

HOT WATER MANAGEMENT SOLUTION

44 Jansen Road
Unit 56, Corvette Business Park
Jet Park

Under-floor Heating

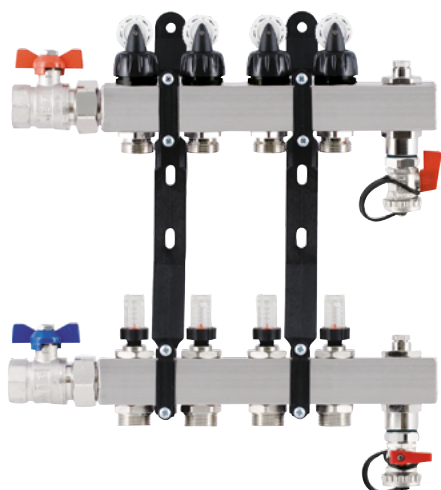


THE MANIFOLD

The completely pre-assembled TacoSys manifolds ensure optimum heat distribution throughout the building. Robust stainless steel manifold bars, fitted with innovative technology, ensure a reliable and economical supply of energy where it is needed. In the High End version, the well-known TopMeter ensures perfect hydraulic balancing. High End and Value are also ideal in combination with NovaDrive actuators and NovaStat room thermostats. They work together to produce a pleasant, individual room climate.



TACOSYS HIGH END



DESCRIPTION

- Underfloor heating manifold with TopMeter balance valves

VERSIONS

- TopMeter balancing valve in return or flow
- 2 – 12 heating circuits
- With or without ball valves
- Accessories and spare parts can be referenced in the data sheet and price list

ADVANTAGES

- Perfect balancing guaranteed in supply or return thanks to TopMeter
- Robust stainless steel manifold bar
- Manifold valves are designed for the electro-thermal actuators NovaDrive and TopDrive
- Manual adjustments permit reproducible flow settings
- Conical valve form with near-linear valve curve for fine flow adjustment
- Self-centring upper and lower valve parts for absolute precision
- TacoVent air vent automatically vents supply and return
- Easy-to-install offset mounting brackets of glass fibre reinforced plastic with sound-damping lining
- Completely pre-assembled, including filling and draining valves and ball valves

FUNCTIONS

- Designed for from two to twelve heating circuits
- Supply and return bars are connected to the heating system
- With optional screw connections, heating circuits can be easily connected to Eurocone outlets
- The design flow volume is set individually on the TopMeter for each heating circuit
- Manual regulators or room thermostats with actuators ensure individual room comfort

EQUIPMENT

- valve with manual regulator in the supply
- 2x automatic air vents TacoVent and filling/draining valve
- heating circuit connections Eurocone 3/4" male thread

TECHNICAL DATA

- Measuring range: 0,5 – 2,5 l/min / 1 – 5 l/min
- Medium temperature: -10 – 70 °C
- Operating pressure $P_{0\max}$: 6 bar
- Measurement accuracy of TopMeter: $\pm 10\%$ of the final value
- All pipe connections: 3/4" Eurocone

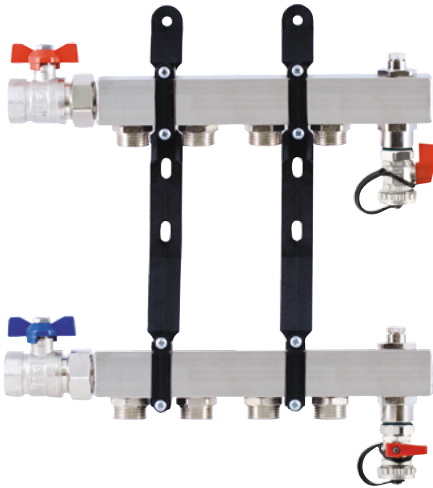
MATERIALS

- Manifold bar: Polished stainless steel
- Internal parts: Nickel-plated brass, heat and impact resistant plastics
- Mounting brackets: Glass fibre reinforced plastic
- Gaskets: EPD

FLOW MEDIA

- For heating and cooling water with normal corrosion protection additives

TACOSYS CONNECT



DESCRIPTION

- Heating circuit connector manifold for radiators

VERSIONS

- 2 – 12 heating circuits
- With or without ball valves
- Accessories and spare parts can be referenced in the data sheet and price list

ADVANTAGES

- Robust stainless steel manifold bar
- Pre-drilled on one side, so no additional seal points or unnecessary plugs
- TacoVent air vent automatically vents supply and return
- Easy-to-install offset mounting brackets of glass fibre reinforced plastic with sound-damping lining
- Completely pre-assembled, including filling and draining valves and ball valves

FUNCTIONS

- Designed for from two to twelve heating circuits
- Supply and return bars are connected to the heating system
- With optional screw connections, heating circuits can be easily connected to Eurocone outlets

EQUIPMENT

- 2x automatic air vents TacoVent and filling/draining valve
- heating circuit connections Eurocone 3/4" male thread

TECHNICAL DATA

- Medium temperature: -10 – 80 °C
- Operating pressure $P_{0\max}$: 8 bar
- All pipe connections: 3/4" Eurocone

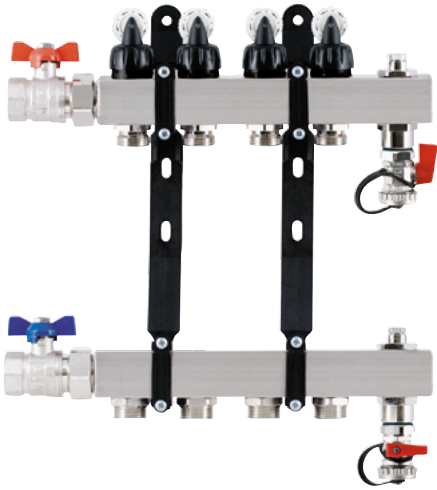
MATERIALS

- Manifold bar: Polished stainless steel
- Internal parts: Brass, heat and impact resistant plastics
- Mounting brackets: Glass fibre reinforced plastic
- Gaskets: EPDM

FLOW MEDIA

- For heating and cooling water with normal corrosion protection additives

TACOSYS VALUE



DESCRIPTION

- Underfloor heating manifold without TopMeter

VERSIONS

- 2 – 12 heating circuits
- With or without ball valves
- Accessories and spare parts can be referenced in the data sheet and price list

ADVANTAGES

- Robust stainless steel manifold bar
- Manifold valves are designed for the electro-thermal actuators NovaDrive and TopDrive
- Manual adjustments permit reproducible flow settings
- Conical valve form with near-linear valve curve for fine flow adjustment
- Self-centring upper and lower valve parts for absolute precision
- TacoVent air vent automatically vents supply and return
- Easy-to-install offset mounting brackets of glass fibre reinforced plastic with sound-damping lining
- Completely pre-assembled, including filling and draining valves and ball valves

FUNCTIONS

- Designed for from two to twelve heating circuits
- Supply and return bars are connected to the heating system
- With optional screw connections, heating circuits can be easily connected to Eurocone outlets
- Manual regulators or room thermostats with actuators ensure individual room comfort

EQUIPMENT

- valve with manual regulator in the supply
- 2x automatic air vents TacoVent and filling/draining valve
- heating circuit connections Eurocone 3/4" male thread

TECHNICAL DATA

- Medium temperature: -10 – 70 °C
- Operating pressure $P_{0\max}$: 6 bar
- All pipe connections: 3/4" Eurocone

MATERIALS

- Manifold bar: Polished stainless steel
- Internal parts: Nickel-plated brass, heat and impact resistant plastics
- Mounting brackets: Glass fibre reinforced plastic
- Gaskets: EPDM

FLOW MEDIA

- For heating and cooling water with normal corrosion protection additives

MIXING STATION



DESCRIPTION

- The mixing station supplies heating manifolds with the required flow rate and in the process regulates and monitors the flow temperature

ADVANTAGES

Compact

- Comes equipped with all the necessary valves and components

Secure

- Intrinsic safety of the station thanks to an integrated safety temperature limiter

Simple

- Simple adjustment and reading of the required flow temperature

Efficient

- High-efficiency pump with integrated temperature monitoring

Flexible

- The center distance between the flow and return can be adjusted flexibly through the use of eccentric connectors

FUNCTIONS

- The required flow temperature can be preset at the heating manifold by means of the integrated thermostatic mixing valve and then regulated subsequently. The circulating pump switches off the volume flow if the safety temperature of approx. 55 °C is exceeded

TECHNICAL DATA

- Medium temperature: -10 – 70 °C
- Operating pressure $P_{0\max}$: 6 bar
- Safety temperature limit 55°C: $\pm 10\%$ of the indicated value

MATERIALS

- Pipes: Stainless steel 1.4400
- Terminal nuts und eccentric connectors: Brass, nickel-plated
- Seals: EPDM O-rings

FLOW MEDIA

- Heating water (VDI 2035; SIA Directive 384/1; ÖNORM H 5195-1)
- Cold water according to DIN 1988-7

THE GATEKEEPER

NovaDrive and TopDrive actuators are the reliable gatekeepers which open or close the valves of the individual heating circuits according to the heat requirement. They take care of the fine adjustment, are silent in operation and require no maintenance. Together with NovaStat room thermostats, they create a climate adjusted for each room. NovaDrive and TopDrive fit almost all generally available valves and, thanks to their bayonet or click connector, are quick and easy to fit.



NOVADRIVE NC/NO



DESCRIPTION

- Electro-thermal actuator in the two variants NC and NO for distribution systems and radiator valves

VERSIONS

- Operating modes: Normally closed (NC), normally open (NO)
- Rated voltage (AC or DC): 24 V or 230 V
- Mounting options and an overview of suitable valve makes/valve manufacturers can be referenced in the data sheet

ADVANTAGES

- Precise bayonet coupling for easy installation
- Fits all generally available makes of valve and manifold upper parts
- Valve position can be felt and seen
- Silent
- Pluggable connecting cable
- Internal sliding contacts (no movement of cables or dry joints)
- Long service life thanks to vertical travel of at least 4 mm
- Can be used with NovaStat room thermostats

FUNCTIONS

- When the room temperature deviates from the target value, the thermostat sends a signal to the actuator
- In the actuator, an electrical resistance heats the expansion element, which passes the vertical movement to the valve
- Regulator and actuator operate according to the "OPEN/CLOSED" principle

TECHNICAL DATA

- Permissible voltage deviation: $\pm 10\%$
- Inrush current:
 - 24V: 0.2 A for max. 1 min;
 - 230V: 0.6 A for max. 100 ms
- Recommended fuse protection: 0.35 A time delay, according to DIN 41662
- Operating efficiency 1.8 W
- Opening/Closing time: approx. 3 min.
- Rated lift: 4 mm
- Rated closing force: 90 N
- Ambient temperature: 0 – 50 °C
- Connecting cable length: 1 m
- Protection type: IP 40
- Protection class: II
- CE conformance

MATERIALS

- Housing and internal parts: Heat and impact resistant plastics
- Spring: Stainless steel
- Contacts: Silver plated
- Cables: PVC

APPLICATIONS

- For manifold systems and radiator valves

TOPDRIVE NC



DESCRIPTION

- Electro-thermal actuator for manifold systems and radiator valves

VERSIONS

- Operating mode: Normally closed (NC)
- Rated voltage (AC or DC): 24 V or 230 V
- Mounting options and an overview of suitable valve makes/valve manufacturers can be referenced in the data sheet

ADVANTAGES

- Precise bayonet coupling for easy installation
- Fits all generally available makes of valve and manifold upper parts
- Inverted installation (360°) possible
- Protection against leaking valves through moulded gasket
- Valve position visible
- Silent
- Long service life thanks to vertical travel of at least 4 mm
- Can be used with NovaStat room thermostats

FUNCTIONS

- When the room temperature deviates from the target value, the thermostat sends a signal to the actuator
- In the actuator, an electrical resistance heats the expansion element, which passes the vertical movement to the valve
- Regulator and actuator operate according to the "OPEN/CLOSED" principle
- Variable rhythmical opening and closing according to heat output requirement produces constant regulation behaviour

TECHNICAL DATA

- Permissible voltage deviation: $\pm 10\%$
- Inrush current:
 - 24V: 0.2 A for max. 1 min;
 - 230V: 0.6 A for max. 100 ms)
- Recommended fuse protection:
 - 0.35 A time delay, according to DIN 41662
- Operating efficiency 1.8 W
- Opening time: approx. 3 min.
- Closing time: approx. 3 min.
- Rated lift: 4 mm
- Rated closing force: 100 N
- Ambient temperature: 0 – 60 °C
- Connecting cable length: 1 m
- Connecting cable VDE approved
- Protection type: Actuator IP44 /Electrical components IP44
- Protection class II
- CE conformance

MATERIALS

- Housing and internal parts: Heat and impact resistant plastics
- Spring: Stainless steel
- Cables: PVC

APPLICATIONS

- For manifold systems and radiator valves

THE FIRST CHOICE

The TopMeter is the first choice for the regulation of manifold systems. The flow rate through heating and cooling energy circuits can be regulated, indicated and shut off directly on the supply or return bar.



TOPMETER SUPPLY/RETURN



DESCRIPTION

- Balancing and shut-off valve
- Hydraulic balancing, flow measurement and control for individual circuits on the supply or return manifold bar

VERSIONS

- Flow/return
- Balancing stem $\frac{3}{8}$ " and $\frac{1}{2}$ "
- Spare parts can be referenced in the data sheet and price list

ADVANTAGES

- Direct visual flow control through scale printed all round on sight glass
- Required water flows are precisely, quickly, easily and continuously variably adjusted
- Sight glass legible in any position and removable at full operating pressure after shut-off (cleaning, replacement)
- No expensive auxiliary devices (measuring devices, charts, tables) required
- Setting can be locked and lead sealed (supply bar: $\frac{1}{2}$ " and $\frac{3}{8}$ " and return bar: $\frac{1}{2}$ ")
- Can be shut off
- Minimal pressure loss

FUNCTIONS

- Turning the black spindle changes the aperture cross-section in the valve and, in this way, regulates the flow volume
- When fully screwed in, the flow is shut off
- Displacement principle of an impact element held in a measuring tube with a counterspring
- The position is transferred into the sight glass or on to the scale by a push rod connecting the impact element with the indicator element

TECHNICAL DATA

- Operating temperature $T_{0\max}$: 60 – 80°C, according to model
- Operating pressure $P_{0\max}$: 6 bar
- Measuring accuracy $\pm 10\%$ of the final value
- External thread (G) as per ISO 228
- Installation position: Any (360°)
- DN 10 – 15
- G: $\frac{3}{8}$ " / $\frac{1}{2}$ "
- k_{VS} value and measuring range: see data sheet
- Measurement range: see data sheet

MATERIALS

- Nipple: Brass or plastic (supply bar: $\frac{1}{2}$ "»)
- Measurement element: Plastic
- Internal parts: Stainless steel, brass and plastic
- Sight glass: Heat-resistant, shock-resistant plastic
- Gaskets: EPDM

FLOW MEDIA

- Water mixtures with typical corrosion and glycol additives
- Hot water
- Cooling water