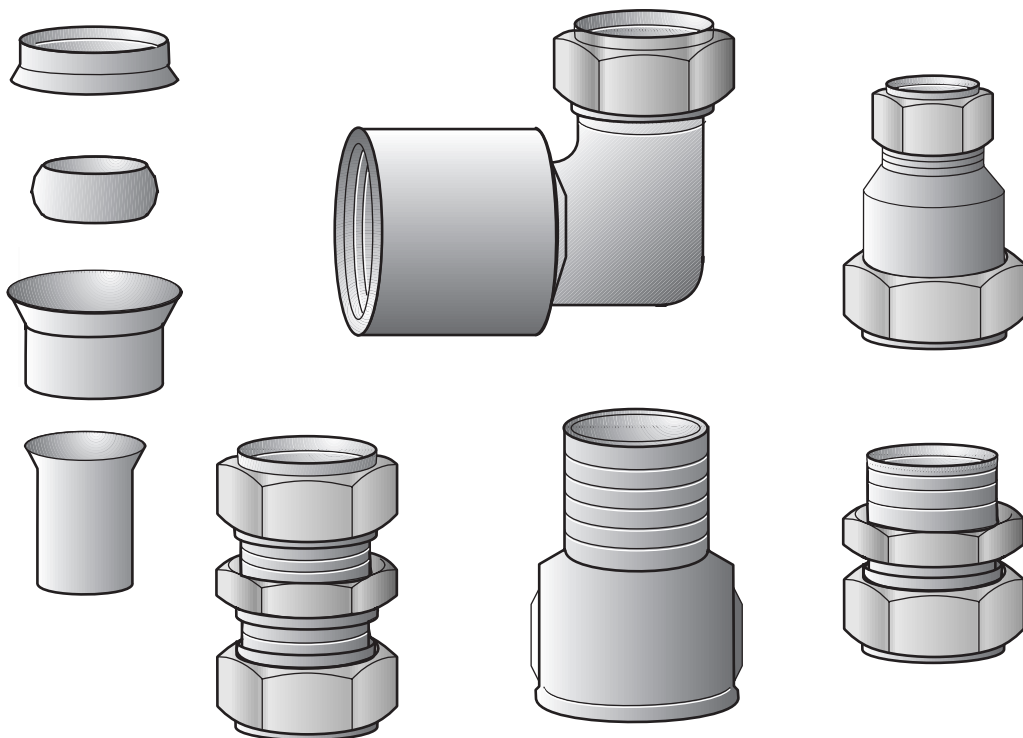


Installation instructions

**Connection set Twin Tube 15
for collectors
with hose coupling nipple acc. to
DIN 3021, part 1**



1 Standard delivery

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

The standard delivery comprises (Fig. 1)

Item 1:	Straight compression fitting R $\frac{3}{4}$ × 15 mm for collector flow connection	1 ×
Item 2:	Locking ring set, 18 mm × 15 mm	4 ×
Item 3:	Straight compression fitting Rp $\frac{3}{4}$ × 15 mm for collector return connection	1 ×
Item 4:	Reducing coupling Rp 1 × R $\frac{3}{4}$ to reduce R1 connections	2 ×
Item 5:	Straight compression fitting 15 mm × 15 mm to connect or extend the Twin Tubes	2 ×
Item 6:	Elbow compression fitting Rp $\frac{3}{4}$ × 15 mm for connection to the cylinder	2 ×
Item 7:	Support sleeve	12 ×

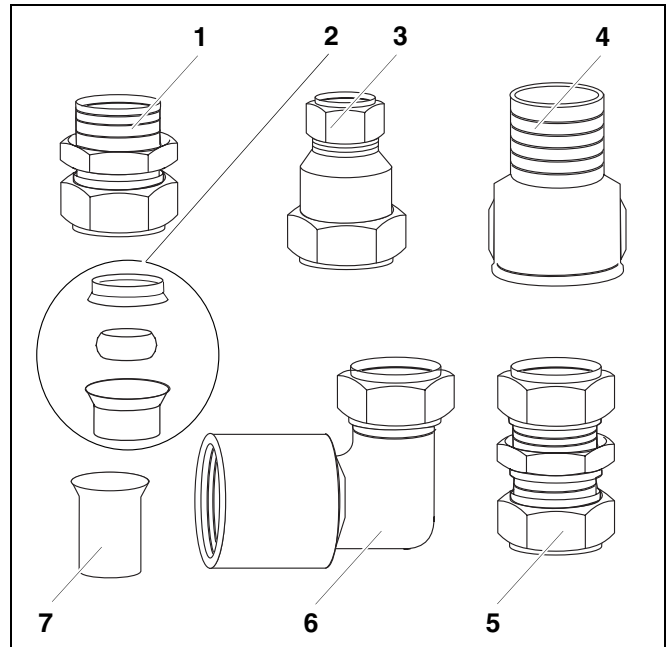


Fig. 1 Standard delivery

2 Installation

Smaller solar heating systems (up to 15 collectors) may be interconnected between collector array, complete station and cylinder with Twin Tube 15 pipes.

Use the connection set to connect the individual solar heating components.



NOTE FOR USERS

Observe any standards and guidelines applicable to the installation and operation of this system, as may apply in your country.



NOTE FOR USERS

The connection set, Twin Tube, supplements the installation set for solar collectors with hose nipple connections. For important safety information regarding the installation of the Twin Tube set, see the solar collector installation instructions.

2.1 Install the inserts at the complete station.

The complete station is equipped with four compression fittings suitable for 18 mm copper pipe. Remove the locking rings to enable the Twin Tube 15 pipes to be installed.



NOTE FOR USERS

If the pipework between the complete station and the cylinder is part of the delivery, this changeover will only be required for the upper fittings.

- Remove the four locking rings on the flow and return connections.
- In accordance with the graphic, replace the locking rings with the locking ring set 18 mm × 15 mm (Fig. 2, **Item 2**).

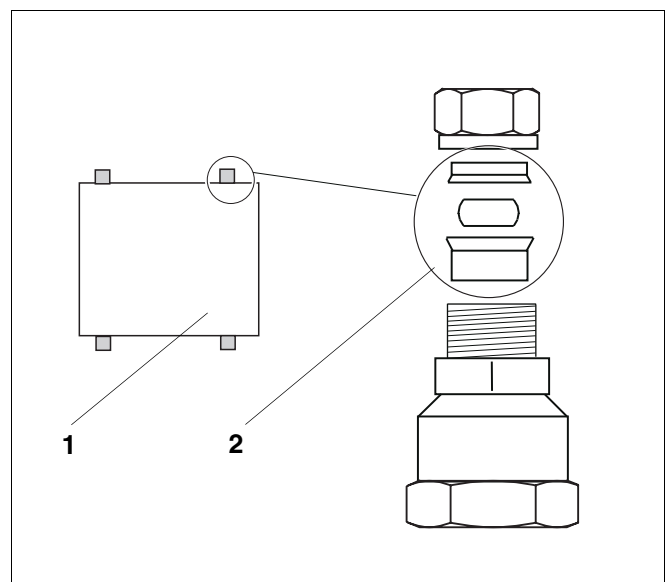


Fig. 2 Remove locking rings

Item 1: Station complete

Item 2: Locking ring set, 18 mm × 15 mm

2.2 Connect the cylinder with R $\frac{3}{4}$ connections.

- Complete the connection to the cylinder using the elbow compression fittings (Fig. 3, **Item 3**).
- Fit the elbow compression fittings (Fig. 3, **Item 3**) to the cylinder connection (Fig. 3, **Item 4**) to connect the cylinder with the complete station.

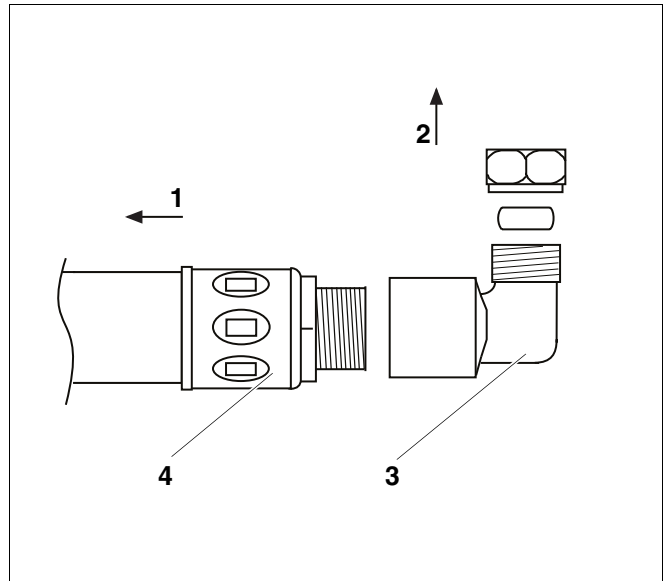


Fig. 3 Connect the complete station with the cylinder.

Item 1: to the DHW tank

Item 2: to the complete station

Item 3: Elbow compression fitting

Item 4: Cylinder connection

2.3 Connect the cylinder with R1 connections.

The following step should be carried out for cylinders with R1 connections:

- On cylinders with R1 connections, install the reducing coupling (Fig. 4, **Item 1**) and the elbow compression fittings (Fig. 4, **Item 2**).

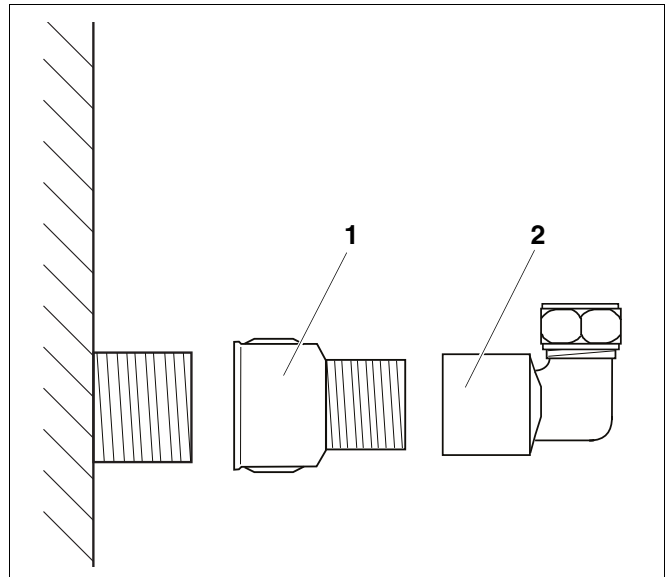


Fig. 4 Connect the cylinder with R1 connections.

Item 1: Reducing coupling

Item 2: Elbow compression fitting

2.4 Install the straight compression fitting $R\frac{3}{4}$ at the flow line.

A basic pipework set is part of every collector array. It comprises an air vent, which is equipped with two threaded holes $Rp\frac{3}{4}$.

- Insert the straight compression fitting $R\frac{3}{4} \times 15$ mm (Fig. 5, **Item 6**) into the air vent (Fig. 5, **Item 5**).

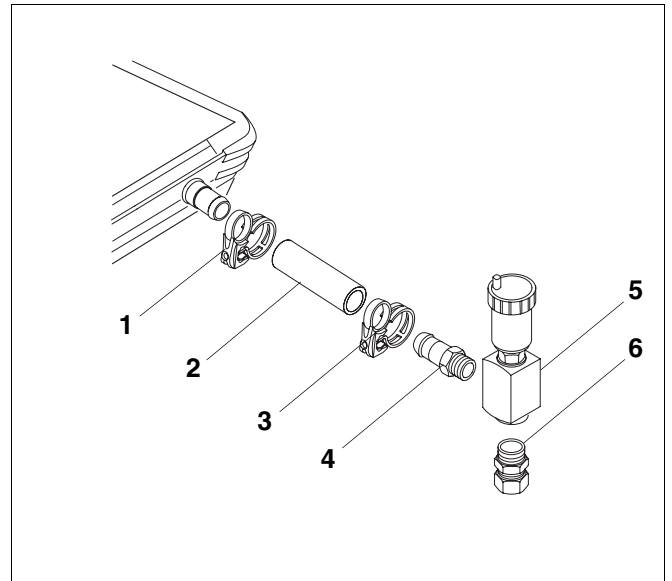


Fig. 5 Collector connection

Item 1: Hose clip

Item 2: Solar hose

Item 3: Hose clip

Item 4: Hose coupler

Item 5: Air vent

Item 6: Straight compression fitting $R\frac{3}{4} \times 15$ mm

2.5 Install the straight compression fitting $R\frac{3}{4}$ at the return line.

- Connect the hose nipple (Fig. 6, **Item 2**) with the straight compression fitting $Rp\frac{3}{4}$ (Fig. 6, **Item 1**).

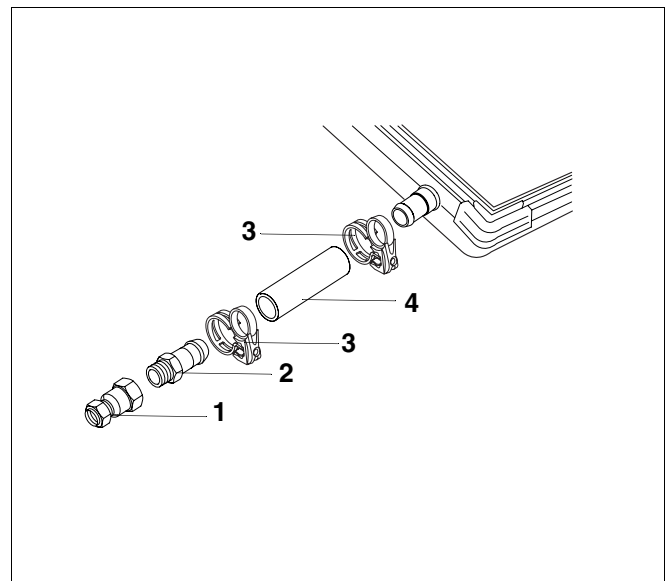


Fig. 6 Install the straight compression fitting $Rp\frac{3}{4}$.

Item 1: Straight compression fitting $Rp\frac{3}{4}$

Item 2: Hose coupler

Item 3: Hose clip

Item 4: Solar hose

2.6 Install the Twin Tube 15.

- Trim the Twin Tube 15 pipe (Fig. 7, **Item 3**) correctly to be able to push it 2–3 cm into the compression fitting (Fig. 7, **Item 1**).



NOTE FOR USERS

Use the straight compression fittings 15 mm × 15 mm (Fig. 1, **Item 5**) if the individual pipes need to be extended.

- Insert the support sleeves (Fig. 7, **Item 2**) into the Twin Tube 15 pipes (Fig. 7, **Item 3**).
- Push the trimmed Twin Tube 15 pipes (Fig. 7, **Item 3**) right up to the stop end, into the prepared compression fittings (Fig. 7, **Item 1**). The locking ring sets 18 mm × 15 mm must completely surround the Twin Tube 15 pipes.
- Secure the union nut with the compression fittings (Fig. 7, **Item 1**) as counter nut using a suitable spanner.

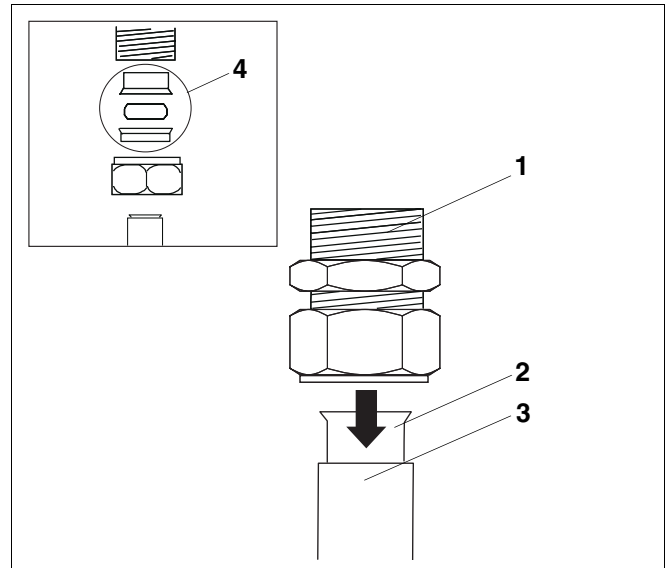


Fig. 7 Connect the Twin Tube 15.

Item 1: Straight compression fitting

Item 2: Support sleeve

Item 3: Twin Tube 15

Item 4: Locking ring set, 18 mm × 15 mm

Your local heating engineer: