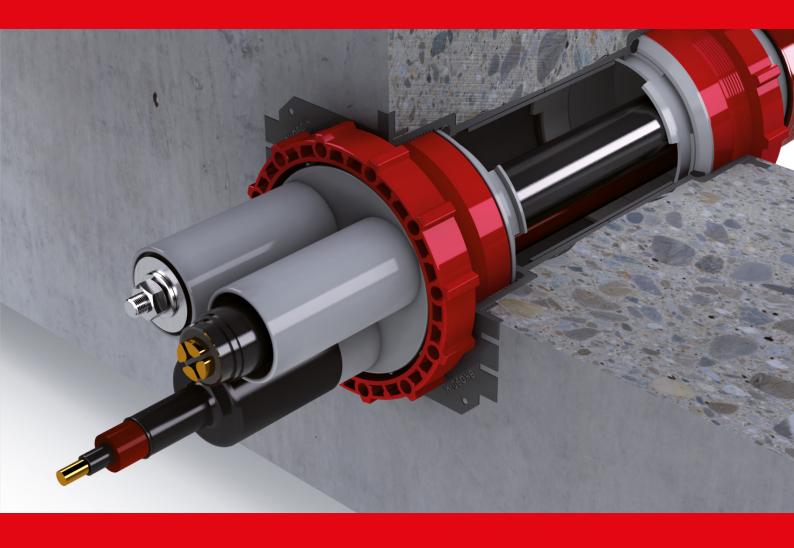


BKD 90Bayonet cable entry



Sealing cables in no time

The BKD 90 system from UGA

▶ Quick installation thanks to bayonet lock

The bayonet mount of the BKD 90 system enables the quick connection of system covers or cable protection pipes to the wall insert. Sealing cables doesn't get any easier. Thermal shrink sleeves TM are supplied with the system covers as standard. Optionally, cold shrink sleeves KS are also available.







► The benefits of the BKD 90 system

- · Fast, simple assembly
- · Immediately gas and water pressure-tight
- · Permanent, reliable sealing
- · Suitable for hot and cold shrink technology
- Lots of variants and connection options
- · Variable assembly in batteries

► Processing instructions

The wall insert is fastened with pin nails and concreted into the formwork. Nail holes are provided in the wall insert for fastening. In order to prevent blowholes, the wall insert must be completely encased in concrete. In the case of single wall inserts, the direction of installation must be determined before concreting. The wall inserts are suitable for waterproof concrete stress class 1 and 2.

▶ One system for all cases

The BKD 90 system always offers the right variant for the changing requirements on construction sites. Single, double, angular and wall inserts are available as well as various system covers, cable protection systems KSS and connection inserts.

The UGA collar technology makes it possible to connect all types of pipes and hoses to the BKD 90 system.







BKD 90

Bayonet wall inserts

► Immediately tight and protected

We manufacture our wall inserts in length to match the wall thickness. Each wall insert comes with a gas and water pressure-tight cover.

This keeps the interior clean during installation, and the wall insert is immediately gas and water pressure-tight after encasing in concrete.

▶ Permanent connection to concrete

The wall insert is equipped with a sealing system. It guarantees a permanent connection to the concrete. This ensures excellent water pressure resistance.



Single wall insert

Suitable for one-sided connection of a system cover or KSS system; Can be used from 60 mm wall thickness; The direction of installation must be specified.

Product name:

BKD90-K/(L)
(L) = Wall thickness in mm



Double wall insert

Suitable for connecting a system cover or KSS system on both sides; Can be used from 100 mm wall thickness

Product name:

BKD90-K2/(L)
(L) = Wall thickness in mm



Single wall insert with pipe connection sleeve

Suitable for one-sided connection of a system cover or KSS system; Opposite side to the direct connection of a smooth-walled cable protection pipe with 110 mm outside diameter; Minimum wall thickness 150 mm

Product name: BKD150-K-SM110/(L)

Also available as single wall insert with pipe connection sleeve in collar technology

Product name: BKD90-K-MA-89/(L)

(L) = Wall thickness in mm Clamping ranges: 89 = 75 mm - 89 mm



Angular wall insert

Suitable for cables fitted at angles of 30°, 45° or 60°;

With auxiliary frame and styrofoam wedge; Single or double wall insert also available assembled in a battery; Minimum wall thickness 200 mm

Angular single wall insert:

Product name:

BKD90-K-S30/(L) BKD90-K-S45/(L)

BKD90-K-S60/(L)

Angular double wall insert:

Product name: BKD90-K2-S30/(L)

BKD90-K2-S45/(L)

BKD90-K2-S45/(L)

(L) = Wall thickness in mm



Stainless steel wall insert

Suitable for sealing in accordance with DIN 18533 (fixed/loose flange design for black trough); Double-sided connection of a system cover or KSS system possible; Also available in a battery (flange plate);
Minimum wall thickness 100 mm

Product name:

BKD90-K2-F+L-W2/(L)/V2A

Pressurised water Flange diameter fixed flange 435 mm

Product name:

BKD90-K2-F+L-W1/(L)/V2A

Non-pressurised water Flange diameter fixed flange 255 mm

(L) = Wall thickness in mm



Assembly flange BKD 90-AF 150

Suitable for sealing before a core drilling in a wall or ceiling. Supplied with flange seal, sealing ring, protective cover and fastening elements, optionally in galvanized steel or A4 stainless steel; Connection of a system cover or KSS system possible; Core drilling diameter maximum 85 mm; flange size 150 x 150 mm

Product name:

BKD90-AF-150/BE-VZ

with steel fastening elements, galvanized

Product name:

BKD90-AF-150/BE-A4

with fastening elements made from A4 stainless steel

Product index for BKD 90 (examples)

Bayonet single wall insert

BKD90-K/(L) Wall thickness in mm Single wall insert System name

Bayonet double wall insert assembled in a battery 2 x 3

BKD90-K2/2x3/(L)

Wall thickness in mm

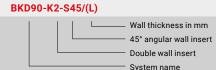
3 wall inserts next to each other

2 wall inserts on top of each other

Double wall insert

System name

45° angular wall insert as a double wall insert



BKD 90 bayonet system cover and other connection options

One connection, lots of possibilities

A system cover with connection piece or sleeve as well as a KSS cable protection system can be connected to the BKD 90 wall insert.

► Cold or hot shrink technology

In the standard version, we supply system covers with thermal shrink sleeves TM.
Optionally, cold shrink sleeves KS are available.

► Handling

With the aid of an installation wrench, system covers and KSS cable protection systems are inserted before laying the cables. Unoccupied system cover connection pieces can be sealed with sealing plugs VS and are thus available for retrofitting.



System cover with one connection piece and one thermal shrink sleeve

Version for a cable with a diameter of 26 – 73 mm;

Product name: BKD90-D-1/75-TM



System cover with three connection pieces

and three thermal shrink sleeves TM
Suitable for three cables with diameter
7 – 28 mm

Various AK spreader caps or VS30 sealing plugs are available as accessories.

Product name: BKD90-D-3/30(3/3)-TM

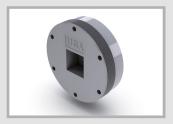


System cover with five connection nieces

and five thermal shrink sleeves TM Suitable for five cables with diameter 7 – 18 mm:

Various AK spreader caps or VS20 sealing plugs are available as accessories.

Product name: BKD90-D-5/20(5/5)-TM



System cover closed

Blind cover for unoccupied wall inserts This system cover is included in the scope of delivery of each wall insert.

Product name: **BKD90-D**



System cover with collar

For connection of a cable protection pipe with outside diameter of 75 or 112 mm; Intermediate sizes on request

Product name: BKD90-D-MA65-75 BKD90-D-MA100-112



Cable protection system KSS

UGA cable protection hoses are available in four diameters with a wide range of connection elements. To connect to the BKD 90 wall insert, use the KSS80 cable protection system. For more information, see the KSS systems section.



Collar technology

Suitable for flexible connection of pipes or cable protection systems to a wall insert; Compatible with all wiring protection systems;

Main area of application: Connection of KSS systems

Product name:

BKD90-D-MA(D1)-(D2) (D1) = Lower scope of application

(D2) = Upper scope of application

Accessories

Assembling in batteries



3-finger AK spreader caps

Hot shrink technology for sealing three cables in one system cover connection piece

Product name: AK35/3F/2-12

for system cover BKD 90-D3/30

and BKD 90-D5/20; Suitable for cables with outside diameter of 2 – 11 mm



4-finger AK spreader caps

Hot shrink technology for sealing four cables in one system cover connection piece

Product name:

AK35/4F/2-13 for system cover BKD 90-D3/30

and BKD 90-D5/20; Suitable for cables with outside diameter of 2 - 12 mm



Sealing plug VS

For sealing unoccupied system cover connection pieces; Can be quickly removed for retrofitting or changing cables; Versions available for connection pieces with diameters 20, 30 and 75 mm

Product name: VS20 / VS30 / VS75



Cold-shrink sleeve KS

For easy and fast assembly without aids, in all weather conditions; 2 bar gas and watertight; Available for all system covers



Articulated spanner GSS

For the assembly of all system covers and KSS systems; With adjustable leg Product name:

GSS



Melt-type adhesive tape SKB

Cold welding tape with very good adhesive properties for sealing and for corrosion protection; Ideal for wrapping around cables and pipes to enlarge the diameter for shrinking; Suitable for all plastics and metals; Thickness: 1 mm, width: 50 mm, roll length: 3.00 m Product name:

SKB



Cable cleaner KR

KR/1-litre

For environmentally friendly cleaning of cables of all kinds, even in the case of stubborn contamination.

Odourless and residue-free evaporating. 500 ml spray bottle, 1000 ml bottle

Density at 20°C: 0.764 g/cm³
Flash point: > 61°C

Evaporation number: 60
Identification: Xn

Product name:

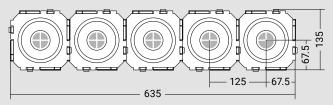
► Variable assembling in batteries

Individual wall inserts can be placed side by side and one above the other.

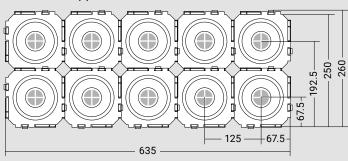
▶ Safety at a glance

Assembling in batteries creates central inspection windows that allow you to subsequently check concrete compaction.

BKD90-K2/1x5/(L)

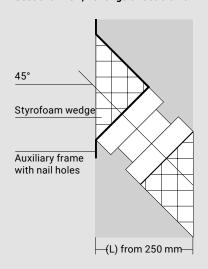


BKD90-K2/2x5/(L)



Angular wall insert

Sectional view, 45° angular double wall insert:



Tested tightness

The BKD 90 system was subjected to the following tests by the Fraunhofer Gesellschaft Bremen (IFAM):

- · Gas tightness with air at an overpressure of 1 bar
- · Gas tightness with helium at an overpressure of 5 bar
- Water pressure tightness at an overpressure of 5 bar
- Cold water pressure tightness at an overpressure of 5 bar and -27°C
- · Destruction test

The wall insert was tested in conjunction with the system cover closed as well as with system covers D-1/75 and D-3/30. The cold water pressure tightness was tested with the system cover D-3/30.



▶ Results

The BKD 90 system achieved excellent test results in terms of gas and water pressure resistance, which far exceeded the required values in practice.

· Gas tightness

The partial pressure immediately after the test setup was 5.4×10^{-6} mbar. This is an excellent value as the partial pressure of helium in the air is approx. 4.8×10^{-6} mbar.

Water pressure tightness

There was no leakage of liquid.

Destruction test

BKD90-D (system cover closed) 5.00 bar BKD90-D-1/75 20.76 bar BKD90-D-3/30 21.15 bar

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We shall supply replacements for all parts that impair functionality due to material defects. No replacements will be provided for defects that are due to transport or storage or are caused by incorrect processing or installation or consequences of such. Our information is based on current technical knowledge. Subject to technical changes. Because of the abundance of possible influences during assembly and use, our information does not exempt processors and users from their own trials and tests.