

ASSEMBLY AND INSTALLATION

FOR ROMOLD CABLE CHAMBERS TYPE KS AND FC



1. GENERAL

ROMOLD Chambers, Typ KS round, made of Poly-ethylen, are (as needed) to be laid out as a water-proof model.

Check the delivery for completeness. Damaged parts must NOT be installed!

2. EXCAVATION

The chamber pit must be designed in such a way that a back-fill width of at least 30 cm around the chamber is ensured.

The subsoil must possess sufficient bearing capacity, if necessary, the soil has to be replaced. A bedding consisting of 10 cm of compacted gravel/sand mixture or lean concrete mix should be prepared on site at the bottom of the excavation with the appropriate slope and level.

3. DRILLING OF EMPTY CONDUIT

3.1 DRILLING:

The entry holes can be made ex factory as well as on site.

Prior to spudding the chamber should be placed in the trench to check the connection facility. The drill hole position is to be marked. The drill holes are to be placed with sufficient distance to each other and to the stiffening ribs.

The drill holes has to be made with the aid of a ROMOLD cup saw and a commercial or cordless drill. The opening has to be deburred and cleaned. The drill holes are to be deflashed and the seal inserted without any anti-blocking agents. The labeled side of the seal has to be outside of the chamber.

3.2 EMPTY CONDUIT CONNECTION:

All seals are to be cleaned of contamination and checked for their proper fitting. Seals and pipe ends are to be supplied with suitable lubricant. Push the empty conduits into the seals.

To be sure of a water-proof empty conduit connection the empty conduits has to be placed in a rectangular angle ($\pm 5^\circ$ aberration) to the chamber wall. For this it can be necessary to expose the empty conduits with a big distance to the chamber to ensure enough flexibility. For the little own weight of the chamber it is also possible to push the chamber onto the empty conduit.

For a water-proof connection of corrugated pipes please use adapter to plain pipes, offered by the conduit manufacturer.

3.3 TRIPLE CONDUIT

Cut connection foil to length of approx. 1 m. Scrape clean in the seal area. Empty conduit should go 15–20 cm into the chamber.

Take care of enough distance between the conduits, to be able to assemble compression of fittings. The conduits can be mounted side by side or shifted.

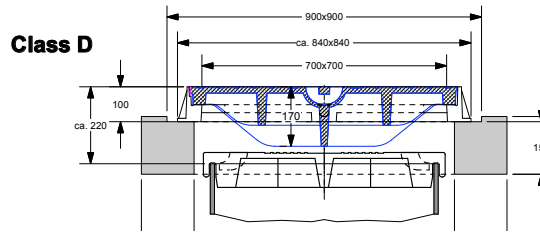
4. INSTALLATION

4.1 BACKFILLING AND COMPACTING:

The backfill material must satisfy the requirements G1 or G2 as per ATV A-127, Section 3.1.

Grain size: round grain < 32 mm
 broken material < 16 mm

Bigger stones than above explained must not have contact to the chamber wall.



The backfill material has to be installed carefully and in layers with a thickness of 20 to 40 cm and compacted using a medium-weight vibration tamper (approx. 50 kg).

The number of necessary compaction passes per layer depending on backfill material, fill height and compaction equipment, can be taken from table 6 of ENV 1046 and/or table 2 of DWA A 139.

During compacting a ROMOLD PE site cover (yellow colour) or ROMOLD cast iron frame should be put on to stiffen the chamber neck.

Caution: When lean concrete is used as backfill material, subsequent integrating of empty conduit is not possible.

4.2 HEIGHT ADJUSTMENT:

To adjust the height, shorten the neck of the upper unit. ROMOLD PE-manholes with diameters of DN 625 can be shortened to a maximum of 30 cm, with diameters of DN 800 and DN 1000 to a maximum of 25 cm. The cutting is to be done with a saw along the marked ribs. The resulting cut needs to be deburred..

5. CHAMBER COVER

Be sure of cleanliness during fitting of covers. All seals have to have a proper fit. To avoid additional cleaning work put the cover after lifting on a clean base (foil, wooden layer).

5.1 PE-COVER, TYP: LGH 63 DD

First assembly the seal with the chamber konus. Provide the seal with lubricant and put PE cover on.

5.2 CAST IRON INFILL COVER,, WATER-PROOF, TYP: LDB 63 BDR:

Please see assembly instruction (comes with the cover).

5.3 CONCRETE BEARING RING WITH COMMERCIAL COVER UP TO CLASS D 400

The concrete bearing ring for commercial cover class D 400 is directing the traffic load into the roadbed and keeping away from the PE chamber. Therefore ensure that there is no direct load contact between concrete ring and PE chamber after the installation of the concrete bearing ring.

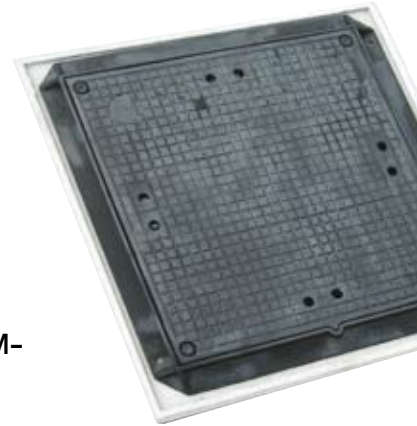
The decoupling of PE chamber and concrete bearing ring as well as save shifting is secured with their overlapping of about 7 cm. The whole construction height of concrete bearing ring and commercial cover class 400 is approx. 24 cm (without AR-V 625) and has to be considered during height adjustment of chamber.

If using a concrete bearing ring with seal (Typ: BARD 66 VSD) it's important to control the correct fit and the swaging process.

5.4 INSTALLATION LGH 63 DD WITH GG-COVER 700 X 700:

This cover combination represents a tight and maintenance free solution where sealing function and carrying function are separated.

The concrete overlay für commercial covers class B/D 700 x 700 has to be bedded onto compact backfill material. For fitting of the PE cover please see Point 5.1.



Assembly- and installation notes „to go“, scan QR-Code.



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