

TACOSSETTER BYPASS FLANGE

BALANCING VALVE



Direct reading and balancing valve with visual flow indication.

DESCRIPTION

Direct hydraulic balancing and control of flows to consumers or in a subsystem. TacoSetter Bypass Flange balancing valves offer an easy and accurate method of adjusting the flow rates for heating-, ventilation-, air conditioning- and cooling systems.

Correct balancing of hydraulic circuits ensures optimum energy distribution, resulting in more efficient and economical operation in accordance with the energy saving regulations provided for by legislation.

With TacoSetter Bypass Flange balancing valves, any qualified fitter can set the appropriate flow rate using the unique flow measurement

device, avoiding investments in training and costly measuring devices.

INSTALLATION

To avoid turbulence and obtain maximum accuracy of the required flow it is necessary to install, on the inlet side of the valve, a section of straight pipe, the same diameter and length as the valve body.

The valve may be installed in any position, care should be taken in order to ensure that both the measuring cylinder and adjustment screw are not obstructed and that the arrow is pointing in the direction of the flow.

ADVANTAGES

- Accurate and fast adjustment with scale and without the aid of diagrams, tables or measurement devices
- Direct reading of the set volume flow in l/min
- Variable installation position, maintenance-free
- Flow control with setpoint adjuster
- Regulating valve with isolating facility (rest leakage possible)
- Minimal pressure loss

OPERATION

Measurement of the flow rate through the valve can be set by turning the adjustment screw until the required flow rate is read on the front edge of the float, which is situated within the measuring cylinder.

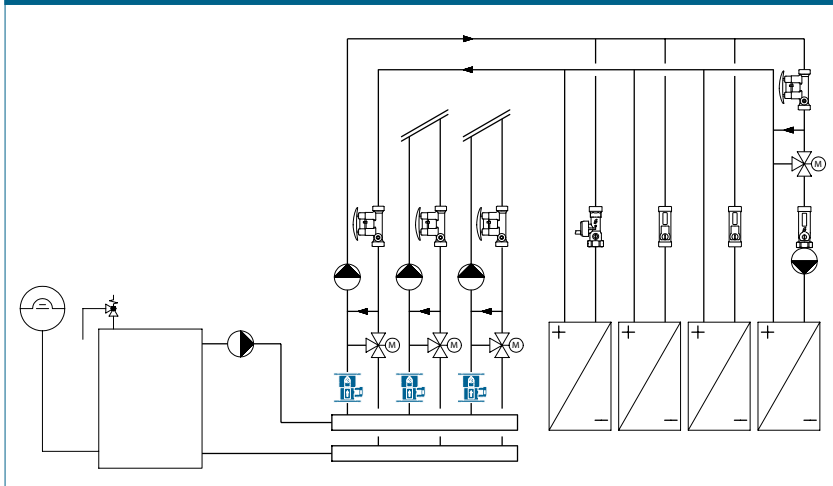
The two check valves must be in the open position but can be closed after commissioning without affecting the set position.

BUILDING CATEGORIES

For pipe installations in heating water and cooling areas:

- Apartment blocks, housing estates, multiple dwelling units
- Residential care facilities and hospitals
- Administration and service buildings
- School buildings and sports facilities
- Commercial and industrial buildings

SYSTEM / BASIC DIAGRAM



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SPECIFICATION TEXT

See www.taconova.com

TECHNICAL DATA

Generally

- Operating temperature $T_{0\max}$: 100 °C (for applications below 0 °C, contact Taconova)
- Operating pressure $P_{0\max}$: 10 bar
- Measuring accuracy: ±5% of nominal flow
- k_{VS} -value and measurement range see «Type program»

Material

- Valve body: grey, cast iron
- Valve housing materials: brass
- Sight glass: heat- and impact resistant plastic
- Seals: EPDM

Fluids

- Heating water (VDI 2035; SWKI BT 102-01; ÖNORM H 5195-1)
- Corrosion and antifreeze additives (glycol) up to 50% designed for heating systems (see document «Glycol correction curves»)

SERVICE

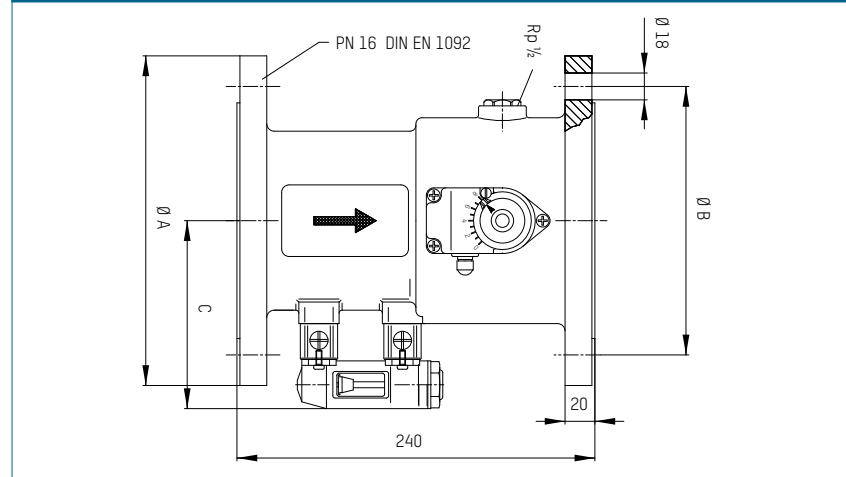
- Clean only with water, avoid contact with chemicals

TYPE PROGRAM

TacoSetter Bypass Flange | Balancing valve

| Order no. | DN | Measuring range | Weight | k_{VS} (m ³ /h) |
|--------------|-----|-------------------|---------|------------------------------|
| 223.2151.000 | 65 | 60 – 325 (l/min) | 13,9 kg | 85,0 |
| 223.2251.000 | 80 | 75 – 450 (l/min) | 16,5 kg | 166,0 |
| 223.2351.000 | 100 | 100 – 650 (l/min) | 19,7 kg | 208,0 |

DIMENSIONAL DRAWING



MEASUREMENT TABLE

TacoSetter Bypass Flange | Balancing valve

| Order no. | DN | A | B | C | ø 18 |
|--------------|-----|-----|-----|-----|---------|
| 223.2151.000 | 65 | 185 | 145 | 110 | 4 holes |
| 223.2251.000 | 80 | 200 | 160 | 118 | 8 holes |
| 223.2351.000 | 100 | 220 | 180 | 128 | 8 holes |

SPARE PARTS



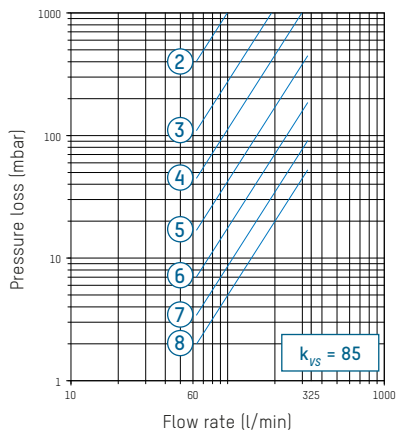
SIGHT GLASS (COMPLETE) AND SEAL

| Order no. | Range | Fits to |
|--------------|-------------------|--------------|
| 298.2321.000 | 60 – 325 (l/min) | 223.2151.000 |
| 298.2322.000 | 75 – 450 (l/min) | 223.2251.000 |
| 298.2323.000 | 100 – 650 (l/min) | 223.2351.000 |

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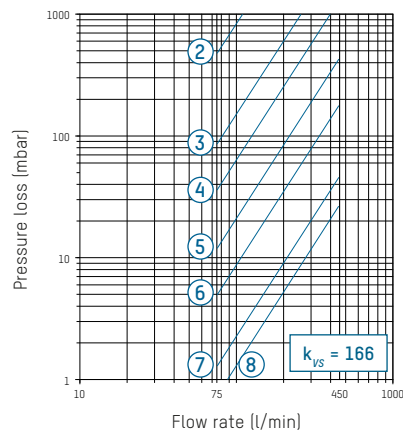
PRESSURE LOSS DIAGRAM

223.2151.000 (DN 65 | 60...325 l/min)



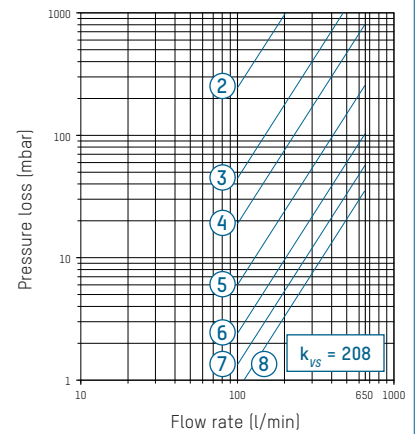
2 - 8 Valve position

223.2251.000 (DN 80 | 75...450 l/min)



2 - 8 Valve position

223.2351.000 (DN 100 | 100...650 l/min)



2 - 8 Valve position