

CV206/216 GG, CV306/316 GG



Standard control valves

2- or 3-way, DN 15-200, cast iron

CV206/216 GG, CV306/316 GG

Suitable in building applications for heating and cooling systems.
Available in dimensions up to DN 200, pressure class PN 6 and PN 16 with flanges.

Key features

- > **Microprocessor controlled**
Multifunctional adjustable.
- > **Tight sealing**
Tight closed in both end-positions.
- > **Extensive actuator programme**
For different actuating thrust and actuating time – easily interchangeable.



Technical description

Application:

Heating and cooling systems

Function:

CV206/216 GG: 2-way control valve
CV306/316 GG: 3-way mixing or reversing valve

Characteristics:

CV206/216 GG: Equal percentage.
CV306/316 GG: A-AB equal percentage.
B-AB linear.

Dimensions:

CV206/306 GG: DN 15-100
CV216/316 GG: DN 15-200

Pressure class:

CV206/306 GG: PN 6
CV216/316 GG: PN 16

Temperature:

Max. working temperature: 150°C
(The valves should be mounted in horizontal position at temperatures above 130°C)

Min. working temperature: 0°C
(Suitable for water with antifreeze compounds down to -10°C)

For lower and higher temperatures (up to 200°C) and working pressures PN 25-40 please contact IMI Hydronic Engineering.

Material:

Body: Cast iron EN-JL1040
Plug: Brass CW614N, DN 125-200 CrNi steel 1.4305
Stem: CrMo steel 1.4122
Stem sealing: EPDM O-rings

Marking:

PN, DN and flow direction arrow.
(in case of CV306/316 GG names of ports also - A, B, AB)

Leakage rate:

DN 15-150: EN 1349, seat-leakage VI G 1 (tight sealing)
DN 200: EN 1349, seat-leakage IV L 1 ($\leq 0,01\%$ of Kvs)

Max. lift of the control valve:

DN 15-50: 14 mm
DN 65: 20 mm
DN 65-100: 30 mm
DN 125-150: 50 mm
DN 200: 60 mm

Range ability:

DN 15: 50:1
DN 20-200: 100:1

Connection type:

Flanges according to EN 1092-2 type 21

Face to face:

According to EN 558-1 basic series 1

Actuator:

TA-MC55
TA-MC65
TA-MC100
TA-MC160
TA-MC161
TA-MC250
TA-MC400
TA-MC500
TA-MC1000
TA-MC100FSE (fail-safe)
TA-MC100FSR (fail-safe)

Valve variants and accessories

See sections “Accessories for actuators”, “Accessories for valves” and “Valve variants”.

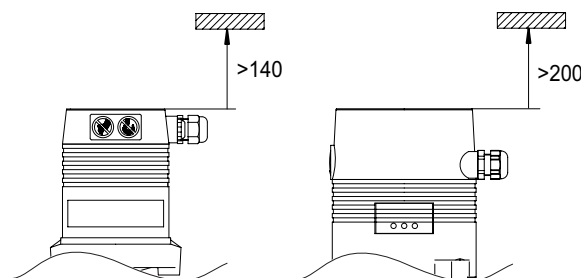
Installation

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

Note! A free space above the actuators is necessary.

TA-MC55/65/100/160/161
TA-MC100FSE/FSR

TA-MC250/400/500/1000



Technical data valve with actuator

PN 6

| DN | | | 15 | 20 | 25 | 32 | 40 | 50 | 65 | 65 | 80 | 100 | |
|--|------------------------------|-----|------|------|------|------|------|------|------|------|------|------|--|
| Kvs | | | 4 | 6,3 | 10 | 16 | 25 | 40 | 63 | 63 | 100 | 160 | |
| | | | 2,5 | 5 | 8 | 12,5 | 20 | 31,5 | 50 | 50 | 80 | 125 | |
| | | | 1,6 | | | | | | | | | | |
| | | | 1,25 | | | | | | | | | | |
| | | | 0,63 | | | | | | | | | | |
| Stroke | | mm | 14 | 14 | 14 | 14 | 14 | 14 | 20 | 30 | 30 | 30 | |
| TA-MC55/24 TA-MC55/230 | Actuating time ¹⁾ | s | 125 | 125 | 125 | 125 | 125 | 125 | - | - | - | - | |
| | Closing pressure | kPa | 70* | 70* | 70* | 70* | 70* | 70* | - | - | - | - | |
| TA-MC55Y | Closing pressure | kPa | 600 | 600 | 600 | 450 | 250 | 150 | - | - | - | - | |
| TA-MC65/24 TA-MC65/230 | Actuating time ¹⁾ | s | - | - | - | - | - | - | 180 | - | - | - | |
| | Closing pressure | kPa | - | - | - | - | - | - | 100* | - | - | - | |
| TA-MC65Y | Closing pressure | kPa | - | - | - | - | - | - | 100 | - | - | - | |
| | Actuating time ¹⁾ | s | 170 | 170 | 170 | 170 | 170 | 170 | 240 | | | | |
| | | | 125* | 125* | 125* | 125* | 125* | 125* | 180* | - | - | - | |
| 55 | | | 55 | 55 | 55 | 55 | 55 | 80 | | | | | |
| 30 | | | 30 | 30 | 30 | 30 | 30 | 40 | | | | | |
| Closing pressure | kPa | 600 | 600 | 600 | 600 | 550 | 350 | 150 | - | - | - | | |
| TA-MC100/24 TA-MC100/230 | Actuating time ¹⁾ | s | - | - | - | - | 85 | 85 | 120 | - | - | - | |
| | Closing pressure | kPa | - | - | - | - | 600 | 600 | 350 | - | - | - | |
| | Closing pressure VDC | | - | - | - | - | 600 | 370 | 230 | - | - | - | |
| TA-MC161/24 TA-MC161/230 | Actuating time ¹⁾ | s | - | - | - | - | - | - | - | 180 | 180 | 180 | |
| | Closing pressure | kPa | - | - | - | - | - | - | - | 120* | 120* | 120* | |
| | Closing pressure VDC | | - | - | - | - | - | - | - | 350 | 230 | 140 | |
| TA-MC160/24 TA-MC160/230 | Actuating time ¹⁾ | s | - | - | - | - | - | - | - | 230 | 150 | 100 | |
| | Closing pressure | kPa | - | - | - | - | - | - | - | 230 | 150 | 100 | |
| | Closing pressure VDC | | - | - | - | - | - | - | - | 230 | 150 | 100 | |
| TA-MC250/24 TA-MC250/230 | Actuating time ¹⁾ | s | - | - | - | - | - | - | - | 150 | 150 | 150 | |
| | Closing pressure | kPa | - | - | - | - | - | - | - | 75* | 75* | 75* | |
| TA-MC400/24 TA-MC400/230 | Actuating time ¹⁾ | s | - | - | - | - | - | - | - | 600 | 350 | 250 | |
| | Closing pressure | kPa | - | - | - | - | - | - | - | 600 | 350 | 250 | |
| | Closing pressure VDC | kPa | - | - | - | - | - | - | - | 600 | 350 | 250 | |
| TA-MC500/24 TA-MC500/230 | Actuating time ¹⁾ | s | - | - | - | - | - | - | - | 20 | 20 | 20 | |
| | Closing pressure | kPa | - | - | - | - | - | - | - | 15* | 15* | 15* | |
| TA-MC500/24 TA-MC500/230 | Actuating time ¹⁾ | s | - | - | - | - | - | - | - | 600 | 600 | 400 | |
| | Closing pressure | kPa | - | - | - | - | - | - | - | 600 | 600 | 400 | |
| | Closing pressure VDC | kPa | - | - | - | - | - | - | - | 600 | 600 | 500 | |
| TA-MC100FSE/24 TA-MC100FSR/24 | Actuating time | s | 30 | 30 | 30 | 30 | 30 | 30 | 40 | - | - | - | |
| | Fail-safe time | s | ~15 | ~15 | ~15 | ~15 | ~15 | ~15 | ~20 | - | - | - | |
| | Closing pressure | kPa | 600 | 600 | 600 | 600 | 550 | 350 | 150 | - | - | - | |
| TA-MC100FSE/230 TA-MC100FSR/230 | Actuating time | s | 130 | 130 | 130 | 130 | 130 | 130 | 180 | - | - | - | |
| | Fail-safe time | s | ~15 | ~15 | ~15 | ~15 | ~15 | ~15 | ~20 | - | - | - | |
| | Closing pressure | kPa | 600 | 600 | 600 | 600 | 550 | 350 | 150 | - | - | - | |

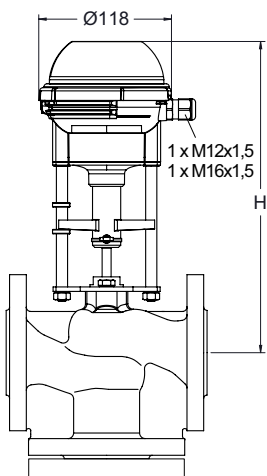
1) Actuating time freely adjustable, presetting marked with *

PN 16

| DN | | | 15 | 20 | 25 | 32 | 40 | 50 | 65 | 65 | 80 | 100 | 125 | 150 | 200 CV216 | 200 CV316 | |
|--|------------------------------|------|---------------------------------|------------|------------|------------|------------|------------|-------------|----------|-----------|------------|------|------|--------------|--------------|---|
| Kvs | | | 4 2,5 1,6 1,25 0,63 | 6,3 5 | 10 8 | 16 12,5 | 25 20 | 40 31,5 | 63 50 | 63 50 | 100 80 | 160 125 | 250 | 315 | 500 | 500 | |
| Stroke | | mm | 14 | 14 | 14 | 14 | 14 | 14 | 20 | 30 | 30 | 30 | 50 | 50 | 60 | 60 | |
| TA-MC55/24 TA-MC55/230 TA-MC55Y | Actuating time ¹⁾ | s | 125 70* | 125 70* | 125 70* | 125 70* | 125 70* | 125 70* | - | - | - | - | - | - | - | - | |
| | Closing pressure | kPa | 1500 | 1250 | 750 | 450 | 250 | 150 | - | - | - | - | - | - | - | - | |
| TA-MC65/24 TA-MC65/230 TA-MC65Y | Actuating time ¹⁾ | s | - | - | - | - | - | - | 180 100* | - | - | - | - | - | - | - | |
| | Closing pressure | kPa | - | - | - | - | - | - | 100 | - | - | - | - | - | - | - | |
| TA-MC100/24 TA-MC100/230 | Actuating time ¹⁾ | s | 170 | 170 | 170 | 170 | 170 | 170 | 240 | - | - | - | - | - | - | - | |
| | | | 125* | 125* | 125* | 125* | 125* | 125* | 125* | 180* | - | - | - | - | - | - | - |
| | | | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 80 | - | - | - | - | - | - | - |
| Closing pressure | kPa | 1600 | 1600 | 1500 | 900 | 550 | 350 | 150 | - | - | - | - | - | - | - | - | |
| TA-MC161/24 TA-MC161/230 | Actuating time ¹⁾ | s | - | - | - | 85 | 85 | 85 | 120 | - | - | - | - | - | - | - | |
| | | | 55* | 55* | 55* | 80* | - | - | - | - | - | - | - | - | - | | |
| | Closing pressure | kPa | - | - | - | 1500 | 950 | 600 | 350 | - | - | - | - | - | - | - | |
| Closing pressure VDC | kPa | - | - | - | 950 | 600 | 370 | 230 | - | - | - | - | - | - | - | | |
| TA-MC160/24 TA-MC160/230 | Actuating time ¹⁾ | s | - | - | - | - | - | - | 180 | 180 | 180 | - | - | - | - | | |
| | | | 120* | 120* | 120* | - | - | - | - | - | | | | | | | |
| | Closing pressure | kPa | - | - | - | - | - | - | 350 | 230 | 140 | - | - | - | - | | |
| Closing pressure VDC | kPa | - | - | - | - | - | - | 180 | 120 | 80 | - | - | - | - | | | |
| TA-MC250/24 TA-MC250/230 | Actuating time ¹⁾ | s | - | - | - | - | - | - | 150 | 150 | 150 | 250 | 250 | - | - | | |
| | Closing pressure | kPa | - | - | - | - | - | - | 75* | 75* | 75* | 125* | 125* | - | - | | |
| TA-MC400/24 TA-MC400/230 | Actuating time ¹⁾ | s | - | - | - | - | - | - | 20 | 20 | 20 | 30 | 30 | 40 | - | | |
| | Closing pressure | kPa | - | - | - | - | - | - | 15* | 15* | 15* | 20* | 20* | 25* | - | | |
| TA-MC500/24 TA-MC500/230 | Actuating time ¹⁾ | s | - | - | - | - | - | - | 150 | 150 | 150 | 250 | 250 | 300 | 300 | | |
| | Closing pressure | kPa | - | - | - | - | - | - | 75* | 75* | 75* | 125* | 125* | 150* | 150* | | |
| TA-MC1000/24 TA-MC1000/230 | Actuating time | s | - | - | - | - | - | - | - | - | - | 50 | 50 | 60 | 60 | | |
| | Closing pressure | kPa | - | - | - | - | - | - | - | - | - | 800 | 550 | 1200 | 240 | | |
| TA-MC100FSE/24 TA-MC100FSR/24 | Actuating time | s | 30 | 30 | 30 | 30 | 30 | 30 | 40 | - | - | - | - | - | - | | |
| | Fail-safe time | s | ~15 | ~15 | ~15 | ~15 | ~15 | ~15 | ~20 | - | - | - | - | - | - | | |
| Closing pressure | kPa | 1600 | 1600 | 1500 | 900 | 550 | 350 | 150 | - | - | - | - | - | - | | | |
| TA-MC100FSE/230 TA-MC100FSR/230 | Actuating time | s | 130 | 130 | 130 | 130 | 130 | 130 | 180 | - | - | - | - | - | | | |
| | Fail-safe time | s | ~15 | ~15 | ~15 | ~15 | ~15 | ~15 | ~20 | - | - | - | - | - | | | |
| | Closing pressure | kPa | 1600 | 1600 | 1500 | 900 | 550 | 350 | 150 | - | - | - | - | - | | | |

1) Actuating time freely adjustable, presetting marked with *

Actuator TA-MC55/TA-MC65



TA-MC55/24, TA-MC55/230, TA-MC55Y, TA-MC65/24, TA-MC65/230, TA-MC65Y

| DN | 24/230 V H | Kg * | |
|---------|---------------|------|---------|
| 15 | 267 | 1,5 | TA-MC55 |
| 20 | 272 | 1,5 | TA-MC55 |
| 25 - 32 | 277 | 1,5 | TA-MC55 |
| 40 - 50 | 282 | 1,5 | TA-MC55 |
| 65 | 335 | 1,5 | TA-MC65 |

*) Actuator

Technical description

| | | TA-MC55/ 24 | TA-MC65/ 24 | TA-MC55/ 230 | TA-MC65/ 230 | TA-MC55Y | TA-MC65Y |
|------------------------------|------|--|----------------|-----------------|-----------------|---|----------|
| Actuating time ¹⁾ | s/mm | 9 · 5* | | | | | |
| Actuating thrust | kN | 0,6 | | | | | |
| Stroke | mm | max. 20 | | | | | |
| Power supply | VAC | 24 ±10% | | 230 +6% -10% | | 24 ±10% | |
| Power supply | VDC | 24 ±10% | | - | | 24 ±10% | |
| Frequency | Hz | 50/60 ±5% | | | | | |
| Power consumption | VA | 3,5 | | 7 | | 3,5 | |
| Input signal ³⁾ | | 3-point | | | | 0(2)...10 VDC, 77 kΩ 0(4)...20 mA, 0,51 kΩ | |
| Output signal ³⁾ | | 0...10 VDC max. 8 mA min. 1200 Ω | | | | | |
| Hysteresis | V | 0,3 | | | | | |

Enclosure class:

Automatic operation: IP 54

Manual operation: IP 30

Resolution:

Electric: 0,04 VDC

Mechanical: 0,06 mm

Electrical connection:

Actuator with screwed terminals.

Ambient temperature:

0 – +60°C

Operation mode:

S3-50% ED c/h 1200, EN 60034-1

End position switch-off:

Load-dependent

Actuator variants:

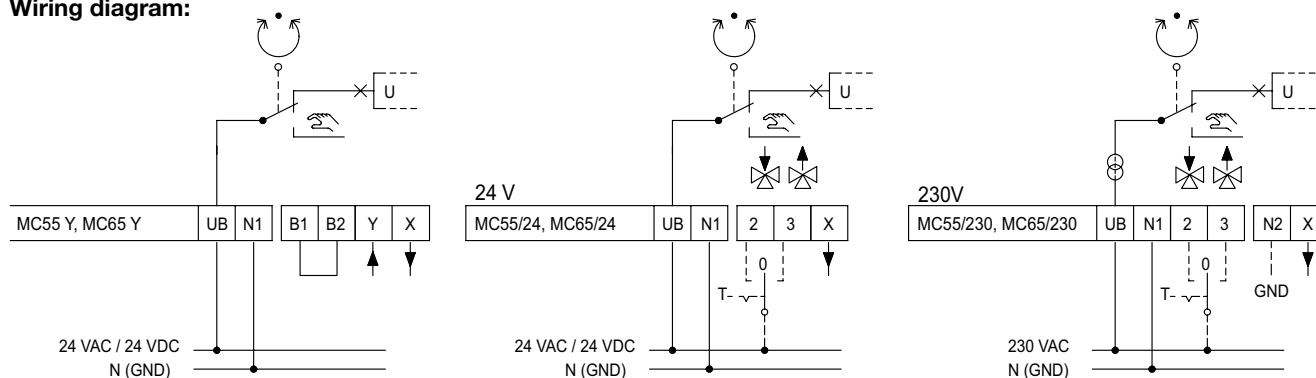
Voltage: 115 VAC

See "Actuators" and "Accessories for actuators".

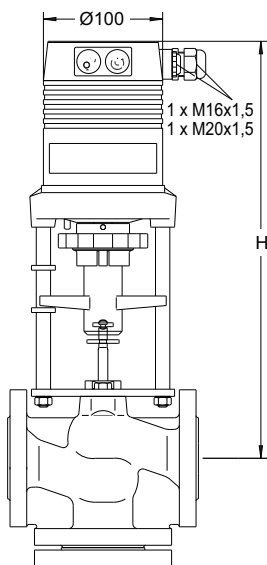
1) Actuating time freely adjustable, presetting is marked with *

3) Invertable input and output signal

Wiring diagram:



Actuator TA-MC100



TA-MC100/24, TA-MC100/230

| DN | 24 V H | 230 V H | Kg * |
|---------|-----------|------------|------|
| 15 | 343 | 368 | 2,5 |
| 20 | 348 | 373 | 2,5 |
| 25 - 32 | 353 | 378 | 2,5 |
| 40 - 50 | 358 | 383 | 2,5 |
| 65 | 408 | 433 | 2,5 |

*) Actuator

Technical description

| | | TA-MC100/24 | TA-MC100/230 |
|------------------------------|------|--|--------------|
| Actuating time ¹⁾ | s/mm | 12 · 9* · 4 · 1,9 | |
| Actuating thrust | kN | 1,0 | |
| Stroke | mm | max. 20 | |
| Power supply | VAC | 24 ±10% | 230 +6% -10% |
| Power supply | VDC | 24 ±10% | - |
| Frequency | Hz | 50/60 ±5% | |
| Power consumption | VA | 6 | 12 |
| Input signal ³⁾ | | 3-point 0(2)...10 VDC, 77 kΩ 0(4)...20 mA, 0,51 kΩ | |
| Output signal ³⁾ | | 0...10 VDC max. 8 mA min. 1200 Ω | |
| Hysteresis ⁴⁾ | V | 0,15 · 0,5 | |

Ingress protection:
IP54

Resolution:
Electric: 0,04 VDC
Mechanical: 0,095 mm

Ambient temperature:
0 – +60°C

Operation mode:
S3-50% ED c/h 1200, EN 60034-1

End position switch-off:
Load-dependent

Actuator variants:

- Voltage: 115 VAC
- Position switch unit ⁵⁾:
2 switches (WE1/WE2), potential free, infinitely adjustable.
Rated load: 8 A / 250 VAC, 8 A / 30 VDC.
Turn-on voltage: max. 400 VAC, max. 125 VDC
- Enclosure protection: IP 65
- Output signal ⁵⁾: X=0(4)...20 mA

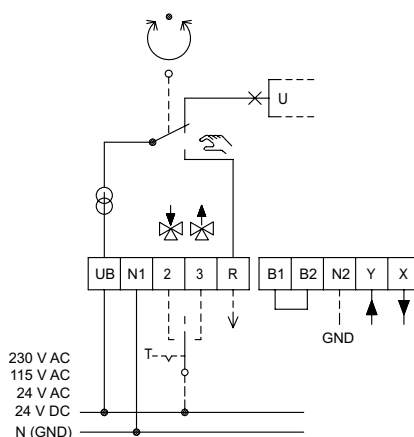
See "Actuators" and "Accessories for actuators".

1) Actuating time freely adjustable, presetting is marked with *
3) Invertible input and output signal
4) Freely adjustable
5) Position switch unit and output signal 0(4)...20 mA not in combination

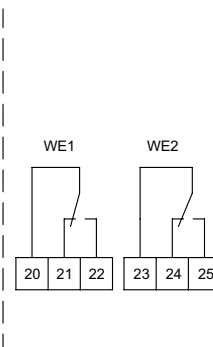
Wiring diagram:

B1/B2 Connection of a binary signal (e.g. frost safety)

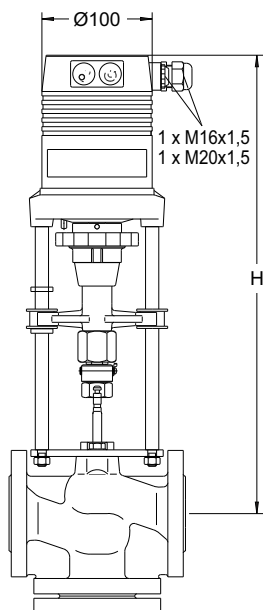
Standard design



Special accessories



Actuator TA-MC160/TA-MC161



TA-MC160/24, TA-MC160/230, TA-MC161/24, TA-MC161/230

| DN | 24 V H | 230 V H | Kg * | |
|---------|-----------|------------|------|-------------------|
| 32 | 443 | 468 | 3,2 | TA-MC161 |
| 40 - 50 | 448 | 473 | 3,2 | TA-MC161 |
| 65 | 486 | 511 | 3,2 | TA-MC161 TA-MC160 |
| 80 | 496 | 521 | 3,2 | TA-MC160 |
| 100 | 506 | 531 | 3,2 | TA-MC160 |

*) Actuator

Technical description

| | | TA-MC160/24 | TA-MC161/24 | TA-MC160/230 | TA-MC161/230 |
|------------------------------|------|--|-------------|--------------|--------------|
| Actuating time ¹⁾ | s/mm | 6 · 4* | | | |
| Actuating thrust | kN | 1,6 (VAC) / 1,1 (VDC) | | | |
| Stroke | mm | max. 30 | max. 20 | max. 30 | max. 20 |
| Power supply | VAC | 24 ±10% | | 230 +6% -10% | |
| Power supply | VDC | 24 ±10% | | - | |
| Frequency | Hz | 50/60 ±5% | | | |
| Power consumption | VA | 6 | | 12 | |
| Input signal ³⁾ | | 3-point 0(2)...10 VDC, 77 kΩ 0(4)...20 mA, 0,51 kΩ | | | |
| Output signal ³⁾ | | 0...10 VDC max. 8 mA min. 1200 Ω | | | |
| Hysteresis ⁴⁾ | V | 0,05 · 0,15 · 0,3 · 0,5 | | | |

Ingress protection:

IP54

Resolution:

Electric: 0,04 VDC

Mechanical: 0,05 mm

Ambient temperature:

0 – +60°C

Operation mode:

S3-30% ED c/h 1200: EN 60034-1

End position switch-off:

Load-dependent

Actuator variants:

- Voltage: 115 VAC

- Position switch unit ⁵⁾:

2 switches (WE1/WE2), potential free, infinitely adjustable.

Rated load: 8 A / 250 VAC, 8 A / 30 VDC.

Turn-on voltage: max. 400 VAC, max. 125 VDC

- Enclosure protection: IP 65

- Output signal ⁵⁾: X=0(4)...20 mA

See "Actuators" and "Accessories for actuators".

1) Actuating time freely adjustable, presetting is marked with *

3) Invertible input and output signal

4) Freely adjustable

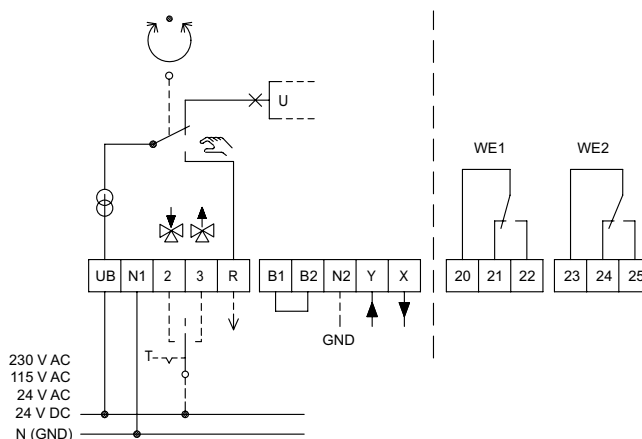
5) Position switch unit and output signal 0(4)...20 mA not in combination

Wiring diagram:

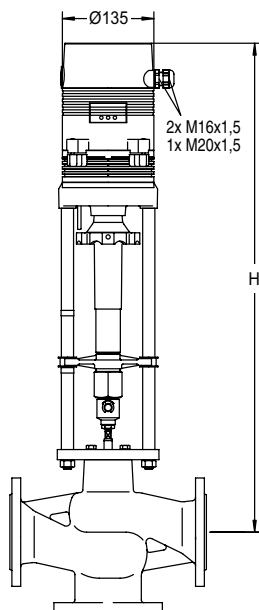
B1/B2 Connection of a binary signal (e.g. frost safety)

Standard design

Special accessories



Actuator TA-MC250



TA-MC250/24, TA-MC250/230

| DN | 24/230 V H | 24 V Kg * | 230 V Kg * |
|---------|---------------|--------------|---------------|
| 65 | 645 | 7,0 | 8,2 |
| 80 | 655 | 7,0 | 8,2 |
| 100 | 665 | 7,0 | 8,2 |
| 125-150 | 805 | 7,0 | 8,2 |

*) Actuator

Technical description

| | | TA-MC250/24 | TA-MC250/230 |
|------------------------------|------|--|--------------|
| Actuating time ¹⁾ | s/mm | 5 · 2,5* | |
| Actuating thrust | kN | 2,5 | |
| Stroke | mm | max. 50 | |
| Power supply | VAC | 24 ±10% | 230 +6% -10% |
| Power supply | VDC | 24 ±10% | - |
| Frequency | Hz | 50/60 ±5% | |
| Power consumption | VA | max. 18 | max. 25 |
| Input signal ³⁾ | | 3-point 0(2)...10 VDC, 77 kΩ 0(4)...20 mA, 0,51 kΩ | |
| Output signal ³⁾ | | 0...10 VDC max. 8 mA min. 1200 Ω | |
| Hysteresis ⁴⁾ | V | 0,05 · 0,15 · 0,3 · 0,5 | |

Ingress protection:
IP54

Resolution:
Electric: 0,04 VDC
Mechanical: 0,04 mm

Ambient temperature:
-10 – +60°C

Operation mode:
S3-50% ED c/h 1200: EN 60034-1

End position switch-off:
Load-dependent

Actuator variants:

- Voltage: 115 VAC
- Position switch unit:
2 switches (WE1/WE2), potential free, infinitely adjustable.
Rated load: 8 A / 250 VAC, 8 A / 30 VDC.
Turn-on voltage: max. 400 VAC, max. 125 VDC.
- Enclosure protection: IP 65
- Output signal: X=0(4)...20 mA

See "Actuators" and "Accessories for actuators".

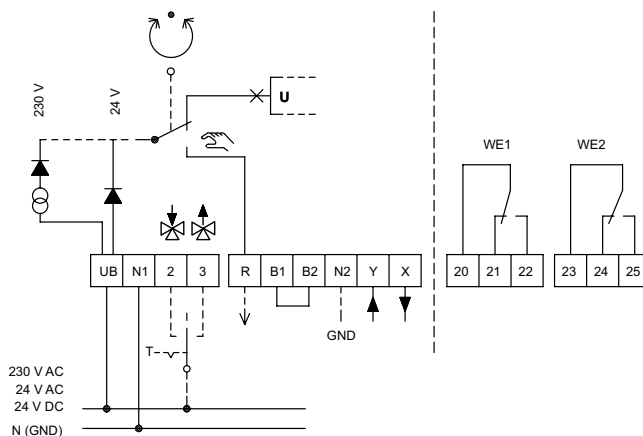
1) Actuating time freely adjustable, presetting is marked with *
3) Invertible input and output signal
4) Freely adjustable

Wiring diagram:

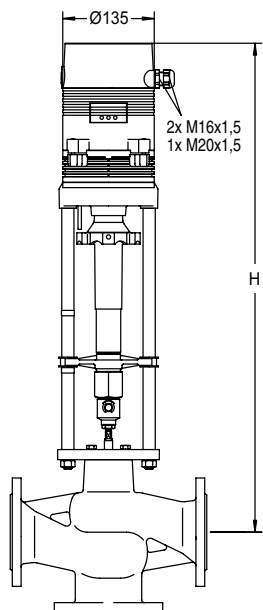
B1/B2 Connection of a binary signal (e.g. frost safety)

Standard design

Special accessories



Actuator TA-MC400



TA-MC400/24, TA-MC400/230

| DN | 24/230 V H | Kg * |
|---------|---------------|------|
| 65 | 695 | 9,5 |
| 80 | 705 | 9,5 |
| 100 | 715 | 9,5 |
| 125-150 | 855 | 9,5 |
| 200 | 875 | 9,5 |

*) Actuator

Technical description

| | | TA-MC400/24 | TA-MC400/230 |
|------------------------------|------|--|--------------|
| Actuating time ¹⁾ | s/mm | 0,6 · 0,4* | |
| Actuating thrust | kN | 4,0 | |
| Stroke | mm | max. 60 | |
| Power supply | VAC | 24 ±10% | 230 +6% -10% |
| Frequency | Hz | 50/60 ±5% | |
| Power consumption | VA | max. 50 | max. 63 |
| Input signal ³⁾ | | 3-point 0(2)...10 VDC, 77 kΩ 0(4)...20 mA, 0,51 kΩ | |
| Output signal ³⁾ | | 0...10 VDC max. 8 mA min. 1200 Ω | |
| Hysteresis ⁴⁾ | V | 0,05 · 0,15 · 0,3 · 0,5 | |

Ingress protection:

IP54

Resolution:

Electric: 0,04 VDC

Mechanical: 0,12 mm

Ambient temperature:

-10 – +60°C

Operation mode:

S3-30% ED c/h 1200: EN 60034-1

End position switch-off:

Load-dependent

Actuator variants:

- Voltage: 115 VAC

- Position switch unit:

2 switches (WE1/WE2), potential free, infinitely adjustable.

Rated load: 8 A / 250 VAC, 8 A / 30 VDC.

Turn-on voltage: max. 400 VAC, max. 125 VDC.

- Enclosure protection: IP 65

- Output signal: X=0(4)...20 mA

1) Actuating time freely adjustable, presetting is marked with *

3) Invertible input and output signal

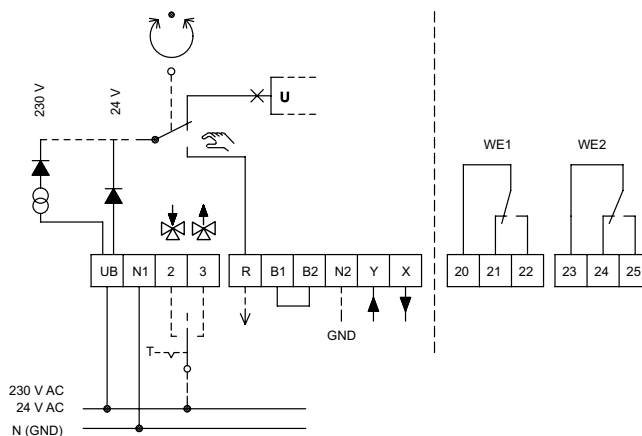
4) Freely adjustable

Wiring diagram:

B1/B2 Connection of a binary signal (e.g. frost safety)

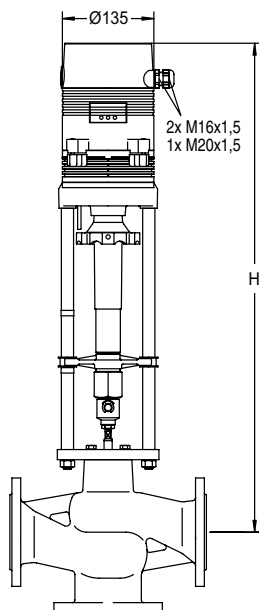
Standard design

Special accessories



See "Actuators" and "Accessories for actuators".

Actuator TA-MC500



TA-MC500/24, TA-MC500/230

| DN | 24/230 V H | 24 V Kg * | 230 V Kg * |
|---------|---------------|--------------|---------------|
| 65 | 645 | 7,0 | 8,2 |
| 80 | 655 | 7,0 | 8,2 |
| 100 | 665 | 7,0 | 8,2 |
| 125-150 | 805 | 7,0 | 8,2 |
| 200 | 825 | 7,0 | 8,2 |

*) Actuator

Technical description

| | | TA-MC500/24 | TA-MC500/230 |
|------------------------------|------|--|--------------|
| Actuating time ¹⁾ | s/mm | 5 · 2,5* | |
| Actuating thrust | kN | 5 | |
| Stroke | mm | max. 60 | |
| Power supply | VAC | 24 ±10% | 230 +6% -10% |
| Power supply | VDC | 24 ±10% | - |
| Frequency | Hz | 50/60 ±5% | |
| Power consumption | VA | max. 18 | max. 25 |
| Input signal ³⁾ | | 3-point 0(2)...10 VDC, 77 kΩ 0(4)...20 mA, 0,51 kΩ | |
| Output signal ³⁾ | | 0...10 VDC max. 8 mA min. 1200 Ω | |
| Hysteresis ⁴⁾ | V | 0,05 · 0,15 · 0,3 · 0,5 | |

Ingress protection:
IP54

Resolution:
Electric: 0,04 VDC
Mechanical: 0,04 mm

Ambient temperature:
-10 – +60°C

Operation mode:
S3-50% ED c/h 1200: EN 60034-1

End position switch-off:
Load-dependent

Actuator variants:

- Voltage: 115 VAC
- Position switch unit:
2 switches (WE1/WE2), potential free, infinitely adjustable.
Rated load: 8 A / 250 VAC, 8 A / 30 VDC.
Turn-on voltage: max. 400 VAC, max. 125 VDC.
- Enclosure protection: IP 65
- Output signal: X=0(4)...20 mA

See "Actuators" and "Accessories for actuators".

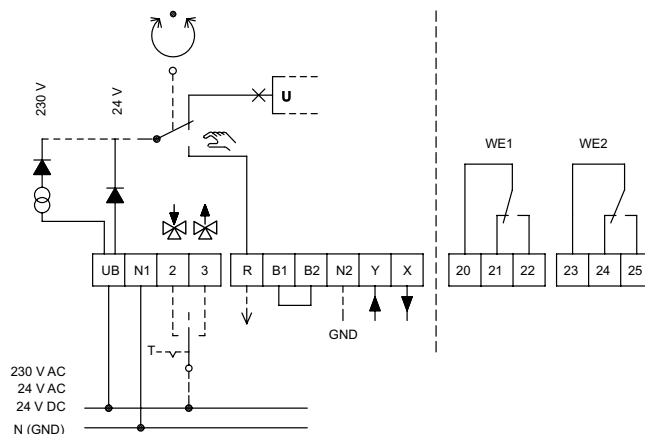
- 1) Actuating time freely adjustable, presetting is marked with *
- 3) Invertible input and output signal
- 4) Freely adjustable

Wiring diagram:

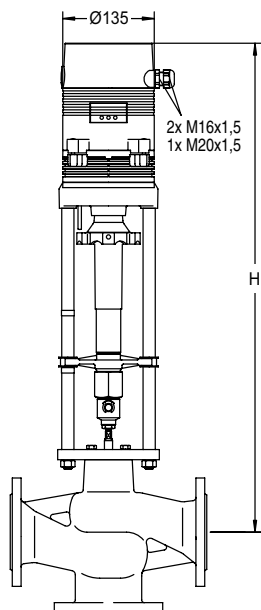
B1/B2 Connection of a binary signal (e.g. frost safety)

Standard design

Special accessories



Actuator TA-MC1000



TA-MC1000/24, TA-MC1000/230

| DN | 24/230 V H | Kg * |
|-----------|---------------|------|
| 125 - 150 | 895 | 11 |
| 200 | 920 | 11 |

*) Actuator

Technical description

| | | TA-MC1000/24 ⁶⁾ | TA-MC1000/230 ⁶⁾ |
|------------------------------------|------|----------------------------|-----------------------------|
| Actuating time | s/mm | 1 | |
| Actuating thrust | kN | 10 | |
| Stroke | mm | max. 60 | |
| Power supply | VAC | 24 ±10% | 230 +6% -10% |
| Frequency | Hz | 50/60 ±5% | |
| Power consumption | VA | max. 50 | max. 63 |
| Input signal ³⁾ | | 3-point | |
| | | 0(2)...10 VDC, 77 kΩ | 0(4)...20 mA, 0,51 kΩ |
| Output signal ³⁾ | | 0...10 VDC | |
| | | max. 8 mA | min. 1200 Ω |
| Hysteresis ⁴⁾ | V | 0,05 · 0,15 · 0,3 · 0,5 | |

Ingress protection:
IP54

Resolution:
Electric: 0,04 VDC
Mechanical: 0,05 mm

Ambient temperature:
-10 – +60°C

Operation mode:
S3-30% ED c/h 1200: EN 60034-1

End position switch-off:
Load-dependent

Actuator variants:

- Voltage: 115 VAC
- Position switch unit:
 - 2 switches (WE1/WE2), potential free, infinitely adjustable.
 - Rated load: 8 A / 250 VAC, 8 A / 30 VDC.
 - Turn-on voltage: max. 400 VAC, max. 125 VDC.
- Enclosure protection: IP 65
- Output signal: X=0(4)...20 mA

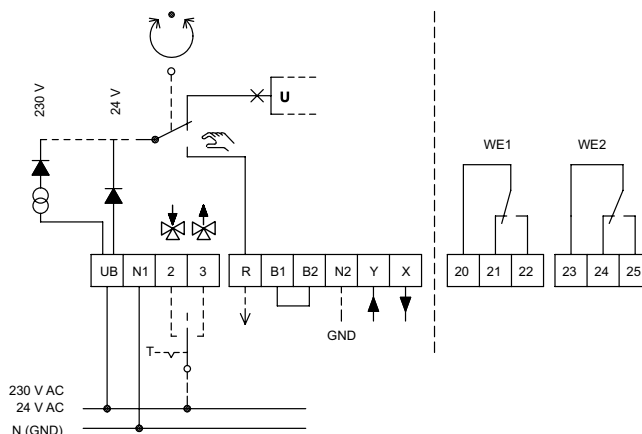
3) Invertible input and output signal
4) Freely adjustable
6) Only for CV216/316 GG

Wiring diagram:

B1/B2 Connection of a binary signal (e.g. frost safety)

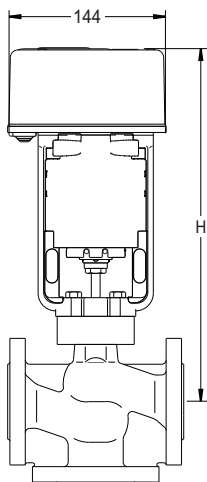
Standard design

Special accessories



See "Actuators" and "Accessories for actuators".

Actuator TA-MC100FSE/FSR



TA-MC100FSE/24, TA-MC100FSE/230, TA-MC100FSR/24, TA-MC100FSR/230

| DN | 24/230 V H | Kg * |
|---------|---------------|------|
| 15 | 309 | 2,8 |
| 20 | 312 | 2,8 |
| 25 | 315 | 2,8 |
| 32 | 324 | 2,8 |
| 40 - 50 | 327 | 2,8 |

*) Actuator

Technical description

| | | TA-MC100FSE/24 TA-MC100FSR/24 | TA-MC100FSE/230 TA-MC100FSR/230 |
|-------------------|------|---|------------------------------------|
| Actuating time | s/mm | 2 | 9 |
| Fail-safe time | s/mm | 1,0 | 1,2 |
| Actuating thrust | kN | 1,0 | |
| Stroke | mm | max. 20 | |
| Power supply | VAC | 24 ±15% | 230 ±15% |
| Frequency | Hz | 50/60 ±5% | |
| Power consumption | VA | 26 | 30 |
| Input signal | | 0(2)...10 VDC 0(4)...20 mA | 3-point |
| Output signal | | 0(2)...10 VDC max. 5 mA 0(4)...20 mA max. 5 mA | 0...10 VDC max. 5 mA |

Ingress protection:
IP54

Fail-safe function:
TA-MC100FSE: Stem extended on power failure
TA-MC100FSR: Stem retracted on power failure

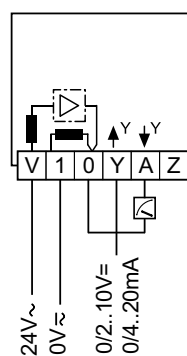
Ambient temperature:
0 - 50°C

Operation mode:
S3-50% ED c/h 1200: EN 60034-1

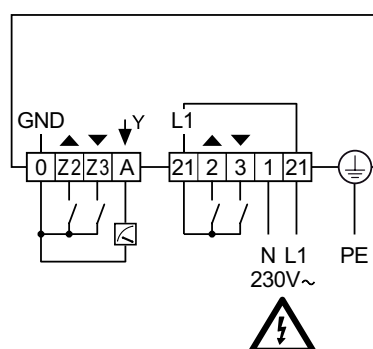
End position switch-off:
Load-dependent

See "Actuators" and "Accessories for actuators".

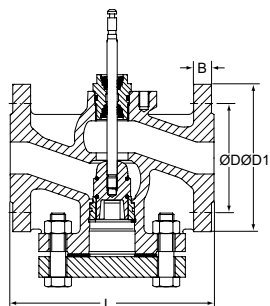
Wiring diagram 24V:



Wiring diagram 230V:



CV206 GG



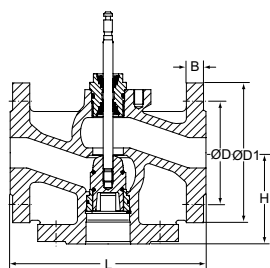
PN 6

| DN | D | D1 | L | B | No of bolts | Kvs | Kg | EAN | Article No |
|------------------|-----|-----|-----|----|-------------|------|------|---------------|------------|
| 15 | 55 | 80 | 130 | 12 | 4 x Ø11 | 0,63 | 2,8 | 5902276885617 | 60 215-115 |
| 15 | 55 | 80 | 130 | 12 | 4 x Ø11 | 1,25 | 2,8 | 5902276885709 | 60 215-215 |
| 15 | 55 | 80 | 130 | 12 | 4 x Ø11 | 1,6 | 2,8 | 5902276885792 | 60 215-315 |
| 15 | 55 | 80 | 130 | 12 | 4 x Ø11 | 2,5 | 2,8 | 5902276885815 | 60 215-415 |
| 15 | 55 | 80 | 130 | 12 | 4 x Ø11 | 4 | 2,8 | 5902276885839 | 60 215-515 |
| 20 | 65 | 90 | 150 | 14 | 4 x Ø11 | 5 | 3,9 | 5902276885624 | 60 215-120 |
| 20 | 65 | 90 | 150 | 14 | 4 x Ø11 | 6,3 | 3,9 | 5902276885716 | 60 215-220 |
| 25 | 75 | 100 | 160 | 14 | 4 x Ø11 | 8 | 4,8 | 5902276885631 | 60 215-125 |
| 25 | 75 | 100 | 160 | 14 | 4 x Ø11 | 10 | 4,8 | 5902276885723 | 60 215-225 |
| 32 | 90 | 120 | 180 | 16 | 4 x Ø14 | 12,5 | 7,1 | 5902276885648 | 60 215-132 |
| 32 | 90 | 120 | 180 | 16 | 4 x Ø14 | 16 | 7,1 | 5902276885730 | 60 215-232 |
| 40 | 100 | 130 | 200 | 16 | 4 x Ø14 | 20 | 8,8 | 5902276885655 | 60 215-140 |
| 40 | 100 | 130 | 200 | 16 | 4 x Ø14 | 25 | 8,8 | 5902276885747 | 60 215-240 |
| 50 | 110 | 140 | 230 | 16 | 4 x Ø14 | 31,5 | 10,5 | 5902276885662 | 60 215-150 |
| 50 | 110 | 140 | 230 | 16 | 4 x Ø14 | 40 | 10,5 | 5902276885754 | 60 215-250 |
| 65 ¹⁾ | 130 | 160 | 290 | 16 | 4 x Ø14 | 50 | 17,9 | 5902276885679 | 60 215-165 |
| 65 ¹⁾ | 130 | 160 | 290 | 16 | 4 x Ø14 | 63 | 17,9 | 5902276885761 | 60 215-265 |
| 65 ²⁾ | 130 | 160 | 290 | 16 | 4 x Ø14 | 50 | 17,9 | 5902276885808 | 60 215-365 |
| 65 ²⁾ | 130 | 160 | 290 | 16 | 4 x Ø14 | 63 | 17,9 | 5902276885822 | 60 215-465 |
| 80 | 150 | 190 | 310 | 18 | 4 x Ø18 | 80 | 26,3 | 5902276885686 | 60 215-180 |
| 80 | 150 | 190 | 310 | 18 | 4 x Ø18 | 100 | 26,3 | 5902276885778 | 60 215-280 |
| 100 | 170 | 210 | 350 | 18 | 4 x Ø18 | 125 | 37,1 | 5902276885693 | 60 215-190 |
| 100 | 170 | 210 | 350 | 18 | 4 x Ø18 | 160 | 37,1 | 5902276885785 | 60 215-290 |

1) Stroke 20 mm

2) Stroke 30 mm

CV306 GG



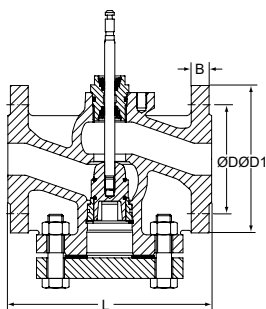
PN 6

| DN | D | D1 | L | H | B | No of bolts | Kvs | Kg | EAN | Article No |
|------------------|-----|-----|-----|-----|----|-------------|------|------|---------------|------------|
| 15 | 55 | 80 | 130 | 65 | 12 | 4 x Ø11 | 0,63 | 2,2 | 5902276891168 | 60 315-115 |
| 15 | 55 | 80 | 130 | 65 | 12 | 4 x Ø11 | 1,25 | 2,2 | 5902276891250 | 60 315-215 |
| 15 | 55 | 80 | 130 | 65 | 12 | 4 x Ø11 | 1,6 | 2,2 | 5902276891335 | 60 315-315 |
| 15 | 55 | 80 | 130 | 65 | 12 | 4 x Ø11 | 2,5 | 2,2 | 5902276891359 | 60 315-415 |
| 15 | 55 | 80 | 130 | 65 | 12 | 4 x Ø11 | 4 | 2,2 | 5902276893131 | 60 315-515 |
| 20 | 65 | 90 | 150 | 70 | 14 | 4 x Ø11 | 5 | 3,0 | 5902276891175 | 60 315-120 |
| 20 | 65 | 90 | 150 | 70 | 14 | 4 x Ø11 | 6,3 | 3,0 | 5902276891267 | 60 315-220 |
| 25 | 75 | 100 | 160 | 75 | 14 | 4 x Ø11 | 8 | 3,7 | 5902276891182 | 60 315-125 |
| 25 | 75 | 100 | 160 | 75 | 14 | 4 x Ø11 | 10 | 3,7 | 5902276891274 | 60 315-225 |
| 32 | 90 | 120 | 180 | 95 | 16 | 4 x Ø14 | 12,5 | 5,6 | 5902276891199 | 60 315-132 |
| 32 | 90 | 120 | 180 | 95 | 16 | 4 x Ø14 | 16 | 5,6 | 5902276891281 | 60 315-232 |
| 40 | 100 | 130 | 200 | 100 | 16 | 4 x Ø14 | 20 | 7,0 | 5902276891205 | 60 315-140 |
| 40 | 100 | 130 | 200 | 100 | 16 | 4 x Ø14 | 25 | 7,0 | 5902276891298 | 60 315-240 |
| 50 | 110 | 140 | 230 | 100 | 16 | 4 x Ø14 | 31,5 | 8,4 | 5902276891212 | 60 315-150 |
| 50 | 110 | 140 | 230 | 100 | 16 | 4 x Ø14 | 40 | 8,4 | 5902276891304 | 60 315-250 |
| 65 ¹⁾ | 130 | 160 | 290 | 120 | 16 | 4 x Ø14 | 50 | 14,7 | 5902276891229 | 60 315-165 |
| 65 ¹⁾ | 130 | 160 | 290 | 120 | 16 | 4 x Ø14 | 63 | 14,7 | 5902276889509 | 60 315-265 |
| 65 ²⁾ | 130 | 160 | 290 | 120 | 16 | 4 x Ø14 | 50 | 14,7 | 5902276891342 | 60 315-365 |
| 65 ²⁾ | 130 | 160 | 290 | 120 | 16 | 4 x Ø14 | 63 | 14,7 | 5902276889516 | 60 315-465 |
| 80 | 150 | 190 | 310 | 130 | 18 | 4 x Ø18 | 80 | 22,0 | 5902276891236 | 60 315-180 |
| 80 | 150 | 190 | 310 | 130 | 18 | 4 x Ø18 | 100 | 22,0 | 5902276891311 | 60 315-280 |
| 100 | 170 | 210 | 350 | 150 | 18 | 4 x Ø18 | 125 | 31,0 | 5902276891243 | 60 315-190 |
| 100 | 170 | 210 | 350 | 150 | 18 | 4 x Ø18 | 160 | 31,0 | 5902276891328 | 60 315-290 |

1) Stroke 20 mm

2) Stroke 30 mm

CV216 GG



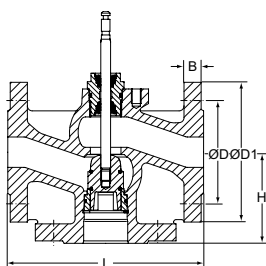
PN 16

| DN | D | D1 | L | B | No of bolts | Kvs | Kg | EAN | Article No |
|------------------|-----|-----|-----|----|-------------|------|------|---------------|------------|
| 15 | 65 | 95 | 130 | 14 | 4 x Ø14 | 0,63 | 4,1 | 5902276886072 | 60 235-115 |
| 15 | 65 | 95 | 130 | 14 | 4 x Ø14 | 1,25 | 4,1 | 5902276886164 | 60 235-215 |
| 15 | 65 | 95 | 130 | 14 | 4 x Ø14 | 1,6 | 4,1 | 5902276886256 | 60 235-315 |
| 15 | 65 | 95 | 130 | 14 | 4 x Ø14 | 2,5 | 4,1 | 5902276886287 | 60 235-415 |
| 15 | 65 | 95 | 130 | 14 | 4 x Ø14 | 4 | 4,1 | 5902276886317 | 60 235-515 |
| 20 | 75 | 105 | 150 | 16 | 4 x Ø14 | 5 | 5,3 | 5902276886089 | 60 235-120 |
| 20 | 75 | 105 | 150 | 16 | 4 x Ø14 | 6,3 | 5,3 | 5902276886171 | 60 235-220 |
| 25 | 85 | 115 | 160 | 16 | 4 x Ø14 | 8 | 6,6 | 5902276886096 | 60 235-125 |
| 25 | 85 | 115 | 160 | 16 | 4 x Ø14 | 10 | 6,6 | 5902276886188 | 60 235-225 |
| 32 | 100 | 140 | 180 | 18 | 4 x Ø18 | 12,5 | 10,0 | 5902276886102 | 60 235-132 |
| 32 | 100 | 140 | 180 | 18 | 4 x Ø18 | 16 | 10,0 | 5902276886195 | 60 235-232 |
| 40 | 110 | 150 | 200 | 18 | 4 x Ø18 | 20 | 11,8 | 5902276886119 | 60 235-140 |
| 40 | 110 | 150 | 200 | 18 | 4 x Ø18 | 25 | 11,8 | 5902276886201 | 60 235-240 |
| 50 | 125 | 165 | 230 | 20 | 4 x Ø18 | 31,5 | 15,3 | 5902276886126 | 60 235-150 |
| 50 | 125 | 165 | 230 | 20 | 4 x Ø18 | 40 | 15,3 | 5902276886218 | 60 235-250 |
| 65 ¹⁾ | 145 | 185 | 290 | 20 | 4 x Ø18 | 50 | 24,8 | 5902276886133 | 60 235-165 |
| 65 ¹⁾ | 145 | 185 | 290 | 20 | 4 x Ø18 | 63 | 24,8 | 5902276886225 | 60 235-265 |
| 65 ²⁾ | 145 | 185 | 290 | 20 | 4 x Ø18 | 50 | 24,8 | 5902276886263 | 60 235-365 |
| 65 ²⁾ | 145 | 185 | 290 | 20 | 4 x Ø18 | 63 | 24,8 | 5902276886294 | 60 235-465 |
| 80 | 160 | 200 | 310 | 22 | 8 x Ø18 | 80 | 29,8 | 5902276886140 | 60 235-180 |
| 80 | 160 | 200 | 310 | 22 | 8 x Ø18 | 100 | 29,8 | 5902276886232 | 60 235-280 |
| 100 | 180 | 220 | 350 | 24 | 8 x Ø18 | 125 | 42,9 | 5902276886157 | 60 235-190 |
| 100 | 180 | 220 | 350 | 24 | 8 x Ø18 | 160 | 42,9 | 5902276886249 | 60 235-290 |
| 125 | 210 | 250 | 400 | 26 | 8 x Ø18 | 250 | 62,0 | 5902276886300 | 60 235-491 |
| 150 | 240 | 285 | 480 | 26 | 8 x Ø22 | 315 | 90,0 | 5902276886270 | 60 235-392 |
| 200 | 295 | 340 | 600 | 24 | 12 x Ø22 | 500 | 156 | | 60-235-393 |

1) Stroke 20 mm

2) Stroke 30 mm

CV316 GG



PN 16

| DN | D | D1 | L | H | B | No of bolts | Kvs | Kg | EAN | Article No |
|------------------|-----|-----|-----|-----|----|-------------|------|------|---------------|------------|
| 15 | 65 | 95 | 130 | 65 | 14 | 4 x Ø14 | 0,63 | 3,1 | 5902276890321 | 60 335-115 |
| 15 | 65 | 95 | 130 | 65 | 14 | 4 x Ø14 | 1,25 | 3,1 | 5902276890383 | 60 335-215 |
| 15 | 65 | 95 | 130 | 65 | 14 | 4 x Ø14 | 1,6 | 3,1 | 5902276890468 | 60 335-315 |
| 15 | 65 | 95 | 130 | 65 | 14 | 4 x Ø14 | 2,5 | 3,1 | 5902276890499 | 60 335-415 |
| 15 | 65 | 95 | 130 | 65 | 14 | 4 x Ø14 | 4 | 3,1 | 5902276890529 | 60 335-515 |
| 20 | 75 | 105 | 150 | 70 | 16 | 4 x Ø14 | 5 | 4,0 | 5902276890338 | 60 335-120 |
| 20 | 75 | 105 | 150 | 70 | 16 | 4 x Ø14 | 6,3 | 4,0 | 5902276890390 | 60 335-220 |
| 25 | 85 | 115 | 160 | 75 | 16 | 4 x Ø14 | 8 | 5,0 | 5902276890345 | 60 335-125 |
| 25 | 85 | 115 | 160 | 75 | 16 | 4 x Ø14 | 10 | 5,0 | 5902276890406 | 60 335-225 |
| 32 | 100 | 140 | 180 | 95 | 18 | 4 x Ø18 | 12,5 | 7,6 | 5902276890352 | 60 335-132 |
| 32 | 100 | 140 | 180 | 95 | 18 | 4 x Ø18 | 16 | 7,6 | 5902276890413 | 60 335-232 |
| 40 | 110 | 150 | 200 | 100 | 18 | 4 x Ø18 | 20 | 9,1 | 5902276890369 | 60 335-140 |
| 40 | 110 | 150 | 200 | 100 | 18 | 4 x Ø18 | 25 | 9,1 | 5902276890420 | 60 335-240 |
| 50 | 125 | 165 | 230 | 100 | 20 | 4 x Ø18 | 31,5 | 11,6 | 5902276890376 | 60 335-150 |
| 50 | 125 | 165 | 230 | 100 | 20 | 4 x Ø18 | 40 | 11,6 | 5902276890437 | 60 335-250 |
| 65 ¹⁾ | 145 | 185 | 290 | 120 | 20 | 4 x Ø18 | 50 | 20,0 | 5902276889615 | 60 335-165 |
| 65 ¹⁾ | 145 | 185 | 290 | 120 | 20 | 4 x Ø18 | 63 | 20,0 | 5902276889646 | 60 335-265 |
| 65 ²⁾ | 145 | 185 | 290 | 120 | 20 | 4 x Ø18 | 50 | 20,0 | 5902276890475 | 60 335-365 |
| 65 ²⁾ | 145 | 185 | 290 | 120 | 20 | 4 x Ø18 | 63 | 20,0 | 5902276890505 | 60 335-465 |
| 80 | 160 | 200 | 310 | 130 | 22 | 8 x Ø18 | 80 | 24,0 | 5902276889622 | 60 335-180 |
| 80 | 160 | 200 | 310 | 130 | 22 | 8 x Ø18 | 100 | 24,0 | 5902276890444 | 60 335-280 |
| 100 | 180 | 220 | 350 | 150 | 24 | 8 x Ø18 | 125 | 36,0 | 5902276889639 | 60 335-190 |
| 100 | 180 | 220 | 350 | 150 | 24 | 8 x Ø18 | 160 | 36,0 | 5902276890451 | 60 335-290 |
| 125 | 210 | 250 | 400 | 160 | 26 | 8 x Ø18 | 250 | 52,0 | 5902276890512 | 60 335-491 |
| 150 | 240 | 285 | 480 | 170 | 26 | 8 x Ø22 | 315 | 77,0 | 5902276890482 | 60 335-392 |
| 200 | 295 | 340 | 600 | 215 | 24 | 8 x Ø22 | 500 | 136 | | 60-335-393 |

1) Stroke 20 mm

2) Stroke 30 mm

Actuators

For CV206/306 GG

| Type | Power supply | Actuating thrust [kN] | Input signal | For valve | Stroke [mm] | EAN | Article No |
|------------------|--------------|-----------------------|--------------------------------|-----------|-------------|---------------|------------|
| TA-MC55/24 | 24 VAC | 0,6 | 3-point | DN 15-50 | 14 | 3831112527812 | 61 055-001 |
| TA-MC55/24 | 24 VDC * | 0,6 | 3-point | DN 15-50 | 14 | | 61 055-402 |
| TA-MC55/230 | 230 VAC | 0,6 | 3-point | DN 15-50 | 14 | 3831112506503 | 61 055-002 |
| TA-MC55/115 | 115 VAC | 0,6 | 3-point | DN 15-50 | 14 | | 61 055-302 |
| TA-MC55Y | 24 VAC | 0,6 | 0(2)-10 V, 4(0)-20 mA | DN 15-50 | 14 | 3831112506510 | 61 055-003 |
| TA-MC55Y | 24 VDC * | 0,6 | 0(2)-10 V, 4(0)-20 mA | DN 15-50 | 14 | | 61 055-004 |
| TA-MC65/24 | 24 VAC | 0,6 | 3-point | DN 65 | 20 | 5902276894336 | 61 065-001 |
| TA-MC65/24 | 24 VDC * | 0,6 | 3-point | DN 65 | 20 | | 61 065-402 |
| TA-MC65/230 | 230 VAC | 0,6 | 3-point | DN 65 | 20 | 5902276894343 | 61 065-002 |
| TA-MC65/115 | 115 VAC | 0,6 | 3-point | DN 65 | 20 | | 61 065-302 |
| TA-MC65Y | 24 VAC | 0,6 | 0(2)-10 V, 4(0)-20 mA | DN 65 | 20 | 5902276889752 | 61 065-003 |
| TA-MC65Y | 24 VDC * | 0,6 | 0(2)-10 V, 4(0)-20 mA | DN 65 | 20 | | 61 065-005 |
| TA-MC100/24 | 24 VAC | 1,0 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 15-65 | 14, 20 | 3831112511675 | 61 100-001 |
| TA-MC100/24 | 24 VDC * | 1,0 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 15-65 | 14, 20 | | 61 100-003 |
| TA-MC100/230 | 230 VAC | 1,0 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 15-65 | 14, 20 | 3831112500235 | 61 100-002 |
| TA-MC100/115 | 115 VAC | 1,0 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 15-65 | 14, 20 | | 61 100-302 |
| TA-MC160/24 | 24 VAC | 1,6 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 65-100 | 30 | 3831112512160 | 61 160-001 |
| TA-MC160/24 | 24 VDC * | 1,1 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 65-100 | 30 | | 61 160-402 |
| TA-MC160/230 | 230 VAC | 1,6 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 65-100 | 30 | 3831112527829 | 61 160-002 |
| TA-MC160/115 | 115 VAC | 1,6 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 65-100 | 30 | | 61 160-302 |
| TA-MC161/24 | 24 VAC | 1,6 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 32-65 | 14, 20 | | 61 161-001 |
| TA-MC161/24 | 24 VDC * | 1,1 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 32-65 | 14, 20 | | 61 161-402 |
| TA-MC161/230 | 230 VAC | 1,6 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 32-65 | 14, 20 | | 61 161-002 |
| TA-MC161/115 | 115 VAC | 1,6 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 32-65 | 14, 20 | | 61 161-302 |
| TA-MC250/24 | 24 VAC | 2,5 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 65-100 | 30 | 5902276894381 | 61 250-001 |
| TA-MC250/24 | 24 VDC * | 2,5 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 65-100 | 30 | | 61 250-402 |
| TA-MC250/230 | 230 VAC | 2,5 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 65-100 | 30 | 5902276894398 | 61 250-002 |
| TA-MC250/115 | 115 VAC | 2,5 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 65-100 | 30 | | 61 250-302 |
| TA-MC400/24 | 24 VAC | 4,0 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 65-100 | 30 | 5902276894428 | 61 400-001 |
| TA-MC400/230 | 230 VAC | 4,0 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 65-100 | 30 | 5902276894435 | 61 400-002 |
| TA-MC400/115 | 115 VAC | 4,0 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 65-100 | 30 | | 61 400-302 |
| TA-MC500/24 | 24 VAC | 5,0 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 65-100 | 30 | 5902276894442 | 61 500-001 |
| TA-MC500/24 | 24 VDC * | 5,0 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 65-100 | 30 | | 61 500-402 |
| TA-MC500/230 | 230 VAC | 5,0 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 65-100 | 30 | 5902276894459 | 61 500-002 |
| TA-MC500/115 | 115 VAC | 5,0 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 65-100 | 30 | | 61 500-302 |
| Fail-safe | | | | | | | |
| TA-MC100FSE/24 | 24 VAC | 1,0 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 15-65 | 14, 20 | 3831112512122 | 61 100-101 |
| TA-MC100FSE/230 | 230 VAC | 1,0 | 3-point | DN 15-65 | 14, 20 | | 61 100-102 |
| TA-MC100FSR/24 | 24 VAC | 1,0 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 15-65 | 14, 20 | | 61 100-201 |
| TA-MC100FSR/230 | 230 VAC | 1,0 | 3-point | DN 15-65 | 14, 20 | | 61 100-202 |

*) DC – Direct current flat voltage.

TA-MC100/160/161/250/400/500 – IP65 version:
Add "IP" after the Article No., example 61 100-001**IP**

For CV216/316 GG

| Type | Power supply | Actuating thrust [kN] | Input signal | For valve | Stroke [mm] | EAN | Article No |
|------------------|--------------|-----------------------|--------------------------------|---------------|-------------|---------------|------------|
| TA-MC55/24 | 24 VAC | 0,6 | 3-point | DN 15-50 | 14 | 3831112527812 | 61 055-001 |
| TA-MC55/24 | 24 VDC * | 0,6 | 3-point | DN 15-50 | 14 | | 61 055-402 |
| TA-MC55/230 | 230 VAC | 0,6 | 3-point | DN 15-50 | 14 | 3831112506503 | 61 055-002 |
| TA-MC55/115 | 115 VAC | 0,6 | 3-point | DN 15-50 | 14 | | 61 055-302 |
| TA-MC55Y | 24 VAC | 0,6 | 0(2)-10 V, 4(0)-20 mA | DN 15-50 | 14 | 3831112506510 | 61 055-003 |
| TA-MC55Y | 24 VDC * | 0,6 | 0(2)-10 V, 4(0)-20 mA | DN 15-50 | 14 | | 61 055-004 |
| TA-MC65/24 | 24 VAC | 0,6 | 3-point | DN 65 | 20 | 5902276894336 | 61 065-001 |
| TA-MC65/24 | 24 VDC * | 0,6 | 3-point | DN 65 | 20 | | 61 065-402 |
| TA-MC65/230 | 230 VAC | 0,6 | 3-point | DN 65 | 20 | 5902276894343 | 61 065-002 |
| TA-MC65/115 | 115 VAC | 0,6 | 3-point | DN 65 | 20 | | 61 065-302 |
| TA-MC65Y | 24 VAC | 0,6 | 0(2)-10 V, 4(0)-20 mA | DN 65 | 20 | 5902276889752 | 61 065-003 |
| TA-MC65Y | 24 VDC * | 0,6 | 0(2)-10 V, 4(0)-20 mA | DN 65 | 20 | | 61 065-005 |
| TA-MC100/24 | 24 VAC | 1,0 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 15-65 | 14, 20 | 3831112511675 | 61 100-001 |
| TA-MC100/24 | 24 VDC * | 1,0 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 15-65 | 14, 20 | | 61 100-003 |
| TA-MC100/230 | 230 VAC | 1,0 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 15-65 | 14, 20 | 3831112500235 | 61 100-002 |
| TA-MC100/115 | 115 VAC | 1,0 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 15-65 | 14, 20 | | 61 100-302 |
| TA-MC160/24 | 24 VAC | 1,6 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 65-100 | 30 | 3831112512160 | 61 160-001 |
| TA-MC160/24 | 24 VDC * | 1,1 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 65-100 | 30 | | 61 160-402 |
| TA-MC160/230 | 230 VAC | 1,6 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 65-100 | 30 | 3831112527829 | 61 160-002 |
| TA-MC160/115 | 115 VAC | 1,6 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 65-100 | 30 | | 61 160-302 |
| TA-MC161/24 | 24 VAC | 1,6 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 32-65 | 14, 20 | 5902276894367 | 61 161-001 |
| TA-MC161/24 | 24 VDC * | 1,1 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 32-65 | 14, 20 | | 61 161-402 |
| TA-MC161/230 | 230 VAC | 1,6 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 32-65 | 14, 20 | 5902276894374 | 61 161-002 |
| TA-MC161/115 | 115 VAC | 1,6 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 32-65 | 14, 20 | | 61 161-302 |
| TA-MC250/24 | 24 VAC | 2,5 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 65-100 | 30 | 5902276894381 | 61 250-001 |
| TA-MC250/24 | 24 VDC * | 2,5 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 65-100 | 30 | | 61 250-402 |
| TA-MC250/230 | 230 VAC | 2,5 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 65-100 | 30 | 5902276894398 | 61 250-002 |
| TA-MC250/115 | 115 VAC | 2,5 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 65-100 | 30 | | 61 250-302 |
| TA-MC250/24 | 24 VAC | 2,5 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 125-150 | 50 | 5902276894404 | 61 250-011 |
| TA-MC250/24 | 24 VDC * | 2,5 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 125-150 | 50 | | 61 250-412 |
| TA-MC250/230 | 230 VAC | 2,5 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 125-150 | 50 | 5902276894411 | 61 250-012 |
| TA-MC250/115 | 115 VAC | 2,5 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 125-150 | 50 | | 61 250-312 |
| TA-MC400/24 | 24 VAC | 4,0 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 65-100 | 30 | 5902276894428 | 61 400-001 |
| TA-MC400/230 | 230 VAC | 4,0 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 65-100 | 30 | 5902276894435 | 61 400-002 |
| TA-MC400/115 | 115 VAC | 4,0 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 65-100 | 30 | | 61 400-302 |
| TA-MC400/24 | 24 VAC | 4,0 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 125-200 ** | 60 | | 61 400-011 |
| TA-MC400/230 | 230 VAC | 4,0 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 125-200 ** | 60 | | 61 400-012 |
| TA-MC400/115 | 115 VAC | 4,0 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 125-200 ** | 60 | | 61 400-312 |
| TA-MC500/24 | 24 VAC | 5,0 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 65-100 | 30 | 5902276894442 | 61 500-001 |
| TA-MC500/24 | 24 VDC * | 5,0 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 65-100 | 30 | | 61 500-402 |
| TA-MC500/230 | 230 VAC | 5,0 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 65-100 | 30 | 5902276894459 | 61 500-002 |
| TA-MC500/115 | 115 VAC | 5,0 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 65-100 | 30 | | 61 500-302 |
| TA-MC500/24 | 24 VAC | 5,0 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 125-200 | 60 | 5902276894466 | 61 500-011 |
| TA-MC500/24 | 24 VDC * | 5,0 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 125-200 | 60 | | 61 500-412 |
| TA-MC500/230 | 230 VAC | 5,0 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 125-200 | 60 | 5902276894473 | 61 500-012 |
| TA-MC500/115 | 115 VAC | 5,0 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 125-200 | 60 | | 61 500-312 |
| TA-MC1000/24 | 24 VAC | 10,0 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 125-200 | 60 | 5902276894282 | 61 000-001 |
| TA-MC1000/230 | 230 VAC | 10,0 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 125-200 | 60 | 5902276894299 | 61 000-002 |
| TA-MC1000/115 | 115 VAC | 10,0 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 125-200 | 60 | | 61 000-301 |
| Fail-safe | | | | | | | |
| TA-MC100FSE/24 | 24 VAC | 1,0 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 15-65 | 14, 20 | 3831112512122 | 61 100-101 |
| TA-MC100FSE/230 | 230 VAC | 1,0 | 3-point | DN 15-65 | 14, 20 | | 61 100-102 |
| TA-MC100FSR/24 | 24 VAC | 1,0 | 3-point, 0(2)-10 V, 4(0)-20 mA | DN 15-65 | 14, 20 | | 61 100-201 |
| TA-MC100FSR/230 | 230 VAC | 1,0 | 3-point | DN 15-65 | 14, 20 | | 61 100-202 |

*) DC – Direct current flat voltage.

**) DN 200 for 2-way valves only.

TA-MC100/160/161/250/400/500/1000 – IP65 version:
Add "IP" after the Article No., example 61 100-001IP

Accessories for actuators

| | EAN | Article No |
|--|-----|------------|
| TA-MC100, TA-MC160, TA-MC161 | | |
| ACA71 Position switch (2 switches) | | 67 071-100 |
| ACA76 Output signal 0(4)-20 mA | | 67 076-100 |
| TA-MC250, TA-MC400, TA-MC500, TA-MC1000 | | |
| ACA71 Position switch (2 switches) | | 67 071-250 |
| ACA76 Output signal 0(4)-20 mA | | 67 076-250 |

NOTE!

TA-MC100, TA-MC160, TA-MC161: Position switch unit (ACA71) and output signal 0(4)...20 mA (ACA76) not in combination.

For IP65 version: See "Actuators" pages.

Accessories for valves

| | For valve | EAN | Article No |
|--------------------------|------------|-----|------------|
| ACV13 Stem heater | DN 15-100 | | 68 013-015 |
| ACV13 Stem heater | DN 125-200 | | 68 013-091 |

Stem heater for water-glycol mixtures.

Min. temperature: -10°C

Power supply: 24 VAC ±10%, 50/60 Hz ±5%.

Power consumption:

DN 15-100: $P_{max} \sim 30$ VA, $P_N \sim 30$ VA

DN 125-200: $P_{max} \sim 250$ VA, $P_N \sim 45$ VA

Valve variants

| | DN 15 | DN 20 | DN 25 | DN 32 | DN 40 | DN 50 |
|---|------------|------------|------------|------------|------------|------------|
| ACV12 Plug made from CrNi-steel 1.4305 | 68 012-015 | 68 012-020 | 68 012-025 | 68 012-032 | 68 012-040 | 68 012-050 |
| ACV14 Epoxy resin varnish, max. 80°C, corrosion prevention | 68 014-015 | 68 014-020 | 68 014-025 | 68 014-032 | 68 014-040 | 68 014-050 |
| ACV15 O-rings made of FKM | 68 015-015 | 68 015-020 | 68 015-025 | 68 015-032 | 68 015-040 | 68 015-050 |
| ACV16 Technical silicon free version, max. 150°C | 68 016-015 | 68 016-020 | 68 016-025 | 68 016-032 | 68 016-040 | 68 016-050 |
| | DN 65 | DN 80 | DN 100 | DN 125 | DN 150 | DN 200 |
| ACV12 Plug made from CrNi-steel 1.4305 | 68 012-065 | 68 012-080 | 68 012-090 | 1) | 1) | 1) |
| ACV14 Epoxy resin varnish, max. 80°C, corrosion prevention | 68 014-065 | 68 014-080 | 68 014-090 | 68 014-091 | 68 014-092 | 68 014-093 |
| ACV15 O-rings made of FKM | 68 015-065 | 68 015-080 | 68 015-090 | - | - | - |
| ACV16 Technical silicon free version, max. 150°C | 68 016-065 | 68 016-080 | 68 016-090 | 68 016-091 | 68 016-092 | 68 016-093 |

NOTE! ACV12, 14, 15, 16 must be ordered together with the valve.

1) Standard

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