

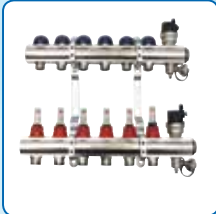
## T2 Wall Hung Radiator & UFH Manifolds



### T2 Topway LS Pre-Assembled Heating Manifold

A range of nickel plated extruded brass manifolds pre-assembled for immediate installation for both radiator and underfloor systems. Available in 1" and 1 1/4" sizes, from 2-12 ways. Provided with integral double regulating lockshields and electrothermic bodies. Can be surface mounted, concealed in a cabinet or within a partition wall. Manifold flow and return outlets are offset.

Also available are ball valves, Monoblocco pipe connectors, electrothermic actuators and matching zone controls to meet or exceed Building Regulations Part L requirements.



### T2 Topway FM Pre-Assembled Heating Manifold

A range of nickel plated extruded brass manifold pre-assembled for immediate mounting for both radiator and underfloor systems. Available in 1" and 1 1/4" sizes, from 2-12 ways. Provided with integral double regulating flowmeters, able to measure 0-4 l/min. Can be surface mounted, concealed in a cabinet or within a partition wall. Manifold flow and return outlets are offset.

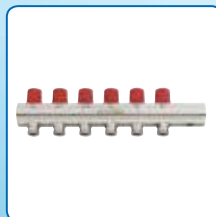
Also available are ball valves, Monoblocco pipe connectors, electrothermic actuators and matching zone controls to meet or exceed Building Regulations Part L requirements.



### T2 Topway SLM Pre-Assembled Single Loop Manifold

Designed to be used with our TM3 and T3 control group range. Nickel plated extruded brass manifold pre-assembled for use with single zone underfloor heating applications such as conservatories and extensions. Available in 1" size, with one flow and return connection complete with automatic air vents, drain complete with fill valves and end caps. Provided with a single integral double regulating flow meter. Can be surface mounted, concealed in a cabinet or within a partition wall. Manifold flow and return outlets are offset.

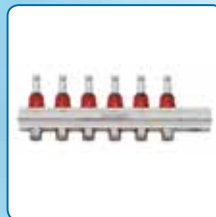
Also available are ball valves, Monoblocco pipe connectors, electrothermic actuators and matching zone controls to meet or exceed Building Regulations Part L requirements.



### T2 Topway LS Single Bar

A range of flow manifolds. Nickel plated extruded brass manifold with integral double regulating lockshield flow control valves for both radiator and underfloor systems. Available in 1" and 1 1/4" sizes, from 2 ways to 12 ways to suit a wide of system requirements. Single bars can be mounted separately or close coupled and concealed in a choice of purpose designed plastic or metal cabinets offering greater flexibility during installation.

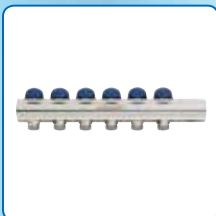
Also available are ball valves, mounting brackets, fittings and WRAS approved Monoblocco pipe connectors for a wide range of pipe types and sizes.



### T2 Topway FM Single Bar

A range of flow manifolds. Nickel plated extruded brass manifold with integral double regulating flow meter flow control valves for both radiator and underfloor systems. Available in 1" and 1 1/4" sizes, from 2 ways to 12 ways to suit a wide range of system requirements. Single bars can be mounted separately or close coupled and concealed in a choice of purpose designed plastic or metal cabinets offering greater flexibility during installation.

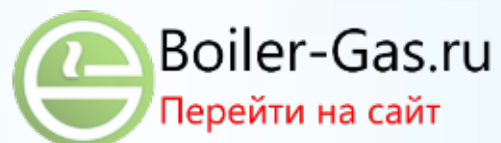
Also available are ball valves, mounting brackets, fittings and WRAS approved Monoblocco pipe connectors for a wide range of pipe types and sizes.



### T2 Topway ETB Single Bar

A range of return manifolds. Nickel plated extruded brass manifold with integral flow control via electrothermically actuated valves for both radiator and underfloor systems. Available in 1" and 1 1/4" sizes, from 2 ways to 12 ways to suit a wide range of system requirements. Single bars can be mounted separately or close coupled and concealed in a choice of purpose designed plastic or metal cabinets offering greater flexibility during installation.

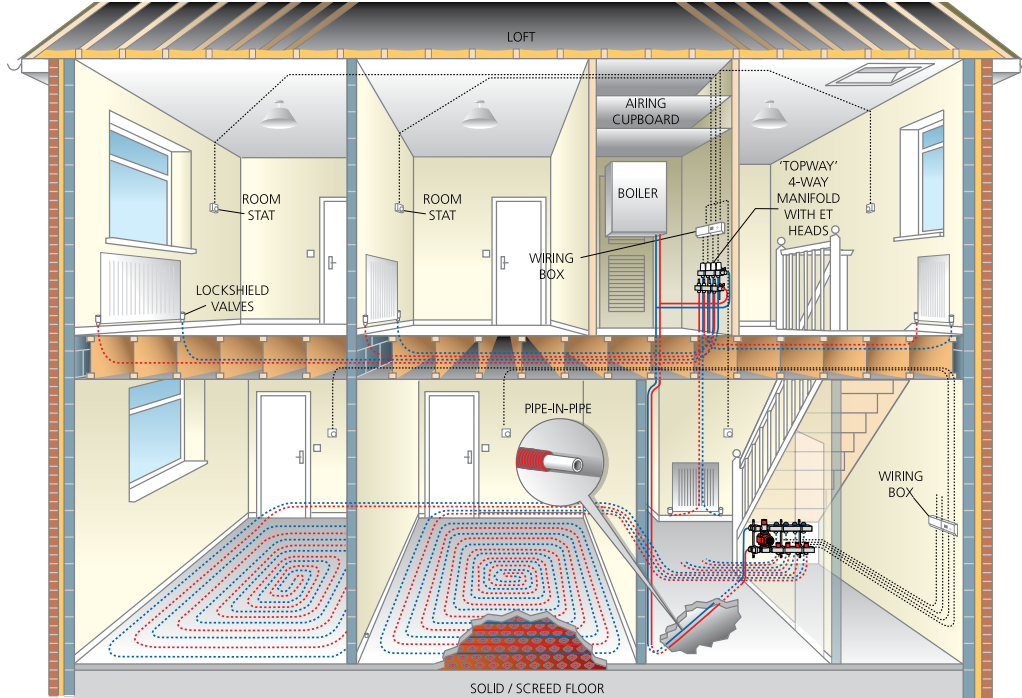
Also available are ball valves, Monoblocco pipe connectors, electrothermic actuators and matching zone controls to meet or exceed Building Regulations Part L requirements.



## Technical Product Guide

### T2 Wall Hung Radiator & UFH Manifolds

Example showing a house with a T2 Topway heating manifold systems with under-floor heating and Wall Hung Radiators.



Emmeti have many years experience of producing and supplying manifold systems for both heating and sanitary applications. We have CPD courses on both available for those who wish to explore the many advantages of using manifolds.

#### The advantages

Manifold based radiator systems are increasing in popularity as specifiers, designers and installers become more aware of the benefits of point to point plumbing and thermal control of individual rooms/zones.

This is because they supply flow and return water directly to each radiator, in a star pattern, which makes it easy to hydraulically balance each independent circuit.

Taking into account pipe runs, the hot water is circulated to all the radiators at the same time. This avoids the balancing or sequencing issues with a non-manifold system, where one radiator can be producing maximum heat well before another has started. A more constant temperature across all manifolds circuits is maintained (providing the balancing is done correctly).

Manifolds encourage the use of small diameter pipes, 10 mm or 12 mm, PB, PEX or Multilayer. These types of pipe is easy to handle and flexible. No further connections are required between the manifold and the radiator, which means there are no concealed joints that have potential to leak. This type of installation is known as "point to point plumbing" and gives the installer and more importantly the home owner greater confidence in the system.

#### Manifold Types

To make understanding the Emmeti range of heating manifolds easier, we have organised them into three simple types, matching each type to a heating system and controls to make the application clear.

**Type 1 (T1):** These are for wall hung radiator (WHR) systems with a Thermostatic Radiator Valve (TRV) and Lockshield valve (LS) on the radiator.

**Type 2 (T2):** These are for either wall hung radiator or underfloor heating (UFH) systems. The manifold is fitted with an electrothermic valve and lockshield to control each circuit; this replaces for example the TRV and LS on a radiator. The electrothermic valves are controlled by a thermostat or programmable thermostat.

**Type 3 (T3):** These are underfloor heating (UFH) systems only and have a temperature controller (mixing valve) and pump to ensure that the water is at the correct temperature for the underfloor heating circuits.

Each type has its own section on our website ([www.emmeti.co.uk](http://www.emmeti.co.uk)) which gives further details of each manifold.

## T2 Wall Hung Radiator & UFH Manifolds

### Individual room zoning

#### Energy saving

By installing manifold based systems with individual zone controls there are significant energy savings to be made. Manifold systems are particularly effective for use in public access building such as **offices, schools and hotels**. However with the increasing emphasis on legislation to save energy in both new and existing homes, Emmeti T2 manifolds offer a cost effective solution to professional installers and specifiers in meeting today's more stringent requirements.

#### Electrothermic actuation

Electrothermic bodies are integrated into the return manifold, one per circuit. The valve body is almost identical to a thermostatic radiator valve but the way in which they are controlled is quite different.

An **electrothermic head** is mounted onto the valve, at 2nd fix or final commissioning stage. This in turn is wired to a **wiring centre** (linking in to the boiler, pump and wall mounted room thermostat),

#### What happens

In principle the individual circuit is controlled as its own zone by way of a thermostat and electrothermic head, in the same way that a conventional heating zone is controlled by a thermostat and two port zone valve.

You are effectively **zoning your heating by rooms or small areas**, allowing individual tailored temperature control.

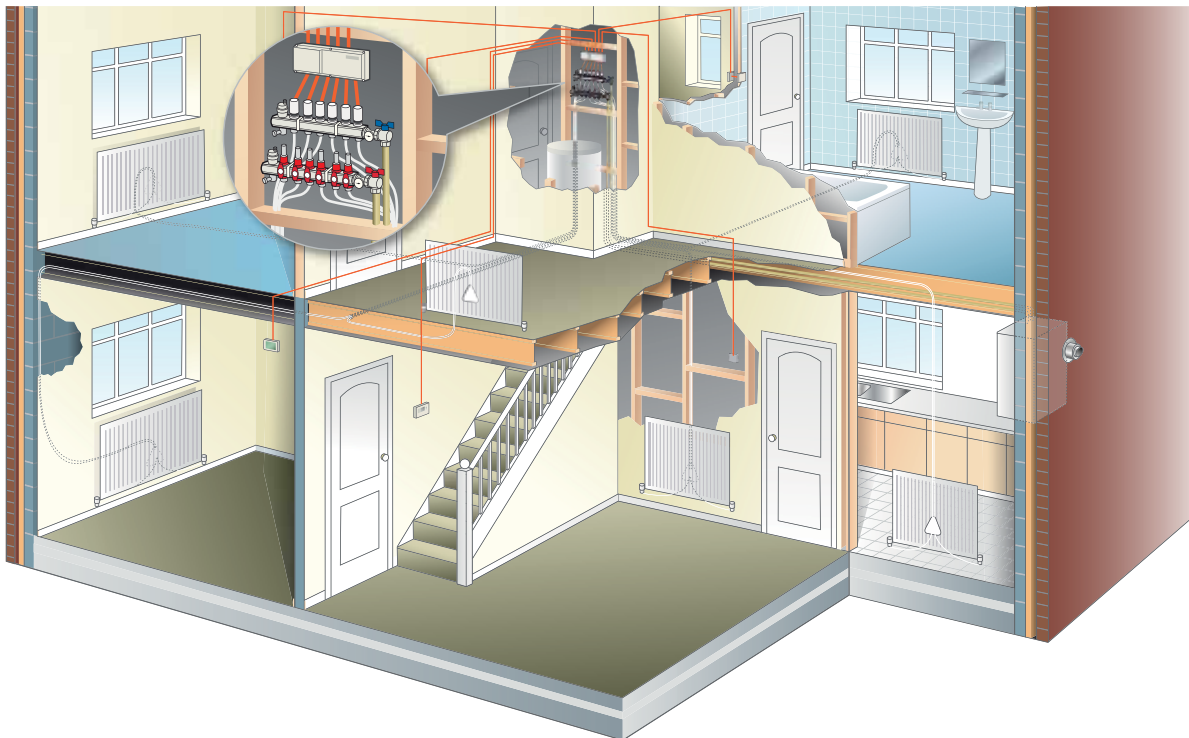
This means that when a room or area gets up to temperature, the thermostat that signals to the manifold electrothermic head (via the wiring centre), and that circuit is closed. This leaves the remaining circuits free to continue receiving heat. When all circuits have been satisfied, closing flow to each, the wiring centre signals the pump (and boiler) to cease pumping (and providing heat).

Room Thermostats can be either simple electromechanical, electronic, or more sophisticated digital combined time and temperature units.

This allows you to choose the time period when you want the room to receive heat, and allows a choice of two temperatures (comfort and energy saving), the choice is dependant on time and use of the room.

For further details of our full range of controls, please see the section on 'Zone Controls' in this document or go to our website ([www.emmeti.co.uk](http://www.emmeti.co.uk)).

### Example showing house with T2 radiator manifold system installed and individual room controls

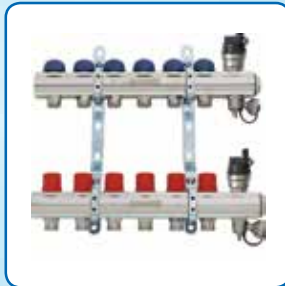


## Technical Product Guide



### T2 Topway FM Pre-Assembled Heating Manifold

- A range of nickel plated extruded brass manifold pre-assembled for immediate mounting for both radiator and underfloor systems
- Available in 1" and 1 1/4" sizes, from 2 ways to 12 ways with integral flow control valves to suit a wide range of system requirements
- The flow rail has a double regulating red sleeved 0 - 4 l/min flow meter per circuit. Double regulating allows flow setting and isolating independently. Return rail has a blue capped integrated electrothermic body (ready for the electrothermic head) per circuit. Complete with M24 x 19 takeoff connections
- Can be surface mounted, concealed in a choice of purpose designed plastic or metal cabinets or within a partition wall for a flexible solution to location
- Manifold flow and return outlets are offset for space saving and ease of installation
- Ball valves, threaded fittings and Monoblocco pipe connectors available to accommodate a wide range of pipe types and sizes



### T2 Topway LS Pre-Assembled Heating Manifold

- A range of nickel plated extruded brass manifold pre-assembled for immediate mounting for both radiator and underfloor systems
- Available in 1" and 1 1/4" sizes, from 2 ways to 12 ways with integral flow control valves to suit a wide range of system requirements
- The flow rail has a sleeved double regulating lockshield per circuit. The double regulation allows isolation and flow balancing of each circuit, with the added ability to read the flow in litres per minute. The return rail has blue capped integrated electrothermic bodies (ready for electrothermic heads) per circuit. Complete with M24x19 takeoff connections
- Can be surface mounted, concealed in a choice of purpose designed plastic or metal cabinets or within a partition wall for a flexible solution to location
- Manifold flow and return outlets are offset for space saving and ease of installation
- Ball valves, threaded fittings and Monoblocco pipe connectors available to accommodate a wide range of pipe types and sizes

## T2 Topway Pre-Assembled Heating Manifold



### T2 manifolds

T2 manifolds can be used in heating applications not only for **WHR Wall Hung Radiator** or other heat emitter based systems but also for **UFH underfloor heating/cooling systems** using a separate low temperature heat source or mixing valve control set (see our T3 and TM3 Control Groups).

For radiator based or perimeter heating systems time and temperature control is centralised at the manifold allowing individual room temperature control if required. No TRV is required at the radiator and by using thermostats the temperature control is far more accurate.

The **thermostat** is wired back to the manifold via a wiring centre which requires electrothermic heads on the return rail. This method is in compliance with Building Regulations Part L1 (conservation of fuel and power) see the current edition of the Domestic Building Services Compliance Guide.

**The function of the TRV (temperature control) and the lockshield (balancing) are now integrated on the manifold.**

For **underfloor heating / cooling systems**, see details of our separate range of our T3 and TM3 Control Groups on our website [www.emmeti.co.uk](http://www.emmeti.co.uk). The individual time and temperature control allowed by Topway T2 manifolds would be connected as for radiator systems using a wiring centre and one thermostat or programmable thermostat per underfloor heating zone.

### The advantages

This state of the art option is pre-assembled onto the bracket, making for quick and easy installation. It has an electrothermic body integrated for each return circuit, which is actuated by the **electrothermic head**. The electrothermic heads, via a **wiring centre**, are connected to the **room thermostats** located in each room or **zone**.

The manifold includes **lockshields or flowmeters** on the flow rail, which are **double regulating** for individual circuit

isolation, and manual setting of flow control for heat balancing per radiator. It also includes **automatic air vents** and **drain-off (filling)** points as standard. These features help to reduce commissioning time, no longer having to physically move to each room or zone to balance each radiator.

On the return rail a blue capped integrated electrothermic body (ready for the head) per circuit.

### Integrated functions

Central point for distribution, central isolation of circuit or floor, central commissioning, venting and filling point. If using electro-thermic heads the electrical controls are also central.

### Optional functions

**Measuring of temperature** using thermostats integrated into the ball valves, one on the flow and one on the return rail.

These aid installation by allowing the installer to verify the hot water is flowing, and how much, as well as what flow and return temperatures are being achieved.

**Automatic by-pass valve**, to prevent pump wear and tear.

**Programmable room thermostats**, with night set back facility, for the individual zones or rooms.

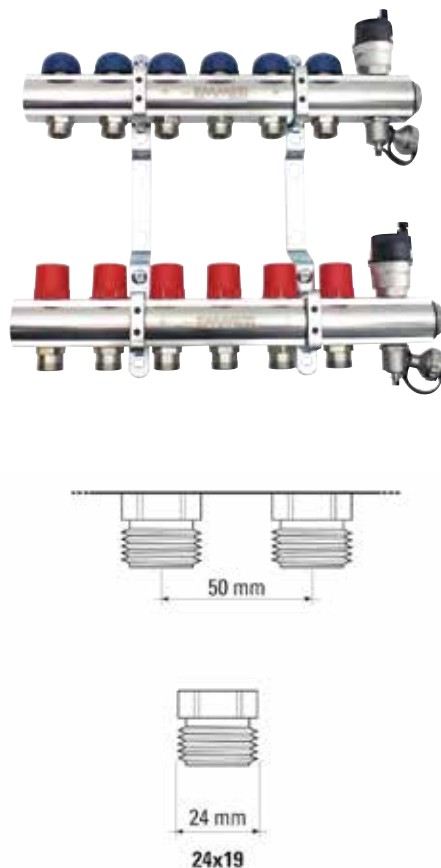
**Wiring centre**, allowing boiler interlock and pump stop/start.



## Technical Product Guide

### T2 Topway LS Pre-Assembled Heating Manifold

1" - 1¼" pre-assembled distribution manifold nickel-plated brass, 24x19 takeoffs designed to be used with Monoblocco connectors. Includes integral double regulating lockshield



Size	Ways	Pcs/Pack	Code	Unit Price £
<b>Flow rail at the top</b>				
1"	2	1	01299730	115.80
1"	3	1	01299732	133.40
1"	4	1	01299734	152.80
1"	5	1	01299736	172.00
1"	6	1	01299738	191.20
1"	7	1	01299740	210.50
1"	8	1	01299742	229.30
1"	9	1	01299744	256.10
1"	10	1	01299746	276.90
1"	11	1	01299748	295.10
1"	12	1	01299750	312.80
<b>Flow rail at the bottom (illustrated)</b>				
1"	2	1	01299020	116.10
1"	3	1	01299022	133.70
1"	4	1	01299024	152.80
1"	5	1	01299026	171.90
1"	6	1	01299028	191.20
1"	7	1	01299030	210.40
1"	8	1	01299032	229.20
1"	9	1	01299034	256.10
1"	10	1	01299036	277.40
1"	11	1	01299038	295.10
1"	12	1	01299040	312.70
<b>Flow rail at the bottom</b>				
1¼"	4	1	01299054	169.90
1¼"	5	1	01299056	192.80
1¼"	6	1	01299058	213.40
1¼"	7	1	01299060	236.90
1¼"	8	1	01299062	258.10
1¼"	9	1	01299064	284.30
1¼"	10	1	01299066	305.90
1¼"	11	1	01299068	327.10
1¼"	12	1	01299070	348.70

Version 01299730 - 01299750 should be ordered when using T3 control and TM3 Mixing Unit. For further information please visit our website [www.emmeti.co.uk](http://www.emmeti.co.uk).

Flow rail has a red capped double regulating lockshield per circuit. Return rail has a blue capped integrated electrothermic body (ready for the head) per circuit. Double regulating allows flow setting and isolating independently.

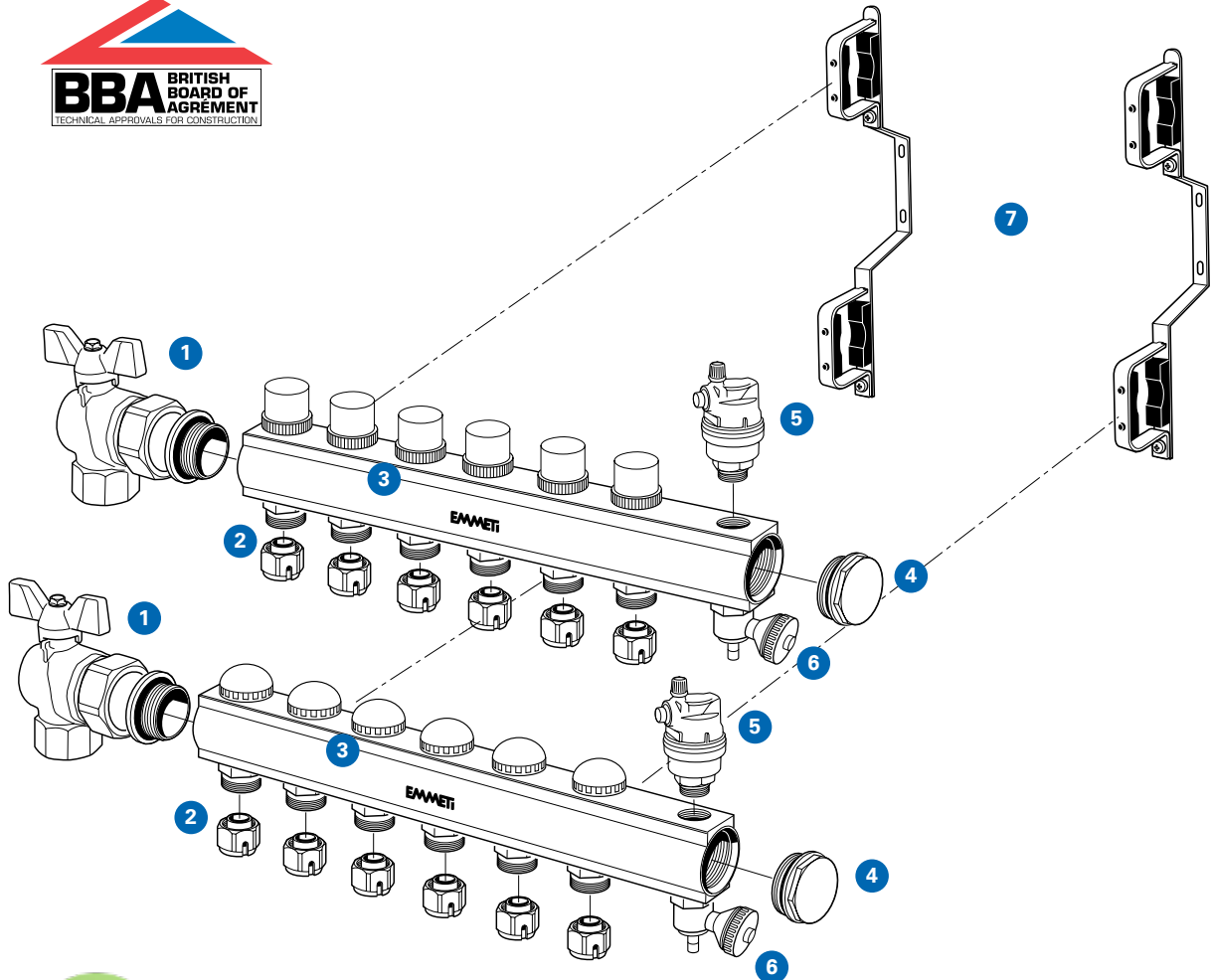
Natural brass finish only on request. Euroconus connections available on request. Takeoffs 50mm (flow and return).

Pre-assembled manifold includes no.2 drain off/fill valves; no. 2 automatic air vents; no. 2 blanking plugs. All pre-mounted onto a double offset bracket at 210mm centres.

For Emmeti Monoblocco connectors, plastic or metal mounting brackets, blanking plugs, manual or automatic air vents and ball valves, please refer to the schematic shown on page 7.

## T2 Topway L5 Pre-Assembled Heating Manifold

1" - 1¼" pre-assembled distribution manifold nickel-plated brass, 24x19 takeoffs designed to be used with Monoblocco connectors. Includes integral double regulating lockshield



### Ball Valves

1 A range of 1" and 1¼" Ball Valves are available. For the complete range please refer to section 'Ball Valves' or visit our website [www.emmeti.co.uk](http://www.emmeti.co.uk)

### Monoblocco Connectors

2 A range of monoblocco connectors are available to suit pipe sizes 10mm - 20mm, and different pipe types PB, PE-X, PE-RT, MLCP and Copper. For the complete range please refer to section 'Monoblocco Connectors and Threaded Fittings' or visit our website [www.emmeti.co.uk](http://www.emmeti.co.uk)

### Manifold

3 Code: Flow Rail at the top 01299730 (2way) to 01299750 (12way) 1"  
Code: Flow Rail at the bottom 01299020 (2way) to 01299040 (12way) 1"  
Code 01299054 (2way) to 01299070 (12way) 1¼"

### Blanking Plug

4 Code 90004830 1" M with O-ring seal  
Code 90005070 1¼" M with O-ring seal

### Automatic Air Vent

5 Tecno-Varia auto air vent ½" - Code 00400004  
Optional: Bleed Valve and Manual air vent Code ½" - 00410021

### Drain Fill Valve

6 Code 90011790 ½" with ¾" hose connection

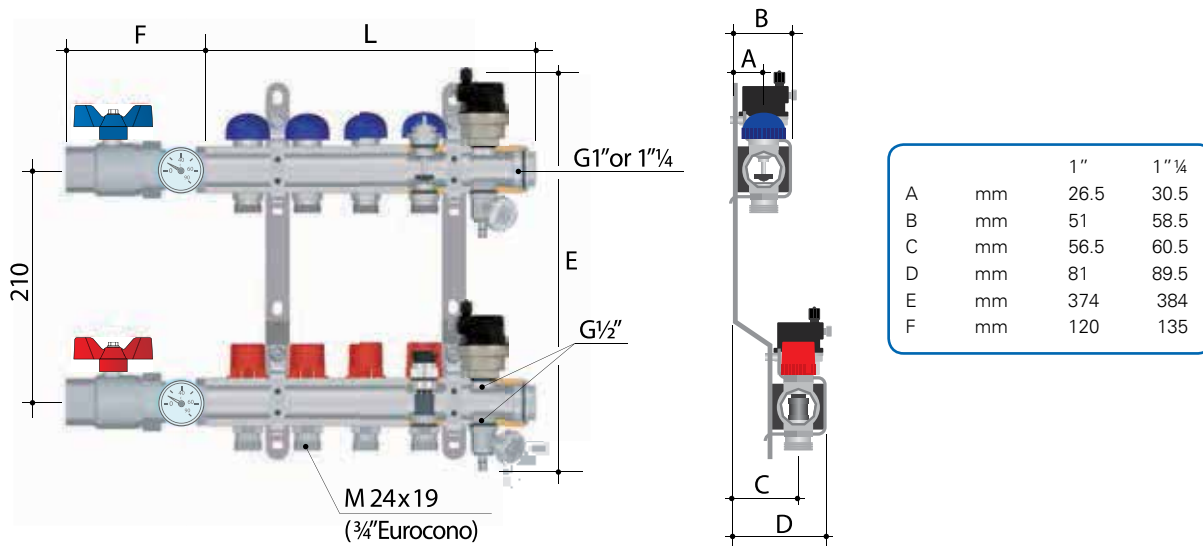
### Metal Brackets

7 (210mm centres)  
Code 90011570 1"  
Code 90011580 1¼"  
supplied in pairs  
Optional: (200mm Centres)  
Code: 90011540 1"  
Code: 90011550 1¼"

## Technical Product Guide

### T2 Topway LS Pre-Assembled Heating Manifold

#### T2 Topway LS Pre-Assembled Dimensions

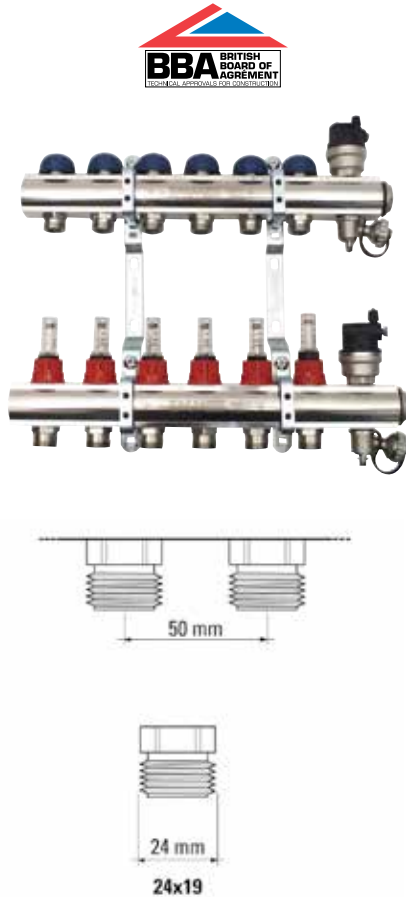


Type	2 ways	3 ways	4 ways	5 ways	6 ways	7 ways	8 ways	9 ways	10 ways	11 ways	12 ways
1"	L mm 172	222	272	322	372	422	472	522	572	622	672
1 1/4"	L mm -	-	282	332	382	432	482	532	582	632	682



## T2 Topway FM Pre-Assembled Heating Manifold

1" - 1¼" pre-assembled distribution manifold nickel-plated brass, 24x19 takeoffs designed to be used with Monoblocco Connectors. Includes integral double regulating flow meters with isolation function



Size	Ways	Pcs/Pack	Code	Unit Price £
<b>Flow rail at the top</b>				
1"	2	1	01295060	116.90
1"	3	1	01295062	136.20
1"	4	1	01295064	157.50
1"	5	1	01295066	178.10
1"	6	1	01295068	198.40
1"	7	1	01295070	219.70
1"	8	1	01295072	240.00
1"	9	1	01295074	267.90
1"	10	1	01295076	290.80
1"	11	1	01295078	310.00
1"	12	1	01295080	329.20
<b>Flow rail at the bottom (illustrated)</b>				
1"	2	1	01299260	117.40
1"	3	1	01299262	136.80
1"	4	1	01299264	157.50
1"	5	1	01299266	178.10
1"	6	1	01299268	199.50
1"	7	1	01299270	219.70
1"	8	1	01299272	240.00
1"	9	1	01299274	268.50
1"	10	1	01299276	291.40
1"	11	1	01299278	310.60
1"	12	1	01299280	329.20
<b>Flow rail at the bottom</b>				
1¼"	4	1	01299294	175.80
1¼"	5	1	01299296	199.00
1¼"	6	1	01299298	221.10
1¼"	7	1	01299300	246.20
1¼"	8	1	01299302	269.00
1¼"	9	1	01299304	296.70
1¼"	10	1	01299306	319.90
1¼"	11	1	01299308	342.60
1¼"	12	1	01299310	365.70

Version 01295060 - 01295080 should be ordered when using T3 control groups and TM3 Mixing Unit. For further information please visit our website [www.emmeti.co.uk](http://www.emmeti.co.uk).

Flow rail has a double regulating red sleeved 0 - 4 l/min flow meter per circuit. Return rail has a blue capped integrated electrothermic body (ready for the head) per circuit. Double regulating allows flow setting and isolating independently.

Natural brass finish only on request. Euroconus connections available on request. Takeoffs 50mm (flow and return).

Pre-assembled manifold includes no.2 drain off/fill valves; no. 2 automatic air vents; no. 2 blanking plugs. All pre-mounted onto a double offset bracket at 210mm centres.

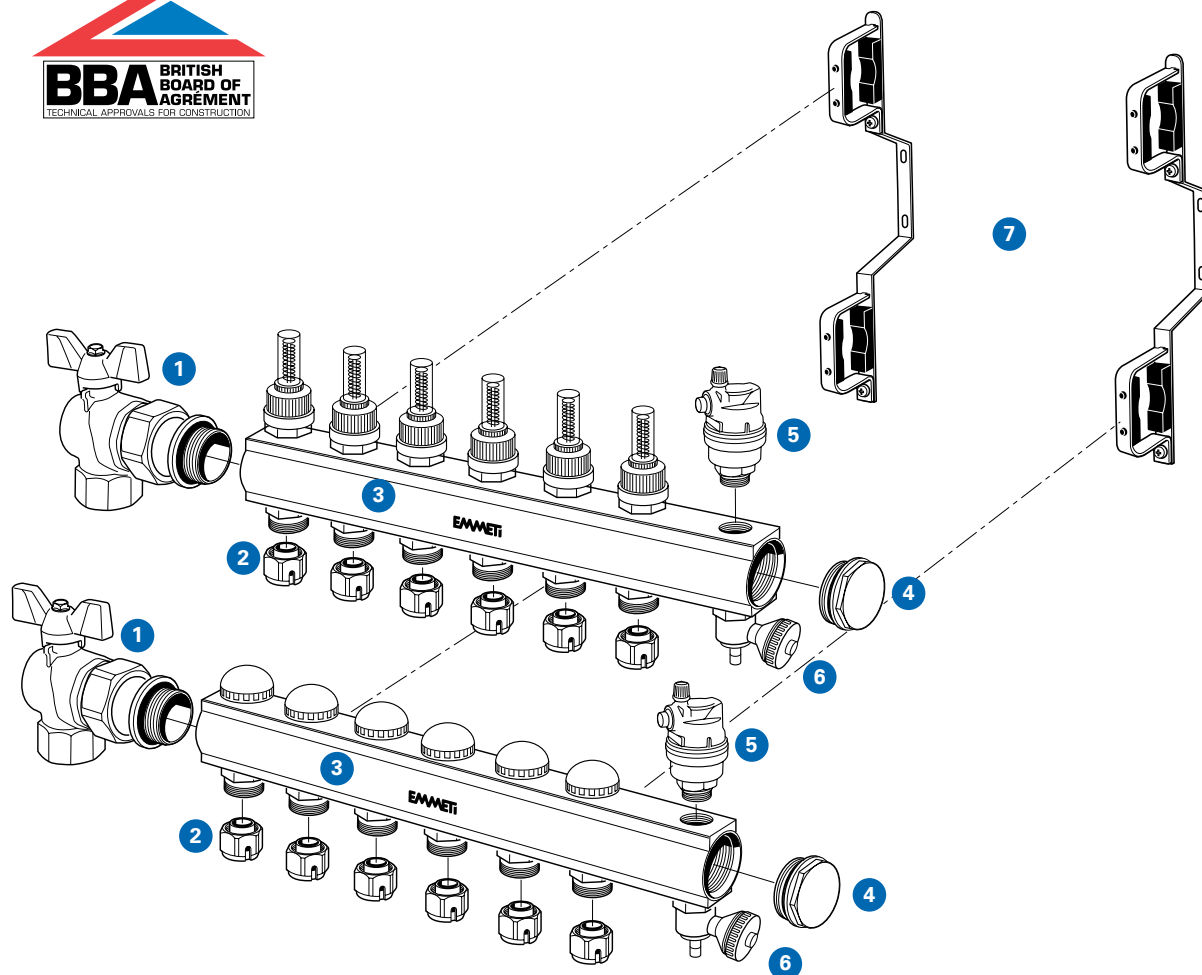
For Emmeti Monoblocco connectors, plastic or metal mounting brackets, blanking plugs, manual or automatic air vents and ball valves, please refer to the schematic shown on page 10.

For electrothermic head, wiring centres and wall thermostats, please refer to our website [www.emmeti.co.uk](http://www.emmeti.co.uk).

## Technical Product Guide

### T2 Topway FM Pre-Assembled Heating Manifold

1" - 1¼" pre-assembled distribution manifold nickel-plated brass, 24x19 takeoffs designed to be used with Monoblocco Connectors. Includes integral double regulating flow meters with isolation function



#### Ball Valves

A range of 1" and 1¼" Ball Valves are available. For the complete range please refer to section 'Ball Valves' or visit our website [www.emmeti.co.uk](http://www.emmeti.co.uk)

#### Monoblocco Connectors

A range of monoblocco connectors are available to suit pipe sizes 10mm - 20mm, and different pipe types PB, PE-X, PE-RT, MLCP and Copper. For the complete range please refer to section 'Monoblocco Connectors and Threaded Fittings' or visit our website [www.emmeti.co.uk](http://www.emmeti.co.uk)

#### Manifold

Code: Flow Rail at the top  
01295060 (2way) to 01295080  
(12way) 1"

Code: Flow Rail at the bottom  
01299260 (2way) to 01299280  
(12way) 1"  
Code 01299294 (2way) to  
01299310 (12way) 1¼"

#### Blanking Plug

Code 90004830 1" M with O-ring seal  
Code 90005070 1¼" M with O-ring seal

#### Automatic Air Vent

Tecno-Varia auto air vent ½" -  
Code 00400004

#### Drain Fill Valve

Code 90011790 ½" with ¾"  
hose connection

#### Double Metal Brackets

(Sold in pairs)  
Code 90011550 - 1" 200mm  
Code 90011550 - 1¼" 200mm  
(sit flush to the wall)  
Code 90011570 - 1" 210mm  
Code 90011580 - 1¼" 210mm  
(allows for circulatory pump)