



**ADRITEC**  
YOUR WAY

# 6 FERTILIZERS & FERTILIZATION



# Fertilizers & Fertilization Fertilization Equipment

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6b1- Fertilizer Tanks

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6b2- Venturi Injectors

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6b3- Water Hydraulic Pumps

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6b4- Fertilization Station

Fertilizer tanks are used for all types of drip, sprinkler and micro irrigation systems. Used to feed soluble and liquid fertilizers through mixing the fertilizer with the irrigation water via a pressure differential or a booster pump, upstream of the screen or disk filter.

#### Features

- Heavy duty non-corrosive all steel construction tank epoxy coated.
- Incorporates an extra strainer for prevention of insoluble material entering the irrigation system.
- Available in horizontal and vertical types.
- Comes with a kit which includes:-

\* 1 piece of air vent 3/4" / 1 piece of 1" valve / 4 pieces of metallic male adaptor 3/4" x 25mm & transparent tube

Vertical Fertilizer Tank		
Code	Capacity / L	Type
6B1FRV000100	100	Vertical
6B1FRV000150	150	Vertical
6B1FRV000250	250	Vertical



Horizontal Fertilizer Tank		
Code	Capacity / L	Type
6B1FRH000100	100	Horizontal
6B1FRH000150	150	Horizontal
6B1FRH000250	250	Horizontal



**Venturi** injectors are high-efficiency, differential pressure injectors with internal mixing vanes. When a sufficient pressure difference exists between the inlet and outlet sides of the injector, a vacuum is created inside the injector body, which initiates suction of a liquid or gas through the suction port. No electrical connections are needed and can run dry with no problems. The venturi injector is an economical solution for fertilization systems. They are available in Polypropylene, natural PVDF or ECTFE.



Venturi Injectors								
Code	Inlet/Outlet	Suction Port	Max. Pressure	Max. Temperature	Min. Pressure differential	Motive Flow Injector at 3.5 Bar	Injection Rate LPH	
	Inch	Inch	Bar	Celsius	%	LPH	Water	Air
6B2FEVIOA012	1/2	1/4 Barbed	10.3	65.5	26	1.7 - 1.9	6	-
6B2FEVIOB012	1/2	shank	13.8	93.3	26	1.7 - 1.9	6	-
6B2FEVIOA034	3/4	1/4 Barbed	10.3	65.5	18	25	10.8	36
6B2FEVIOB034	3/4	1/4 Barbed	13.8	93.3	18	25	10.8	36
6B2FEVIOC034	3/4	shank	13.8	93.3	18	25	10.8	36
6B2FEVIOA010	1	1/2 Barbed	10.3	65.5	16	44	37	30
6B2FEVIOB010	1	shank	13.8	93.3	16	44	37	30
6B2FEVIOC010	1	1/4	13.8	93.3	16	44	37	30
6B2FEVIOA112	1 1/2	1/2 Barbed	10.3	65.5	18	139	153	192
6B2FEVIOB112	1 1/2	shank	13.8	93.3	18	139	153	192
6B2FEVIOC112	1 1/2	1/2	13.8	93.3	18	139	153	192
6B2FEVIOA200	2	1 1/4	10.3	65.5	18	410	436	2100
6B2FEVIOB200	2	1 1/4	13.8	93.3	18	410	436	2100

Note : Injection rate is achieved at min. PD. required / Check Valve is not included in model 6B2FEVIO0200.

Suction line kit assembly	Suction line kit includes - 2 meters of vinyl tubing, metering valve, strainer, connectors & clamps.	Code	Use with Injector Model
		6B2FEVISK184	6B2FEVIO0012 - 6B2FEVIO0034
		6B2FEVISK183	6B2FEVIO0010 - 6B2FEVIO0112
		6B2FEVISK282	6B2FEVIO0200
Suction line strainers	Tube and stainless steel mesh strainer (500 µ) in 1/4", 3/8", 1/2" .	6B2FEVIPS014	1/4"
		6B2FEVIPS038	3/8"
		6B2FEVIPS012	1/2"
PVC suction line strainer	Mesh strainer ( 1000 µ ), available in 1" PVC hose barb connector, for use with 6B2FEVIO0200	6B2FEVIPS010	1"
Check valves	In-line check valves with low cracking pressure, used in liquid or gas suction applications	6B2FEVIPC012	1/2"
		6B2FEVIPC010	1"
Foot valve	Foot valve strainer combination check valve and strainer.	6B2FEVIPF014	1/4
		6B2FEVIPF038	3/8
Metering valves	Polypropylene and Teflon valve with compression type connectors for 1/4" ID X 3/8" OD, used with 1/2" & 3/4".	6B2FEVIPM012	1/2
		6B2FEVIPM034	3/4
		6B2FEVIPM010	1
		6B2FEVIPM112	1 1/2



**Hydraulic pumps** are installed directly in the water supply line. They operate by using the flow of water as the power source. The water activates the pump, which takes up the required percentage of concentrate directly from the fertilizer container and injects it into the water. Inside the hydraulic pump, the concentrate is mixed with the water and the water pressure forces the solution downstream. The dose of concentrate will be directly proportional to the volume of water entering the pump, regardless of variations in flow or pressure, which may occur in the main line.

Water Hydraulic Pumps							
Code	Inlet/Outlet	Quantity water passing through injector LPH		Adj. injection rate	Section Flow LPH		Operating Pressure
		Min.	Max.		%	Min.	
6B3FEHP7002A	3/4	0.5	700	0.15 - 1.25	0.0075	8.8	0.3 - 6
6B3FEHP7002B	3/4	0.5	700	0.8 - 5.5	0.8	38.5	0.3 - 7
6B3FEHP2502A	3/4	10	2500	0.07 - 0.2	0.007	22.5	0.3 - 6
6B3FEHP2502B	3/4	10	250	0.1 - 0.9	0.01	50.0	0.3 - 6
6B3FEHP2502C	3/4	10	2500	0.2 - 2	0.02	125.0	0.3 - 6
6B3FEHP2502D	3/4	10	2500	1.0 - 5.0	0.1	200.0	0.3 - 6
6B3FEHP2502E	3/4	10	2500	1.0 - 10	0.3	5.0	0.3 - 6
6B3FEHP3002A	3/4	10	3000	0.05 - 0.3	0.005	9.0	0.3 - 6
6B3FEHP3002B	3/4	10	3000	0.2 - 2	0.02	60.0	0.3 - 6
6B3FEHP3002C	3/4	10	3000	0.5 - 5	0.05	150.0	0.3 - 6
6B3FEHP3002D	3/4	10	3000	1.0 - 10	0.1	300.0	0.5 - 6
6B3FEHP3002E	3/4	10	3000	5.0 - 25	0.5	500.0	0.4 - 4
6B3FEHP4504A	1 1/4	100	4500	0.03 - 0.1	0.03	4.5	0.5 - 5
6B3FEHP4504B	1 1/4	100	4500	0.2 - 1.5	0.2	67.5	0.5 - 5
6B3FEHP4504C	1 1/4	100	4500	0.5 - 3	0.5	135.0	0.5 - 5
6B3FEHP4504D	1 1/4	100	4500	3.0 - 8	3	360.0	0.5 - 5
6B3FEHP8005A	1 1/2	500	8000	0.2 - 2	1	160.0	0.15 - 8
6B3FEHP8005B	1 1/2	500	8000	1.0 - 5	5	400.0	0.15 - 8
6B3FEHP20006	2	1000	20000	0.2 - 2	2	400.0	0.12 - 10



**Fertilization stations** are equipment that work on mixing more than one solution of fertilizers into the irrigation system in accordance to a pre-determined dosing percentage. Fertilizers, acids and other nutrients are mixed and dosed into the system by the fertilization station. Many such models are available depending on the type of nutrient solution required and enjoy a variety of optional features to improve the fertilization process and control.

#### Series 6B4FSDOSA300

This model is widely used in small to medium sized production farms where a mixer is still needed to put in place a precise and reliable dosing of fertilizers and acids with irrigation water. The dosage can be done in proportion or by adjustment of the pH and EC in the water. It controls the irrigation shift mode with a clock, a timer and even sun light.

- Electronic control panel with waterproof plastic membrane keypad and backlit LCD display, the electronic processing and control with the possibility of a front door lock.
- Measurement of EC
- Stainless steel frame 304.
- Tank water / fertilizer.
- Pump power plants of your choice.
- Water inlet & Outlet DN 40
- Lock Venturi.
- Adjustable feet.
- Control of zone valve 24VAC 7.
- Base software for irrigation time or volume
- Alarm output 24VAC.
- Software for proportional dosing.
- General Software alarms.
- Base software for the start of irrigation to watch or cyclic.



#### Optional Equipment

- Measurement and adjustment of pH
- One channel acid dosage max. 300 l / h.
- Adjusting the EC.
- Irrigation sun light
- Irrigation Drainage DRENAMATIC probe.
- Connecting to a PC with oversight MC-Net
- Irrigation lost EXPANSIONBOX probe.
- Up to 3-channel dosing fertilizer with variable area flow meter and control valve. Max. 3 x 300 l / h.
- Up to 27 zone valves with square-BOX EXPANSION.
- Control and monitoring via the internet with supervision MC-Web
- Vision and using SMS messages with MC-SMS and phone call in case of alarm.

#### Series 6B4FSBRAVLMH

A series of fertigation mixers with a mixing tank. They are excellent for direct fertigation of sensible cultivations such as soil-less cultivations and nurseries. The connection to sensors such as Cultivation or Drenamatic Gravimatic makes it directly visible on the internet making fertigation in this model a computerized activity. Easy to manage the nutrition requirements. Three different models of this series are offered. They feature an easy connection to all optional features, have one aspiration of acid or base solution with maximum capacity of 2 LPM, designed for 4 aspirations of liquid fertilizer with maximum capacity of 7 LPM, and have controls for 10 irrigation valves 24 VAC.



#### Model 6B4FSBRAL020

- Capacity from 3 to 20 m<sup>3</sup> / h, 380V 3P + N + T 50 Hz

#### Model 6B4FSBRAM040

- Capacity from 10 to 40 m<sup>3</sup> / h, 380V 3P + N + T 50 Hz

#### Model 6B4FSBRAH120

- Capacity from 30 to 120 m<sup>3</sup> / h, 380V 3P + N + T 50 Hz
- Designed for mounting 4 aspirations of liquid fertilizer with a maximum capacity of 14 LPM.

## Series 6B4FSFERVOX

This model is a fertigation computer with the ability to mix up to 8 and 2 concentrated fertilizer solution acid or alkaline solution for pH adjustment. It allows the formulation of a wide variety of nutritious solutions in an extremely precise way in compliance to a scheduled formulation program. It includes one aspiration of acid or base solution with maximum capacity of 2 LPM, has 10 irrigation valves 24 VAC, and connections to optional equipment, in addition to capability for the installation of 8 aspirations of liquid fertilizer with maximum capacity of 7 LPM, the possibility for a second intake of acidic or basic liquid.

## Model 6B4FSFERL020

- Capacity from 3 to 20 m<sup>3</sup> / h ,380V 3P + N + T 50 H

## Model 6B4FSFERM040

- Capacity from 10 to 40 m<sup>3</sup> / h, 380V 3P + N + T 50 Hz

## Model 6B4FSFERH120

- Capacity from 30 to 120 m<sup>3</sup> / h, 380V 3P + N + T 50 Hz
- Preparation for installation of 8 aspirations of liquid fertilizer with a maximum capacity of 14 LPM.

## Optional Equipment

- Proportional dosing.
- Works with sub-irrigation ebb flow.
- Pre-acidification in the storage tank.
- Operation at variable pressure.
- EC and pH probes of the drainage.
- Drenamix for mixing fresh water with drainage.
- Photo-Radiometer for the management of irrigation sun light.
- Probe for the management of Drenamatic as a function of irrigation drainage.
- Temperature and humidity probe for the management of mist or fog.
- PC interface MC-Net, Web interface Web-MC, MC-SMS mobile interface.

