

# Installation instructions

## Twin Tube DN 20

### 1 Standard delivery

- Check whether all listed components have been delivered, before commencing the installation.

#### The standard delivery comprises

– Twin Tube DN 20 (12.5 m)	1 ×	– Chassis disc	1 ×
– Union nut RP1	4 ×	– Gaskets	4 ×
– Clamping washer	4 ×	– Dual nipple R1	1 ×

### 2 General

The Twin Tube DN 20 (corrugated stainless steel pipe) already contains an integral sensor cable, as well as a high-temperature and UV resistant protective casing. Markings are provided to differentiate between the flow and return pipes.

The Twin Tube DN 20 allows you to realise a bending radius of 90°, without the pipe springing back, just like other corrugated, soft pipes.

You should, however, consider the thermal expansion of the corrugated pipe when routing the Twin Tube DN 20.

Special pipe cleats with dowels and screws for fixing the Twin Tube DN 20 to walls and ceilings are available as an option.

Use the connection set, which is also available as an option, for the installation of the Twin Tube 20. This comprises all necessary fasteners, to create the connection between the individual components.



#### NOTE FOR USERS

Store the Twin Tube DN 20 and all residues horizontally inside the carton as this prevents unnecessary pressure points.

You can repair any damage on the protective PE cover caused by the installation work with the enclosed PE tape.

## 3 Installation

### 3.1 Cutting to length

- Slit the thermal insulation at the required place with a sharp knife.



#### SYSTEM DAMAGE

through damaged sensor cable.

#### CAUTION

- Pay particular attention to the sensor cable when separating the corrugated stainless steel pipe.

- Push the insulation hose away on the r.h. and l.h. side of the cut.
- Make a square cut through the valley of the corrugated stainless steel pipe using a metal saw or a pipe cutter (Fig. 1, **item 1** and **2**).



#### DANGER OF INJURY

through protruding burrs.

#### WARNING

- Please ensure that you cut the corrugated stainless steel pipe cleanly. Remove any possible burrs with a metal file.

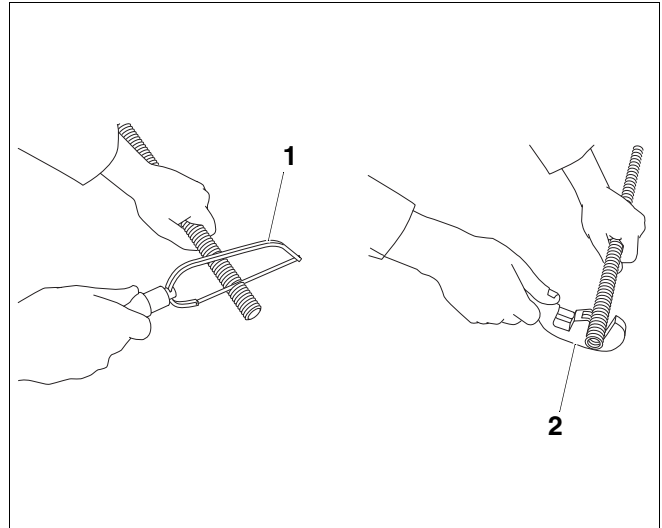


Fig. 1 Cutting to length

**Item 1:** Metal saw

**Item 2:** Pipe cutter

### 3.2 Install the clamping collar

- Push the union nut (Fig. 2, **item 1**) over the corrugated stainless steel pipe.



#### NOTE FOR USERS

Insert the clamping collar (Fig. 2, **item 2**) with the sharp edge towards the sealing face.

- Insert the clamping collar (Fig. 2, **item 2**) into the first valley of the corrugation and push the parts tightly together (use pliers if required).
- Then push the union nut (Fig. 2, **item 3**) over the clamping collar.
- Ensure that the clamping collar fits snugly against the union nut flange.

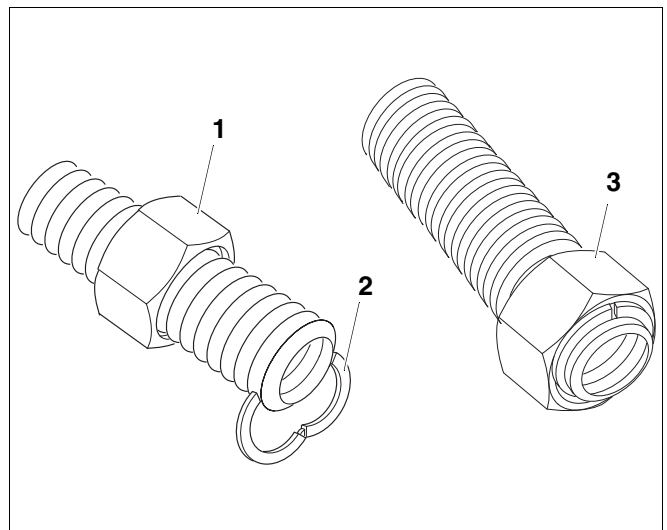


Fig. 2 Install the clamping collar

**Item 1:** Push the union nut back.

**Item 2:** Insert the clamping collar in the valley of the corrugation.

**Item 3:** Push the union nut over the clamping collar.

## 3.3 Create the sealing seat

- Push the union nut against the clamping collar.
- Insert the chassis disc (Fig. 3, **item 1**) into the union nut.
- Insert the dual nipple (Fig. 3, **item 2**) by turning it by hand.
- Hold the union nut with pliers or a spanner.
- Now tighten the dual nipple (Fig. 3, **item 3**) against the nut.
- Unscrew the dual nipple and remove the chassis disc.
- Check, whether a level sealing seat has been created.
- Remove any protruding burrs.

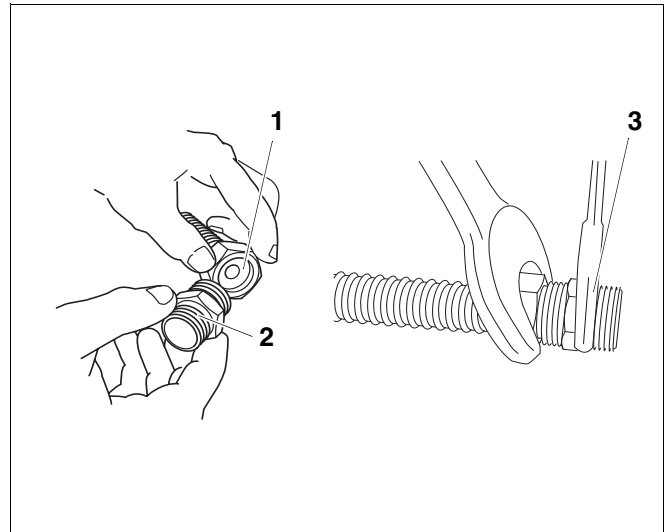


Fig. 3 Create the sealing seat

**Item 1:** Insert the chassis disc

**Item 2:** Insert the dual nipple by hand.

**Item 3:** Connect the dual nipple with the union nut

## 3.4 Installation

- Insert the flat gasket (Fig. 4, **item 1**).
- Check the correct seating of the clamping collar and tighten the union nut.



### SYSTEM DAMAGE

through stress fracture corrosion.

**CAUTION**

- Only use thermal insulation in accordance with DIN 1988, part 7.



### NOTES FOR USERS

- Do not bend the corrugated stainless steel pipe more than necessary.
- Never install the corrugated stainless steel pipe when it is twisted.

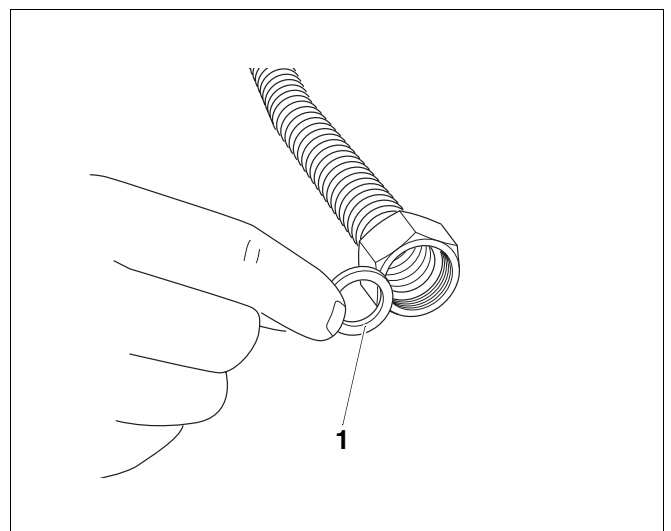


Fig. 4 Installation

**Item 1:** Insert the flat gasket

Your local heating engineer: