# **VSC-VDC**

## 2-/3-way Motorized Ball Valves Modulating

MODELS	DESCRIPTION					
VSC2	Motorized ball valve, 2-way, DN 1/2"; Kvs 4 m³/h					
VSC3	Motorized ball valve, 2-way, DN 3/4"; Kvs 6,3 m³/h					
VSC4	Motorized ball valve, 2-way, DN 1"; Kvs 10 m³/h					
VSC5	Motorized ball valve, 2-way, DN 1"1/4; Kvs 16 m³/h					
VSC6	Motorized ball valve, 2-way, DN 1"1/2; Kvs 25 m <sup>3</sup> /h					
VSC8	Motorized ball valve, 2-way, DN 2" Kvs 40 m³/h					
VSC8-63	Motorized ball valve, 2-way, DN 2" Kvs 63 m³/h					
VDC2	Motorized ball valve, 3-way, DN 1/2"; Kvs 4 m³/h					
VDC3	Motorized ball valve, 3-way, DN 3/4"; Kvs 6,3 m³/h					
VDC4	Motorized ball valve, 3-way, DN 1"; Kvs 10 m³/h					
VDC5	Motorized ball valve, 3-way, DN 1"1/4; Kvs 16 m³/h					
VDC6	Motorized ball valve, 3-way, DN 1"1/2; Kvs 25 m <sup>3</sup> /h					
VDC8	Motorized ball valve, 3-way, DN 2"; Kvs 40 m³/h					
VDC8-63	Motorized ball valve, 3-way, DN 2"; Kvs 63 m <sup>3</sup> /h					



#### **APPLICATION AND USE**

For use in heating, ventilation, heating systems, and air conditioning systems.

Available in 2- and 3-way threaded connections, both provided with either modulating, on/off and 3p actuator (MVS216, MVS416, MVS416F and MVS516 with ISO 5211 F04 flange).

The substances admitted are belonging at the following categories:

- water, from -10°C to +130°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**

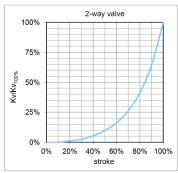
DESCRIPTION		VSC-VDC				
В	ody	PN40				
Const	ruction	Pmax 16 bar				
	Body	Brass (EN-12165 CW617N)				
Materials	Seat	PTFE				
	Ball	Chrome plated brass (EN-12164 CW617N)				
Sealing	g leakage	Tight close-off				
Connections		Female threaded				
Actuator connection		ISO 5211 F04				

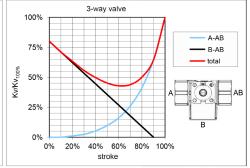
The performances stated in this sheet can be modified without any prior notice.

TYPE	MODELS	DN	1/ /C [M2/LI]	THREADED	P MAX ACTUA-		FLUID TEMP.		AD
ITPE	INIODELS	DN	KVS [IVIS/IT]	INKEADED	TOF	TORS	MIN	MAX	ΔΡ
>	VSC2	1/2"	4	FF	16 bar	MVSx16 (16 Nm)	-10°C	+130°C	3.5 bar
	VSC3	3/4"	6,3	FF					
	VSC4	1"	10	FF					
2-way	VSC5	1 1/4"	16	FF					
2-	VSC6	1 ½"	25	FF					
	VSC8	2"	40	FF					
	VSC8-63	2"	63	FF					
	VDC2	1/2"	4	FFF					
3-way	VDC3	3/4"	6,3	FFF					
	VDC4	1"	10	FFF					
	VDC5	1 1/4"	16	FFF					
	VDC6	1 ½"	25	FFF					
	VDC8	2"	40	FFF					
	VDC8-63	2"	63	FFF					

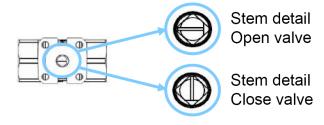
## **OPERATION**

#### **Characteristic Curve**

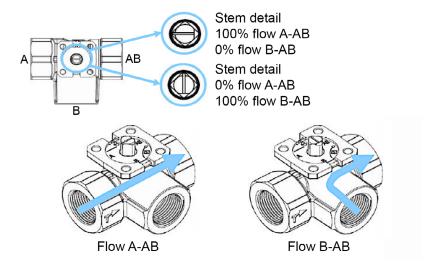




## 2-way Valve



## 3-way Valve



#### **ACCESSORIES**

GVSC2	Thermal insulation for VSC2
GVSC3	Thermal insulation for VSC3
GVSC4	Thermal insulation for VSC4
GVSC5	Thermal insulation for VSC5
GVSC6	Thermal insulation for VSC6
GVSC8	Thermal insulation for VSC8 and VSC8-63
GVDC2	Thermal insulation for VDC2
GVDC3	Thermal insulation for VDC3
GVDC4	Thermal insulation for VDC4

**GVDC8** Thermal insulation for VDC8 and VDC8-63

Thermal insulation for VDC5

Thermal insulation for VDC6

## **INSTALLATION RECOMMENDATIONS**

## **Operating Conditions**

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

#### **Pipe Flushing**

**GVDC5** 

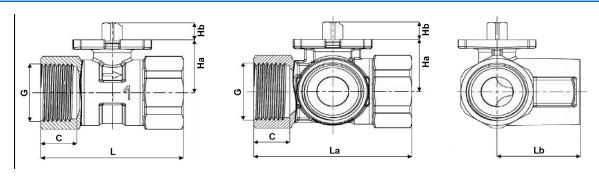
**GVDC6** 

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]



TYPE	MODELS	DN	G	L	LA	LB	С	НА	НВ
	VSC2	1/2"	1/2"	61.6	-	-	15.5	24.2	10
	VSC3	3/4"	3/4"	67.4	-	-	16.5	27.6	10
	VSC4	1"	1"	76.8	-	-	19.5	30.5	10
2-way	VSC5	1 1/4"	1″1/4	88	-	-	21.5	34.3	10
7	VSC6	1 ½"	1″1/2	101.8	-	-	21.5	39.8	10
	VSC8	2"	2"	116.2	-	-	25	52.8	10
	VSC8-63	2"	2"	116.2	-	-	25	52.8	10
	VDC2	1/2"	1/2"	-	66.6	34	15.5	24.2	10
	VDC3	3/4"	3/4"	-	72.2	36.7	16.5	27.6	10
3-way	VDC4	1"	1"	-	85.4	44.8	19.5	30.5	10
	VDC5	1 1/4"	1″1/4	-	99.2	52.6	21.5	34.3	10
	VDC6	1 ½"	1″1/2	-	109.6	57.1	21.5	39.8	10
	VDC8	2"	2"	-	131.4	68.9	25	52.8	10
	VDC8-63	2"	2"	-	131.4	68.9	25	52.8	10

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