



Modern technology means less energy use with unchanged or higher comfort and no need to be ashamed of a warm home.

The Austrian HERZ Group, with its focus on energy efficiency and related production of biomass plants, heat pumps, fittings, district heating stations, control technology and insulation materials, supplies the products for the required applications and is uniquely structured in this form in Europe. The HERZ Group has 40 production facilities in 12 European countries, is active worldwide and employs over 3,500 people.

The full-range supplier for renewable energy systems

Decades of experience and specialisation in the fields of heating and control technology, fittings and heat distribution provide the basis for the development of innovative products with successful solutions in technology and design. The group headquarters in Vienna is the HERZ centre of valve production and innovation. Today, HERZ supllies the full range for the HVAC industry, all products are manufactured in Europe in order to meet the quality demands placed on HERZ products.

HERZ Energietechnik

With the most modern pellet and wood chip heating systems up to 1500 kW (with cascade operation up to 4500 kW), the wood gasification boilers up to 40 kW as well as the heat pumps up to 80 kW, HERZ offers a complete range of modern, cost-efficient and environmentally friendly heating systems with the highest comfort and best user-friendliness. For the Austrian heating technology specialist, the further development of products and the generation of new technologies have a high priority. Even systems that are already successfully established on the market are constantly being expanded and optimised to keep up with the times.

BINDER - Biomass plants up to 20 megawatts

The wide range of products offered by BINDER - a 100% subsidiary of the HERZ Group - perfectly complements the existing product range in the biomass sector. Plants up to 20,000 kW are offered, which makes HERZ an interesting partner for private as well as commercial and industrial customers. In addition to conventional hot water heating systems, hot water and saturated steam systems and hot air drying systems are also produced.

ARMATUREN

Valves, fittings, controls and thermostatic valves for the heating, cooling, sanitary and gas installations

BIOMASS SYSTEMS / HEAT PUMPS

Full service provider for renewable energy systems

INSULATING MATERIALS

EPS products as thermal insulation and for underfloor heating in building services

HIRSCH Servo







Franz Gebauer and Viktor Lehrner found "Gebauer & Lehrner" and start manufacturing fittings in Herzgasse in Vienna Favoriten.



Where there's heating, there's HERZ. The motto for the coming decades. Specialisation in heating fittings.



New construction of the company headquarters and Relocation to the Wiener Richard-Strauss-Strasse 23, 1220 Vienna.



Founding of numerous sales companies and establishment of a worldwide market presence.



New construction of factories and takeover manufacturers of technical building equipment at home and abroad.



HERZ Energietechnik is founded in Pinkafeld and Binder Energietechnik is acquired.



Acquisition of the majority of shares in the Hirsch Servo Group based in Glanegg and the Styrian biomass plant manufacturer Binder.







Burj Khalifa, VAE

For the world's tallest building, Herz supplied various HVAC valves for this project, including pressure independent control valves as well as associated actuators, which play an important role in reducing energy consumption while ensuring optimal building temperature.



Opernhaus, Ungarn

From 2017-2022, the Hungarian State Opera underwent a complete renovation. In the course of the renovation work, HERZ supplied static and dynamic control and regulating valves and thus made a significant contribution to optimised hydraulic energy use in this magnificently renovated work of art that is the Budapest Opera House.





A botanical garden in the middle of the arid desert. In the desert state of Saudi Arabia, work has been underway on the King Abdullah International Garden (KAIG) project since 2019. The project aims to raise awareness of the consequences, process and study of climate change by showing the history of botanical evolution to visitors.







 \heartsuit



HERZ clever&smart Heating and cooling made intelligent

After the revolutionary development of smartphones that make our everyday lives easier, smart household appliances have also proven to be an important part of our lives. With the touch of a button on a smartphone, you can switch on the oven or set the robot to vacuum on its own. This smart technology is also well known in building technology. HERZ Armaturen goes one better and offers the complete package for an intelligent and controlled heating and cooling system. HERZ clever&smart is the intelligent solution for adapting your home to your needs.

The intelligent set

Consisting of a control box, a room controller and additional LED controllers or room sensors, HERZ clever&smart can be put together individually. A distinction is made between systems for heating only or heating and cooling. Whether wired or via radio - the HERZ clever&smart family offers the right smart solution for all comfort lovers.

The control box is not just a simple signal distributor, but a heating and cooling controller. The flow temperature can be controlled according to weather conditions and dew point. The room controller climate, equipped with a colour touch display, measures the temperature as well as the relative humidity. It is also used to configure and operate the system. The LEDcontroller climate also measures and displays the air quality.

Comfort at the highest level

In addition to the 2 main operating modes (heating and cooling), HERZ clever&smart offers 4 modules thanks to its smart technology: Normal, Turbo, Eco and Off. This makes it easy to choose between preset modules for heating and cooling or to adapt the room temperature to everyday life by specifying the time window on the selected day. The modules as well as the heating and cooling times, which room should have how many degrees and when, can be set directly on the room controller or conveniently via the mobile phone.

The air is clean

Indoor Air Quality (IAQ) serves as a benchmark for air quality. This plays a major role in our health indoors. The more polluted the air, the higher the risk of infection or airborne diseases and contagions. Most people only ventilate when the stuffy air is already noticeable. HERZ clever&smart LEDcontroller climate



LED controller with display.

measures the air quality and the CO₂ content in the interior through the integrated sensors and shows these via colour codes on the display of the LEDcontroller. In this way, the first signal to take action is given in real time and before it is too late.



elever & smart

Mobile technology

If desired, the entire system can also be connected to a smartphone via WiFi. With the app, the desired room temperature at the desired time can be conveniently set from anywhere and adapted to one's own daily routine. In addition, the app, which is available in various languages, also offers simple communication for the service technician. In addition, the app provides you with an overview of the rooms, temperatures and relative humidity.

HERZ clever&smart offers you user-friendliness and comfort for a controlled and effortlessly adjustable heating and cooling system. Easy operation can be done remotely with iOS / Android apps as well as with touch sensor controllers included in various product packages. HERZ clever&smart reduces your energy costs while increasing comfort. ⊠



Climate control box for heating and cooling zones.



HERZ clever&smart app with display of the individual rooms, individual setting of the cooling/ heating time and module selection.

HERZ pressure-independent 6-way control ball valve For the control of heating and cooling systems



The HERZ pressure-independent 6-way control ball valve can be used for the control of heating/cooling ceilings and fan coils in 4-pipe systems. It can be used as a control valve or switching valve. The HERZ pressure-independent 6-way characterised control valve is used in heating and cooling systems, e.g. in supermarkets, office complexes, public buildings, but also in residential complexes, etc. The valve is operated via an electric rotary actuator. Here, an electric rotary actuator is used to switch between heating and cooling. The internal safety function prevents an unintentional increase in pressure. The HERZ pressure-independent 6-way control ball valve is a combination of a 6-way valve, regulating ball valve and pressure-independent control valve.

A ball valve with several functions

The installation of a HERZ pressure-independent 6-way regulating ball valve reduces the number of valves required for switching and regulating the system. With a go° turn of a rotary actuator, both the heating-cooling changeover and the regulation of the heating side and the cooling side can be performed. The integrated differential pressure regulator keeps the differential pressure constant via the control valve and prevents the pressure from rising unintentionally. Regardless of changes in the applied system differential pressure, the same set flow rate always flows through the control ball valve. The flow rate can be regulated by intermediate positions.



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Heating Interface Unit Renova The perfect replacement for your gas boiler

In many houses, a gas boiler is responsible for the heat supply. The heat is produced directly in the consumer's home. Among other things, this leads to undesirable noise emissions from gas boilers. If one also considers the uncertain availability of gas supply due to the current situation, it is advisable to find an alternative. Flat transfer stations prevent this and other problems.

Heating Interface Unit Renova

Renova is a compact solution for room heating and hot water. It transfers the heating energy directly to the existing radiator heating system and has a zone valve for convenient control of the flat heating via a room thermostat. The heat is produced according to demand. Thanks to the insulated pipes, unwanted heat loss is prevented.

When retrofitting existing gas boilers, it is recommended to use Renova. This flat transfer station was specially designed for use as a replacement for wall-mounted gas boilers. A standard connection sequence, based on typical gas boilers, facilitates the replacement of the boiler. Thus, the extremely small dimensions in combination with the option to connect the station from above or from below with the supply lines enable the smooth replacement of the gas floor heating in the flat. The supply lines can be installed in the former chimney, which can now be converted into an installation shaft.

Low system temperatures are the key to the energy turnaround

Low flow and return temperatures are the key to meeting today's requirements for system efficiency in the production and transport of heat. Renova, in contrast to the gas boiler, offers a sustainable as well as efficient heat supply. Thanks to the extraordinarily high transfer capacity of the heat exchanger, the return temperature of the entire system is particularly low. A feature that works very well in combination with energy-efficient systems such as district or local heating, heat pumps or even condensing biomass systems.



AVAILABLE Renova order number: 1 4022 XX

Limiting the formation of legionella

The issue of legionella is also effectively curbed with WÜS Renova. Since hot sanitary water does not have to be stored at any time during normal operation, the formation of harmful legionella cultures is practically ruled out.



Heating Interface Unit LEN Low Energy Network

eating Interface Unit LEN is the compact flat transfer station with minimal space requirements and separate supply for heating and hot water. It has all the necessary components to control both the space heating and the hot water generation in an energy-efficient manner. While the panel heating works with considerably lower temperatures than the water heating, the LEN as a 4-pipe station with separate primary supply ensures more efficient operation precisely at this point. This allows a heat pump to perform in the optimum temperature range when generating space heating, ensuring lower heating costs.

HERZ Heating Interface Unit LEN uses a highly efficient heat exchanger for decentralised hot water production on demand in the high-temperature circuit. At the same time, thanks to the extraordinarily high transfer capacity of the heat exchanger, the return temperature of the entire system is particularly low. ⊠



AVAILABLE

Hot water supply

- High hot water comfort due to the instantaneous water heater principle
- Thermostatically controlled tap temperature
- HERZ differential pressure regulator 25- 60 kPa for hydraulic balancing
- HERZ pressure-temperature regulator
- Fittings for heat quantity and cold water meters also for continuous operation

Space heating supply

- Separate heating supply with low temperature
- Can also be used for cooling/temperature control via the heating surfaces
- HERZ stainless steel manifold with thermostatic valves and flowmeter o-3 l/min
- 4 in 1: HERZ differential pressure regulator with shut-off, zone valve function and adjustable flow limitation
- Automatic hydraulic balancing between all heating circuit manifolds in the building
- Heat meter fitting suitable for continuous operation

Heating Interface Unit compactE Safe and electronically controlled HERZ Heating Interface Unit

The Heating Interface Unit compactE has a precise, electronic control of the withdrawal temperature. The advantage of this electronic control is that lower differential pressures are necessary for the operation of the station and slightly fluctuating supply temperatures can be compensated via the electronic control.

The newly developed multifunctional valve block contains a strainer, the necessary summer bypass with return temperature limiter, as well as an adjustable differential pressure regulator for safeguarding hot water production and for automatic hydraulic balancing between several stations. This also significantly reduces the space requirement compared to mechanically-hydraulically controlled flat transfer stations.

HERZ Heating Interface Unit compactE transfers the heating energy directly with integrated admixture to a panel heating system and has a second HERZ differential pressure controller with 4 functions in 1 valve (differential pressure control, zone valve, shutoff valve function and the option of adjustable flow limitation) for convenient and safe control of the apartment heating system.



AVAILABLE

District Heating Transfer Stations Individual complete solutions

A district heating transfer station is the link between the district heating network and the consumers in single-family and terraced houses up to apartment blocks and industrial plants. It transfers and measures the delivered heat quantity and enables integration into a remote monitoring and control system. Depending on the model and customer requirements, outputs from 20 kW up to 4 MW can be transmitted. A modular system makes it possible to react quickly to different customer requirements from standard modules.

Adaptation to customer requirements

Each station is planned as well as produced in accordance with the technical guidelines of the district heating provider and can also be manufactured according to special requirements. The dimensions

manufactured according to special requirements. The dimensions can be adapted to the intended installation site. The compact design and good accessibility of components allow for user-friendly maintenance. Special attention is paid to the training of users by HERZ specialists for the operation and maintenance of the district heating transfer station.

Individual designs

Depending on the area of application, the district heating transfer stations are divided into three models. Basically, the following applies: On the primary district heating side, the output of all district heating transfer stations is controlled electronically. Provision for the installation of a heat meter is provided



Model A

From single and multi-family houses to large plants and businesses, HERZ district heating transfer station knows no limits. The standard model includes a heat exchanger (brazed or screwed), a PICV, an electric actuator, an ultrasonic flow meter, a circulation pump (speed-controlled), temperature and pressure measuring devices, a strainer, non-return valves and a safety valve. Depending on the location and customer requirements, the HERZ district heating transfer station can transmit up to 4 MW of power.

Model B

Compact and fully equipped district heating transfer station with all necessary components, safety devices and control technology up to 30 kW output. Ideally suited for detached houses and apartment buildings looking for a compact solution. Because with this station, hot water preparation and heating circuits are integrated on the secondary side, ready for connection. The control system with all sensors and actuators is pre-wired. One or two low-temperature heating circuits, one or two high-temperature heating circuits or one low-temperature and one high-temperature heating circuit each can be implemented. The hot water preparation can be done from the primary side or from the secondary side.

Model C

Compact district heating transfer station as a stand-alone model with control technology up to 30 kW output. Ideal for supplying single and multi-family houses. In this station, a boiler safety group is pre-installed on the secondary side. The control system with all sensors and actuators is pre-wired.



PUMPFIX The indispensable product of the heating system

ERZ boiler connection groups of the "PUMPFIX" series are compact system units with shut-off and safety fittings as well as control and regulating devices for connecting energy generators and supply circuits in building services. An indispensable product of every heating system.

Depending on the area of application, HERZ PUMPFIX pump groups are fitted with a heating circulation pump of various manufacturers and efficiencies, isolation valves, temperature indi-

> NOW ALSO AVAILABLE IN DN 40 - DN 50!

cators, backflow preventer, spacer, regulating valve, mixing valve with manual adjustment and 3-point actuator, diaphragm safety valve and venting fitting to form a compact connection set with insulating shell.

The PUMPFIX pump groups can be supplied with or without an electronic circulation pump. They are characterised by their time and space-saving installation as well as their HERZ quality. HERZ PUMPFIX pump groups are available in DN 20 to DN 50.

AVAILABLE

PUMPFIX DIRECT

Pump group for a direct heating circuit or direct connection between boiler and water heater.

Components:

- Thermometer ball valves with isolation valve (o - 120 °C).
- Spacer with non-return valve
- Connecting piece with shut-off • valve
- Thermal insulation
- Distance VL/RL: 125 mm

PUMPFIX MIX

AVAILABLE

Pump group for electronic control of the heating circuit temperature.

Components:

- Thermometer ball valves with isolation valve (o - 120 °C)
- Overflow valve (accessories)
- Spacer with non-return valve
- 3-way mixing valve with bypass (DN25)
- Mixer motor for 3-point control
- Thermal insulation
- Distance VL/RL: 125 mm



AVAILABLE

PUMPFIX SOLAR

Pump group for solar systems.

Components:

- Thermometer ball valves with isolation and non-return valve (0 - 150 °C)
- Connection for expansion vessel
- Volume flow controller 4 24 l/min
- With sight glass and drain
- Spacer with vent
- Incl. safety valve 6 bar and pressure
 - Thermal insulation

HERZ DE LUXE Competence meets design

Radiators have changed. They are no longer just a "means to an end", but a significant element of interior design. Well-being requirements and environmental concerns have also evolved. Thermostatically controlled room temperature and efficient heating systems are state of the art. Thus, HERZ Armaturen has developed a range of thermostatic heads with modern and at the same time timeless colours in cooperation with "Porsche Design GmbH".

he function of the thermostatic head is long proven: The desired temperature is set by adjusting the thermostatic head. The room temperature is continuously adjusted to this by the integrated liquid sensor. When the desired temperature is reached in the room, the expansion element expands to such an extent that little to no hot water can flow through the valve to the radiator to maintain the temperature. If it is colder than desired, the expansion element contracts again to let hot water through. By using it correctly, the HERZ thermostatic head thus ensures a regulated and efficient heating system

and a corresponding sense of well-being. Over time, the use of the thermostatic head has also proven to be an interior design element. In most cases, the thermostatic head is chosen to match the rest of the interior design. For this reason, HERZ Armaturen, together with Porsche Design, has developed a collection consisting of 18 different colours. From Gold Money to Ultramarine, from Calypso to Pergamon, many modern and timeless colours provide the finishing touch to interiors.

DE LUXE fittings

HERZ DE LUXE radiator fittings complete the architectural design of the room. Thanks to more than 125 years experience in heating control, HERZ makes these fittings an integral part of the precise and efficient control of the heating system, ensuring comfort and



energy savings throughout. A variety of designs and connection options make the HERZ DE LUXE range a perfect solution for all new build as well as renovation projects in the HERZ quality that speaks for itself.

> HERZ-VUA four-way valve in angle form for two-pipe systems with immersion pipe in matt black. (S 74684 49).



Colourful DE LUXE thermostatic heads. Order number S 9230 XX







Dynamic thermostatic valves Precise temperature control and automatic balancing

ynamic thermostatic valves are mounted directly on radiators and combine the classic thermostatic valve with a differential pressure regulator in one housing. The integrated differential pressure requlator ensures that the required amount of water is available to each radiator. With a mounted HERZ thermostatic head, the required amount of water is automatically regulated depending on the set temperature. Both an angle version and a straight-through version are available. Dynamic thermostatic valves are available in DN 15 and can regulate flow ranges from 10 l/h to 120 l/h, depending on the application. The maximum differential pressure of 60 kPa enables a wide range of applications. 💟



Dynamic thermostatic valves in angle and straightway version with mounted HERZ Mini thermostatic head.

District heating valves For temperatures up to 150°C and pressures up to 25 bar

D istrict heating valves are installed in house transfer stations in the district heating network on the primary side. The advantage is that the range of use is guaranteed for temperatures up to 150°C and pressures up to 25 bar. This is ensured by special EPDM (ethylene-propylene-diene rubber) seals. The installation dimensions, which are adapted to the market, allow easy installation in existing systems. HERZ district heating valves are

tested on the test bench at the TU-Graz and impress with their quality. For the time being, the valves will be available in dimensions DN15 to DN100. Depending on the dimension, screwed or flanged versions are available. Whether differential pressure regulators and port valves or PICVs, HERZ offers the right product for every customer requirement.



HERZCON The international success model from Austria

It is not for nothing that HerzCON is called the "HEART of control technology". The all-rounder has already won all hearts internationally, is used tens of thousands of times in numerous countries and receives only compliments for its functions, its easy and quick installation and its compact design. But what exactly makes HerzCON so indispensable?

Compact, easy to install and easy to operate - HerzCON offers control, regulation, filling, flushing, backflushing, draining, isolation and filtering in a compact form from a single source. As a prefabricated direct connection, HerzCON ensures a reliable and quick connection between FanCoils and the heating or cooling system. Added to this is the snap-on insulating box, which is designed to be water vapour diffusionproof.

The core product is the pressure independent control valve. All around, a complete system unit has been developed with a multi-function ball valve block, vent valve, drain valve and strainer. The backflush process allows the strainer screen to be cleaned without having to remove it from the valve. A simple procedure that saves time. The eight flow ranges result in a wide range of applications. All components are made of dezincification-resistant brass, which allows operation with both heating water and antifreeze mixtures based on ethylene glycol or prophylene glycol in accordance with the guidelines of ÖNORM H 5195 or VDI 2035.

Pressure independent control valve

The integrated pressure independent control valve - the HERZ 4006 SMART valve - keeps the volume flow constant by controlling pressure fluctuations, so that all parts of the system are supplied with the required amount of energy at all times. Due to the differential pressureindependent volume flow setting, balancing and control, no calculation and verification of the valve authority is required. The pressure independent control valve can be equipped with



various types of actuators, which means that any control system can be used - from room thermostats to building management systems.

Drain valve

The integrated drain valve in the strainer allows the system to be flushed without removing the strainer basket. This saves a lot of work for the installer.

Multifunctional ball valve block

The HERZ multifunctional ball valve

block is equipped with a red and blue handle. The T-bore of the ball with full passage allows complete systems or a sub-system to be emptied or filled in the event of maintenance. The position of the ball valves is clearly indicated by the ball valve handles.

Scan now for more information!



HERZ FLOORFIX COMPACT Individual room control by means of thermostatic valve and return temperature limiter

"Keep your head cool, your feet warm - that makes the best doctor poor" rhymed the famous German poet Heinrich Heine. Warm feet have a positive effect on our well-being. For a clearer understanding, the other way round - if you have cold feet, it is unpleasant, because the cold spreads quickly over the whole body. So many people opt for surface temperature control in the typical "barefoot zone" such as the bathroom to keep their feet warm. But how is it regulated if the rest of the rooms are equipped with radiator heating systems? HERZ Armaturen presents HERZ FLOORFIX COMPACT.

Radiators require a higher flow temperature than underfloor heating systems. As a rule, this is not a problem, because depending on the choice of heat distribution, it is possible to work with the appropriate flow temperature. The challenge only arises when radiators and underfloor heating are combined.

Warm feet for more comfort

There are new buildings that are equipped with combined heat distribution. In practice, however, there is much more talk of retrofitting when it comes to the combination. For example, many people decide to retrofit the bathroom, i.e. the so-called barefoot zone of a flat, with underfloor heating in order to increase comfort. It also often happens during renovations that individual rooms are retrofitted with panel heating. In order to maintain the different heating water temperatures, an additional distribution circuit for the underfloor heating would theoretically be required. However, this is often too complex and associated with high costs, so that it does not tend to be profitable with a small panel heating system.



VAILABLE

HERZ Armaturen offers HERZ FLOOR-FIX COMPACT for all comfort lovers. The simple solution for individual room control by means of a thermostatic valve and return temperature limiter. An installation set for flush mounting with installation box made of EPP and with white cover plate is supplied. Optically timeless design and suitable for every room. For optimum function, installation after approx. half the heating circuit length of the underfloor heating is recommended (see illustration).

The return temperature limiter regulates the flow temperature for the underfloor heating so that a comfortable upper floor temperature is achieved. The second integrated thermostatic head can be used to conveniently set the desired room temperature. Thus, a combination of underfloor heating and radiator heating is possible at low cost without an additional distribution circuit.







HERZ FLOORFIX COMPACT with installation box and white cover plate. Order number: 1 8100 30

HERZ Stainless steel manifold The preferred method of many new buildings and refurbishments

Surface heating and cooling systems are becoming increasingly important in modern society. Thus, many consumers prefer a surface heating or cooling system in new buildings and also when modernising existing heating and cooling systems. HERZ stainless steel manifold is the compact all-in-one product for this, with all the necessary components for an installation-friendly and smooth process.

•he HERZ stainless steel manifold was specially developed to meet the requirements of modern surface heating and cooling systems. systems. It can be used for floor, wall and ceiling heating and cooling systems as well as in combination with radiators. The HERZ stainless steel manifold is ideally suited for both new buildings and modernisation projects. HERZ flowmeters in the versions up to 3 l/min and up to 6 l/min in combination with the HERZ thermostatic valves ensure excellent controllability. In combination with the HERZ room temperature controls, optimum comfort for the end user is ensured.

A seamlessly drawn special stainless steel profile, which is precisely machined with state-of-the-art equipment, guarantees the highest functionality and quality. Depending on the connection configuration, up to 10 bar operating pressure and up to 110 °C operating temperature are possible or 6 bar/70 °C if HERZ flow meters are fitted. Optional left or right 1" connection as well as equipment with vent valves and filling and draining taps are obligatory. Due to the low height of 66 mm, the HERZ stainless steel manifold is ideally suited for installation in drywall. Depending on your requirements, HERZ stainless steel manifolds can be designed for 3 to 12 heating circuits and offer easy installation and a high level of user-friendliness.

Drain valve:

The direction of flow can be seen from the handle colour of the valve (red: flow; blue: return). A filling and draining valve with a G $_3/_4$ " connection thread is provided on both the flow and return manifolds. It is possible to add the HERZ hose connection 1 6206 o1. The valve can be opened or closed by means of a handwheel.

HERZ Flowmeter:

Heat- and cold-resistant plastic in combination with dezincification-resistant brass enable maximum service life. Double O-ring seals and a non-flow-through display area ensure long-term functionality. The simple operation by the reading unit without its own tools is extremely installer- and customer-friendly. Two design variants, up to 3 l/min and up to 6 l/min, provide a wide range of applications.

AVAILABLE HERZ stainless steel manifold Order number: : 18632 XX

Brackets: The distribution manifolds can be mounted directly on a wall or in a distribution cabinet using the brackets supplied. The supplied brackets with integrated sound-absorbing inserts ensure ease of installation to the fullest extent.

Venting valves: One venting valve each is fitted to the flow and return manifolds. The valves can be operated with the HERZ universal key.

Dynamic control set Dynamic control of underfloor heating systems

he dynamic control set with HERZ differential pressure regulator is the tried-and-tested solution for problems such as uneven or even partially inadequately heated living areas that can be traced back to a heating system that is not properly controlled and regulated. It enables simple hydraulic adjustment of the underfloor heating for the best energy efficiency of the entire heating system. The differential pressure regulator also impresses in practice with its robust and dirt-resistant mode of operation. In addition, the product also scores with its fast delivery time and compatibility with all 1-inch manifolds on the market

Adjustment of underfloor heating systems

Heating systems are dynamic systems. Individual heating circuits or entire manifolds are opened or closed by controls, which changes the differential pressure at the individual heating circuit and thus the flow rate each time. However, each heating circuit must be provided with the flow rate calculated in the design. The heating circuit pump must overcome the entire resistance at the manifold together with the heating circuits.

Speed-controlled pumps cannot make a positive contribution here because the differential pressure for the heating circuit with the highest pressure loss must always be made available. In practice, one therefore sees the use of two systems:

System 1

Differential pressure-independent thermostatic valves directly on the manifold

In theory, differential pressureindependent thermostatic valves keep the flow constant for each heating circuit, even if the differential pressure applied to the manifold changes. In practice, it can be seen that the precision mechanical components



AVAILABLE

HERZ stainless steel manifold for underfloor heating with included flowmeters and in combination with HERZ thermomotors as well as the dynamic control set ensures excellent control of the panel heating.

Order numbers: HERZ Stainless steel distributor: 18632 XX / HERZ Thermomotors: 17709 XX / HERZ Dynamic Control Set: 18635 XX

of these thermostatic valves react extremely sensitively to the slightest impurities in the heating water. As a result, these valves lose their ability to regulate in a very short time.

System 2 Differential pressure regulator for each manifold

By keeping the differential pressure constant throughout the manifold, the set flow rate in the heating circuits is maintained, even if the differential pressures in the heating system vary. This is tried and tested and yet, or perhaps because of this, good. HERZ now supplies a further development of the classic differential pressure regulator precisely for the application area of underfloor heating.

Dynamic control sets with HERZ differential pressure controller 4012

In addition to the classic differential pressure control function, the 4012 product series has an integrated throttle valve for flow limitation and a zone valve to accommodate an actuator. The adjustable throttle valve guarantees that a manifold cannot be oversupplied. The zone valve is pressure-balanced. Thermal actuators or geared motors with low actuating forces are ideally suited for mounting. This allows the supply to the manifold to be completely interrupted. This is particularly practical if the entire area supplied by the distributor, e.g. a flat, is to be isolated.

Dynamic control set functions

Four functions can be realised with the dynamic control sets:

- 🖸 Differential pressure control
- 🗹 Zone control
- 🖾 Isolation
- 🖾 Flow limitation



Further inquiry

We are at your disposal for any requirements, questions, concerns and feedback. Our press kit can be downloaded from our website or via QR code.





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