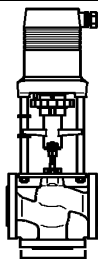


Flanschanschluss  
PN 6 / PN 16  
Grauguss



mit elektrischen Antrieben  
MC55/24 • MC55/230 • MC55Y  
MC100/24 • MC100/230  
MC160/24 • MC160/230  
MC220/24 • MC220/230  
MC400/24 • MC400/230  
MC500/24 • MC500/230  
MC1000/24 • MC1000/230

**BR206GF**    **BR306GF**  
**BR216GF**    **BR316GF**

## Merkmale

- Einsetzbar in Heizungs-, Lüftungs- und Klimaanlage zur Regelung des Heiß- und Kaltwasserdurchflusses von 0...+150°C. Ab 130°C Antriebsposition nur waagrecht zulässig.
- Mit Spindelheizung geeignet für Wasser mit Frostschutz bis -10°C
- Ventile in den Endlagen dichtschießend
- Microcontroller gesteuerter Hubantrieb
- Automatischer Selbstabgleich bei Inbetriebnahme

## Technische Daten Ventil

| Baureihe        | BR206GF                           | BR216GF  | BR306GF                 | BR316GF        |
|-----------------|-----------------------------------|--|-------------------------|----------------|
| Form            | Durchgang                         |  | Dreiwege                |                |
| Nennweite       | DN 15 – DN 100                    | DN 15 – DN 200   | DN 15 – DN 100          | DN 15 – DN 200 |
| Druckstufe      | PN 6                              | PN 16  | PN 6                    | PN 16          |
| Kennlinie       | A→AB gl%                          |  | A→AB gl%<br>B→AB linear |                |
| Hub             | mm                                | 14 (DN 15 – DN 50)<br>20 (DN 65)<br>30 (DN 65 – DN 100)<br>50 (DN 125 – DN 150)<br>60 (DN 200) |                         |                |
| Stellverhältnis | DN 15: 50:1<br>DN 20 – 200: 100:1 |  |                         |                |

Funktion: BR206/216GF als Durchgangsventil  
BR306/316GF als Misch- oder Umschaltventil

Anschlussart: Flansche nach EN 1092-2 Typ 21

Baulänge: EN 558-1 Grundreihe 1

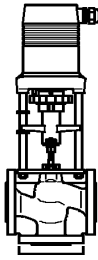
Leckrate: DN 15 – DN 150 EN 1349 – Sitzleckage VI G 1 (dichtschießend)  
DN 200 EN 1349 – Sitz-Leckage IV L 1 (≤ 0,01% vom kvs-Wert)

Gehäuse: Grauguss EN-JL1040  
Kegel: Messing CW614N  
Spindel: CrMo-Stahl 1.4122  
Abdichtung: O-Ringe EPDM

## Ventilvariante und Zubehör

- Kegel aus CrNi-Stahl 1.4305
- Mit Spindelheizung geeignet für Wasser mit Frostschutz bis -10°C  
24 VAC, 50/60 Hz  
DN 15 – DN 100 Leistungsaufnahme: P<sub>max.</sub> ≈ 30 VA P<sub>N</sub> ≈ 30 VA  
DN 125 – DN 200 Leistungsaufnahme: P<sub>max.</sub> ≈ 250 VA P<sub>N</sub> ≈ 45 VA
- Epoxydharz-Sonderlackierung als Korrosionsschutz bei Schwitzwasserbildung, max. 80°C
- Einsetzbar für Medien auf Mineralölbasis mit Abdichtung aus FKM
- Technisch silikonfreie Ausführung

Flanschanschluss  
PN 6 / PN 16  
Grauguss

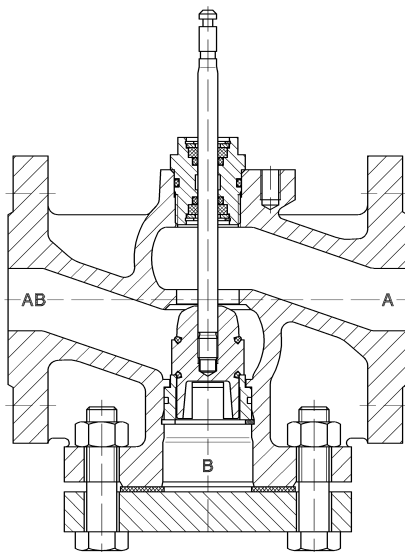


mit elektrischen Antrieben  
MC55/24 • MC55/230 • MC55Y  
MC100/24 • MC100/230  
MC160/24 • MC160/230  
MC220/24 • MC220/230  
MC400/24 • MC400/230  
MC500/24 • MC500/230  
MC1000/24 • MC1000/230

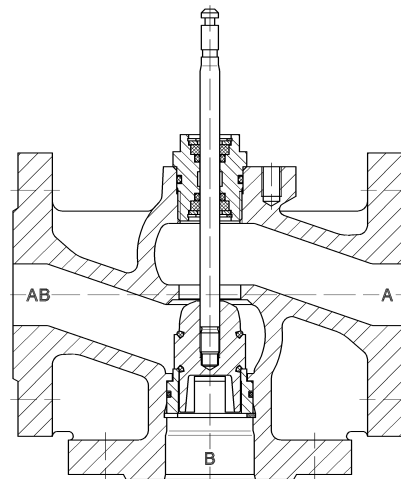
BR206GF BR306GF  
BR216GF BR316GF

**Schnittzeichnung**

DN 15 – DN 65 (Hub 20)

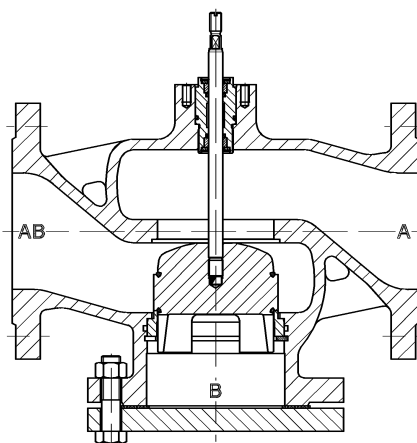


BR206GF / BR216GF

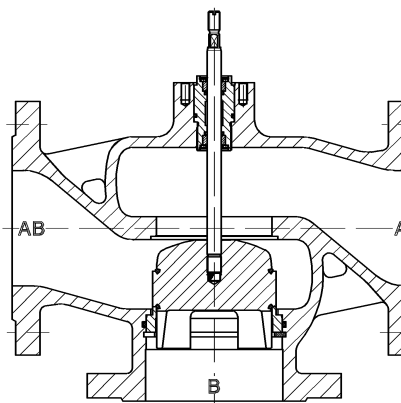


BR306GF / BR316GF

DN 65 (Hub 30) – DN 100

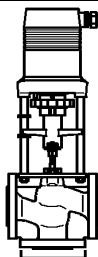


BR206GF / BR216GF



BR306GF / BR316GF

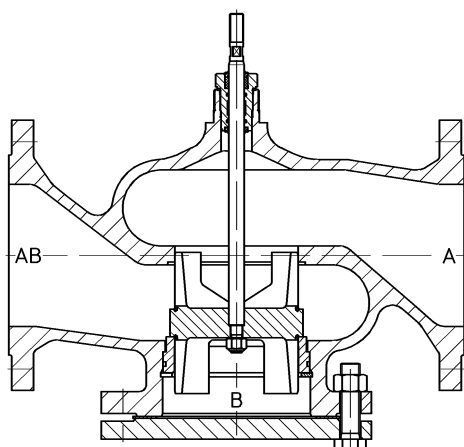
Flanschanschluss  
PN 6 / PN 16  
Grauguss



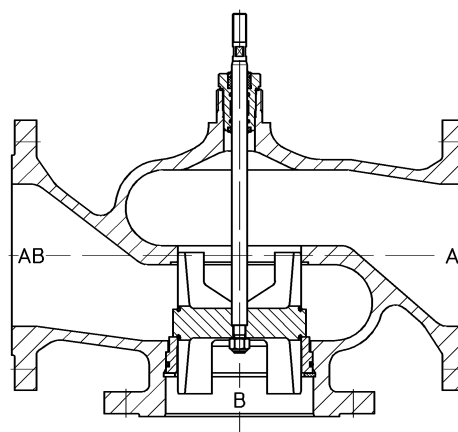
mit elektrischen Antrieben  
MC55/24 • MC55/230 • MC55Y  
MC100/24 • MC100/230  
MC160/24 • MC160/230  
MC220/24 • MC220/230  
MC400/24 • MC400/230  
MC500/24 • MC500/230  
MC1000/24 • MC1000/230

**BR206GF**    **BR306GF**  
**BR216GF**    **BR316GF**

DN 125 – DN 200



BR216GF



BR316GF

### Technische Daten Antrieb MC55

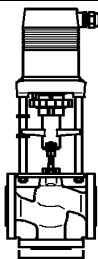
| Typ                          |      | MC55/24                                  |         | MC55/230                                 |         | MC55Y   |         |
|------------------------------|------|--|---------|--|---------|---|---------|
| Stellzeit <sup>1)</sup>      | s/mm | 9 · 5*                                   |         | 9 · 5*                                   |         | 9 · 5*  |         |
| Stellkraft                   | kN   | 0,6                                      |         | 0,6                                      |         | 0,6   |         |
| Hub                          | mm   | max. 14                                  | max. 20 | max. 14                                  | max. 20 | max. 14   | max. 20 |
| Spannung                     | VAC  | 24 ±10%                                  |         | 230 +6% -10%                             |         | 24 ±10%   |         |
| Spannung <sup>2)</sup>       | VDC  | 24 ±10%                                  |         |  |         | 24 ±10%   |         |
| Frequenz                     | Hz   | 50/60 ±5%                                |         | 50/60 ±5%                                |         | 50/60 ±5%                                       |         |
| Leistungsaufnahme            | VA   | 3,5                                      |         | 7  |         | 3,5   |         |
| Eingangssignal <sup>3)</sup> |      | 3-Punkt                                  |         | 3-Punkt                                  |         | 0(2)...10 VDC 77 kOhm<br>0(4)...20 mA 0,51 kOhm |         |
| Ausgangssignal <sup>3)</sup> |      | 0...10 VDC<br>max. 8 mA<br>min. 1200 Ohm |         | 0...10 VDC<br>max. 8 mA<br>min. 1200 Ohm |         | 0...10 VDC<br>max. 8 mA<br>min. 1200 Ohm        |         |
| Hysterese                    | V    | 0,3                                      |         | 0,3                                      |         | 0,3   |         |

<sup>1)</sup> Stellzeit frei wählbar, Voreinstellung ist mit \* gekennzeichnet, vor Ort einstellbar

<sup>2)</sup> nur gleichgerichtete Wechselspannung

<sup>3)</sup> stetige Signale invertierbar

Flanschanschluss  
PN 6 / PN 16  
Grauguss



mit elektrischen Antrieben  
MC55/24 • MC55/230 • MC55Y  
MC100/24 • MC100/230  
MC160/24 • MC160/230  
MC220/24 • MC220/230  
MC400/24 • MC400/230  
MC500/24 • MC500/230  
MC1000/24 • MC1000/230

BR206GF  
BR216GF

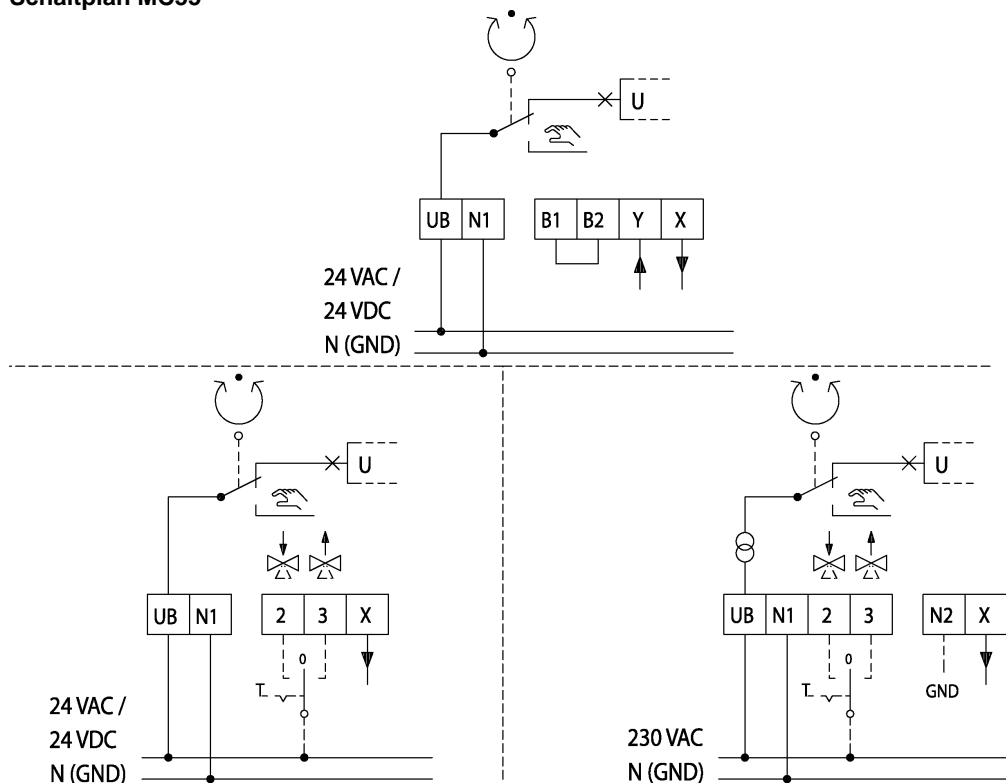
BR306GF  
BR316GF

|                         |   |            |
|-------------------------|---|------------|
| Schutzart:              | IP 54 im Automatikbetrieb<br>IP 30 bei Handbetätigung |            |
| Auflösung:              | elektrisch  | 0,04 VDC   |
|                         | mechanisch  | 0,06 mm    |
| Elektrischer Anschluss: | Antrieb mit Klemmleiste                               |            |
| Betriebsart:            | S3-50% ED c/h 1200                                    | EN 60034-1 |
| Endlagenabschaltung:    | lastabhängig  |            |
| Umgebungstemperatur:    | 0...+60°C   |            |
| Gewicht:                | 1,5 kg  |            |

### Antriebsvariante und Zubehör

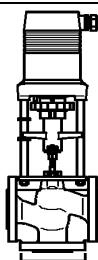
- Sonderspannung: 115 VAC
- Adapter mit Aufnahme für Fremdfabrikate

### Schaltplan MC55



B1/B2 Anschlussmöglichkeit eines Binärsignals (z.B. Frostschutz)

Flanschanschluss  
PN 6 / PN 16  
Grauguss



mit elektrischen Antrieben  
MC55/24 • MC55/230 • MC55Y  
MC100/24 • MC100/230  
MC160/24 • MC160/230  
MC220/24 • MC220/230  
MC400/24 • MC400/230  
MC500/24 • MC500/230  
MC1000/24 • MC1000/230

**BR206GF**    **BR306GF**  
**BR216GF**    **BR316GF**

## Technische Daten Antrieb MC100 – MC1000

| Typ                          |      | MC100/24   | MC100/230  |
|------------------------------|------|--|--|
| Stellzeit <sup>1)</sup>      | s/mm | 12 · 9* · 4 · 1,9  | 12 · 9* · 4 · 1,9  |
| Stellkraft                   | kN   | 1,0  | 1,0  |
| Hub                          | mm   | max. 20  | max. 20  |
| Spannung                     | VAC  | 24 ±10%  | 230 +6% -10%   |
| Spannung <sup>2)</sup>       | VDC  | 24 ±10%  | -  |
| Frequenz                     | Hz   | 50/60 ±5%  | 50/60 ±5%  |
| Leistungsaufnahme            | VA   | 6  | 12   |
| Eingangssignal <sup>3)</sup> |      | 3-Punkt<br>0(2)...10 VDC    77 kOhm<br>0(4)...20 mA    0,51 kOhm | 3-Punkt<br>0(2)...10 VDC    77 kOhm<br>0(4)...20 mA    0,51 kOhm |
| Ausgangssignal <sup>3)</sup> |      | 0...10 VDC    max. 8 mA<br>min. 1200 Ohm                         | 0...10 VDC    max. 8 mA<br>min. 1200 Ohm                         |
| Hysterese <sup>4)</sup>      | V    | 0,15 · 0,5   | 0,15 · 0,5   |

| Typ                          |      | MC160/24   | MC160/24     | MC160/230  | MC160/230    |
|------------------------------|------|--|--------------|--|--------------|
| Stellzeit <sup>1)</sup>      | s/mm | 6 · 4*   |              | 6 · 4*   |              |
| Stellkraft                   | kN   | 1,6  |              | 1,6  |              |
| Hub                          | mm   | max. 30  | max. 14 / 20 | max. 30  | max. 14 / 20 |
| Spannung                     | VAC  | 24 ±10%  |              | 230 +6% -10%   |              |
| Spannung <sup>2)</sup>       | VDC  | 24 ±10%  |              | -  |              |
| Frequenz                     | Hz   | 50/60 ±5%  |              | 50/60 ±5%  |              |
| Leistungsaufnahme            | VA   | 6  |              | 12   |              |
| Eingangssignal <sup>3)</sup> |      | 3-Punkt<br>0(2)...10 VDC    77 kOhm<br>0(4)...20 mA    0,51 kOhm |              | 3-Punkt<br>0(2)...10 VDC    77 kOhm<br>0(4)...20 mA    0,51 kOhm |              |
| Ausgangssignal <sup>3)</sup> |      | 0...10 VDC    max. 8 mA<br>min. 1200 Ohm                         |              | 0...10 VDC    max. 8 mA<br>min. 1200 Ohm                         |              |
| Hysterese <sup>4)</sup>      | V    | 0,05 · 0,15 · 0,3 · 0,5  |              | 0,05 · 0,15 · 0,3 · 0,5  |              |

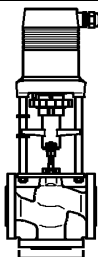
<sup>1)</sup> Stellzeit frei wählbar, Voreinstellung ist mit \* gekennzeichnet, vor Ort einstellbar

<sup>2)</sup> nur gleichgerichtete Wechselspannung

<sup>3)</sup> stetige Signale invertierbar

<sup>4)</sup> vor Ort einstellbar

Flanschanschluss  
PN 6 / PN 16  
Grauguss



mit elektrischen Antrieben  
MC55/24 • MC55/230 • MC55Y  
MC100/24 • MC100/230  
MC160/24 • MC160/230  
MC220/24 • MC220/230  
MC400/24 • MC400/230  
MC500/24 • MC500/230  
MC1000/24 • MC1000/230

BR206GF  
BR216GF

BR306GF  
BR316GF

| Typ                          |      | MC220/24   | MC220/230  |
|------------------------------|------|--|--|
| Stellzeit <sup>1)</sup>      | s/mm | 3  | 3  |
| Stellkraft                   | kN   | 2,2  | 2,2  |
| Hub                          | mm   | max. 30  | max. 30  |
| Spannung                     | VAC  | 24 ±10%  | 230 ±10%   |
| Spannung <sup>2)</sup>       | VDC  | 24 ±10%  | -  |
| Frequenz                     | Hz   | 50/60 ±5%  | 50/60 ±5%  |
| Leistungsaufnahme            | VA   | 6  | 12   |
| Eingangssignal <sup>3)</sup> |      | 3-Punkt<br>0(2)...10 VDC 77 kOhm<br>0(4)...20 mA 0,51 kOhm | 3-Punkt<br>0(2)...10 VDC 77 kOhm<br>0(4)...20 mA 0,51 kOhm |
| Ausgangssignal <sup>3)</sup> |      | 0...10 VDC max. 8 mA<br>min. 1200 Ohm                      | 0...10 VDC max. 8 mA<br>min. 1200 Ohm                      |
| Hysterese <sup>4)</sup>      | V    | 0,05 · 0,15 · 0,3 · 0,5                                    | 0,05 · 0,15 · 0,3 · 0,5                                    |

| Typ                          |      | MC400/24   | MC400/230  |
|------------------------------|------|--|--|
| Stellzeit                    | s/mm | 0,6 · 0,4*   | 0,6 · 0,4*   |
| Stellkraft                   | kN   | 4,0  | 4,0  |
| Hub                          | mm   | max. 60  | max. 60  |
| Spannung                     | VAC  | 24 ±10%  | 230 +6% -10%   |
| Frequenz                     | Hz   | 50/60 ±5%  | 50/60 ±5%  |
| Leistungsaufnahme            | VA   | max. 50  | max. 63  |
| Eingangssignal <sup>3)</sup> |      | 3-Punkt<br>0(2)...10 VDC 77 kOhm<br>0(4)...20 mA 0,51 kOhm | 3-Punkt<br>0(2)...10 VDC 77 kOhm<br>0(4)...20 mA 0,51 kOhm |
| Ausgangssignal <sup>3)</sup> |      | 0...10 VDC max. 8 mA<br>min. 1200 Ohm                      | 0...10 VDC max. 8 mA<br>min. 1200 Ohm                      |
| Hysterese <sup>4)</sup>      | V    | 0,05 · 0,15 · 0,3 · 0,5                                    | 0,05 · 0,15 · 0,3 · 0,5                                    |

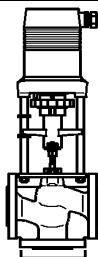
<sup>1)</sup> Stellzeit frei wählbar, Voreinstellung ist mit \* gekennzeichnet, vor Ort einstellbar

<sup>2)</sup> nur gleichgerichtete Wechselspannung

<sup>3)</sup> stetige Signale invertierbar

<sup>4)</sup> vor Ort einstellbar

Flanschanschluss  
PN 6 / PN 16  
Grauguss



mit elektrischen Antrieben  
MC55/24 • MC55/230 • MC55Y  
MC100/24 • MC100/230  
MC160/24 • MC160/230  
MC220/24 • MC220/230  
MC400/24 • MC400/230  
MC500/24 • MC500/230  
MC1000/24 • MC1000/230

**BR206GF**    **BR306GF**  
**BR216GF**    **BR316GF**

| Typ                          |      | MC500/24   | MC500/230  |
|------------------------------|------|--|--|
| Stellzeit <sup>1)</sup>      | s/mm | 5 · 3,5*   | 5 · 3,5*   |
| Stellkraft                   | kN   | 5,0  | 5,0  |
| Hub                          | mm   | max. 60  | max. 60  |
| Spannung                     | VAC  | 24 ±10%  | 230 +6% -10%   |
| Spannung <sup>2)</sup>       | VDC  | 24 ±10%  | -  |
| Frequenz                     | Hz   | 50/60 ±5%  | 50/60 ±5%  |
| Leistungsaufnahme            | VA   | max. 18  | max. 25  |
| Eingangssignal <sup>3)</sup> |      | 3-Punkt<br>0(2)...10 VDC    77 kOhm<br>0(4)...20 mA    0,51 kOhm | 3-Punkt<br>0(2)...10 VDC    77 kOhm<br>0(4)...20 mA    0,51 kOhm |
| Ausgangssignal <sup>3)</sup> |      | 0...10 VDC    max. 8 mA<br>min. 1200 Ohm                         | 0...10 VDC    max. 8 mA<br>min. 1200 Ohm                         |
| Hysterese <sup>4)</sup>      | V    | 0,05 · 0,15 · 0,3 · 0,5  | 0,05 · 0,15 · 0,3 · 0,5  |

| Typ                          |      | MC1000/24  | MC1000/230   |
|------------------------------|------|--|--|
| Stellzeit                    | s/mm | 1  | 1  |
| Stellkraft                   | kN   | 10   | 10   |
| Hub                          | mm   | max. 60  | max. 60  |
| Spannung                     | VAC  | 24 ±10%  | 230 +6% -10%   |
| Frequenz                     | Hz   | 50/60 ±5%  | 50/60 ±5%  |
| Leistungsaufnahme            | VA   | max. 50  | max. 63  |
| Eingangssignal <sup>3)</sup> |      | 3-Punkt<br>0(2)...10 VDC    77 kOhm<br>0(4)...20 mA    0,51 kOhm | 3-Punkt<br>0(2)...10 VDC    77 kOhm<br>0(4)...20 mA    0,51 kOhm |
| Ausgangssignal <sup>3)</sup> |      | 0...10 VDC    max. 8 mA<br>min. 1200 Ohm                         | 0...10 VDC    max. 8 mA<br>min. 1200 Ohm                         |
| Hysterese <sup>4)</sup>      | V    | 0,05 · 0,15 · 0,3 · 0,5  | 0,05 · 0,15 · 0,3 · 0,5  |

Schutzart: IP 54

Auflösung:

|               |            |          |
|---------------|------------|----------|
| MC55          | elektrisch | 0,04 VDC |
| MC100         | mechanisch | 0,095 mm |
| MC160 / MC220 | mechanisch | 0,05 mm  |
| MC500         | mechanisch | 0,04 mm  |
| MC400         | mechanisch | 0,12 mm  |
| MC1000        | mechanisch | 0,05 mm  |

Betriebsart:

|                |                    |            |
|----------------|--------------------|------------|
| MC55           | S3-50% ED c/h 1200 | EN 60034-1 |
| MC100 – MC500  | S3-50% ED c/h 1200 | EN 60034-1 |
| MC400 / MC1000 | S3-30% ED c/h 1200 | EN 60034-1 |

Endlagenabschaltung: lastabhängig

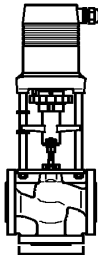
<sup>1)</sup> Stellzeit frei wählbar, Voreinstellung ist mit \* gekennzeichnet, vor Ort einstellbar

<sup>2)</sup> nur gleichgerichtete Wechselspannung

<sup>3)</sup> stetige Signale invertierbar

<sup>4)</sup> vor Ort einstellbar

Flanschanschluss  
PN 6 / PN 16  
Grauguss



mit elektrischen Antrieben  
MC55/24 • MC55/230 • MC55Y  
MC100/24 • MC100/230  
MC160/24 • MC160/230  
MC220/24 • MC220/230  
MC400/24 • MC400/230  
MC500/24 • MC500/230  
MC1000/24 • MC1000/230

**BR206GF**    **BR306GF**  
**BR216GF**    **BR316GF**

|                      |                        |             |
|----------------------|------------------------|-------------|
| Umgebungstemperatur: | MC55                   | 0...+60°C   |
|                      | MC100 / MC160 / MC220  | 0...+60°C   |
|                      | MC400 / MC500 / MC1000 | -10...+60°C |

|          |                 |         |
|----------|-----------------|---------|
| Gewicht: | MC55            | 1,5 kg  |
|          | MC100           | 2,5 kg  |
|          | MC160 und MC220 | 3,2 kg  |
|          | MC500/24        | 7,0 kg  |
|          | MC500/230       | 8,2 kg  |
|          | MC400           | 9,5 kg  |
|          | MC1000          | 11,0 kg |

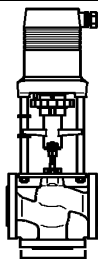
### Antriebsvariante und Zubehör

- Sonderspannung: 115 VAC
- Wegschaltereinheit <sup>1)</sup>: 2 Schalter (WE1/WE2), potentialfrei, stufenlos einstellbar  
     Nennlast: 8 A / 250 VAC  
                   8 A / 30 VDC  
     Schaltspannung: max. 400 VAC  
                           max. 125 VDC
- Schutzart: IP 65
- Platine für Ausgangssignal X=0(4)...20 mA <sup>1)</sup>
- Adapter mit Aufnahme für Fremdfabrikate

<sup>1)</sup> MC100/MC160/MC220: Wegschaltereinheit und Ausgangssignal 0(4)...20 mA nicht kombinierbar



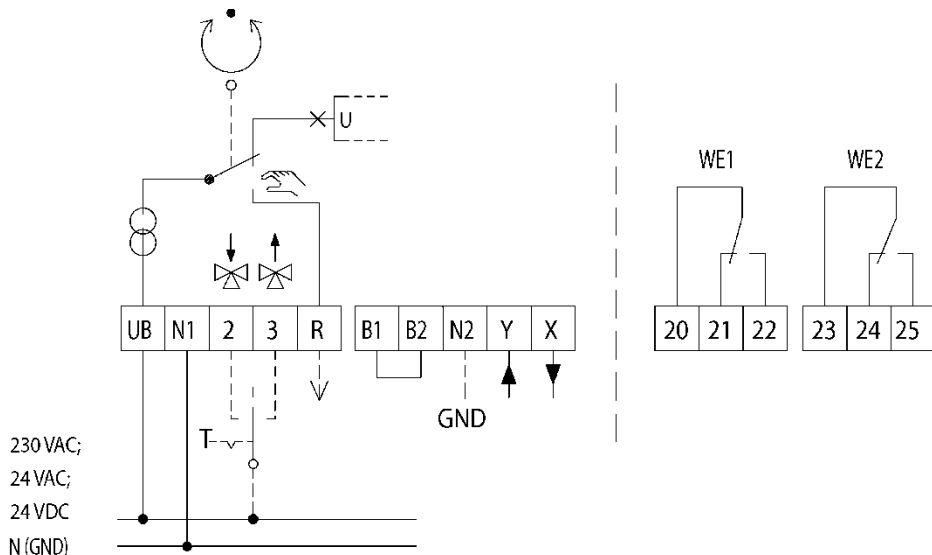
Flanschanschluss  
PN 6 / PN 16  
Grauguss



mit elektrischen Antrieben  
MC55/24 • MC55/230 • MC55Y  
MC100/24 • MC100/230  
MC160/24 • MC160/230  
MC220/24 • MC220/230  
MC400/24 • MC400/230  
MC500/24 • MC500/230  
MC1000/24 • MC1000/230

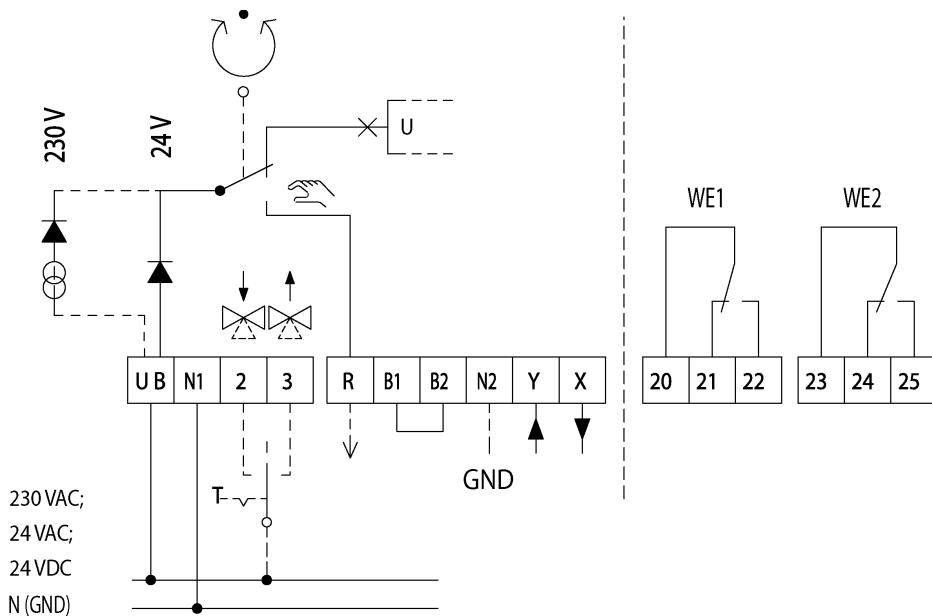
BR206GF BR306GF  
BR216GF BR316GF

## Schaltplan MC100 / MC160 / MC220



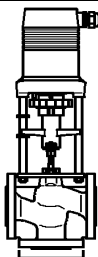
B1/B2 Anschlussmöglichkeit eines Binärsignals (z.B. Frostschutz)

## Schaltplan MC400 / MC500 / MC1000



B1/B2 Anschlussmöglichkeit eines Binärsignals (z.B. Frostschutz)

Flanschanschluss  
PN 6 / PN 16  
Grauguss



mit elektrischen Antrieben  
MC55/24 • MC55/230 • MC55Y  
MC100/24 • MC100/230  
MC160/24 • MC160/230  
MC220/24 • MC220/230  
MC400/24 • MC400/230  
MC500/24 • MC500/230  
MC1000/24 • MC1000/230

**BR206GF**    **BR306GF**  
**BR216GF**    **BR316GF**

## Technische Daten Ventil mit Stellantrieb

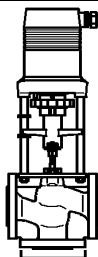
### PN 6

| DN                           |                         | 15   | 20  | 25  | 32   | 40  | 50   | 65   | 65  | 80   | 100  |     |
|------------------------------|-------------------------|------|-----|-----|------|-----|------|------|-----|------|------|-----|
| kvs-Wert                     | m <sup>3</sup> /h       | 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                    |      |     |     |      |     |      |      |     |      |      |     |
| Hub                          | mm                      | 14   |     |     |      |     |      | 20   | 30  |      |      |     |
| MC55/24<br>MC55/230<br>MC55Y | Stellzeit <sup>1)</sup> | 125  |     |     |      |     |      |      |     |      |      |     |
|                              |                         | 70*  |     |     |      |     |      |      |     |      |      |     |
|                              | Schließdruck            | kPa  | 600 | 600 | 600  | 450 | 250  | 150  |     |      |      |     |
| MC100/24<br>MC100/230        | Stellzeit <sup>1)</sup> | 170  |     |     |      |     |      | 240  |     |      |      |     |
|                              |                         | 125* |     |     |      |     |      | 180* |     |      |      |     |
|                              |                         | 55   |     |     |      |     |      | 80   |     |      |      |     |
|                              |                         | 30   |     |     |      |     |      | 40   |     |      |      |     |
|                              | Schließdruck            | kPa  | 600 | 600 | 600  | 600 | 550  | 350  |     |      |      |     |
| MC160/24<br>MC160/230        | Stellzeit <sup>1)</sup> |      |     |     |      |     | 95   | 120  |     |      |      |     |
|                              |                         |      |     |     |      |     | 55*  | 80*  |     |      |      |     |
|                              | Schließdruck            | kPa  |     |     | 600  | 600 | 350  |      |     |      |      |     |
| MC160/24<br>MC160/230        | Stellzeit <sup>1)</sup> |      |     |     |      |     |      |      | 120 | 180  |      |     |
|                              |                         |      |     |     |      |     |      |      | 80* | 120* |      |     |
|                              | Schließdruck            | kPa  |     |     |      |     |      |      |     | 350  | 230  | 140 |
| MC220/24<br>MC220/230        | Stellzeit <sup>1)</sup> |      |     |     |      |     |      |      |     | 90   |      |     |
|                              |                         |      |     |     |      |     |      |      |     | 500  | 300  | 200 |
| MC400/24<br>MC400/230        | Stellzeit <sup>1)</sup> |      |     |     |      |     |      |      | 15  | 20   |      |     |
|                              |                         |      |     |     |      |     |      |      | 10* | 15*  |      |     |
|                              | Schließdruck            | kPa  |     |     |      |     |      |      |     | 600  | 600  | 400 |
| MC500/24<br>MC500/230        | Stellzeit <sup>1)</sup> |      |     |     |      |     |      |      |     | 150  | 150  |     |
|                              |                         |      |     |     |      |     |      |      |     | 105* | 105* |     |
|                              | Schließdruck            | kPa  |     |     |      |     |      |      |     | 600  | 600  | 500 |

100 kPa = 1 bar = 10 mWS

<sup>1)</sup> Stellzeit frei wählbar, Voreinstellung ist mit \* gekennzeichnet

Flanschanschluss  
PN 6 / PN 16  
Grauguss



mit elektrischen Antrieben  
MC55/24 • MC55/230 • MC55Y  
MC100/24 • MC100/230  
MC160/24 • MC160/230  
MC220/24 • MC220/230  
MC400/24 • MC400/230  
MC500/24 • MC500/230  
MC1000/24 • MC1000/230

**BR206GF**    **BR306GF**  
**BR216GF**    **BR316GF**

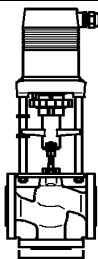
## PN 16

| DN                           |                         | 15           | 20   | 25   | 32   | 40  | 50   | 65   | 65   | 80   | 100  | 125  | 150 | 200<br>BR216 GF | 200<br>BR316GF |  |  |  |
|------------------------------|-------------------------|--------------|------|------|------|-----|------|------|------|------|------|------|-----|-----------------|----------------|--|--|--|
| kvs-Wert                     | m³/h                    | 4            | 6,3  | 10   | 16   | 25  | 40   | 63   | 63   | 100  | 160  | 250  | 315 | 500             |                |  |  |  |
|                              |                         | 2,5          | 5    | 8    | 12,5 | 20  | 31,5 | 50   | 50   | 80   | 125  |      |     |                 |                |  |  |  |
| Hub                          |                         | 14           |      |      |      |     |      | 20   | 30   |      |      | 50   |     | 60              |                |  |  |  |
| MC55/24<br>MC55/230<br>MC55Y | Stellzeit <sup>1)</sup> | 125          |      |      |      |     |      | 180  |      |      |      |      |     |                 |                |  |  |  |
|                              | Schließdruck            | 70*          |      |      |      |     |      | 100* |      |      |      |      |     |                 |                |  |  |  |
| MC100/24<br>MC100/230        | Stellzeit <sup>1)</sup> | 170          |      |      |      |     |      | 240  |      |      |      |      |     |                 |                |  |  |  |
|                              |                         | 125*         |      |      |      |     |      | 180* |      |      |      |      |     |                 |                |  |  |  |
|                              |                         | 55           |      |      |      |     |      | 80   |      |      |      |      |     |                 |                |  |  |  |
|                              | 30                      |              |      |      |      |     | 40   |      |      |      |      |      |     |                 |                |  |  |  |
| Schließdruck                 |                         | 1600         | 1600 | 1500 | 900  | 550 | 350  | 150  |      |      |      |      |     |                 |                |  |  |  |
| MC160/24<br>MC160/230        | Stellzeit <sup>1)</sup> | 95           |      |      |      |     |      | 120  |      |      |      |      |     |                 |                |  |  |  |
|                              |                         | 55*          |      |      |      |     |      | 80*  |      |      |      |      |     |                 |                |  |  |  |
| Schließdruck                 |                         | 1500         |      |      |      |     |      | 950  | 600  | 350  |      |      |     |                 |                |  |  |  |
| MC160/24<br>MC160/230        | Stellzeit <sup>1)</sup> |              |      |      |      |     |      | 120  | 180  |      |      |      |     |                 |                |  |  |  |
|                              |                         |              |      |      |      |     |      | 80*  | 120* |      |      |      |     |                 |                |  |  |  |
| Schließdruck                 |                         |              |      |      |      |     |      | 350  | 230  | 140  |      |      |     |                 |                |  |  |  |
| MC220/24<br>MC220/230        | Stellzeit <sup>1)</sup> |              |      |      |      |     |      | 90   |      |      |      |      |     |                 |                |  |  |  |
|                              |                         | Schließdruck |      |      |      |     |      |      |      | 500  | 300  | 200  |     |                 |                |  |  |  |
| MC400/24<br>MC400/230        | Stellzeit <sup>1)</sup> |              |      |      |      |     |      | 15   | 20   | 30   | 40   |      |     |                 |                |  |  |  |
|                              |                         |              |      |      |      |     |      | 10*  | 15*  | 20*  | 30*  |      |     |                 |                |  |  |  |
| Schließdruck                 |                         |              |      |      |      |     |      | 950  | 650  | 400  | 300  | 200  | 300 |                 |                |  |  |  |
| MC500/24<br>MC500/230        | Stellzeit <sup>1)</sup> |              |      |      |      |     |      | 150  | 150  | 250  | 300  |      |     |                 |                |  |  |  |
|                              |                         |              |      |      |      |     |      | 105* | 105* | 175* | 210* |      |     |                 |                |  |  |  |
| Schließdruck                 |                         |              |      |      |      |     |      | 1250 | 850  | 500  | 370  | 270  | 600 | 110             |                |  |  |  |
| MC1000/24<br>MC1000/230      | Stellzeit               |              |      |      |      |     |      | 50   |      |      | 60   |      |     |                 |                |  |  |  |
|                              |                         | Schließdruck |      |      |      |     |      |      |      | 800  | 550  | 1200 | 240 |                 |                |  |  |  |

100 kPa = 1 bar = 10 mWS

<sup>1)</sup> Stellzeit frei wählbar, Voreinstellung ist mit \* gekennzeichnet

Flanschanschluss  
PN 6 / PN 16  
Grauguss

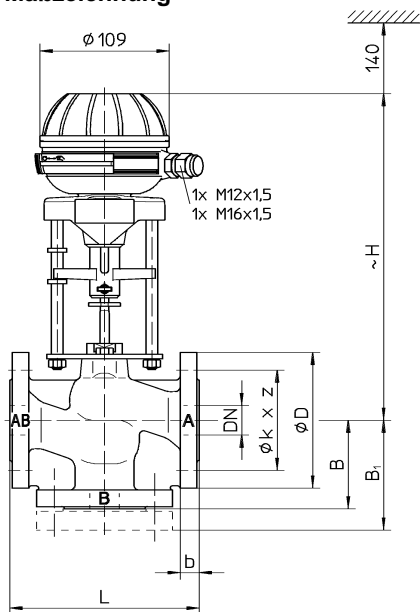


mit elektrischen Antrieben  
MC55/24 • MC55/230 • MC55Y  
MC100/24 • MC100/230  
MC160/24 • MC160/230  
MC220/24 • MC220/230  
MC400/24 • MC400/230  
MC500/24 • MC500/230  
MC1000/24 • MC1000/230

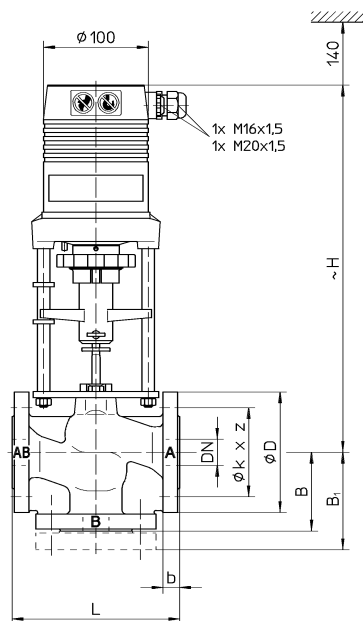
BR206GF  
BR216GF

BR306GF  
BR316GF

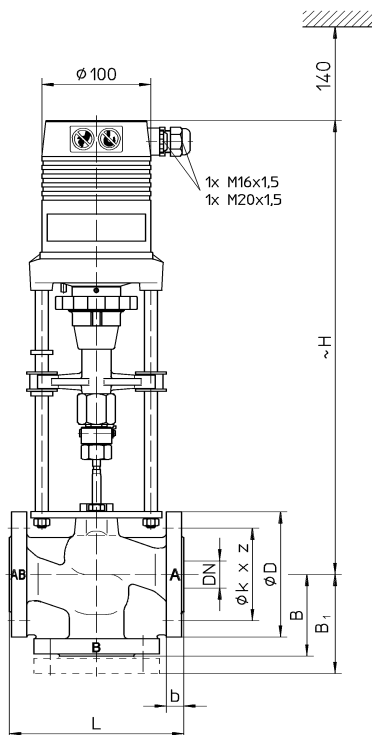
Maßzeichnung



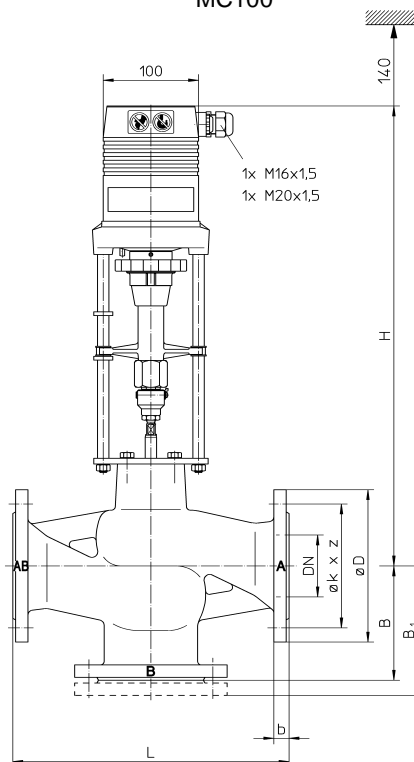
DN 15 – DN 50  
MC55



DN 15 – DN 65 (Hub 20)  
MC100

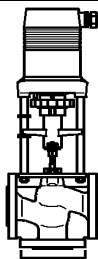


DN 32 – DN 65 (Hub 14 / 20)  
MC160



DN 65 (Hub 30) – DN 100  
MC160 / MC220

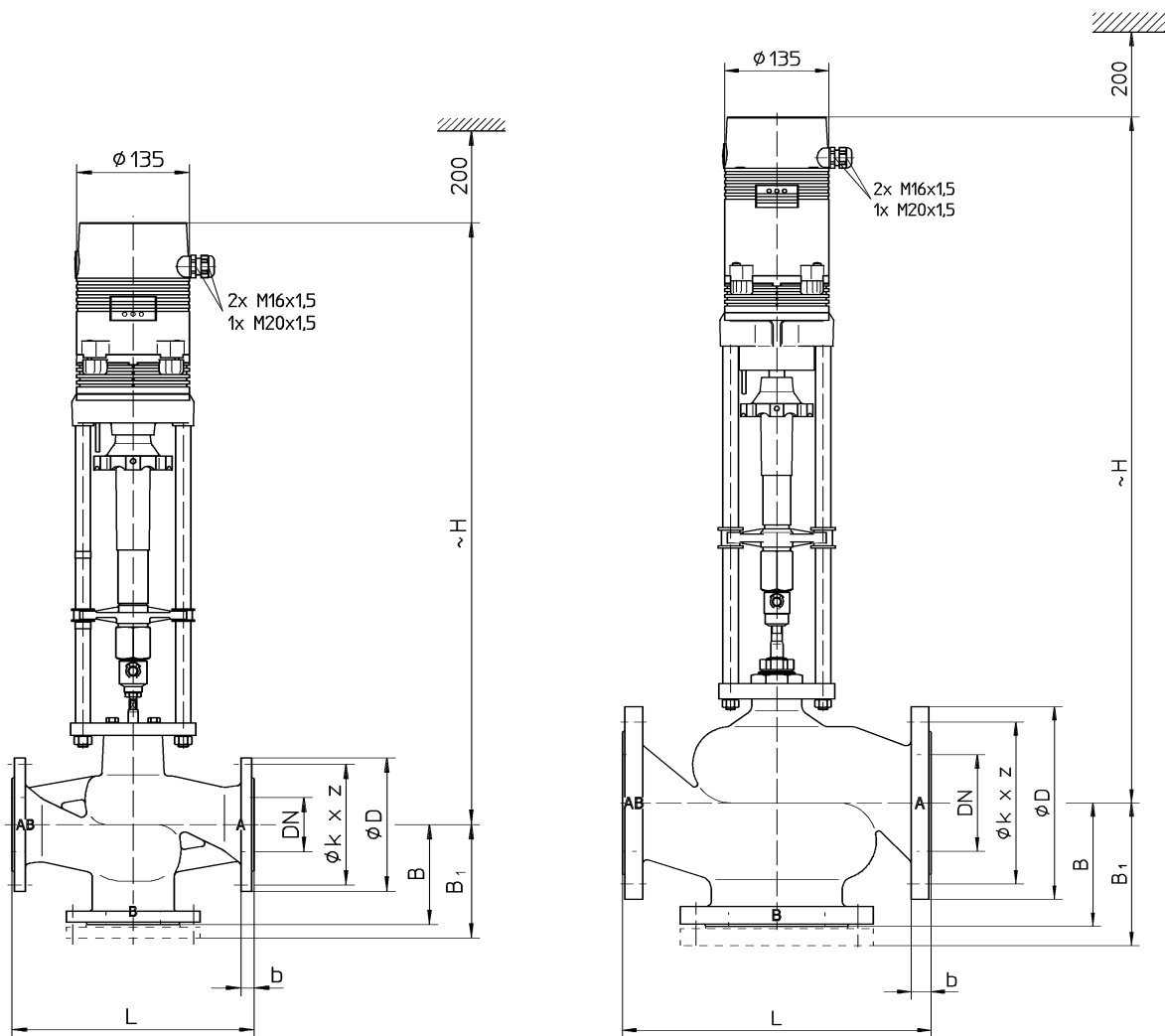
Flanschanschluss  
PN 6 / PN 16  
Grauguss



mit elektrischen Antrieben  
MC55/24 • MC55/230 • MC55Y  
MC100/24 • MC100/230  
MC160/24 • MC160/230  
MC220/24 • MC220/230  
MC400/24 • MC400/230  
MC500/24 • MC500/230  
MC1000/24 • MC1000/230

BR206GF  
BR216GF

BR306GF  
BR316GF



DN 65 (Hub 30) – DN 100

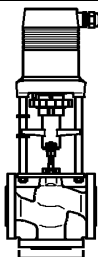
DN 125 – DN 200

MC400 / MC500 / MC1000

### Einbauhinweis:

Da Verunreinigungen im Rohrsystem sehr leicht den Ventilsitz beschädigen können, ist der Einbau eines Schmutzfängers zu empfehlen.

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mit elektrischen Antrieben  
MC55/24 • MC55/230 • MC55Y  
MC100/24 • MC100/230  
MC160/24 • MC160/230  
MC220/24 • MC220/230  
MC400/24 • MC400/230  
MC500/24 • MC500/230  
MC1000/24 • MC1000/230

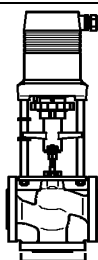
**BR206GF**    **BR306GF**  
**BR216GF**    **BR316GF**

## Abmessungen

### 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 <sub>1</sub>   | 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  |      |      |      |
|                  |         | 24 VAC         | mm      | 343 | 348    | 353 | 353 | 358    | 358  | 408  |      |      |
|                  | MC100   | 230 VAC        | mm      | 368 | 373    | 378 | 378 | 383    | 383  | 433  |      |      |
|                  |         | 24 VAC         | mm      |     |        |     |     | 448    | 448  | 486  |      |      |
|                  | MC160   | 230 VAC        | mm      |     |        |     |     | 473    | 473  | 511  |      |      |
|                  |         | 24 VAC         | mm      |     |        |     |     |        |      | 486  | 496  | 506  |
|                  | MC160   | 230 VAC        | mm      |     |        |     |     |        |      | 511  | 521  | 531  |
|                  |         | 24 VAC         | mm      |     |        |     |     |        |      | 486  | 496  | 506  |
|                  | MC220   | 230 VAC        | mm      |     |        |     |     |        |      | 511  | 521  | 531  |
|                  |         | 24 VAC/230 VAC | mm      |     |        |     |     |        |      | 695  | 705  | 715  |
|                  | MC500   | 24 VAC/230 VAC | mm      |     |        |     |     |        |      | 645  | 655  | 665  |
|                  | m       | 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  |      |      |      |
| 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 |      |      |
| MC160            |         | 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 |
| MC220            |         | BR206GF        | kg      |     |        |     |     |        |      | 21,1 | 29,5 | 40,3 |
|                  |         | BR306GF        | kg      |     |        |     |     |        |      | 17,9 | 25,2 | 34,2 |
| MC500<br>24 VAC  |         | BR206GF        | kg      |     |        |     |     |        |      | 24,9 | 33,3 | 44,1 |
|                  |         | BR306GF        | kg      |     |        |     |     |        |      | 21,7 | 29,0 | 38,0 |
| MC500<br>230 VAC | BR206GF | kg             |         |     |        |     |     |        | 26,1 | 34,5 | 45,3 |      |
|                  | BR306GF | kg             |         |     |        |     |     |        | 22,9 | 30,2 | 39,2 |      |
| MC400            | BR206GF | kg             |         |     |        |     |     |        | 27,4 | 35,8 | 46,6 |      |
|                  | BR306GF | kg             |         |     |        |     |     |        | 24,2 | 31,5 | 40,5 |      |

Flanschanschluss  
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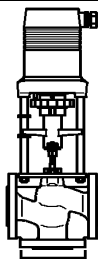
mit elektrischen Antrieben  
MC55/24 • MC55/230 • MC55Y  
MC100/24 • MC100/230  
MC160/24 • MC160/230  
MC220/24 • MC220/230  
MC400/24 • MC400/230  
MC500/24 • MC500/230  
MC1000/24 • MC1000/230

**BR206GF**    **BR306GF**  
**BR216GF**    **BR316GF**

## PN 16

| DN               |                | 15             | 20  | 25  | 32     | 40   | 50   | 65   | 80     | 100  | 125  | 150    | 200     |     |
|------------------|----------------|----------------|-----|-----|--------|------|------|------|--------|------|------|--------|---------|-----|
| L                | mm             | 130            | 150 | 160 | 180    | 200  | 230  | 290  | 310    | 350  | 400  | 480    | 600     |     |
| B                | mm             | 65             | 70  | 75  | 95     | 100  | 100  | 120  | 130    | 150  | 160  | 170    | 215     |     |
| B <sub>1</sub>   | mm             | 89             | 96  | 101 | 123    | 128  | 130  | 150  | 162    | 182  | 194  | 207    | 254     |     |
| ∅ D              | mm             | 95             | 105 | 115 | 140    | 150  | 165  | 185  | 200    | 220  | 250  | 285    | 340     |     |
| ∅ k              | mm             | 65             | 75  | 85  | 100    | 110  | 125  | 145  | 160    | 180  | 210  | 240    | 295     |     |
| z                | mm             | 4x ∅14         |     |     | 4x ∅18 |      |      |      | 8x ∅18 |      |      | 8x ∅22 | 12x ∅22 |     |
| b                | mm             | 14             | 16  | 16  | 18     | 18   | 20   | 20   | 22     | 24   | 26   | 26     | 24      |     |
| H                | MC55           | 24 VAC/230 VAC | mm  | 267 | 272    | 277  | 277  | 282  | 282    |      |      |        |         |     |
|                  |                | 24 VAC         | mm  | 343 | 348    | 353  | 353  | 358  | 358    | 408  |      |        |         |     |
|                  | MC100          | 230 VAC        | mm  | 368 | 373    | 378  | 378  | 383  | 383    | 433  |      |        |         |     |
|                  |                | 24 VAC         | mm  |     |        |      | 443  | 448  | 448    | 486  |      |        |         |     |
|                  | MC160          | 230 VAC        | mm  |     |        |      | 468  | 473  | 473    | 511  |      |        |         |     |
|                  |                | 24 VAC         | mm  |     |        |      |      |      |        | 486  | 496  | 506    |         |     |
|                  | MC160          | 230 VAC        | mm  |     |        |      |      |      |        | 511  | 521  | 531    |         |     |
|                  |                | 24 VAC         | mm  |     |        |      |      |      |        | 486  | 496  | 506    |         |     |
|                  | MC220          | 230 VAC        | mm  |     |        |      |      |      |        | 511  | 521  | 531    |         |     |
|                  |                | 24 VAC/230 VAC | mm  |     |        |      |      |      |        | 695  | 705  | 715    | 855     | 855 |
| MC500            | 24 VAC/230 VAC | mm             |     |     |        |      |      |      | 645    | 655  | 665  | 805    | 805     | 825 |
| MC1000           | 24 VAC/230 VAC | mm             |     |     |        |      |      |      |        |      |      | 895    | 895     | 920 |
| m                | 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   |      |      |        |         |     |
| 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   |      |      |        |         |     |
| MC160            | 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 |        |         |     |
| MC220            | BR216GF        | kg             |     |     |        |      |      |      | 28,0   | 33,0 | 46,1 |        |         |     |
|                  | BR316GF        | kg             |     |     |        |      |      |      | 23,2   | 27,2 | 39,2 |        |         |     |
| MC500<br>24 VAC  | BR216GF        | kg             |     |     |        |      |      |      | 31,8   | 36,8 | 49,9 | 69,0   | 97,0    | 163 |
|                  | BR316GF        | kg             |     |     |        |      |      |      | 27,0   | 31,0 | 43,0 | 59,0   | 84,0    | 143 |
| MC500<br>230 VAC | BR216GF        | kg             |     |     |        |      |      |      | 33,0   | 38,0 | 51,1 | 70,2   | 98,2    | 164 |
|                  | BR316GF        | kg             |     |     |        |      |      |      | 28,2   | 32,2 | 44,2 | 60,2   | 85,2    | 144 |
| MC400            | BR216GF        | kg             |     |     |        |      |      |      | 34,3   | 39,3 | 52,4 | 71,5   | 99,5    | 183 |
|                  | BR316GF        | kg             |     |     |        |      |      |      | 29,5   | 33,5 | 45,5 | 61,5   | 86,5    |     |
| MC1000           | BR216GF        | kg             |     |     |        |      |      |      |        |      |      | 73     | 101     | 184 |
|                  | BR316GF        | kg             |     |     |        |      |      |      |        |      |      | 63     | 88      | 165 |

Flanged connection  
PN 6 / PN 16  
Cast iron



with electric actuators  
MC55/24 • MC55/230 • MC55Y  
MC100/24 • MC100/230  
MC160/24 • MC160/230  
MC220/24 • MC220/230  
MC400/24 • MC400/230  
MC500/24 • MC500/230  
MC1000/24 • MC1000/230

**BR206GF**      **BR306GF**  
**BR216GF**      **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 200   | DN 15 – DN 100 | DN 15 – DN 200    |
| Pressure rating  | PN 6                              | PN 16  | PN 6           | PN 16             |
| Characteristic   | A→AB equal %                      |  | A→AB<br>B→AB   | equal %<br>linear |
| Stroke           | mm                                | 14 (DN 15 – DN 50)<br>20 (DN 65)<br>30 (DN 65 – DN 100)<br>50 (DN 125 – DN 150)<br>60 (DN 200) |                |                   |
| Rangeability     | DN 15: 50:1<br>DN 20 – 200: 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: DN 15 – DN 150 EN 1349 – seat-leakage VI G 1 (tight sealing)  
DN 200 EN 1349 – seat-leakage IV L 1 ( $\leq 0,01\%$  of kvs-value)

Body: Cast iron EN-JL1040  
Plug: Brass CW614N  
Stem: CrMo-steel 1.4122  
Stem sealing: O-rings EPDM

### Valve variant and accessories

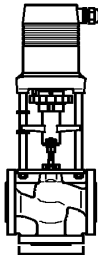
- Plug made of CrNi-steel 1.4305
- With stem heater suitable for water with antifreeze compounds down to -10°C  
24 VAC, 50/60 Hz

|                 |                    |                                   |                             |
|-----------------|--------------------|-----------------------------------|-----------------------------|
| DN 15 – DN 100  | Power consumption: | $P_{max.} \approx 30 \text{ VA}$  | $P_N \approx 30 \text{ VA}$ |
| DN 125 – DN 200 | Power consumption: | $P_{max.} \approx 250 \text{ VA}$ | $P_N \approx 45 \text{ VA}$ |

- 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



Flanged connection  
PN 6 / PN 16  
Cast iron

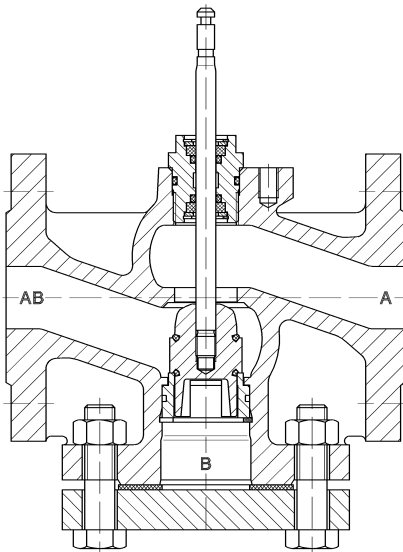


with electric actuators  
MC55/24 • MC55/230 • MC55Y  
MC100/24 • MC100/230  
MC160/24 • MC160/230  
MC220/24 • MC220/230  
MC400/24 • MC400/230  
MC500/24 • MC500/230  
MC1000/24 • MC1000/230

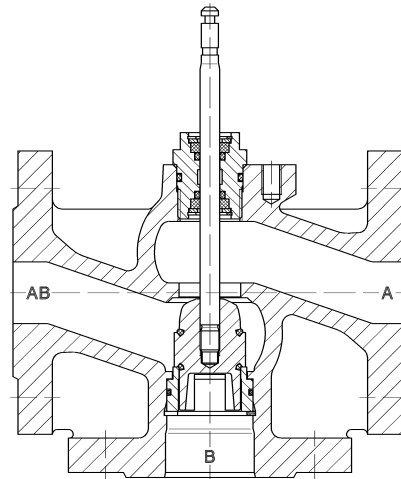
BR206GF BR306GF  
BR216GF BR316GF

**Drawing**

DN 15 – DN 65 (stroke 20)

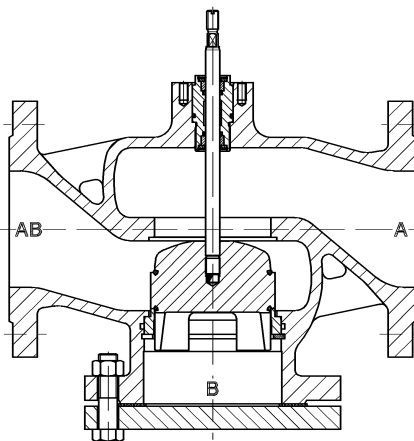


BR206GF / BR216GF

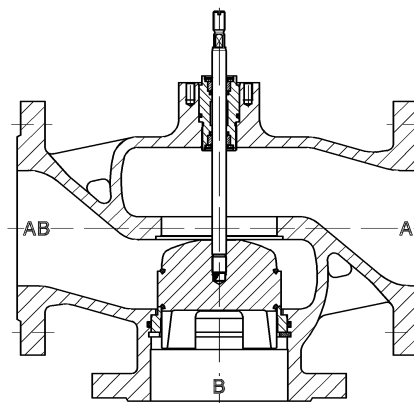


BR306GF / BR316GF

DN 65 (Stroke 30) – DN 100

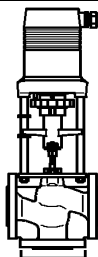


BR206GF / BR216GF



BR306GF / BR316GF

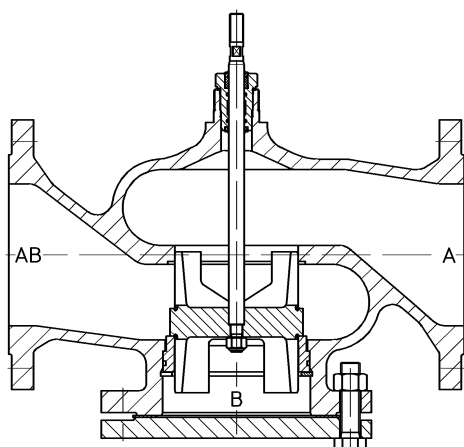
Flanged connection  
PN 6 / PN 16  
Cast iron



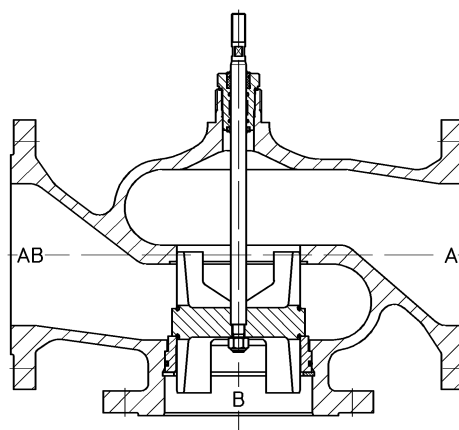
with electric actuators  
MC55/24 • MC55/230 • MC55Y  
MC100/24 • MC100/230  
MC160/24 • MC160/230  
MC220/24 • MC220/230  
MC400/24 • MC400/230  
MC500/24 • MC500/230  
MC1000/24 • MC1000/230

BR206GF BR306GF  
BR216GF BR316GF

DN 125 – DN 200



BR216GF



BR316GF

### Technical data actuator MC55

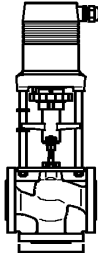
| Type                         |      | MC55/24                                  |         | MC55/230                                 |         | MC55Y   |         |
|------------------------------|------|--|---------|--|---------|---|---------|
| Actuating time <sup>1)</sup> | s/mm | 9 · 5*                                   |         | 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 ±10%                                 |         | 24 ±10%   |         |
| Power supply <sup>2)</sup>   | 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 <sup>3)</sup>   |      | 3-point                                  |         | 3-point                                  |         | 0(2)...10 VDC 77 kOhm<br>0(4)...20 mA 0.51 kOhm |         |
| Output signal <sup>3)</sup>  |      | 0...10 VDC<br>max. 8 mA<br>min. 1200 Ohm |         | 0...10 VDC<br>max. 8 mA<br>min. 1200 Ohm |         | 0...10 VDC<br>max. 8 mA<br>min. 1200 Ohm        |         |
| Hysteresis                   | V    | 0.3                                      |         | 0.3                                      |         | 0.3   |         |

<sup>1)</sup> Actuating time freely adjustable, presetting is marked with \*

<sup>2)</sup> only rectified alternating voltage

<sup>3)</sup> Invertible input and output signal

Flanged connection  
PN 6 / PN 16  
Cast iron



with electric actuators  
MC55/24 • MC55/230 • MC55Y  
MC100/24 • MC100/230  
MC160/24 • MC160/230  
MC220/24 • MC220/230  
MC400/24 • MC400/230  
MC500/24 • MC500/230  
MC1000/24 • MC1000/230

**BR206GF**  
**BR216GF**

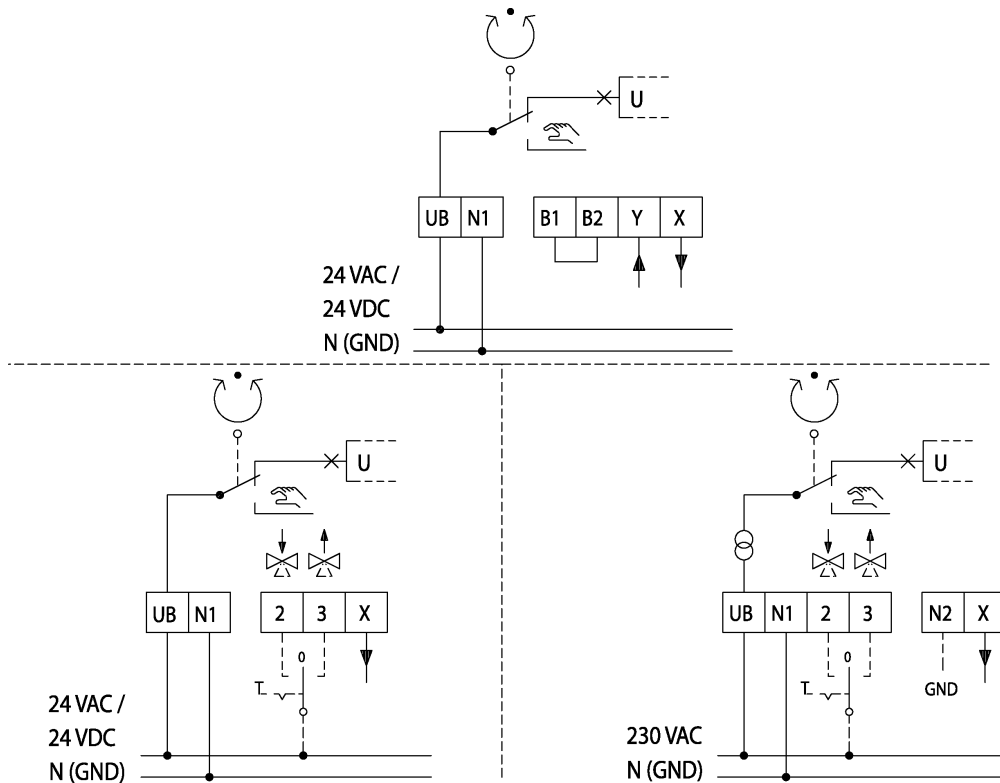
**BR306GF**  
**BR316GF**

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

### Actuator variant and accessories

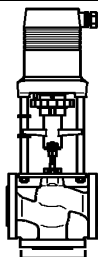
- Voltage: 115 VAC
- Adapter with coupling for external products

### Circuit diagram MC55



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

Flanged connection  
PN 6 / PN 16  
Cast iron



with electric actuators  
MC55/24 • MC55/230 • MC55Y  
MC100/24 • MC100/230  
MC160/24 • MC160/230  
MC220/24 • MC220/230  
MC400/24 • MC400/230  
MC500/24 • MC500/230  
MC1000/24 • MC1000/230

BR206GF BR306GF  
BR216GF BR316GF

#### Technical data actuator MC100 – MC1000

| Type                         |      | MC100/24   | MC100/230  |
|------------------------------|------|--|--|
| Actuating time <sup>1)</sup> | 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 ±10%   |
| Power supply <sup>2)</sup>   | VDC  | 24 ±10%  | -  |
| Frequency                    | Hz   | 50/60 ±5%  | 50/60 ±5%  |
| Power consumption            | VA   | 6  | 12   |
| Input signal <sup>3)</sup>   |      | 3-point<br>0(2)...10 VDC 77 kOhm<br>0(4)...20 mA 0.51 kOhm | 3-point<br>0(2)...10 VDC 77 kOhm<br>0(4)...20 mA 0.51 kOhm |
| Output signal <sup>3)</sup>  |      | 0...10 VDC max. 8 mA<br>min. 1200 Ohm                      | 0...10 VDC max. 8 mA<br>min. 1200 Ohm                      |
| Hysteresis <sup>4)</sup>     | V    | 0.15 · 0.5   | 0.15 · 0.5   |

| Type                         |      | MC160/24   | MC160/24     | MC160/230  | MC160/230    |
|------------------------------|------|--|--------------|--|--------------|
| Actuating time <sup>1)</sup> | s/mm | 6 · 4*   |              | 6 · 4*   |              |
| Actuating thrust             | kN   | 1.6  |              | 1.6  |              |
| Stroke                       | mm   | max. 30  | max. 14 / 20 | max. 30  | max. 14 / 20 |
| Power supply                 | VAC  | 24 ±10%  |              | 230 ±10%   |              |
| Power supply <sup>2)</sup>   | VDC  | 24 ±10%  |              | -  |              |
| Frequency                    | Hz   | 50/60 ±5%  |              | 50/60 ±5%  |              |
| Power consumption            | VA   | 6  |              | 12   |              |
| Input signal <sup>3)</sup>   |      | 3-point<br>0(2)...10 VDC 77 kOhm<br>0(4)...20 mA 0.51 kOhm |              | 3-point<br>0(2)...10 VDC 77 kOhm<br>0(4)...20 mA 0.51 kOhm |              |
| Output signal <sup>3)</sup>  |      | 0...10 VDC max. 8 mA<br>min. 1200 Ohm                      |              | 0...10 VDC max. 8 mA<br>min. 1200 Ohm                      |              |
| Hysteresis <sup>4)</sup>     | V    | 0.05 · 0.15 · 0.3 · 0.5                                    |              | 0.05 · 0.15 · 0.3 · 0.5                                    |              |

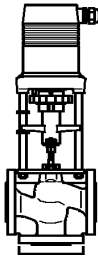
<sup>1)</sup> Actuating time freely adjustable, presetting is marked with \*

<sup>2)</sup> only rectified alternating voltage

<sup>3)</sup> Invertible input and output signal

<sup>4)</sup> Freely adjustable

Flanged connection  
PN 6 / PN 16  
Cast iron



with electric actuators  
MC55/24 • MC55/230 • MC55Y  
MC100/24 • MC100/230  
MC160/24 • MC160/230  
MC220/24 • MC220/230  
MC400/24 • MC400/230  
MC500/24 • MC500/230  
MC1000/24 • MC1000/230

BR206GF  
BR216GF

BR306GF  
BR316GF

| Type                         |      | MC220/24   | MC220/230  |
|------------------------------|------|--|--|
| Actuating time <sup>1)</sup> | s/mm | 3  | 3  |
| Actuating thrust             | kN   | 2,2  | 2,2  |
| Stroke                       | mm   | max. 30  | max. 30  |
| Power supply                 | VAC  | 24 ±10%  | 230 ±10%   |
| Power supply <sup>2)</sup>   | VDC  | 24 ±10%  | -  |
| Frequency                    | Hz   | 50/60 ±5%  | 50/60 ±5%  |
| Power consumption            | VA   | max. 18  | max. 25  |
| Input signal <sup>3)</sup>   |      | 3-point<br>0(2)...10 VDC 77 kOhm<br>0(4)...20 mA 0.51 kOhm | 3-point<br>0(2)...10 VDC 77 kOhm<br>0(4)...20 mA 0.51 kOhm |
| Output signal <sup>3)</sup>  |      | 0...10 VDC max. 8 mA<br>min. 1200 Ohm                      | 0...10 VDC max. 8 mA<br>min. 1200 Ohm                      |
| Hysteresis <sup>4)</sup>     | V    | 0.05 · 0.15 · 0.3 · 0.5                                    | 0.05 · 0.15 · 0.3 · 0.5                                    |

| Type                         |      | MC400/24   | MC400/230  |
|------------------------------|------|--|--|
| Actuating time <sup>1)</sup> | 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 ±10%   |
| Power supply <sup>2)</sup>   | VDC  | 50/60 ±5%  | 50/60 ±5%  |
| Frequency                    | Hz   | max. 50  | max. 63  |
| Power consumption            | VA   | 3-point<br>0(2)...10 VDC 77 kOhm<br>0(4)...20 mA 0.51 kOhm | 3-point<br>0(2)...10 VDC 77 kOhm<br>0(4)...20 mA 0.51 kOhm |
| Input signal <sup>3)</sup>   |      | 0...10 VDC max. 8 mA<br>min. 1200 Ohm                      | 0...10 VDC max. 8 mA<br>min. 1200 Ohm                      |
| Output signal <sup>3)</sup>  |      | 0.05 · 0.15 · 0.3 · 0.5                                    | 0.05 · 0.15 · 0.3 · 0.5                                    |

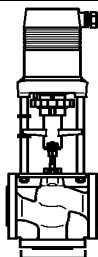
<sup>1)</sup> Actuating time freely adjustable, presetting is marked with \*

<sup>2)</sup> only rectified alternating voltage

<sup>3)</sup> Invertible input and output signal

<sup>4)</sup> Freely adjustable

Flanged connection  
PN 6 / PN 16  
Cast iron



with electric actuators  
MC55/24 • MC55/230 • MC55Y  
MC100/24 • MC100/230  
MC160/24 • MC160/230  
MC220/24 • MC220/230  
MC400/24 • MC400/230  
MC500/24 • MC500/230  
MC1000/24 • MC1000/230

BR206GF BR306GF  
BR216GF BR316GF

| Type                         |      | MC500/24   | MC500/230  |
|------------------------------|------|--|--|
| Actuating time <sup>1)</sup> | 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 ±10%   |
| Power supply <sup>2)</sup>   | VDC  | 24 ±10%  | -  |
| Frequency                    | Hz   | 50/60 ±5%  | 50/60 ±5%  |
| Power consumption            | VA   | max. 18  | max. 25  |
| Input signal <sup>3)</sup>   |      | 3-point<br>0(2)...10 VDC 77 kOhm<br>0(4)...20 mA 0.51 kOhm | 3-point<br>0(2)...10 VDC 77 kOhm<br>0(4)...20 mA 0.51 kOhm |
| Output signal <sup>3)</sup>  |      | 0...10 VDC max. 8 mA<br>min. 1200 Ohm                      | 0...10 VDC max. 8 mA<br>min. 1200 Ohm                      |
| Hysteresis <sup>4)</sup>     | 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 ±10%   |
| Frequency                   | Hz   | 50/60 ±5%  | 50/60 ±5%  |
| Power consumption           | VA   | max. 50  | max. 63  |
| Input signal <sup>1)</sup>  |      | 3-Punkt<br>0(2)...10 VDC 77 kOhm<br>0(4)...20 mA 0.51 kOhm | 3-Punkt<br>0(2)...10 VDC 77 kOhm<br>0(4)...20 mA 0.51 kOhm |
| Output signal <sup>1)</sup> |      | 0...10 VDC max. 8 mA<br>min. 1200 Ohm                      | 0...10 VDC max. 8 mA<br>min. 1200 Ohm                      |
| Hysteresis <sup>2)</sup>    | V    | 0.05 · 0.15 · 0.3 · 0.5                                    | 0.05 · 0.15 · 0.3 · 0.5                                    |

Enclosure protection: IP 54

Resolution:

|               |            |          |
|---------------|------------|----------|
| MC55          | electric   | 0.04 VDC |
| MC100         | mechanical | 0.095 mm |
| MC160 / MC220 | mechanical | 0.05 mm  |
| 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

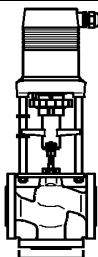
<sup>1)</sup> Stellzeit frei wählbar, Voreinstellung ist mit \* gekennzeichnet, vor Ort einstellbar

<sup>2)</sup> nur gleichgerichtete Wechselspannung

<sup>3)</sup> stetige Signale invertierbar

<sup>4)</sup> vor Ort einstellbar

Flanged connection  
PN 6 / PN 16  
Cast iron



with electric actuators  
MC55/24 • MC55/230 • MC55Y  
MC100/24 • MC100/230  
MC160/24 • MC160/230  
MC220/24 • MC220/230  
MC400/24 • MC400/230  
MC500/24 • MC500/230  
MC1000/24 • MC1000/230

**BR206GF**    **BR306GF**  
**BR216GF**    **BR316GF**

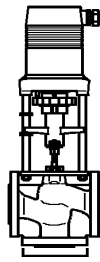
|                      |                        |             |
|----------------------|------------------------|-------------|
| Ambient temperature: | MC55                   | 0...+60°C   |
|                      | MC100 / MC160 / MC220  | 0...+60°C   |
|                      | MC400 / MC500 / MC1000 | -10...+60°C |
| Weight:              | MC55                   | 1.5 kg      |
|                      | MC100                  | 2.5 kg      |
|                      | MC160 and MC220        | 3.2 kg      |
|                      | MC500/24               | 7.0 kg      |
|                      | MC500/230              | 8.2 kg      |
|                      | MC400                  | 9.5 kg      |
|                      | MC1000                 | 11.0 kg     |

### Actuator variant and accessories

- Voltage: 115 VAC
- Position switch unit <sup>1)</sup>: 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 <sup>1)</sup>
- Adapter with coupling for external products

<sup>1)</sup> MC100/MC160/MC220: Position switch unit and output signal 0(4)...20 mA not in combination

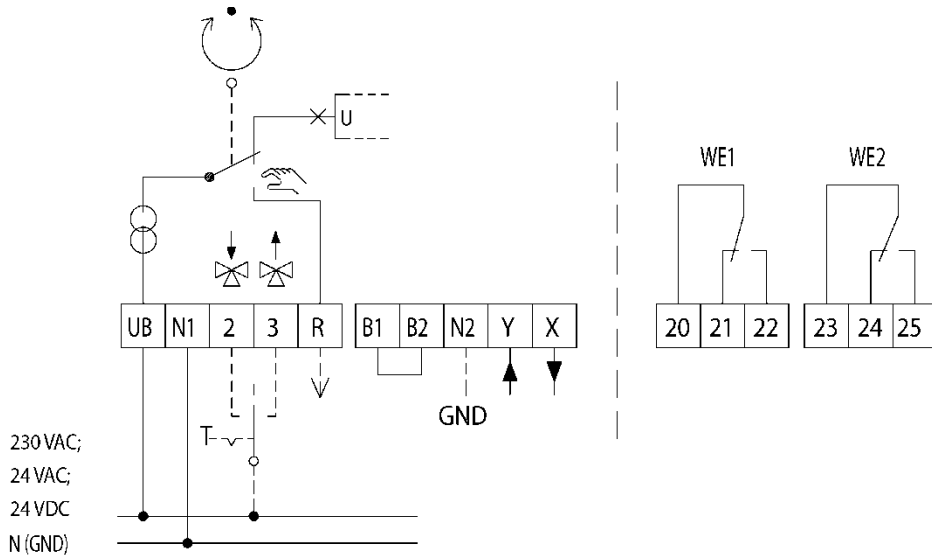
Flanged connection  
PN 6 / PN 16  
Cast iron



with electric actuators  
MC55/24 • MC55/230 • MC55Y  
MC100/24 • MC100/230  
MC160/24 • MC160/230  
MC220/24 • MC220/230  
MC400/24 • MC400/230  
MC500/24 • MC500/230  
MC1000/24 • MC1000/230

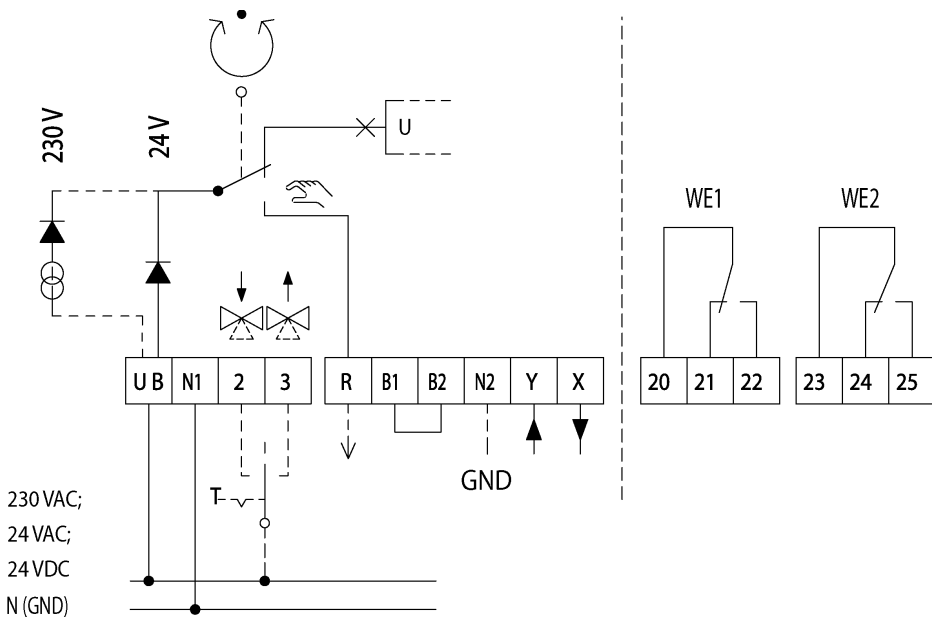
BR206GF BR306GF  
BR216GF BR316GF

**Circuit diagram MC100 / MC160 / MC220**



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

**Circuit diagram MC400 / MC500 / MC1000**

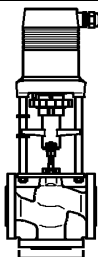


B1/B2 Connection of a binary signal (e.g. frost safety)

21/09/2021 Data subject to change without notice



Flanged connection  
PN 6 / PN 16  
Cast iron



with electric actuators  
MC55/24 • MC55/230 • MC55Y  
MC100/24 • MC100/230  
MC160/24 • MC160/230  
MC220/24 • MC220/230  
MC400/24 • MC400/230  
MC500/24 • MC500/230  
MC1000/24 • MC1000/230

**BR206GF**    **BR306GF**  
**BR216GF**    **BR316GF**

## Technical data valve with actuator

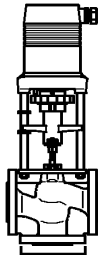
### PN 6

| DN                           |                              | 15   | 20  | 25  | 32   | 40  | 50   | 65   | 65   | 80  | 100 |  |
|------------------------------|------------------------------|------|-----|-----|------|-----|------|------|------|-----|-----|--|
| kvs-value                    | m <sup>3</sup> /h            | 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   |     |     |      |     |      | 20   | 30   |     |     |  |
| MC55/24<br>MC55/230<br>MC55Y | Actuating time <sup>1)</sup> | 125  |     |     |      |     |      | 180  |      |     |     |  |
|                              |                              | 70*  |     |     |      |     |      | 100* |      |     |     |  |
|                              | Closing pressure             | 600  | 600 | 600 | 450  | 250 | 150  | 100  |      |     |     |  |
| MC100/24<br>MC100/230        | Actuating time <sup>1)</sup> | 170  |     |     |      |     |      | 240  |      |     |     |  |
|                              |                              | 125* |     |     |      |     |      | 180* |      |     |     |  |
|                              |                              | 55   |     |     |      |     |      | 80   |      |     |     |  |
|                              |                              | 30   |     |     |      |     |      | 40   |      |     |     |  |
|                              | Closing pressure             | 600  | 600 | 600 | 600  | 550 | 350  | 150  |      |     |     |  |
| MC160/24<br>MC160/230        | Actuating time <sup>1)</sup> |      |     |     |      | 95  |      | 120  |      |     |     |  |
|                              |                              |      |     |     |      | 55* |      | 80*  |      |     |     |  |
|                              | Closing pressure             |      |     |     |      | 600 | 600  | 350  |      |     |     |  |
| MC160/24<br>MC160/230        | Actuating time <sup>1)</sup> |      |     |     |      |     |      | 120  | 180  |     |     |  |
|                              |                              |      |     |     |      |     |      | 80*  | 120* |     |     |  |
|                              | Closing pressure             |      |     |     |      |     |      | 350  | 230  | 140 |     |  |
| MC220/24<br>MC220/230        | Actuating time <sup>1)</sup> |      |     |     |      |     |      | 90   |      |     |     |  |
|                              | Closing pressure             |      |     |     |      |     |      | 500  | 300  | 500 |     |  |
| MC400/24<br>MC400/230        | Actuating time <sup>1)</sup> |      |     |     |      |     |      | 15   | 20   |     |     |  |
|                              |                              |      |     |     |      |     |      | 10*  | 15*  |     |     |  |
|                              | Closing pressure             |      |     |     |      |     |      | 600  | 600  | 400 |     |  |
| MC500/24<br>MC500/230        | Actuating time <sup>1)</sup> |      |     |     |      |     |      | 100  | 150  |     |     |  |
|                              |                              |      |     |     |      |     |      | 50*  | 75*  |     |     |  |
|                              | Closing pressure             |      |     |     |      |     |      | 600  | 600  | 500 |     |  |

100 kPa = 1 bar = 10 mWS

<sup>1)</sup> Actuating time freely adjustable, presetting is marked with \*

Flanged connection  
PN 6 / PN 16  
Cast iron



with electric actuators  
MC55/24 • MC55/230 • MC55Y  
MC100/24 • MC100/230  
MC160/24 • MC160/230  
MC220/24 • MC220/230  
MC400/24 • MC400/230  
MC500/24 • MC500/230  
MC1000/24 • MC1000/230

**BR206GF**    **BR306GF**  
**BR216GF**    **BR316GF**

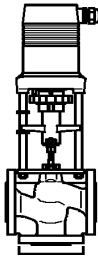
## PN 16

| DN                           |                              | 15   | 20   | 25   | 32   | 40  | 50   | 65   | 65   | 80   | 100  | 125 | 150  | 200<br>BR216 GF | 200<br>BR316GF |  |  |  |
|------------------------------|------------------------------|------|------|------|------|-----|------|------|------|------|------|-----|------|-----------------|----------------|--|--|--|
| kvs-value                    | m³/h                         | 4    | 6,3  | 10   | 16   | 25  | 40   | 63   | 63   | 100  | 160  | 250 | 315  | 500             |                |  |  |  |
|                              |                              | 2,5  | 5    | 8    | 12,5 | 20  | 31,5 | 50   | 50   | 80   | 125  |     |      |                 |                |  |  |  |
| Stoke                        | mm                           | 14   |      |      |      |     |      | 20   | 30   |      |      | 50  | 60   |                 |                |  |  |  |
| MC55/24<br>MC55/230<br>MC55Y | Actuating time <sup>1)</sup> | 125  |      |      |      |     |      | 180  |      |      |      |     |      |                 |                |  |  |  |
|                              | Closing pressure             | 1500 | 1250 | 750  | 450  | 250 | 150  | 100  |      |      |      |     |      |                 |                |  |  |  |
| MC100/24<br>MC100/230        | Actuating time <sup>1)</sup> | 170  |      |      |      |     |      | 240  |      |      |      |     |      |                 |                |  |  |  |
|                              |                              | 125* |      |      |      |     |      | 180* |      |      |      |     |      |                 |                |  |  |  |
|                              |                              | 55   |      |      |      |     |      | 80   |      |      |      |     |      |                 |                |  |  |  |
|                              | Closing pressure             | 1600 | 1600 | 1500 | 900  | 550 | 350  | 150  |      |      |      |     |      |                 |                |  |  |  |
| MC160/24<br>MC160/230        | Actuating time <sup>1)</sup> | 95   |      |      |      |     |      | 120  |      |      |      |     |      |                 |                |  |  |  |
|                              |                              | 55*  |      |      |      |     |      | 80*  |      |      |      |     |      |                 |                |  |  |  |
| MC160/24<br>MC160/230        | Closing pressure             | 1500 |      |      |      |     |      | 950  | 600  | 350  |      |     |      |                 |                |  |  |  |
|                              |                              |      |      |      |      |     |      | 120  | 180  |      |      |     |      |                 |                |  |  |  |
| MC160/24<br>MC160/230        | Actuating time <sup>1)</sup> |      |      |      |      |     |      | 80*  | 120* |      |      |     |      |                 |                |  |  |  |
|                              |                              |      |      |      |      |     |      | 350  | 230  | 140  |      |     |      |                 |                |  |  |  |
| MC220/24<br>MC220/230        | Actuating time <sup>1)</sup> |      |      |      |      |     |      | 90   |      |      |      |     |      |                 |                |  |  |  |
|                              |                              |      |      |      |      |     |      | 500  | 300  | 200  |      |     |      |                 |                |  |  |  |
| MC400/24<br>MC400/230        | Actuating time <sup>1)</sup> |      |      |      |      |     |      | 15   | 20   | 30   | 40   |     |      |                 |                |  |  |  |
|                              |                              |      |      |      |      |     |      | 10*  | 15*  | 20*  | 30*  |     |      |                 |                |  |  |  |
| MC400/24<br>MC400/230        | Closing pressure             |      |      |      |      |     |      | 950  | 650  | 400  | 300  | 200 | 300  |                 |                |  |  |  |
|                              |                              |      |      |      |      |     |      | 100  | 150  | 250  | 300  |     |      |                 |                |  |  |  |
| MC500/24<br>MC500/230        | Actuating time <sup>1)</sup> |      |      |      |      |     |      | 50*  | 75*  | 125* | 150* |     |      |                 |                |  |  |  |
|                              |                              |      |      |      |      |     |      | 1250 | 850  | 500  | 370  | 270 | 600  | 110             |                |  |  |  |
| MC1000/24<br>MC1000/230      | Actuating time <sup>1)</sup> |      |      |      |      |     |      | 50   |      |      | 60   |     |      |                 |                |  |  |  |
|                              |                              |      |      |      |      |     |      |      |      |      | 800  | 550 | 1200 | 240             |                |  |  |  |

100 kPa = 1 bar = 10 mWS

<sup>1)</sup> Actuating time freely adjustable, presetting is marked with \*

Flanged connection  
PN 6 / PN 16  
Cast iron

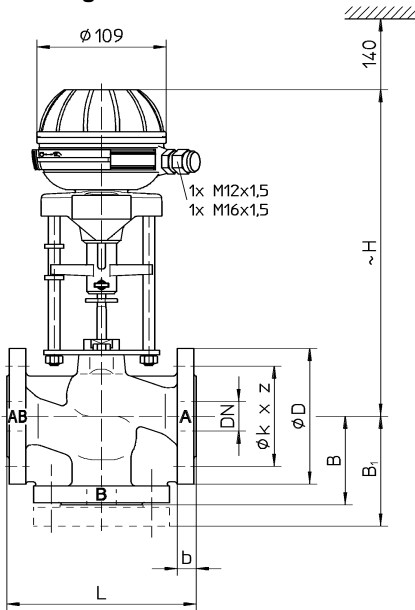


with electric actuators  
MC55/24 • MC55/230 • MC55Y  
MC100/24 • MC100/230  
MC160/24 • MC160/230  
MC220/24 • MC220/230  
MC400/24 • MC400/230  
MC500/24 • MC500/230  
MC1000/24 • MC1000/230

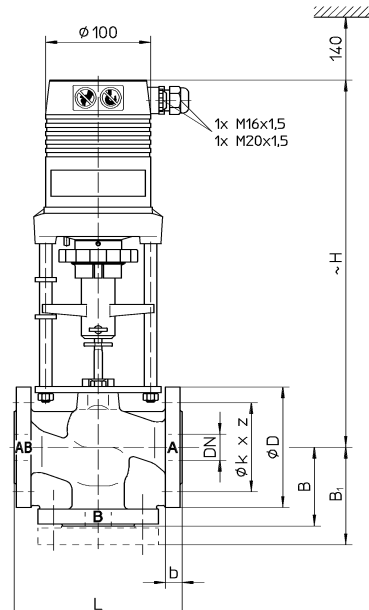
BR206GF  
BR216GF

BR306GF  
BR316GF

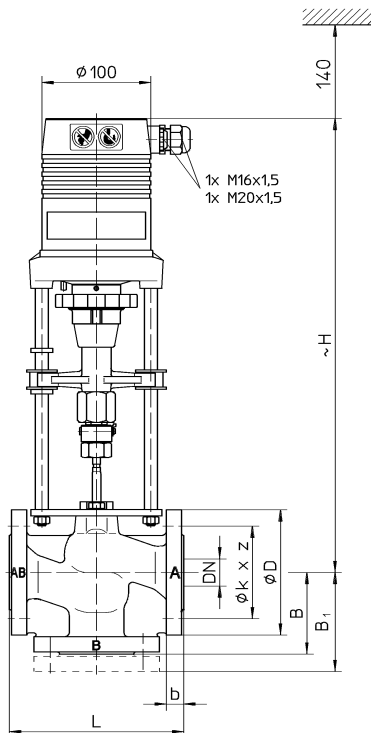
## Drawing



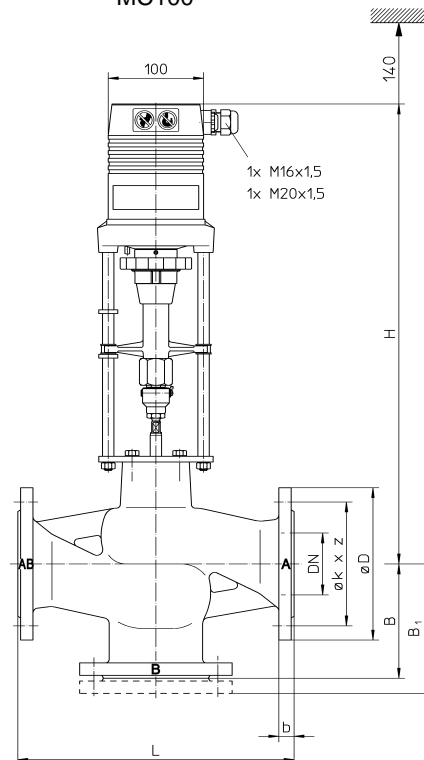
DN 15 – DN 50  
MC55



DN 15 – DN 65 (stroke 20)  
MC100

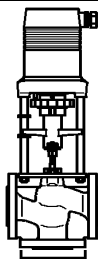


DN 32 – DN 65 (stroke 20)  
MC160



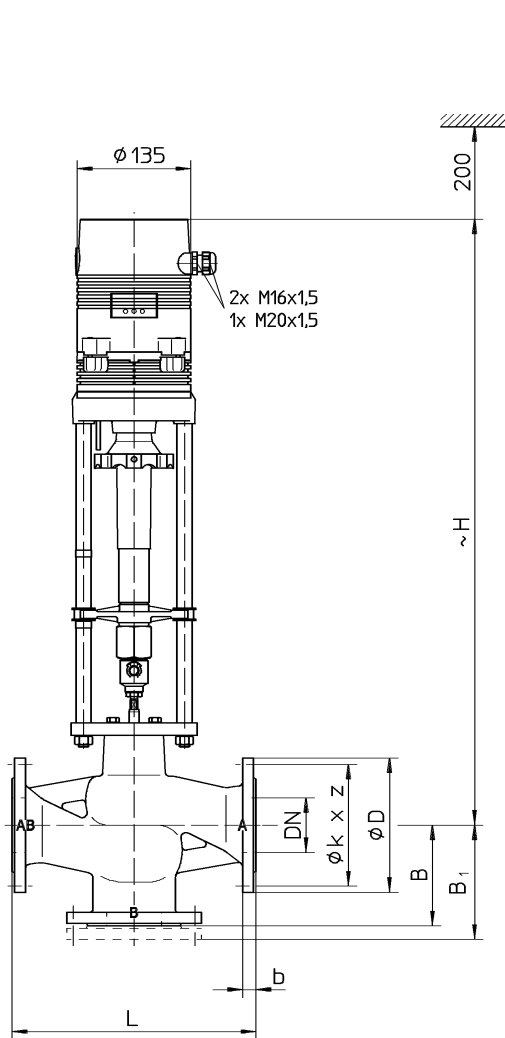
DN 65 (stroke 30) – DN 100  
MC160 / MC220

Flanged connection  
PN 6 / PN 16  
Cast iron

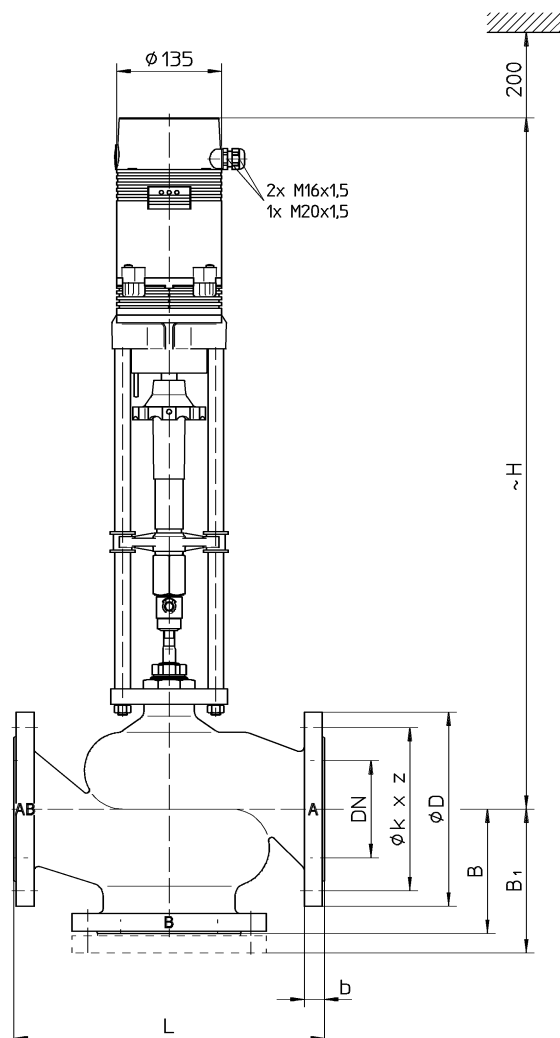


with electric actuators  
MC55/24 • MC55/230 • MC55Y  
MC100/24 • MC100/230  
MC160/24 • MC160/230  
MC220/24 • MC220/230  
MC400/24 • MC400/230  
MC500/24 • MC500/230  
MC1000/24 • MC1000/230

BR206GF BR306GF  
BR216GF BR316GF



DN 65 (stroke 30) – DN 100



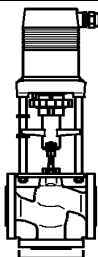
DN 125 – DN 200

MC400 / MC500 / MC1000

**Installation instruction:**

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

Flanged connection  
PN 6 / PN 16  
Cast iron



with electric actuators  
MC55/24 • MC55/230 • MC55Y  
MC100/24 • MC100/230  
MC160/24 • MC160/230  
MC220/24 • MC220/230  
MC400/24 • MC400/230  
MC500/24 • MC500/230  
MC1000/24 • MC1000/230

**BR206GF**  
**BR216GF**

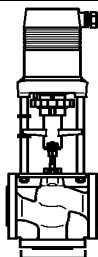
**BR306GF**  
**BR316GF**

## 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 <sub>1</sub>   | 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  |      |      |
|                  | MC100   | 24 VAC         | mm      | 343 | 348    | 353 | 353 | 358    | 358  | 408  |      |
|                  |         | 230 VAC        | mm      | 368 | 373    | 378 | 378 | 383    | 383  | 433  |      |
|                  | MC160   | 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  |
|                  | MC220   | 24 VAC         | mm      |     |        |     |     |        | 486  | 496  | 506  |
|                  |         | 230 VAC        | mm      |     |        |     |     |        | 511  | 521  | 531  |
|                  | MC400   | 24 VAC/230 VAC | mm      |     |        |     |     |        | 695  | 705  | 715  |
|                  | MC500   | 24 VAC/230 VAC | mm      |     |        |     |     |        | 645  | 655  | 665  |
|                  | m       | 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  |      |      |
| 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 |      |
| MC160            |         | 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 |
| MC220            |         | BR206GF        | kg      |     |        |     |     |        | 21,1 | 29,5 | 40,3 |
|                  |         | BR306GF        | kg      |     |        |     |     |        | 17,9 | 25,2 | 34,2 |
| MC500<br>24 VAC  |         | BR206GF        | kg      |     |        |     |     |        | 24.9 | 33.3 | 44.1 |
|                  |         | BR306GF        | kg      |     |        |     |     |        | 21.7 | 29.0 | 38.0 |
| MC500<br>230 VAC | BR206GF | kg             |         |     |        |     |     | 26.1   | 34.5 | 45.3 |      |
|                  | BR306GF | kg             |         |     |        |     |     | 22.9   | 30.2 | 39.2 |      |
| MC400            | BR206GF | kg             |         |     |        |     |     | 27.4   | 35.8 | 46.6 |      |
|                  | BR306GF | kg             |         |     |        |     |     | 24.2   | 31.5 | 40.5 |      |

Flanged connection  
PN 6 / PN 16  
Cast iron



with electric actuators  
MC55/24 • MC55/230 • MC55Y  
MC100/24 • MC100/230  
MC160/24 • MC160/230  
MC220/24 • MC220/230  
MC400/24 • MC400/230  
MC500/24 • MC500/230  
MC1000/24 • MC1000/230

**BR206GF**    **BR306GF**  
**BR216GF**    **BR316GF**

## PN 16

| DN               |         | 15             | 20  | 25  | 32     | 40   | 50   | 65   | 80     | 100  | 125  | 150    | 200     |     |     |
|------------------|---------|----------------|-----|-----|--------|------|------|------|--------|------|------|--------|---------|-----|-----|
| L                | mm      | 130            | 150 | 160 | 180    | 200  | 230  | 290  | 310    | 350  | 400  | 480    | 600     |     |     |
| B                | mm      | 65             | 70  | 75  | 95     | 100  | 100  | 120  | 130    | 150  | 160  | 170    | 215     |     |     |
| B <sub>1</sub>   | mm      | 89             | 96  | 101 | 123    | 128  | 130  | 150  | 162    | 182  | 194  | 207    | 254     |     |     |
| ∅ D              | mm      | 95             | 105 | 115 | 140    | 150  | 165  | 185  | 200    | 220  | 250  | 285    | 340     |     |     |
| ∅ k              | mm      | 65             | 75  | 85  | 100    | 110  | 125  | 145  | 160    | 180  | 210  | 240    | 295     |     |     |
| z                | mm      | 4x ∅14         |     |     | 4x ∅18 |      |      |      | 8x ∅18 |      |      | 8x ∅22 | 12x ∅22 |     |     |
| b                | mm      | 14             | 16  | 16  | 18     | 18   | 20   | 20   | 22     | 24   | 26   | 26     | 24      |     |     |
| H                | MC55    | 24 VAC/230 VAC | mm  | 267 | 272    | 277  | 277  | 282  | 282    |      |      |        |         |     |     |
|                  |         | 24 VAC         | mm  | 343 | 348    | 353  | 353  | 358  | 358    | 408  |      |        |         |     |     |
|                  | MC100   | 230 VAC        | mm  | 368 | 373    | 378  | 378  | 383  | 383    | 433  |      |        |         |     |     |
|                  |         | 24 VAC         | mm  |     |        |      | 443  | 448  | 448    | 486  |      |        |         |     |     |
|                  | MC160   | 230 VAC        | mm  |     |        |      | 468  | 473  | 473    | 511  |      |        |         |     |     |
|                  |         | 24 VAC         | mm  |     |        |      |      |      |        | 486  | 496  | 506    |         |     |     |
|                  | MC160   | 230 VAC        | mm  |     |        |      |      |      |        | 511  | 521  | 531    |         |     |     |
|                  |         | 24 VAC         |     |     |        |      |      |      |        | 486  | 496  | 506    |         |     |     |
|                  | MC220   | 230 VAC        | mm  |     |        |      |      |      |        | 511  | 521  | 531    |         |     |     |
|                  |         | 24 VAC/230 VAC | mm  |     |        |      |      |      |        | 695  | 705  | 715    | 855     | 855 | 875 |
|                  | MC500   | 24 VAC/230 VAC | mm  |     |        |      |      |      |        | 645  | 655  | 665    | 805     | 805 | 825 |
|                  | MC1000  | 24 VAC/230 VAC | mm  |     |        |      |      |      |        |      |      |        | 895     | 895 | 920 |
| m                | 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   |      |      |        |         |     |     |
| 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   |      |      |        |         |     |     |
| MC160            | 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 |        |         |     |     |
| MC220            | BR216GF | kg             |     |     |        |      |      |      | 28,0   | 33,0 | 46,1 |        |         |     |     |
|                  | BR316GF | kg             |     |     |        |      |      |      | 23,2   | 27,2 | 39,2 |        |         |     |     |
| MC500<br>24 VAC  | BR216GF | kg             |     |     |        |      |      |      | 31.8   | 36.8 | 49.9 | 69.0   | 97.0    | 163 |     |
|                  | BR316GF | kg             |     |     |        |      |      |      | 27.0   | 31.0 | 43.0 | 59.0   | 84.0    | 143 |     |
| MC500<br>230 VAC | BR216GF | kg             |     |     |        |      |      |      | 33.0   | 38.0 | 51.1 | 70.2   | 98.2    | 164 |     |
|                  | BR316GF | kg             |     |     |        |      |      |      | 28.2   | 32.2 | 44.2 | 60.2   | 85.2    | 144 |     |
| MC400            | BR216GF | kg             |     |     |        |      |      |      | 34.3   | 39.3 | 52.4 | 71.5   | 99.5    | 183 |     |
|                  | BR316GF | kg             |     |     |        |      |      |      | 29.5   | 33.5 | 45.5 | 61.5   | 86.5    |     |     |
| MC1000           | BR216GF | kg             |     |     |        |      |      |      |        |      |      | 73     | 101     | 184 |     |
|                  | BR316GF | kg             |     |     |        |      |      |      |        |      |      | 63     | 88      | 165 |     |