



FAN COIL UNIT VALVES AND ACTUATORS



TECHNICAL DATA

Valve

Type	2 way VSZ*
	3 way VMZ*
Part number	see dimensional table
Size	15mm, 20mm, 25mm
Construction	linear plug
Characteristics	linear
Kv value	2.5 - 6.0
Pressure rating	16 bar
Temperature	range from 5°C to 95°C
Material	
body	Brass OT58
seat	rubber
stem	CrNi steel
stem packing	Double O ring in Buna N

Actuator

Voltage	MVA21 110 - 240 vac
	MVA41 24 vac
cold start time	180 seconds
max stroke	3.5mm
Temperature	range from 5°C to 50°C

DESCRIPTION

This range of control valves can be used in air conditioning systems to control the flow of chilled and heating water. The valves are screwed and available in sizes from 15mm to 25mm with Kv values of 2.5 thru 6. The actuators are available in 24 and 240 volt.

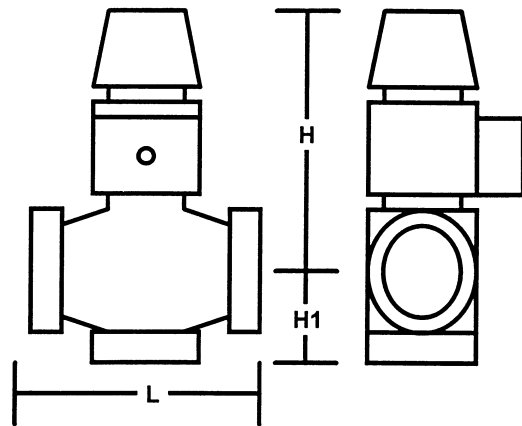
PRESSURE DROP

$$PD = (1 / (kv / (\text{flow} \times 3.6)))^2 \times 100$$

where PD = kPa
flow = l/s

DIMENSIONS

PART NUMBER	SIZE	k	v	"L"	"H"	"H1"	
VSZ1	15	2	.56	4	99	32	
VSZ3	20	4	77	106	2	8	
VSZ4	25	6	8	7	106	3	0
VMZ1	15	2	.56	4	99	52	
VMZ3	20	4	7	7	106	3	4
VMZ4	25	6	8	7	106	5	1

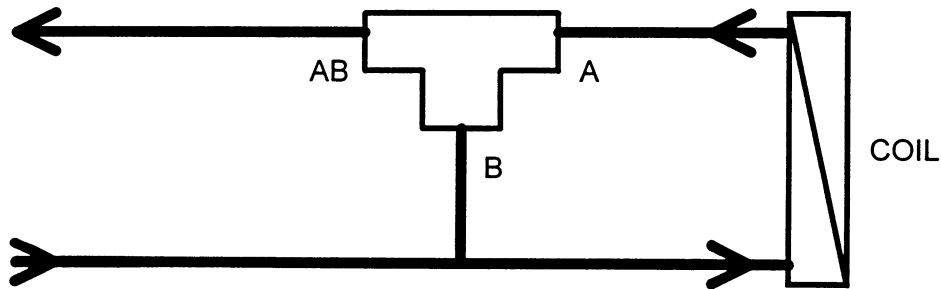




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INSTALLATION

The valve should be mounted on the leaving side of the coil, to avoid unnecessary extremes of temperatures on the actuator. The actuator should always be mounted on top or to the side of the valve, never below it.



ACTUATOR

The MVA actuators are electro-thermal type. When power is applied to the actuator, a small PTC thermistor is used to heat the thermostatic element causing a small piston to come out and lower the valve stem. With a suitable PWM signal the actuator can modulate the valve, normally the actuator is a 2 position type.