

TOPMETER SUPPLY

BALANCING VALVE (FLOW)



Direct regulation, indication and isolation of flows from heating and cooling circuits in manifold flow pipe bars.

DESCRIPTION

The TopMeter offers an easy and accurate method of adjusting the flow rates in heating and cooling circuits. Thanks to intensive development work and new technologies, the TopMeter can be integrated efficiently in the flow pipe bar to ensure reliable indicator values. 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 the TopMeter, any qualified fitter can set the appropriate flow rate on the premises in question, thus avoiding investments in training and expensive measuring devices.

INSTALLATION POSITION

The TopMeter is installed in the flow pipe bar of the manifold in a horizontal or vertical position. The adaptation of the manifold must correspond to the manufacturer's specifications in accordance with the mounting dimension drawings.

ADVANTAGES

- Precise and quick balancing without diagrams, tables or measuring devices
- Flow rate displayed directly in l/min
- Adjustments can be prevented using a lead seal
- Regulating valve with isolating facility
- Removable sight glass available as a replacement part
- Can be installed in any position

OPERATION

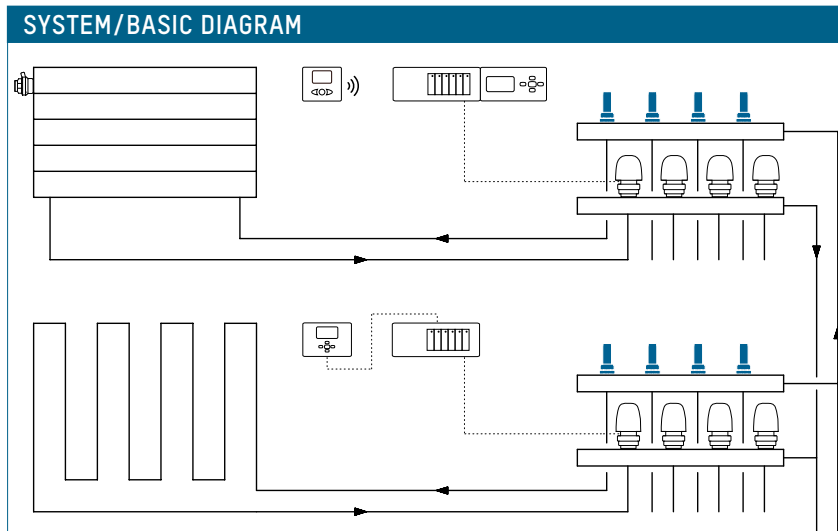
The flow measurement is based on the displacement principle of a baffle disc, which is inserted in a measuring tube. The position is conveyed to the sight glass on the indicator unit by means of a sliding bar, which fixes the baffle disc to the indicator unit. The scale printed on the sight glass allows the flow rate to be read with ease.

Turning the black spindle changes the opening profile of the valve and allows the desired flow rate to be set. The flow is isolated by turning the spindle fully.

BUILDING CATEGORIES

For installations in the heating and cooling area:

- Apartment blocks, housing estates, multiple dwelling units
- Residential care facilities, hospitals
- Administration and service buildings
- Hotels and restaurants, industrial kitchens
- School buildings and sports facilities
- Commercial and industrial buildings
- Facilities with partial use, such as barracks, camping sites



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SPECIFICATION TEXT

See www.taconova.com

TECHNICAL DATA

General

- Medium temperature:
Brass TopMeter: -10 °C – +70 °C
Plastic TopMeter: -5 °C – +60 °C
- Operating pressure $P_{0 \text{ max}}$: 6 bar
- System test pressure:
max. 10 bar (20 °C)
- Measuring accuracy:
±10% of the highest nominal value
(the change in viscosity must be taken into account with antifreeze additives)
- k_{VS} value and measuring range:
see type overview
- External thread G (cylindrical) as per ISO 228

Material

- Brass, heat-resistant plastics and stainless steel
- Seals: EPDM

Fluids

- Heating water
(VDI 2035; SWKI BT 102-01; ÖNORM H 5195-1)
- Water and proprietary additives used against corrosion and freezing up to 50%

ADDITIONAL MODELS

See data sheet for TopMeter Return

ASSEMBLY

When assembling the TopMeter in the manifold, the starting torque must not exceed 20 Nm ($\frac{1}{2}$ "), 15 Nm ($\frac{3}{8}$ ") or 12 Nm (plastic TopMeter).

SERVICE

The sight glass can be disassembled and replaced if necessary for servicing. See installation instructions (EA 1075).

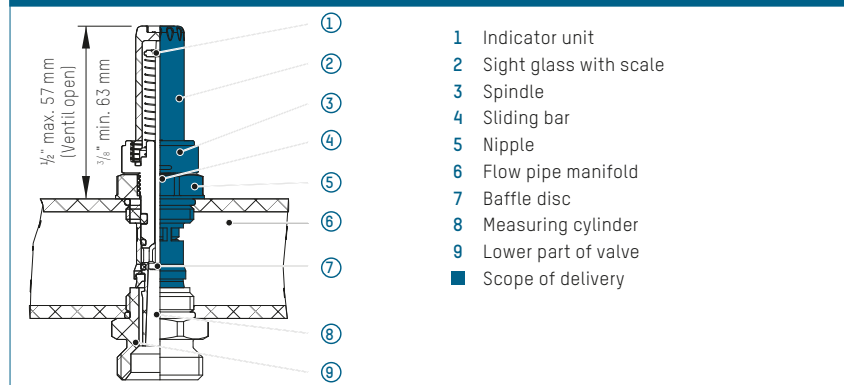
TYPE OVERVIEW

TopMeter Supply | Balancing valve - Flow pipe

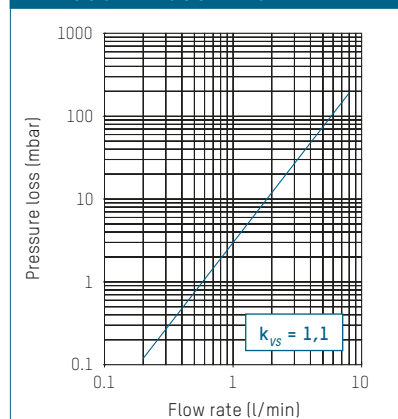
| Order no. | DN | G | Measuring range | Nipple | k_{VS} (m ³ /h) |
|--------------|----|-----------------|-----------------|----------------------|------------------------------|
| 223.6502.100 | 15 | $\frac{1}{2}$ " | 0 – 2,5 l/min | Brass, nickel-plated | 1,1* |
| 223.6505.100 | 15 | $\frac{1}{2}$ " | 0 – 5,0 l/min | Brass, nickel-plated | 1,1* |
| 223.6506.100 | 15 | $\frac{1}{2}$ " | 0 – 6,0 l/min | Brass, nickel-plated | 1,1* |
| 223.6508.100 | 15 | $\frac{1}{2}$ " | 0 – 8,0 l/min | Brass, nickel-plated | 1,1* |
| 223.6502.116 | 15 | $\frac{1}{2}$ " | 0 – 2,5 l/min | Brass | 1,1* |
| 223.6505.116 | 15 | $\frac{1}{2}$ " | 0 – 5,0 l/min | Brass | 1,1* |
| 223.6506.116 | 15 | $\frac{1}{2}$ " | 0 – 6,0 l/min | Brass | 1,1* |
| 223.6508.116 | 15 | $\frac{1}{2}$ " | 0 – 8,0 l/min | Brass | 1,1* |
| 223.6605.100 | 10 | $\frac{3}{8}$ " | 0 – 5,0 l/min | Brass, nickel-plated | 1,1* |
| 223.6605.116 | 10 | $\frac{3}{8}$ " | 0 – 5,0 l/min | Brass | 1,1* |
| 223.6702.XXX | 15 | $\frac{1}{2}$ " | 0 – 2,5 l/min | Plastic | 1,1* |
| 223.6705.XXX | 15 | $\frac{1}{2}$ " | 0 – 5,0 l/min | Plastic | 1,1* |

* The effective k_{VS} value depends on the counterpart used and the manifold geometry. Available on request with gpm and/or regulation knob in a different color. The definitive order number is assigned on the basis of the particular configuration.

DIMENSIONAL DRAWING



PRESSURE LOSS DIAGRAM



SPARE PARTS

| Order no. | Sight glass |
|--------------|---------------|
| 298.2317.000 | 0 – 2,5 l/min |
| 298.2316.000 | 0 – 5,0 l/min |
| 298.2318.000 | 0 – 6,0 l/min |
| 298.2319.000 | 0 – 8,0 l/min |

NOTE

Depending on the individual design of your application, the manifold (lower part of valve) has to be adapted to the TopMeter. For this purpose you will receive a drawing from us showing the required mounting dimensions. The sealing as well as the counterpart in the manifold remain in the responsibility of the customer in all cases.

CONTACT AND FURTHER INFORMATION

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