



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 together with smart design.
- Simple, compact and reliable product.

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

- 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.
- 1/2" Vacuum breaker (Model ARV), prevents drip lines from clogging in tough topographic conditions and in sub-surface drip-irrigation system.

Features

- Only one or two moving parts, depending on model
- Corrosion-resistant construction
- Pressure-balanced float, free of distortion or collapse
- Special drip-tight dynamic seal
- Exclusive kinetic design prevents floats from being blown shut
- Perfect sealing under system pressure as low as 0.1 bar, 1.5 psi

* Additional Hub to provide 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:

- 1" Automatic (Model 01-ARA)
- 2" Kinetic (Model 02-ARK)
- 2" Combination (Model 02-ARC)

End Connection:

- Threading BSP, NPT

Pressure Rating:

- Plastic body models: ISO PN 10
- Cast iron models: ISO PN 16; ANSI # 125

Operating Pressure Range:

- Plastic body: 0, 1-10 bar (1.5-150 psi)
- Iron body: 0, 1-16 bar (1.5-225 psi)

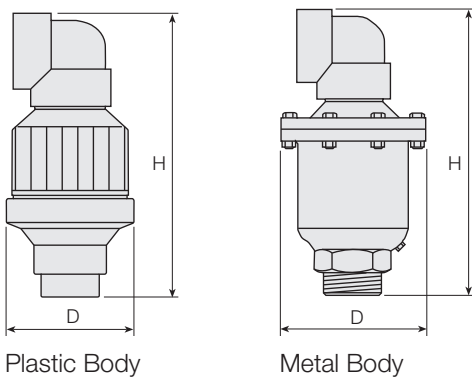
Temperature Range:

- 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

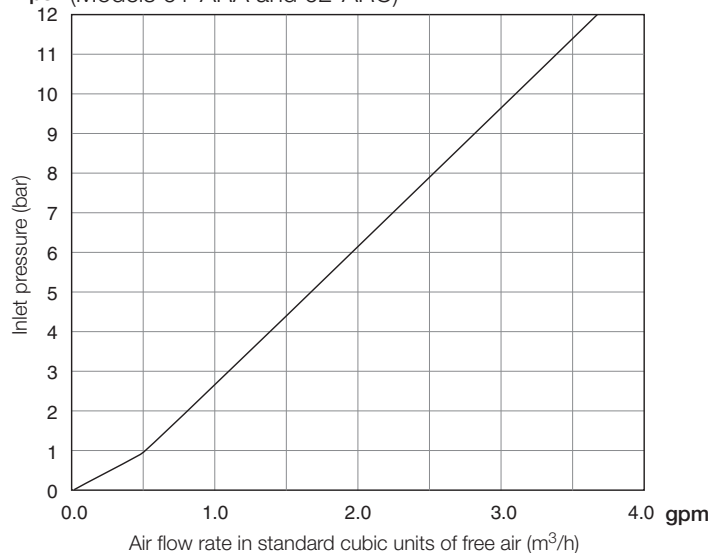
Dimensions and Weights



Performance Charts

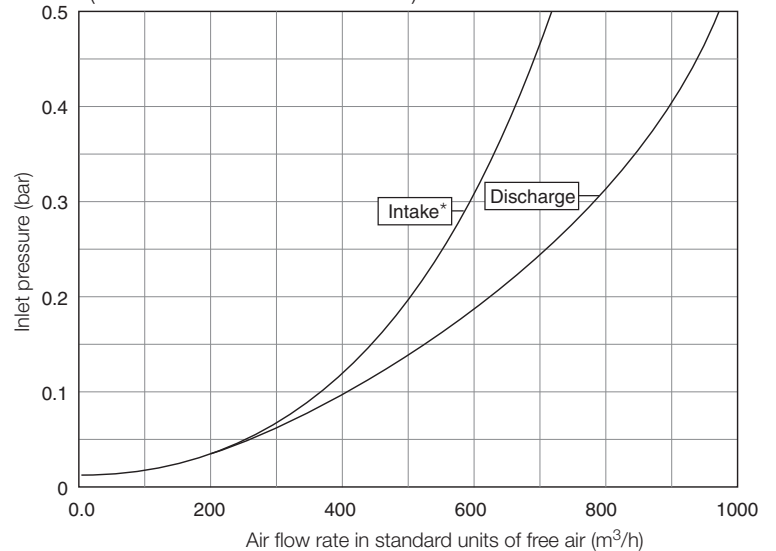
Automatic orifice for release of air under pressure

(Models 01-ARA and 02-ARC)



Kinetic large orifice for release of air under pressure

(Models 01-ARA and 02-ARC)



* Intake graph refers to negative pressure valves

Valve Model	Size	D (mm)	H (mm)	Weight (kg) (Plastic)	D (mm)	H (mm)	Weight (kg) (Metal)
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