LINK-SEAL® KIT BC

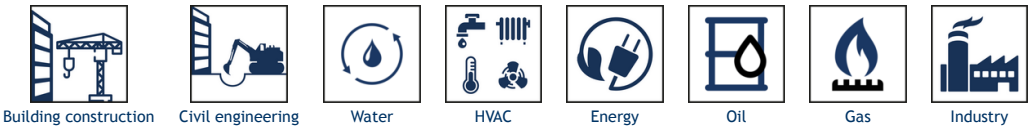
Flexible link chain for the sealing of wall penetrations for gas, water, sewage pipes and cables

AREA OF APPLICATION
Particularly soft rubber, especially suitable for plastic pipes. Use in normal atmosphere, water or humidity. Suitable for electrical isolation and cathodic corrosion protection.

MATERIAL
Material type: EPDM Rubber
Shore hardness: Shore A 40° ±5
Pressure plates: glass fibre reinforced polyamide
Bolts: galvanized

PROPERTIES
Temperature range: -40 °C bis + 80 °C
UV-resistant: Yes
Pressure-tight: 3 bar
Color: blue
Electrical isolation: with a dielectric strength of 500 V/mm

SIZE
Core drilling 50 to 350 mm



PRODUCT INFORMATION

FEATURES
Easy and quick installation due to pre-assembled modules Different versions available for potable water, oil, fuel, solvents and high temperature resistance High quality rubber parts ensure long lifetime Protected position in the masonry Suitable for retrofitting Choice of galvanized 8.8 or stainless steel bolts A4-70 Color differentiation of the various rubber qualities Electrically isolating Hydrostatic sealing against pressing water

AREAS OF APPLICATION
For sealing wall penetrations of gas, Water, sewage pipes and cables (considering the calculation basis and the suitability of the product on site) Tank embeddings Casing pipe seals

PRODUCT DESCRIPTION
The radial expansion of the rubber parts ensures a permanent, pressure-tight and secure sealing of the annular space. For particularly thin-walled plastic pipes such as pre-insulated, flexible casing and corrugated pipe systems, a Compakt Temp or Compakt Super Soft is recommended.

NOTE

The surface of the core drilled holes should be coated to protect the reinforcement from corrosion. Therefore we recommend ProteX epoxy resin or ProteX sealant. The specified values for the pressure tightness are valid at 23 °C. For different, higher permanent operating temperatures, changing temperatures and permanent pressure, it might be necessary to fit an ejection safety device. Please be sure to ask us in advance about the technical feasibility of planned applications for which there is no description (e.g. applications in the biogas or food sector).

RECOMMENDATIONS

- PipeX FZH
- ProteX Epoxy Resin

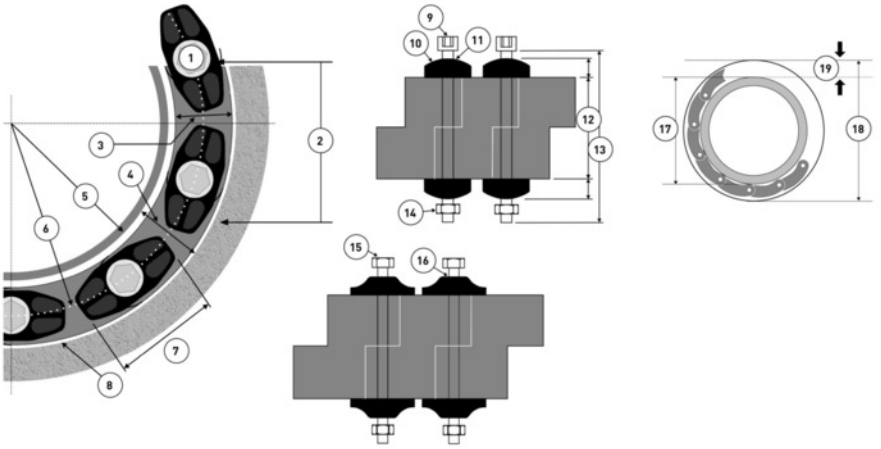
CERTIFICATES

TEXT

Lloyds Register: “Pressure Test for Wall Penetration Seal, Type LINK-SEAL® Modular Seal”; Certificate No: APE 0409369/1
Product certificate: - TUV SUD: Production facilities audit (annual) - TUV SUD: Technical report DDA4/118/94 Component testing of a modular seal
Production facility audit (annual):
FHRK quality seal FHRK test specifications GE 101 compakt seals: (Test report no. G 30 322-6-1), closed version Compakt Solo / Compakt Temp / Compakt Super Soft / Compakt with oversized flange / Compakt Multicable / Compakt Varia / Compakt Blind / Compakt SpeX / Compakt Combi
Drinking water applications: ACS: Certificate of sanitary conformity
Drinking water applications: Pressure plate testing Materials testing DVGW W270 KTW
Drinking water applications: Sealing elements material testing DVGW W270 UBA ELL
Drinking water applications: Radon seal test report Dr Joachim Kemski Radon seal LINK SEAL® W sealing material

TECHNICAL INFORMATION

The suitable LINK-SEAL® for the application results from the thickness of the annular space between the casing pipe (wall sleeve) and carrier pipe. The perfect LINK-SEAL® is smaller than the annular space in a non-tensioned condition and larger in tensioned- condition.
To calculate the appropriate LINK-SEAL® annular space seal, use our online calculation program or the type selection as a basis for calculation. This is available for you to download online as a PDF

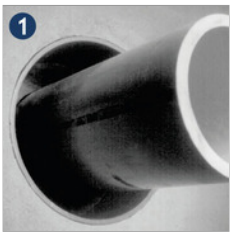


1 Hexagon nut	9 Allen head bolt	17 d = Medium pipe OD
2 Arc length	10 Pressure plate	18 D = Wall sleeve ID
3 Thickness non-tensioned	11 Compression assist boss	19 Annular space
4 Annular space	12 Height sealing element	
5 Outer diameter pipe	13 Total height element	
6 Bolt pitch circle	14 Hexagon nut	
7 Longer pressure plate	15 Allen head bolt (LS 325 & LS 360-700)	
8 ID Sleeve, casing pipe or core hole	16 Steel washers (LS 325 & LS 360-700)	

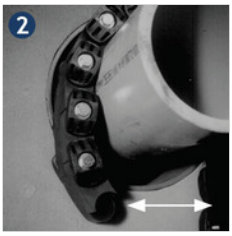
TYPE SELECTION

Article No.	Size	GTIN
2-020-02058	LS 200	4062987000189
2-020-02035	LS 250	4062987008529
2-020-02002	LS 275	4062987000202
2-020-02000	LS 275	4062987000172
2-020-02004	LS 300	4062987000233
2-020-02054	LS 300	4062987000240
2-020-02022	LS 310	4062987000332
2-020-02010	LS 310	4062987000011
2-020-02003	LS 315	4062987000226
2-020-02014	LS 315	4062987000325
2-020-02053	LS 340	4062987000165
2-020-02013	LS 340	4062987000318
2-020-02001	LS 340	4062987000196
2-020-02006	LS 340	4062987000455
2-020-02009	LS 340	4062987000271
2-020-02005	LS 360	4062987000219
2-020-02008	LS 360	4062987000264
2-020-02012	LS 360	4062987000301
2-020-02063	LS 360	4062987000448
2-020-02021	LS 360	4062987000400
2-020-02017	LS 400	4062987000363
2-020-02062	LS 410	4062987000431
2-020-02007	LS 410	4062987000257
2-020-02040	LS 425	4062987000370
2-020-02011	LS 475	4062987000295
2-020-02016	LS 475	4062987000356
2-020-02020	LS 475	4062987000394
2-020-02060	LS 500	4062987000417
2-020-02031	LS 575	4062987000288
2-020-02061	LS 575	4062987000424
2-020-02015	LS 575	4062987000349
2-020-02019	LS575	4062987000387

INSTALLATION



1
Center the pipe, cable or conduit in wall opening or casing. Carrier pipes must be suitable, dimensionally stable and without damage in the sealing area. Make sure the pipe is adequately supported on both ends. The LINK-SEAL® can only perform a sealing function and does not serve as a pipe support or fixed point. All building and pipeline guidelines are to be observed



2
Use only in suitable wall sleeves, installation tolerances according to dimensions in the calculation program. The specified clamping ranges must be observed here. This also applies to the dimensions of the carrier pipes. With suitable sealing surface in the inner wall and suitable rigidity (dimensional stability after installation) of the wall sleeve. Loosen rear pressure plate with nutjust enough so links move freelytowards and away from each other connect both ends of belt.

3
Check to be sure bolt heads are facingthe installer. Extra slack or sag is normal. Do not remove links if extra slack exists. Note: On smaller diameter pipes, linksmay need to be stretched.

4
Slide belt assembly into annular space. For larger size belts, start inserting LINK-SEAL® modular seal assembly at the 6 o’clock position and work both sides up toward the 12 o’clock position in the annular space.

5
Slide belt assembly into annular space. For larger size belts, start inserting LINK-SEAL® modular seal assembly at the 6 o’clock position and work both sides up toward the 12 o’clock position in the annular space. Do not tighten any bolt more than 4 turns at a time. Continue in a clockwise manner. Make 2 or 3 more passes at 3 turns per bolt until links have been uniformly compressed and the max. torque moment (see table) is reached.

6
Repeat tightening after approx. 2 hours. Especially for LINK-SEAL®Type LS 500 up to LS 700 it might be necessary (depending on the installation conditions such as annular space, temperature, etc.) to tighten again for several times.

WHAT MUST BE OBSERVED

The PSI warranty is limited to the replacement of defective material.
The suitability of the product for the specific use must be checked by the user on his own responsibility. use.

WHAT NEEDS TO BE DONE

- Check that the sealing elements, the pipe surface and the inner wall of the core drill or wall sleeve are free of dirt and other contaminants.
- Make sure that the pipe is centered.
- Install the chain and ensure that the pressure plates are evenly aligned.
- install the exact number of segments specified.
- make sure the pipe is properly supported when backfilling.

WHAT THEY MUST NOT DO

- Do not install the chain until the pressure plates are aligned.
- Do not install LINK-SEAL® annular space seals on spiral pipes.
- Do not tighten one bolt before moving on to the next.
- do not use a cordless, impact or drill screwdriver.
- note that the LINK-SEAL® is not a fixed point.

INSTALLATION NOTE

We expressly draw your attention to the fact that the installation must be carried out by an authorized specialist company in accordance with the installation instructions.

RECOMMENDATION

To create a suitable sealing surface, we recommend coating the core holes with PSI KB epoxy resin. This serves to protect the concrete and to smooth out any shrinkage holes/scoring.

TOOLS

Cleaning material/preparation, measuring tool, torque wrench, aids for markings