

| Models |       | DN    | Kvs m <sup>3</sup> /h |      | Stroke [mm] |
|--------|-------|-------|-----------------------|------|-------------|
| 2-way  | 3-way |       | A-AB                  | B-AB |             |
| VSBT3  | VMBT3 | 3/4"  | 6,3                   | 5,5  | 5,5         |
| VSBT4  | VMBT4 | 1"    | 10                    | 9    |             |
| VSBT5  | VMBT5 | 1"1/4 | 14                    | 11   |             |
| VSBT6  | VMBT6 | 1"1/2 | 18                    | 7    |             |



### APPLICATION AND USE

VSBT two-way and VMBT three-way valves can be used for fluid control in industrial and residential air-conditioning, thermoventilation and heating plants and in machinery for product thermal process.

Three-way valves must be used only as mixers, angle way must never be employed for control purposes.

### MANUFACTURING CHARACTERISTICS

G25 cast iron valve body.  
 Brass plug with Contoured-type profile on direct way and V-port profile on angle way.  
 CrNi steel stem. Female threaded connections.  
 Double BUNA O-ring stem packing.

### TECHNICAL CHARACTERISTICS

|                        |  |
|------------------------|--|
| Operating pressure     | 1600 Kpa max (16 bar)                              |
| Control characteristic | linear   |
| Rangeability (Kvs/Kvm) | ≥ 50   |
| Leakage*               |  |
| VSBT                   | < 0,03% of Kvs                                     |
| VMBT                   | direct way < 0,03% of Kvs<br>angle way < 2% of Kvs |
| Connections            | Female thread                                      |
| Stroke                 | 5,5 mm   |
| Allowed fluids         |  |
| water                  | max temperature 95 °C<br>min. temperature 5 °C     |
| glycol-added           | max 50%  |
| Weight                 | See overall dimensions                             |

\*Leakage is measured according to the EN1349 standard.

### OPERATION

The valve is normally closed (A-AB way).  
 By pushing the stem inwards, the actuator opens A-AB way and, in three-way valves, it contemporarily closes the angle way B-AB

### INSTALLATION

Before mounting, ensure pipes are clean, free from weld slag, perfectly aligned with the valve body and not subjected to vibrations.

As far as valve mounting positions are concerned, follow the instructions given in the actuator data sheets.

While mounting, respect the fluid directions indicated by the letters on the valve body (see fig. 1 and 2).

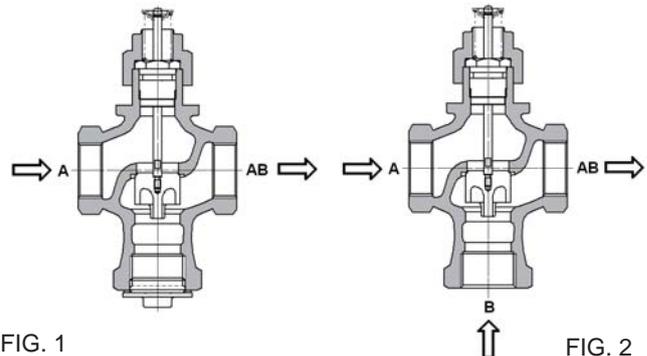


FIG. 1

FIG. 2

### ACTUATORS

VSBT and VMBT valves are actuated by CONTROLLI MVT actuators.

### MAX DIFFERENTIAL PRESSURE (kPa)

| DN     | direct way | angle way |
|--------|------------|-----------|
| 3/4"   | 240        | 150       |
| 1"     | 150        | 100       |
| 1 1/4" | 90         | 60        |
| 1 1/2" | 60         | 40        |

DPmax = max differential pressure ensured by the actuator for normal operation.

100 Kpa = 1 bar

