

MODEL		DN [inches]	Kvs [m <sup>3</sup> /h]	STROKE [mm]
2WAY	3 WAY			
VSBP3M	VMBP3M	3/4"	6,3	16,5
VSBP4M	VMBP4M	1"	10	
VSBP5M	VMBP5M	1 1/4"	16	
VSBP6M	VMBP6M	1 1/2"	25	
VSBP8M	VMBP8M	2"	36	

## APPLICATION AND USE

VSBPM/VMBPM are control valves with modulating characteristic, which are composed of two-way (VSBPM) and three-way (VMBPM) valve body with tight close-off plug. They can be used in civil, industrial, zootechnic and purification plants, desiccators and in all applications where tight close-off is required.

## TECHNICAL CHARACTERISTICS

<b>Nominal pressure:</b>	1600 kPa max (16 bar)
<b>Valve body:</b>	G25 cast iron (brass for DN 1/2" only)
<b>Plug:</b>	Rubber
<b>Stem packing:</b>	Double EPDM O-ring with graphite teflon scraper rings.
<b>Leakage (% Kvs)*</b>	
VSBPM-VMBPM	Direct way 0 (tight close-off)
VMBPM	Angle way 0 (tight close-off)
<b>Connections:</b>	Female threaded
<b>Temperature limits:</b>	-5T95 °C

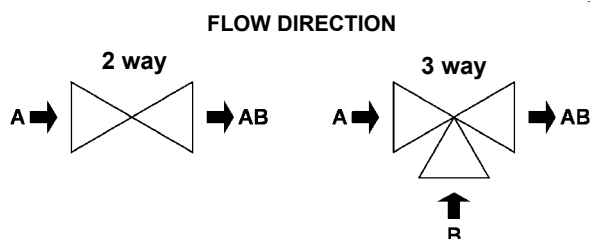
\* Leakage is measured according to the EN1349 standard.

## INSTALLATION

Observe the correct flow direction as indicated on the valve. Before mounting, make sure that pipes are clean, free from slugs. It is essential that pipes are lined up with the valve at each connection.

Valves can be mounted in any position.

Valves must not be installed in explosive atmosphere and at an ambient temperature below -5 °C and above 50° C; they must not be subjected to either steam, water jets or dripping.



**NOTE:** for all information about the actuator, refer to MVB data sheets (DBL005e/DIM001e).

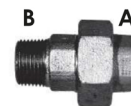
## OPERATION

When stem is up, the direct way is closed, with stem down direct way is open.

## ACCESSORIES

- GVB3** Thermal insulation for DN 3/4" valves (V.BPM3)
- GVB4** Thermal insulation for DN 1" valves (V.BPM4)
- GVB5** Thermal insulation for DN 1 1/4" valves (V.BPM5)
- GVB6** Thermal insulation for DN 1 1/2" valves (V.BPM6)
- GVB8** Thermal insulation for DN 2" valves (V.BPM8)

CAST IRON FITTINGS 3 PIECES			
THREAD		FITTING CODE	SEAL CODE
A	B		
G3/4" F	G3/4" M	89948-02	89949-02
G1" F	G1" M	89948-03	89949-03
G1 1/4" F	G1 1/4" M	89948-04	89949-04
G1 1/2" F	G1 1/2" M	89948-05	89949-05
G2" F	G2" M	89948-06	89949-06



## ACTUATOR CHARACTERISTICS

VSBPM/VMBPM valves are motorized by CONTROLLOI electric actuators MVB.

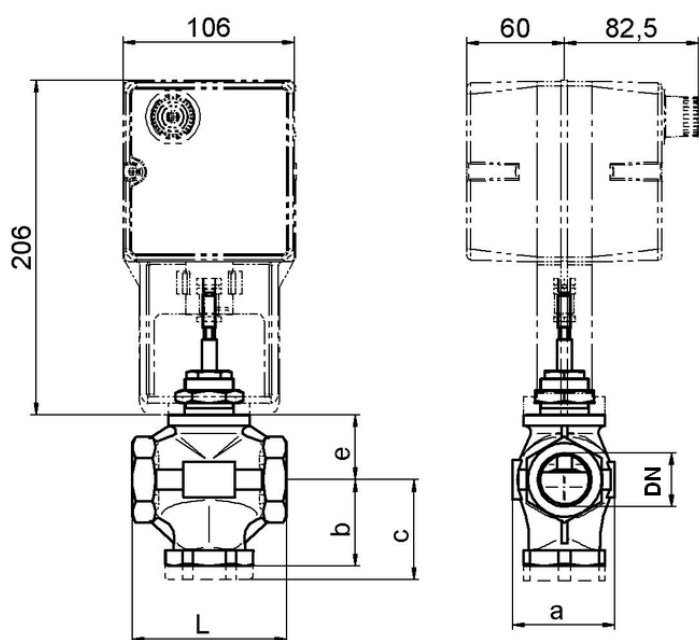
DN	$\Delta p$ max [kPa]	Close-off [kPa]
3/4"	200	880
1"		550
1 1/4"		350
1 1/2"		250
2"		180

$\Delta p$  max = max differential pressure value ensured by the actuator for regular operation.

**ATTENTION:** we recommend not to exceed the differential pressure of 2 bar, in order to avoid wear.

**NOTE:** three-way valves must always be mounted as mixing (in case they are required as diverting valves, the flow speed must not be above 2 m/s).

## DIMENSIONS [mm]



DN	e	b (2 way)	c (3 way)	L	a
3/4"	34,5	52	69	85	54
1"	40	53	73	95	63
1 1/4"	43,5	53	73	108	70
1 1/2"	51	56,5	75	120	81
2"	54,5	62,5	83	142	97

The performances stated in this sheet can be modified without any prior notice