AO 23 TOPMETER

Balancing valve top ⅜" and ½" – Flow pipe

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.

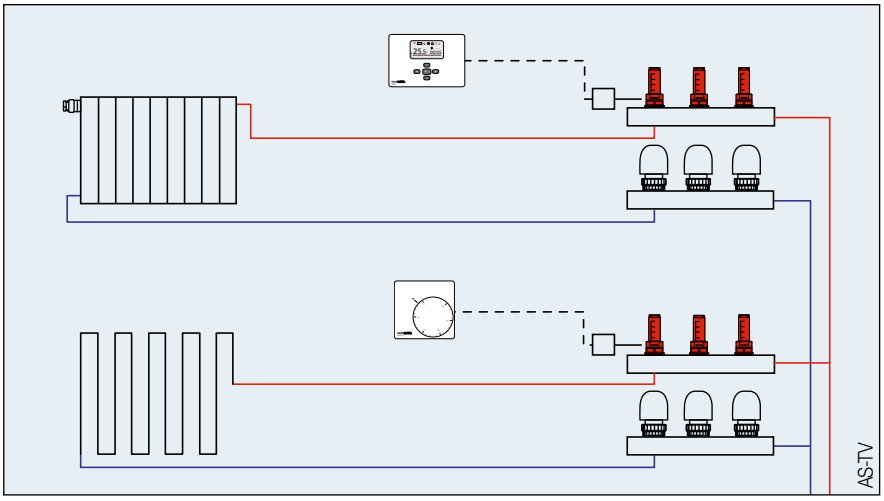
Installation

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
- Sight glass available as a replacement part
- Removable sight glass (ease of maintenance)
- 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.

Taconova Group AG | Steinackerstrasse 6 | 8902 Urdorf | Switzerland | T +41 44 735 55 55 | F +41 44 735 55 02 | group@taconova.com | **taconova.com**

AO 23 TOPMETER

taconova

Technical data

Operating temperatures:
Brass Topmeter: –10 °C – +70 °C
Plastic Topmeter: –5 °C – +60 °C

Max. operating pressure: 6 bar

System test pressure max.:
10 bar (20 °C)

k_{VS} value and measurement range:
see type program

Material: brass, heat-resistant plastics and stainless steel

Seals: EPDM

Male thread to ISO 228

Measuring accuracy:
±10% of the highest nominal value
(the change in viscosity must be taken into account with antifreeze additives)

Fluids

- Heating water (VDI 2035)
- Cold water
- Water and proprietary additives used against corrosion and freezing

Assembly

When assembling the Topmeter in the manifold, the starting torque must not exceed 20 Nm (½"), 15 Nm (⅜") and 12 Nm for plastic Topmeter.

Service

The sight glass can be removed if necessary for maintenance purposes and replaced. The relevant underfloor heating circuit must be separated in this case from the rest of the system. See instruction manual No. 1075.

Additional specifications

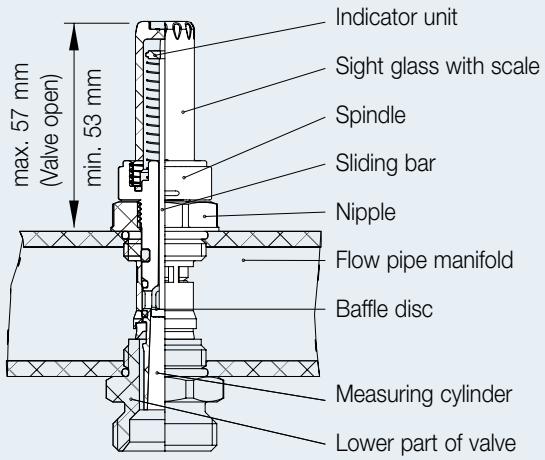
See data sheet for return pipe Topmeter

Type Program

Code no.	DN	G	Measuring range	Nipple	k_{VS} (m³/h)
223.6502.116	15	½"	0 – 2.5 l/min	Brass	1,1*
223.6505.116	15	½"	0 – 5.0 l/min	Brass	1,1*
223.6506.116	15	½"	0 – 6.0 l/min	Brass	1,1*
223.6508.116	15	½"	0 – 8.0 l/min	Brass	1,1*
223.6605.116	10	⅜"	0 – 5.0 l/min	Brass	1,1*
223.6705.116	15	½"	0 – 5.0 l/min	Plastic	1,1*

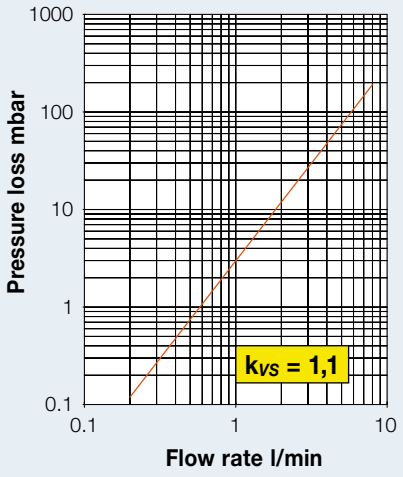
* *The effective k_{VS}-value depends on the counterpart used and the manifold geometry. Available on request with nickel-plated nipple and a different measuring range.*

Detailed drawing



Scope of delivery of TACONOVA

Pressure loss diagram at max. valve opening



Spare parts

Sight glass	Code no.
0 – 2,5 l/min	**298.2317.000**
0 – 5,0 l/min	**298.2316.000**
0 – 6,0 l/min	**298.2318.000**
0 – 8,0 l/min	**298.2319.000**
0 – 2,0 gpm + 0 – 8,0 l/min	**298.2320.000**

Please 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.