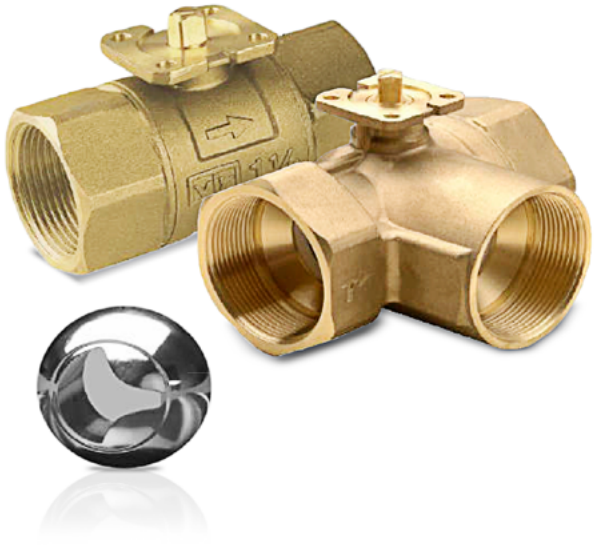
Two/Three-way motorized ball valves modulating

VSC-VDC

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 m³/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 m³/h
VDC8	Motorized ball valve, 3-way, DN 2"; Kvs 40 m³/h
VDC8-63	Motorized ball valve, 3-way, DN 2"; Kvs 63 m³/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, MV-S416F and MVS516 with ISO 5211 F04 flange).

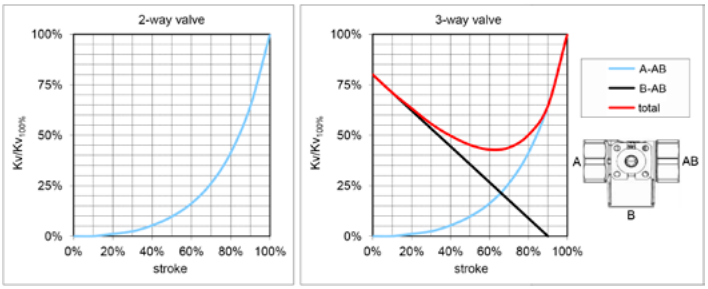
The substances admitted are belonging at the following categories:

- 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%

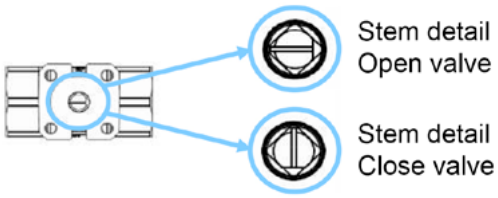
Not suitable for gas 1 and group 2, group 1 liquids (Dir. 2014/68/UE)

OPERATION

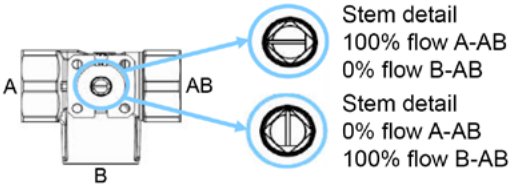
Characteristic curve

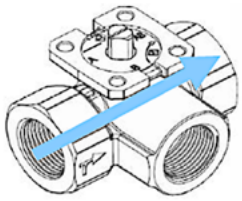


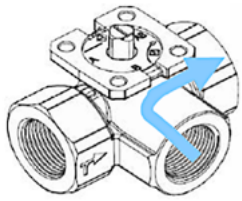
2-way valve



3-way valve




Flow A-AB


Flow B-AB

TECHNICAL CHARACTERISTICS

Body: PN 40
Construction: Pmax 16 bar
Materials: **Body** Brass (EN-12165 CW617N)
Seat PTFE
Ball Chrome plated Brass (EN-12164 CW617N)
Sealing leakage: Tight close-off
Connections: Female threaded
Actuator connection: ISO 5211 F04

Controlli S.p.A.
16010 Sant'Olcese (GE)
Tel. 010 73 06 1
Fax. 010 73 06 870/871
www.controlli.eu

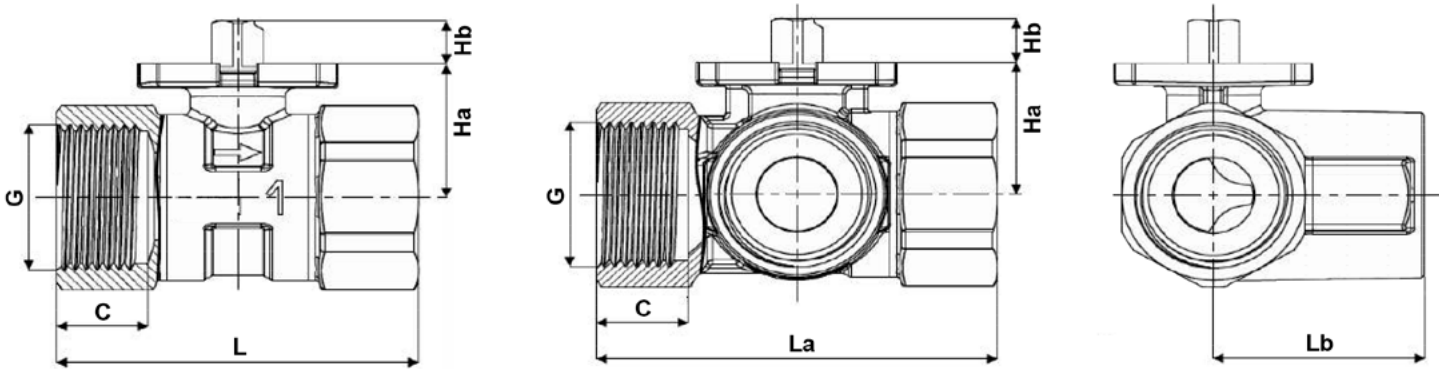
TYPE	MODELS	DN	Kvs [m³/h]	THREADED	P max	ACTUATORS	FLUID TEMP.		ΔP
							MIN	MAX	
2-way	VSC2	1/2"	4	FF	16 bar	MVSx16 (16 Nm)	-10° C	+130° C	3,5 bar
	VSC3	3/4"	6,3	FF					
	VSC4	1"	10	FF					
	VSC5	1 ¼"	16	FF					
	VSC6	1 ½"	25	FF					
	VSC8	2"	40	FF					
	VSC8-63	2"	63	FF					
3-way	VDC2	1/2"	4	FFF					
	VDC3	3/4"	6,3	FFF					
	VDC4	1"	10	FFF					
	VDC5	1 ¼"	16	FFF					
	VDC6	1 ½"	25	FFF					
	VDC8	2"	40	FFF					
	VDC8-63	2"	63	FFF					

INSTALLATION RECOMMENDATIONS

Operating conditions
Temperature, nominal pressure and differential pressure on the valve must be within in 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]



TYPE	MODELS	DN	G	L	La	Lb	C	Ha	Hb
2-way	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
	VSC5	1 ¼"	1"1/4	88	-	-	21,5	34,3	10
	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
3-way	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
	VDC4	1"	1"	-	85,4	44,8	19,5	30,5	10
	VDC5	1 ¼"	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

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