

Connecting element

Radiator connecting element for thermostat-controlled and manually controlled operation

Data sheet for 1 7650 00, Issue 1221

Regulating valves			
Connection pipe	<p>L = 600 mm 1 6335 00</p>	<p>M 22x1,5 1 7650 22</p>	Compression adapter, metallic seal
Bypass body	<p>DUAL PIPE</p>		
Pipe connections	<p>6284 10, 12, 14, 15, 16</p> <p>1 6248 16 M 22 x 1,5; 90°</p>		Copper and soft steel pipe
	<p>6066 14 x 2, 16 x 2, 17 x 2</p> <p>1 6248 16 M 22 x 1,5; 90°</p>		Plastic pipe
<p>P 7014 86 P 7016 86 P 7017 86 P 7018 86 P 7020 86 P 7021 86</p>	<p>Connection press screw fitting 14 x 2 Connection press screw fitting 16 x 2 Connection press screw fitting 17 x 2 Connection press screw fitting 18 x 2 Connection press screw fitting 20 x 2 Connection press screw fitting 20 x 2,5</p>		<p>Press connections, nickelplated, for aluminum composite pipes, gland nut M22 x 1.5</p>

Regulating valve HERZ-TS-98 V

1/2 x 15

Regulating valve, reverse angle version, with protective cap for construction sites, installed with radiator connection with self-sealing O-Ring and compression set for 12 mm connection pipe.

Connection pipe 6335

1 6335 00 600

Copper connection pipe, nickel-plated; length 600 mm, dimension Ø 12 x 0,8 mm.

Compression adapter, metallic seal

1 7650 22 M 22 x 1,5 Olive, metallic seal to pipe 1 6335 00, union nut M 22 x 1.5.

Bypass body M 22 x 1,5

1/2" x M 22 x 1,5

Bypass body for dual pipe operation, 100% water distribution, Radiator connection, installed with self-sealing O-Ring and compression set for Ø12 mm connection pipe, without pipe connection.

Pipe connection M 22 x 1,5

1 6248 16 M 22 x 1,5

90° elbow with free-spinning nut, is installed between bypass body and connection if pipe is to be fitted at a right angle.

Compression set for steel and copper pipes

6284 10-16

Compression set including nut and olive for pipe diameters 10, 12, 14, 15, 15 and 16 mm.

Plastic pipe connections for PE-X, PB, PE and aluminum composite pipes

6066 14-17

Plastic pipe connection with double O-ring and insulating washer including hose sleeve, hose olive and nut M 22 x 1.5 for pipe diameters 14 x 2 mm, 16 x 2 mm and 17 x 2 mm.

P 10-75 HERZ-PIPEFIX

Radiator connection

1/2

Iron pipe connection, installed with self-sealing O-ring. We recommend using a hexagon socket WAF 10, at a torque of 25 Nm.

Version

The radiator connecting elements include regulating valve, connection pipe, bypass body and pipe connections. All components shipped are nickel-plated and can be combined as per requirements.

Installation type

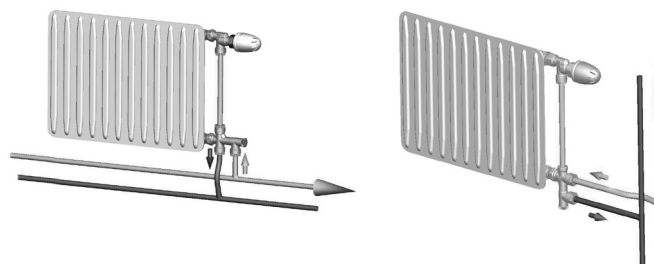
The connecting elements are installed at the side of the radiator, the regulating valve facing upwards and the bypass body facing downwards.

Material

Pursuant to Article 33 of the REACH Regulation (EC No. 1907/2006), we are obliged to point out that the material lead is listed on the SVHC list and that all brass components manufactured in our products exceed 0.1% (w / w) lead (CAS: 7439-92-1 / EINECS: 231-100-4). Since lead is a component part of an alloy, actual exposure is not possible and therefore no additional information on safe use is necessary.

Area of application

Water heating systems in dual pipe design using calibrated steel, copper or plastic pipes. As a replacement with system refurbishments (replacement of radiators by AGA, Thermopanel or Stelrad).



Operation data

Max. operation pressure 10 bar
 Max. operation temperature 120 °C
 Heating water quality as per ÖNORM H 5195 and VDI Directive 2035.

with compression sets for metal pipes

When using compression sets for copper and steel pipes, the admissible temperature and pressure limits as per EN 1254-2:1998, table 5, must be adhered to.

with plastic pipe connections

The plastic pipe connections are suitable for application classes 4 and 5 as per ISO 10508 (panel heating and radiator connection) and for pipes made of PE-RT (DIN 4721), PE-MDX (DIN 4724), PB and PE-X (DIN 4726) as well as for multilayer plastic/metal pipes (ÖNORM B 5157). This results in a max. operation temperature of 95 °C at 10 bar. It is up to the user to select operating pressure and operating temperature as per pipe version so as to ensure that the standard values and admissible operation parameters provided by the pipe manufacturer are complied with. Deviations from these specifications are explicitly stated in the relevant technical documentation. Fittings and pipes must always be checked together.

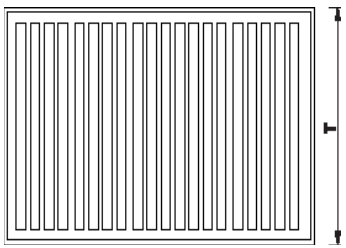
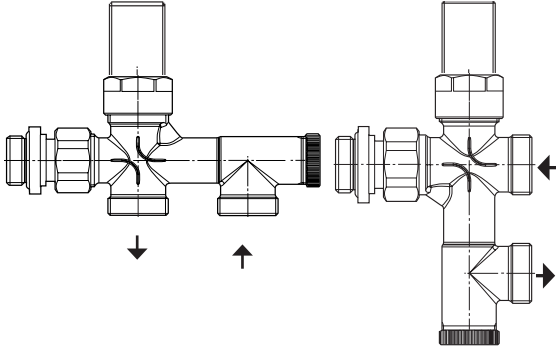
HERZ - Pipefix

HERZ press fittings are connection elements for multilayer plastic pipes. The fittings are designed as radial press fitting elements sealing in multiple ways. The fitting is provided with support bodies to accommodate for the pipe end with a dual O-ring seal.

Hub distance

Calculation of pipe length taking hub distance into account:
 Hub distance of radiator - insertion depth of pipe = necessary pipe length.

Insertion depths

H	L
	
550	514 (505-517)
540	504 (495-507)
548	512 (503-515)

Cutting connection pipe to length

The connection pipe must be cut to length properly using a pipe cutter. If necessary, the pipe cut to length must be calibrated. Section „Installing compression sets“ must be adhered to.

Presetting using regulating screw

Presetting on the dual pipe version is done using the regulating and shutoff screws. Remove protective cap. Adjust the presetting screw now visible using a hexagon socket WAF 8 starting with closed valve. The presetting values can be taken from the diagrams.

☑ Replacement of thermostatic valve upper part

The HERZ thermostatic valve upper part can be replaced under pressure using the HERZ replacement device to: – clean the seat seal at the spindle or to replace the thermostatic upper part. This allows easy correction of faults on radiator thermostatic valves e.g. caused by debris such as dirt, weld and solder residues.

CAUTION when replacing thermostatic upper parts: The regulating valve is equipped with an upper part 1 6367 98. The operating instructions shipped with the replacement device must be adhered to.

☑ Setting procedure on HERZ-TS-98-V using adjustment key 1 6819 98

1. Remove HERZ thermostatic head, hand drive or screw cap.
 2. Set orange adjustment knob (factory setting between „4“ and „5“) manually or using adjustment key (1 6819 98) directly to the desired presetting stage 1–6 (0).
 3. Install HERZ thermostatic head or hand drive.
- The setting is now secured.

☑ Spindle seal HERZ-TS-98-V upper part

Spindle sealing is ensured by a special sealing ring requiring extremely low maintenance and guaranteeing long-term smooth valve operation. When the spindle seal is worn, the thermostatic upper part and thus the possibly damaged seat seal is replaced. Any existing presetting stage must be reset after upper part replacement.

1. Remove the HERZ thermostatic head or the HERZ-TS hand drive.
2. Screw off thermostatic upper part and replace with a new one.
3. Reinstall the HERZ thermostatic head or the HERZ-TS hand drive.

The upper part can be replaced with the system being under pressure using HERZ Changefix. The operating instructions of the HERZ replacement device must be adhered to. Order number for HERZ-TS-98-V thermostatic upper part: 1 6367 98.

☑ HERZ thermostatic valve



The protective cap for construction sites enables operation during the construction phase (line purging). The thermostatic valve is completed by removing the screw cap and subsequently screwing-on the HERZ thermostatic valve without having to drain the system.

Setting the nominal stroke using the screw cap:

1. Close valve turning clockwise.
2. Turn screw cap anti-clockwise by approx. 90°.

☑ HERZ-TS hand wheel



as an exception a HERZ thermostatic valve lower insert is not replaced with a HERZ thermostatic head, the HERZ-TS (1 9102 08) hand drive replaces the protective cap for construction sites.

The included installation instructions must be adhered to during installation.

☑ Removing the radiator

Once the regulating screw on the bypass body has been turned to the closed position and the regulating valve has been shut off, the radiator can also be removed during system operation. With thermostatic operation, shutting-off corresponds to the setting „0“ on the thermostat. For this reason only a thermostat that can be shut off should be used.

CAUTION: With a prolonged removal procedure the open connections should be sealed off using cap 1 1056 66 for security reasons.

When using thermostats without a „0“ setting, the protective cap for construction sites or the metal cap 1 6329 30 must be used during maintenance work on the radiator.

☑ Installing at the construction site

1. Tighten radiator connections at radiator connection Rp 1/2.
2. Install regulating valve.
3. Fasten connection pipe (cut to length if necessary) to regulating valve using compression set.
4. Connect bypass body and radiator inserting the connection pipe.
5. Fasten bypass body to connection pipe using compression set.
6. Attach nut and olive to connection pipe of ring line and insert into sleeves of bypass body.
7. Tighten olive (approx. by 1/4 turn).

☑ Installing compression sets

No adjustable wrench or similar tools may be used since this would lead to a deformation of the compression nut! We recommend using support sleeves for the pipe. The pipe must be properly calibrated and deburred. Oil the thread of the compression nut prior to installation using silicone oil – mineral oil destroys the O-ring of the olive! Please refer to our processing instructions as well as the description „Installation instruction, installation procedure“ in standard sheet "HERZ compression sets".

☑ Delivery form and order example

HERZ radiator connecting element, nickel-plated, for thermostatic operation as dual pipe system, thermostat with mechanical shutoff facility, valve axis parallel to radiator, radiator connection 1/2, hub distance 500 mm, 14 mm copper pipe.

Regulating valve	1 7650 00
Thermostat Mini	1 9200 60
Compression set	1 6284 03

☑ Accessories

- 1 6625 00 Multipurpose key for presetting
- 1 6680 00 Installation key for connections
- 1 6822 40 Double rosette, mean pipe distance 40 mm
- 1 7780 00 HERZ Changefix, replacement device for thermostat upper parts
Thermostatic heads and hand drive from current product range.

☑ Additional HERZ connecting element

- 1 7727 19 HERZ Thermostatic valve TS 90 straightway version with 90° elbow, compression set 15 x 1
- 1 7728 92 HERZ Thermostatic valve TS 90 angle version with flow reversal, bleeding facility, compression set 15 x 1
- 1 7758 19 HERZ Thermostatic valve TS 90 axial version AB, compression set 15 x 1
- 1 7759 19 HERZ Thermostatic valve TS 90 axial version CD, compression set 15 x 1
- 1 6330 11 Connection pipe 600 mm 15 x 1
- 1 6330 31 Connection pipe 1000 mm 15 x 1
- 1 7173 01 HERZ 2000 Bypass body, straightway version, single pipe, with shutoff facility, G 3/4
- 1 7175 01 HERZ 2000 Bypass body, straightway version, dual pipe, with shutoff facility, G 3/4
- 1 7174 01 HERZ 2000 Bypass body, straightway version, single pipe, with shutoff facility, M22 x 1.5
- 1 7176 01 HHERZ 2000 Bypass body, straightway version, dual pipe, with shutoff facility, M22 x 1.5
- 1 7187 14 HERZ Bypass body, angle version, single pipe, with shutoff facility, G 3/4
- 1 7189 14 HERZ Bypass body, angle version, dual pipe, with shutoff facility, G 3/4
- 1 7179 11 HERZ 1000 bypass body, straightway version, single pipe, M22 x 1,5
- 1 7182 11 HERZ 1000 bypass body, straightway version, dual pipe, M22 x 1,5
- 1 7184 11 HERZ 1000 bypass body, straightway version, single pipe, with shutoff facility M22 x 1,5
- 1 7186 11 HERZ 1000 bypass body, straightway version, dual pipe, with shutoff facility M22 x 1,5
- 1 7187 11 HERZ 1000 Bypass body, straightway version, single pipe, with shutoff facility, G 3/4
- 1 7189 11 HERZ 1000 Bypass body, straightway version, dual pipe, with shutoff facility, G 3/4
- 1 5151 01 HERZ 500 Complete connecting element, GP regulating valve, angle version, bypass body, straightway version, single pipe, with shutoff facility, upstream flow direction freely selectable, G 3/4
- 1 7151 01 HERZ 500 Complete connecting element, thermostatic valve TS-90 special angle version, bypass body, straightway version, single pipe, with shutoff facility, upstream flow direction freely selectable, G 3/4
- 1 7788 21 HERZ Complete connecting element, TS 90 upper part, bypass body, straightway version, single pipe, with shutoff facility, G 3/4
- 1 7688 21 HERZ Complete connecting element, TS 98 V upper part, bypass body, straightway version, dual pipe, with shutoff facility, G 3/4

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