



BTR

3-way control valves

BTR is a range of 3-way control valves. They are used to control hot, cold or glycol-mixed water or steam in heating and ventilation systems.

- Kv-value 0.63...39
- Size DN15 up to DN50
- Temperature area -5...+185°C

The valve range BTR is used with RVA5 actuators. The valve is intended for cold and hot water, glycol-mixed water or steam. The 3-way valve is intended to be used as a mixing valve.

Function

BTR (3-way valve):

Open between port 2 and port 1 when the stem is in its lowest position. (Is in this position closed between ports 3 and 1).

Open between port 3 and port 1 when the stem is in its top position. (Is in this position closed between ports 2 and 1).

See drawing on overleaf.

Actuators

The valves are intended to be used with RVA5 actuators (3-point or 0...10 V). See product sheets for RVA5 for detailed information on suitable actuators.

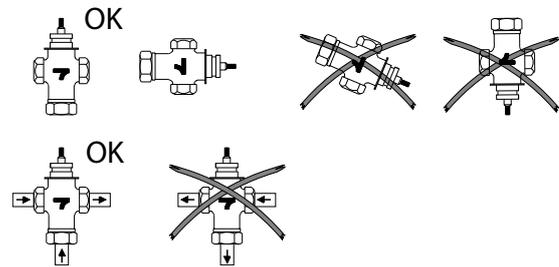
BTR can also be adjusted for use with other actuator brands (contact Systemair for more information).

- Pressure class PN16
- Differential pressure 0.7...1.6 MPa

Installation

The valve should be mounted according to the flow directions on the valve.

The 3-way valve is of mixing type and should be mounted in the mixing point.



Material

The valves have body and plug in gunmetal and stem in stainless steel. O-ring in Viton in the packing box.

Control of refrigerants

The valves can be used with different refrigerants. In this case, a special type of packing box should be mounted. Contact Systemair for more information.

Models

3-way valves		Kv	Max. diff. pressure	Max. actuator force
BTR15-0,63	DN15	0.63	1.6 MPa	800 N
BTR15-1,0	DN15	1.0	1.6 MPa	800 N
BTR15-1,6	DN15	1.6	1.6 MPa	800 N
BTR15-2,1	DN15	2.1	1.6 MPa	800 N
BTR15-2,7	DN15	2.7	1.6 MPa	800 N
BTR20-4,2	DN20	4.2	1.6 MPa	1500 N
BTR20-5,6	DN20	5.6	1.6 MPa	1500 N
BTR25-10	DN25	10	1.6 MPa	1500 N
BTR32-16	DN32	16	1.6 MPa	1500 N
BTR40-27	DN40	27	1.3 MPa	1500 N
BTR50-39	DN50	39	0.7 MPa	1500 N

Technical data

Pressure class	PN16
Connection	Metric female threaded
Flow characteristics	Equal percentage
Rangeability	100:1
Stroke	20 mm
Media	Hot, cold or glycol-mixed water (max 50%) or steam
Max leakage	0.1 % of kv
Temperature area	-5...+185°C
Thread	The valves have female threaded connections according to ISO 228/1

Material

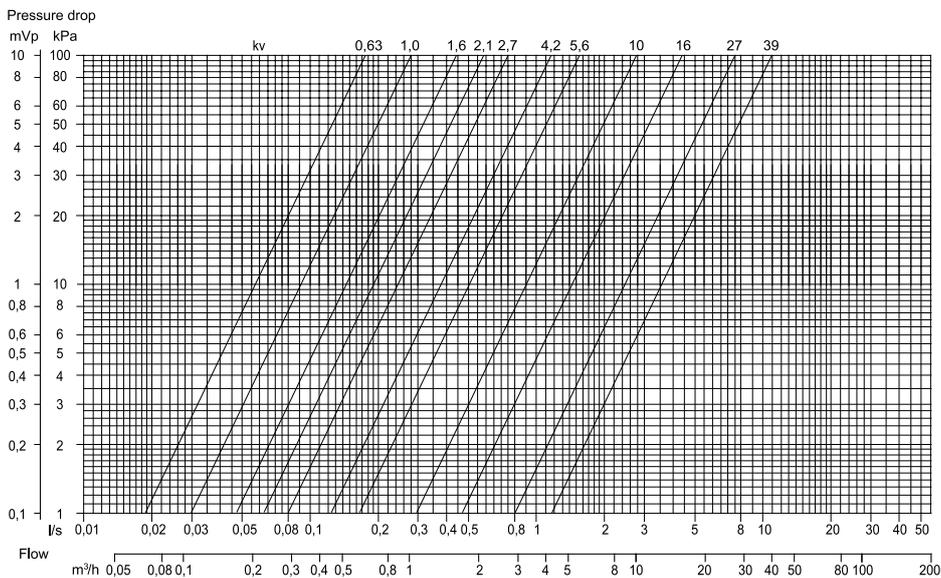
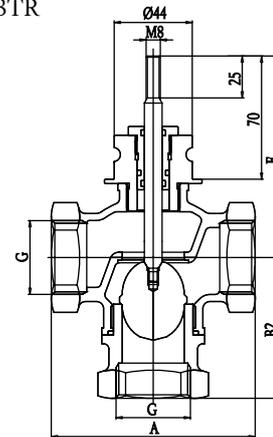
Body	Rg5 (gun metal SS 5204)
Plug	Rg5 (gun metal SS 5204)
Stem	Stainless steel
Packing box	Self-adjusting Teflon (O-ring Viton)

Dimensions and pressure drop diagram

Measurements in mm.

BTR	15-0,63	15-1,0	15-1,6	15-2,1	15-2,7	20-4,2	20-5,6	25-10	32-16	40-27	50-39
A	70	70	70	70	70	80	80	90	115	130	160
G	G1/2"	G1/2"	G1/2"	G1/2"	G1/2"	G3/4"	G3/4"	G1"	G1 1/4"	G1 1/2"	G2"
B1	56	56	56	56	56	56	56	56	60	64	70
B2	70	70	70	70	70	70	70	70	80	80	95
E	106	106	106	106	106	106	106	112	115	123	128

BTR



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