

**Sealing Sleeve
Type Compenseal and Type KMR
4 pipes**





Product information

Special flexible sealing collar made out of high quality elastomer for wall penetrations at pipelines which are exposed to movements. The seal is excellently suitable for axial and radial pipe movement as well as settlements and tight against pressing water.

Usage

As a compensator the sealing collar can be used excellently for preinsulated pipe penetration through walls and ceilings on buildings.

Water pressure tight up to 0,5 bar with max. 70mm annular space.

Advantages

- Suitable for axial and radial pipe load alternations up to +/- 25mm
- Suitable for settlements depending on outside pipe diameter and core bore sizes up to 40mm
- ideal movement compensator

Technical data

For sizes and measurements please check our price list or ask us.

Standard for outside pipe diameter 75mm up to 630mm and core bores 150mm up to 700mm, other on request.

Eigenschaften:

Material:	synth. elastomer
Pressure plate:	stainless steel V2A
Operating temperature:	55°C
Thickness:	5-8mm
Ripping strength:	27 N/mm
Tensile strength:	11 N/mm
Grade Shore A:	50 ± 5
Elongation at break:	400%

Instruction guide

1. Centre and support **media pipe in** core bore.
2. Apply pressure plate mediated to core bore and mark **boreholes** at wall/ceiling. After that **drill** into marks and **put dowel inside**.
3. Apply sealing compound material on the wall with a hand pistole circular around every screw bore as well as the complete core bore range.
4. Push the side of the Compenseal with flange bore holes over the media pipe, sealing first up to the wall/ceiling. After that interlock Compenseal with pressure plate and **spread** emergent **sealing compound**.
5. Adjust **opening** of the collar to media pipe so that a wave shaped elongation wrinkle occurs. **Inject sealing compound** circularly into the collar opening and **stretch strap tightly** afterwards.

Advice:

- You have to consider that media pipe, the wall/ceiling and compenseal are dry **during the application as well as fat- and dust-free**.
- When laid in the ground the Compenseal must be covered before backfilling with an expansion cushion to ensure that the seal can move in all directions.
- At a media pipe size of 250mm and bigger, a tightening tool for a 19mm stainless steel band has to be used.



Sealing sleeve type KMR 4 pipes



Pipe movements and settings are the largest challenges for a **pipeline wall penetration**, especially at **pre-isolated warm-going pipelines**.

The Sealing sleeve type KMR 4pipes fulfills the high technical requirements to seal secure and permanently, especially in larger dimensions.

Necessary for the versatility of the PIP-sealing sleeve is a casing pipe on which a sleeve can be mounted. The sealing system consists of a **sealing sleeve** made of **synthtetic elastomer** with a thickness of about 6-8 mm. A one-component **special-sealing adhesive** has to be injected under the sleeve on both sides. Two high-quality stainless steel straps press the sleeve on and hold the sealing adhesive in position under stress.

A pressure tightness of 0,6 bar can be reached up to an annular space of 75mm. For larger annular spaces please consult us at 4pipes.

Place a **compensation cushion** in front of the sleeve before the trench will be backfilled. So a stretching zone is created if an eventual expansion happens.



„**Compenseal 4 pipes**“ is available to be flanged on the wall if no casing sleeve is available.



Sealing sleeve type KMR is available in sizes up to 1400mm medium pipe diameter. The sealing sleeves are manufactured individually and have to be ordered (1 week delivery time) under exact specification of pipe diameters and the expected expansion.

The maximum permanent operating temperature for these sealing sleeves is 55°C. For special needs please contact us at 4pipes.

The sealing sleeve comes in a set ready to mount with enough tension tape and sealing adhesive in a 300ml cartridge.

A tension tool for the 19mm stainless steel straps has to be ordered separately in case of demand.

For a belated mounting 4pipes offers the possibility to weld or glue the sealing sleeve on site with special equipment.

Costs therefore accord. to efforts.

Fix arrangements in time.

The 4pipes warrantee is limited only to the delivered materials. For the individual application the user is responsible on this own.



1. Push sealing sleeve over carrier and casing pipe



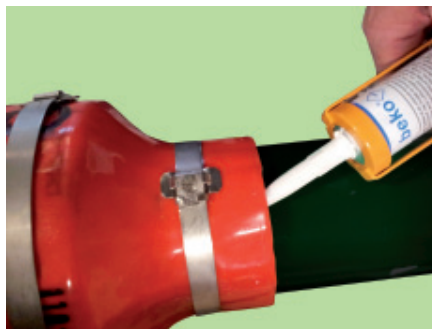
2. Fix included steel straps on the front end of the seal on the casing pipe side.



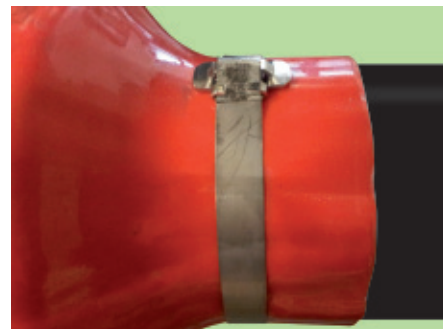
3. Inject sealing adhesive under the sleeve all around



4. Fix second strap on the casing pipe (smoothen sealing adhesive on the edges)



5. Fix strap if possible on the back range of the sleeve and inject sealing adhesive all around under the sleeve



6. Smoothen sealing adhesive on the edges as well



7. Fix the second strap on the carrier pipe at the end



Expansion direction of the carrier pipe:
S-shaped application



Elongation direction of the carrier pipe:
stretched application

Protect sleeve before backfilling with an expansion cushion!



1. Push straps through the closure and bend about 5cm downwards



2. Put straps around the seal and push into the closure



3. Treat strap tightly and pitch sideways into the tension pincers. Then push the pincers up to the closure.



4. Fix tape with the blocking lever



5. Afterwards stretch tape with the crank lever



6. To loosen the tape with the crank lever a little bit at the same time, bend tape at maximum tension (about half a turn). Cut tape with cutting crank after wards.



7. Revert tape with a hammer into the closure clip.



8. Revert security clips to fix the tape



Install Expansion pad at least 40 mm thick with laminate on top