



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

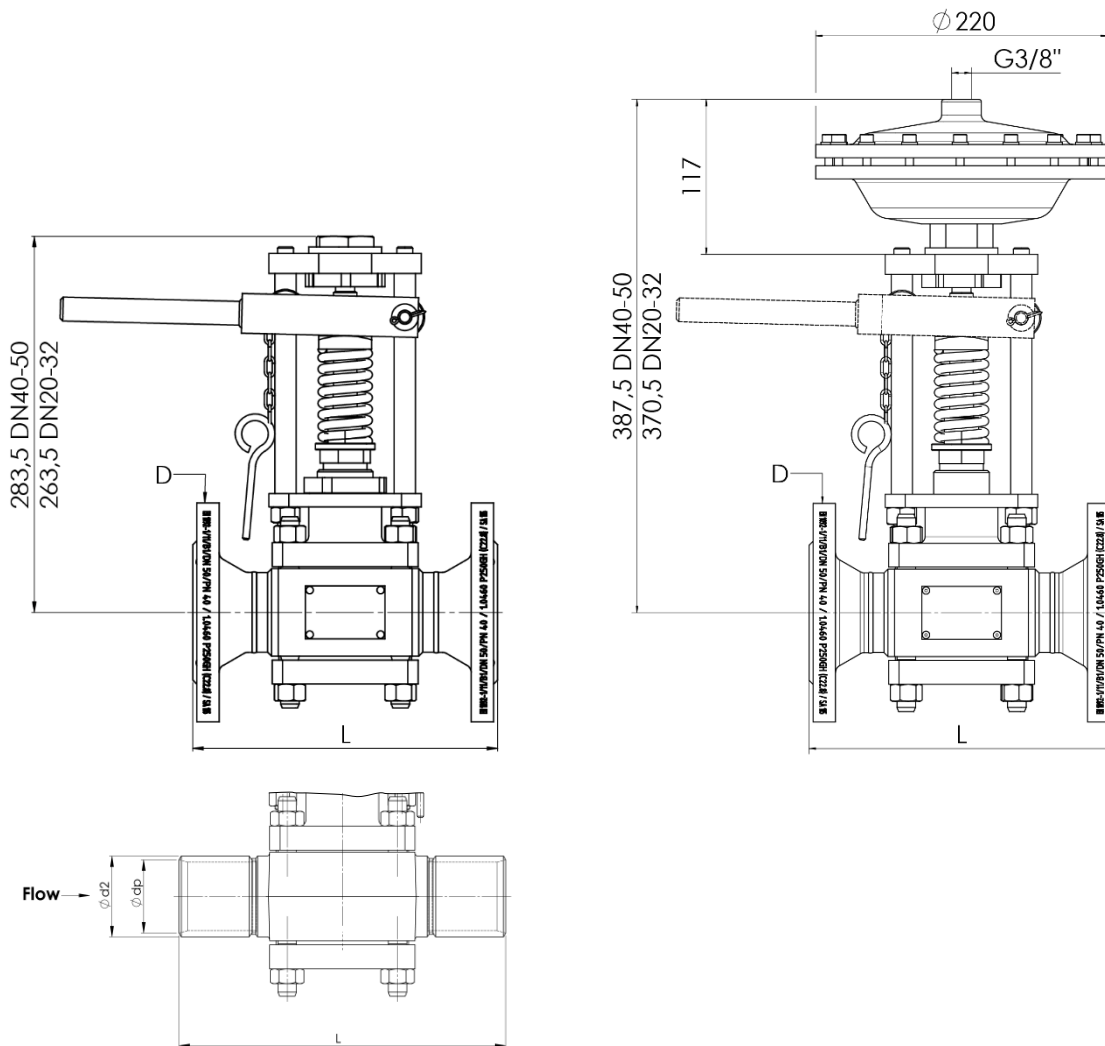
Technical data

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

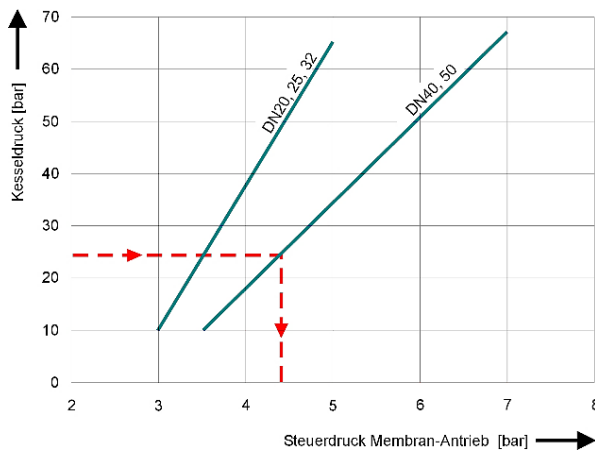
Dimensions

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

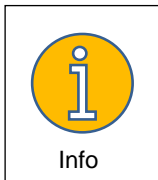
The determined control pressure may be exceeded by max. 10%.

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

Possible valve hand lever positions

1. Hand lever against the direction of flow (Standard)
2. Hand lever turned 90° to the right
3. Hand lever in flow direction
4. Hand lever turned 90° to the left

