

Technical description

Application:

Heating- and cooling systems.

Functions:

TBV:

- Balancing
 - Pre-setting
 - Measuring
 - Shut-off
- TBV-C:
- Control
 - Balancing
 - Pre-setting
 - Measuring
 - Shut-off

Material:

Valve body: AMETAL®
Bonnet: AMETAL®
Seat seal: Metal seated (TBV). Valve disc of EPDM (TBV-C)
Spindle seal: EPDM O-ring
Handwheel: Polyamide

AMETAL® is the dezincification resistant alloy of TA.

Marking:

Body: TA, PN 16/150, DN and inch size, flow direction arrow
Handwheel TBV: Valve type and DN

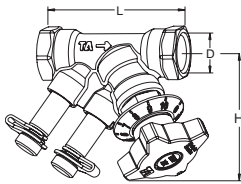
Pressure class:

PN 16

Temperature:

Max. working temperature: 120°C
Min. working temperature: -20°C

TBV

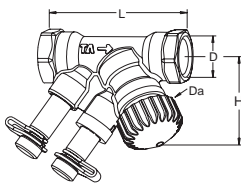


TA No	DN	D	L	H	Kvs
52 130-015	15	G1/2	78	72	1.8
52 130-020	20	G3/4	91	78	3.6

Kvs = m³/h at a pressure drop of 1 bar and fully open valve.

TBV can be connected to smooth pipes by KOMBI compression coupling. See catalogue leaflet KOMBI.

TBV-C



TA No	DN	D	Da*	L	H	Kvs
52 132-015	15	G1/2	M30x1,5	78	70	1.8
52 132-020	20	G3/4	M30x1,5	91	73	3.6

*) Connection to actuator or thermostatic head.

Kvs = m³/h at a pressure drop of 1 bar and fully open valve.

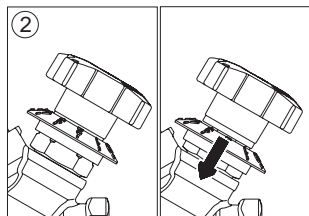
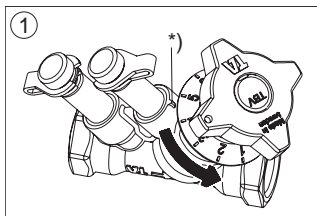
TBV-C can be connected to smooth pipes by KOMBI compression coupling. See catalogue leaflet KOMBI.

Setting TBV

Setting of a valve for a given pressure drop, eg corresponding to position 5 is done as follows:

1. Shut the valve completely.
2. Turn the scale so that position 5 is pointing at the index* of the valve body (fig 1).
3. Push the scale downwards over the bonnet (fig 2).
4. Reopen the valve until stop. The valve is now set.

There is a diagram for every valve size that shows the flow for different pressure drops and settings.



Setting TBV-C

Setting of a valve for a given pressure drop, eg corresponding to position 5 is done as follows:

1. Place the adjustment tool at the valve.
2. Turn the tool so that position 5 is pointing at the index* of the valve body.
3. Remove the tool. The valve is now set.

There is a diagram for every valve size that shows the flow for different pressure drops and settings.

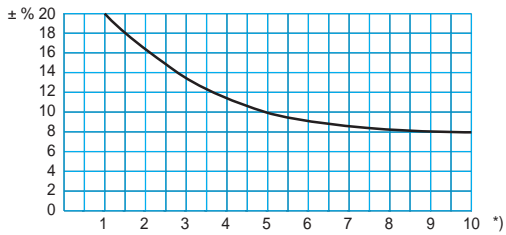
Support material

Measuring instruments

Use the CBI^{III} electronic instrument. See catalogue leaflet for further information on CBI^{II}.

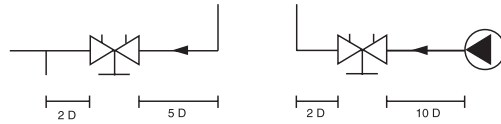
Measuring accuracy

Flow deviation at different settings



*) Position

Try to avoid mounting taps and pumps, immediately before the valve.



Sizing

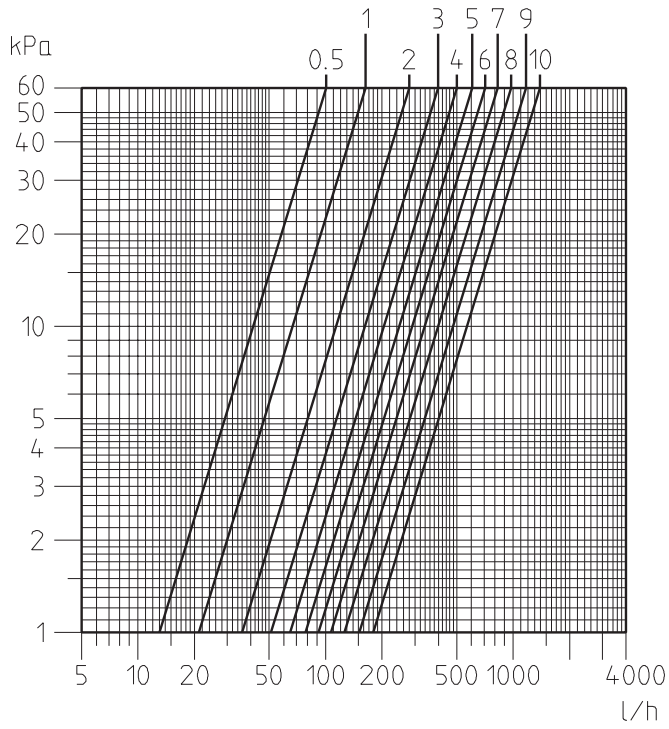
When Δp and the design flow are known, use the formula to calculate the Kv-value.

$$K_v = 0,01 \frac{q}{\sqrt{\Delta p}} \quad q \text{ l/h, } \Delta p \text{ kPa}$$

$$K_v = 36 \frac{q}{\sqrt{\Delta p}} \quad q \text{ l/s, } \Delta p \text{ kPa}$$

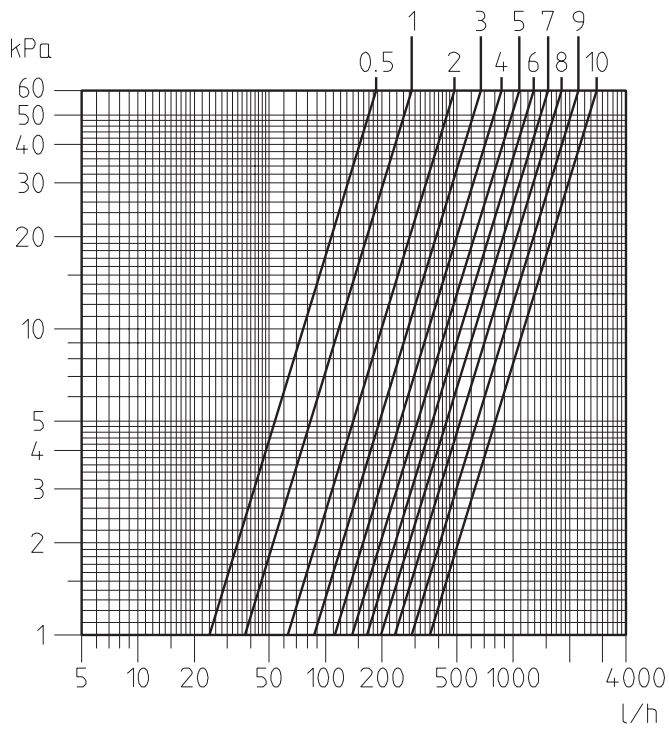
Diagram TBV

DN 15



Position	Kv
0,5	0,13
1	0,21
2	0,36
3	0,51
4	0,65
5	0,78
6	0,92
7	1,07
8	1,26
9	1,51
10	1,80

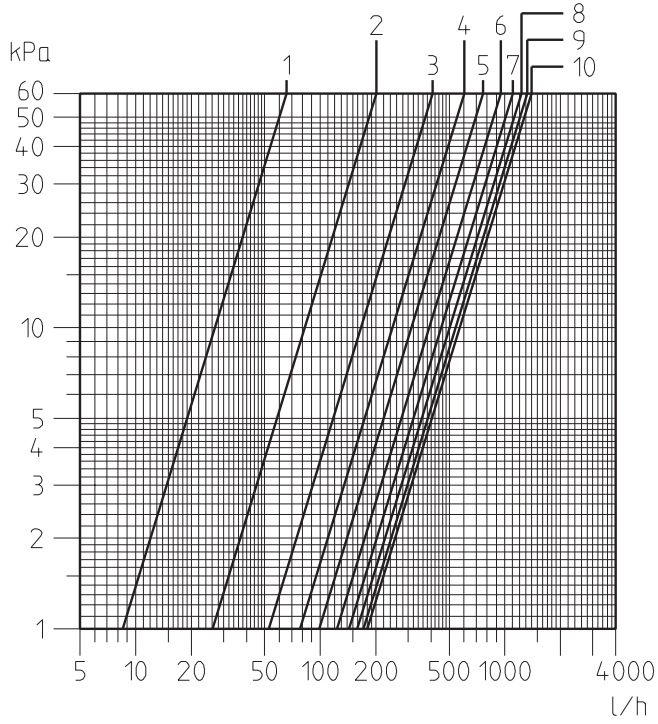
DN 20



Position	Kv
0,5	0,24
1	0,37
2	0,63
3	0,87
4	1,12
5	1,39
6	1,66
7	1,98
8	2,34
9	2,88
10	3,60

Diagram TBV-C

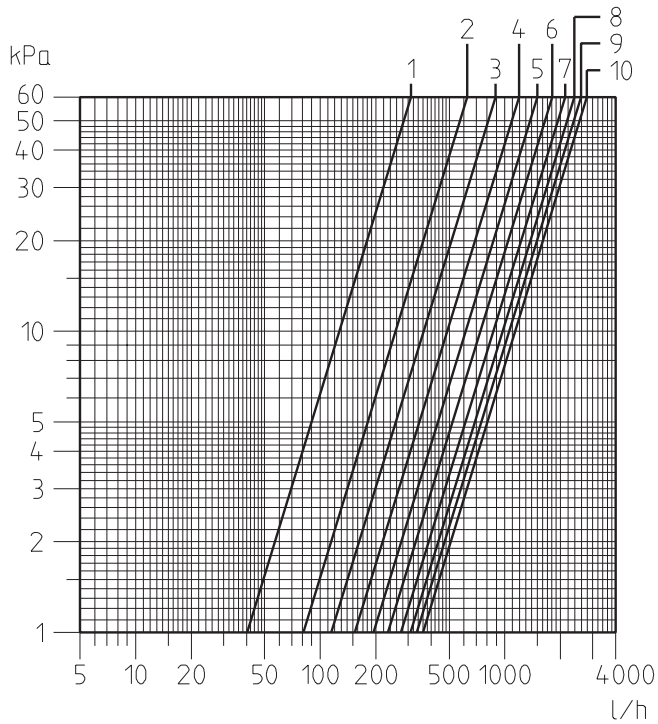
DN 15



Position	Kv
1	0,09
2	0,26
3	0,53
4	0,78
5	0,99
6	1,23
7	1,43
8	1,59
9	1,71
10	1,80

5

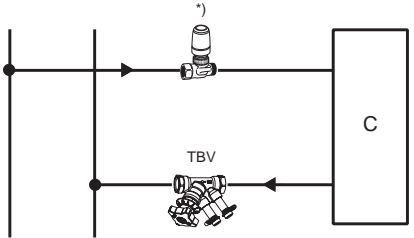
DN 20



Position	Kv
1	0,40
2	0,81
3	1,15
4	1,54
5	1,94
6	2,33
7	2,74
8	3,08
9	3,34
10	3,60

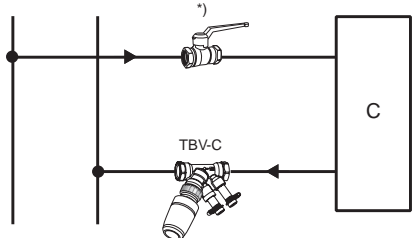
Installation

TBV



*) Control valve

TBV-C

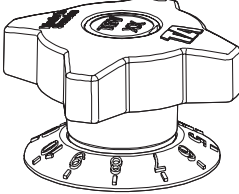


*) Shut-off valve

Accessories

TBV

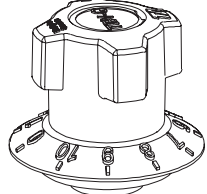
Handwheel, complete



TA No
52 130-100

TBV-C

Adjustment tool



TA No
52 132-100

Tour & Andersson retains the right to make changes to its products and specifications without prior notice.