

Product Description**RF15..150(-BF), RF65K(-BF)****RF15..150(-BF), RF65K(-BF) Two-Way and Three-Way Valves****Application**

The grey cast iron three-way valves are used for mixing liquids precisely.

The valves are used as two-way valves with the BF blank flange.



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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 - Změny vyhrazeny - Zmiany zastrzeżone - Возможны изменения - A változtatások jogát fenntartjuk - 保留未经通知而改动的权力

Important Information Regarding Product Safety

Safety Instructions

This data sheet contains information on installing and commissioning the product "RF15..150(-BF), RF65K(-BF)". 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.

Product Description**RF15..150(-BF), RF65K(-BF)****Valve Types RF15..150(-BF), RF65K(-BF)**

Grey cast iron three-way valves for water up to 120°C, 16 bar

Type	DN	PN	kvs	Stroke [mm]	Connection	Weight [kg]
RF15/0,63	15	16	0,63	14	Flange	3,1
RF15/1,0	15	16	1,0	14	Flange	3,1
RF15/1,25	15	16	1,25	14	Flange	3,1
RF15/1,6	15	16	1,6	14	Flange	3,1
RF15/2,5	15	16	2,5	14	Flange	3,1
RF15	15	16	4,0	14	Flange	3,1
RF20/5,0	20	16	5,0	14	Flange	4,0
RF20	20	16	6,3	14	Flange	4,0
RF25/8,0	25	16	8,0	14	Flange	5,0
RF25	25	16	10	14	Flange	5,0
RF32/12,5	32	16	12,5	14	Flange	7,6
RF32	32	16	16	14	Flange	7,6
RF40/20	40	16	20	14	Flange	9,1
RF40	40	16	25	14	Flange	9,1
RF50/31,5	50	16	31,5	14	Flange	11,6
RF50	50	16	40	14	Flange	11,6
RF65/50K	65	16	50	20	Flange	19,1
RF65K	65	16	63	20	Flange	19,1
RF65/50	65	16	50	30	Flange	19,8
RF65	65	16	63	30	Flange	19,8
RF80/80	80	16	80	30	Flange	24
RF80	80	16	100	30	Flange	24
RF100/125	100	16	125	30	Flange	36
RF100	100	16	160	30	Flange	36
RF125	125	16	250	50	Flange	50
RF150/315	150	16	315	50	Flange	76

Grey cast iron two-way valves for water up to 120°C, 16 bar

Type	DN	PN	kvs	Stroke [mm]	Connection	Weight [kg]
RF15/0,63-BF	15	16	0,63	14	Flange	4,1
RF15/1,0-BF	15	16	1,0	14	Flange	4,1
RF15/1,25-BF	15	16	1,25	14	Flange	4,1
RF15/1,6-BF	15	16	1,6	14	Flange	4,1
RF15/2,5-BF	15	16	2,5	14	Flange	4,1
RF15-BF	15	16	4,0	14	Flange	4,1
RF20/5,0-BF	20	16	5,0	14	Flange	5,3
RF20-BF	20	16	6,3	14	Flange	5,3
RF25/8,0-BF	25	16	8	14	Flange	6,6
RF25-BF	25	16	10	14	Flange	6,6

RF15..150(-BF), RF65K(-BF)

Product Description

Type	DN	PN	kvs	Stroke [mm]	Connection	Weight [kg]
RF32/12,5-BF	32	16	12,5	14	Flange	10
RF32-BF	32	16	16	14	Flange	10
RF40/20-BF	40	16	20	14	Flange	11,8
RF40-BF	40	16	25	14	Flange	11,8
RF50/31,5-BF	50	16	31,5	14	Flange	13,3
RF50-BF	50	16	40	14	Flange	13,3
RF65/50K-BF	65	16	50	20	Flange	24,8
RF65K-BF	65	16	63	20	Flange	24,8
RF65/50-BF	65	16	50	30	Flange	24,8
RF65-BF	65	16	63	30	Flange	24,8
RF80/80-BF	80	16	80	30	Flange	29,8
RF80-BF	80	16	100	30	Flange	29,8
RF100/125-BF	100	16	125	30	Flange	42,9
RF100-BF	100	16	160	30	Flange	42,9
RF125-BF	125	16	250	50	Flange	60,8
RF150/315-BF	150	16	315	50	Flange	88,8

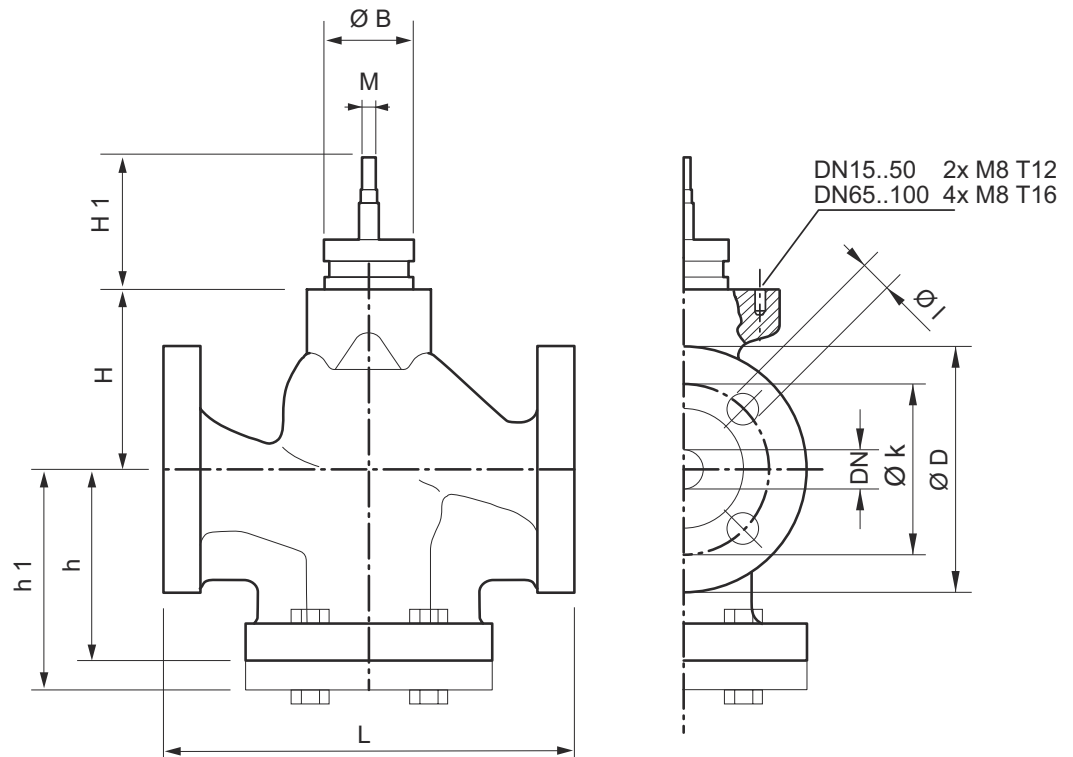
Technical Data for Valves RF15..150(-BF), RF65K(-BF)

Nominal diameter	DN15..100
Pressure rating	PN 16
Connection	Flange in accordance with EN 1092-2 Type 21
Characteristic curve	RF.. Gates A → AB = same percentage Gates B → AB = linear
	RF..-BF Gates A → AB = same percentage
Nominal stroke	RF15..50(-BF): 14 mm RF65K(-BF): 20 mm RF65..100(-BF): 30 mm RF125..150(-BF): 50 mm
Leak rate	in accordance with EN 1349 leakage class VI G 1 (leak proof)
Medium temperature	0 °C to 130 °C (max. 120 °C at 16 bar)
Housing	Grey cast iron GG25/ EN-JL1040
Cone	Brass CW614N
Spindle	CrMo steel 1.4122
Seal	O-rings, EPDM peroxide-cured

Product Description

RF15..150(-BF), RF65K(-BF)

Dimensions



DN	L [mm]	h [mm]	h1 (RF..-BF) [mm]	H [mm]	H1 [mm]	M	$\varnothing B$ [mm]	$\varnothing D$ [mm]	$\varnothing k$ [mm]	$\varnothing I$ [mm]
15	130	65	89	42	46±1	M6	30	95	65	4x $\varnothing 14$
20	150	70	96	47	46±1	M6	30	105	75	4x $\varnothing 14$
25	160	75	101	52	46±1	M6	30	115	85	4x $\varnothing 14$
32	180	95	123	55	46±1	M6	30	140	100	4x $\varnothing 18$
40	200	100	128	58	46±1	M6	30	150	110	4x $\varnothing 18$
50	230	100	137	58	46±1	M6	30	165	125	4x $\varnothing 18$
65K	290	120	150	107	46±1	M6	30	185	145	4x $\varnothing 18$
65	290	120	150	107	62±1	M10	35	185	145	4x $\varnothing 18$
80	310	130	162	119	62±1	M10	35	200	160	8x $\varnothing 18$
100	350	150	182	126	62±1	M10	35	220	180	8x $\varnothing 18$
125	400	160	194	132	64±1	M10	35	250	180	8x $\varnothing 18$
150	480	170	207	137	65±1	M10	35	285	180	8x $\varnothing 22$

Valve Installation



CAUTION

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.

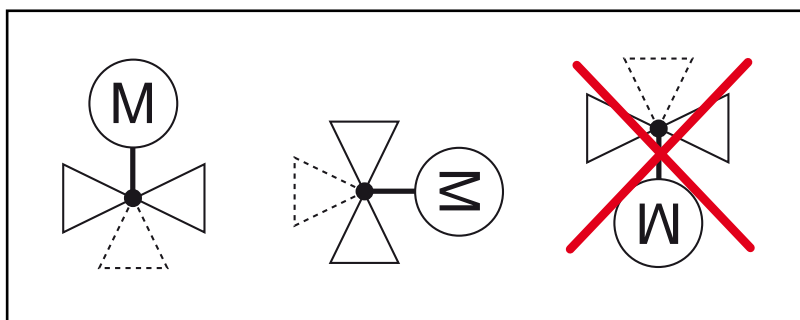
Be sure to comply with VDE guidelines and local wiring regulations. The device is connected according to the legally binding system circuit diagram.



CAUTION

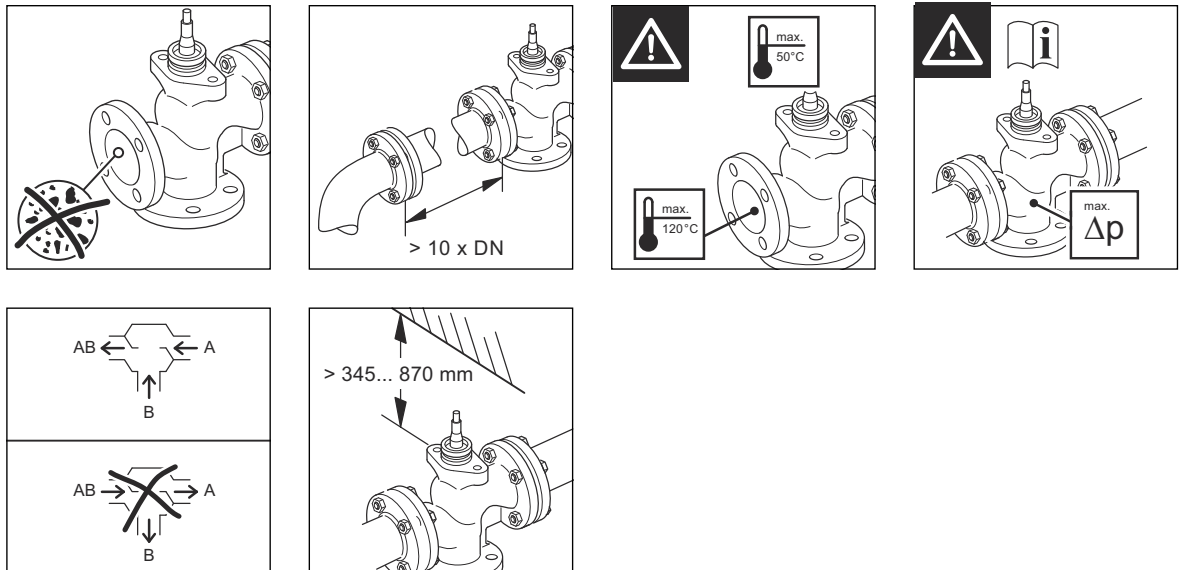
The valve may only be installed by qualified technicians. In addition to the generally valid installation guidelines, the following points are to be observed:

- 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 Δp 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.



Product Description

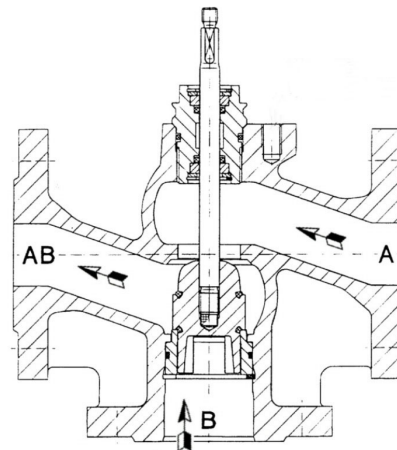
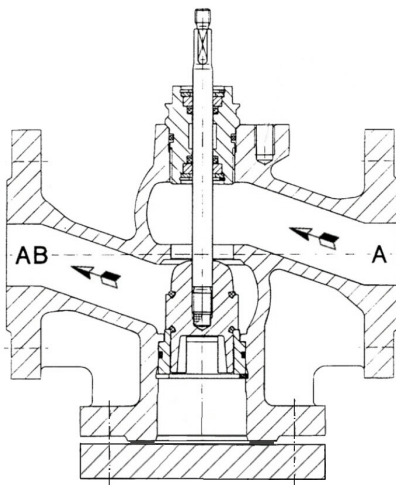
RF15..150(-BF), RF65K(-BF)



Valve Cross-Sections with Flow Directions

Two-way valve

Three-way valve



Overview of Compatible Valve Actuators

	M250xx	M300Kxx	M500xx	MD50Y	MD200xx	MD210xx	MF200xx
RF15..RF50 (-BF)	-	-	-	X	X	X	X
RF65K(-BF)	-	-	-	-	X	X	X
RF65..RF100(-BF)	X	X	-	-	-	-	-
RF125..RF150(-BF)	-	-	X	-	-	-	-



NOTE

You can find further information on using the valves with actuators in the product descriptions of the M250xx, M300Kxx, M500xx, MD50Y, MD200xx, MD210xx and MF200xx actuators.

