

CV216/316 MZ



Standard control valves

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

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:

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: 24 VAC/VDC ±10%
TA-MC15/230: 230 VAC +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, with wire end sleeve.
24 V: 0,5 mm²
230 V: 0,75 mm²

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 silicone free version.

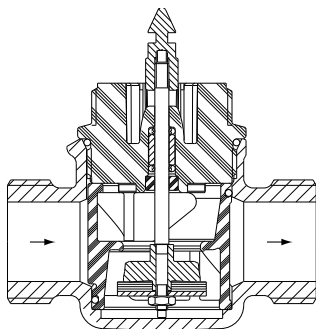
Technical data valve with actuator

		DN 15						DN 20	DN 25	
Kvs	CV216MZ	0,25	0,4	0,63	1,0	1,6	2,5	4,0	6,3	8,0
	CV316MZ A-AB	0,25	0,4	0,63	1,0	1,6	2,5	4,0	6,3	8,0
	CV316MZ B-AB	0,16	0,25	0,40	0,63	1,0	1,6	2,5	4,0	6,3
Stroke	mm	6,5								
TA-MC15/24	Actuating time	s								
TA-MC15/230	Closing pressure	600	600	600	600	300	300	300	150	150

Operating function

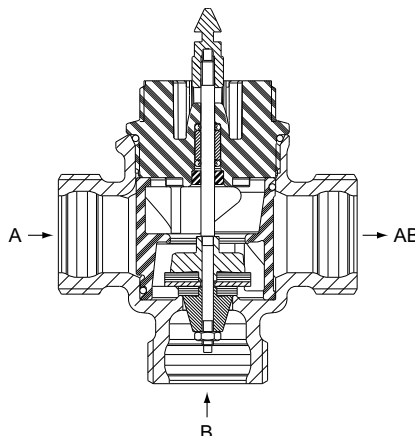
CV216 MZ

Work as a two-way valve.



CV316 MZ

Work as a mixing valve.

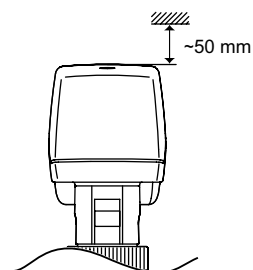


Installation

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

Application example

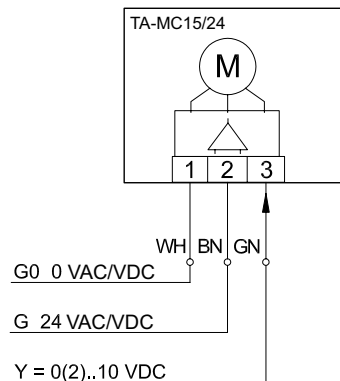
Optimal for zone and room regulation.



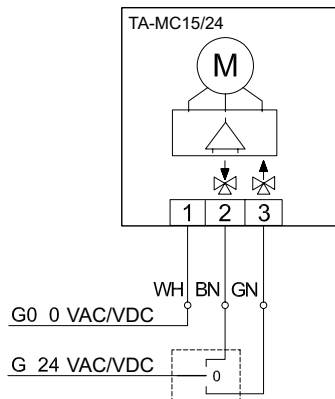
Connection diagram

24 VAC/VDC

Modulating - 0(2)-10V

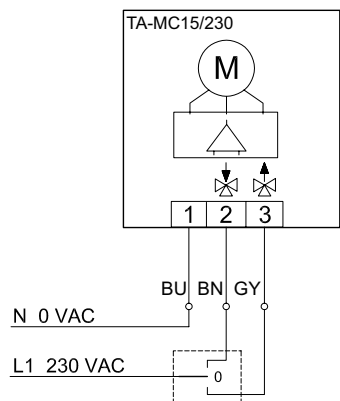


3-point



230 VAC

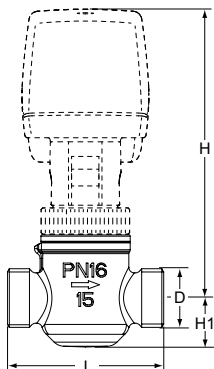
3-point



For 24V in 3-point control, the actuating direction can be changed by exchanging the **green** and **brown** wires.

For 230V in 3-point control, the actuating direction can be changed by exchanging the **gray** and **brown** wires.

CV216 MZ (2-way)

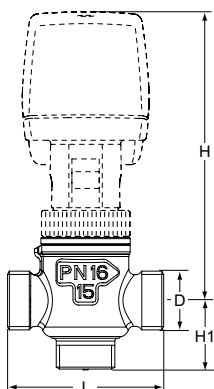


Male threads according to ISO 228

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

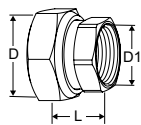
DN	D	L	H	H1	Kvs A-AB	Kvs B-AB	Kg	Article No
15	G1/2	56	110	24.5	0.25	0.16	0.35	60-381-115
15	G1/2	56	110	24.5	0.40	0.25	0.35	60-381-215
15	G1/2	56	110	24.5	0.63	0.40	0.35	60-381-315
15	G1/2	56	110	24.5	1.0	0.63	0.35	60-381-415
15	G1/2	56	110	24.5	1.6	1.0	0.35	60-381-515
15	G1/2	56	110	24.5	2.5	1.6	0.35	60-381-615
20	G3/4	66	115	33	4.0	2.5	0.43	60-381-120
25	G1 1/4	76	130	38	6.3	4.0	0.75	60-381-125
25	G1 1/4	76	130	38	8.0	6.3	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

Connections



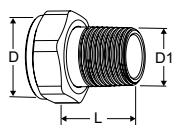
With female thread

Threads according to ISO 228. Thread length according to ISO 7-1.

Swivelling nut.

Brass/AMETAL®

Valve DN	D	D1	L*	EAN	Article No
15	G1/2	G3/8	21	7318794016804	52 163-010
20	G3/4	G1/2	21	7318794016903	52 163-015
25	G1 1/4	G1	23	7318794017108	52 163-025



With male thread

Threads according to ISO 7-1.

Swivelling nut

Brass

Valve DN	D	D1	L*	EAN	Article No
15	-	-	-	-	-
20	G3/4	R1/2	29	4024052516612	0601-02.350
25	G1 1/4	R1	35	4024052517015	0601-04.350

*) Fitting length (from the gasket surface to the end of the connection).