

UNIRAIN ARV-2"-KA-Compact

Combination Air Valve



Application

Valve designed to extract air from pipes, large filters, tanks or any other similar equipment which must work without the presence of air.

The air 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, and 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.
- Its exclusive independent double seal system, one for kinetic function and the other for automatic function, as well as the low density of its float, make the valve completely watertight when the pipe is being pressurized or emptied, no matter how slowly these operations are carried out.
- Its new inner design allows the float to resist the air stream even when the flow velocity is faster than the speed of sound at the outlet. The valve will only shut by the action of water.
- Includes an internal grille in the elbow to prevent foreign bodies from entering the valve.

Technical specifications

- Combination air valve.
- At least 1800 m³/h (1060 CFM) of air released without having the valve shut while no water present.
- Released air volume is at least 400 m³/h (235 CFM) at 0.6 bar (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.



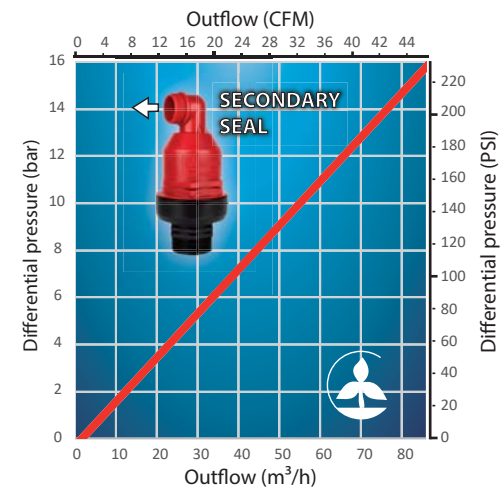
ARV-2"-KA-Compact

Performance

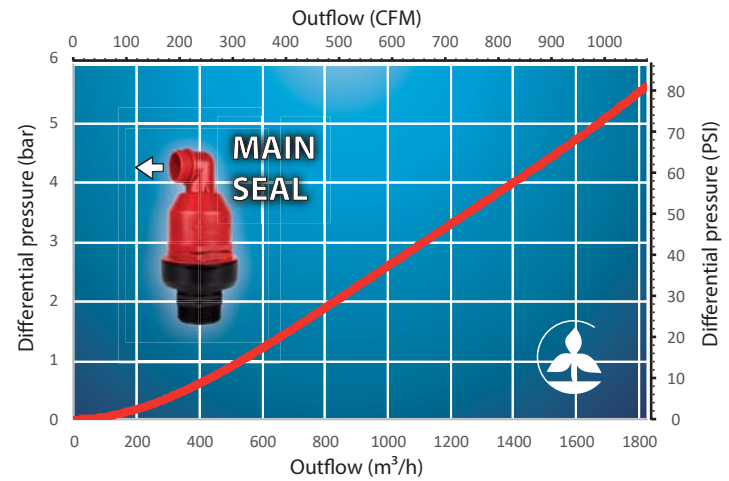
- **Extracts** air from pipes as they fill. When water reaches the inside of the valve, the float rises and seals the discharge outlet (KINETIC).
- **Maintains** automatically and continuously its function of eliminating any residual air pockets reaching the valve, as the float immediately drops and the closure outlet is partly or totally opened. Water pressure does not interfere with this function (AUTOMATIC).
- **Introduces** air into the pipes to prevent collapse. At the smallest decrease in pressure, the float drops and opens the seal allowing outside air to enter the pipe immediately (AIR VACCUM RELIEF).



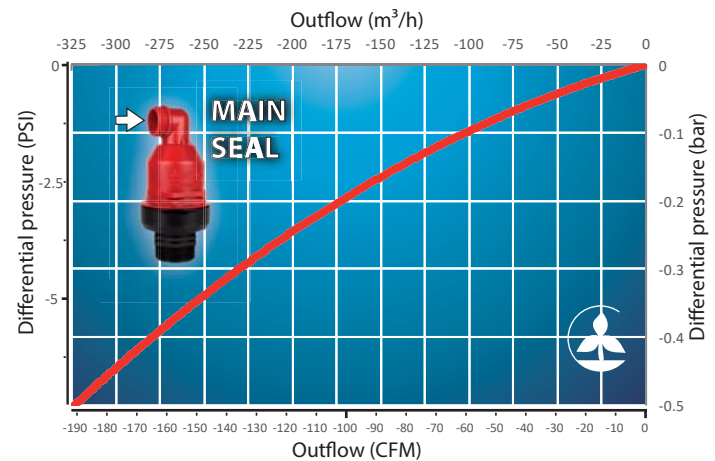
Automatic Outflow



Kinetic Outflow



Kinetic Inflow



Units Conversion	
FLOW	PRESSURE
m ³ / 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)	
1 CFM = 1.699 m³ / h	1 PSI = 0.70307 mWa
1 GPM = 227.1192 l / h	

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.

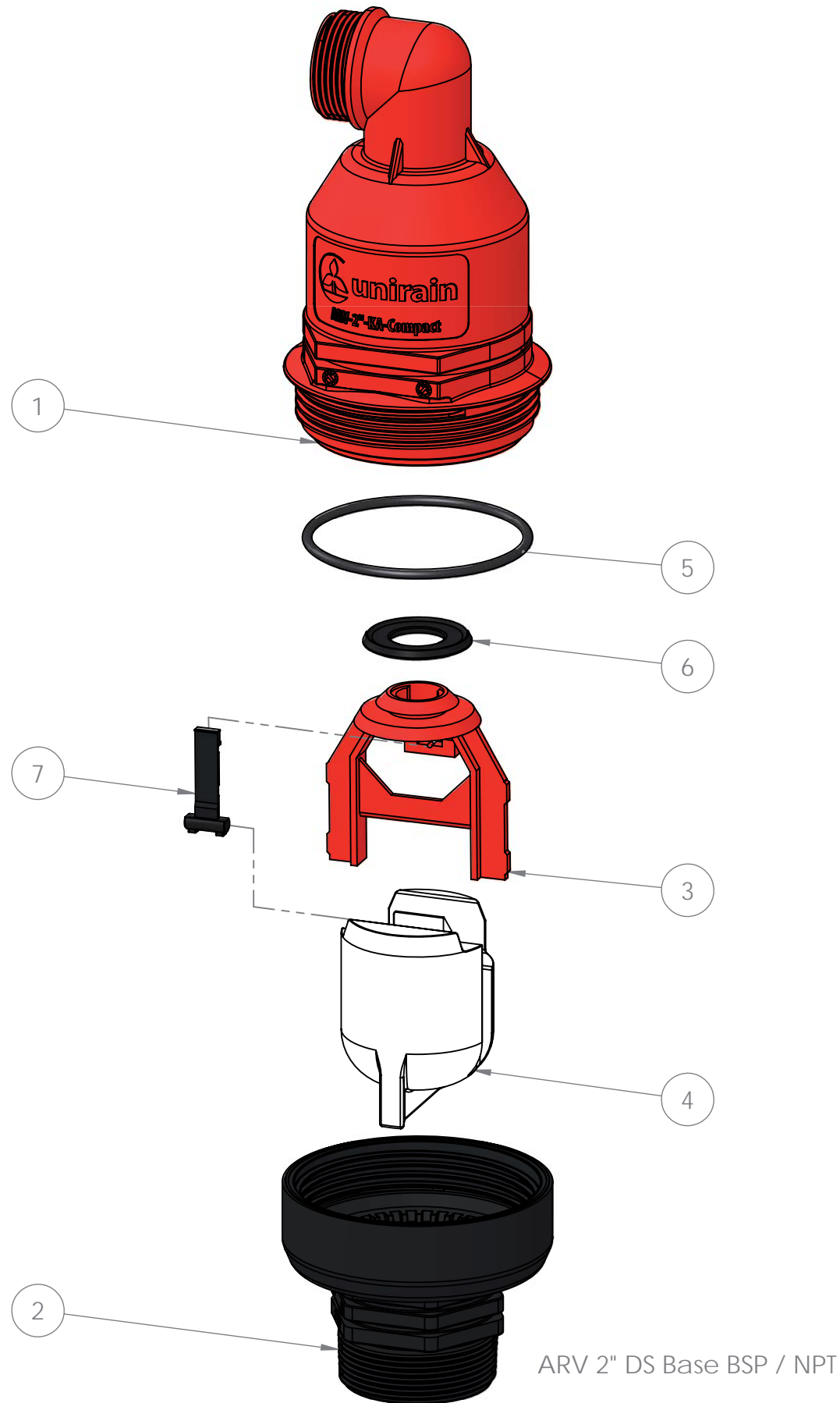
WARRANTY AND EXCLUSIONS

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-2"-KA Compact Valve Body	PA6 + Fiber Glass	1
2	----	ARV-2" (BSP) DS Base	PA6 + Fiber Glass	1
3	----	ARV-2"-KA-Compact Yoke	PA6 + Fiber Glass	1
4	----	ARV 2"-KA-Compact Float	PA6 + Fiber Glass	1
5	01787DNS	2" DNS O-Ring	NBR	1
6	01785SPU	ARV 2" Main Seal SPU	EPDM	1
7	01786	ARV KA Secondary Seal	EPDM	1

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