

EN

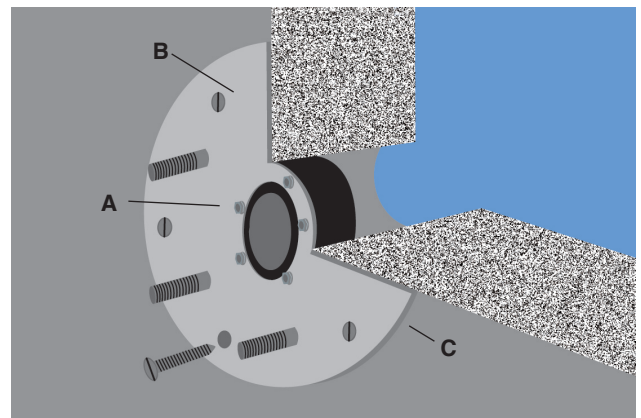
INSTALLATION INSTRUCTION

Important notes:

- Please compare the data on the sealing insert with the carrier pipe and casing/core drilling diameter.
- PSI pipe penetrations are neither an anchor point nor a pipe support.
- The carrier pipes have to be centred and supported (fixed)
- All building and pipeline guidelines are to be observed
- Use only in suitable casings acc. table Installation tolerances with suitable sealing surface in the inner wall and suitable rigidity (dimensional stability after installation).

Fastening of the sealing insert inside the wall

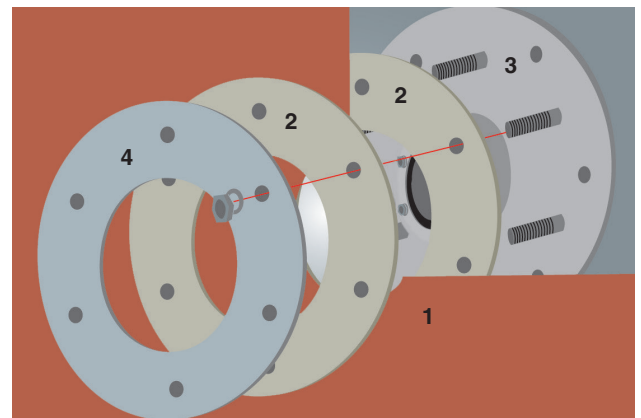
- Insert the component with the sealing insert in the casing/ core drilling and fasten it slightly by tightening the screws (A)
- Mark the drill holes, untighten the screws and remove the component. Bore the holes, insert the dowels and fasten the component to the wall.
- Level the junction of the fixed flange and the wall with mortar (C)



Laying of the sealing sheeting, assembly of the loose flange for loose and bonded sealing sheetings

- Cut the sealing sheeting (1) (and any necessary inserts* (2) for loosely laid sheetings in accordance with the sheeting manufacturer's specification), (the loose flange can be used as a template)
- Place the inserts and the sealing sheeting on the fixed flange construction (3).
- Fit the loose flange (4) (the bevelled side facing the sealing sheeting), the washers and the nuts.

* Please order inserts separately



FHRK Standard 40 (untill core drilling <800 mm)

FHRK Standard 60 (core drilling from 800 mm)

Wall opening / casing ID	Tolerance wall opening / casing	Tolerance Carrier pipe OD
80 mm	-1/+3 mm	see product labeling
100; 125 mm	-1,5/+4 mm	
150; 200 mm	-1,5/+3 mm	
250; 300; 350 mm	-3/+3 mm	
400 mm	-4/+4 mm	
450 up to 1000 mm	-3/+4 mm	pipe OD -3/+2 mm

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INSTALLATION INSTRUCTION

Clean casing pipe/core drilling and carrier pipe. Carrier pipes must be suitable, dimensionally stable and without damage in the sealing area. Core drillings have to be made true to scale and with a smooth inner side.

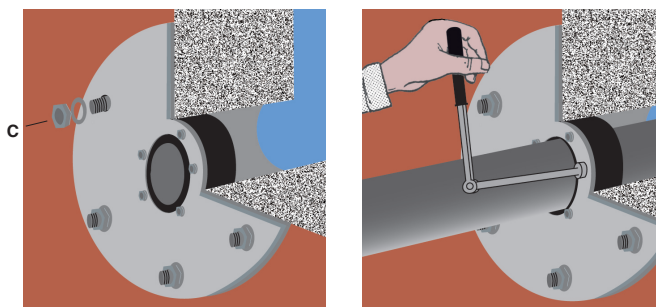
We recommend coating core drillings with KB epoxy resin in order to protect the concrete and smoothen enpossible cavities/grooves. Verify the casing pipe/core drilling and carrier pipe diameters based on the sealing kit data. Insert PSI Kompakt seal into the casing pipe or core drilling flush with the wall and insert the carrier pipe. Care must be taken to ensure the sealing insert is mounted on the outside of the building. In doing so, the nuts should preferably point to the inside in order to be accessible for subsequent tightening (tolerance for the carrier pipes).

Bracing of the sealing sheeting

Tighten the nuts (C) crosswise several times to brace the sealing sheeting. Please bear in mind: torques according to sheeting manufacturer's specification or to DIN 18533 (see table).

Torques for tightening Kompakt seals

Nuts	Max. Torque	Torque for thin-walled plastic pipes
M 6	5 Nm	5 Nm
M 8	17 Nm for standard seal (Shore 43 ± 5)	8 Nm for standard seal (Shore 43 ± 5)
	20 Nm for special seals (Shore 50 ± 5)	15 Nm for special seals (Shore 50 ± 5)
M 10	30 Nm	22 Nm
M 12	35 Nm	25 Nm



Mounting of the sealing insert

- Lay the pipe centred through the sealing insert.
- Tighten the nuts clockwise a few turns (see table), however, not exceeding the torque listed opposite.
- Important for several rows of bolts: first tighten the nuts of the inner bolt row.

Tools

Cleaning material / preparation, measuring tool, drilling tool, impact tool, torque wrench, tools for markings, punches for mounting bitumen sheetings etc ...

Please note:

We recommend reducing the respective maximum torques in case of particularly thin-walled plastic pipes such as flexible casing and corrugated pipes (see table)

Warning: Please observe the sheeting manufacture's standard torque values or DIN 18533 when tightening the nuts

Type of sealing coat	Torque* for M12 (Nm)	Torque* for M20 (Nm)
For KMB (polymer modified high build coatings)	30	100
Bare bitumen sheetings according to DIN 52129-R 500 N	12	50
PIB bonded with bitument	12	50
Bitumen sheetings and polymer bitumen sheetings according to DIN 18533-2:2017-06, table 1 with glass fabric lining material	15	65
Bitumen sheetings and polymer bitumen sheetings according to DIN 18533-2:2017-06, table 1 with polyester fleece or copper platelining material	20	80
DIN 52129 500 N + 1 Cu	20	1. Tightening 100 2. und 3. 80
ECB sheetings, PVC-P sheetings, elastomer sheetings and EVA sheetings bonded with bitumen according to DIN 18533-2:2017-06, table 3	20	80
DIN 52129 R 500 N + 2x Cu	30	1. Tightening 120 / 2. 100 / 3. 80
Plastic seals loosely laid according to DIN 18533-2:2017-06, table 3	30	100

* torque in accordance with DIN 18533-2:2017-06, table A.2 for tripple tightening