RBK15..50 (-BK) Compact Gunmetal Three-Way and Two-Way Valves

Application

The compact gunmetal two-way and three-way valves are used for fine mixing of liquids.

The valves are installed as two-way valves using the BK blank cover on gate B.



kieback@peter

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Änderungen vorbehalten - Contents subject to change - Sous réserve de modifications - Reservado el derecho a modificación - Wijzigingen voorbehouden - Con riserva di modifiche - Innehåll som skall ändras - Zmeny vyhradené - Změny vyhrazeny - Zmiany zastrzeżone - Возможны изменения - A változtatások jogát fenntartjuk - 保留未经通知而改动的权力

Issue 2014-08-13

Product Description

Important Information Regarding Product Safety

Safety Instructions

This data sheet contains information on installing and commissioning the product "RBK15..50 (-BK)". Each person who carries out work on this product must have read and understood this data sheet. If you have any questions that are not resolved by this data sheet, you can obtain further information from the supplier or manufacturer.

If the product is not used in accordance with this data sheet, the protection provided will be impaired. Applicable regulations must be observed when installing and using the device. Within the EU, these include regulations regarding occupational safety and accident prevention as well as those from the VDE (Association for Electrical, Electronic & Information Technologies). If the device is used in other countries, it is the responsibility of the system installer or operator to comply with local regulations.

Mounting, installation and commissioning work on the devices may only be carried out by qualified technicians. Qualified technicians are persons who are familiar with the described product and who can assess given tasks and recognize possible dangers due to technical training, knowledge and experience as well as knowledge of the appropriate regulations.

Legend



WARNING

Indicates a hazard of medium risk which can result in death or severe bodily injury if it is not avoided.



CAUTION

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



CAUTION

Indicates a hazard of medium risk which can result in material damage or malfunctions if it is not avoided.



NOTE

Indicates additional information that can simplify the work with the product for you.

Notes on Disposal

For disposal, the product is considered waste from electrical and electronic equipment (electronic waste) and must not be disposed of as household waste. Special treatment for specific components may be legally binding or ecologically sensible. The local and currently applicable legislation must be observed.

RBK15..50 (-BK)

Types

Gunmetal three-way valves RBK15..50-BK for water up to 120 °C, 16 bar

	DN	PN	kvs	Connectio	on Weight [kg]
RBK15/0,63	15	16	0,63	G 1 1/8	1,06
RBK15/1,0	15	16	1,0	G 1 1/8	1,06
RBK15/1,6	15	16	1,6	G 1 1/8	1,06
RBK15/2,5	15	16	2,5	G 1 1/8	1,06
RBK20/4,0	20	16	4,0	G 1 1/4	1,16
RBK20/6,3	20	16	6,3	G 1 1/4	1,16
RBK25/6,3	25	16	6,3	G 1 1/2	1,38
RBK25/8,0	25	16	8,0	G 1 1/2	1,38
RBK25/10,0	25	16	10,0	G 1 1/2	1,38
RBK32/10,0	32	16	10,0	G 2	1,92
RBK32/16,0	32	16	16,0	G 2	1,92
RBK40	40	16	25,0	G 2 1/4	2,34
RBK50	50	16	35,0	G 2 3/4	3,50

Gunmetal two-way valves RBK15..50-BK for water up to 120 °C, 16 bar

	DN	PN	kvs	Connection	Weight [kg]
RBK15/0,63-BK	15	16	0,63	G 1 1/8	1,17
RBK15/1,0-BK	15	16	1,0	G 1 1/8	1,17
RBK15/1,6-BK	15	16	1,6	G 1 1/8	1,17
RBK15/2,5-BK	15	16	2,5	G 1 1/8	1,17
RBK20/4,0-BK	20	16	4,0	G 1 1/4	1,29
RBK20/6,3-BK	20	16	6,3	G 1 1/4	1,29
RBK25/6,3-BK	25	16	6,3	G 1 1/2	1,54
RBK25/8,0-BK	25	16	8,0	G 1 1/2	1,54
RBK25/10,0-BK	25	16	10,0	G 1 1/2	1,54
RBK32/10,0-BK	32	16	10,0	G 2	2,20
RBK32/16,0-BK	32	16	16,0	G 2	2,20
RBK40-BK	40	16	25,0	G 2 1/4	2,69
RBK50-BK	50	16	35,0	G 2 3/4	4

RBK15..50 (-BK)

Technical Data

Nominal diameter Pressure rating	DN15 to 50 PN 16	(G 1 1/8 to G 2 3/4)	
Connection	Male thread ISO 228	3/1	
Characteristic curve	RBK1550	Gates A \rightarrow AB = same percentage up to DN32 Gates A \rightarrow AB = linear DN40 and higher Gates B \rightarrow AB = linear	
	RBK1550-BK	Gates A \rightarrow AB = same percentage up to DN32 Gates A \rightarrow AB = linear DN40 and higher	
Nominal stroke	10 mm		
Leak rate	in accordance with E	N 1349; leackage class I; 0,05 % from kvs valu	
Medium temperature	0 to 120 °C		
Housing	gunmetal, CC491K		
Cone	Brass CW614N		
Valve spindle	CrMo steel 1.4021		
Spindle seal	EPDM O-rings, maintenance-free		
Blank cover	GTW union nut (malleable iron, yellow chromated)Steel gasket, yellow chromated		

Accessories

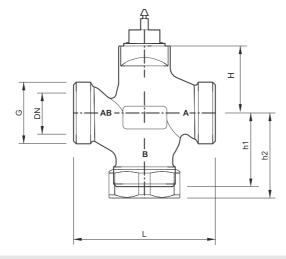
Not included in delivery.

Two Z... fittings are required for RBK15..50-BK two-way valves and three Z... fittings for RBK15..50 three-way valves.

- 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

RBK15..50 (-BK)

Dimensions



DN	L [mm]	h1 [mm]	h2 [mm]	H [mm]	G [inches]
15	80	55	65	46	1 1/8"
20	90	55	65	46	1 1/4"
25	110	55	65	52	1 1/2"
32	120	55	67	56	2"
40	130	60	72	65	2 1/4"
50	150	65	77	65	2 3/4"

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Product Description

Valve Installation



Installation and commissioning work may only be carried out by qualified technicians.

If the valve is installed in the system, 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, the actuator can be installed.

Be sure to comply with VDE guidelines and local wiring regulations. The device is connected according to the legally binding system circuit diagram.

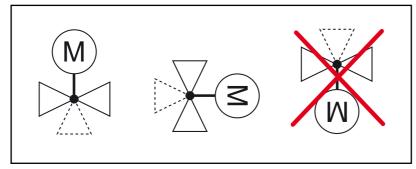


CAUTION

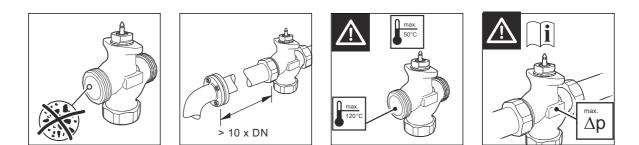
CAUTION

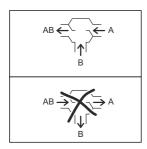
The valve may only be installed by qualified technicians. In addition to the generally valid installation guidelines, the following points are to be observed:

- 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.
- A strainer should be installed upstream of the valve. For maintenance purposes, shut-off valves should be installed upstream and downstream of the valve.
- When carrying out installation, observe the maximum permitted pressure difference △p and the specified flow direction.
- When installing the drive or removing the connection cover, ensure that there is sufficient clearance above the drive.
- Observe the flow direction arrow on the valve body. Inverting the flow direction impairs control behavior.



RBK15..50 (-BK)





Overview of Compatible Valve Actuators

	MD50	MD50/230	MD50-E	MD50-R
RBK1550(-BF)	Х	Х	Х	Х



NOTE

You can find further information on using the valves with actuators in the product descriptions of actuators MD50, MD50/230, MD50-E and MD50-R.

