



Air and Vacuum Release Valves for Waterworks, Irrigation and Landscape Systems

The exclusive AR Series, plastic and metal manufactured products offer outstanding features and advantages:

- Perfect sealing under very low system pressure.
- High Air flow capacity.
- Patented operation combined with smart design.
- Simple, compact and reliable product.

The BERMAD AR Series air and vacuum release valves include four basic models:

- 1/2" Vacuum breaker (Model ARV), prevents drip lines from clogging in tough topographic conditions and in sub-surface drip-irrigation system.
- 1" Automatic pressure air release valve (Model 01-ARA), for the automatic release of entrapped air pockets from pressurized systems.
- 2" Kinetic air and vacuum release valve (Model 02-ARK), with large orifice, for the release of large quantities of air from filling pipelines and for admitting air into quick-draining pipelines to prevent vacuum damage.
- 2" Combination air and vacuum release valve (Model 02-ARC), in which the features of the two previous models are incorporated in one single valve body, for safe pipeline filling and draining and for releasing air pockets during system operation.

Features

- Only one or two moving parts, depending on model
- Corrosion-resistant construction
- Pressure-balanced float, free of distortion or collapse
- Optional pressure check point.
- Optional drain valve for testing operation.
- Special drip-tight dynamic seal
- Exclusive kinetic design prevents surges caused by fast closure
- Perfect sealing under system pressure as low as 0.1 bar, 1.5 psi

* Additional port provides optional pressure source or pressure gauge connection is available for Plastic Model 02-ARC-P/02-ARK-P



1/2"-ARV



01-ARA-P



01-ARA-I



02-ARC-P*
02-ARK-P*



02-ARC-I
02-ARK-I



Technical Data

Specifications

Sizes:

- ½" Vacuum breaker (Model ARV)
- 1" Automatic (Model 01-ARA)
- 2" Kinetic (Model 02-ARK)
- 2" Combination (Model 02-ARC)

End Connection:

- Threaded; BSP, NPT

Pressure Rating:

- Plastic body models: ISO PN 12 (175 PSI)
- Cast iron models: ISO PN 16; ANSI # 225

Operating Pressure Range:

- Plastic body: 0.1-12 bar (1.5-175 psi)
- Iron body: 0.1-16 bar (1.5-225 psi)

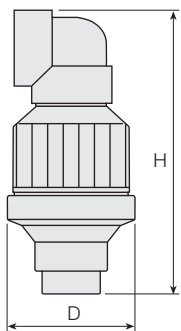
Temperature Range:

- Water, 4-50°C; 40-122°F

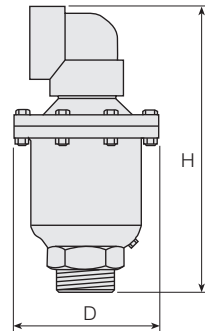
Materials:

- Body and cover: Plastic or polyester-coated cast iron
- Floats and kinetic shield: Plastic
- Automatic orifice: Stainless steel
- Seals: NBR and NR

Dimensions and Weights



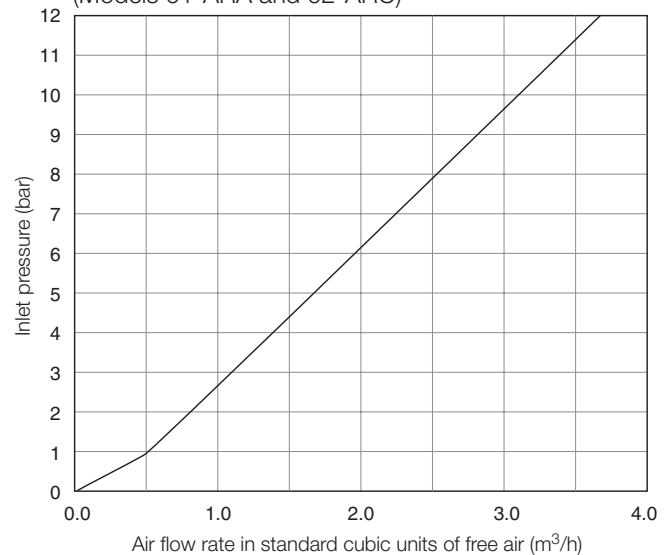
Plastic Body



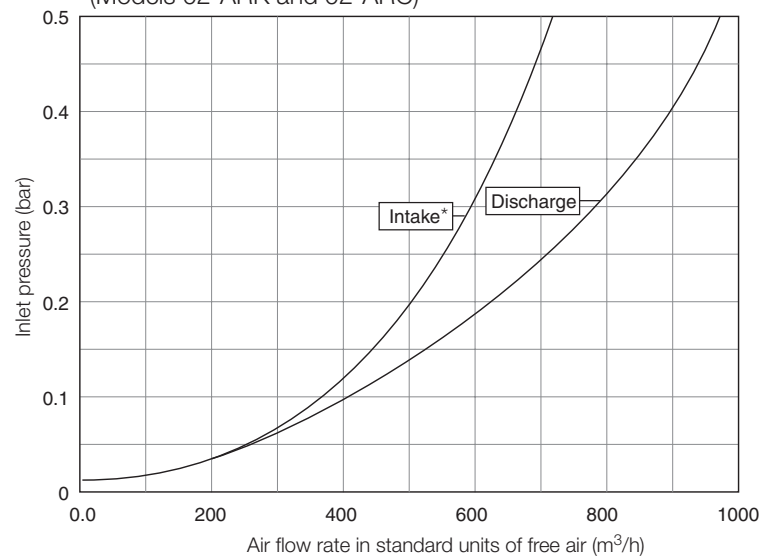
Metal Body

Performance Charts

Automatic orifice for release of air under pressure (Models 01-ARA and 02-ARC)



Kinetic large orifice for release of air under pressure (Models 02-ARK and 02-ARC)



* Intake graph refers to negative pressure value

Valve Model	Size	D (mm)	H (mm)	Weight (kg) (Plastic)	D (mm)	H (mm)	Weight (kg) (Metal)
Vacuum Breaker (ARV)	½"	25	43	0.011	N/A	N/A	N/A
Automatic (01-ARA)	1"	85	180	0.9	120	230	3.0
Kinetic (02-ARK)	2"	130	245	1.6	150	290	5.4
Combination (02-ARC)	2"	130	245	1.8	150	290	5.5