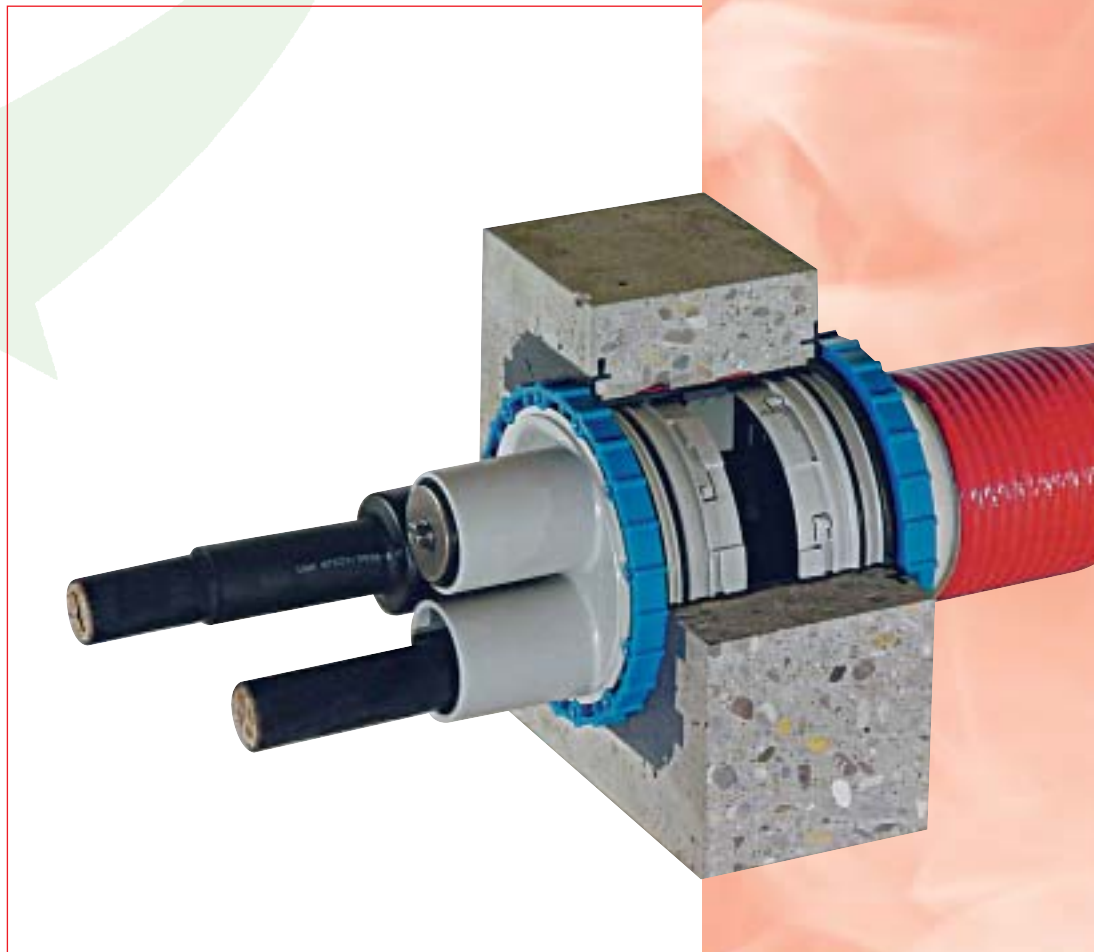




BKD 150

Bayonet Cable Bushing

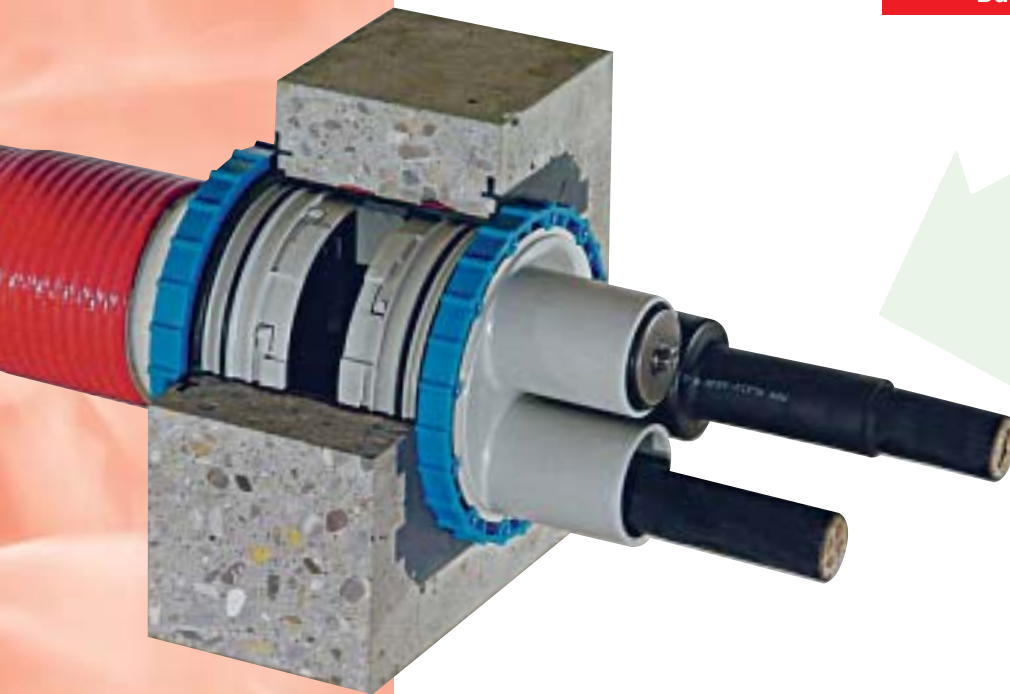


SYSTEM-TECHNIK

Leading in ideas

BKD 150

Bayonet Cable Bushing



Bayonet Cable Bushing BKD 150

System BKD with its bayonet reception consists of a sealing collar which is designed as single or double collar and can be assembled into packages by means of the frames around the collar to be imbedded flush into the concrete of the formwork. The frame is provided with nail holes for fixing with stud nails.

In order to prevent voids the bayonet cable bushing must be completely enclosed by concrete.

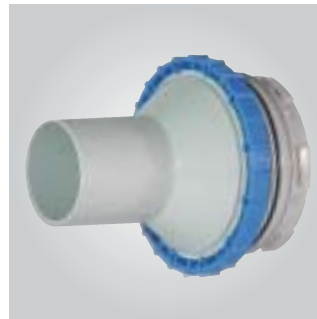
When using individual packages the direction of installation has to be determined with the principal or planner prior to concreting.

BKD 150 sealing collars will be supplied fitting to the wall thickness of the structural works and are inserted flush into the formwork. (L = wall thickness in mm)

BKD 150 is provided with protective foils and sealing caps. Thus the interior of the sealing collar stays clean during installation and is **gas- and presswater tight immediately** after concreting.

BKD 150 system covers have the suitable bayonet connection offering a technology for quick and simple installation which is finished with only 1/12 turn.

- ▶ System BKD 150 with its bayonet catch fulfils highest requirements and offers a technology for quick and simple installation.
- ▶ Bayonet cable bushing BKD 150 is suitable for the application of various sealing techniques. The standard design is supplied with heat shrink-on sleeves. As an option, sleeves are also available in cold shrink-on technique KS.
- ▶ Bayonet cable bushing BKD 150 offers compatibility with other systems and is prepared for numerous special solutions.
- ▶ For special applications and requirements please contact our technical department.



Bayonet Sealing Collars

Bayonet System Covers

Application and Function



Single Sealing Collar
suitable for connection of a system cover or system KSS on one side. Applicable for a wall thickness from 60 mm. Direction of installation has to be determined!

🔗 **order no.: BKD 150-K/L**
(L) = wall thickness in mm



Double Sealing Collar
Suitable for connection of a system cover or system KSS on both sides. Applicable for a wall thickness from 140 mm.

🔗 **order no.: BKD 150-K2/L**
(L) = wall thickness in mm



Single Sealing Collar with pipe connection plug-type sleeve
Suitable for connection of a system cover or system KSS on one side. Other side for direct connection of a smooth-walled cable protection tube with an outside diameter of 110, 125, 140, or 160 mm.

Minimum wall thickness 200 mm.
🔗 **order no.: BKD 150-SMB-110/(L)**
BKD 150-SMB-125/(L)
BKD 150-SMB-140/(L)
BKD 150-SMB-160/(L)

(L) = wall thickness in mm

Also available as single sealing collar with pipe connection glue-in sleeve

🔗 **order no. e.g.: BKD 150-KMB-110/(L)**



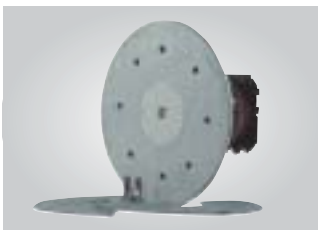
Angular Sealing Collar
suitable for cables laid at an angle of 30°, 45° or 60° from any direction. With auxiliary frame and polystyrene wedge. Single or double sealing collar also available as package.

Minimum wall thickness 250 mm.

🔗 **order no.:**
Angular Single Sealing Collar
BKD 150-S30-K/(L)
BKD 150-S45-K/(L)
BKD 150-S60-K/(L)

🔗 **order no.:**
Angular Double Sealing Collar
BKD 150-S30-K2/(L)
BKD 150-S45-K2/(L)
BKD 150-S60-K2/(L)

(L) = wall thickness in mm



Stainless Steel Flange Sealing Collar
suitable for sealing to DIN 18195 part 9 (integral / slip-on type flange design for black basement lining). On both sides connection of system cover or system KSS possible. Also available as package (flange plate). Flange diameter 500 mm
Minimum wall thickness 160 mm

🔗 **order no.: BKD 150-KF2/(L)**
(L) = wall thickness in mm



Aluminium Flange Sealing Collar AF
suitable for sealing in front of diamond tipped drilled holes in walls or ceilings. Supplied with flange gasket, protective cover and fastening elements. Connection of a system cover or system KSS possible. Diameter of diamond tipped drilled hole max. 150 mm. Flange 235 x 235 mm.

🔗 **order no.: BKD 150-AF 235**
(L) = wall thickness in mm

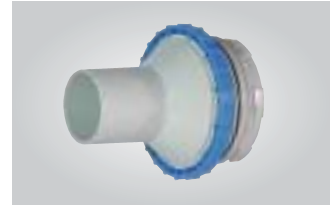
BKD 150 sealing collars are undivided plastic elements which will be supplied fitting to the wall thickness to be imbedded flush into the concrete of the formwork.

Upon supply each sealing collar is provided with a closed cover and is thus gas- and presswater tight immediately after concreting. Permanent sealing towards the concrete is ensured by the novel expansion sealing system.

Single sealing collars can be plugged together next to each other or one on top of the other. These packages create „check holes“ which allow subsequent control of the concrete compaction.

The frame is provided with nail holes for easy fixing of the sealing collar to the formwork. The inner diameter of the sealing collar is 150 mm

Connection technology BKD 150 is characterized by easy installation and the bayonet type joining between sealing collar and system cover.



System cover with 1 connection piece and appropriate shrink-on sleeve.

Design for 1 cable of diameter 34 - 108 mm

🔗 **order no.: BKD 150-D1/110**

design for 1 cable of diameter 26 - 78 mm

🔗 **order no.: BKD 150-D1/80**



System cover with 3 connection pieces and 3 shrink-on sleeves. Suitable for 3 cables of diameter 21 - 56 mm. Several joint boxes AK or sealing plugs VS 60 (as blind cover) are available as accessory.

🔗 **order no.: BKD 150-D3/60**



System cover with 8 connection pieces and 4 shrink-on sleeves. 4 connection pieces are closed upon supply and can be opened when necessary. Suitable for max. 4 cables of diameter 7 - 23 mm and max. 4 cables of diameter 12 - 33 mm.

🔗 **order no.: BKD 150-D8/35/25**

A set of special thermal sleeves for the subsequently opened connection pieces is available as accessory.

🔗 **order no.: BKD 150-TM Set-D8**

We provide replacements for all parts which are impaired in their function due to faults in the material. No replacement for defects that are due to transport or storage or result from faulty processing or installation or the effects thereof. Our specifications are based on the current state of the art. Subject to technical modifications. Due to the amount of possible influences during installation and application our specifications do not release processors and users from checking and testing the material themselves.

Accessory

Application and Function



System Cover with Sleeve
for connection of a cable protection tube with an outside diameter of 80, 110, 125, 140, or 160 mm. Sealing by means of provided shrink-on sleeve.

order no.: **BKD 150-DM 80**
BKD 150-DM 110
BKD 150-DM 125
BKD 150-DM 140
BKD 150-DM 160



System Cover
with 1 thick-walled connection piece and appropriate shrink-on sleeve. Suitable for 1 cable of dia. 60 - 158 mm or for the connection of a cable protection tube of max. 160 mm outside diameter.

order no.: **BKD 150-D1/160**



System Cover with Plug-type Sleeve
for connection of a smooth-walled cable protection tube with an outside diameter of 110, 125, 140, or 160 mm. Sealing by means of sealing lip in the plug-type sleeve.

order no.: **BKD 150-DSM 110**
BKD 150-DSM 125
BKD 150-DSM 140
BKD 150-DSM 160



Instead of using a system cover it is also possible to connect flexible cable protection hose systems. For further information see Systems KSS.

BKD 150 system covers offer various possibilities for sealing cables and cable protection tubes. They are screwed in manually and tightened by means of the installation spanner GSS prior to laying the cables into a BKD 150 sealing collar or a BKD 150 aluminium flange AF 235. Several shrink-on techniques are available for sealing occupied cover connection pieces. (Standard design with heat shrink-on sleeves).

Unused cover connection pieces are sealed with sealing plugs and can be subsequently used as spare ducts.



System Cover
suitable as blind cover for unused sealing collars. **This system cover is included in the scope of supply of each sealing collar.** A square wrench VMS is available for economical installation.

order no.: **BKD 150-D**



Three-finger Joint Box AK
(heat shrink-on technique) for sealing 3 cables in one cover connection piece.

order no.: **AK 35-3F-12/2**
for cover BKD 150-D8/35/25 and cables with an outside dia. of 2 - 12 mm

order no.: **AK 50-3F-22/5**
for cover BKD 150-D8/35/25 and cables with an outside dia. of 5 - 22 mm

order no.: **AK 75-3F-29/8**
for cover BKD 150-D3/60 and cables with an outside dia. of 8 - 29 mm



Four-finger Joint Box AK
(heat shrink-on technique) for sealing 4 cables in one cover connection piece.

order no.: **AK 35-4F-13/2**
for cover BKD 150-D8/35/25 and cables with an outside dia. of 2 - 13 mm

order no.: **AK 50-4F-20/5**
for cover BKD 150-D8/35/25 and cables with an outside dia. of 5 - 20 mm

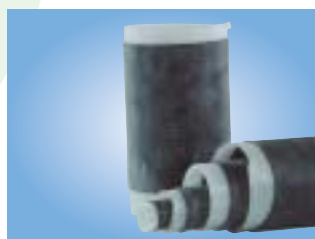
order no.: **AK 75-4F-29/8**
for cover BKD 150-D3/60 and cables with an outside dia. of 8 - 29 mm



Sealing Plugs VS
for sealing unused cover connection pieces. Plugs can be removed for using the connection piece.

Available for connection pieces of dia. 25, 35, 60 mm

order no.: **VS 25 / VS 35 / VS 60**



Cold Shrink-on Technique KS
for quick and simple installation without auxiliaries under all weather conditions. Gas- and watertight up to 2 bars. Absorbs tension and pressure loads.

Available for all system covers.

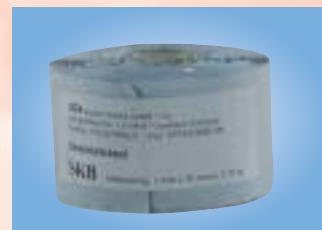


Articulated Face Spanner GSS
with adjustable leg. Suitable for mounting all system covers and KSS systems.

order no.: **GSS**

Square Mounting Wrench VMS
suitable for efficiently mounting and dismantling BKD 150, KD 150 and KD 85 blind covers with 1/2" ratchet spanner.

order no.: **VMS**



Melt-type Adhesive Tape SKB
is a cold welding-type tape with very good adhesive properties. Suitable for all cable sheath materials, for plastics and metals, for sealing and corrosion protection.

Tape thickness: 1 mm
Tape width: 50 mm
Roll length: 3.30 m

order no.: **SKB**



Cable Cleaner KR
for ecologically cleaning cables of all types, removes even tenacious dirt. Inodorous, evaporating without residues.

Density at 20 °C: 0,762
Flash point: >+55 °C
Evaporation number: 60
Characteristic value: 0
Duty to mark: none
Packing drum: 1000 ml
5000 ml
500 ml
spray bottle.

order no.: **KR**



Packages

Application and Function

Variable Packages

Single sealing collars can be plugged together at random next to each other or one on top of the other.

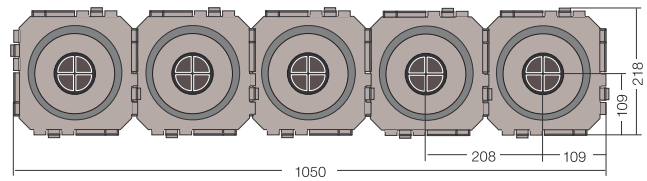
Safety at a Glance

Packages create central check holes which allow subsequent control of the concrete compaction!

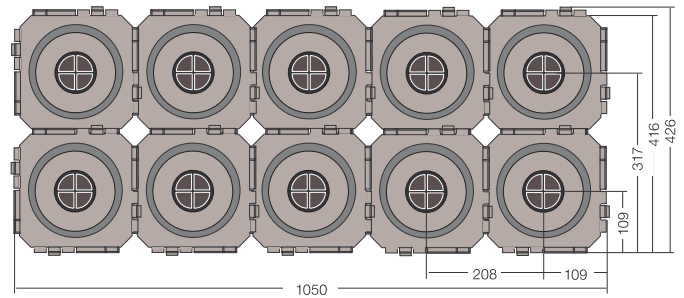
System KD consists of a sealing collar which is designed as single or double collar and can be assembled into packages by means of the frames around the collar to be imbedded flush into the concrete of the formwork.

Variable Packages

BKD 150-1x5-K2/(L)



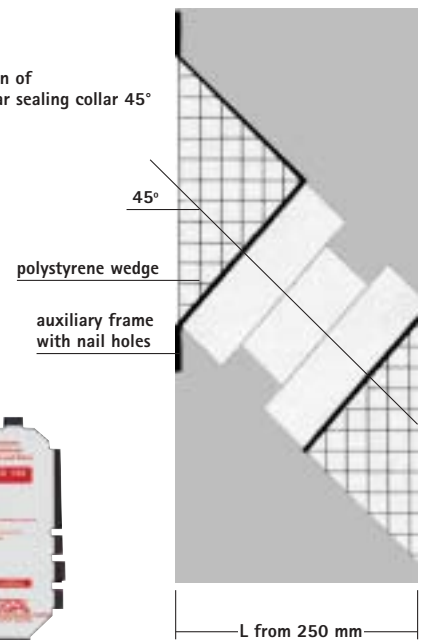
BKD 150-2x5-K2/(L)



Angular Sealing Collar



Section of angular sealing collar 45°



Product Nomenclature

Example:
Single Bayonet Sealing Collar

BKD 150 - K/ (L)
 wall thickness in mm
 single sealing collar
 system designation

Example:
Double Bayonet Sealing Collar

BKD 150 - K2 / (L)
 double sealing collar

Example:
Double Bayonet Sealing Collar as package 2 x 3

BKD 150 - 2 x 3 - K2/ (L)
 wall thickness in mm
 double sealing collar
 3 sealing collars next to each other
 2 sealing collars one on top of the other
 system designation

Example:
Angular Bayonet Sealing Collar 45° as double sealing collar

BKD 150 - S45 - K2/ (L)
 wall thickness in mm
 double sealing collar
 angular sealing collar 45°
 system designation

Test Report Bayonet Cable Bushing BKD 150

For this test the testing arrangement was set similarly to the tests of system KD. Here the installation of the system into concrete was simulated with a test bell.

All test specimens proved successful in the tests for gastightness and presswater tightness.

Due to the closeness of system BKD 150 to system KD 150 only system cover BKD 150-D3/60 was subjected to the helium gastightness test and the presswater tightness test at low temperatures as an example.

In the helium test the specimens were checked for gastightness. In this test, the partial pressure of helium in the atmosphere directly after the experimental set-up is to give conclusions about the leakage rate of the system.

In the test for presswater tightness at low temperatures the specimens were checked for presswater tightness (with a water / antifreeze compound solution) at extremely low temperatures for a period of 24 hours.

The obtained results confirm that system BKD 150 is an excellent sealing system and exceeds the values demanded for practical purposes by far.

Test Results in Detail

The following tightness tests were carried out:

- presswater tightness at low temperatures at a pressure of 5 bars.
- gastightness with helium at a pressure of 5 bars

► Result of Gastightness Test:

Partial pressure (directly after experimental set-up) was 4.8×10^{-6} mbars. This is a very good value as the partial pressure of helium in the atmosphere is ca. 4.8×10^{-6} mbars.

► Result of Presswater Tightness Test:

Liquid did not emerge. A feature was made of the optimum structure of the sealing collar and the very good expansion seal which is applied annularly around the sealing collar. This expansion seal guarantees that the connection between sealing collar and concrete does not break when the concrete dries.



Sealing systems and fire protection for cables and pipes

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