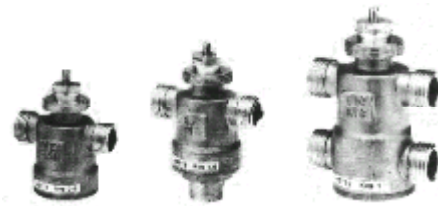


PART NUMBER (**)	FLOW RATE kvs(*) (m ³ /h)	ΔP max (kPa)	CONNECTIONS (male, gas threaded) in inches
Two-way			
VST09	0.25	350	G ½
VST10	0,4	350	G ½
VST11	0,6	350	G ½
VST12	1	350	G ½
VST13	1,6	350	G ½
VST1	2,5	350	G ½
VST21	2,5	250	G ¾
VST2	4	250	G ¾
Three-way			
VMT09	0.25 (0.25)	350	G ½
VMT10	0.4 (0.25)	350	G ½
VMT11	0.6 (0.4)	350	G ½
VMT12	1 (0.6)	350	G ½
VMT13	1.6 (1)	350	G ½
VMT1	2.5 (1.6)	350	G ½
VMT2	4 (2.5)	250	G ¾
Three-way with built-in by-pass (4 port)			
VTT09	0.25 (0.25)	350	G ½
VTT10	0.4 (0.25)	350	G ½
VTT11	0.6 (0.4)	350	G ½
VTT12	1 (0.6)	350	G ½
VTT13	1.6 (1)	350	G ½
VTT1	2.5 (1.6)	350	G ½
VTT21	2.5 (1.6)	250	G ¾
VTT2	4 (2.5)	250	G ¾



TECHNICAL CHARACTERISTICS

Material:

Body	OT58-brass
IXEF Plug	RILSAN coated
Stem	CrNi steel
Packing	Double O-Ring in BUNA N
Body pressure rating	PN16
Connections	Threaded
Stroke	5.5 mm
Suitable medium	water with max 50% GLYCOL
Fluid temperature	2T 95
Control characteristics	equal percentage A-AB port linear B-AB port (VMT4 and VST4:both linear ports)
Max fluid speed	3 m/sec
Rangeability	>50
Leakage	none
	perfect sealing on both straight and angle way).

100 KPa = 1 bar = 10 m H₂O

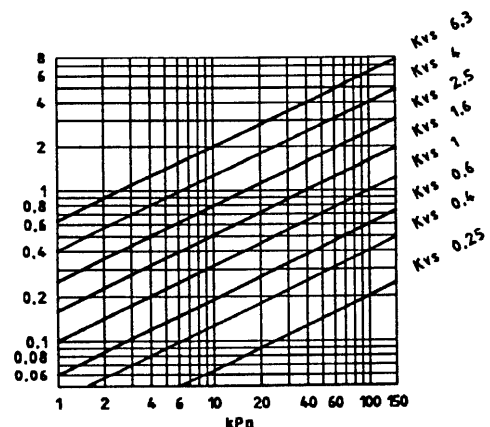
ΔPmax = maximum guaranteed differential pressure with closed valve and opened flow

(*) The values in brackets represent kvs on angle ways.

(**) Valves can be supplied NPT threaded.

To pass on the order, add N to the part number, i.e. VST2N.
1/2" and 3/4" valve bodies can be supplied for linkage with CONEX connection (DN15 for 1/2", DN22 for 3/4").
Add C to the part number, i.e. VST2C.

PRESSURE DROP DIAGRAM



APPLICATIONS

V.T valves are used for hot and/or chilled water control fan-coil units, induction units, solar energy on plants, small reheaters and dehumidifiers (in electric/electronic temperature control systems).

ACTUATORS

V.T valves are motorized by CONTROLLI MVT actuators.

WORKING

Non-motorized V.T valves are normally closed (ref. A-AB port). The rubber plug gives the various models a perfect tightness on both straight and angle way. Even disassembled, perfect seal with DP max is guaranteed by valve spring.

INSTALLATION

Before installing the valve, make sure that pipes are clean, slag free, perfectly coaxial with the valve body and not subject to vibration. The valve can be mounted in any position but with the stem pointing downward.

(Install the valve with flow direction as per typical operations). 3-way valves must be used as mixing valves (see ill. 4).

Should valves be installed as diverting (inlet AB; outlet A and B) a reduction to 1/3 of the declared value will result in the max. differential pressure for standard working.

Once disassembled from actuator, the valve can be placed - stem downwards, i.e. straight way A-AB port open - by screwing up completely the plug (see ill. 1).

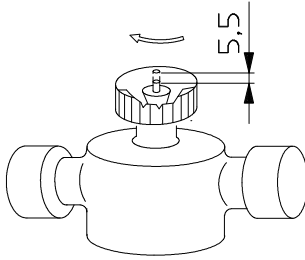


FIG. 1

N4039

ASSEMBLING V.T. VALVE

with MVT actuator

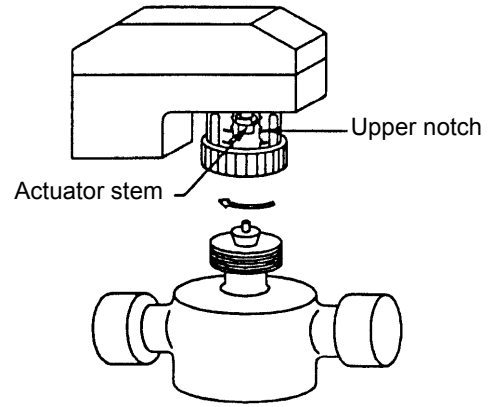


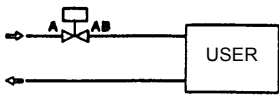
FIG. 2

N4039

Before assembling MVT actuator on the valve, make sure that actuator's stem is at the level of the upper notch on the base. Screw down M30x1,5 nut on valve thread (see ill. 2).

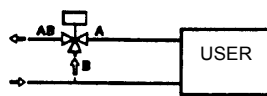
APPLICATION DIAGRAMS

Two-way valves



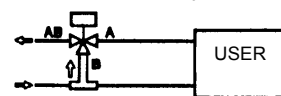
ILL. 3

Three-way valves

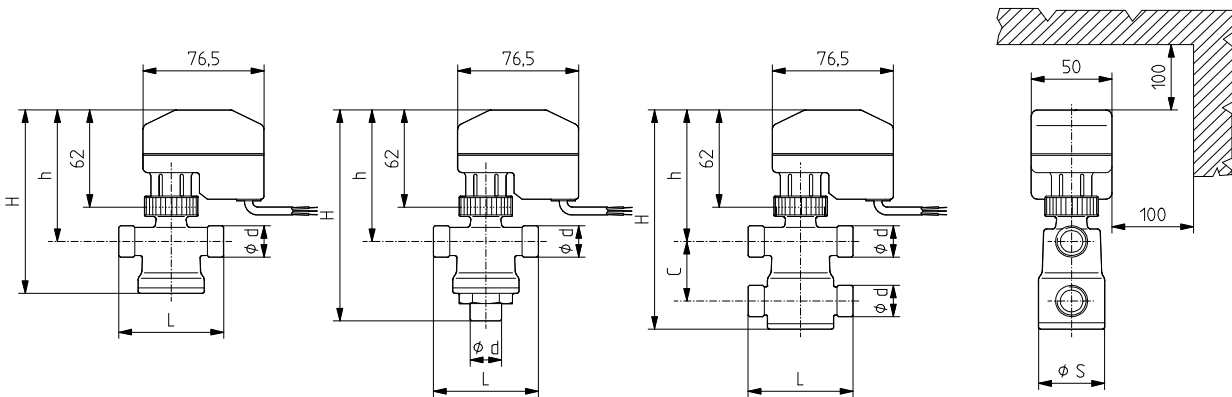


ILL. 4

Three-way valves with built-in by-pass



V.T VALVES DIMENSIONS (mm)



VALVE PART NUMBER	Æ d	L	Æ S	C	H	h	VALVE WEIGHT (kg)
VMT09/10/11/12/13/1	G1/2	66	42	--	142	85	0.45
VMT2	G3/4	77	46	--	147	88	0.55
VST09/10/11/12/13/1	G1/2	66	42	--	124	85	0.40
VST21/2	G3/4	77	46	--	131	88	0.50
VTT09/10/11/12/13/1	G1/2	66	42	38	141	85	0.50
VTT21/2	G3/4	77	46	65	166	88	0.70

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