Buderus

Assembly Instructions for Boiler – DHW Storage Tank Connection Piping

for Buderus cast iron boiler »Loganatherm« G 205 ST with adjacently placed DHW storage tank ST 150, ST 200, ST 300

1. Delivery and installation

Carton: Complete DHW storage tank connection pieces and assembly instructions.

The storage tank may be arranged on the right or left of the boiler.

The storage tank is normally installed on the right hand side of the boiler. (View D from behind)

When installing the storage tank on lefthand side the return connection fitting has to be turned accordingly.

Tank and boiler should be mounted on a firm, level surface.

The storage tank has to be vertically aligned by means of the jacking screws.

The minimum distances according to Fig. 2 and table have to be observed!

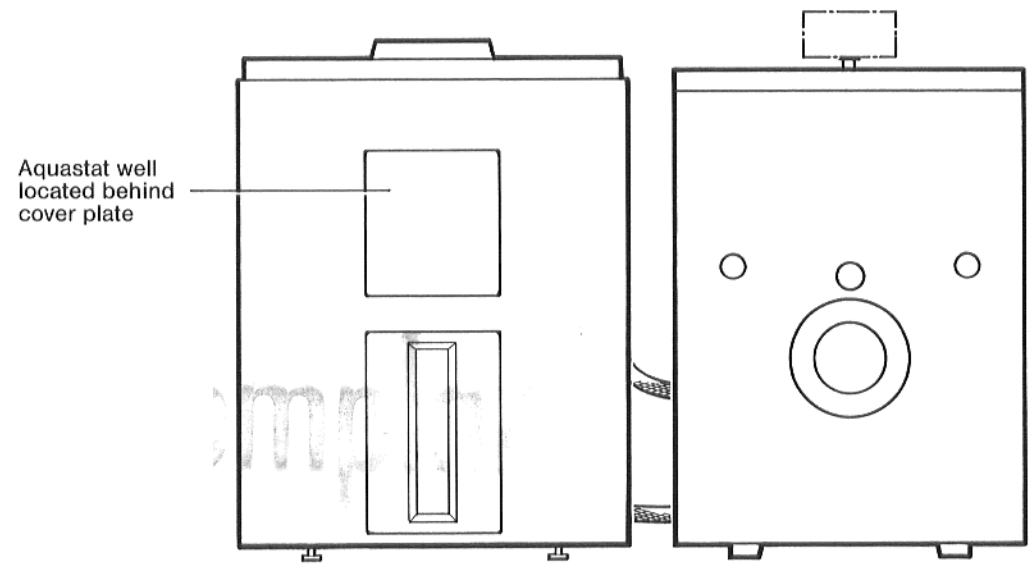

Fig. 1 – Boiler »Loganatherm« G 205 ST with DHW storage tank

2. Assembly of flexible tube connection

1. Remove screwed flange on boiler supply and screw in supply connection fitting.

2. Length of flexible tube:
   Storage tank supply: 37⅜ inches
   Storage tank return: 31½ inches

3. Unscrew storage tank return elbow (45°) together with union joint from screwed connection on storage tank return tube and seal into storage tank return connection.

4. Seal storage tank return tube (31½ inches long) with thread fitting piece into return connection fitting.

5. Screw storage tank return tube with screwed connection to storage tank (do not forget to use a gasket).

Storage tank flow

6. Seal in assembly group "non-return valve" consisting of threaded fitting piece, socket, pipe nipple, corner non-return valve, union nut, gasket, screw-in piece and screwed flange on storage tank flow.

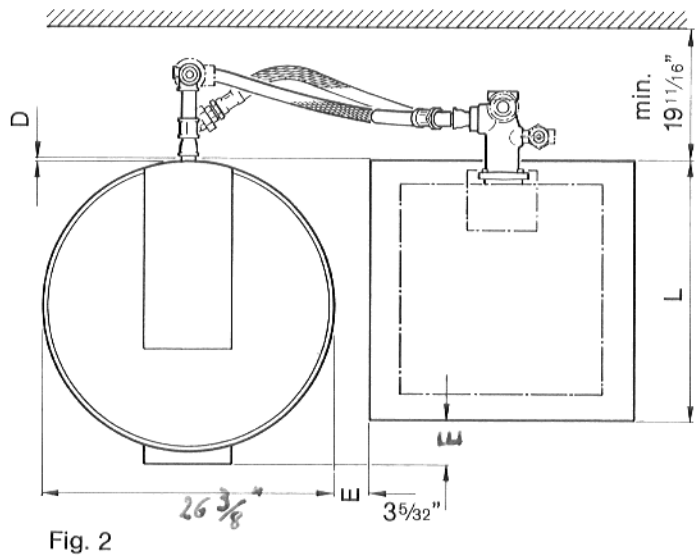

Fig. 2

Boiler size	Dimension		
	D inches	E inches	L inches
GK 205			
20–27/3	6½	3 3/16	16¾
34/4	3⅜	3 3/16	3 5/16
42/5	3⅜	± 0	23
50/6	¼	± 0	26 3/16
58/7	± 0	−3 *)	29 5/16
66/8	± 0	−6⅛ *)	32½

*) Storage tank is set back with respect to boiler front edge!

7. Seal thread fitting piece with 45° elbow into flow connection piece.

8. Seal storage tank flow tube 37⅜ inches long) into elbow.

9. The already presealt assembly group comprising T-reducer, double nipple and screwed flange has to be sealt into the flow tube.

10. Screw storage tank charging pump (mounting dimension approx. 6⅜ inches to assembly group "non-return valve" (do not forget to use a gasket).

    The arrow (flow direction) on the storage tank charging pump must point towards the storage tank flow.

11. The storage tank flow drain connection may be provided at site with a drain cock.

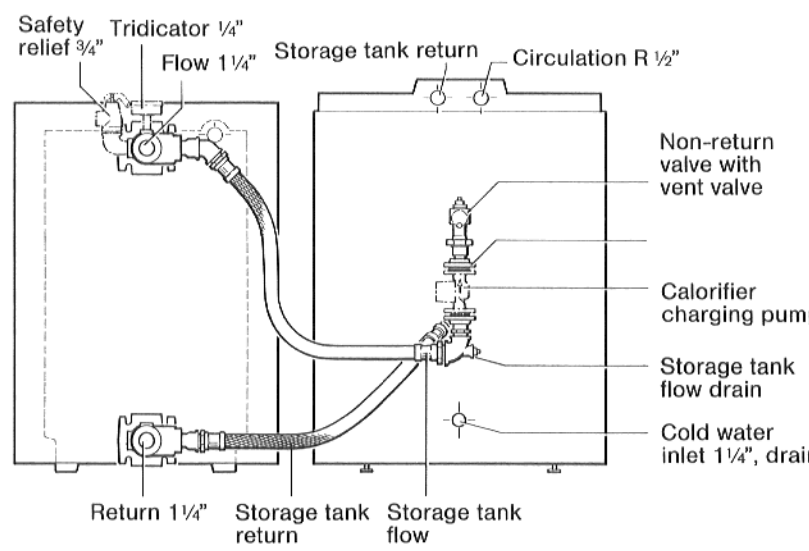

Fig. 3

Storage tank charging pump: Volume capacity 528,06 gal/hr
Pumping head H approx. 145 11/16 in
Flow rate V approx. 3,94 ft/s

Important

Prior to start-up manually vent non-return valve in storage tank flow during filling. For this purpose the screw slot of the frontal adjusting screw (large screw) has to be turned 1/4 to the right into vertical position.

When starting the system turn adjusting screw to initial position (screw slot in horizontal position).

During assembly work and even afterwards the flexible tubes may not be exposed to external pressure, tension or bending (see special note).

Waterside connection

Installation and equipment of the water pipes have to be carried out in accordance with local regulations.

For DHW and circulation pipe the tank hood clearance has to be taken into account (Fig. 3).

Do not mount bow-shaped connections into the drain pipes in order to ensure de-sludging.

Check whether the connections are tight.

All pipes and connections have to be mounted free of tension!

Assembly of storage tank jacket

Regarding assembly of tank hood see special assembly instructions for DHW storage tanks »TBS-Isocal« ST 150 up to 800 (belongs to scope of delivery of storage tank).

Legend:

1 DHW storage tank
2 Venting and drain valve
3 Shut-off valve with drain valve
4 Safety valve (see table)
5 Non-return valve
6 Shut-off valve
7 (Circulation pump)
8 Pressure relief valve (if required)
9 Test valve (drain valve)
10 Return flow preventer
11 Connection piece for pressure gauge
12 Drain

Safety relief ½"

Safety valve

Nominal capacity of storage tank gal	Connection diameter min	Max. heating output BtU/hr
≦ 52.82	DN 15	255 900
> 52.82 – 264.1	DN 20	511 800
> 264.1 – 1320.5	DN 25	583 000

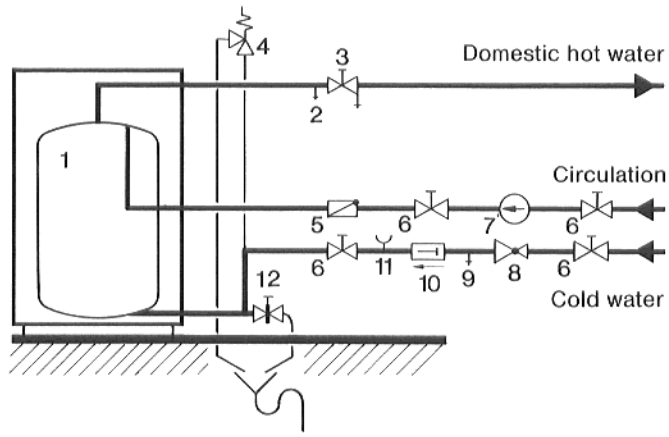

Fig. 4