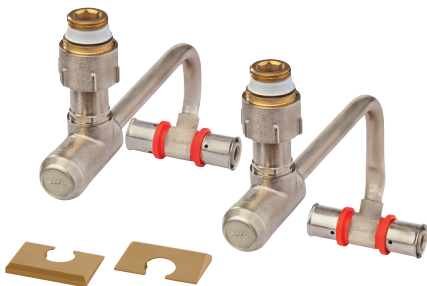


VK 31 UNI

Base Board Connection Kit

Profile U/TH/F/H

simplex

Work on heating and domestic water systems must only be done by qualified professional personnel and in accordance with the respective applicable regulations, guidelines and rules of engineering.

**Refer in particular to:**

DIN 18 380: Heating systems and central hot water heating systems

VDI 2035: Scale formation in water heating systems

BGV: German Professional Association Regulations (accident prevention regulations)

*(DIN = The German Institute for Standardisation
VDI = Association of German Engineers)*

VK 31 UNI Base Board Connection Kit U/TH/F/H

As part of its product liability, Simplex provides a warranty for press connections used with the **VK 31 UNI Base Board Connection Kit U/TH/F/H** with dimensions 16 x 2 mm and 20 x 2 mm when used with pipes that conform to the following technical regulations.

Only press jaws with **U, TH, F and H profile** are permitted.

Refer to the general technical regulations and the system manufacturer's specific requirements when installing the pipe system. For material specifications please refer to the relevant pipe manufacturer's specifications.

Simplex Armaturen & Systeme GmbH has no access to technical modifications by the pipe manufacturer and therefore reserves the right make adjustments and technical amendments to the connection kits.

DIN 16833/16834 - Pipes made of polyethylene with raised temperature resistance (PE-RT) - general quality requirements and testing, dimensions

DIN 16892 - Cross-linked high-density polyethylene (PE-X) pipes - General quality requirements and testing

DIN 16893 - Cross-linked high-density polyethylene (PE-X) pipes - Dimensions

DIN 16894 - Cross-linked medium-density polyethylene (PE-MDX) pipes - General quality requirements and testing

DIN EN ISO 15875 - Plastic piping systems for cold and hot water systems - cross-linked polyethylene (PE-X)

DIN EN ISO 15874 - Plastic piping systems for cold and hot water systems - polypropylene (PP)

DIN EN ISO 15876 - Plastic piping systems for cold and hot water systems - Polybutylene (PB)

DIN EN ISO 15877 - Plastic piping systems for cold and hot water systems - Chlorinated polyvinyl chloride (CPVC)

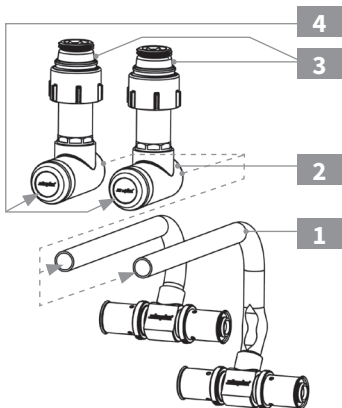
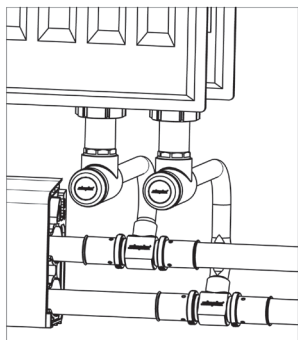
DIN 16836 - Multilayer composite pipes - Polyolefin-aluminium composite pipes

DIN 16837 - Multilayer composite pipes - multilayer plastic composite pipes

DIN EN ISO 21003-2 - Multilayer composite pipe systems for hot and cold water systems inside of buildings - Part 2: Pipes (ISO 21003-2:2008); German version EN ISO 21003-2:2008

VK 31 UNI Base Board Connection Kits U/TH/F/H were specifically developed for the following pipes:

- Henco PE-RT (EVOH) 16 x 2 / 20 x 2
- Henco aluminium composite pipe 16 x 2 / 20 x 2
- Henco PE-Xc (EVOH) 16 x 2 / 20 x 2
- Fraenkische alpex F50 Profi 16 x 2 / 20 x 2



Assembling the Connection Kit

Important! Absolute adherence to the assembly sequence!

- When installing the VK 31 UNI Base Board Connection Kit U/TH/F/H, **always assemble the return flow first** according to the following steps. Only commence work on the supply flow once the return flow has been installed.
- 1 After assembling the radiator, cut to appropriate length and de-burr the connection pipes of the telescopic angle valve.
 - 2 Push the telescopic angle valve onto the connection pipe of the radiator.
 - 3 Screw the union nut onto the radiator and tighten it with a spanner wrench 30 mm (use connection nipples for radiators with 1/2" female thread, cone inserts for radiators with 3/4" male thread).
 - 4 Remove the protective cap and tighten the compression adapter, integrated in the telescopic angle valve, at the front by utilising a spanner wrench 13 mm.

Important!

Only utilise the valve spindle with Allen key 4 mm for shutting-off the radiator after completion of the installation work.

An incorrect sequence will cause irreparable damage to the spindle and malfunction!

- Make sure that the socket depth is limited by the valve to ensure correct installation of the supply flow and return flow pipe.

- Remove the valve from the radiator again.

■ Press the pipe:

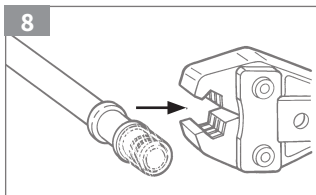
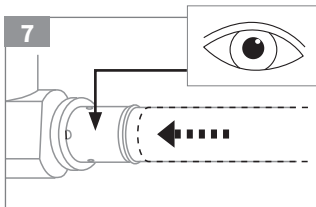
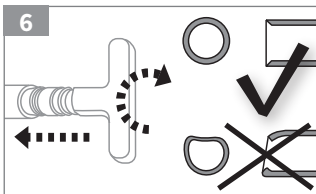
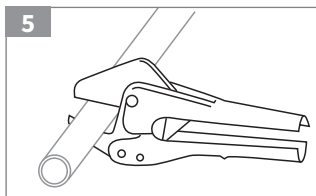
Check all components for any transport damage before fitting.

- 5 Only cut the pipe at right angles using the appropriate cutting tool.

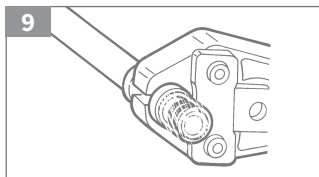
- 6 Use an appropriate tool to calibrate the pipe.

- 7 Fit the connection kit and perform a visual check:
Insert the pipe manually into the press connection until it reaches the stop. Ensure a dirt-free assembly process. Perform a visual check to determine whether the requisite socket depth has been reached! (Pipe should be visible in the openings of the press sleeve).

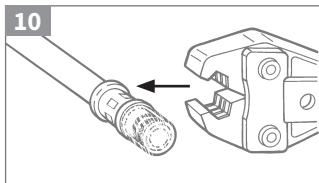
- 8 Place the press head onto the press connection:
Press the legs together to open the pressing pliers.
Place the pressing pliers onto the adjustment ring.
U, TH, F and H profiles are permitted.



- 9** Pressing process:
Refer to the tool manufacturer's operating instructions.



- 10** Remove the pressing pliers:
Open and remove the pressing pliers by pressing the legs together.
Check that the press connection has been properly pressed.



Important notes:

- Always disconnect the unit from the mains power supply when swapping the press jaw heads or carrying out maintenance or repair work.
- Never insert fingers or other body parts into the press jaw head during pressing.
- Make sure that press jaw heads and the drive machine are not damaged during transport or storage.
- Regularly inspect press jaw heads and machines for cleanliness, damage and correct operation.

- Re-connect the pressed connection kit to the radiator.
- With several radiators on one wall, always assemble the complete connection of the return flow firstly.
Check the direction and axial distance of the supply flow to the return flow – refer to the dimensional drawing on the reverse page.
- Then fit the supply flow (in the same way as the return flow).

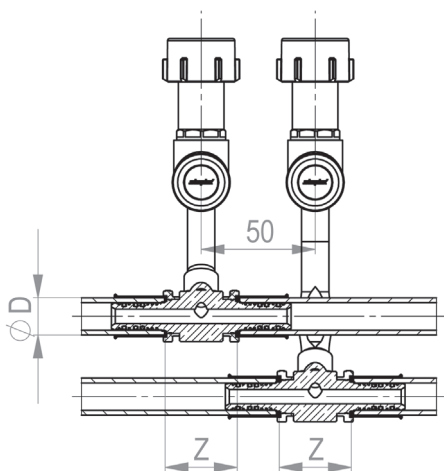
Shutting-off the Radiator

Remove the protective cap and shut-off the telescopic angle valve at the front by utilising an Allen key 4 mm in a clockwise direction.

Important:

Shut-off the valve spindle (wrench size 4 mm) only after full tightening (clockwise) the integrated compression adapter (wrench size 13 mm).

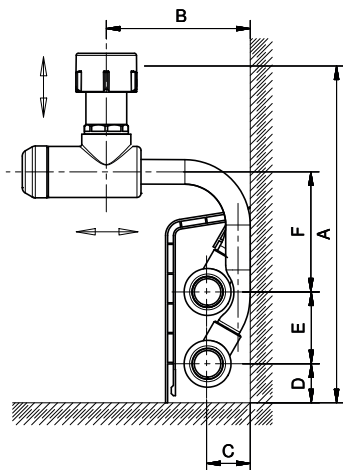
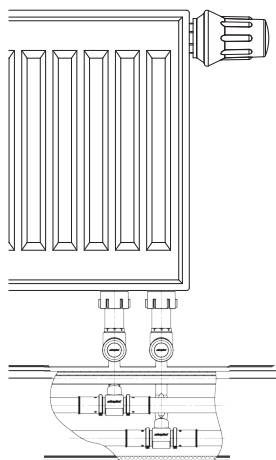
Installation Length (Z-dimension)



$\varnothing D$	Z
16	33.6
20	32.4

(Data in mm)

Dimensional Drawings



For radiator with integrated valve with	A*		B*		C	D	E	F
	min.	max.	min.	max.				
Rp 1/2	175	200	50	175	21.5	19	35	59
G 3/4 male	164	189	50	175				

* up to radiator connection (data in mm)

The illustrations are symbolic and may differ from the respective product.
Errors and technical changes reserved.

01/2017