

INSTALLATION AND FITTING INSTRUCTIONS

KESSEL-comfort inspection chamber LW 800

General technical approval Z-42.1-224

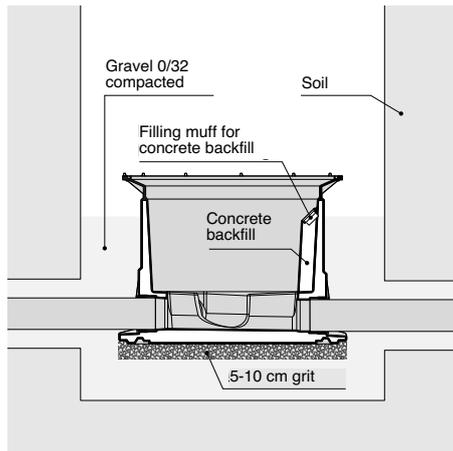


Safety instructions

Installation, fitting, operation and maintenance may only be carried out by a specialist company.

Guidelines and safety regulations must be heeded (e.g. VBG 37 and DIN 4124)!

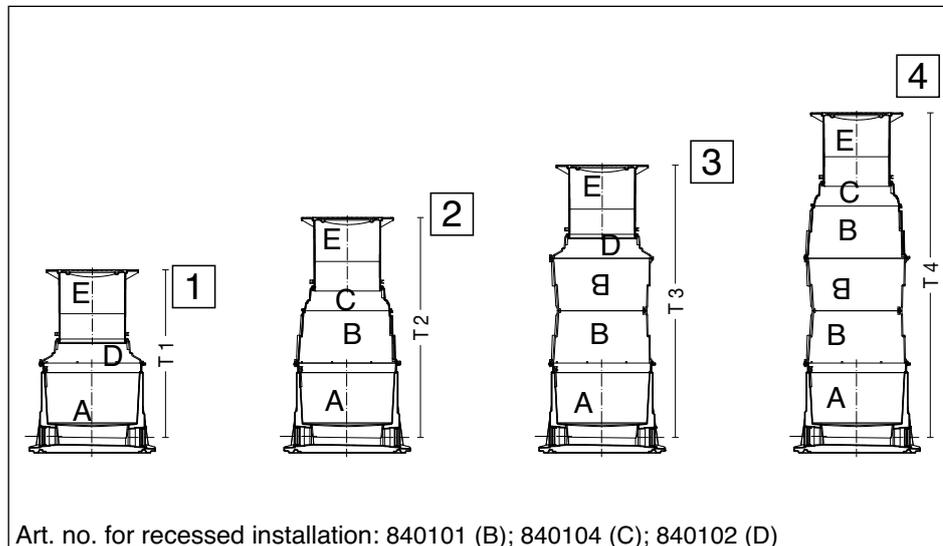
1. Installation of chamber base



- A horizontal surface is prepared with compacted wet mix aggregate (gravel) in the prepared excavation pit. The layer thickness should be about 30 cm.
- In order to set the chamber base down completely on its complete surface, a layer of about 5-10 cm grit must be added to the compacted wet mix aggregate (gravel).
- The chamber base is set down on the prepared base and connected to the inlet(s) and outlet. (When stoneware or cast pipes are used, standard adapters must be used).
- Then the chamber base is aligned using a spirit level.

- During installation, the open channel must be padded with e.g. concrete to prevent deformation (filling volume between 210 and 220 l).
- The closed base (e.g. for the closed channel) is not suitable for installation in the groundwater without having been reinforced in the factory first.
- DIN EN 12056 must always be heeded when routing the base pipe. In addition, a stilling section must be observed upstream and downstream of the FKA (at least 1 m).

2. Installation depths



- The individual chamber parts are put together as shown in the illustration, depending on installation depth

Installation depths open channel:

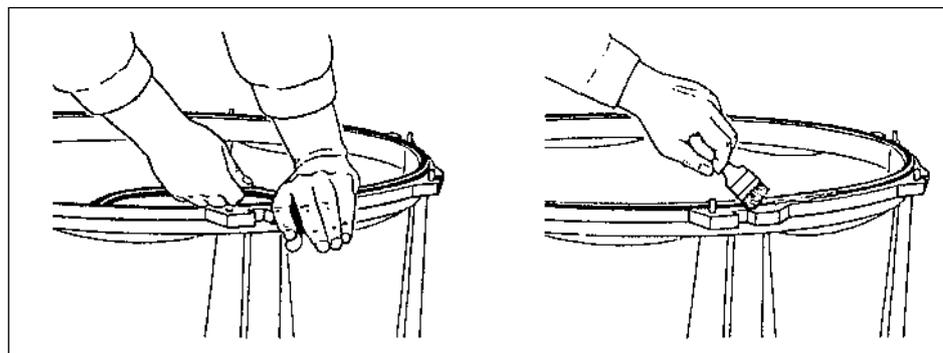
- 1 980 - 1480 mm
- 2 1480 - 1980 mm
- 3 1980 - 2480 mm
- 4 2480 - 2980 mm

Installation depths closed

channel:

- 1 770 - 1270 mm
- 2 1270 - 1770 mm
- 3 1770 - 2270 mm
- 4 2270 - 2770 mm
- 2770 - 3270 mm (without fig.)

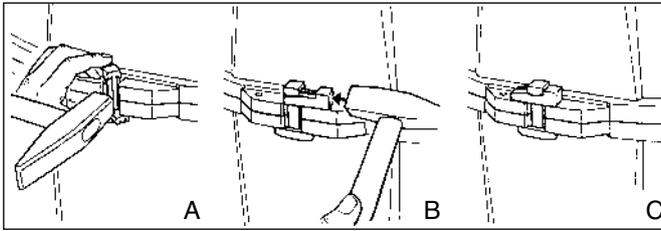
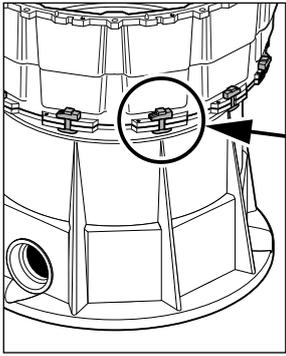
3. Insert the seals



- Fit the seal as shown in the adjacent illustration. **Two different seal diameters must be heeded.** Only lubricate the seal once it is in the sealing groove. Then set the chamber parts on top of one another

Profile seal 800 (art.no. 840112),
Profile seal 980 (art.no. 840113)

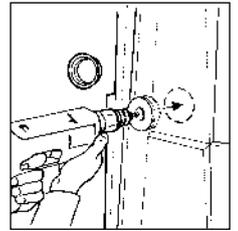
4. Put the parts together



- Set the chamber parts on top of one another. Fit the chamber parts together in such a way that steps are arranged above one another.
- Connect the chamber parts as shown in the illustration A, B, C using the connection pieces (art. no. 860-111, in packs of 8.)

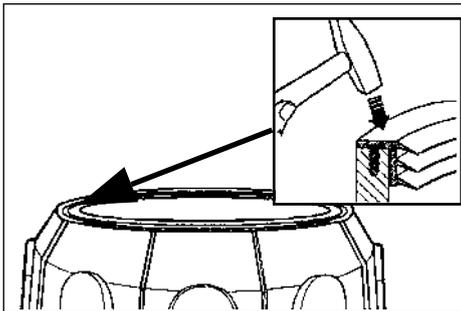
5. Inlets at the side

- To make it the later fitting of inlets at the side easier at any installation depth, the chamber parts can be pre-scored using a saw cap.

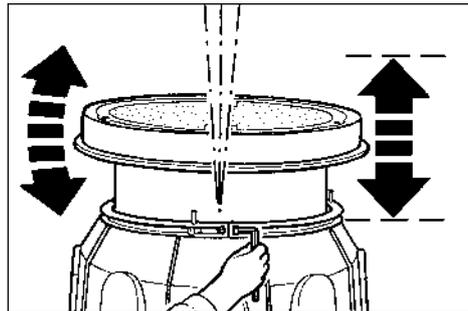


- The seals for the pipe duct are available in the sizes DN 50, 70, 100, 125 and 150. Check side inlets for leaks.

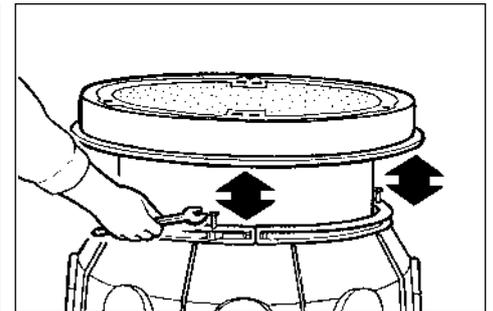
6. Fit the upper cover section



- Hammer the seal into place. (art. no. 860-114)

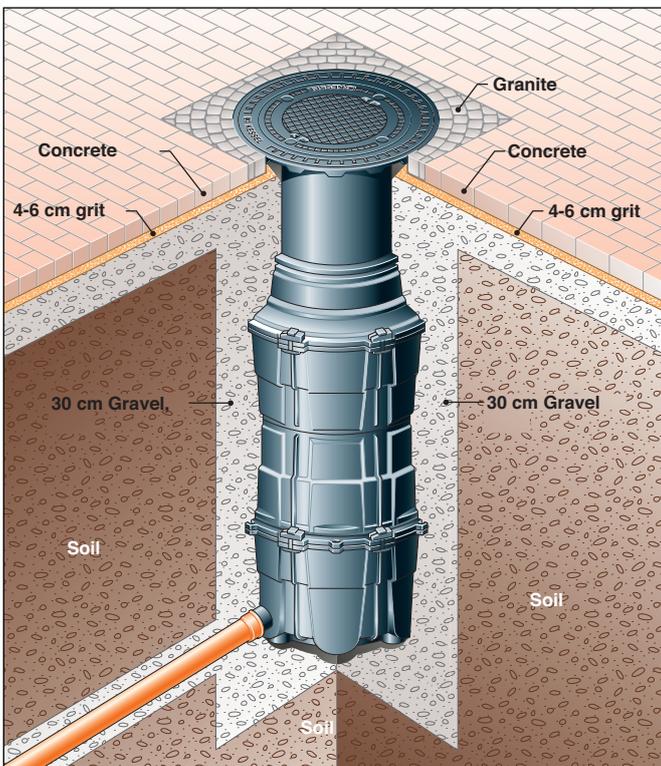


- Lubricate the lip seal, fit the upper cover section, move it roughly to the required installation height, fix in place using a clamping ring.



- Use the adjustment screws to carry out fine adjustment to the final height.

7. Backfill the excavation pit



Installation: Class A/B

- The excavation pit is backfilled and compacted step by step after every chamber element has been installed.
- When installing chamber systems, the respective load class must be heeded. Where the chamber is installed in a location which is walked on (Class A) or where light traffic drives over it (Class B), the projecting attachment piece must be made flush with the ground level (see diagram).
- Where the chamber is installed in an area that can be driven over (Class D), the KESSEL chamber systems must be installed in line with standard road-building regulations RSto combined with ZTVE-StB and DIN 18196. For this purpose, the KESSEL chamber systems are fitted with KESSEL upper cover section (accessory art. no. 860 122) and standard BEGU covers. In all other installation cases, a concrete base plate (height = 150 cm) about 2x2 m in size must be cast around the upper cover section. A formwork plan and reinforcement drawing can be provided on request. Please note: When fitting the chamber, care must be taken that the gradient between the inlet and outlet pipes is at least 1.5 cm.
- When installed in groundwater, the chamber system must be secured against buoyancy. In the case of the open channel type, you can solve the problem of deformation resistance to groundwater on site (see section 1). With all other chamber variants, a reinforced base plate (from the factory) must be purchased at an additional charge for this purpose.
- Check all connections for leaks.