

LINEAR MOTORIZED VALVES

CONTROL VALVE PN16 SERIES VLA121/VLA221 AND VLA131

ESBE control valves series VLA121/VLA221 and VLA131 are 2-way and 3-way internal threaded valves for PN16, DN 15-50.



Internal thread PN16

Internal thread PN16, pressure-balanced plug

Internal thread PN16

MEDIA

These valves can handle the following types of media:

- Hot and cold water.
- Water with antifreeze additives such as glycol.

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

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 VLA121/VLA221 and VLA131 may most easily be fitted with ESBE actuators:

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

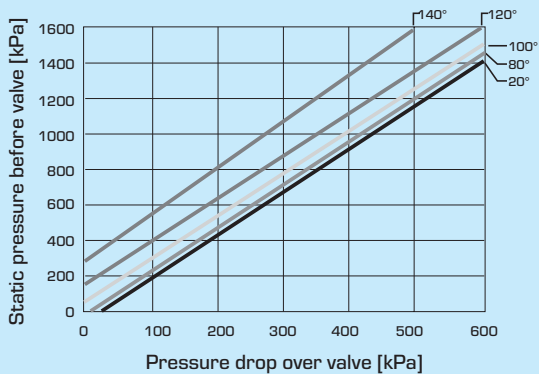
TECHNICAL DATA

Type: _____ 2- and 3-way plug valve
 Pressure class: _____ PN 16
 Flow characteristic A-AB: _____ EGM
 Flow characteristic B-AB: _____ Complementary
 Stroke: _____ 20 mm
 Rangeability K_v/K_v^{min} : _____ see table
 Leakrate A-AB: _____ Tight sealing
 Leakrate B-AB: _____ Tight sealing
 ΔP_{max} : _____ see tables pages 170-176
 Media temperature: _____ max. +130°C
 _____ min. -20°C
 Connection: _____ Internal thread, EN 10226-1

Material

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

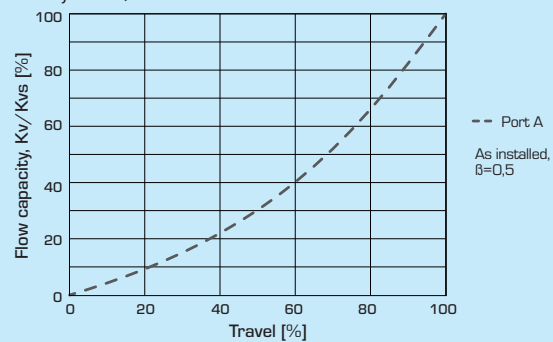
PED 97/23/EC, article 3.3



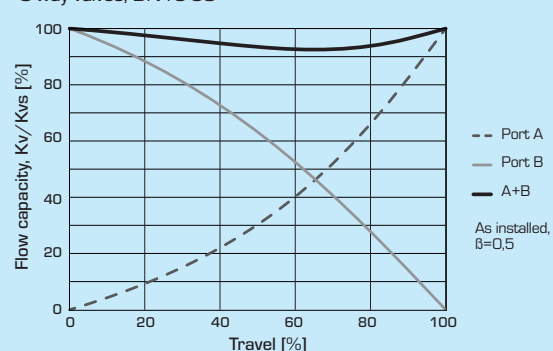
Pressure drop limit where cavitation might occur. Is dependent of valve inlet pressure and temperature of water.

VALVE CHARACTERISTICS

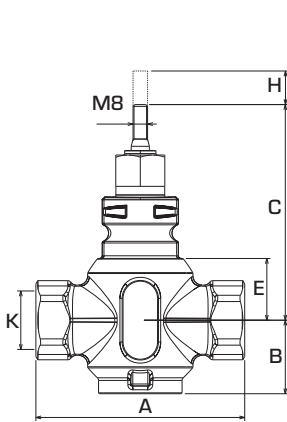
2-way valves, DN15-50



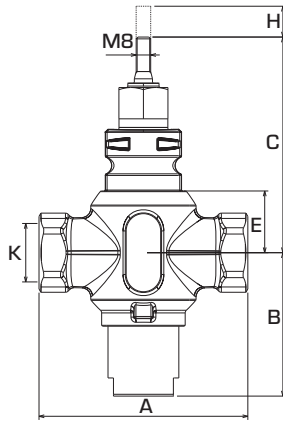
3-way valves, DN15-50



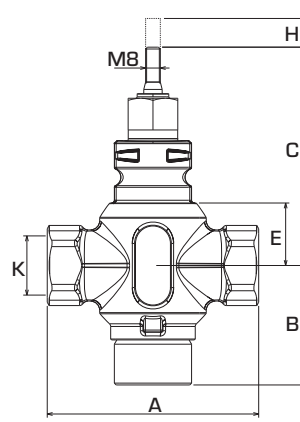
CONTROL VALVE PN16 SERIES VLA121/VLA221 AND VLA131



VLA121



VLA221



VLA131

2-WAY CONTROL VALVE SERIES VLA121

| Art. No. | Reference | DN | Kvs * | A | B | C | E | H | K | Rangeability Kv/Kv ^{min} | Weight [kg] |
|------------|-----------|----|-------|-----|----|-----|----|----|-----------|--------------------------------------|----------------|
| 2115 01 00 | VLA121 | 15 | 1.6 | 85 | 38 | 108 | 24 | 20 | Rp 1/2" | >50 | 1.0 |
| 2115 02 00 | | | 2.5 | | | | | | | | |
| 2115 03 00 | | | 4 | | | | | | | | |
| 2115 04 00 | VLA121 | 20 | 6.3 | 100 | 40 | 115 | 30 | 20 | Rp 3/4" | >50 | 1.2 |
| 2115 05 00 | VLA121 | 25 | 10 | 115 | 40 | 119 | 34 | 20 | Rp 1" | >50 | 1.3 |
| 2115 06 00 | VLA121 | 32 | 16 | 130 | 41 | 120 | 35 | 20 | Rp 1 1/4" | >50 | 1.8 |
| 2115 07 00 | VLA121 | 40 | 25 | 150 | 50 | 128 | 42 | 20 | Rp 1 1/2" | >50 | 2.7 |
| 2115 08 00 | VLA121 | 50 | 38 | 180 | 59 | 138 | 53 | 20 | Rp 2" | >50 | 4.2 |

2-WAY CONTROL VALVE SERIES VLA221 WITH PRESSURE BALANCED PLUG

| Art. No. | Reference | DN | Kvs * | A | B | C | E | H | K | Rangeability Kv/Kv ^{min} | Weight [kg] |
|------------|-----------|----|-------|-----|----|-----|----|----|-----------|--------------------------------------|----------------|
| 2115 17 00 | VLA221 | 25 | 10 | 115 | 79 | 119 | 34 | 20 | Rp 1" | >50 | 1.7 |
| 2115 18 00 | VLA221 | 32 | 16 | 130 | 70 | 120 | 35 | 20 | Rp 1 1/4" | >50 | 2.2 |
| 2115 19 00 | VLA221 | 40 | 25 | 150 | 74 | 128 | 42 | 20 | Rp 1 1/2" | >50 | 3.1 |
| 2115 20 00 | VLA221 | 50 | 38 | 180 | 84 | 138 | 53 | 20 | Rp 2" | >50 | 4.5 |

3-WAY CONTROL VALVES SERIES VLA131

| Art. No. | Reference | DN | Kvs * | A | B | C | E | H | K | Rangeability Kv/Kv ^{min} | Weight [kg] |
|------------|-----------|----|-------|-----|----|-----|----|----|-----------|--------------------------------------|----------------|
| 2115 09 00 | VLA131 | 15 | 1.6 | 85 | 58 | 108 | 24 | 20 | Rp 1/2" | >50 | 1.1 |
| 2115 10 00 | | | 2.5 | | | | | | | | |
| 2115 11 00 | | | 4 | | | | | | | | |
| 2115 12 00 | VLA131 | 20 | 6.3 | 100 | 61 | 115 | 30 | 20 | Rp 3/4" | >50 | 1.3 |
| 2115 13 00 | VLA131 | 25 | 10 | 115 | 65 | 119 | 34 | 20 | Rp 1" | >50 | 1.5 |
| 2115 14 00 | VLA131 | 32 | 16 | 130 | 70 | 120 | 35 | 20 | Rp 1 1/4" | >50 | 2.1 |
| 2115 15 00 | VLA131 | 40 | 25 | 150 | 74 | 128 | 42 | 20 | Rp 1 1/2" | >50 | 3.0 |
| 2115 16 00 | VLA131 | 50 | 38 | 180 | 90 | 138 | 53 | 20 | Rp 2" | >50 | 4.7 |

* Kvs-value in m³/h at a pressure drop of 1 bar.