

LINEAR MOTORIZED VALVES

# CONTROL VALVE PN16

## SERIES VLA325/VLB225/ VLA425 AND VLA335/VLB235

ESBE control valves series VLA325/VLB225/VLA425 and VLA335/VLB235 are 2-way and 3-way flanged valves for PN16, DN 15-150.



Flange PN16

Flange PN16, pressure-balanced plug

Flange PN16

### MEDIA

These valves can handle the following types of media:

- Hot and cold water.
- Water with antifreeze additives such as glycol.
- Low pressure steam < 115°C, only DN 65-150

If the valve is used for media at temperatures below 0°C (32°F), it should be equipped with a stem heater in order to prevent ice formation on the valve stem.

### OPTION DN 15 - 50

Adaptor kit \_\_\_\_\_ Siemens SQX, Art. No. 2600 07 00

### CONTROL VALVE DESIGNED FOR

- Heating
- Comfort Cooling
- Potable water
- Floor heating
- Solar heating
- Ventilation
- Zone
- District Hot Water
- District Heating
- District Cooling

### SUITABLE ACTUATORS

The control valve series VLA325/VLB225/VLA425 and VLA335/VLB235 may most easily be fitted with ESBE actuators:

- Series ALA200
- Series ALB140
- Series ALD100
- Series ALD200

### TECHNICAL DATA

Type: \_\_\_\_\_ 2- and 3-way plug valve  
 Pressure class: \_\_\_\_\_ PN 16  
 Flow characteristic A-AB: \_\_\_\_\_ EGM  
 Flow characteristic B-AB: \_\_\_\_\_ DN 15-50, Complementary  
 \_\_\_\_\_ DN 65-150, Linear  
 Stroke: \_\_\_\_\_ DN 15-80, 20 mm  
 \_\_\_\_\_ DN 100-150, 40 mm  
 Rangeability  $K_v/K_v^{min}$ : \_\_\_\_\_ see table  
 Leakrate A-AB: \_\_\_\_\_ DN 15-50, Tight sealing  
 \_\_\_\_\_ DN 65-150, 0.05% of  $K_v$   
 Leakrate B-AB: \_\_\_\_\_ DN 15-50, Tight sealing  
 \_\_\_\_\_ DN 65-150, 1% of  $K_v$   
 $\Delta P_{max}$ : \_\_\_\_\_ see tables pages 170-176  
 Media temperature: \_\_\_\_\_ DN 15-50, max. +130°C  
 \_\_\_\_\_ min. -20°C  
 \_\_\_\_\_ DN 65-150, max. +120°C  
 \_\_\_\_\_ min. -10°C  
 Connection: \_\_\_\_\_ Flange, ISO 7005-2

#### Material DN 15 - 50

Body: \_\_\_\_\_ Nodular iron EN-JS 1030  
 Stem: \_\_\_\_\_ Stainless steel SS 2346  
 Plug: \_\_\_\_\_ Brass CW602N  
 Seat: \_\_\_\_\_ Nodular iron EN-JS 1030  
 Blind plug: \_\_\_\_\_ Brass CW602N  
 Seat seal: \_\_\_\_\_ EPDM  
 Packing box seal: \_\_\_\_\_ PTFE/EPDM

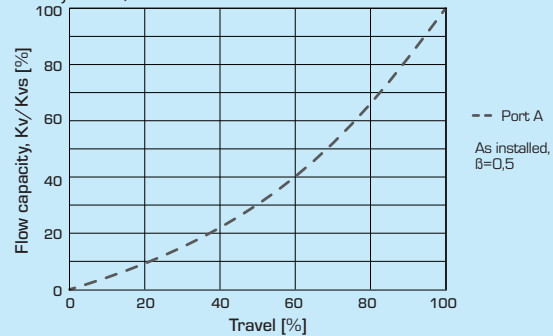
#### Material DN 65 - 150

Body: \_\_\_\_\_ Grey cast iron EN-JL 1040  
 Stem: \_\_\_\_\_ Stainless steel DIN 1.4305  
 Plug: \_\_\_\_\_ Brass CW617N  
 Seat: \_\_\_\_\_ Grey cast iron EN-JL 1040  
 Seat seal: \_\_\_\_\_ Metallic  
 Packing box seal: \_\_\_\_\_ EPDM

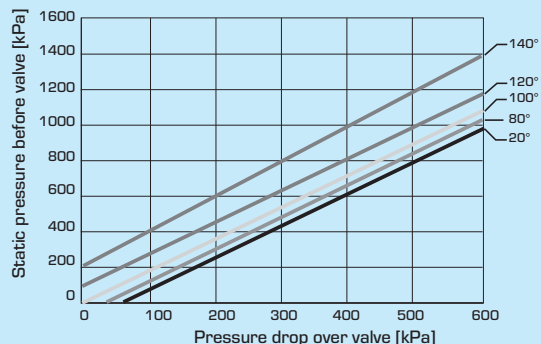
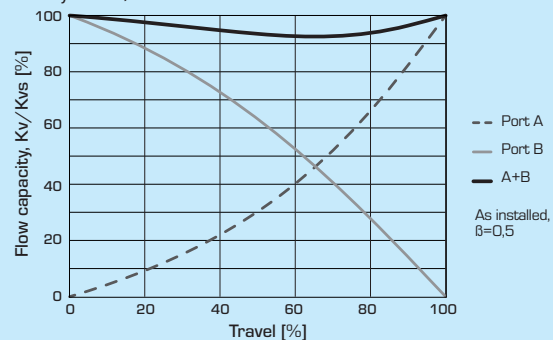
PED 97/23/EC, article 3.3

### VALVE CHARACTERISTICS

2-way valves, DN15-50



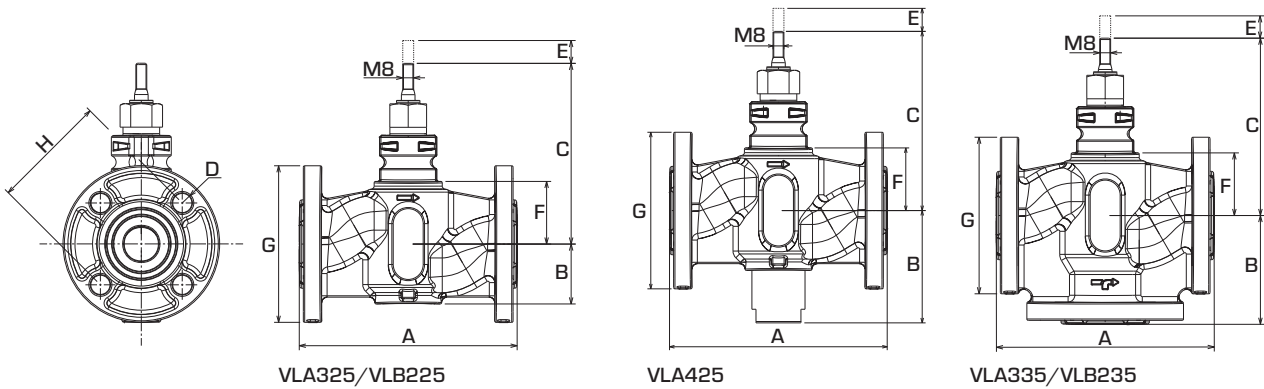
3-way valves, DN15-50



Pressure drop limit where cavitation might occur. Is dependent of valve inlet pressure and temperature of water.

# CONTROL VALVE PN16

## SERIES VLA325/VLB225/ VLA425 AND VLA335/VLB235



### 2-WAY CONTROL VALVE SERIES VLA325/VLB225

Art. No.	Reference	DN	Kvs*	A	B	C	D	E	F	G	H	Rangeability Kv/Kv <sup>min</sup>	Weight [kg]
2120 01 00	VLA325	15	1.6	130	42	123	4x14	20	38	95	65	>50	2.1
2120 02 00			2.5										
2120 03 00			4										
2120 04 00	VLA325	20	6.3	150	44	126	4x14	20	41	105	75	>50	2.6
2120 05 00	VLA325	25	10	160	44	131	4x14	20	46	115	85	>50	3.2
2120 06 00	VLA325	32	16	180	58	144	4x19	20	60	140	100	>50	4.6
2120 07 00	VLA325	40	25	200	60	146	4x19	20	61	150	110	>50	5.8
2120 08 00	VLA325	50	38	230	74	161	4x19	20	76	165	125	>50	8.0
2120 31 00	VLB225	65	49	290	173	119	4x19	20	62	185	145	50	17.3
2120 32 00	VLB225	80	78	310	185	119	8x19	20	62	200	160	50	22.9
2120 33 00	VLB225	100	124	350	205	150	8x19	40	93	220	180	50	33.0
2120 34 00	VLB225	125	200	400	232	161	8x18	40	104	250	210	50	48.0
2120 35 00	VLB225	150	300	480	275	177	8x22	40	120	285	240	50	68.0

### 2-WAY CONTROL VALVE SERIES VLA425 WITH PRESSURE BALANCED PLUG

Art. No.	Reference	DN	Kvs*	A	B	C	D	E	F	G	H	Rangeability Kv/Kv <sup>min</sup>	Weight [kg]
2120 17 00	VLA425	25	10	160	83	131	4x14	20	46	115	85	>50	3.4
2120 18 00	VLA425	32	16	180	88	144	4x19	20	60	140	100	>50	5.0
2120 19 00	VLA425	40	25	200	84	146	4x19	20	61	150	110	>50	6.1
2120 20 00	VLA425	50	38	230	100	161	4x19	20	76	165	125	>50	8.3

### 3-WAY CONTROL VALVE SERIES VLA335/VLB235

Art. No.	Reference	DN	Kvs*	A	B	C	D	E	F	G	H	Rangeability Kv/Kv <sup>min</sup>	Weight [kg]
2120 09 00	VLA335	15	1.6	130	65	123	4x14	20	38	95	65	>50	2.5
2120 10 00			2.5										
2120 11 00			4										
2120 12 00	VLA335	20	6.3	150	75	126	4x14	20	41	105	75	>50	3.2
2120 13 00	VLA335	25	10	160	80	131	4x14	20	46	115	85	>50	3.8
2120 14 00	VLA335	32	16	180	90	144	4x19	20	60	140	100	>50	6.6
2120 15 00	VLA335	40	25	200	100	146	4x19	20	61	150	110	>50	7.5
2120 16 00	VLA335	50	38	230	115	161	4x19	20	76	165	125	>50	10.0
2120 36 00	VLB235	65	49	290	145	119	4x19	20	62	185	145	50	14.7
2120 37 00	VLB235	80	78	310	155	119	8x19	20	62	200	160	50	18.8
2120 38 00	VLB235	100	124	350	175	150	8x19	40	93	220	180	50	29.0
2120 39 00	VLB235	125	200	400	200	161	8x18	40	104	250	210	50	42.0
2120 40 00	VLB235	150	300	480	240	177	8x22	40	120	285	240	50	61.0

\* Kvs-value in m<sup>3</sup>/h at a pressure drop of 1 bar.