Advanced
Automation
Systems

Emitter
Solutions

Aquarius PC

Online PC Emitter

The most versatile and easy to install Pressure Compensating emitter for a great variety of applications

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Pressure Compensating (PC)

Aquarius PC emitters incorporate a silicone membrane which enables the delivery of precise and equal amounts of water over a broad pressure range.

Aquarius PC emitters are designed for precision irrigation needs, ranging from a home garden to the most advanced hydroponic application.

Drain (D) and Non-Drain (ND) Options

With the Non-Drain system of Aquarius PC, the pipe remains full of water during irrigation intervals, ensuring immediate and uniform irrigation along the pipe. Non-Drain emitters eliminate drainage and refill effect, and improve efficiency in pulse irrigation.

In order to achieve the Non-Drain function, the emitter opens at 0,30 bar and closes at 0,20 bar.

Emitter Characteristics

Wide range of flow rates 2,0 / 4,0 and 8,0 l/h.

Aquarius PC is designed for installation in pipes from 12 mm up to 32 mm diameter and wall thickness from 0,9 mm up to 1,2 mm.

Wide pressure compensation range.

Cross shaped water inlet.

Wide and accurate water passages along the labyrinth.

Special labyrinth design that ensures highly turbulent flow of the water.

Continuous self cleaning mechanism ensures non-clogging uninterrupted emitter operation.

High UV resistance.

Resistant to standard nutrients used in agriculture.

Injected emitter that provides very low Coefficient of Variation (CV).

Aquarius emitters can be installed manually exactly where they are required.

The number of emitters can be increased in order to increase water supply aimed at meeting tree growth rate requirements.

Aquarius PC design allows the installation of manifold outlet with multiple outputs.

One type of outlet suitable for 3 mm internal diameter micro-tube and for press-fit nipple connectors.

Product Applications

Greenhouses and nurseries

Orchards

Landscaping

Gardening

Hydroponics

Soilless culture

Pulse irrigation

Aquarius PC Design Characteristics

Ultrasonic Welding Technology

The advanced welding process of Aquarius PC eliminates the problem all online emitters eventually face, leakage between the body and the cover of the emitter. In our emitter this is prevented by a parallel formation and welding of the cover, around the edge of the body of Aquarius PC, making it impossible to leak regardless of the climatic or pressure conditions

The design of Aquarius PC emitter provides all the benefits of the large online emitters in compact dimensions which make it the perfect choice in terms of value

Cylindrical labyrinth with wide water passages. Color distinction for different flow rates

Chemical-resistant silicon diaphragm

Emitter cover with color distinction for Drain and Non-Drain function

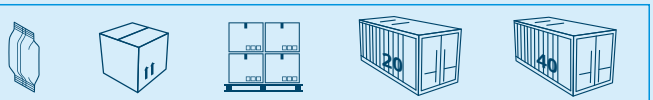
Aquarius PC emitters are tested from both CIT and Irstea institutes and achieved the highest ranking for CV, emission uniformity, flow accuracy and clogging resistance

Installation with a 2,8 mm punch tool

Actual Size

28 mm

Packaging



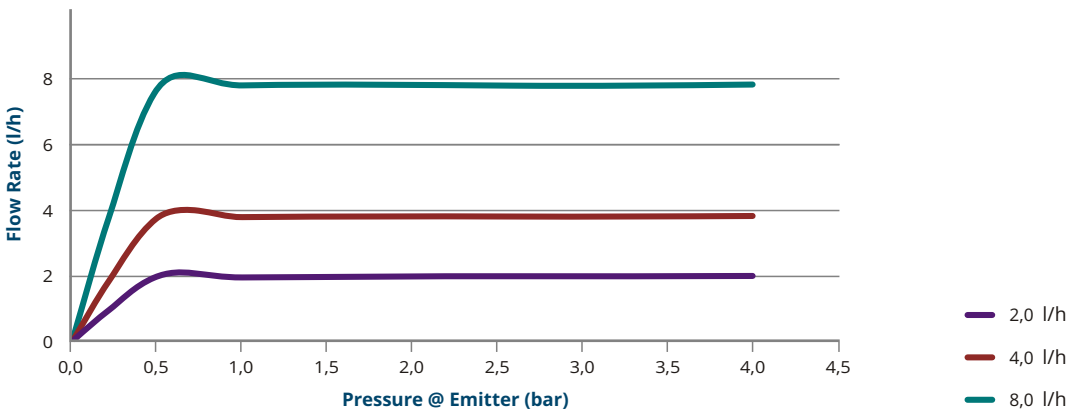
100 pcs	25 bags 2.500 pcs	120 boxes 300.000 pcs	11 pallets 3.300.000 pcs	22 pallets 6.600.000 pcs

Aquarius PC Emitter Specifications

Nominal Flow Rate (l/h)	Constant k (bar)	Exponent (x)	Coefficient of Variation CV (%)	Water Passage Width x Depth x Length (mm)	Filtration Area (mm^2)	Recommended Filtration (mesh/micron)
2,0	2,0	0,0	2,0	1,00 x 1,00 x 55,4	3,80	120/130
4,0	3,9	0,0	2,0	1,30 x 1,10 x 50,6	3,80	120/130
8,0	7,9	0,0	2,2	1,50 x 1,15 x 46,5	3,80	120/130

Pressure range: 0,5 - 4,0 bar
Opening pressure: 0,30 bar
Closing pressure: 0,20 bar

Aquarius PC Emitter Flow Curves



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