Two/three-way Valves PN16

VSBT-VMBT

CE

MODELS		DN	FLOW RATE	STROKE
		inches	Kvs	mm
Two-way	**Three-way**		m^2/h	
VSBT3	VMBT3	¾	6,3	5,5
VSBT4	VMBT4	1	10	5,5
VSBT5	VMBT5	1¼	13	5,5
VSBT6	VMBT6	1½	16	5,5

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 product thermal process machinery.
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.

ACTUATORS

VSBT and VMBT valves are actuated by CONTROLLI MVT actuators.

VALVE MODELS		**ACTUATORS**
		D P max (KPa)
Two-way	Three-way	MVT
VSBT3	VMBT3	170
VSBT4	VMBT4	100
VSBT5	VMBT5	70
VSBT6	VMBT6	50

ΔPmax = max differential pressure ensured by the actuator for normal operation.
100 Kpa = 1 bar

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 angle way < 2% of Kvs
Connections	Female thread
Stroke	5,5 mm
Allowed fluids	
water	max temperature 95 °C min.temperature 5 °C
glycol-added	max 50%
Weight	See overall dimensions

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.

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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).

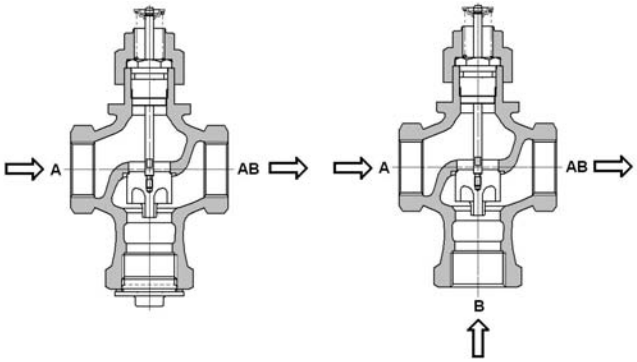
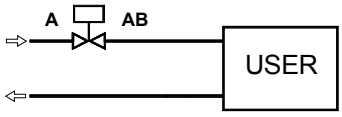


FIG. 1 **FIG. 2**

APPLICATION SCHEMES

VSBT VALVES

a) Variable flow control to the user



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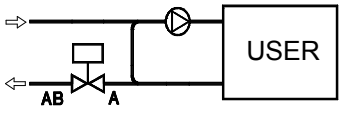
b) Constant flow control to the user in injection circuits



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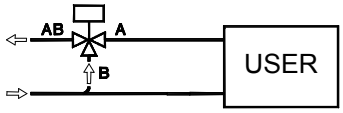
VMBT VALVES

c) Variable flow mixing to the user



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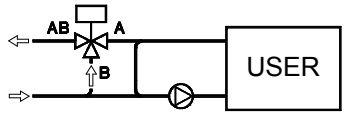
d) Constant flow mixing to the user in injection or tapping circuits



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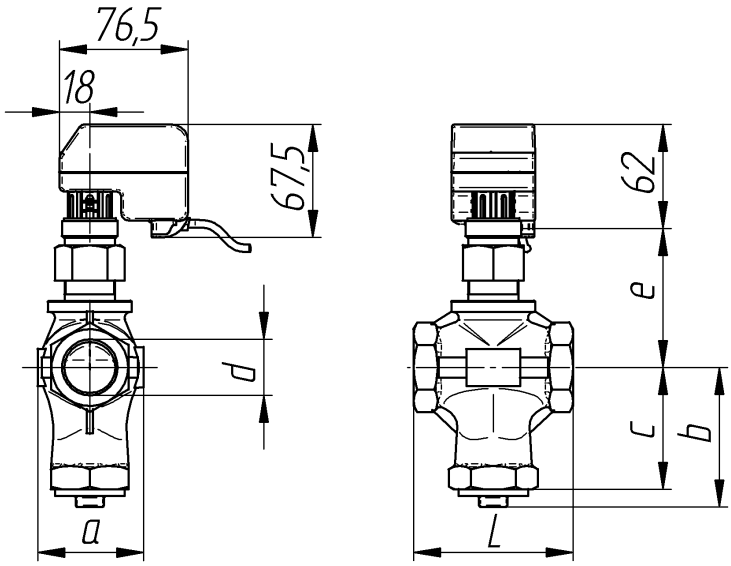
OVERALL DIMENSIONS (mm)



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		VALVE DIMENSION								WEIGHT Kg
		VSBT				VMBT				
DN	Ø d	L	a	e	b	L	a	e	c	
¾""	G ¾""	85	54	78	79	85	54	78	67,5	1,1
1""	G 1""	95	62	83	83	95	62	83	72,5	1,5
1 ¼""	G 1 ¼""	108	70	87	90	108	70	87	78,5	2
1 ½""	G 1 ½""	120	81	94	98	120	81	94	85,5	2,7

The performances stated on this sheet can be modified without any prior notice due to design improvement.