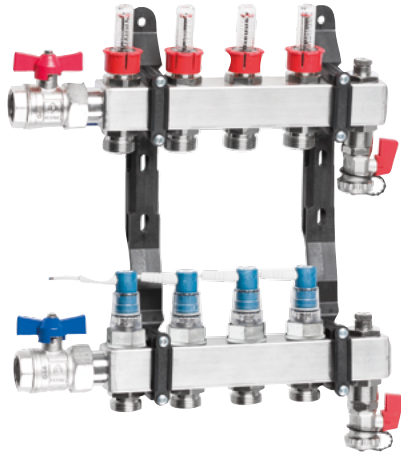


TACOSYS PRO

UNDERFLOOR HEATING CIRCUIT MANIFOLD



The TacoSys Pro heating circuit manifolds from Taconova ensure the perfect distribution of heat throughout the entire house.

DESCRIPTION

The TacoSys Pro is a next-generation heating circuit manifold, which now comes with two new components. Firstly, the TopMeter Plus balancing valve, which is positioned in the supply and allows reproducible adjustment of the flow control at the stop limit. The last setting can thus be restored any time in compliance with DIN-EN 1264-4. Secondly, the TacoDrive valve drive unit, in which case the actuator has been integrated directly in the valve. The actuator is extremely compact and has a reversible first-open function, with the force of the expansion element acting directly on the valve.

Different valve positions result in different flow volumes. They thus guarantee individual regulation of the room temperature, precisely tailored to the requirements of your customers.

The TacoVent Vent air vent ensures fully automatic ventilation of supply and return, thus enhancing operating safety and user convenience.

The underfloor heating circuit manifolds are supplied fully pre-assembled and ready-for-connection. The high-quality stainless steel TacoSys Pro manifold can be supplied with between two and twelve heating circuits.

ADVANTAGES

- Balancing with TopMeter Plus in the supply circuit
- Directly integrated TacoDrive valve drive unit
- TacoDrive offers high protection class (IP54)
- Integrated valve position indicator
- Compliance with DIN-EN 1264-4 standard
- Light, modern and robust stainless steel manifold bars
- Ventilation with the fully automatic TacoVent Vent air vent
- Glass-fiber reinforced plastic stay for sound-damping assembly

It fulfills all requirements with respect to performance, energy efficiency, reliability, durability and comfort.

INSTALLATION POSITION

For riser pipe assembly left and right, and overhead.

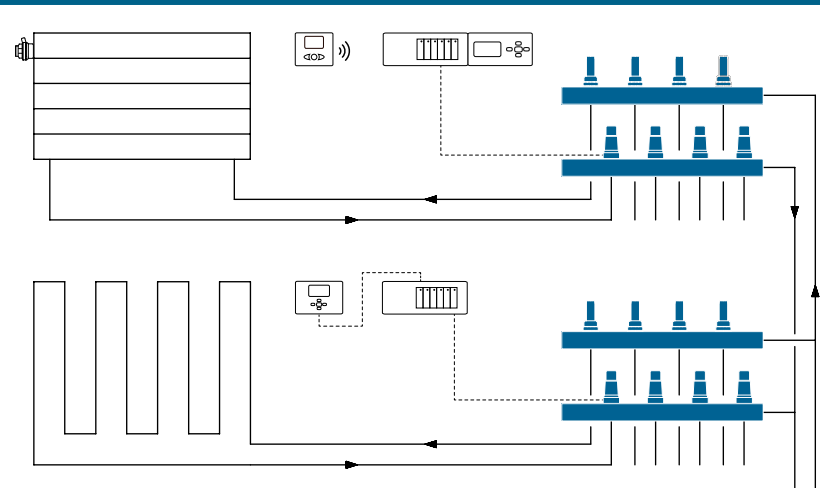
OPERATION

Manifold supply and return bars are connected to the heating system. The heating and cooling circuits can be connected effortlessly to the Eurocone outlets using the likewise optionally available fittings. The designed flow volume is set for each circuit at the TopMeter Plus. The room thermostats together with the actuators ensure comfortable conditions in individual rooms.

BUILDING CATEGORIES

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

SYSTEM/BASIC DIAGRAM



TACOSYS PRO | HEATING CIRCUIT MANIFOLD

SPECIFICATION TEXT

See www.taconova.com

TECHNICAL DATA

General

- Medium temperature: -10°C – $+60^{\circ}\text{C}$
- Operating pressure $P_{0\text{ max}}$: 6 bar
- Display accuracy: $\pm 10\%$ of final value
- k_{vs} value and measurement range according to „pressure loss diagram“
- Heating circuit connections: $\frac{3}{4}$ " eurocone

Material

- Bars: stainless steel
- Internal parts: Nickel-plated brass, heat-resistant and impact-proof plastics
- Seals: EPDM O-rings
- Securing brackets: Plastic, glass fiber-reinforced

Actuator

- Type: Normally closed (NC)
- Ambient temperature: $0 - 50^{\circ}\text{C}$
- Opening/closing time: approx. 3 minutes
- Visual inspection of expansion element
- Reversible first-open
- Nominal stroke: 4 mm
- Protection class of actuator: IP54
- Protection class II

Electrical connection data

- Rated voltage: 230 V, 50/60 Hz
- Permissible voltage deviation: $\pm 10\%$
- Operating efficiency: 1.8 W
- Inrush current:
230 V: 0.6 A for max. 100 ms
- Recommended fuse: 0.35 A slow-acting, as per DIN 41662
- Connection cable length: 1 m
- Connection cable: $2 \times 0.75\text{ mm}^2$, PVC with connector

Flow media

- Heating water (VDI 2035; SWKI BT 102-01; ÖNORM H 5195-1)
- Water free of chemical additives

SYSTEM COMPONENTS

Room thermostats as well as distribution cabinets; see separate data sheets

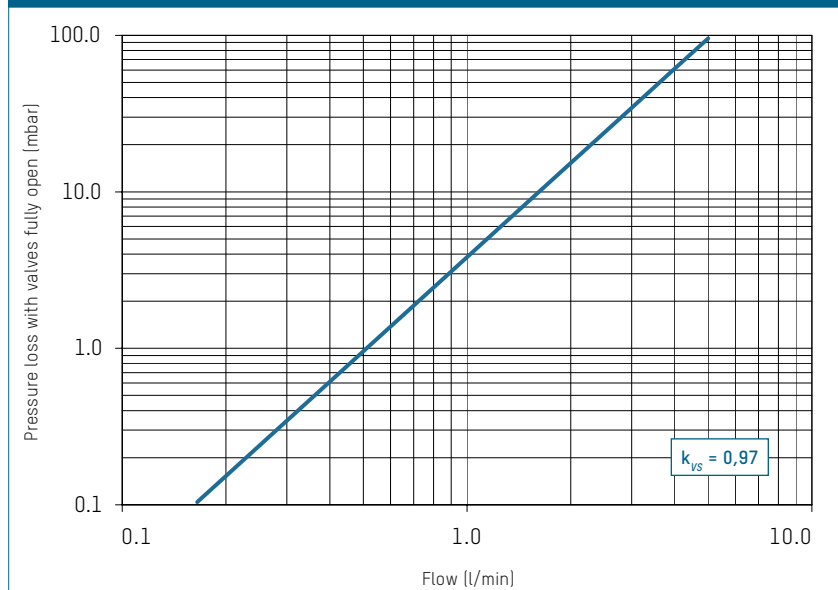
TYPE OVERVIEW

TacoSys Pro | Heating manifold with TopMeter Plus, TacoDrive and $\frac{3}{4}$ " ball valve

Heating circuits	Flow range 0 – 2,5 l/min	Flow range 0 – 5 l/min
	Order No.	Order No.
2	288.5002.000	288.6002.000
3	288.5003.000	288.6003.000
4	288.5004.000	288.6004.000
5	288.5005.000	288.6005.000
6	288.5006.000	288.6006.000
7	288.5007.000	288.6007.000
8	288.5008.000	288.6008.000
9	288.5009.000	288.6009.000
10	288.5010.000	288.6010.000
11	288.5011.000	288.6011.000
12	288.5012.000	288.6012.000

Variants with TopMeter Supply and TacoDrive or TopMeter Plus with plastic valve on request.

PRESSURE LOSS DIAGRAM



NOTE

We recommend that manifolds with 1" ball valves be used if there are eight or more heating circuits and their valves are fully opened ($> 2.5\text{ l/min}$), in order to avoid potential flow noise.

NOTE

Adjusting the TacoSys Pro manifold

The floor heating circuits are regulated directly at the manifold using the TopMeter Plus balancing valves. The adjustment process is carried out when the circulating pump is running. All of the valves in the heating circuit must be fully open for adjustment. The first-open function may have to be activated.

- 1 Start at the TopMeter Plus of the heating circuit with the smallest flow volume
- 2 Set the calculated volume flow by rotating the red regulation knob
- 3 Read off the settings from the red indicator collar in the porthole
- 4 Repeat the adjustment process for all of the heating circuits
- 5 Next, check the first values and re-adjust if necessary
- 6 Once adjustment is complete, note the corresponding flow values on the manifold or in the planning documents

DIMENSIONAL DRAWING

The drawing shows a manifold with two rows of balancing valves. The top row has valves labeled 1 (TopMeter Plus) and 2 (TacoDrive). A connector (3) is shown on the left. Dimensions include a total height of 364 mm, a top section height of 77 mm, a middle section height of 207 mm, and a bottom section height of 80 mm. The width of the manifold is labeled X. Spacing between valves is 50 mm. A side view shows a height of 66 mm, a top section height of 37 mm, a bottom section height of 53 mm, and a total width of 79 mm. A 35 mm dimension is also shown on the right side.

- 1 TopMeter Plus
- 2 TacoDrive
- 3 Connector

LENGTH DIMENSIONS

Heating circuits	Length X (mm)	Heating circuits	Length X (mm)
2	204	8	504
3	254	9	554
4	304	10	604
5	354	11	654
6	404	12	704
7	454		

TACOSYS PRO | HEATING CIRCUIT MANIFOLD

ACCESSORIES



SCREW CONNECTIONS

Two nickel-plated compression fittings, complete, for plastic and multilayer pipes, with molded seal, slotted compression ring and barrier seal.

Order No.	Dimensions	G x mm
210.8614.003	Ø 14 x 2	¾" x 14
210.8616.003	Ø 16 x 2	¾" x 16
210.8617.003	Ø 17 x 2	¾" x 17
210.8618.003	Ø 18 x 2	¾" x 18
210.8620.003	Ø 20 x 2	¾" x 20

Additional accessories: see datasheets for manifold cabinets and mixing stations (TacoSys ou Universal)

SPARE PARTS



BALL VALVE

Order No.	Dimensions	Length	Handle color
298.8630.001	¾"	50 mm	red
298.8631.001	¾"	50 mm	blue
298.8628.001	1"	65 mm	red
298.8629.001	1"	65 mm	blue



BOILER FILLING AND DRAIN VALVE

The boiler filling and drain valve is only available with red handle

Order No.	Handle color
296.8653.001	red

TOPMETER PLUS BALANCING GROUP

Order No.	Range
298.8610.001	0 - 2.5 l/min
298.8611.001	0 - 5 l/min



TACODRIVE VALVES AND MANUAL ADJUSTMENT FOR TACOSYS PRO

Order No.	Type
298.8622.001 (1)	Drive with valve for TacoDrive
298.8624.001 (2)	TacoDrive complete (drive upper with valve, base part with fine thread)
298.2270.100 (3)	Drive upper part for TacoDrive (for nickel-plated nipple)
298.8635.001 (4)	TacoDrive valve with manual adjustment
298.8636.001 (5)	Manual adjustment for TacoDrive

AIR VENT GROUP WITHOUT FILLING AND DRAINING VALVE

Order No.
298.8604.001

The pipe sections shown are for illustrative purposes only and are not included in the replacement part packs.

CONTACT AND FURTHER INFORMATION

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