

# UNIRAIN ARV-2"-K-Compact

## Combination 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

Designed to efficiently extract air trapped in medium-sized pipes, large filters, tanks and other places where the absence of air is required for correct functioning.

The release valves are located at the outlet of pipes whose slope varies according to the hydraulic gradient, in areas where pipes are located above ground level, in long pipes with uniform slope, at the input of measuring instruments, the output of reducing valves, in diameter reductions, pumps, filtration systems, on both sides of a subterranean crossing road.

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

- New compact design more sustainable and competitive with similar quality and performance as the rest of our air valves.
- Owing to a perfect inner finish, the valve is totally sealed even at very low pressures.
- With just five parts, it's very easy to disassemble when it needs to be cleaned.
- Its outlet features a threaded elbow to provide a wider range of connection possibilities, as it's easily detachable, offering a vertical outlet.
- Owing to its exclusive internal design, the air stream will not drag the float up, even when air is faster than the speed of sound at the outlet. Only water will cause the float to rise.
- Includes an internal grille in the elbow to prevent foreign bodies from entering the valve.

### Technical specifications

- Kinetic air valve.
- At least 1700 m<sup>3</sup>/h (1000 CFM) of air released without having the valve shut while no water present.
- Released air volume is at least 260 m<sup>3</sup>/h (153 CFM) at 0.4 bar (5.8 PSI).
- Maximum working pressure 16 bar (232 PSI).
- Body and base made of fibreglass reinforced polyamide.
- Treated for protection from UV radiation.
- 2"M base thread. Optional base in BSP or NPT thread.
- 1-1/4" F threaded outlet with grille.

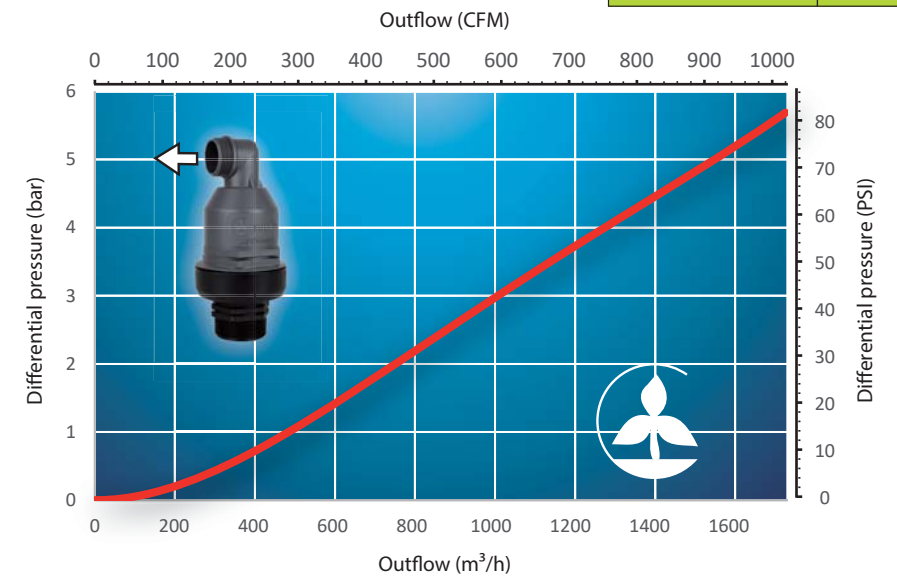


ARV-2"-K-Compact

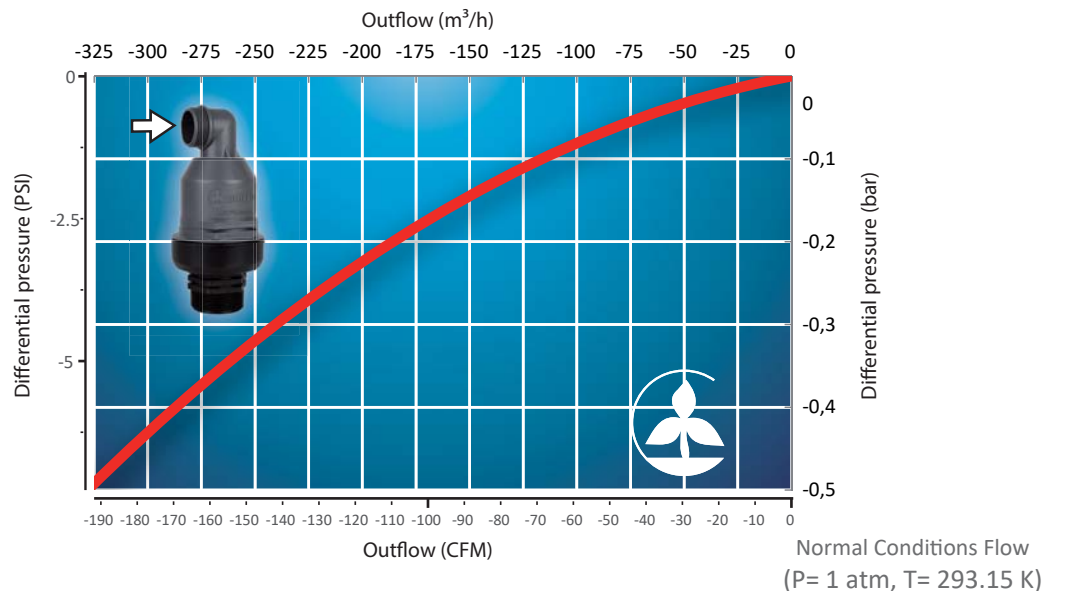
### Performance

- **Extracts** the air trapped in pipes as they fill. When water reaches the inside of the valve, the float rises, shutting the outlet (KINETIC).
- **Prevents** pipes from collapsing. At the smallest decrease in pressure, the float drops and opens the seal allowing outside air to enter the pipe immediately (AIR VACUUM RELIEF).

### Kinetic Outflow



### Kinetic 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.

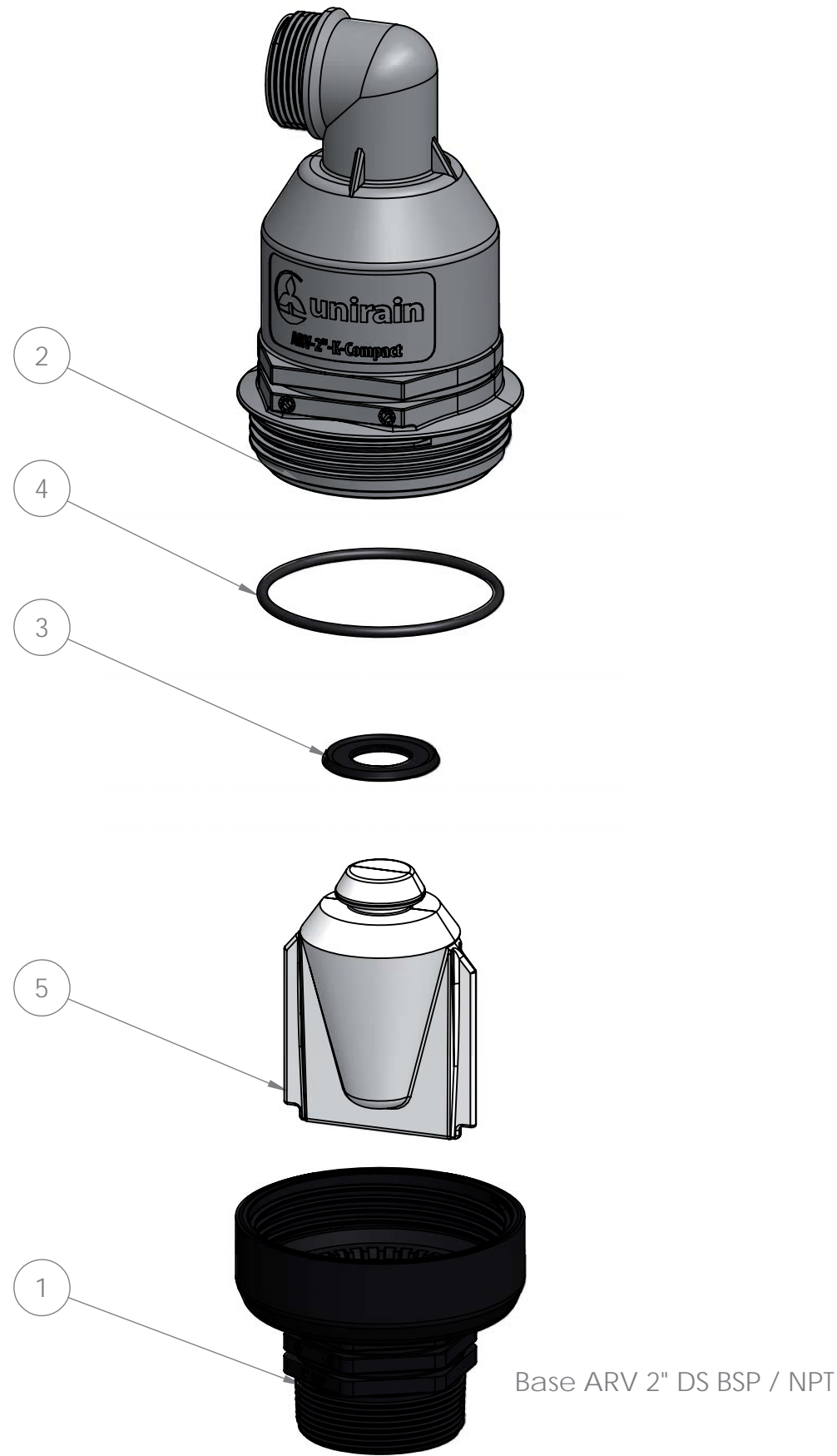
### WARRANTY AND EXCLUSIONS

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	01782BDS	ARV-2" (BSP) DS Base	PA6 + Fiber Glass	1
2	01782BDS	ARV 2"-K Compact Gray Valve Body	PA6 + Fiber Glass	1
3	01785SPU	ARV 2" Main Seal SPU	EPDM	1
4	01787DNS	2" DNS O-Ring	NBR	1
5	01793COM	ARV 2"-K-Compact Float	Expanded PP	1

Anotaciones

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Process/Manufacturer  UNIRAIN	Size A3	Material	Code
	Scale 1:2	Name ARV-2"K-Compact	
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	P.M.M.		