

Control Valves and Actuators

ic.tech

Wide selection of control valves for room, zone, HVAC, and industrial processes with a perfectly matched range of analog, network, and smart actuators.



ic ISMA CONTROLLI

Ensure comfort and guarantee efficiency at every stage of the building control process. Reduce energy, installation and maintenance costs with a wide range of valves and actuators.

Product applications range from zone and FCU control through air handling units and HVAC to industrial processes.

iSMA CONTROLLI with over 90 years of experience in manufacturing Control Valves and Actuators offers a reliable and trusted solution for every building.

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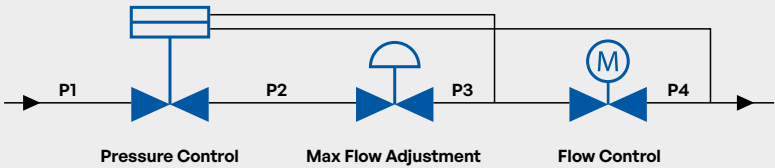
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LIBRA Dynamic Pressure Independent Control Valves

iSMA CONTROLLI PICVs are ideal for use in heating/cooling variable flow systems and provide constant flow regulation within a given range of differential pressure drop.
Dynamic balancing eliminates overflows regardless of fluctuating pressure conditions in the system.

3 PRODUCTS IN 1

- Control valve
- Differential pressure controller
- Static flow limiting valve



- One PICV replaces up to three separate valves (a 2-way control valve, a flow limiting valve, a differential pressure control valve).
- Optimum control in heating and cooling circuits with variable systems.
- Flow rate can be precisely set at its specified design value.
- Constant flow across the control valve regardless of changes in pump speed or valves closure elsewhere in the system.
- Authority close to 100%.
- Linear valve characteristic regardless of the preset value.
- 100% stroke always available regardless of the preset value.
- No cartridge design.
- Very low hysteresis.

Easy Selection & Commissioning

- Very quick selection among thousands of units thanks to our PICV selection tool.
- Simple commissioning: it is just a matter of selecting one of the preset values on the valve caliber.
- Easy pressure change measurement with our DMP700 differential pressure meter (up to 101.5 psi).
- Maximum flow rate setting from the knob placed on the bottom of the valve without a need of removing the actuator.



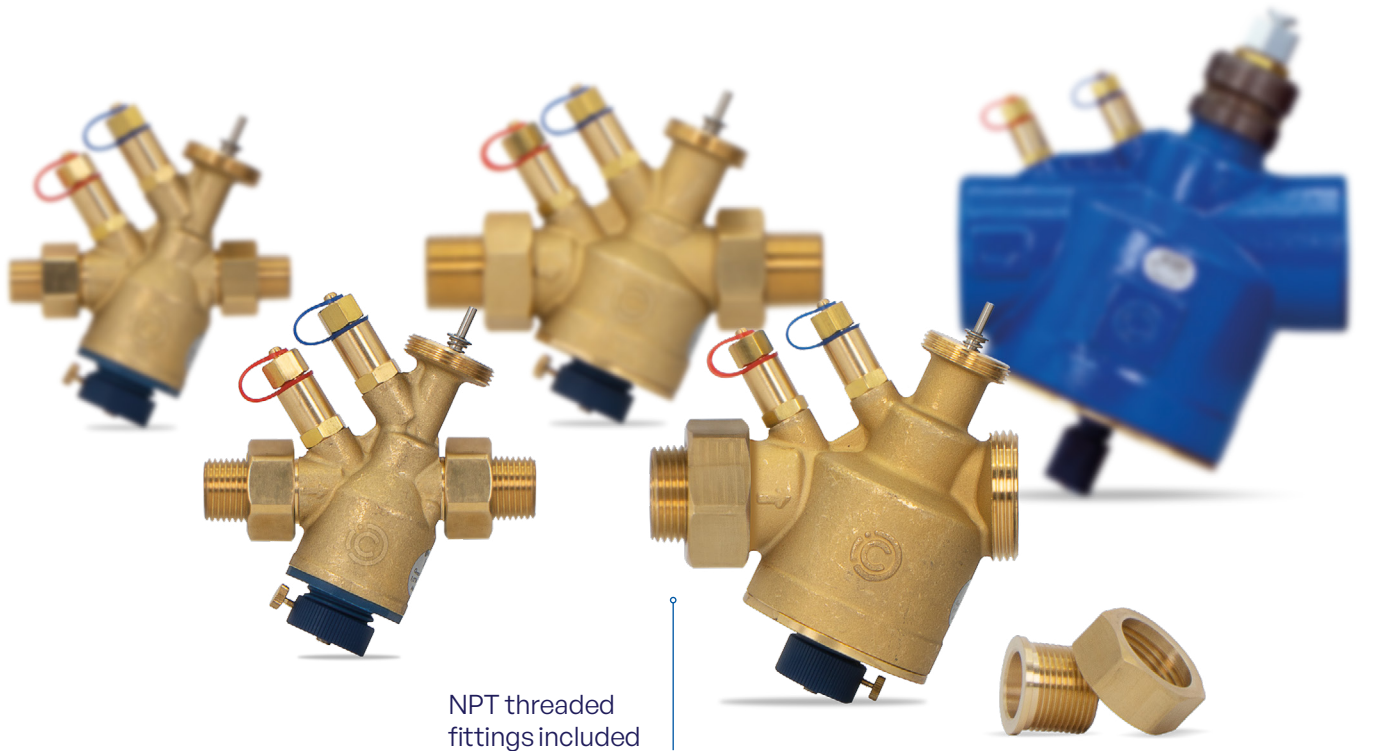
DMP700

Body: CW617N brass (DN15 to DN32) and GJS-400 cast iron (DN40 and DN50) | **Plug:** AISI303 stainless steel | **Max pressure:** 232 psi | **Temperature:** 14°F to 248°F | **Leakage:** tight close-off | **Stroke:** 0.16" and 0.59" | **Motorized by:** MCA, MVX52B, MVT.S, MVC503R, MVC503x-2-RS, MVE.04 and MVE.04-2-RS

Model		Con- nection	DN	Stroke [inch]	Flow rate [gpm - US]		ΔP max. [psi]	Compatible actuators and maximum flow rates [gpm - US]	
Without p/t plugs	With p/t plugs				Min.	Max.		MCA24L MVX52B	MVT403S MVT503SB MVC503R
VLX1PS6	VLX1PPS6	1/2" M	15	0.16	0.4	1.7	87	Electro-thermal 31.5 lbf	Electro-mechanical 67.4 lbf
VLX2PS6	VLX2PPS6	3/4" M	15		0.7	3.5		1.7	1.7
VLX3PS6	VLX3PPS6	1" M	20		0.9	4.4		3.5	3.5
VLX4PS6	VLX4PPS6	1 1/4" M	25		0.9	8.8		4.4	4.4
VLX5PS6	VLX5PPS6	1 1/2" M	32		1.8	17.6		8.8	8.8
								-	17.6

Model	Con- nection	DN	Stroke [inch]	Flow rate [gpm - US]		ΔP max. [psi]	Compatible actuators and maximum flow rates [gpm - US]	
With p/t plugs				Min.	Max.		MVE504S MVE504SR	MVE504S-65 MVE504SR-65
							Electro-mechanical 89.9 lbf	
VLX6PPS6	1 1/2" F	40	0.59	4.8	44	116	44	44
VLX8PPS6	2" F	50		9.7	55		55	55

ATTENTION - If MVX52B is not powered, PICV is OPEN, and if MCA24L is not powered, PICV is CLOSED.



NPT threaded
fittings included

EBV - Electronic Pressure Independent Control Valves

EBV is an electronic PICV designed for stabilizing flow in large hydronic heating and cooling systems. By integrating high-resolution differential pressure sensors and a motorized actuator with an equal-percentage control characteristic, EBV maintains constant flow even when system pressure fluctuates.

Energy Valve - Balance and Control with Energy function

Energy Valve combines EBV functionality with an integrated Energy Function, using supply and return temperature sensors to enable real-time thermal power control and energy monitoring.



Key Features	PICV	Energy Valve
Pressure independent control	•	•
Energy monitoring	-	•
Pressure transducers (x2)	•	•
Temperature sensors (x2)	-	•
P/T test points	•	•
Flow rate calculation	•	•
Minimum and maximum flow value setting	•	•
Analog inputs (0-10 V DC, 4-20 mA)	•	•
Modbus and BACnet connectivity	•	•
Valve control and feedback via Modbus and BACnet	•	•
ΔT (temperature difference between supply and return water) limit control loop	-	•
Power (kW) and energy (kWh) calculation of the heat exchanger	-	•
Power (kW) and energy (kWh) control	-	•
Remote monitoring of energy consumption	-	•
Configuration through micro USB	•	•

65 = DN65, max flow 162.9 gpm
80 = DN80, max flow 259.8 gpm
100 = DN100, max flow 339 gpm
125 = DN125, max flow 519.5 gpm
150 = DN150, max flow 779.3 gpm

0 = No emergency return
1 = With emergency return

EBVXX-XXX-X1XA

024 = Power supply 24 V AC/DC

A = Flanges drilled according to ANSI 125

0 = No temperature sensors
1 = With temperature sensors

1 = BACnet and Modbus connection

Example: **EBV65-024-011A**: • max flow 162.9 gpm • DN65 • 24 V AC/DC • no emergency return • with BACnet and Modbus connectivity • with energy function enabled • 2 temperature sensors included

Configurations

PICV

Network actuator
Pressure sensors
Control valve

Example: EBV65-024-010

ENERGY CONTROL VALVE

Network actuator
Pressure sensors
Control valve
Temperature sensors

Example: EBV65-024-011

Pressure sensors for pressure independent flow control

Supply & return temperature sensor for energy monitoring and ΔT control

Connectivity

COMMISSIONING

CONV-USB-RS485 OR USB PORT

OPERATION

MODBUS/BACNET MASTER DEVICE

PICV

EBV Electronic Pressure Independent Control Valves

Body: GJL-250 cast iron | Plug: CW617N brass and CB491K bronze | Max pressure: 232 psi | Temperature: 14°F to 248°F | Leakage: 0.03%

Model	DN	Min. flow [gpm - US]	Max flow [gpm - US]	Emergency return	Power supply	Connectivity	Max. ΔP [psi]		
EBV65-024-010A	65	52.8	162.9	No	24 V AC/DC	BACnet and Modbus	5-116		
EBV80-024-010A	80	110.1	259.8	No					
EBV100-024-010A	100	198.1	339	No					
EBV125-024-010A	125	268.6	519.5	No					
EBV150-024-010A	150	352.2	779.3	No					
EBV65-024-110A	65	52.8	162.9	Yes	24 V AC/DC				
EBV80-024-110A	80	110.1	259.8	Yes					
EBV100-024-110A	100	198.1	339	Yes					
EBV125-024-110A	125	268.6	519.5	Yes					
EBV150-024-110A	150	352.2	779.3	Yes					



Energy Valves

Energy Valves Balance and Control with Energy Function

Body: GJL-250 cast iron | Plug: CW617N brass and CB491K bronze | Max pressure: 232 psi | Temperature: 14°F to 248°F | Leakage: 0.03% | 2 temperature sensors and 2 sensor pockets included

Model	DN	Min. flow [gpm - US]	Max flow [gpm - US]	Emergency return	Power supply	Connectivity	Max. ΔP [psi]		
EBV65-024-011A	65	52.8	162.9	No	24 V AC/DC	BACnet and Modbus	5-116		
EBV80-024-011A	80	110.1	259.8	No					
EBV100-024-011A	100	198.1	339	No					
EBV125-024-011A	125	268.6	519.5	No					
EBV150-024-011A	150	352.2	779.3	No					
EBV65-024-111A	65	52.8	162.9	Yes	24 V AC/DC				
EBV80-024-111A	80	110.1	259.8	Yes					
EBV100-024-111A	100	198.1	339	Yes					
EBV125-024-111A	125	268.6	519.5	Yes					
EBV150-024-111A	150	352.2	779.3	Yes					



FCU & Zone Valves

MICRA® Compact Brass Zone Valves for tight close-off application

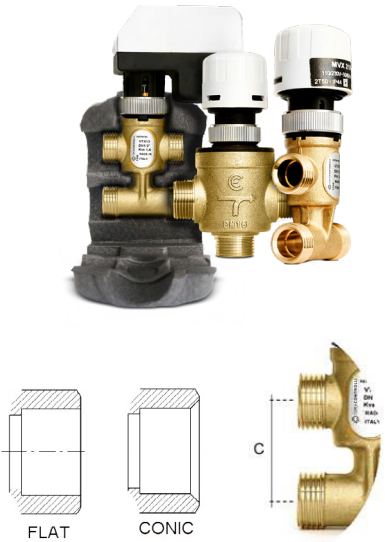
Micra® is our successful range of motorized valves for fan-coil units. Range consists of PN16 brass (CW617N) valve bodies with compact dimensions. Valves are 100% tight close-off.

VSX (2-way), VMX (3-way) and VTX (3-way 4-ports)

- Valves with 0.1" stroke
- For electro-thermal actuators (On/Off or modulating)
- Totally silent
- Spring return (normally open & normally closed depending on actuator models)
- No friction, no wear
- Price competitive solution

VSXT (2-way), VMXT (3-way) and VTXT (3-way 4-ports)

- Valves with 0.22" stroke
- For electro-mechanical actuators
- Faster opening/closing times
- Higher close-off
- Better modulating control
- 3-position control also available



Body: CW617N brass | Plug: PPS-GF50 and CW617N brass | Max pressure: 232 psi | Temperature: 41°F to 203°F | Leakage: tight close-off | Stroke: 0.1" | Motorized by: MVX, MVR and MCA

Model	Cv		Close-off [psi]	Threaded connections	Tight	Interaxis [inch]	Action type on direct way
	Direct way	Angle way					
VSX09PPS6	0.3	-	58	G 1/2" M	flat	-	2-way n.c.
VSX10PPS6	0.5	-	58	G 1/2" M	flat	-	
VSX11PPS6	0.7	-	58	G 1/2" M	flat	-	
VSX12PPS6	1.2	-	50.8	G 1/2" M	flat	-	
VSX13PS6	1.8	-	50.8	G 1/2" M	conic	-	
VSX13PPS6	1.8	-	50.8	G 1/2" M	flat	-	
VSX21PS6	2.9	-	50.8	G 3/4" M	conic	-	
VSX21PPS6	2.9	-	50.8	G 3/4" M	flat	-	
VSX24PPS6	4.6	-	21.8	G 3/4" M	flat	-	3-way
VSX26PPS6	6.9	-	21.8	G 3/4" M	flat	-	
VSX28PPS6	6.9	-	21.8	G 1" M	flat	-	
VMX09PPS6	0.3	0.3	58	G 1/2" M	flat	-	
VMX10PPS6	0.5	0.5	58	G 1/2" M	flat	-	
VMX11PPS6	0.6	0.7	58	G 1/2" M	flat	-	
VMX12PPS6	1.2	0.7	50.8	G 1/2" M	flat	-	
VMX13PS6	1.8	1.2	50.8	G 1/2" M	conic	-	
VMX13PPS6	1.8	1.2	50.8	G 1/2" M	flat	-	
VMX21PS6	2.9	1.8	50.8	G 3/4" M	conic	-	
VMX21PPS6	2.9	1.8	50.8	G 3/4" M	flat	-	
VMX24PPS6	4.6	2.9	14.5	G 3/4" M	flat	-	
VMX26PPS6	6.9	4.6	14.5	G 3/4" M	flat	-	
VMX28PPS6	6.9	4.6	14.5	G 1" M	flat	-	

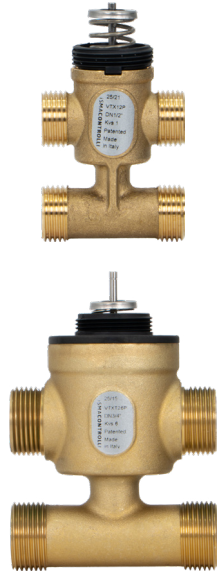


Model	Cv		Close-off [psi]	Threaded connections	Tight	Interaxis [inch]	Action type on direct way
	Direct way	Angle way					
VTX09PPS6	0.3	0.3	58	G 1/2" M	flat	1.38	3-way 4-ports
VTX09P4PS6	0.3	0.3	58	G 1/2" M	flat	1.57	
VTX10PPS6	0.5	0.5	58	G 1/2" M	flat	1.38	
VTX10P4PS6	0.5	0.5	58	G 1/2" M	flat	1.57	
VTX11PPS6	0.7	0.7	58	G 1/2" M	flat	1.38	
VTX11P4PS6	0.7	0.7	58	G 1/2" M	flat	1.57	
VTX12PPS6	12	0.7	50.8	G 1/2" M	flat	1.38	
VTX12P4PS6	12	0.7	50.8	G 1/2" M	flat	1.57	
VTX13PS6	1.8	1.2	50.8	G 1/2" M	conic	1.38	
VTX13PPS6	1.8	1.2	50.8	G 1/2" M	flat	1.38	
VTX13P4PS6	1.8	1.2	50.8	G 1/2" M	flat	1.57	
VTX21PS6	14.5	1.8	50.8	G 3/4" M	conic	1.97	
VTX21PPS6	14.5	1.8	50.8	G 3/4" M	flat	1.97	
VTX21P4PS6	14.5	1.8	50.8	G 3/4" M	flat	1.57	
VTX24PPS6	4.6	2.9	14.5	G 3/4" M	flat	1.73	
VTX26PPS6	6.9	4.6	14.5	G 3/4" M	flat	1.73	

Close-off values refer to the direct way, for angle way values see the datasheet.

Body: CW617N brass | **Plug:** PPS-GF50 | **Max pressure:** 232 psi | **Temperature:** 41°F to 203°F | **Leakage:** tight close-off | **Stroke:** 0.22" | **Motorized by:** MVC503R, MVC-2-RS and MVT.S

Model	Cv		Close-off [psi]	Threaded connections	Tight	Interaxis [inch]	Action type on direct way
	Direct way	Angle way					
VSXT09PS6	0.3	-	58	G 1/2" M	conic	-	2-way n.c
VSXT09PPS6	0.3	-	58	G 1/2" M	flat	-	
VSXT10PS6	0.5	-	50.8	G 1/2" M	conic	-	
VSXT10PPS6	0.5	-	50.8	G 1/2" M	flat	-	
VSXT11PS6	0.7	-	50.8	G 1/2" M	conic	-	
VSXT11PPS6	0.7	-	50.8	G 1/2" M	flat	-	
VSXT12PS6	1.2	-	50.8	G 1/2" M	conic	-	
VSXT12PPS6	1.2	-	50.8	G 1/2" M	flat	-	
VSXT13PS6	1.8	-	50.8	G 1/2" M	conic	-	
VSXT13PPS6	1.8	-	50.8	G 1/2" M	flat	-	
VSXT1PS6	2.3	-	50.8	G 1/2" M	conic	-	
VSXT1PPS6	2.3	-	50.8	G 1/2" M	flat	-	
VSXT21PPS6	2.9	-	50.8	G 3/4" M	flat	-	
VSXT24PPS6	4.6	-	21.8	G 3/4" M	flat	-	
VSXT26PPS6	6.9	-	21.8	G 3/4" M	flat	-	
VSXT28PPS6	6.9	-	21.8	G 1" M	flat	-	



Model	Cv		Close-off [psi]	Threaded connections	Tight	Interaxis [inch]	Action type on direct way
	Direct way	Angle way					
VMXT09PS6	0.3	0.3	58	G 1/2" M	conic	-	3-way
VMXT09PPS6	0.3	0.3	58	G 1/2" M	flat	-	
VMXT10PS6	0.5	0.3	58	G 1/2" M	conic	-	
VMXT10PPS6	0.5	0.3	58	G 1/2" M	flat	-	
VMXT11PS6	0.7	0.5	50.8	G 1/2" M	conic	-	
VMXT11PPS6	0.7	0.5	50.8	G 1/2" M	flat	-	
VMXT12PS6	1.2	0.7	50.8	G 1/2" M	conic	-	
VMXT12PPS6	1.2	0.7	50.8	G 1/2" M	flat	-	
VMXT13PS6	1.8	1.2	50.8	G 1/2" M	conic	-	
VMXT13PPS6	1.8	1.2	50.8	G 1/2" M	flat	-	
VMXT1PS6	2.3	1.8	50.8	G 1/2" M	conic	-	
VMXT1PPS6	2.3	1.8	50.8	G 1/2" M	flat	-	
VMXT21PPS6	2.9	1.8	50.8	G 3/4" M	flat	-	
VMXT24PPS6	4.6	2.9	14.5	G 3/4" M	flat	-	
VMXT26PPS6	6.9	4.6	14.5	G 3/4" M	flat	-	
VMXT28PPS6	6.9	4.6	14.5	G 1" M	flat	-	
VTXT09PS6	0.3	0.3	58	G 1/2" M	conic	1.38	3-way 4-ports
VTXT09PPS6	0.3	0.3	58	G 1/2" M	flat	1.38	
VTXT09P4PS6	0.3	0.3	58	G 1/2" M	flat	1.57	
VTXT10PS6	0.5	0.3	58	G 1/2" M	conic	1.38	
VTXT10PPS6	0.5	0.3	58	G 1/2" M	flat	1.38	
VTXT10P4PS6	0.5	0.3	58	G 1/2" M	flat	1.57	
VTXT11PS6	0.7	0.7	50.8	G 1/2" M	conic	1.38	
VTXT11PPS6	0.7	0.7	50.8	G 1/2" M	flat	1.38	
VTXT11P4PS6	0.7	0.7	50.8	G 1/2" M	flat	1.57	
VTXT12PS6	1.2	0.7	50.8	G 1/2" M	conic	1.38	
VTXT12PPS6	1.2	0.7	50.8	G 1/2" M	flat	1.38	
VTXT12P4PS6	1.2	0.7	50.8	G 1/2" M	flat	1.57	
VTXT13PS6	1.8	1.2	50.8	G 1/2" M	conic	1.38	
VTXT13PPS6	1.8	1.2	50.8	G 1/2" M	flat	1.38	
VTXT13P4PS6	1.8	1.2	50.8	G 1/2" M	flat	1.57	
VTXT1PS6	2.3	1.8	50.8	G 1/2" M	conic	1.38	
VTXT1PPS6	2.3	1.8	50.8	G 1/2" M	flat	1.38	
VTXT1P4PS6	2.3	1.8	50.8	G 1/2" M	flat	1.57	
VTXT21PS6	2.9	1.8	50.8	G 3/4" M	conic	1.97	
VTXT21PPS6	2.9	1.8	50.8	G 3/4" M	flat	1.97	
VTXT21P4PS6	2.9	1.8	50.8	G 3/4" M	flat	1.57	
VTXT24PPS6	4.6	2.9	14.5	G 3/4" M	flat	1.73	
VTXT26PPS6	6.9	4.6	14.5	G 3/4" M	flat	1.73	

Close-off values refer to the direct way, for angle way values see the datasheet.



Globe Valves with Threaded Connections

2-3TGB Valves for HVAC application

Body: GJL-250 cast iron | **Plug:** CW614N brass | **Max pressure:** 232 psi | **Temperature:** 23°F¹⁾ to 284°F | **Leakage:** 0 to 0.001% Cv | **Stroke:** 0.45" | **Motorized by:** MVB, MVC and MVE.S

	Model	DN	Cv	Max. differential pressure [psi]			Other features
				MVC.03	MVB	MVE.S	
2-way	2TGB15BR00PS6	1/2"	0.5	198.6	168.2	-	- Equal-percentage control flow characteristic - Internal threaded connections: fluid temp. 23¹⁾ to 284°F, with MVB max. 248°F (284°F with MVB+MVBHT)
	2TGB15BR0PS6	1/2"	0.7				
	2TGB15BR1PS6	1/2"	1.2				
	2TGB15BR2PS6	1/2"	1.8				
	2TGB15BR3PS6	1/2"	2.9				
	2TGB15BPS6	1/2"	4.6				
	2TGB15FR00PS6	1/2"	0.5	-	-	232	- Equal-percentage control flow characteristic - Internal threaded connections: fluid temp. 23¹⁾ to 284°F
	2TGB15FR0PS6	1/2"	0.7				
	2TGB15FR1PS6	1/2"	1.2				
	2TGB15FR2PS6	1/2"	1.8				
	2TGB15FR3PS6	1/2"	2.9				
	2TGB15FPS6	1/2"	4.6				
3-way	3TGB15BR2PS6	1/2"	1.8	168.2	198.6	-	- Equal-percentage control flow characteristic - With MVB max 248°F (284°F with MVB + MVBHT)
	3TGB15BR3PS6	1/2"	2.9				
	3TGB15BPS6	1/2"	4.6				
	3TGB15FR2PS6	1/2"	1.8	-	-	232	
	3TGB15FR3PS6	1/2"	2.9				
	3TGB15FPS6	1/2"	4.6				

Close-off and Cv values refer to the direct way, for angle way values see the datasheet.
In order to avoid seat & plug wearing issues, we recommend not to exceed 58 psi differential pressure.
1) For applications with negative temperature fluid, use the stem heater, 244 or 248.

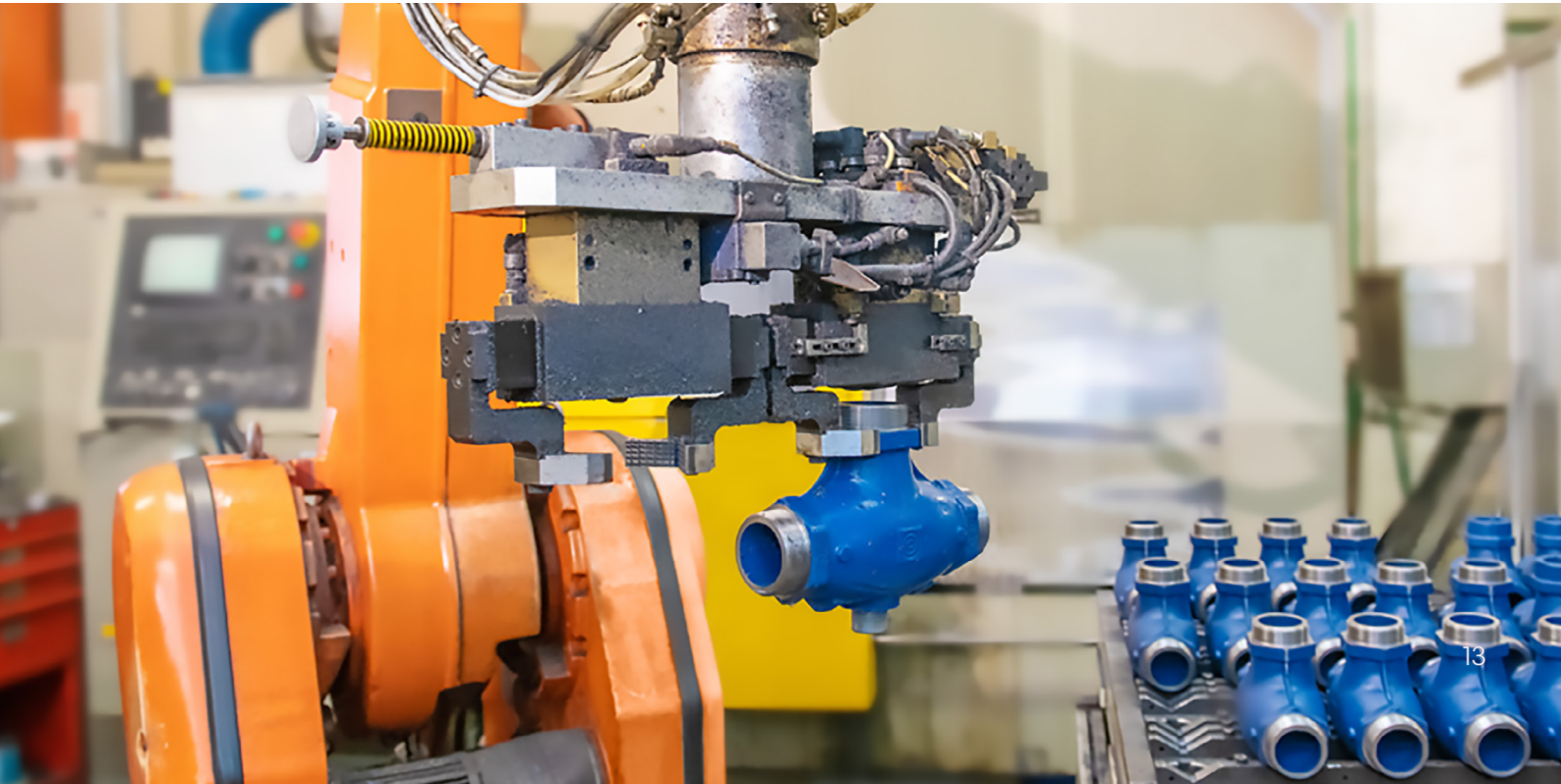


VSF-VMB Valves for HVAC application

Body: GJL-250 cast iron | **Plug:** CW617N brass | **Max pressure:** 232 psi | **Temperature:** 14°F¹⁾ to 302°F | **Leakage:** 0.03% Cv | **Stroke:** 0.65" (0.73" max) | **Motorized by:** MVB, MVE and MVH

	Model	DN	Cv	Max. differential pressure [psi]							Other features
				MVB	MVE.06(R)	MVE.10(R)	MVE.15(R)	MVH	MVH56EA MVH56EC	MVE.22	
2-way	VSF3PS6	3/4"	7.3	156.6	232	232	232	232	232	232	- With MVB max 248°F, with MVB + MVBHT max 284°F) - Control characteristic: equal-percentage on direct way, linear on angle way - For MVE actuator, add AG52 linkage - For MVH actuator, add AG62 linkage - For MVE.S actuator, add AG63 linkage
	VSF4PS6	1"	11.6	98.6	172.5	232	232	232	200.1	232	
	VSF5PS6	1 1/4"	18.5	59.4	104.4	172.4	232	232	121.8	232	
	VSF6PS6	1 1/2"	25.4	42	72.5	124.7	188.5	169.6	85.5	232	
	VSF8PS6	2"	34.7	30.4	53.6	92.8	139.2	127.6	63.8	207.3	
	VSF8APS6	2"	46.2	30.4	53.6	92.8	139.2	127.6	63.8	207.3	
3-way	VMB3PS6	3/4"	7.3	37.7	189.9	232	232	232	232	232	
	VMB4PS6	1"	11.6	24.6	126.1	232	232	232	232	149.3	
	VMB5PS6	1 1/4"	18.5	15.9	78.3	121.8	232	232	232	94.2	
	VMB6PS6	1 1/2"	25.4	11.6	56.5	102.9	160.9	232	143.5	68.1	
	VMB8PS6	2"	34.7	8.7	42	78.3	121.8	207.3	108.7	50.7	
	VMB8APS6	2"	46.2	8.7	42	78.3	121.8	207.3	108.7	50.7	

Close-off and Cv values refer to the direct way, for angle way values see the datasheet.
In order to avoid seat & plug wearing issues, we recommend not to exceed 29 psi differential pressure.
1) For applications with negative temperature fluid, use the stem heater, 244 or 248.



Globe Valves with Threaded Connections

VSB.T-VMB.T Valves for HVAC application

Body: GJL-250 cast iron | **Plug:** CW617N brass | **Max pressure:** 232 psi | **Temperature:** 23°F to 203°F | **Leakage:** 0.03% Cv | **Stroke:** 0.22" | **Motorized by:** MVC.03 and MVC503R

Model		DN	Cv	Max. diff. pressure [psi]	Other features
				MVC	
2-way	VSB3TPS6	3/4"	7.3	130.5	• Linear control characteristic
	VSB4TPS6	1"	11.6	79.7	
	VSB5TPS6	1 ¼"	16.2	50.7	
	VSB6TPS6	1 ½"	20.8	36.2	
	VSB8TPS6	2"	28.9	27.5	
	VSB8TPS6	2"	28.9	27.5	
3-way	VMB3TPS6	3/4"	7.3	130.5	
	VMB4TPS6	1"	11.6	79.7	
	VMB5TPS6	1 ¼"	16.2	50.7	
	VMB6TPS6	1 ½"	20.8	36.2	
	VMB8TPS6	2"	28.9	27.5	
	VMB8TPS6	2"	28.9	27.5	

Close-off and Cv values refer to the direct way, for angle way values see the datasheet.
Old VSBT3, VSBT4, VSBT5, VSBT6, VMBT3, VMBT4, VMBT5, VMBT6 (motorized by MVT44, MVT28, MVT56 and MVT57 actuators) still available as spare parts.

2TGA.BT Valves for HVAC and high close-off application

Body: GJL-250 cast iron | **Plug:** AISI304 stainless steel, pressure balanced | **Max pressure:** 232 psi | **Temperature:** 23°F to 248°F | **Leakage:** 0.03% Cv | **Stroke:** 0.33" | **Motorized by:** MVC.03 and MVC503R

Model		DN	Cv	Max. diff. pressure [psi]
				MVC
2-way	2TGA20BTPS6	3/4"	5.8	145
	2TGA25BTPS6	1"	11.6	
	2TGA32BTPS6	1 ¼"	15	
	2TGA40BTPS6	1 ½"	20.8	
	2TGA50BTPS6	2"	34.7	
	2TGA50BTPS6	2"	34.7	



VSBP.M-VMBP.M Valves for HVAC application with tight close-off

Body: GJL-250 cast iron | **Plug:** NBR | **Max pressure:** 232 psi | **Temperature:** 23°F to 203°F | **Leakage:** tight close-off | **Stroke:** 0.65" | **Motorized by:** MVB

Model		DN	Cv	Max. differential pressure [psi]
				MVB
2-way	VSBP3MPS6	3/4"	7.3	127.6
	VSBP4MPS6	1"	11.6	79.8
	VSBP5MPS6	1 ¼"	18.5	50.8
	VSBP6MPS6	1 ½"	28.9	36.3
	VSBP8MPS6	2"	41.6	26.1
	VSBP8MPS6	2"	41.6	26.1
3-way	VMBP3MPS6	3/4"	7.3	127.6
	VMBP4MPS6	1"	11.6	79.8
	VMBP5MPS6	1 ¼"	18.5	50.8
	VMBP6MPS6	1 ½"	28.9	36.3
	VMBP8MPS6	2"	41.6	26.1
	VMBP8MPS6	2"	41.6	26.1

Close-off and Cv values refer to the direct way, for angle way values see the datasheet.
In order to avoid seat & plug wearing issues, we recommend not to exceed 29 psi differential pressure.



2-3TIA Stainless steel valves for industrial application

Body: AISI304 stainless steel | **Plug:** AISI304 stainless steel | **Max pressure:** 232 psi | **Temperature:** -13°F¹⁾ to 302°F | **Leakage:** tight close-off | **Stroke:** 0.79" | **Motorized by:** MVE

Model		DN	Cv	Max. differential pressure [psi]					
				MVE.04(R)	MVE.06(R)	MVE.10(R)	MVE.15(R)	MVE.22	MVH56EA MVH56EC
2-way	2TIA20LPS6	3/4"	7.3	158.1	232.1	232.1	232.1	232.1	232.1
	2TIA25LPS6	1"	11.6	101.5	152.3	232.1	232.1	232.1	185.6
	2TIA32LPS6	1 ¼"	18.5	66.7	104.4	175.5	232.1	232.1	121.8
	2TIA40LPS6	1 ½"	28.9	49.3	76.9	130.5	198.7	232.1	89.9
	2TIA50LPS6	2"	46.2	29	46.4	79.8	121.8	181.3	55.1
	2TIA65LPS6	2 ½"	72.8	91.4	26.1	45	69.6	103	30.5
3-way	3TIA20PS6	3/4"	7.3	158.1	232.1	232.1	232.1	232.1	232.1
	3TIA25PS6	1"	11.6	101.5	152.3	232.1	232.1	232.1	185.6
	3TIA32PS6	1 ¼"	18.5	66.7	104.4	175.5	232.1	232.1	121.8
	3TIA40PS6	1 ½"	28.9	49.3	76.9	130.5	198.7	232.1	89.9
	3TIA50PS6	2"	46.2	29	46.4	79.8	121.8	181.3	55.1
	3TIA65PS6	2 ½"	72.8	16	26.1	45	69.6	103	30.5

Close-off and Cv values refer to the direct way, for angle way values see the datasheet.
1) For applications with negative temperature fluid. use the stem heater 248.



Globe Valves with Flanged Connections

2-3FGB Valves for HVAC application

Body: GJL-250 cast iron | **Plug:** CW617N brass (DN25-DN100), CB491K bronze (DN125-DN150) | **Max pressure:** 232 psi | **Temperature:** 14°F¹⁾ to 302°F | **Leakage:** 0,03% Cv (direct), 2% Cv (angle) | **Stroke:** 0,65" (DN25), 0,98" (DN40 to DN65), 1,77" (DN80 to DN150) | **Motorized by:** MVE and MVH

Model		DN	Cv	Max. differential pressure [psi]							Other features
				MVE.06(R)	MVE.10(R)	MVE.15(R)	MVE.22	MVH	MVHE3K	MVH56EA MVH56EC	
2-way	2FGB25 ²⁾	25	11.6	136.3	230.6	232.1	232.1	232.1	232.1	159.5	Control flow characteristic equal-percentage
	2FGB32 ²⁾	32	22	72.5	124.7	188.5	232.1	169.7	232.1	85.6	
	2FGB40 ²⁾	40	28.9	72.5	124.7	188.5	232.1	169.7	232.1	85.6	
	2FGB50 ²⁾	50	46.2	45.0	76.9	117.5	174.0	105.9	232.1	52.2	
	2FGB65A125	65	72.8	26.1	45.0	69.6	103.0	62.4	139.2	30.5	
	2FGB80A125	80	115.6	16.0	29.0	45.0	66.7	40.6	89.9	18.9	
	2FGB100A125	100	150.3	10.2	17.4	27.6	42.1	24.7	56.6	11.6	
	2FGB125A125	125	231.2	5.8	10.2	17.4	26.1	14.5	34.8	7.3	
3-way	3FGB25A125	25	11.6	136.3	230.6	232.1	232.1	232.1	232.1	159.5	Control flow characteristic direct way: equal-percentage. angle way: linear
	3FGB32A125	32	22	72.5	124.7	188.6	232.1	169.7	232.1	85.6	
	3FGB40A125	40	28.9	72.5	124.7	188.6	232.1	169.7	232.1	85.6	
	3FGB50A125	50	46.2	45	76.9	117.5	174	105.9	232.1	52.2	
	3FGB65A125	65	72.8	26.1	45	69.6	103	62.4	139.2	30.5	
	3FGB80A125	80	115.6	16	29	45	66.7	40.6	89.9	18.9	
	3FGB100A125	100	150.3	10.2	17.4	27.6	42.1	24.7	56.6	11.6	
	3FGB125A125	125	231.2	5.8	10.2	17.4	26.1	14.5	34.8	7.3	

Close-off and Cv values refer to the direct way, for angle way values see the datasheet,
In order to avoid seat & plug wearing issues, we recommend not to exceed 29 psi differential pressure,
1) For applications with negative temperature fluid, use the stem heater 248,
2) Valves available with metric flanges only, not ANSI,

2-3FGB.L Valves for tight close-off application

Body: GJL-250 cast iron | **Plug:** CW617N brass (DN65 to DN100), CB491K bronze (DN125-DN150) | **Max pressure:** 232 psi | **Temperature:** 14°F¹⁾ to 302°F | **Leakage:** tight close-off | **Stroke:** 0.98" (DN65), 1.77" (DN80 to DN150) | **Motorized by:** MVE and MVH

Model		DN	Cv	Max. differential pressure [psi]							Other features
				MVE.06(R)	MVE.10(R)	MVE.15(R)	MVE.22	MVH	MVHE3K	MVH56EA MVH56EC	
2-way	2FGB65LA125	65	72.8	26.1	45	69.6	103	62.4	139.2	30.5	Control flow characteristics equal-percentage
	2FGB80LA125	80	115.6	16	29	45	66.7	40.6	89.9	18.9	
	2FGB100LA125	100	150.3	10.2	17.4	27.6	42.1	24.7	56.6	11.6	
	2FGB125LA125	125	231.2	5.8	10.2	17.4	26.1	14.5	34.8	7.3	
	2FGB150LA125	150	346.8	4.4	7.3	11.6	17.4	10.2	23.2	4.4	
3-way	3FGB65LA125	65	72.8	26.1	45	69.6	103	62.4	139.2	30.5	Control flow characteristic direct way: equal-percentage, angle way: linear
	3FGB80LA125	80	115.6	16	29	45	66.7	40.6	89.9	18.9	
	3FGB100LA125	100	150.3	10.2	17.4	27.6	42.1	24.7	56.6	11.6	
	3FGB125LA125	125	231.2	5.8	10.2	17.4	26.1	14.5	34.8	7.3	
	3FGB150LA125	150	346.8	4.4	7.3	11.6	17.4	10.2	23.2	4.4	

Close-off and Cv values refer to the direct way, for angle way values see the datasheet.
In order to avoid seat & plug wearing issues, we recommend not to exceed 29 psi differential pressure.
1) For applications with negative temperature fluid, use the stem heater 248.



2-3FAA Steel Valves for high temperature application

Body: ASTM A216 WCB steel | **Plug:** AISI304 stainless steel | **Max pressure:** 40 bar | **Temperature:** 14°F to 446°F | **Leakage:** 0.02% Cv | **Stroke:** 0.65" mm (DN25), 0.98" (DN40 to DN65) | **Motorized by:** MVE and MVH

Model		DN	Cv	Max. differential pressure [psi]							Other features
				MVE.06(R)	MVE.10 (R)	MVE.15 (R)	MVE.22	MVH	MVHE3K	MVH56EA MVH56EC	
2-way	2FAA15A300	15	4.6	210.3	465.6	580.2	580.2	435.1	435.1	271.2	Control flow characteristics equal-percentage
	2FAA20 ¹⁾	20	7.3	123.3	275.6	467	580.2	411.9	435.1	161	
	2FAA25 ¹⁾	25	11.6	74	168.2	287.2	451.1	252.4	435.1	97.2	
	2FAA32A300	32	18.5	74	168.2	287.2	451.1	252.4	435.1	97.2	
	2FAA40A300	40	27.7	49.3	113.1	192.9	304.6	169.7	423.5	65.3	
	2FAA50A150	50	37	31.9	74	126.2	198.7	110.2	277	42.1	
	2FAA65A150	65	72.8	11.6	29	50.8	81.2	45	114.6	16	
	2FAA80A150	80	127.2	7.3	18.9	33.4	53.7	29	75.4	10.2	
3-way	3FAA25 ¹⁾	25	11.6	134.9	229.2	346.6	512	311.8	435.1	156.6	Control flow characteristic: linear
	3FAA32A300	32	18.5	89.9	153.7	233.5	346.6	210.3	435.1	105.9	
	3FAA40A300	40	28.9	58	100.1	152.3	226.3	136.3	303.1	68.2	
	3FAA50A150	50	46.2	40.6	69.6	107.3	158.1	95.7	213.2	47.9	
	3FAA65A150	65	72.8	23.2	40.6	62.4	92.8	56.6	124.7	27.6	
	3FAA80A150	80	115.6	14.5	26.1	40.6	60.9	36.3	82.7	17.4	
	3FAA100A150	100	161.8	8.7	16	24.7	37.7	23.2	52.2	10.2	
	3FAA125A150	125	289	4.4	10.2	16	24.7	14.5	33.4	5.8	

Close-off and Cv values refer to the direct way, for angle way values see the datasheet.
In order to avoid seat & plug wearing issues, we recommend not to exceed 174 psi differential pressure.
1) Valves available with metric flanges only, not ANSI.



Globe Valves with Grooved Connections

2-3FGB.PS89 Valves for HVAC application

Body: GJL-250 cast iron | **Plug:** CW617N brass (DN40 to DN100), CB491K bronze (DN125) | **Max pressure:** 232 psi | **Temperature:** 14°F¹⁾ to 302°F | **Leakage:** 0.03% Cv (direct way), 2% Cv (angle way) | **Stroke:** 0.98" (DN40 to DN65), 1.77" (DN80 to DN125) | **Motorized by:** MVE and MVH

Model		DN	Cv	Max. differential pressure [bar]							Other features
				MVE.06(R)	MVE.10(R)	MVE.15(R)	MVE.22	MVH	MVHE3K	MVH56EA MVH56EC	
2-way	2FGB40PS89	40	28.9	72.5	124.7	188.5	232.1	169.7	232.1	85.6	Control flow characteristics equal-percentage
	2FGB50PS89	50	46.2	45	76.9	117.5	174	105.9	232.1	52.2	
	2FGB65PS89	65	72.8	26.1	45	69.6	103	62.4	139.2	30.5	
	2FGB80PS89	80	115.6	16	29	45	66.7	40.6	89.9	18.9	
	2FGB100PS89	100	150.3	10.2	17.4	27.6	42.1	24.7	56.6	11.6	
	2FGB125PS89	125	231.2	5.8	10.2	17.4	26.1	14.5	34.8	7.3	
3-way	3FGB40PS89	40	28.9	72.5	124.7	188.5	232.1	169.7	232.1	85.6	Control flow characteristic direct way: equal-percentage, angle way: linear
	3FGB50PS89	50	46.2	45	76.9	117.5	174	105.9	232.1	52.2	
	3FGB65PS89	65	72.8	26.1	45	69.6	103	62.4	139.2	30.5	
	3FGB80PS89	80	115.6	16	29	45	66.7	40.6	89.9	18.9	
	3FGB100PS89	100	150.3	10.2	17.4	27.6	42.1	24.7	56.6	11.6	
	3FGB125PS89	125	231.2	5.8	10.2	17.4	26.1	14.5	34.8	7.3	

Close-off and Cv values refer to the direct way, for angle way values see the datasheet.
In order to avoid seat & plug wearing issues, we recommend not to exceed 29 psi differential pressure.
1) For applications with negative temperature fluid, use the stem heater 248.

2-3FGB.LPS89 Valves for tight close-off application

Body: GJL-250 cast iron | **Plug:** CW617N brass (DN65 to DN100), CB491K bronze (DN125) | **Max pressure:** 232 psi | **Temperature:** 14°F¹⁾ to 302°F | **Leakage:** tight close-off | **Stroke:** 0.98" (DN65), 1.77" (DN80 to DN125) | **Motorized by:** MVE and MVH

Model		DN	Cv	Max. differential pressure [psi]							Other features
				MVE.06(R)	MVE.10(R)	MVE.15(R)	MVE.22	MVH	MVHE3K	MVH56EA MVH56EC	
2-way	2FGB65LPS89	65	72.8	26.1	45	69.6	103	62.4	139.2	30.5	Control flow characteristics equal-percentage
	2FGB80LPS89	80	115.6	16	29	45	66.7	40.6	89.9	18.9	
	2FGB100LPS89	100	150.3	10.2	17.4	27.6	42.1	24.7	56.6	11.6	
	2FGB125LPS89	125	231.2	5.8	10.2	17.4	26.1	14.5	34.8	7.3	
3-way	3FGB65LPS89	65	72.8	26.1	45	69.6	103	62.4	139.2	30.5	Control flow characteristic direct way: equal-percentage, angle way: linear
	3FGB80LPS89	80	115.6	16	29	45	66.7	40.6	89.9	18.9	
	3FGB100LPS89	100	150.3	10.2	17.4	27.6	42.1	24.7	56.6	11.6	
	3FGB125LPS89	125	231.2	5.8	10.2	17.4	26.1	14.5	34.8	7.3	

Close-off and Cv values refer to the direct way, for angle way values see the datasheet.
In order to avoid seat & plug wearing issues, we recommend not to exceed 29 psi differential pressure.
1) For applications with negative temperature fluid, use the stem heater 248.

2FGB.BPS89 Balanced Plug Valves for HVAC application

Body: GJL-250 cast iron | **Plug:** CW617N brass (DN65-DN100), CB491K bronze (DN125) | **Max pressure:** 232 psi | **Temperature:** 14°F¹⁾ to 302°F | **Leakage:** 0.03% Cv | **Stroke:** 0.98" (DN65), 1.77" (DN80 to DN125) | **Motorized by:** MVE and MVH

Model		DN	Cv	Max. differential pressure [psi]						Other features
				MVE.06(R)	MVE.10(R)	MVE.15(R)	MVE.22	MVH	MVH56EA MVH56EC	
2-way	2FGB65BPS89	65	72,8	156.6	232.1	232.1	232.1	232.1	203.1	Control flow characteristics equal-percentage
	2FGB80BPS89	80	115,6	116	232.1	232.1	232.1	232.1	153.7	
	2FGB100BPS89	100	150,3	76.9	201.6	232.1	232.1	232.1	107.3	
	2FGB125BPS89	125	231,2	50.8	150.8	232.1	232.1	232.1	74	

In order to avoid seat & plug wearing issues, we recommend not to exceed 29 psi.
1) For applications with negative temperature fluid, use the stem heater 248.



Grooved connections are suitable to Victaulic clamps.
Clamps are not supplied.

Butterfly Valves

VFA Butterfly Valves

Body: EN-JS1030 spheroidal cast-iron | **Disk:** 1.4581 (DN25-80), EN-JS1030 (DN100-200) stainless steel | **Max pressure:** 232 psi | **Temperature:** 14°F to 212°F | **Leakage:** tight close-off | **Motorized by:** MDA, MDL with AF24 or AF25 adapter.

Model	DN	Cv	Max. differential pressure [psi]	
			MDA22, MDA42, MDA52 MDL24, MDL44, MDL54	MDA24, MDA44, MDA54 MDL26, MDL46, MDL56
VFA25	25	30,1	87	-
VFA32	32	30,6		-
VFA40	40	57,3		-
VFA50	50	134,1		-
VFA65	65	299,4		-
VFA80	80	435,8		-
VFA100	100	882,0		-
VFA125	125	1190,7	-	87
VFA150	150	2069,2	-	43.5
VFA200	200	3999,8	-	



MVX Actuator for PICV and Zone Valves

MVX42R and MVX52 are electro-thermal actuators for V.X valves with Cv from 0.3 to 6.9 and PICV - Stroke with end indicator - 25.6" bipolar/tripolar cable - M30x1.5 connection¹⁾

Model	Power supply	Force [lbf]	Control signal	Stroke [inch]	IP	Consumption [VA]		Starting time [s]
						Starting	Operation	
MVX42R	24 V AC/DC	31.5	On-off	0.16	44	4	1.8	90
MVX52	24 V AC	31.5	Proportional 0-10 V DC	0.1	44	5	1.8	90

When power is off: actuator spindle is completely inside.
When power is on and control signal is 0 V DC: actuator spindle is completely inside (top position if mounting is vertical).
When power is on and control signal is 10 V DC: actuator spindle is completely outside (bottom position if mounting is vertical).
1) The M28x1.5 connection variant is available by choosing a model with the PS107 suffix (e.g., MVX42RPS107) when ordering.

MVX52B is equipped with a potentiometer, which allows to limit the valve maximum opening stroke (selectable from 20% to 100%). For example, if the potentiometer is set to 6 (60%):

- maximum stroke becomes 0.1";
- with 0 V DC signal actuator spindle is in the bottom position and with 10 V DC signal actuator reaches 60% of the whole stroke (0.1").

Micra® valves closure is guaranteed only by selecting 100%.
2 m tripolar cable and M30x1.5 connection.

Model	Power supply	Force [lbf]	Control signal	Stroke [inch]	IP	Consumption [VA]		Starting time [s]
						Starting	Operation	
MVX52B	24 V AC	31.5	Proportional 0-10 V DC	0.16	44	5	1.8	150

When power is off: actuator spindle is completely inside.
When power is on and control signal is 0 V DC: actuator spindle is completely outside (bottom position if mounting is vertical).
When power is on and control signal is 10 V DC: actuator spindle is completely inside (top position if mounting is vertical).

MCA Adjustable Actuator for PICV and Zone Valves

Protection from condensation and from leaking regardless of the valve position (throughout 360°). MCA is designed to be adapted to the majority of underfloor heating manifolds and zone valves up to 0.16" stroke available on the market without a need of any adapters. - 70 cm bipolar/quadripolar cable and M30x1.5 connection¹⁾.
Another feature of the MCA is the manual override position, which allows opening and closing the valve/manifold through an easy operation and without powering the actuator.
The MCA is equipped with an on-off position indicator, visible from any directions, which allows an easy and fast installation.
The MCA is then an ideal product for installers and distributors who can use it on any manifolds/valves, but also for OEMs thanks to its high performances, its installation quickness as well as the possibility to be customized, for example, with the customer's logo.

Model	Power supply	Force [lbf]	Control signal	Stroke [inch]	IP	Consumption [VA]		Starting time [s]	Aux micro switch
						Starting	Operation		
MCA24L	24 V AC/DC	31.5	On-off, PWM	0.16	54	4	1.8	60	No
MCA24LM	24 V AC/DC	31.5	On-off, PWM	0.16	54	4	1.8	60	Yes

1) The M28x1.5 connection variant is available by choosing a model with the PS107 suffix (e.g., MCA24LPS107) when ordering.



By a simple rotation of the actuator cover, the installer can adjust it to manifolds or valves without a need of adapters (that are usually and easily lost).

MVP Actuator for Piuma Valves

Electro-thermal actuator for on-off control of fan-coil Piuma valves - 25.6" cable - M30x1.5 connection

Model	Power supply	Force [lbf]	Control signal	Stroke [inch]	IP	Consumption [VA]		Starting time [s]	Aux micro switch
						Starting	Operation		
MVP24	24 V AC/DC	38.2	On-off, PWM	0.16	44	4	1.8	60	No
MVP24M	24 V AC/DC	38.2	On-off, PWM	0.16	44	4	1.8	60	Yes

When power is off: actuator spindle is completely out. When power is on: actuator spindle is completely inside.

MVR Actuator for Zone Valves

On/off and PWM control - 25.6" bipolar/quadripolar cable - M30x1.5 connection²⁾.
Thanks to a little plastic stem adapter, MVR are suitable to a number of different valves or manifolds.

Model	Power supply	Force [lbf]	Control signal	Stroke [inch]	IP	Consumption [VA]		Starting time [s]	Aux micro switch	Stem output [mm]
						Starting	Operation			
MVR24	24 V AC/DC	31.5	On-off, PWM	0.16	43	4	1.8	60	No	0.42-0.46
MVR24M	24 V AC/DC	31.5	On-off, PWM	0.16	43	4	1.8	60	Yes	0.42-0.46

When power is off: actuator spindle is completely out. When power is on: actuator spindle is completely inside.
1) Models suitable to manifolds or valves of many different brands. Please check the MVR_DBL310en datasheet for details.
2) The M28x1.5 connection variant is available by choosing a model with the PS107 suffix (e.g., MVR24MPS107) when ordering.



MVC & MVT.S Compact HVAC Actuators

MVC & MVT.S Compact Actuators are designed for precise control of terminal units, zone valves, hydronic coils, and globe valves in two- and four-pipe heating and cooling systems. Thanks to its universal M30x1.5¹⁾ mounting interface and support for push/pull valves, spring-return valves, and globe valves, this family provides a flexible and robust solution suitable for a wide range of HVAC applications.

The series offers ON/OFF, three-point, and proportional control options, making it adaptable to simple control strategies as well as advanced modulating applications. Automatic stroke calibration enables accurate adaptation to the connected valve, while fixed-stroke operation ensures compatibility with spring-return designs.

Model	Emerg. return	Control signal	Power supply	Speed [s/mm]	Force [lbf]	IP	Valves with spring		Valves without spring				
							VLX / VLX.P 3/4"-1 1/4" stroke 0.16"	V.XT 1/2"-3/4" stroke 0.22"	VSB.T-VMB.T 3/4"-2" stroke 0.22"	2-3TGB15B 1/2" stroke 0.45"	2-3TBB.T 1/2"-2" stroke 0.47"	2TGA.BT 3/4"-2" stroke 0.33"	Valves from other manu- facturers with stroke up to 0.63"
MVC403	No	3P	24 V AC	11.5	67.4	54	-	-	•	• AG74-03	•	•	•
MVC503	No	Prop.					-	-	•	• AG74-03	•	•	•
MVC503R	Yes		24 V AC/DC	5			•	•	•	• AG74-03	•	•	• (STROKE max 0.47")

1) The M28x1.5 connection variant is available by choosing a model with the PS107 suffix (e.g., MVC403PS107) when ordering.

Model	Power supply	Force [lbf]	Control signal	Stroke [inch]	IP	Consumption [VA]	Timing [s]
MVT403S	24 V AC	67.4	3P - on/off	0.35	43	2.2	11.5 s/mm @ 50 Hz
MVT503S	24 V AC	67.4	Proportional	0.35	43	3.6	
MVT503SB	24 V AC	67.4	Proportional	0.35	43	3.6	9.4 s/mm @ 60 Hz

1) The M28x1.5 connection variant is available by choosing a model with the PS107 suffix (e.g., MVT403SPS107) when ordering.

MVB HVAC Actuator

MVB is a linear actuator for VSB-VMB family valves with threaded connections 1/2" to 2" and flanged connections from 15 to 50 mm (VSB.F-VMB.F) and tight close-off versions (VSBP.M-VMBP.M). Also suitable to 2TGB15B-3TGB15B 1/2" valves.

Model	Power supply	Force [lbf]	Control signal	Stroke [inch]	IP	Consumption [VA]	Timing [s]
MVB46	24 V AC	101.2	3-position	0.65	50	5	60
MVB46P	24 V AC	101.2	3-p with potentiometer (1 kΩ)	0.65	50	5	60
MVB52	24 V AC	101.2	Proportional	0.65	50	5	37
MVB56	24 V AC	101.2	Proportional	0.65	50	5	60



MVE HVAC Actuator

The **MVE** HVAC Actuator provides high-precision electro-mechanical control for 2-way and 3-way globe valves in modern building automation.

This version features a long-stroke design supporting valve stroke to 60 mm for optimal modulation across large hydronic coils and high-capacity distribution circuits.

Driven by a quiet brushless motor, the MVE family offers force classes from 90 lbf to 495 lbf with automatic stroke calibration and an available fail-safe option for enhanced system security.

With its robust construction and optional IP65 housing, the MVE ensures consistent, stable control and long-term reliability in both commercial and industrial environments.



Model		Power supply	Force [lbf]	Control signal	Stroke [inch]	IP	Consumption [VA]		Timing [s]											
									Stroke [inch]			3P.								
							Running	Holding	0.2"/0.6"	0.6"/1"	1"/2.4"									
Without Emergency Fail-safe Function	MVE504*	24 V AC/DC	90	3p floating and proportional switch selectable. Control range 0-10 V DC, 2-10 V DC, 0-5 V DC, 5-10 V DC, 2-6 V DC, 6-10 V DC, and 4-20 mA	0.2"-2.4"	54	10	8	15 s	20 s	30 s	60 s								
	MVE506*		13				11													
	MVE510*		18				11													
	MVE515*		21				13													
	MVE522*		25				10													
	MVE504-65		65			10	8													
	MVE506-65					13	11													
	MVE510-65					18	11													
	MVE515-65					21	13													
	MVE522-65					25	10													
With Emergency Fail-safe Function	MVE504R	24 V AC/DC	90	3p floating and proportional switch selectable. Control range 0-10 V DC, 2-10 V DC, 0-5 V DC, 5-10 V DC, 2-6 V DC, 6-10 V DC and 4-20 mA	0.2"-2.4"	54	10	8	15 s	20 s	30 s	60 s								
	MVE506R		13				11													
	MVE510R		18				11													
	MVE515R		21				13													
	MVE504R-65		10				8													
	MVE506R-65		65			13	11													
	MVE510R-65					18	11													
	MVE515R-65					21	13													
	MVEAV																			
	MVE assembly on valve body																			

* UL recognized models (UR).

MVE HVAC Actuator Short Yoke

The **MVE** Short Yoke HVAC Actuator provides high-precision electro-mechanical control for 2-way and 3-way globe valves in modern building automation. This version features a compact design optimized for valves with travel up to 1.18", making it ideal for installations with space constraints.

Driven by a quiet brushless motor, the MVE family offers force classes from 90 lbf to 495 lbf along with automatic stroke calibration and an available fail-safe option for enhanced system security. With its robust construction and optional IP65 housing, the MVE ensures consistent, stable control and long-term reliability in both commercial and industrial environments.



Model		Power supply	Force [lbf]	Control signal	Stroke [inch]	IP	Consumption [VA]		Timing [s]			
									Stroke [inch]			3P.
							Running	Holding	0.2"/0.6"	0.6"/1"	1"/2.4"	
Without Emergency Fail-safe Function	MVE504S*	24 V AC/ DC	90	3p floating and proportional switch selectable. Control range 0-10 V DC, 2-10 V DC, 0-5 V DC, 5-10 V DC, 2-6 V DC, 6-10 V DC, and 4-20 mA	0.2"-1.2"	54	10	8	15 s	20 s	30 s	60 s
	MVE506S*		135				13	11				
	MVE510S*		225				18	11				
	MVE515S*		337				21	13				
	MVE522S*		495				25	10				
	MVE504S-65		90			65	10	8	15 s	20 s	30 s	60 s
	MVE506S-65		135				13	11				
	MVE510S-65		225				18	11				
	MVE515S-65		337				21	13				
	MVE522S-65		495				25	10				
With Emergency Fail-safe Function	MVE504SR	24 V AC/ DC	90	3p floating and proportional switch selectable. Control range 0-10 V DC, 2-10 V DC, 0-5 V DC, 5-10 V DC, 2-6 V DC, 6-10 V DC and 4-20 mA	0.2"-1.2"	54	10	8	15 s	20 s	30 s	60 s
	MVE506SR		135				13	11				
	MVE510SR		225				18	11				
	MVE515SR		337				21	13				
	MVE504SR-65		90				65	10				
	MVE506SR-65		135			13		11				
	MVE510SR-65		225			18		11				
	MVE515SR-65		337			21		13				
	MVEAV		MVE assembly on valve body									

* UL recognized models (UR).

MVH Industrial Actuator

The **MVH** Industrial Actuator is designed for precise modulation and floating control of two and three way globe valves in heating, cooling and industrial temperature control systems. Equipped with a robust electromechanical drive and a high-resolution linear positioning mechanism, MVH actuators deliver accurate, repeatable stem movement across a wide stroke range.

Model	Power supply	Force [lbf]	Control signal	Stroke [inch]	IP	Consumption [VA]	Timing depending on valve stroke [s]		
							0.6"	1"	1.8"
MVH46	24 V AC	337	On/off floating	0-1.77"	55	12	37	55	99
MVH56	24 V AC	337	Proportional control selectable range	0.4"-1.77"	55	12	37	55	99
MVH56E	24 V AC/DC	337	3-position and/or proportional control (selectable) Ranges: 6 to 9/4 to 7/8 to 11/0 to 10/2 to 10/1 to 5 V DC; current 4 to 20 mA. Default setting: 0 to 10 V DC	0.2"-1.97"	55	12	26	40	70
MVHE3K	24 V AC/DC	674		0.2"-1.97"	55	25	26	40	70
MVHAV	MVH assembly on valve body								



Series with direct-reverse action

For VSB, VSB.F and VMB, VMB.F valves only, add linkage AG62.

Model	Power supply	Force [lbf]	Control signal	Stroke [inch]	IP	Consumption [VA]		Timing depending on valve stroke [s] ¹⁾		
						Running	Holding	0.6"	1"	1.8"
MVH56EA	24 V AC/DC	157	V DC/mA proportional control or floating control. Default setting: 0 to 10 V DC	0.2"-1.97"	55	13	8	17 (35)	25 (50)	48 (90)
MVH56EC	24 V AC/DC	157		0.2"-1.97"	55	13	8	17 (35)	25 (50)	48 (90)
MVHAV	MVH assembly on valve body									

1) The values in brackets indicate the return time by spring return. By spring return: MVH56EA closes 2-way valves and direct way in 3-way valves, MVH56EC opens 2-way valves and direct way in 3-way valves. This is valid for all valves except 2FAA, 2FAA150B and 2FAA200B in which it works the opposite way.



Action of spring return on power failure

2-way valves	MVH56EA	MVH56EC
VSB	VALVE CLOSED	VALVE OPEN
2FGB	VALVE CLOSED	VALVE OPEN
2FAA	VALVE OPEN	VALVE CLOSED
2FGB.B	VALVE CLOSED	VALVE OPEN
2FAA.B	VALVE CLOSED	VALVE OPEN
2FAA150B/2FGA200B	VALVE OPEN	VALVE CLOSED

2-way valves	MVH56EA	MVH56EC
VMB	DIRECT WAY CLOSED	DIRECT WAY OPEN
3FGB	DIRECT WAY CLOSED	DIRECT WAY OPEN
3FAA	DIRECT WAY CLOSED	DIRECT WAY OPEN

USB
PORT

ENERGY
VALVE

PID

ELECTRONIC
FAIL-SAFE



NEW

Sensors are not included

MVC-2-RS Compact Network Actuator

MVC-2-RS is a compact actuator designed to control hot/cool water flow rate in two/four pipes terminal units, zone, small reheating and dehumidification coils. It can be controlled by a Modbus RTU or BACnet MS/TP device via a RS485 network bus as well as by a proportional (modulating) control signal and it is also equipped with a USB port for local configuration and diagnostics. When MVC503x-2-RS is used in combination with a PICV valve and it is equipped with 1 or 2 temperature sensors, it can deliver the energy calculation and power control function. Embedded control loop for supply/return and ΔT are available.

Network actuator

PICV

Energy valve


MVC503-2-RS


VLX1 / VLX5


26.4 gph – 1056.7 gph

Model	Emergency return	Control signal	Power supply	Speed [s/mm]	Force [lbf]	IP
MVC503-2-RS	No	BACnet MS/TP, Modbus RTU and proportional switch selectable	24 V AC/DC	10	67.4	54
MVC503R-2-RS	Yes					

1) The M28x1.5 connection variant is available by choosing a model with the PS107 suffix (e.g., MVC503-2-RSPS107) when ordering.

Model	Valves without spring					Valves with spring			
	VSB.T-VMB.T 3/4" .. 2" stroke 0.22"	2-3TGB15B 1/2" stroke 0.45"	2-3TBB.T 1/2" .. 2" stroke 0.47"	2TGA.BT 3/4" .. 2" stroke 0.33"	Valvole altri costruttori stroke max 0.47"	VLX / VLX.P 1/2" .. 1 1/4" stroke 0.16"	VSXT/VMXT/VTXT 1/2" .. 3/4" stroke 0.22"	VSXT.PBP 1 1/2" stroke 0.22"	VSB.T.-VMB.T. 3/4" .. 1 1/2" stroke 0.22"
MVC503x-2-RS	•	• AG74-03	•	•	•	•	•	•	•

MVE-2-RS Network Actuator

MVE-2-RS is a multiprotocol network actuator device equipped with 2 temperature inputs and with RS485 (**Modbus RTU and BACnet MS/TP**) network connectivity for Supply&Return and ΔT control and limitation as well as for integration with the BMS. The actuator is able to implement a temperature control loop without the need of a BMS controller with significant savings in terms of hardware (eg. controllers with less I/Os, more compact electrical panels) and field wiring. The actuator can be controlled by a Modbus RTU or BACnet MS/TP device via an RS485 network bus as well as by a proportional (modulating) control signal. When it is installed on PICV valves and both temperature sensors are connected **the actuator can calculate the flow rate** using the valve characteristics and therefore **calculate the energy delivered to the coil**. It can be used to **control the thermal power transferred** from the coil or limits **the power consumption** and estimate **the energy consumption**.

Network actuator

PICV

Energy valve


MVE504S-2-RS


VLX6 / VLX8


290.6 gph – 3302.2 gph

Modbus

BACnet

Sensors are not included

NEW



USB PORT

ENERGY VALVE

PID

EMERGENCY FAIL-SAFE

	Model	Power supply	Force [lbf]	Control signal	Stroke [inch]	IP	Consumption [VA]		Timing [s]
							Running	Holding	Stroke 1.77"
Without Emergency Fail-safe Function	MVE504-2-RS	24 V AC/DC	90	BACnet MS/TP, Modbus RTU and proportional switch selectable. Control range: 0-10 V DC, 2-10 V DC, 0-5 V DC, 5-10 V DC, 2-6 V DC, 6-10 V DC and 4-20 mA	0.2"-2.4"	54	10	8	16
	MVE506-2-RS		135				13	11	
	MVE510-2-RS		225				18	11	
	MVE515-2-RS		337				21	13	
	MVE522-2-RS		495				25	13	
With Emergency Fail-safe Function	MVE504R-2-RS	24 V AC/DC	90	BACnet MS/TP, Modbus RTU and proportional switch selectable. Control range: 0-10 V DC, 2-10 V DC, 0-5 V DC, 5-10 V DC, 2-6 V DC, 6-10 V DC and 4-20 mA	0.2"-2.4"	54	10	8	16
	MVE506R-2-RS		135				13	11	
	MVE510R-2-RS		225				18	11	
	MVE515R-2-RS		337				21	13	

MVE-2-RS Network Actuator Short Yoke

	Model	Power supply	Force [lbf]	Control signal	Stroke [inch]	IP	Consumption [VA]		Timing [s]
							Running	Holding	Stroke 1.77"
Without Emergency Fail-safe Function	MVE504S-2-RS	24 V AC/DC	90	BACnet MS/TP, Modbus RTU and proportional switch selectable. Control range: 0-10 V DC, 2-10 V DC, 0-5 V DC, 5-10 V DC, 2-6 V DC, 6-10 V DC and 4-20 mA	0.2"-1.2"	54	10	8	16
	MVE506S-2-RS		135				13	11	
	MVE510S-2-RS		225				18	11	
	MVE515S-2-RS		337				21	13	
	MVE522S-2-RS		495				25	13	
With Emergency Fail-safe Function	MVE504SR-2-RS	24 V AC/DC	90	BACnet MS/TP, Modbus RTU and proportional switch selectable. Control range: 0-10 V DC, 2-10 V DC, 0-5 V DC, 5-10 V DC, 2-6 V DC, 6-10 V DC and 4-20 mA	0.2"-1.2"	54	10	8	16
	MVE506SR-2-RS		135				13	11	
	MVE510SR-2-RS		225				18	11	
	MVE515SR-2-RS		337				21	13	

Rotary Actuators

MDA Actuators for VFA Butterfly Valves

Bidirectional actuator for VFA butterfly valves - Manual control - Supplied with linkage for mounting on valve body.

Model	Power supply	Torque [ft · lb]	Control signal	Rotation angle	IP	Timing [s]	Other features
MDA42	24 V AC/DC	14.75	Floating	90°	54	90	For VFA valves up to DN100
MDA44		29.5	Floating	90°	54	150	For VFA valves from DN125 to DN200
MDA52		14.75	Proportional 0-10 V	90°	54	90	For VFA valves up to DN100
MDA54		29.5	Proportional 0-10 V	90°	54	150	For VFA valves from DN125 to DN200
MDAV1	MDA actuators are supplied NOT mounted on valve bodies. In case the actuator-valve assembly is required, order the specific part number (MDAV1) together with the models of actuator and valve body.						
MDAV2	DMDA microswitch assembling on MDA actuator						



MDB Actuators for Air Dampers

Model	Power supply	Torque [ft · lb]	Control signal	IP	Timing [s. per 90°]	Aux microswitch	Max damper surface [m²]
MDB42	24 V AC/DC	3.7	2-3 pos.	52	60-120	-	1
MDB42M			2-3 pos.	54	60-120	2	1
MDB52			2-10 V	52	60-120	-	1
MDB44	24 V AC/DC	7.4	2-3 pos.	54	< 150	-	2
MDB44M			2-3 pos.	54	< 150	1	2
MDB54			2-10 V	54	< 150	-	2
MDB46	24 V AC/DC	3.7	2-3 pos.	54	< 150	-	3
MDB46M			2-3 pos.	54	60-120	1	3
MDB56			2-10 V	54	< 150	-	3
MDB48	24 V AC/DC	7.4	2-3 pos.	54	< 150	-	4
MDB48M			2-3 pos.	54	< 150	2	4
MDB58			2-10 V	54	< 150	-	4



MDS Actuators for Air Dampers with Emergency Fail-safe Function

Model	Power supply	Torque [ft · lb]	Control signal	IP	Timing [s. per 90°]	Aux microswitch	Max damper surface [m²]
MDS406R	24 V AC/DC	4.4	2 pos.	54	60-80	-	1.5
MDS406RM	24 V AC/DC	4.4	2 pos.	54	60-80	1	1.5
MDS506R	24 V AC/DC	4.4	0-10 V	54	60-80	-	1.5
MDS506RM	24 V AC/DC	4.4	0-10 V	54	60-80	1	1.5
MDS410R	24 V AC/DC	7.4	2 pos.	54	60-80	-	2
MDS410RM	24 V AC/DC	7.4	2 pos.	54	60-80	1	2
MDS510R	24 V AC/DC	7.4	0-10 V	54	60-80	-	2
MDS510RM	24 V AC/DC	7.4	0-10 V	54	60-80	1	2
MDS420R	24 V AC/DC	14.8	2 pos.	54	90-125	-	4
MDS420RM	24 V AC/DC	14.8	2 pos.	54	90-125	2	4
MDS5205R	24 V AC/DC	14.8	0-10 V	54	90-125	-	4
MDS520RM	24 V AC/DC	14.8	0-10 V	54	90-125	2	4



Units Conversion Charts

Temperature

Conversion from °C (Celsius) to °F (Fahrenheit)
(0°C × 9/5) + 32 = 32°F

Celsius [°C]	Fahrenheit [°F]	Celsius [°C]	Fahrenheit [°F]	Celsius [°C]	Fahrenheit [°F]	Celsius [°C]	Fahrenheit [°F]
-30	-22	35	95	100	212	165	329
-25	-13	40	104	105	221	170	338
-20	-4	45	113	110	230	175	347
-15	5	50	122	115	239	180	356
-10	14	55	131	120	248	185	365
-5	23	60	140	125	257	190	374
0	32	65	149	130	266	195	383
5	41	70	158	135	275	200	392
10	50	75	167	140	284	205	401
15	59	80	176	145	293	210	410
20	68	85	185	150	302	215	419
25	77	90	194	155	311	220	428
30	86	95	203	160	320	225	437

Pipes and valves diameters

Conversion from DN (ISO standard) to inch NPS (ANSI/ASME)

DN (Diameter Nominal) [mm]	NPS (Nominal Pipe Size) [Inch]	DN (Diameter Nominal) [mm]	NPS (Nominal Pipe Size) [Inch]	DN (Diameter Nominal) [mm]	NPS (Nominal Pipe Size) [Inch]	DN (Diameter Nominal) [mm]	NPS (Nominal Pipe Size) [Inch]
15	1/2	40	1 ½	90	3 ½	150	6
20	3/4	50	2	100	4	200	8
25	1	65	2 ½	115	4 ½	250	10
32	1 ¼	80	3	125	5		

Water flow

Conversion from cubic meter per hour to US gallon per minute
1 m³/h = 4.403 gpm
1 gpm = 0.227 m³/h

Pressure

Conversion from bar to psi
1 bar = 14.5037 psi
1 psi = 0.0689 bar

Flow coefficient for valves

conversion from Kvs (m³/h) to Cv (gpm)
1 Kvs = 1 Cv x 0.865
1 Cv = 1 Kvs x 1.156

Linkage Kits

Model	Description	Model	Description
AF24	Linkage kit for MDL on valves VFA DN25-100	AG65	Linkage kit for MVH on old valves SS-DS-VM-3V DN >80 Linkage kit for MVLHT
AF25	Linkage kit for MDL on valves VFA DNI25-200	AG66	Linkage kit for MVE on JOHNSON CONTROL VB7816 valves
AG22	Linkage kit for MVB on V500	AG69	Linkage kit for MVE on MUT valves
AG40	Linkage kit for MVB ON VB7200/7300	AG72	Linkage kit for MVA on Micra® valves
AG51	Linkage kit for MVE-MVH on valves VMB16, VBG, VSG (45 mm stroke) and SS, DS, 3V, VSS, VBS, VMS, VBAA	AG73	Linkage kit for MVT203, MVT403, MVT503 on SATCHWELL MZX, VZX, FEU, MEU, VEU valves
AG52	Linkage kit for MVE on threaded valves VSB, VMB and VSB.F, VMB.F	AG70-10/70-14	Linkage kit for MVE on Siemens valves
AG53	Linkage kit for MVE on Satchwell valves	AM71	Linkage kit for MDB on LAZZARI shoe valves
AG54	Linkage kit for MVH on Satchwell valves	AM72	Linkage kit for MDB on M3 & M4 shoe valves
AG60-07	Linkage kit for MVE on Danfoss valves	AG74-01	Linkage kit for MVC and MVT.03 on VSB.T-VMB.T and 2TGA.BT valves
AG60-10/79	Linkage kit for MVE on Honeywell valves	AG74-03	Linkage kit for MVC and MVT.03 on 2-3TGB.B valves
AG62	Linkage kit for MVH on threaded valves, VSB, VMB and VSB.F, VMB.F	AG81	Linkage Kit for MVH with 2-3FIA valves
AG63	Linkage kit for MVE.S on threaded valves VSB, VMB and VSB.F, VMB.F	AG82	Linkage Kit for MVE with BELIMO H2...X-S and H3...X-S valves
AG64	Linkage kit for MVH on old valves SS-DS-VM-3V DNI5-65 Linkage kit for MVLHT		

Accessories for Actuators

Model	Description
244	Stem heater 24 V AC for MVB actuators on VSB, VMB, VSB.F, VMB.F valves
248	Stem heater 24 V AC for MVH and MVE actuators with threaded or flanged valves
D36	One stroke-end auxiliary microswitch adjustable on the whole stroke for MVB
DMDA	Two auxiliary microswitches for MDA
DMVE	Two auxiliary microswitches for MVE, MVH.E
DMVH	Two auxiliary microswitches adjustable on the whole stroke for MVH
MVBC	Rain-proof protection
MVBD	Microswitch driven by manual control knob. Supplied only factory-mounted
MVBHT	Spacer for MVB. To be used with V.B/V.BF valves with temperature from 120°C to 140°C
MVHPA2	1000 Ohm auxiliary potentiometer for MVH26
MVHPA4	1000 Ohm auxiliary potentiometer for MVH46
MVHT	Spacer for high temperature for MVH. To be used with valve bodies with fluid temperature higher than 302°F (2F-3F)

All accessories, except MVBD, are supplied separately. Mounting is carried out by the user.

Insulation Jackets for 2-& 3-way Valves

(Supplied separately from the valve body, mounting to be arranged by the user)

Model	Description	Model	Description
54304-01	Thermal insulation for VSXT09P, VSXT10P, VSXT11P, VSXT12P, VSXT13P, VSXT1P and VSX09P, VSX10P, VSX11P, VSX12P, VSX13P, VSX1P	GVB5	Thermal insulation for VSB5, VMB5, VSB5F, VMB5F, VSB5T, VMB5T, DN 1 ¼"
54304-02	Thermal insulation for VSXT21P and VSX21P	GVB6	Thermal insulation for VSB6, VMB6, VSB6F, VMB6F, VSB6T, VMB6T, DN 1 ½"
54304-03	Thermal insulation for VMXT09P, VMXT10P, VMXT11P, VMXT12P, VMXT13P, VMXT1P and VMX09P, VMX10P, VMX11P, VMX12P, VMX13P, VMX1P	GVB8	Thermal insulation for VSB8, VMB8, VSB8F, VM8F, VSB8T, VMB8T, DN 2", KV30
54304-04	Thermal insulation for VMXT21P and VMXT21P	GVB8A	Thermal insulation for VSB8A, VMB8A, VSB8AF, VMB8AF, DN 2", KV40
54304-05	Thermal insulation for VTXT09P, VTXT10P, VTXT11P, VTXT12P, VTXT13P, VTXT1P and VTX09P, VTX10P, VTX11P, VTX12P, VTX13P, VTX1P	GVB40	Thermal insulation for 2FGB40 and 3FGB40
54304-06	Thermal insulation for VTXT09P4, VTXT10P4, VTXT11P4, VTXT12P4, VTXT13P4 and VTX09P4, VTX10P4, VTX11P4, VTX12P4, VTX13P4	GVB50	Thermal insulation for 2FGB50 and 3FGB50
54304-07	Thermal insulation for VTXT21P and VTX21P	GVB65	Thermal insulation for 2FGB65 and 3FGB65
54304-08	Thermal insulation for VSXT24P, VSXT26P and VSX24P, VSX26P	GVB80	Thermal insulation for 2FGB80 and 3FGB80
54304-09	Thermal insulation for VMXT24P, VMXT26P and VMX24P, VMX26P	GVB100	Thermal insulation for 2FGB100 and 3FGB100
54304-10	Thermal insulation for VTXT24P, VTXT26P and VTX24P, VTX26P	GVB125	Thermal insulation for 2FGB125 and 3FGB125
55047-015	thermal insulation for VLX1, VLX1P, VLX2 and VLX2P valves	GVB150	Thermal insulation for 2FGB150 and 3FGB150
55047-020	thermal insulation for VLX3 and VLX3P valves	GVB40PS89	Thermal insulation for 2FGB40PS89 and 3FGB40PS89
55047-025	thermal insulation for VLX4 and VLX4P valves	GVB50PS89	Thermal insulation for 2FGB50PS89 and 3FGB50PS89
55047-032	thermal insulation for VLX5 and VLX5P valves	GVB65PS89	Thermal insulation for 2FGB65PS89 and 3FGB65PS89
55047-040	thermal insulation for VLX6P valves	GVB80PS89	Thermal insulation for 2FGB80PS89 and 3FGB80PS89
55047-050	thermal insulation for VLX8P valves	GVB100PS89	Thermal insulation for 2FGB100PS89 and 3FGB100PS89
GVB15	Thermal insulation for 3TGB15B and 3TGB15F	GVB125PS89	Thermal insulation for 2FGB125PS89 and 3FGB125PS89
GVB3	Thermal insulation for VSB3, VMB3, VSB3F, VMB3F, VSB3T, VMB3T, DN 3/4"	GVB4PS150	Thermal insulation for VSB4PS150, VMB4PS150, VSB4TPS150, VMB4TPS150, DN 1"
GVB4	Thermal insulation for VSB4, VMB4, VSB4F, VMB4F, VSB4T, VMB4T, DN 1"	GVB5PS150	Thermal insulation for VSB5PS150, VMB5PS150, VSB5TPS150, VMB5TPS150, DN 1 ¼"
		GVB6PS150	Thermal insulation for VSB6PS150, VMB6PS150, VSB6TPS150, VMB6TPS150, DN 1 ½"
		GVB8PS150	Thermal insulation for VSB8PS150, VMB8PS150, VSB8TPS150, VMB8TPS150, DN 2", KV30
		GVB8APS150	Thermal insulation for VSB8APS150, VMB8APS150, DN 2", KV40

Insulation Jackets for Actuators

Model	Description
GMDL	Insulation jackets (2 shell with Velcro strips) for MDL actuators
GMVE	Insulation jackets (2 shell with Velcro strips) for MVE actuators
GMVE.S	Insulation jackets (2 shell with Velcro strips) for MVE.S actuators (short yoke)
GMVH	Insulation jackets (2 shell with Velcro strips) for MVH actuators
GMVHA	Insulation jackets (2 shell with Velcro strips) for MVH56EA actuator
GMVHC	Insulation jackets (2 shell with Velcro strips) for MVH56EC actuators
GMVT	Insulation jackets for MVT 300 N actuators



Valves & Actuators

Compatibility

ACTUATORS											
ZONE AND COMPACT GLOBE VALVES											
PN16 BRASS VALVES			MVC			MVX			MCA	MVP	
			MVC403	MVC503	MVC503R	MVC-2-RS	MVX42R	MVX52	MVX52B	MCA24L(M)	MVP24(M)
			3 pos. 24 V	Prop. 24 V	Prop. 24 V	Modbus/BACnet 24 V	2 pos. 24 V		Prop. 24 V	2 pos. 24 V	2 pos. 24 V
			300 N				140 N			315 lbf	382 lbf
	VSXT	2-way	-	-	•	•	-	-	-	-	-
	VMXT	3-way	-	-	•	•	-	-	-	-	-
	VTXT	3-way + bypass	-	-	•	•	-	-	-	-	-
PN16 BRASS VALVES											
	VSX	2-way	-	-	-	-	•	•	• NORM. OPEN*	• NORM. OPEN	-
	VMX	3-way	-	-	-	-	•	•	• NORM. OPEN*	• NORM. OPEN	-
	VTX	3-way + bypass	-	-	-	-	•	•	• NORM. OPEN*	• NORM. OPEN	-
PN16 FRP VALVES											
	VPS	2-way	-	-	-	-	-	-	•	-	•
	VPM	3-way	-	-	-	-	-	-	•	-	•
	VPT	3-way + bypass	-	-	-	-	-	-	•	-	•
PN16 CAST IRON VALVES											
	VSB.T-VMB.T	2- and 3-way	•	•	•	•	-	-	-	-	-
	2TGA.BT	2-way	•	•	•	•	-	-	-	-	-
	2-3TGB.B	2- and 3-way	With AG74-03	With AG74-03	With AG74-03	With AG74-03	-	-	-	-	-

ACTUATORS									
PIEVs									
LIBRA									
		MCA	MVR	MVX	MVT.S		MVC		MVE
VLX1-5(P)	2-way		●	● **	●			●	-
VLX6P VLX8P	2-way	-	-	-	-			-	●
VLX2-4HF(P)	2-way	●	-	-	●			●	-
		2 pos. 24 V	2 pos. 24 V	Prop. 24 V	MVT403S	MVT503SB	Prop. 24 V	MVC-2-RS	MVE504S MVE504S-2-RS
		31.5 lbf	31.5 lbf	31.5 lbf	3 pos. 24 V	Prop. 24 V	Prop. 24 V	Modbus/BACnet 24 V	3 pos. & prop. 24 V
					67.4 lbf		67.4 lbf		90 lbf

* ATTENTION: MVX52B without power closes VSX, VMX and VTX valves
** ATTENTION: MVX52B without power opens VLX valves

ACTUATORS											
			MVB		MVE*		MVE:R (with emergency return)*		MVH		
			MVB46	MVB52 MVB56	MVE504 MVE506 MVE510 MVE515 MVE522	MVE504S MVE506S MVE510S MVE515S MVE522S	MVE504R MVE506R MVE510R MVE515R	MVE504SR MVE506SR MVE510SR MVE515SR	MVH46	MVH56 prop. pot. or V DC-mA 24 V	MVH56E MVH56EC
			2 - 3 pos. 24V	prop. 24V	3 pos. & prop. 24 V	3 pos. & prop. 24 V short yoke	3 pos. & prop. 24 V	3 pos. & prop. 24 V short yoke	2 - 3 pos. 24 V	prop. pot. 24 V	3 pos. & prop. 24 V
			101.2 lbf		90 lbf, 135 lbf, 225 lbf, 337 lbf, 495 lbf		90 lbf, 135 lbf, 225 lbf, 337 lbf		337 lbf	337 lbf	337 lbf 674 lbf
GLOBE VALVES			PN16 THREADED VALVES								
2-3TGB.B	2- and 3-way threaded	1/2"	•	•	-	-	-	-	-	-	-
	2- and 3-way threaded	1/2"	-	-	-	•	-	•	-	-	-
	VSB	2-way threaded	•	•	With AG52	With AG63	With AG52	With AG63	With AG62	With AG62	With AG62
		3-way threaded	•	•	With AG52	With AG63	With AG52	With AG63	With AG62	With AG62	With AG62
	VSBP. M	2-way threaded tight close-off	•	•	-	-	-	-	-	-	-
	VMBP. M	3-way threaded tight close-off	•	•	-	-	-	-	-	-	-
	2-3TIA	2- and 3-way AISI304 stainless steel	20-65	-	-	•	-	•	-	-	•
PN16, 25, 40 FLANGED VALVES											
2FGB	2-way flanged PN16	25-150	-	-	•	-	•	-	•	•	•
3FGB	3-way flanged PN16		-	-	•	-	•	-	•	•	•
2FAA	2-way flanged PN40	15-80	-	-	•	-	•	-	•	•	•
3FAA	3-way flanged PN40	25-125	-	-	•	-	•	-	•	•	•
FLANGED VALVES FOR HIGH CLOSE-OFF PRESSURE											
2FGB.B	2-way flanged PN16	65-150	-	-	•	-	•	-	•	•	•
2FAA.B	2-way flanged PN40	25-125	-	-	•	-	•	-	•	•	•
2FAA150B	2-way double seat PN25	150	-	-	•	-	•	-	•	•	•
2FGA200B	2-way double seat PN16	200	-	-	•	-	•	-	•	•	•

* MVE-2-RS models are available

2F & 3F Valves Cross Reference with Old CONTROLLI Valves

Old model		New model	
2-way valves PN40	Steel valves	SSAA15R	2FAA15R2
		SSAA15	2FAA15
		SSAA20	2FAA20
		SSAA25	2FAA25
		SSAA32	2FAA32
		SSAA40	2FAA40
		SSAA50	2FAA50
		SSAA65	2FAA65
		SSAA80	2FAA80
	Steel valves for very high temperatures	SSAACPI5R	2FAA15PR2
		SSAACPI5	2FAA15P
		SSAACP20	2FAA20P
		SSAACP25	2FAA25P
		SSAACP32	2FAA32P
		SSAACP40	2FAA40P
		SSAACP50	2FAA50P
		SSAACP65	2FAA65P
		SSAACP80	2FAA80P
	Steel valves for very low temperatures	SSAACPI5RB	2FAA15TR2
		SSAACPI5B	2FAA15T
		SSAACP20B	2FAA20T
		SSAACP25B	2FAA25T
		SSAACP32B	2FAA32T
		SSAACP40B	2FAA40T
		SSAACP50B	2FAA50T
		SSAACP65B	2FAA65T
		SSAACP80B	2FAA80T
	Balanced plug valves	VBAA25	2FAA25B
		VBAA32	2FAA32B
		VBAA40	2FAA40B
		VBAA50	2FAA50B
		VBAA65	2FAA65B
		VBAA80	2FAA80B
		VBAA100	2FAA100B
		VBAA125	2FAA125B
3-way valves PN25	Spheroidal cast iron valves	VMS25R	3FSA25R4
		VMS25I	3FSA25R7
		VMS25	3FSA25
		VMS32	3FSA32
		VMS40	3FSA40
		VMS50	3FSA50
		VMS65	3FSA65
		3VSA80	3FSA80
	High temperature valves	VMSTS25R	3FSA25SR4
		VMSTS25I	3FSA25SR7
		VMSTS25	3FSA25S
		VMSTS32	3FSA32S
		VMSTS40	3FSA40S
		VMSTS50	3FSA50S
		VMSTS65	3FSA65S
		3VSATS80	3FSA80S

Old model		New model	
2-way valves PN16	Cast iron valves with s/steel internal parts	SSGA1I	2FGA15R0
		SSGA12	2FGA15R1
		SSGA15R	2FGA15R2
		SSGA1	2FGA15R3
		SSGA15	2FGA15
		SSGA20	2FGA20
		SSGA25	2FGA25
		SSGA32	2FGA32
		SSGA40	2FGA40
		SSGA50	2FGA50
		SSGA65	2FGA65
		SSGA80	2FGA80
		SSGA100	2FGA100
	Cast iron valves	VSG25R	2FGB25R4
		VSG25I	2FGB25R7
		VSG25	2FGB25
		VSG40	2FGB40
		VSG50	2FGB50
		VSG65	2FGB65
		VSG80	2FGB80
		VSG100	2FGB100
		VSG125	2FGB125
		VSG150	2FGB150
	Balanced plug valves	VBG65	2FGB65B
		VBG80	2FGB80B
		VBG100	2FGB100B
		VBG125	2FGB125B
		VBG150	2FGB150B
		DSGA200	2FGA200B
3-way valves PN16	Cast iron valves	VMB1625R	3FGB25R4
		VMB1625I	3FGB25R7
		VMB1625	3FGB25
		VMB1640R	3FGB40R19
		VMB1640	3FGB40
		VMB1650	3FGB50
		VMB1665	3FGB65
		VMB1680	3FGB80
		VMB16100	3FGB100
		VMB16125	3FGB125
		VMB16150	3FGB150

Old model	New model		
MVL-SH actuators	MVH-MVE actuators	Description	
245 - 245F	248	Stem heater for MVH-MVE with flanged valves	
246	244	Stem heater for MVH-MVE with VSB-VMB-VSBF-VMBF valves	
AG31	AG62	Linkage for MVH actuators with VSB-VMB-VSBF-VMBF valves	
DMVL	DMVH	Aux. microswitches for MVH	
MVLFS5	MVHFS5	4-20 mA input signal	
MVLPA2	MVHPA2	1 kOhm aux. potentiometer for MVH26	
MVLPA4	MVHPA4	1 kOhm aux. potentiometer for MVH46	
MVLHT	MVHT	High temperature spacer	

Old model		New model	
2-way valves PN25	Spheroidal cast iron valves	VSS25R	2FSA25R4
		VSS25I	2FSA25R7
		VSS25	2FSA25
		VSS32	2FSA32
		VSS40	2FSA40
		VSS50	2FSA50
		VSS65	2FSA65
	Balanced plug valves	VBS25R	2FSA25BR4
		VBS25I	2FSA25BR7
		VBS25	2FSA25B
		VBS32	2FSA32B
		VBS40	2FSA40B
		VBS50	2FSA50B
		VBS65	2FSA65B
		VBS80	2FSA80B
3-way valves PN40	Steel Valves	DSAA150	2FAA150B
		3VAA25R	3FAA25R4
		3VAA25I	3FAA25R7
		3VAA25	3FAA25
		3VAA32	3FAA32
		3VAA40	3FAA40
		3VAA50	3FAA50
		3VAA65	3FAA65
		3VAA80	3FAA80
		3VAA100	3FAA100
		3VAA125	3FAA125
		3VAACP25R	3FAA25PR4
		3VAACP25I	3FAA25PR7
		3VAACP25	3FAA25P
		3VAACP32	3FAA32P
	Steel valves for very high temperatures	3VAACP40	3FAA40P
		3VAACP50	3FAA50P
		3VAACP65	3FAA65P
		3VAACP80	3FAA80P
		3VAACP100	3FAA100P
		3VAACPI25	3FAA125P
	Steel valves for very low temperatures	3VAACP25RB	3FAA25TR4
		3VAACP25IB	3FAA25TR7
		3VAACP25B	3FAA25T
		3VAACP32B	3FAA32T
		3VAACP40B	3FAA40T
		3VAACP50B	3FAA50T
		3VAACP65B	3FAA65T
		3VAACP80B	3FAA80T
		3VAACP100B	3FAA100T
		3VAACPI25B	3FAA125T

Replacing Old CONTROLLI Actuators

In the event of replacing an old CONTROLLI actuator mounted on one of the old valves listed below, here is the equivalent MVH and MVE actuators model to be used:

Old model		New model	
SH242	=	MVH26	+ AG51 or AG62 valve/actuator linkage kit (see LINKAGE KITS chart below)
SH222		MVH46	
SH522		MVH56	
MVL26		MVH26	
MVL36		MVH36	
MVL46		MVH46	
MVL56		MVH56	
MVL56F		MVH56E	
MVL56A / MVL56FA/MVL46A		MVH56EA	
MVL56C / MVL56FC/MVL46C		MVH56EC	
MVL3K	=	MVHE3K	No linkage kit required
MVF54		MVE506	
MVF58		MVE510	
MVF515		MVE515	
MVF54S		MVE506S	
MVF58S		MVE510S	
MVF515S		MVE515S	
MVH56F		MVH56E	
MVH56FA		MVH56EA	
MVH56FC		MVH56EC	
MVH3K	=	MVHE3K	No linkage kit required
MVT28		MVT203S	
MVT44		MVT403S	
MVT56		MVT503S	
MVT56S		MVT503S	
MVT57		MVT503S	
MVT56L		MVT503S	
MVT203		MVC203	
MVT403		MVC403	
MVT503		MVC503	
	=		+ 55061 kit

Linkage Kits for MVH, MVE & MVB Actuators

iSMA CONTROLLI valves models	MVH	MVE	MVB
OBSOLETE MODELS			
S300	No	No	AG40
V500	No	No	AG22
OLD FLANGED VALVES			
VSG, VMB16, VBG, SS, DS, VSS, VBS, VBAA, 3V, VMS	AG51		No
SS, DS, VS, VBS, 3V, VM + MVLHT DN15-65mm	AG64	No	No
SS, DS, VS, VBS, 3V, VM + MVLHT DN80-200mm	AG65	No	No
EXISTING THREADED VALVES			
2TGB.B, 3TGB.B	No	No	Compatible
2TGB.F, 3TGB.F	No	Compatible	No
VSB, VMB	AG62	AG52 / AG63 *	Compatibile
EXSISTING VALVES WITH SLIP-ON FLANGES			
VSB.F, VMB.F	AG62	AG52 / AG63 *	Compatible
EXSISTING FLANGED VALVES			
2F, 3F	Compatible	Compatible	No

*AG52 (MVE) & AG63 (MVE.S)



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