



ETRS

Externally threaded control valve, manually convertible to either 2-way or 3-way (selectable)

Valves intended for control of cold, hot and glycol-mixed water in heating, ventilation and domestic water systems. The valves are intended to be used together with Regin's RVAN5 actuators. Valves with DN32-50 may also be used with RVAN10 if a larger actuating force is required. The valve is supplied with a cover lid for converting the 3-way valve into a 2-way valve.

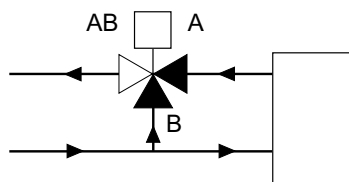
- ✓ Size DN15...DN50
- ✓ Kvs value 0.63...40
- ✓ Media temperature -5...+185°C
- ✓ Pressure rating PN16
- ✓ Can be used in domestic water systems
- ✓ Supplied complete with pipe fittings and blanking cover lid

Function

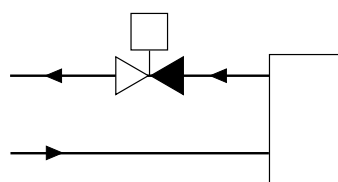
The valve is supplied with a cover lid, enabling the user to easily convert it either into a 2-way valve or a 3-way valve.

If the valve is configured as a 3-way valve, it is open between port A and port AB (the ports opposite to one another) when the stem is in its lowest position. In this position, the valve is also closed between the bottom port B and the common supply port AB. When the stem is in its highest position, the 3-way valve is completely closed between port A and port AB and consequently open between the bottom port B and the common port AB.

If the valve is configured as a 2-way valve, it is open between ports A and AB when the stem is at its lowest position (and closed between ports B and AB).



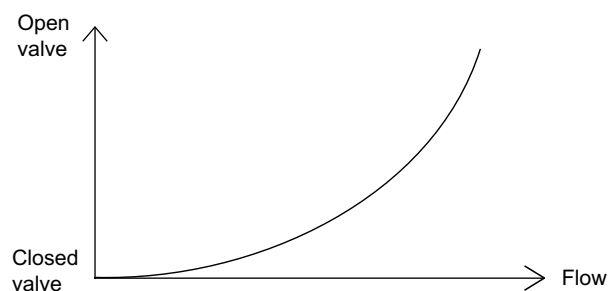
3-way valve



2-way valve

Flow characteristics

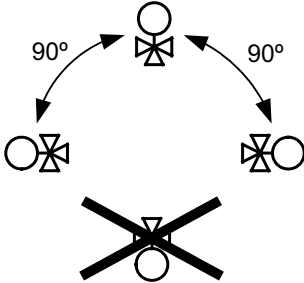
The flow type is equal percentage according to the figure below.



Installation

The valve is of a mixing type and must therefore be mounted in the mixing point.

- Before installation of the control valve, ensure that the pipe is clean. Make sure that pipe scale, metal chips, welding slag and other foreign materials are removed.
- For maximum efficiency and minimum wear, install the valve in a vertical position with the stem pointing upward. If the valve is mounted with the actuator on the side, more wear is caused to the valve stuffing box. The valve should never be mounted at an angle of more than 90°.



- Install the valve according to the fluid direction arrow shown on the valve.
- Make sure there is ample space above the valve to facilitate easy removal of the valve actuator.
- Fit a strainer/filter upstream of the valve to prolong the equipment's life span.
- A water quality according to VDI 2035 is recommended.

Technical data

Application	Heating systems, cooling systems, domestic water systems, ventilation systems
Pressure rating	PN16
Connection	BSP externally threaded according to ISO 228/1; supplied with threaded connections
Flow characteristics	Equal percentage
Max. leakage	0.1 % of the kvs value
Media	Hot water, cold water, glycol-mixed water (max. 50 % glycol)
Media temperature	-5...+185 °C
Rangeability	100:1
Stroke	20 mm

Material

Body	Gunmetal CC491K (RG5)
Seat	Gunmetal CC491K (RG5)
Plug	Gunmetal CC491K (RG5)
Stem	Stainless steel 1.4305
Packing box	Dezincification resistant brass CW 602N, self-adjusting teflon
O-rings	Viton

Material, connections

Nut	Malleable cast iron, galvanized
Nipple	Dezincification resistant brass CW 602N
Fitting seal	Novatec Premium 2, Nitrile bonded aramid fibre with graphite
Cover lid	Dezincification resistant brass CW 602N

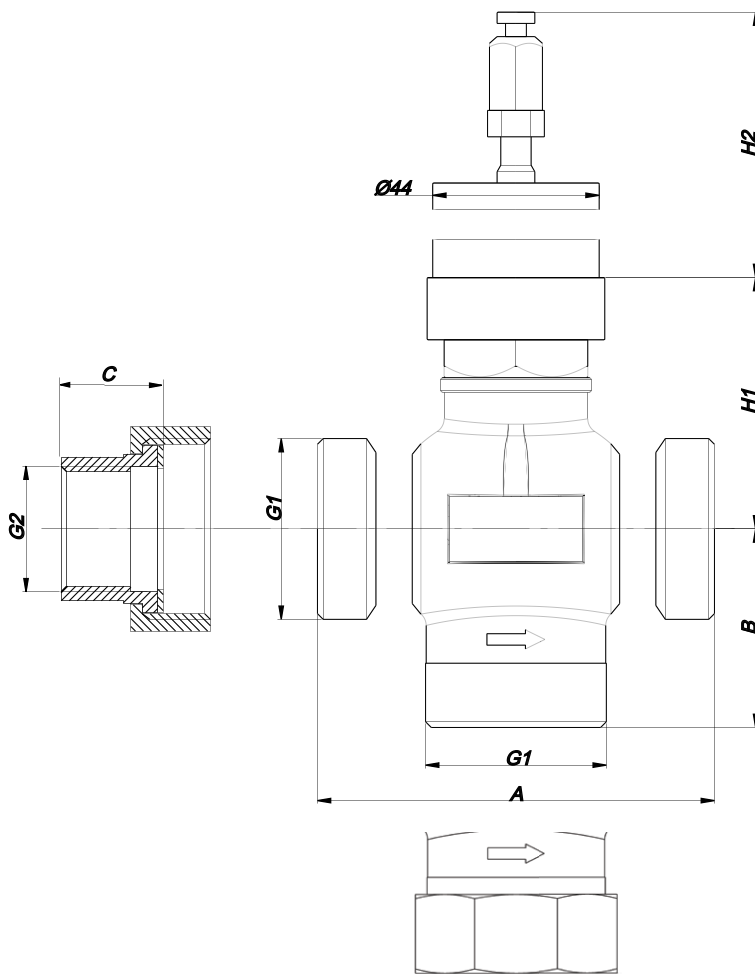
Models

Article	Nominal diameter	Max. diff. pressure	Kvs	Actuator
ETRS15-0,63	DN15	1600 kPa	0.63	RVAN5
ETRS15-1,0	DN15	1600 kPa	1	RVAN5
ETRS15-1,25	DN15	1600 kPa	1.25	RVAN5
ETRS15-1,6	DN15	1600 kPa	1.6	RVAN5
ETRS15-2,5	DN15	1600 kPa	2.5	RVAN5
ETRS15-4,0	DN15	1600 kPa	4	RVAN5
ETRS20-4,0	DN20	1600 kPa	4	RVAN5
ETRS20-5,0	DN20	1600 kPa	5	RVAN5
ETRS20-6,3	DN20	1600 kPa	6.3	RVAN5
ETRS25-6,3	DN25	1000 kPa	6,3	RVAN5
ETRS25-8,0	DN25	1000 kPa	8	RVAN5
ETRS25-10	DN25	1000 kPa	10	RVAN5
ETRS32-10	DN32	600 kPa	10	RVAN5, RVAN10
ETRS32-12,5	DN32	600 kPa	12.5	RVAN5, RVAN10
ETRS32-16	DN32	600 kPa	16	RVAN5, RVAN10
ETRS40-16	DN40	400 kPa	16	RVAN5, RVAN10
ETRS40-20	DN40	400 kPa	20	RVAN5, RVAN10
ETRS40-25	DN40	400 kPa	25	RVAN5, RVAN10
ETRS50-25	DN50	250 kPa	25	RVAN5, RVAN10
ETRS50-31,5	DN50	250 kPa	31.5	RVAN5, RVAN10
ETRS50-40	DN50	250 kPa	40	RVAN5, RVAN10

Accessories

Article	Description
S0603080300	Spare parts kit, packing box

Dimensions

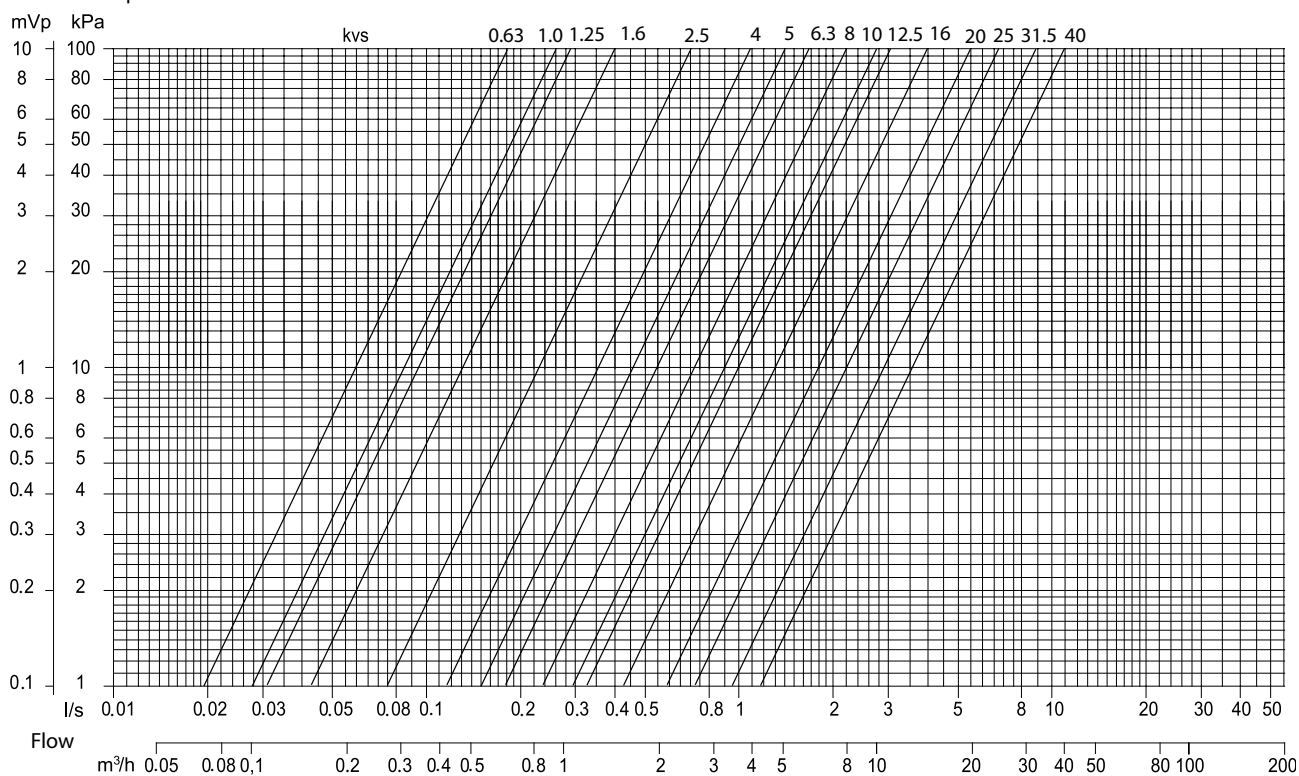


DN	A	B	H1	H2	G1	G2	C
15	100	50	60,5	70-90	G 1"	G 1/2"	23,5
20	100	50	60,5	70-90	G 1 1/4"	G 3/4"	23,5
25	105	52,5	66,5	70-90	G 1 1/2"	G 1"	27
32	105	52,5	68,5	70-90	G 2"	G 1 1/4"	32
40	130	65	76,5	70-90	G 2 1/4"	G 1 1/2"	33,5
50	150	75	82,5	70-90	G 2 3/4"	G 2"	36,5

Measurements in mm unless otherwise specified.

Pressure drop diagram

Pressure drop



Example: calculation of kv value

If the pressure drop is 7 kPa (A) and the flow is 4 m³/h (B), the kv value is 16 (C). See the markings in the picture to the right.

