

Uponor Comfort Port EU

EN Technical Information

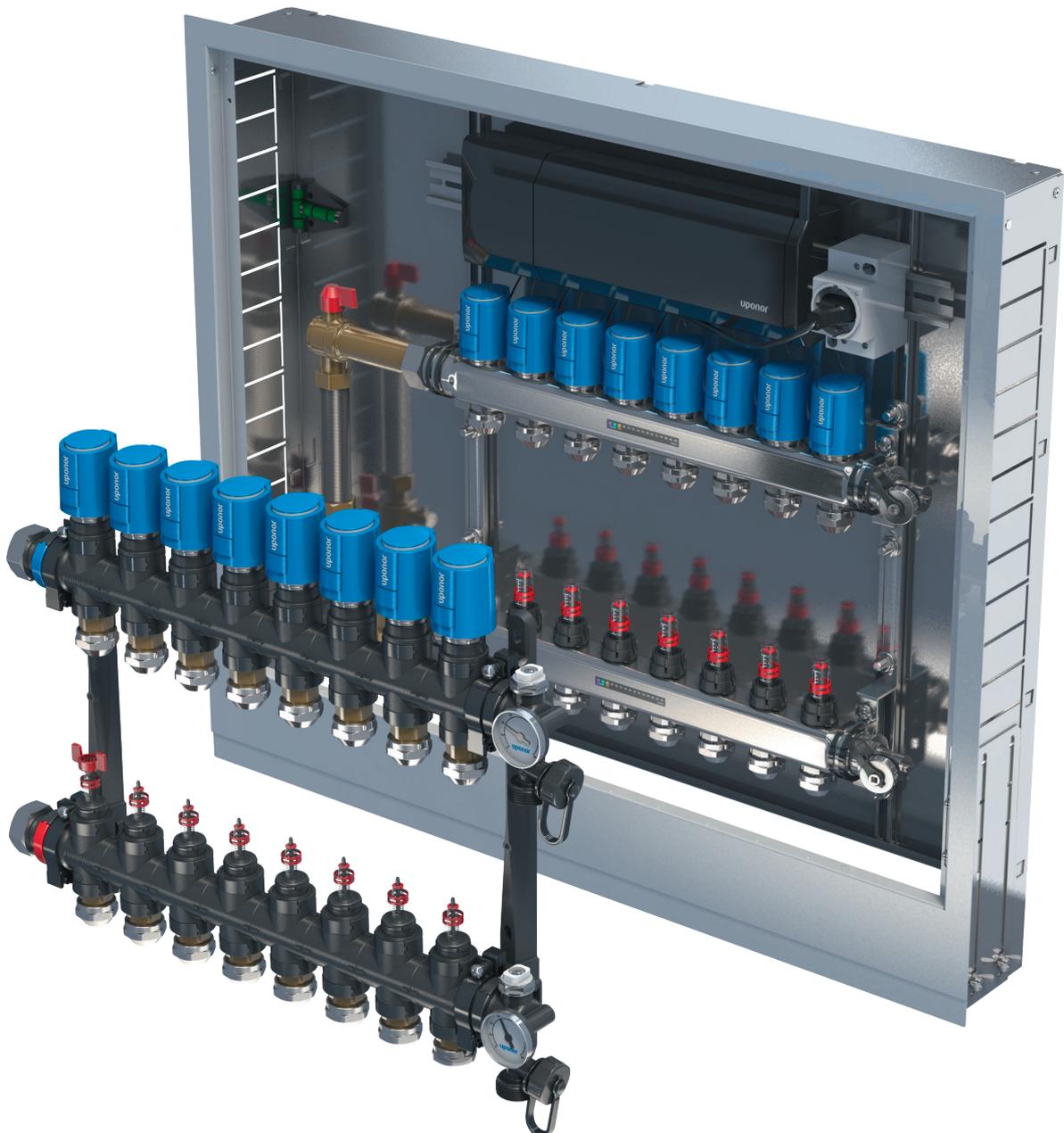


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1 Prefabricated cabinets

1.1 System description

Comfort Port, easy, fast and comfortable – made for the modern site

Uponor Comfort Ports are ideally suited for use in multifamily houses or other residential buildings with high size of apartments due to enormous time and cost savings. Assembled according to customer specifications the Comfort Ports are delivered ready-to-install to the building site. Reduction of installation time, pre-wired actuators and control units, or marking of loops are only few of the advantages of preassembling in Uponor factory which avoids significantly installation errors on site.

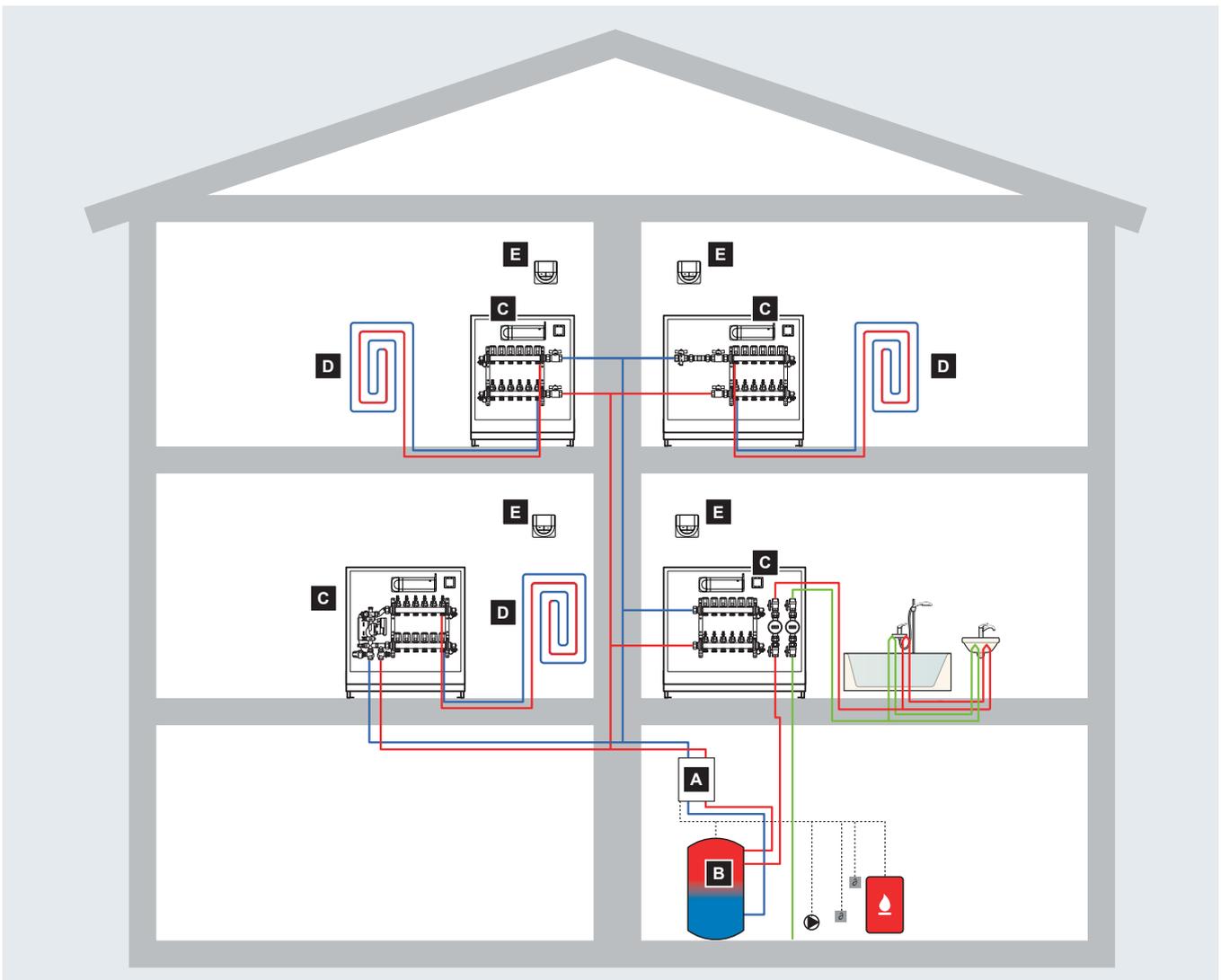
9800 possible variances...

Comfort Ports are available for all common mounting situations, and upon request, also with specific valves, heat meters and room control components from the Uponor Smatrix range.

Pos.	Part name
A	Boiler
B	Buffer tank
C	Comfort Port
D	Under floor heating
E	Room thermostat

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1.2 Operating principle



1.3 Advantages

Up to 2.5 hours of installation and set-up time savings through prefabrication

The conventional assembly of individual components on the construction site requires time, which is often insufficient in hectic construction site operation. Especially not if you only realize on site that urgently needed components are missing.



The better, if you can save valuable working time by installing prefabricated modules. In the Uponor Comfort Ports, therefore, all the components required for the hydraulic connection and for connection to the room temperature control of a Uponor underfloor heating system are already integrated in the stable distribution box ready for connection. Depending on the configuration, even completely wired pump groups for connection to a heat generator without own flow temperature control are factory-installed in the Uponor Comfort Ports.

Avoid assembly errors on the construction site

Nobody is perfect. Just under time pressure happen on a construction site sometimes errors. Factory assembly and wiring of the control components in the Uponor Comfort Ports virtually eliminates the likelihood of something going wrong on the job site. All actuators are

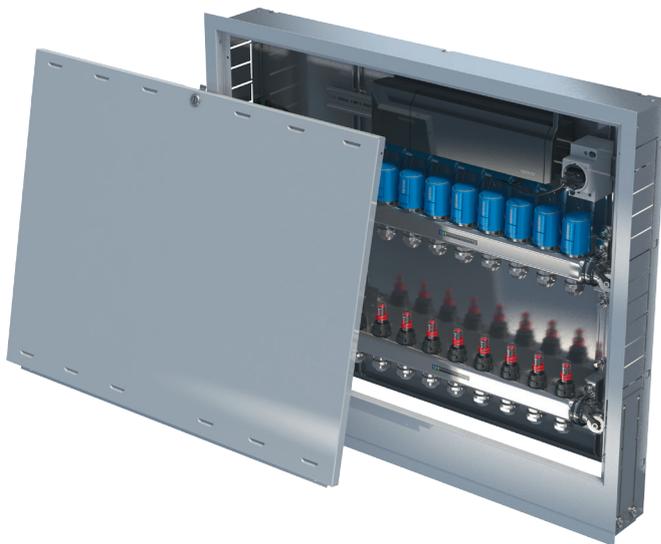
assigned to the respective heating zones, labeled and placed on the control terminal block. A factory pre-setting of the hydraulic balancing as well as the function test of the actuators ensure the defect-free assembly progress. For the electrical connection, only one power supply cable must be connected to the factory-integrated safety socket.

And for the vertical installation of Comfort Ports, not even a spirit level is necessary, because it is already integrated in the ports.

You configure online – we assemble and deliver

Possible system constellations are so diverse that Uponor Comfort Ports are not produced off the shelf but exactly according to customer specifications. Configuration is easy on the PC with the Uponor Comfort Port Online Configurator.

Based on the entered basic conditions and desired functions, the Comfort Port, which is needed for the respective construction project, is put together. The convenient query and order process ensures that no configuration parameters are forgotten. The delivery of the preassembled Uponor Comfort Ports is then carried out with the appropriate assignment marking in protective packaging suitable for the construction site, if desired directly to the construction site.



1.4 Cost comparison

Faster and safer installation including controls

When comparing the standard case (left in the table) with the use of prefabricated Uponor Comfort Port distribution cabinets (on the right in the table), the installation effort becomes visible.

Time expenses [%]	Standard way	Uponor Comfort Port
6 %	Check content of delivered items	–
6 %	Select and configure material to the individual manifold	–
6 %	Bring material to the installation site	Bring material to the installation site
9 %	Unpack the cabinet, dismantle/store the door and the frame	–
9 %	Align and fasten the distribution cabinet	–
13 %	Installation of the manifold bars, heat meter sets, ball valves, etc.	–
9 %	Check tightness	–
9 %	Assembly of the control and the actuators	–
7 %	Installation of a distribution or power socket	–
9 %	Wiring the actuators to the control units	–
9 %	Assing room sensors	Assing room sensors
5 %	Designation of the control circuits (option)	Designation of the control circuits (option)
3 %	Mount protective cover or mount frame, door and front sheet	Mount protective cover or mount frame, door and front sheet
1 Comfort Port	approx. 150 minutes installation time	approx. 35 minutes installation time

1.5 Variances and configuration examples

About 9,800 different configuration can be assembled to one complete Comfort Port unit. All they base and consists on general components which ensure the perfect functionality. This general components are:

- Stainless steel manifolds (2 – 16 loops) or polyamide manifolds (2 – 15 loops)
- With lock shield valve or with flowmeter
- 2 different connection sets for heat meter
- With pump group (thermostatic control)
- With water meter sets
- Cabinet door made of sheet steel or plastic
- Uponor 230V and all Smatrix single room controllers (wired or wireless)

All mentioned components can be preassembled in 3 different cabinet types:

- In-wall Cabinet with depth 80 mm
- In-wall CAabinet with dept 110 mm
- On-wall Cabinet with depth 140 mm

The following examples show the 6 general variances of Comfort Ports.

Vertical w/o metering set

Uponor Vario S Manifold, 4 loops, with ball vale 3/4", vertical connection. In wall cabinet.



Horizontal w/o metering set

Uponor Vario S Manifold, 6 loops, with ball valve 3/4", horizontal connection. In wall cabinet.



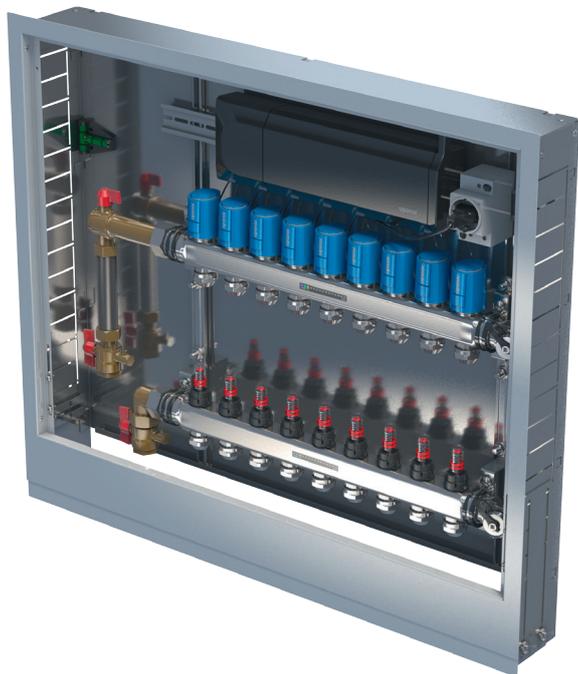
Horizontal with metering set

Uponor Vario S Manifold, 6 loops, with metering set 3/4", horizontal connection. On wall cabinet.



Vertical with metering set

Uponor Vario S Manifold, 9 loops, with metering set 3/4", vertical connection. In wall cabinet.



Vertical with metering set and water counters

Uponor Vario M manifold, 8 loops, with metering set 3/4", vertical connection, with water meters. In wall cabinet.



Vertical with PUSH 23

Uponor Vario S Manifold, 9 loops, with pump group PUSH 23, vertical connection. In wall cabinet.



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Vertical with dynamic balancing valve

Uponor Vario S Manifold, 9 loops, balancing valve, vertical connection. In wall cabinet.



1.6 Components

Depending on the configuration, the Uponor Comfort ports can be equipped with the following components.

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Cabinets

In-wall or on-wall cabinets made of sendzimir galvanized sheet steel, surface-mounted with 140 mm depth and flush-mounted with 80 and 110 mm depth. Optionally with metal or plastic door.



Manifolds

Optionally with stainless steel or plastic manifold, with 230 V or 24 V actuators.



Uponor Smatrix control units

Control components for room temperature control, optionally via radio (Smatrix Wave) or wired (Smatrix Base or Flexiboard).

Please consider: thermostats, remote controls or Smart Home modules are not a part of Comfort Port delivery. Please use the relevant Uponor Technical Informations to find the right thermostats or get detailed descriptions.



Pump Group Uponor Fluvia T Push-23-B-W

Constant flow temperature control station for use in combined systems with radiators and Uponor surface heating systems.



Connection sets for heat meter

Optionally for horizontal or vertical installation of on-site heat meters.



Differential pressure control

Dynamic controller for hydraulic balancing in larger heating systems with several Uponor Comfort Ports.



	Basic functions				Comfort functions		Technical functions				
	Auto-balancing	Cooling function	Modular design	Remote control	Trend display	Comfort setting	Data backup	Supply diagnostics	Bypass function	Heat pump integration	Room check
Smatrix Wave	✓	✓	✓	App	✓	✓	✓	✓	✓	✓	✓
Smatrix Base	✓	✓	✓	SMS							
Smatrix Base Pro	✓	✓	✓	KNX	✓	✓	✓	✓	✓	✓*	✓*

* ≤ 4 control modules

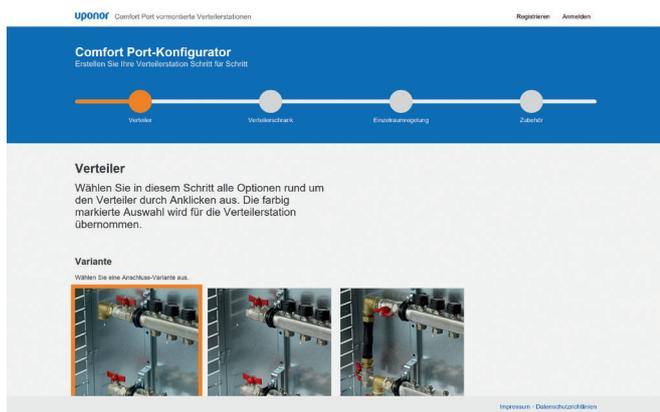
2 Configuration and calculation

2.1 Web-Configurator

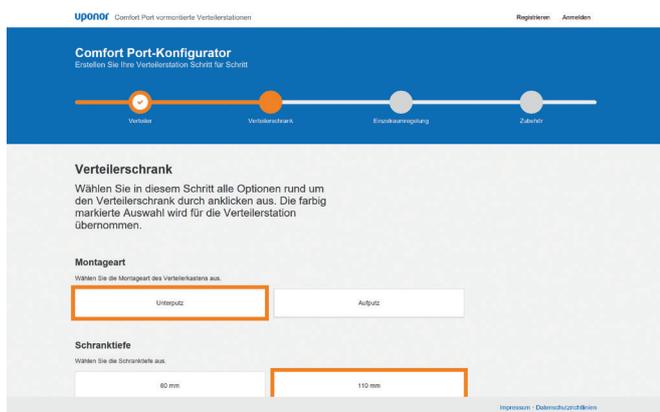
The pre-assembled Comfort Ports can be fast and easy compliant with the Uponor online configurator according to customer requirements.

On the Uponor Homepage you will be guided through the entire steps until all parameters are in place. Finally the ordering process will be started by automatic contact to Uponor Sales office.

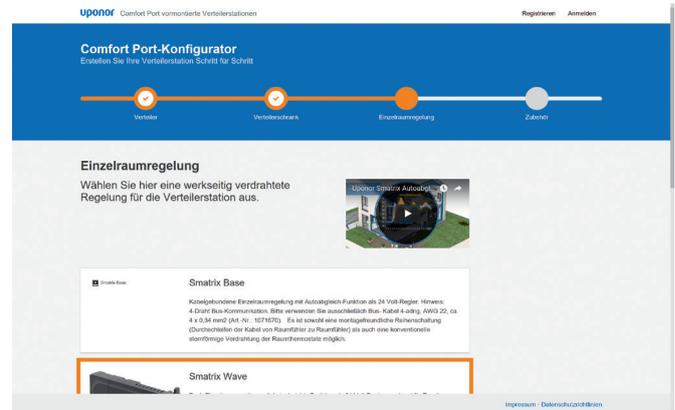
In parallel the production and subsequent delivery to the construction site will be prepared.



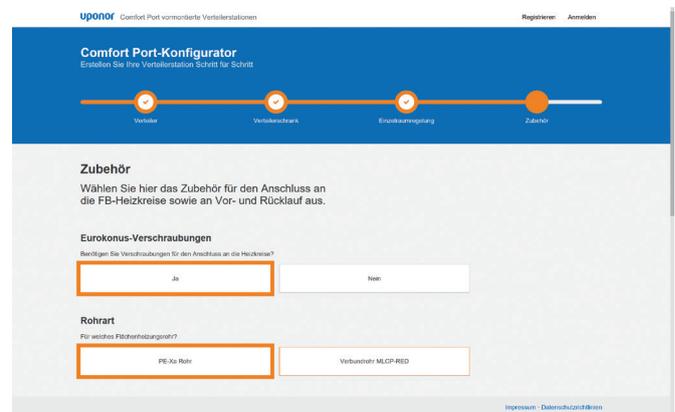
Choose the variant for manifold connection.



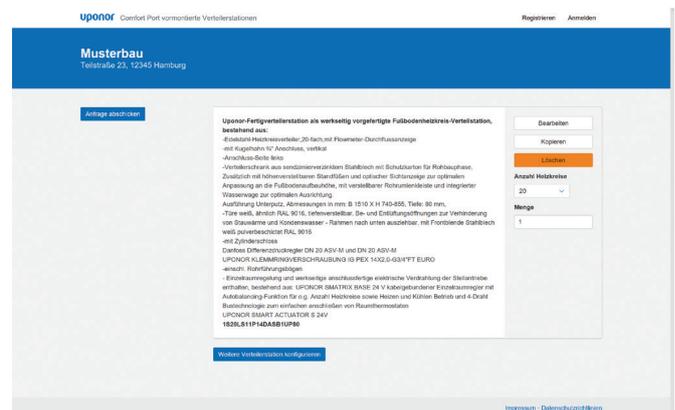
Choose the Cabinet and the mounting variant of it.



Choose the single room control.



Choose additional accessories.



Result of your choice as tender text and production code needed for order the required Comfort Ports.

The result of the selection is the tender text as well as a manufacturing code which describes the specific construction of each Comfort Port distribution cabinet.

This code serves as identification for your order. Then the customized Comfort Port can be manufactured in a very short time: Delivery time "please country specific delivery time".

3 Installation and Operation

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3.1 Design requirements

1. The preassembled Uponor Comfort Ports are used to distribute the heating water into the heating circuits of a floor heating system. Uponor stainless steel distributors may not be used in drinking water systems or sanitary installations.

The manufacturer is not liable for any damage resulting from improper use of the Uponor Comfort Ports.

2. Check the stations for completeness prior to installation; any loose or loosened screws due to transport should be retightened.

3. Conversion or modification to the Uponor Comfort Ports is only permitted upon agreement with Uponor.

4. Never remove any part of the Uponor Manifold or other hydraulic components when the system is under pressure. Serious injuries could be the result.

5. Required electrical connections, work for installation, commissioning and maintenance must only be carried out by qualified specialist personnel.

6. The heating system must be planned and constructed according to the recognized rules of technology as well as current DIN standards and VDI guidelines. The applicable and comparable country-specific regulations or standards must be observed.

7. The heating water used must comply with the requirements of VDI 2035. In the case of warranty claims, a water analysis is mandatory.

8. In order to ensure the hydraulic function of the individual heating circuits or the entire underfloor heating system, the individual heating circuits must be hydraulically regulated.

9. Prior to any work on the control module or the components connected to it, the control module must be switched to voltage-free according to the regulations.

10. For mounting and hydraulic and electrical connection of the Uponor Comfort Ports, please refer to the enclosed installation and operating instructions. Damage caused to the Uponor Comfort Ports or the heating system or the building as a result of an infringement will void our warranty.

11. Properly instruct the user of the system in the operation of the system and hand over this technical information together with the inventory documents.

If you have questions regarding the application or operation of Uponor products, please contact your Uponor contact person or contact our Technical Hotline directly.

Technical Hotline Uponor: (put unit specific call number)

3.2 Installation

Installation Comfort Port (example: In-wall version)

The Uponor Comfort Port is delivered pre-assembled ready for connection to the construction site. There it can be used directly in the on-site wall niche.

Below are some basic steps briefly described. Detailed assembly and operating instructions for the components you will find in each Comfort Port packaging.



The comfort ports are already quipped with two spirit levels built into the cabinets for easy leveling without additional tools for horizontal and vertical leveling.



It is important to adjust the adjustable feet according to the height of the later floor structure. The cabinet must be adjusted so that the frame and the door can be easily inserted after the screed and floor covering has been laid. In case of any unevenness of the gaps and thus possibly remaining gaps between the lower edge of the frame and the baseboard, the frame can be adjusted accordingly height. After alignment, the comfort port can be screwed and dowels on the unfinished floor and laterally with Mounting foam to be fixed.



During work interruption at the Comfort Port as well as during plastering and screed work the built-in components should be protected against damage and contamination with delivered protective cover.



Connecting manifold feeder lines and the heating circuits

The primary-side supply and return connections are connected with G1 or G $\frac{3}{4}$ transition fittings. Depending on the configuration, the connection is either from below or from the side. For side connection, the pre-punched side panel segments of the manifolds can simply

be broken out at the appropriate location. The underfloor heating pipes are laid in the calculated laying distance and connected to the distributor in the comfort port. The $\frac{3}{4}$ " Euroconus fittings fitting to the installed Uponor heating tube are already included if this option has been selected in the Comfort Port Configurator.

Electrical connections

Uponor Comfort Ports are factory wired and tested delivered. A 230 V socket for the installed electrical components is already installed in the factory. This only has to be connected to the supply network at the construction site.



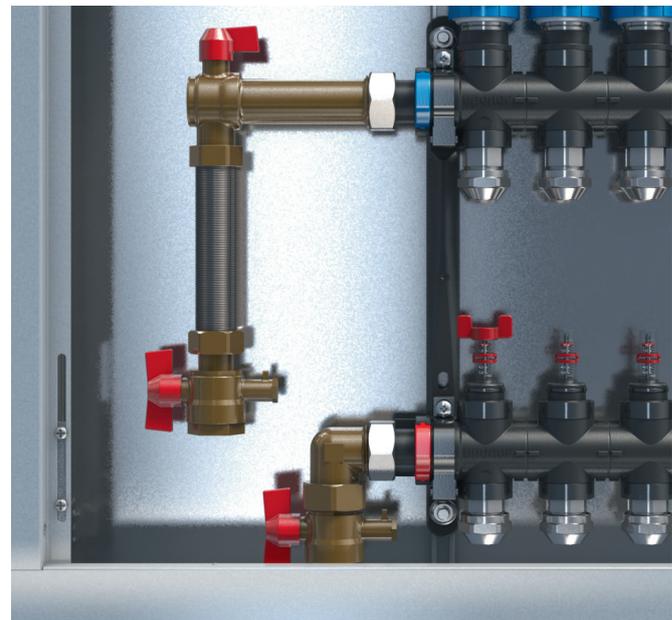
Attention!
Electric shock! Electrical connections to the 230 V power supply may only be used by authorized professionals be made.

If a wired Uponor individual room control was selected during the configuration of the comfort port, the required cables must be routed from the room sensors to the comfort port. Further information can be found in the enclosed installation and operating instructions of the control systems.

In the case that the Uponor Smatrix Wave radio control has been selected for room temperature control, no cable connection is required between the room sensors and the control module installed in the Comfort Port.

Installation of a heat meter

Depending on the configuration, Comfort Ports can be equipped with a WMZ connection set, which enables the installation of a heat quantity meter with a construction length of 110mm. A special ball valve with sensor connection M10 according to DIN 4713 / EN 1434 is part of the WMZ installation section.



If no heat meter is used, it may be necessary to replace the factory fitted plastic fitting with a metal fitting in continuous operation at high temperatures.

Please consider: by heat meter the cabinet dept needs to be min. 95 mm.

Installation of a water meter

If the installation of a water meter is provided in the Uponor Comfort Port, a tooling track is installed at the factory. It allows the installation of a surface-mounted water meter of length of 110 mm.



The factory has an appropriate fitting made of plastic with KTW certification. If no water meters are used, the fitting can be replaced with a fitting made of suitable metallic materials.

3.3 Operation

Filling the system and pressure test

After all hydraulic connections have been made, the system can be filled with heating water and then vented. The water used must comply with the requirements of VDI 2035.

The connections and valves required for filling and venting are part of the heating circuit distributor installed in the Comfort Ports. Detailed information on filling and bleeding can be found in the enclosed installation and operating instructions of the Uponor heating manifold.

Before commissioning, the Comfort Port and underfloor heating must be subjected to a leak test in accordance with EN 1264-4 and VOB DIN 18380. For related descriptions and forms, consult the Uponor Floor Heating System Technical Information.

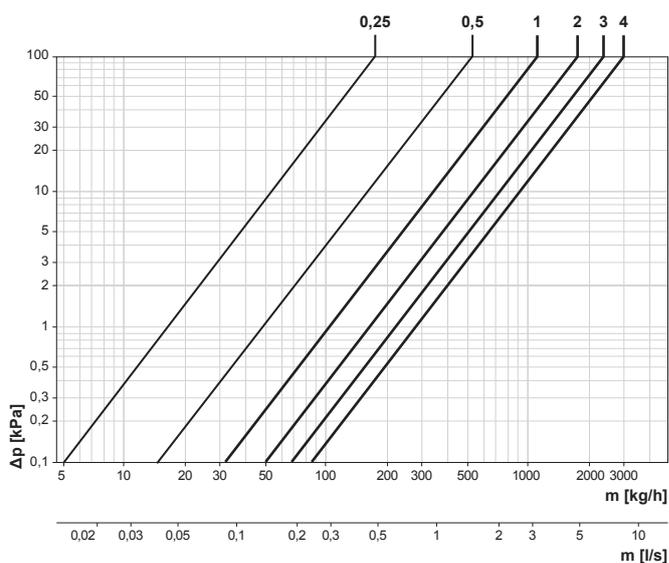
Hydraulic balancing of the heating circuits

To ensure the required flow rate of the individual heating circuits according to the design calculation, the heating circuits must be hydraulically adjusted via the respective preset-able return control valves. Depending on whether a distributor with or without a flow indicator has been selected, the setting on the return control valve can be made according to the diagram (kv value) or after the flow has been read off.

Setting Vario S Manifold



The setting is made on the return regulating valve (remove the cap, use the hand wheel of the drain valve) when using the following diagram.



Einstelldiagramm Rücklaufregelventil

Setting Vario M Manifold FM

The Vario M manifold is set directly on the flow indicators acc. the values from the underfloor heating planning documents (flow rate in ltr / min).



If required, the return control valve with the manual control cap can be completely shut off in accordance with the requirements of DIN EN 1264-4 without changing the default setting.

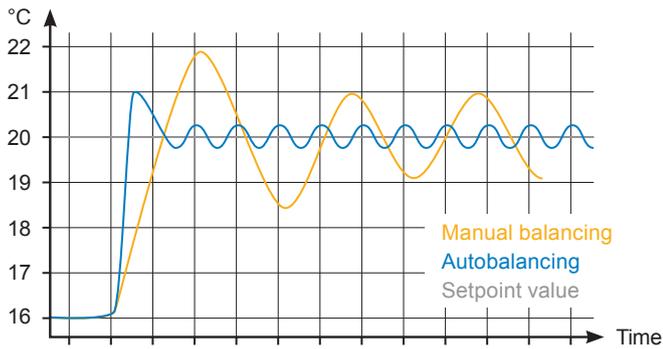
Detailed information on hydraulic balancing can be found in the enclosed installation and operating instructions of the installed Uponor heating manifold.

Pre-wired Uponor Smatrix Controls including Autobalancing function

Smatrix is a fully equipped control system for radiant heating and cooling with supply temperature control as function of room temperature.

The unique Autobalancing technology eliminates the need for manual balancing of the loops. The smart system accurately determines and controls the exact energy needed for an optimal room temperature. The result is a high comfort of underfloor heating and cooling by reduced energy consumption.

While the manual hydraulic balancing only takes account on initial conditions, the Autobalancing function automatically adjusts the temperature changes in the system or room, without any need for complex recalculation or adjustment by installer.



Installation or connection of the Uponor Vario thermal actuators

Uponor Vario 230V / 24V thermo drives are thermoelectric actuators for opening and closing valves on heating circuit distributors of surface heating systems. The thermo drives are connected to the flow valves via an adapter VA 10 with M30 x 1.5 thread.



Adapter VA 10 with M30 x 1,5

The drive is in the delivery state by the first-open function without current geoff net. As a result, a heating operation in the shell phase is possible. During commissioning, the first open function is automatically unlocked by applying the operating voltage and the drive is ready for operation.

Attention!
 Electric shock! Electrical connections to the 230 V power supply may only be used by authorized professionals be made.

Uponor Vario thermal drive with all-round function display



Hydraulic adjustment of the Uponor Comfort Ports with each other by means of a line valve

Depending on the configuration, the ports can be equipped with an automatic line valve (differential pressure regulator), especially in larger heating networks with several Uponor Comfort ports. It can be used to limit the flow of the entire distributor.



During commissioning, the string valve is set to the particular differential pressure setpoint of the distributor installed in the Comfort Port.

Detailed information on hydraulic balancing can be found in the enclosed installation and operating instructions of the string valve.

4 Technical data and regulations

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4.1 Standards and regulations

1. Planning and design of the heating system must be carried out in accordance with the recognized rules of technology and the VDI guidelines described below.

Observe the applicable and comparable country-specific regulations or standards.

(the list does not claim of completeness)

- DIN EN 6946 U-value calculation
- DIN EN 12831 Calculation of the heating load
- DIN EN 128282 Heating systems in buildings Planning of
- Hot water Heizungsanlagen
- DIN 18380 VOB / C
- DIN 4109 Sound insulation in building construction
- TRGI Technical Rules Gas Installation
- VDI 2035 Treatment of heating water
- EneV energy saving regulation

Please note that according to EneV the heating load of the building must be recalculated in case of a major renovation of the heating system (eg. boiler replacement). The plant shall be provided with facilities enabling automatic control of the same according to time and temperature.

Ensure that no aggressive substances come in contact with the stainless steel manifold and manifold components (eg acids, lubricants, bleach, flux, strong liquid cleaning agents, / contact sprays screed / concrete including its components, etc.).

A water analysis is recommended for each installation. In the case of warranty claims, a water analysis is mandatory.

It is essential that the heating circuits are regulated on the water side so that a sufficient hydraulic function of the individual heating circuits or the entire underfloor heating system is guaranteed!

2. Electrical installations must be carried out in accordance with following regulations: commissioning and maintenance IEC 364 or CENELEC HD 384 or DIN VDE 0100 and IEC Report 446 or DIN VDE 0110 as well as EN 50178, EN 60204, EN 60335 / Part 1 and Part 51 or local regulations.

Warning: Prior to any work on the controller or the components connected to it, switch off the controller according to the regulations. The outputs are also lost in the non-activated state mains voltage.

3. By Comfort Ports with assembled water meters planning and implementation of the drinking water system must be done in accordance with the Infection Protection Ordinance, in particular § 38 of the Drinking Water Ordinance, DIN 1988, DIN 50930 Part 6, DIN 2000, DIN 2001 and DIN 18381 and VDI 6003 and VDI 6023 and the DVGW Guidelines cited below . (The list does not claim of completeness.)

Additionally the following regulations to be obtained:

(the list does not claim of completeness)

- W 551 Tap water heating and distribution systems, technical measures to reduce legionella growth.
- W 553 Dimensioning of circulation systems in central Drinking water heating systems.
- W 291 Cleaning and disinfecting water distribution systems.
- The regulations of local water companies.
The applicable and comparable country-specific regulations or standards.

Finally, we would like to highlight a few points that should also be considered:

- The safety equipment of the drinking water and domestic hot water system must comply with DIN 1988 or the comparable country-specific regulations or standards.
- The system must be flushed and disinfected before commissioning and handover to the user.
- Domestic hot water pipes must be provided with the required thermal insulation strength in accordance with EneV.
- Drinking cold water pipes must be insulated in such a way that no heating in excess of the requirements of the Drinking Water Ordinance or comparable country-specific regulations or standards takes place.
- The drinking cold water pipe is not together with to insulate warm lines and if possible not to lay in the immediate vicinity of the same.

4.2 Technical data

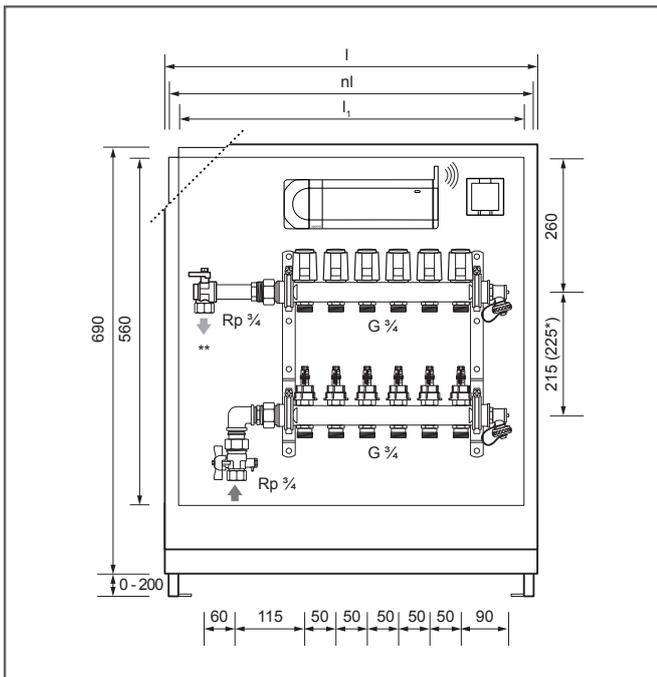
Uponor Comfort Port, Version 1: vertical w/o metering set

Preassembled underfloor heating cabinet, complete with:

- Stainless steel manifold (2-20 loops), or polyamide manifold (2-15 loops), with flowmeters or with lock shield valve
- Primary connection vertical with ball valves G3/4, connection on left or right
- Secondary connections G3/4 Eurocone, optional: with compression adapters for PEX or MLC pipes
- In-wall cabinet depth 110 mm, or depth 80 mm, or on-wall cabinet depth 140 mm
- Cabinet made of galvanized steel with protective cardboard, with height-adjustable feet's, with adjustable tube deflection bar
- Door and frame powder coated, white (RAL 9016), optional: with plastic door, optional: with key lock
- Integrated water level for optimal alignment
- Single room control and factory-fitted electrical wiring of actuators (24 or 230V), possible options: Smatrix Base, Smatrix Wave, Smatrix Base Pro, Smatrix Base Pro KNX, Base Flexiboard



Dimensions

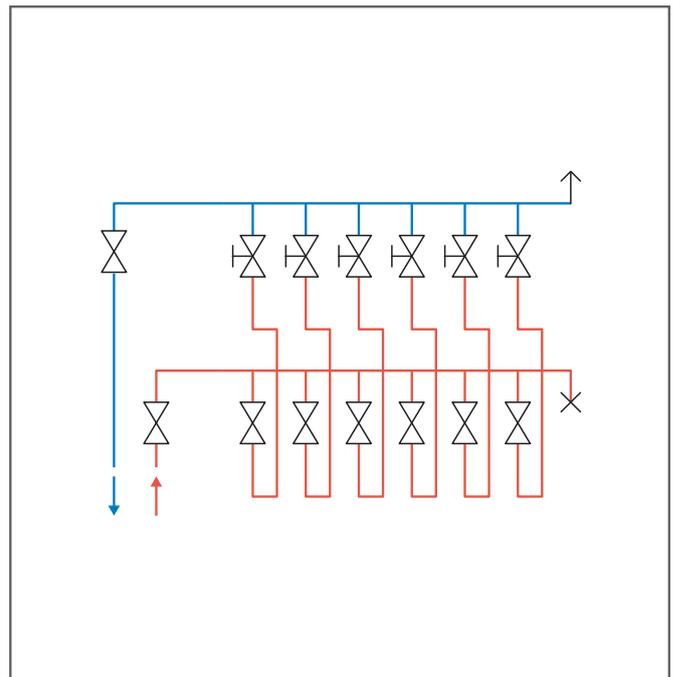


* Vario M Manifold ** Optional: balancing valve or diff. pressure control valve

Loops	l_1 [mm]	nl [mm]	l [mm]
2	410	450	443
3 – 4	510	550	543
5 – 6	610	650	643
7 – 9	760	800	793
10 – 12	910	950	943
13 – 15	1060	1100	1093
16 – 17	1210	1250	1243
18 – 20	1510	1550	1543

Depth: In-wall 80 – 120 or 110 – 150 mm, On-wall 140 mm

Hydraulic scheme



Loops	l_1 [mm]	nl [mm]	l [mm]
2	410	450	460
3 – 4	510	550	560
5 – 6	610	650	660
7 – 9	760	800	810
10 – 12	910	950	960
13 – 15	1060	1100	1110
16 – 17	1210	1250	1260
18 – 20	1510	1550	1560

Uponor Comfort Port, Version 2: horizontal w/o metering set

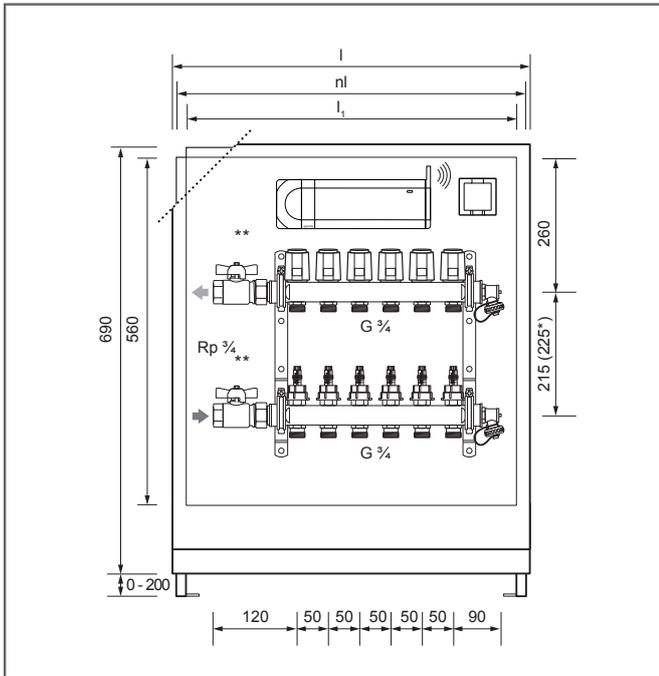
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Preassembled underfloor heating cabinet, complete with:

- Stainless steel manifold (2-20 loops), or polyamide manifold (2-15 loops), with flowmeters or with lock shield valve
- Primary connection horizontal with ball valves G3/4, connection on left or right
- Secondary connections G3/4 Eurocone, optional: with compression adapters for PEX or MLC pipes
- In-wall cabinet depth 110 mm, or depth 80 mm, or on-wall cabinet depth 140 mm
- Cabinet made of galvanized steel with protective cardboard, with height-adjustable feet's, with adjustable tube deflection bar
- Door and frame powder coated, white (RAL 9016), optional: with plastic door, optional: with key lock
- Integrated water level for optimal alignment
- Single room control and factory-fitted electrical wiring of actuators (24 or 230V), possible options: Smatrix Base, Smatrix Wave, Smatrix Base Pro, Smatrix Base Pro KNX, Base Flexiboard



Dimensions

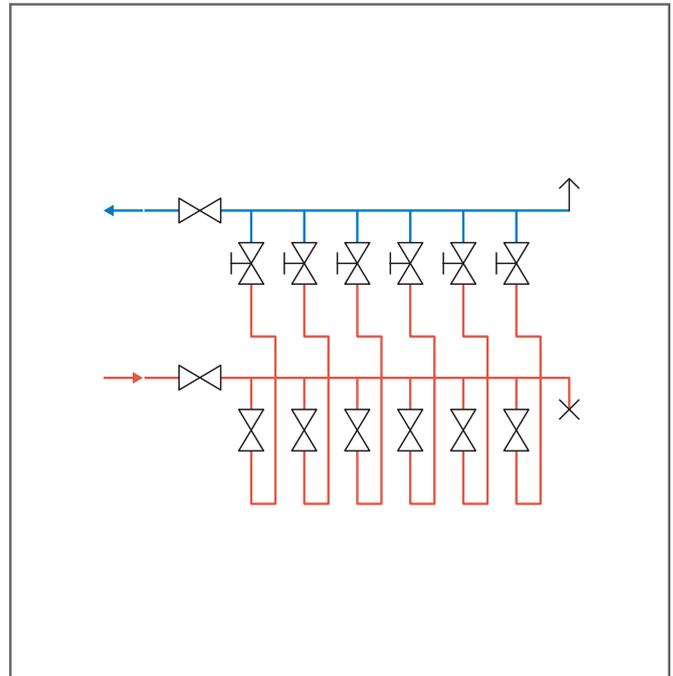


* Vario M Manifold ** Optional: balancing valves or diff. pressure control valve

Loops	l_1 [mm]	nl [mm]	l [mm]
2 – 3	410	450	443
4 – 5	510	550	543
6 – 7	610	650	643
8 – 10	760	800	793
11 – 13	910	950	943
14 – 16	1060	1100	1093
17 – 18	1210	1250	1243
19 – 20	1510	1550	1543

Depth: In-wall 80 – 120 or 110 – 150 mm, On-wall 140 mm

Hydraulic scheme



Uponor Comfort Port, Version 4: horizontal with metering set

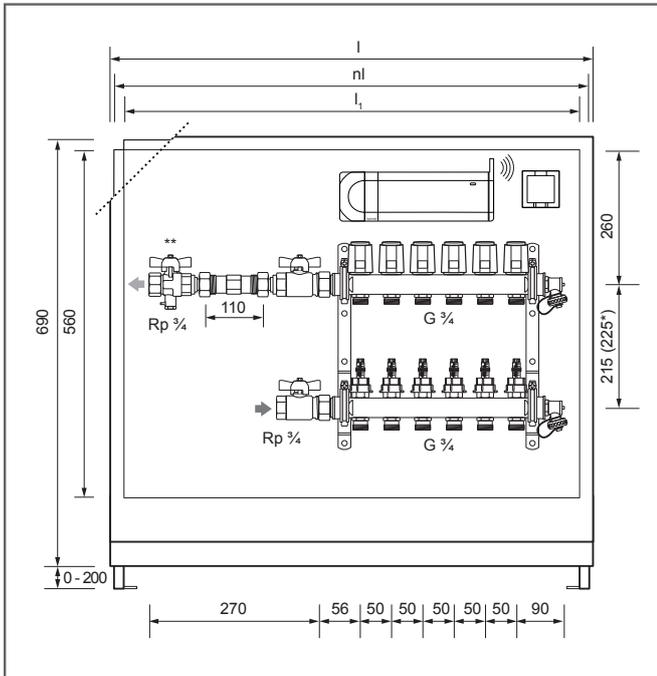
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Preassembled underfloor heating cabinet, complete with:

- Stainless steel manifold (2-20 loops), or polyamide manifold (2-15 loops), with flowmeters or with lock shield valve
- Primary connection horizontal with metering set G3/4, connection on left or right
- Secondary connections G3/4 Eurocone, optional: with compression adapters for PEX or MLC pipes
- In-wall cabinet depth 110 mm, or depth 80 mm, or on-wall cabinet depth 140 mm
- Cabinet made of galvanized steel with protective cardboard, with height-adjustable feet's, with adjustable tube deflection bar
- Door and frame powder coated, white (RAL 9016), optional: with plastic door, optional: with key lock
- Integrated water level for optimal alignment
- Single room control and factory-fitted electrical wiring of actuators (24 or 230V), possible options: Smatrix Base, Smatrix Wave, Smatrix Base Pro, Smatrix Base Pro KNX, Base Flexiboard



Dimensions



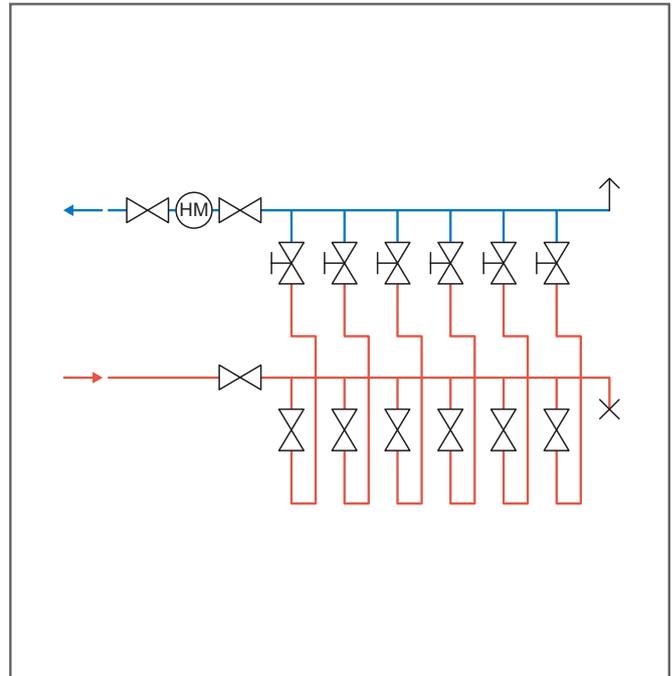
* Vario M Manifold ** Optional: balancing valve or diff. pressure control valve

Loops	l_1 [mm]	nl [mm]	l [mm]
2 – 3	610	650	643
4 – 6	760	800	793
7 – 9	910	950	943
10 – 12	1060	1100	1093
13 – 15	1210	1250	1243
16 – 20	1510	1550	1543

Depth: In-wall 95** – 120 or 110 – 150 mm, On-wall 140 mm

** by heat meter depth > 95mm

Hydraulic scheme



HM = Heat meter

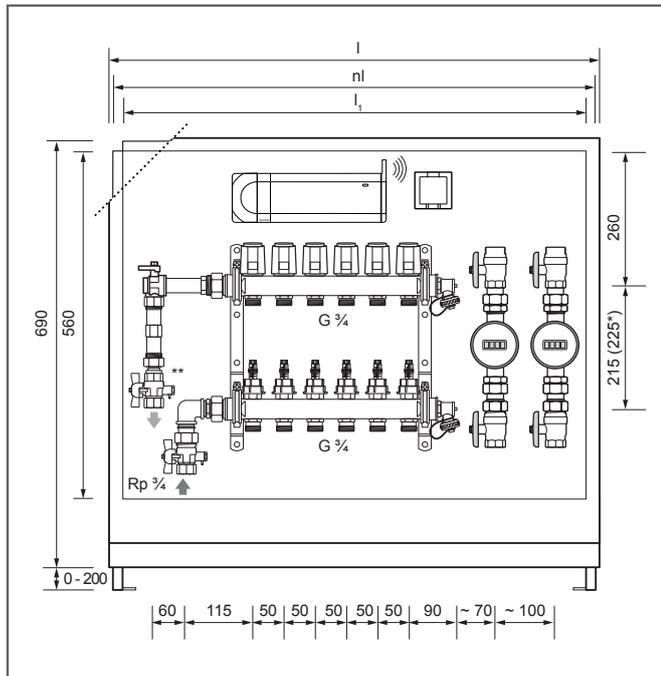
Uponor Comfort Port, Version 5: vertical with metering sets for heating and cold/warm water

Preassembled underfloor heating cabinet, complete with:

- Stainless steel manifold (2-15 loops), or polyamide manifold (2-15 loops), with flowmeters or with lock shield valve
- Primary connection vertical with metering sets for heating and cold/warm water G3/4, connection on left or right
- Secondary connections G3/4 Eurocone, optional: with compression adapters for PEX or MLC pipes
- In-wall cabinet depth 110 mm, or depth 80 mm, or on-wall cabinet depth 140 mm
- Cabinet made of galvanized steel with protective cardboard, with height-adjustable feet's, with adjustable tube deflection bar
- Door and frame powder coated, white (RAL 9016), optional: with plastic door, optional: with key lock
- Integrated water level for optimal alignment
- Single room control and factory-fitted electrical wiring of actuators (24 or 230V), possible options: Smatrix Base, Smatrix Wave, Smatrix Base Pro, Smatrix Base Pro KNX, Base Flexiboard



Dimensions

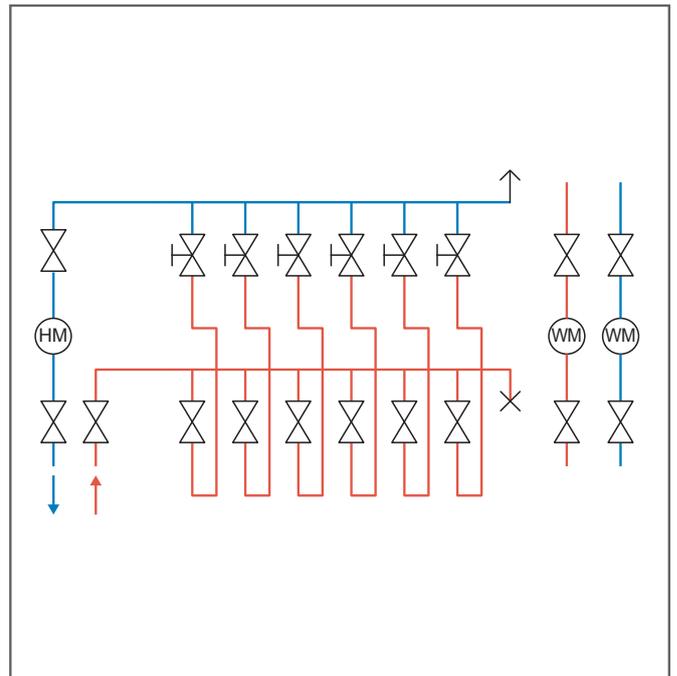


* Vario M Manifold ** Optional: balancing valve or diff. pressure control valve

Loops	l ₁ [mm]	nl [mm]	l [mm]
2 – 4	760	800	793
5 – 6	910	950	943
7 – 9	1060	1100	1093
10 – 12	1210	1250	1243
13 – 15	1510	1550	1543

Depth: In-wall 95** – 120 or 110 – 150 mm, On-wall 140 mm
** by heat meter depth > 95mm

Hydraulic scheme



HM = Heat meter WM = Water meter

Uponor Comfort Port, Version 6: with pump group Fluvia T Push 23

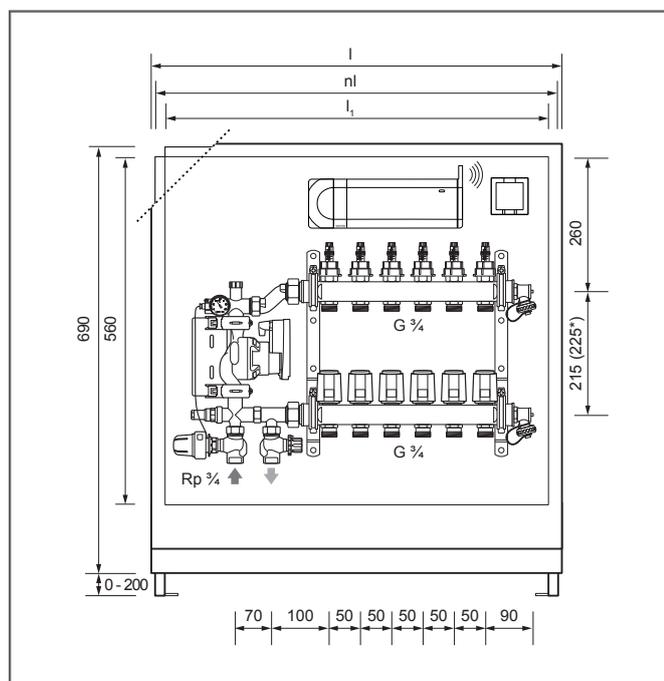
EN

Preassembled underfloor heating cabinet, complete with:

- Stainless steel manifold (2-20 loops), or polyamide manifold (2-15 loops), with flowmeters or with lock shield valve
- Primary connection with pump group Fluvia T Push 23, connection on left or right
- Secondary connections G3/4 Eurocone, optional: with compression adapters for PEX or MLC pipes
- In-wall cabinet depth 110 mm, or on-wall cabinet depth 140 mm
- Cabinet made of galvanized steel with protective cardboard, with height-adjustable feet's, with adjustable tube deflection bar
- Door and frame powder coated, white (RAL 9016), optional: with plastic door, optional: with key lock
- Integrated water level for optimal alignment
- Single room control and factory-fitted electrical wiring of actuators (24 or 230V), possible options: Smatrix Base, Smatrix Wave, Smatrix Base Pro, Smatrix Base Pro KNX, Base Flexiboard



Dimensions

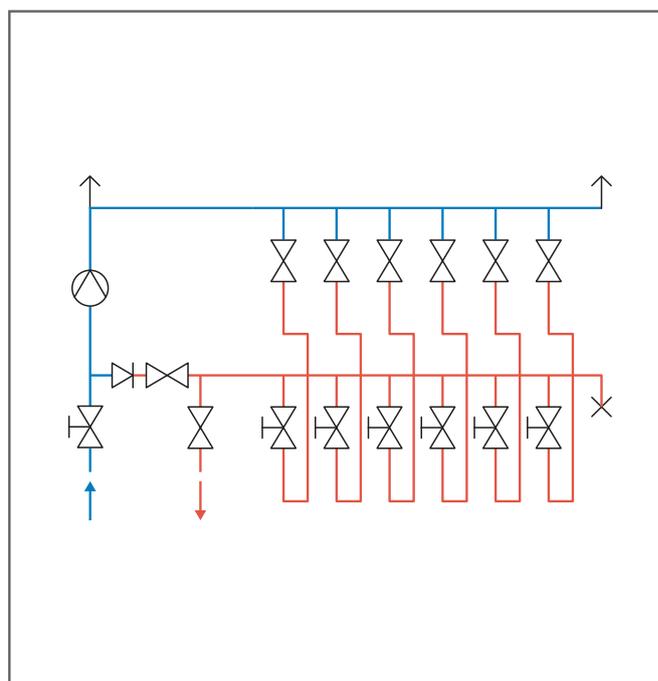


* Vario M Manifold

Loops	l_1 [mm]	nl [mm]	l [mm]
2	410	450	443
3 - 4	510	550	543
5 - 6	610	650	643
7 - 9	760	800	793
10 - 12	910	950	943
13 - 15	1060	1100	1093
16	1210	1250	1243
17 - 20	1510	1550	1543

Depth: In-wall 110 - 150 mm, On-wall 140 mm

Hydraulic scheme



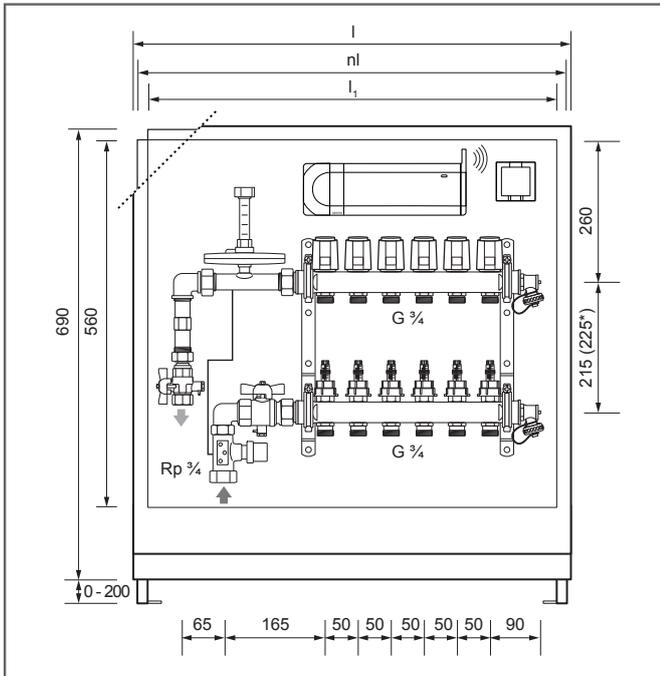
Uponor Comfort Port, like Version 3 but vertical with dynamic balancing valve

Preassembled underfloor heating cabinet, complete with:

- Stainless steel manifold (2-20 loops), or polyamide manifold (2-15 loops), with flowmeters or with lock shield valve
- Primary connection vertical with dynamic balancing valve, connection on left or right
- Secondary connections G3/4 Eurocone, optional: with compression adapters for PEX or MLC pipes
- In-wall cabinet depth 110 mm, or depth 80 mm, or on-wall cabinet depth 140 mm
- Cabinet made of galvanized steel with protective cardboard, with height-adjustable feet's, with adjustable tube deflection bar
- Door and frame powder coated, white (RAL 9016), optional: with plastic door, optional: with key lock
- Integrated water level for optimal alignment
- Single room control and factory-fitted electrical wiring of actuators (24 or 230V), possible options: Smatrix Base, Smatrix Wave, Smatrix Base Pro, Smatrix Base Pro KNX, Base Flexiboard



Dimensions

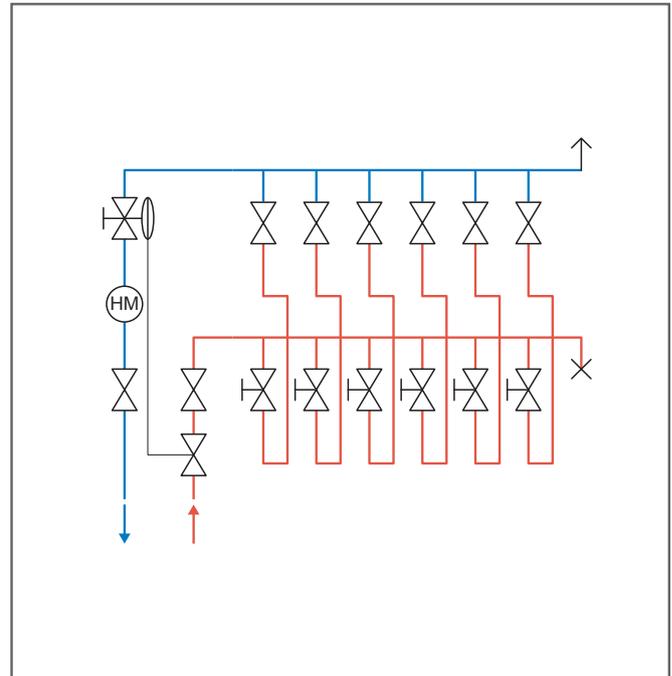


* Vario M Manifold

Loops	l ₁ [mm]	nl [mm]	l [mm]
2 – 3	410	450	443
4 – 5	510	550	543
6 – 7	610	650	643
8 – 10	760	800	793
11 – 13	910	950	943
14 – 16	1060	1100	1093
17 – 18	1210	1250	1243
19 – 20	1510	1550	1543

Depth: In-wall 95** – 120 or 110 – 150 mm, On-wall 140 mm
 ** by heat meter depth > 95mm

Hydraulic scheme

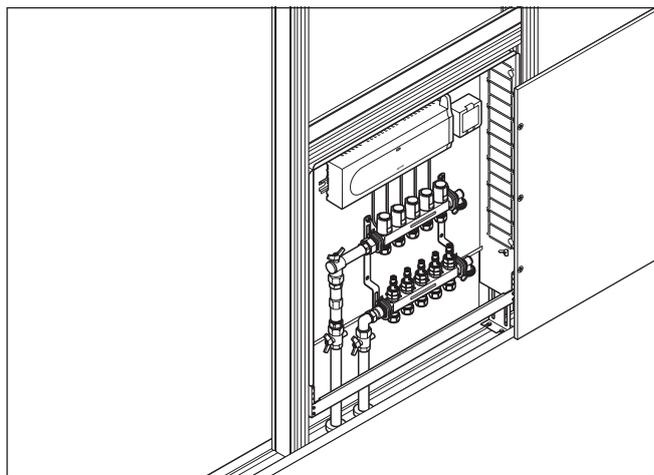
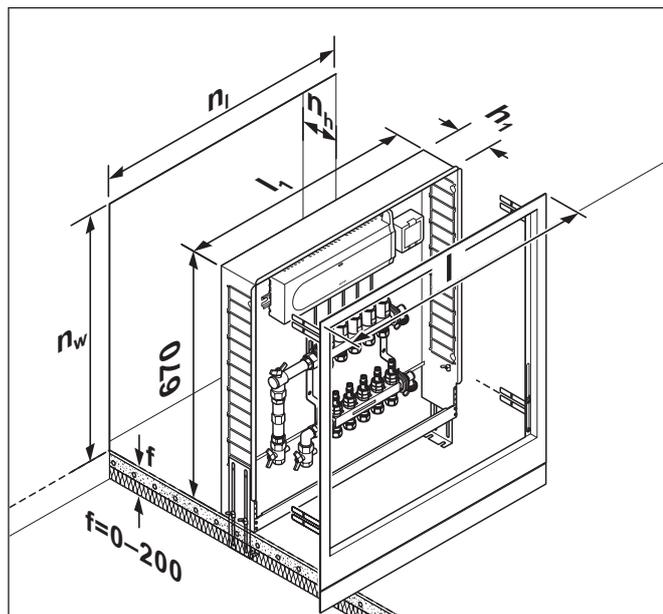


HM = Heat meter

5 Overview installation dimensions

EN

Uponor Comfort Port in wall



Caution!

When installing in drywall walls, pay attention to greater installation depth if installed with heat meter (≥ 95 mm).

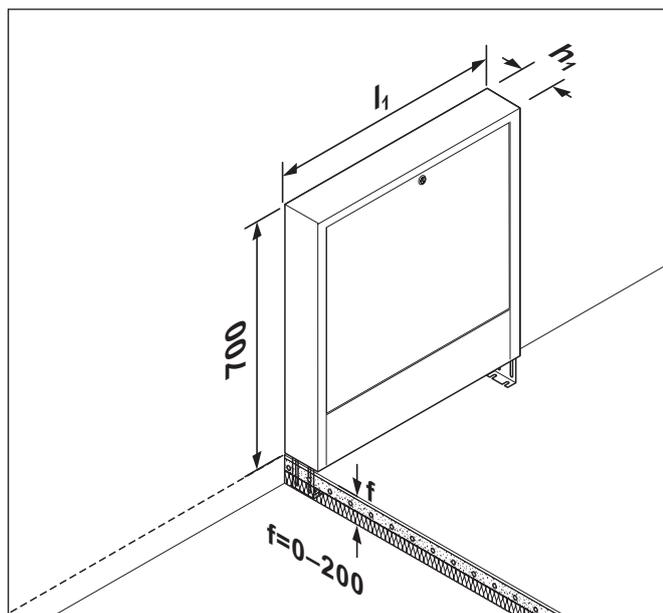
Uponor Comfort Port in wall 110

Type [mm]	l_1	h_1	l	n_1	n_w	n_h
410/110	410	110	443	450	690+f	110-150
510/110	510	110	543	550	690+f	110-150
610/110	610	110	643	650	690+f	110-150
760/110	760	110	793	800	690+f	110-150
910/110	910	110	943	950	690+f	110-150
1060/110	1060	110	1093	1100	690+f	110-150
1210/110	1210	110	1243	1250	690+f	110-150
1510/110	1510	110	1543	1550	690+f	110-150

Uponor Comfort Port in wall 80

Type [mm]	l_1	h_1	l	n_1	n_w	n_h
410/80	410	80	443	450	690+f	80-120
510/80	510	80	543	550	690+f	80-120
610/80	610	80	643	650	690+f	80-120
760/80	760	80	793	800	690+f	80-120
910/80	910	80	943	950	690+f	80-120
1060/80	1060	80	1093	1100	690+f	80-120
1210/80	1210	80	1243	1250	690+f	80-120
1510/80	1510	80	1543	1550	690+f	80-120

Uponor Comfort Port on wall



Uponor Comfort Port on wall 140

Type [mm]	l_1	h_1
410/140	410	140
510/140	510	140
610/140	610	140
760/140	760	140
910/140	910	140
1060/140	1060	140
1210/140	1210	140
1510/140	1510	140

Uponor

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1093008 – 10-2018
Production: Uponor / JL / ME

Uponor reserves the right to make changes, without prior notification,
to the specification of incorporated components in line with its policy
of continuous improvement and development.



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