

# VSS-VSD

## 2-/3-way motorized ball valves ISO connection

MODEL	DESCRIPTION
VSS6	Motorized ball valve, 2-way, DN 1 ½"; Kvs 120 m³/h
VSS8	Motorized ball valve, 2-way, DN 2"; Kvs 220 m³/h
VSD5	Motorized ball valve, 3-way, DN 1 ¼"; Kvs 19,2 m³/h
VSD6	Motorized ball valve, 3-way, DN 1 ½"; Kvs 27,7 m³/h
VSD8	Motorized ball valve, 3-way, DN 2"; Kvs 57 m³/h



### APPLICATION AND USE

For use in heating, ventilation, heating systems, air conditioning systems. Available in 2 and 3 way threaded connections, both provided with on/off actuator MVS216 and MVS416 using flange kit ISO 5211 F03/F05.

The substances admitted are belonging at the following categories:

- water, from -15°C to +110°C
- below 0°C only for water with antifreeze additive
- over 100°C only with additives that prevent boiling
- mixtures of ethylene glycol or propylene glycol > 20% and up to 50%

Not suitable for gas 1 and group 2, group 1 liquids (Dir. 2014/68/UE).

### TECHNICAL CHARACTERISTICS

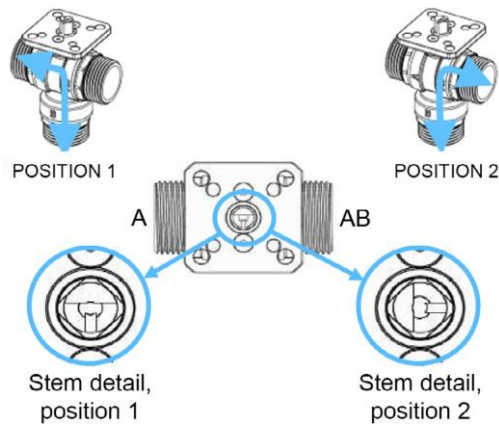
DESCRIPTION	2-WAY		3-WAY		
	VSS6	VSS8	VSD5	VSD6	VSD8
<b>Body</b>	<b>PN 40</b>				
<b>Construction</b>	<b>Pmax 16 bar</b>				
<b>Material</b>	<b>Body</b>	<b>Brass (EN-12165 CW617N)</b>			
	<b>Seat</b>	<b>PTFE</b>			
	<b>Ball</b>	<b>Chrome plated Brass (EN-12164 CW617N)</b>			
<b>Sealing leakage</b>	<b>Tight close-off</b>				
<b>Connections</b>	<b>Female threaded</b>				
<b>DN</b>	<b>1 ½"</b>	<b>2"</b>	<b>1 ¼"</b>	<b>1 ½"</b>	<b>2"</b>
<b>Kvs [m³/h]</b>	<b>120</b>	<b>220</b>	<b>19,2</b>	<b>27,7</b>	<b>57</b>
<b>Threaded</b>	<b>FF</b>	<b>FF</b>	<b>MMM</b>	<b>FFF</b>	<b>FFF</b>
<b>P max</b>	<b>16 bar</b>				
<b>Actuators</b>	<b>MVSx16 (16 Nm)</b>				
<b>Fluid temperature</b>	<b>Min.</b>	<b>-15° C</b>			
	<b>Max.</b>	<b>+110° C</b>			
<b>ΔP</b>	<b>3,5 bar</b>				

### OPERATION

VSD are diverting valves with the following directions of flow.

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

VALVE	STEM POSITION 1	STEM POSITION 2
<b>2-way</b>	<b>Open</b>	<b>Close</b>
<b>3-way</b>	<b>Open B-A</b>	<b>Open B-AB</b>



## INSTALLATION RECOMMENDATIONS

### Operating conditions

Temperature, nominal pressure and differential pressure on the valve must be within the specified value.

### Pipe flushing

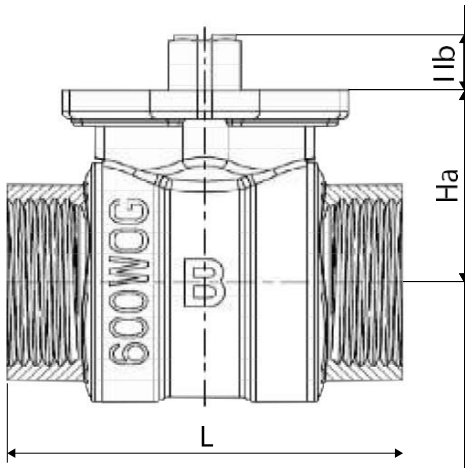
An anomalous valve flow action is caused, in almost all cases, by weld slag or foreign bodies entrapped between the valve seat and the plug, often causing damages.

To prevent such inconveniences, it is advisable to use filters upstream of the valve.

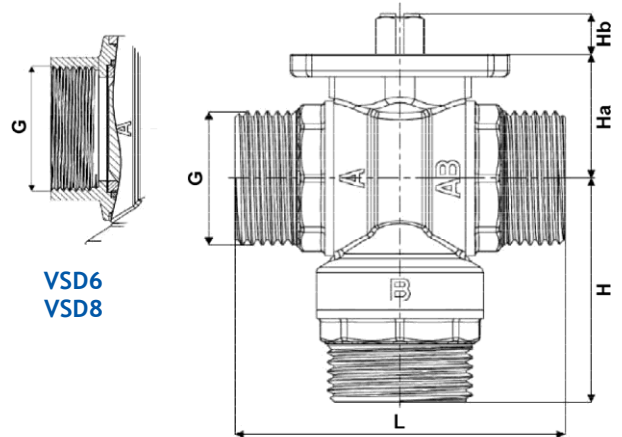
Moreover, the pipelines must be thoroughly washed by positioning the valve stem at half stroke; this operation must be performed before start-up and after a prolonged shutdown of the system.

## DIMENSIONS [mm]

### VSS6 - VSS8



### VSD5



TYPE	MODELS	DN	G	L	H	Ha	Hb
<b>2-way</b>	<b>VSS6</b>	<b>1 ½"</b>	<b>1 ½"</b>	<b>96</b>	-	<b>52,8</b>	<b>11</b>
	<b>VSS8</b>	<b>2"</b>	<b>2"</b>	<b>113</b>	-	<b>60,5</b>	<b>11</b>
<b>3-way</b>	<b>VSD5</b>	<b>1 ¼"</b>	<b>1 ½"</b>	<b>102</b>	<b>76,8</b>	<b>39,8</b>	<b>10</b>
	<b>VSD6</b>	<b>1 ½"</b>	<b>1 ½"</b>	<b>96</b>	<b>77</b>	<b>52,8</b>	<b>11</b>
	<b>VSD8</b>	<b>2"</b>	<b>2"</b>	<b>113</b>	<b>92,3</b>	<b>60,5</b>	<b>11</b>