

# CV216/316 MZ



## Standard control valves

2- or 3-way, DN 15-25, brass



Engineering  
GREAT Solutions

# CV216/316 MZ

Suitable for zone control and room control. Available in dimensions up to DN 25, pressure class PN 16 with external thread connection.

## Key features

- > **Microprocessor controlled**  
Multifunctional adjustable.
- > **Optimized characteristic**  
Long-stroke plug profile for optimized characteristic.
- > **Interlocking connection**  
Automatic coupling for 100% push and pull thrust.



## Technical description

### Application:

Heating and cooling systems

### Function:

Control  
CV216 MZ: 2-way control valve  
CV316 MZ: 3-way mixing or reversing valve

### Characteristics:

CV216 MZ: Equal percentage.  
CV316 MZ: A-AB equal percentage.  
B-AB linear.

### Dimensions:

DN 15-25

### Pressure class:

PN 16

### Temperature:

Max. working temperature: 120°C  
Min. working temperature: 0°C

### Material:

Valve body: Brass  
Valve plug: Brass  
Stem: Steel CrNi 1.4305  
Stem sealing: EPDM O-rings

### Marking:

TA, PN, DN and flow direction arrow.  
(in case of CV316 MZ names of ports also - A, B, AB)

### Connection type:

Body with male thread according to ISO 228/1.

### Leakage rate:

EN 1349, seat-leakage V L1 (<0,02%).

### Max. lift of the control valve:

6.5 mm

### Range ability:

≥30:1

### Actuator:

TA-MC15

## Technical description – TA-MC15

### Power supply:

TA-MC15/24: 24V AC/DC ±10%  
TA-MC15/230: 230V AC +6% -10%  
Frequency 50-60 Hz ±5%

### Power consumption:

2,5 VA

### Input signal:

TA-MC15/24: DC 0(2)-10 V or 3-point.  
TA-MC15/230: 3-point.

### Actuating time:

20 s/mm

### Actuating thrust:

150 N

### Temperature:

Max. ambient temperature: 50°C  
Min. ambient temperature: 0°C

### Ingress protection:

IP 40

### Cable:

1,5 m, 0,34 mm<sup>2</sup>, with wire end sleeve.

### Stroke:

Max. 9 mm

### Colour:

Black body and red cover.

## Valve variants and accessories

- Male thread connection parts of brass union nuts and gaskets.
- Technical silicon free version.

## Technical data valve with actuator

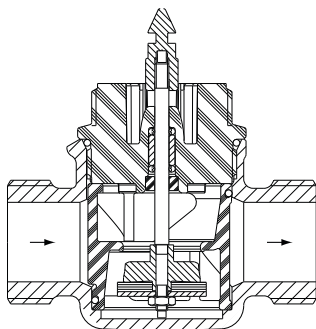
### CV216 MZ / CV316 MZ

		DN 15					DN 20	DN 25			
<b>Kvs</b>		0,25	0,4	0,63	1,0	1,6	2,5	4,0	6,3	8,0	
<b>Stroke</b>	mm	6,5									
<b>TA-MC15/24</b>	<b>Actuating time</b>	s									
<b>TA-MC15/230</b>	<b>Closing pressure</b>	kPa	600	600	600	600	300	300	300	150	150

## Operating function

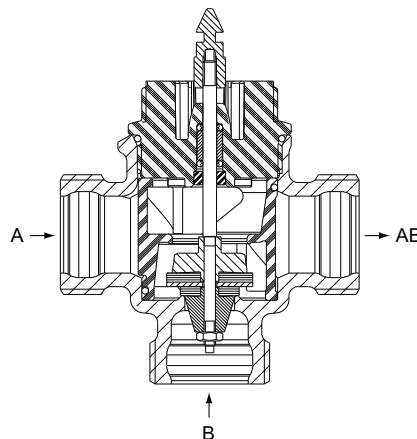
### CV216 MZ

Work as a two-way valve.



### CV316 MZ

Work as a mixing valve.

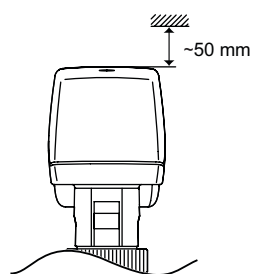


## Installation

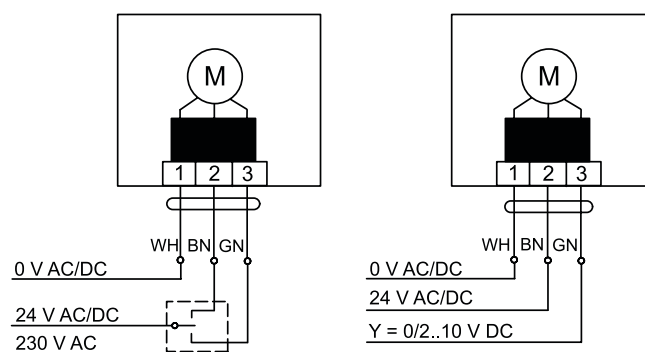
Valve trim could be damaged by dirt in the pipe system. Installation of strainers are recommended.

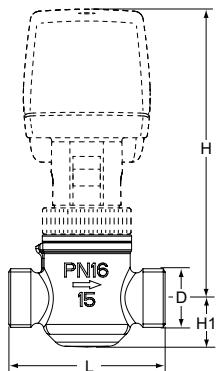
### Application example

Optimal for zone and room regulation.



### Wiring diagram

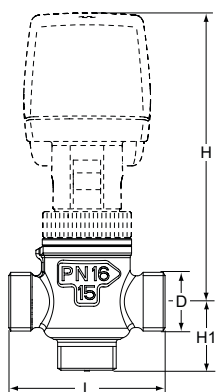


**CV216 MZ (2-way)**

Male threads according to ISO 228

DN	D	L	H	H1	Kvs	Kg	Article No
15	G1/2	56	110	18	0.25	0.34	60-281-115
15	G1/2	56	110	18	0.40	0.34	60-281-215
15	G1/2	56	110	18	0.63	0.34	60-281-315
15	G1/2	56	110	18	1.0	0.34	60-281-415
15	G1/2	56	110	18	1.6	0.34	60-281-515
15	G1/2	56	110	18	2.5	0.34	60-281-615
20	G3/4	66	115	19	4.0	0.40	60-281-120
25	G1 1/4	76	130	26	6.3	0.70	60-281-125
25	G1 1/4	76	130	26	8.0	0.70	60-281-225

Articles without actuator.

**CV316 MZ (3-way)**

Male threads according to ISO 228

DN	D	L	H	H1	Kvs	Kg	Article No
15	G1/2	56	110	24.5	0.25	0.35	60-381-115
15	G1/2	56	110	24.5	0.40	0.35	60-381-215
15	G1/2	56	110	24.5	0.63	0.35	60-381-315
15	G1/2	56	110	24.5	1.0	0.35	60-381-415
15	G1/2	56	110	24.5	1.6	0.35	60-381-515
15	G1/2	56	110	24.5	2.5	0.35	60-381-615
20	G3/4	66	115	33	4.0	0.43	60-381-120
25	G1 1/4	76	130	38	6.3	0.75	60-381-125
25	G1 1/4	76	130	38	8.0	0.75	60-381-225

Articles without actuator.

**Actuators**

Type	Power supply	Actuating thrust [kN]	Input signal	EAN	Article No
TA-MC15/24	24 VAC/DC	0.15	3-point, 0(2)-10 V	3831112527799	61-015-001
TA-MC15/230	230 VAC	0.15	3-point	3831112527805	61-015-002