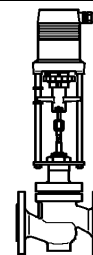
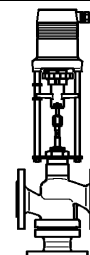


Flanged connection	with electric actuators
PN 16 – 40	MC103/24 • MC103/230
Cast iron	MC163/24 • MC163/230
Spheroidal graphite	MC253/24 • MC253/230
Cast steel	MC403/24 • MC403/230
Stainless steel	MC503/24 • MC503/230
	MC1003/24 • MC1003/230
	MC1503/24 • MC1503/230
	M300-20kN • M300Y-20kN
	M300-25kN • M300Y-25kN



BR216
BR225
BR240S
BR240E



BR316
BR325
BR340S
BR340E

Features

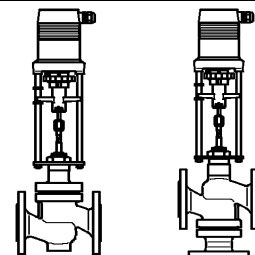
- Suitable in building and process engineering for various mediums 0...+200°C
- Suitable with stuffing box extension or stem seal with stainless steel bellow to –10...+350°C and for valves made of stainless steel to –30...+350°C
- Suitable with stem heater for water with antifreeze compounds down to –10°C and for valves made of stainless steel to –30
- Microprocessor controlled
- Automatic self-calibration on start up

Technical data valve

Series	BR216	BR225	BR240S	BR240E
Form	Two-way			
Diameter nominal	DN 125 – DN 300	DN 15 – DN 250 ¹⁾	DN 15 – DN 300	
Pressure rating	PN 16	PN 16 / PN 25 / PN 40	PN 40	
Body	Cast iron EN-JL1040	Spheroidal graphite EN-JS1024	Cast steel 1.0619+N	Stainless steel 1.4408
Plug	CrNi-steel 1.4057			CrNi-steel 1.4571
Stem	CrMo-steel 1.4122			CrNi-steel 1.4571
Characteristic	≤ DN 50: equal % ≥ DN 65: eq. % mod.		Option: linear	Option: linear
	Perforated plug: equal %		Option: linear	
Stroke [mm] MC103 – MC1503	20 (DN 15 – DN 40) 30 (DN 50 – DN 65) 50 (DN 80 – DN 100) 60 (DN 125 – DN 200) 80 (DN 250 – DN 300)			
Stroke [mm] M300(Y)	60 (DN 125 – DN 150) 80 (DN 200) 90 (DN 250 – DN 300)		25 kN 20 kN / 25 kN 20 kN / 25 kN	
Rangeability	≥ 50:1			
Connection type	Flanges acc. EN 1092-2 Typ 21		Flanges acc. EN 1092-1 Typ 21	
Pressure, Temp.	Acc. EN 1092 part 2		Acc. EN 1092 part 1	

¹⁾ DN 150: PN 16 or PN 25
DN 200: PN 16

Flanged connection PN 16 – 40	with electric actuators MC103/24 • MC103/230
Cast iron	MC163/24 • MC163/230
Spheroidal graphite	MC253/24 • MC253/230
Cast steel	MC403/24 • MC403/230
Stainless steel	MC503/24 • MC503/230 MC1003/24 • MC1003/230 MC1503/24 • MC1503/230 M300-20kN • M300Y-20kN M300-25kN • M300Y-25kN



BR216	BR316
BR225	BR325
BR240S	BR340S
BR240E	BR340E

Series	BR316	BR325	BR340S	BR340E
Form	Three-way			
Diameter nominal	DN 125 – DN 300	DN 15 – DN 250 ¹⁾	DN 15 – DN 300	
Pressure rating	PN 16	PN 25	PN 40	
Body	Cast iron ²⁾ EN-JL1040	Spheroidal graphite EN-JS1024	Cast steel 1.0619+N	Stainless steel 1.4408
Plug	CrNi-steel 1.4057			CrNi-steel 1.4571
Stem	CrMo-steel 1.4122			CrNi-steel 1.4571
Characteristic	≤ DN 40: A→AB equal % Option: linear B→AB linear ≥ DN 50: A→AB eq. % mod. Option: linear B→AB linear			
Stroke [mm] MC103 – MC1503	20 (DN 15 – DN 40) 30 (DN 50 – DN 65) 50 (DN 80 – DN 100) 60 (DN 125 – DN 200) 80 (DN 250 – DN 300)			
Stroke [mm] M300(Y)	60 (DN 125 – DN 150)		25 kN	
	80 (DN 200)		20 kN / 25 kN	
	90 (DN 250 – DN 300)		20 kN / 25 kN	
Rangeability	≥ 50:1			
Connection type	Flanges acc. EN 1092-2 Typ 21		Flanges acc. EN 1092-1 Typ 21	
Pressure, Temp.	Acc. EN 1092 part 2		Acc. EN 1092 part 1	

Function: BR216/225/240S/240E as two-way valve
 BR316/325/340S/340E as mixing valve or
 BR316/325/340S/340E as diverting valve with reduced closing pressure

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

Leakage rate: EN 1349 – seat-leakage IV L1 (≤ 0.01% of kvs-value)

Stem sealing: O-rings made of EPDM 0...+180°C chilled and hot-water with max. 50% antifreeze and anti-corrosive compounds: glycol, ethylene glycol, mono ethylene, ethanol, methyl alcohol, glycerine, antifrogen® N+L

O-rings made of FKM 0...+200°C media based on mineral oil

O-rings made of Fluoraz® 0...+200°C hot water, steam and oil

PTFE-lip-rings 0...+200°C hot water, steam and oil

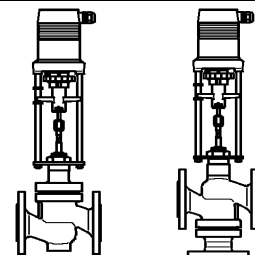
Graphite-Packing 0...+350°C ³⁾ hot water, steam and oil

¹⁾ DN 150: PN 16 or PN 25
 DN 200: PN 16

²⁾ Due to a change in material, we reserve the right to supply valves up to DN 100 in higher grade spheroidal graphite EN-JS1024

³⁾ only in combination with stuffing box extension or stem seal with stainless steel bellow

Flanged connection	with electric actuators
PN 16 – 40	MC103/24 • MC103/230
Cast iron	MC163/24 • MC163/230
Spheroidal graphite	MC253/24 • MC253/230
Cast steel	MC403/24 • MC403/230
Stainless steel	MC503/24 • MC503/230
	MC1003/24 • MC1003/230
	MC1503/24 • MC1503/230
	M300-20kN • M300Y-20kN
	M300-25kN • M300Y-25kN



BR216	BR316
BR225	BR325
BR240S	BR340S
BR240E	BR340E

Valve variant and accessories

for two-way and three-way valves:

- Housing connecting flanges: with groove acc. to EN 1092-1 type D, with socket acc. to EN 1092-1 type F, with spigot acc. to EN 1092-1 type E
- Body and plug seat grounded in, EN 1349 – seat-leakage IV-S1 L1 ($\leq 0.0005\%$ of kvs-value)
- Plug with soft sealing made of NBR, EPDM, PTFE; EN 1349 – seat-leakage VI G1 (tight sealing)
- Stem heater: 24 VAC, 50 Hz or 24 VDC
 $P_{max.} \approx 200 \text{ VA}$
 $P_N \approx 45 \text{ VA}$
 S1 100% ED
 IP 54
- Transformer for stem heater: 230/24 VAC, 50 Hz
- Stem seal with stainless steel bellow: for valves made of cast iron $-10^\circ\text{C} \dots +200^\circ\text{C}$
 for valves made of spheroidal graphite and cast steel $-10^\circ\text{C} \dots +350^\circ\text{C}$
 for valves made of stainless steel $-30^\circ\text{C} \dots +350^\circ\text{C}$
 Stuffing box made of graphite
 Stuffing box made of graphite
- Stuffing box extension: 100 mm
 for valves made of spheroidal graphite and cast steel $-10^\circ\text{C} \dots +350^\circ\text{C}$
 for valves made of stainless steel $-30^\circ\text{C} \dots +350^\circ\text{C}$
- Epoxy resin special varnish as a corrosion resistant in case of condensed water, max. 80°C ¹⁾
- technical silicon free version, max. 180°C
- oil and fat free for oxygen application

only for two-way valves:

- Screwed seat: for valves made of cast iron, spheroidal graphite and cast steel made of 1.4122, unhardened or hardened
 for valves made of stainless steel made of 1.4571
- Perforated plug: for valves made of cast iron, spheroidal graphite and cast steel made of 1.4057, unhardened or hardened
 for valves made of stainless steel made of 1.4571
- Housing seat SKWAM plated or Stellite 6 plated ²⁾
- Balanced plug, max. operating temperature 200°C

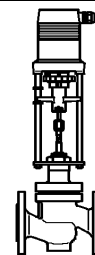
¹⁾ except valves made of stainless steel

²⁾ only for valves made of spheroidal graphite and stainless steel

01/06/2009 Data subject to change without notice

Flanged connection
PN 16 – 40
Cast iron
Spheroidal graphite
Cast steel
Stainless steel

with electric actuators
MC103/24 • MC103/230
MC163/24 • MC163/230
MC253/24 • MC253/230
MC403/24 • MC403/230
MC503/24 • MC503/230
MC1003/24 • MC1003/230
MC1503/24 • MC1503/230
M300-20kN • M300Y-20kN
M300-25kN • M300Y-25kN

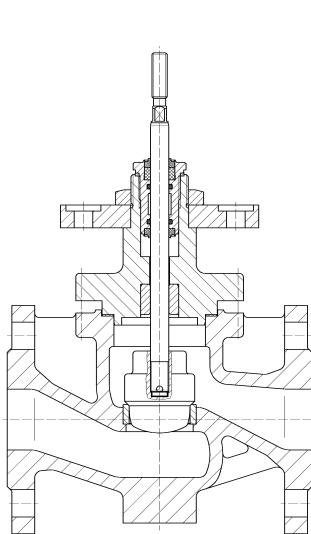


BR216
BR225
BR240S
BR240E

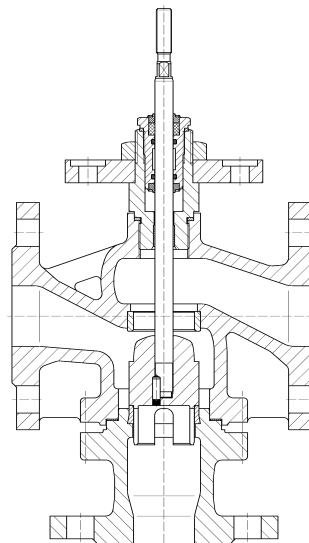


BR316
BR325
BR340S
BR340E

Drawing



BR216/225/240S/240E



BR316/325/340S/340E

Technical data actuator MC103 – MC1503

Type		MC103/24 ⁵⁾	MC103/230 ⁵⁾
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

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

²⁾ only rectified alternating voltage

³⁾ Invertible input and output signal

⁴⁾ Freely adjustable

⁵⁾ Actuator suitable for medium temperature up to 150°C

2.3.1

Phone +49 (0) 52 07 / 89 03 - 0
Fax +49 (0) 52 07 / 89 03 - 80
e-Mail b-a@hora.de
Internet www.hora-ba.com

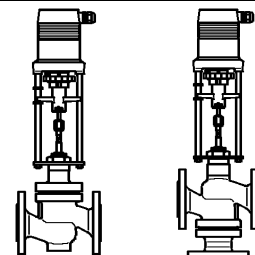
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Holter Regelarmaturen GmbH & Co. KG
Helleforthstraße 58-60
33758 Schloß Holte-Stukenbrock
Germany



Excellence is our standard

Flanged connection	with electric actuators
PN 16 – 40	MC103/24 • MC103/230
Cast iron	MC163/24 • MC163/230
Spheroidal graphite	MC253/24 • MC253/230
Cast steel	MC403/24 • MC403/230
Stainless steel	MC503/24 • MC503/230
	MC1003/24 • MC1003/230
	MC1503/24 • MC1503/230
	M300-20kN • M300Y-20kN
	M300-25kN • M300Y-25kN



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BR240E

BR316
BR325
BR340S
BR340E

Type		MC163/24	MC163/230
Actuating time ¹⁾	s/mm	6 · 4*	6 · 4*
Actuating thrust	kN	1.6	1.6
Stroke	mm	max. 30	max. 30
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

Type		MC253/24	MC253/230
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

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

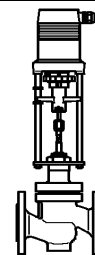
²⁾ only rectified alternating voltage

³⁾ Invertible input and output signal

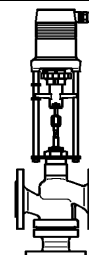
⁴⁾ Freely adjustable

01/06/2009 Data subject to change without notice

Flanged connection PN 16 – 40	with electric actuators MC103/24 • MC103/230
Cast iron	MC163/24 • MC163/230
Spheroidal graphite	MC253/24 • MC253/230
Cast steel	MC403/24 • MC403/230
Stainless steel	MC503/24 • MC503/230 MC1003/24 • MC1003/230 MC1503/24 • MC1503/230 M300-20kN • M300Y-20kN M300-25kN • M300Y-25kN



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BR240E



BR316
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BR340S
BR340E

Type		MC403/24	MC403/230
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%
Frequency	Hz	50/60 ±5%	50/60 ±5%
Power consumption	VA	max. 50	max. 63
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		MC503/24	MC503/230
Actuating time ¹⁾	s/mm	5 · 2.5*	5 · 2.*
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

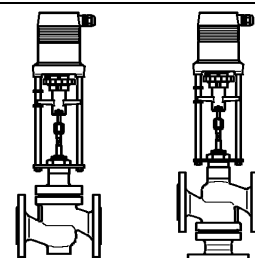
¹⁾ Actuating time freely adjustable, presetting is marked with *

²⁾ only rectified alternating voltage

³⁾ Invertible input and output signal

⁴⁾ Freely adjustable

Flanged connection	with electric actuators
PN 16 – 40	MC103/24 • MC103/230
Cast iron	MC163/24 • MC163/230
Spheroidal graphite	MC253/24 • MC253/230
Cast steel	MC403/24 • MC403/230
Stainless steel	MC503/24 • MC503/230
	MC1003/24 • MC1003/230
	MC1503/24 • MC1503/230
	M300-20kN • M300Y-20kN
	M300-25kN • M300Y-25kN



BR216	BR316
BR225	BR325
BR240S	BR340S
BR240E	BR340E

Type		MC1003/24	MC1503/24	MC1003/230	MC1503/230
Actuating time ¹⁾	s/mm	1	2	1	2
Actuating thrust	kN	10	15	10	15
Stroke	mm	max. 80		max. 80	
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 ²⁾		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 ²⁾		0...10 VDC max. 8 mA min. 1200 Ohm		0...10 VDC max. 8 mA min. 1200 Ohm	
Hysteresis ³⁾	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
	MC103	mechanical	0.095 mm
	MC163 / MC1003 / MC1503	mechanical	0.05 mm
	MC253 / MC503	mechanical	0.04 mm
	MC403	mechanical	0.12 mm

Operating mode:	MC103 / MC163 / MC253 / MC503	S3-50% ED c/h 1200	EN 60034-1
	MC403 / MC1003 / MC1503	S3-30% ED c/h 1200	EN 60034-1

End position switch-off: load-dependent

Ambient temperature:	MC103 / MC163	0...+60°C
	MC253 / MC403 / MC503 / MC1003	-10...+60°C
	MC1503	-10...+50°C

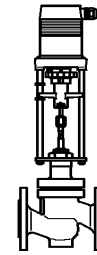
Weight:	MC103	2.5 kg
	MC163	4.0 kg
	MC253/24 and MC503/24	7.4 kg
	MC253/230 and MC503/230	8.6 kg
	MC403	9.5 kg
	MC1003 / MC1503	11.5 kg

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

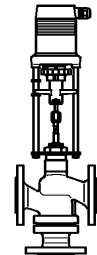
²⁾ Invertible input and output signal

³⁾ Freely adjustable

Flanged connection	with electric actuators
PN 16 – 40	MC103/24 • MC103/230
Cast iron	MC163/24 • MC163/230
Spheroidal graphite	MC253/24 • MC253/230
Cast steel	MC403/24 • MC403/230
Stainless steel	MC503/24 • MC503/230
	MC1003/24 • MC1003/230
	MC1503/24 • MC1503/230
	M300-20kN • M300Y-20kN
	M300-25kN • M300Y-25kN



BR216
BR225
BR240S
BR240E

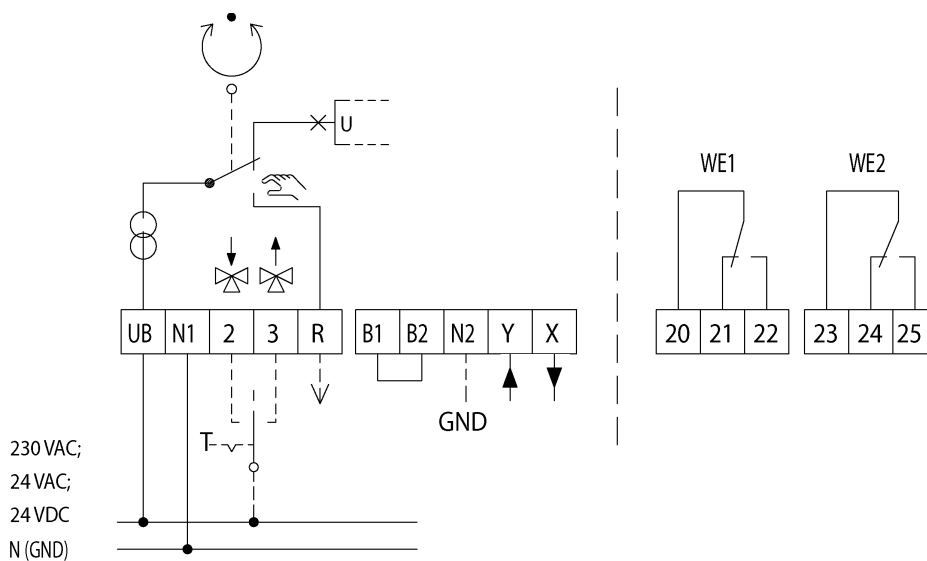


BR316
BR325
BR340S
BR340E

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

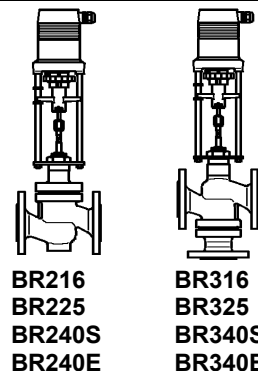
Circuit diagram MC103 / MC163



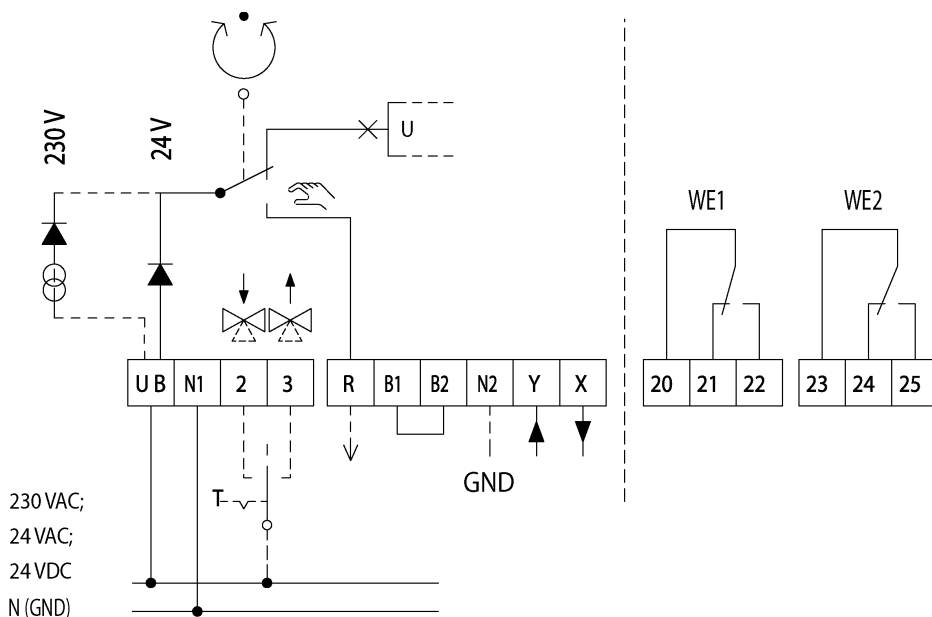
B1/B2 Connection of a binary signal (e.g. frost safety)

¹⁾ MC103/MC163: Position switch unit and output signal 0(4)...20 mA not in combination

Flanged connection	with electric actuators
PN 16 – 40	MC103/24 • MC103/230
Cast iron	MC163/24 • MC163/230
Spheroidal graphite	MC253/24 • MC253/230
Cast steel	MC403/24 • MC403/230
Stainless steel	MC503/24 • MC503/230
	MC1003/24 • MC1003/230
	MC1503/24 • MC1503/230
	M300-20kN • M300Y-20kN
	M300-25kN • M300Y-25kN



Circuit diagram MC253 / MC403 / MC503 / MC1003 / MC1503



Technical data actuator M300(Y)

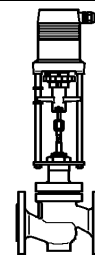
Type		M300 – 20 kN		M300Y – 20 kN	
Actuating time at 50 Hz ¹⁾	s/mm	1.2	2.4	1.2	2.4
Actuating thrust	kN	20		20	
Stroke	mm	max. 90		max. 90	
Power supply	VAC	230 ±10%		230 ±10%	
Frequency	Hz	50 or 60 ±5%		50 or 60 ±5%	
Power consumption	VA	240	170	260	190
Input signal ²⁾		3-point		0(2)...10 VDC	10 kOhm
				0(4)...20 mA ¹⁾	500 Ohm
Output signal		-		0(2)...10 VDC	max. 20 mA
				0(4)...20 mA ¹⁾	min. 500 Ohm
					max. 500 Ohm

¹⁾ Please state when ordering

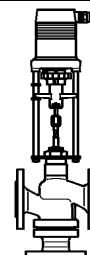
²⁾ Invertible input signal

01/06/2009 Data subject to change without notice

Flanged connection	with electric actuators
PN 16 – 40	MC103/24 • MC103/230
Cast iron	MC163/24 • MC163/230
Spheroidal graphite	MC253/24 • MC253/230
Cast steel	MC403/24 • MC403/230
Stainless steel	MC503/24 • MC503/230
	MC1003/24 • MC1003/230
	MC1503/24 • MC1503/230
	M300-20kN • M300Y-20kN
	M300-25kN • M300Y-25kN



BR216
BR225
BR240S
BR240E



BR316
BR325
BR340S
BR340E

Type		M300 – 25 kN		M300Y – 25 kN	
Actuating time at 50 Hz ¹⁾	s/mm	1.2	2.4	1.2	2.4
Actuating thrust	kN	25		25	
Stroke	mm	max. 90		max. 90	
Power supply	VAC	230 ±10%		230 ±10%	
Frequency	Hz	50 or 60 ±5%		50 or 60 ±5%	
Power consumption	VA	240	170	260	190
Input signal ²⁾		3-point		0(2)...10 VDC 10 kOhm	0(4)...20 mA ¹⁾ 500 Ohm
Output signal		-		0(2)...10 VDC	max. 20 mA min. 500 Ohm
				0(4)...20 mA ¹⁾	max. 500 Ohm

Enclosure protection: IP 65

Limit switches (motor): max. rated load: resistive load: 10 A
inductive load: 5 A

Operating mode: S4-30% ED c/h 600 EN 60034-1

End position switch-off: Two-way valves: Extending actuator spindle: load-dependent
Retracting actuator spindle: travel (WE-S3) and load-depend.
Three-way valves: Extending and retracting actuator spindle: load-dependent

Ambient temperature: 0...+60°C

Weight: 22 kg

Actuator variant and accessories

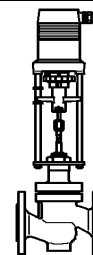
Type	M300 20 kN	M300 25 kN	M300Y 20 kN	M300Y 25 kN
Potentiometer (max. 2 pieces) 0,1 / 0,2 / 0,5 / 1 / 5 / 10 kOhm 1,5 VA	•	•		
Position switch unit 2 switches (WE-S4/WE-S5), max. 250 VAC potential free, infinitely adjustable max. rated load: resistive load 5 A inductive load 3 A filament lamp 1 A	•	•	•	•
Heater -20°C ... +60°C 230 VAC, 15 VA	•	•	•	•
Electric position indication Voltage: 24 VDC Output signal: X=0(4)...20 mA max. 500 Ohm	•	•		

¹⁾ Please state when ordering

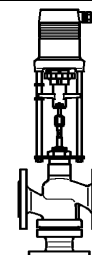
²⁾ Invertible input signal

Flanged connection
 PN 16 – 40
 Cast iron
 Spheroidal graphite
 Cast steel
 Stainless steel

with electric actuators
 MC103/24 • MC103/230
 MC163/24 • MC163/230
 MC253/24 • MC253/230
 MC403/24 • MC403/230
 MC503/24 • MC503/230
 MC1003/24 • MC1003/230
 MC1503/24 • MC1503/230
 M300-20kN • M300Y-20kN
 M300-25kN • M300Y-25kN

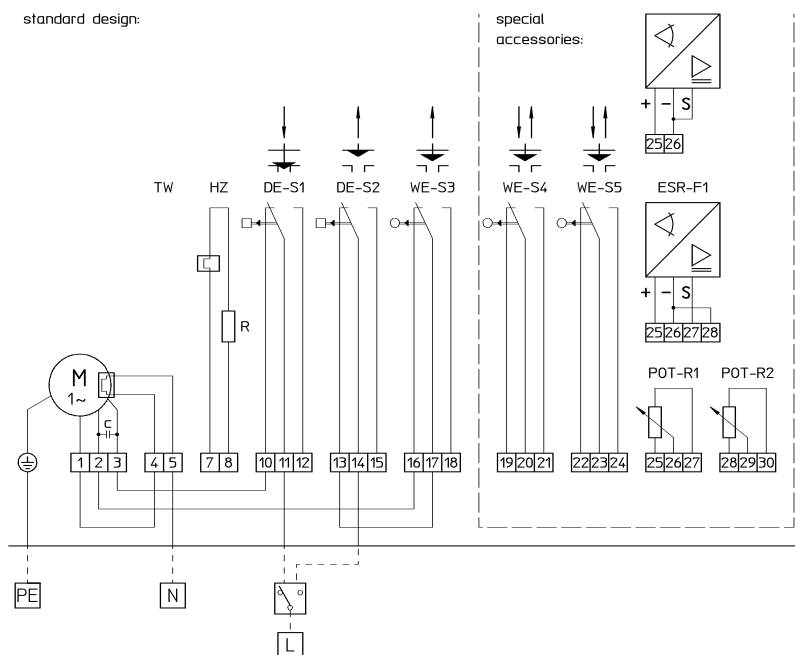


BR216
BR225
BR240S
BR240E

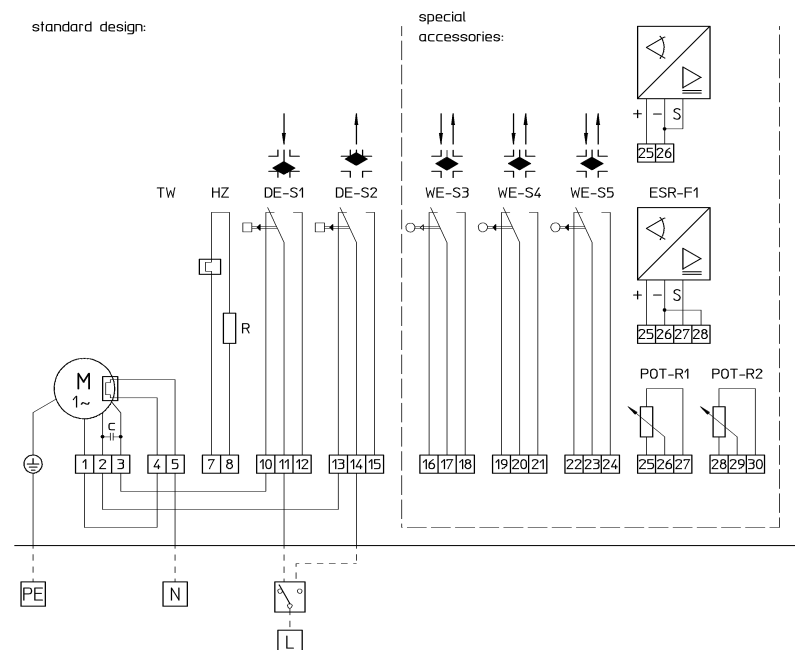


BR316
BR325
BR340S
BR340E

Circuit diagram M300 - 20 kN / M300 - 25 kN Two-way valves



Three-way valves



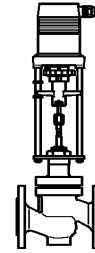
01/06/2009 Data subject to change without notice

Control valves with electric actuators up to 350°C

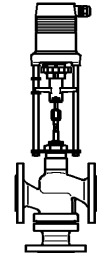
PN 16-40 **2.3.1**

Flanged connection
PN 16 – 40
Cast iron
Spheroidal graphite
Cast steel
Stainless steel

with electric actuators
MC103/24 • MC103/230
MC163/24 • MC163/230
MC253/24 • MC253/230
MC403/24 • MC403/230
MC503/24 • MC503/230
MC1003/24 • MC1003/230
MC1503/24 • MC1503/230
M300-20kN • M300Y-20kN
M300-25kN • M300Y-25kN

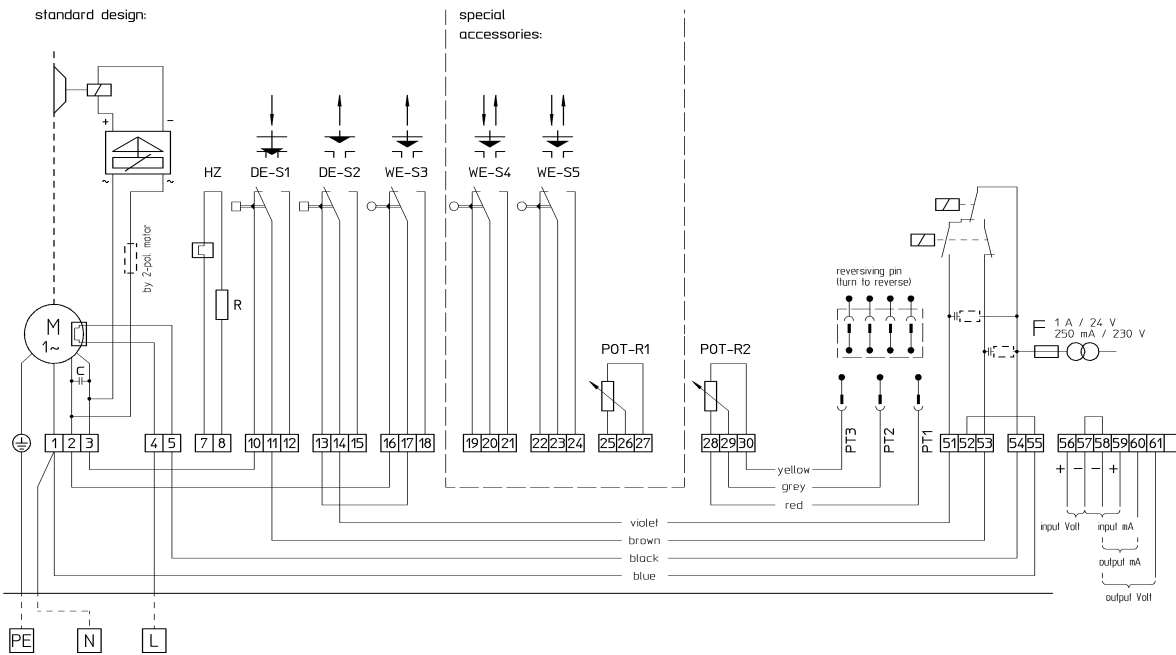


BR216
BR225
BR240S
BR240E

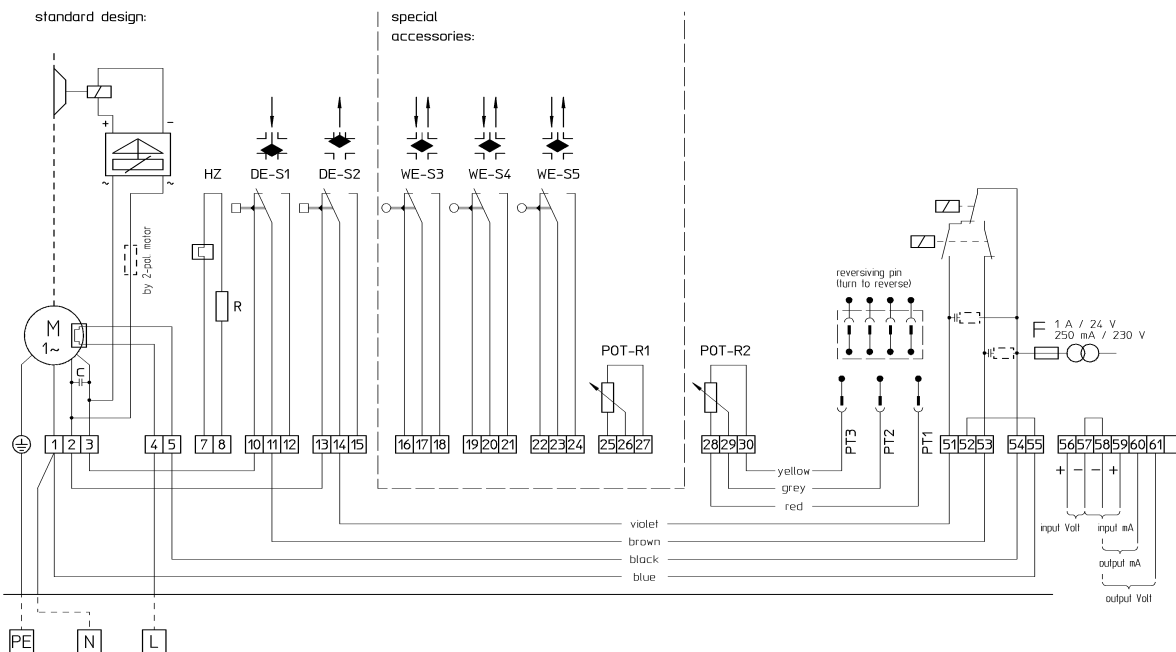


BR316
BR325
BR340S
BR340E

Circuit diagram M300Y - 20 kN / M300Y - 25 kN Two-way valves



Three-way valves



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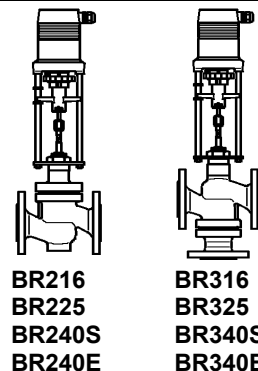
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33758 Schloß Holte-Stukenbrock
Germany



Excellence is our standard

Flanged connection	with electric actuators
PN 16 – 40	MC103/24 • MC103/230
Cast iron	MC163/24 • MC163/230
Spheroidal graphite	MC253/24 • MC253/230
Cast steel	MC403/24 • MC403/230
Stainless steel	MC503/24 • MC503/230
	MC1003/24 • MC1003/230
	MC1503/24 • MC1503/230
	M300-20kN • M300Y-20kN
	M300-25kN • M300Y-25kN



Technical data valve with actuator

PN 16 BR216

DN		125	150	200	250	300
kvs-value	m³/h	250	400	630	1000	1250
		200 ^S	315 ^S	500 ^S	800	1000
		160	250	400	630	800
		125 ^{S/L}	200 ^{S/L}	315 ^{S/L}	500 ^L	630 ^L
Stroke	mm	60			80	
MC403/ 24 MC403/ 230	t ¹⁾	s	40			
			25*			
	Δp _s	kPa	200	130		
MC503/ 24 MC503/ 230	t ¹⁾	s	300			
			150*			
	Δp _s	kPa	290	190		
MC1003/ 24 MC1003/ 230	t	s	60			80
			Δp _s	kPa	500	350
MC1503/ 24 MC1503/ 230	t	s	120			160
			Δp _s	kPa	950	700

100 kPa = 1 bar = 10 mWS
Δp_s: Closing pressure

DN		125	150	200	250	300
kvs-value	m³/h	250	400	630	1000	1600
		200 ^S	315 ^S	500 ^S	800	1250
		160	250	400	630 ^L	1000
		125 ^{S/L}	200 ^{S/L}	315 ^{S/L}	500 ^L	800 ^L
Stroke	mm	60		80	90	
M300/ M300Y 20 kN	t ²⁾	s	155		205	225
			80		105	120
	Δp _s	kPa	1400	980	540	340
M300/ M300Y 25 kN	t ²⁾	s	155		205	225
			80		105	120
	Δp _s	kPa	1600	1250	690	440

100 kPa = 1 bar = 10 mWS
Δp_s: Closing pressure

¹⁾ Actuating time freely adjustable, presetting is marked with *
²⁾ Please state when ordering
^{L)} Available with perforated plug
^{S)} Special-kvs-value

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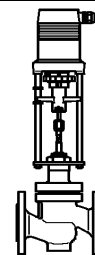
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Control valves with electric actuators up to 350°C

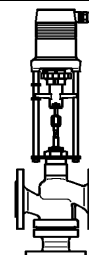
PN 16-40 **2.3.1**

Flanged connection
 PN 16 – 40
 Cast iron
 Spheroidal graphite
 Cast steel
 Stainless steel

with electric actuators
 MC103/24 • MC103/230
 MC163/24 • MC163/230
 MC253/24 • MC253/230
 MC403/24 • MC403/230
 MC503/24 • MC503/230
 MC1003/24 • MC1003/230
 MC1503/24 • MC1503/230
 M300-20kN • M300Y-20kN
 M300-25kN • M300Y-25kN



BR216
BR225
BR240S
BR240E



BR316
BR325
BR340S
BR340E

PN 16 BR316

DN	125		150		200		250		300	
kvs-value	m ³ /h	250	400	630	1000	1250				
		200	315	500	800	1000				
		160 ^S	250 ^S	400 ^S	630	800				
		125 ^S	200 ^S	315 ^S	500	630				
Stroke	mm	60				80				
MC403/ 24 MC403/ 230	t ¹⁾	s	40							
			25*							
MC503/ 24 MC503/ 230	t ¹⁾	s	300							
			150*							
MC1003/ 24 MC1003/ 230	t	s	60		80					
			Δp _s	kPa	500	350	200	100		
MC1503/ 24 MC1503/ 230	t	s	120		160					
			Δp _s	kPa	950	700	370	220	150	

PN 16 BR316

DN	125		150		200		250		300	
kvs-value	m ³ /h	250	400	630	1000	1600				
		200	315	500	800	1250				
		160 ^S	250 ^S	400 ^S	630	1000				
		125 ^S	200 ^S	315 ^S	500	800				
Stroke	mm	60		80		90				
M300/ M300Y 20 kN	t ¹⁾	s	155		205		225			
			80		105		120			
M300/ M300Y 25 kN	t ¹⁾	s	155		205		225			
			80		105		120			
	Δp _s	kPa	1400		980		540		340	
			1600		1250		690		440	

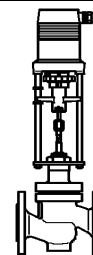
100 kPa = 1 bar = 10 mWS
 Δp_s: Closing pressure

¹⁾ Please state when ordering
^{S)} Special-kvs-value

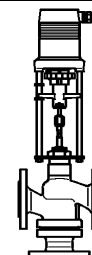
Control valves with electric actuators up to 350°C

PN 16-40 **2.3.1**

Flanged connection	with electric actuators
PN 16 – 40	MC103/24 • MC103/230
Cast iron	MC163/24 • MC163/230
Spheroidal graphite	MC253/24 • MC253/230
Cast steel	MC403/24 • MC403/230
Stainless steel	MC503/24 • MC503/230
	MC1003/24 • MC1003/230
	MC1503/24 • MC1503/230
	M300-20kN • M300Y-20kN
	M300-25kN • M300Y-25kN



BR216
BR225
BR240S
BR240E



BR316
BR325
BR340S
BR340E

PN 16 / PN 25 / PN 40 BR225

DN	15	15	20	25	32	40	50	65 ²⁾	80	100 ²⁾	125 ²⁾	150 ³⁾	200 ⁴⁾							
kvs-value	4 ^L	2.5 1.6 1.25 1.0 0.63 0.4 0.25 0.16	6.3 ^L 5 ^{S/L} 4 ^L 2.5 ^{S/L}	10 8 ^{S/L} 6.3 ^L 5 ^{S/L}	16 12.5 ^S 10 ^L 8 ^{S/L}	25 20 ^S 16 ^L 12.5 ^{S/L}	40 31.5 ^S 25 ^L 20 ^{S/L}	63 50 ^S 40 ^L 31.5 ^{S/L}	100 80 ^S 63 ^L 50 ^{S/L}	160 125 ^S 100 ^L 80 ^{S/L}	250 200 ^S 160 125 ^{S/L}	400 315 ^S 250 200 ^{S/L}	630 500 ^S 400 315 ^{S/L}							
Stroke	20						30		50		60									
MC103/ 24 MC103/ 230	t ¹⁾	s	240																	
			180																	
			80*																	
			40																	
	Δp _s	kPa	1250	3500	1250	1050	600	350												
MC163/ 24 MC163/ 230	t ¹⁾	s	120						180											
			80*						120*											
			Δp _s	kPa	2400	4000	2400	2050	1250	750	450	300								
MC253/ 24 MC253/ 230	t ¹⁾	s	100						150		250									
			50*						75*		125*									
			Δp _s	kPa	4000	4000	4000	3500	2200	1400	850	540	350	200						
MC403/ 24 MC403/ 230	t ¹⁾	s	15						20		30		40							
			10*						15*		20*		25*							
			Δp _s	kPa	4000	4000	4000	4000	3700	2400	1500	950	650	400	200	130				
MC503/ 24 MC503/ 230	t ¹⁾	s	100						150		250		300							
			50*						75*		125*		150*							
			Δp _s	kPa	4000	4000	4000	4000	4000	3150	1950	1250	850	500	290	190				
MC1003/ 24	t	s							30		50		60							
MC1003/ 230	Δp _s	kPa							2150		1500		950		500		350		200	
MC1503/ 24	t	s													120					
MC1503/ 230	Δp _s	kPa													950		700		370	

100 kPa = 1 bar = 10 mWS

Δp_s: Closing pressure

The closing pressure is limited by the nominal pressure.

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

²⁾ PN 16 or PN25-40

³⁾ PN 16 or PN25

⁴⁾ PN 16

^{L)} Available with perforated plug

^{S)} Special-kvs-value

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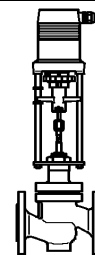


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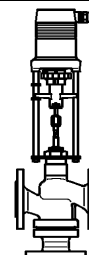
Control valves with electric actuators up to 350°C

PN 16-40 **2.3.1**

Flanged connection	with electric actuators
PN 16 – 40	MC103/24 • MC103/230
Cast iron	MC163/24 • MC163/230
Spheroidal graphite	MC253/24 • MC253/230
Cast steel	MC403/24 • MC403/230
Stainless steel	MC503/24 • MC503/230
	MC1003/24 • MC1003/230
	MC1503/24 • MC1503/230
	M300-20kN • M300Y-20kN
	M300-25kN • M300Y-25kN



BR216
BR225
BR240S
BR240E



BR316
BR325
BR340S
BR340E

PN 16 / PN 25 / PN 40 BR225

DN			125 ²⁾	150 ³⁾	200 ⁴⁾
kvs-value	m ³ /h		250	400	630
			200 ⁵⁾	315 ⁵⁾	500 ⁵⁾
			160	250	400
			125 ^{S/L}	200 ^{S/L}	315 ^{S/L}
Stroke		mm	60		80
M300/ M300Y 20 kN	t ¹⁾	s	155		205
			80		105
	Δp _s	kPa	1400	980	540
M300/ M300Y 25 kN	t ¹⁾	s	155		205
			80		105
	Δp _s	kPa	1800	1250	690

100 kPa = 1 bar = 10 mWS

Δp_s: Closing pressure

The closing pressure is limited by the nominal pressure.

¹⁾ Please state when ordering

²⁾ PN 16 or PN25-40

³⁾ PN 16 or PN25

⁴⁾ PN 16

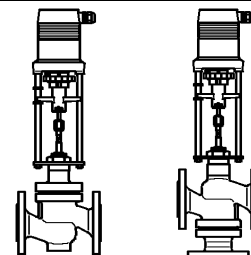
^{L)} Available with perforated plug

⁵⁾ Special-kvs-value

Control valves with electric actuators up to 350°C

PN 16-40 **2.3.1**

Flanged connection	with electric actuators
PN 16 – 40	MC103/24 • MC103/230
Cast iron	MC163/24 • MC163/230
Spheroidal graphite	MC253/24 • MC253/230
Cast steel	MC403/24 • MC403/230
Stainless steel	MC503/24 • MC503/230
	MC1003/24 • MC1003/230
	MC1503/24 • MC1503/230
	M300-20kN • M300Y-20kN
	M300-25kN • M300Y-25kN



BR216
BR225
BR240S
BR240E

BR316
BR325
BR340S
BR340E

PN 16 / PN 25 / PN 40 BR325

DN	15	20	25	32	40	50	65 ²⁾	80	100 ²⁾	125 ²⁾	150 ³⁾	200 ⁴⁾	
kvs-value	m ³ /h	4	6.3	10	16	25	40	63	100	160	250	400	630
		2.5	5	8	12.5	20	31.5	50	80	125	200	315	500
Stroke	mm	20				30			50		60		
		240				180			80*		40		
MC103/ 24 MC103/ 230	t ¹⁾	s	80*				40						
	Δp _s	kPa	1250	1250	1050	600	350						
MC163/ 24 MC163/ 230	t ¹⁾	s	120				180						
	Δp _s	kPa	2400	2400	2050	1250	750	450	300				
MC253/ 24 MC253/ 230	t ¹⁾	s	100				150			250			
	Δp _s	kPa	4000	4000	3500	2200	1400	850	540	350	200		
MC403/ 24 MC403/ 230	t ¹⁾	s	15				20			30		40	
	Δp _s	kPa	4000	4000	4000	3700	2400	1500	950	650	400	200	130
MC503/ 24 MC503/ 230	t ¹⁾	s	100				150			250		300	
	Δp _s	kPa	4000	4000	4000	4000	3150	1950	1250	850	500	290	190
MC1003/ 24 MC1003/ 230	t	s					30			50		60	
	Δp _s	kPa					2150			1500	950	500	350
MC1503/ 24 MC1503/ 230	t	s										120	
	Δp _s	kPa										950	700

100 kPa = 1 bar = 10 mWS

Δp_s: Closing pressure

The closing pressure is limited by the nominal pressure.

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

²⁾ PN 16 or PN25-40

³⁾ PN 16 or PN25

⁴⁾ PN 16

⁵⁾ Special-kvs-value

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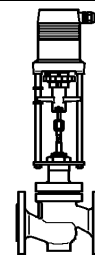


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Control valves with electric actuators up to 350°C

PN 16-40 **2.3.1**

Flanged connection	with electric actuators
PN 16 – 40	MC103/24 • MC103/230
Cast iron	MC163/24 • MC163/230
Spheroidal graphite	MC253/24 • MC253/230
Cast steel	MC403/24 • MC403/230
Stainless steel	MC503/24 • MC503/230
	MC1003/24 • MC1003/230
	MC1503/24 • MC1503/230
	M300-20kN • M300Y-20kN
	M300-25kN • M300Y-25kN



BR216
BR225
BR240S
BR240E



BR316
BR325
BR340S
BR340E

PN 16 / PN 25 / PN 40 BR325

DN			125 ²⁾	150 ³⁾	200 ⁴⁾
kvs-value	m ³ /h		250	400	630
			200	315	500
			160 ^S	250 ^S	400 ^S
			125 ^S	200 ^S	315 ^S
Stroke	mm	60			80
M300/ M300Y 20 kN	t ¹⁾	s	155		
			80		
	Δp _s	kPa	1400	980	540
M300/ M300Y 25 kN	t ¹⁾	s	155		
			80		
	Δp _s	kPa	1800	1250	690

100 kPa = 1 bar = 10 mWS

Δp_s: Closing pressure

The closing pressure is limited by the nominal pressure.

¹⁾ Please state when ordering

²⁾ PN 16 or PN25-40

³⁾ PN 16 or PN25

⁴⁾ PN 16

⁵⁾ Special-kvs-value

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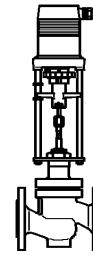


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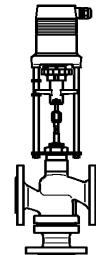
Control valves with electric actuators up to 350°C

PN 16-40 **2.3.1**

Flanged connection	with electric actuators
PN 16 – 40	MC103/24 • MC103/230
Cast iron	MC163/24 • MC163/230
Spheroidal graphite	MC253/24 • MC253/230
Cast steel	MC403/24 • MC403/230
Stainless steel	MC503/24 • MC503/230
	MC1003/24 • MC1003/230
	MC1503/24 • MC1503/230
	M300-20kN • M300Y-20kN
	M300-25kN • M300Y-25kN



BR216
BR225
BR240S
BR240E



BR316
BR325
BR340S
BR340E

PN 40 BR240S / BR240E

DN	15	15	20	25	32	40	50	65	80	100	125	150	200	250	300									
kvs-value	4 ^L	2.5 1.6 1.25 1.0 0.63 0.4 0.25 0.16	6.3 ^L 5 ^{S/L} 4 ^L 2.5 ^{S/L}	10 8 ^{S/L} 6.3 ^L 5 ^{S/L}	16 12.5 ^S 10 ^L 8 ^{S/L}	25 20 ^S 16 ^L 12.5 ^{S/L}	40 31.5 ^S 25 ^L 20 ^{S/L}	63 50 ^S 40 ^L 31.5 ^{S/L}	100 80 ^S 63 ^L 50 ^{S/L}	160 125 ^S 100 ^L 80 ^{S/L}	250 200 ^S 160 125 ^{S/L}	400 315 ^S 250 200 ^{S/L}	630 500 ^S 400 315 ^{S/L}	1000 800 630 500 ^L 400 ^L	1250 1000 800 630 ^L									
Stroke	20						30		50		60			80										
MC103/24 MC103/230	t ¹⁾	s	240																					
			180																					
	80*																							
	40																							
Δp _s	kPa	1250	3500	1250	1050	600	350																	
MC163/24 MC163/230	t ¹⁾	s	120						180															
			80*						120*															
	Δp _s	kPa	2400	4000	2400	2050	1250	750	450	300														
MC253/24 MC253/230	t ¹⁾	s	100						150		250													
			50*						75*		125*													
	Δp _s	kPa	4000	4000	4000	3500	2200	1400	850	540	350	200												
MC403/24 MC403/230	t ¹⁾	s	15						20		30		40											
			10*						15*		20*		25*											
	Δp _s	kPa	4000	4000	4000	4000	3700	2400	1500	950	650	400	200	130										
MC503/24 MC503/230	t ¹⁾	s	100						150		250		300											
			50*						75*		125*		150*											
	Δp _s	kPa	4000	4000	4000	4000	4000	3150	1950	1250	850	500	290	190										
MC1003/24	t	s							30		50		60		80									
MC1003/230	Δp _s	kPa							2150		1500		950		500		350		200		100			
MC1503/24	t	s													120		160							
MC1503/230	Δp _s	kPa													950		700		370		220		150	

100 kPa = 1 bar = 10 mWS
Δp_s: Closing pressure

¹⁾ Actuating time freely adjustable, presetting is marked with *
^{L)} Available with perforated plug
^{S)} Special-kvs-value

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Germany



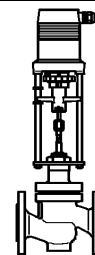
Excellence is our standard

Control valves with electric actuators up to 350°C

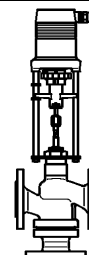
PN 16-40 **2.3.1**

Flanged connection
 PN 16 – 40
 Cast iron
 Spheroidal graphite
 Cast steel
 Stainless steel

with electric actuators
 MC103/24 • MC103/230
 MC163/24 • MC163/230
 MC253/24 • MC253/230
 MC403/24 • MC403/230
 MC503/24 • MC503/230
 MC1003/24 • MC1003/230
 MC1503/24 • MC1503/230
 M300-20kN • M300Y-20kN
 M300-25kN • M300Y-25kN



BR216
BR225
BR240S
BR240E



BR316
BR325
BR340S
BR340E

PN 40 BR240S / BR240E

DN	125		150		200		250		300	
kvs-value	m ³ /h	250	400	630	1000	1600				
		200 ^S	315 ^S	500 ^S	800	1250				
		160	250	400	630 ^L	1000				
		125 ^{S/L}	200 ^{S/L}	315 ^{S/L}	500 ^L	800 ^L				
Stroke	mm		60		80		90			
M300/ M300Y 20 kN	t ¹⁾	s	155		205		225			
			80		105		120			
	Δp _s	kPa	1400	980	540	340	240			
M300/ M300Y 25 kN	t ¹⁾	s	155		205		225			
			80		105		120			
	Δp _s	kPa	1800	1250	690	440	300			

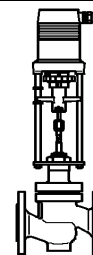
100 kPa = 1 bar = 10 mWS
 Δp_s: Closing pressure

¹⁾ Please state when ordering
^{L)} Available with perforated plug
^{S)} Special-kvs-value

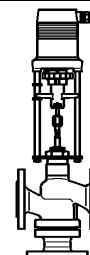
Control valves with electric actuators up to 350°C

PN 16-40 **2.3.1**

Flanged connection	with electric actuators
PN 16 – 40	MC103/24 • MC103/230
Cast iron	MC163/24 • MC163/230
Spheroidal graphite	MC253/24 • MC253/230
Cast steel	MC403/24 • MC403/230
Stainless steel	MC503/24 • MC503/230
	MC1003/24 • MC1003/230
	MC1503/24 • MC1503/230
	M300-20kN • M300Y-20kN
	M300-25kN • M300Y-25kN



BR216
BR225
BR240S
BR240E



BR316
BR325
BR340S
BR340E

PN 40 R340S / BR340E

DN	15	20	25	32	40	50	65	80	100	125	150	200	250	300		
kvs-value	4	6.3	10	16	25	40	63	100	160	250	400	630	1000	1250		
	2.5 ^s	5 ^s 4 ^s 2.5 ^s	8 ^s 6.3 ^s 5 ^s	12.5 ^s 10 ^s 8 ^s	20 ^s 16 ^s 12.5 ^s	31.5 ^s 25 ^s 20 ^s	50 ^s 40 ^s 31.5 ^s	80 ^s 63 ^s 50 ^s	125 ^s 100 ^s 80 ^s	200 ^s 160 ^s 125 ^s	315 ^s 250 ^s 200 ^s	500 ^s 400 ^s 315 ^s	800 ^s 630 ^s 500 ^s	1000 ^s 800 ^s 630 ^s	1250 ^s 1000 ^s 800 ^s	
Stroke	20				30			50		60			80			
MC103/ 24 MC103/ 230	t ¹⁾	s	240													
			180													
	80*															
	40															
Δp _s	kPa	1250	1250	1050	600	350										
MC163/ 24 MC163/ 230	t ¹⁾	s	120				180									
			80*				120*									
Δp _s	kPa	2400	2400	2050	1250	750	450	300								
MC253/ 24 MC253/ 230	t ¹⁾	s	100				150			250						
			50*				75*			125*						
Δp _s	kPa	4000	4000	3500	2200	1400	850	540	350	200						
MC403/ 24 MC403/ 230	t ¹⁾	s	15				20			30		40				
			10*				15*			20*		25*				
Δp _s	kPa	4000	4000	4000	3700	2400	1500	950	650	400	200	130				
MC503/ 24 MC503/ 230	t ¹⁾	s	100				150			250		300				
			50*				75*			125*		150*				
Δp _s	kPa	4000	4000	4000	4000	3150	1950	1250	880	540	290	190				
MC1003/ 24 MC1003/ 230	t	s					30			50		60		80		
										2150		1500		950		500
Δp _s	kPa								2150		1500		950		500	
MC1503/ 24 MC1503/ 230	t	s										120		160		
												950		700		370
Δp _s	kPa										950		700		370	

100 kPa = 1 bar = 10 mWS
Δp_s: Closing pressure

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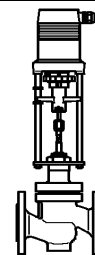
¹⁾ Actuating time freely adjustable, presetting is marked with *
^{s)} Special-kvs-value

Control valves with electric actuators up to 350°C

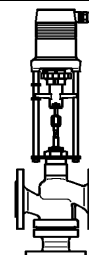
PN 16-40 **2.3.1**

Flanged connection
 PN 16 – 40
 Cast iron
 Spheroidal graphite
 Cast steel
 Stainless steel

with electric actuators
 MC103/24 • MC103/230
 MC163/24 • MC163/230
 MC253/24 • MC253/230
 MC403/24 • MC403/230
 MC503/24 • MC503/230
 MC1003/24 • MC1003/230
 MC1503/24 • MC1503/230
 M300-20kN • M300Y-20kN
 M300-25kN • M300Y-25kN



BR216
BR225
BR240S
BR240E



BR316
BR325
BR340S
BR340E

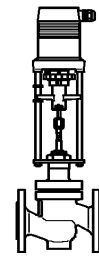
PN 40 BR340S / BR340E

DN	125		150		200		250		300		
kvs-value	m ³ /h	250	400	630	1000	1600					
		200	315	500	800	1250					
		160 ^S	250 ^S	400 ^S	630	1000					
		125 ^S	200 ^S	315 ^S	500	800					
Stroke	mm	60		80	90						
M300/ M300Y 20 kN	t ¹⁾	s	155		205	225					
			80		105	120					
	Δp _s	kPa	1400	980	540	340	240				
M300/ M300Y 25 kN	t ¹⁾	s	155		205	225					
			80		105	120					
	Δp _s	kPa	1800	1250	690	440	300				

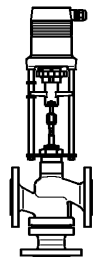
100 kPa = 1 bar = 10 mWS
 Δp_s: Closing pressure

¹⁾ Please state when ordering
^{S)} Special-kvs-value

Flanged connection	with electric actuators
PN 16 – 40	MC103/24 • MC103/230
Cast iron	MC163/24 • MC163/230
Spheroidal graphite	MC253/24 • MC253/230
Cast steel	MC403/24 • MC403/230
Stainless steel	MC503/24 • MC503/230
	MC1003/24 • MC1003/230
	MC1503/24 • MC1503/230
	M300-20kN • M300Y-20kN
	M300-25kN • M300Y-25kN

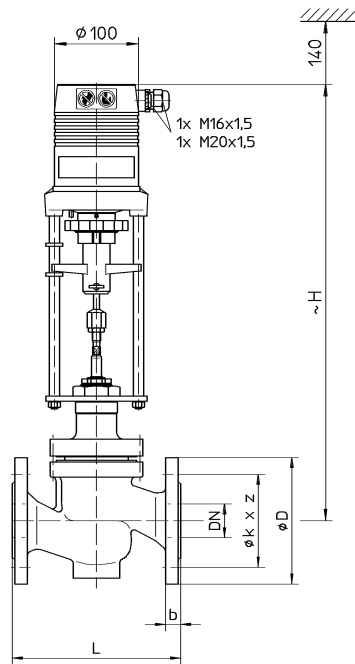


**BR216
BR225
BR240S
BR240E**

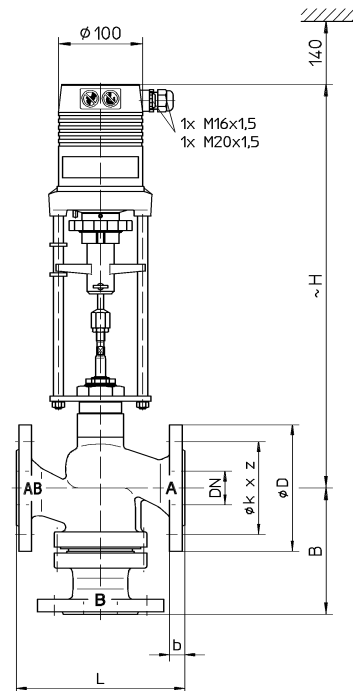


**BR316
BR325
BR340S
BR340E**

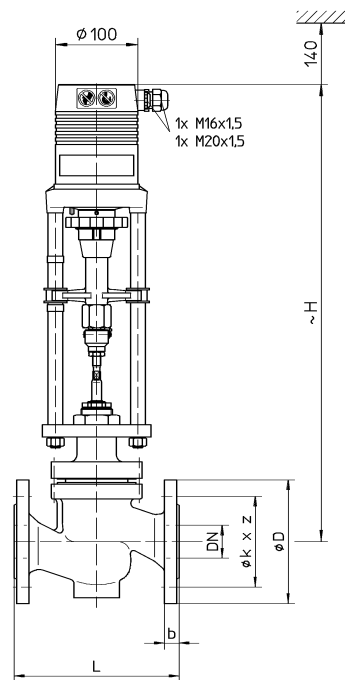
Drawing



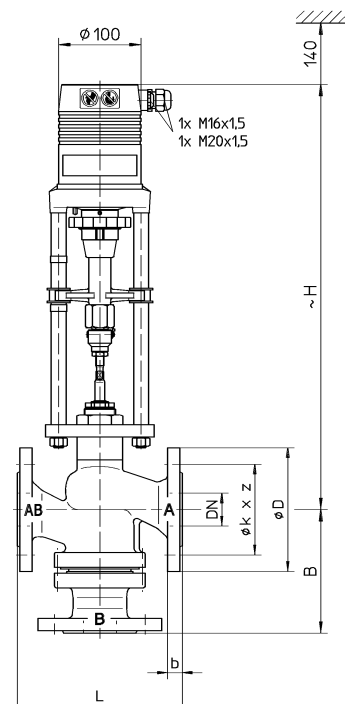
BR2... MC103



BR3... MC103



BR2... MC163



BR3... MC163

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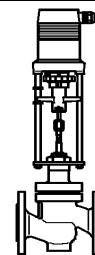
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Control valves with electric actuators up to 350°C

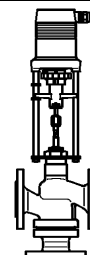
PN 16-40 **2.3.1**

Flanged connection
PN 16 – 40
Cast iron
Spheroidal graphite
Cast steel
Stainless steel

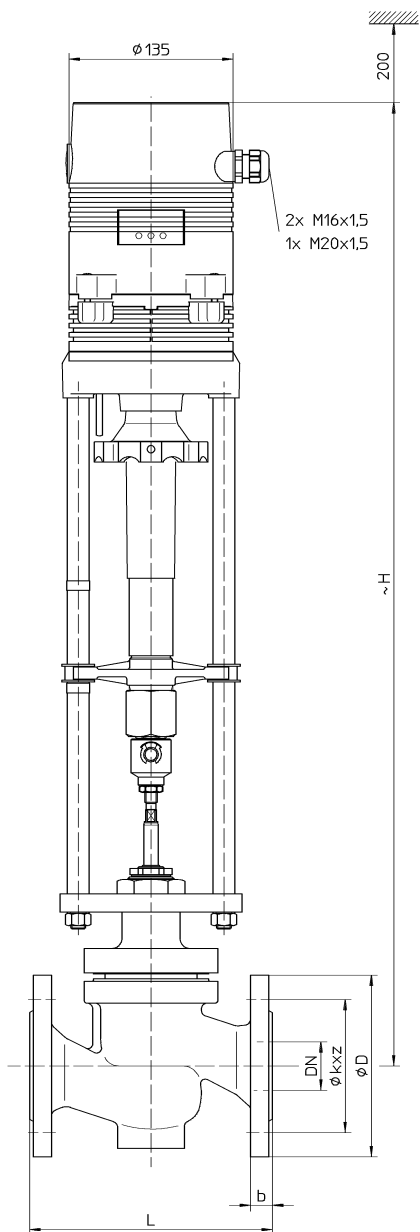
with electric actuators
MC103/24 • MC103/230
MC163/24 • MC163/230
MC253/24 • MC253/230
MC403/24 • MC403/230
MC503/24 • MC503/230
MC1003/24 • MC1003/230
MC1503/24 • MC1503/230
M300-20kN • M300Y-20kN
M300-25kN • M300Y-25kN



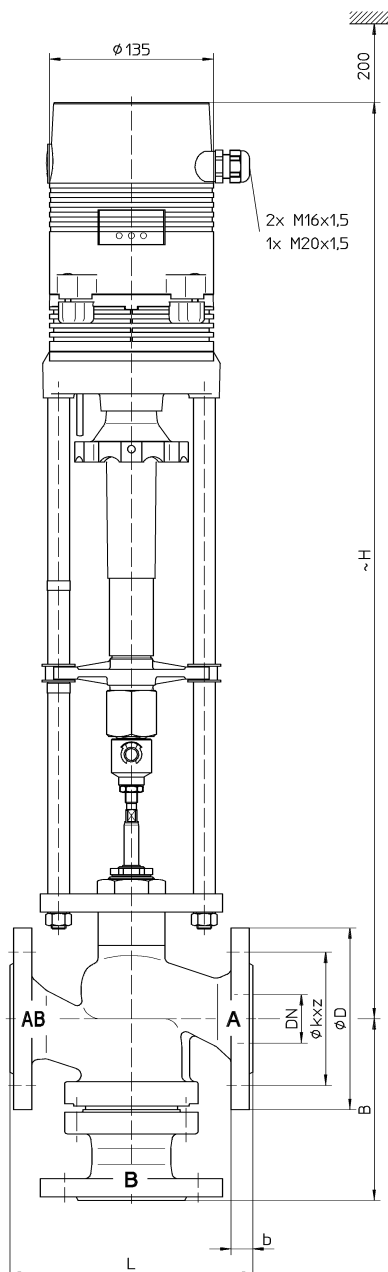
BR216
BR225
BR240S
BR240E



BR316
BR325
BR340S
BR340E



BR2... MC253
MC403
MC503
MC1003
MC1503



BR3... MC253
MC403
MC503
MC1003
MC1503

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2.3.1
24/29

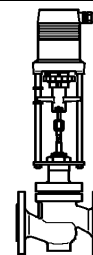
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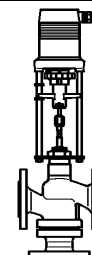


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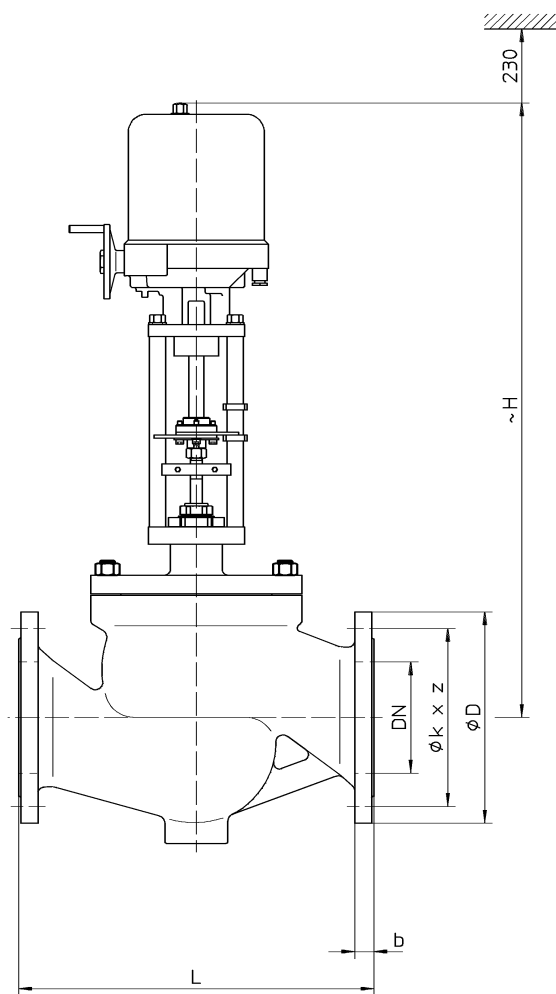
Flanged connection	with electric actuators
PN 16 – 40	MC103/24 • MC103/230
Cast iron	MC163/24 • MC163/230
Spheroidal graphite	MC253/24 • MC253/230
Cast steel	MC403/24 • MC403/230
Stainless steel	MC503/24 • MC503/230
	MC1003/24 • MC1003/230
	MC1503/24 • MC1503/230
	M300-20kN • M300Y-20kN
	M300-25kN • M300Y-25kN



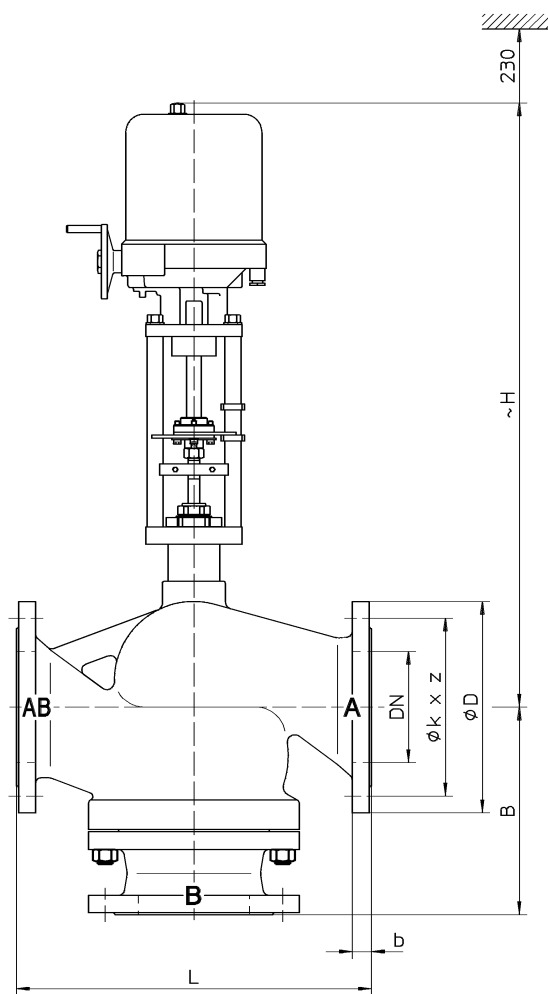
BR216
BR225
BR240S
BR240E



BR316
BR325
BR340S
BR340E



BR2... M300(Y)



BR3... M300(Y)

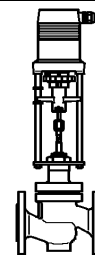
Installation instruction:

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

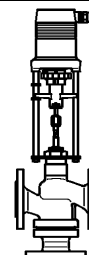
01/06/2009 Data subject to change without notice

Flanged connection
PN 16 – 40
Cast iron
Spheroidal graphite
Cast steel
Stainless steel

with electric actuators
MC103/24 • MC103/230
MC163/24 • MC163/230
MC253/24 • MC253/230
MC403/24 • MC403/230
MC503/24 • MC503/230
MC1003/24 • MC1003/230
MC1503/24 • MC1503/230
M300-20kN • M300Y-20kN
M300-25kN • M300Y-25kN



**BR216
BR225
BR240S
BR240E**



**BR316
BR325
BR340S
BR340E**

Dimension

BR216/BR316 and BR225/BR325

DN		15	20	25	32	40	50	65	80	100	125	150	200 ¹⁾	250 ¹⁾	300 ¹⁾	
L	mm	130	150	160	180	200	230	290	310	350	400	480	600	730	850	
B	mm	130	130	130	150	150	160	170	215	215	260	280	400	450	550	
PN 16	∅ D	mm	95	105	115	140	150	165	185	200	220	250	285	340	405	460
	∅ k	mm	65	75	85	100	110	125	145	160	180	210	240	295	355	410
	z	mm	4x ∅14			4x ∅18				8x ∅18			8x ∅22	12x ∅22	12x ∅26	
	b	mm	16	16	18	18	18	20	20	20	22	24	24	30	32	32
PN 25	∅ D	mm	95	105	115	140	150	165	185	200	235	270	300			
	∅ k	mm	65	75	85	100	110	125	145	160	190	220	250			
	z	mm	4x ∅14			4x ∅18				8x ∅18	8x ∅22	8x ∅26				
	b	mm	16	16	18	18	18	20	20	20	22	24	24			
MC103 24 VAC	BR2...	mm	500	500	500	515	515									
	BR3...	mm	460	460	465	475	475									
MC103 230 VAC	BR2...	mm	525	525	525	540	540									
	BR3...	mm	485	485	490	500	500									
MC163 24 VAC	BR2...	mm	552	537	537	567	567	577	587							
	BR3...	mm	512	512	517	527	527	537	552							
MC163 230 VAC	BR2...	mm	577	577	577	592	592	602	612							
	BR3...	mm	537	537	542	552	552	562	577							
MC253	BR2...	mm	725	725	725	740	740	750	760	860	905					
	BR3...	mm	685	685	690	700	700	710	725	840	870					
H MC403	BR2...	mm	775	775	775	790	790	800	810	905	950	975	1000			
	BR3...	mm	735	735	740	750	750	760	775	885	915	920	940			
MC503	BR2...	mm	725	725	725	740	740	750	760	860	905	930	955			
	BR3...	mm	685	685	690	700	700	710	725	840	870	875	895			
MC1003	BR2...	mm							935	950	995	1020	1045	1150	1210	
	BR3...	mm							900	930	960	965	985	1100	1155	
MC1503	BR2...	mm										1020	1045	1150	1210	1270
	BR3...	mm										965	985	1100	1155	1210
M300(Y)	BR2...	mm										900	925	990	1045	1105
	BR3...	mm										885	905	980	1030	1085

¹⁾ PN 16

2.3.1
26/29

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Internet www.hora-ba.com

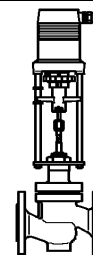
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Germany



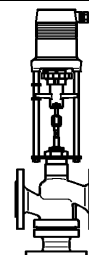
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Flanged connection
 PN 16 – 40
 Cast iron
 Spheroidal graphite
 Cast steel
 Stainless steel

with electric actuators
 MC103/24 • MC103/230
 MC163/24 • MC163/230
 MC253/24 • MC253/230
 MC403/24 • MC403/230
 MC503/24 • MC503/230
 MC1003/24 • MC1003/230
 MC1503/24 • MC1503/230
 M300-20kN • M300Y-20kN
 M300-25kN • M300Y-25kN



**BR216
 BR225
 BR240S
 BR240E**



**BR316
 BR325
 BR340S
 BR340E**

BR240S / BR340S and BR240E / BR340E

DN		15	20	25	32	40	50	65	80	100	125	150	200	250	300	
L	mm	130	150	160	180	200	230	290	310	350	400	480	600	730	850	
B	mm	130	130	130	150	150	160	170	215	215	260	280	400	450	550	
PN 16	∅ D	mm	95	105	115	140	150	165	185	200	220	250	285	340	405	460
	∅ k	mm	65	75	85	100	110	125	145	160	180	210	240	295	355	410
	z	mm	4x ∅14			4x ∅18				8x ∅18			8x ∅22	12x ∅22	12x ∅26	
	b	mm	16	18	18	18	18	20	18	20	20	22	22	24	26	28
PN 25	∅ D	mm	95	105	115	140	150	165	185	200	235	270	300	360	425	485
	∅ k	mm	65	75	85	100	110	125	145	160	190	220	250	310	370	430
	z	mm	4x ∅14			4x ∅18				8x ∅18	8x ∅22	8x ∅26		12x ∅26	12x ∅30	16x ∅30
	b	mm	16	18	18	18	18	20	22	24	24	26	28	30	32	34
PN 40	∅ D	mm	95	105	115	140	150	165	185	200	235	270	300	375	450	515
	∅ k	mm	65	75	85	100	110	125	145	160	190	220	250	320	385	450
	z	mm	4x ∅14			4x ∅18				8x ∅18	8x ∅22	8x ∅26		12x ∅30	12x ∅33	16x ∅33
	b	mm	16	18	18	18	18	20	22	24	24	26	28	34	38	42
MC103 24 VAC	BR2...	mm	500	500	500	515	515									
	BR3...	mm	460	460	465	475	475									
MC103 230 VAC	BR2...	mm	525	525	525	540	540									
	BR3...	mm	485	485	490	500	500									
MC163 24 VAC	BR2...	mm	552	537	537	567	567	577	587							
	BR3...	mm	512	512	517	527	527	537	552							
MC163 230 VAC	BR2...	mm	577	577	577	592	592	602	612							
	BR3...	mm	537	537	542	552	552	562	577							
MC253	BR2...	mm	725	725	725	740	740	750	760	860	905					
	BR3...	mm	685	685	690	700	700	710	725	840	870					
H MC403	BR2...	mm	775	775	775	790	800	800	810	905	950	975	1000			
	BR3...	mm	735	735	740	750	750	760	775	885	915	920	940			
MC503	BR2...	mm	725	725	725	740	740	750	760	860	905	930	955			
	BR3...	mm	685	685	690	700	700	710	725	840	870	875	895			
MC1003	BR2...	mm							935	950	995	1020	1045	1150	1210	
	BR3...	mm							900	930	960	965	985	1100	1155	
MC1503	BR2...	mm										1020	1045	1150	1210	1270
	BR3...	mm										965	985	1100	1155	1210
M300(Y)	BR2...	mm										900	925	990	1045	1105
	BR3...	mm										885	905	980	1030	1085

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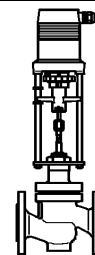
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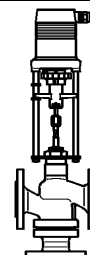


Excellence is our standard

Flanged connection	with electric actuators
PN 16 – 40	MC103/24 • MC103/230
Cast iron	MC163/24 • MC163/230
Spheroidal graphite	MC253/24 • MC253/230
Cast steel	MC403/24 • MC403/230
Stainless steel	MC503/24 • MC503/230
	MC1003/24 • MC1003/230
	MC1503/24 • MC1503/230
	M300-20kN • M300Y-20kN
	M300-25kN • M300Y-25kN



**BR216
BR225
BR240S
BR240E**



**BR316
BR325
BR340S
BR340E**

Weight

PN 16 / PN 25

DN			15	20	25	32	40	50	65	80	100	125	150	200	250	300
MC103	BR2...	kg	6.5	8.5	9.5	10.5	13.5									
	BR3...	kg	7.5	8.5	10.5	12.5	14.5									
MC163	BR2...	kg	8	10	11	12	15	17	21							
	BR3...	kg	9	10	12	14	16	20	24							
MC253 24 VAC	BR2...	kg	11.4	13.4	14.4	15.4	18.4	20.4	24.4	37.4	49.4					
	BR3...	kg	12.4	14.4	15.4	17.4	19.4	23.4	27.4	41.4	52.4					
MC253 230 VAC	BR2...	kg	12.6	14.6	15.6	16.6	19.6	21.6	25.6	38.6	50.6					
	BR3...	kg	13.6	15.6	16.6	18.6	20.6	24.6	28.6	42.6	53.6					
MC403	BR2...	kg	13.5	15.5	16.5	17.5	20.5	22.5	26.5	39.5	51.5	70.5	102.5			
	BR3...	kg	14.5	16.5	17.5	19.5	21.5	25.5	29.5	43.5	54.5	82.5	113.5			
MC503 24 VAC	BR2...	kg	11.4	13.4	14.4	15.4	18.4	20.4	24.4	37.4	49.4	68.4	100.4			
	BR3...	kg	12.4	14.4	15.4	17.4	19.4	23.4	27.4	41.4	52.4	80.4	111.4			
MC503 230 VAC	BR2...	kg	12.6	14.6	15.6	16.6	19.6	21.6	25.6	38.6	50.6	69.6	101.6			
	BR3...	kg	13.6	15.6	16.6	18.6	20.6	24.6	28.6	42.6	53.6	81.6	112.6			
MC1003	BR2...	kg							28.5	41.5	53.5	72.5	104.5	241.5	301.5	
	BR3...	kg							31.5	45.5	56.5	84.5	115.5	281.5	346.5	
MC1503	BR2...	kg										72.5	104.5	241.5	301.5	391.5
	BR3...	kg										84.5	115.5	281.5	346.5	451.5
M300(Y)	BR2...	kg										83	115	252	312	402
	BR3...	kg										95	126	292	357	462

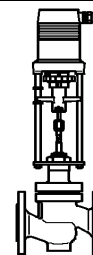
m

Control valves with electric actuators up to 350°C

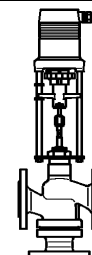
PN 16-40 **2.3.1**

Flanged connection
 PN 16 – 40
 Cast iron
 Spheroidal graphite
 Cast steel
 Stainless steel

with electric actuators
 MC103/24 • MC103/230
 MC163/24 • MC163/230
 MC253/24 • MC253/230
 MC403/24 • MC403/230
 MC503/24 • MC503/230
 MC1003/24 • MC1003/230
 MC1503/24 • MC1503/230
 M300-20kN • M300Y-20kN
 M300-25kN • M300Y-25kN



BR216
BR225
BR240S
BR240E



BR316
BR325
BR340S
BR340E

PN 40

DN			15	20	25	32	40	50	65	80	100	125	150	200	250	300
MC103	BR2...	kg	9.5	10.5	12.5	15.5	16.5									
	BR3...	kg	10.5	11.5	13.5	18.5	19.5									
MC163	BR2...	kg	11	12	14	17	18	23	31							
	BR3...	kg	12	13	15	20	21	26	37							
MC253 24 VAC	BR2...	kg	14.4	15.4	17.4	20.4	21.4	26.4	37.4	45.4	60.4					
	BR3...	kg	15.4	16.4	18.4	23.4	24.4	29.4	40.4	52.4	65.4					
MC253 230 VAC	BR2...	kg	15.6	16.6	18.6	21.6	22.6	27.6	35.6	46.6	61.6					
	BR3...	kg	16.6	17.6	19.6	24.6	25.6	30.6	41.6	53.6	66.6					
MC403	BR2...	kg	16.5	17.5	19.5	22.5	23.5	28.5	39.5	47.5	62.5	76.5	111.5			
	BR3...	kg	17.5	18.5	20.5	25.5	26.5	31.5	42.5	54.5	67.5	88.5	130.5			
MC503 24 VAC	BR2...	kg	14.4	15.4	17.4	20.4	21.4	26.4	37.4	45.4	60.4	74.4	109.4			
	BR3...	kg	15.4	16.4	18.4	23.4	24.4	29.4	40.4	52.4	65.4	86.4	128.4			
MC503 230 VAC	BR2...	kg	15.6	16.6	18.6	21.6	22.6	27.6	35.6	46.6	61.6	75.6	110.6			
	BR3...	kg	16.6	17.6	19.6	24.6	25.6	30.6	41.6	53.6	66.6	87.6	129.6			
MC1003	BR2...	kg							41.5	49.5	64.5	78.5	113.5	271.5	366.5	
	BR3...	kg							44.5	56.5	69.5	90.5	132.5	311.5	426.5	
MC1503	BR2...	kg										78.5	113.5	271.5	366.5	471.5
	BR3...	kg										90.5	132.5	311.5	426.5	551.5
M300(Y)	BR2...	kg										89	124	282	377	482
	BR3...	kg										101	143	322	437	562

DN

m

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