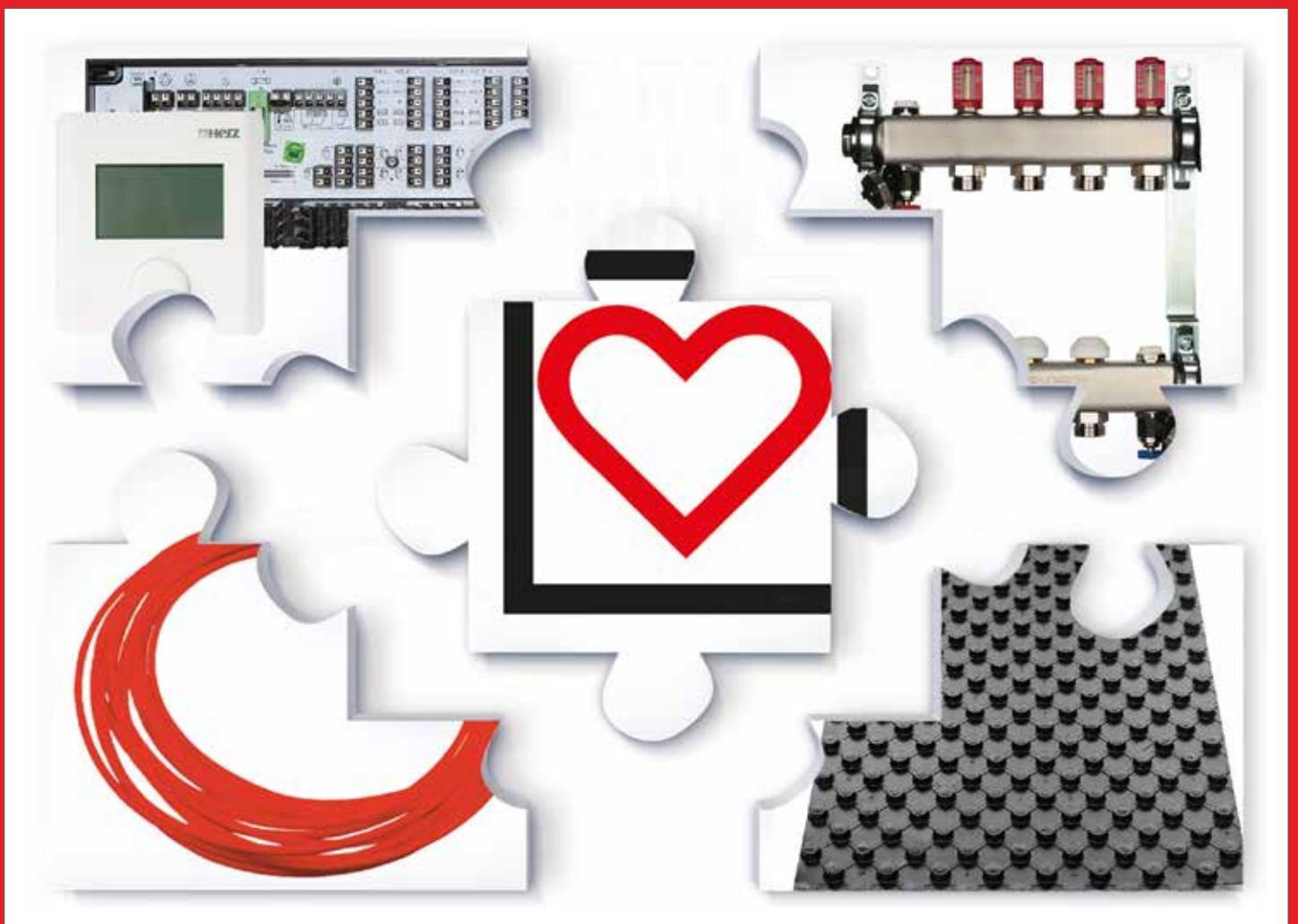


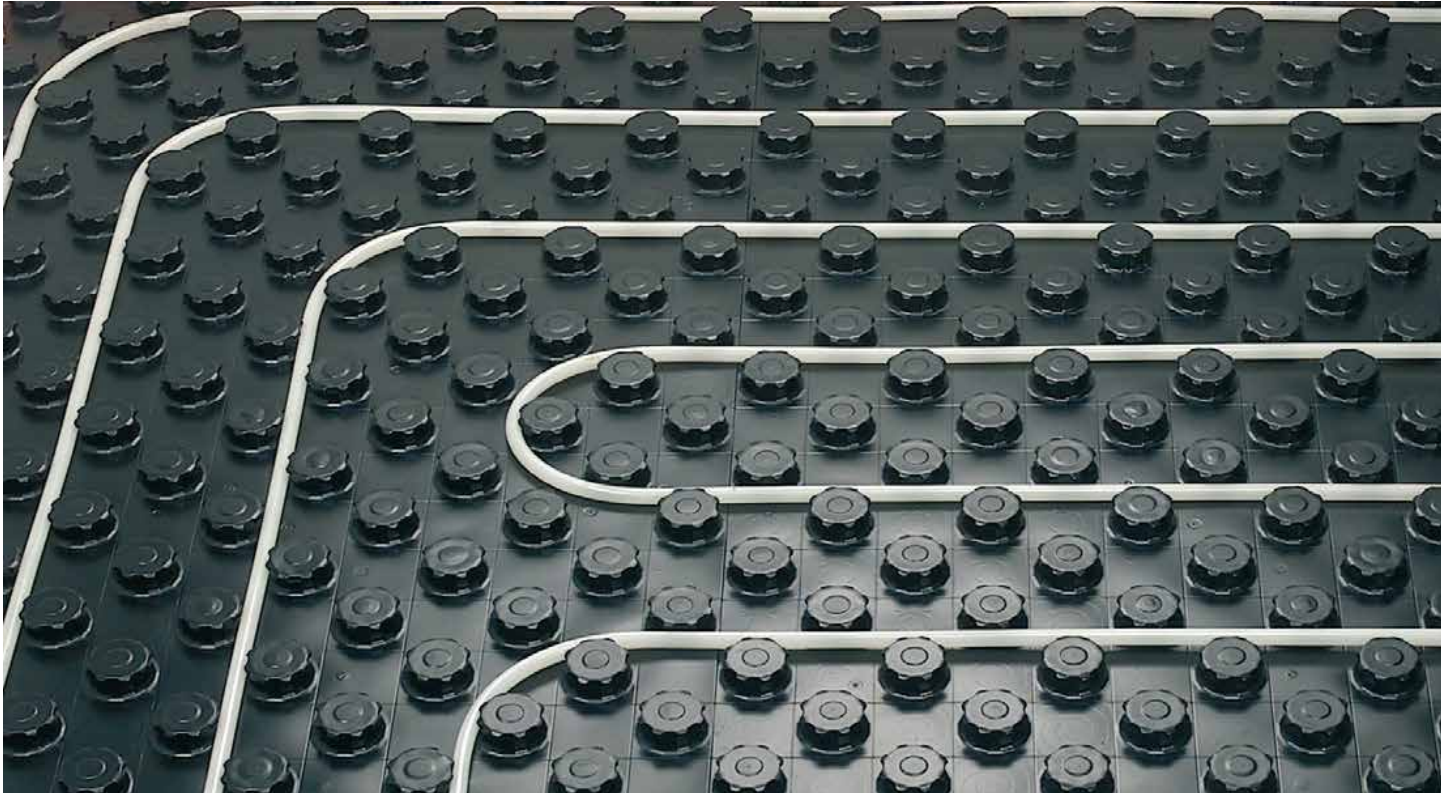
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Underfloor heating systems

From experts for experts





Underfloor heating systems – from experts for experts

HERZ is **the** synonym for heating. We offer a wide and harmonized range of products around the theme underfloor heating: from pipes and installation panels including accessories, control stations and distributors to solutions for optimum room temperature control.

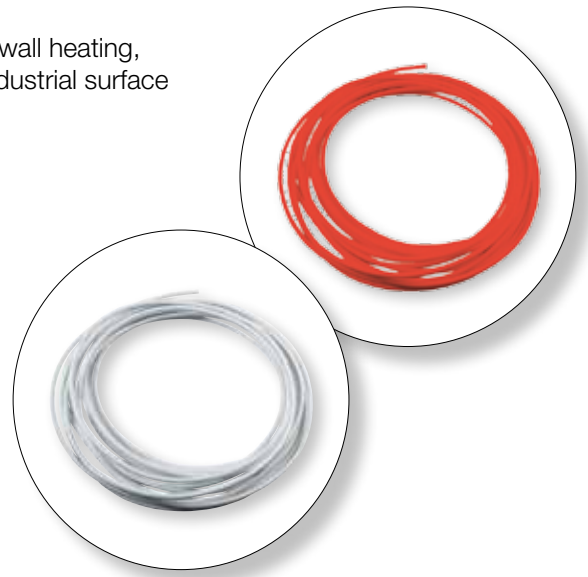
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|---|------------|
| <input checked="" type="checkbox"/> 5-layer PE-RT-pipe | page 3 |
| <input checked="" type="checkbox"/> Mounting system studded panel | page 4 |
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HERZ 5-layer PE-RT-pipe family

The HERZ PE-RT 5-layer pipes are perfect suited for use in underfloor and wall heating, concrete core activation, cooling ceilings, energy floors, open space and industrial surface heating.



- ☑ High-security pipe
- ☑ Available as 5-layer PE-RT plastic pipe or as 5-layer PE-RT aluminum composite pipe
- ☑ Oxygen diffusion tight according to DIN 4726
- ☑ PE-RT outer layer for protection against mechanical damage of the oxygen barrier layer
- ☑ Manufactured according to EN ISO 22391 or EN ISO 21003
- ☑ 5-layer PE-RT plastic pipe: red
5-layer PE-RT aluminum composite pipe: white




Dimension	16 x 2,0	17 x 2,0	18 x 2,0	20 x 2,0	16 x 2,0	20 x 2,0
Order number	U 162X XX	U 172X XX	U 182X XX	U 202X XX	3 D160 20	3 C200 30
According to	EN ISO 22391	EN ISO 22391	EN ISO 22391	EN ISO 22391	EN ISO 21003	EN ISO 21003
Delivery length [m]	240/480/600	240/480/600	240/480	240/480	200	100
Material	PE-RT Polyethylen temp.stabilized	PE-RT Polyethylen temp.stabilized	PE-RT Polyethylen temp.stabilized	PE-RT Polyethylen temp.stabilized	PE-RT/Al/PE-RT	PE-RT/Al/PE-RT
Order reference	PE-RT 16x2	PE-RT 17x2,0	PE-RT 18x2,0	PE-RT 20x2,0	PE-RT/Al/PE-RT 16x2	PE-RT/Al/PE-RT 20x2
Type	5-layer plastic pipe	5-layer plastic pipe	5-layer plastic pipe	5-layer plastic pipe	5-layer aluminum composite pipe	5-layer aluminum composite pipe
ø Outside [mm]	16	17	18	20	16	20
Wall thickness [mm]	2	2	2	2	2	2
ø Inside [mm]	12	13	14	16	12	16
Tube weight [g/lfm]	90	100	104	120	102	175
Tube weight with H2O [g/lfm]	203	233	258	321	215	376
Inner volume [l/m]	0,113	0,133	0,154	0,201	0,113	0,201
Expansion coefficient [mm/ mK]	0,19	0,19	0,19	0,19	0,023	0,023
Thermal conductivity [W/mK] average	0,35	0,35	0,35	0,35	0,47	0,47
Oxygen diffusion [mg/l/d]	<0,1	<0,1	<0,1	<0,1	<0,1	<0,1
Class 4: max. temperature [°C] / max. pressure [bar]	70 / 6	70 / 6	70 / 6	70 / 6	70 / 10	70 / 10
Class 5: max. temperature [°C] / max. pressure [bar]	90 / 4	90 / 4	90 / 4	90 / 4	90 / 10	90 / 10
Bend radius	5 x AD	5 x AD	5 x AD	5 x AD	5 x AD	5 x AD
Color	red	red	red	red	white	white
Layer structure	PE-RT adhesive barrier layer adhesive PE-RT	PE-RT adhesive barrier layer adhesive PE-RT	PE-RT adhesive barrier layer adhesive PE-RT	PE-RT adhesive Alumium adhesiver PE-RT	PE-RT adhesive Alumium adhesiver PE-RT	PE-RT adhesive Alumium adhesiver PE-RT

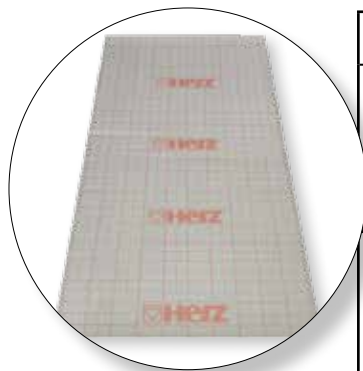
HERZ mounting system studded panel

- ☑ For pipes \varnothing 14 – 17 mm
- ☑ Increased sure-footedness
- ☑ The “nubs on nubs” principle ensures an almost waste-free installation
- ☑ The knob design guarantees an absolutely secure hold of the heating pipe
- ☑ Smallest pipe distance: 50 mm

		
	3 F030 02	3 F030 01
Panel format (length x width)	1450 x 850 mm	1450 x 850 mm
Effective size (length x width)	1400 x 800 mm	1400 x 800 mm
Effective area	1,12 m ²	1,12 m ²
Laying pattern (pipe spacing)	50 mm	50 mm
Nominal thickness of insulation dL	11 mm (thickness of delivery)	30-2 mm
Total thickness incl. rail bases	31 mm	51 mm
Pipe diameter	14 - 17 mm	14 - 17 mm
Application type acc. to DIN 4108-10	DEO	DESsg
Classification according to EN 13163	EPS 150	PST-TK 5000
Acoustic Improvement Value	-	28 dB (Impact sound insulation board)
Thermal conductivity	0,035 W/mK	0,040 W/mK
Thermal Transfer Resistivity	0,30 m ² K/W	0,75 m ² K/W
Thermolability	80 °C	80 °C
max. traffic load	45 kPa (4500 kg/m ²)	5 kPa (500 kg/m ²)
Colour polystyrol foil	black	black

	3 F030 03	 <ul style="list-style-type: none"> ☑ Studded plates made of deep drawn 1 mm thick polystyrene film ☑ Laying on heat and sound insulation ☑ Suitable for cement and floating screed ☑ Smallest pipe distance: 50 mm
Panel format (length x width)	1450 x 850 mm	
Effective size (length x width)	1400 x 800 mm	
Effective area	1,12 m ²	
Laying pattern (pipe spacing)	50 mm	
Height of nops, total	20 mm	
Pipe diameter	14 - 17 mm	
Film	Polystyrol (PS)	
Film thickness	1 mm	
Humidity protection according to DIN 18560	Polystyrol (PS) 1 mm	
Weight per piece	approx. 1280 g	
Standard colour of polystyrol foil	black	
max. traffic load	5 kPa (500 kg/m ²)	
Packing unit per palette	130 pcs./palette = 145,6 m ² /palette	
Packing unit per cardboard	12 pcs. = 13,44 m ²	



HERZ mounting system tacker panel



	Dim.	EAN 91 20068	Order number	Sale Unit
Tacker panel for floor heating systems, of EPS 70, coated with a PP fabric film. Compressive strength 70 kPa, thermal conductivity 0,039 W/m*K	1,000 x 10,000 x 30 mm	89005 2	H 3070 01	10 m²
Tacker panel for floor heating systems, of EPS 100, coated with a PP fabric film. Compressive strength 100 kPa, thermal conductivity 0,035 W/m*K..	1,000 x 10,000 x 30 mm	88008 3	H 3100 01	10 m²

Tacker fastening


Tacker needle

	Tacker needle for fastening of the heating pipe to the insulation. Collected with tape into magazines of 30 needles, black. Use of the tacker 3 F110 13 allows for simple and efficient fastening of the pipes.	99899 7	3 F110 06	200
	Special tacker needle, extra long needle shape, specially suited for unlaminated surfaces, of high-quality polyamide, in magazines of 30 needles. Use of the tacker 3 F110 13 allows for simple and efficient fastening of the pipes.	99900 0	3 F110 07	300



Rail fastening

Clip rail

U-profile, extruded fastening strip with profiled pipe retention clips in a light, compact and low-profile design effectively prevents weakening of the subfloor, suitable for all rigid floor coverings, stone panels, natural stone and ceramic flooring, for quick laying and clipping in. Fastening to the thermal insulation via double-sided tape or with fastening needles through the perforations.

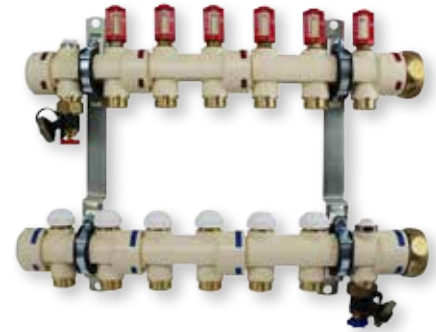
	Clip rail for pipes Ø 18 mm Profile size: L x W x H = 2.000 x 40 x 25 mm, Version with adhesive tape	03017 8	3 F100 31	32
	Clip rail for pipes Ø 18 mm Profile size: L x W x H = 2.000 x 40 x 25 mm, Version without adhesive tape	03018 5	3 F100 32	32
	Clip rail for pipes Ø 20 mm Profile size: L x W x H = 2.000 x 50 x 25 mm, Version with adhesive tape	03019 2	3 F100 33	32
	Clip rail for pipes Ø 20 mm Profile size: L x W x H = 2.000 x 50 x 25 mm, Version without adhesive tape	03020 8	3 F100 34	32

Fixing needle

	Fixing needles, red For direct fastening of insulation with thickness of 30 mm or more. Due to the special material used, these fixing needles have outstanding retaining strength, which can be further increased by pressing in the needles at an angle.	99896 6	3 F110 03	500
	Fixing needles, green For direct fastening of insulation with thickness of 40 mm or more. Due to the special material used, these fixing needles have outstanding retaining strength, which can be further increased by pressing in the needles at an angle.	99897 3	3 F110 04	500

HERZ plastic distributor UNI MINI

- ☑ Heating and cooling
- ☑ Made of thermally insulated plastic
- ☑ High temperature stable up to 70 °C
- ☑ Modular design with 2-port and 3-port elements
- ☑ No condensation



1 8732 03 - 1 8732 12		1 8733 03 - 1 8733 12	
Flow manifold 6/4":	Return flow manifold 6/4":	Flow manifold 6/4":	Return flow manifold 6/4":
<ul style="list-style-type: none"> • Flow meter 0 - 3 l/min red • Drain valve red • Vent valve • 3/4" pipe connection 	<ul style="list-style-type: none"> • with thermostatic valve • Drain valve blue • Vent valve • 3/4" pipe connection 	<ul style="list-style-type: none"> • Flow meter 0 - 6 l/min grey • Drain valve red • Vent valve • 3/4" pipe connection 	<ul style="list-style-type: none"> • with thermostatic valve • Drain valve blue • Vent valve • 3/4" pipe connection

HERZ stainless steel manifold

HERZ stainless steel manifolds can be used for floor, wall and ceiling heating and cooling systems as well as in combination with radiators. In the product version with thermostatic valves, individual heating circuits can be switched off and individually regulated and the flow rate can be set specifically. The manifolds are closed at one end with an end module. Distributor inlet is female thread G1" - this allows connection with threaded pipes or with an adapter for the HERZ PIPEFIX system. We recommend the use of HERZ ball valves.



1 **8632** 03 - 1 **8632** 12

- Flow manifold G1":
- Flow meter 0 - 3 l/min red
 - Drain valve red
 - Vent valve
 - 3/4" pipe connection
- Return flow manifold G1":
- with thermostatic valve
 - Drain valve blue
 - Vent valve
 - 3/4" pipe connection



1 **8633** 03 - 1 **8633** 12

- Flow manifold G1":
- Flow meter 0 - 6 l/min grey
 - Drain valve red
 - Vent valve
 - 3/4" pipe connection
- Return flow manifold G1":
- with thermostatic valve
 - Drain valve blue
 - Vent valve
 - 3/4" pipe connection

HERZ ball valves

These HERZ ball valves made of nickel-plated brass were specially developed for HERZ stainless steel manifolds. They have an O-ring seal and are available with red and blue handles in straight and corner versions.



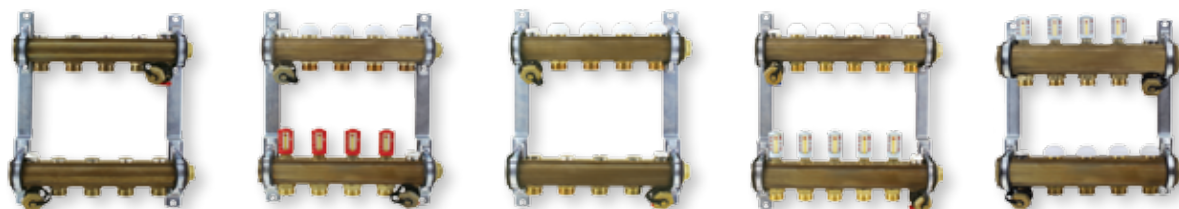
Order number	DN	Handle colour
1 2224 03	25	red
1 2224 13	25	blue



Order number	DN	Handle colour
1 2205 13	25	red
1 2205 23	25	blue

HERZ rod-type brass manifolds

The HERZ rod-type heating circuit manifolds made of brass CW614N are available with 1 to 16-port manifolds as well as with flowmeters up to max. 3 l/min or 6 l/min to adjust the flow rate. The manifolds 1 **8531** xx, 1 **8532** xx and 1 **8533** xx can be optionally equipped with thermal actuators for individual room temperature control. The manifolds include venting, filling and draining valve, nameplates and soundproof mounting units.




1 **8534** 03 - 12 1 **8532** 03 - 16 1 **8531** 03 - 16 1 **8533** 93
1 **8533** 03 - 16 1 **8531** 42 - 56

Dimension	DN 25	DN 25	DN 25	DN 25	DN 32
Pipe connection	Connection with clamp connector G 3/4"	Connection with clamp connector G 3/4"	Connection with clamp connector G 3/4"	Connection with clamp connector G 3/4"	Connection with clamp connector G 3/4"
Pipes	HERZ aluminum composite pipes and HERZ 5-layer PE-RT pipes	HERZ aluminum composite pipes and HERZ 5-layer PE-RT pipes	HERZ aluminum composite pipes and HERZ 5-layer PE-RT pipes	HERZ aluminum composite pipes and HERZ 5-layer PE-RT pipes	HERZ aluminum composite pipes and HERZ 5-layer PE-RT pipes
Flow	Upper shutoff inserts	Flow meter 3 l/min	Upper shutoff inserts	Flow meter 6 l/min	Flow meter 6 l/min
Return flow	Upper shutoff inserts	Thermostatic valve	Thermostatic valve	Thermostatic valve	Thermostatic valve
Max. temperature	110 °C	70 °C	110 °C	70 °C	70 °C
Heating circuit	3 – 12 times	3 – 16 times	3 – 16 times	1 – 16 times	2 – 16 times

HERZ Distributor cabinets


The HERZ distribution cabinets made of sheet steel are hot-dip galvanized and white powder-coated (RAL 9003). They have a front door and a front frame, installation depth and installation height are adjustable.

Model	Dim.	EAN 90 04174	Order number	Sale Unit	
 <p>HERZ distributor cabinet of sheet steel for HERZ rod-type manifold Adjustable installation depth (80-110 mm) and cabinet height (705-775 mm), fastening rail for distributor mounts and front panel powder-coated. With removable pipe redirection rail.</p>	Width 300 mm	81200 2	1 8569 03	1	
	Width 400 mm	81210 1	1 8569 04	1	
	Width 500 mm	81220 0	1 8569 05	1	
	Width 600 mm	81230 9	1 8569 10	1	
	Width 750 mm	81240 8	1 8569 15	1	
	Width 900 mm	81250 7	1 8569 20	1	
	Width 1050 mm	81260 6	1 8569 25	1	
	Width 1200 mm	81270 5	1 8569 30	1	
	Width 1500 mm	81280 4	1 8569 40	1	
	<p>HERZ- distributor cabinet of sheet steel for HERZ COMPACTFLOOR Adjustable installation depth (150-190 mm) and cabinet height (720-805 mm), fastening rail for distributor mounts and front panel powder-coated. With removable pipe redirection rail.</p>	Width 750 mm	81501 0	1 8570 50	1
		Width 900 mm	81502 7	1 8570 51	1
		Width 1050 mm	81503 4	1 8570 52	1
		Width 1200 mm	81504 1	1 8570 53	1
		Width 1500 mm	81505 8	1 8570 54	1

Accessories


Angled pipe clamp

Plastic angled pipe clamp for redirecting the heating pipe by 90° in the area of ceiling openings, manifold feeder pipes, etc.


Model		EAN 90 04174	Order number	Sale Unit
	Plastic angled pipe clamp for pipe 14–18 mm.	99901 7	3 F110 08	500 pcs.
	Plastic angled pipe clamp for pipe 20 mm.	99902 4	3 F110 09	50 pcs.

Insulation strips


Edge insulation strip made of polyethylene with foil flap for impact sound insulation according to DIN 18560.

	RDS 10/150 OK, 10 x 150 mm, with foil flap	99886 7	3 F080 03	8 rolls of 25 m each
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Cover film of polyethylene

	PE-film 0,2 Roll dimensions 1 x 150 m, thickness 0,2 mm, pattern red 50 x 50 mm	99893 5	3 F100 06	100 m ²
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Screed additive

	The screed additive homogenizes the cement screed, resulting in improved thermal conductivity and improved compressive and tensile strength. Consumption approx. 0,25 l/m ² .	99883 6	3 F090 01	10 kg
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Level indicator for screed

	Level indicator for screed for marking measurement points in heating screeds for the prescribed measurement of the readiness for pipe laying according to DIN EN 1264.	99882 9	3 F090 00	75 pcs.
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Expansion joint pipe laying kit

	Protective conduit for expansion joint profile Corrugated pipe Ø 16 - 20 mm, length 40 cm, black	99889 8	3 F100 02	50 pcs.
	Expansion strips for expansion joint profile Expansion strips of PE-foam, height 80 mm, thickness 10 mm, length 1.800 mm, with self-adhesive base	03016 1	3 F100 30	36 m

HERZ control signal distributor

For central distribution of power supply and forwarding control signals of the programmable room thermostat to the thermal drives. Fields of application and product advantages:

- ☑ The signal distributor is used to control a surface heating and surface cooling system
- ☑ Directs the space controller command and the pulldown signal to the thermal drives
- ☑ 230 V or 24 V and 1 to 5 actuators per zone
- ☑ Easy wiring from 6 to 10 zones
- ☑ Version with pump logic and integrated valve protection function
- ☑ Input for a temperature limiter and dew point monitor



- 3 **F798 02** - 230 V/24 V
- 3 **F798 03** - 230 V
- 3 **F798 04** - 24 V

HERZ room thermostats

The electronic HERZ thermostats in analog and digital version are suitable for individual and optimized energy use by precise setpoint compliance. Fields of application and product advantages:

- ☑ Individual stand-alone single-room control or an individual single-room control in combination with a HERZ signal distributor for surface heating and surface cooling systems
- ☑ 230 V or 24 V, 2-point output for thermal actuators
- ☑ Temperature measurement via precise NTC sensor
- ☑ Selectable PI control algorithm
- ☑ Noiseless switching triac output for 24 V actuators
- ☑ Version with heating / cooling available
- ☑ Individually adjustable time program
- ☑ Automatic antifreeze and valve protection function



- 3 **F799 11** - 230 V
- 3 **F799 12** - 24 V

- 3 **F799 13** - 230 V
- 3 **F799 14** - 24 V

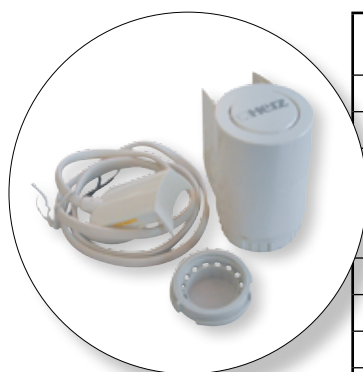


- 3 **F799 15** - 230 V
- 3 **F799 16** - 24 V

- 3 **F799 17** - 230 V
- 3 **F799 18** - 24 V

HERZ Actuators

The HERZ actuator is a thermoelectric actuator for opening and closing small valves and valves on heating circuit manifolds for surface heating and surface cooling systems. The main field of application is energy-efficient individual room control in the area of building services and building automation.



Order number	Operating voltage	Description	Function	Connection
1 7708 52	24 V, AC	Actuating drive for 2-point control without limit switch	NC	M 28 x 1,5 *
1 7708 53	230 V, AC		NC	M 28 x 1,5 *
1 7708 24	230 V, AC		NO	M 28 x 1,5 *
1 7711 12	24 V, AC		NC	M 28 x 1,5 **
1 7711 10 + 1 7711 24	230 V, AC		NC	M 28 x 1,5 **
1 7711 11	230 V, AC		NO	M 28 x 1,5 **
1 7711 13	24 V, AC/DC		NO	M 28 x 1,5 **
1 7708 87	230 V, AC	Actuating drive for 2-point control with limit switch	NC	M 28 x 1,5 *
1 7708 10	230 V, AC		NC	M 28 x 1,5 **

* In combination with M 30 x 1.5 valves, the adapter 1 **7708 86** or 1 **7708 98** must be ordered separately. | ** Also available as M 30 version.

HERZ Compactfloor

COMPACTFLOOR is a connection-ready control station including a high-efficiency circulating pump and flush-mounted box for the connection of 3 to 12 heating circuits for surface heating.

- allows individual heating of rooms
- individually adjustable according to consumer behavior and temperature
- distributor connection available on left or right
- minimal space requirement
- easy operation
- optimal heat comfort
- optional with connection possibility for 2 high-temperature circuits



- 3 **E532** 03-12 (rechts)
3 **E532** 13-22 (links)
- without high temperature circuits
 - including electrical components for RTRs (actuators, signal distributors)
 - including highly efficient circulating pump
 - including over temperature breaker
 - thermostatic head with contact sensor



- 3 **E533** 03-12 (rechts)
3 **E533** 13-22 (links)
- with 2 high temperature circuits
 - including electrical components for RTRs (actuators, signal distributors)
 - including highly efficient circulating pump
 - including over temperature breaker
 - thermostatic head with contact sensor

COMPACTFLOOR Simple - 1 **4510** 34

is a fixed value control station including high efficiency pump and thermostatic head with immersion sensor for connection of 3 to 12 heating circuits for surface heating in a compact design without electrical components for room temperature control. A flush-mounted box must be ordered separately.



COMPACTFLOOR WE - 3 **F532** 83-92

Connection-ready control station for floor heating, connected to a secondary district heating grid consisting of:

- Shutoff zone valve with fixed value control via thermostatic head with contact sensor
- Pre-settable control and regulating valve with electronic drive
- Countercurrent heat exchanger for system separation of stainless steel, copper-soldered model
- Electronic highly efficient circulating pump
- Safety group with thermo-manometer, automatic air vent and safety valve
- Rod-type manifold of stainless steel, supply manifold with regulating inserts and flow indication and return manifold with thermostatic valves, drain with hose connection
- Actuating drives for heating circuit control
- Automatic over-temperature protection via pump shutoff
- Diaphragm pressure expansion tank with connection valve fully installed in distributor cabinet of galvanized sheet steel
- Vienna Energy class A approve



HERZ FLOORFIX

In modern heating engineering, high expectations are placed on comfort and coziness. HERZ FLOORFIX enables the integration of floor heating circuits in radiator heating systems with low installation costs and optimal functionality.

The HERZ FLOORFIX is used to control the room temperature and to limit the heating water temperature. The inspection opening of the junction box can also be aligned to the neighboring room. The installation is carried out in a metal flush-mounted box, which is optionally available with a white or chrome-plated front cover. Another important advantage of the FLOORFIX is the spatial separation of the room temperature controller from the junction box.

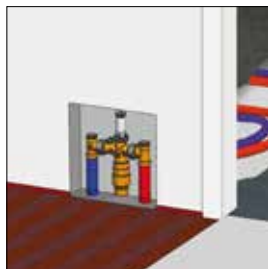
The temperature of the supply heating water for the floor heating is set with the adjusting screw on the temperature scale. That means that circulation only takes place when the optimum operating temperature for the floor heating is reached. The room temperature is controlled by HERZ thermostats with remote adjuster, the pipe connection by HERZ clamping sets G 3/4" with inner cone in the dimensions 14 x 2, 16 x 2, 18 x 2, 20 x 2.



Maximum heating supply temperature	80 °C
Setting range room temperature	6 °C up to 28 °C
Maximum operating pressure	10 bar
Maximum differential pressure	0,2 bar
Maximum room heating load (heat requirement)	1.000 Watt
Maximum pipe length floor heating circuit	20 m
Set point range of temperature limiter	30 - 60 °C
Recommended maximum operating temperature for floor heating	35 °C



There is no disruptive interruption of the wall paneling required for the junction box, thereby a continuous area is possible, e.g. tiling.



The junction box of HERZ FLOORFIX floor heating is accessible from a neighboring room e.g. anteroom or storeroom. The panel of the junction box is optionally available in chrome or white plastic.



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