

HERZ-Valve Arrangements for Convectors

Data sheet **HERZ 7688-7788**, Issue 0412

	<p>1 7788 21</p>	<p>1 7688 21</p>	
	1-Pipe	2-Pipe	
G 3/4 with cone			
HERZ connection adapters	<p>8, 10, 12, 14, 15, 16</p> <p>6274</p>	<p>12, 14, 15, 16, 18</p> <p>6276</p>	Copper and steel pipes
	<p>10x1,3, 14x2, 15x2,5, 16x2, 16x2,2, 16x2,7, 17x2, 17x2,5, 18x2, 18x2,5, 18x3, 20x2, 20x3,5, 20x2,5, 20x3,4</p> <p>6098</p>		Plastic pipes

Connection adapters
G 3/4
 Connection adapters for copper and steel pipes
Plastic pipe connections

6274	8-16	Compression union with O-ring seal consisting of nut (female thread) and olive, for outside pipe diameters 8, 10, 12, 14, 15, 16mm.
6276	12-18	HERZ-compression union with soft seal for copper and thin-walled steel pipes, for outside pipe diameters 12, 14, 15, 16 und 18 mm.
6098	14-20	Plastic pipe connection consisting of hose sleeve, hose olive, and union nut, for PE-X-, PB-, and plastic composite pipes, for pipe diameters 14 x 2, 16 x 2, 16 x 2,2, 17 x 2, 17 x 2,5, 18 x 2, 18 x 2,5, 20 x 2, 20 x 2,5, 20 x 3,5
P	14-63	HERZ-Pipefix

Junction Press Screw Fitting with cone
G 3/4

Press fittings nickel plated for plastic pipes, nut G 3/4



P 7014 82	14 x 2
P 7016 82	16 x 2
P 7017 82	17 x 2
P 7018 82	18 x 2
P 7020 82	20 x 2
P 7021 82	20 x 2,5

Thermostatic valves
G 3/4

1 7788 21	1/2	Thermostatic valve for one pipe operation, radiator connection 1/2 pipe connection with thread G 3/4
1 7688 21	1/2	Thermostatic valve for two pipe operation, radiator connection 1/2 pipe connection with thread G 3/4

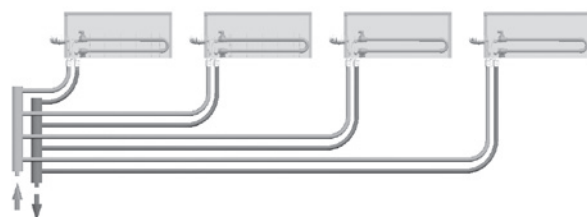
Radiator connection
 Version

The thermostatic valves are mounted at the side of the radiator. All components are nickel plated.

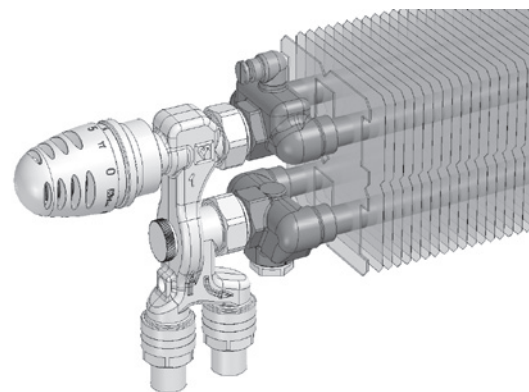
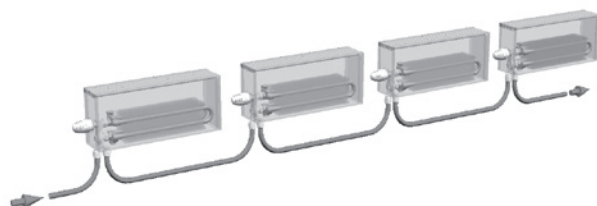
 Application

For heating systems in one and two pipe with calibrated copper, steel or plastic pipes.

2 pipe system



1 pipe system



☑ Technical data

Max. operating pressure 10 bar
Max. operating temperature 120 °C

Water purity in accordance with the OeNORM H5195 and VDI 2035 standards.

HERZ compression adapters for copper and steel pipes, allowable temperature and pressure ratings according to EN 1254-2 1998 Table 5. HERZ plastic pipe connections max. operating temperature 95 °C and max. operating pressure 10 bar, if approved by the pipe manufacturer.

Ammonia contained in hemp can damage brass valve bodies, EPDM gaskets can be affected by Mineral oils lubricants and thus lead to failure of the EPDM seals. Please refer to manufacturers documentation when using ethylene glycol products for frost and corrosion protection.

☑ For Plastic Pipe connections

The plastic pipe connections are suitable for application class 4 and 5 in according ISO 10508 and for pipes made of PE-RT (DIN 4721), PE-MDX (DIN 4724), PB and PE-X (DIN 4726) and multilayer pipes (ÖNORM B 5157). max. Operating temperature 95 ° C at 10 bar. It is up to the user, to ensure that the operating pressure and operating temperature for each type of pipe is selected within the allowable operating data of the pipe manufacturer. Deviations from this data are noted in the technical documentation, particularly.

☑ HERZ - Pipefix

HERZ-Press fittings are connections for multi layer pipes. The fittings are designed as multi-sealing crimping connectors. On the fitting itself is a double O-ring sealing.

☑ Special design features

In one pipe systems the body bypass will bypass the flowrate for the zone.

When opening the valve, a part of it is diverted into the radiator and the mixing takes place in the zone to bypass the flowrate.

For two pipe systems, the thermostatic valves 1 **7688** 21 are used. 100% of the flow rate is passed through the valve to the radiator.

☑ Replacement of the thermostatic valve upper part

The HERZ thermostatic valve upper part can be changed by means of the HERZ-changing tool while the system is under pressure for the purpose of cleaning the seat seal at the spindle or replacing the upper part. This permits easy removal of malfunctions at the thermostatic valves, caused, e.g., by foreign substances such as dirt, welding or soldering residues. Attention when changing valve upper parts:

For 1 **7788** 21 use 1 **6390** 92.

For 1 **7688** 21 use 1 **6367** 98.

Take into account the instructions for operation supplied with the HERZ-changing tool.

☑ Presetting Function

Presetting is performed by means of a flow restrictor downstream of the valve seat enclosing the seat seal. This flow restrictor is continuously adjustable from outside. It does not obstruct the working lift of the valve spindle. Presetting can be performed manually by means of the orange presetting button, by setting the pointer on the presetting button to the figure on the scale of the upper part obtained by calculation or from the HERZ standard diagram. For convenient presetting, the HERZ-TS-98 setting key (1 **6819** 98) is available. which engages with the teeth of the presetting button.

☑ HERZ-Thermostatic Valve



The screw cap is used for operation during the installation phase (pipe flushing). The thermostatic valve is formed by removing the screw cap and screwing in the HERZ thermostatic head without draining the heating system.

Adjustment of nominal lift by means of screw cap:

On the knurled part of the circumference of the screw cap there are two setting marks (webs) in alignment with the "+" and "-" marks.

1. Close the valve by turning the screw cap clockwise
2. Mark the position corresponding to the setting mark "+"
3. Turn the screw cap anticlockwise until the setting mark "-" is at the position marked according to item 2.

☑ HERZ-TS Handwheel



In the exceptional case that the HERZ thermostatic valve lower part is not equipped with a HERZ thermostatic head, the HERZ-TS handwheel is used to replace the screw cap.

During installation, follow the instructions enclosed with the handwheel.

☑ Installing the compression connections

When installing soft steel or copper pipes with a pipe wall of 1 mm or less with compression unions, we recommend the use of support sleeves (order no.: 1 0674 xx). For proper installation use silicone oil to lubricate the thread of the locking nut or olive screw as well as the olive. We refer to our instructions, in the data sheet „HERZ compression unions“

☑ Accessories and spare parts

- 1 **6625** 00 Multi-Purpose Key
 - 1 **6680** 00 Assembly Key
 - 1 **6822** 40 Spacer block centre pipe distance 40 mm
 - 1 **6890** 00 HERZ-TS-90-O-Ring-set
 - 1 **7780** 00 HERZ-Changefix,
- Thermostatic heads and handwheels look in the actual product range.

☑ Proportional band

	kv-value							
p-difference [K]	0,5	1	1,5	2	2,5	3	3,5	4
pre setting								
1	0,05	0,11	0,14	0,14	0,14	0,14	0,14	0,14
2	0,13	0,25	0,29	0,30	0,30	0,30	0,30	0,30
3	0,14	0,26	0,38	0,42	0,44	0,44	0,45	0,45
4	0,14	0,27	0,39	0,50	0,54	0,55	0,56	0,57
5	0,15	0,28	0,40	0,53	0,66	0,70	0,72	0,73
6	0,15	0,28	0,41	0,56	0,70	0,76	0,80	0,81

