

## Blow down valve type KAVx R1-N

### Application and function

The valve is used to blow down and / or to drain steam boilers. The conception of the valve enables a fast opening necessary for the blowing down.

This fast opening causes a suction in the boiler whereby deposits and possible solids are flushed out of the boiler.

### Technical basic equipment

- **KAV1 R1-N** Blow-down valve with handlever.; A later equipment with pneumatic actuator is possible without problems.
- **KAV2 R1-N** Blow-down valve with pneumatic actuator for automatic blowing down in connection with the program-controlled IGEMA magnetic valve type PGM
- Construction as globe valve with flange connection or welding end according to DIN
- Quick closing mechanism for fast closing and opening
- Adjustable stuffing box
- Clamp-in valve seat
- Possibility to lock the valve manually in open position
- Possibility to operate the pneumatic actuator with the control media air or water

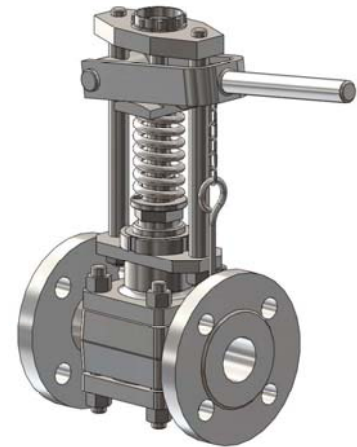
Materials: pressure holding parts: steel for high-temperature service  
Spindle, seat and cone: stainless steel  
Yoke: carbon steel  
Lever: carbon steel

### Available (optional) versions

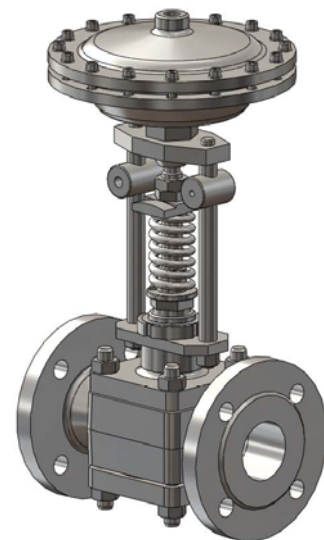
- Other process connections as per DIN or ANSI on request

### Technical data

|                       |          |     |     |
|-----------------------|----------|-----|-----|
| Allowable pressure    | PS [bar] | 32  | 50  |
| Allowable temperature | TS [° C] | 239 | 265 |



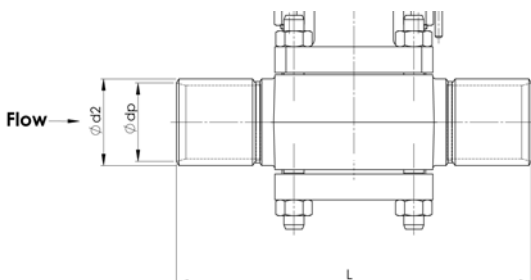
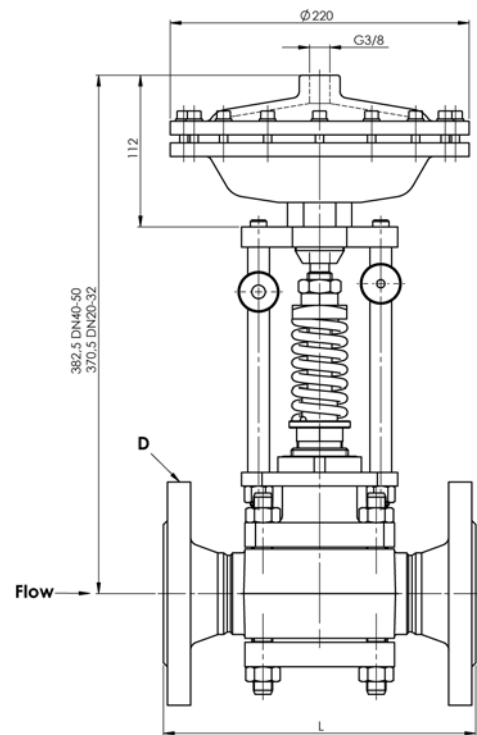
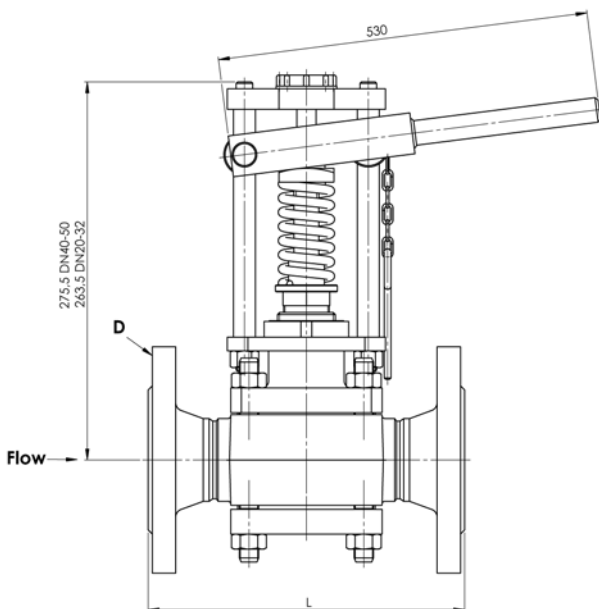
KAV1 R1-N



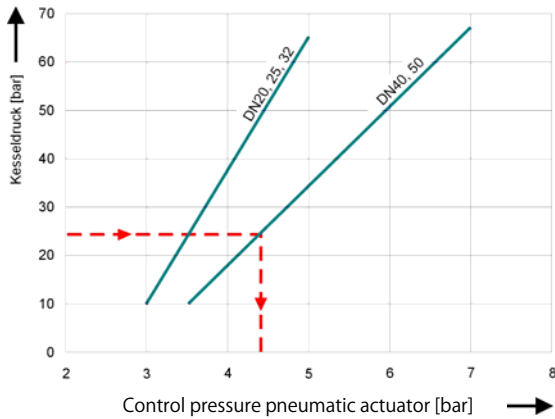
KAV2 R1-N

Dimensions

| Version with flange                        |                    |              |                  |                  |
|--|--------------------|--------------|------------------|------------------|
| PS [bar]                                   | Connecton flange D | Contact face | Dimension L [mm] |                  |
| 32   | DN 20 DIN 2635     | DIN 2626-C   | 160              |                  |
|  | DN 25 DIN 2635     |              | 160              |                  |
|  | DN 32 DIN 2635     |              | 180              |                  |
|  | DN 40 DIN 2635     |              | 200              |                  |
|  | DN 50 DIN 2635     |              | 230              |                  |
| 50   | DN 25 DIN 2637     | DIN 2526-E   | 190              |                  |
|  | DN 40 DIN 2637     |              | 220              |                  |
| Version with welding end as per DIN 3239-2 |                    |              |                  |                  |
| PS [bar]                                   | DN                 | ø dp [mm]    | ø d2 [mm]        | Dimension L [mm] |
| 32   | 20                 | 22           | 28               | 160              |
|  | 25                 | 28,5         | 34               | 160              |
|  | 40                 | 43           | 49               | 210              |
| 50   | 25                 | 28,5         | 34               | 160              |
|  | 40                 | 42           | 61               | 210              |



**Pneumatic actuator, required control pressure:**



**Reading example:**

Boiler pressure: 25 bar

Nominal diameter of valve: DN40

**Result: Control pressure 4,3 bar**

The determined control pressure may be exceeded by max. 10%.

**Hint:**

Filling volume of pneumatic actuator per blowing down process 0,55 l. The pneumatic actuator may only be operated with a control pressure of **max. 7 bar** to exclude a destruction of the pneumatic actuator or the diaphragm.

**Material:**

|           |                 |
|-----------|-----------------|
| Case      | cast aluminium  |
| Spindle   | stainless steel |
| Diaphragm | rubber          |



Position of the handle: in flow direction (see drawing). Other positions of the lever (turned by 90° ) must be fixed in case of order.

Standard values for frequency and duration of blowing down: see Operating Instructions

**Installation example**

