



**AB VALVES GmbH**  
Manufacturer of Industrial Valves  
and Relevant Equipments

**Double Chamber - Double Orifice  
Triple Function Air Valves (AVDC)**





Double Chamber - Double Orifice Triple Function Air Valves (AVDC)

Size: DN 100 - 200 mm  
Pressure: PN 10 - 40 bars

Flange: drilling according to DIN EN 1092-2 (DIN 2501)

Product features:

The material of sealing rubber made of EPDM or NBR. The bolts made of galvanized steel or stainless steel (A2). Internal material parts are made of stainless steel. The design is reliable with high capacity and also small dimensions. This air valve can be produced with internal shut off valve or without it, according to customer order. In case of using air valve without internal shut off system it is recommended to install an isolating valve under air valve.

Advantages:

- Reliable design
- Equipped with shut-off valve for services during operation
- Float made of stainless steel
- Screws and nuts of corrosion resistant steel

Application:

These valves are designed for entry and exit of Air in pipelines (Double chamber) and installation is by flanges. Air valves (Double chamber) can be used for potable water, row water, filling and discharging pipelines and also for air evacuating in startup the pipeline. The pressure can be between 1 up to 25 bars and temperature up to 70°C. These valves are usually installed at the peak of pipelines and will be installed before or after of other valves.

Corrosion protection:

electrostatic epoxy powder coating with min. 250 micron thickness.

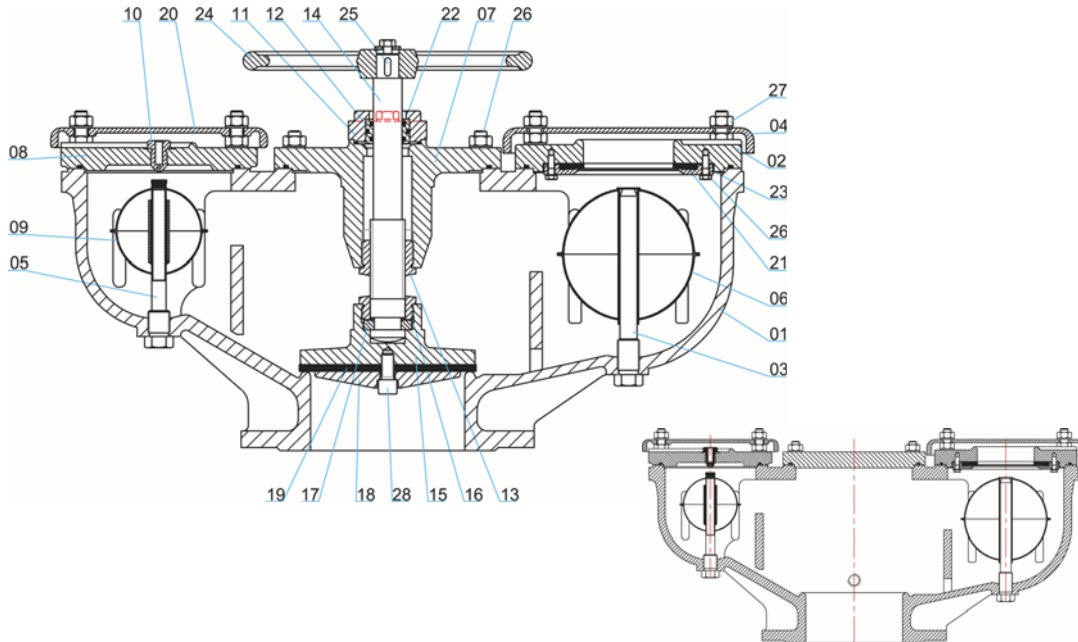
Testing:

| Hydrostatic test Pressure (bar) according to DIN EN 12266-1 |               |      |
|-------------------------------------------------------------|---------------|------|
| Nominal Pressure<br>PN (bar)                                | Test Pressure |      |
|                                                             | Body          | Seat |
| 10                                                          | 17            | 11   |
| 16                                                          | 25            | 17.6 |
| 25                                                          | 37.5          | 27.5 |

Minimum permissible tightness pressure is 1 bar



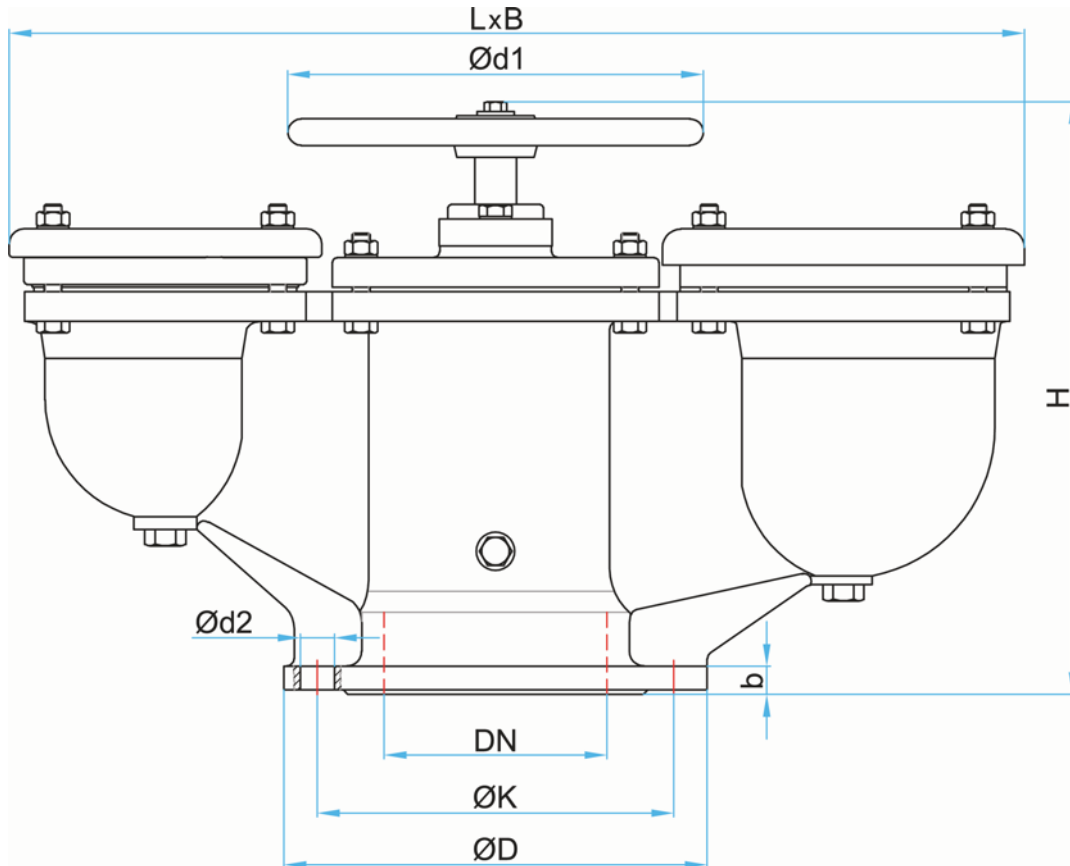
## Parts list



| Part | Description       | Material          | Spare parts | Part | Description          | Material              | Spare parts |
|------|-------------------|-------------------|-------------|------|----------------------|-----------------------|-------------|
| 1    | Body              | EN-GJS-400-15 (1) |             | 16   | Retainer nut         | BRASS                 |             |
| 2    | Cover             | EN-GJS-400-15 (1) |             | 17   | Washer               | BRASS                 |             |
| 3    | Float driver      | 1.4301            |             | 18   | Disc                 | EN-GJS-400-15 (1)     |             |
| 4    | Cover             | EN-GJS-400-15 (1) |             | 19   | Retainer ring        | EPDM / NBR            | ●           |
| 5    | Float driver      | 1.4301            |             | 20   | Cover                | EN-GJS-400-15 (1)     |             |
| 6    | Float             | 1.4301            | ●           | 21   | Seal                 | EPDM / NBR            | ●           |
| 7    | Cover             | EN-GJS-400-15 (1) |             | 22   | O-ring               | EPDM / NBR            | ●           |
| 8    | Cover with nuzzle | EN-GJS-400-15 (1) |             | 23   | Retainer             | EN-GJS-400-15 (1)     |             |
| 9    | Float             | 1.4301            | ●           | 24   | Hand wheel           | EN-GJS-400-15 (1)     |             |
| 10   | Nuzzle            | BRASS             | ●           | 25   | Key                  | St 60                 |             |
| 11   | Sealing Cover     | EN-GJS-400-15 (1) |             | 26   | Hexagonal Head Screw | A2                    |             |
| 12   | Sealing bush      | BRASS             |             | 27   | Nut                  | A2 / Galvanized Steel |             |
| 13   | Stem nut          | BRASS             |             | 28   | Socket screw         | A2                    |             |
| 14   | Stem              | 1.4021            |             | 29   | Stud                 | A2 / Galvanized Steel |             |
| 15   | Retainer          | EN-GJS-400-15 (1) |             | 30   | Hexagonal Head Screw | A2 / Galvanized Steel |             |

(1) EN-GJS-500-7 can be product as requested.

## Dimensions and weight

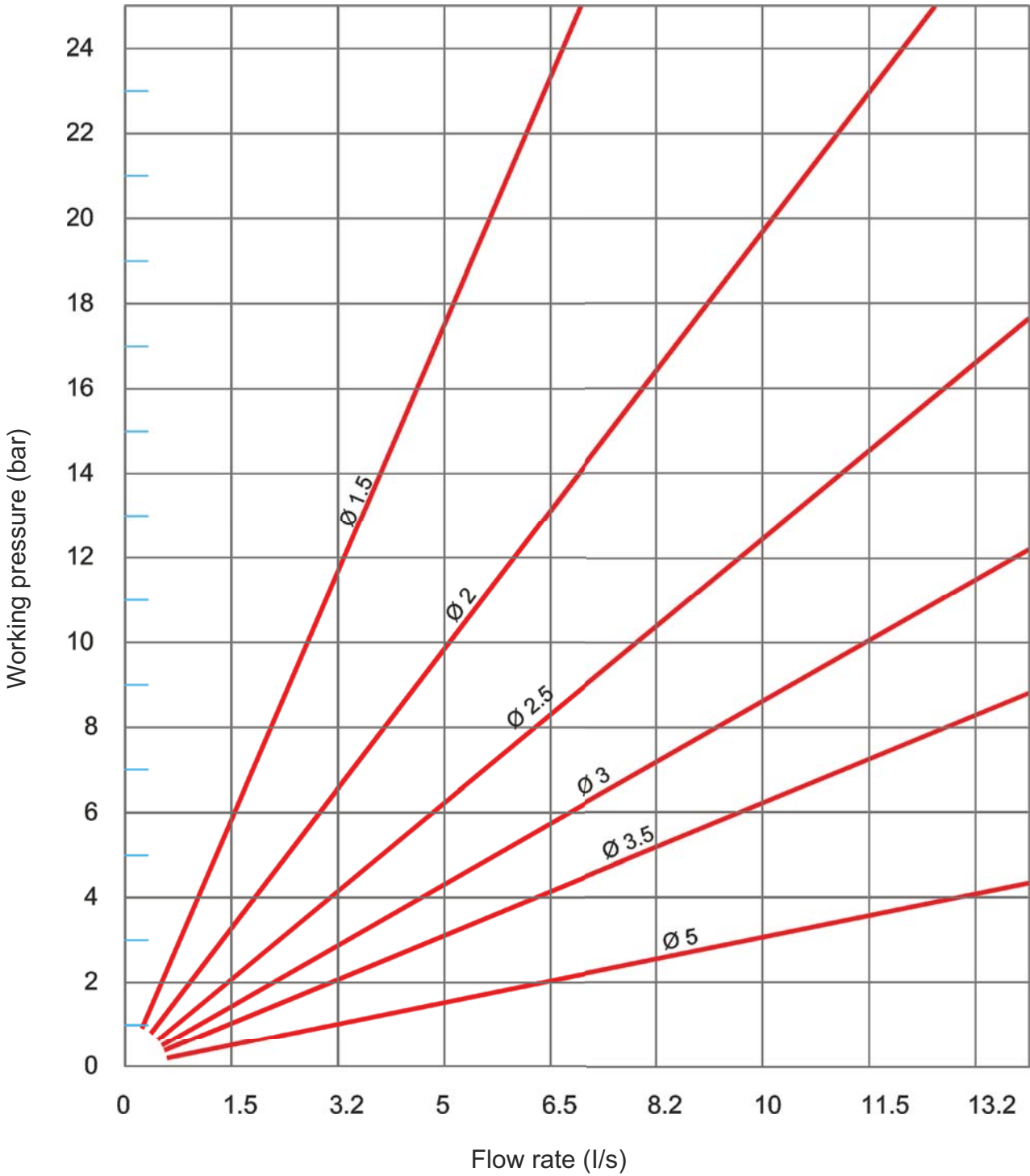


• DIN EN 1092 - 2 (DIN 2501)

|       | DN  | • ØD | • ØK | • Ød2 | • n | • b | • Ød1 | H   | L × B     | ~W  | ~V              |
|-------|-----|------|------|-------|-----|-----|-------|-----|-----------|-----|-----------------|
|       | mm  | mm   | mm   | mm    |     | mm  | mm    | mm  | mm        | Kg  | dm <sup>3</sup> |
| PN 10 | 100 | 220  | 180  | 19    | 8   | 19  | 200   | 240 | 560 × 210 | 71  | 10              |
|       | 150 | 285  | 240  | 23    | 8   | 19  | 280   | 330 | 684 × 220 | 103 | 15              |
|       | 200 | 340  | 295  | 23    | 8   | 20  | 280   | 435 | 830 × 284 | 170 | 15              |
| PN 16 | 100 | 220  | 180  | 19    | 8   | 19  | 200   | 240 | 560 × 210 | 71  | 10              |
|       | 150 | 285  | 240  | 23    | 8   | 19  | 280   | 330 | 684 × 220 | 103 | 15              |
|       | 200 | 340  | 295  | 23    | 12  | 20  | 280   | 435 | 830 × 284 | 170 | 15              |
| PN 25 | 100 | 235  | 190  | 23    | 8   | 19  | 200   | 240 | 560 × 210 | 71  | 10              |
|       | 150 | 300  | 250  | 28    | 8   | 20  | 280   | 330 | 684 × 220 | 103 | 15              |
|       | 200 | 360  | 310  | 28    | 12  | 22  | 280   | 435 | 830 × 284 | 170 | 15              |



Amounts of air release under working pressure:

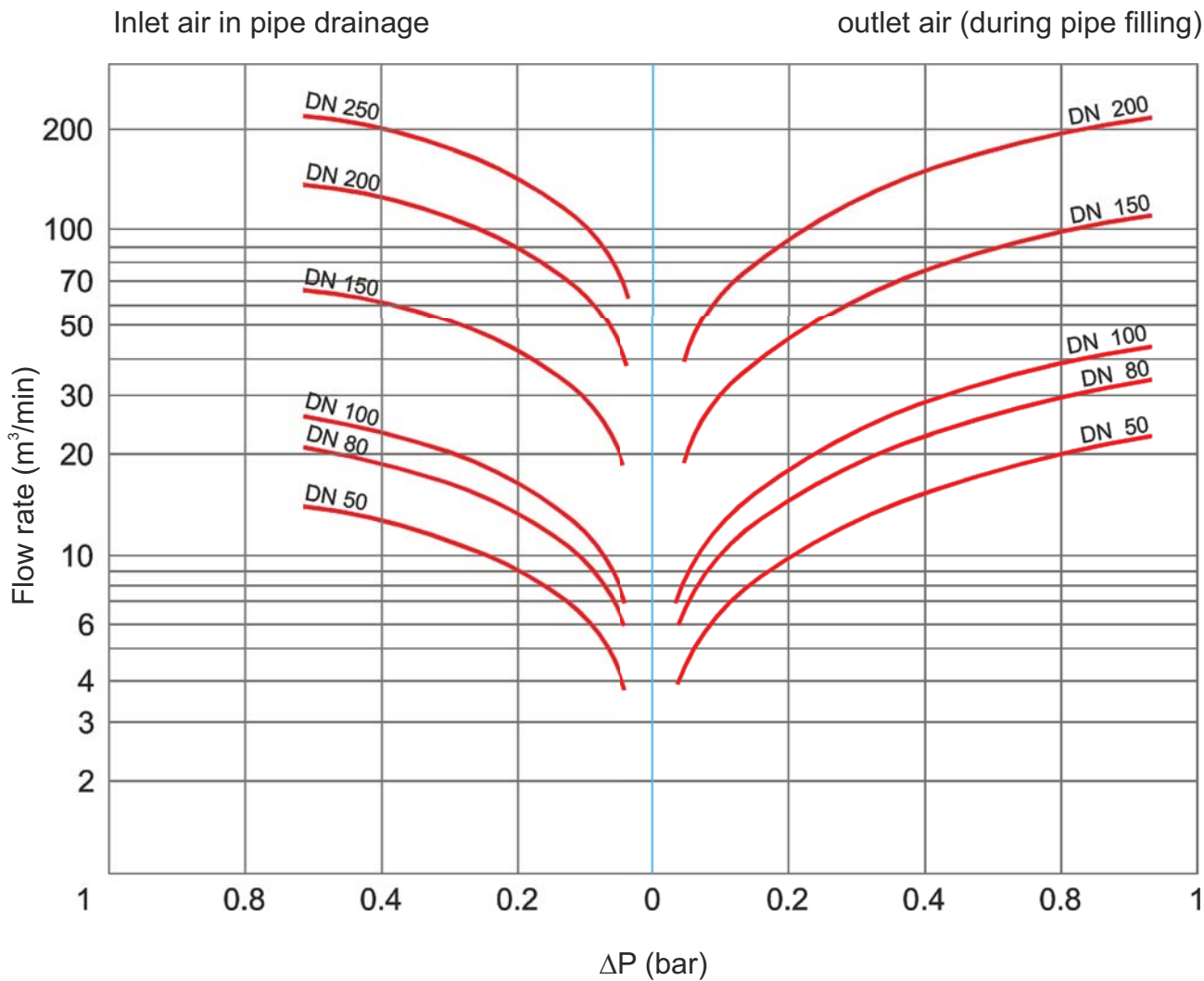


Large and small orifices Area:

| DN (mm)             | 100  | 150  | 200   |
|---------------------|------|------|-------|
| Large orifice (mm²) | 1925 | 6082 | 12272 |
| Small orifice (mm²) | 1.7  | 1.7  | 1.7   |



Air flow for the large chamber





## **AB VALVES' PRODUCTS**

**Butterfly Valves Flange Type (BVF)**  
**Butterfly Valves Wafer Type (BVW)**  
**Butterfly Valves Wafer Type for Sea Water (BVS)**  
**Gate Valves (GV)**  
**Valves for Special Applications**  
**Air Valves (AV)**  
**Hydrants (HT)**  
**Automatic Control Valves (RV)**  
**Non-Return Valves (NV)**  
**Strainers (STR)**  
**Accessories**  
**Actuators**



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