



Bottom blow down valve type

KAV1 R1-N, KAV2 R2-N

Application and function

The valve is used to blow down and / or to drain of steam boilers. The conception of the valve enables a fast opening necessary for the blow down. This fast opening causes a vortex in the boiler whereby deposits and possible solids are flushed out of the boiler.

Technical basic equipment

- KAV1 R1-N Bottom blow-down valve with hand lever.; A later equipment with pneumatic actuator is possible without problems.
- KAV2 R1-N Bottom blow-down valve with a diaphragm actuator for automatic blowing down in connection with the program-controlled IGEMA solenoid-timer valve type PGM
- Construction as globe valve with flanged connection up to max. DN 50 as per DIN EN1092-1, or welding end up to max. DN 50 as per DIN EN 12627
- Quick closing mechanism for fast closing and opening
- Sealing package consisting of PTFE V-ring seals
- Screwed-in valve seat
- Possibility of manual locking of the valve in open position
- Operation of the diaphragm actuator with air or water
- Materials:
 - all pressurised parts as well as yoke and lever made of heat-resistant steel
 - Stem, seat and cone made of stainless steel
 - Diaphragm actuator housing made of aluminium



KAV1 R1-N



KAV2 R1-N

Available (optional) versions

- Other process connections as per DIN or ANSI on request

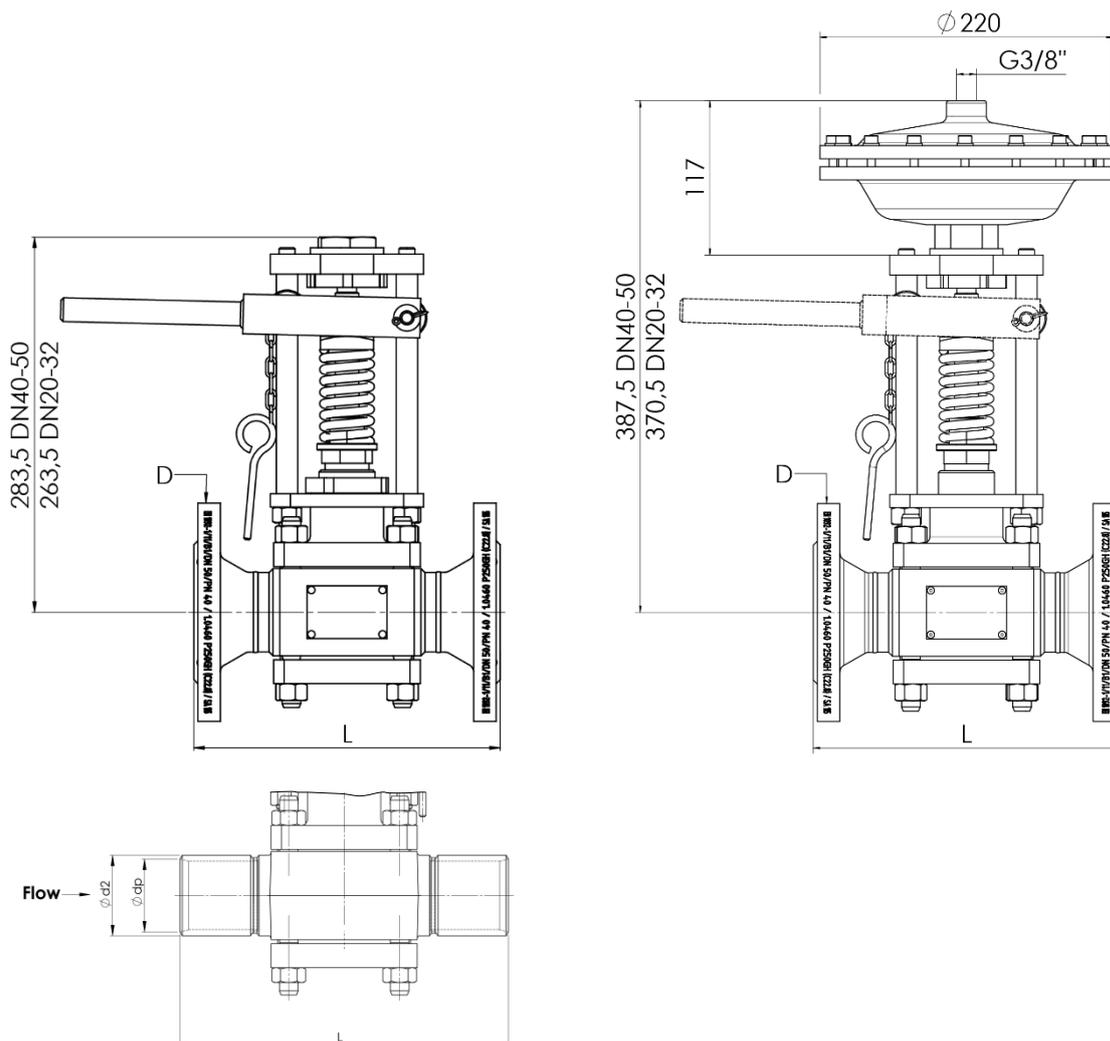
Technical data

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

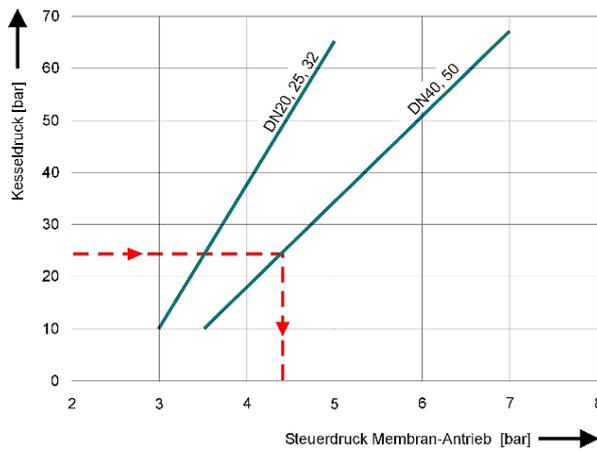
Dimensions

| Version with welding flange | | | |
|-----------------------------|---------------------|--------------|------------------|
| PS [bar] | Connection flange D | Contact face | Dimension L [mm] |
| 32 | DN 20 DIN EN1092-1 | Form B1 | 160 |
| | DN 25 DIN EN1092-1 | | 160 |
| | DN 32 DIN EN1092-1 | | 180 |
| | DN 40 DIN EN1092-1 | | 200 |
| | DN 50 DIN EN1092-1 | | 230 |
| 50 | DN 25 DIN EN1092-1 | | 190 |
| | DN 40 DIN EN1092-1 | | 220 |

| Version with welding end as per DIN EN 12627 | | | | |
|--|----|-----------|-----------|------------------|
| 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 | 54,5 | 61 | 250 |
| 50 | 25 | 28,5 | 34 | 160 |
| | 40 | 42 | 61 | 210 |



Pneumatic actuator, required control pressure



Example given:

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%.

Note:

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

Material:

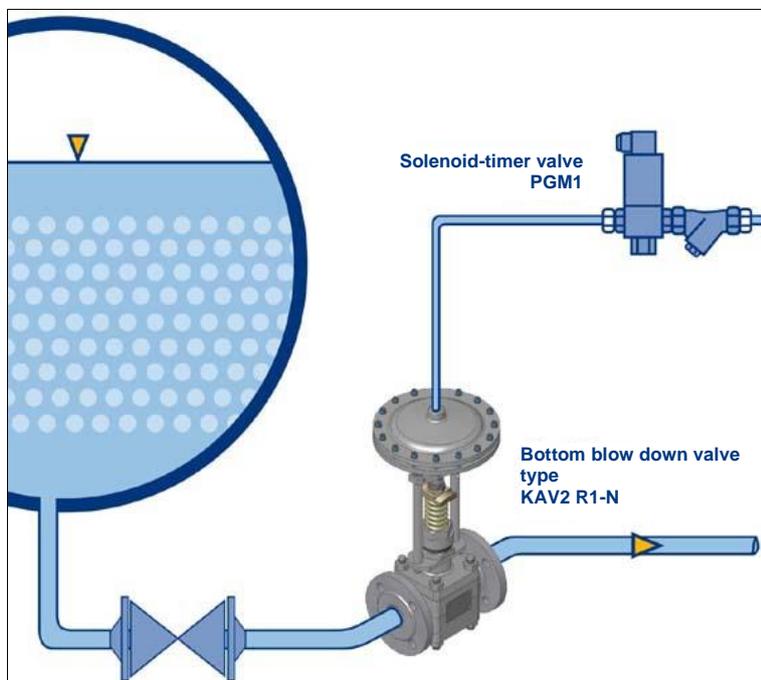
- Case - cast aluminium
- Stem - stainless steel
- Diaphragm - rubber



Position of the hand lever: 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 blow down: see Operating Instructions

Installation example



Digital Documentation

