

UNIRAIN ARV-Ø-(3G)-FL

Metal flanged Air Release Valve with double or triple acting



Units Conversion	
FLOW	PRESSURE
m ³ / h (metro cúbico por hora)	mca (metro de columna de agua)
l / h (litro por hora)	PSI (Pounds per Square Inch)
GPM (Gallons per Minute)	
CFM (Cubic Feet per Minute)	
1 CFM = 1.699 m ³ / h	1 PSI = 0.70307 mca
1 GPM = 227.1192 l / h	

Application

The Air Release Valves (ARV) are used for extraction and intake of air in pipes, avoiding breakages due to the overpressure and depression. The ARV-Ø-(3G)-FL is designed only for clean water in systems with flanged assemblies. Suitable for a wide range of pipe depending on diameter 200-800 mm (see table).

Advantages

- Virtually maintenance free, works automatically.
- The air filter (4) prevents the penetration of foreign bodies and small animals that can nest in the closing hole.
- Easy to clean. The triple acting valve incorporates a small purge valve. In case of obstruction by dirt in the 1" purge valve (1), the procedure is simple: close the stopcock (2), remove small valve, clean and assemble it again. Turn the stopcock (2) to the vertical position. Clean the big valve while the purge valve is disassembled and the stopcock is closed.
- There are no variations in performance thanks to the interaction between the ball of polypropylene (hard material) and the dome of vulcanized neoprene (soft material) at closing. Perfect closed position due to the contact between spherical-conical surfaces.

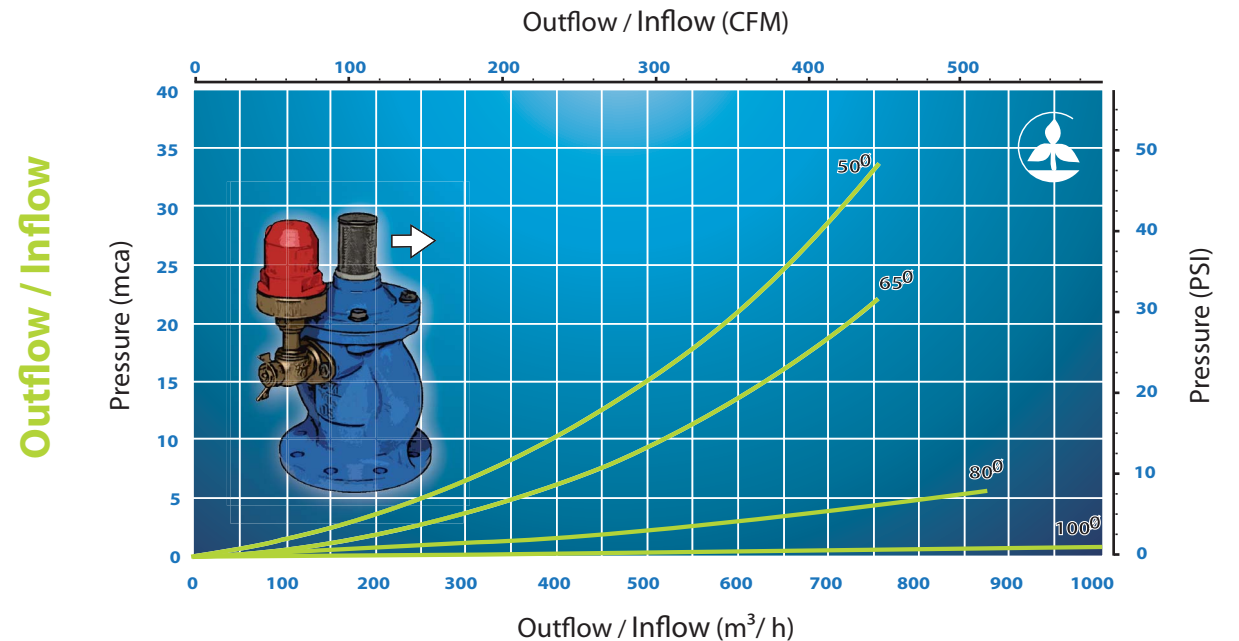
Technical specifications

- Kinetic and automatic (optional) operation.
- Minimum evacuation (according to model): Ø50= 441 CFM, Ø65 = 441 CFM, Ø80 = 500 CFM, Ø100 = 588 CFM liters of air without causing the closure of the valve (while no water present).
- Maximum working pressure for TRIPLE ACTING Valve: 225 PSI.
- Maximum working pressure for DOUBLE ACTING Valve: 355 PSI.
- Body and dome made of nodular cast iron GGG-40 with EPOXY cover.
- Flange for assembly and installation.
- Output with filter and screws made of stainless steel AISI 304.
- Purge valve with a body made of polyamide reinforced with fiberglass and brass base.
- Stopcock made of chrome plated brass with sphere closure.



Performance

- It **extracts** the air from pipes as they fill. This stage ends when water reaches the inside of the valve, raising the float and closing the main discharge outlet.
- Using the purge valve, the ARV exerts continuous **automatic control**, eliminating any residual pocket of air that might reach the valve, as when it happens, the float drops partially or totally and opens the discharge outlet. Water pressure will not prevent this function from being carried out.
- It **prevents** pipe collapse. At the least decrease in pressure, the float drops and opens the main seal, allowing outside air to enter in the pipe.



Vertical axis: differential pressure (psi).
Horizontal axis: Air flow evicted.
Absolute values of pressure and flow.

UTILIZATION CRITERIA

Pipe diameter	Valve type
200-250	Ø50
250-300	Ø65
300-450	Ø80
450-800	Ø100

Diameter of pipes and valves in mm.

*Normal use, service and maintenance conditions.

This product has been tested at low pressure (8 psi) and high pressure (225 psi) with satisfactory results.

For the correct running of valves they must be regularly checked. The checking should include the cleaning of the internal components and a control of the seal conditions. For more detailed information about use and maintenance of valves, please check the document called "Unirain ARV: INSTALLATION AND OPERATION".

For specific uses, please check the technical department.

WARRANTY AND EXCLUSIONS

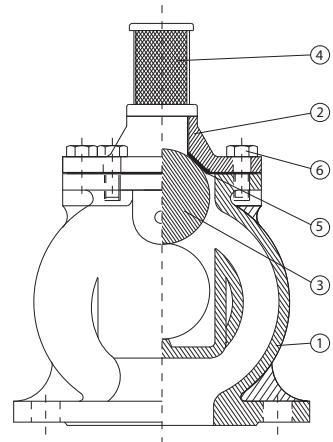
The manufacturer guarantees its products for direct customer against any defects in materials or manufacture for a period of two years from the original date of purchase, when the products have been used under normal operating conditions. The manufacturer assumes no responsibility for installation, removal or repairs carried out by unauthorized personnel. The manufacturer's liability under this warranty is limited to the replacement or repair of defective parts and the manufacturer does not accept responsibility for damages to crops or any other consequential damages deriving from defects in the products covered by this warranty.

THE PRESENT WARRANTY SUPERCEDES AND VOIDS ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSES OR ANY OTHER ATTRIBUTING LIABILITY TO THE MANUFACTURER.

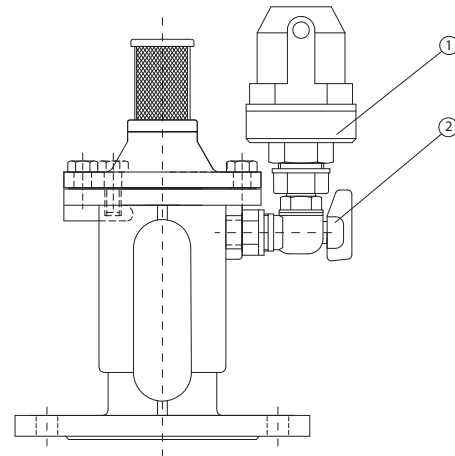
No agent, employee or representative of the manufacturer is authorised to void, alter or add to the conditions contained in this warranty, nor to take responsibility for, nor to make guarantees not specified herein.

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

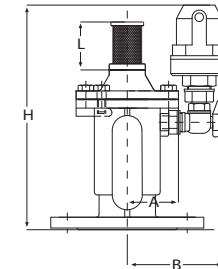
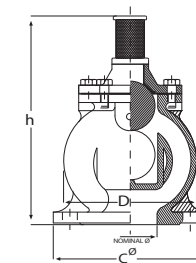
AIR RELEASE VALVES DN 50-65



DOBLE ACTING		
Ref	Description	Material
1	BODY	Nod Cast Iron GGG-40
2	DOME	Nod Cast Iron GGG-40
3	CLOSURE BALL	Polypropylene d=0.9
4	AIR FILTER	Stainless steel mesh
5	VULCANIZED	Neoprene 65° Shore
6	SCREWS	Stainless steel

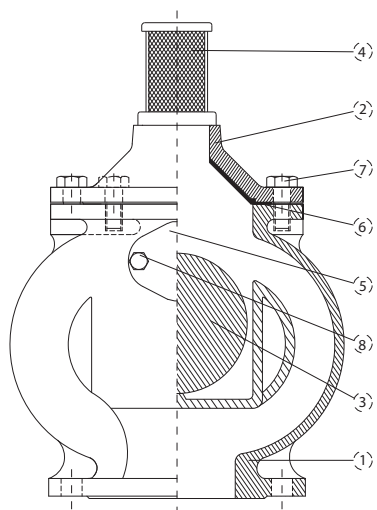


TRIPLE ACTING		
Ref	Description	Material
1	PURGE VALVE 1"	Polyamide+Fibrer Glass METALIC BASE (brass)
2	STOPCOCK	Chrome-plated brass

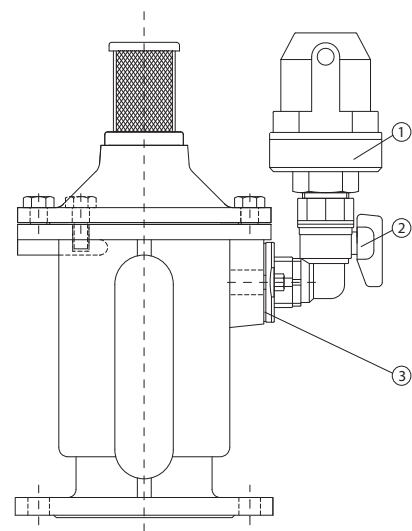


General Dimensions			DOBLE ACTING		TRIPLE ACTING				
Ø NOMINAL	C ^Ø	D	L	h	A	WEIGHT (Kg)	H	B	WEIGHT (Kg)
40	150	125	40	200	51	4	---	---	-
50	165	160	50	235	54	6	285	123	7
65	185	170	60	260	56	8	295	130	9
80	200	214	72	325	81	13	340	155	15
100	220	291	72	395	108	23	395	180	25

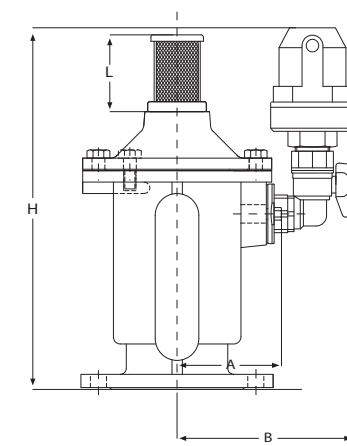
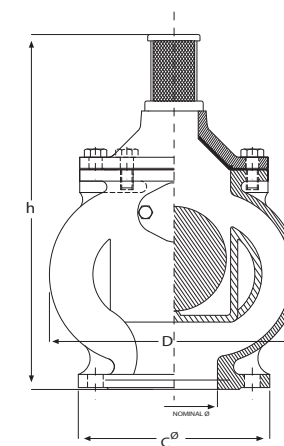
AIR RELEASE VALVES DN 80-100



DOBLE ACTING		
Ref	Description	Material
1	BODY	Nod Cast Iron GGG-40
2	DOME	Nod Cast Iron GGG-40
3	CLOSURE BALL	Polypropylene d=0.9
4	AIR FILTER	Stainless steel mesh
5	COVER (Double acting)	Cadmium-plated steel
6	VULCANIZED	Neoprene 65° Shore
7	SCREWS	Stainless steel
8	COVER SCREWS	Stainless steel



TRIPLE ACTING		
Ref	Description	Material
1	PURGE VALVE 1"	Polyamide+Fibrer Glass METALIC BASE (brass)
2	STOPCOCK	Chrome-plated brass
3	SEAL	Pressed Leather



Process/Manufacturer	Size	Material	Code
	A3		
UNIRAIN	Escala	Name	
		ARV-Ø-KA (3G)-FL	
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	E.G.B.		