



Kieback&Peter

OPERATING INSTRUCTIONS

MD50/230

**Actuator for valves from the series
RBK15..50(-BK) and RBQ40..50**

This document replaces all versions with an older release date. This version is not updated automatically. Subject to change.

The figures in this document were created with the utmost care. Nevertheless, we cannot guarantee that the delivered product will not differ from these figures.

The original operating instructions were composed in German.

Documentation in other languages has been translated from German.

Kieback&Peter is not liable for damages that result directly or indirectly from the improper use of this device.

Copyright © 2026 Kieback&Peter GmbH & Co. KG

All rights reserved. No part of this document may be reproduced in any form (by printing, photocopying or otherwise) or processed, copied or distributed using electronic systems without written permission from Kieback&Peter.

Kieback&Peter GmbH & Co. KG

Tempelhofer Weg 50, 12347 Berlin, Germany

Phone: +49 30 60095-0, Fax: +49 30 60095-164

info@kieback-peter.de, www.kieback-peter.com

IMPORTANT

READ CAREFULLY BEFORE USE

RETAIN FOR LATER REFERENCE

Table of Contents

Content	Page
1 Notes on these operating instructions	5
1.1 Validity of the operating instructions	5
1.2 Display elements	5
2 Safety	5
2.1 Explanation of safety instructions and warnings	5
2.2 Basic safety instructions	6
2.3 Responsibilities of the Operator	7
2.4 Qualification of personnel	7
2.5 Intended use	8
2.6 Transportation and storage	8
3 Technical features and functions.	9
3.1 Technical data	9
3.2 Dimensions	10
3.3 Accessories (not included in the delivery)	10
3.4 Scope of delivery	10
3.5 Identification	11
3.6 Structure	11
3.7 Operating mode.	12
4 Actuator/valve combinations	13
4.1 RBK15..50 three-way/two-way valve with actuator	13
4.1.1 Types.	13
4.1.2 Technical Data: RBK..(BK) Valves	14
4.1.3 Dimensions	15
4.1.4 Accessories (not included)	15
4.2 RBQ40..50 (Cocon QTR40..50) combo valve with actuator	16
4.2.1 Types.	16
4.2.2 Technical data RBQ40..50	17
5 Mounting	18
5.1 Valve mounting	18
5.2 Mounting the actuator onto the valve	19
5.2.1 Mount the actuator on a RBK15..50 valve.	19
5.2.2 Mounting the actuator with Z223 onto a RBQ40..50 (Cocon QTR40..50) valve	20

6	Connect actuator and start up	21
6.1	Wiring diagram MD50/230	21
6.2	Commissioning	22
6.3	Reinitialization	23
6.4	Manual adjustment	23
7	Faults and remedial measures	24
8	Maintenance	24
9	Repair	24
10	Decommissioning, Removal and Disposal	25
10.1	Decommissioning and dismounting the actuator	25
10.2	Removing the valve	25
10.3	Notes on disposal	26
11	Contact persons	26
12	Declaration of conformity	27
	Index	28

1 Notes on these operating instructions



NOTE

If you have any questions that cannot be clarified with these operating instructions, you can obtain further information from your Kieback&Peter contact person.

1.1 Validity of the operating instructions

These operating instructions are part of the MD50/230 actuator for two-way and three-way valves of the compact valve series RBK15..50(-BK) and combo valves RBQ40..50.

To make the document easier to read, the MD50/230 actuator is referred to in the text below as the “actuator.” The valve types specified above are referred to in the text as the “valve.”

The scope of delivery is specific to each actuator and is in accordance with the customer requirements. The positions and figures of the components in the operating instructions may differ depending on the choice of valve.

1.2 Display elements



NOTE

Notes provide you with important information.

You can find the following display elements in these instructions:

- List point
- ▶ Step or measure for avoiding danger

2 Safety

IMPORTANT

READ CAREFULLY BEFORE USE

RETAIN FOR LATER REFERENCE

2.1 Explanation of safety instructions and warnings

The basic safety information includes general instructions for the safe use of the actuator with valve or instructions to maintain its safe condition.

Action-related warnings of residual risks are indicated prior to performing dangerous actions.

Presentation and structure of warnings

The warnings are action-related and are structured as follows.



CAUTION

Type and source of danger!

Potential consequences when the danger occurs or the warning is not observed.

- ▶ Measures to avoid the danger.

Warnings are classified according to the severity of the hazard. The hazard levels and their corresponding signal words and warning symbols are described below:



WARNING

Indicates a hazard of medium risk which can result in **death or serious bodily injury** if not avoided.



CAUTION

Indicates a hazard of low risk which can result in **minor or medium bodily injury** if not avoided.



CAUTION

Indicates a hazard which can result in **material damage or malfunctions** if not avoided.

2.2 Basic safety instructions

Safety in the workplace depends on the attention, care and rationality of all the persons involved. To prevent damage and injury, read and follow the safety instructions below, the safety instructions in the documentation on using the components and the applicable local regulations.

Sharp edges and corners

There is a risk of skin abrasions and cutting injuries due to sharp edges and corners, such as those on cast iron bodies and the outer threads of the valves and individual parts of the actuators.

- ▶ Proceed with care.
- ▶ Wear protective gloves.

Toppling, falling and ejected parts

Severe injury and substantial damage to property due to:

- Toppling or falling valve or actuator parts
- Ejected parts in the event of impermissible pressure increases (bursting components)
- Impermissible drop in pressure (e.g. when using tensioning devices)
- ▶ Secure the protected area against access by unauthorized persons.
- ▶ Secure parts to prevent toppling and falling.
- ▶ Do not exceed the maximum valve operating pressure.

Pressurized liquids

There is a risk of severe burns and injuries caused by liquid jets due to incorrect connections.

- ▶ Do not exceed the maximum valve operating pressure.
- ▶ Check all connections before filling the system.
- ▶ Secure the protected area against access by unauthorized persons.

Hot and cold surfaces

There is a risk of severe burns or hypothermia from contact with hot or cold surfaces on the valves and pipelines.

- ▶ Before starting work, wait until the temperature of the pipelines and valves is between roughly 10 to 40 °C.

Musculoskeletal disorders

There is a risk of severe musculoskeletal disorders (e.g. back injuries) due to incorrect posture or excessive exertion (e.g. due to weight loads).

- ▶ Proceed with care.

2.3 Responsibilities of the Operator

The actuator and valve must be operated only when in a technically sound and safe condition. The operator must observe the following points:

- Ensure that the operating instructions are available to all persons who perform work on the actuator and valve.
- Ensure that all persons have read and understood the operating instructions before working on the actuator and valve.
- Ensure the required ambient conditions and clearances at the mounting location.
- Ensure that mounting, installation and commissioning are carried out only by a fitter or specialist electrician, according to the tasks. NOT DEFINED
- Inform your Kieback&Peter contact person in the event of damage to the actuator and/or valve.
- Ensure that personnel receive the personal protective equipment (PPE) stipulated in the specific country and use this equipment at all times.

2.4 Qualification of personnel

Fitter

The fitter is familiar with heating, ventilation and air conditioning systems. Based on his or her technical training and appropriate knowledge and experience, he or she is familiar with the described actuator and valve. The fitter knows the applicable regulations, can assess his or her assigned tasks and identify potential dangers.

Electrical specialist

The electrical specialist is a person who is familiar with the described actuator. Based on his or her professional training, knowledge and experience, he or she has a very good understanding of the fields of cable, wire and laying systems and a good knowledge of the areas of electrical engineering and electrical machines and actuators. The electrical specialist knows the applicable regulations, can assess work assigned to him or her and identify possible dangers.

Who is permitted to perform which tasks?

Task	Fitter	Electrical specialist
Mounting		
Assembling the valve	x	
Assembling the actuator	x	
Commissioning		
Electrical connection		x
Adapting actuator functions		x
Faults and remedial measures		
Searching for and correcting faults	x	x
Decommissioning, disassembly and disposal		
Taking the actuator out of operation		x
Disassembling the actuator	x	
Disassembling the valve	x	
Disposal	x	

2.5 Intended use

- The actuator with valve is designed to control the flow or precise mixture of liquids for heating, ventilation and air conditioning systems.
- Operate the actuator only with one of the specified valves and the original valve accessories.
- The actuator with valve is intended only for industrial and commercial use; never operate the actuator with valve in the private sphere or in households.
- Only operate the actuator with valve indoors.
- Maintain the specified ambient conditions during operation, transport and storage.
- Use a suitable operating medium.
- Only operate the actuator with valve in its original condition. Modifications to the actuator and/or valve may result in unforeseeable dangers and are thus prohibited.

2.6 Transportation and storage

Unpacking

- ▶ Do not use damaged deliveries and get in touch with your contact at Kieback&Peter.
- ▶ Dispose of packaging material according to local regulations.

Transportation

- ▶ Maintain the specified ambient temperature of -20..+60 °C and ambient humidity of 0..85% r. F., non-condensing.
- ▶ Avoid slipping.

Storage

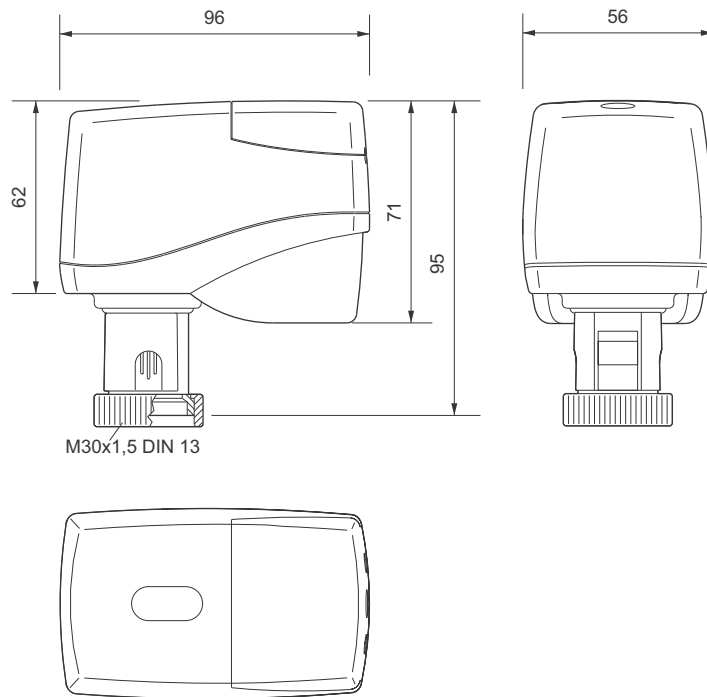
- ▶ Maintain the specified ambient temperature of -20..+50 °C and ambient humidity of 0..85% r. F., non-condensing.

3 Technical features and functions

3.1 Technical data

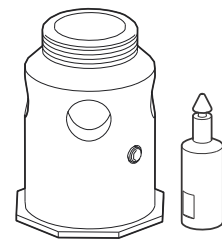
Nominal voltage	230 V AC $\pm 10\%$; 50/60 Hz
Dimensioning	9.9 VA
Power consumption	Nominal: 5.3 VA Sleep mode: 1.7 VA
Switch-on current	max. 10 A < 1 ms; $< 0,1$ A ² s for a short time
Control	3-point signal (open/stop/closed) or 2-point signal \ (open/closed), minimum switch-on time 1 s
Connection	Built-in cable: 1.5 m; 3 x 0.75 mm ²
Motor switch-off	Actuator spindle: extending = load-dependent, retracting = load-dependent
Sound power	< 28 dB (A)
Positioning stroke	10 mm max.
Positioning time	22 s/mm
Positioning force	500 N
Permitted medium temperature in the valve	0..+120 °C
Ambient temperature	0..+50° C
Ambient humidity	0..85% r.h., non-condensing
Overvoltage category	III
Level of contamination	2
Degree of protection	IP54
Protection class	II in accordance with EN 60730
Installation position	Anywhere from vertical to horizontal
Maintenance	Maintenance-free
Weight	320 g

3.2 Dimensions



3.3 Accessories (not included in the delivery)

- Z223** Adapter for RBQ40 (QTR DN40) and RBQ50 (QTR DN50) with actuator MD50-BUS, MD50(-E)(-R), MD50/230 or MF50-R. Further information can be found in the mounting instructions for Z223 and in the operating instructions for the actuators.

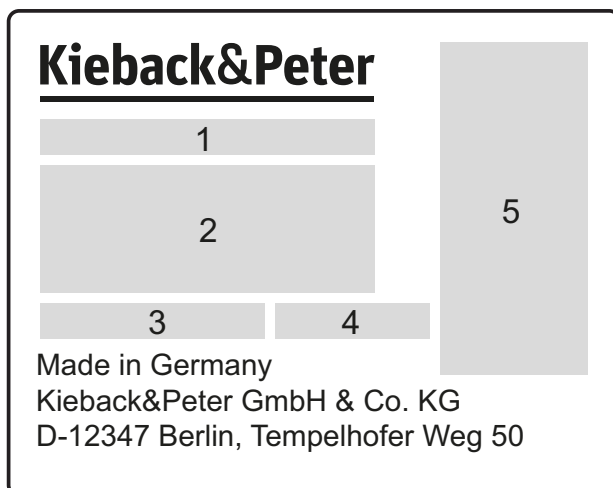


3.4 Scope of delivery

- MD50/230 actuator
- Operating instructions MD50/ 230 actuator for RBK15..50(- BK) and RBQ40..50 valves
- Mounting instructions MD50/230

3.5 Identification

The type plate is attached on the underside of the actuator housing.



- 1 Item number
- 2 Technical data (nominal voltage, power consumption, etc.)
- 3 Serial number/revision number
- 4 Year and month of construction (mm/yyyy)
- 5 Symbols, graphics (CE marks, protection class, etc.)



NOTE

Information on the type of valve can be found on the cast body of the valve.

3.6 Structure



- 1 Inspection cover
- 2 Plug/port for manual adjustment
- 3 Housing
- 4 Automatic coupling
- 5 Union nut



6 Manual adjustment (only when disconnected from the power supply)

The receptacle for a hex key (4 mm) is located under the plug.
The hex key is not included in the scope of delivery.

3.7 Operating mode

The actuator MD50/230 with a positioning force of 500 N is used for fine stroke adjustment of two-way and three-way valves of the types:

- RBK15..50(-BK)
- RBQ40..50

This is controlled with one of the following signals:

- 3-point signal open/stop/closed or
- 2-point signal open/closed

4 Actuator/valve combinations

4.1 RBK15..50 three-way/two-way valve with actuator

Application

The gunmetal three-way valves and two-way valves with an MD50/230 actuator are used for mixing liquids precisely.

The valves can be used as two-way valves using the BK blank cover on gate B.



4.1.1 Types

Compact gunmetal three-way valve RBK15..50 with an MD50/230 actuator for water up to 120 °C, 16 bar

Types	DN	PN	kvs	Δp (bar)	Travel time (s)	Connection	Weight (kg)
RBK15/0,63MD50/230	15	16	0.63	12.1	220	G 1 1/8	1.36
RBK15/1,0MD50/230	15	16	1.0	12.1	220	G 1 1/8	1.36
RBK15/1,6MD50/230	15	16	1.6	12.1	220	G 1 1/8	1.36
RBK15/2,5MD50/230	15	16	2.5	12.1	220	G 1 1/8	1.36
RBK20/4,0MD50/230	20	16	4.0	9.2	220	G 1 1/4	1.46
RBK20/6,3MD50/230	20	16	6,3	9.2	220	G 1 1/4	1.46
RBK25/6,3MD50/230	25	16	6.3	5.0	220	G 1 1/2	1.68
RBK25/8,0MD50/230	25	16	8.0	5.0	220	G 1 1/2	1.68
RBK25/10,0MD50/230	25	16	10.0	5,0	220	G 1 1/2	1.68
RBK32/10,0MD50/230	32	16	10.0	3.5	220	G 2	2.22
RBK32/16,0MD50/230	32	16	16.0	3.5	220	G 2	2.22
RBK40MD50/230	40	16	25,0	1.5	220	G 2 1/4	2.64
RBK50MD50/230	50	16	35.0	0.7	220	G 2 3/4	3.80

Compact gunmetal three-way valve RBK15..50-BK with an MD50/230 actuator for water up to 120 °C, 16 bar

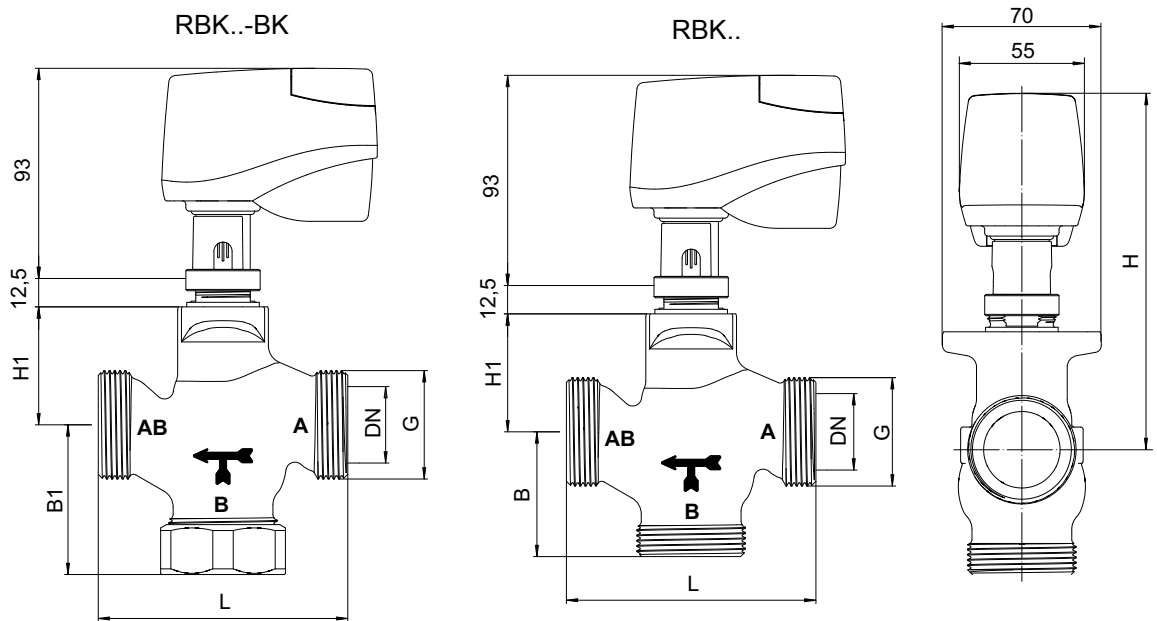
Types	DN	PN	kvs	Δp (bar)	Travel time (s)	Connection	Weight (kg)
RBK15/0,63-BKMD50/230	15	16	0.63	12.1	220	G 1 1/8	1.47
RBK15/1,0-BKMD50/230	15	16	1.0	12.1	220	G 1 1/8	1.47
RBK15/1,6-BKMD50/230	15	16	1.6	12.1	220	G 1 1/8	1.47
RBK15/2,5-BKMD50/230	15	16	2.5	12.1	220	G 1 1/8	1.47
RBK20/4,0-BKMD50/230	20	16	4.0	9.2	220	G 1 1/4	1.59
RBK20/6,3-BKMD50/230	20	16	6.3	9.2	220	G 1 1/4	1.59
RBK25/6,3-BKMD50/230	25	16	6.3	5.0	220	G 1 1/2	1.84
RBK25/8,0-BKMD50/230	25	16	8.0	5.0	220	G 1 1/2	1.84

Types	DN	PN	kvs	Δp (bar)	Travel time (s)	Connection	Weight (kg)
RBK25/10,0-BKMD50/230	25	16	10.0	5.0	220	G 1 1/2	1.84
RBK32/10,0-BKMD50/230	32	16	10.0	3.5	220	G 2	2.50
RBK32/16,0-BKMD50/230	32	16	16.0	3.5	220	G 2	2.50
RBK40-BKMD50/230	40	16	25.0	1.5	220	G 2 1/4	2.99
RBK50-BKMD50/230	50	16	35.0	0.7	220	G 2 3/4	4.30

4.1.2 Technical Data: RBK..(BK) Valves

Nominal width	DN15..50 (G 1 1/8.. G 2 3/4)		
Pressure rating	PN 16		
Connection	Male thread ISO 228/1		
Characteristic curve	RBK..	Gates A → AB = modified, same percentage up to DN32 Gates A → AB = linear as of DN40 Gates B → AB = linear	
	RBK..-BK	Gates A → AB = modified, same percentage up to DN32 Gates A → AB = linear as of DN40	
Positioning stroke	RBK15..50(-BK): 10 mm		
Leak rate	in accordance with EN 1349; leakage class I; 0.05% from Kvs value		
Medium temperature	0..+120 °C		
Housing	Gunmetal, CC491K		
Cone	Brass CW614N		
Valve spindle	CrMo steel 1.4021		
Stem seal	EPDM O-rings, maintenance-free		
Pipe connections	Female thread fittings and GTW union nuts (malleable iron, yellow chromated)		
Blank cover	GTW union nut (malleable iron, yellow chromated) Steel gasket, yellow chromated		

4.1.3 Dimensions



RBK... -BK design (two-way valve) with blank cover on gate B

DN	H1	B	B1	L	H	G
15	46	55	65	80	152	G 1 1/8
20	46	55	65	90	152	G 1 1/4
25	52	55	66	110	158	G 1 1/2
32	56	55	67	120	162	G 2
40	65	60	72	130	171	G 2 1/4
50	65	65	77	150	171	G 2 3/4
Dimensions H1 to H in mm, connection threads G in inches						

4.1.4 Accessories (not included)

RBK15..50-BK two-way valves require 2 fittings and RBK15..50 three-way valves require 3 fittings.

Z210	Female thread fitting DN15
Z211	Female thread fitting DN20
Z212	Female thread fitting DN25
Z213	Female thread fitting DN32
Z214	Female thread fitting DN40
Z215	Female thread fitting DN50

4.2 RBQ40..50 (Cocon QTR40..50) combo valve with actuator

Application

The two-way combo valves with actuator are used to set the volume flow rate and for automatic flow control independent of the differential pressure (hydraulic balancing).
The combo valve is used in air conditioning, cooling, and heating systems, e.g. central heating systems, floor heating systems, fan coil systems, cooling ceilings and fan convectors.



4.2.1 Types

Gunmetal combo valve RBQ40..50 (Cocon QTR40..50) usable for MD50/230 actuator, for water up to 120 °C, 16 bar

Type	DN	PN	Volume flow rate range [l/h] min*..max	kvs	Control range [kPa]	Connection	Weight [kg]
RBQ40 (QTR DN40 1146172)	40	16	1500..7500	11.5	20..400	G 1 3/4	10.0
RBQ50 (QTR DN50 1146174)	50	16	2500..10000	15.0	20..400	G 2 3/8	13.0

* Recommended minimum setting value; using the actuator, the flow rate can be reduced from the setting value all the way down to full shut-off.



NOTE
Z223 mounting kit required (see accessories on page 10).

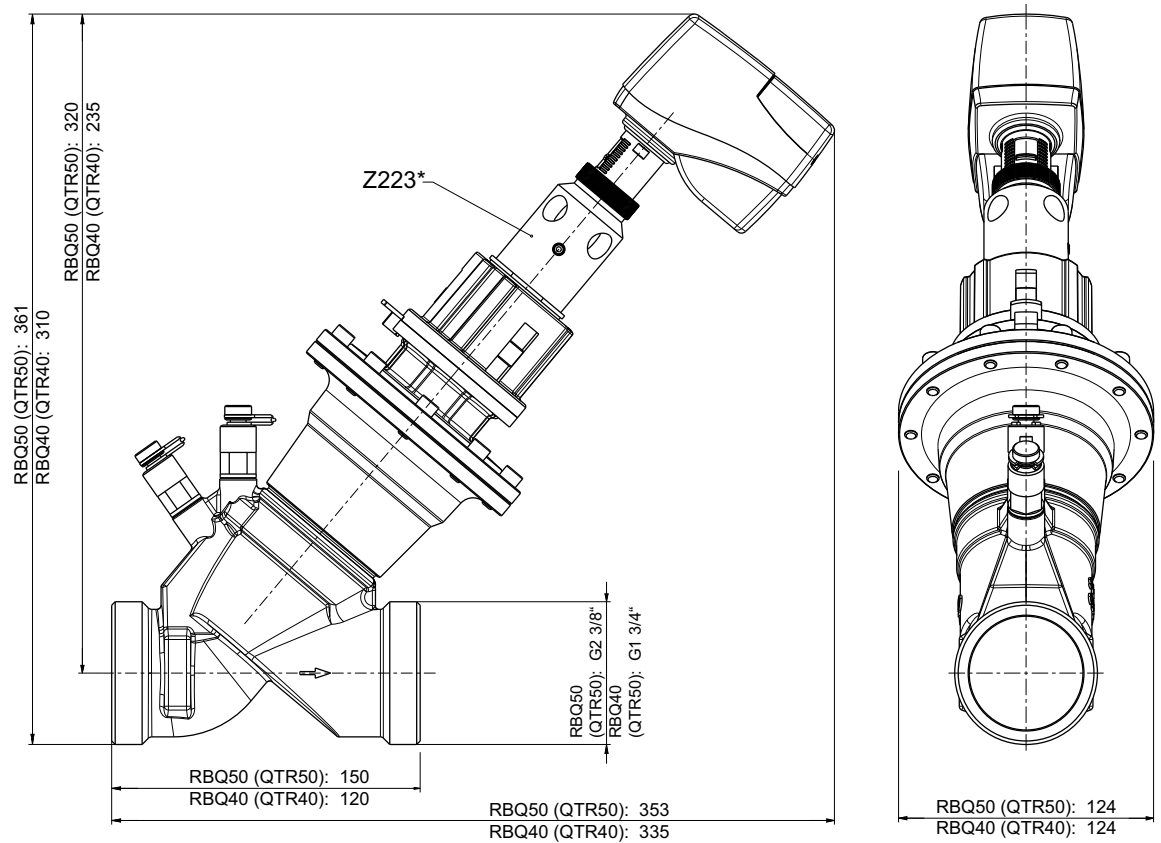


NOTE
Detailed descriptions regarding technical data, function, volume flow rate adjustment and dimensions for the RBQ combo valves can be found in the RBQ15..200 product description, document no. 3.10-20.000-01.

4.2.2 Technical data RBQ40..50

Medium temperature	-10..+120 °C
Max. operating pressure	16 bar (1600 kPa)
Max. differential pressure	4 bar (400 kPa)
Leak rate	0.01% of kvs
Positioning stroke	10 mm
Medium	Water or ethylene/propylene glycol-water mixtures (max. 50%, pH value 6.5..10)
Housing	Gunmetal, male thread on both sides
Seals	Made of EPDM or PTFE

Dimensions



Z223* adapter accessory for RBQ40..50

5 Mounting

5.1 Valve mounting



CAUTION

The valve may only be installed by qualified technicians. In addition to the generally valid installation guidelines, the following points are to be observed:

- Any protective caps on the valve gates should be removed before assembling the valves.
- No grease or oil may be used during assembly because these could destroy the valve seals.
- The pipeline system and the interior of the fitting must be free of foreign objects, particles of dirt, and grease and oil residues. Rinse them out if necessary.
- There must be no tension between the fixture and the pipeline connection.
- To avoid eddy formations in the valve body, the valve should be installed in a straight section of the pipe. A distance of 10 times the nominal diameter is recommended between the valve flange and manifold or other similar parts.
- The installation location is to be selected so that the ambient temperature at the actuator is kept between 0 °C and +50 °C.
- If the operating medium is contaminated, a strainer must be installed in the supply pipe. For maintenance purposes, we recommend to install shut-off valves both upstream and downstream of the valve or plant section.
- During installation, observe the maximum permitted differential pressure Δp .
- Note that a free space of 150 mm above the valve is required for mounting the actuator and removing the connection cover.
- Observe the direction of flow arrow on the valve body. Inverting the direction of flow impairs control behavior.
- Differential pressure must not occur on the valve body. Close the gate valve and turn off pumps.
- Screw the valve connections onto the pipelines.

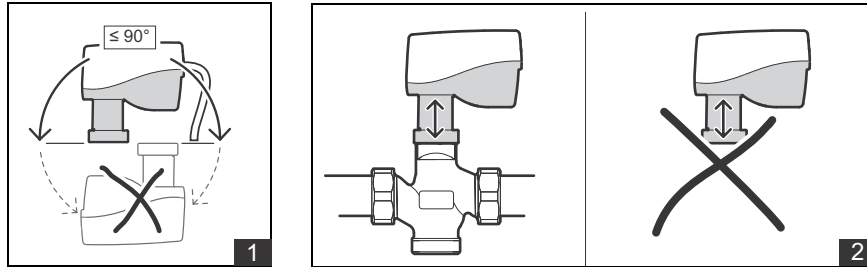
5.2 Mounting the actuator onto the valve

Preparatory tasks

Perform the following preparatory tasks to mount the actuator on a valve in a plant that is in operation:

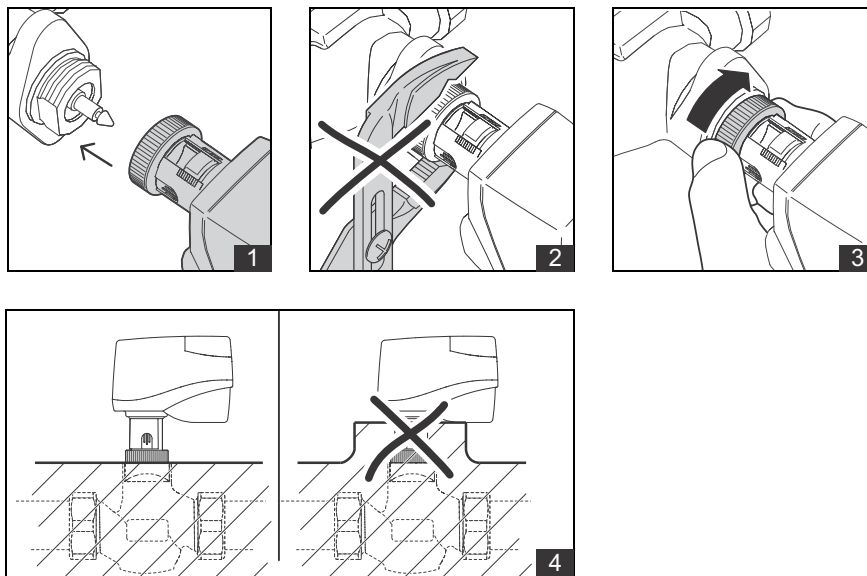
- ▶ Before starting the tasks, ensure that there is no buildup of differential pressure in the valve body.
 - ▶ Close the gate valve and turn off pumps.
- ▶ Allow the valve and pipelines to cool down.

Installation instructions



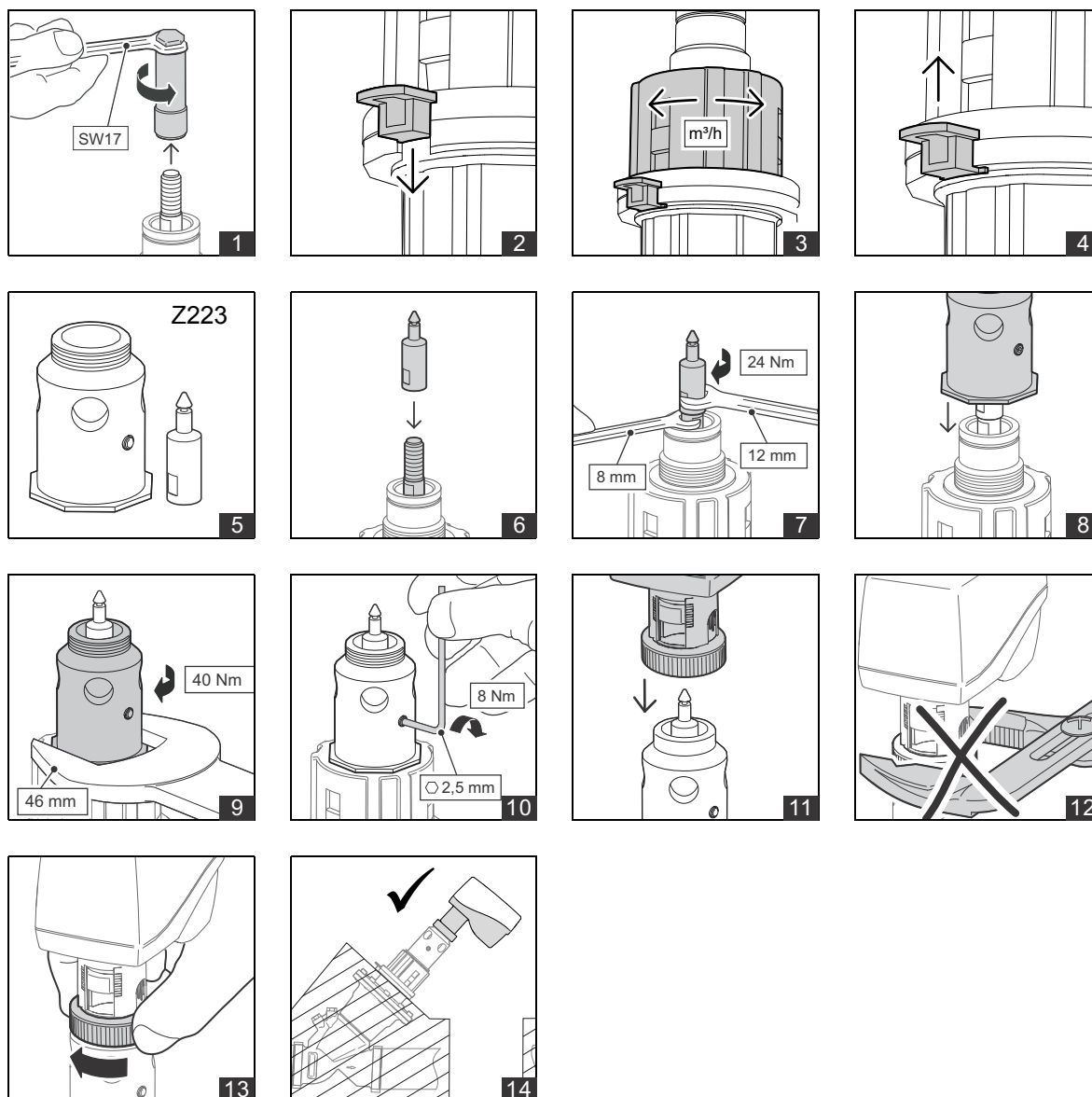
- ▶ **1** All installation positions above the valve up to a horizontal position are permitted in which the cable is routed downward.
- ▶ **2** CAUTION! Do not operate the actuator without a valve.

5.2.1 Mount the actuator on a RBK15..50 valve.



- ▶ **1** Place the actuator onto the valve.
- ▶ **2** CAUTION! Do not use a pipe wrench. This may damage the actuator and valve.
- ▶ **3** Tighten the union nut by hand.
- ▶ **4** In the case of system-side insulation, ensure that the flange of the actuator remains clear and is not covered.

5.2.2 Mounting the actuator with Z223 onto a RBQ40..50 (Cocon QTR40..50) valve



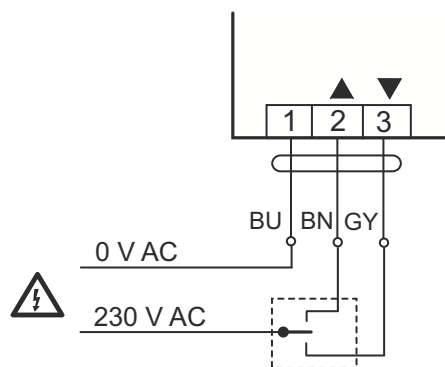
- ▶ **1** Remove the adjustment sleeve of the valve using a 17 mm open-end wrench.
- ▶ **2** Push the locking clip down.
- ▶ **3** Adjust the setpoint of the maximum volume flow rate to the desired value by turning the hand-wheel.
- ▶ **4** Push the locking clip up. This locks the setting.
- ▶ **5** Z223 adapter
- ▶ **6** Install the spindle adapter (part of Z223).
- ▶ **7** Tighten the spindle adapter with a tightening torque of 24 Nm using a 12 mm open-end wrench. While doing so, hold the spindle in place with an 8 mm open-end wrench.
- ▶ **8** Install the valve adapter (part of Z223).
- ▶ **9** Tighten the valve adapter with a tightening torque of 40 Nm using a 46 mm open-end wrench.

- ▶ **10** Secure the valve adapter: Tighten the grub screw with a tightening torque of 8 Nm using a 2.5 mm hexagon socket.
- ▶ **11** Set the actuator onto the threaded connection on the adapter.
- ▶ **12** CAUTION! Do not use a pipe wrench. This may damage the actuator and valve.
- ▶ **13** Tighten the union nut by hand.
- ▶ **14** In the case of system-side insulation, ensure that the flange of the actuator remains clear and is not covered.

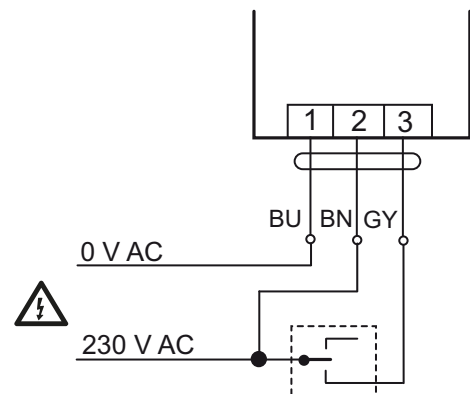
6 Connect actuator and start up

6.1 Wiring diagram MD50/230

- Three-point control

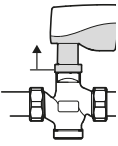
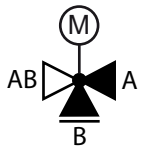
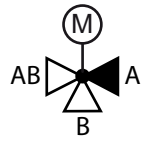
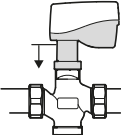
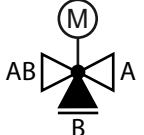
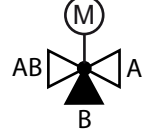


- Two-point control



NOTE

The actuating direction can be reversed by swapping the supply lines to terminals 2 and 3 on the actuator. This must only be done in de-energized state.

Actuating direction	Two-way valve		Three-way valve
	RBQ..	RBK-BK..	RBK..
Valve stem pulling 			
Valve stem pushing 			
 = open  = closed  = sealed at the flange			

6.2 Commissioning



WARNING

Live parts

There is risk of death by electrocution by coming into contact with live parts on the actuator or on electrical components of the actuator that have become live due to faults.

- ▶ Disconnect the actuator from the power supply before opening the inspection cover.



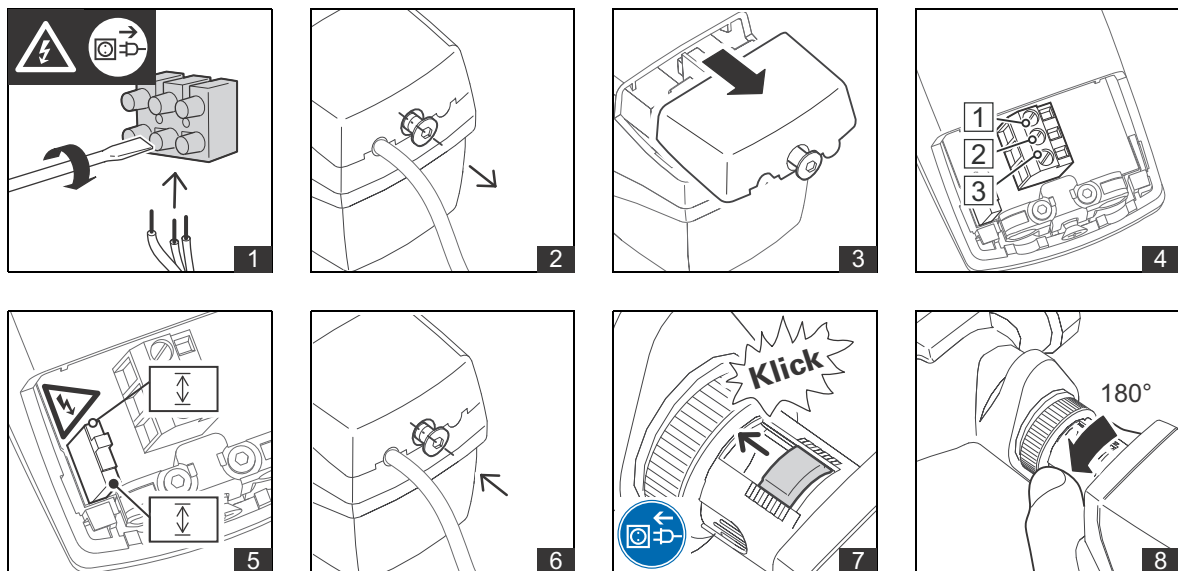
CAUTION

A 1 A delayed-action backup fuse is required to operate the actuator.



CAUTION

Peak loads of up to 10 A may occur when switching on the actuator. Ensure suitability of switching components (e.g. controller connection) to ensure proper functioning and to avoid malfunctions and damage.



- ▶ **1** Carry out the electrical connection of the actuator as a fixed installation.
- ▶ **2 3** Remove the inspection cover.
- ▶ **4** Refer to the circuit diagram.
- ▶ **5** When putting the unit back into operation or after a manual adjustment, you must specifically trigger an initialization run. To do so, activate the DIP switch before switching on the power supply.
- ▶ **6** Mount the inspection cover.
- ▶ **7** After the line power has been switched on, an automatic initialization run takes place. The actuator first travels to the upper end position and then to the lower end position. The actuator will not respond to the control signal until the initialization run is complete.
- ▶ **8** After mounting and commissioning work is complete, the automatic coupling must be protected with the dust cover.

6.3 Reinitialization



WARNING

Live parts

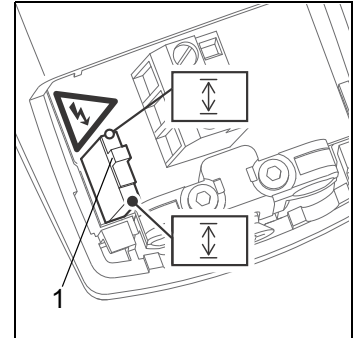
There is risk of death by electrocution by coming into contact with live parts on the actuator or on electrical components of the actuator that have become live due to faults.

- ▶ Disconnect the actuator from the power supply before opening the inspection cover.

In the case of recommissioning (re-installation of the actuator) or after a manual adjustment, you must specifically trigger an initialization run.

- ▶ De-energize the actuator and remove the inspection cover.
- ▶ Change the switch position (1).
- ▶ Fit the inspection cover and reconnect the power supply.

The actuator performs an initialization run.



6.4 Manual adjustment



CAUTION

Manual adjustment may only be performed when the actuator is installed.

- ▶ Disconnect the actuator from the voltage supply.
- ▶ Fold the cover plug to the side.
- ▶ A hexagon key (key socket 4 mm) can be used to move the actuator into any position.



CAUTION

If you manually adjust the spindle position until the slip clutch engages in the upper or lower end position, you must turn back the hexagon key by half a turn.



NOTE

An initialization run must be performed after a manual adjustment. See chapter 6.3 “Reinitialization”, page 23.

7 Faults and remedial measures



WARNING

Live parts

There is risk of death by electrocution by coming into contact with live parts on the actuator or on electrical components of the actuator that have become live due to faults.

- ▶ Disconnect the actuator from the power supply before opening the inspection cover.



WARNING

Hot and cold surfaces!

If a hardware or software error occurs, there may be unexpected movements and the valve may open. There is a risk of severe burns or hypothermia from contact with hot or cold surfaces on the valves and pipelines.

- ▶ Wear protective gloves

Error	Cause	Rectification
Actuator does not run	Operating voltage failure	▶ Determine the cause and rectify it.
	Wiring incorrect	▶ Check the connection and correct.
	Main circuit board defective	▶ Get in touch with your contact at Kieback&Peter.
Actuator stops every so often	Supply line has a loose connection	▶ Check and tighten the connections to the terminal strip.
Actuator not moving or not moving correctly to the valve position dictated by the input signal, valve not closing or opening	Valve is blocked/jammed	▶ Ensure the valve can travel freely or replace the valve.
	Pressure difference too high	▶ Have the hydraulic system and differential pressure checked and adjusted.

8 Maintenance

Maintenance

The actuator does not require maintenance.

Cleaning

The actuator does not require cleaning.

9 Repair

At the installation location, the valve/actuator combination can only be repaired by replacing the valve or actuator. Contact your Kieback&Peter contact person.

10 Decommissioning, Removal and Disposal

10.1 Decommissioning and dismantling the actuator



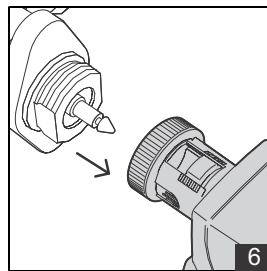
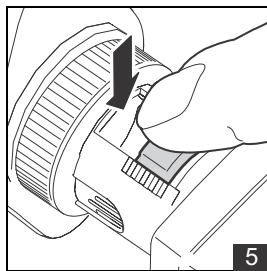
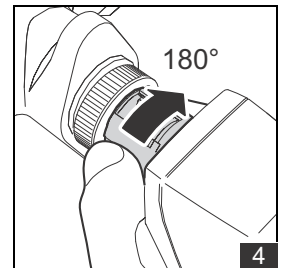
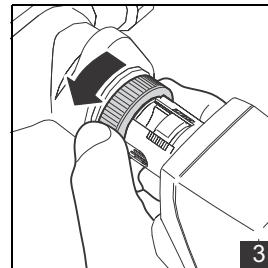
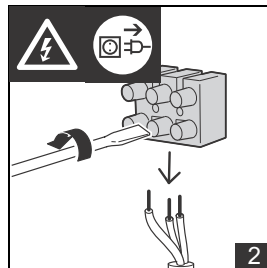
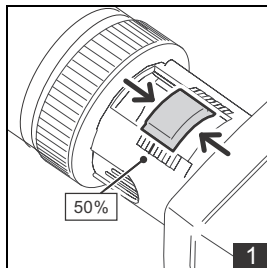
WARNING

Hot and cold surfaces!

If a hardware or software error occurs, there may be unexpected movements and the valve may open. There is a risk of severe burns or hypothermia from contact with hot or cold surfaces on the valves and pipelines.

- ▶ Wear protective gloves

- Before beginning to dismantle the unit, make sure that no differential pressure builds up in the valve body before beginning work. If necessary, close the gate valve and turn off pumps. After the pipeline has cooled off, you can begin to dismantle the actuator.



- ▶ **1** Move the actuator to the center position using a control signal.
- ▶ **2** Shut off the actuator power supply and disconnect all electrical cables.
- ▶ **3** Loosen the union nut. Do not use pliers if possible.
- ▶ **4** Turn the dust cover far enough so that you can press the safety button.
- ▶ **5** Press the safety button on the automatic coupling all the way in and hold it.
- ▶ **6** Remove the actuator from the valve.

10.2 Removing the valve

- ▶ No differential pressure must occur on the valve body. Close the gate valve and turn off pumps.
- ▶ Loosen the screw fittings between the pipeline and the valve connections.
- ▶ Remove the valve from the pipeline.

10.3 Notes on disposal

In accordance with the applicable laws and directives of the European Union countries, the product should not be disposed of with household waste. This ensures environmental protection and sustainable recycling or raw materials. Commercial users should contact their supplier and observe the conditions of the purchase agreement. This device may not be disposed of together with other commercial waste.

11 Contact persons

Orders and questions

If you want to submit an order, have questions or require technical information, please contact your Kieback&Peter contact person.

Repair service

If your device has a defect, contact your Kieback&Peter contact person to clarify how to proceed.

12 Declaration of conformity

EN

Kieback&Peter



EU-DECLARATION OF CONFORMITY

Kieback&Peter GmbH & Co. KG
Tempelhofer Weg 50
12347 Berlin / Germany

Authorized Representative for Documentation:
Lydia Bruchno / Eva Franke

declares in sole responsibility that the designated product

Actuator

MD50, MD50-R, MD50-E

in combination with the **valves** of the series

RBK15..50, RBQ40..50

to which this declaration refers, corresponds to the requirements which are stipulated in the following European directives:

- **2006/42/EG** Directive Machinery
- **2014/35/EU** Low Voltage Directive
- **2014/30/EU** electromagnetic compatibility
- **2011/65/EU** Restriction of certain Hazardous Substances

Harmonised standards applied:

DIN EN 60730-2-14: 2009-06
DIN EN ISO 12100: 2011-03

Signed for and on behalf of:

Berlin,
01/06/26

(ppa. Philipp Menzel)

Managing Director
Product & Solutionmanagement

(ppa. Rainer Mahling)

Managing Director
Solution & Support Center

QM-F-060 | Rev. 3.0 vom 15.01.2026
Template: QM-T-034, Rev 1.3

Klassifizierung: Öffentlich

Index

A

Accessories	10
Actuator/valve combinations	13

C

Commissioning	22
Contact persons	26

D

Declaration of conformity	27
Decommissioning	25
Dismounting	25

F

Faults and remedial measures	24
--	----

I

Intended use	8
------------------------	---

M

Maintenance	24
Mounting	18
Mounting the actuator onto the valve	19

P

Personnel qualifications	
Fitter	7

Q

Qualification of personnel	7
Qualifications of personnel	
Electrical specialist	7

R

Reinitialization	23
Repair service	26

S

Storage	8
-------------------	---

T

Technical data	9
Transport	8
Transportation and storage	8

V

Valve mounting	18
--------------------------	----

W

Wiring diagram	21
--------------------------	----