

UNIRAIN ARV-Kinetic Automatic

Combination Air Valve

Available with 1" & 3/4" thread



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, 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

- An exclusive double seal system, together with a low density float for kinetic function and automatic control, 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 gets 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.
- Its outlet elbow features an internal filter to prevent debris from entering inside the valve.

Technical specifications

- Combination air valve.
- At least 800 m³/h (471 CFM) of air released without having the valve shut while no water present.
- Released air volume is at least 130 m³/h (76.5 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.
- Base available in 1" M and 3/4" M thread.
- Optional BSP or NPT thread.
- 3/4" Female threaded outlet includes filter.



AVAILABLE BASES



ARV-1"-KA
BSP/NPT



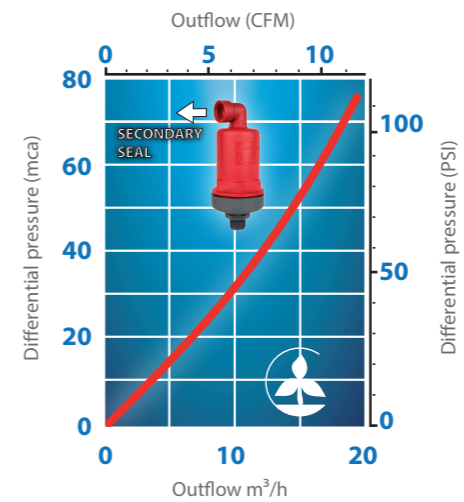
ARV-3/4"-KA
BSP/NPT

Performance

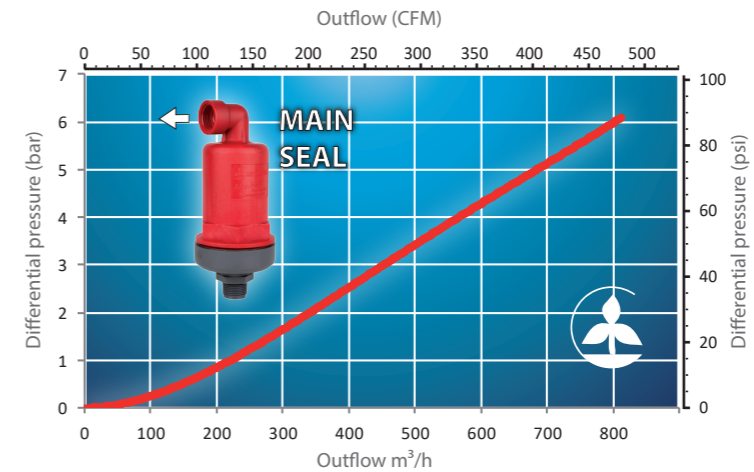
- **Extracts** air from pipes as they fill. When water reaches the inside of the valve, the float rises and seals the discharge outlet (KINETIC).
- **Maintains** automatically and continuously its function of eliminating any residual air pockets reaching the valve, as the float immediately drops and the closure outlet is partly or totally opened. Water pressure does not interfere with this function (AUTOMATIC).
- **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).



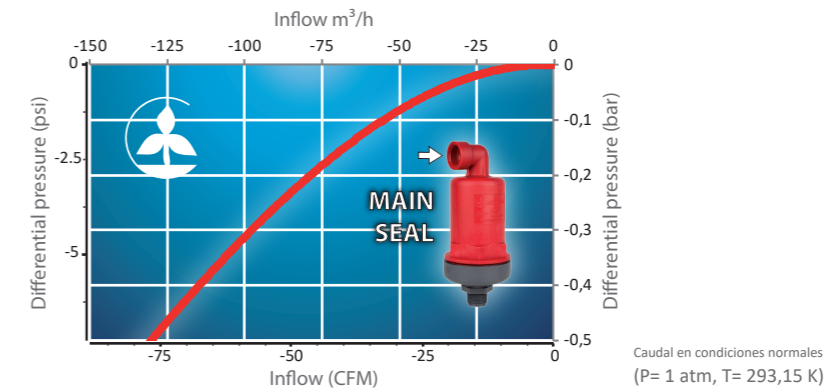
Automatic Outflow



Outflow



Inflow



Units Conversion

FLOW	PRESSURE
m ³ / h (cubic metres per hour)	mWc (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 mWc
1 GPM = 227.1192 l / h	

*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.

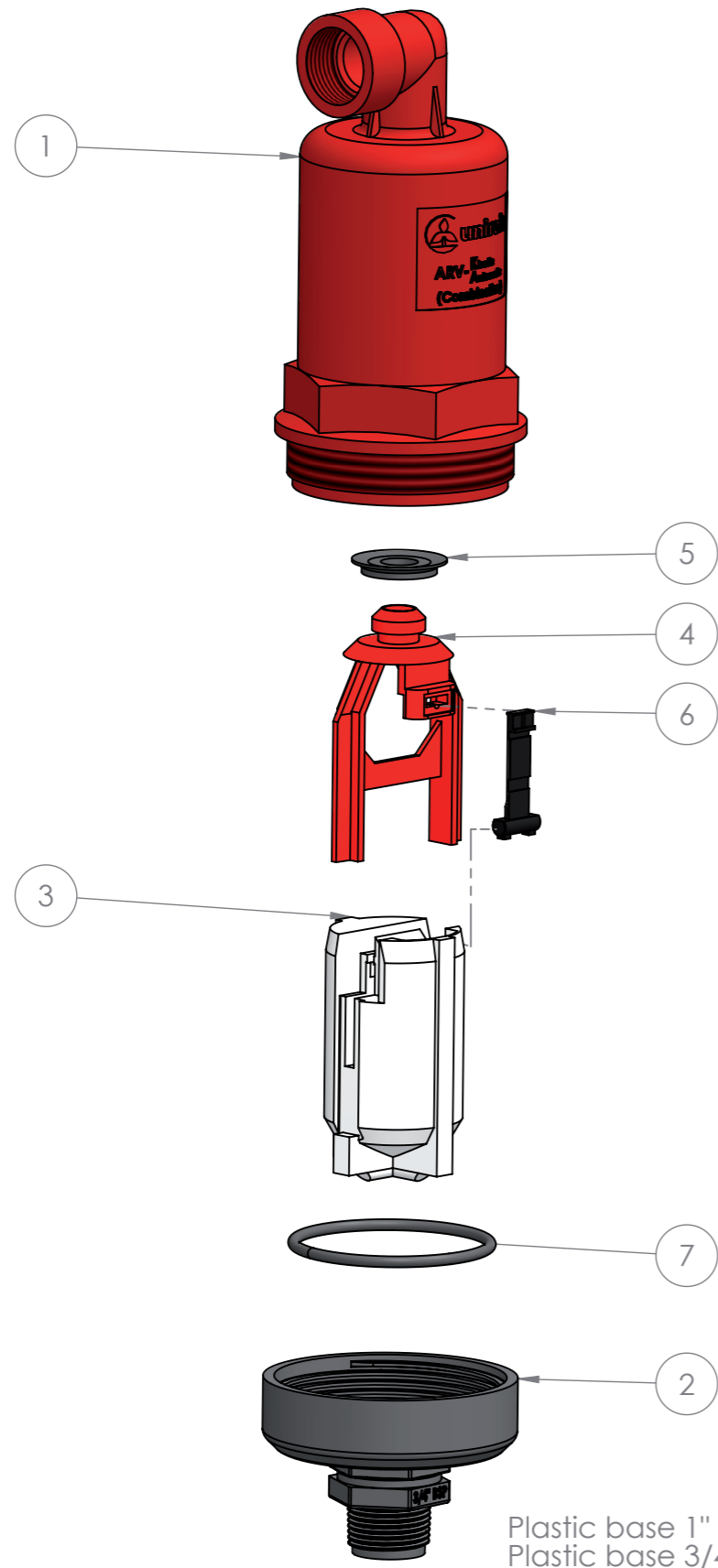
WARRANTY AND EXCLUSIONS

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.



Plastic base 1" BSP/NPT
Plastic base 3/4" BSP/NPT

COMPONENT NUMBER	SPARE CODE	DESCRIPTION	MATERIAL	QUANTY
1	---	ARV- Kinetic Automatic Body	PA6+Fiber Glass	1
2	---	3/4" BSP Valve Base	PA6 + Fiber Glass	1
3	---	ARV 1"-3/4" KA Float	Expanded PP	1
4	---	ARV 1"-3/4" KA Yoke	PA6+Fiber Glass	1
5	01769EPD	ARV 1"-3/4" Main Seal	EPDM	1
6	01786	ARV KA Secondary Seal	EPDM	1
7	01765ANC	NBR	1"-3/4" O-Ring	1

Process/Manufacturer UNIRIAN	Size A3	Material	Code ---
	Scale 1:2	Name ARV-Kinetic Automatic (Combination)	
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	P.M.M.		