the bottom of the tank. Do not apply tensile strain to the power cable connected to the

pump as otherwise, the sealing gasket between pump and motor may be pulled out thus enabling water to penetrate the motor. On installation, mind the correct polarity of the cables, as otherwise, the pump will not draw in the silage additive:

Connect **red & brown to blue** and **blue & black to brown!**

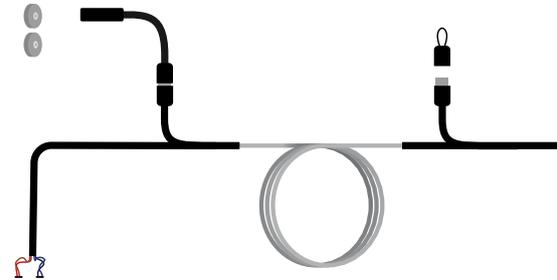
5 metre hose included in the scope of delivery



Available on

Pick-up-Sensor (opener)

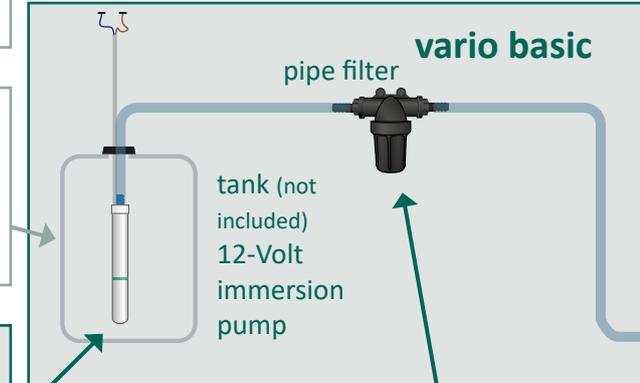
magnetic switch (at the pick-up) bridge (in the driver's cab)



vario basic

pipe filter

tank (not included)
12-Volt immersion pump



Scope of delivery

Pipe filter

The pipe filter ensures blockage-free operation of flow meter and nozzles and should regularly be opened for cleaning (rinse with cold water).





Electric control unit

For a very exact application, install the electric control unit between pump and power supply.

The control unit switches the pump on and off and continuously adjusts the flow rate. It should be installed in the driver's cab (use the magnet on the back of the unit to attach it). Voltages above 12 V may damage the unit!



Install the **cables** in such a way that they will neither get pinched nor worn through!

request

Control unit



with power socket

Nozzle bar

nozzle bar for balers / forage wagons



Nozzle bar



The nozzle bar may optionally be equipped with up to 4 nozzles.

The delivery scope includes 2 blind caps which enable you to close the valve connection in order to obtain an optimum spray pattern. An integrated non-return valve keeps the applicator from dripping. When operating the pump for the first time, open the non-return valve for airing.

Manual power switch (if an electric control unit is not needed)

Install the power switch between pump and power supply. It will switch the pump on and off.

Single nozzle carrier



The bayonet nut on the nozzle carrier allows rapid changing from the nozzles. An integrated non-return valve keeps the applicator from dripping. To ensure a perfect spray pattern at all times, change the nozzles. When operating the pump for the

first time, open the non-return valve for airing.

Nozzles:

- metal (for application rates between 4 and 8 l/h)
- blue plastic (for application rates between 8 and 17 l/h)



flow meter 3 - 24 l/h or 10 - 100 l/h

single nozzle carrier

vario basic



Flow meter (comes in two sizes)

The flow meter comes with a display range of 3 - 24 l/h or 10 - 100 l/h. If possible, use the supplied hose clips to fix flow meter in uninterrupted sight

of driver. In any case, the flow meter needs to be installed vertically (upright).

We recommend calibrating the applicator once more after the installation in order to be able to adjust the application if necessary.



In order to avoid jamming of the individual components and to prevent the formation of a biofilm (slime layer containing bacteria, fungi and viruses), **clean with cold water after usage!**

vario sets

Choose your desired set! If required, additional components are also available (prices on request).

vario basic



immersion pump (12 V)
manual power switch
pipe filter
flow meter
single nozzle carrier
(incl. nozzles)

vario cool e



single nozzle carrier
(incl. nozzles)

vario cool r



nozzle bar
(incl. nozzles)



immersion pump (12 V), electric control unit
flow meter, pipe filter
pick-up sensor, vario cool set