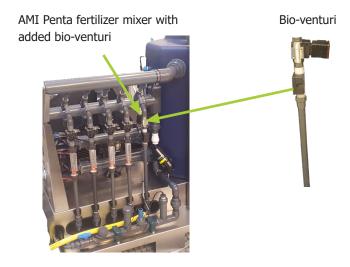


# AMI PENTA BIO- & FERTILIZER MIXER





## For precise irrigation of bio-fertilizer

#### **Highlights**

- Precise dosing of biomass (Bio-fertilizer and beneficials / microorganisms) based on flow of water from the mixer to your cultures
- Dosing of biomass can be done independently on EC and pH
- Savings on working hours and use of biomass
- The mixer is available with up to 8 bio-venturis
- Software for all groups, recipes and control of valves is included in the price - no extra future cost if your needs change
- Always delivered with mixing tank ensures the right mix of fertilizers and thereby higher accuracy of EC and pH control
- Can be connected to a PC with SuperLink programme for central control and for further analysis of data

By mixing biomass, the addition can irrigate the culture medium at a very precise dosage. AMI Penta controls the irrigation flow so that the software in the mixer allows for different dosing strategies. Exact dosing ensures you control and thus success with your production.

AMI Penta can function as a common fertilizer mixer with e.g. Ec, but with additional options for biomass dosing by purchasing a bio-venturi.

#### Easy to operate

AMI Penta fertilizer mixer is easy to operate with well-arranged menus shown on a 10.1" touch screen. Many languages are available and switching between them is very simple. This minimizes the risk of human errors in nurseries employing people of different nationality.

#### Large capacity and flexibility

AMI Penta can control up to 100 groups with individual start conditions. For each group you can choose between 20 different fertilizer recipes with information about EC, pH and the fertilizer mix. Each group can control up to 30 valves, and these can be chosen freely between the 200 valves available today in the mixer. Up to 9 valves can irrigate at the same time giving a maximal utilization of the capacity. Irrigation time and irrigation volume can be set individually for each valve.

#### **Optimizing of water resources**

To get the same water mix to all valves in the same group, you can mix fresh water sources and return water in ratio percentages. Up to 8 return water basins can be selected with individual control. Thereby the return water is recycled and the water resources optimized.





### SPECIFICATIONS / AMI PENTA BIO- & FERTILIZER MIXER

Specifications	
Supply Voltage	3 x 230 V / 400 V AC +10/-15 % 50/60 Hz
Flow rate - Inline	7 - 58 m³/h, 3 to 8 bar
Flow rate - Amigo - injector system	40 - 200 m³/h, 3 to 9 bar
Main mixer pump, brand	Grundfos
Fertiliser dosing units	Small model: 2 - 5 units (one could be pH) With 1 pump - up to 32 m³/h Mixing tank: 130 L Dim.: 1200 x 790 x 1560 mm Large model: 2 - 8 units (one could be pH) with 1 or 2 pumps <32 m³/h Mixing tank: 350 L Dim.: 1530 x 1400 x 2000 mm
Irrigation valves	24 V DC, 0.5 A or 24 V AC
alarm outputs	1 digital output 24 V DC, 0.5 A
Communication	ETHERNET
Min./max. flow in the bio-venturi	0,25 l/m - 6 l/m - but depending on the pump size
Temperature, running	0 - 50° C (32 - 122° F) no direct sun radiation
Humidity	0 - 95 % Rh without condensation
Proofing	IP65

#### System requirements for the Bio mixer

- Flow sensor on outgoing flow
- Space in Venturi unit for bio venturi
- Software version 1.2.35 or newer

#### Separate choice of units

Volume: Liter, m3, gallonFlow: I/min, 0m3/h, gpm

• Temperature: °C,°F

• Irrigation time: mm:ss, hh:mm

Energy: kJ, Wh

#### **AMI Penta controls up to**

•	pH, EC sensor set	2
•	Venturi dosing	8
•	Main pumps	2
•	Irrigation valves	200
•	Fertilizer recipes	20
•	Irrigation groups	100
•	Basins, recirkulation	8

#### **Program content**

- Bio-program
- Irrigation on time or volume and volume registration
- SIIP (Senmatic Intelligent Irrigation Program)
- EC control 2-8 stock solutions
- · EC depending on solar radiation
- · Sun integrator and drain control
- Frost protection
- · Manual start of individual valves
- Possible start via external units
- Analogue start via sensor in the culture
- Flow from 5 200 m<sup>3</sup>
- 6 time zones per day 6 different watering strategies
- 24 hour program and week program
- · Mixing of fresh water and return water
- · Automatic filter cleaning
- Control of rinse valve for emptying basins and flushing the main
- Preprogramming of up to 20 fertilizer recipes
- Can be connected to SuperLink for central control and further analysis of data
- · Many different languages

#### **Alarms**

- EC1/2 and pH1/2 min./max., absolute
- · EC and pH min./max., relative
- Flow alarm
- Many user-defined alarms in more time zones

#### **Accessories**

Among other things: Valve box - EC Sensor - EC Transmitter - pH Transmitter - pH Sensor - Sun cell - Venturi - Drain tray - SIIP - Weather station

#### **Distributor:**

#### **Head office:**

Senmatic A/S Industrivej 8, 5471 Søndersø, Denmark Phone: +45 64 89 22 11

dgtsales@senmatic.com – www.senmatic.com