



**PN 10/16 - DN 50...200**

KAT-A 1917

### Product characteristics and benefits

- With flange end acc. to EN 1092-2
- Single chamber air valve in compact design
- High discharge capacity for large quantities of air
- Triple function air valve
- Venting function:
  - Large orifice to vent high quantities of air during draining the pipeline
  - Large orifice to release high quantities of air during filling the pipeline
  - Small orifice to release low quantities of air during operation under pressure
- Outlet female threaded acc. to DIN ISO 228 G 1 ¼", G 2 ½"
- Minimum operation pressure: 0.1 bar
- Low weight for easy handling
- Easy to maintain, all internal functional parts can be removed together
- Incrustation- and corrosion-free due to polyethylene PE housing

### Materials

- Body: Polyethylene PE 100
- Bonnet: Stainless steel 1.4308
- Inner parts: Plastic (POM/PVC)
- Float: Polyethylene PE 100
- Sealing: NBR
- Cover flange and guide screws: Stainless steel
- Loose flange for flange connection: Steel with polypropylene (PP) coating

### Versions

- Standard version as described
- For flange dimensions acc. to ANSI class150
- Higher temperatures possible at reduced pressure
- With non-return valve
- Lockable in open position for purging

### Field of Application

- Chamber installation
- Installation in plants



### Tests and approvals

- Final inspection test acc. to EN 12266 (DIN 3230 Part 4)

### Note

For valve dimensioning the free VAG UseCAD® software is available on request. Operating temperature 20° C. Reduced maximum admissible operating pressure at higher temperatures (50° C max)

For proper installation and safe operation please ensure that you read the installation and operation instructions: KAT-B 1917

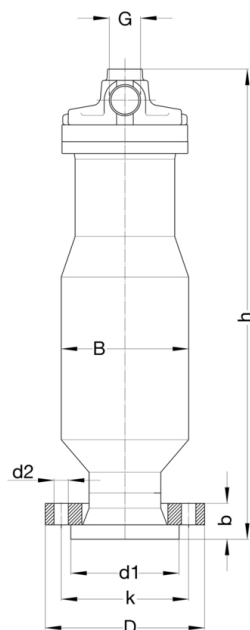
### Field of application

| DN       | PN | Maximum operating pressure<br>[bar] | Maximum operating temperature for neutral liquids<br>[°C] |
|----------|----|-------------------------------------|-----------------------------------------------------------|
| 50...200 | 16 | 16                                  | 20                                                        |
| 200      | 10 | 10                                  | 20                                                        |

### Pressure test acc. to EN 12266

| Test pressure body with water<br>[bar] | Test pressure seat with water<br>[bar] |
|----------------------------------------|----------------------------------------|
| 24                                     | 17.6                                   |
| 16                                     | 11                                     |

**Drawing**



**Technical data**

**PN 16**

| DN                 |                   | 50     | 80     | 100    | 150    | 200    |
|--------------------|-------------------|--------|--------|--------|--------|--------|
| G Screw connection | [inch]            | 1 1/4" | 1 1/4" | 1 1/4" | 2 1/2" | 2 1/2" |
| B                  | [mm]              | 160    | 160    | 160    | 225    | 225    |
| D                  | [mm]              | 165    | 200    | 220    | 285    | 340    |
| b                  | [mm]              | 35     | 38     | 38     | 50     | 63     |
| d1                 | [mm]              | 102    | 136    | 156    | 212    | 268    |
| d2                 | [mm]              | 18     | 18     | 18     | 22     | 22     |
| h                  | [mm]              | 665    | 595    | 590    | 700    | 690    |
| k                  | [mm]              | 125    | 160    | 180    | 240    | 295    |
| No. of holes       |                   | 4      | 8      | 8      | 8      | 12     |
| Weight approx.     | [kg]              | 10.00  | 9.00   | 10.00  | 23.00  | 25.00  |
| Volume approx.     | [m <sup>3</sup> ] | 0.020  | 0.020  | 0.020  | 0.040  | 0.040  |

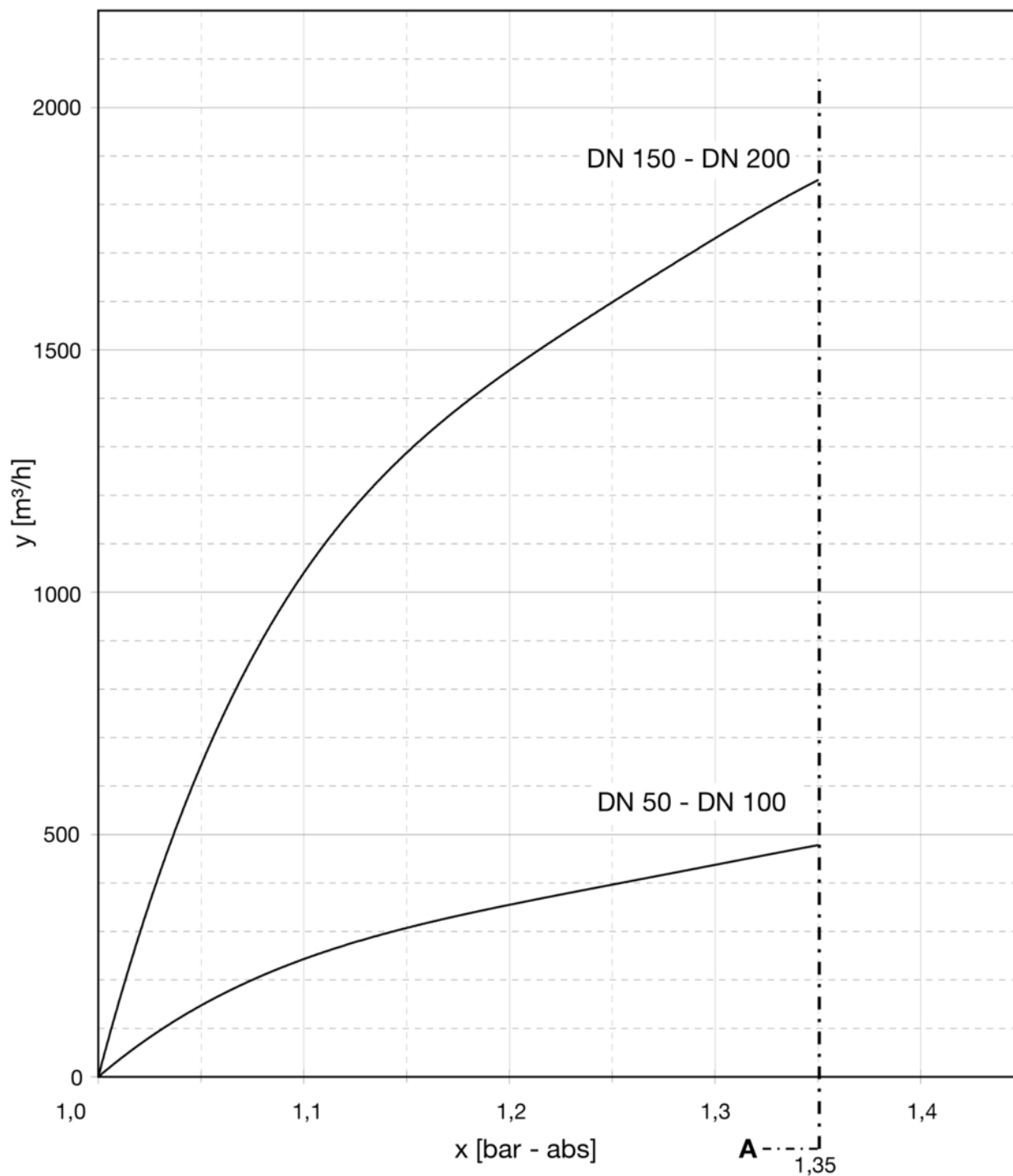
**PN 10**

| DN                 |                   | 200    |
|--------------------|-------------------|--------|
| G Screw connection | [inch]            | 2 1/2" |
| B                  | [mm]              | 225    |
| D                  | [mm]              | 340    |
| b                  | [mm]              | 63     |
| d1                 | [mm]              | 268    |
| d2                 | [mm]              | 22     |
| h                  | [mm]              | 690    |
| k                  | [mm]              | 295    |
| No. of holes       |                   | 8      |
| Weight approx.     | [kg]              | 25.00  |
| Volume approx.     | [m <sup>3</sup> ] | 0.040  |



### Further information

#### Rate of air release in dependence of the internal pressure



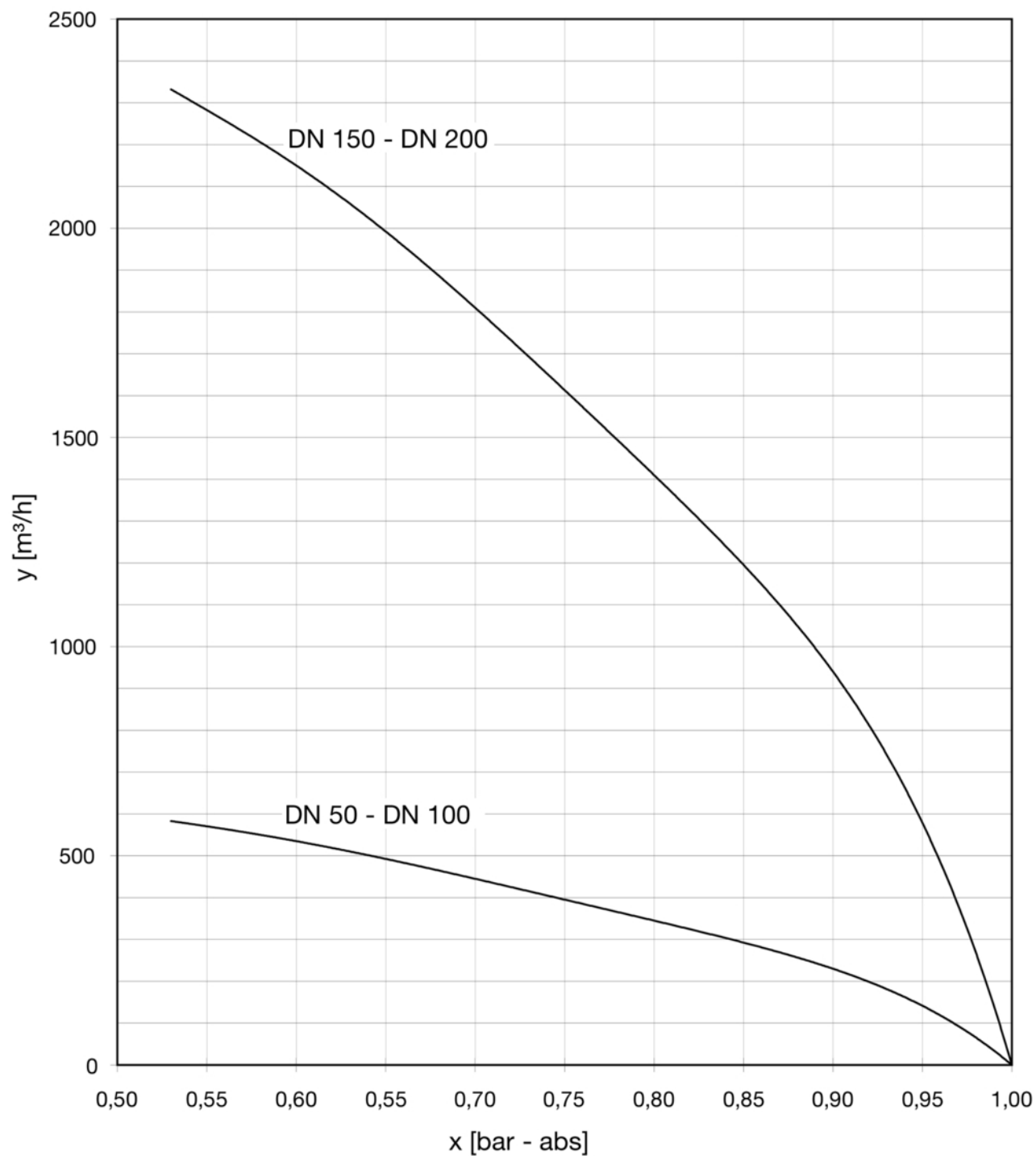
x: Internal pressure p [bar - absolute]

y: Air release rate Q [m³/h]



**Further information**

**Rate of air intake in dependence of the internal pressure**



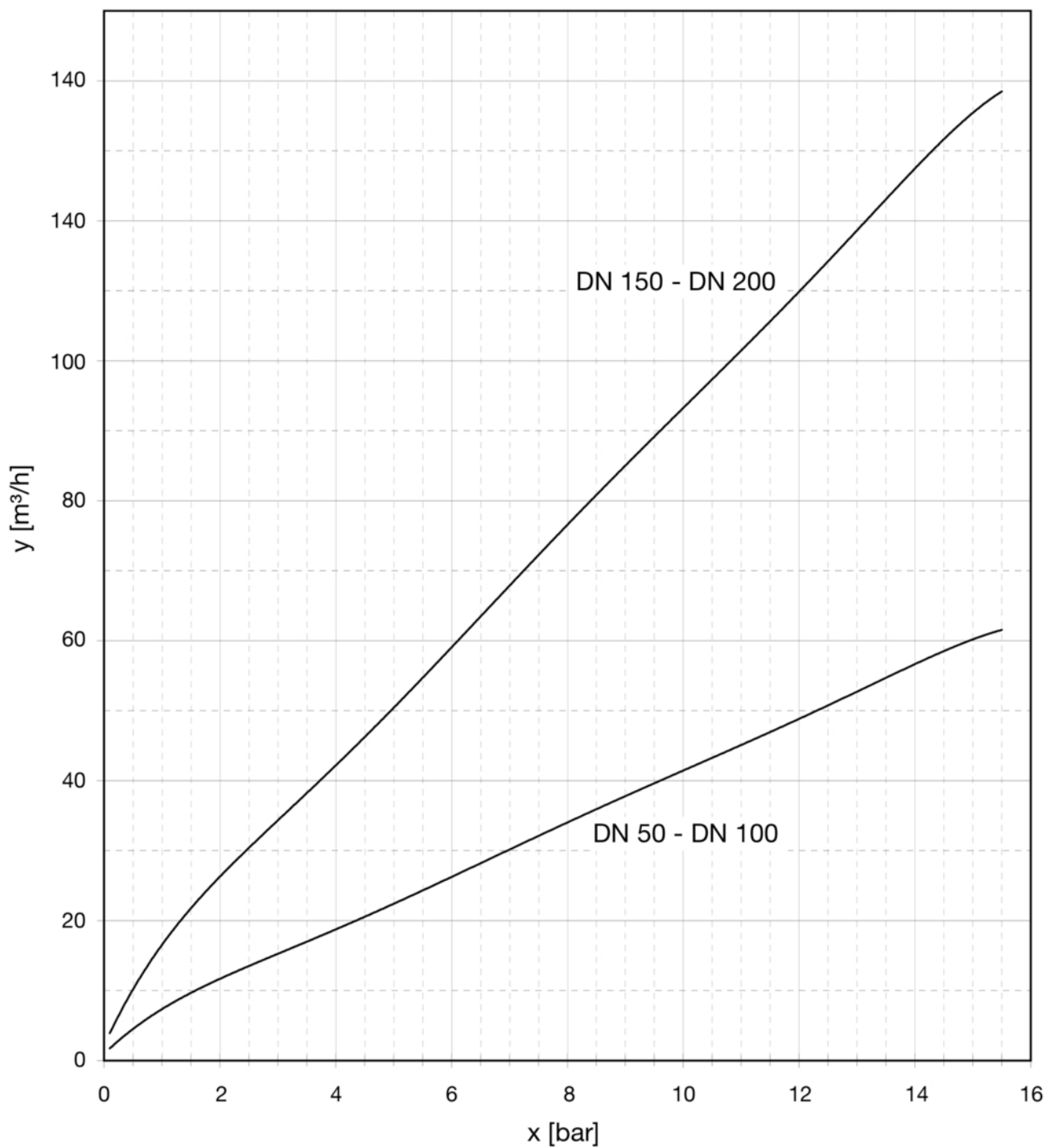
**x: Internal pressure p [bar - absolute]**

**y: Air inflow rate Q [m³/h]**



### Further information

#### Rate of air release at full internal pressure



**x:** Operating pressure  $p$  in pipeline [bar]

**y:** Air release rate  $Q$  [m³/h]