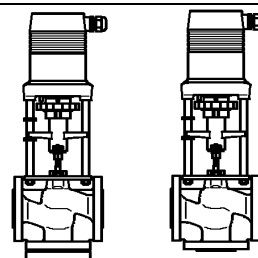


Control valves with electric actuators up to 150°C

PN 6 / 16 **2.2.3**

Flanged connection
PN 6 / PN 16
Cast iron

with electric actuators
MC55/24 • MC55/230 • MC55Y
MC65/24 • MC65/230 • MC65Y
MC100/24 • MC100/230
MC160/24 • MC160/230
MC161/24 • MC161/230
MC250/24 • MC250/230
MC400/24 • MC400/230
MC500/24 • MC500/230
MC1000/24 • MC1000/230



BR206GF
BR216GF

BR306GF
BR316GF

Features

- Suitable for the control of hot and chilled water (0...+150°C) in HEVAC systems control of heating plants. Above 130°C valves should only be mounted in the horizontal position.
- With stem heater suitable for water with antifreeze compounds down to -10°C
- Tight shut-off in the closed position
- Microprocessor controlled
- Automatic self-calibration on start up

Technical data valve

| Series | BR206GF | BR216GF | BR306GF | BR316GF |
|------------------|---|----------------|----------------|-------------------|
| Form | Two-way | | Three-way | |
| Diameter nominal | DN 15 – DN 100 | DN 15 – DN 150 | DN 15 – DN 100 | DN 15 – DN 150 |
| Pressure rating | PN 6 | PN 16 | PN 6 | PN 16 |
| Characteristic | A→AB equal % | | A→AB B→AB | equal % linear |
| Stroke mm | 14 (DN 15 – DN 50) 20 (DN 65) 30 (DN 65 – DN 100) 50 (DN 125 – DN 150) | | | |
| Rangeability | DN 15: 50:1 DN 20 – 150: 100:1 | | | |

Function: BR206/216GF as two-way valve
BR306/316GF as mixing or on-off valve

Connection type: Flanges acc. EN 1092-2 type 21

Face to face dimension: Acc. EN 558-1 basic series 1

Leakage rate: EN 1349 – seat-leakage VI G 1 (tight sealing)

Body: Cast iron EN-JL1040

Plug: Brass CW614N

Stem: CrMo-steel 1.4122

Stem sealing: O-rings EPDM

Valve variant and accessories

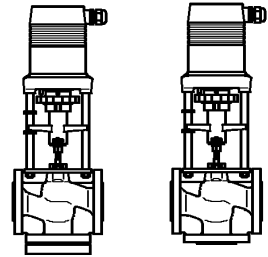
- Plug made of CrNi-steel 1.4305
- With stem heater suitable for water with antifreeze compounds down to -10°C
24 VAC, 50/60 Hz
DN 15 – DN 100 and DN 125 – DN 150 Power consumption: $P_{max.} \approx 400 \text{ VA}$
 $P_N \approx 45 \text{ VA}$
- Epoxy resin special varnish as a corrosion resistant in case of condensed water, max. 80°C
- Usable for media based on mineral oil basis (stem sealing made of FKM)
- Technical silicon free version

Control valves with electric actuators up to 150°C

PN 6 / 16 **2.2.3**

Flanged connection
PN 6 / PN 16
Cast iron

with electric actuators
MC55/24 • MC55/230 • MC55Y
MC65/24 • MC65/230 • MC65Y
MC100/24 • MC100/230
MC160/24 • MC160/230
MC161/24 • MC161/230
MC250/24 • MC250/230
MC400/24 • MC400/230
MC500/24 • MC500/230
MC1000/24 • MC1000/230

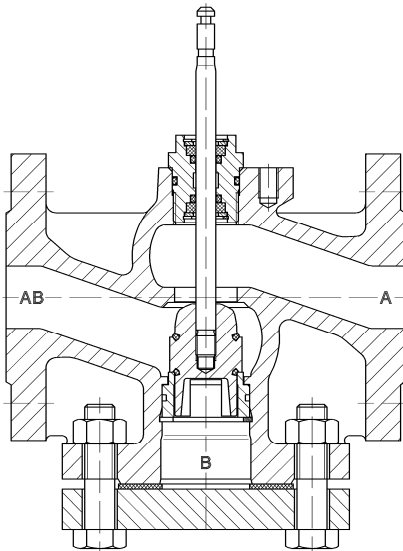


BR206GF
BR216GF

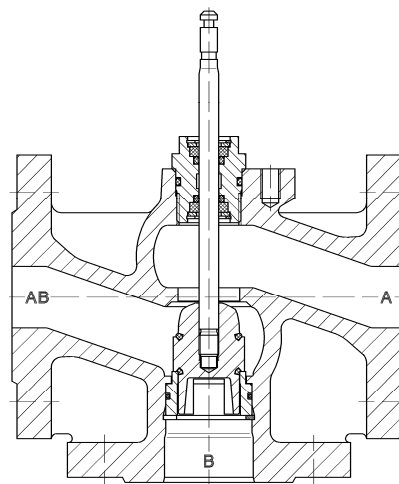
BR306GF
BR316GF

Drawing

DN 15 – DN 65 (stroke 20)

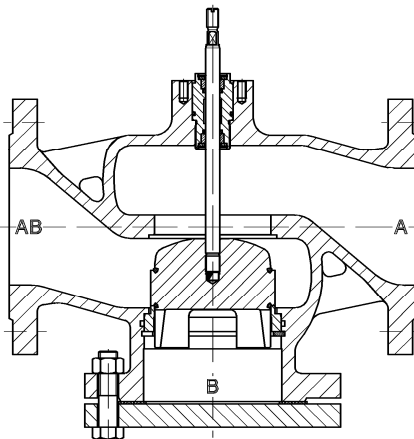


BR206GF / BR216GF

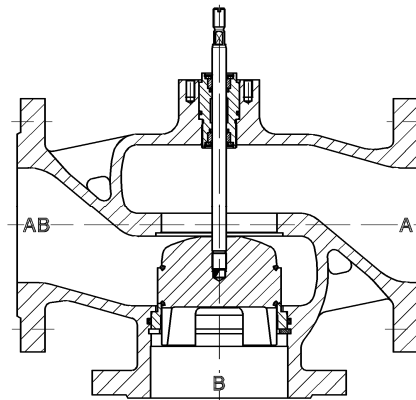


BR306GF / BR316GF

DN 65 (Stroke 30) – DN 100



BR206GF / BR216GF



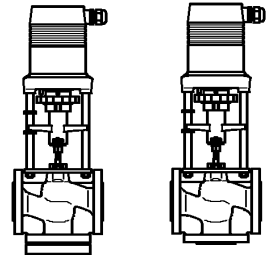
BR306GF / BR316GF

Control valves with electric actuators up to 150°C

PN 6 / 16 **2.2.3**

Flanged connection
PN 6 / PN 16
Cast iron

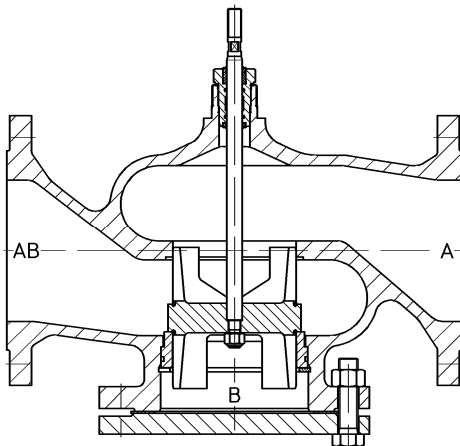
with electric actuators
MC55/24 • MC55/230 • MC55Y
MC65/24 • MC65/230 • MC65Y
MC100/24 • MC100/230
MC160/24 • MC160/230
MC161/24 • MC161/230
MC250/24 • MC250/230
MC400/24 • MC400/230
MC500/24 • MC500/230
MC1000/24 • MC1000/230



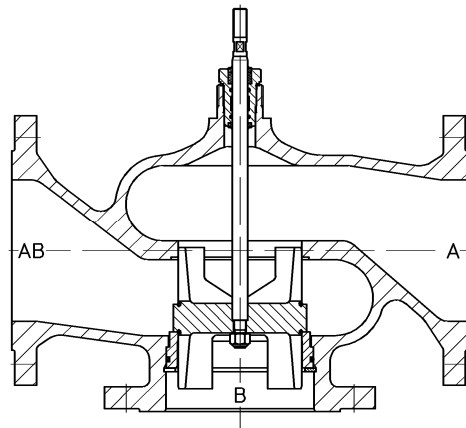
BR206GF
BR216GF

BR306GF
BR316GF

DN 125 – DN 150



BR216GF



BR316GF

Technical data actuator MC55 · MC65

| Type | | MC55/24 | MC65/24 | MC55/230 | MC65/230 | MC55Y | MC65Y |
|------------------------------|------|--|---------|--|----------|---|---------|
| Actuating time ¹⁾ | s/mm | 9 · 5* | | 9 · 5* | | 9 · 5* | |
| Actuating thrust | kN | 0.6 | | 0.6 | | 0.6 | |
| Stroke | mm | max. 14 | max. 20 | max. 14 | max. 20 | max. 14 | max. 20 |
| Power supply | VAC | 24 ±10% | | 230 +6% -10% | | 24 ±10% | |
| Power supply ²⁾ | VDC | 24 ±10% | | | | 24 ±10% | |
| Frequency | Hz | 50/60 ±5% | | 50/60 ±5% | | 50/60 ±5% | |
| Power consumption | VA | 3.5 | | 7 | | 3.5 | |
| Input signal ³⁾ | | 3-point | | 3-point | | 0(2)...10 VDC 77 kOhm 0(4)...20 mA 0.51 kOhm | |
| Output signal ³⁾ | | 0...10 VDC max. 8 mA min. 1200 Ohm | | 0...10 VDC max. 8 mA min. 1200 Ohm | | 0...10 VDC max. 8 mA min. 1200 Ohm | |
| Hysteresis | V | 0.3 | | 0.3 | | 0.3 | |

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

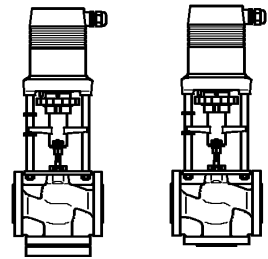
²⁾ only rectified alternating voltage

³⁾ Invertible input and output signal

Control valves with electric actuators up to 150°C

PN 6 / 16 2.2.3

| | |
|--|---|
| <p>Flanged connection PN 6 / PN 16 Cast iron</p> | <p>with electric actuators MC55/24 • MC55/230 • MC55Y MC65/24 • MC65/230 • MC65Y MC100/24 • MC100/230 MC160/24 • MC160/230 MC161/24 • MC161/230 MC250/24 • MC250/230 MC400/24 • MC400/230 MC500/24 • MC500/230 MC1000/24 • MC1000/230</p> |
|--|---|



**BR206GF
BR216GF**

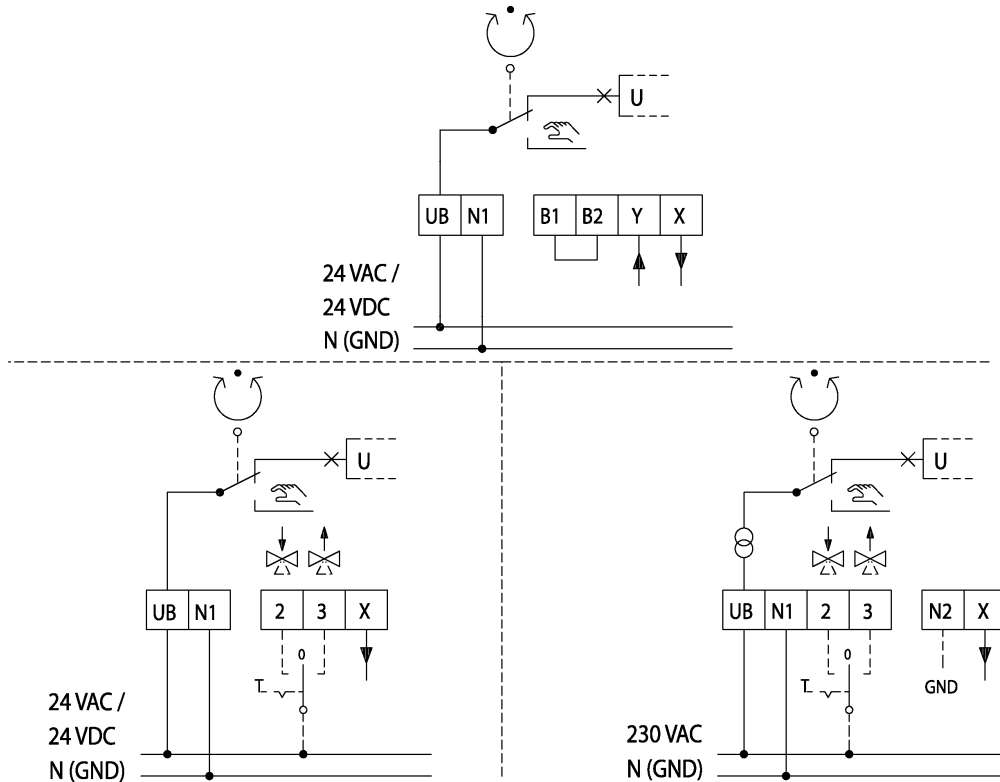
**BR306GF
BR316GF**

| | |
|--|---|
| <p>Enclosure protection: Resolution: Mains connection: Operating mode: End position switch-off: Ambient temperature: Weight:</p> | <p>IP 54 in automatic operation IP 30 in manual operation electric 0.04 VDC mechanical 0.06 mm Actuator with terminal S3-50% ED c/h 1200 EN 60034-1 load-dependent 0...+60°C 1.5 kg</p> |
|--|---|

Actuator variant and accessories

- Voltage: 115 VAC
- Adapter with coupling for external products

Circuit diagram MC55 / MC65



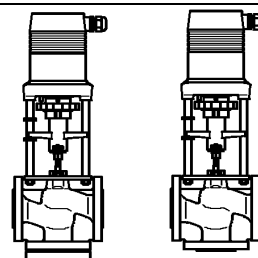
B1/B2 Connection of a binary signal (e.g. frost safety)

Control valves with electric actuators up to 150°C

PN 6 / 16 2.2.3

Flanged connection
PN 6 / PN 16
Cast iron

with electric actuators
MC55/24 • MC55/230 • MC55Y
MC65/24 • MC65/230 • MC65Y
MC100/24 • MC100/230
MC160/24 • MC160/230
MC161/24 • MC161/230
MC250/24 • MC250/230
MC400/24 • MC400/230
MC500/24 • MC500/230
MC1000/24 • MC1000/230



**BR206GF
BR216GF**

**BR306GF
BR316GF**

Technical data actuator MC100 – MC1000

| Type | | MC100/24 | MC100/230 |
|------------------------------|------|--|--|
| Actuating time ¹⁾ | s/mm | 12 · 9* · 4 · 1.9 | 12 · 9* · 4 · 1.9 |
| Actuating thrust | kN | 1.0 | 1.0 |
| Stroke | mm | max. 20 | max. 20 |
| Power supply | VAC | 24 ±10% | 230 +6% -10% |
| Power supply ²⁾ | VDC | 24 ±10% | - |
| Frequency | Hz | 50/60 ±5% | 50/60 ±5% |
| Power consumption | VA | 6 | 12 |
| Input signal ³⁾ | | 3-point 0(2)...10 VDC 77 kOhm 0(4)...20 mA 0.51 kOhm | 3-point 0(2)...10 VDC 77 kOhm 0(4)...20 mA 0.51 kOhm |
| Output signal ³⁾ | | 0...10 VDC max. 8 mA min. 1200 Ohm | 0...10 VDC max. 8 mA min. 1200 Ohm |
| Hysteresis ⁴⁾ | V | 0.15 · 0.5 | 0.15 · 0.5 |

| Type | | MC160/24 | MC161/24 | MC160/230 | MC161/230 |
|------------------------------|------|--|----------|--|-----------|
| Actuating time ¹⁾ | s/mm | 6 · 4* | | 6 · 4* | |
| Actuating thrust | kN | 1.6 | | 1.6 | |
| Stroke | mm | max. 30 | max. 20 | max. 30 | max. 20 |
| Power supply | VAC | 24 ±10% | | 230 +6% -10% | |
| Power supply ²⁾ | VDC | 24 ±10% | | - | |
| Frequency | Hz | 50/60 ±5% | | 50/60 ±5% | |
| Power consumption | VA | 6 | | 12 | |
| Input signal ³⁾ | | 3-point 0(2)...10 VDC 77 kOhm 0(4)...20 mA 0.51 kOhm | | 3-point 0(2)...10 VDC 77 kOhm 0(4)...20 mA 0.51 kOhm | |
| Output signal ³⁾ | | 0...10 VDC max. 8 mA min. 1200 Ohm | | 0...10 VDC max. 8 mA min. 1200 Ohm | |
| Hysteresis ⁴⁾ | V | 0.05 · 0.15 · 0.3 · 0.5 | | 0.05 · 0.15 · 0.3 · 0.5 | |

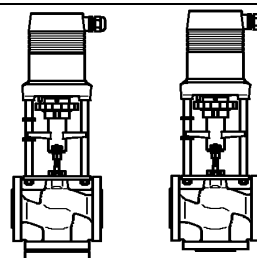
¹⁾ Actuating time freely adjustable, presetting is marked with *
²⁾ only rectified alternating voltage
³⁾ Invertible input and output signal
⁴⁾ Freely adjustable

Control valves with electric actuators up to 150°C

PN 6 / 16 2.2.3

Flanged connection
PN 6 / PN 16
Cast iron

with electric actuators
MC55/24 • MC55/230 • MC55Y
MC65/24 • MC65/230 • MC65Y
MC100/24 • MC100/230
MC160/24 • MC160/230
MC161/24 • MC161/230
MC250/24 • MC250/230
MC400/24 • MC400/230
MC500/24 • MC500/230
MC1000/24 • MC1000/230



**BR206GF
BR216GF**

**BR306GF
BR316GF**

| Type | | MC250/24 | MC250/230 |
|------------------------------|------|--|--|
| Actuating time ¹⁾ | s/mm | 5 · 2.5* | 5 · 2.5* |
| Actuating thrust | kN | 2.5 | 2.5 |
| Stroke | mm | max. 60 | max. 60 |
| Power supply | VAC | 24 ±10% | 230 +6% -10% |
| Power supply ²⁾ | VDC | 24 ±10% | - |
| Frequency | Hz | 50/60 ±5% | 50/60 ±5% |
| Power consumption | VA | max. 18 | max. 25 |
| Input signal ³⁾ | | 3-point 0(2)...10 VDC 77 kOhm 0(4)...20 mA 0.51 kOhm | 3-point 0(2)...10 VDC 77 kOhm 0(4)...20 mA 0.51 kOhm |
| Output signal ³⁾ | | 0...10 VDC max. 8 mA min. 1200 Ohm | 0...10 VDC max. 8 mA min. 1200 Ohm |
| Hysteresis ⁴⁾ | V | 0.05 · 0.15 · 0.3 · 0.5 | 0.05 · 0.15 · 0.3 · 0.5 |

| Type | | MC400/24 | MC400/230 |
|------------------------------|------|--|--|
| Actuating time ¹⁾ | s/mm | 0.6 · 0.4* | 0.6 · 0.4* |
| Actuating thrust | kN | 4.0 | 4.0 |
| Stroke | mm | max. 60 | max. 60 |
| Power supply | VAC | 24 ±10% | 230 +6% -10% |
| Power supply ²⁾ | VDC | 50/60 ±5% | 50/60 ±5% |
| Frequency | Hz | max. 50 | max. 63 |
| Power consumption | VA | 3-point 0(2)...10 VDC 77 kOhm 0(4)...20 mA 0.51 kOhm | 3-point 0(2)...10 VDC 77 kOhm 0(4)...20 mA 0.51 kOhm |
| Input signal ³⁾ | | 0...10 VDC max. 8 mA min. 1200 Ohm | 0...10 VDC max. 8 mA min. 1200 Ohm |
| Output signal ³⁾ | | 0.05 · 0.15 · 0.3 · 0.5 | 0.05 · 0.15 · 0.3 · 0.5 |

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

²⁾ only rectified alternating voltage

³⁾ Invertible input and output signal

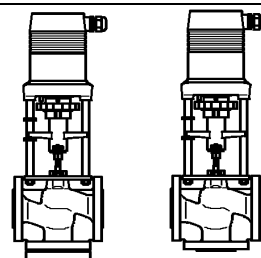
⁴⁾ Freely adjustable

Control valves with electric actuators up to 150°C

PN 6 / 16 2.2.3

Flanged connection
PN 6 / PN 16
Cast iron

with electric actuators
MC55/24 • MC55/230 • MC55Y
MC65/24 • MC65/230 • MC65Y
MC100/24 • MC100/230
MC160/24 • MC160/230
MC161/24 • MC161/230
MC250/24 • MC250/230
MC400/24 • MC400/230
MC500/24 • MC500/230
MC1000/24 • MC1000/230



**BR206GF
BR216GF**

**BR306GF
BR316GF**

| Type | | MC500/24 | MC500/230 |
|------------------------------|------|--|--|
| Actuating time ¹⁾ | s/mm | 5 · 2.5* | 5 · 2.5* |
| Actuating thrust | kN | 5.0 | 5.0 |
| Stroke | mm | max. 60 | max. 60 |
| Power supply | VAC | 24 ±10% | 230 +6% -10% |
| Power supply ²⁾ | VDC | 24 ±10% | - |
| Frequency | Hz | 50/60 ±5% | 50/60 ±5% |
| Power consumption | VA | max. 18 | max. 25 |
| Input signal ³⁾ | | 3-point 0(2)...10 VDC 77 kOhm 0(4)...20 mA 0.51 kOhm | 3-point 0(2)...10 VDC 77 kOhm 0(4)...20 mA 0.51 kOhm |
| Output signal ³⁾ | | 0...10 VDC max. 8 mA min. 1200 Ohm | 0...10 VDC max. 8 mA min. 1200 Ohm |
| Hysteresis ⁴⁾ | V | 0.05 · 0.15 · 0.3 · 0.5 | 0.05 · 0.15 · 0.3 · 0.5 |

| Type | | MC1000/24 | MC1000/230 |
|-----------------------------|------|--|--|
| Actuating time | s/mm | 1 | 1 |
| Actuating thrust | kN | 10 | 10 |
| Stroke | mm | max. 60 | max. 60 |
| Power supply | VAC | 24 ±10% | 230 +6% -10% |
| Frequency | Hz | 50/60 ±5% | 50/60 ±5% |
| Power consumption | VA | max. 50 | max. 63 |
| Input signal ¹⁾ | | 3-Punkt 0(2)...10 VDC 77 kOhm 0(4)...20 mA 0.51 kOhm | 3-Punkt 0(2)...10 VDC 77 kOhm 0(4)...20 mA 0.51 kOhm |
| Output signal ¹⁾ | | 0...10 VDC max. 8 mA min. 1200 Ohm | 0...10 VDC max. 8 mA min. 1200 Ohm |
| Hysteresis ²⁾ | V | 0.05 · 0.15 · 0.3 · 0.5 | 0.05 · 0.15 · 0.3 · 0.5 |

Enclosure protection: IP 54

Resolution:

| | | |
|---------------|------------|----------|
| MC... | electric | 0.04 VDC |
| MC100 | mechanical | 0.095 mm |
| MC160 / MC161 | mechanical | 0.05 mm |
| MC250 / MC500 | mechanical | 0.04 mm |
| MC400 | mechanical | 0.12 mm |
| MC1000 | mechanical | 0.05 mm |

Operating mode:

| | | |
|----------------|--------------------|------------|
| MC100 – MC500 | S3-50% ED c/h 1200 | EN 60034-1 |
| MC400 / MC1000 | S3-30% ED c/h 1200 | EN 60034-1 |

End position switch-off: load-dependent

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

²⁾ only rectified alternating voltage

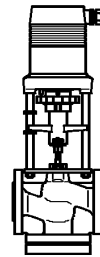
³⁾ Invertible input and output signal

⁴⁾ Freely adjustable

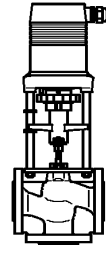
Control valves with electric actuators up to 150°C

PN 6 / 16 **2.2.3**

| | |
|---|---|
| Flanged connection PN 6 / PN 16 Cast iron | with electric actuators MC55/24 • MC55/230 • MC55Y MC65/24 • MC65/230 • MC65Y MC100/24 • MC100/230 MC160/24 • MC160/230 MC161/24 • MC161/230 MC250/24 • MC250/230 MC400/24 • MC400/230 MC500/24 • MC500/230 MC1000/24 • MC1000/230 |
|---|---|



BR206GF
BR216GF



BR306GF
BR316GF

| | | |
|----------------------|--------------------------------|-------------|
| Ambient temperature: | MC100 / MC160 / MC161 | 0...+60°C |
| | MC250 / MC400 / MC500 / MC1000 | -10...+60°C |
| Weight: | MC100 | 2.5 kg |
| | MC160 and MC161 | 3.2 kg |
| | MC250/24 and MC500/24 | 7.0 kg |
| | MC250/230 and MC500/230 | 8.2 kg |
| | MC400 | 9.5 kg |
| | MC1000 | 11.0 kg |

Actuator variant and accessories

- Voltage: 115 VAC
- Position switch unit ¹⁾: 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
- Board for output signal X=0(4)...20 mA ¹⁾
- Adapter with coupling for external products

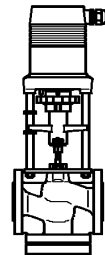
³⁾ MC100/MC160/MC161: Position switch unit and output signal 0(4)...20 mA not in combination

Control valves with electric actuators up to 150°C

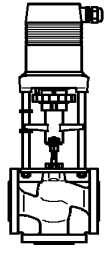
PN 6 / 16 **2.2.3**

Flanged connection
PN 6 / PN 16
Cast iron

with electric actuators
MC55/24 • MC55/230 • MC55Y
MC65/24 • MC65/230 • MC65Y
MC100/24 • MC100/230
MC160/24 • MC160/230
MC161/24 • MC161/230
MC250/24 • MC250/230
MC400/24 • MC400/230
MC500/24 • MC500/230
MC1000/24 • MC1000/230

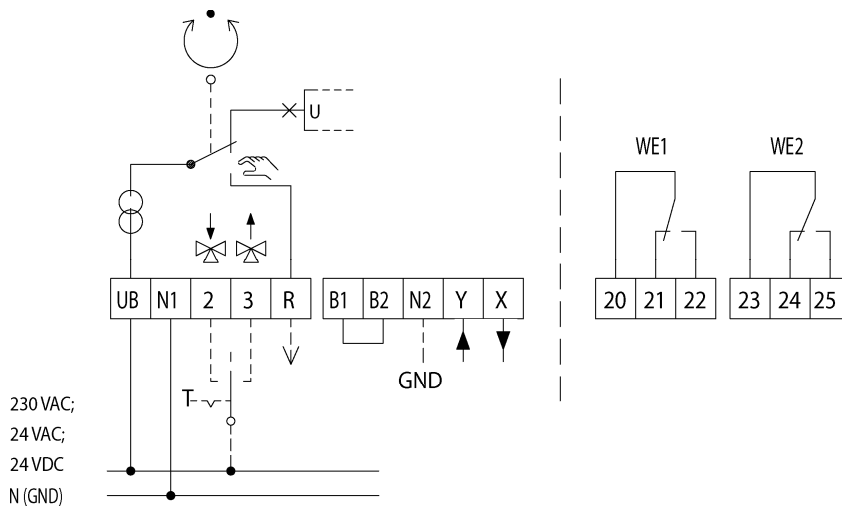


BR206GF
BR216GF



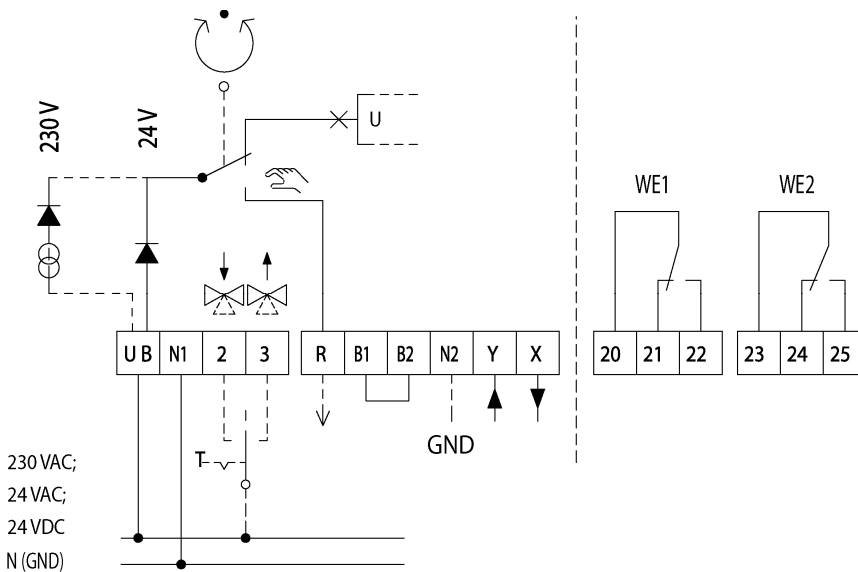
BR306GF
BR316GF

Circuit diagram MC100 / MC160 / MC161



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

Circuit diagram MC250 / MC400 / MC500 / MC1000



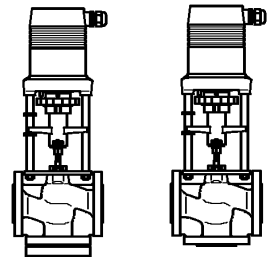
B1/B2 Connection of a binary signal (e.g. frost safety)

Control valves with electric actuators up to 150°C

PN 6 / 16 2.2.3

Flanged connection
PN 6 / PN 16
Cast iron

with electric actuators
MC55/24 • MC55/230 • MC55Y
MC65/24 • MC65/230 • MC65Y
MC100/24 • MC100/230
MC160/24 • MC160/230
MC161/24 • MC161/230
MC250/24 • MC250/230
MC400/24 • MC400/230
MC500/24 • MC500/230
MC1000/24 • MC1000/230



**BR206GF
BR216GF**

**BR306GF
BR316GF**

Technical data valve with actuator

PN 6

| DN | 15 | 20 | 25 | 32 | 40 | 50 | 65 | 65 | 80 | 100 | |
|------------------------------|---------------------------------|----------|---------|------------|----------|------------|----------|----------|-----------|------------|--|
| kvs-value | 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 | |
| Stroke | mm | | | | | | 14 | 20 | 30 | | |
| MC55/24 MC55/230 MC55Y | Actuating time ¹⁾ | s | | | | | | 125 | | | |
| | Closing pressure | kPa | | | | | | 70* | | | |
| MC65/24 MC65/230 MC65Y | Actuating time ¹⁾ | s | | | | | | 180 | | | |
| | Closing pressure | kPa | | | | | | 100* | | | |
| MC100/24 MC100/230 | Actuating time ¹⁾ | s | | | | | | 170 | | | |
| | | s | | | | | | 125* | | | |
| | | s | | | | | | 55 | | | |
| | Closing pressure | kPa | | | | | | 30 | | | |
| MC161/24 MC161/230 | Actuating time ¹⁾ | s | | | | | | 95 | | | |
| | Closing pressure | kPa | | | | | | 55* | | | |
| MC160/24 MC160/230 | Actuating time ¹⁾ | s | | | | | | 120 | | 180 | |
| | Closing pressure | kPa | | | | | | 80* | | 120* | |
| MC250/24 MC250/230 | Actuating time ¹⁾ | s | | | | | | 100 | | 150 | |
| | Closing pressure | kPa | | | | | | 50* | | 75* | |
| MC400/24 MC400/230 | Actuating time ¹⁾ | s | | | | | | 15 | | 20 | |
| | Closing pressure | kPa | | | | | | 10* | | 15* | |
| MC500/24 MC500/230 | Actuating time ¹⁾ | s | | | | | | 100 | | 150 | |
| | Closing pressure | kPa | | | | | | 50* | | 75* | |
| MC1000/24 MC1000/230 | Actuating time ¹⁾ | s | | | | | | 100 | | 150 | |
| | Closing pressure | kPa | | | | | | 600 | | 600 500 | |

100 kPa = 1 bar = 10 mWS

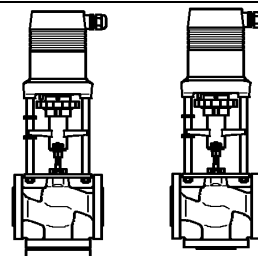
¹⁾ Actuating time freely adjustable, presetting is marked with *

Control valves with electric actuators up to 150°C

PN 6 / 16 2.2.3

Flanged connection
PN 6 / PN 16
Cast iron

with electric actuators
MC55/24 • MC55/230 • MC55Y
MC65/24 • MC65/230 • MC65Y
MC100/24 • MC100/230
MC160/24 • MC160/230
MC161/24 • MC161/230
MC250/24 • MC250/230
MC400/24 • MC400/230
MC500/24 • MC500/230
MC1000/24 • MC1000/230



**BR206GF
BR216GF**

**BR306GF
BR316GF**

PN 16

| DN | | 15 | 20 | 25 | 32 | 40 | 50 | 65 | 65 | 80 | 100 | 125 | 150 | |
|------------------------------|------------------------------|--------------|-----|----|------|----|------|-----------|------|------|-----|-----|-----|-----|
| kvs-value | m³/h | 4 | 6.3 | 10 | 16 | 25 | 40 | 63 | 63 | 100 | 160 | 250 | 315 | |
| | | 2.5 | 5 | 8 | 12.5 | 20 | 31.5 | 50 | 50 | 80 | 125 | | | |
| | | 1.6 | | | | | | | | | | | | |
| | | 1.25 0.63 | | | | | | | | | | | | |
| Stroke | | mm | | | | | | 14 | 20 | 30 | | | 50 | |
| MC55/24 MC55/230 MC55Y | Actuating time ¹⁾ | s | | | | | | 125 | | | | | | |
| | Closing pressure | kPa | | | | | | 70* | | | | | | |
| MC65/24 MC65/230 MC65Y | Actuating time ¹⁾ | s | | | | | | 1500 | 1250 | 750 | 450 | 250 | 150 | |
| | Closing pressure | kPa | | | | | | 180 | | | | | | |
| MC100/24 MC100/230 | Actuating time ¹⁾ | s | | | | | | 100* | | | | | | |
| | Closing pressure | kPa | | | | | | 170 | | | | | | |
| MC160/24 MC160/230 | Actuating time ¹⁾ | s | | | | | | 240 | | | | | | |
| | | s | | | | | | 125* | | | | | | |
| | | s | | | | | | 180* | | | | | | |
| | | s | | | | | | 55 | | | | | | |
| MC161/24 MC161/230 | Closing pressure | kPa | | | | | | 80 | | | | | | |
| | | kPa | | | | | | 30 | | | | | | |
| MC161/24 MC161/230 | Actuating time ¹⁾ | s | | | | | | 1600 | 1600 | 1500 | 900 | 550 | 350 | 150 |
| | Closing pressure | kPa | | | | | | 95 | | | | | | |
| MC161/24 MC161/230 | Closing pressure | kPa | | | | | | 55* | | | | | | |
| | | kPa | | | | | | 1500 | 950 | 600 | 350 | | | |
| MC160/24 MC160/230 | Actuating time ¹⁾ | s | | | | | | 120 | 180 | | | | | |
| | Closing pressure | kPa | | | | | | 80* | 120* | | | | | |
| MC250/24 MC250/230 | Actuating time ¹⁾ | s | | | | | | 350 | 230 | 140 | | | | |
| | Closing pressure | kPa | | | | | | 100 | 150 | 250 | | | | |
| MC250/24 MC250/230 | Actuating time ¹⁾ | s | | | | | | 50* | 75* | | | | | |
| | Closing pressure | kPa | | | | | | 600 | 350 | 250 | 160 | 120 | | |
| MC400/24 MC400/230 | Actuating time ¹⁾ | s | | | | | | 15 | 20 | | | | | |
| | Closing pressure | kPa | | | | | | 10* | 15* | | | | | |
| MC400/24 MC400/230 | Actuating time ¹⁾ | s | | | | | | 950 | 650 | 400 | 200 | 130 | | |
| | Closing pressure | kPa | | | | | | 100 | 150 | | | | | |
| MC500/24 MC500/230 | Actuating time ¹⁾ | s | | | | | | 50* | 75* | | | | | |
| | Closing pressure | kPa | | | | | | 1250 | 850 | 500 | 370 | 270 | | |
| MC1000/24 MC1000/230 | Actuating time ¹⁾ | s | | | | | | 50 | | | | | | |
| | Closing pressure | kPa | | | | | | 800 550 | | | | | | |

100 kPa = 1 bar = 10 mWS

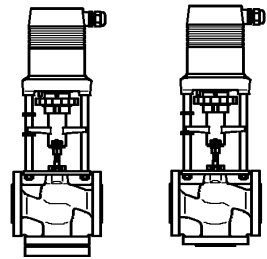
¹⁾ Actuating time freely adjustable, presetting is marked with *

Control valves with electric actuators up to 150°C

PN 6 / 16 **2.2.3**

Flanged connection
PN 6 / PN 16
Cast iron

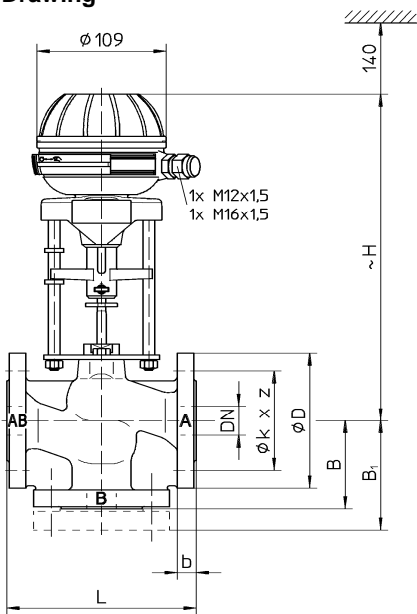
with electric actuators
MC55/24 • MC55/230 • MC55Y
MC65/24 • MC65/230 • MC65Y
MC100/24 • MC100/230
MC160/24 • MC160/230
MC161/24 • MC161/230
MC250/24 • MC250/230
MC400/24 • MC400/230
MC500/24 • MC500/230
MC1000/24 • MC1000/230



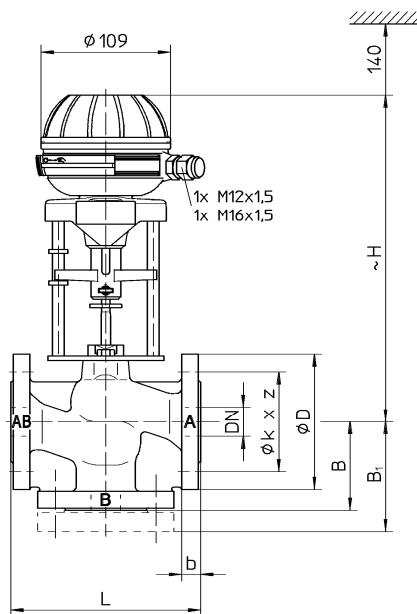
BR206GF
BR216GF

BR306GF
BR316GF

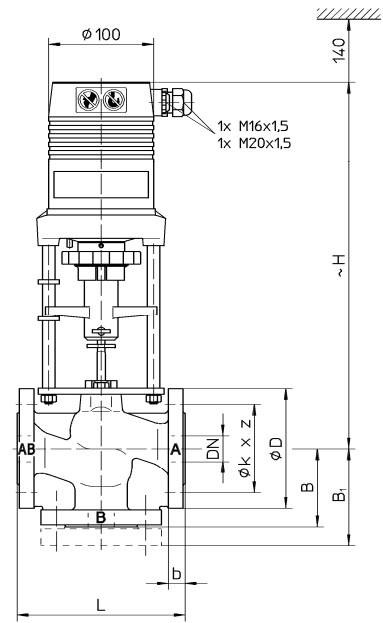
Drawing



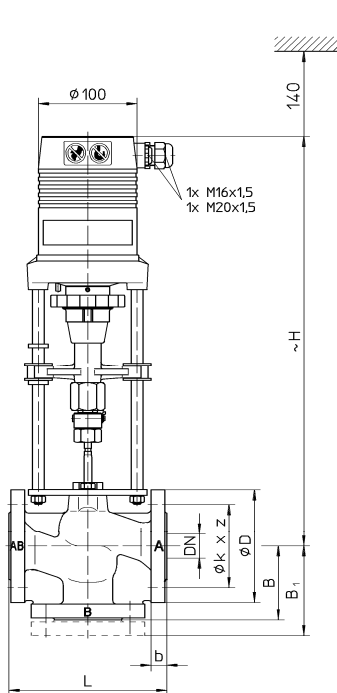
DN 15 – DN 50
MC55



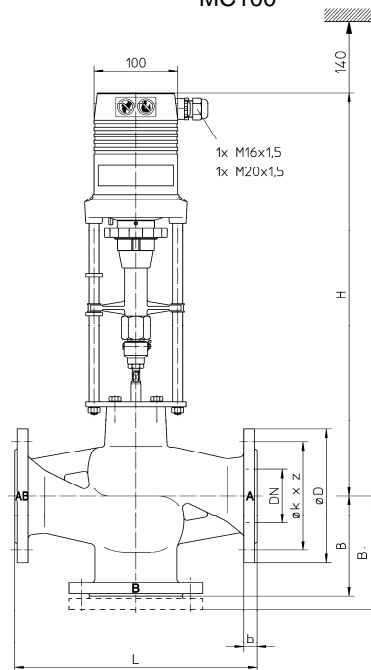
DN 65 (stroke 20)
MC65



DN 15 – DN 65 (stroke 20)
MC100



DN 32 – DN 65 (stroke 20)



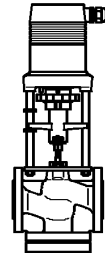
DN 65 (stroke 30) – DN 100

Control valves with electric actuators up to 150°C

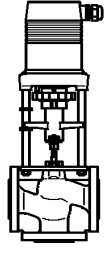
PN 6 / 16 **2.2.3**

Flanged connection
PN 6 / PN 16
Cast iron

with electric actuators
MC55/24 • MC55/230 • MC55Y
MC65/24 • MC65/230 • MC65Y
MC100/24 • MC100/230
MC160/24 • MC160/230
MC161/24 • MC161/230
MC250/24 • MC250/230
MC400/24 • MC400/230
MC500/24 • MC500/230
MC1000/24 • MC1000/230



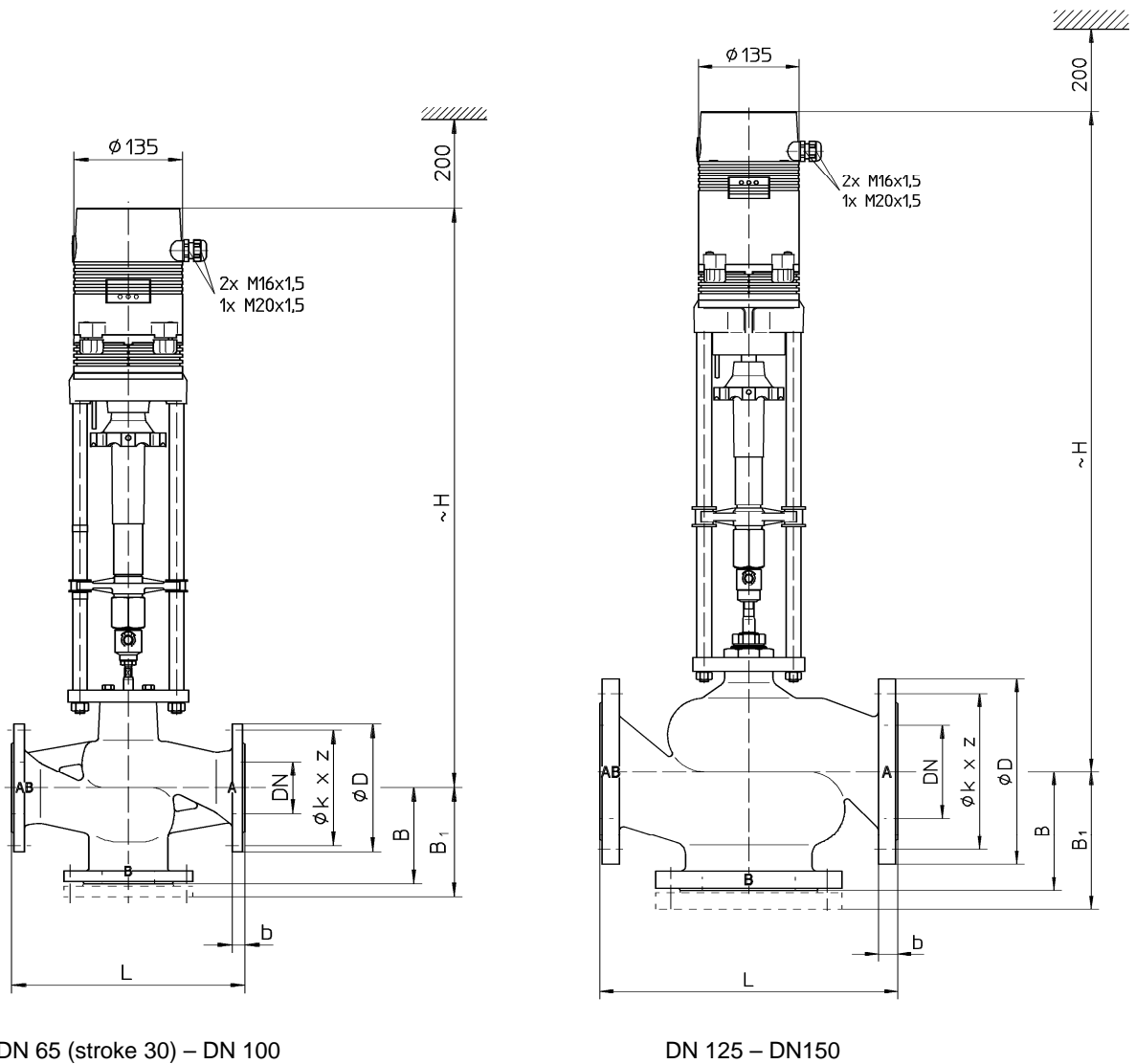
BR206GF
BR216GF



BR306GF
BR316GF

MC161

MC160



DN 65 (stroke 30) – DN 100

DN 125 – DN150

MC250 / MC400 / MC500 / MC1000

Installation instruction:

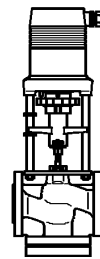
Valve trim could be damaged by dirt in the pipe system. Therefore we recommend the installation of strainers.

Control valves with electric actuators up to 150°C

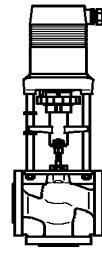
PN 6 / 16 2.2.3

Flanged connection
PN 6 / PN 16
Cast iron

with electric actuators
MC55/24 • MC55/230 • MC55Y
MC65/24 • MC65/230 • MC65Y
MC100/24 • MC100/230
MC160/24 • MC160/230
MC161/24 • MC161/230
MC250/24 • MC250/230
MC400/24 • MC400/230
MC500/24 • MC500/230
MC1000/24 • MC1000/230



**BR206GF
BR216GF**



**BR306GF
BR316GF**

Dimension

PN 6

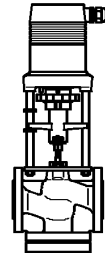
| DN | | 15 | 20 | 25 | 32 | 40 | 50 | 65 | 80 | 100 | |
|----------------------------|---------|----------------|-----|-----|--------|-----|------|--------|------|------|-----|
| L | mm | 130 | 150 | 160 | 180 | 200 | 230 | 290 | 310 | 350 | |
| B | mm | 65 | 70 | 75 | 95 | 100 | 100 | 120 | 130 | 150 | |
| B ₁ | mm | 86 | 93 | 98 | 119 | 124 | 124 | 144 | 158 | 178 | |
| ∅ D | mm | 80 | 90 | 100 | 120 | 130 | 140 | 160 | 190 | 210 | |
| ∅ k | mm | 55 | 65 | 75 | 90 | 100 | 110 | 130 | 150 | 170 | |
| z | mm | 4x ∅11 | | | 4x ∅14 | | | 4x ∅18 | | | |
| b | mm | 12 | 14 | 14 | 16 | 16 | 16 | 16 | 18 | 18 | |
| H | MC55 | 24 VAC/230 VAC | mm | 267 | 272 | 277 | 277 | 282 | 282 | | |
| | MC65 | 24 VAC/230 VAC | mm | | | | | | 335 | | |
| | MC100 | 24 VAC | mm | 343 | 348 | 353 | 353 | 358 | 358 | 408 | |
| | | 230 VAC | mm | 368 | 373 | 378 | 378 | 383 | 383 | 433 | |
| | MC161 | 24 VAC | mm | | | | | 448 | 448 | 486 | |
| | | 230 VAC | mm | | | | | 473 | 473 | 511 | |
| | MC160 | 24 VAC | mm | | | | | | 486 | 496 | 506 |
| | | 230 VAC | mm | | | | | | 511 | 521 | 531 |
| | MC250 | 24 VAC/230 VAC | mm | | | | | | 645 | 655 | 665 |
| | MC400 | 24 VAC/230 VAC | mm | | | | | | 695 | 705 | 715 |
| | MC500 | 24 VAC/230 VAC | mm | | | | | | 645 | 655 | 665 |
| | MC55 | BR206GF | kg | 4.3 | 5.4 | 6.3 | 8.6 | 10.3 | 12.0 | | |
| | | BR306GF | kg | 3.7 | 4.5 | 5.2 | 7.1 | 8.5 | 9.9 | | |
| | MC65 | BR206GF | kg | | | | | | | 19.4 | |
| BR306GF | | kg | | | | | | | 16.2 | | |
| MC100 | BR206GF | kg | 5.3 | 6.4 | 7.3 | 9.6 | 11.3 | 13.0 | 20.4 | | |
| | BR306GF | kg | 4.7 | 5.5 | 6.2 | 8.1 | 9.5 | 10.9 | 17.2 | | |
| MC161 | BR206GF | kg | | | | | 12.0 | 13.7 | 21.1 | | |
| | BR306GF | kg | | | | | 10.2 | 11.6 | 17.9 | | |
| MC160 | BR206GF | kg | | | | | | 21.1 | 29.5 | 40.3 | |
| | BR306GF | kg | | | | | | 17.9 | 25.2 | 34.2 | |
| MC250/ MC500 24 VAC | BR206GF | kg | | | | | | 24.9 | 33.3 | 44.1 | |
| | BR306GF | kg | | | | | | 21.7 | 29.0 | 38.0 | |
| MC250/ MC500 230 VAC | BR206GF | kg | | | | | | 26.1 | 34.5 | 45.3 | |
| | BR306GF | kg | | | | | | 22.9 | 30.2 | 39.2 | |

Control valves with electric actuators up to 150°C

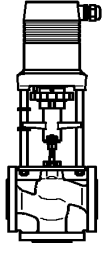
PN 6 / 16 **2.2.3**

Flanged connection
PN 6 / PN 16
Cast iron

with electric actuators
MC55/24 • MC55/230 • MC55Y
MC65/24 • MC65/230 • MC65Y
MC100/24 • MC100/230
MC160/24 • MC160/230
MC161/24 • MC161/230
MC250/24 • MC250/230
MC400/24 • MC400/230
MC500/24 • MC500/230
MC1000/24 • MC1000/230



BR206GF
BR216GF



BR306GF
BR316GF

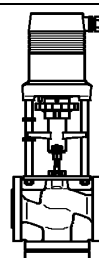
| | | | | | | | | | | |
|-------|---------|----|--|--|--|--|--|------|------|------|
| MC400 | BR206GF | kg | | | | | | 27.4 | 35.8 | 46.6 |
| | BR306GF | kg | | | | | | 24.2 | 31.5 | 40.5 |

Control valves with electric actuators up to 150°C

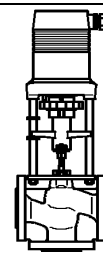
PN 6 / 16 2.2.3

Flanged connection
PN 6 / PN 16
Cast iron

with electric actuators
MC55/24 • MC55/230 • MC55Y
MC65/24 • MC65/230 • MC65Y
MC100/24 • MC100/230
MC160/24 • MC160/230
MC161/24 • MC161/230
MC250/24 • MC250/230
MC400/24 • MC400/230
MC500/24 • MC500/230
MC1000/24 • MC1000/230



**BR206GF
BR216GF**



**BR306GF
BR316GF**

PN 16

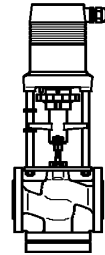
| DN | | 15 | 20 | 25 | 32 | 40 | 50 | 65 | 80 | 100 | 125 | 150 | |
|----------------------------|---------|----------------|-----|-----|--------|------|------|------|--------|------|------|------|-----|
| L | mm | 130 | 150 | 160 | 180 | 200 | 230 | 290 | 310 | 350 | 400 | 480 | |
| B | mm | 65 | 70 | 75 | 95 | 100 | 100 | 120 | 130 | 150 | 160 | 170 | |
| B ₁ | mm | 89 | 96 | 101 | 123 | 128 | 130 | 150 | 162 | 182 | 194 | 207 | |
| ∅ D | mm | 95 | 105 | 115 | 140 | 150 | 165 | 185 | 200 | 220 | 250 | 285 | |
| ∅ k | mm | 65 | 75 | 85 | 100 | 110 | 125 | 145 | 160 | 180 | 210 | 240 | |
| z | mm | 4x ∅14 | | | 4x ∅18 | | | | 8x ∅18 | | | 8x | |
| b | mm | 14 | 16 | 16 | 18 | 18 | 20 | 20 | 22 | 24 | 26 | 26 | |
| H | MC55 | 24 VAC/230 VAC | mm | 267 | 272 | 277 | 277 | 282 | 282 | | | | |
| | MC65 | | | | | | | | 335 | | | | |
| | MC100 | 24 VAC | mm | 343 | 348 | 353 | 353 | 358 | 358 | 408 | | | |
| | | 230 VAC | mm | 368 | 373 | 378 | 378 | 383 | 383 | 433 | | | |
| | MC161 | 24 VAC | mm | | | | 443 | 448 | 448 | 486 | | | |
| | | 230 VAC | mm | | | | 468 | 473 | 473 | 511 | | | |
| | MC160 | 24 VAC | mm | | | | | | 486 | 496 | 506 | | |
| | | 230 VAC | mm | | | | | | 511 | 521 | 531 | | |
| | MC250 | 24 VAC/230 VAC | mm | | | | | | 645 | 655 | 665 | 805 | 805 |
| | MC400 | 24 VAC/230 VAC | mm | | | | | | 695 | 705 | 715 | 855 | 855 |
| | MC500 | 24 VAC/230 VAC | mm | | | | | | 645 | 655 | 665 | 805 | 805 |
| | MC1000 | 24 VAC/230 VAC | mm | | | | | | | | | 895 | 895 |
| | MC55 | BR216GF | kg | 5.6 | 6.8 | 8.1 | 11.5 | 13.3 | 16.8 | | | | |
| | | BR316GF | kg | 4.6 | 5.5 | 6.5 | 9.1 | 10.6 | 13.1 | | | | |
| | MC65 | BR216GF | kg | | | | | | | 26.3 | | | |
| | | BR316GF | kg | | | | | | | 21.5 | | | |
| MC100 | BR216GF | kg | 6.6 | 7.8 | 9.1 | 12.5 | 14.3 | 17.8 | 27.3 | | | | |
| | BR316GF | kg | 5.6 | 6.5 | 7.5 | 10.1 | 11.6 | 14.1 | 22.5 | | | | |
| MC161 | BR216GF | kg | | | | 13.2 | 15.0 | 18.5 | 28.0 | | | | |
| | BR316GF | kg | | | | 10.8 | 12.3 | 14.8 | 23.2 | | | | |
| MC160 | BR216GF | kg | | | | | | 28.0 | 33.0 | 46.1 | | | |
| | BR316GF | kg | | | | | | 23.2 | 27.2 | 39.2 | | | |
| MC250/ MC500 24 VAC | BR216GF | kg | | | | | | 31.8 | 36.8 | 49.9 | 69.0 | 97.0 | |
| | BR316GF | kg | | | | | | 27.0 | 31.0 | 43.0 | 59.0 | 84.0 | |
| MC250/ MC500 230 VAC | BR216GF | kg | | | | | | 33.0 | 38.0 | 51.1 | 70.2 | 98.2 | |
| | BR316GF | kg | | | | | | 28.2 | 32.2 | 44.2 | 60.2 | 85.2 | |
| MC400 | BR216GF | kg | | | | | | 34.3 | 39.3 | 52.4 | 71.5 | 99.5 | |
| | BR316GF | kg | | | | | | 29.5 | 33.5 | 45.5 | 61.5 | 86.5 | |

Control valves with electric actuators up to 150°C

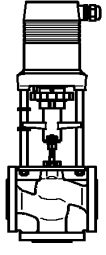
PN 6 / 16 2.2.3

Flanged connection
PN 6 / PN 16
Cast iron

with electric actuators
MC55/24 • MC55/230 • MC55Y
MC65/24 • MC65/230 • MC65Y
MC100/24 • MC100/230
MC160/24 • MC160/230
MC161/24 • MC161/230
MC250/24 • MC250/230
MC400/24 • MC400/230
MC500/24 • MC500/230
MC1000/24 • MC1000/230



**BR206GF
BR216GF**



**BR306GF
BR316GF**

| | | | | | | | | | | | | | |
|--------|---------|----|--|--|--|--|--|--|--|--|--|----|-----|
| MC1000 | BR216GF | kg | | | | | | | | | | 73 | 101 |
| | BR316GF | kg | | | | | | | | | | 63 | 88 |