

# UNIRAIN ARV-Mini-In

## Vacuum Breaker Air Valve



Units Conversion	
FLOW	PRESSURE
m <sup>3</sup> / h (cubic metres per hour)	mWa (metres of water column)
l / h (litres per hour)	PSI (pounds per square inch)
GPM (gallons per minute)	
CFM (cubic feet per minute)	
<b>1 CFM = 1.699 m<sup>3</sup> / h</b>	<b>1 PSI = 0.70307 mWa</b>
<b>1 GPM = 227.1192 l / h</b>	

### Application

Vacuum breaker air valve, designed to effectively admit air at high flow rates during drainage and in case of pumping interruption or water column separation. Recommended as safety valve in drip irrigation systems, to remove trapped air, breaking the system vacuum and preventing dirt suction into the drippers.

For correct operation, the valve should always be in a vertical position.

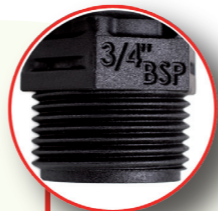
It is recommended to install a manual ball valve under the ARV, in order to make maintenance and repair operations easier without shutting the whole system\*.

### Advantages

- The valve has a large hole, with a special seal system, capable of admitting high air flow rates.
- Simple in design, with only 5 parts, it's easy to disassemble for maintenance and cleaning when needed.
- Its body features a built-in filter to prevent objects, such as insects and leaves, from getting into the valve through the outlet.
- Owing to a perfect fit, the valve is totally sealed at low pressures.

### Technical specifications

- Performance as vacuum breaker.
- It admits air flows rates up to 185 m<sup>3</sup>/h (109 CFM).
- Maximum working pressure 16 bar (232 PSI).
- Body and base made of fiberglass-reinforced polyamide.
- Treated for protection from UV radiation.
- Base available in 3/4" male thread.
- Optional BSP or NPT thread.
- Built-in filter in body hole.



**BASE**  
3/4" Male Thread  
Available  
BSP & NPT

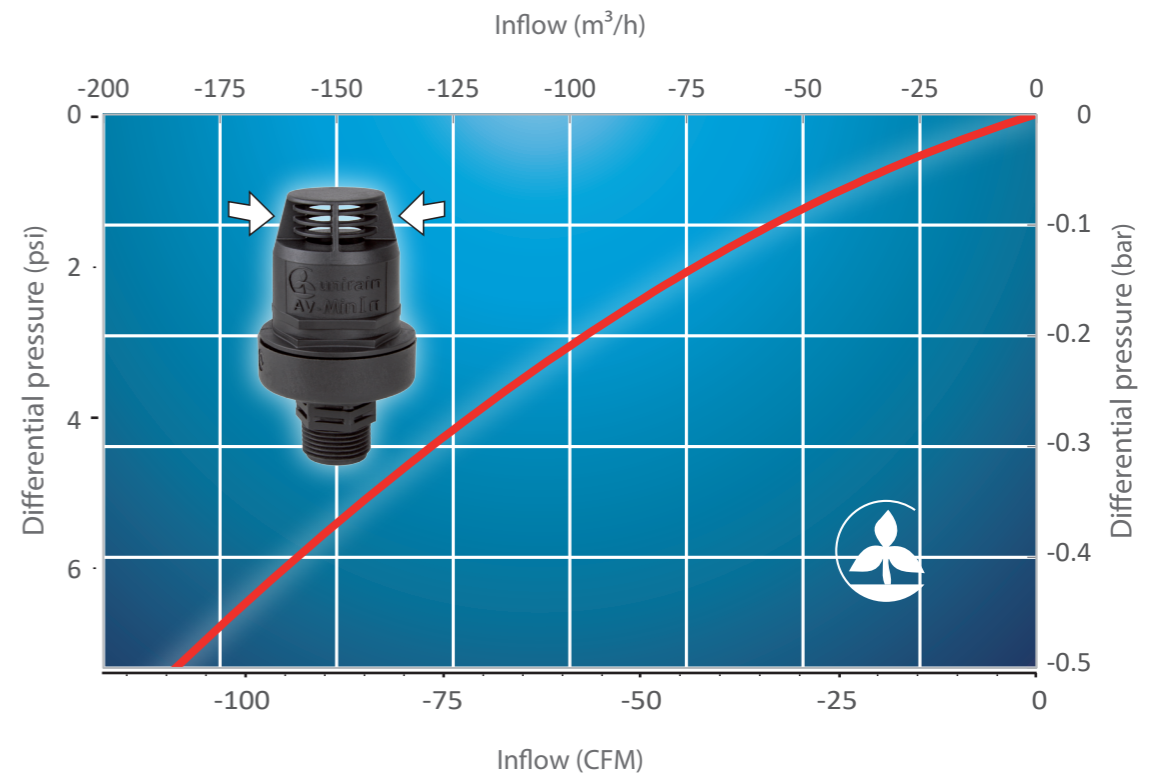
ARV-Mini-In

### Performance

**Prevents** pipes from collapsing (**Vacuum**). At the smallest decrease in pressure, the float drops and opens the seal allowing outside air to enter the pipe immediately.

In drip irrigation systems, this performance helps avoiding dirt suction into the drippers.

### Inflow



Normal Conditions Flow  
(P= 1 atm, T= 293.15 K)

### \*Normal conditions of use, service and maintenance.

This product has been tested at low pressure (0.5 bar) and high pressure (16 bar) with satisfactory results.

For correct operation, valves must undergo regular routine checks. The check should include the cleaning of the internal components and inspection of the seal conditions. For more detailed information about the use and maintenance of valves, please check the document called "Unirain ARV: INSTALLATION AND OPERATION MANUAL".

For specific uses, please consult the technical department.

### WARRANTY AND EXCLUSIONS

The manufacturer guarantees its products for direct customers against any defects in materials or manufacture for a period of two years from the original date of purchase, when the products have been used under normal operating and service conditions. The manufacturer assumes no liability for installation, removal or repairs carried out by unauthorised personnel.

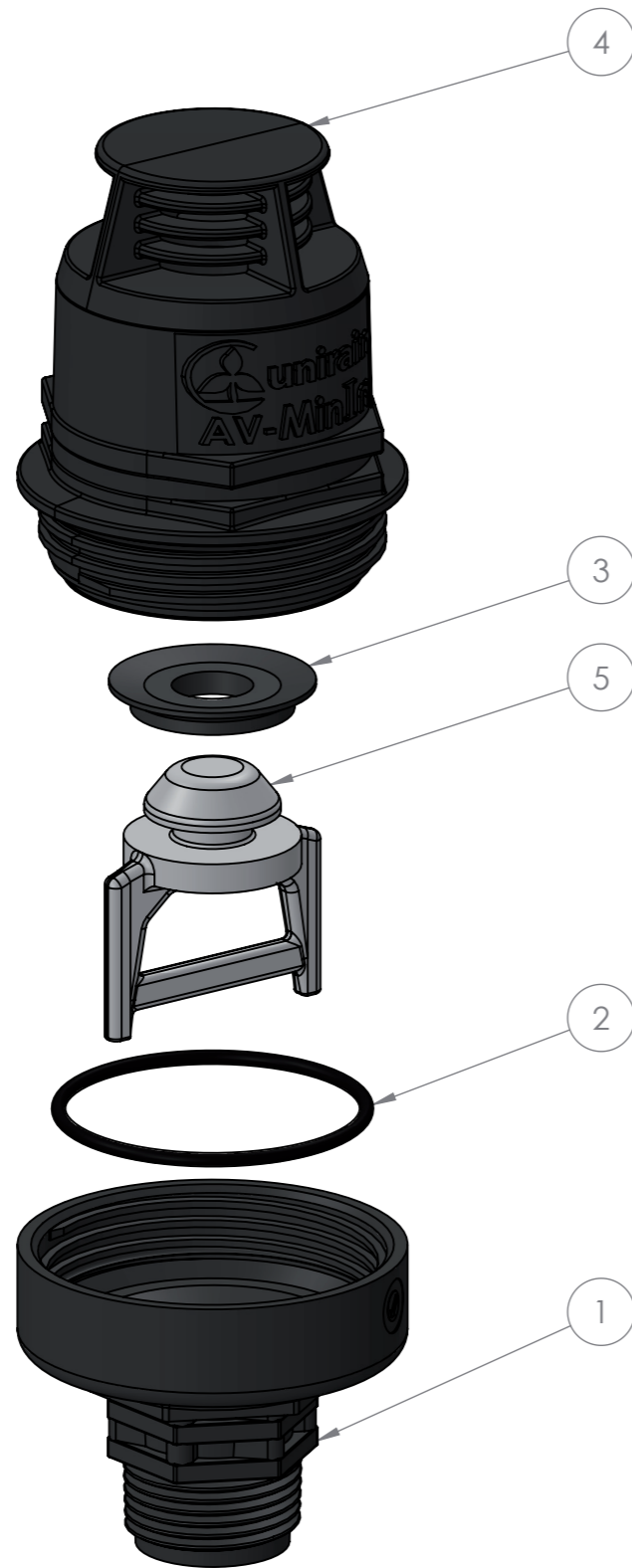
This warranty is limited to the replacement or repair of defective parts.

The manufacturer does not accept liability for damage to crops or any other consequences damages deriving from defects in the products covered by this warranty.

**THIS WARRANTY SUPERSEDES AND VOIDS ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING THOSE OF MERCHANTABILITY OR ANY OTHER ATTRIBUTING LIABILITY TO THE MANUFACTURER.**

No agent, employee or representative of the manufacturer is authorised to change, alter or add to the conditions contained in this warranty or to assume liability or make guarantees not specified herein.

UNIRAIN S.A. reserves the right to amend any of the technical features of this product.



COMPONENT NUMBER	SPARE CODE	DESCRIPTION	MATERIAL	QUANTY
1	----	ARV Mini 3/4" BSP Base	PA6+Fiberglass	1
2	01748	ARV-Mini 43x2 O-Ring	NBR	1
3	01769EPD	ARV 1"-3/4" Main Seal	EPDM	1
4	----	ARV MinIn body	PA6+Fiberglass	1
5	----	Flotador ARV-MinIn	Expanded PP	1

Notes

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Process/Manufacturer  UNIRAIN	Size A3	Material	Code 02334UNI
	Scale 1:1	Name ARV-Mini-In	
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	P.M.M.		