

2-PORT FLANGED SEAT VALVES PN 25 (1...120 °C), PN 20 (120...200 °C)

VE 2.. Eng.



- GGG 40.3 cast iron body; stainless steel spindle, seat and plug
- Flanged connections PN 25 (ISO 7005/2)



1. APPLICATION

VE.. valves are designed for controlling the flow of hot or superheated water (max. 200°C) or steam (max.6 bar) in heating or air-conditioning plants.
Powered by linear actuators of type CLF ... or CEF D16 (with spring-return closure).

2. OPERATION

The control component of the valve is a shaped plug, which, operated by the linear movement of the spindle, controls the flow between the A port (input) and the AB port (output).

3. MODELS

Code	DN body	Kvs ⁽¹⁾ m ³ /h	Run mm.	Suitable actuators						
				CLF 16.. 1,000 N 11 s/mm		CLF 04.. 600 N 3 s/mm		CEF D16.. ⁽⁵⁾ 450 N 11 s/mm		
				bar ⁽²⁾	s ⁽³⁾	bar ⁽²⁾	s ⁽³⁾	bar ⁽²⁾	bar ⁽⁴⁾	s ⁽³⁾
VE 225	25	10	7	10	77	8	21	6	6	77
VE 232	32	16	10	9	110	6	30	6	6	110
VE 239	40	20	10	6	110	6	30	6	6	110
VE 248	50	25	10	6	110	6	30	6	6	110

4. ACCESSORIES

Code	Description
ADS E12	Actuator spacing collar (12 cm) for fluid with temperature above 150°C.

100 kPa = 10 mWG = 1 bar

(1) : Kvs – Flow coefficient: Flow in m³/h with valve open and pressure drop of 100 kPa.

(2) : bar – Maximum differential pressure Δp max. with hot or superheated water permitted by actuator.

(3) : s – Time in seconds necessary for actuator to make a complete valve run.

(4) : bar – Maximum differential pressure Δp max. with steam permitted by actuator.

(5) : actuator with spring-return closure.

5. TECHNICAL DATA

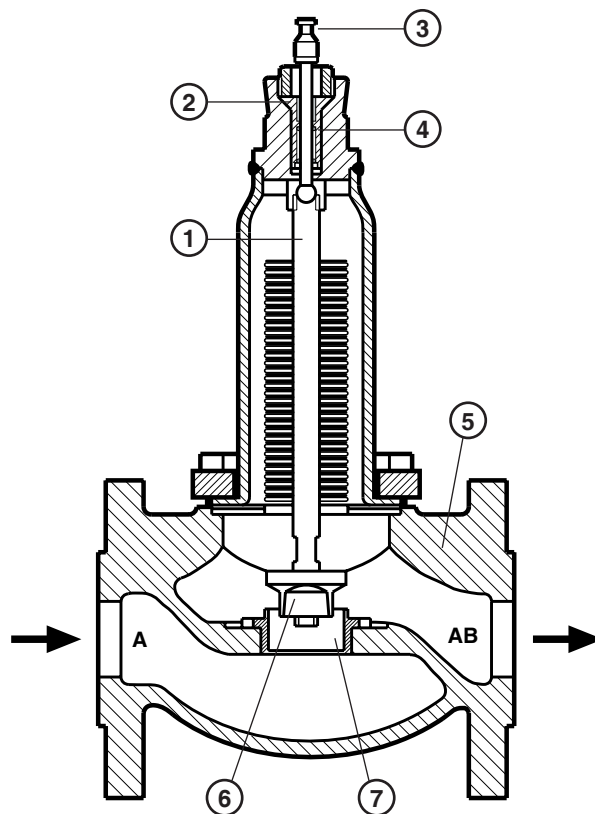
Valve body	GGG 40.3 cast iron	Fluid temperature	1...200 °C
Spindle	stainless steel	Maximum vapour pressure	6 bar
Seat	stainless steel	Run:	
Plug	stainless steel	DN 25	7 mm
Spindle seals	PTFE	DN 32...50	10 mm
Connections	anged PN 25 (ISO 7005/2)	Control characteristic	linear
Nominal pressure	25 bar at 120 °C ; 20 bar at 200 °C	Control ratio	50:1
		Let by	0.05 % Kvs

6. CONSTRUCTION

The valve body is made of GGG 40.3 cast iron; the spindle, seat and plug of stainless steel.

The spindle is hydraulically sealed by self-cleaning gaskets enclosed in an easily-replaceable sealing block. At the head of the spindle is a groove for insertion in the coupling block of the actuator.

- 1 – Spindle
- 2 – Sealing block
- 3 – Groove for attachment to actuator
- 4 – Te on seals
- 5 – Valve body
- 6 – Plug
- 7 – Seat
- A – Input port
- AB – Output port

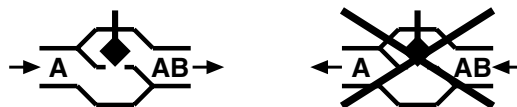


7. MOUNTING

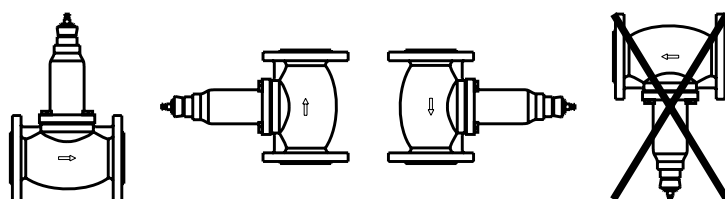
Before mounting the valve ensure that there is no extraneous material in the pipework such as residues from welding or threading.

The pipework must not be subject to vibrations and must be perfectly aligned with the valve connections in order to avoid dangerous stresses.

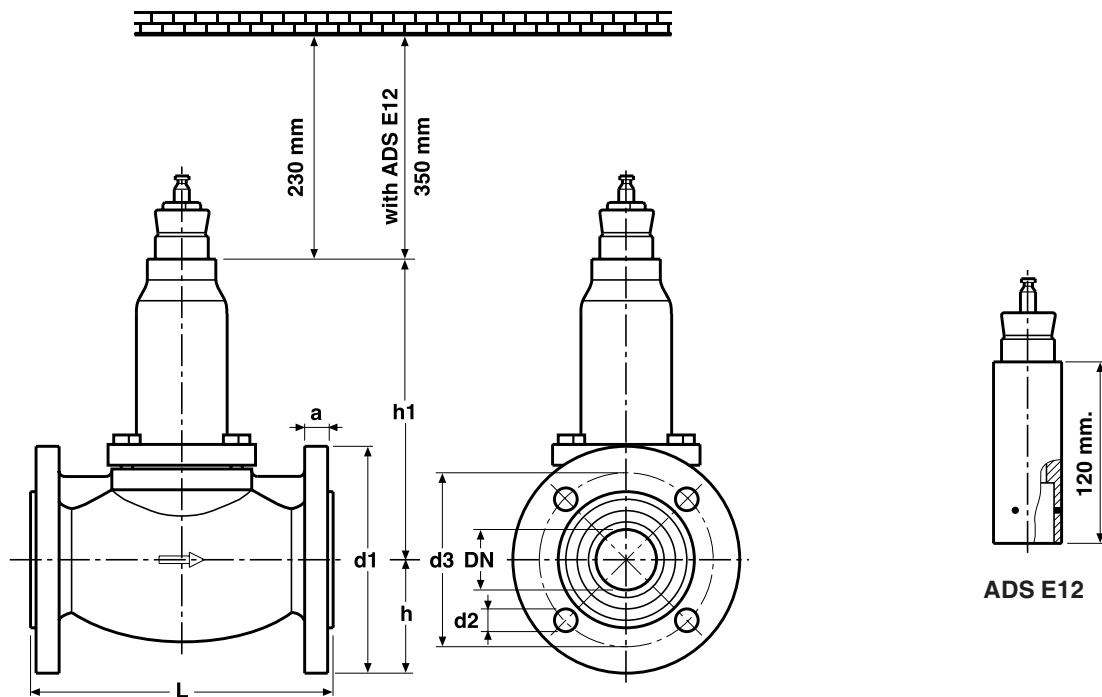
To avoid vibration problems it is preferable always to mount the valve so that water flows out of the AB port (9. EXAMPLES OF PLANTS).



The valve can be installed in any position except that with the spindle pointing downwards. Leave sufficient space on the spindle side for mounting the actuator (8. OVERALL DIMENSIONS).



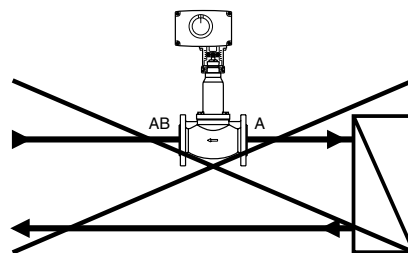
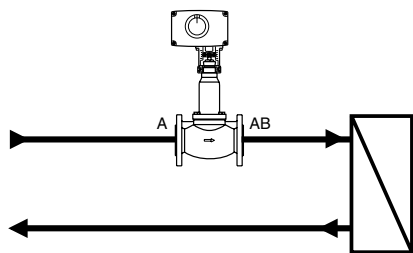
8. OVERALL DIMENSIONS



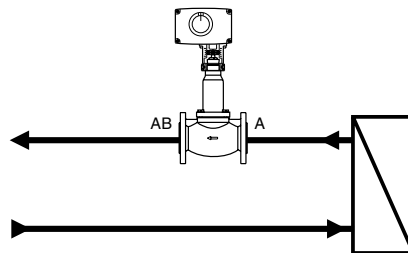
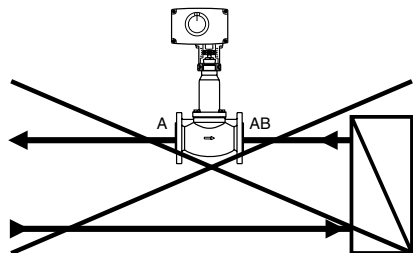
Model	DN mm	L mm	d1 mm	d2 mm	d3 mm	a mm	h mm	h1 mm	Weight kg
VE 225	25	160	115	4 x 14	85	16	57.5	176	5.5
VE 232	32	180	140	4 x 18	100	18	70	197	9.2
VE 239	40	200	150	4 x 18	110	18	75	197	9.9
VE 248	50	230	165	4 x 18	125	20	82.5	197	12.5

9. EXAMPLES OF PLANTS

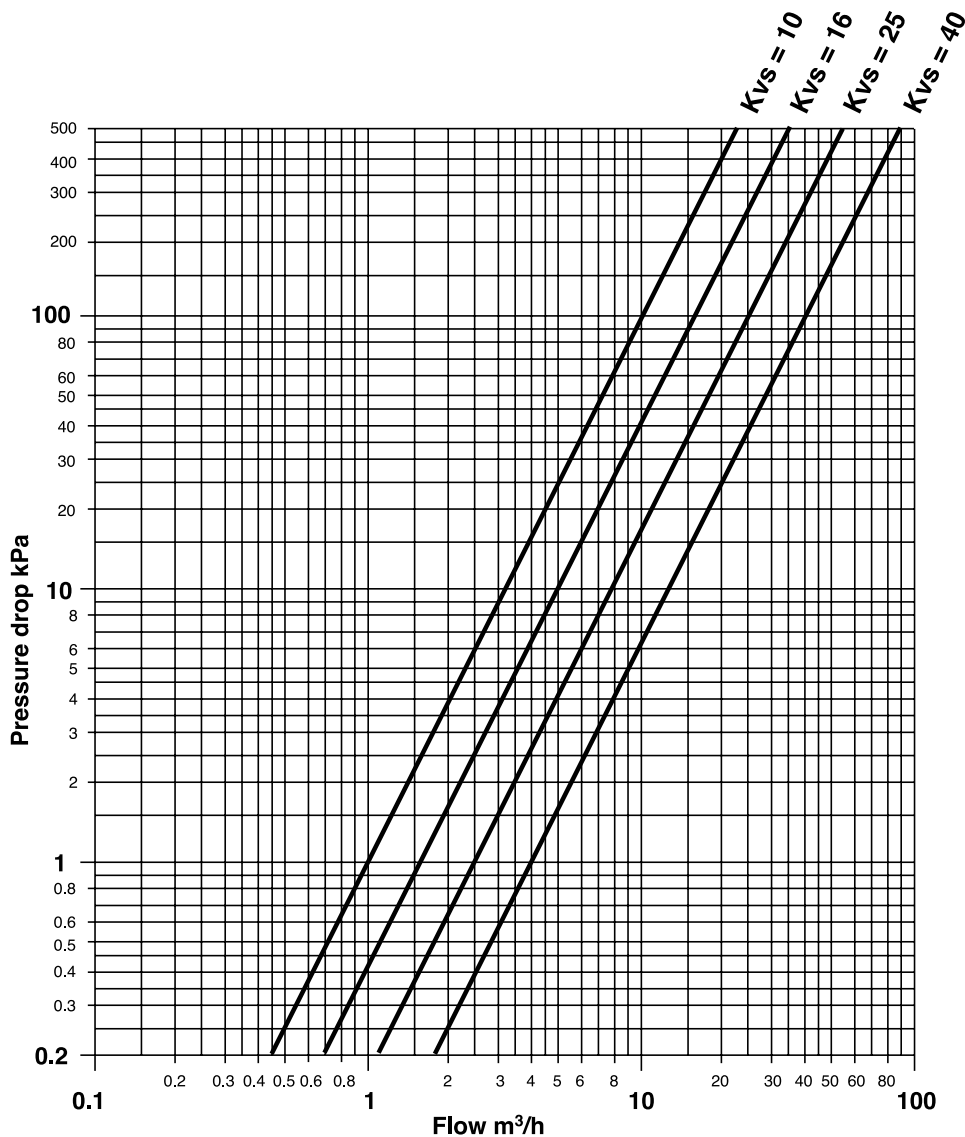
Mounting on ow



Mounting on return



10. PRESSURE DROP



Kvs = Flow coefficient: Flow in m³/h with valve open and pressure drop of 100 kPa.
 100 kPa = 10 mWG = 1 bar

Amendments to data sheet

from version	to version	Page	Section	Details of amendments
23.01.03 LB	11.07.06 LB	1	3. VERSIONI	Amended code of suitable actuator CEF.



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