



# COMBINATION AIR VALVE

## Glass Reinforced Nylon, PN10 / 150 PSI

### Model C15

BERMAD C15 is a high quality combination air valve for a variety of water networks and operating conditions. It relieves air during pipeline filling, allows efficient release of air pockets from pressurized pipes, and enables large volume air intake in the event of network draining.

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

#### Features & Benefits

- Straight flow body: Higher than usual flow rates.
- Dynamic Sealing: Prevents leakage under low pressure conditions (1.5 psi; 0.1 bar).
- Compact and simple structure, whose internal 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, including vacuum pressure conditions.

#### Typical Applications

- Irrigation networks: Protection against air accumulation and vacuum formation at elevations, slope change points and river crossings.
- Irrigation and landscape control heads: Protection against air accumulation and vacuum formation at filtration and fertilization stations and downstream of main control valves.

#### Additional Features & Accessories

- Service port (code P) fitted with ¼"; DN6 plug for pressure gauge connection, check point or test drain for air valve function.
- Test point (code T).

#### Inlet and Outlet Connections

- Inlets: Male threaded 2"; DN50
- Outlets: Sideways, female threaded 1.5"; DN40

#### Operational Data

- Pressure Rating: ISO PN10 or ISO PN12
- Minimum operating pressure: 0.1 bar
- Maximum operating pressure: 10 or 12 bar
- Media and operating temperature: Water, 1-60°C

#### Materials

- Body: Glass-Reinforced Nylon
- Float: Polypropylene, Glass-reinforced Nylon
- Elastomers: EPDM



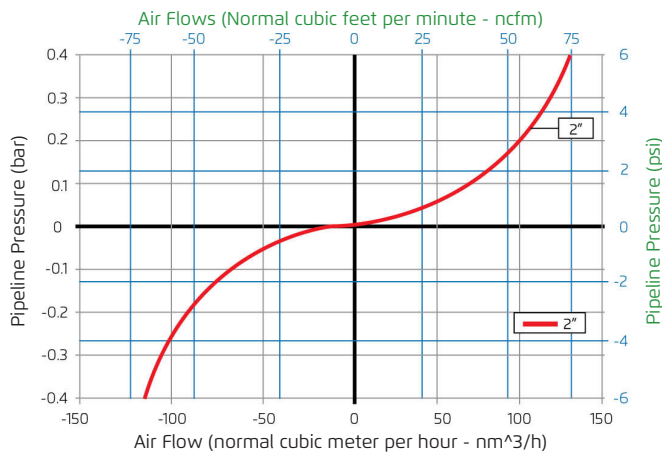


### Orifice Specifications

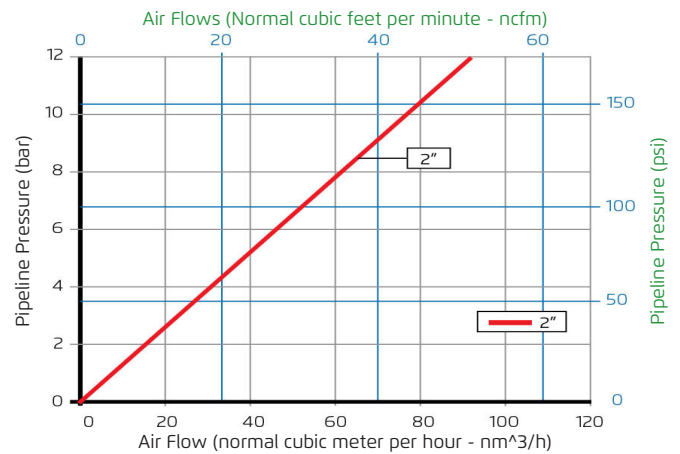
| Inlet Sizes | Automatic Orifice | Kinetic Orifice |       |
|-------------|-------------------|-----------------|-------|
|             | Area              | Diameter        | Area  |
| Inch; mm    | Sq mm             | mm              | Sq mm |
| 2"; DN50    | 5.4               | 20.2            | 320   |

### Air Flow Performance Charts

**Air Relief and Intake** (Pipeline Filling, Draining and Vacuum Conditions)



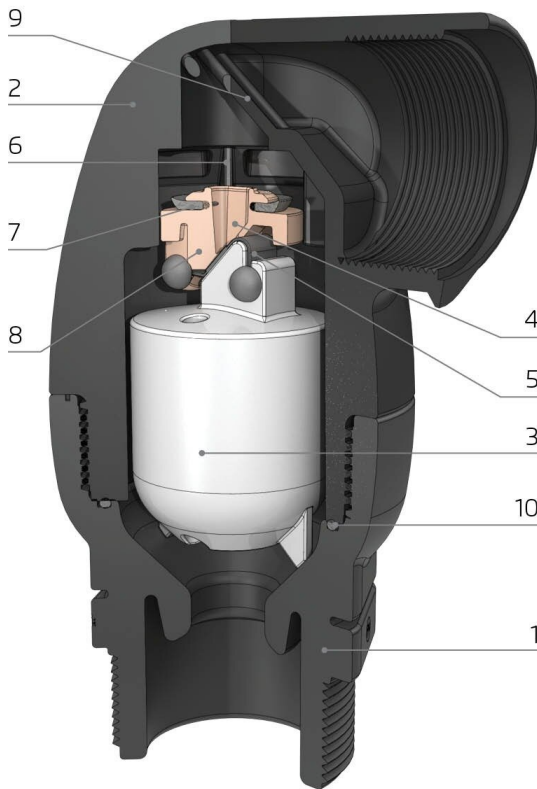
**Air Release** (Pressurized Operation)



- For higher automatic air release capacity, Please consult with BERMAD.
- Air relief and intake charts are based on actual measurements, measured in Bermad Air Flow test bench, according to EN-1074/4 and AS4883 standard and refer to side outlet. Use Bermad Air software for optimized Sizing & Positioning of Air Valves.

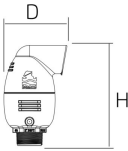


## Cutaway



- [1] Base
- [2] Body
- [3] Float
- [4] Auto Orifice
- [5] Auto Orifice Seal
- [6] Kinetic Orifice
- [7] Kinetic Orifice Seal
- [8] Kinetic Plug
- [9] Insect Screen
- [10] O-Ring

## Dimensions & Weights

|  |            |  |            |        |
|-------------------------------------------------------------------------------------|------------|-------------------------------------------------------------------------------------|------------|--------|
|                                                                                     |            | C15                                                                                 |            |        |
| Inlet Sizes                                                                         | Connection | Width (D)                                                                           | Height (H) | Weight |
| in; mm                                                                              |            | mm                                                                                  | mm         | Kg     |
| 2"; DN50                                                                            | Threaded   | 107                                                                                 | 164        | 0.60   |