

## Automatic Air Valve

### Model A10

BERMAD A10 is a high quality automatic air release valve that allows efficient release of air pockets from pressurized pipelines.

With its advanced design and automatic orifice, this valve provides excellent protection against air accumulation with improved sealing in low pressure conditions.

Specifically designed for irrigation applications.



### Typical Applications

- Irrigation Control Heads – Protection against air accumulation at filtration and fertilization stations and downstream of main control valves.
- Infield Systems – Protection against air accumulation near water meters and automatic regulators.
- Landscape Irrigation – Protection against air accumulation.
- Nursery irrigation - used in overhead manifolds maximising pipeline efficiency's

### Features & Benefits

- Large diameter automatic orifice – Higher flow rates.
- Dynamic sealing – Prevents leakage under low pressure conditions (0.1 bar).
- Compact, simple and reliable structure whose parts are fully corrosion, chemical and fertilizer resistant – Lower maintenance and increased life span.
- Factory approval and Quality Control – Performance and specification tested and measured with specialized test bench.
- Designed to be used in typical irrigation applications with use in dam water, channel water, river water and treated effluent.

### Additional Features

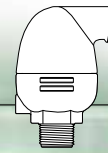
- Service port - DN3(1/8") plug fitted for pressure gauge connection, check point or test drain for air valve function.
- Female threaded outlet - DN20 (3/4").

### Principles of Operation

#### Pressurized Operation:

During pressurized operation of a pipeline, air accumulates in the upper part of the air valve chamber, causing the float to gravitate downwards. This in turn causes the automatic orifice to open, releasing the accumulated air.

Once the air is discharged, the water level and float rise, causing the automatic orifice to close.



### Valve Selection

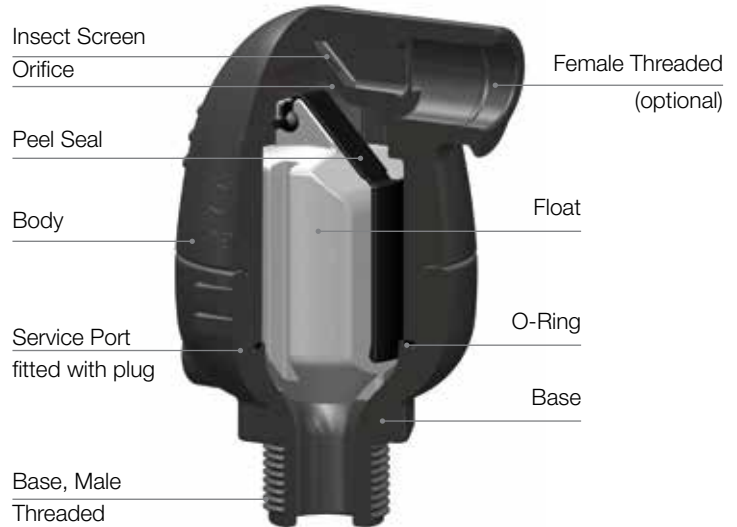
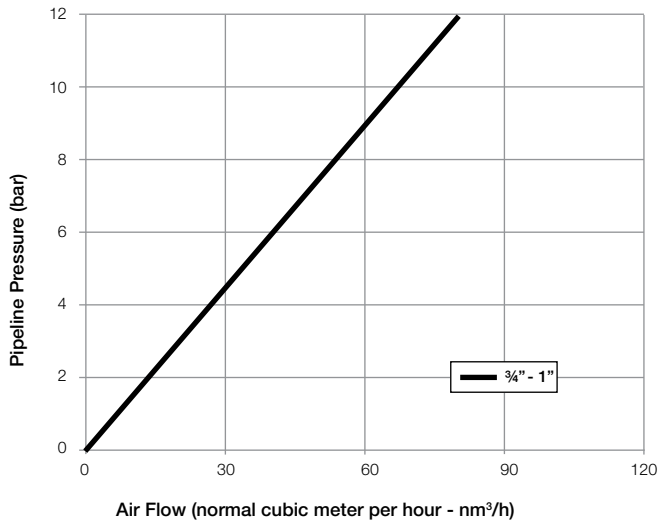
- Body material: Glass-reinforced Nylon
- Inlet sizes: DN20, DN25 (¾", 1")
- Connections: Threaded male BSPT
- Outle: Sideways

### Operational Data

- Pressure rating: PN12
- Operating pressure range: 0.1-12 bar
- Operating temperature: Water up to 60°C

### Air Flow Performance Charts

#### Air Release (Pressurized Operation)



### Orifice Specifications

Size		Automatic
DN	Inch	Ad[mm²]
20	¾"	8.8
25	1"	8.8

### Dimensions & Weights

Size			Side Outlet		
DN	Inch	Connection	D (mm)	H (mm)	Weight (Kg)
20	¾"	Threaded	95	136	0.35
25	1"	Threaded	95	136	0.36

### Parts List and Materials

	Description	Material
1	Base BSP /NPT	Glass Reinforced Nylon
2	Body	Glass Reinforced Nylon
3	Float	Polypropylene
4	Peel Seal	EPDM
6	O-ring	EPDM
7	Test Point	Stainless Steel
8	Service Port	POM

