

Delivery programme

Edition June 2015





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For all disputes relating to this guarantee the sole place of jurisdiction will be Oyten, in the Federal Republic of Germany.

The original text can be found in German on the Internet at www.doyma.de. We cannot accept responsibility for errors made in translation.

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Buildings

Pipes and cables from and into buildings could be compared to the arteries and veins in our body. Building owners insisting on the installation of DOYMA sealing systems for pipes and cables because it can save themselves a lot of problems; lack of attention to the points of entry of pipes and cables into the building can have serious results: damp cellars, equipment damaged by water ingress and high repair costs. However, it is gradually becoming part of good practice to include sealing systems in standard specifications for buildings.

Selection of buildings where DOYMA products have been used:

- **Ministry of Defence**, London, Great Britain
- **Sunflower Tower**, Peking, China
- **Breitling Watches**, Switzerland

Power plants

Electricity is now everywhere. Reliability of supply is the top priority of power station operators. It is therefore no surprise that DOYMA is chosen to provide the sealing system for the entry points of pipes and cables. Our pipe and cable entry point sealing systems for supply and waste pipes are supplied to customers worldwide.

Selection of power plants where DOYMA products have been used:

- **Power Station Bern**, Switzerland
- **Jebel Ali Power Plant**, Dubai
- **Oslo Energi**, Norway
- **Gas Separating Plant**, Shlobin, Belarus

Airports

Airports are an important link in the worldwide transport system for people and goods. Airport buildings are available 24 hours a day to facilitate the necessary services associated with air travel – a fact we have come to take for granted. But fault-free operation is only possible when the entry points of all pipes and cables into the buildings are reliably and durably sealed to prevent moisture ingress.

DOYMA sealing systems have been installed in numerous international airports and thus contribute to securing a smooth flow of passenger and goods transport.

Selection of airports where DOYMA products have been used:

- **Heathrow**, London
- **Schiphol**, Amsterdam
- **Zurich**, Switzerland



Plus X Award

Outstanding sealing systems



Gasket insert Curaflex Nova® Multi

Product description



Application field

Sealing off of penetrations, use in on-site pipe sleeve or water-impermeable concrete core bore (white tank).
High variability in range NB 100 and NB 200

Product benefits

ITL system for optimum contact pressure, modular gasket insert (DDE) resulting in high variability, reversible adjustability to media line, simple installation due to precise dimensions

Seal of approval ¹

Innovation, functionality and high quality
"Best product of the year 2014" as sealing insert



Gasket insert Curaflex Nova® Senso

Product description



Application field

Sealing off of penetrations, use in on-site pipe sleeve or water-impermeable concrete core bore (white tank), ideal for plastic pre-insulated pipes in range NB 150 and NB 200

Product benefits

ITL system for optimum contact pressure, STS for caring seals: ideal for flexible, pre-insulated plastic pipes and flexible cable protection pipes

Seal of approval ¹

Innovation, functionality and high quality
"Best product of the year 2014" as sealing insert



¹ Seal of approval, awarded by specialist jury of Plus X Award 2014

Basic requirements for permanently sealed building entries

1 Introduction

Basic information on building waterproofing

In general, supply to and disposal from a building is implemented using service lines laid underground. The building shell needs to be penetrated in order to introduce these lines into the building.

In turn, the building shell is provided with waterproofing to protect the people, objects and of course the building itself against external influences, and especially penetrating water. This means that the building entry also penetrates the waterproofing.

It is possible to provide a gastight and watertight transition between the building waterproofing and the service line using an appropriate sealing system, also known as an entry system. This reinstates the building waterproofing. The building waterproofing, and therefore also the entry system, is logically located on the outside of the building, which means that access to the entry system is often extremely restricted or even no longer possible. This means that a large proportion of all entry systems have to function without maintenance.

Depending on the building usage the lifespan of the building, and therefore also of the entry system, can be up to 50 years. This makes the high quality requirements on entry systems obvious.

2 Load cases in structures contacting the ground

Definition, determination, influencing factors

The type and method of building waterproofing is dependent on the load case acting on the building.

The designer decides which load case is acting by calculating the design water levels (highest groundwater level to be expected +30 cm safety factor). Normally, a minimum period of between 20 and 30 years is assumed in this case. On top of this, the water management influencing factors should also be taken into account. Irrespective of these, changes (height increases) to the moisture load can still occur, for example caused by:

- extreme weather conditions with high precipitation levels,
- increase in groundwater levels through reconditioning work to sewage lines,
- surface sealing,
- soil substance (e.g. mining areas) or
- water management influencing factors (e.g. shutting down of pumps).

DIN 18195 describes the following load cases which are described below in more detail:

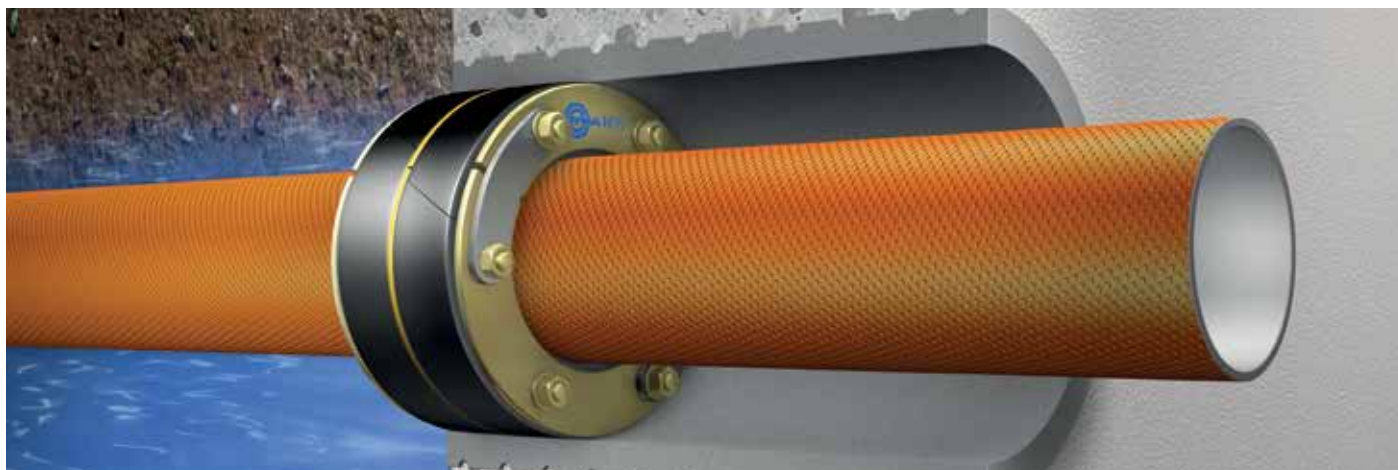


Fig. 1: Illustration of a building wall with service lines

2.1 Soil moisture and non-standing seepage water

Soil moisture is understood to be capillary-bound water which is also capable of moving against the forces of gravity due to capillary forces present in the soil (suction water, retained water, capillary water). However, non-standing seepage water from rainfall is also included in the case of vertical wall elements. A requirement for the above is a strongly permeable soil (sand, gravel, with a water permeability coefficient of $k > 10^{-4}$ m/s or a permanently-functioning drainage system in acc. w. DIN 4095.

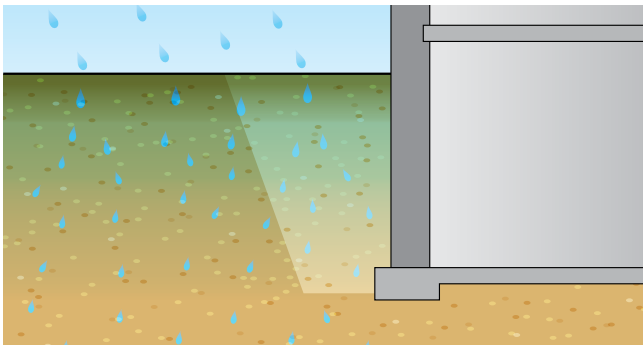


Fig. 2: Soil moisture

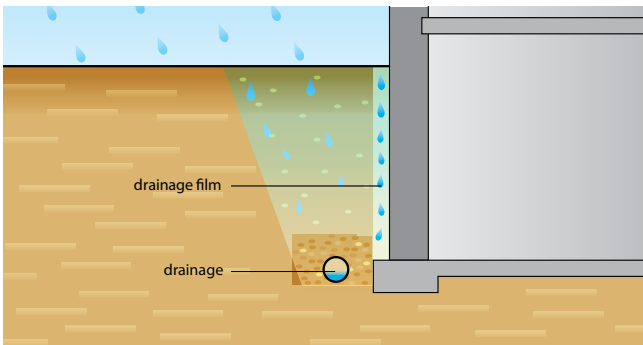


Fig. 3: Non-standing seepage water

2.2 Non-pressing water

Non-pressing water is understood to be water in drop and liquid form which does not exert, or exerts very little, hydrostatic pressure onto the waterproofing (precipitation, seepage or process water). This applies to the waterproofing of horizontal and inclined surfaces in addition to wet areas (e.g. baths with floor drainage) with irrigation heads of up to 100 mm (under greened roofs). This means that it is not used for external walls in contact with soil.

2.3 Temporarily standing seepage water

Standing seepage water is understood to be water which exerts a temporary hydrostatic pressure.

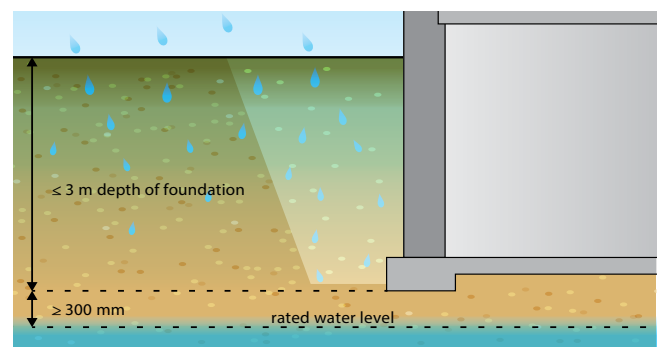


Fig. 4: Temporarily standing seepage water

2.4 Pressing water

Pressing water is understood to be water which exerts a permanent hydrostatic pressure.

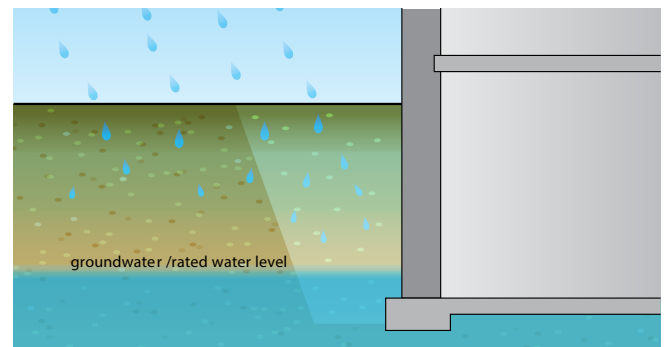


Fig. 5: Pressing water

3 Types of structural waterproofing

3.1 White tank

Water-impermeable structures in concrete (water-impermeable concrete)

The construction of entries in water-impermeable structures made of concrete is regulated by the **DAfStb Guideline - Water-impermeable Structures in Concrete** issued by the German Committee for Reinforced Concrete. In general linguistic use these building waterproofing systems are known as a "white tank". The guideline specifies the following with regard to entries:

"All structural joints and entries must basically be designed and implemented as waterproof with suitably adapted systems depending on the loading class."

The **WI Guideline** differentiates between **two loading classes**:

- **Class 1**: pressing and non-pressing water in addition to temporarily standing seepage water
- **Class 2**: soil moisture and non-standing seepage water

There is little information about the implementation of entries, and also few definitions of requirements.

The wall thicknesses are specified depending on the expected water loading (immersion depth) and from the concrete quality (crack sizes and crack frequency).

In this type of building waterproofing it should be noted that this

No.	Structural element	Load Class	1	2	3
			Implementation type		
			In-situ concrete	Element walls	Precast elements
1	walls	1 ¹	240	240	200
2		2 ²	200	240 ³⁾	100
3	base plate	1 ¹	250		200
4		2 ²	150		100

¹ Loading Class 1: Pressing and non-pressing water in addition to temporary standing seepage water

² Loading Class 2: soil moisture and non-standing seepage water

³ Reduction down to 200 mm is possible under the implementation of special concrete and implementation measures

Table: Recommended minimum structural component thicknesses (information in mm) [7]

type of building consists of not a waterproof but rather a water-impermeable wall structure. Water in the form of pressing water can penetrate up to 25 mm into the concrete over its full area.

On top of this, the water can penetrate maximum 70 mm into the existing capillaries. Water can defuse up to 80 mm into or out of the wall on the wall weather side depending on the moisture conditions.

A core area which prevents water transport from the water side to the air side (water impermeability) can only be formed if a wall thickness of ≥ 200 mm (depending on concrete quality, grain size, reinforcement cover etc.) is chosen. For this reason, the entry system must be provided with a sealing area width appropriate to the load case.

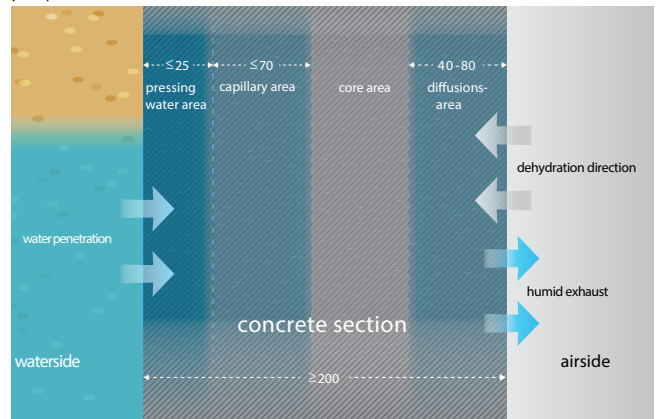


Fig. 6: Working model for moisture conditions in a concrete component cross-section with one-sided application of pressing water (concrete C30/37 (B35 water-impermeable) w/c ≤ 0.55) based on Beddoe / Springenschmid

Furthermore, it should be installed on the side of the wall facing the water so that the water cannot penetrate the wall deeper and therefore so that the core area is lost.

When constructing the apertures for entries using core drillings, the reinforcement is cut. This can result in cracks. These cracks have to be repaired before installing the entry systems, and any reinforcing steel uncovered in this manner must be protected against corrosion. This means that the use of pipe sleeves is explicitly recommended. Normally, pipe sleeves are concreted in when constructing the structural element.

Entries, and especially the apertures for their use, may never be located on construction joints. A distance of ≥ 300 mm is recommended.

3.1.1 Element walls

Combination walls

Element walls represent a **combination of precast concrete elements and in-situ concrete**. In this case, two precast segments are separated by lattice beams, and the void between them is concreted in with in-situ concrete. The requirements and the measures to be taken are regulated in the **WI Guideline**.

Such entry systems should be positioned in the sealing layer. This is generally the in-situ concrete. If surface sealing systems or special versions of precast concrete segments are used, the systems can also be located in the outer surface. In this case, clarification with the planner or constructor of the wall is necessary in advance. In cases of doubt, special entry systems which cover all the sealing layers can be used.

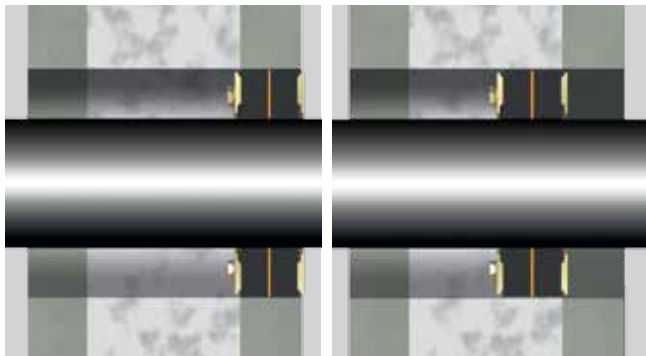


Fig. 7a: Sealing layer precast element

Fig. 7b: Sealing layer in-situ concrete

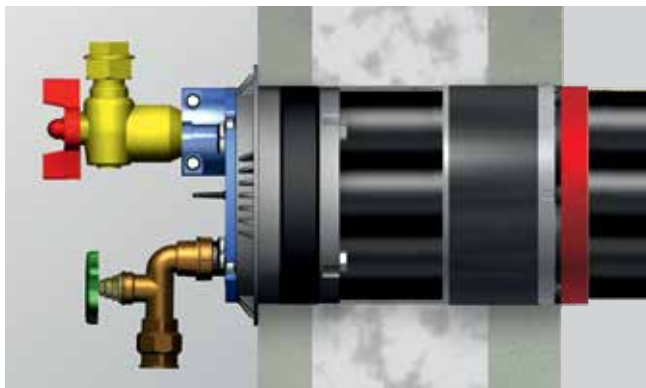


Fig. 7c: Covering sealing system

3.2 Black tank

Waterproofing of non-waterproof structures

Penetration of the waterproofing in structural segments in contact with soil for cable and pipe entries is mostly regulated by **DIN 18195**. DIN 18195's scope is related to the waterproofing of non-waterproof structures or structural segments. The arrangement and implementation of entries is especially regulated by DIN 18195-9. Building waterproofing of this type is generally known as a **"black tank"**.

Entries must be planned and implemented so that they cannot be run round or under, if necessary with the help of installation components. The constructive and waterproofing measures necessary for this purpose must be adapted to the expected water loading [3].

The entry must be located so that the structural waterproofing can be professionally closed off. Components requiring maintenance must be located and further layers must be designed so that simple accessibility is guaranteed [6]. The edges of the entry system must be free of burrs.

External edges of the connecting elements of glued and welded flanges in addition to collar constructions should normally be at least 150 mm from structural element edges and structural element fillets, and at least 300 mm from structural joints. In cases of loose and fixed flange structures, the distance should be at least 300 mm from structural element edges and structural element fillets, and at least 500 mm from structural joints. If these distances cannot be adhered to, special structures must be planned.

Entries may not lose their function if the structural component or adjacent soil layers carry out expected movements, if necessary special measures must be taken in such cases (proper compaction, footings made of lean concrete etc.).

3.2.2 Entry implementation

The following entry systems are to be used depending on the load case:

3.2.2.1 With the use of tanking membranes

a) Soil moisture and non-standing seepage water

With this load case, the waterproofing is to be connected to the entry with the aid of a bonding flange, a welding flange or a collar with a clamp. The flange width for bonding and welding flange structures must be between 80 mm and 120 mm depending on the waterproofing material.

b) Non-pressing water

With this load case, the waterproofing is to be connected to the entry with the aid of a bonding flange, a welding flange, a collar with a clamp or a loose and fixed flange structure.

The loose and fixed flange structure must be made of steel and have the following dimensions:

- loose flange width min. 60 mm
- fixed flange width min. 70 mm
- material thickness min. 6 mm
- tensioning bolt or tensioning screws min. M12 with a spacing of between 75 and 150 mm.

The torques with which the construction is to be tightened are specified in DIN 18195 Part 9 depending on the type of tanking membranes used. In cases of doubt these must be requested from the manufacturer of the tanking membranes.

When bitumen tanking membranes is used, a steel ring for prevention of bitumen outflow is to be provided. In the area around flanges, the tanking membranes may not have any faults, kinks or other uneven features. DIN 18195 also requires packings constructed of the same material or material-compatible elastomers on both sides in the case of single-layer, loosely-laid waterproofing.

Practice has shown that thin and/or hard tanking membranes cannot be sealed off properly without packings.



Fig. 8: Tanking membrane with packing (Curaflex® C/2/SD/5)

c) Temporarily standing seepage water and pressing water

The waterproofing is to be connected to the entry with the aid of a loose and fixed flange structure for this load case.

The loose and fixed flange structure must be made of steel and have the following dimensions:

- loose flange width min. 150 mm
- fixed flange width min. 160 mm
- material thickness min. 10 mm
- tightening bolts or screws min. M20 with a spacing of between 75 and 150 mm

The requirements or specifications with regard to torques, limitations against outflow of bitumen, condition of tanking membranes in the area around the flange and packings apply analog in this case.

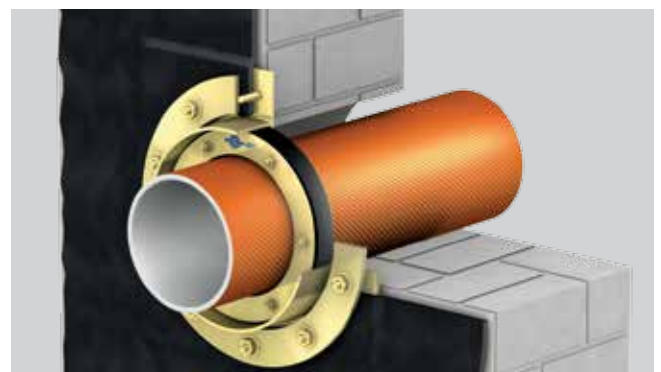


Fig. 9: Example of fixed/loose flange structure

3.2.2.2 With the use of plastic-modified bituminous thick-coating

If waterproofing in the form of trowelable plastic-modified bitumen waterproof coatings has been applied, the entry can be implemented as follows depending on the load case:

a) Soil moisture and non-standing seepage water

For this load case, the plastic-modified bituminous thick-coating (PMB) can be trowelled on to the entry in the form of a fillet. This implementation variation is only permissible if the service line or pipe sleeve is not expected to be subjected to any axial or radial movements over the entire service life. It may be necessary to roughen the surface in order to achieve sufficient bonding to the service line. This must be agreed in advance with the service line operator or constructor. Since this option can seldom be guaranteed in practice, implementation using a bonding flange is recommended.

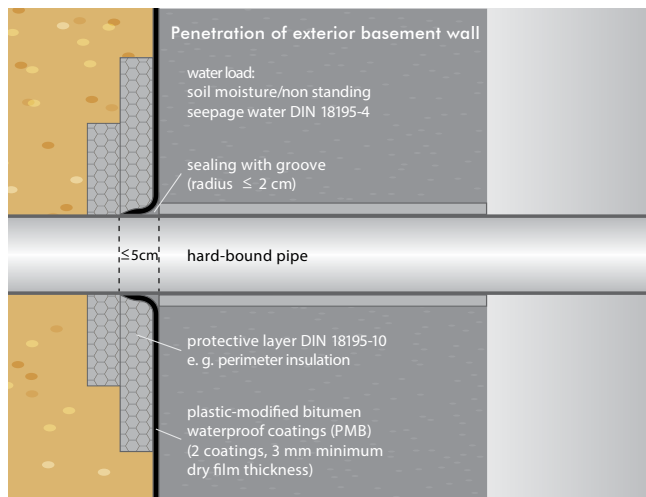


Fig. 10: Trowelling of fillet type [11]

b) Non-pressing water

In this load case, the plastic-modified bituminous thick-coating (PMB) must be applied to a bonding flange using reinforcing inserts, or connected to a loose and fixed flange structure.

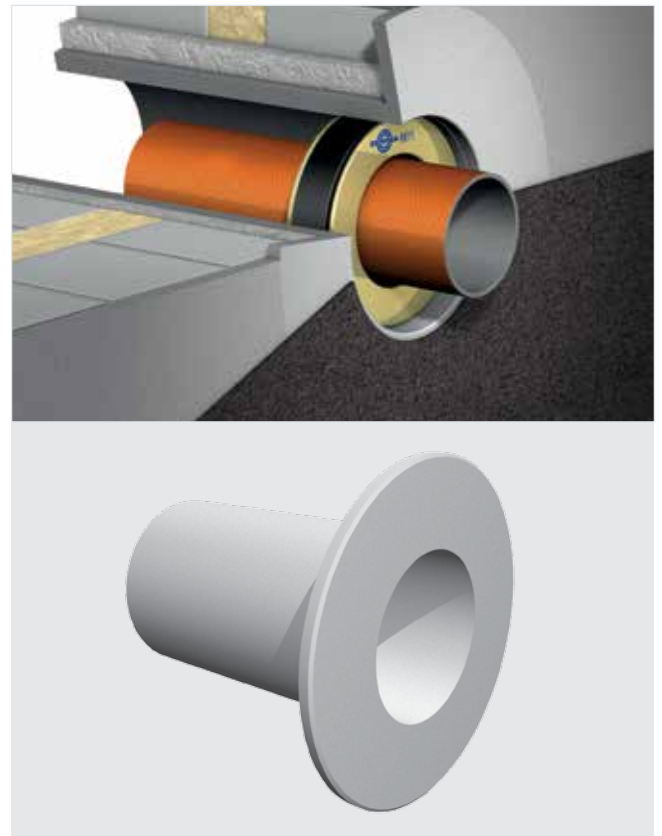


Fig. 11: Pipe sleeve system with bonding flange (Curaflex® 3001)

c) Temporary standing seepage water

A prefabricated installation component made of a bitumen-compatible plastic tanking membranes must be clamped in a loose and fixed flange structure for this load case. In the connection area around the plastic-modified bituminous thick-coating (PMB) this waterproofing sheet must be provided with a fleece or fabric backing in which the plastic-modified bituminous thick-coating (PMB) can be bedded.

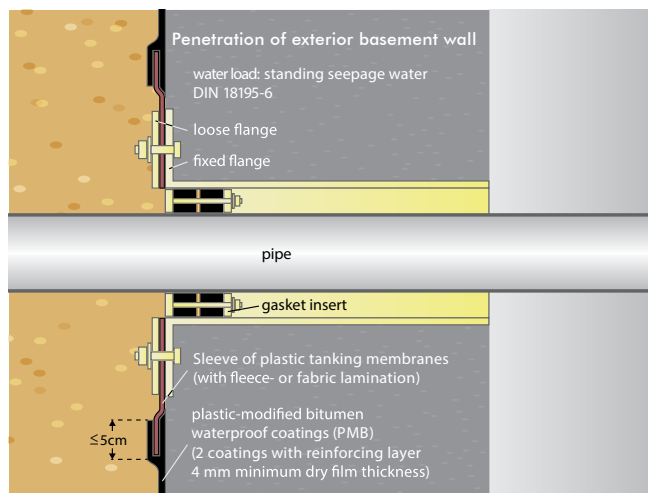


Fig. 12: Connection of PMB to loose and fixed flange structure [11]

Such installation components made of tanking membranes are difficult to obtain in normal trade. Other solutions, such as the DOYMA Curaflex® 1776, have proven themselves in this situation.

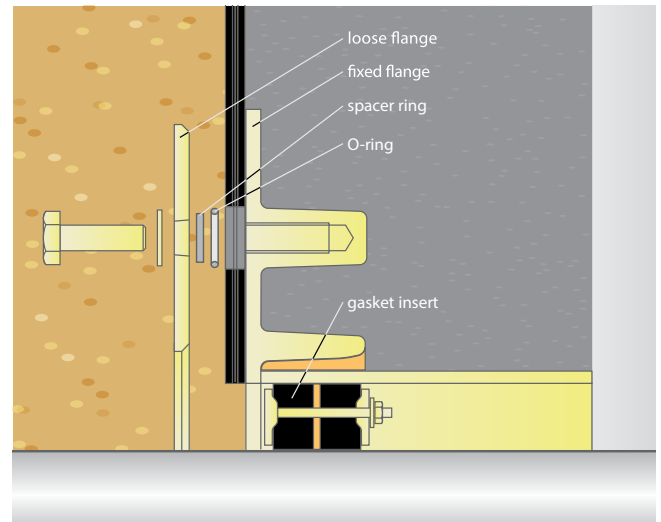


Fig. 13: DOYMA Curaflex® 1776

d) Pressing water

According to DIN 18195, this load case is not permitted for plastic-modified bituminous thick-coating (PMB). However, this procedure is recommended by the manufacturers of plastic-modified bituminous thick-coating (PMB) and the "Verband der Deutschen Bauchemie", and should be carried out using a loose and fixed flange structure.

4 Support and service line movements

4.1 Support Basic fixing methods

Annular gap seals in the form of compression seals can not absorb radial movements in normal cases. In this case, they may not be used as bearings.

The service lines must be appropriately supported. A range of fitting systems are used to absorb such support forces.

These fitting systems can be fixed directly in front of and behind the wall entry. If fitting to the wall is not possible for static or waterproofing reasons, a support made of lean concrete can be constructed in front of the wall, for example.

If axial movements are expected in the service lines, special fitting systems with appropriate slide elements and guide supports can be used.

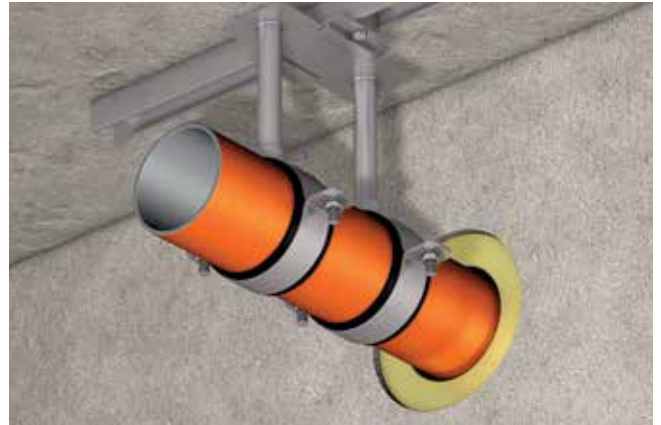


Fig. 14 a: Support with suspension mechanics and sliding element

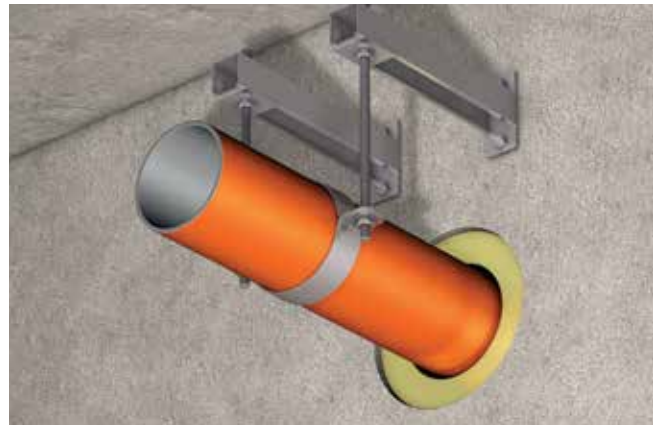


Fig. 14 b: Support with suspension mechanics

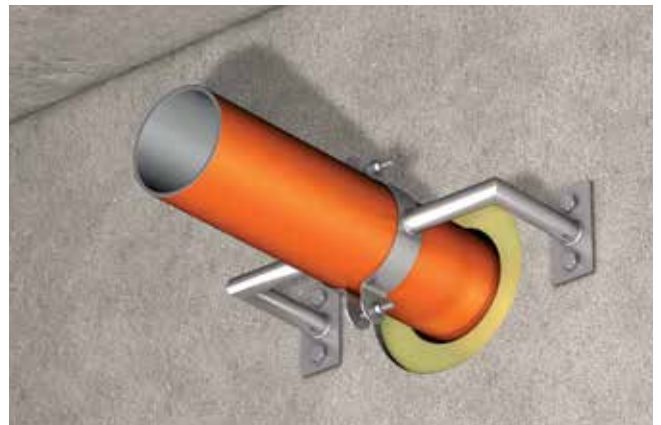


Fig. 14 c: Support with side mechanics

4.2 Service line movements

Possible service line movements in sealing insert

Axial displacement

Movement in the direction of the service line axis/longitudinal axis.

Gasket inserts can sometimes absorb these movements.

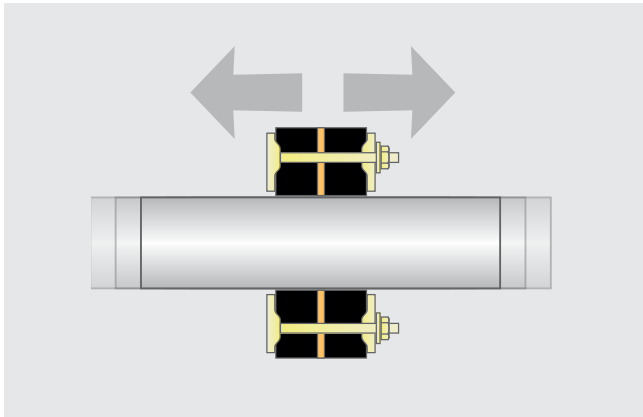


Fig. 15 a: Axial displacement

Lateral movement

Sideways displacement of service line (radial movement) The sealing insert is not capable of absorbing sideways displacement. For this reason this type of movement must be ruled out

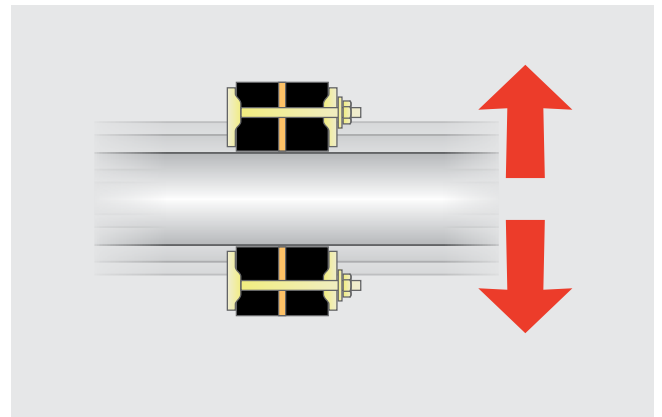


Fig. 15 c: Lateral movement

Angular deflection

Inclination of pipe axis: The pivot point must be in the centre of the sealing insert. Gasket inserts can sometimes absorb these movements. It is imperative that clarification is carried out with professional experts for each individual case.

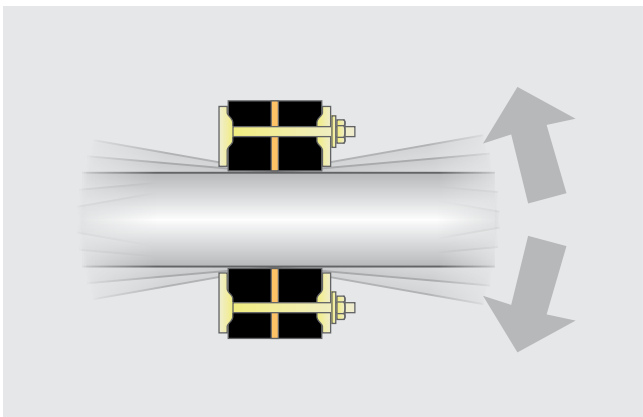


Fig. 15 b: Angling

Settlement

Building settlement can lead to the displacement or twisting of pipes. Displacement or twisting cannot be absorbed by the sealing insert. For this reason, displacement must be ruled out structurally .

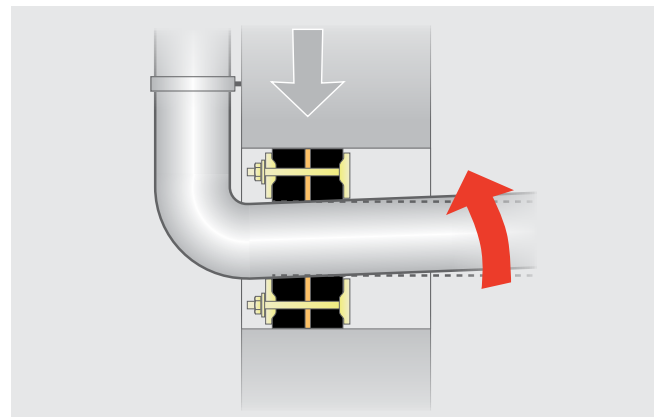


Fig. 15 d: Settlement

References

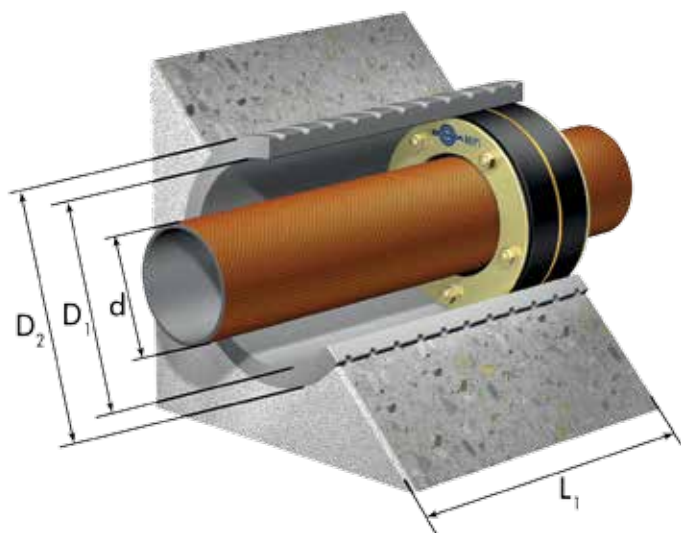
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- [2] Normenausschuss Bauwesen im DIN Deutsches Institut für Normung e.V.: DIN 18195 Bauwerksabdichtungen Teil 2: Stoffe. Beuth Verlag GmbH, Berlin April 2009
- [3] Normenausschuss Bauwesen im DIN Deutsches Institut für Normung e.V.: DIN 18195 Bauwerksabdichtungen Teil 4: Abdichtung gegen Bodenfeuchte und nichtstauendes Sickerwasser an Bodenplatten und Wänden, Bemessung und Ausführung. Beuth Verlag GmbH, Berlin December 2011
- [4] Normenausschuss Bauwesen im DIN Deutsches Institut für Normung e.V.: DIN 18195 Bauwerksabdichtungen Teil 5: Abdichtung gegen nichtdrückendes Wasser auf Deckenflächen und in Nassräumen, Bemessung und Ausführung. Beuth Verlag GmbH, Berlin December 2011
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- [10] Thomas Boge and Rolf Kampen: Zement-Merkblatt Hochbau H10 – Wasserundurchlässige Betonbauwerke. Verein Deutscher Zementwerke e.V.: Düsseldorf 2010
- [11] Deutsche Bauchemie e.V.: Richtlinie für die Planung und Ausführung von Abdichtungen mit kunststoffmodifizierten Bitumendickbeschichtungen (KMB) – erdgerührte Bauteile (KMB-Richtlinie), 3rd edition. Frotsher, Darmstadt May 2010
- [12] Michael Bonk: Lufsky Bauwerksabdichtung, 7th edition. Vieweg+Teubner Verlag, Wiesbaden 2010

Pipe-/cable diameter d and diameter core bore/pipe sleeve D_1

pipe / cable diameter d [mm]*	diameter core bore / inner diameter pipe sleeve D_1 [DN in mm]**	tolerance core bore/pipe sleeve \emptyset - min D_1 \emptyset - max D_1		max. external diameter pipe sleeve D_2 [mm]
1 - 24	50	49	53	-
1 - 40	80	78,5	83	140
41 - 57	100	98,5	104	160
58 - 77	125	123,5	128	156
78 - 104	150	148,5	153	187
105 - 145	200	199	204	238
146 - 190	250	247	253	289
191 - 233	300	297	304	347
234 - 288	350	347	354	395
289 - 339	400	397	404	461
340 - 380	450	447	454	511
381 - 430	500	497	503	570
431 - 530	600	597	603	673
531 - 620	700	697	703	787
621 - 720	800	797	803	897
721 - 820	900	897	903	1007
821 - 920	1000	997	1003	1117
921 - 1020	1100	1096	1102	1230
1021 - 1110	1200	1196	1202	1340
1111 - 1210	1300	1296	1302	1452
1211 - 1310	1400	1396	1402	1564

* In case of order the exact outer diameter of pipe/cable is required because there are different gasket inserts to seal the pipes.

** Gasket inserts for NB 50 only available for core bores or pipe sleeves already installed.



With your order we need the following information:

- pipe/cable outer diameter d
- core bore inner diameter D_1 or NB of pipe sleeve

Please ask us, Phone 0049 4207/9166 550

Pipe diameter d, NB gasket insert and wrench width

Curaflex® gasket inserts A - F

pipe-Ø d from - to	NB	bolt-Ø	wrench width
1 - 12	50	M 5	8
13 - 18			
19 - 24			
1 - 13	80	M 6	10
14 - 21			
22 - 28			
29 - 35			
36 - 40	100	M 6	10
41 - 45			
46 - 52			
53 - 57	125	M 6	10
58 - 67			
68 - 77			
78 - 85	150	M 6	10
86 - 94			
95 - 104			
105 - 115	200	M 8	13
116 - 124			
125 - 135		M 6	10
136 - 145			
146 - 156	250	M 8	13
157 - 165			
166 - 172			
173 - 179			
180 - 186			
187 - 190			
191 - 197	300	M 8	13
198 - 207			
208 - 215			
216 - 224			
225 - 233			

pipe-Ø d from - to	NB	bolt-Ø	wrench width			
234 - 240	350	M 8	13			
241 - 249						
250 - 259						
260 - 269						
270 - 278						
279 - 288						
289 - 294	400*	M 12	19			
295 - 300						
301 - 306						
307 - 311		M 8	13			
312 - 317						
318 - 322						
323 - 327	450*	M 8	13			
328 - 333						
334 - 339						
340 - 344				500*	M 12	19
345 - 350						
351 - 356						
357 - 362	M 8	13				
363 - 368						
369 - 370						
371 - 375	500*	M 12	19			
376 - 380						
381 - 386						
387 - 392						
393 - 397						
398 - 403						
404 - 409	500*	M 8	13			
410 - 415						
416 - 420						
421 - 425		M 12	19			
426 - 430						

Gasket inserts C/S, A/S

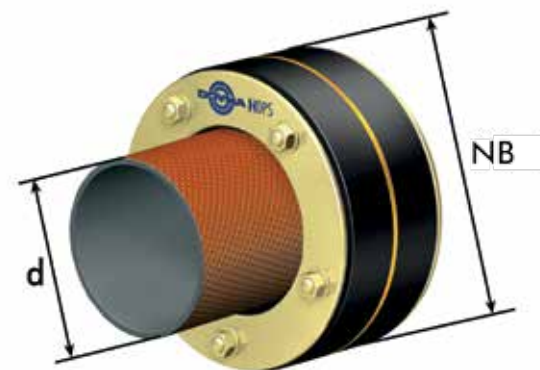
pipe-Ø d from - to	NB	bolt-Ø	wrench width
9 - 14	100	M 6	10
15 - 21			
22 - 28			
29 - 35			
36 - 40			
58 - 65			
40 - 48	125	M 6	10
49 - 57			
58 - 67	130	M 6	10
68 - 77			
57 - 62	150	M 6	10
63 - 70			
71 - 77			
78 - 85	160	M 6	10
86 - 94			
95 - 104			
78 - 86	200	M 8	13
87 - 95			
96 - 104			
105 - 114			
115 - 121	250	M 8	13
122 - 129			
130 - 136			
137 - 145			
158 - 168	300	M 8	13
169 - 179			
180 - 190			

* Specifications do not apply for Curaflex® C 40 and A 40.

Max. torque values

bolt-Ø	wrench width	Max. torque values Curaflex® A - F
M 5	8	3 Nm
M 6	10	8 Nm
M 8	13	12 Nm
M 10	17	25 Nm
M 12	19	30 Nm

bolt-Ø	wrench width	Max. torque values Curaflex® A 40/C 40
M 5	8	2 Nm
M 6	10	5 Nm
M 8	13	7 Nm
M 10	17	15 Nm
M 12	19	18 Nm



Product guide Curaflex® gasket inserts

sealing against **pressing water**

product	without tanking membranes/ bituminous coating	with tanking membranes/ bituminous coating	page
Curaflex Nova® Multi	●		24
Curaflex Nova® Senso	●		25
Curaflex Nova® Uno	●		26
Curaflex® C	●		28
Curaflex® Quick In C	●		29
Curaflex® C 40	●		30
Curaflex® C/M	●		31
Curaflex® C/M/T	●		32
Curaflex® C/O	●		33
Curaflex® MS/C	●		34
Curaflex® C/S	●		35
Curaflex® F	●		36
Curaflex® D	●		36
Curaflex® C/2/SD/6		●	37
Curaflex® F/2/SD/6		●	37

pressing / non-pressing water

Pressing water – water which exerts hydrostatic pressure (even if limited in time, e.g. accumulating seepage water) on the structural element with the feedthrough. Groundwater and floodwater are typical water types. **Non-pressing water** – water which does not exert any hydrostatic pressure on the structural element with the feedthrough. Capillary water is a typical water type.

without tanking membranes / bituminous coating (white tank), with tanking membranes / bituminous coating (black tank)

Non-waterproof structures must be protected with a sealing coat against penetrating water. This sealing coat can be in the form of sheeting, trowelable or liquid-applicable masses and therefore results in a skin-type seal. Since bitumen plays a major role in terms of materials, these forms of seals are often known as a "black tank". Waterproof or non-water-permeable structures do not require additional skin sealing. This type of structure includes those using impermeable reinforced concrete. This type of structural waterproofing is also known as a "white tank".

sealing against **non-pressing water**

product	without tanking membranes/ bituminous coating	with tanking membranes/ bituminous coating	page
Curaflex Nova® Multi	●		24
Curaflex Nova® Senso	●		25
Curaflex Nova® Uno	●		26
Curaflex® A	●		38
Curaflex® Quick In A	●		39
Curaflex® A 40	●		40
Curaflex® A/M	●		41
Curaflex® A/M/T	●		42
Curaflex® A/0	●		43
Curaflex® MS/A	●		44
Curaflex® A/S	●		45
Curaflex® B	●		46
Curaflex® C/2/SD/5		●	47
Curaflex® F/2/SD/5		●	47

protection against **superfine particles**

product	installation on the clean room side	installation on the outside	page
Curaflex® 59.100	●		48
Curaflex® 59.200		●	49

protection against **dust and splash**

product	protection against dust and splash through open annuli or bores	page
Curaflex® RRV	●	50

Installation of Curaflex® gasket inserts

Installation example gasket insert Curaflex® C/2/SD/6

Please note:

- The wall must be clean, flat and dry in the installation vicinity.
- There may be no grooves, cracks and breakouts on the wall surface in the installation vicinity.
- Masonry must always be fitted with a pipe sleeve.
- The seals and pipe services must be clean and free of damage.
- Curaflex® gasket inserts are maintenance-free. Re-tightening the bolts is not necessary if installed correctly.
- Does the gasket insert fit? Compare service line and pipe sleeve/core drilling diameter with the information on the gasket insert.
- The nut side of the gasket insert should be facing the dry side of the wall.
- Gasket inserts are not fixed points or supports, but are exclusively intended for elastic sealing of service lines.

- Slight axial movements of the service lines are permissible.
- We recommend sealing the drillhole walls with Curaflex® Aquagard (primer 1710/1711 and special paint 1715/1716).

Note:

DOYMA products are continuously being further developed, technical changes will take place without previous notification.

Extensive installation instructions are provided with the product. On top of this, they are available on the Internet at www.doyma.de



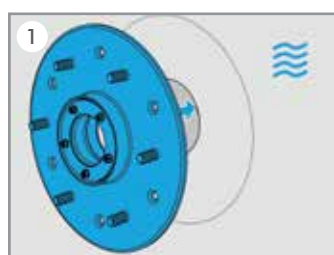
Curaflex® C/2/SD/6 gasket insert installed in core bore.

bolt Ø	wrench width	Maximum torque
M 5	8	3 Nm
M 6	10	8 Nm
M 8	13	12 Nm
M 10	17	25 Nm
M 12	19	30 Nm

Maximum torque

Installation example of Curaflex® C/2/SD/6 gasket insert (see p. S. 37)

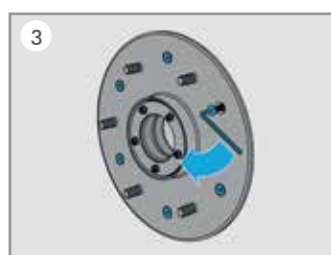
Curaflex® C/2/SD/6 is a gasket insert with one fixed and one loose flange. The system seals off pipes and cables against pressing water, and is suitable for buildings with sealing sheets or bituminous coating



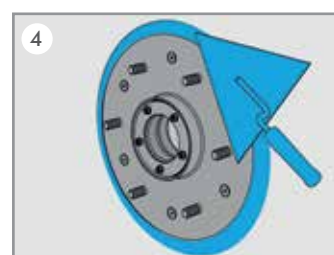
1 Position the gasket insert in the cut-out.



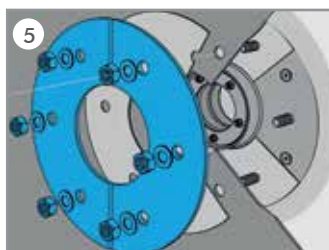
2 Mark the rawplug holes, drill holes and insert the rawplugs.



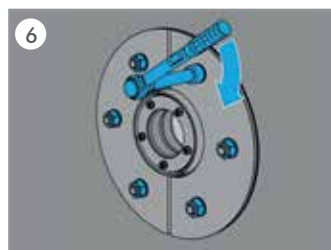
3 Tighten the countersunk screws.



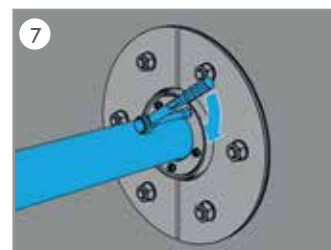
4 Compensation of transition between fixed flange and wall using mortar.



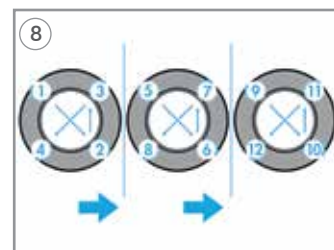
5 If necessary, fix the sealing sheet with edgings and loose flange halves.



6 Tension the loose flange with the torque wrench. Observe torques in accordance with DIN 18195.



7 Install the service line and tension the gasket insert with the torque wrench (note Fig. 8).



8 Tighten the bolts diametrically opposing. Note maximum torque.

Curaflex Nova® Multi

against pressing water or non-pressing water

- sealing system for penetrations
- to install in **preinstalled pipe sleeve** or **core bore in waterproof concrete** (white tank)
- **high variability**

Gasket inserts



Product benefits

- with ITL system for optimal contact pressure – installation without special tool
- with DDE, modular gasket insert, thereby high variability
- reversible adjustability to the media line
- simple installation due to precise dimensions, large sealing ranges
- permanently sealed without re-tensioning (maintenance-free)
- blind plug integrated, subsequent configuration possible and easy
- high sealing capability in terms of the gasket insert due to **DPS** and **DOYMA-Grip**

25 Years Guarantee

Technical details

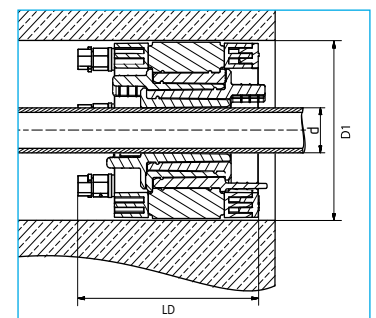
- gas-tight
- accepts angular deviations of service duct up to 8°
- accepts axial movements
- 45 mm seal width
- NB 100 sealing from 20 – 63 mm
- NB 200 sealing from 108 – 160 mm

The gasket insert consists of:

- blue frame rings made out of high-performance plastic, elastomer and seal rings, 45 mm wide, made out of EPDM (**DOYMA-Grip**) with **DPS**
- **DDE (DOYMA Diameter Extension)** modules in black and orange
- **ITL (Integrated Torque Limiter)** nuts
- screws made of stainless steel

Accessories from page 88

Curaflex Nova® Multi NB 100		
pipe external diameter from - to	colour of the modules	NB pipe sleeve/ core bore [mm]
blind	orange	100 (99 - 104)
20 - 25	black	
28 - 35	orange	
40 - 45	black	
46 - 52	orange	
57 - 63	black	
Curaflex Nova® Multi NB 200		
blind	orange	200 (199 - 203)
108 - 112	black	
113 - 118	orange	
124 - 128	black	
131 - 135	orange	
139 - 144	black	
156 - 160	black	
L_D (max. overall length) [mm]: 105		



Curaflex Nova® Senso

against pressing water or non-pressing water

- sealing system for penetrations
- to install in **preinstalled pipe sleeve** or **core bore in waterproof concrete** (white tank)
- suitable **for flexible pipes**



Product benefits

- with ITL system for optimal contact pressure – installation without special tool
- with STS for caring sealing, therefore ideal for flexible pre-insulated plastic pipes and flexible cable protection pipes
- simple installation due to precise dimensions
- permanently sealed without re-tensioning (maintenance-free)
- high sealing capability in terms of the gasket insert due to **DPS** and **DOYMA-Grip**

25
Years
Guarantee

Technical details

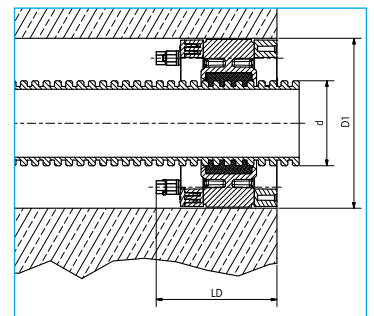
- gas-tight
- accepts angular deviations of service duct up to 8°
- 45 mm seal width
- NB 150 for pipes with ext. dia. 75, 90 mm
- NB 200 for pipes with ext. dia 110, 125, 140, 160 mm

The gasket insert consists of:

- blue frame rings made out of high-performance plastic, elastomer and seal rings, 45 mm wide, made out of EPDM (**DOYMA-Grip**) with **DPS**
- **DDE (DOYMA Diameter Extension)** modules in black and orange
- **ITL (Integrated Torque Limiter)** nuts
- **STS (Soft Tight System)**: for caring sealing
- screws made of stainless steel

Accessories from page 88

pipe external diameter from - to	NB pipe sleeve/ core bore [mm]
74 - 76	150 (149 - 153)
89 - 91	
109 - 111	
109 - 111	200 (199 - 203)
124 - 126	
139 - 141	
159 - 161	
L₀ (max. overall length) [mm]: 105	

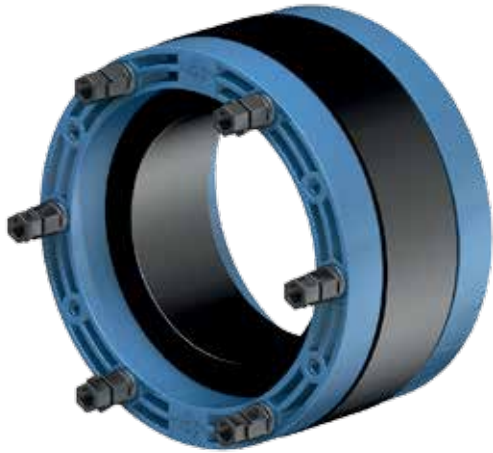


Curaflex Nova® Uno

against pressing water or non-pressing water

- sealing system for penetrations
- to install in **preinstalled pipe sleeve** or **core bore in waterproof concrete** (white tank)

Gasket inserts



Product benefits

- with ITL system for optimal contact pressure – installation without special tool
- simple installation due to precise dimensions, large sealing ranges
- permanently sealed without re-tensioning (maintenance-free)
- high sealing capability for Curaflex® gasket inserts due to DPS and DOYMA-Grip

25 Years Guarantee

Technical details

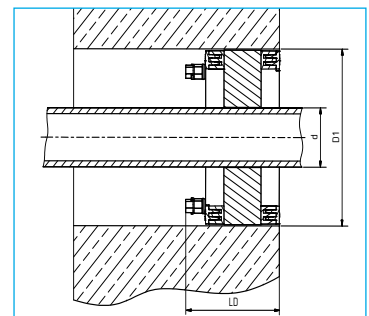
- gas-tight
- accepts angular deviations of service duct up to 8°
- accepts axial movements
- 40 mm seal width

The gasket insert consists of:

- blue frame rings made out of high-performance plastic, elastomer and seal rings, 45 mm wide, made out of EPDM (DOYMA-Grip) with DPS
- ITL (Integrated Torque Limiter) nuts
- screws made of stainless steel

Accessories from page 88

pipe external diameter from - to	NB pipe sleeve/ core bore [mm]
25 - 29	100 (99 - 104 mm)
30 - 35	
38 - 45	
46 - 52	
56 - 63	
63 - 68	150 (149 - 153 mm)
73 - 78	
87 - 92	
98 - 104	
105 - 112	200 (199 - 203 mm)
108 - 112	
113 - 118	
124 - 128	
131 - 135	
139 - 144	
154 - 160	
L_p (max. overall length) [mm]: 100	



We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

DOYMA products are characterised by high complexity

DOYMA – high competence in engineering and technical support. We provide the right solution for any kind of requirement – special, custom-made products and services are highly appreciated by our customers all over the world.

Especially unusual jobs, such as the determination of appropriate dimensions or the installation of fixed and loose flange systems may require the intervention of a DOYMA specialist. Our highly qualified staff will assist you with advice and assistance, which includes the organisation of on-site consulting or help with installing products.

The close collaboration between our distributors, installers and us as the manufacturer has already proven itself for many years as a plus for the customer.

Ask us – we are always at your service!

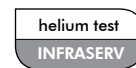
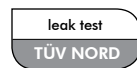


- sealing system for penetrations
- to install in **preinstalled pipe sleeve** or **core bore in waterproof concrete** (white tank)



Product benefits

- simple installation due to precise dimensions, large sealing ranges
- permanently sealed without re-tensioning (maintenance-free)
- higher sealing performance of the gasket insert due to **DPS*** and **DOYMA-Grip**
- system component, without steps or divisions, with water-tight welded bolts



Technical details

- gas-tight
- accepts angular deviations of service duct up to 8°
- accepts axial movements
- double sealing

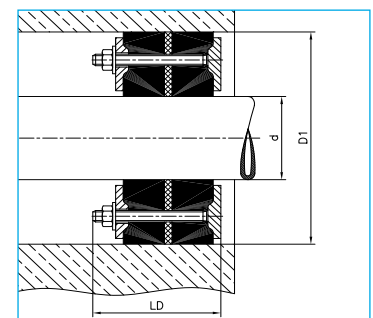
The gasket insert consists of:

- frame rings: asymmetrically profiled steel rings (DPS*), electro-galvanised, yellow passivated and sealant coated; optionally made of stainless steel grade 304 (1.4301) or grade 316 (1.4571/1.4404)
- elastomer: 2 x 27 mm EPDM seal rings (**DOYMA-Grip**), optionally EPDM-POD (for potable water), NBR (fuel/oil-resistant) or silicon (resistant to high temperatures) or FPM (chemical resistant)
- 3 mm EPDM thick orange-coloured centre ring

* DPS up to NB 350

Accessories from page 88

pipe external diameter from - to	NB pipe sleeve/ core bore [mm]
1 - 24	50 (49 - 53)
1 - 40	80 (78,5 - 83)
41 - 57	100 (98,5 - 104)
58 - 77	125 (123,5 - 128)
78 - 104	150 (148,5 - 153)
105 - 145	200 (199 - 204)
146 - 190	250 (247 - 253)
191 - 233	300 (297 - 304)
234 - 288	350 (347 - 354)
289 - 339	400 (397 - 404)
340 - 380	450 (447 - 454)
381 - 430	500 (497 - 503)
431 - 530	600 (597 - 603)
531 - 620	700 (697 - 703)
L₀ (max. overall length) [mm]: 95	
Other sizes, materials and customised versions on request!	



Curaflex® Quick In C

against pressing water

- sealing system for penetrations
- to install in **preinstalled pipe sleeve** or **core bore in waterproof concrete** (white tank)
- hinged version for **retrofit installation**



Product benefits

- simple installation due to precise dimensions, large sealing ranges
- permanently sealed without re-tensioning (maintenance-free)
- higher sealing performance of the gasket insert due to **DPS*** and **DOYMA-Grip**
- watertight welded bolts
- with quick-closure (up to NB 500)
- to be retrospectively installed around the existing line

25
Years
Guarantee

Technical details

- gas-tight
- accepts angular deviations of service duct up to 8°
- accepts axial movements
- double sealing
- can be hinged**

The gasket insert consists of:

- split frame rings: asymmetrically profiled steel rings (DPS*), electro-galvanised, yellow passivated and sealant coated; optionally made of stainless steel grade 304 (1.4301) or grade 316 (1.4571/1.4404)
- elastomer: 2 x 27 mm EPDM seal rings (**DOYMA-Grip**), optionally EPDM-POD (for potable water), NBR (fuel/oil-resistant) or silicon (resistant to high temperatures) or FPM (chemical resistant)
- 3 mm EPDM thick orange-coloured centre ring

* DPS up to NB 350

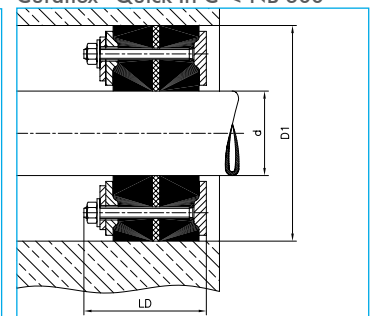
** starting with NB 600 in split version with additional steel ring for stabilisation

Accessories from page 88

pipe external diameter from - to	NB pipe sleeve/ core bore [m]
1 - 24	50 (49 - 53)
1 - 40	80 (78,5 - 83)
41 - 57	100 (98,5 - 104)
58 - 77	125 (123,5 - 128)
78 - 104	150 (148,5 - 153)
105 - 145	200 (199 - 204)
146 - 190	250 (247 - 253)
191 - 233	300 (297 - 304)
234 - 288	350 (347 - 354)
289 - 339	400 (397 - 404)
340 - 380	450 (447 - 454)
381 - 430	500 (497 - 503)
L_D (max. overall length) [mm]: 95	
Other sizes, materials and customised versions on request!	



Curaflex® Quick In C < NB 600



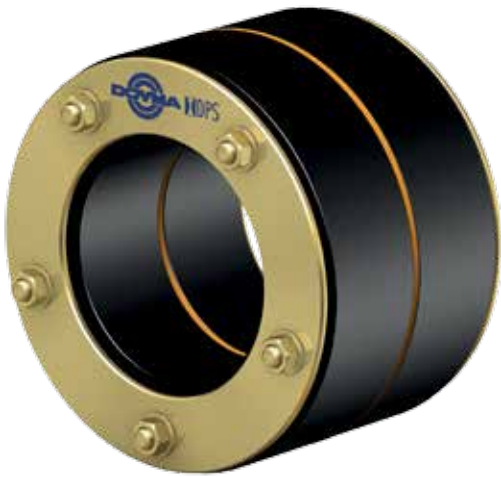
Curaflex® Quick In C NB > 600:
Split version with additional steel
ring for stabilisation.

Curaflex® C 40

against pressing water

- sealing system for penetrations
- to install in **preinstalled pipe sleeve** or **core bore in waterproof concrete** (white tank)
- extra-wide EPDM-rubber suitable for **pre-insulated pipes**

Gasket inserts



Product benefits

- extra wide and soft EPDM rubber seals particularly gently seal the media tube
- ideal for most plastic jacket tubes (district heat)
- simple installation due to precise dimensions, large sealing ranges
- permanently leakproof without retensioning (maintenance-free)
- high sealing capability in terms of the gasket insert due to **DPS*** and **DOYMA-Grip**
- system component, without steps or divisions, with water-tight welded bolts



Technical details

- gas-tight
- accepts angular deviations of service duct up to 8°
- accepts axial movements
- double sealing

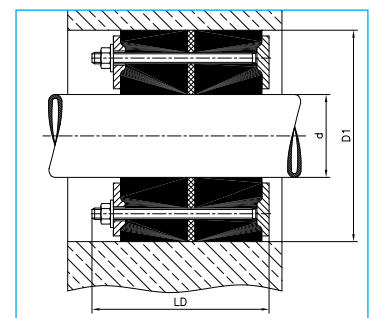
The gasket insert consists of:

- frame rings: asymmetrically profiled steel rings (DPS*), electro-galvanised, yellow passivated and sealant coated; optionally made of stainless steel grade 304 (1.4301) or grade 316 (1.4571/1.4404)
- elastomer: 2 x 40 mm EPDM extra soft elastomeric seal rings
- 3 mm EPDM thick orange-coloured centre ring

* DPS up to NB 350

Accessories from page 88

pipe external diameter from - to	NB pipe sleeve/ core bore [m]
58 - 77	125 (123,5 - 128)
78 - 104	150 (148,5 - 153)
105 - 145	200 (199 - 204)
146 - 190	250 (247 - 253)
191 - 233	300 (297 - 304)
234 - 288	350 (347 - 354)
289 - 339	400 (397 - 404)
340 - 380	450 (447 - 454)
381 - 430	500 (497 - 503)
L_p (max. overall length) [mm]: 110	
Other sizes, materials and customised versions on request!	



We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

- sealing system for penetrations
- to install in **preinstalled pipe sleeve** or **core bore in waterproof concrete** (white tank)
- for **several multi-lines**



Product benefits

- simple installation due to precise dimensions, large sealing ranges
- permanently sealed without re-tensioning (maintenance-free)
- higher sealing performance of the gasket insert due to **DPS** and **DOYMA-Grip**
- system component, without steps or divisions, with water-tight welded bolts

25
Years
Guarantee

Technical details

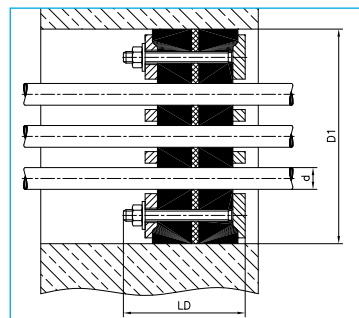
- gas-tight
- accepts angular deviations of service duct up to 8°
- accepts axial movements
- double sealing

The gasket insert consists of:

- frame rings: asymmetrically profiled steel rings (DPS), electro-galvanised, yellow passivated and sealant coated; optionally made of stainless steel grade 304 (1.4301) or grade 316 (1.4571/1.4404)
- elastomer 2 x 27 mm EPDM seal rings (**DOYMA-Grip**), optionally EPDM-POD (for potable water), NBR (fuel/oil-resistant) or silicon (resistant to high temperatures) or FPM (chemical resistant)
- 3 mm EPDM thick orange-coloured centre ring

* DPS up to NB 350

Accessories from page 88



pipe external diameter from - to	no. of pipes/cables	NB pipe sleeve/ core bore [mm]
1 - 14	1 - 2	50 (49 - 53)
1 - 26	1 - 2	80 (78,5 - 83)
1 - 23	1 - 3	
1 - 24	1 - 4	
1 - 16	1 - 7	
1 x 4 - 32 1 x 1 - 14	1 - 2	
4 x 4 - 28 1 x 1 - 12	1 - 5	100 (98,5 - 104)
1 - 21	1 - 7	
4 - 37	1 - 2	
4 - 33	1 - 3	
1 x 4 - 46 1 x 1 - 16	1 - 2	
4 - 36	1 - 4	125 (123,5 - 128)
2 x 4 - 34 2 x 4 - 42	1 - 4	
4 - 28	1 - 7	
4 - 41	1 - 3	
2 x 23 - 51 2 x 8 - 36	1 - 4	150 (148,5 - 153)
2 x 30 - 58 2 x 13 - 41	1 - 4	
4 x 22 - 50 1 x 4 - 16	1 - 5	
1 - 20	1 - 13	
6 x 8 - 36 2 x 4 - 16	1 - 8	
43 - 71	1 - 3	200 (199 - 204)
5 x 23 - 51 1 x 4 - 31	1 - 6	
2 x 28 - 56 2 x 54 - 82	1 - 4	
40 - 69	1 - 4	
4 - 36	1 - 10	
4 - 26	1 - 15	
8 x 13 - 41 4 x 4 - 30	1 - 12	250 (247 - 253)
4 - 26	1 - 20	
12 - 40	1 - 8	
10 x 16 - 44 5 x 4 - 36	1 - 15	
L_b (max. overall length) [mm] 90		

We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

- sealing system for penetrations
- to install in **preinstalled pipe sleeve** or **core bore in waterproof concrete** (white tank)
- for **several multi-lines**
- split version for **retrofit installation**

DOYMA
GRIP



Product benefits

- simple installation due to precise dimensions, large sealing ranges
- permanently leakproof without retensioning (maintenance-free)
- high sealing capability in terms of the gasket insert due to **DOYMA-Grip**
- watertight welded bolts
- to be subsequently installed around the existing line

25
Years
Guarantee

Technical details

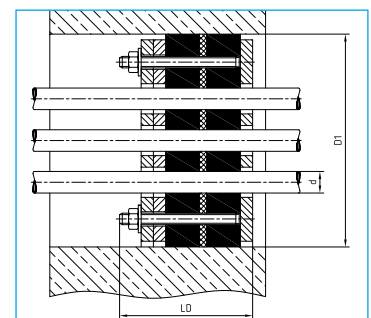
- gas-tight
- accepts angular deviations of service duct up to 8°
- accepts axial movements
- double sealing
- split

The gasket insert consists of:

- split frame rings:
electro-galvanised, yellow passivated and sealant coated;
optionally made of stainless steel grade 304 (1.4301) or grade 316 (1.4571/1.4404)
- elastomer:
2 x 27 mm EPDM seal rings (**DOYMA-Grip**), optionally EPDM-
POD (for potable water), NBR (fuel/oil-resistant) or silicon
(resistant to high temperatures) or FPM (chemical resistant)
- 3 mm EPDM thick orange-coloured centre ring

Accessories from page 88

pipe external diameter from - to	no. of pipes/cables	pipe sleeve/ core bore diameter D ₁ [NB in mm]
1 - 21	1 - 3	80 (78,5 - 83)
4 - 37	1 - 2	100 (98,5 - 104)
4 - 26	1 - 4	
1 x 18 - 36 2 x 8 - 16	1 - 3	
1 x 8 - 22 4 x 8 - 16	1 - 5	125 (123,5 - 128)
4 - 32	1 - 4	
25 - 41	1 - 3	150 (148,5 - 153)
2 x 2 - 46 2 x 2 - 36	1 - 4	
15 - 31	1 - 9	200 (199 - 204)
L_p (max. overall length): 90 mm		
We supply gasket inserts in other sizes. Please call us.		



Curaflex® C/0

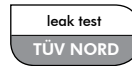
against pressing water

- sealing system for penetrations
- to install in **preinstalled pipe sleeve** or **core bore in waterproof concrete** (white tank)
- permanent **blind sealing**



Product benefits

- simple installation due to precise dimensions, large sealing ranges
- permanently leakproof without retensioning (maintenance-free)
- high sealing capability in terms of the gasket insert due to **DPS*** and **DOYMA-Grip**
- watertight welded bolts



25
Years
Guarantee

Technical details

- gas-tight
- double sealing „blind“

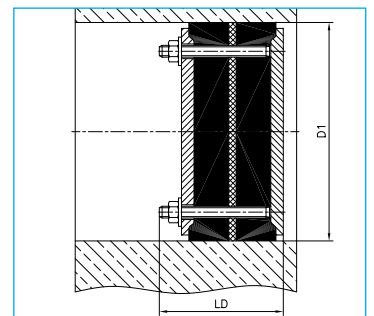
The gasket insert consists of:

- frame rings:
asymmetrically profiled steel rings (DPS*), electro-galvanised, yellow passivated and sealant coated; optionally made of stainless steel grade 304 (1.4301) or grade 316 (1.4571/1.4404)
- elastomer:
2 x 27 mm EPDM seal rings (**DOYMA-Grip**), optionally EPDM-POD (for potable water), NBR (fuel/oil-resistant) or silicon (resistant to high temperatures) or FPM (chemical resistant)
- 3 mm EPDM thick orange-coloured centre ring

* DPS up to NB 350

Accessories from page 88

	NB pipe sleeve/ core bore [m]
	50 (49 - 53)
	80 (78,5 - 83)
	100 (98,5 - 104)
	125 (123,5 - 128)
	150 (148,5 - 153)
	200 (199 - 204)
	250 (247 - 253)
	300 (297 - 304)
	350 (347 - 354)
	400 (397 - 404)
	450 (447 - 454)
	500 (497 - 503)
	600 (597 - 603)
	700 (697 - 703)
L_D (max. overall length) [mm]: 90	
Other sizes, materials and customised versions on request!	



We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

- sealing system for penetrations
- to install in **preinstalled pipe sleeve** or **core bore in waterproof concrete** (white tank)
- with heat **shrink sleeve**
- suitable for **cable protection pipes**



Product benefits

- no relevant mechanical forces are exerted on the line thanks to the shrink technology
- ideal for, amongst other things, corrugated pipes or medium voltage cables for which the lines may/can not be subjected to any mechanical forces (thin-walled "ribs" or similar)
- simple installation due to precise dimensions, large sealing ranges
- permanently sealed without re-tensioning (maintenance-free)
- higher sealing performance of the gasket insert due to **DPS*** and **DOYMA-Grip**
- system component, without steps or divisions
- ring with watertight welded bolts



Technical details

- gas-tight
- double sealing
- with shrink technology

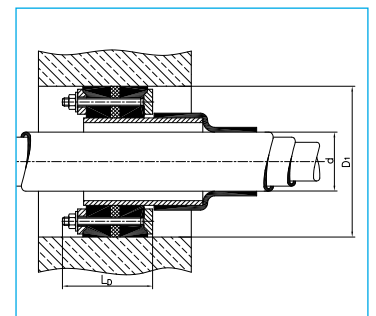
The gasket insert consists of:

- frame rings: asymmetrically profiled steel rings (DPS*), electro-galvanised, yellow passivated and sealant coated; optionally made of stainless steel grade 304 (1.4301) or grade 316 (1.4571/1.4404)
- heat shrink hose (standard)
- jacket tube PEHD
- elastomer: 2 x 27 mm EPDM seal rings (**DOYMA-Grip**), optionally EPDM-POD (for potable water), NBR (fuel/oil-resistant) or silicon (resistant to high temperatures) or FPM (chemical resistant)
- 3 mm EPDM thick orange-coloured centre ring

* DPS up to NB 350

Accessories from page 88

pipe external diameter from - to	pipe sleeve/core bore diameter D ₁ [NB in mm]
20 - 39	100 (98,5 - 104)
40 - 50	
40 - 50	125 (123,5 - 128)
40 - 50	150 (148,5 - 153)
51 - 95	
64 - 95	200 (199 - 204)
96 - 147	
64 - 95	250 (247 - 253)
96 - 150	
90 - 150	300 (297 - 304)
151 - 204	
205 - 280	400 (397 - 404)
L_D (max. overall length) [mm]: 85	
Other sizes, materials and customised versions on request!	



- sealing system for penetrations
- to install in **preinstalled pipe sleeve** or **core bore in waterproof concrete** (white tank)
- gasket insert for pipes and cables **with special dimensions**
- for **too large or too small** penetrations



Product benefits

- simple installation due to precise dimensions, large sealing ranges
- permanently leakproof without retensioning (maintenance-free)
- higher sealing performance of the gasket insert due to **DPS*** and **DOYMA-Grip**
- system component, without steps or divisions
- ring with watertight welded bolts
- manufactured according to specifications

25
Years
Guarantee

Technical details

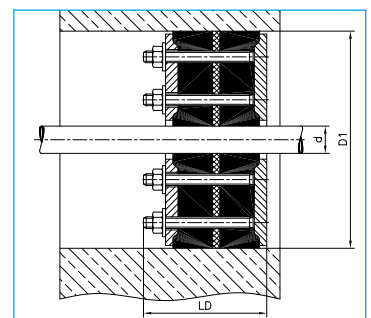
- gas-tight
- accepts angular deviations of service duct up to 8°
- accepts axial movements
- double sealing

The gasket insert consists of:

- frame rings:
asymmetrically profiled steel rings (DPS*), electro-galvanised, yellow passivated and sealant coated; optionally made of stainless steel grade 304 (1.4301) or grade 316 (1.4571/1.4404)
- elastomer:
2 x 27 mm EPDM seal rings (**DOYMA-Grip**), optionally EPDM-POD (for potable water), NBR (fuel/oil-resistant) or silicon (resistant to high temperatures) or FPM (chemical resistant)
- 3 mm EPDM thick orange-coloured centre ring

Accessories from page 88

pipe external diameter from - to	pipe sleeve/core bore diameter D ₁ [NB in mm]
9 - 40	100 (98,5 - 104)
58 - 65	100 (98,5 - 104)
40 - 57	125 (123,5 - 128)
58 - 77	130 (128,5 - 133)
57 - 77	150 (148,5 - 153)
78 - 104	160 (158,5 - 163)
78 - 104	200 (199 - 204)
105 - 145	250 (247 - 253)
158 - 190	300 (297 - 304)
L_D (max. overall length) [mm]: 85	
Other sizes, materials and customised versions on request!	



We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

- sealing system for penetrations
- to install in **preinstalled pipe sleeve** or **core bore in waterproof concrete** (white tank)
- with extra large ring for **axial fixation**
- for **high hydrostatic loads**



Product benefits

- simple installation due to precise dimensions, large sealing ranges
- permanently sealed without re-tensioning (maintenance-free)
- higher sealing performance of the gasket insert due to **DPS*** and **DOYMA-Grip**
- system component, without steps or divisions, with water-tight welded bolts
- fastening is secured, amongst other things, for high pressure thanks to the large ring
- installation on the low pressure side



Technical details

- gas-tight
- accepts angular deviations of service duct up to 8°
- accepts axial movements
- double sealing
- with large ring for ease of installation

The gasket insert consists of:

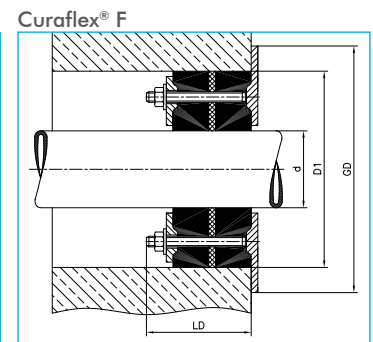
- frame rings: asymmetrically profiled steel rings (DPS*), electro-galvanised, yellow passivated and sealant coated; optionally made of stainless steel grade 304 (1.4301) or grade 316 (1.4571/1.4404)
- elastomer: 2 x 27 mm EPDM seal rings (**DOYMA-Grip**), optionally EPDM-POD (for potable water), NBR (fuel/oil-resistant) or silicon (resistant to high temperatures) or FPM (chemical resistant)
- 3 mm EPDM thick orange-coloured centre ring

* DPS up to NB 350

Accessories from page 88

pipe external diameter from - to	pipe sleeve/core bore diameter D ₁ [NB in mm]	large ring diameter G _D max. [mm]
1 - 24	50 (49 - 53)	70
1 - 40	80 (78,5 - 83)	98
41 - 57	100 (98,5 - 104)	120
58 - 77	125 (123,5 - 128)	145
78 - 104	150 (148,5 - 153)	170
105 - 145	200 (199 - 204)	240
146 - 190	250 (247 - 253)	290
191 - 233	300 (297 - 304)	340
234 - 288	350 (347 - 354)	390
289 - 339	400 (397 - 404)	440
340 - 380	450 (447 - 454)	490
381 - 430	500 (497 - 503)	550
431 - 530	600 (597 - 603)	650
531 - 620	700 (697 - 703)	750
L_p (max. installation depth) [mm]: 95		
Other sizes, materials and customised versions on request!		

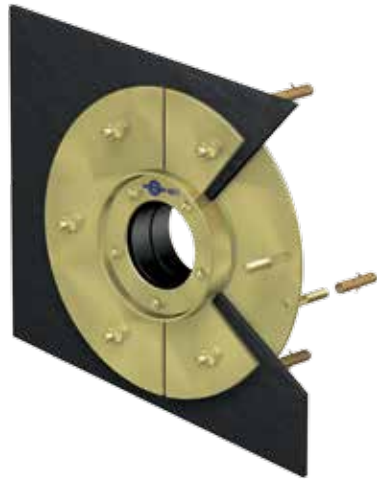
Variant Curaflex® D
as described on the top, but installation the high pressure side



Curaflex® C/2/SD/6

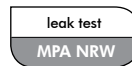
against pressing water

- sealing system for penetrations
- use in **pipe sleeve** or **concrete core bore**
- for buildings with **tanking membrane** or **bituminous thick-coating** (black tank)
- with **fixed and loose flange**



Product benefits

- simple installation due to precise dimensions, large sealing ranges
- permanently sealed without re-tensioning (maintenance-free)
- high sealing capability in terms of the gasket insert due to **DPS*** and **DOYMA-Grip**
- system component, without steps or divisions, with water-tight welded bolts
- integrated fixed and loose flange (loose flange split)



25
Years
Guarantee

Technical details

- with flanges according to DIN 18 195
- gas-tight
- accepts angular deviations of service duct up to 8°
- accepts axial movements
- installation on the high pressure side
- depending on the tanking membranes arranged on both sides packings 1775 (with thin and hard membranes) and accessories for thick-coating

The gasket insert consists of:

- frame rings: asymmetrically profiled steel rings (DPS*), electro-galvanised, yellow passivated and sealant coated; optionally made of stainless steel grade 304 (1.4301) or grade 316 (1.4571/1.4404)
- elastomer: 2 x 27 mm EPDM seal rings (**DOYMA-Grip**), optionally EPDM-POD (for potable water), NBR (fuel/oil-resistant) or silicon (resistant to high temperatures) or FPM (chemical resistant)
- 3 mm EPDM thick orange-coloured centre ring

* DPS up to NB 350

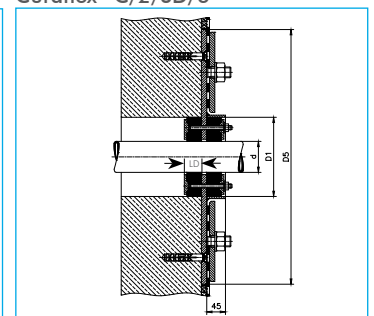
Accessories from page 88

pipe external diameter from - to	pipe sleeve/core bore diameter D ₁ [NB in mm]	fixed flange diameter D ₅ max. [mm]
1 - 40	80 (78,5 - 83)	420
41 - 57	100 (98,5 - 104)	440
58 - 77	125 (123,5 - 128)	465
78 - 104	150 (148,5 - 153)	490
105 - 145	200 (199 - 204)	540
146 - 190	250 (247 - 253)	590
191 - 233	300 (297 - 304)	640
234 - 288	350 (347 - 354)	690
289 - 339	400 (397 - 404)	740
340 - 380	450 (447 - 454)	790
381 - 430	500 (497 - 503)	840
431 - 530	600 (597 - 603)	940
531 - 620	700 (697 - 703)	1040
L_D (max. installation depth) [mm]: 40 (at F/2/SD/6: 50 mm)		
Other sizes, materials and customised versions on request!		

Variant Curaflex® F/2/SD/6:
installation on the low pressure side



Curaflex® C/2/SD/6

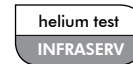


- sealing system for penetrations
- to install in **preinstalled pipe sleeve** or **core bore in waterproof concrete** (white tank)



Product benefits

- simple installation due to precise dimensions, large sealing ranges
- permanently sealed without re-tensioning (maintenance-free)
- higher sealing performance of the gasket insert due to **DPS*** and **DOYMA-Grip**
- system component, without steps or divisions, with water-tight welded bolts



Technical details

- gas-tight
- accepts angular deviations of service duct up to 8°
- accepts axial movements
- single sealing

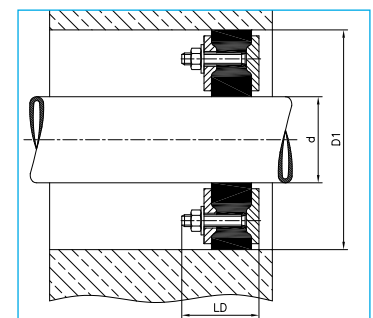
The gasket insert consists of:

- frame rings: asymmetrically profiled steel rings (DPS*), electro-galvanised, yellow passivated and sealant coated; optionally made of stainless steel grade 304 (1.4301) or grade 316 (1.4571/1.4404)
- elastomer: 27 mm EPDM seal ring (**DOYMA-Grip**), optionally EPDM-POD (for potable water), NBR (fuel/oil-resistant) or silicon (resistant to high temperatures) or FPM (chemical resistant)

* DPS up to NB 350

Accessories from page 88

pipe external diameter from - to	NB pipe sleeve/ core bore [mm]
1 - 24	50 (49 - 53)
1 - 40	80 (78,5 - 83)
41 - 57	100 (98,5 - 104)
58 - 77	125 (123,5 - 128)
78 - 104	150 (148,5 - 153)
105 - 145	200 (199 - 204)
146 - 190	250 (247 - 253)
191 - 233	300 (297 - 304)
234 - 288	350 (347 - 354)
289 - 339	400 (397 - 404)
340 - 380	450 (447 - 454)
381 - 430	500 (497 - 503)
431 - 530	600 (597 - 603)
531 - 620	700 (697 - 703)
L_p (max. overall length) [mm]: 60	
Other sizes, materials and customised versions on request!	



Curaflex® Quick In A

against non pressing water

- sealing system for penetrations
- to install in **preinstalled pipe sleeve** or **core bore in waterproof concrete** (white tank)
- hinged version for **retrofit installation**



Product benefits

- simple installation due to precise dimensions, large sealing ranges
- permanently sealed without re-tensioning (maintenance-free)
- higher sealing performance of the gasket insert due to **DPS*** and **DOYMA-Grip**
- watertight welded bolts
- with quick-closure (up to NB 500)
- to be subsequently installed around the existing pipeline

25
Years
Guarantee

Technical details

- gas-tight
- accepts angular deviations of service duct up to 8°
- accepts axial movements
- single sealing
- can be hinged**

The gasket insert consists of:

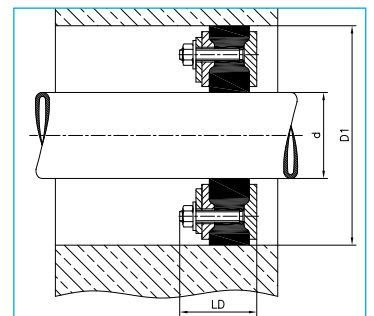
- split frame rings: asymmetrically profiled steel rings (DPS*), quick fastener (up to NB 500), electro-galvanised, yellow passivated and sealant coated; optionally made of stainless steel grade 304 (1.4301) or grade 316 (1.4571/1.4404)
- elastomer: 27 mm EPDM seal ring (**DOYMA-Grip**), optionally EPDM-POD (for potable water), NBR (fuel/oil-resistant) or silicon (resistant to high temperatures) or FPM (chemical resistant)

* DPS up to NB 350

** starting with NB 600 in split version with additional steel ring for stabilisation

Accessories from page 88

pipe external diameter from - to	NB pipe sleeve/ core bore [m]
1 - 24	50 (49 - 53)
1 - 40	80 (78,5 - 83)
41 - 57	100 (98,5 - 104)
58 - 77	125 (123,5 - 128)
78 - 104	150 (148,5 - 153)
105 - 145	200 (199 - 204)
146 - 190	250 (247 - 253)
191 - 233	300 (297 - 304)
234 - 288	350 (347 - 354)
289 - 339	400 (397 - 404)
340 - 380	450 (447 - 454)
381 - 430	500 (497 - 503)
L_D (max. overall length) [mm]: 60	
Other sizes, materials and customised versions on request!	



Curaflex® A 40

against non pressing water

- sealing system for penetrations
- to install in **preinstalled pipe sleeve** or **core bore in waterproof concrete** (white tank)
- extra-wide EPDM-rubber suitable for **pre-insulated pipes**

Gasket inserts



Product benefits

- extra wide and soft EPDM rubber seals particularly gently seal the media tube
- ideal for most plastic jacket tubes (district heat)
- simple installation due to precise dimensions, large sealing ranges
- permanently leakproof without retensioning (maintenance-free)
- high sealing capability in terms of the gasket insert due to **DPS*** and **DOYMA-Grip**
- system component, without steps or divisions, with water-tight welded bolts



Technical details

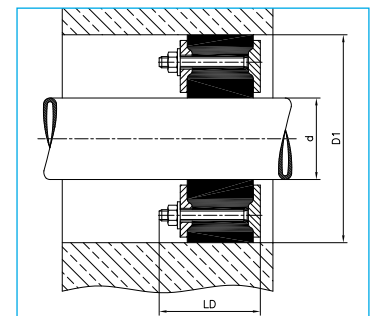
- gas-tight
- accepts angular deviations of service duct up to 8°
- accepts axial movements
- single sealing

The gasket insert consists of:

- frame rings: asymmetrically profiled steel rings (DPS*), electro-galvanised, yellow passivated and sealant coated; optionally made of stainless steel grade 304 (1.4301) or grade 316 (1.4571/1.4404)
 - elastomer: 40 mm EPDM extra soft elastomeric seal ring
- * DPS up to NB 350

Accessories from page 88

pipe external diameter from - to	NB pipe sleeve/ core bore [m]
58 - 77	125 (123,5 - 128)
78 - 104	150 (148,5 - 153)
105 - 145	200 (199 - 204)
146 - 190	250 (247 - 253)
191 - 233	300 (297 - 304)
234 - 288	350 (347 - 354)
289 - 339	400 (397 - 404)
340 - 380	450 (447 - 454)
381 - 430	500 (497 - 503)
L_D (max. overall length) [mm]: 70	
Other sizes, materials and customised versions on request!	



Curaflex® A/M
against non pressing water

- sealing system for penetrations
- to install in **preinstalled pipe sleeve** or **core bore in waterproof concrete** (white tank)
- for **several multi-lines**



Product benefits

- simple installation due to precise dimensions, large sealing ranges
- permanently sealed without re-tensioning (maintenance-free)
- higher sealing performance of the gasket insert due to **DPS** and **DOYMA-Grip**
- system component, without steps or divisions, with water-tight welded bolts

25
Years
Guarantee

Gasket inserts

Technical details

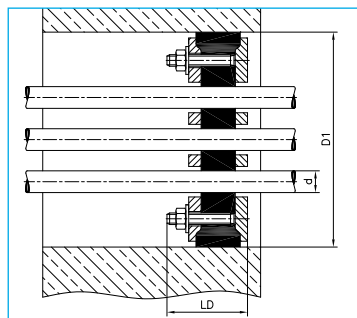
- gas-tight
- accepts angular deviations of service duct up to 8°
- accepts axial movements
- single sealing

The gasket insert consists of:

- frame rings:
asymmetrically profiled steel rings (DPS), electro-galvanised, yellow passivated and sealant coated; optionally made of stainless steel grade 304 (1.4301) or grade 316 (1.4571/1.4404)
- elastomer:
27 mm EPDM seal ring (**DOYMA-Grip**), optionally EPDM-POD (for potable water), NBR (fuel/oil-resistant) or silicon (resistant to high temperatures) or FPM (chemical resistant)

* DPS up to NB 350

Accessories from page 88



pipe external diameter from - to	no. of pipes/cables	NB pipe sleeve/ core bore [mm]
1 - 14	1 - 2	50 (49 - 53)
1 - 26	1 - 2	80 (78,5 - 83)
1 - 23	1 - 3	
1 - 24	1 - 4	
1 - 16	1 - 7	
1 x 4 - 32 1 x 1 - 14	1 - 2	
4 x 4 - 28 1 x 1 - 12	1 - 5	100 (98,5 - 104)
1 - 21	1 - 7	
4 - 37	1 - 2	
4 - 33	1 - 3	
1 x 4 - 46 1 x 1 - 16	1 - 2	
4 - 36	1 - 4	125 (123,5 - 128)
2 x 4 - 34	1 - 4	
2 x 4 - 42	1 - 4	
4 - 28	1 - 7	
4 - 41	1 - 3	
2 x 23 - 51 2 x 8 - 36	1 - 4	150 (148,5 - 153)
2 x 30 - 58 2 x 13 - 41	1 - 4	
4 x 22 - 50 1 x 4 - 16	1 - 5	
1 - 20	1 - 13	
6 x 8 - 36 2 x 4 - 16	1 - 8	
43 - 71	1 - 3	200 (199 - 204)
5 x 23 - 51 1 x 4 - 31	1 - 6	
2 x 28 - 56 2 x 54 - 82	1 - 4	
40 - 69	1 - 4	
4 - 36	1 - 10	
4 - 26	1 - 15	250 (247 - 253)
8 x 13 - 41 4 x 4 - 30	1 - 12	
4 - 26	1 - 20	
12 - 40	1 - 8	
10 x 16 - 44 5 x 4 - 36	1 - 15	
L₀ (max. overall length) [mm] 50		

We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

Curaflex® A/M/T

against non pressing water

- sealing system for penetrations
- to install in **preinstalled pipe sleeve** or **core bore in waterproof concrete** (white tank)
- for **several multi-lines**
- split version for **retrofit installation**

Gasket inserts

DOYMA
GRIP



Product benefits

- simple installation due to precise dimensions, large sealing ranges
- permanently leakproof without retensioning (maintenance-free)
- high sealing capability in terms of the gasket insert due to **DOYMA-Grip**
- watertight welded bolts
- to be retrospectively installed around the existing line

25
Years
Guarantee

Technical details

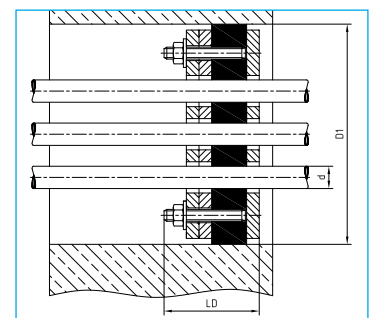
- gas-tight
- accepts angular deviations of service duct up to 8°
- accepts axial movements
- single sealing
- split

The gasket insert consists of:

- split frame rings:
electro-galvanised, yellow passivated and sealant coated;
optionally made of stainless steel grade 304 (1.4301) or grade 316 (1.4571/1.4404)
- elastomer:
27 mm EPDM seal ring (**DOYMA-Grip**), optionally EPDM-POD (for potable water), NBR (fuel/oil-resistant) or silicon (resistant to high temperatures) or FPM (chemical resistant)

Accessories from page 88

pipe external diameter from - to	no. of pipes/cables	pipe sleeve/ core bore diameter D ₁ [NB in mm]
1 - 21	1 - 3	80 (78,5 - 83)
4 - 37	1 - 2	100 (98,5 - 104)
4 - 26	1 - 4	
1 x 18 - 36 2 x 8 - 16	1 - 3	
1 x 8 - 22 4 x 8 - 16	1 - 5	125 (123,5 - 128)
4 - 32	1 - 4	
25 - 41	1 - 3	150 (148,5 - 153)
2 x 2 - 46 2 x 2 - 36	1 - 4	
15 - 31	1 - 9	200 (199 - 204)
L_D (max. overall length): 60 mm		
We supply gasket inserts in other sizes. Please call us.		



We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

Curaflex® A/0

against non pressing water

- sealing system for penetrations
- to install in **preinstalled pipe sleeve** or **core bore in waterproof concrete** (white tank)
- permanent **blind sealing**



Product benefits

- simple installation due to precise dimensions, large sealing ranges
- permanently leakproof without retensioning (maintenance-free)
- high sealing capability in terms of the gasket insert due to **DPS*** and **DOYMA-Grip**
- watertight welded bolts

25
Years
Guarantee

Technical details

- gas-tight
- single sealing „blind“

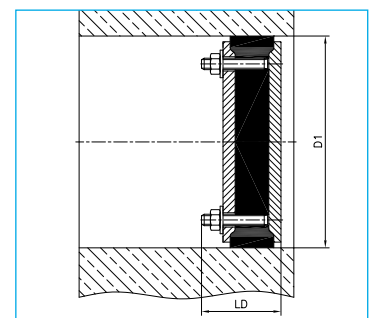
The gasket insert consists of:

- frame rings:
asymmetrically profiled steel rings (DPS*), electro-galvanised, yellow passivated and sealant coated; optionally made of stainless steel grade 304 (1.4301) or grade 316 (1.4571/1.4404)
- elastomer:
27 mm EPDM seal ring (**DOYMA-Grip**), optionally EPDM-POD (for potable water), NBR (fuel/oil-resistant) or silicon (resistant to high temperatures) or FPM (chemical resistant)

* DPS up to NB 350

Accessories from page 88

NB pipe sleeve/ core bore [m]
50 (49 - 53)
80 (78,5 - 83)
100 (98,5 - 104)
125 (123,5 - 128)
150 (148,5 - 153)
200 (199 - 204)
250 (247 - 253)
300 (297 - 304)
350 (347 - 354)
400 (397 - 404)
450 (447 - 454)
500 (497 - 503)
600 (597 - 603)
700 (697 - 703)
L_D (max. overall length) [mm]: 60
Other sizes, materials and customised versions on request!



Curaflex® MS/A

against non pressing water

- sealing system for penetrations
- to install in **preinstalled pipe sleeve** or **core bore in waterproof concrete** (white tank)
- with heat **shrink sleeve**
- suitable for **cable protection pipes**

Gasket inserts



Product benefits

- no relevant mechanical forces are exerted on the line thanks to the shrink technology
- ideal for, amongst other things, corrugated pipes or medium voltage cables for which the lines may/can not be subjected to any mechanical forces (thin-walled "ribs" or similar)
- simple installation due to precise dimensions, large sealing ranges
- permanently sealed without re-tensioning (maintenance-free)
- higher sealing performance of the gasket insert due to **DPS*** and **DOYMA-Grip**
- system component, without steps or divisions
- ring with watertight welded bolts

Technical details

- gas-tight
- single sealing
- with shrink technology

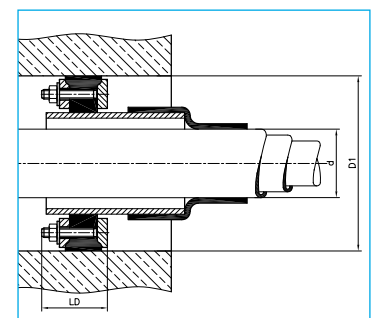
The gasket insert consists of:

- frame rings: asymmetrically profiled steel rings (DPS*), electro-galvanised, yellow passivated and sealant coated; optionally made of stainless steel grade 304 (1.4301) or grade 316 (1.4571/1.4404)
- heat shrink hose (standard)
- jacket tube PEHD
- elastomer: 27 mm EPDM seal ring (**DOYMA-Grip**), optionally EPDM-POD (for potable water), NBR (fuel/oil-resistant) or silicon (resistant to high temperatures) or FPM (chemical resistant)

* DPS up to NB 350

Accessories from page 88

pipe external diameter from - to	pipe sleeve/core bore diameter D ₁ [NB in mm]
20 - 39	100 (98,5 - 104)
40 - 50	
40 - 50	125 (123,5 - 128)
40 - 50	150 (148,5 - 153)
51 - 95	
64 - 95	200 (199 - 204)
96 - 147	
64 - 95	250 (247 - 253)
96 - 150	
90 - 150	300 (297 - 304)
151 - 204	
205 - 280	400 (397 - 404)
L₀ (max. overall length) [mm]: 55	
Other sizes, materials and customised versions on request!	



Curaflex® A/S

against non pressing water

- sealing system for penetrations
- to install in **preinstalled pipe sleeve** or **core bore in waterproof concrete** (white tank)
- gasket insert for pipes and cables **with special dimensions**
- for **too large or too small** penetrations



Product benefits

- simple installation due to precise dimensions, large sealing ranges
- permanently leakproof without retensioning (maintenance-free)
- higher sealing performance of the gasket insert due to **DPS*** and **DOYMA-Grip**
- system component, without steps or divisions
- ring with watertight welded bolts
- manufactured according to specifications

25
Years
Guarantee

Technical details

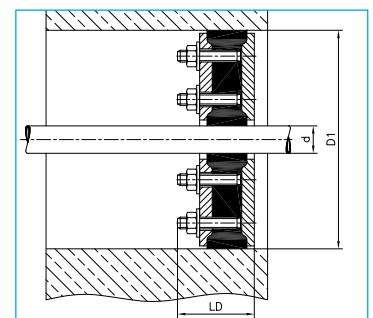
- gas-tight
- accepts angular deviations of service duct up to 8°
- accepts axial movements
- single sealing

The gasket insert consists of:

- frame rings:
asymmetrically profiled steel rings (DPS*), electro-galvanised, yellow passivated and sealant coated; optionally made of stainless steel grade 304 (1.4301) or grade 316 (1.4571/1.4404)
- elastomer:
27 mm EPDM seal ring (**DOYMA-Grip**), optionally EPDM-POD (for potable water), NBR (fuel/oil-resistant) or silicon (resistant to high temperatures) or FPM (chemical resistant)

Accessories from page 88

pipe external diameter from - to	pipe sleeve/core bore diameter D ₁ [NB in mm]
9 - 40	100 (98,5 - 104)
58 - 65	100 (98,5 - 104)
40 - 57	125 (123,5 - 128)
58 - 77	130 (128,5 - 133)
57 - 77	150 (148,5 - 153)
78 - 104	160 (158,5 - 163)
78 - 104	200 (199 - 204)
105 - 145	250 (247 - 253)
158 - 190	300 (297 - 304)
L_D (max. overall length) [mm]: 55	
Other sizes, materials and customised versions on request!	



- sealing system for penetrations
- to install in **preinstalled pipe sleeve** or **core bore in waterproof concrete** (white tank)
- with extra large ring for **axial fixation**
- for **high hydrostatic loads**



Product benefits

- simple installation due to precise dimensions, large sealing ranges
- permanently sealed without re-tensioning (maintenance-free)
- higher sealing performance of the gasket insert due to **DPS*** and **DOYMA-Grip**
- system component, without steps or divisions, with water-tight welded bolts
- fastening is secured, amongst other things, for high pressure thanks to the large ring
- installation on the low pressure side



Technical details

- gas-tight
- accepts angular deviations of service duct up to 8°
- accepts axial movements
- single sealing
- with large ring for ease of installation

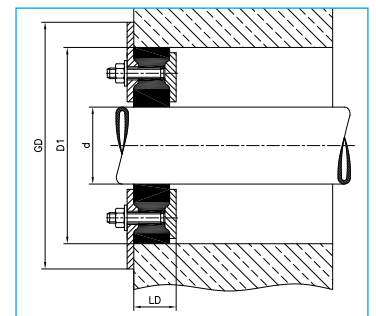
The gasket insert consists of:

- frame rings: asymmetrically profiled steel rings (DPS*), electro-galvanised, yellow passivated and sealant coated; optionally made of stainless steel grade 304 (1.4301) or grade 316 (1.4571/1.4404)
- elastomer: 27 mm EPDM seal ring (**DOYMA-Grip**), optionally EPDM-POD (for potable water), NBR (fuel/oil-resistant) or silicon (resistant to high temperatures) or FPM (chemical resistant)

* DPS up to NB 350

Accessories from page 88

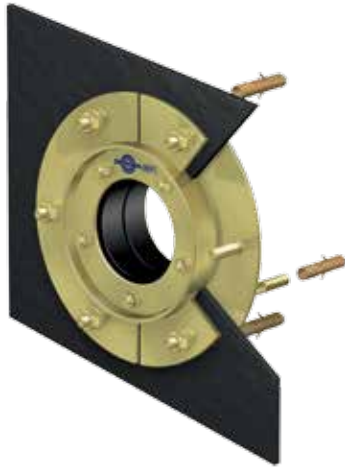
pipe external diameter from - to	pipe sleeve/core bore diameter D ₁ [NB in mm]	large ring diameter G _D max. [mm]
1 - 24	50 (49 - 53)	70
1 - 40	80 (78,5 - 83)	98
41 - 57	100 (98,5 - 104)	120
58 - 77	125 (123,5 - 128)	145
78 - 104	150 (148,5 - 153)	170
105 - 145	200 (199 - 204)	240
146 - 190	250 (247 - 253)	290
191 - 233	300 (297 - 304)	340
234 - 288	350 (347 - 354)	390
289 - 339	400 (397 - 404)	440
340 - 380	450 (447 - 454)	490
381 - 430	500 (497 - 503)	550
431 - 530	600 (597 - 603)	650
531 - 620	700 (697 - 703)	750
L₀ (max. installation depth) [mm]: 60		
Other sizes, materials and customised versions on request!		



Curaflex® C/2/SD/5

against non pressing water

- sealing system for penetrations
- use in **pipe sleeve or concrete core bore**
- for buildings with **tanking membrane or bituminous thick-coating** (black tank)
- with **fixed and loose flange**



Product benefits

- simple installation due to precise dimensions, large sealing ranges
- permanently sealed without re-tensioning (maintenance-free)
- high sealing capability in terms of the gasket insert due to **DPS*** and **DOYMA-Grip**
- system component, without steps or divisions, with water-tight welded bolts
- integrated fixed and loose flange (loose flange split)

25
Years
Guarantee

Technical details

- with flanges according to DIN 18 195
- gas-tight
- accepts angular deviations of service duct up to 8°
- accepts axial movements
- installation on the high pressure side
- depending on the tanking membranes arranged on both sides packings 1775 (with thin and hard membranes) and accessories for thick-coating

The gasket insert consists of:

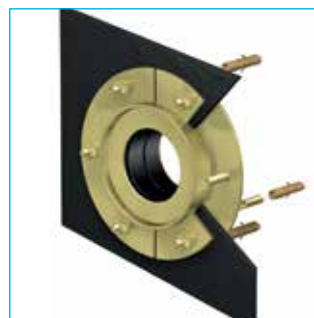
- frame rings:
asymmetrically profiled steel rings (DPS*), electro-galvanised, yellow passivated and sealant coated; optionally made of stainless steel grade 304 (1.4301) or grade 316 (1.4571/1.4404)
- elastomer:
27 mm EPDM seal ring (**DOYMA-Grip**), optionally EPDM-POD (for potable water), NBR (fuel/oil-resistant) or silicon (resistant to high temperatures) or FPM (chemical resistant)

* DPS up to NB 350

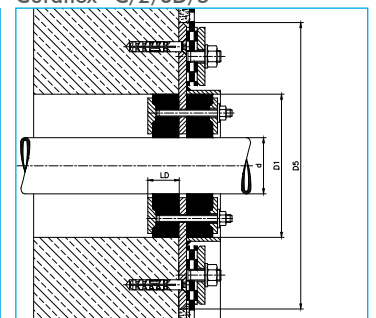
Accessories from page 88

pipe external diameter from - to	pipe sleeve/core bore diameter D ₁ [NB in mm]	fixed flange diameter D ₅ max. [mm]
1 - 40	80 (78,5 - 83)	240
41 - 57	100 (98,5 - 104)	260
58 - 77	125 (123,5 - 128)	285
78 - 104	150 (148,5 - 153)	310
105 - 145	200 (199 - 204)	360
146 - 190	250 (247 - 253)	410
191 - 233	300 (297 - 304)	460
234 - 288	350 (347 - 354)	510
289 - 339	400 (397 - 404)	560
340 - 380	450 (447 - 454)	610
381 - 430	500 (497 - 503)	660
431 - 530	600 (597 - 603)	760
531 - 620	700 (697 - 703)	860
L_p (max. installation depth) [mm]: 40 (at F/2/SD/6: 50 mm)		
Other sizes, materials and customised versions on request!		

Variant Curaflex® F/2/SD/5:
installation on the low pressure side



Curaflex® C/2/SD/5



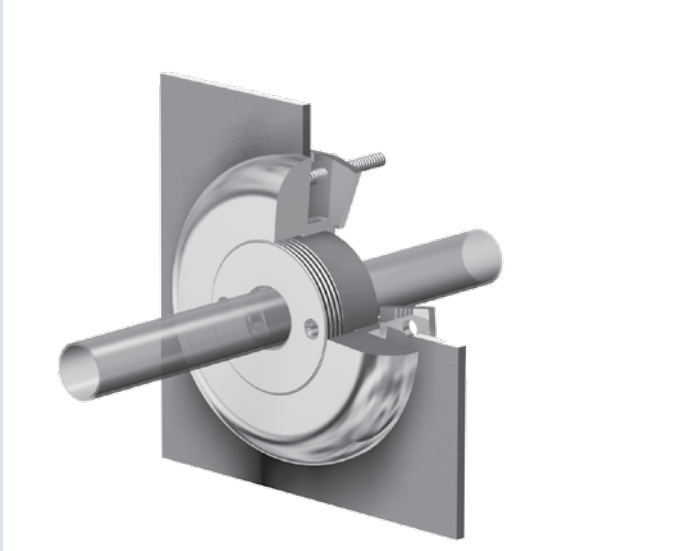
We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

Curaflex® 59.100

Protection against superfine particles

- sealing system for penetrations
- for **clean rooms** in accordance with VDI guideline 2083
- installation on the **clean room** side

Gasket inserts



Product benefits

- especially if a high degree of purity as well as the negative pressure and overpressure of the ambient air is required
- simple installation inside the clean room

25
Years
Guarantee

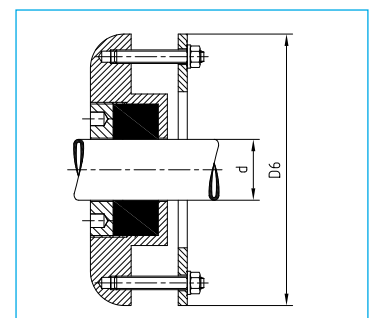
Technical details

- suitable for clean rooms equipped with sandwich walls
- loose ring is installed from the outside
- sealing is done on the clean room side by screwing in the cover screw with a face wrench
- place rosette on the wall with Sikaflex 11 FC+

The clean room sealing system consists of:

Stainless steel grade 304 (1.4301) or grade 316 (1.4571/1.4404), surface with fine finish and polished, sealing elements made out of NBR or silicon

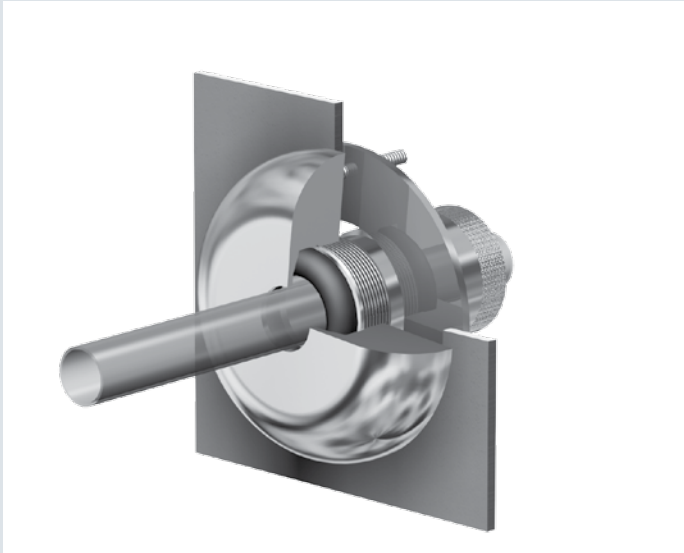
pipe external diameter from - to	rosette-external diameter D ₆ [mm]
14,5 - 15,5	120
16,7 - 17,7	
17,8 - 18,5	
20,8 - 21,7	
21,8 - 22,5	
26,4 - 27,4	
33,2 - 34,2	



Curaflex® 59.200

Protection against superfine particles

- sealing system for penetrations
- for **clean rooms** in accordance with VDI guideline 2083
- installation on the **outside**



Product benefits

- especially if a high degree of purity as well as the negative pressure and overpressure of the ambient air is required
- simple installation outside the clean room

25
Years
Guarantee

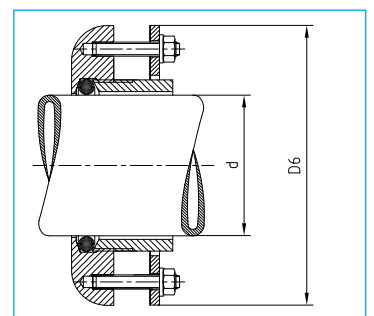
Technical details

- suitable for clean rooms equipped with sandwich walls
- loose ring is installed from the outside
- sealing is done on the outside by screwing in the cover screw with a face wrench
- place rosette on the wall with Sikaflex 11 FC+

The clean room sealing system consists of:

Stainless steel grade 304 (1.4301) or grade 316 (1.4571/1.4404), surface with fine finish and polished, sealing elements made out of NBR or silicon

pipe external diameter from - to	rosette-external diameter D _e [mm]
14,5 - 15,5	80
16,7 - 17,7	
17,8 - 18,5	
20,8 - 21,7	
21,8 - 22,5	
59,8 - 60,8	120



We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

Curaflex® annulus closure RRV

- closure of **annuli**
- to install in **preinstalled pipe sleeve** or **core bore in waterproof concrete** (white tank)

Gasket inserts



Product benefits

- high variability by elastic adaptation to the existing pipes/cables
- easy installation
- ideally combined with all Curaflex® gasket inserts

25
Years
Guarantee

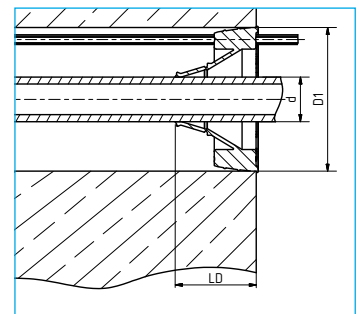
Technical details

- dust and splash protection
- accepts angular deviations of service duct up to 8°
- accepts axial movements

The annular space Curaflex® RRV-circuit consists of:

- **DOYMA Grip** (EPDM)

pipe external diameter from - to	no. of pipes/cables	pipe sleeve/ core bore diameter D ₁ [NB in mm]
1 x (20 - 31) 2 x 5 2 x 7	1 - 5	100
1 x (32 - 45) 2 x 5 2 x 7		
1 x (46 - 63) 2 x 5 2 x 7		
1 x (108 - 135) 2 x 5 2 x 7		200
1 x (136 - 160) 2 x 5 2 x 7		
LD (max. installation depth) ≤ 85 mm		



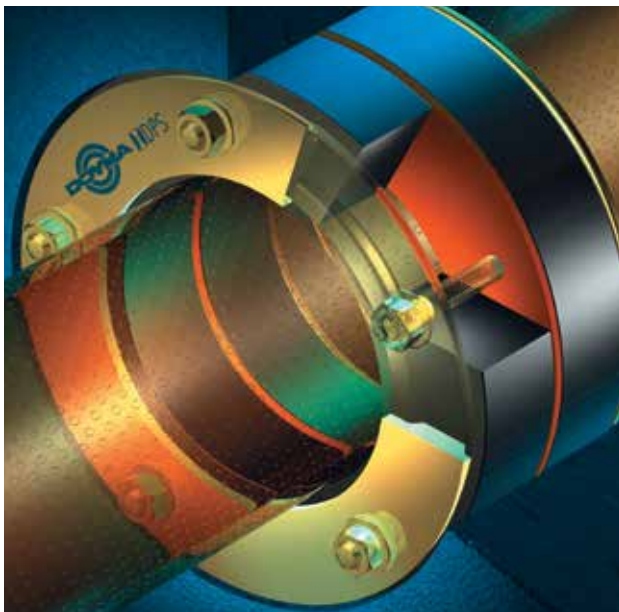
We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

Sealing with a profile

Curaflex® gasket inserts with DPS

The unique Double Profile System (DPS) generates a differential contact pressure by means of profiled sealing frames and caters for a larger sealing surface.

The unique DOYMA grip is a special elastomer with high adhesive force on the media pipe. Together, this caters for excellent and permanent sealing of the DOYMA gasket inserts.



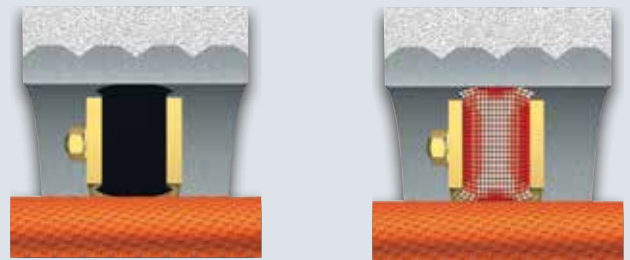
DPS system of a Curaflex® C gasket insert



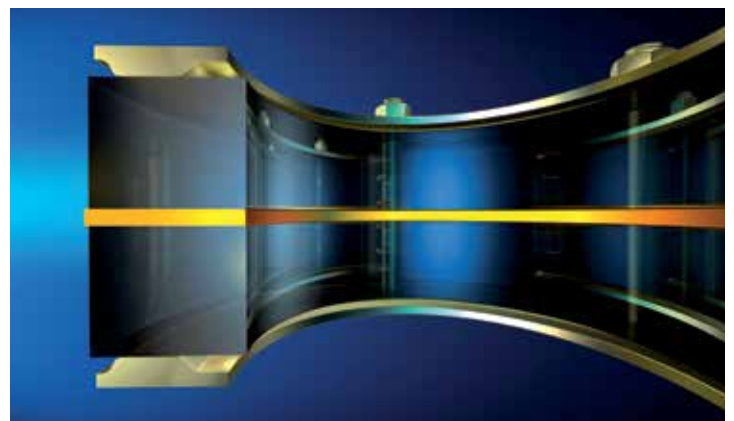
with DPS



Conventional



DOYMA DPS distributes the pressure more intelligently: In comparison to conventional gasket inserts, the contact pressure increases towards the core bore (or pipe sleeve). At the same time, the contact pressure on the media pipe is reduced by up to 30 %.



DPS system – cross-section

Product guide Curaflex® pipe sleeves

sealing against **pressing water**

Pipe sleeve

product	without tanking membranes/ bituminous coating	with tanking membranes/ bituminous coating	Installation		page
			in the wall	on the face of the wall	
Curaflex® 3000	●		●		56
Curaflex® 3000/T	●		●		56
Curaflex® 9000	●		●		57
Curaflex® 8000	●			●	58
Curaflex® 8000/T	●			●	58
Curaflex® 4006		●	●		60
Curaflex® 6000		●	●		61
Curaflex® 7006		●		●	62
Curaflex® 7006/T		●		●	62
Curaflex® 7006/M/S		●		●	63

pressing / non-pressing water

Pressing water – water which exerts hydrostatic pressure (even if limited in time, e.g. accumulating seepage water) on the structural element with the feedthrough. Groundwater and floodwater are typical water types. **Non-pressing water** – water which does not exert any hydrostatic pressure on the structural element with the feedthrough. Capillary water is a typical water type.

- without tanking membranes / bituminous coating (white tank),
- with tanking membranes / bituminous coating (black tank)

Non-waterproof structures must be protected with a sealing coat against penetrating water. This sealing coat can be in the form of sheeting, trowelable or liquid-applicable masses and therefore results in a skin-type seal. Since bitumen plays a major role in terms of materials, these forms of seals are often known as a "black tank". Waterproof or non-water-permeable structures do not require additional skin sealing. This type of structure includes those using impermeable reinforced concrete. This type of structural waterproofing is also known as a "white tank".

Installation in the wall / in front of the wall

The wall thickness is normally sufficient for installing a Curaflex® pipe sleeve. In this case, the sealing system is also located **in the wall**. If the wall is too thin, or the costs too high, to adapt the wall feedthrough for inserting a pipe sleeve and a gasket insert appropriately, it is recommended that the system is **installing on the face of the wall**

sealing against **non-pressing water**

product	without tanking membranes/ bituminous coating	with tanking membranes/ bituminous coating	Installation		page
			in the wall	on the face of the wall	
Curaflex® 3000	●		●		56
Curaflex® 3000/T	●		●		56
Curaflex® 9000	●		●		57
Curaflex® 8000	●	● with bituminous thick coating		●	58/59
Curaflex® 8000/T	●	● with bituminous thick coating		●	58
Curaflex® 4005		●	●		64
Curaflex® 5000		●	●		65
Curaflex® 7005		●		●	66
Curaflex® 7005/T		●		●	66
Curaflex® 3001		●	●		67

Installation of Curaflex® pipe sleeves

Installation example of Curaflex® 8000 in connection with butyl sealing tape (1753)

Please note:

- The wall must be clean, flat and dry in the steel pipe sleeve installation vicinity.
- No grooves, cracks or breakouts may be present on the wall surface in the steel pipe sleeve installation vicinity.
- The steel pipe sleeve must be clean and free of dust and grease.
- If a pipe sleeve is present in the wall, it must finish flush with the wall surface.
- The diameter of the core drilling/wall pipe sleeve must be smaller than the steel pipe sleeve pipe socket. If this is not the case, a special construction is necessary.
- If the pipe/cable is not centralised in the pipe sleeve, a special construction may be necessary in consultation with DOYMA.

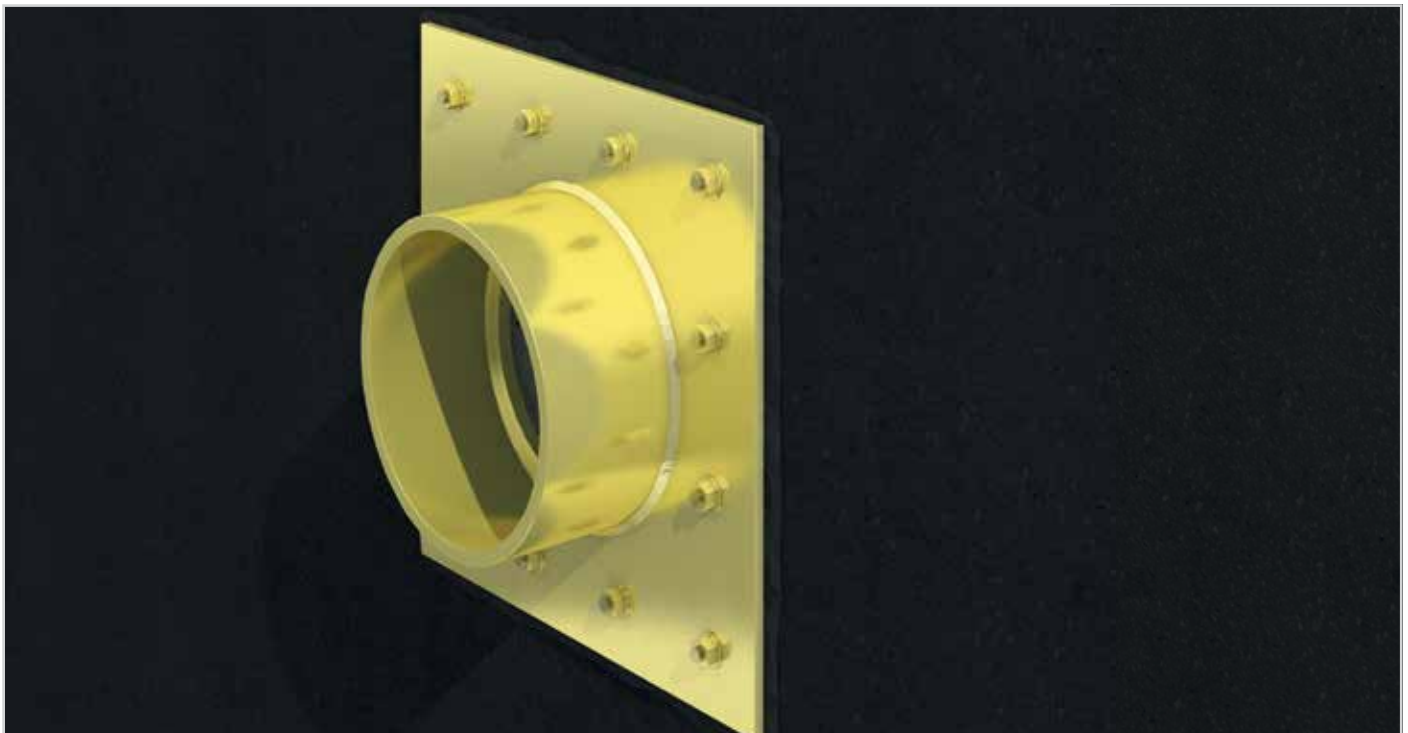
- You will require a sealing element to seal off the annular gap between pipe/cable and pipe sleeve. We recommend the installation of a Curaflex® gasket insert*
- To ensure that the Curaflex® Butyl sealing tape (1753) bonds better to the steel pipe sleeve, additional accessories are required, for example. Sika Adhesive Cleaner-1 (yield per litre: approx. 8 - 9 m²)*

Note:

DOYMA products are continuously being further developed, technical changes will take place without previous notification.

Extensive installation instructions are provided with the product. On top of this, they are available on the Internet at www.doyma.de

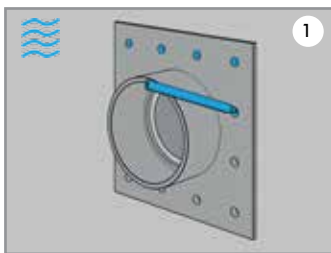
*) not included in delivery



Curaflex® 8000 steel pipe sleeve.

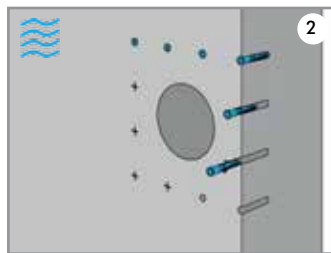
Installation example Curaflex® 8000 pipe sleeve (see p. 59)

Curaflex® 8000 is a steel pipe sleeve for sealing structures with bituminous coating (black tank) sealed against non-pressing water / soil moisture (not in acc. w. DIN 18195-9). The sealing material is a butyl sealing tape (1753). Installation of the pipe sleeve takes place on the existing, hardened thick-coated membrane.

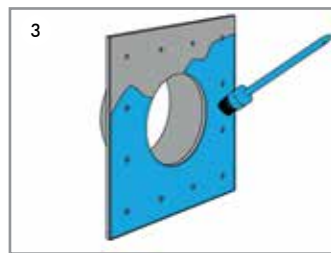


Position the steel pipe sleeve in the wall and mark the rawplug holes.

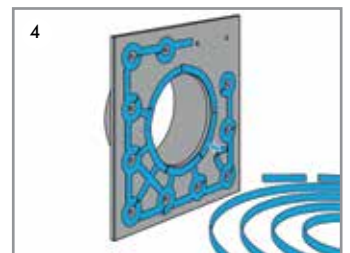
Important: if pipe has already been laid, it is imperative that the pipe sleeve is centred in the pipe.



Drill the rawplug holes and insert the rawplugs.

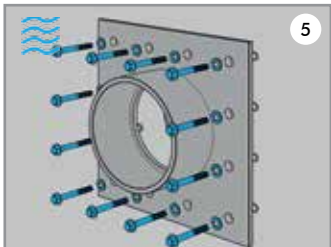


Pre-treating the steel pipe sleeve with Sika Adhesive Cleaner-1. Apply to the rear side of the steel sheet (opposite the sleeve) with the help of a brush or cloth.

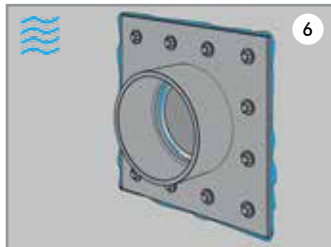


Glue the butyl sealing tape (1753) onto the rear of the steel sheet in a spider's web pattern. Leave a diameter of around 25 mm free around drill holes. In this case, the rawplug seam acts as a spacer between the wall and the sheet.

A pre-requirement for permanent sealing is application of the sealing tape without gaps.



Push the plastic washers onto the special screws, and then fix the steel pipe sleeve to the wall by placing and tightening the screws.



The installation is correct if butyl runs out around the entire circumference both inside and outside when tightening the screws. Remove any protruding butyl from the sleeve.

Curaflex® 3000

against pressing or non-pressing water

- opening for penetrations
- for buildings **yet to be constructed**
- for **waterproof concrete** (white tank)

Pipe sleeves



Product benefits

- homogeneous connection to concrete, reinforced by special grooving
- the inside face of the sleeve provides an optimum contact surface for the elastomer of the Curaflex® gasket insert
- watertight bond with the concrete because the coefficient of expansion of the material corresponds to that of concrete
- for buildings without tanking membranes



Technical details

- gas-tight when both inside and front faces of sleeve are coated
- can be used in conjunction with all Curaflex® gasket inserts

Material:

- asbestos-free special fibre cement

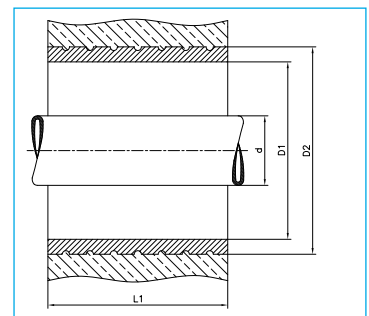
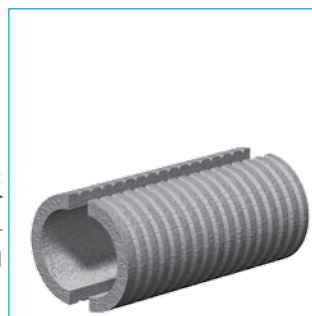
Accessories from page 88

pipe external diameter from - to	NB pipe sleeve [mm]	pipe sleeve diameter D ₂ max. [mm]	standard length L ₁ [mm]
1 - 40	80	≤ 140	200 240 250 300 350 365 400 500 650 1000
41 - 57	100	≤ 160	
58 - 77	125	≤ 156	
78 - 104	150	≤ 187	
105 - 145	200	≤ 238	
146 - 190	250	≤ 289	
191 - 233	300	≤ 347	
234 - 288	350	≤ 395	
289 - 339	400	≤ 461	
340 - 380	450	≤ 511	
381 - 430	500	≤ 570	
431 - 530	600	≤ 673	
531 - 620	700	≤ 787	

We supply pipe sleeves in more sizes. Please call us.

Variant:

Curaflex® pipe sleeve 3000/T
longitudinally split version. For installations with existing pipeline in the wall

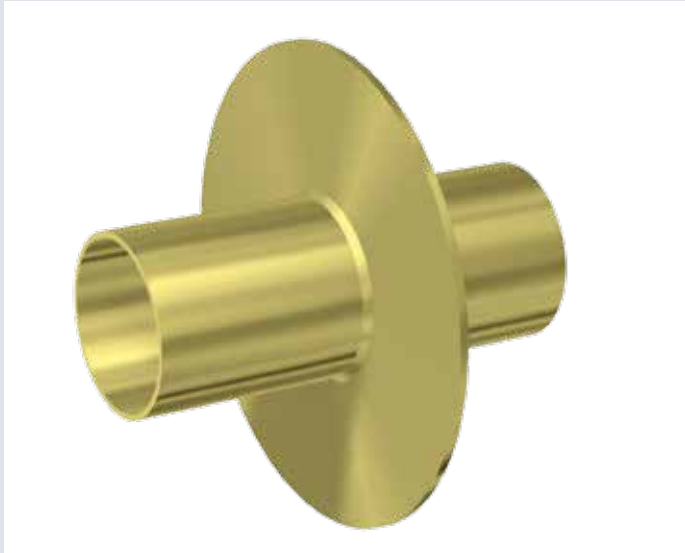


We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

Curaflex® 9000

against pressing or non-pressing water

- opening for penetrations
- for buildings **yet to be constructed**
- for **waterproof concrete** (white tank)
- for **high static load**



Product benefits

- steel, for high static loads
- the inside face of the sleeve provides an optimum contact surface for the elastomer of the Curaflex® gasket insert
- for buildings without tanking membranes

25
Years
Guarantee

Technical details

- gas-tight
- can be used in conjunction with all Curaflex® gasket inserts
- 100 mm circumferential middle flange made of steel (can be welded at any point)
- middle flange can be used as an bonding or wall flange

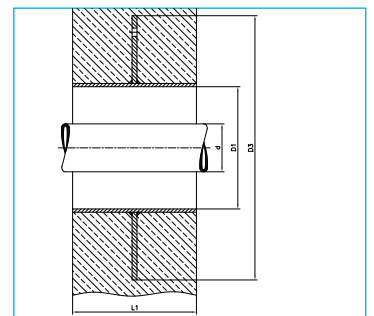
Material:

- steel, electro-galvanised, yellow passivated and sealant coated; optionally made of stainless steel grade 304 (1.4301) or grade 316 (1.4571/1.4404)

Accessories from page 88

pipe external diameter from - to	NB pipe sleeve [mm]	middle flange diameter D ₃ max. [mm]	standard length L ₁ [mm]
1 - 40	80	290	200 240 250 300 350 365 400 500
41 - 57	100	310	
58 - 77	125	330	
78 - 104	150	360	
105 - 145	200	410	
146 - 190	250	460	
191 - 233	300	510	
234 - 288	350	560	
289 - 339	400	610	
340 - 380	450	660	
381 - 430	500	710	
431 - 530	600	810	
531 - 620	700	910	

We supply pipe sleeves in more sizes. Please call us.

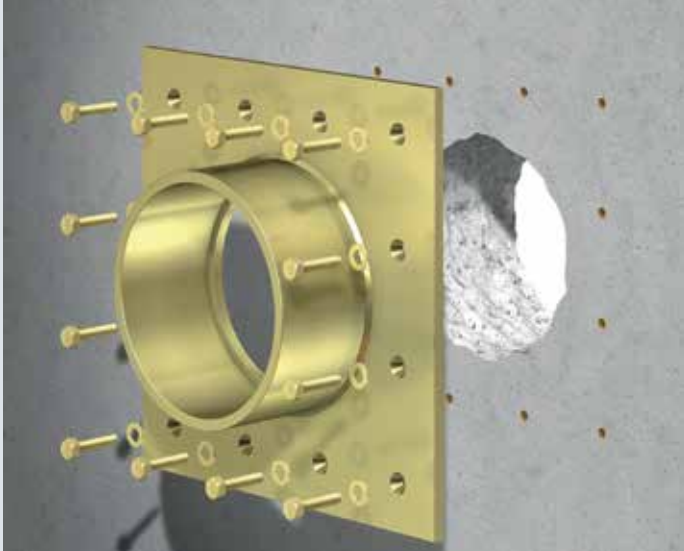


Curaflex® 8000

against pressing or non-pressing water

- flange with sleeve for penetrations
- for installation **on the face of walls**
- for **waterproof concrete** (white tank) or applications with **bituminous thick-coating** (black tank)
- suitable for **reconstruction**

Pipe sleeves



Product benefits

- sealing on the face of wall (nature of the hole/wall opening is not relevant)
- suitable for penetrations without a suitable core bore or pipe sleeve
- the inside face of the sleeve provides an optimum contact surface for the elastomer of the Curaflex® gasket insert

25
Years
Guarantee

Technical details

- gas-tight
- leak-proof against pressing water and non-pressing water
- for buildings without tanking membranes (white tank)
- for buildings with thick-coating - contact surface "bonding flange" additionally sanded
- can be used in conjunction with all Curaflex® gasket inserts

materials:

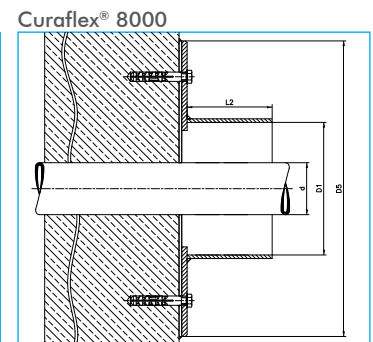
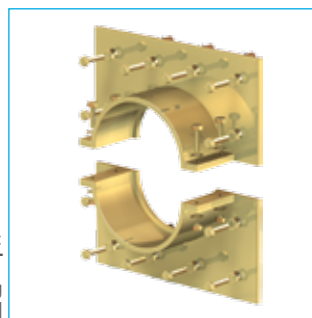
- steel, electro-galvanised, yellow passivated and sealant coated; optionally made of stainless steel grade 304 (1.4301) or grade 316 (1.4571/1.4404)
- with thick-coating made of ggV, contact surfaces sanded

Delivery incl. fastening material for solid walls

Accessories from page 88

pipe external diameter from - to	NB pipe sleeve [mm]	fixed flange diameter/ edge length D _s max. [mm]
1 - 40	80	260
41 - 57	100	280
58 - 77	125	300
78 - 104	150	330
105 - 145	200	380
146 - 190	250	430
191 - 233	300	480
234 - 288	350	530
289 - 339	400	580
340 - 380	450	630
381 - 430	500	680
431 - 530	600	780
531 - 620	700	880
L2 (length of steel pipe sleeve) [mm]: 110		
We supply pipe sleeves in more sizes. Please call us.		

Variant:
Curaflex® pipe sleeve 8000/T
split version. For installations with existing
pipeline in the wall



Curaflex® 8000

against non-pressing water

- flange with sleeve for penetrations
- for installation **on the face of walls**
- with **bituminous thick-coating** (black tank)
- suitable for **reconstruction**



Product benefits

- sealing the existing cured bituminous coating
- sealing on the face of wall (nature of the hole/wall opening is not relevant)
- suitable for penetrations without a suitable core bore or pipe sleeve
- the inside face of the sleeve provides an optimum contact surface for the elastomer of the Curaflex® gasket insert

25
Years
Guarantee

Technical details

- leak-proof against non-pressing water
- for buildings with existing cured coating thickness
- can be used in conjunction with all Curaflex® gasket inserts

materials:

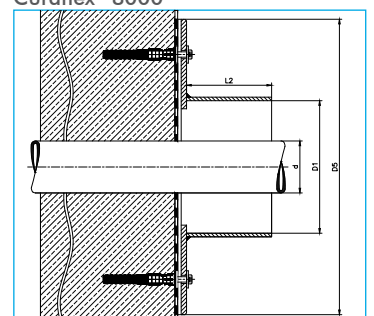
- steel, electro-galvanised, yellow passivated and sealant coated; optionally made of stainless steel grade 304 (1.4301) or grade 316 (1.4571/1.4404)

Delivery incl. fastening material for solid walls and Butyl sealing tape (type 1753).

Accessories from page 88

pipe external diameter from - to	NB pipe sleeve [mm]	fixed flange diameter/ edge length D _s max. [mm]
1 - 40	80	260
41 - 57	100	280
58 - 77	125	300
78 - 104	150	330
105 - 145	200	380
146 - 190	250	430
191 - 233	300	480
234 - 288	350	530
289 - 339	400	580
340 - 380	450	630
381 - 430	500	680
431 - 530	600	780
531 - 620	700	880
L2 (length of steel pipe sleeve) [mm]: 110		
We supply pipe sleeves in more sizes. Please call us.		

Curaflex® 8000

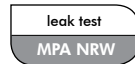


- opening for penetrations
- for buildings **yet to be constructed**
- for buildings with **tanking membranes** or applications with **bituminous thick-coating** (black tank)
- with **fixed and loose flange**



Product benefits

- the inside face of the sleeve provides an optimum contact surface for the elastomer of the Curaflex® gasket insert
- watertight bond with the concrete because the coefficient of expansion of the material corresponds to that of concrete
- corrosion-free and asbestos-free; dimensionally stable and resistant special fibre cement with tightly attached fixed and loose flange made of cast iron



Technical details

- with fixed and loose flange made of cast iron according to DIN 18195
- gas-tight with optional coating of the pipe sleeve inside
- depending on the tanking membranes arranged on both sides packings 1775 (with thin and hard membranes) or accessories for thick-coating
- can be used in conjunction with all Curaflex® gasket inserts

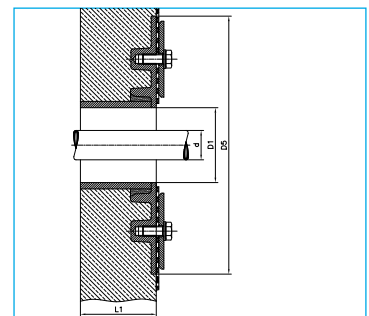
Material:

- asbestos-free special fibre cement pipe sleeve with bonded cast iron fixed flange and a loose flange made of cast iron

Accessories from page 88

pipe external diameter from - to	NB pipe sleeve [mm]	fixed flange diameter D _s max. [mm]	standard length L ₁ [mm]
1 - 40	80	440	200 240 250 300 350 365 400 500
41 - 57	100	460	
58 - 77	125	480	
78 - 104	150	510	
105 - 145	200	560	
146 - 190	250	610	
191 - 233	300	660	

We supply pipe sleeves in more sizes. Please call us.



- opening for penetrations
- for buildings **yet to be constructed**
- for buildings with **tanking membranes** or applications with **bituminous thick-coating** (black tank)
- with **fixed and loose flange**
- for **high static loads**



Product benefits

- the inside face of the sleeve provides an optimum contact surface for the elastomer of the Curaflex® gasket insert
- steel pipe sleeve for high static loads with integrated fixed and loose flange (loose flange split)
- can be installed flush within the shuttering

25
Years
Guarantee

Technical details

- with fixed and loose flange (loose flange split) made of steel according to DIN 18 195
- gas-tight
- can be used in conjunction with all Curaflex® gasket inserts
- depending on the tanking membranes arranged on both sides packings 1775 (with thin and hard membranes) and accessories for thick-coating

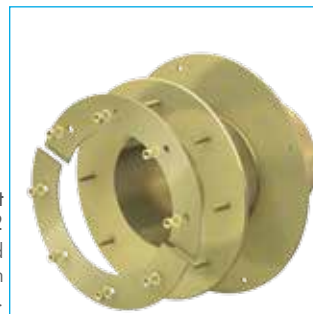
Materials:

- steel, electro-galvanised, yellow passivated and sealant coated; optionally made of stainless steel grade 304 (1.4301) or grade 316 (1.4571/1.4404)

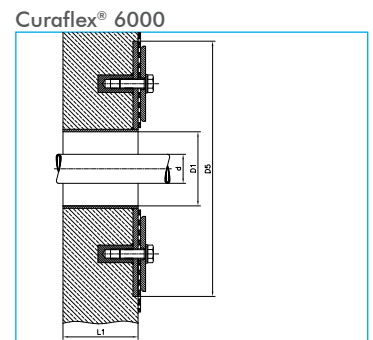
Accessories from page 88

pipe external diameter from - to	NB pipe sleeve [mm]	fixed flange diameter D _s [mm]	standard length L ₁ [mm]
1 - 40	80	440	200 240 250 300 350 365 400 500
41 - 57	100	460	
58 - 77	125	480	
78 - 104	150	510	
105 - 145	200	560	
146 - 190	250	610	
191 - 233	300	660	
234 - 288	350	710	
289 - 339	400	760	
340 - 380	450	810	
381 - 430	500	860	
431 - 530	600	960	
531 - 620	700	1060	

We supply pipe sleeves in more sizes. Please call us.



Variant Curaflex® Pipe sleeve 6.6002
Fixed flange with stud bolts and additional middle flange, e.g., for an additional sealing area or the like.



- flange with sleeve for penetrations
- for installation **on the face of walls**
- for buildings with **tanking membranes** or applications with **bituminous thick-coating** (black tank)
- with **fixed and loose flange**
- suitable for **reconstruction**



Product benefits

- sealing on the face of wall (nature of the hole/wall opening is not relevant)
- suitable for penetrations without a suitable core bore or pipe sleeve
- the inside face of the sleeve provides an optimum contact surface for the elastomer of the Curaflex® gasket insert



Technical details

- with fixed and loose flange (loose flange split) made of steel according to DIN 18 195
- for buildings with tanking membranes/thick-coating (black tank)
- gas-tight
- can be used in conjunction with all Curaflex® gasket inserts
- depending on the tanking membranes arranged on both sides packings 1775 (with thin and hard membranes) or accessories for thick-coating

Material:

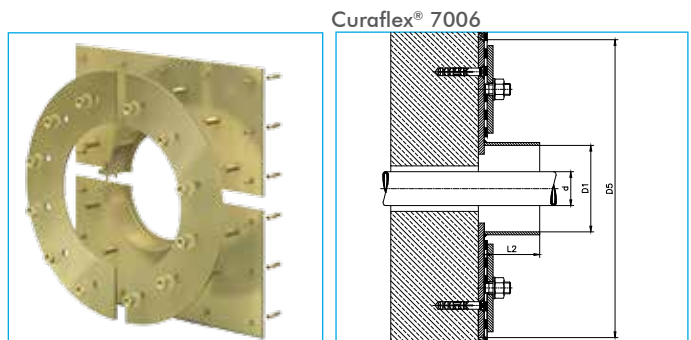
- steel, electro-galvanised, yellow passivated and sealant coated; optionally made of stainless steel grade 304 (1.4301) or grade 316 (1.4571/1.4404)

Accessories from page 88

pipe external diameter from - to	NB pipe sleeve [mm]	fixed flange diameter / edge length D _s max. [mm]	
		Curaflex® 7006	Curaflex® 7006/T
1 - 40	80	440	530
41 - 57	100	460	550
58 - 77	125	480	570
78 - 104	150	510	600
105 - 145	200	560	650
146 - 190	250	610	700
191 - 233	300	660	750
234 - 288	350	710	800
289 - 339	400	760	850
340 - 380	450	810	900
381 - 430	500	860	950
431 - 530	600	960	1050
531 - 620	700	1060	1150

L2 (length of steel pipe sleeve) [mm]: 110

We supply pipe sleeves in more sizes. Please call us.



Variant:
Curaflex® Pipe sleeve 7006/T
split version. For installations with existing pipeline in the wall.

Curaflex® 7006/M/S

against pressing water

- multi flange plate with fixed and loose flange
- for installation **on the face of walls**
- for buildings with **tanking membranes** or applications with **bituminous thick-coating** (black tank)
- suitable for **reconstruction**
- for **several/multilines**



Product benefits

- sealing on the face of wall (nature of the hole/wall opening is not relevant)
- suitable for penetrations without a suitable core bore or pipe sleeve
- the inside face of the sleeve provides an optimum contact surface for the elastomer of the Curaflex® gasket insert

25
Years
Guarantee

Technical details

- with fixed and loose flange made of steel (loose flange split) according to DIN 18 195
- dimensions and number of sleeves according to the specifications and in consideration of DIN 18 195
- for buildings with tanking membranes/thick-coating (black tank)
- gas-tight
- can be used in conjunction with all Curaflex® gasket inserts
- depending on the tanking membranes arranged on both sides packings 1775 (with thin and hard membranes) and accessories for thick-coating
- other variations, e.g., with descenders, additional flanges, in combination with Curaline® BKD. We are also happy to produce the against non-pressing water variation for you.

Example of use:

Suitable as pipe sleeve for sealing the flow and return of district heating pipes.

Material:

- electro-galvanised, yellow passivated and sealant coated, optionally made of stainless steel grade 304 (1.4301) or grade 316 (1.4571/1.4404)
- with thick-coating made of gg, contact surfaces sanded

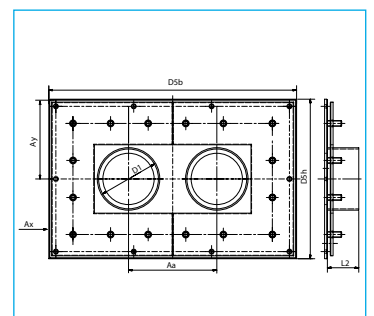
Delivery incl. fastening material for solid walls

Variant Curaflex® pipe sleeve 7006/M/T/S:

split version. For installations with existing pipeline in the wall; to be able to retrospectively mount the pipes.

diameter of sealing pipes/cables	d [mm]
inner diameter of pipe sleeve	D1 [DN in mm]
dimensions/edge length of fixed flange	D5b x D5h [mm]
length of steel pipe sleeve	L2 (standard 110 mm)
exact dimensions of the pipe/cable axis	Ay
centre distances between the pipes / cables	Aa
distances to other elements	Ax
class of tanking membrane/bituminous coating	-

Accessories from page 88



Curaflex® 4005
against non-pressing water

- opening for penetrations
- for buildings **yet to be constructed**
- for buildings with **tanking membranes** or applications with **bituminous thick-coating** (black tank)
- with **fixed and loose flange**

Pipe sleeves



Product benefits

- the inside face of the sleeve provides an optimum contact surface for the elastomer of the Curaflex® gasket insert
- watertight bond with the concrete because the coefficient of expansion of the material corresponds to that of concrete
- corrosion-free and asbestos-free; dimensionally stable and resistant special fibre cement with tightly attached fixed and loose flange made of cast iron

25
Years
Guarantee

Technical details

- with fixed and loose flange made of cast iron according to DIN 18195
- gas-tight with optional coating of the pipe sleeve inside
- depending on the tanking membranes arranged on both sides packings 1775 (with thin and hard membranes) or accessories for thick-coating
- can be used in conjunction with all Curaflex® gasket inserts

Material:

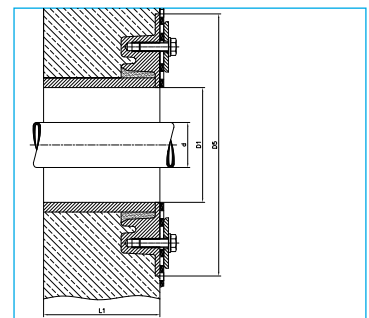
Material:

- asbestos-free special fibre cement pipe sleeve with bonded cast iron fixed flange and a loose flange made of cast iron

Accessories from page 88

pipe external diameter from - to	NB pipe sleeve [mm]	fixed flange diameter D _s max. [mm]	standard length L ₁ [mm]
1 - 40	80	270	200 240 250 300 350 365 400 500
41 - 57	100	290	
58 - 77	125	320	
78 - 104	150	345	
105 - 145	200	400	
146 - 190	250	455	
191 - 233	300	510	

We supply pipe sleeves in more sizes. Please call us.



We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

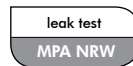
Curaflex® 5000
against non-pressing water

- opening for penetrations
- for buildings **yet to be constructed**
- for buildings with **tanking membranes** or applications with **bituminous thick-coating** (black tank)
- with **fixed and loose flange**
- for **high static loads**



Product benefits

- the inside face of the sleeve provides an optimum contact surface for the elastomer of the Curaflex® gasket insert
- steel pipe sleeve for high static loads with integrated fixed and loose flange (loose flange split)
- can be installed flush within the shuttering



Technical details

- with fixed and loose flange (loose flange split) made of steel according to DIN 18 195
- gas-tight
- can be used in conjunction with all Curaflex® gasket inserts
- depending on the tanking membranes arranged on both sides packings 1775 (with thin and hard membranes) and accessories for thick-coating

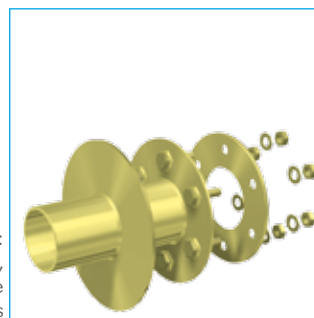
materials:

- steel, electro-galvanised, yellow passivated and sealant coated; optionally made of stainless steel grade 304 (1.4301) or grade 316 (1.4571/1.4404)

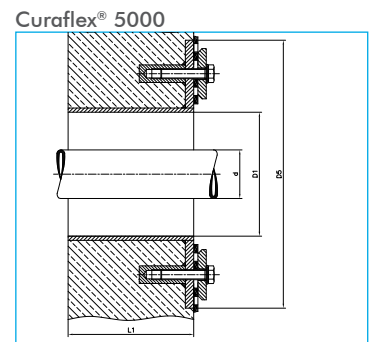
Accessories from page 88

pipe external diameter from - to	NB pipe sleeve [mm]	fixed flange diameter D _s [mm]	standard length L ₁ [mm]
1 - 40	80	260	200 240 250 300 350 365 400 500
41 - 57	100	280	
58 - 77	125	300	
78 - 104	150	330	
105 - 145	200	380	
146 - 190	250	430	
191 - 233	300	480	
234 - 288	350	530	
289 - 339	400	580	
340 - 380	450	630	
381 - 430	500	680	
431 - 530	600	780	
531 - 620	700	880	

We supply pipe sleeves in more sizes. Please call us.



Variant:
Curaflex® Pipe sleeve 5.5002,
as described above but steel pipe
sleeve with stud bolts

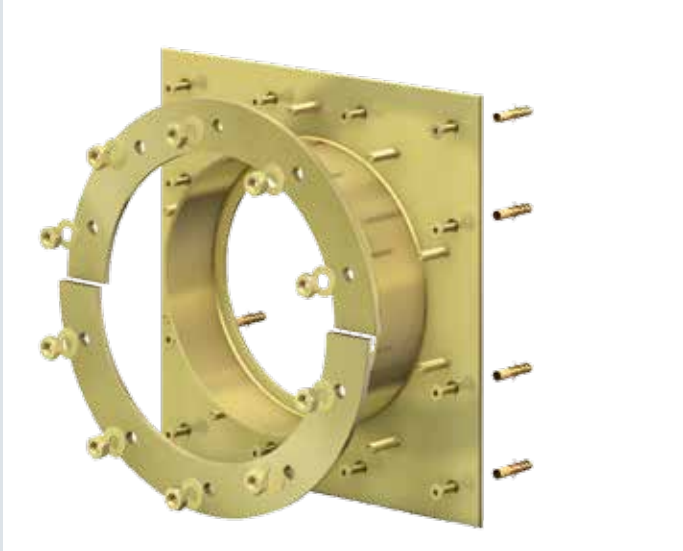


Curaflex® 7005

against non-pressing water

- flange with sleeve for penetrations
- for installation **on the face of walls**
- for buildings with **tanking membranes** or applications with **bituminous thick-coating** (black tank)
- with **fixed and loose flange**
- suitable for **reconstruction**

Pipe sleeves



Product benefits

- sealing on the face of wall (nature of the hole/wall opening is not relevant)
- suitable for penetrations without a suitable core bore or pipe sleeve
- the inside face of the sleeve provides an optimum contact surface for the elastomer of the Curaflex® gasket insert

25
Years
Guarantee

Technical details

- with fixed and loose flange (loose flange split) made of steel according to DIN 18 195
- for buildings with tanking membranes/thick-coating (black tank)
- gas-tight
- can be used in conjunction with all Curaflex® gasket inserts
- depending on the tanking membranes arranged on both sides packings 1775 (with thin and hard membranes) or accessories for thick-coating

Material:

- steel, electro-galvanised, yellow passivated and sealant coated; optionally made of stainless steel grade 304 (1.4301) or grade 316 (1.4571/1.4404)

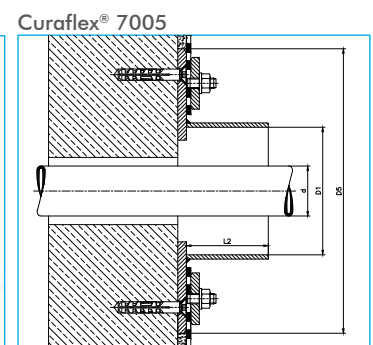
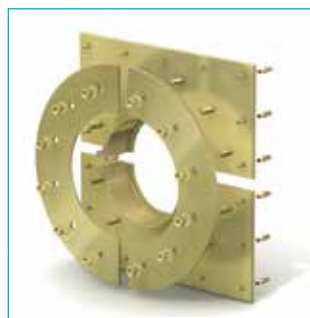
Accessories from page 88

pipe external diameter from - to	NB pipe sleeve [mm]	fixed flange diameter / edge length D ₅ max. [mm]	
		Curaflex® 7005	Curaflex® 7005/T
1 - 40	80	260	340
41 - 57	100	280	360
58 - 77	125	300	380
78 - 104	150	330	410
105 - 145	200	380	460
146 - 190	250	430	510
191 - 233	300	480	560
234 - 288	350	530	610
289 - 339	400	580	660
340 - 380	450	630	710
381 - 430	500	680	760
431 - 530	600	780	860
531 - 620	700	880	960

L2 (length of steel pipe sleeve) [mm]: 110

We supply pipe sleeves in more sizes. Please call us.

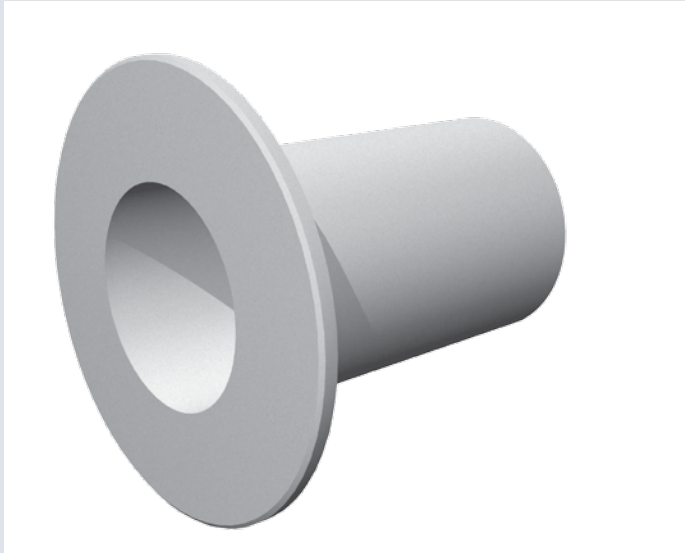
Variant:
Curaflex® Pipe sleeve 7005/T
split version. For installations with existing pipeline in the wall.



Curaflex® 3001

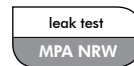
against non-pressing water

- opening for penetrations
- for buildings **yet to be constructed**
- for buildings with **bituminous thick-coating** (black tank)
- with **bonding flange**



Product benefits

- dimensionally stable and resistant special fibre
- watertight bond with the concrete because the coefficient of expansion of the material corresponds to that of concrete
- with fibre cement flange as bonding flange for the onsite installation of thick-coating (KMB)
- optimal connection via fibre cement flange
- the inside face of the sleeve provides an optimum contact surface for the elastomer of the Curaflex® gasket insert



Pipe sleeve

Technical details

- gas-tight when both inside and front faces of sleeve are coated
- can be used in conjunction with all Curaflex® gasket inserts
- for all conventional synthetically modified bituminous coating and thick-coatings

Material:

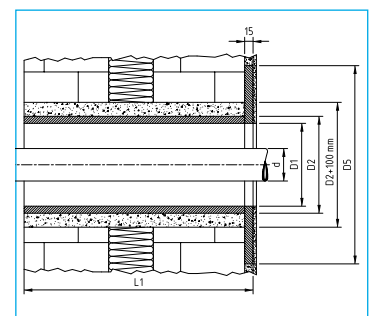
- asbestos-free special fibre cement pipe sleeve with bonded fibre cement fixed flange
- glass fibre fabric

Accessories from page 88

pipe external diameter from - to	NB pipe sleeve [mm]	pipe sleeve diameter D ₂ max. [mm]	bonding flange D _s max. [mm]
1 - 40	80	≤ 140	285
41 - 57	100	≤ 160	305
58 - 77	125	≤ 156	330
78 - 104	150	≤ 187	355
105 - 145	200	≤ 238	405
146 - 190	250	≤ 289	455
191 - 233	300	≤ 347	505

L1: standard length of pipe sleeves: 415 mm

We supply pipe sleeves in more sizes. Please call us.



We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

Product guide Curaflex® combinations

sealing against **pressing water**

product	without tanking membranes/ bituminous coating	with tanking membranes/ bituminous coating	installation		page
			in the wall	on the face of the wall	
Curaflex® 3300	●		●		72
Curaflex® 3300/T	●		●		73
Curaflex® 3600	●		●		74
Curaflex® 8300	●			●	75
Curaflex® 8300/T	●			●	76
Curaflex® 4300		●	●		77
Curaflex® 6300		●	●		78
Curaflex® 7300		●		●	79
Curaflex® 7300/T		●		●	80

Combinations

pressing / non-pressing water

Pressing water – water which exerts hydrostatic pressure (even if limited in time, e.g. accumulating seepage water) on the structural element with the feedthrough. Groundwater and floodwater are typical water types. **Non-pressing water** – water which does not exert any hydrostatic pressure on the structural element with the feedthrough. Capillary water is a typical water type.

**without tanking membranes / bituminous coating (white tank),
with tanking membranes / bituminous coating (black tank)**

Non-waterproof structures must be protected with a sealing coat against penetrating water. This sealing coat can be in the form of sheeting, trowelable or liquid-applicable masses and therefore results in a skin-type seal. Since bitumen plays a major role in terms of materials, these forms of seals are often known as a "black tank". Waterproof or non-water-permeable structures do not require additional skin sealing. This type of structure includes those using impermeable reinforced concrete. This type of structural waterproofing is also known as a "white tank".

Installation in the wall / in front of the wall

The wall thickness is normally sufficient for installing a Curaflex® pipe sleeve. In this case, the sealing system is also located **in the wall**. If the wall is too thin, or the costs too high, to adapt the wall feedthrough for inserting a pipe sleeve and a gasket insert appropriately, it is recommended that the system is **installing on the face of the wall**

sealing against **non-pressing water**

product	without tanking membranes/ bituminous coating	with tanking membranes/ bituminous coating	installation		page
			in the wall	on the face of the wall	
Curaflex® 3100	●		●		81
Curaflex® 8100	●	● with bituminous thick coating		●	82
Curaflex® 8100/T	●	● with bituminous thick coating		●	82
Curaflex® 4100		●	●		83
Curaflex® 5100		●	●		84
Curaflex® 5.5102		●	●		85
Curaflex® 7100		●		●	86
Curaflex® 7100/T		●		●	86
Curaflex® 3101		●	●		87

Installation of Curaflex® combinations

Installation example of Curaflex® 3300

Please note before installing the pipe sleeve:

- If Curaflex® 3000 or 3000/T or a gasket insert is fixed in a special fibre cement pipe sleeve which is not yet concreted in place, this should only be slightly pre-tightened. Otherwise, the pipe sleeve could be damaged. Once concreting is complete, tighten the gasket insert with the specified torque.
- If the service line has already been laid, then the pipe sleeve must be positioned centred around the service line and fixed before concreting.
- If possible, place pipe sleeves at a spacing of minimum 10 cm between each other during concreting so that compaction of the concrete/mortar is easier; also observe a spacing of 10 cm between the pipe sleeve and the breakthrough borders when installing in existing walls.

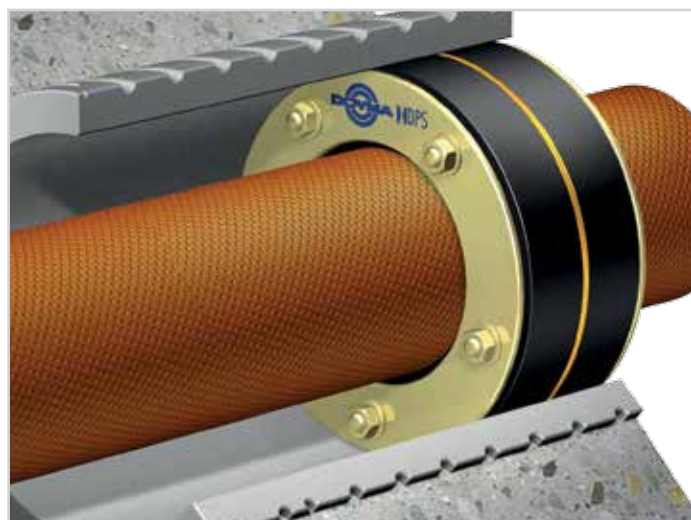
Before installing the gasket insert, please note:

- Curaflex® gasket inserts are maintenance-free. Re-tightening the bolts is not necessary if installed correctly.
- Does the gasket insert fit? Compare service line and pipe sleeve diameters with the information on the gasket insert.
- The nut side of the gasket insert should be facing the dry side of the wall.
- Gasket inserts are not fixed points or supports, but are exclusively intended for elastic sealing of service lines.
- Slight axial movements of the service lines are permissible.
- The seals and pipe services must be clean and free of damage.

Note:

DOYMA products are continuously being further developed, technical changes will take place without previous notification.

Extensive installation instructions are provided with the product. On top of this, they are available on the Internet at www.doyma.de



Curaflex® Combination 3300

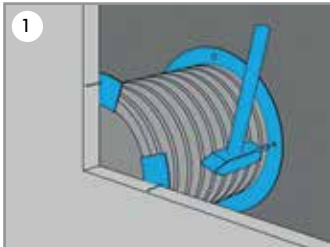
bolt Ø	wrench width	Maximum torque
M 5	8	3 Nm
M 6	10	8 Nm
M 8	13	12 Nm
M 10	17	25 Nm
M 12	19	30 Nm

Maximum torque for Curaflex® A - F gasket inserts.

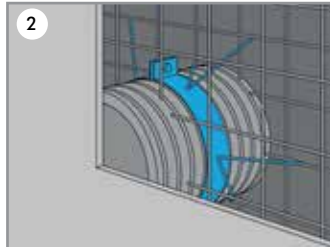
Installation example of Curaflex® combination 3300 (see p. 72)

Curaflex® 3300 is a pipe penetration system for sealing off service lines against pressing water. The system consists of a Curaflex® C gasket insert and the Curaflex® 3000 pipe sleeve. It can be built into walls, ceilings or bases in sealing systems without sealing sheets or bituminous coating.

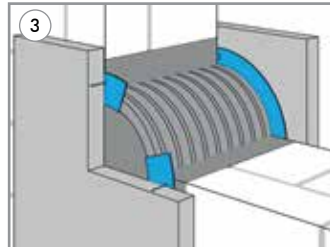
Installation of the pipe sleeve during shell construction



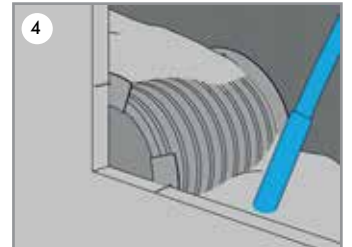
1 Fix the pipe sleeve in the shuttering using Curaflex® 1701. 2 shuttering aids are required for each pipe sleeve.



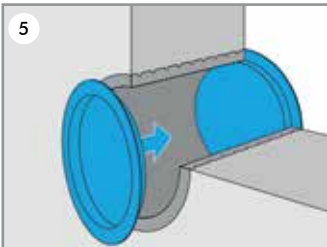
2 Example: fixing into steel shuttering using welded connections with pipe clamps (pipe clamps provided on site).



3 Example: walling in.

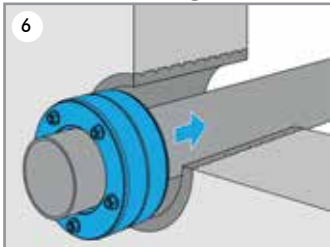


4 Ensure concrete around pipe sleeve is well-compacted.

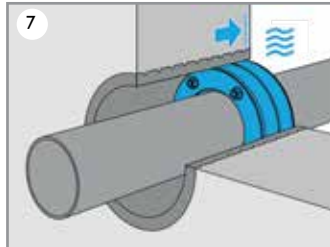


5 Use Curaflex® 1702 protection cap to protect the pipe during the shell construction phase.

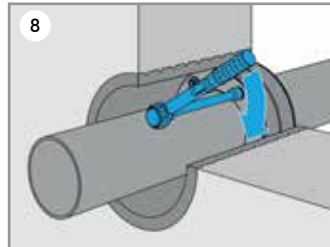
Installation of the gasket insert



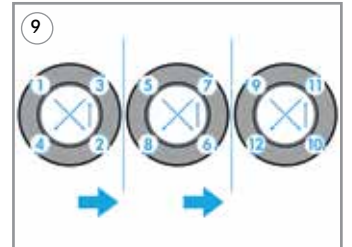
6 Push the gasket insert over the service pipe in the annular gap.



7 Position the gasket insert on the water side.



8 Tension the gasket insert nuts using a torque wrench (note Fig. 9).

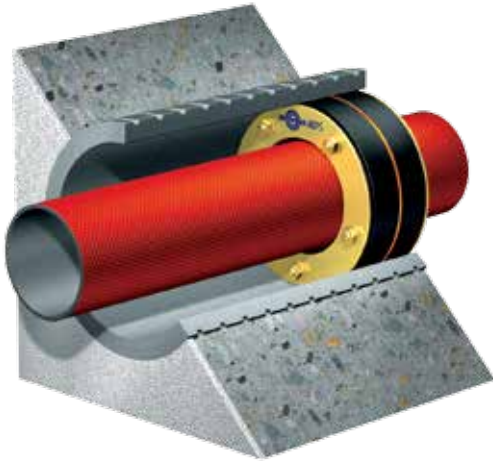


9 Tighten the bolts diametrically opposing. Note maximum torque.

Curaflex 3300

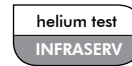
against pressing water

- sealing system for penetrations
- for buildings **yet to be constructed**
- for **waterproof concrete** (white tank)



Product benefits

- simple installation due accurately fitting combination from gasket insert and pipe sleeve
- permanently sealed without re-tensioning (maintenance-free) higher sealing performance of the gasket insert due to **DPS*** and **DOYMA-Grip**
- system component, without cuts or divisions
- with water-tight welded bolts
- dimensionally stable and resistant special fibre cement
- homogeneous connection to concrete, reinforced by special grooving



Combinations

Technical details

- gas-tight when both inside and front faces of sleeve are coated
- accepts angular deviations of service duct up to 8°
- accepts axial movements

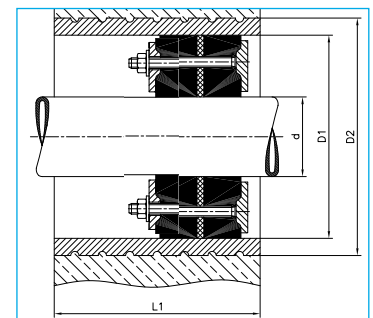
The combination consist of:

- Curaflex® gasket insert C with DPS*, one sided double sealing
- Curaflex® pipe sleeve 3000

* DPS up to NB 350

Accessories from page 88

pipe external diameter from - to	NB pipe sleeves [mm]	pipe sleeve external diameter D ₂ max. [mm]	standard length L ₁ [mm]
1 - 40	80	≤ 140	200 240 250 300 350 365 400 500 650 1000
41 - 57	100	≤ 160	
58 - 77	125	≤ 156	
78 - 104	150	≤ 187	
105 - 145	200	≤ 238	
146 - 190	250	≤ 289	
191 - 233	300	≤ 347	
234 - 288	350	≤ 395	
289 - 339	400	≤ 461	
340 - 380	450	≤ 511	
381 - 430	500	≤ 570	
431 - 530	600	≤ 673	
531 - 620	700	≤ 787	
Other sizes, materials and customised versions on request!			

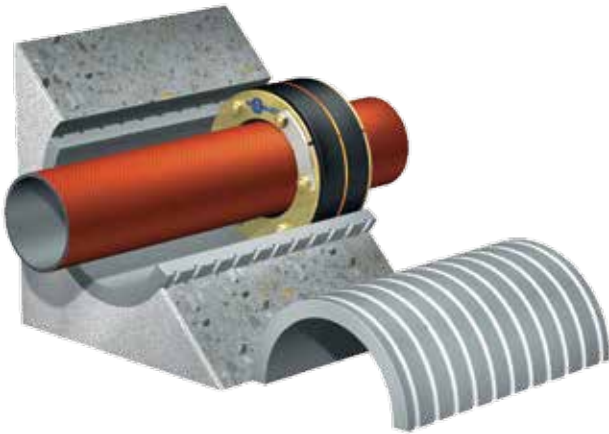


We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

Curaflex 3300/T

against pressing water

- sealing system for penetrations
- for buildings **yet to be constructed**
- for **waterproof concrete** (white tank)
- split version for **retrofit installation**



Product benefits

- simple installation due accurately fitting combination from gasket insert and pipe sleeve
- permanently sealed without re-tensioning (maintenance-free) higher sealing performance of the gasket insert due to **DPS*** and **DOYMA-Grip**
- system component, without cuts or divisions
- with water-tight welded bolts
- dimensionally stable and resistant special fibre cement
- homogeneous connection to concrete, reinforced by special grooving
- retrospectively to mount the existing pipe

25
Years
Guarantee

Combinations

Technical details

- gas-tight when both inside and front faces of sleeve are coated
- accepts angular deviations of service duct up to 8°
- accepts axial movements

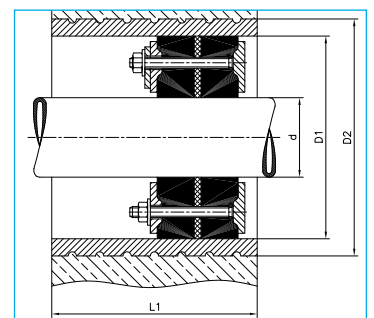
The combination consist of:

- Curaflex® gasket insert C with DPS*, one sided double sealing
- Curaflex® pipe sleeve 3000

* DPS up to NB 350

Accessories from page 88

pipe external diameter from - to	NB pipe sleeves [mm]	pipe sleeve external diameter D ₂ max. [mm]	standard length L ₁ [mm]
1 - 40	80	≤ 140	200 240 250 300 350 365 400 500 650 1000
41 - 57	100	≤ 160	
58 - 77	125	≤ 156	
78 - 104	150	≤ 187	
105 - 145	200	≤ 238	
146 - 190	250	≤ 289	
191 - 233	300	≤ 347	
234 - 288	350	≤ 395	
289 - 339	400	≤ 461	
340 - 380	450	≤ 511	
381 - 430	500	≤ 570	
431 - 530	600	≤ 673	
531 - 620	700	≤ 787	
Other sizes, materials and customised versions on request!			



We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

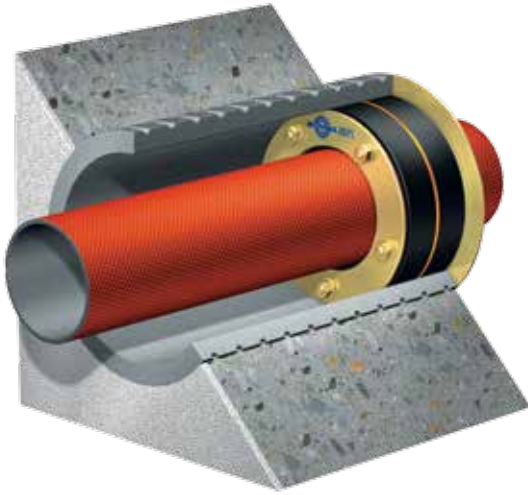
Curaflex 3600

against pressing water

- sealing system for penetrations
- for buildings **yet to be constructed**
- for **waterproof concrete** (white tank)
- with extra large ring for **axial fixation**
- for **high hydrostatic loads**

DPS

DOYMA GRIP



Product benefits

- simple installation due accurately fitting combination from gasket insert and pipe sleeve
- permanently sealed without re-tensioning (maintenance-free)
- higher sealing performance of the gasket insert due to **DPS*** and **DOYMA-Grip**
- system component, without cuts or divisions
- with water-tight welded bolts
- mounting from the pressurised side
- dimensionally stable and resistant special fibre cement
- homogeneous connection to concrete, reinforced by special grooving



25 Years Guarantee

Combinations

Technical details

- gas-tight when both inside and front faces of sleeve are coated
- accepts angular deviations of service duct up to 8°
- accepts axial movements

The combination consist of:

- Curaflex® gasket insert F, one sided double sealing (variant gasket insert D)
- Curaflex® pipe sleeve 3000

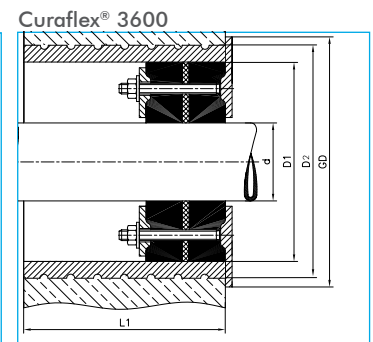
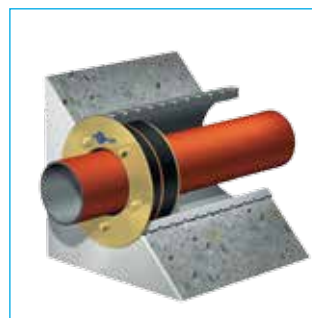
* DPS up to NB 350

Accessories from page 88

pipe external diameter from - to	NB pipe sleeve [mm]	pipe sleeve external diameter D ₂ max. [mm]	large ring diameter G _D max. [mm]	standard length L ₁ [mm]
1 - 40	80	≤ 140	98	200 240 250 300 350 365 400 500 650 1000
41 - 57	100	≤ 160	120	
58 - 77	125	≤ 156	145	
78 - 104	150	≤ 187	170	
105 - 145	200	≤ 238	240	
146 - 190	250	≤ 289	290	
191 - 233	300	≤ 347	340	
234 - 288	350	≤ 395	390	
289 - 339	400	≤ 461	440	
340 - 380	450	≤ 511	490	
381 - 430	500	≤ 570	550	
431 - 530	600	≤ 673	650	
531 - 620	700	≤ 787	750	

Other sizes, materials and customised versions on request!

Variant Curaflex® 3400
Installation of the pressure-facing side ("water side").



We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

Curaflex 8300

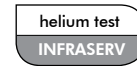
against pressing water

- sealing system for penetrations
- for installation **on the face of walls**
- for **waterproof concrete** (white tank) or applications with **bituminous thick-coating** (black tank)
- suitable for **reconstruction**



Product benefits

- simple installation due accurately fitting combination from gasket insert and pipe sleeve
- permanently sealed without re-tensioning (maintenance-free)
- higher sealing performance of the gasket insert due to **DPS*** and **DOYMA-Grip**
- with water-tight welded bolts
- system component, without cuts or divisions
- sealing on the wall (nature of the hole/wall opening is not relevant)



25 Years Guarantee

Combinations

Technical details

- gas-tight
- accepts angular deviations of service duct up to 8°
- accepts axial movements

The combination consist of:

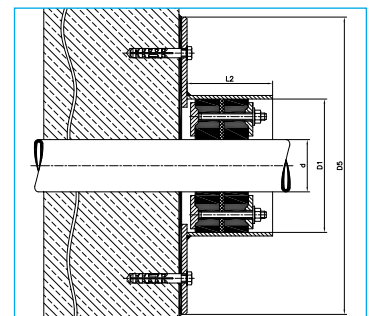
- Curaflex® gasket insert C with DPS*, one sided double sealing
- Curaflex® pipe sleeve 8000

Delivery incl. fastening material for solid walls.

* DPS up to NB 350

Accessories from page 88

pipe external diameter from - to	NB pipe sleeve [mm]	fixed flange edge length D _s max. [mm]
1 - 40	80	260
41 - 57	100	280
58 - 77	125	300
78 - 104	150	330
105 - 145	200	380
146 - 190	250	430
191 - 233	300	480
234 - 288	350	530
289 - 339	400	580
340 - 380	450	630
381 - 430	500	680
431 - 530	600	780
531 - 620	700	880
L2 (length of steel pipe flange) [mm]: 110		
Other sizes, materials and customised versions on request!		



We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

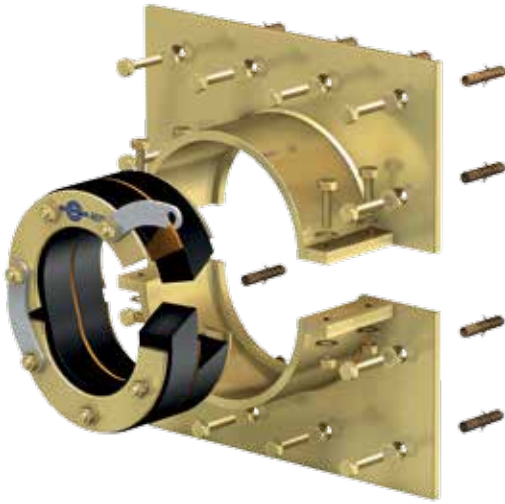
Curaflex 8300/T

against pressing water

- sealing system for penetrations
- for installation **on the face of walls**
- for **waterproof concrete** (white tank) or applications with **bituminous thick-coating** (black tank)
- suitable for **reconstruction**
- split version for **retrofit installation**

DPS

DOYMA GRIP



Product benefits

- easy installation, accurately fitting combination from split gasket insert and split pipe sleeve
- permanently sealed without re-tensioning (maintenance-free)
- higher sealing performance of the gasket insert due to **DPS*** and **DOYMA-Grip**
- with water-tight welded bolts
- sealing on the wall (nature of the hole/wall opening is not relevant)
- retrospectively to mount the existing pipe

Combinations

Technical details

- gas-tight
- accepts angular deviations of service duct up to 8°
- accepts axial movements

The combination consist of:

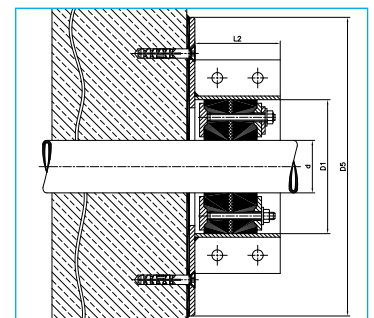
- Curaflex® gasket insert C with DPS*, one sided double sealing
- Curaflex® pipe sleeve 8000

Delivery incl. fastening material for solid walls.

* DPS up to NB 350

Accessories from page 88

pipe external diameter from - to	NB pipe sleeve [mm]	fixed flange edge length D _s max. [mm]
1 - 40	80	260
41 - 57	100	280
58 - 77	125	300
78 - 104	150	330
105 - 145	200	380
146 - 190	250	430
191 - 233	300	480
234 - 288	350	530
289 - 339	400	580
340 - 380	450	630
381 - 430	500	680
431 - 530	600	780
531 - 620	700	880
L2 (Length of steel pipe flange) [mm]: 110		
Other sizes, materials and customised versions on request!		

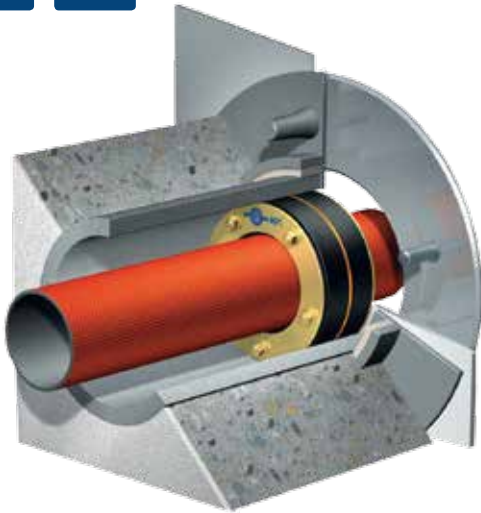


We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

Curaflex 4300

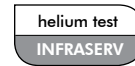
against pressing water

- sealing system for penetrations
- for buildings **yet to be constructed**
- for buildings with **tanking membranes** or applications with **bituminous thick-coating** (black tank)
- with **fixed and loose flange**



Product benefits

- simple installation due accurately fitting combination from gasket insert and pipe sleeve
- permanently sealed without re-tensioning (maintenance-free)
- higher sealing performance of the gasket insert due to **DPS*** and **DOYMA-Grip**
- system component, without cuts or divisions
- with water-tight welded bolts
- dimensionally stable and resistant special fibre cement with fixed and loose flange made of cast iron



Technical details

- with flanges according to DIN 18 195
- gas-tight when both inside and front faces of sleeve are coated
- accepts angular deviations of service duct up to 8°
- accepts axial movements
- depending on the tanking membranes arranged on both sides packings 1775 (with thin and hard membranes) or accessories for thick-coating

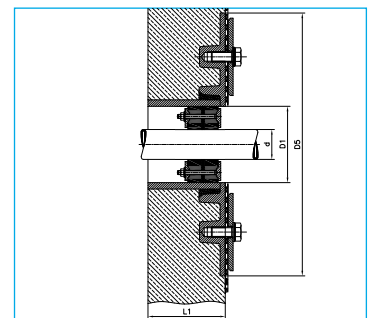
The combination consist of:

- Curaflex® gasket insert C with DPS*, one sided double sealing
- Curaflex® pipe sleeve 4006

* DPS up to NB 350

Accessories from page 88

pipe external diameter from - to	NB pipe sleeve [mm]	fixed flange diameter D _s max. [mm]	standard length L ₁ [mm]
1 - 40	80	440	200 240 250 300 350 365 400 500
41 - 57	100	460	
58 - 77	125	480	
78 - 104	150	510	
105 - 145	200	560	
146 - 190	250	610	
191 - 233	300	660	
Other sizes, materials and customised versions on request!			



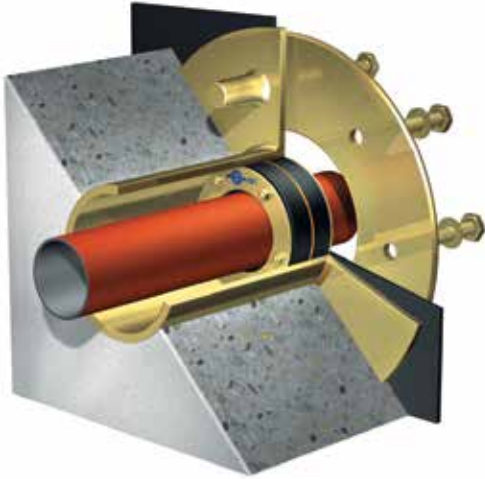
Curaflex 6300

against pressing water

- sealing system for penetrations
- for buildings **yet to be constructed**
- for buildings with **tanking membranes** or applications with **bituminous thick-coating** (black tank)
- with **fixed and loose flange**
- for **high static loads**

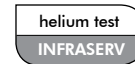
DPS

DOYMA GRIP



Product benefits

- simple installation due accurately fitting combination from gasket insert and pipe sleeve
- permanently sealed without re-tensioning (maintenance-free)
- higher sealing performance of the gasket insert due to **DPS*** and **DOYMA-Grip**
- system component, without cuts or divisions
- with water-tight welded bolts
- steel pipe sleeve for high static loads
- can be installed flush within the shuttering
- integrated fixed and loose flange (loose flange split)



Technical details

- with flanges according to DIN 18 195
- depending on the tanking membranes arranged on both sides packings 1775 (with thin and hard membranes) and accessories for thick-coating
- gas-tight
- accepts axial movements

The combination consist of:

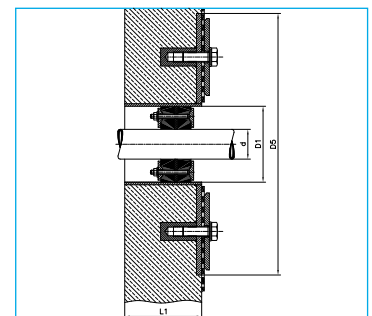
- Curaflex® gasket insert C with DPS*, one sided double sealing
- Curaflex® pipe sleeve 6000

* DPS up to NB 350

Accessories from page 88

pipe external diameter from - to	NB pipe sleeve [mm]	fixed flange diameter D _s [mm]	standard length L ₁ [mm]
1 - 40	80	440	200 240 250 300 350 365 400 500
41 - 57	100	460	
58 - 77	125	480	
78 - 104	150	510	
105 - 145	200	560	
146 - 190	250	610	
191 - 233	300	660	
234 - 288	350	710	
289 - 339	400	760	
340 - 380	450	810	
381 - 430	500	860	
431 - 530	600	960	
531 - 620	700	1060	

Other sizes, materials and customised versions on request!

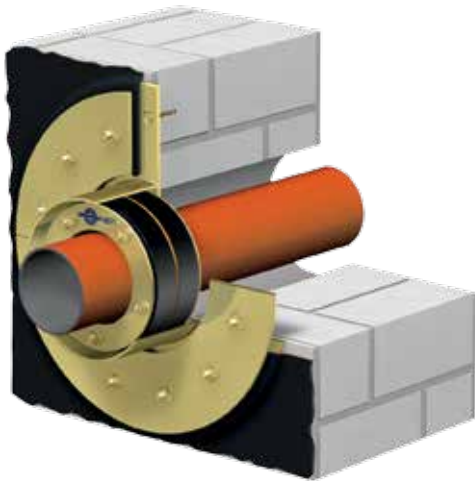


We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

Curaflex 7300

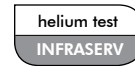
against pressing water

- sealing system for penetrations
- for installation **on the face of walls**
- for buildings with **tanking membranes** or applications with **bituminous thick-coating** (black tank)
- with **fixed and loose flange**
- suitable for **reconstruction**



Product benefits

- simple installation due accurately fitting combination from gasket insert and pipe sleeve
- permanently sealed without re-tensioning (maintenance-free)
- higher sealing performance of the gasket insert due to **DPS*** and **DOYMA-Grip**
- system component, without cuts or divisions
- with water-tight welded bolts
- sealing on the wall (nature of the hole/wall opening is not relevant)
- integrated fixed and loose flange (loose flange split)



25 Years Guarantee

Combinations

Technical details

- with flanges according to DIN 18 195
- gas-tight
- accepts angular deviations of service duct up to 8°
- accepts axial movements
- depending on the tanking membranes arranged on both sides packings 1775 (with thin and hard membranes) and accessories for thick-coating

The combination consist of:

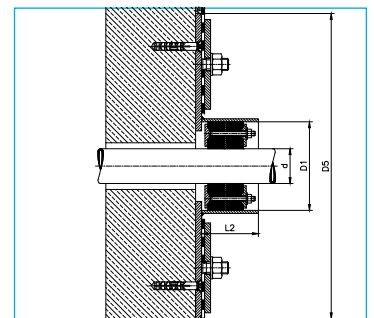
- Curaflex® gasket insert C with DPS*, one sided double sealing
- Curaflex® pipe sleeve 7006

Delivery incl. fastening material for solid walls.

* DPS up to KB/NB 350

Accessories from page 88

pipe external diameter from - to	NB pipe sleeve [mm]	fixed flange edge length D _s max. [mm]
1 - 40	80	440
41 - 57	100	460
58 - 77	125	480
78 - 104	150	510
105 - 145	200	560
146 - 190	250	610
191 - 233	300	660
234 - 288	350	710
289 - 339	400	760
340 - 380	450	810
381 - 430	500	860
431 - 530	600	960
531 - 620	700	1060
L2 (Length of steel pipe flange) [mm]: 110		
Other sizes, materials and customised versions on request!		



We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

Curaflex 7300/T

against pressing water

- sealing system for penetrations
- for installation **on the face of walls**
- for buildings with **tanking membranes** or applications with **bituminous thick-coating** (black tank)
- with **fixed and loose flange**
- suitable for **reconstruction**
- split version for **retrofit installation**

DPS

DOYMA GRIP



Product benefits

- simple installation due accurately fitting combination from gasket insert and pipe sleeve
- permanently sealed without re-tensioning (maintenance-free)
- higher sealing performance of the gasket insert due to **DPS*** and **DOYMA-Grip**
- system component, without cuts or divisions
- with water-tight welded bolts
- sealing on the wall (nature of the hole/wall opening is not relevant)
- integrated splitted fixed and loose flange

25
Years
Guarantee

Technical details

- with flanges according to DIN 18 195
- gas-tight
- accepts angular deviations of service duct up to 8°
- accepts axial movements
- depending on the tanking membranes arranged on both sides packings 1775 (with thin and hard membranes) and accessories for thick-coating

The combination consist of:

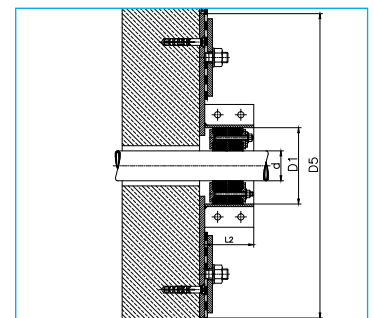
- Curaflex® gasket insert Quick In C with DPS*, one sided double sealing, split
- Curaflex® pipe sleeve 7006/T

Delivery incl. fastening material for solid walls.

* DPS up to NB 350

Accessories from page 88

pipe external diameter from - to	NB pipe sleeve [mm]	fixed flange edge length D _s max. [mm]
1 - 40	80	530
41 - 57	100	550
58 - 77	125	570
78 - 104	150	600
105 - 145	200	650
146 - 190	250	700
191 - 233	300	750
234 - 288	350	800
289 - 339	400	850
340 - 380	450	900
381 - 430	500	950
431 - 530	600	1050
531 - 620	700	1150
L2 (length of steel pipe sleeve) [mm]: 110		
Other sizes, materials and customised versions on request!		

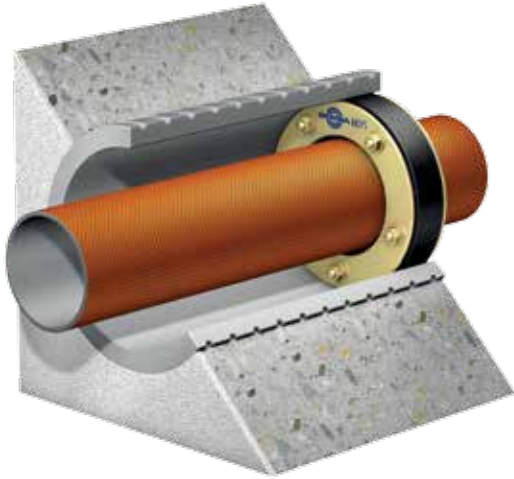


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Curaflex 3100

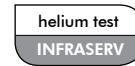
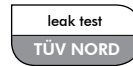
against non-pressing water

- sealing system for penetrations
- for buildings **yet to be constructed**
- for **waterproof concrete** (white tank)



Product benefits

- simple installation due accurately fitting combination from gasket insert and pipe sleeve
- permanently sealed without re-tensioning (maintenance-free) higher sealing performance of the gasket insert due to **DPS*** and **DOYMA-Grip**
- system component, without cuts or divisions
- with water-tight welded bolts
- dimensionally stable and resistant special fibre cement
- homogeneous connection to concrete, reinforced by special grooving



Technical details

- gas-tight when both inside and front faces of sleeve are coated
- accepts angular deviations of service duct up to 8°
- accepts axial movements

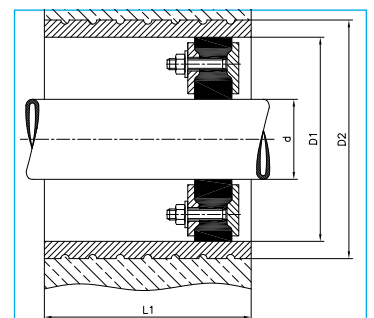
The combination consist of:

- Curaflex® gasket insert A with DPS*, one sided single sealing
- Curaflex® pipe sleeve 3000

* DPS up to NB 350

Accessories from page 88

pipe external diameter from - to	NB pipe sleeves [mm]	pipe sleeve external diameter D ₂ max. [mm]	standard length L ₁ [mm]
1 - 40	80	≤ 140	200 240 250 300 350 365 400 500 650 1000
41 - 57	100	≤ 160	
58 - 77	125	≤ 156	
78 - 104	150	≤ 187	
105 - 145	200	≤ 238	
146 - 190	250	≤ 289	
191 - 233	300	≤ 347	
234 - 288	350	≤ 395	
289 - 339	400	≤ 461	
340 - 380	450	≤ 511	
381 - 430	500	≤ 570	
431 - 530	600	≤ 673	
531 - 620	700	≤ 787	
Other sizes, materials and customised versions on request!			



We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

Curaflex 8100

against non-pressing water

- sealing system for penetrations
- for installation **on the face of walls**
- for **waterproof concrete** (white tank) or applications with **bituminous thick-coating** (black tank)
- suitable for **reconstruction**

DPS

DOYMA GRIP



Product benefits

- simple installation due accurately fitting combination from gasket insert and pipe sleeve
- permanently sealed without re-tensioning (maintenance-free)
- higher sealing performance of the gasket insert due to **DPS*** and **DOYMA-Grip**
- with water-tight welded bolts
- system component, without cuts or divisions
- sealing on the wall (nature of the hole/wall opening is not relevant)

leak test
TÜV NORD

helium test
INFRASERV

25
Years
Guarantee

Combinations

Technical details

- gas-tight
- accepts angular deviations of service duct up to 8°
- accepts axial movements

The combination consist of:

- Curaflex® gasket insert A with DPS*, one sided single sealing
- Curaflex® pipe sleeve 8000

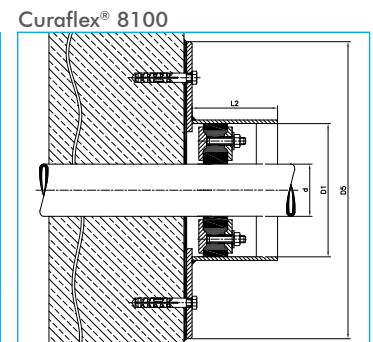
Delivery incl. fastening material for solid walls.

* DPS up to KB/NB 350

Accessories from page 88

pipe external diameter from - to	NB pipe sleeves [mm]	fixed flange edge length D _s max. [mm]
1 - 40	80	260
41 - 57	100	280
58 - 77	125	300
78 - 104	150	330
105 - 145	200	380
146 - 190	250	430
191 - 233	300	480
234 - 288	350	530
289 - 339	400	580
340 - 380	450	630
381 - 430	500	680
431 - 530	600	780
531 - 620	700	880
L2 (length of steel pipe sleeve) [mm]: 110		
Other sizes, materials and customised versions on request!		

Variant pipe sleeve 8100/T
split version of Curaflex®
Pipe sleeve 8000/T with gasket insert Quick In A. To be subsequently installed around the existing pipeline.

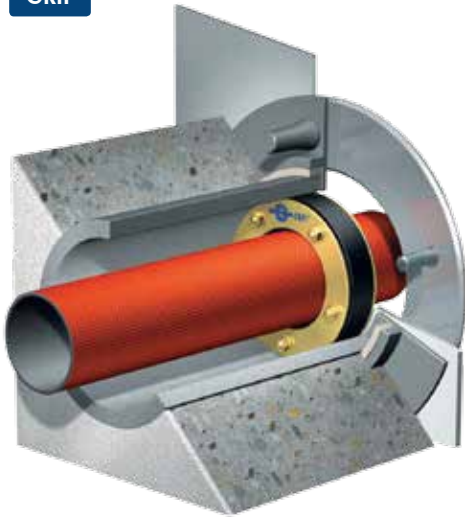


We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

Curaflex 4100

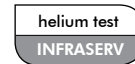
against non-pressing water

- sealing system for penetrations
- for buildings **yet to be constructed**
- for buildings with **tanking membranes** or applications with **bituminous thick-coating** (black tank)
- with **fixed and loose flange**



Product benefits

- simple installation due accurately fitting combination from gasket insert and pipe sleeve
- permanently sealed without re-tensioning (maintenance-free)
- higher sealing performance of the gasket insert due to **DPS*** and **DOYMA-Grip**
- system component, without cuts or divisions
- with water-tight welded bolts
- dimensionally stable and resistant special fibre cement with fixed and loose flange made of cast iron



Combinations

Technical details

- with flanges according to DIN 18 195
- gas-tight when both inside and front faces of sleeve are coated
- accepts angular deviations of service duct up to 8°
- accepts axial movements
- depending on the tanking membranes arranged on both sides packings 1775 (with thin and hard membranes) or accessories for thick-coating

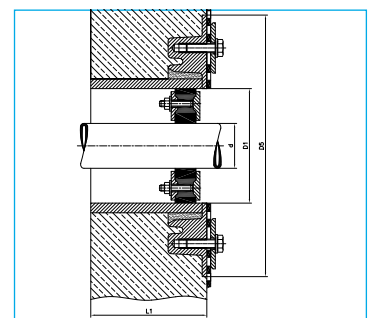
The combination consist of:

- Curaflex® gasket insert A with DPS*, one sided single sealing
- Curaflex® pipe sleeve 4005

* DPS up to NB 350

Accessories from page 88

pipe external diameter from - to	NB pipe sleeves [mm]	fixed flange diameter D _s max. [mm]	standard length L ₁ [mm]
1 - 40	80	270	200 240 250 300 350 365 400 500
41 - 57	100	290	
58 - 77	125	320	
78 - 104	150	345	
105 - 145	200	400	
146 - 190	250	455	
191 - 233	300	510	
Other sizes, materials and customised versions on request!			



We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

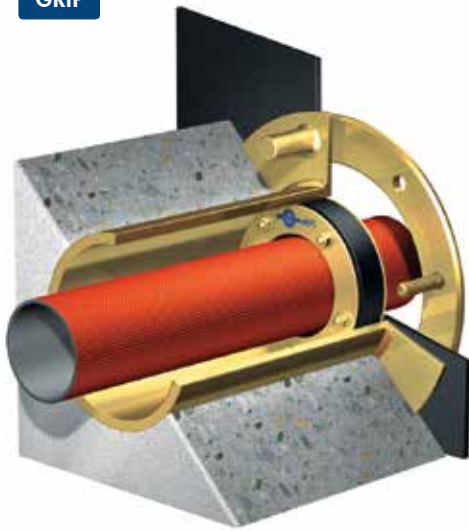
Curaflex 5100

against non-pressing water

- sealing system for penetrations
- for buildings **yet to be constructed**
- for buildings with **tanking membranes** or applications with **bituminous thick-coating** (black tank)
- with **fixed and loose flange**
- for **high static loads**

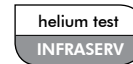
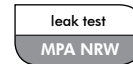
DPS

DOYMA GRIP



Product benefits

- simple installation due accurately fitting combination from gasket insert and pipe sleeve
- permanently sealed without re-tensioning (maintenance-free)
- higher sealing performance of the gasket insert due to **DPS*** and **DOYMA-Grip**
- system component, without cuts or divisions
- with water-tight welded bolts
- steel pipe sleeve for high static loads
- can be installed flush within the shuttering
- integrated fixed and loose flange (loose flange split)



Combinations

Technical details

- with flanges according to DIN 18 195
- depending on the tanking membranes arranged on both sides packings 1775 (with thin and hard membranes) and accessories for thick-coating
- gas-tight
- accepts axial movements

The combination consist of:

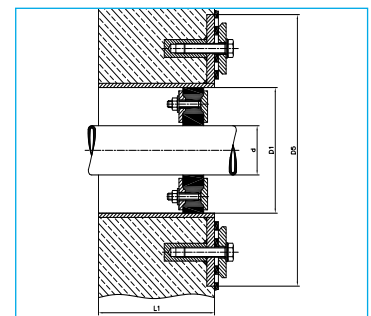
- Curaflex® gasket insert A with DPS*, one sided single sealing
- Curaflex® pipe sleeve 5000

* DPS up to NB 350

Accessories from page 88

pipe external diameter from - to	NB pipe sleeve [mm]	fixed flange diameter D _s [mm]	standard length L ₁ [mm]
1 - 40	80	260	200 240 250 300 350 365 400 500
41 - 57	100	280	
58 - 77	125	300	
78 - 104	150	330	
105 - 145	200	380	
146 - 190	250	430	
191 - 233	300	480	
234 - 288	350	530	
289 - 339	400	580	
340 - 380	450	630	
381 - 430	500	680	
431 - 530	600	780	
531 - 620	700	880	

Other sizes, materials and customised versions on request!

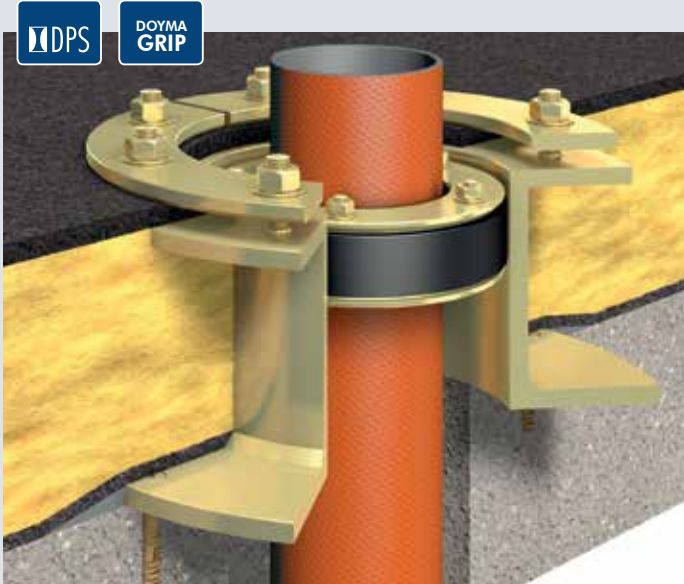


We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

Curaflex 5.5102

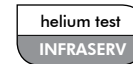
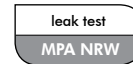
against non-pressing water

- sealing system for penetrations
- for buildings **yet to be constructed**
- for buildings with **tanking membranes** or applications with **bituminous thick-coating** (black tank)
- suitable for **ceiling / flat roof penetrations**
- extra **bonding/puddle flange**
- with **fixed and loose flange**



Product benefits

- simple installation due accurately fitting combination from gasket insert and pipe sleeve
- permanently sealed without re-tensioning (maintenance-free)
- higher sealing performance of the gasket insert due to **DPS*** and **DOYMA-Grip**
- system component, without cuts or divisions
- with water-tight welded bolts
- steel pipe sleeve for high static loads
- can be installed flush within the shuttering
- integrated fixed and loose flange (loose flange split) and additional middle flange, if necessary as bonding flange



Technical details

- with flanges according to DIN 18 195
- gas-tight
- accepts axial movements
- bonding flange/middle flange also available for mounting on the ceiling or as an additional fixed/loose flange
- depending on the tanking membranes arranged on both sides packings 1775 (with thin and hard foil) or accessories for thick-coating

The combination consist of:

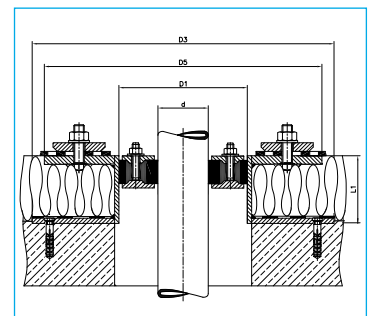
- Curaflex® gasket insert A with DPS*, one sided single sealing
- Curaflex® pipe sleeve 5.5002

* DPS up to KB/NB 350

Accessories from page 88

pipe external diameter from - to	NB pipe sleeve [mm]	middle flange diameter D ₃ max. [mm]	fixed flange diameter D ₅ max. [mm]	standard length L ₁ [mm]
1 - 40	80	290	260	200 240 250 300 350 365 400 500
41 - 57	100	310	280	
58 - 77	125	330	300	
78 - 104	150	360	330	
105 - 145	200	420	380	
146 - 190	250	470	430	
191 - 233	300	520	480	
234 - 288	350	570	530	
289 - 339	400	620	580	
340 - 380	450	670	630	
381 - 430	500	720	680	
431 - 530	600	810	780	
531 - 620	700	910	880	

Other sizes, materials and customised versions on request!



We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

Curaflex 7100

against non-pressing water

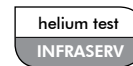
- sealing system for penetrations
- for installation **on the face of walls**
- for buildings with **tanking membranes** or applications with **bituminous thick-coating** (black tank)
- with **fixed and loose flange**
- suitable for **reconstruction**

Combinations



Product benefits

- simple installation due accurately fitting combination from gasket insert and pipe sleeve
- permanently sealed without re-tensioning (maintenance-free)
- higher sealing performance of the gasket insert due to **DPS*** and **DOYMA-Grip**
- system component, without cuts or divisions
- with water-tight welded bolts
- sealing on the wall (nature of the hole/wall opening is not relevant)
- integrated fixed and loose flange (loose flange split)



Technical details

- with flanges according to DIN 18 195
- gas-tight
- accepts angular deviations of service duct up to 8°
- accepts axial movements
- depending on the tanking membranes arranged on both sides packings 1775 (with thin and hard membranes) and accessories for thick-coating

The combination consist of:

- Curaflex® gasket insert A with DPS*, one sided single sealing
- Curaflex® pipe sleeve 7005

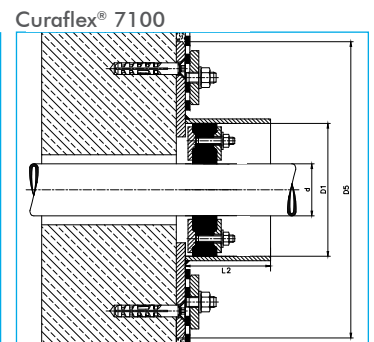
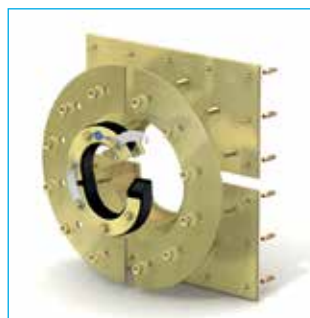
Delivery incl. fastening material for solid walls.

* DPS up to NB 350

Accessories from page 88

pipe external diameter from - to	NB pipe sleeve [mm]	fixed flange edge length D _s max. [mm]	
		Curaflex® 7100	Curaflex® 7100/T
1 - 40	80	260	340
41 - 57	100	280	360
58 - 77	125	300	380
78 - 104	150	330	410
105 - 145	200	380	460
146 - 190	250	430	510
191 - 233	300	480	560
234 - 288	350	530	610
289 - 339	400	580	660
340 - 380	450	630	710
381 - 430	500	680	760
431 - 530	600	780	860
531 - 620	700	880	960
L2 (length of steel pipe sleeve) [mm]: 80			
Other sizes, materials and customised versions on request!			

Variant pipe sleeve 7100/T
split version of Curaflex®
Pipe sleeve 7005/T with gasket insert Quick In A. To be subsequently installed around the existing pipeline.



Curaflex 3101

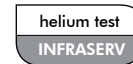
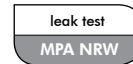
against non-pressing water

- sealing system for penetrations
- for buildings **yet to be constructed**
- for buildings with **bituminous thick-coating** (black tank)
- with **bonding flange**



Product benefits

- simple installation due accurately fitting combination from gasket insert and pipe sleeve
- permanently sealed without re-tensioning (maintenance-free)
- higher sealing performance of the gasket insert due to **DPS*** and **DOYMA-Grip**
- system component, without cuts or divisions, with water-proof welded bolts
- optimal connection with fibre cement flange as bonding flange for the onsite installation of thick-coating (KMB)
- dimensionally stable and resistant special fibre cement
- homogeneous connection to concrete



Technical details

- gas-tight with optional coating of the pipe sleeve inside and front surface
- accepts angular deviations of service duct up to 8°
- accepts axial movements
- for all conventional synthetically modified bituminous coating and thick-coatings

The combination consist of:

- Curaflex® gasket insert A with DPS*, one sided single sealing
- Curaflex® pipe sleeve 3001
- fleece material for thick-coating

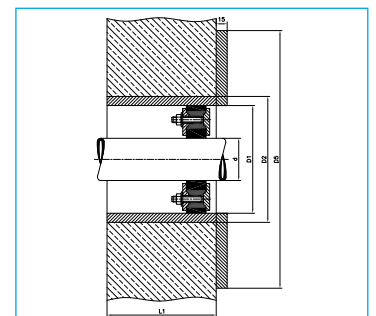
* DPS up to NB 350

Accessories from page 88

pipe external diameter from - to	NB pipe sleeve [mm]	pipe sleeve external diameter D ₂ max. [mm]	bonding flange diameter D _s max. [mm]
1 - 40	80	≤ 140	285
41 - 57	100	≤ 160	305
58 - 77	125	≤ 156	330
78 - 104	150	≤ 187	355
105 - 145	200	≤ 238	405
146 - 190	250	≤ 289	455
191 - 233	300	≤ 347	505

L1: Standard length of pipe sleeves: 415 mm

Other sizes, materials and customised versions on request!



Accessories for Curaflex® combinations and gasket inserts: AQUAGARD concrete sealant



Delivery size 1 litre



Delivery size 1/3 litres

Delivery sizes:

- **AQUAGARD preservative (large)**
 - **AQUAGARD primer**
1 litres for 4.0 m² (Curaflex® 1710)
 - **AQUAGARD special paint**
1 litre for 3.5 m² (Curaflex® 1715)
- **AQUAGARD preservative (small)**
 - **AQUAGARD primer**
1/3 litre for 1.5 m² (Curaflex® 1711)
 - **AQUAGARD special paint**
1/3 litre for 1.0 m² (Curaflex® 1716)

Concrete needs protection!

Concrete can become saturated up to a specific level before absolute water permeability occurs. This makes it possible for water to permeate around the gasket insert. Apart from this, there is danger that cut reinforcing steel corrodes around the core drilling. The AQUAGARD concrete seal prevents this.

For reasons of this knowledge, we **recommend** AQUAGARD preservation.

The system consists of

- **AQUAGARD primer** (Curaflex® 1710/1711)
Primer for AQUAGARD special paint

The primer penetrates deep into the capillaries and air bubbles in the concrete, and closes these off so that they are permanently waterproof. This means that water cannot permeate around the gasket insert. The primer is applied using a brush or roller.

- **AQUAGARD special paint** (Curaflex® 1715/1716)

Special paint for sealing off core drillings

Aquagard special paint seals off the surface of the core drilling walls and simultaneously protects any possibly cut reinforcing steel against corrosion. The special paint is also applied with a brush or roller.



AQUAGARD	Primer	Special paint
Yield	3,5 - 4 m ² /litre	
Colour	colourless	pigeon grey
Drying time (room temp.)	1 hour	5 - 6 hours

Accessories for Curaflex® combinations, gasket inserts and pipe sleeves: Packings (1775)



- **Curaflex® packings (for thin or hard membranes) (1775).** Packings consist of 2 no. 3 mm thick EPDM cutouts which are matched to the dimensions and hole diameters of the selected fixed/loose flange structures.

General

In accordance with DIN 18195-9, single-layer, loosely-laid tanking membranes must be edged using permanently compatible packings on both sides. Sealtightness is only guaranteed for fixed and loose flange structures if the thickness and the elasticity of the tanking membranes or also the packings is sufficient that they are pressed against the substrate to form a seal. Before laying ceiling sheets, the information provided by the sheeting manufacture must be observed in addition to the specifications in the standard (laying guidelines)!

A) Application with very thin or hard sealing sheets - Curaflex® 1775

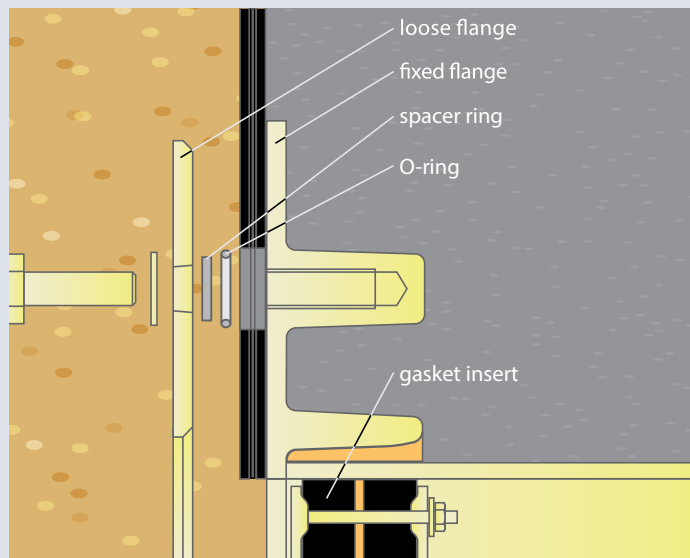
If tanking membranes are made of very thin and/or very hard materials, even pressing onto the substrate is often insufficient. When such tanking membranes are used, the standard proposes the use of packings.

DOYMA packings are made of material-compatible EPD elastomer and have already been provided with the necessary boltholes on the fixed flange, and are therefore ready for installation. These matching packings are not included in delivery as standard.

B) Application with other sealing sheets

In the case of tanking membranes made, for example, of bitumen or bitumen rubber, even pressing onto the substrate is provided in most cases. In such cases, there are no problems with regard to sealtightness. For this reason, packings are not necessary.

Accessories for Curaflex® combinations and gasket inserts: Access reset for bituminous coating



Accessory set for bituminous coating consisting of space rings, O-rings and fleece inserts. These parts match the dimensions and hole sizes for the selected fixed/loose flange structures when fitted together.

Caution!

If steel pipe sleeves are built into building walls with bituminous coating, the contact surfaces must be sand-coated in the works. When ordering, please always state the following in such cases: "For bituminous coating".

Application description

The contact areas / internal areas of fixed and loose flanges in the Curaflex® 5000, C/2/SD/5, F/2/SD/5 products and the Curaflex® 6000, 7000, 8000, C/2/SD/6 and F/2/SD/6 products will be sand-coated. WEROPOX-EP Primer no. 6142 with 6141-H hardener is used as a carrier material for the leading sand.

Areas around drill holes or the bolts themselves, in locations where O-rings and U-washers will be applied, may not be sand-coated. Diameter of these surfaces: 40 mm for non-pressing water, 55 mm for pressing water

Sand coating is not necessary for Curaflex® 4005 and 4006 pipe sleeves.

Bitumen bituminous coating are to be applied in several layers according to the manufacturer's instructions. Once the first layer has been applied the fleece insert, which is 100 mm larger than the fixed flange all round, is pressed into the first layer while still wet. After this, the fleece insert is trowelled in wet in wet so that the minimum dry layer thickness for the load case in question has been achieved.

Once the drying time stipulated by the manufacturer has expired, the bitumen filling compound will be broken out in the areas around threaded drill holes or bolts, for example using a hollow punch, depending on the version of the fixed or loose flange structure (Accessory Curaflex® hollow punch 1777/6 (5) or 1778/6 (5)).

If Curaflex® products against pressing water are being used, spacer rings of 4 mm thickness are to be inserted between the flanges around each bolt, and in the case of Curaflex® products against non-pressing water the spacer rings are of 3 mm thickness. This prevents the overall bitumen filling compound being squeezed out when the loose flange is tightened, and also achieves a defined layer thickness of the bitumen filling compound between the fixed and the loose flange.

Furthermore, rubber O-rings are placed around the bolts and the spacer rings to prevent any possible pressure losses in the areas around the bolts.



Layers (from bottom to top):
- sand coating
- thick-coated membrane
- fleece material
- thick-coated membrane



Punching out holes with the hollow punch

Accessories for Curaflex® combinations and pipe sleeves: Curaflex® formwork fastener (1701)

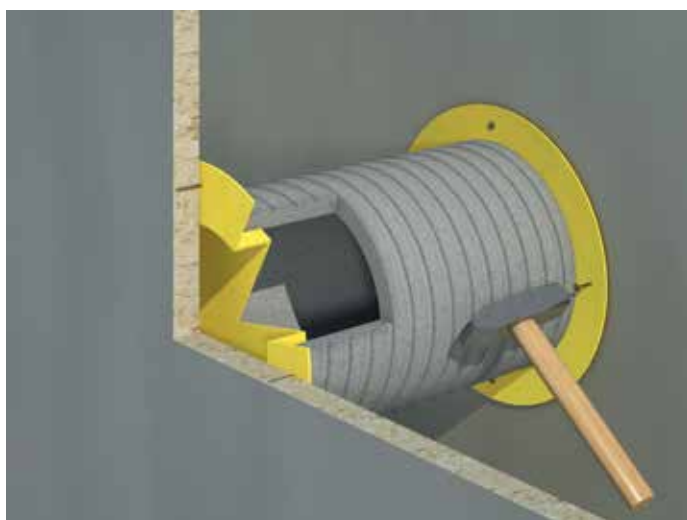


Technical details

- holder for simple and rapid fixing of the pipe sleeve into wooden shuttering.
- provided with wide nail border for fixing to wooden shuttering.
- available for pipe sleeves of up to NB 400.
- material: Plastic

25
Years
Guarantee

Accessories



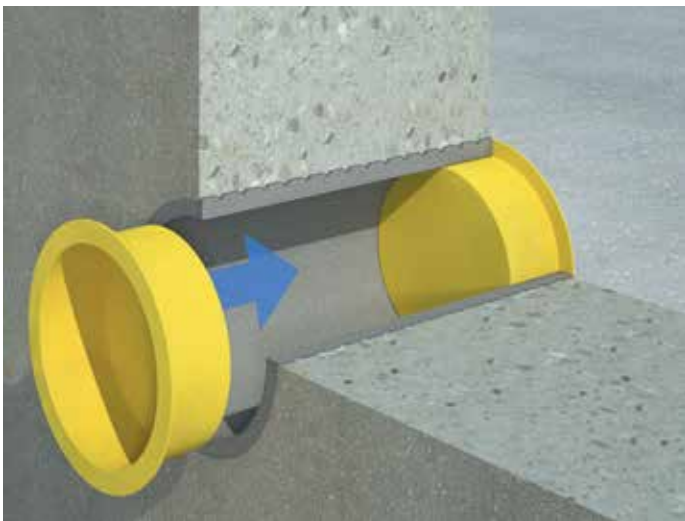
internal diameter pipe sleeve NB in [mm]	external diameter shuttering holder [mm]	insertion depth [mm]
80	138	20
100	162	20
125	188	20
150	213	20
200	268	25
250	340	25
300	408	22
350	455	21
400	510	32

Accessories for Curaflex® combinations and pipe sleeves: Curaflex® protection cap (1702)



Technical details

- pipe stoppers fore closing off the pipe sleeve during the shell construction phase to prevent penetration of dirt and foreign objects
- provided with wide border for secure fixing to pipe sleeve
- available for pipe sleeves of up to NB 400.
- material: plastic

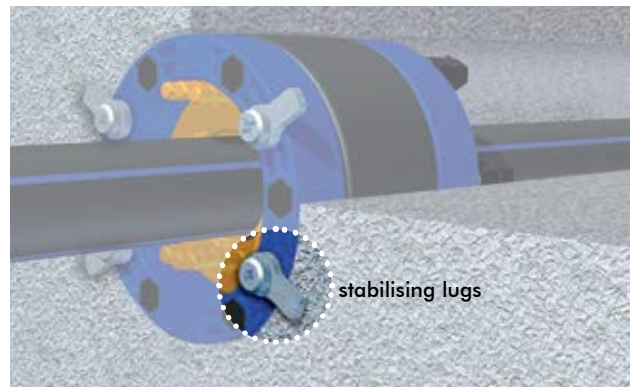


internal diameter pipe sleeve NB in [mm]	external diameter protection cap [mm]	insertion depth [mm]
80	90	29
100	110	30
125	135	30
150	159.5	33
200	214	38
250	264	46
300	314	23
400	420	33

Accessories for Curaflex® combinations, gasket inserts and pipe sleeves: Glue, cleaner

- **Sikadur 31 concrete adhesive (1740)**
Adhesive for glueing the divided 3000/T special fibre cement pipe sleeve. This adhesive also connects the two special fibre cement pipe sleeves to form an elongated pipe length.
1.2 kg, sufficient for approx. 0.6 m²
- **2-component epoxy resin coating (1745)**
Epoxy resin for coating pipe sleeve internal services, front face and core drilling walls. With high chemical resistance; seals off gastight against natural, town and liquid gas, led-free petrols, diesel etc.
2.0 kg, sufficient for approx. 2.0 m²
- **Sikadur Adhesive Cleaner (1754)**
Activator and cleaner of metallic substrates for better bonding of Sikaflex 11 FC+ sealing compound.
1 litre, sufficient for approx. 8 m²
- **Sika Primer-3N (1755)**
Primer for concrete for improving bonding with Sikaflex 11FC+.
0.25 litres, sufficient for approx. 1.25 m²
- **Sikaflex 11 FC+ (1756) sealing compound.**
Elastic sealing compound with excellent strength values. Movement absorption of approx. 10%. Rapid-hardening, permanently elastic. Excellent weathering and ageing stability. Resistant against aqueous cleansing agents, seawater, lime water, weak acids and alkalis and wastewater.
300 ml cartridge, sufficient for approx. 0.24 m².
- **Butyl sealing tape (1753)**
Elastic sealing compound for sealing off existing bituminous coating
- **Curaflex® hollow punch for bituminous coating subject to pressing water**
 - for two applications (1777/6)
 - for multiple applications (1778/6)**subject to non-pressing water**
 - for two applications (1777/5)
 - for multiple applications (1778/5)

- **Fixing set for Curaflex Nova® gasket inserts**
Consisting of 4 stabilising lugs with screws
Article no. 188060000429



Product guide Link-Seal® link chains

for sealing off **rigid pipes**

product	galvanised	stainless steel	Page
Link chains, version C	●		98
Link chains, version S316		●	98

Link chains

for sealing off **plastic pipes**

Produkt	galvanised	stainless steel	Page
Link chains, version BC	●		99
Link chains, version BS316		●	99



Installation of Link-Seal® link chains

Fitting example link chains version C

Please note:

- The wall must be clean, flat and dry in the installation vicinity.
- There may be no grooves, cracks and breakouts on the wall surface in the installation vicinity.
- The seals and pipe services must be clean and free of damage.
- Ensure that the pipe to be sealed off is centred and does not exert any radial forces on the sealing module.
- The pressure plates must be evenly aligned.
- The number of sealing modules to be fitted in accordance with the calculation program (<http://psi-products.de/linksealberechnung/>) must be observed in all cases.

Note:

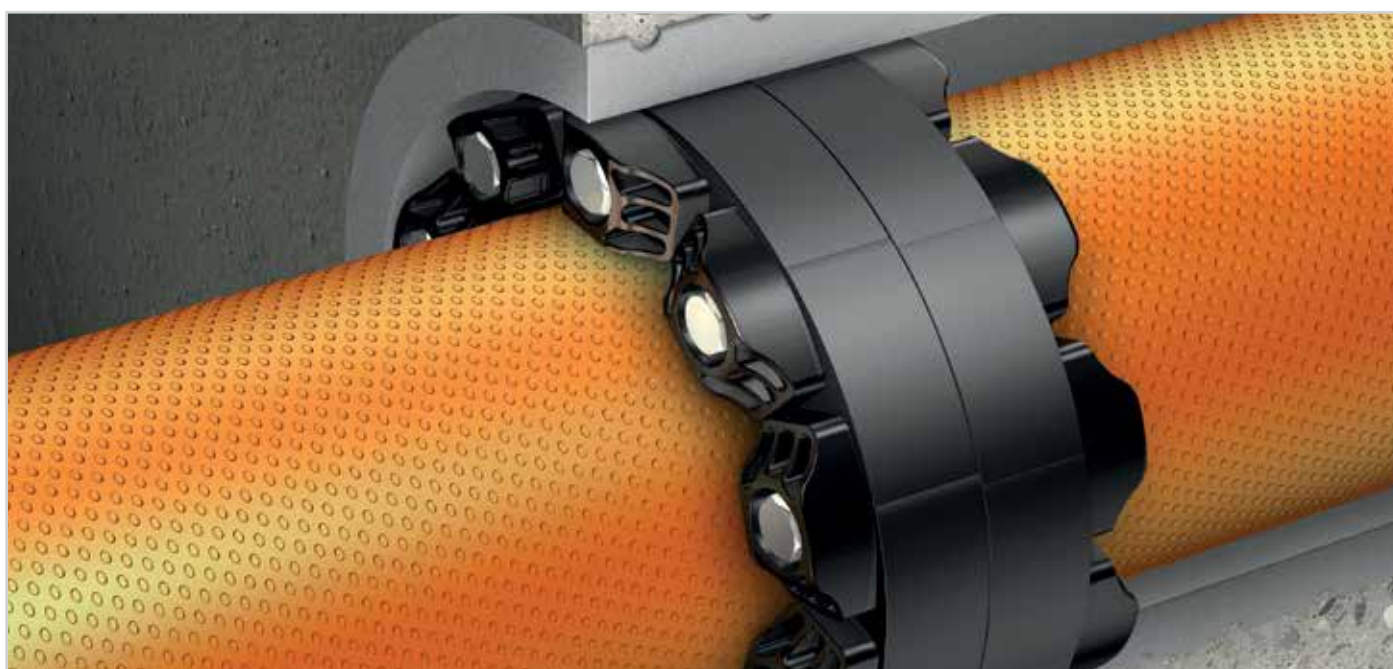
Extensive installation instructions are provided with the product. On top of this, they are available on the Internet at www.doyma.de

module type	wall thickness
LS 200	75 mm
LS 265	
LS 275	
LS 300	100 mm
LS 310	
LS 315	
LS 325	120 mm
LS 340	
LS 360	
LS 400	140 mm
LS 410	
LS 425	
LS 440	
LS 475	
LS 500	150 mm
LS 525	
LS 575	
LS 625	
LS 700	

Minimum wall thickness

module type	version C, S 316
LS 200 - LS 275	2 Nm
LS 300 - LS 360	8 Nm
LS 400 - LS 475	27 Nm
LS 500 - LS 575	65 Nm
LS 615	110 Nm
LS 625 - LS 700	65 Nm

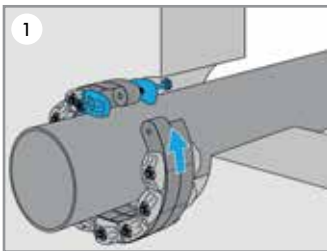
Maximum torque when sealing off steel/cast-iron pipes.



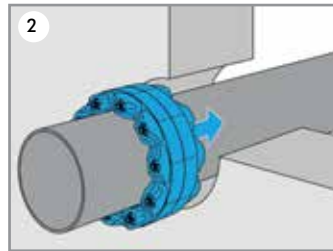
Link chain Link-Seal® C

Installation example for Link-Seal® link chain version C (see p. 98)

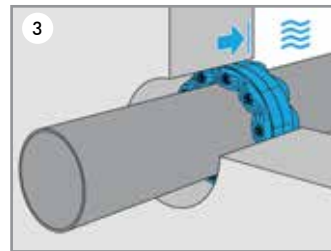
The link chain version C is suitable for sealing off steel pipes which are fed through walls, ceilings and bases. One advantage of this sealing method is the possible retrospective installation.



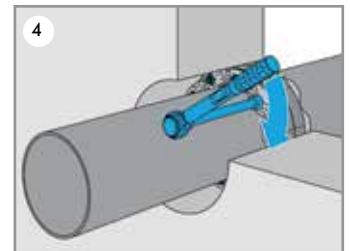
1 Wrap a chain with appropriate number of modules around the pipe and close it using the union.



2 Push the link chain into the annular gap.



3 Position the link chain on the water side.



4 Tighten the link chain with a torque wrench.

Link chain Link-Seal® C, S316

for steel / cast iron pipes

- sealing system for penetrations
- to install in **preinstalled pipe sleeve** or **core bore in waterproof concrete** (white tank)
- split version for **retrofit installation**



Product benefits

- quicker deployment due to prefabricated system
- robust rubber parts guarantee long service life
- radial expansion of rubber parts guarantees permanent, pressure-tight and safe sealing of ring space
- oil, fuel and solvent-resistant, also high-temperature resistant and versions with KTW certification are available
- simple, even retrospective installation possible
- for galvanised bolts:
 - general application for normal atmosphere, water or humidity. Suitable for electrical insulation and cathodic corrosion protection
- for stainless steel bolts:
 - high resistance against water, against most anorganic substances (acids and alkalis) and most organic substances (e.g. acetic acid and acetone).

Technical details

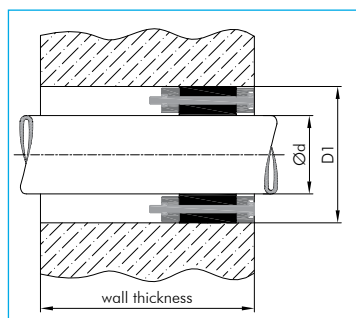
- sealing against pressing water
- pressure plates: glass fibre-reinforced polyamide
- rubber material: EPDM natural black rubber
 - **version C**: bolts in galvanised steel
 - **version S316**: bolts in A4-70 stainless steel

For further rubber materials as nitrile, KTW/W270 or silicone pls contact us: phone: +49 4207/9166-300

Link-Seal® products are excluded from the 25-year warranty.

pipe external diameter from - to	number of modules x module-typ	NB pipe sleeve/ core bores, D ₁ [NB in mm]
42 + 48	5 x 265	80
34 + 42	5 x 340	100
48	6 x 315	
58 + 60	6 x 300	
42 + 48 + 58	5 x 360	125
60	7 x 340	
76 + 78	8 x 315	
58 + 60	5 x 410	150
76	6 x 360	
83	7 x 360	
89	9 x 340	
98	10 x 315	
110	7 x 310	
114	10 x 265	
110	7 x 475	200
114	7 x 410	
135	13 x 340	
160	9 x 475	250
168	7 x 400	
160 + 168 + 170	7 x 500	300
210 + 219	12 x 410	
222	15 x 360	
273	18 x 360	350
324	21 x 360	400
406	21 x 475	500
429	16 x 425	
508	25 x 475	600
532	19 x 425	
610	30 x 475	700
711	25 x 400	800
813	39 x 475	900
914	32 x 400	1000

Other dimensions on request



We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

Link chain Link-Seal® BC, BS316

for plastic pipes

- sealing system for penetrations
- to install in **preinstalled pipe sleeve** or **core bore in waterproof concrete** (white tank)
- split version for **retrofit installation**



Product benefits

- quicker deployment due to prefabricated system
- robust rubber parts guarantee long service life
- radial expansion of rubber parts guarantees permanent, pressure-tight and safe sealing of ring space
- oil, fuel and solvent-resistant, also high-temperature resistant and versions with KTW certification are available
- simple, even retrospective installation possible
- for galvanised bolts:
 - general application for normal atmosphere, water or humidity. Suitable for electrical insulation and cathodic corrosion protection
- for stainless steel bolts:
 - high resistance against water, against most anorganic substances (acids and alkalis) and most organic substances (e.g. acetic acid and acetone).

Technical details

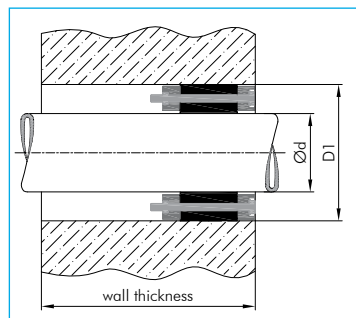
- sealing against pressing water
- pressure plates: glass fibre-reinforced polyamide
- rubber material: softer EPDM natural rubber in blue (EPDM 40°±5°Shore A) (LS 440: black natural rubber)
 - **version BC**: bolts in galvanised steel
 - **version BS316**: bolts in A4-70 stainless steel

For further rubber materials as nitrile, KTW/W270 or silicone pls contact us: phone: +49 4207/9166-300

Link-Seal® products are excluded from the 25-year warranty.

pipe external diameter from - to	number of modules x module-typ	NB pipe sleeve/ core bores, D ₁ [NB in mm]
40	7 x 275	80
32 + 40	5 x 340	100
50	6 x 315	
63	6 x 265	
63	7 x 340	125
75	8 x 315	
63	5 x 410	150
75	6 x 360	
90	9 x 340	
110	7 x 310	
90	6 x 575	200
110	7 x 475	
125	9 x 360	
140	13 x 340	
160	10 x 310	
160	9 x 475	250
180	12 x 360	
200	18 x 315	
225	15 x 360	300
250	22 x 315	
315	17 x 410	400
400	17 x 325	450
560	20 x 500	700
630	22 x 425	
630	21 x 625	800
710	25 x 400	
900	30 x 400	1000

Other dimensions on request



Product guide Curaline® cable ducts

Product	combination flanged sleeve/ system caps	KSS duct system	gasket insert	building earthing	page
Curaline® BKD 150	●				104
Curaline® KD 110	●				108
Curaline® BKD 90	●				112
Curaline® KSS		●			116
Curaline® BKD 150/4006	●				118
Curaline® BKD 150/4005	●				118
Curaline® BKD 150/4001	●				119
Curaline® Vario			●		120
Curaline® GE				●	121

We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15



Cable ducts

Installation of Curaline® cable ducts

Installation example Curaline® BKD 150

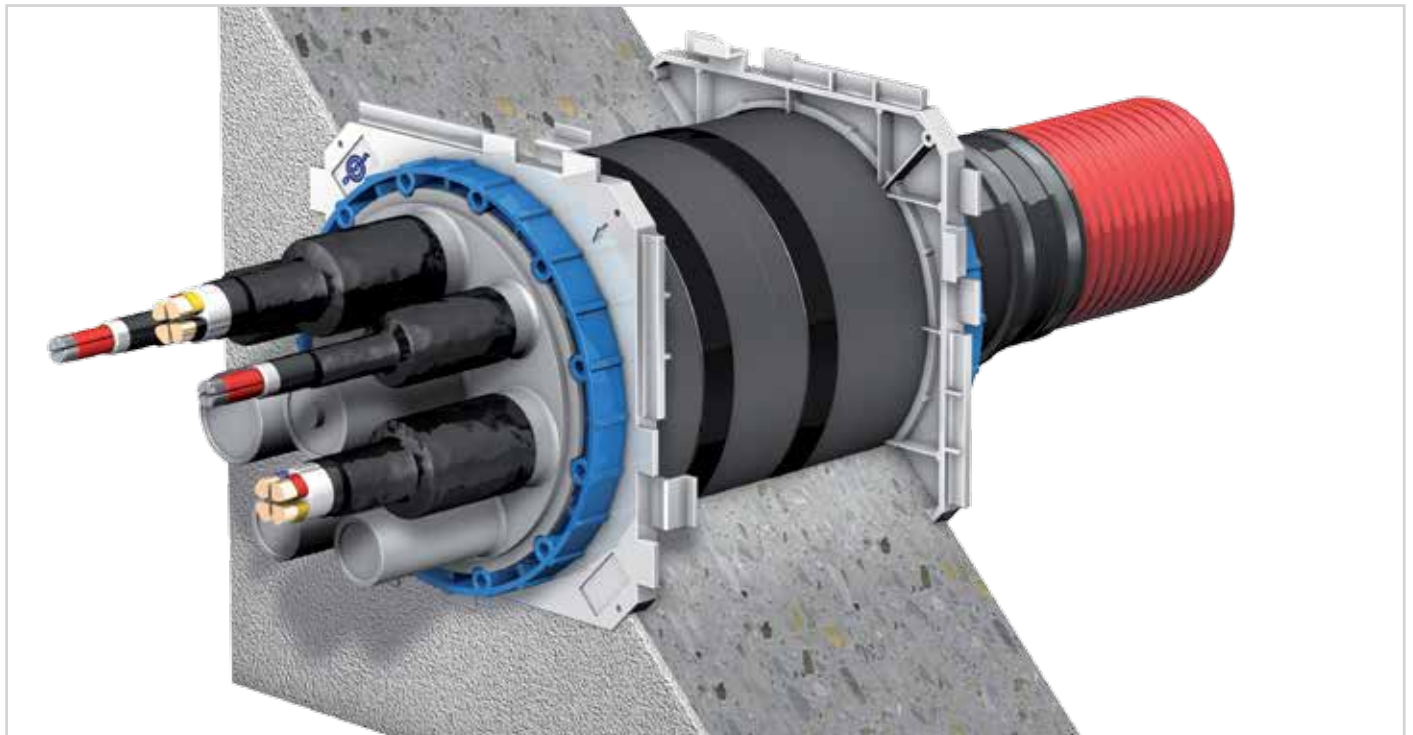
Please note:

- The wall must be clean, level and dry in the installation area.
- There may be no grooves, cracks or breakouts on the wall surface in the installation area.
- The seals and pipe surfaces must be clean and free of damage.
- Only remove protective film before cable laying. If necessary, slightly heat the protective film.
- Avoid soiling and damage to the bayonet fixtures.
- Before installation, ensure that the system cover O-ring is greased.
- Ensure that the service lines to be sealed off are appropriately fixed and that there are no radial forces acting on the sealing system.

Extensive installation instructions are provided with the product. On top of this, they are available on the Internet at www.doyma.de

Note:

DOYMA products are continuously being further developed, technical changes will take place without previous notification.



Curaline® BKD 150

Installation example Curaline® BKD 150 (see. p. 104)

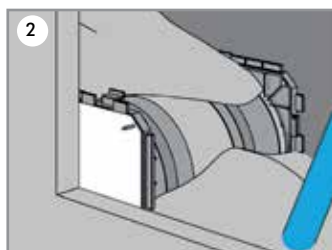
Curaline® BKD 150 is a system for sealing off cables which are fed through walls or ceilings from outside a building. The maximum cable diameter is 108 mm.

Installation of this cable duct is split into 2 stages, installation of the flange sleeve during the shell construction phase and subsequent installation of the system cap.

Installing the flange sleeve

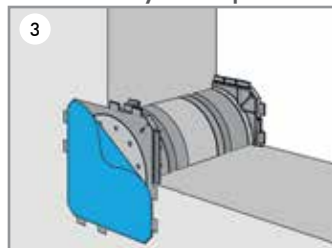


1 Position the seal packing in the shuttering and fix it.

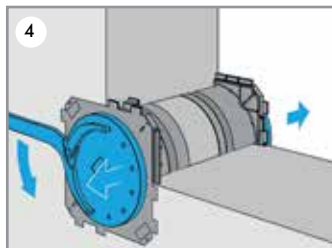


2 Ensure that concrete in the vicinity of the seal packing is well-compacted.

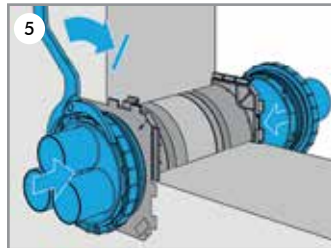
Connect the system cap.



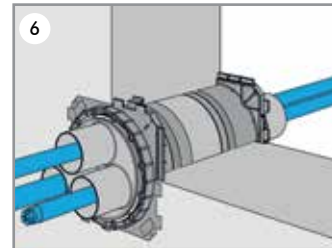
3 Peel off the protective film.



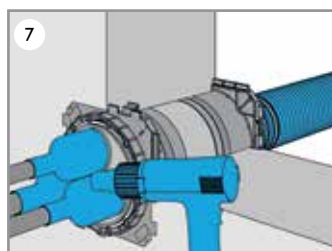
4 Dismantle the blank cover using the articulated spanner.



5 Fit the appropriate system cover using the face spanner.



6 Feed the service lines through.

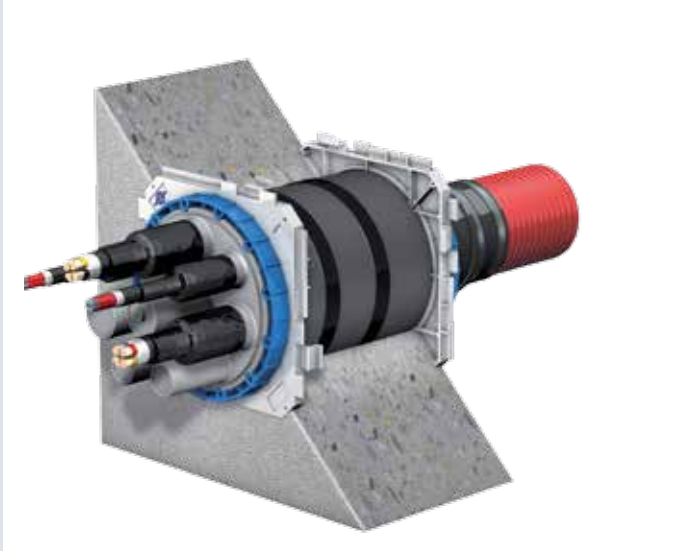


7 Shrink the shrink-on sleeves onto the service lines using a hot air device.

Curaline® BKD 150

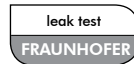
Combination flange sleeve / system cap

- sealing system for penetrations
- for buildings **yet to be constructed**
- to install in **waterproof concrete** (white tank)
- with **bayonet action lock**
- suitable for **cables** and **cable protection pipes**



Product benefits

- quick and easy installation (with bayonet cap) through precise and coordinated combination of system cover and seal packing
- no reworking required
- several sleeves with flanges can be assembled together in batteries when a multiplicity of cables is to be ducted.
- the chamfered corners of the packings provide total control of the concrete compaction in the field of cable ducts.
- high variability thanks to large selection of system caps and additional partition valves
- by blind cap already in the installation gas- and watertight, even against pressing water



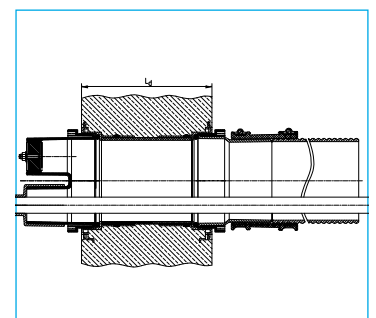
Technical details

- gas-tight
- suitable for cables 7 - 108 mm diameter
- suitable to connect cable ducts ≤ 160 mm diameter
- cables are sealed to system cap spigots using heat shrink sleeves as standard
- compatible with existing duct systems
- materials are ecologically friendly and highly resistant against chemicals

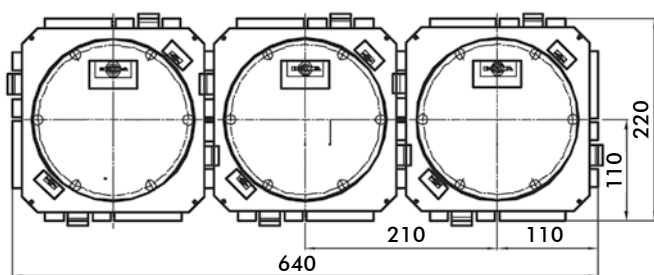
Curaline® BKD 150 as combination package consists of:

- Flanged sleeve
 - supplied complete with protection plug and peel-off film
 - installed individually or in batteries
 - available for any wall thickness – fits flush within the shuttering
- System caps
 - quick and simple attachment using bayonet action lock
 - have 1, 3 or 8 spigots
 - each with its own heat shrink sleeve

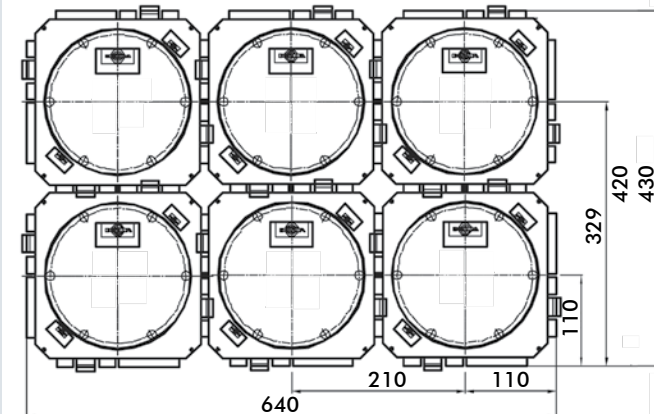
No. of spigots (system cap)	Inside Ø of spigot [mm]	cable-Ø [mm]
1	110	34 - 108
3	59	22 - 57
8	4 x 25 4 x 35	7 - 23 12 - 33
L_d: 140 mm min.		



Assembling in batteries
BKD 150-1x3-K2/(L)



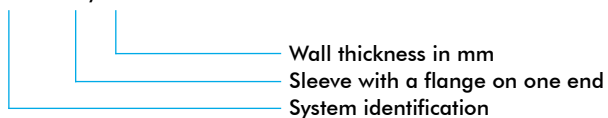
Assembling in batteries
BKD 150-2x3-K2/(L)



Product specification

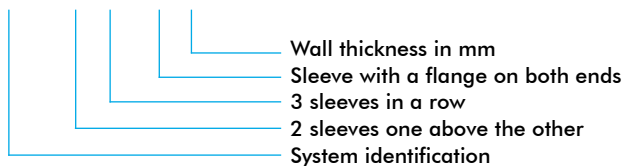
Ordering example:
Single flange sleeve with bayonet action lock

BKD 150 - K / L



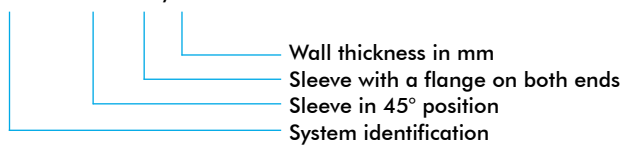
Ordering example:
Double flange sleeve with bayonet action lock
assembled in a battery of 2 x 3 units

BKD 150 - 2 x 3 - K 2 / L

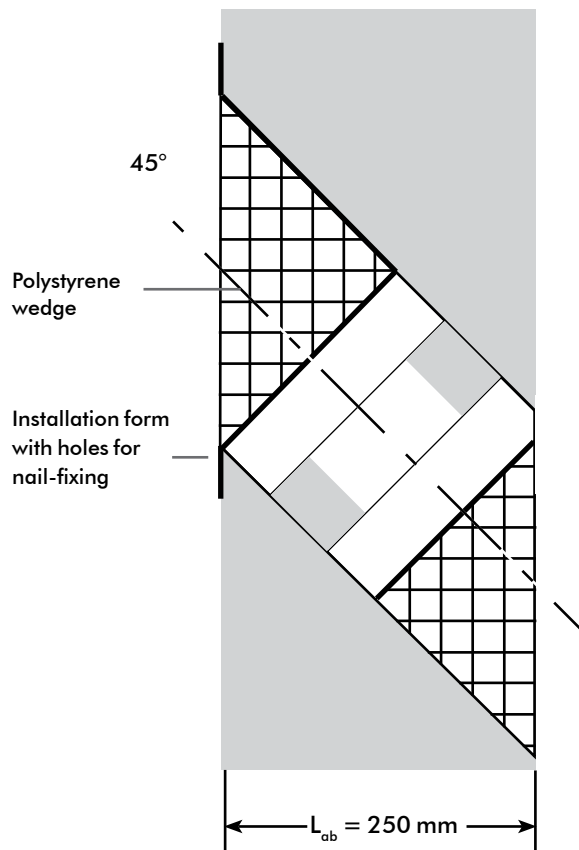


Ordering example:
Angled double flange sleeve in 45° position with bayonet action lock

BKD 150 - S45 - K 2 / L



Angled sleeve





Single flange sleeve

suitable for installation of system caps or KSS system on one end, for min. wall thickness 80 mm. Correct direction of installation must be followed.

Order No.: BKD 150-K/L

(L) = wall thickness in mm



Double flange sleeve

suitable for installation of system caps or KSS system on both ends, for min. wall thickness 150 mm.

Order No.: BKD 150-K2/L

(L) = wall thickness in mm



Aluminium flange AF

suitable for sealing in front of core bores in walls and floors. Supplied with flange packing, protection cap and installation accessories.

For use with system caps or KSS system.

Max. core bore diameter 150 mm.

Flange size: 235 x 235 mm

Order No.: BKD 150-AF 235



System cap with one spigot

and accompanying heat-shrink sleeve, suitable for one cable 34 - 108 mm diameter.

Order No.: BKD 150-D1/110

Cables and cable ducts with max. 110 mm external diameter can be sealed using heat shrink sleeves.



System cap with three spigots

and accompanying heat-shrink sleeves, suitable for three cables 22 - 57 mm diameter.

Order No.: BKD 150-D3/59



System cap with eight spigots

four are open with accompanying heat-shrink sleeves and four are blanked off, suitable for 4 cables 7 - 23 mm diameter and 4 cables 12 - 33 mm diameter.

Order No.: BKD 150-D8/35/25



System cap with socket,

Duct system with clamping collar

Order No.: BKD 150-DMM 80

BKD 150-DMM 110

BKD 150-DMM 125

BKD 150-DMM 140

BKD 150-DMM 160

BKD 150-DMM 170



System cap with spigot coupling

to adapt smooth-faced cable ducts with 110, 125, 140 or 160 mm outside diameter. An O-ring on the inside of the coupling provides the seal.

Order No.: BKD 150-DSM 110

BKD 150-DSM 125

BKD 150-DSM 140

BKD 150-DSM 160



System cap with duct connection socket

for connecting smooth-faced cable ducts with 125, 140 or 160 mm outside diameter. Accompanying heat-shrink sleeve provides the seal.

Order No.: BKD 150-DM 125

BKD 150-DM 140



Angled sleeve

for angled cable entry from any direction at 30°, 45° or 60°, with installation form and polystyrene wedge, sleeve with a flange on one or both ends, also available as a multiple battery for min. wall thickness 250 mm. Angled single flange sleeve.

Order No.: BKD 150-S30-K/(L)
BKD 150-S45-K/(L)
BKD 150-S60-K/(L)

Angled double flange sleeve

Order No.: BKD 150-S30-K2/(L)
BKD 150-S45-K2/(L)
BKD 150-S60-K2/(L)

(L) = wall thickness in mm



3-finger shrouds

(heat-shrink type) for sealing 3 cables in 1 spigot.

Order No.: AK 35-3F-12/2
for system cap BKD 150-D8/35/25 and cables 2 - 12 mm diameter

Order No.: AK 50-3F-22/5
for system cap BKD 150-D8/35/25 and cables 5 - 12 mm diameter

Order No.: AK 75-3F-29/8
for system cap BKD 150-D3/60 and cables 8 - 29 mm diameter



4-finger shrouds

(heat-shrink type) for sealing 4 cables in 1 spigot.

Order No.: AK 35-4F-13/2
for system cap BKD 150-D8/35/25 and cables 2 - 13 mm diameter

Order No.: AK 50-4F-20/5
for system cap BKD 150-D8/35/25 and cables 5 - 20 mm diameter

Order No.: AK 75-4F-29/8
for system cap BKD 150-D3/60 and cables 8 - 29 mm diameter



Blind plug VS

seals unused spigots, removable for retrofit installation of cables. Available for spigots 25, 35 and 59 mm diameter.

Order No.: VS 25 / VS 35 / VS 60



Articulated spanner - GSS

with adjustable arm for removal and assembly of sleeve protection plugs, system caps and KSS duct adaptors.

Order ref.: GSS

Set of heat shrink sleeves

Order No.: BKD 150-TM Set-DB

Cold shrink sleeves upon request.

Curaline® KD 110

Combination flange sleeve / system cap

- sealing system for penetrations
- for buildings **yet to be constructed**
- to install in **waterproof concrete** (white tank)
- with **screw thread**
- suitable for **cables** and **cable protection pipes**



Product benefits

- simple installation (with screw connection) through precise-fit and matched combination of system cover and seal packing
- no reworking required
- several sleeves with flanges can be assembled together in batteries when a multiplicity of cables is to be ducted.
- the chamfered corners of the packings provide total control of the concrete compaction in the field of cable ducts.
- high variability thanks to large selection of system caps and additional partition valves
- by blind cap already in the installation gas- and watertight, even against pressing water



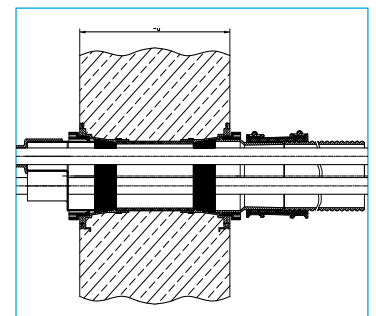
Technical details

- gas-tight
- screw thread for connecting system caps to sleeve flange
- suitable for cables 7 - 98 mm diameter
- cables are sealed to system cap spigots using heat shrink sleeves as standard
- compatible with existing duct systems
- materials are ecologically friendly and highly resistant against chemicals

Curaline® KD 110 as a combined packing which consists of

- Flanged sleeve
 - supplied complete with protection plug and peel-off film
 - installed individually or in batteries
 - available for any wall thickness - fits flush within the shuttering
- System caps
 - quick and simple attachment using screw fastening
 - have 1, 3 or 7 spigots
 - each with its own heat shrink sleeve

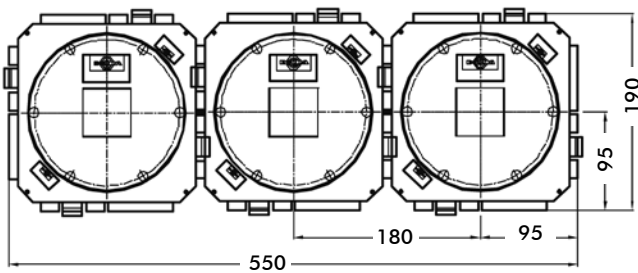
No. of spigots (system cap)	Inside Ø of spigot [mm]	cable-Ø [mm]
1	80	26 - 78
1	100	26 - 98
3	46	16 - 44
7	4 x 25 3 x 32	7 - 23 12 - 30
L_d: 140 mm min.		



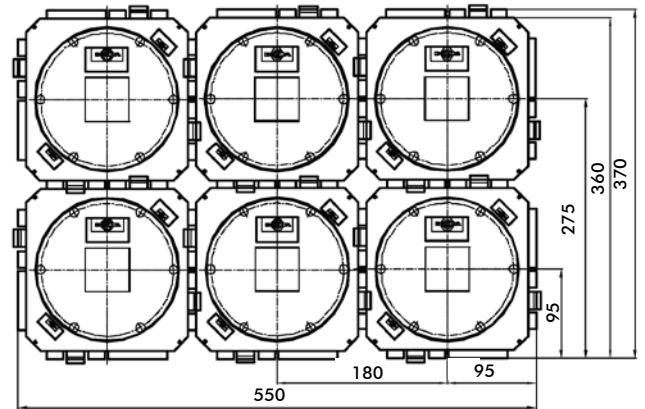
We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

Cable ducts

Assembling in batteries
KD 110-1x3-K2/(L)



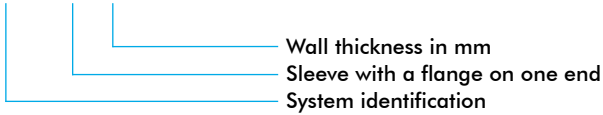
Assembling in batteries
KD 110-2x3-K2/(L)



Product specification

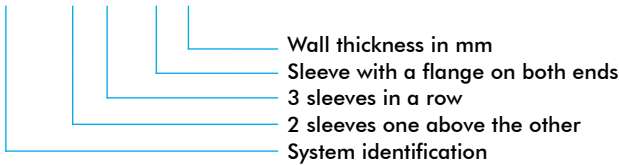
Ordering example:
Single flange sleeve with bayonet action lock

KD 110 - K / L



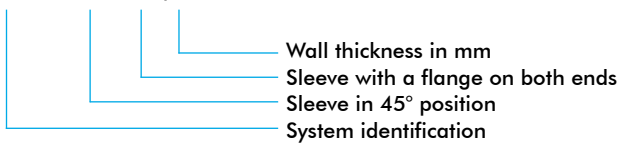
Ordering example:
Double flange sleeve with bayonet action lock
assembled in a battery of 2 x 3 units

KD 110 - 2 x 3 - K 2 / L



Ordering example:
Angled double flange sleeve in 45° position with bayonet action lock

KD 110 - S45 - K 2 / L





Single flange sleeve

suitable for installation of system caps or KSS system on one end, for min. wall thickness 80 mm. Correct direction of installation must be followed.

Order No.: KD 110-K/L
(L) = Wall thickness in mm



Double flange sleeve

suitable for installation of system caps or KSS system on both ends, for min. wall thickness 140 mm.

Order No.: KD 110-K2/L
(L) = Wall thickness in mm



System cap with plug in bushing to connect smooth-faced cable duct with 110 mm and 125 mm external diameter. An O-ring on the inside of the bushing provides the seal.

Order No.:
KD 110-DSM 110
KD 110-DSM 125



System cap with one spigot and accompanying heat-shrink sleeve, suitable for one cable.

Order No.: KD 110-D1/100
for cable: 34 - 98 mm
Order No.: KD 110-D1/80
for cable: 26 - 78 mm



System cap with three spigots and accompanying heat-shrink sleeves, suitable for 3 cables with diameter 16 - 44 mm.

Order No.: KD 110-D3/46



System cap with seven spigots 6 are open with accompanying heat-shrink sleeves and one is blanked off, suitable for 4 cables 7 - 23 mm diameter and 3 cables 12 - 30 mm diameter.

Order No.: KD 110-D7/32/25



System cap with cuff,

Order No.: KD 110-DMM 75
KD 110-DMM 80
KD 110-DMM 110
KD 110-DMM 125



Conical gasket insert

made from highly durable EPDM elastomer for sealing cables (Z) up to 110 mm dia. (D).

Order No.: KD 110-WA/ZxD



Conical gasket insert

made from highly durable EPDM elastomer for connecting 110 mm outside dia. cable duct.

Order No.: KD 110-WA/1x110



Angled sleeve

for angled cable entry from any direction at 30°, 45° or 60° with installation form and polystyrene wedge, sleeve with a flange on one or both ends, also available as a multiple battery for min. wall thickness 250 mm.

Angled single sleeve

Order no.: KD 110-S30-K/(L)
KD 110-S45-K/(L)
KD 110-S60-K/(L)

Angled double sleeve

Order no.: KD 110-S30-K2/(L)
KD 110-S45-K2/(L)
KD 110-S60-K2/(L)

(L) = Wall thickness in mm



3-finger shrouds

(heat-shrink type) for sealing 3 cables in 1 spigot.

Order No.: AK 35-3F-12/2
for system cap KD 110-D7/32/25 and
cables 2 - 12 mm diameter

Order No.: AK 50-3F-22/5
for system cap KD 110-D3/46 and cables
5 - 22 mm diameter



4-finger shrouds

(heat-shrink type) for sealing 4 cables in 1 spigot.

Order No.: AK 35-4F-13/2
for system cap KD 110-D7/32/25 and
cables 2 - 13 mm diameter

Order No.: AK 50-4F-20/5
for system cap KD 110-D3/46 and
cables 5 - 20 mm diameter



Blind plug VS

seals unused spigots, removable for retrofit installation of cables.

Available for spigots 25, 32 and 46 mm diameter.

Order No.: VS 25 / VS 32 /VS 46



Articulated spanner - GSS

with adjustable arm for removal and assembly of sleeve protection plugs, system caps and KSS duct adaptors.

Order ref.: GSS

Set of heat-shrink sleeves

Order No.: KD 110-TM Set-D8

Cold shrink sleeves on request.

Curaline® BKD 90

Combination flange sleeve / system cap

- sealing system for penetrations
- for buildings **yet to be constructed**
- to install in **waterproof concrete** (white tank)
- with **bayonet action lock**
- suitable for **cables** and **cable protection pipes**



Product benefits

- quick and easy installation (with bayonet cap) through precise and coordinated combination of system cover and seal packing
- no reworking required
- several sleeves with flanges can be assembled together in batteries when a multiplicity of cables is to be ducted.
- the chamfered corners of the packings provide total control of the concrete compaction in the field of cable ducts.
- high variability thanks to large selection of system caps and additional partition valves
- by blind cap already in the installation gas- and watertight, even against pressing water

25
Years
Guarantee

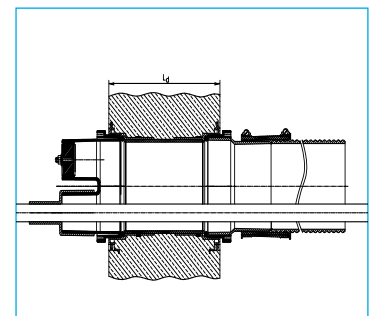
Technical details

- gas-tight
- bayonet action lock for connecting system caps to sleeve flange
- suitable for cables 7 - 73 mm diameter
- cables are sealed to system cap spigots using heat shrink sleeves as standard
- compatible with existing duct systems
- materials are ecologically friendly and highly resistant against chemicals

Curaline® BKD 90 as combination package consists of:

- Flanged sleeve
 - supplied complete with protection plug and peel-off film
 - installed individually or in batteries
 - available for any wall thickness – fits flush within the shuttering
- System caps
 - quick and simple attachment using bayonet action lock
 - have 1, 3 or 5 spigots
 - each with its own heat-shrink sleeve

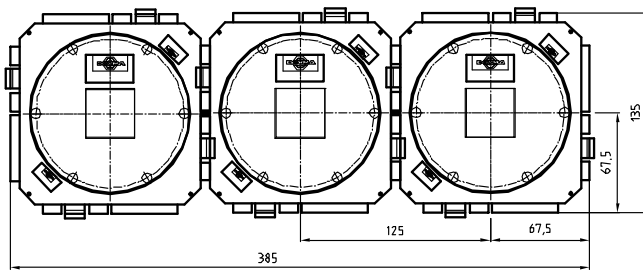
No. of spigots (system cap)	Inside Ø of spigot [mm]	cable-Ø [mm]
1	75	26 - 73
3	30	12 - 28
5	20	7 - 18
L_d: 100 mm min.		



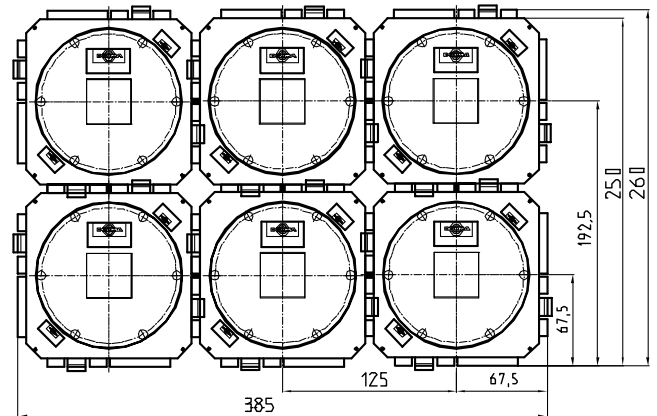
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Cable ducts

Assembling in batteries
BKD 90-1x3-K2/(L)



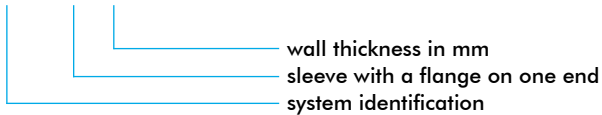
Assembling in batteries
BKD 90-2x3-K2/(L)



Product specification

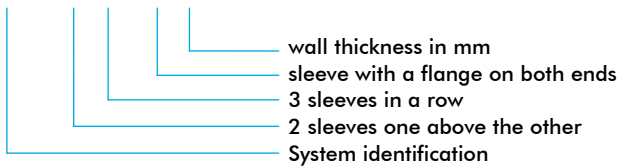
Ordering example:
Single flange sleeve with bayonet action lock

BKD 90 - K / L



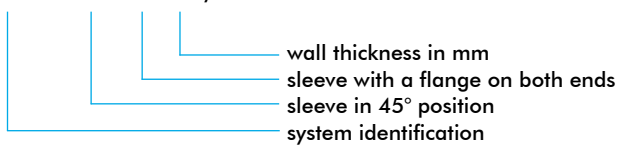
Ordering example:
Double flange sleeve with bayonet action lock
assembled in a battery of 2 x 3 units

BKD 90 - 2 x 3 - K 2 / L



Ordering example:
Angled double flange sleeve in 45° position with bayonet action lock

BKD 90110 - S45 - K 2 / L





Single flange sleeve

suitable for installation of system caps or KSS system on one end, for min. wall thickness 60 mm.

Correct direction of installation must be followed.

Order No.: BKD 90-K/(L)

(L) = wall thickness in mm



Double flange sleeve

suitable for installation of system caps or KSS system on both ends, for min. wall thickness 100 mm.

Order No.: BKD 90-K2/(L)

(L) = wall thickness in mm



Aluminium flange AF

suitable for sealing in front of core bores in walls and floors. Supplied with flange packing, protection cap and installation accessories.

For use with system caps or KSS system.

Max. core bore diameter 85 mm.

Flange size: 150 x 150 mm

Order No.: BKD 90-AF 150



System cap with one spigot

and accompanying heat-shrink sleeve, suitable for one cable with diameter 26 - 73 mm.

Order No.: BKD 90-D1/75



System cap with three spigots and accompanying heat-shrink sleeves, suitable for three cables with diameter 7 - 28 mm.

Order No.: BKD 90-D3/30



System cap with five spigots

and accompanying heat-shrink sleeves, suitable for five cables with max. 7 - 18 mm diameter.

Order No.: BKD 90-D5/20



System cap with socket,

Duct system with clamping collar

Order No.: BKD 90-DMM 75

BKD 90-DMM 85

BKD 90-DMM 110



System cap with plug in bushing

to connect smooth-faced cable duct with 110 mm outside diameter. An O-ring on the inside of the coupling provides the seal.

Order No.: BKD 90-DSM 110



System cap with duct connection socket

for connecting cable duct with 85 or 110 mm outside diameter. Accompanying heat-shrink sleeve provides the seal.

Order No.: BKD 90-DM 85

BKD 90-DM 110

**Angled sleeve**

for angled cable entry from any direction at 30°, 45° or 60° with installation form and polystyrene wedge, sleeve with a flange on one or both ends, also available as a multiple battery for min. wall thickness 200 mm.
Angled single flange sleeve

Order No.: **BKD 90-S30-K/(L)**
BKD 90-S45-K/(L)
BKD 90-S60-K/(L)

Angled double flange sleeve

Order No.: **BKD 90-S30-K2/(L)**
BKD 90-S45-K2/(L)
BKD 90-S60-K2/(L)

(L) = wall thickness in mm

**3-finger shrouds**

(heat shrink type) for sealing 3 cables in 1 spigot.

Order No.: **AK 35-3F-12/2**
for system cap BKD 90-D3/30 and BKD 90-D5/20 and cables 2 - 11 mm diameter.

**4-finger shrouds**

(heat shrink type) for sealing 4 cables in 1 spigot.

Order No.: **AK 35-4F-13/2**
for system cap BKD 90-D3/30 and BKD 90-D5/20 and cables 2 - 12 mm diameter

**Blind plug VS**

seals unused spigots, removable for retrofit installation of cables.

Available for spigots 20 and 30 mm diameter.

Order No.: **VS 20 / VS 30**

**Articulated spanner - GSS**

with adjustable arm for removal and assembly of sleeve protection plugs, system caps and KSS duct adaptors.

Order ref.: **GSS**

- cable protection ducts for **gas- and water-tight installation** of cables
- **simple connection** with flange sleeves/system caps
- with **bayonet action lock**
- possible installation as **empty ducts for retrofit use**



Product benefits

- high variability thanks to large selection of system caps and additional partition valves
- easy to set the tube systems in concrete
- compatible with prevalent systems
- protects cable tubs and cables in event of earthmoving
- easy to change cable assignment without hard earth work

25
Years
Guarantee

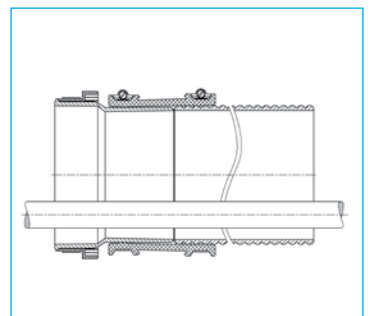
Technical details

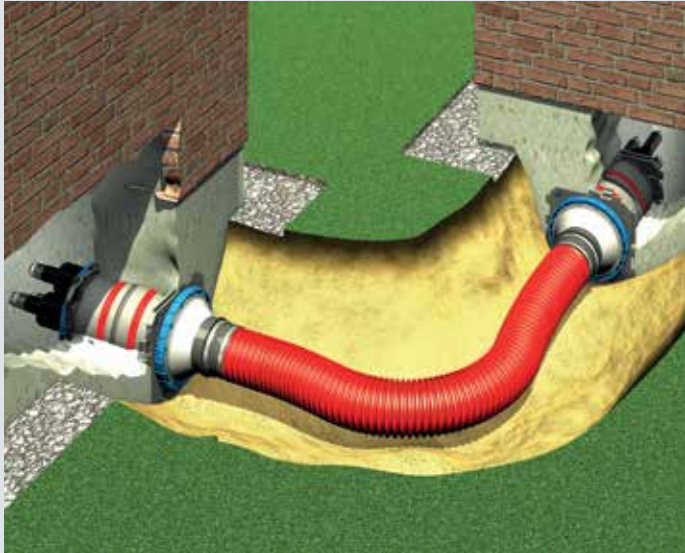
- flexible, mechanically strong, load-bearing plastic spiral duct for conduits and cables
- the wide range of system components ensures straightforward connection to all Curaline® systems at both ends, including flanged sleeves and core bores
- ensures gas- and watertight connection to cable ducts and underground cables
- compatible with existing duct systems
- protects cable conduits and cables from ground movement
- facilitates alterations and modifications to cable runs without costly ground works

KSS-Variations

- KSS B150: used to connect to Curaline® BKD 150
- KSS B90: used to connect to Curaline® BKD 90

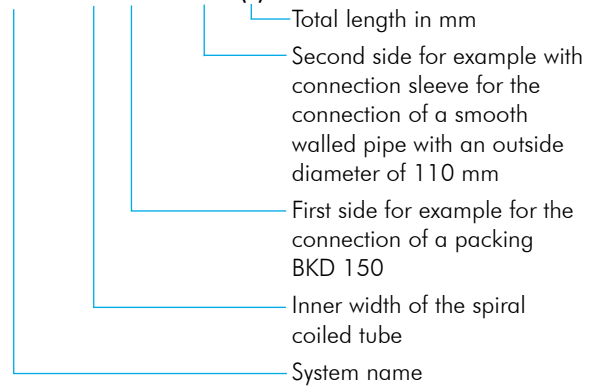
system	Inside diameter of duct [mm]	bend radius	duct wall thickness
KSS B150	150	730 mm	7,8 mm
KSS B90	80	540 mm	5,0 mm





Product nomenclature for KSS (example)

KSS B150/110/D/SM110/(L)



KSS sleeves

Article
KSS-sleeve, 80 mm Ø
KSS-sleeve, 110 mm Ø
KSS-sleeve, 125 mm Ø
KSS-sleeve, 150 mm Ø



Transition joints with sleeve technique

ÜMM (cable-Ø 150 mm)
ÜMM (cable-Ø 125 mm)
ÜMM (cable-Ø 110 mm)
ÜMM (cable-Ø 80 mm)



Flange sleeve / K

KSS-M 150-K-80
KSS-M 150-K-110
KSS-M 150-K-150



System cap / D

KSS-M 150-D-110
KSS-M 150-D-125
KSS-M 150-D-150
KSS M 90-D-80



Cap with multiple sockets

KSS-M 150-D3-110
KSS-M 150-D7-110
KSS-M 150-D3-150
KSS M 150-D8-150
KSS-M 90-D3-80
KSS M 90-D5-80

**Curaline® BKD 150/4006/K(2) or
Curaline® BKD 150/4005/K(2)**
Combination flange sleeve / system cap

- sealing system for penetrations
- for buildings **yet to be constructed**
- for buildings with **tanking membranes** or applications with **bituminous thick-coating** (black tank)
- with **bayonet action lock**
- suitable for **cables** and **cable protection pipes**
- against **pressing and non-pressing water**



Product benefits

- quick and easy installation (with bayonet cap) through precise and coordinated combination of system cover and tightly bound seal packing with iron-cast fixed and loose flange
- high variability thanks to large selection of system caps and additional partition valves
- no reworking required

25
Years
Guarantee

Technical details

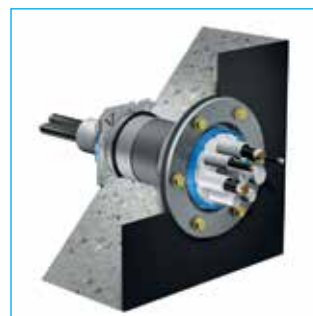
- gas-tight
- flange sleeve with fixed and loose flange according to DIN 18 195
- for buildings with tanking membranes or with bituminous thick-coating. Thin tanking membranes require two additional elastomeric packings according to DIN 18195 (DOYMA packings 1775)
- suitable for cables 7 - 108 mm diameter
- suitable to connect cable ducts ≤ 160 mm diameter
- cables are sealed to system cap spigots using heat shrink sleeves as standard
- compatible with existing duct systems
- materials are ecologically friendly and highly resistant against chemicals
- other variations, e.g. for renovations on the wall, are possible in combination with Curaflex® boards (technical specifications required)

Curaline® BKD 150/400x with fixed and loose flange is consists of:

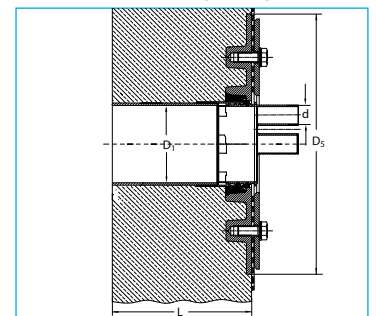
- flange sleeve (K = one-sided connection and K2 = two-sided connection), and depending on the requirement:
- with fixed and loose flange against pressing water (BKD 150K(2)/4006)
- with fixed and loose flange against non-pressing water (BKD 150K(2)/4005)

Curaline® BKD 150/4005/K2
as double flange sleeve

Cable ext. diameter d [mm]	Pipe sleeve internal diameter D ₁ [NB in mm]	Fixed flange diameter D ₃ [mm]	Standard length L [mm]
according to system cap	150	Curaline® BKD 150/4006 pressing water: 510	200 - 500
		Curaline® BKD 150/4005 non-pressing water: 345	



Curaline® BKD 150/4006/K

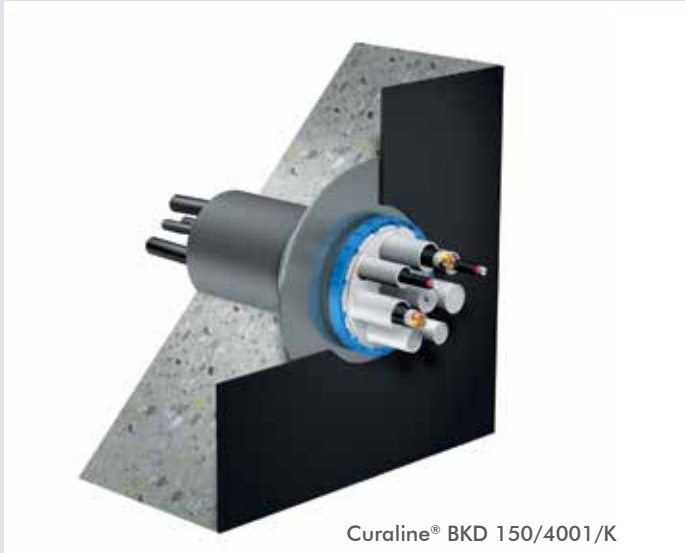


We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

Curaline® BKD 150/4001/K(2)

Combination flange sleeve / system cap

- sealing system for penetrations
- for buildings **yet to be constructed**
- for buildings with **tanking membranes** or applications with **bituminous thick-coating** (black tank)
- with **bayonet action lock**
- suitable for **cables** and **cable protection pipes**
- against **non-pressing water**



Product benefits

- rapid and simple installation (with bayonet connection) through precise-fit, matching combinations of system cover and permanently bonded seal packing with gluing flange made of cast iron.
- high variability through large selection of system caps and additional spreader caps
- no reworking required

25
Years
Guarantee

Technical details

- gas-tight
- for installation in walls or ceilings with bonding flange made of cast iron
- for buildings with tanking membranes or with bituminous thick-coating
- suitable for cables 7 - 108 mm diameter
- suitable to connect cable ducts ≤ 160 mm diameter
- cables are sealed to system cap spigots using heat shrink sleeves as standard
- compatible with existing duct systems
- materials are ecologically friendly and highly resistant against chemicals
- other variations, e.g. during renovation works in front of wall, are possible in combination with Curaflex® panels (technical specifications required)

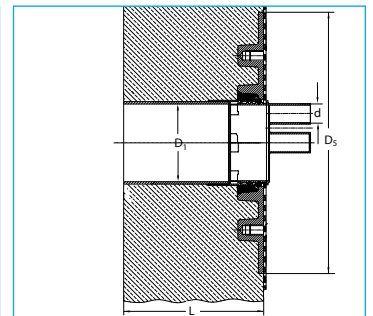
Curaline® BKD 150/4001/K(2) with bonding flange is consists of:

- flange sleeve (K = one-sided connection and K2 = two-sided connection), and depending on the requirement:
- bonding flange against non-pressing water

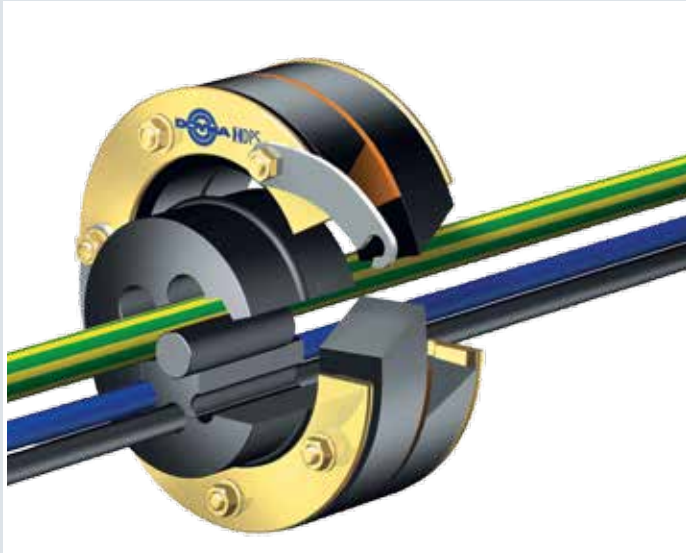
Delivery, the seal packings are fitted with a pressing water-proof blind cover

Curaline® BKD 150/4001/K2
as double flange sleeve

cable ext. diameter d [mm]	pipe sleeve internal diameter D _i [NB in mm]	fixed flange diameter D _s [mm]	standard length L [mm]
according to system cap	150	345	200 - 500



- sealing system for penetrations
- to install in **preinstalled pipe sleeve** or **core bore in waterproof concrete** (white tank)
- hinged version for **retrofit installation**
- with **changeable rubber insert**



Product benefits

- simple installation due to precise dimensions, large sealing ranges
- permanently sealed without re-tensioning (maintenance-free)
- higher sealing performance of the gasket insert due to **DPS*** and **DOYMA-Grip**
- watertight welded bolts
- with quick fastener
- to be subsequently installed around the existing line



Technical details

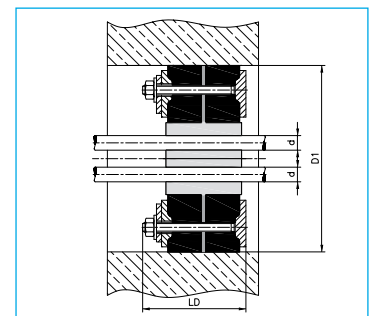
- gas-tight
- accepts angular deviations of service duct up to 8°
- accepts axial movements
- double sealing
- can be hinged
- leak-proof against pressing water

The gasket insert consists of:

- split frame rings: asymmetrically profiled steel rings (DPS), electro-galvanised, yellow passivated and sealant coated; optionally made of stainless steel grade 304 (1.4301) or grade 316 (1.4571/1.4404)
- elastomer: 2 x 27 mm EPDM seal rings (**DOYMA-Grip**), optionally EPDM-POD (for potable water), NBR (fuel/oil-resistant) or silicon (resistant to high temperatures) or FPM (chemical resistant)
- 3 mm EPDM thick orange-coloured centre ring

Accessories from page 88

cable ext. diameter d [mm]	No. of pipes / cables	pipe sleeve / core bore D ₁ [mm]
5 - 22	1 - 3	100
5 - 17	1 - 5	
5 - 12	1 - 9	
5 - 30	1 - 3	125
5 - 24	1 - 5	
5 - 16	1 - 9	
5 - 42	1 - 3	150
5 - 34	1 - 5	
5 - 24	1 - 9	
5 - 50	1 - 3	200
5 - 40	1 - 6	
8 x 5 - 30	1 - 9	
1 x 5 - 40		
L_D max: overall length: 85 mm		



We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

- **building earthing** for potential balancing for reinforcement and for retrofit installation in rigid or flexible design



Product benefits

- suitable for potential balancing
- maintenance-free

25
Years
Guarantee

Technical details

- high safety thanks to connection thread and connection bolts M12
- gas-tight and watertight
- hose-connected wall and ceiling installation
- permanent labelling of the grounding
- stainless steel design
- deliverable in almost all construction length

Potential-Earthing GE-P

Rigid earthing anchor with welded cross clamp for connecting to earthing installation, conductors and reinforcements for flush casting in with M12 connecting thread at one end.

Order No.: GE-P
(standard length abt. 120 mm)



Earthing insulator GE-A/L

Rigid earthing anchor for welding connection to a reinforcement and for flush casting in with M12 connecting thread at one end.

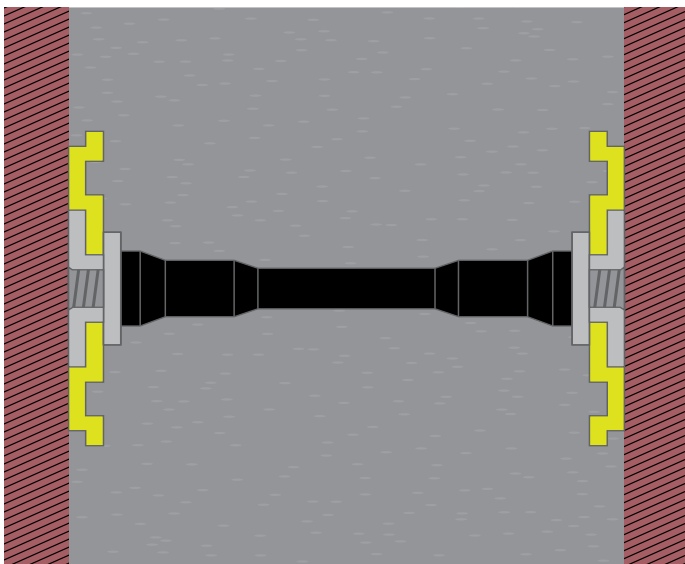
Order No.: GE-A/L
(L = wall thickness in mm)



Cable entry earth GE-D/L

Rigid insulated sleeve for flush casting in with M12 connecting thread at each end.

Order No.: GE-D/L
(L = wall thickness in mm)



Product guide

Quadro-Sicura® multi-utility wall penetration

for buildings **with basements**

product	multi-utility	single-utility	lines/supply media				
			Gas	geothermal/local/district heating	Water	Electricity	Telecomm.
Quadro-Sicura® Nova 1	●		●		●	●	●
Quadro-Sicura® Nova 2	●		●		●	●	●
Quadro-Sicura® Nova 3	●		●		●	●	●
Quadro-Sicura® 1-M	●				●	●	●
Quadro-Sicura® 2-M	●				●	●	●
Quadro-Sicura® Nova V	●		●		●	●	●
Quadro-Sicura® Nova 1-FW	●			●	●	●	●
Quadro-Sicura® Nova 2-FW	●			●	●	●	●
Quadro-Sicura® MF	●		●		●	●	●
Quadro-Sicura® MG	●		●		●	●	●
Quadro-Sicura® MG2	●		●		●	●	●
Quadro-Sicura® E 1		●	●		●	●	●
Quadro-Sicura® E 2		●	●		●	●	●
Quadro-Sicura® E-S		●	●				
Quadro-Sicura® MIS 40		●					●
Quadro-Sicura® MIS 60 D		●			●	●	●
Quadro-Sicura® MIS 90		●			●	●	●

for waterproof concrete walls	for brick walls / with tanking membranes / thick coatings	wet installation	suitable for double element walls	Page
	•			128
•			•	129
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	•			134
•				135
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**without tanking membranes / bituminous coating (white tank),
with tanking membranes / bituminous coating (black tank)**

Non-waterproof structures must be protected with a sealing coat against penetrating water. This sealing coat can be in the form of sheeting, trowelable or liquid-applicable masses and therefore results in a skin-type seal. Since bitumen plays a major role in terms of materials, these forms of seals are often known as a "black tank". Waterproof or non-water-permeable structures do not require additional skin sealing. This type of structure includes those using impermeable reinforced concrete. This type of structural waterproofing is also known as a "white tank".

double/element walls

Double/element walls consists of precast concrete walls and in-situ concrete. Precast concrete walls are kept at a specific distance apart by lattice girders and the void between them is concreted using in-situ concrete. During hardening, the in-situ concrete shrinks and there is a danger that the in-situ concrete does not bond to the concrete walls, which results in the formation of capillaries. A further weak point is the butt joints between individual precast concrete segments. The water in permeability of the precast concrete sections is not guaranteed due to their low wall thickness. This means that there is a risk of water permeating the outside precast concrete walls and collecting in front of the in-situ concrete core.

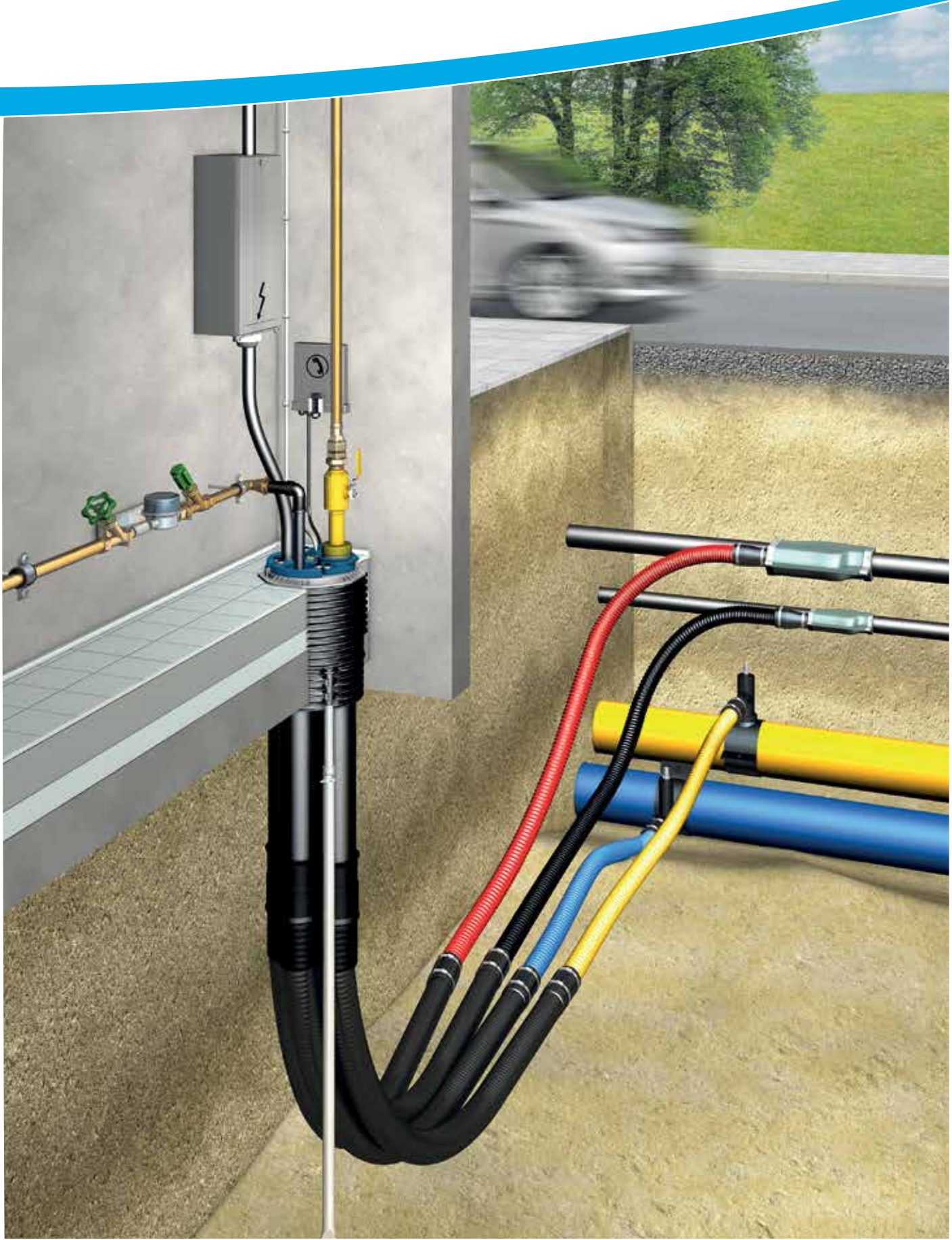
Product guide

Quadro-Sicura® multi-utility wall penetration

for buildings **without basements**

product	multi-utility	single-utility	lines/supply media				Page
			Gas	Water	Electricity	Telecomm.	
Quadro-Sicura® Nova BP+	●		●	●	●	●	145
Quadro-Sicura® Basic R-4	●		●	●	●	●	146
Quadro-Sicura® Basic R-2	●		●	●	●	●	147
Quadro-Sicura® Basic R-3	●		●	●	●	●	147
Quadro-Sicura® Basic R-5	●		●	●	●	●	147
Quadro-Sicura® E-BP		●	●	●	●	●	148
Quadro-Sicura® MIS 40S		●				●	149

We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15



Service entries

Installation Quadro-Sicura® multi-utility wall penetration Installation example Quadro-Sicura® Nova 1

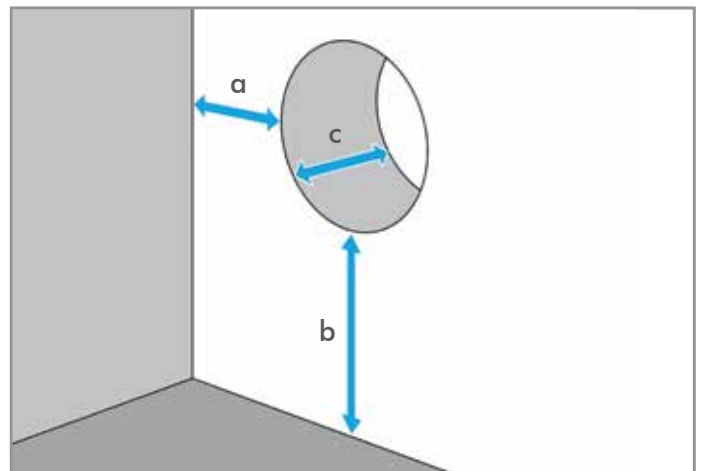
Please note:

- The wall must be clean, flat and dry in the installation vicinity.
- There may be no grooves, cracks and breakouts on the wall surface in the installation vicinity.
- Masonry must always be fitted with a pipe sleeve.
- The seals and pipe services must be clean and free of damage.
- We recommend sealing the core bore with Curaflex® Aquagard (primer 1710/1711 and special paint 1715/1716).
- The following minimum wall/floor spacings must be observed (see image on right).

Note:

DOYMA products are continuously being further developed, technical changes will take place without previous notification.

Extensive installation instructions are provided with the product. On top of this, they are available on the Internet at www.doyma.de



Minimum spacings: a ≥ 50 mm
b ≥ 50 mm
c: 190 - 550 mm

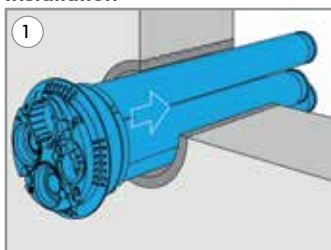


Quadro-Sicura® Nova 1

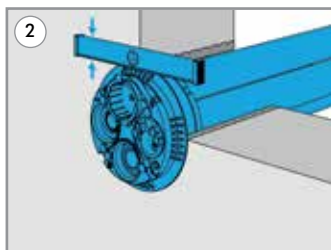
Installation example Quadro-Sicura® Nova 1 (see. p. 128)

Quadro-Sicura® Nova 1 is a multi-utility wall penetration for buildings with basements which has additional sealing on the outside of the wall to seal off when black coatings and bituminous coating are used.

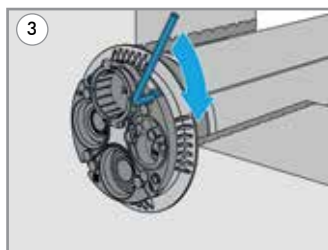
Installation



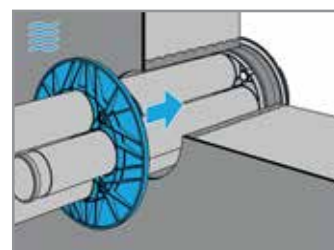
1 Push the internal seal into the cutout.



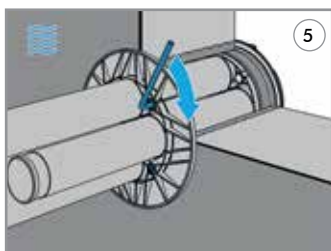
2 Align the internal seal.



3 Tighten the internal seal.

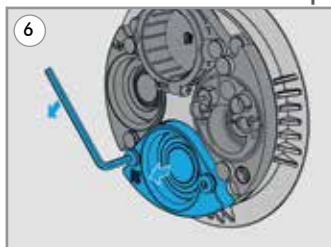


4 Press the external seal over the sleeve tube into the cutout.

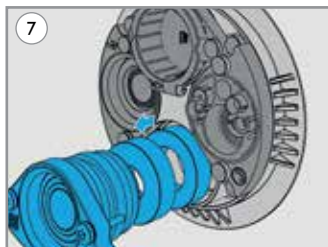


5 Tighten the external seal.

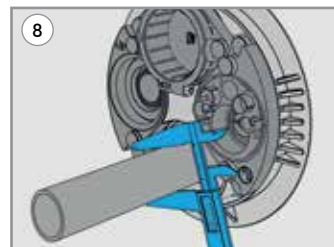
Installation of a service: example of water service



6 Undo the fixing screws (Allen screws) on the "water supply" gland packing.



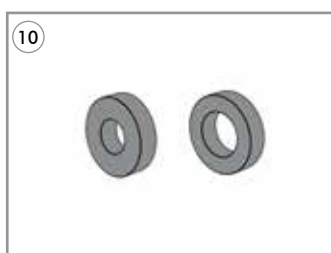
7 Pull out the seal unit with the ring stopper behind it (two items, "secondary seals").



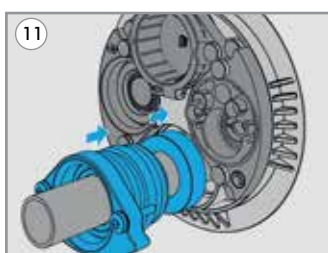
8 Push the service line through and determine the service diameter.



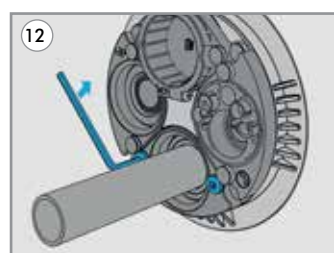
9 Removed the dummy stoppers from the seal unit and adapt the module seal in accordance with the water service line diameter.



10 Select an appropriate ring stopper (secondary seal) for the water service line.



11 Fit the seal unit: first the matching ring stopper (secondary seal), then the seal unit.



12 Tighten the fixing screws (Allen screws) alternately until the gland packing is contacting the anchor plate.

Quadro-Sicura® Nova 1

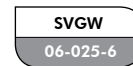
for buildings with basements

- multi-utility wall penetration **sealing off on both sides**
- to install in **preinstalled pipe sleeve** or **core bore in waterproof concrete** (white tank)
- for utilities: **gas**, water, power and telecom
- for **tanking membranes** or applications with **bituminous thick-coating** (black tank)



Product benefits

- corrosion-free and non-conductive due to production using high-performance plastic
- gas-tight and pressing water-tight
- installation without torque wrench (using turn-stop system)
- stageless module seal for water and electricity
- extremely simple installation
- low component weight
- simple assignment of section seal using symbol identification

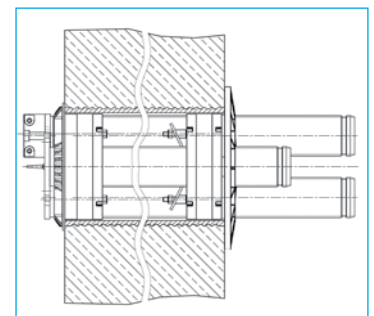


Technical details

- DVGW-certified according to VP 601: DV-4541 BQ 0130
- SVGW-certified
- installation in buildings with a cellar
- resistant to methane gas
- dry installation
- 100% section separation, each section is sealed separately
- variable arrangement of the individual sections possible
- the whole component can be freely turned according to the connection requirements
- relining possible when connected to jacket tubes
- possible to connect inflexible and flexible jacket tubes NB 75. Larger or smaller diameters possible via expansion coupling and reductions
- all sections come with gas-tight and pressing water-tight sealing plugs

Accessories from page 150

supply lines	diameter of the pipes / cables
gas	Gas-multi-utility wall penetration RMA, Schuck, VAF Voigt, Jeschke: 1" (1 ¼" + 1 ½" on request)
water	external diameter 32 mm, 40 mm, 50 mm; optional external diameter 63 mm
electricity	26 - 36 mm external diameter
telecom	external diameter 2 x 5 - 7 mm, 3 x 7 - 13 mm, 1 x 14 - 18 mm and 1 x 19 - 22 mm
building	dimensions
core bore/pipe sleeve-Ø	199 - 204 mm
wall thickness	190 - 550 mm
Other dimensions on request	



We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

Quadro-Sicura® Nova 2

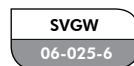
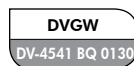
for buildings with basements

- multi-utility wall penetration **sealing off on both sides**
- to install in **preinstalled pipe sleeve** or **core bore in waterproof concrete** (white tank)
- for utilities: **gas**, water, power and telecom



Product benefits

- corrosion-free and non-conductive due to production using high-performance plastic
- gas-tight and pressing water-tight
- installation without torque wrench (using turn-stop system)
- stageless module seal for water and electricity
- extremely simple installation
- low component weight
- simple assignment of section seal using symbol identification

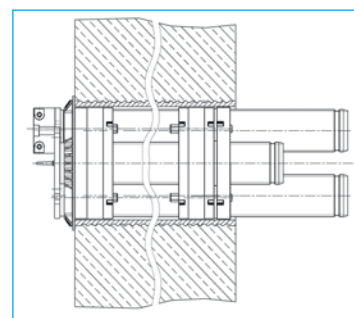


Technical details

- DVGW-certified according to VP 601: DV-4541 BQ 0130
- SVGW-certified
- installation in buildings with a cellar
- resistant to methane gas
- dry installation
- optional installation possible according to DIN 18195
- 100% section separation, each section is sealed separately
- variable arrangement of the individual sections possible
- the whole component can be freely turned according to the connection requirements
- relining possible when connected to jacket tubes
- possible to connect inflexible and flexible jacket tubes NB 75. Larger or smaller diameters possible via expansion coupling and reductions
- all sections come with gas-tight and pressing water-tight sealing plugs
- suitable for double walls / prefabricated walls

Accessories from page 150

supply lines	diameter of the pipes / cables
gas	Gas-multi-utility wall penetration RMA, Schuck, VAF Voigt, Jeschke: 1" (1 1/4" + 1 1/2" on request)
water	external diameter 32 mm, 40 mm, 50 mm; optional external diameter 63 mm
electricity	26 - 36 mm external diameter
telecom	external diameter 2 x 5 - 7 mm, 3 x 7 - 13 mm, 1 x 14 - 18 mm and 1 x 19 - 22 mm
building	dimensions
core bore/pipe sleeve-Ø	199 - 204 mm
wall thickness	150 - 550 mm
Other dimensions on request	



Quadro-Sicura® Nova 3

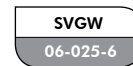
for buildings with basements

- multi-utility wall penetration **sealing off on single side**
- to install in **preinstalled pipe sleeve** or **core bore in waterproof concrete** (white tank)
- for utilities: **gas**, water, power and telecom



Product benefits

- corrosion-free and non-conductive due to production using high-performance plastic
- gas-tight and pressing water-tight
- installation without torque wrench (using turn-stop system)
- stageless module seal for water and electricity
- extremely simple installation
- low component weight
- simple assignment of section seal using symbol identification

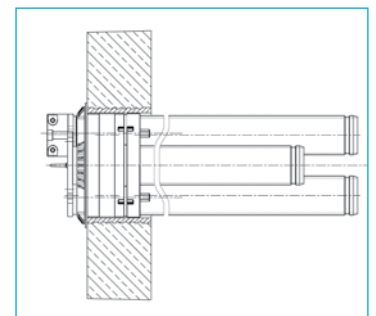


Technical details

- DVGW-certified according to VP 601: DV-4541 BQ 0130
- SVGW-certified
- installation in buildings with a cellar
- resistant to methane gas
- dry installation
- optional installation possible according to DIN 18195
- 100% section separation, each section is sealed separately
- variable arrangement of the individual sections possible
- the whole component can be freely turned according to the connection requirements
- relining possible when connected to jacket tubes
- possible to connect inflexible and flexible jacket tubes NB 75. Larger or smaller diameters possible via expansion coupling and reductions
- all sections come with gas-tight and pressing water-tight sealing plugs

Accessories from page 150

supply lines	diameter of the pipes / cables
gas	Gas-multi-utility wall penetration RMA, Schuck, VAF Voigt, Jeschke: 1" (1 1/4" + 1 1/2" on request)
water	external diameter 32 mm, 40 mm, 50 mm; optional external diameter 63 mm
electricity	26 - 36 mm external diameter
telecom	external diameter 2 x 5 - 7 mm, 3 x 7 - 13 mm, 1 x 14 - 18 mm and 1 x 19 - 22 mm
building	dimensions
core bore/pipe sleeve-Ø	199 - 204 mm
wall thickness	90 - 550 mm
Other dimensions on request	



Quadro-Sicura® Nova 1-M

for buildings with basements

- multi-utility wall penetration **sealing off on both sides**
- to install in **preinstalled pipe sleeve** or **core bore in waterproof concrete** (white tank)
- for utilities: **gas**, water, power and telecom
- for **tanking membranes** or applications with **bituminous thick-coating** (black tank)
- for **multiple use** of different utilities



Product benefits

- for multiple allocation of various individual sections
- corrosion-free and non-conductive due to production using high-performance plastic
- installation without torque wrench (using turn-stop system)
- stageless module seal for water and electricity
- extremely simple installation
- low component weight
- simple assignment of section seal using symbol identification



25
Years
Guarantee

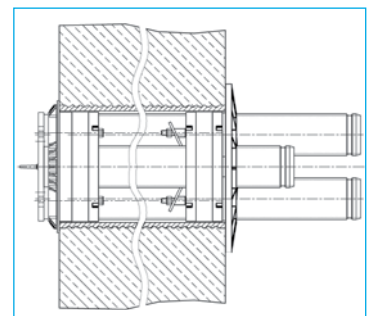
Technical details

- DVGW-certified according to VP 601: DV-4541 BQ 0130
- SVGW-certified
- installation in buildings with a cellar
- resistant to methane gas
- dry installation
- 100% section separation, each section is sealed separately
- variable arrangement of the individual sections possible
- the whole component can be freely turned according to the connection requirements
- relining possible when connected to jacket tubes
- possible to connect inflexible and flexible jacket tubes NB 75. Larger or smaller diameters possible via expansion coupling and reductions
- all sections come with gas-tight and pressing water-tight sealing plugs

Accessories from page 150

supply lines		diameter of the pipes / cables
optional	water	external diameter 32 mm, 40 mm, 50 mm; optional external diameter 63 mm
	electricity	26 - 36 mm external diameter
	telecom	external diameter 2 x 5 - 7 mm, 3 x 7 - 13 mm, 1 x 14 - 18 mm and 1 x 19 - 22 mm

building	dimensions
Core bore/pipe sleeve-Ø	199 - 204 mm
wall thickness	190 - 550 mm
Other dimensions on request	



Quadro-Sicura® Nova 2-M

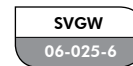
for buildings with basements

- multi-utility wall penetration **sealing off on both sides**
- to install in **preinstalled pipe sleeve** or **core bore in waterproof concrete** (white tank)
- for utilities: **gas**, water, power and telecom
- for **multiple use** of different utilities



Product benefits

- for multiple allocation of various individual sections
- corrosion-free and non-conductive due to production using high-performance plastic
- Installation without torque wrench (using turn-stop system)
- stageless module seal for water and electricity
- extremely simple installation
- low component weight
- simple assignment of section seal using symbol identification



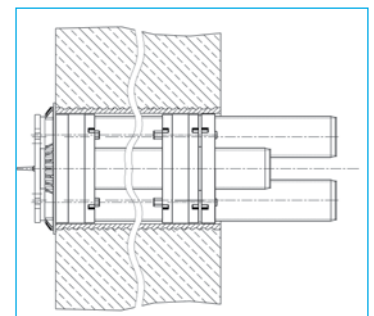
Technical details

- DVGW-certified according to VP 601: DV-4541 BQ 0130
- SVGW-certified
- installation in buildings with a cellar
- resistant to methane gas
- dry installation
- optional installation possible according to DIN 18195
- 100% section separation, each section is sealed separately
- variable arrangement of the individual sections possible
- the whole component can be freely turned according to the connection requirements
- relining possible when connected to jacket tubes
- possible to connect inflexible and flexible jacket tubes NB 75. Larger or smaller diameters possible via expansion coupling and reductions
- all sections come with gas-tight and pressing water-tight sealing plugs
- suitable for double walls / prefabricated walls

Accessories from page 150

supply lines		diameter of the pipes / cables
optional	water	external diameter 32 mm, 40 mm, 50 mm; optional external diameter 63 mm
	electricity	26 - 36 mm external diameter
	telecom	external diameter 2 x 5 - 7 mm, 3 x 7 - 13 mm, 1 x 14 - 18 mm and 1 x 19 - 22 mm

building	dimensions
Core bore/pipe sleeve-Ø	199 - 204 mm
wall thickness	150 - 550 mm
Other dimensions on request	



We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

Quadro-Sicura® Nova V

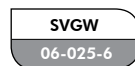
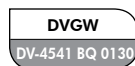
for buildings with basements

- multi-utility wall penetration for **wet installation**
- to install in **preinstalled pipe sleeve** or **core bore in waterproof concrete** (white tank)
- for utilities: **gas**, water, power and telecom



Product benefits

- corrosion-free and non-conductive due to production using high-performance plastic
- installation without torque wrench (using turn-stop system)
- stageless module seal for water and electricity
- extremely simple installation
- low component weight
- simple assignment of section seal using symbol identification

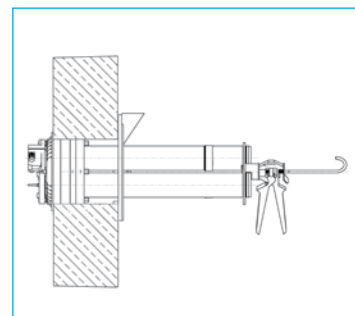


Technical details

- DVGW-certified according to VP 601: DV-4541 BQ 0130
- SVGW-certified
- installation in buildings with a cellar
- resistant to methane gas
- wet installation
- optional installation possible according to DIN 18195
- 100% section separation, each section is sealed separately
- variable arrangement of the individual sections possible
- the whole component can be freely turned according to the connection requirements
- relining possible when connected to jacket tubes
- possible to connect inflexible and flexible jacket tubes NB 75. Larger or smaller diameters possible via expansion coupling and reductions
- all sections come with gas-tight and pressing water-tight sealing plugs

Accessories from page 150

supply lines	diameter of the pipes / cables
gas	Gas-multi-utility wall penetration RMA, Schuck, VAF Voigt, Jeschke: 1" (1 1/4" + 1 1/2" on request)
water	external diameter 32 mm, 40 mm, 50 mm; optional external diameter 63 mm
electricity	26 - 36 mm external diameter
telecom	external diameter 2 x 5 - 7 mm, 3 x 7 - 13 mm, 1 x 14 - 18 mm and 1 x 19 - 22 mm
building	dimensions
core bore/pipe sleeve-Ø	199 - 204 mm
wall thickness	180 - 550 mm
Other dimensions on request	



Service entries

We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

Quadro-Sicura® Nova 1-FW

for buildings with basements

- multi-utility wall penetration **sealing off on both sides**
- to install in **preinstalled pipe sleeve** or **core bore in waterproof concrete** (white tank)
- for **tanking membranes** or applications with **bituminous thick-coating** (black tank)
- for utilities: **district heating, geothermal heating, water, power, telecom**



Product benefits

- stageless module seal for water and electricity
- extremely simple installation
- space-saving building lead-in for the supply lines
- simple assignment of section seal using symbol identification
- installation possible without torque wrench

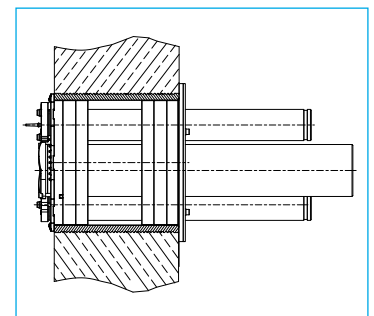
25
Years
Guarantee

Technical details

- installation in buildings with a cellar
- gas-tight and pressing water-tight
- dry installation
- installation in core holes or pipe sleeves with inner diameter of 298 – 304 mm
- district heat flow line and return line in one or two jacket tubes
- the district/local heat lines, water line, electricity and telecommunications cables are sealed independently of the individual sections
- variable arrangement of the individual sections possible
- stageless adjustability for wall thicknesses from 200 – 550 mm
- no additional external seal required
- possible to connect inflexible and flexible jacket tubes NB 75 and NB 125. Larger or smaller diameters possible via expansion coupling and reductions
- visual inspection of the tightening torque using control pins

Accessories from page 150

supply lines	diameter of the pipes / cables
district/local heat or geothermal	external diameter 75 mm, 90 mm, 110 mm external diameter 32 mm, 40 mm, 50 mm (specify when ordering)
water	external diameter 32 mm, 40 mm, 50 mm; optional external diameter 63 mm
electricity	26 - 36 mm external diameter
telecom	external diameter 2 x 5 - 7 mm, 3 x 7 - 13 mm, 1 x 14 - 18 mm and 1 x 19 - 22 mm
building	dimensions
core bore/pipe sleeve-Ø	298 - 304 mm
wall thickness	200 - 550 mm
Other dimensions on request	

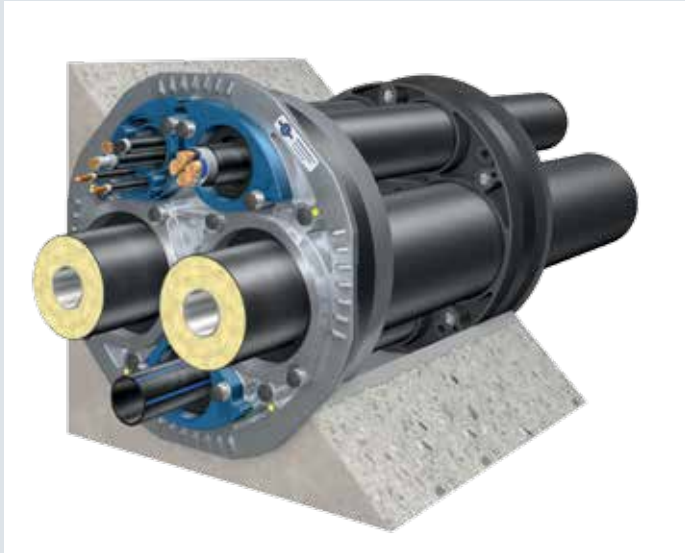


We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

Quadro-Sicura® Nova 2-FW

for buildings with basements

- multi-utility wall penetration **sealing off on both sides**
- to install in **preinstalled pipe sleeve** or **core bore in waterproof concrete** (white tank)
- for utilities: **district heating, geothermal heating, water, power, telecom**



Product benefits

- stageless module seal for water and electricity
- extremely simple installation
- space-saving building lead-in for the supply lines
- simple assignment of section seal using symbol identification
- installation possible without torque wrench

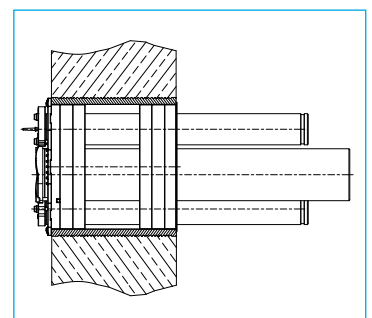
25
Years
Guarantee

Technical details

- installation in buildings with a cellar
- gas-tight and pressing water-tight
- dry installation
- installation in core holes or pipe sleeves with inner diameter of 298 – 304 mm
- district heat flow line and return line in one or two jacket tubes
- the district/local heat lines, water line, electricity and telecommunications cables are sealed independently of the individual sections
- variable arrangement of the individual sections possible
- stageless adjustability for wall thicknesses from 200 – 550 mm
- no additional external seal required
- possible to connect inflexible and flexible jacket tubes NB 75 and NB 125. Larger or smaller diameters possible via expansion coupling and reductions
- visual inspection of the tightening torque using control pins

Accessories from page 150

supply lines	diameter of the pipes / cables
district/local heat or geothermal	external diameter 75 mm, 90 mm, 110 mm external diameter 32 mm, 40 mm, 50 mm (specify when ordering)
water	external diameter 32 mm, 40 mm, 50 mm; optional external diameter 63 mm
electricity	26 - 36 mm external diameter
telecom	external diameter 2 x 5 - 7 mm, 3 x 7 - 13 mm, 1 x 14 - 18 mm and 1 x 19 - 22 mm
building	dimensions
core bore/pipe sleeve-Ø	298 - 304 mm
wall thickness	200 - 550 mm
Other dimensions on request	



Quadro-Sicura® MF

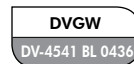
for buildings with basements

- multi-utility wall penetration **sealing off on both sides**
- to install in **preinstalled pipe sleeve** or **core bore in waterproof concrete** (white tank)
- for utilities: **gas**, water, power and telecom
- for **tanking membranes** or applications with **bituminous thick-coating** (black tank)
- with integrated **leak testing**



Product benefits

- with connection for tightness testing
- installation possible without torque wrench
- extremely simple installation
- stageless module seal for water and electricity

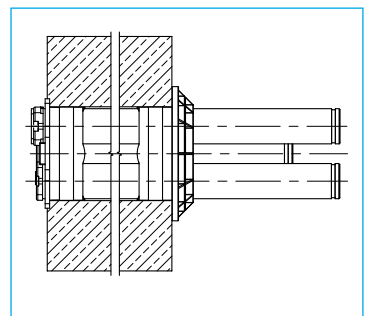


Technical details

- DVGW-certified according to VP 601: DV-4541 BL0436
- installation in buildings with a cellar
- dry installation
- 100% section separation, each section is sealed separately
- variable arrangement of the individual sections possible
- relining possible when connected to jacket tubes
- possible to connect inflexible and flexible jacket tubes NB 75. Larger or smaller diameters possible via expansion coupling and reductions
- the exact contact pressure is indicated via control pins

Accessories from page 150

supply lines	Diameter of the pipes / cables
gas	Gas-multi-utility wall penetration RMA, Schuck: 1" (1 1/4" + 1 1/2" on request)
water	external diameter 32 mm, 40 mm, 50 mm
electricity	20 - 34 mm external diameter
telecom	external diameter 1 x 5 - 13 mm, 1 x 14 - 21 mm, 3 x 7 - 13 mm
building	dimensions
core bore/pipe sleeve-Ø	199 - 203 mm
wall thickness	130 - 500 mm
Other dimensions on request	



We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

Quadro-Sicura® MG

for buildings with basements

- multi-utility wall penetration **sealing off on both sides**
- to install in **preinstalled pipe sleeve** or **core bore in waterproof concrete** (white tank)
- for utilities: **gas**, water, power and telecom
- with integrated **leak testing**



Product benefits

- with connection for tightness testing
- installation possible without torque wrench
- extremely simple installation
- stageless module seal for water and electricity



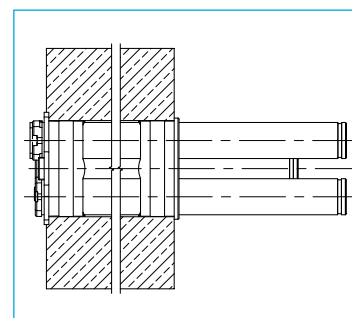
Technical details

- DVGW-certified according to VP 601: DV-4541 BL0436
- installation in buildings with a cellar
- dry installation
- 100% section separation, each section is sealed separately
- variable arrangement of the individual sections possible
- relining possible when connected to jacket tubes
- possible to connect inflexible and flexible jacket tubes NB 75. Larger or smaller diameters possible via expansion coupling and reductions
- the exact contact pressure is indicated via control pins

Accessories from page 150

supply lines	Diameter of the pipes / cables
gas	Gas-multi-utility wall penetration RMA, Schuck: 1" (1 1/4" + 1 1/2" on request)
water	external diameter 32 mm, 40 mm, 50 mm
electricity	20 - 34 mm external diameter
telecom	external diameter 1 x 5 - 13 mm, 1 x 14 - 21 mm, 3 x 7 - 13 mm

building	dimensions
core bore/pipe sleeve-Ø	199 - 203 mm
wall thickness	130 - 500 mm
Other dimensions on request	



Service entries

We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

Quadro-Sicura® MG 2

for buildings with basements

- multi-utility wall penetration **sealing off on both sides**
- to install in **preinstalled pipe sleeve** or **core bore in waterproof concrete** (white tank)
- for utilities: **gas**, water, power and telecom
- with integrated **leak testing**
- for **double element walls**



Product benefits

- suitable for double walls / prefabricated walls
- with connection for tightness testing
- installation possible without torque wrench
- extremely simple installation
- stageless module seal for water and electricity

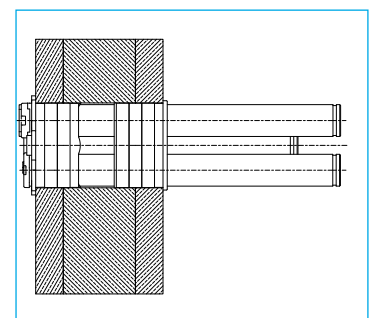


Technical details

- DVGW-certified according to VP 601: DV-4541 BL0436
- installation in buildings with a cellar
- gas-tight and pressing water-tight
- dry installation
- 100% section separation, each section is sealed separately
- variable arrangement of the individual sections possible
- relining possible when connected to jacket tubes
- possible to connect inflexible and flexible jacket tubes NB 75. Larger or smaller diameters possible via expansion coupling and reductions
- the exact contact pressure is indicated via control pins

Accessories from page 150

supply lines	diameter of the pipes / cables
gas	Gas-multi-utility wall penetration RMA, Schuck: 1" (1 1/4" + 1 1/2" on request)
water	external diameter 32 mm, 40 mm, 50 mm
electricity	20 - 34 mm external diameter
telecom	external diameter 1 x 5 - 13 mm, 1 x 14 - 21 mm, 3 x 7 - 13 mm
building	dimensions
core bore/pipe sleeve-Ø	199 - 203 mm
wall thickness	240 - 500 mm
Other dimensions on request	



We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

Quadro-Sicura® E 1

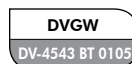
for buildings with basements

- single-utility wall penetration **sealing off on both sides**
- to install in **preinstalled pipe sleeve** or **core bore in waterproof concrete** (white tank)
- for utilities: **gas**, water, power or telecom
- for **tanking membranes** or applications with **bituminous thick-coating** (black tank)



Product benefits

- stageless module seal for water and electricity
- extremely simple installation
- low component weight
- simple assignment of section seal using symbol identification

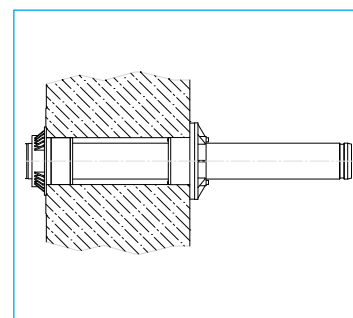


Technical details

- DVGW-certified according to VP 601: DV-4543 BT 0105
- gas-tight and pressing water-tight
- Installation in buildings with a cellar
- resistant to methane gas
- dry installation
- relining possible when connected to jacket tubes
- possible to connect inflexible and flexible jacket tubes NB 75. Larger or smaller diameters possible via expansion coupling and reductions
- the section comes with a gas-tight and pressing water-tight sealing plug

Accessories from page 150

supply lines	diameter of the pipes / cables
gas or	Gas-multi-utility wall penetration RMA, Schuck, VAF Voigt, Jeschke: 1" (1 ¼" + 1 ½" on request)
water or	external diameter 32 mm, 40 mm, 50 mm; optional external diameter 63 mm
electricity or	26 - 36 mm external diameter
telecom	external diameter 2 x 5 - 7 mm, 3 x 7 - 13 mm, 1 x 14 - 18 mm and 1 x 19 - 22 mm
building	dimensions
core bore/pipe sleeve-Ø	99 - 103 mm
wall thickness	130 - 550 mm
Other dimensions on request	



Quadro-Sicura® E 2

for buildings with basements

- single-utility wall penetration **sealing off on both sides**
- to install in **preinstalled pipe sleeve** or **core bore in waterproof concrete** (white tank)
- for utilities: **gas**, water, power or telecom



Product benefits

- stageless module seal for water and electricity
- extremely simple installation
- low component weight
- simple assignment of section seal using symbol identification

DVGW
DV-4543 BT 0105

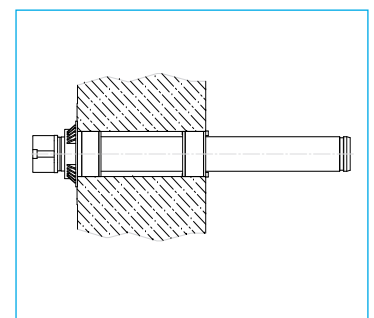
25
Years
Guarantee

Technical details

- DVGW-certified according to VP 601: DV-4543 BT 0105
- gas-tight and pressing water-tight
- installation in buildings with a cellar
- resistant to methane gas
- installation possible according to DIN 18195
- dry installation
- relining possible when connected to jacket tubes
- possible to connect inflexible and flexible jacket tubes NB 75. Larger or smaller diameters possible via expansion coupling and reductions
- the section comes with a gas-tight and pressing water-tight sealing plug

Accessories from page 150

supply lines	diameter of the pipes / cables
gas or	Gas-multi-utility wall penetration RMA, Schuck, VAF Voigt, Jeschke: 1" (1 ¼" + 1 ½" on request)
water or	external diameter 32 mm, 40 mm, 50 mm; optional external diameter 63 mm
electricity or	26 - 36 mm external diameter
telecom	external diameter 2 x 5 - 7 mm, 3 x 7 - 13 mm, 1 x 14 - 18 mm and 1 x 19 - 22 mm
building	dimensions
core bore/pipe sleeve-Ø	99 - 103 mm
wall thickness	130 - 550 mm
Other dimensions on request	



Quadro-Sicura® E-S

for buildings with basements

- single-utility wall penetration **sealing off on both sides**
- to install in **preinstalled pipe sleeve** or **core bore in waterproof concrete** (white tank)
- for utility: **gas**
- **without** jacket tubes connection



Product benefits

- additional mechanical fixation unnecessary
- permanently leakproof without retension (maintenance-free)
- installation regardless of weather conditions

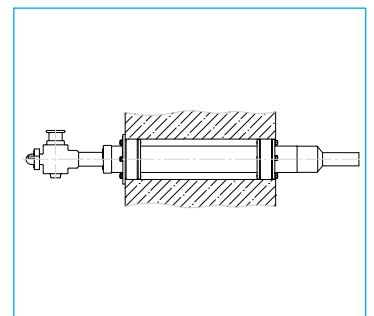


Technical details

- DVGW-certified according to VP 601: DG-4540BT0396
- extraction-proof and torsion-proof according to DVGW VP 601
- installation in buildings with a cellar
- optional installation according to DIN 18195
- comprised of a sealing insert with large ring, installed in the inside of the cellar, and a sealing insert installed in the external area of the building wall

Accessories from page 150

gas building entry type	NB	core bore/ Pipe sleeve	wall thickness
RMA	NB 25	NB 100	≥ 90 mm
	NB 32 - NB 50	NB 150	≥ 140 mm
Schuck	NB 25	NB 125	≥ 180 mm
	NB 32 - NB 50	NB 150	≥ 140 mm
VAF-Voigt	NB 25	NB 100	≥ 140 mm
	NB 50	NB 150	≥ 140 mm
Burger	NB 25 and NB 32	NB 100	≥ 140 mm
Other dimensions on request			



Quadro-Sicura® MIS 40

for buildings with basements

- single-utility wall penetration **with injection system**
- use in standard wall types according to **DIN 18195-4** or for core bore in **waterproof concrete (white tank)**
- for **fibre glass cable/pipes** or telecom lines



Product benefits

- ideal for sealing on existing thick bitumen coating
- tensioning and sealing using resin injection via an integrated membrane system
- can also be used without filler in popular hollow bricks
- short installation times
- suitable for building restorations

25
Years
Guarantee

Technical details

- gas-tight and watertight up to 1 bar
- for open construction methods
- integrated blind seal
- no additional shrinkage
- for drill holes in the most prevalent DIN 18185-4 wall types and WU core holes "white tub"

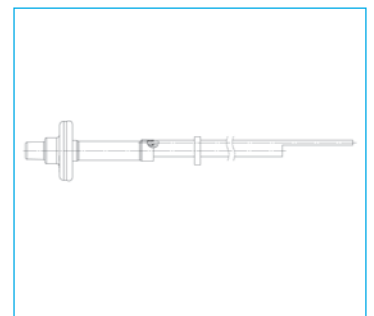
The single building entry consists of:

- Quadro-Sicura® MIS 40
- end caps
- grid sheet
- expansion resin
- quick tensioning device

Accessories from page 150

supply lines	diameter of cables / pipes
fibre optic cable / electric cable	2 x (5 - 7 mm) or 1 x 9 - 12 mm

building	dimensions
core bore/pipe sleeve-Ø	40 - 50 mm
wall thickness	200 - 900 mm optional 900 - 1200 mm
Other dimensions on request	



Quadro-Sicura® MIS 60 D

for buildings with basements

- single-utility wall penetration **with injection system**
- use in standard wall types according to **DIN 18195-4** or for core bore in **waterproof concrete (white tank)**
- for **fibre glass cable/pipes** or **water pipes**



Product benefits

- ideal for sealing on existing thick bitumen coating
- tensioning and sealing using resin injection via an integrated membrane system
- can also be used without filler in popular hollow bricks
- short installation times
- suitable for building restorations

25
Years
Guarantee

Technical details

- gas-tight and watertight up to 1 bar
- for open construction methods
- integrated blind seal
- no additional shrinkage
- for drill holes in the most prevalent DIN 18185-4 wall types and WU core holes "white tub"

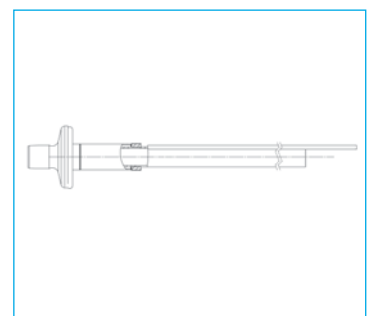
The single building entry consists of:

- Quadro-Sicura® MIS 60 D
- end caps
- grid sheet (only for cable-Ø 5 - 12 mm)
- expansion resin
- quick tensioning device
- base for cables with diameter 30-34 mm
- on deviation of pipe diameter with selectable change adapter (see accessories)

Accessories from page 150

supply lines	diameter of cables / pipes
fibre optic cable / electric cable	30 - 34 mm or 24 - 30 mm or 18 - 24 mm or 12 - 18 mm or 6 - 12 mm or 4 x 5 mm - 7 mm (please specify when ordering)

building	dimensions
core bore/pipe sleeve-Ø	62 - 65 mm
wall thickness	200 - 900 mm optional 900 - 1200 mm
Other dimensions on request	



Quadro-Sicura® MIS 90

for buildings with basements

- single-utility wall penetration **with injection system**
- use in standard wall types according to **DIN 18195-4** or for core bore in **waterproof concrete (white tank)**
- for **cable types** or **water pipes**



Product benefits

- facilitates simultaneous feeding of electricity or water and telecommunications
- ideal for sealing on existing thick bitumen coating
- tensioning and sealing using resin injection via an integrated membrane system
- can also be used without filler in popular hollow bricks
- short installation times
- suitable for building restorations

25
Years
Guarantee

Technical details

- gas-tight and watertight up to 1 bar
- for open construction methods
- for the most prevalent tube and cable diameters
- integrated blind seal
- no additional shrinkage
- for drill holes in the most prevalent DIN 18185-4 wall types and WU core holes "white tub"

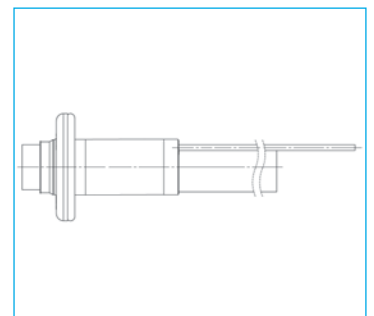
The single building entry consists of:

- Quadro-Sicura® MIS 90
- end caps
- grid sheet
- expansion Resin
- quick tensioning device
- selectable blind plug (see accessories)

Accessories from page 150

supply lines	diameter of cables / pipes
water, electricity or telecom	1 x (24 - 40 mm) and 3 x (7 - 12 mm) or 1 x (24 - 52 mm) (please specify when ordering)

building	dimensions
core bore/pipe sleeve-Ø	92 - 102 mm
wall thickness	200 - 900 mm optional 900 - 1200 mm
Other dimensions on request	



Quadro-Sicura® Nova BP+

for buildings without basements

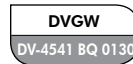
- multi-utility wall penetration in **round version**
- for buildings **yet to be constructed**
- for utilities: **gas**, water, power and telecom
- for **multiple use** of individual different utilities (except gas)

Installation part
Quadro-Sicura® Nova BP-I+



Product benefits

- corrosion-free and non-conductive due to production using high-performance plastic
- installation without torque wrench (using turn-stop system)
- stageless module seal for water and electricity
- space-saving building lead-in for the supply lines
- low component weight
- simple assignment of section seal using symbol identification
- bend-resistant and pull out-proof jacket tubes

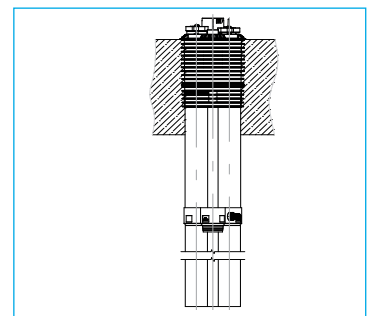


Technical details

- DVGW-certified according to VP 601: DV-4541 BQ 0130
- installation in buildings without a cellar
- gas-tight and pressing water-tight
- 100% section separation, each section is sealed separately
- variable arrangement of the individual sections possible
- prior to embedding, the whole component can be freely turned according to the connection requirements
- relining possible when connected to jacket tubes
- possible to connect inflexible and flexible jacket tubes NB 75. Larger or smaller diameters possible via expansion coupling and reductions
- suitable for immediate installation in the ground plate or subsequent installation in a space in the ground plate
- variable height adjustment to the finished floor level up to 130 mm
- unfinished component made of plastic pipe sleeve NB 200 and 4 connecting sleeves with integrated bending-resistant jacket tube NB 75 (internal diameter 70 mm, 2000 mm long) and height-adjustable peg
- for supply lines with $\varnothing \geq 50$ mm, we recommend the use of jacket tube NB 100.
- all sections come with gas-tight and pressing water-tight sealing plugs

Accessories from page 150

supply lines	diameter of the pipes / cables
gas	Gas-multi-utility wall penetration RMA, Schuck, VAF Voigt, Jeschke: 1" (1 ¼" + 1 ½" on request)
water	external diameter 32 mm, 40 mm, 50 mm; optional external diameter 63 mm
electricity	26 - 36 mm external diameter
telecom	external diameter 2 x 5 - 7 mm, 3 x 7 - 13 mm, 1 x 14 - 18 mm and 1 x 19 - 22 mm
Other dimensions on request	



Quadro-Sicura® Basic R4

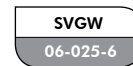
for buildings without basements

- multi-utility wall penetration in **row version**
- for buildings **yet to be constructed**
- for utilities: **gas**, water, power and telecom
- for **multiple use** of individual different utilities (except gas)



Product benefits

- compact and space-saving thanks to series arrangement
- installation without torque wrench (using turn-stop system)
- stageless module seal for water and electricity
- simple installation
- simple assignment of section seal using symbol identification
- bend-resistant and pull out-proof jacket tubes

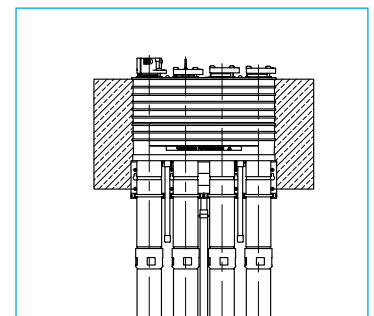


Technical details

- DVGW-certified according to VP 601: DV-4541 BQ 0130
- installation in buildings without a cellar
- gas-tight and pressing water-tight
- 100% section separation, each section is sealed separately
- variable arrangement of the individual sections possible
- relining possible when connected to jacket tubes
- possible to connect inflexible and flexible jacket tubes NB 75. Larger or smaller diameters possible via expansion coupling and reductions
- suitable for immediate installation in the ground plate or subsequent installation in a space in the ground plate
- variable height adjustment to the finished floor level up to 130 mm
- unfinished component made of plastic pipe sleeve NB 200 and 4 connecting sleeves with integrated bend-resistant jacket tube NB 75 (internal diameter 70 mm, 2000 mm long) and height-adjustable peg
- for supply lines with $\varnothing \geq 50$ mm, we recommend the use of jacket tube NB 100.
- all sections come with gas-tight and pressing water-tight sealing plugs

Accessories from page 150

supply lines	diameter of the pipes / cables
gas	Gas-multi-utility wall penetration RMA, Schuck, VAF Voigt, Jeschke: 1" (1 1/4" + 1 1/2" on request)
water	external diameter 32 mm, 40 mm, 50 mm;
electricity	26 - 36 mm external diameter
telecom	external diameter 2 x 5 - 7 mm, 3 x 7 - 13 mm, 1 x 14 - 18 mm and 1 x 19 - 22 mm
Other dimensions on request	



We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

Quadro-Sicura® Basic R2, R3, R5

for buildings without basements

- multi-utility wall penetration in **row version**
- for buildings **yet to be constructed**
- for two to five utilities: **gas**, water, power or telecom
- for **multiple use** of individual different utilities (except gas)



Product benefits

- compact and space-saving thanks to series arrangement
- installation without torque wrench (using turn-stop system)
- stageless module seal for water and electricity
- simple installation
- simple assignment of section seal using symbol identification
- bend-resistant and pull out-proof jacket tubes



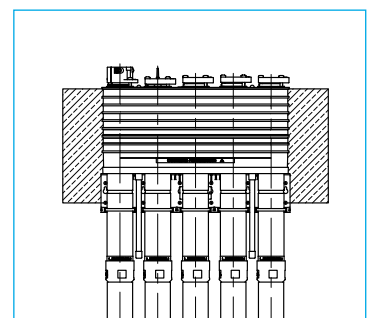
25
Years
Guarantee

Technical details

- DVGW-certified according to VP 601: DV-4541 BQ 0130
- installation in buildings without a cellar
- gas-tight and pressing water-tight
- 100% section separation, each section is sealed separately
- variable arrangement of the individual sections possible
- relining possible when connected to jacket tubes
- possible to connect inflexible and flexible jacket tubes NB 75. Larger or smaller diameters possible via expansion coupling and reductions
- suitable for immediate installation in the ground plate or subsequent installation in a space in the ground plate
- variable height adjustment to the finished floor level up to 130 mm
- unfinished component made of plastic pipe sleeve NB 200 and 2 - 5 connecting sleeves with integrated bend-resistant jacket tube NB 75 (internal diameter 70 mm, 2000 mm long) and height-adjustable peg
- for supply lines with $\varnothing \geq 50$ mm, we recommend the use of jacket tube NB 100.
- all sections come with gas-tight and pressing water-tight sealing plugs

Accessories from page 150

supply lines	diameter of the pipes / cables
gas	Gas-multi-utility wall penetration RMA, Schuck, VAF Voigt, Jeschke: 1" (1 ¼" + 1 ½" on request)
water	external diameter 32 mm, 40 mm, 50 mm;
electricity	26 - 36 mm external diameter
telecom	external diameter 2 x 5 - 7 mm, 3 x 7 - 13 mm, 1 x 14 - 18 mm and 1 x 19 - 22 mm
Other dimensions on request	



Quadro-Sicura® E-BP

for buildings without basements

- single-utility wall penetration in **round version**
- for buildings **yet to be constructed**
- for utilities: **gas**, water, power or telecom



Product benefits

- stageless module seal for water and electricity
- low component weight)
- extremely simple installation
- relining option with use of jacket tubes
- bend-resistant and pull out-proof jacket tubes

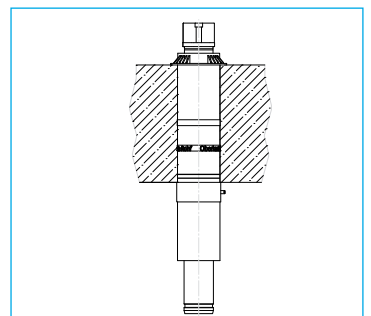


Technical details

- DVGW-certified according to VP 601: DV-4541 BQ 0130
- installation in buildings without a cellar
- gas-tight and pressing water-tight
- resistant to methane gas
- optional installation possible according to DIN 18195
- possible to connect inflexible and flexible jacket tubes NB 75. Larger or smaller diameters possible via expansion coupling and reductions
- suitable for immediate installation in the ground plate or subsequent installation in a space in the ground plate
- unfinished component made of plastic pipe sleeve NB 200 and 4 connecting sleeves with integrated bend-resistant jacket tube NB 75 (internal diameter 70 mm, 2000 mm long) and height-adjustable peg
- for supply lines with $\varnothing \geq 50$ mm, we recommend the use of jacket tube NB 100.
- the section come with gas-tight and pressing water-tight sealing plug

Accessories from page 150

supply lines	diameter of the pipes / cables
gas or	gas-multi-utility wall penetration RMA, Schuck, VAF Voigt, Jeschke: 1" (1 1/4" + 1 1/2" on request)
water or	external diameter 32 mm, 40 mm, 50 mm; optional external diameter 63 mm
electricity or	26 - 36 mm external diameter
telecom	external diameter 2 x 5 - 7 mm, 3 x 7 - 13 mm, 1 x 14 - 18 mm and 1 x 19 - 22 mm
Other dimensions on request	



We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

Quadro-Sicura® MIS 40S

for buildings without basements

- single-utility wall penetration **with injection system**
- use as **slanting** connection
- for **fibre glass cable/pipes** or telecom lines



Product benefits

- tensioning and sealing using resin injection via an integrated membrane system
- short installation times
- suitable for building restorations

25
Years
Guarantee

Technical details

- installation as sloped lead-in in floor plates
- gas-tight and watertight up to 1 bar
- for open construction methods
- integrated blind seal
- no additional shrinkage

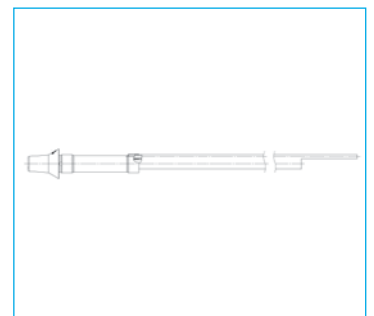
The single building entry consists of:

- Quadro-Sicura® MIS 40 S
- end caps
- grid sheet
- expansion resin
- quick tensioning device

Accessories from page 150

supply lines	diameter of cables / pipes
fibre glass cable/pipes	2 x (5 - 7 mm) or 1 x (9 - 12 mm)

building	dimensions
core bore/pipe sleeve-Ø	40 - 50 mm
wall thickness	200 - 1200 mm
Other dimensions on request	



Accessories



Sleeve pipe stoppers (2704) NB 75 for sealing off sleeve pipes and service lines.



Double socket coupling (2707) for connecting and extending cable sleeve pipe 2775. Not suitable for inflexible sleeve pipes.



Threading points (2711)



Spacers (2770)



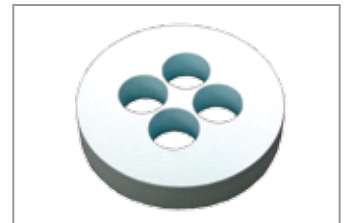
Connecting socket (2726) NB 75/125 for connecting and extending inflexible sleeve pipes.



Protection pipe (2775)



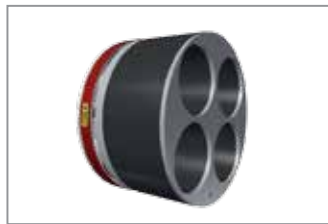
Lubricant, 250 ml tube (2780)



Insulating disc for perimeter installation (2725).



External seal Quadro-Sicura® Nova 1 "wide"



External seal for Quadro-Sicura® Nova 2 "wide"



External seal Quadro-Sicura® Nova 1-FW "wide"



External seal Quadro-Sicura® Nova 2-FW "wide"



Curaflex® special fibre cement pipe sleeve 3000



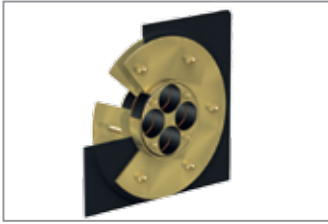
Curaflex® special fibre cement pipe sleeve 3001 with flange in fibre cement



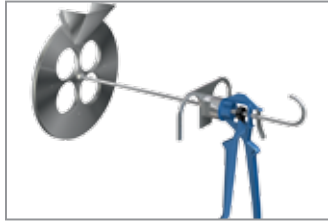
Curaflex® 4006/ 4005 pipe sleeve with fix and loose flange in cast-iron in acc. w. DIN 18195



Sleeve pipe stoppers (2704) NB 125 for sealing off sleeve pipes and service lines.



Curaflex® C/2/SD/6/M or C/2/SD/5/M. External seal with fixed/loose flange in acc. w. DIN 18195.



Reusable grouting fixture



Gas house feedthrough combination, product RMA, Type KETH-S/PE



Gas house feedthrough combination, product Schuck, Type HSP..

We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

Curaflam® Fire Protection Systems

With Curaflam® Fire Protection products, DOYMA offers firestop systems which are characterised by their clear uses, simple installation, secure function and a 25-year guarantee.

Our research and product development in the field of preventative fire protection is very successful and has led to numerous product innovations over the course of the last years, which make using fire protection products easier and safer. The product range includes Curaflam® KonfixPro, the first licensed firestop system for mixed-material installations in Germany and Curaflam® Segment SMPro, the unique segment firestop collar.

The firestop materials of DOYMA's fire protection products are made from intumescent material. During a fire, the firestop material heats up, causing this mass to expand and immediately closing the cable conduits. This prevents fire and smoke from spreading where the firestop system is in use.

The path to new fire protection products is long and requires a high degree of staff and financial commitment. A license or test certificate can only be granted after a number of successful fire tests. The major risks for people and property arising from fire disasters justify the high expense of these security standards.

The diagram shows some of the logos of registration centres, test institutes and certifying bodies that license and inspect DOYMA products.



Inflation pressure testing for intumescent material

Plus X Award

Outstanding Fire Protection Systems



Firestop collar Curaflam® Segment SM^{Pro}

Product description



Product description

Unique flexible segment firestop collar principle
 - Supply lines OD ≤ 110 mm,
 - Disposal lines OD ≤ 160 mm

Product benefits

Flexibly adjustable, all components in one box, all types of cable, all insulation (supply and disposal), redundant segments can be reused

Seal of Approval ²

Innovation, Functionality and High Quality and "Best Product of 2013" as a firestop collar

Firestops for mixed-material installations Curaflam® Konfix^{Pro}

Product description



Product description

Fire protection system for mixed-material installations, flexibly adjustable

Product benefits

Flexibly adjustable, all standard plastic pipelines, PE sound insulation hose possible in opening, low-lying branch (floor-level shower possible) and zero clearance possible, approx. 80 % time saving during assembly in comparison with other systems

Seal of Approval ¹

Functionality and High Quality and "Best Product of 2014" as a firestop collar

¹ Seal of Quality, awarded by the Plus X Award 2014 jury
² Seal of Quality, awarded by the Plus X Award 2013 jury

Product guide

Firestops for supply lines

Flammable pipes

Product	Product type	Evidence	Insulation		Page
			with	without	
Curafam® Rollit BBR ^{Pro}	Winding tape	abZ	●	●	168
		LAR	●*	●	
Curafam® Rollit	Winding tape	LAR	●*	●	170 171
Curafam® Segment SM ^{Pro}	Segment firestop collar (adjustable size)	abZ	●	●	166
Curafam® Manschette XS ^{Pro}	Firestop collar (fixed size)	abZ	●**	●	164
		ETA		●	
Curafam® Manschette Eco ^{Pro}	Firestop collar (fixed size)	abZ		●	165
Curafam® Inject BS ^{+K10}	Cartridge material	LAR	●*	●	172

Non-flammable pipes

Product	Product type	Evidence	Insulation		Page
			with	without	
Curafam® Rollit ISO ^{Pro}	Winding tape	abP	●		169
		LAR	●*	●	
Curafam® Rollit	Winding tape	LAR	●*	●	170 171
Curafam® Inject BS ^{+K10}	Cartridge material	LAR	●*	●	172

*) as per LAR with non-flammable insulation, melting point > 1000° C

***) tested positive, not yet a component of the abZ/abP.

Firestops for disposal lines

Flammable pipes

Product	Product type	Evidence	Insulation		Page
			with	without	
Curaflam® Segment SM ^{Pro}	Segment firestop collar	abZ	●	●	166
Curaflam® Manschette XS ^{Pro}	Firestop collar (fixed size)	abZ	●**	●	164
		ETA		●	
Curaflam® Manschette Eco ^{Pro}	Firestop collar (fixed size)	abZ		●	165

Non-flammable pipes

Product	Product type	Evidence	Insulation		Page
			with	without	
Curaflam® Rollit ISO ^{Pro}	Winding tape	abP	●		169
		LAR	●*	●	
Curaflam® Rollit	Winding tape	abP		●	170
		LAR	●*	●	171
Curaflam® Inject BS ^{+K10}	Cartridge material	LAR	●*	●	172

*) as per LAR with non-flammable insulation, melting point > 1000° C

**) tested positive, not yet a component of the abZ/abP.

Product guide

Firestops for supply lines with special requirements

Flammable pipes

Product	Product type	Evi- dence	For damp rooms	For dry rooms	in supplied casing / hollow tube	in coring / or in existing casing	Wall installa- tion	Ceiling installa- tion	Page	
			in visual range		for water-tight and / or gas-proof ducts					
Curaflam® 49.950 BSRB	pipe penetration combined with fire protection insert	abZ	●	●			●	●	177	
Curaflam® 12.500 BSRB				●			●	●	176	
Curaflam® 3110 BSHB						●		●		180
Curaflam® 2 x A BSHB							●	●		178
Curaflam® A + B BSHB							●		●	179

Non-flammable pipes

Product	Product type	Evi- dence	For damp rooms	For dry rooms	in supplied casing / hollow tube	in coring / or in existing casing	Wall installa- tion	Ceiling installa- tion	Page	
			in visual range		for water-tight and / or gas-proof ducts					
Curaflam® 49.950 BSRN	pipe penetration combined with fire protection insert	abP	●	●			●	●	177	
Curaflam® 12.500 BSRN				●			●	●	176	
Curaflam® 3110 BSHN						●		●		180
Curaflam® 2 x A BSHN							●	●		178
Curaflam® A + B BSHN							●		●	179

Firestops for disposal lines with special requirements

Flammable pipes

Product	Product type	Evi- dence	For damp rooms	For dry rooms	in supplied casing / hollow tube	in coring / or in existing casing	Wall installa- tion	Ceiling installa- tion	Page	
			in visual range		for water-tight and / or gas-proof ducts					
Curafam® 49.950 BSRB	pipe penetration combined with fire protection insert	abZ	●	●			●	●	177	
Curafam® 12.500 BSRB				●			●	●	176	
Curafam® 3110 BSHB						●		●		180
Curafam® 2 x A BSHB							●	●		178
Curafam® A + B BSHB							●		●	179

Non-flammable pipes

Product	Product type	Evi- dence	For damp rooms	For dry rooms	in supplied casing / hollow tube	in coring / or in existing casing	Wall installa- tion	Ceiling installa- tion	Page	
			in visual range		for water-tight and / or gas-proof ducts					
Curafam® 49.950 BSRN	pipe penetration combined with fire protection insert	abP	●	●			●	●	177	
Curafam® 12.500 BSRN				●			●	●	176	
Curafam® 3110 BSHN						●		●		180
Curafam® 2 x A BSHN							●	●		178
Curafam® A + B BSHN							●		●	179

Product guide

Firestops for disposal lines for mixed-material installations

Product	Product type	Evidence	Without or with sound insulation	Page
Curaflam® Konfix ^{Pro}	Firestop collar (fixed size)	abZ	●	167

Firestops for cables

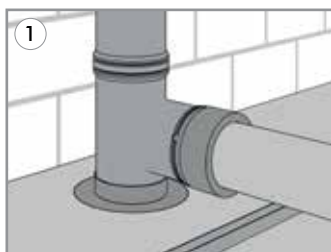
Product	Insulation system	Individual cable	Cable bundle	Cable ducts	Cables and pipes	Electrical conduits	Page
Curaflam® Insulation System Stone	Stone	●	●	●	●	●	173
Curaflam® Insulation System Plug	Plug (fixed size)	●	●	●		●	174
Curaflam® Insulation System Cable Kit	Cartridge material	●	●				175
Curaflam® Inject BS ^{+K10}	Cartridge material	●					172

Installation examples

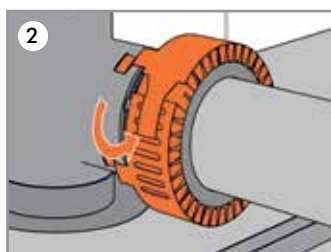
Curaflam® KonfixPro[®] (see Page 167)

Curaflam® KonfixPro[®] is a hinged firestop collar to provide fire resistance for mixed-material installations (junction of cast pipe to plastic pipe), which is fitted around the Konfix connector.

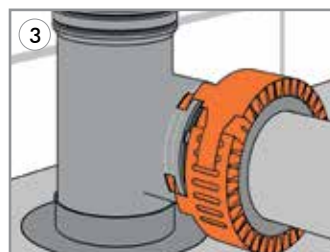
You can find more details about the operating conditions in the General Building Inspection Certificate Z-19.17-2074 (abZ) (download at www.doyma.de).



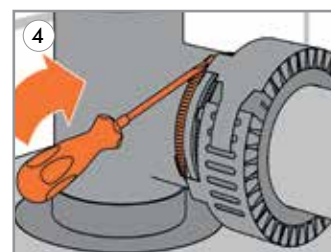
1
Ceiling penetration / annulus
Cast iron pipe branch with intersection to plastic pipe with Konfix connector.



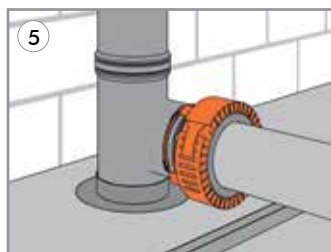
2
Place the Curaflam® KonfixPro firestop collar around the connector and connect it tightly with the connector*).



3
Retaining tabs must be positioned behind the connector and be in contact with the cast pipe.



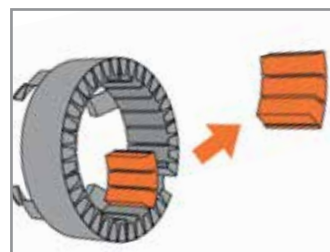
4
Position the clamp around the retaining tab and attach the firestop collar to the cast pipe.



5
Fixed firestop collar.



6
Panelling / encasing of the seal
Zero clearance of the casing to the firestop collar or connector permitted.
Complete the fire protection sign and attach it so it is visible when the casing is removed.
Complete the conformity attestation and give to the building owner.



***) Adapting the Curaflam® KonfixPro firestop collar**
To use the Curaflam® KonfixPro NB 100 firestop collar on NB 70, NB 75 and NB 80 pipe connectors, remove 3 fire protection components before assembly.

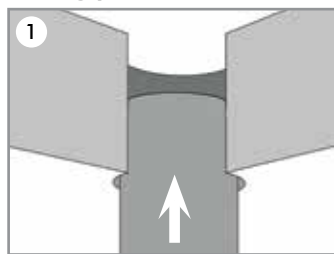
Installation examples

Curaflam® Manschette XS^{Pro} (see Page 164)

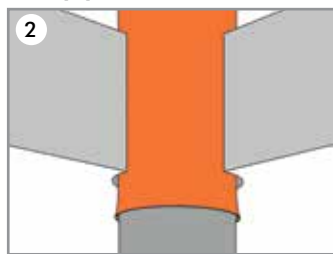
The Curaflam® Manschette XS^{Pro} firestop collar is a fire seal for flammable pipes. The system is licensed for many market-relevant pipes and many different conduit designs. You can

find more details about the operating conditions of this fire seal in the General Building Inspection Certificate Z-19.17-1983 (abZ) (download at www.doyma.de).

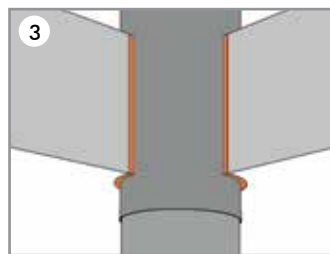
Ceiling penetration of a flammable pipe.



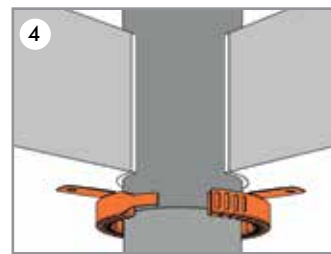
1 Feed the pipe through the ceiling.



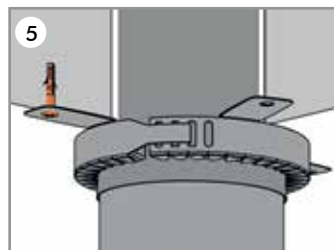
2 Conventional PE sound insulation film can be wound around the pipe.



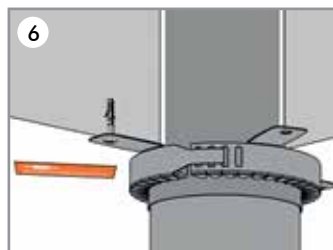
3 Set the pipe in place using mortar. We recommend Curaflam® Mörtel^{Pro} (order No. 326101500000).



4 For ceiling penetrations, place a fire-stop collar around the pipe from below and seal using the mounting brackets. Mark the position for the fixing holes using a pen.

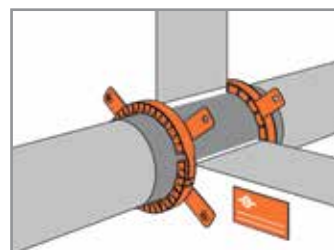


5 Then drill the holes / position the plugs.

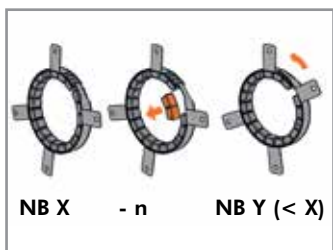


6 Screw the firestop collar to the ceiling / wall. Complete the fire protection sign and attach. Complete the conformity attestation and give to the building owner.

Comments

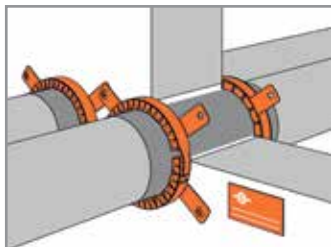


To seal in a wall, a firestop collar must be used in front and behind the wall.

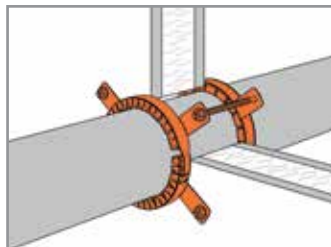


The firestop collar diameter can be reduced by a NB step (applies for firestop collars NB 32 – 200).

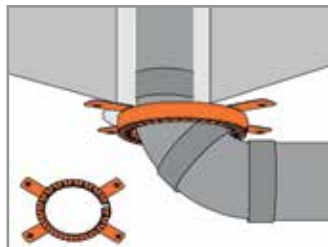
Special features



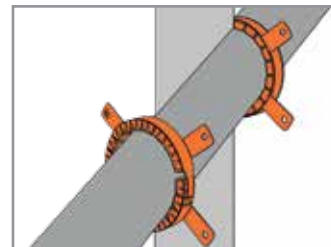
Zero clearance: The firestop collars can be attached to each other.



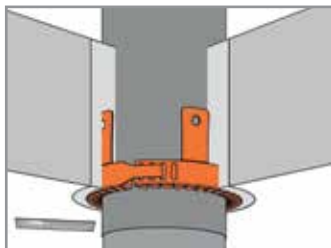
Installation in light partition walls: In light partition walls, the firestop collars should be attached opposite each other using threaded bars (size M 8).



Firestops is possible using a CV connector. The firestop collar may be bent into an oval shape.



Installation on inclined pipes through wall and ceiling. The firestop collar may be bent to an oval.



Completely grouted into place: The firestop collar can be firmly grouted into the ceiling, depending on the type of pipe.

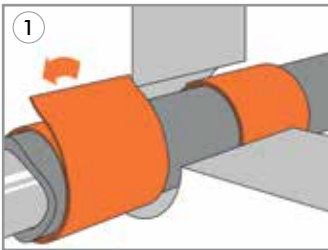
Installation examples

Curafam® Rollit ISO^{Pro} (see Page 169)

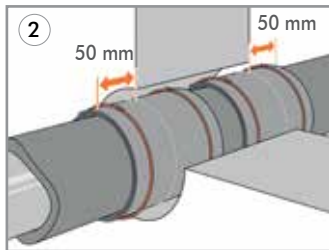
Curafam® Rollit ISO^{Pro} is a winding tape to provide a fire seal for non-flammable insulated pipes with a fire resistance class of R 30 or R 90. You can find more details about the

operating conditions of this fire seal in the General Building Inspection Certificates P-3222/9781MPA BS and P-3637/8902 MPA-BS (download at www.doyma.de).

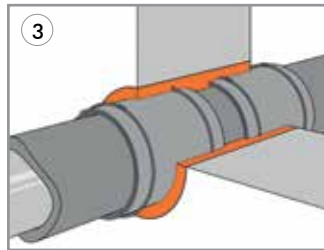
Firestop in solid walls / ceilings with thickness ≥ 150 mm, pipe ed ≤ 326 mm.



Positioning of winding tape. Please see Table on P. 165 for length, number of coils and degree of overlap. Protrusion of the winding tape on both sides of the wall or ceiling 50 mm.



Fixing of the matting by winding with wire ($\varnothing \geq 0.8$ mm).



Seal annulus completely and without any cavities using dimensionally-stable non-flammable materials, e.g. concrete, mortar or plaster. We recommend Curafam® Mör-tel^{Pro} (see Page 177, order number 326101500000).



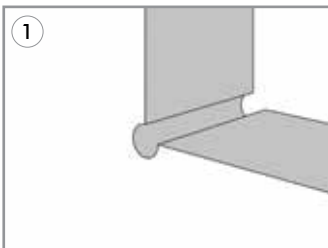
Complete the fire protection sign and attach. Complete the conformity attestation and give to the building owner.

Curafam® Inject BS^{+K10} (see Page 172)

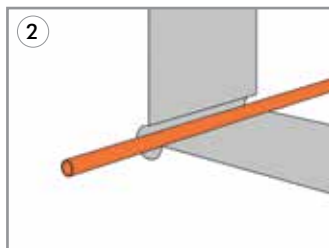
Curafam® Inject BS^{+K10} is a fire protection material dispensed from a cartridge. Licensed in accordance with the General Technical Approval Z-19.11-1607 (can be downloaded at

www.doyma.de). It is suitable for providing a fire seal for pipe and electrical conduits in accordance with the German Wiring System Directive.

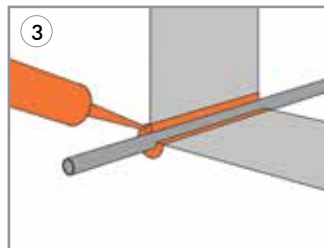
Installation in solid wall / ceiling



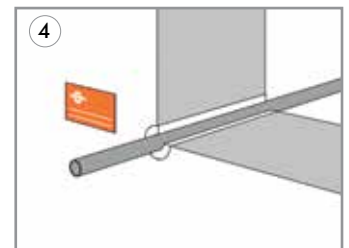
Opening in the wall.



Push the pipe conduit through the wall.
Flammable pipe EX ≤ 32 mm;
Non-flammable pipe OD ≤ 160 mm.
Joint width / annulus ≤ 15 mm.



Fill the annulus completely.



You can label the fire protection sign and position it near the seal.

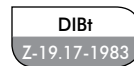


- hinged fire protection seal
- with **European ETA** approval



Product benefits

- inclined duct possible
- zero clearance checks to other wiring systems
- larger pipe diameters possible (up to 315 mm)



Use

- plastic pipes PVC, PP, PE-HD, LDPE, PB, PE-X, ABS, ASA pipes OD ≤ 200 mm
- sound insulating sewage pipes OD ≤ 200 mm
 - Geberit Silent PP OD ≤ 110 mm
 - Wavin Sitech, Polo-Kal 3S OD ≤ 160 mm
 - Geberit Silent dB 20, Wavin AS, Friatec Friaphon, Ostendorf Skolan, Rehau Raupiano Plus, Polo-Kal NG OD ≤ 200 mm
- multi-layer composite pipes with aluminium inserts OD ≤ 110 mm
- installation possible on inclined pipes, pipe collars, e-collars, CV connectors

Assembly of the firestop collar

- both sides in front of walls made of porous concrete, concrete, masonry and light partition walls with thickness ≥ 100 mm
- on one side under ceilings made of concrete with thickness ≥ 150 mm
- completely flushly fixed with mortar into ceilings
- installation on pipe collars with 45 deg elbows through the ceiling

Licensing

- Curafam® Manschette XS^{Pro} is licensed by the Deutsches Institut für Bautechnik (DIBt) in accordance with Z-19.17-1983.

Use in accordance with EN 1366-3

- plastic pipes OD ≤ 315 mm
- plastic pipes positively checked up to OD ≤ 450 mm

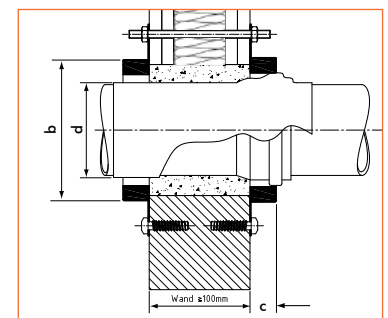
Licensing

- ETA-11/0498

Please see the certification for more details.

pipe OD d [mm]	OD of firestop collar b [mm]	depth approx. c [mm]	xxx for item numbers*
1 - 34	43	30	032
35 - 42	56		040
43 - 52	70		050
53 - 65	85		063
66 - 77	99		075
78 - 92	117		090
93 - 112	141	50	110
113 - 125	154		125
126 - 140	178		140
141 - 160	200		160
161 - 180	228		180
181 - 200	253		200
201 - 225	307	100	225
226 - 250	336		250
251 - 280	370		280
281 - 315	410		315

* Item number 3 22 1 xxx 000 00



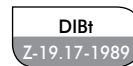
We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

- **hinged** fire protection seal
- particularly **cost-effective**



Product benefits

- zero clearance possible
- 2 x 45° arches possible
- installation flush-to-ceiling possible



Use

- plastic pipes PVC, PP, PE-HD, LDPE, PB, PE-X, ABS, ASA pipes
OD ≤ 160 mm
- sound-insulating sewage pipes
 - Geberit Silent PP OD ≤ 160 mm
 - Geberit Silent dB 20 OD ≤ 110 mm
 - Wavin AS OD ≤ 160 mm
 - Wavin SiTech OD ≤ 160 mm
 - Rehau Raupiano Plus OD ≤ 160 mm
 - Friatec Friaphon OD ≤ 160 mm
 - Ostendorf Skolan OD ≤ 160 mm
- multi-layer composite pipes
 - With aluminium insert OD ≤ 110 mm
 - From PEX for the transportation of flammable gases (as per DVGW G 600/G 260) OD ≤ 63 mm

Assembly of the firestop collar

- both sides in front of walls made of porous concrete, concrete, masonry and light partition walls with thickness ≥ 100 mm
- on one side under ceilings made of concrete with thickness ≥ 150 mm
- completely flush fixed with mortar into ceilings

Licensing

The Curaflam® Manschette ECO^{Pro} is licensed by the Deutsches Institut für Bautechnik (DIBt) in accordance with Z-19.17-1989.

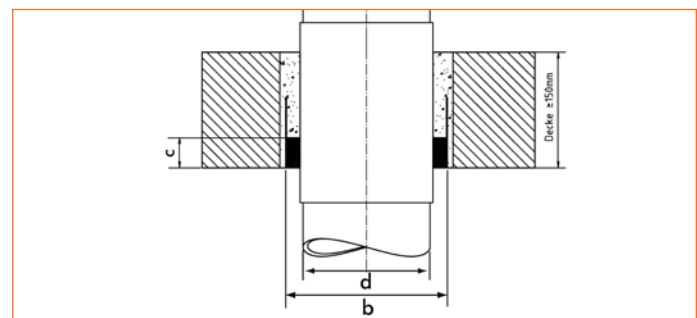
Please see the certification for more details.

Flexible use

Screw the firestop collar to the wall / ceiling using the straps. Or fix the straps into the ceiling using mortar after bending the straps down or fix the firestop collar flush into the ceiling using mortar.

pipe OD d [mm]	OD of firestop collar b [mm]	depth approx. c [mm]	xxx for item numbers*
1 - 34	43	30	032
35 - 42	56		040
43 - 52	70		050
53 - 65	85		063
66 - 77	99		075
78 - 92	117		090
93 - 112	141		110
113 - 125	154	50	125
126 - 140	178		140
141 - 160	200		160

* Item number 3 23 1 xxx 000 00



Fire Protection

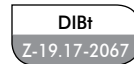
We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

- **modular** firestop collar
- **flexible size** due to segment technology



Product benefits

- flexibly adjustable
- all components in one box
- all types of conduits and insulation (supply and disposal)
- redundant segments can be reused



Use

- plastic pipes made of PVC, PP, PE-HD, LDPE, PP, PB, PE-X, ABS, ASA OD ≤ 160 mm
- sound-insulating sewage pipes OD ≤ 160 mm
 - Geberit Silent PP OD ≤ 160 mm
 - Wavin Sitech OD ≤ 160 mm
 - Geberit Silent dB 20, Wavin AS, Friatec Friaphon OD ≤ 160 mm
 - Ostendorf Skolan, Rehau Raupiano Plus OD ≤ 160 mm
 - Multi-layer composite pipes with aluminium insert OD ≤ 110 mm
 - Installation on inclined pipes, 2 x 45 deg elbows tested with and without anti-vibration mounts / noise insulation (PE) OD ≤ 110 mm
 - pipes made from thermoplastics as per DVGW Datasheet G 600 (gas pipes) OD ≤ 63 mm

Assembly of the firestop collar

- both sides in front of walls made of porous concrete, concrete, masonry and light partition walls with thickness ≥ 100 mm
- on one side under ceilings made of concrete with thickness ≥ 150 mm
- Firestop collars partially grouted with mortar into ceilings possible
- completely flush fixed with mortar into ceilings
- installation on 2 x 45 deg elbows through the ceiling / wall

Licensing

The Curafam® Manschette SM^{Pro} is licensed by the Deutsches Institut für Bautechnik (DIBt) in accordance with Z-19.17-2067. Please see the certification for more details.

pipe external diameter [mm]	number of segments
32	1 x 3
40	1 x 3
50	1 x 3
58	1 x 4
63	1 x 4
75	1 x 4
78	1 x 4
90	1 x 5
110	1 x 5
125	2 x 6
135	2 x 6
140	2 x 6
160	2 x 7

Please see the certification for more details.

From a pipe external diameter of 125 mm, fit the firestop collar in two rows. Height of single row approx. 41 mm, double row approx. 82 mm.

Packaging unit
Curafam® Segment SM^{Pro}

- 20 segments
- 4 fire protection signs
- 20 plugs
- 20 screws
- Installation instructions

Item number
3 281020 000 00



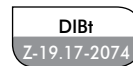
We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

- **hinged** fire protection seal
- licensed for **Konfix connectors**
- **quick and easy** installation



Product benefits

- Flexibly adjustable
- For all conventional plastic pipes
- PE sound insulation hose possible in opening
- Low-lying branch (floor-level shower possible)
- Verified zero clearances to other systems
- approx. 80 % time saving during assembly in comparison with other systems
- only 2 sizes:
 - NB 50 and
 - NB 70 to NB 100



Uses

For ceiling seals of SML sewage pipes with an intersection to plastic connecting pipes as per the inspection specifications in the DiBt Newsletter 02/2012 "Metal pipes with Connections to Plastic pipes".

- prevention of noise transmission in the ceiling penetration using PE sound insulation strips ≤ 5 mm or Curaflam® Rollit
- from SML pipe (cast branch line) to NB 150 with branch / intersection of NB 50 to NB 100
- assembly of Curaflam® KonfixPro to conventional Konfix connectors at the SML branch for connected plastic disposal pipes up to NB 100.
- licensed plastic sewage pipes (up to NB 100)
 - Geberit db20, Geberit Silent PP,
 - Wavin AS, Wavin Sitech,
 - Rehau Raupiano plus,
 - Polokal NG, Polokal 3S,
 - Ostendorf Skolan DB
 - Friatec Friaphon, Friatec dBlue
 - PVC, PE-HD
 - Etc.

Assembly of the member

- in the ceiling with a thickness of at least 150 mm
- fix the SML pipe (branch pipe) with grout into the ceiling thickness (PE sound insulation strips up to a 5 mm thickness possible)
- adapt KonfixPro to size if necessary and fix with the supplied clamp to the SML pipe / component using the Konfix connector.
- rear cladding of the SML installation at least 9.5 mm thick gypsum plasterboard or similar facing

Curaflam® KonfixPro NB nominal size	cast pipe		plastic pipe
	branch nominal size*	branch external diameter* (mm)	nominal diameter** (mm)
50	50	58	≤ 56
	70	78	≤ 75
100	80	83	≤ 90
	100	110	≤ 110

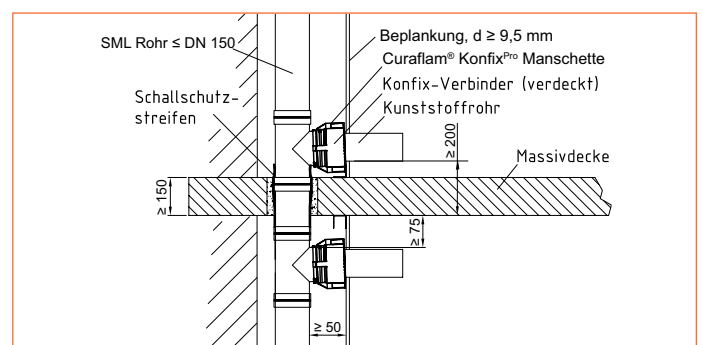
*) Dimension as per DIN EN 877

**) Pay attention to the field of use for Konfix connectors

Licensing

Curaflam® KonfixPro is licensed by the Deutsches Institut für Bautechnik (DIBt) in accordance with Z-19.17-2074.

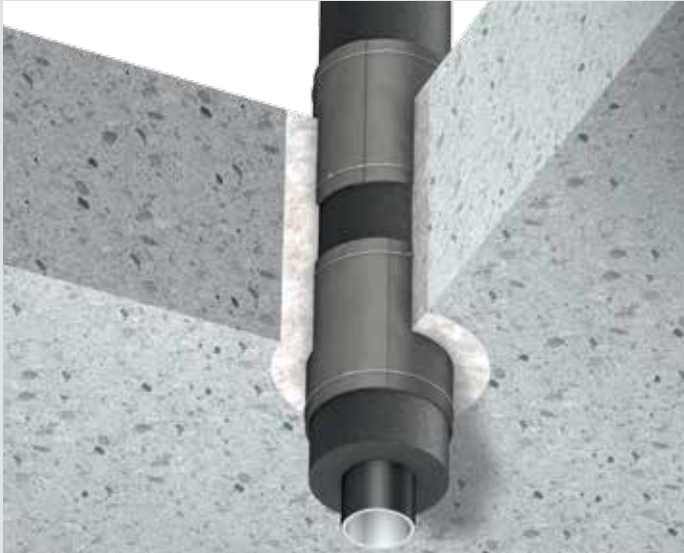
Please see the certification for more details.



Fire Protection

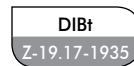
We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

- flexibly adjustable fire protection winding tape
- storage box satisfies building site requirements



Product benefits

- licensed zero clearances
- insulated and uninsulated pipes
- retrospective fitting possible
- space-saving and flexible



Uses

for sealing flammable pipes

- PVC; PE; PP; ABS; ASA; PE-X, PB up to a pipe OD ≤ 110 mm
- Plastic composite pipes ≤ 110 mm

For the following assembly sections

- Heating, air conditioning, drinking water

Fitting of the winding tape

- both sides with overlap
 - light partition walls with thickness < 150 mm overlap 75 mm
 - solid walls with thickness < 150 mm overlap ≥ 75 mm
 - solid walls with thickness ≥ 150 mm overlap ≥ 50 mm
 - solid walls with thickness ≥ 150 mm overlap ≥ 50 mm
- retrospective fitting in front of the wall is possible

Licensed for the following insulation:

- synthetic rubber of 6 mm – 32 mm in thickness

Licensing

Curafam® Rollit BBR^{Pro} is licensed by the Deutsches Institut für Bau-technik (DIBt) in accordance with Z-19.17-1935.

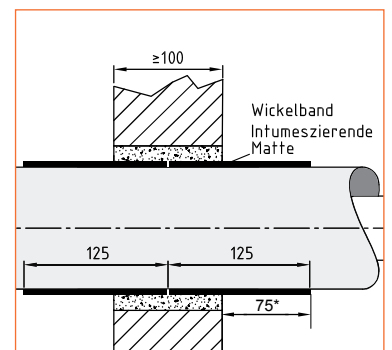
Please see the certification for more details..

pipe =D [mm] (without insulation)	thickness of insulation (mm)	consumption volumes [mm] (installation on both sides)	number of posi- tions
16	11	580	2
20	11	640	
25	19	900	
32	24	1120	
40	24	1220	
50	32	1540	
63	32	1700	
75	32	1860	
90	32	2040	
110	32	2300	

Table of necessary tape lengths

Schematic representation of pipe with insulation

*) When installing in solid walls with a thickness of ≥ 150, the overlap can be reduced to 50 mm.



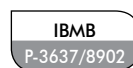
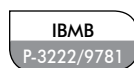
We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

- flexibly adjustable fire protection winding tape
- storage box satisfies building site requirements



Product benefits

- tested zero clearances, even to other systems
- insulated pipe conduits
- retrospective fitting possible
- space-saving and flexible



Uses

For sealing non-flammable insulated pipes

- steel, case iron, stainless steel pipes up to an OD ≤ 813 mm*
 - copper pipes up to an OD ≤ 88.9 mm
- *in solid wall/ceiling; in light partition wall for steel, cast iron and stainless steel pipes max. pipe OD ≤ 406 mm.

Licensed for the following insulations

- PU with an insulation thickness of 40 mm to 100 mm [B1, B2]
- synthetic rubber up to an insulation thickness of ≤ 100 mm [B1, B2]
- mineral wool, glass wool, with melting point ≥ 500°C up to an insulation thickness ≤ 100 mm [A]
- foam glass up to an insulation thickness ≤ 100 mm [A]

Assembly instructions

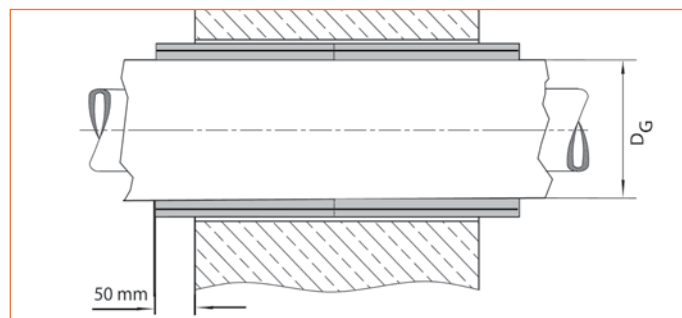
- wall assembly
 - on both sides in walls made of porous concrete, concrete, masonry with a thickness ≥ 150 mm. The tape protrudes at least 50 mm from the wall on both sides.
 - retrospective fitting in front of the wall is possible, take care with the sheet metal cable coating!
 - on both sides in light partition walls with a thickness ≥ 75 mm (covering required on both sides). The tape protrudes at least 75 mm from the wall on both sides. Pay attention to sound insulation on both sides!
- ceiling assembly
 - on both sides in ceilings made of porous concrete, concrete, masonry with a thickness ≥ 150 mm. The tape protrudes at least 50 mm from the ceiling on both sides.
 - retrospective fitting beneath and above the ceiling is possible, take care with the sheet metal coating!
 - installation with "zero clearance". Seals around each pipe are permitted to come into contact with each other.

Test certificates

General appraisal certificates (abP) P-3222/9781-MPA BS and P-3637/8902-MPA BS. Please see the certification for more details.

insulation material made of mineral wool, glass wool (melting point ≥ 500°C)			
overlap	60 mm	100 mm	200 mm
total OD (pipe + insulation)	length of the winding tape [mm] 1-ply, incl. overlap		
53	500		
66	580		
85	700		
90	720		
115		960	
125		1020	
137		1100	
190		1440	
215			1700
230			1780
250			1920
260			1980
285			2140
310			2300
315			2320
335			2440
345			2520

Table of necessary tape lengths



Curaflam® Rollit Curaflam® Rollit LAR

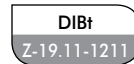
Firestops for flammable / non-flammable pipes

- flexibly adjustable fire protection winding tape
- storage box satisfies building site requirements



Product benefits

- very clean processing
- practical packaging units
- high yield, flexible application



1 Use as per German Wiring System Directive (LAR)

Uses

- for individual electrical cables, e.g. power cables, telephone cables, ICT cables, fibre optic cables
- for flammable pipes up to OD ≤ 32 mm, e.g. B. PB, PE, PVC, composite pipes, empty conduits for electrical cables
- for non-flammable pipes up to OD ≤ 160 mm, e.g. copper, steel, cast iron

Conditions of use

- the pipes are fed through walls / ceilings and light partition walls.
- the spacing regulations of the LAR of each Federal state must be complied with.

Licensing

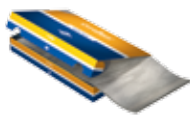
Curaflam® Rollit, manufactured from Curaflam® Intusit, is licensed by the Deutsches Institut für Bautechnik (DIBt) Z-19.11-1211.

Please see the certification for more details.

Packaging units



Curaflam® Rollit Box
The practical storage box with 10 m winding tape



Curaflam® Rollit Pack
The unit with 1.10 m winding tape



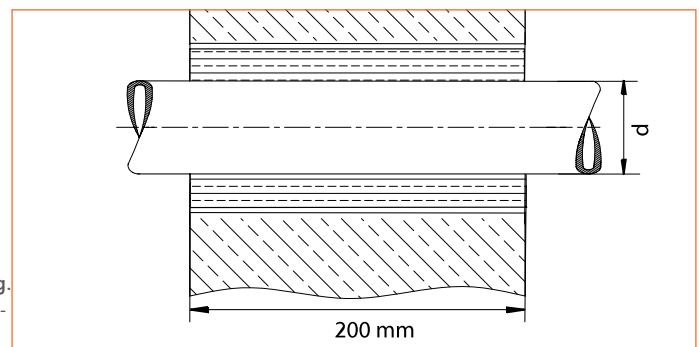
Curaflam® Rollit LAR Bag.
Available in LAR roll dimension of 70 mm wide and 2 metres in length.

pipe OD d [mm]	tape length [mm]	Firestops per sales unit (SU)		
		Curaflam® Rollit Width = 200 mm, thickness = 4 mm		Curaflam® Rollit LAR Width = 80 mm, thickness = 4 mm
		SU 1.1 m	SU 10 m	SU 2 m
≤ 38	140	7	71	14
≤ 58	200	5	50	10
≤ 78	270	4	37	7
≤ 110	360	3	27	5
≤ 135	440	2	22	4
≤ 160	520	2	19	3

Table of firestops per sales unit

Available accessories

- fire protection sign
- aluminium adhesive tape (roll available with 50 m and 100 m)

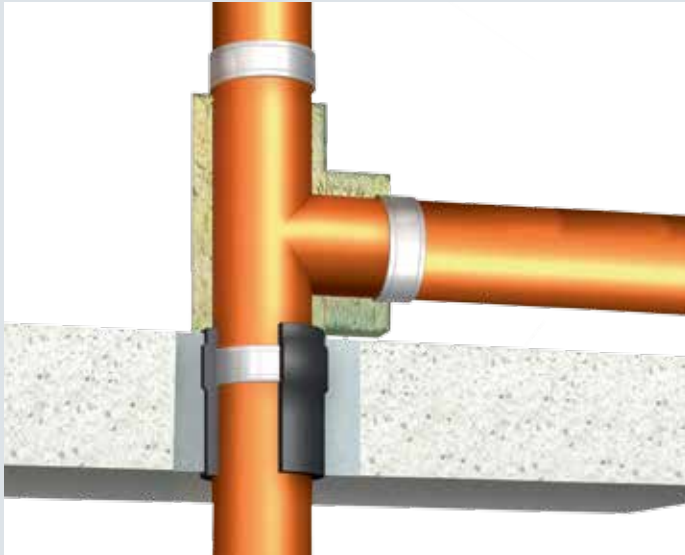


We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

Curaflam® Rollit Curaflam® Rollit LAR

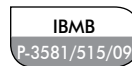
Firestops for non-flammable pipes

- flexibly adjustable fire protection winding tape
- storage box satisfies building site requirements
- firestop for cast iron pipes
- inspected sound insulation



Product benefits

- safety due to R 90 fire safety regulations
- streamlined in ceiling penetration
- inspected sound insulation
- easy-to-assemble



2 Use as per R 90 Test Certificate, P-3581/515/09-MPA-BS for cast iron pipes with branches

Uses

- for cast iron / SML pipes up to OD ≤ 135 mm – even using conventional connectors
- material requirement always 1 layer around the pipe
- zero clearance between the Rollit seals is possible
- branches 50 mm above the ceiling are possible
- from the upper edge of the ceiling, insulate 300 mm long with mineral wool (mineral wool A; melting point > 1000°C; apparent density > 40 kg/m³)

Notes

- the Curaflam® Rollit winding tape must span the entire ceiling height.
- attachment with aluminium adhesive tape
- ceiling thickness of at least 150 mm for ceilings made from concrete; porous concrete

Please always seal remaining annulus or large openings with at least MG II or MG III mortar. We recommend Curaflam® MörtelPro (Page 177).

pipe OD d [mm]	tape length [mm] Width 200 mm	number of firestops per sales unit (SU)	
		SU with 1.1 m	SU with 10 m
≤ 38	140	7	71
≤ 58	200	5	50
≤ 78	270	4	37
≤ 110	360	3	27
≤ 135	440	2	22

Table of firestops per sales unit

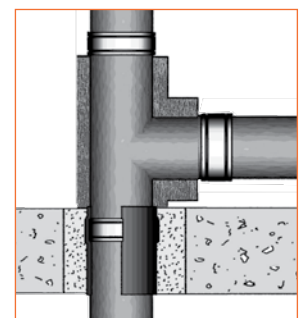
Calculation of minimum total OD =

Media pipe OD (with connector if possible) + 12 mm Curaflam® Rollit tape thickness!

Is the result of

Media pipe OD (with connector if possible) + 1 layer Curaflam® Rollit (total 2 x 4 mm = 8 mm tape thickness)
+ 20 mm overlap of Curaflam® Rollit on the edge (4 mm tape thickness)

(e.g. 110 mm cast iron pipe OD + 12 Curaflam® Rollit = 122 mm min. core drilling ID)



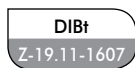
Fire Protection

- simple-to-use cartridge material
- firestop as per **LAR/RbALei**



Product benefits

- very clean processing
- standard cartridge gun can be used
- high yield, flexible application



Fire protection mass to seal pipes and cables

1: Use as per German Specimen Wiring Systems Directive (MLAR) 03/00 and 11/05 for:

- individual electrical cables, e.g. power cables, telephone cables, ICT cables, fibre optic cables
- flammable pipes up to OD ≤ 32 mm, e.g. B. PB, PE, PVC, composite pipes, empty conduits for electrical cables
- non-flammable pipes up to OD ≤ 160 mm, e.g. copper, steel, cast iron
- joints in fire-resistant components

Conditions of use:

- the pipes are fed through walls / ceilings with thickness ≥ 80 mm. Can also be used for light partition walls, with non-flammable protection tubes
- the spacing regulations of the MLAR 03/2000 and 11/05 must be complied with.

Licensing / test certificates:

Curafam® Inject BS^{K10} is licensed by the Deutsches Institut für Bautechnik (DIBt) Z-19.11-1607.

2: Use as per P-3138/0325 – MPA BS test certificate for:

- steel / stainless steel pipes with OD ≤ 88.9 mm
- copper pipes with OD ≤ 54 mm
- synthetic rubber insulation, insulating material thickness ≤ 56 mm

3: Use as per 4185/2014 expert report for

- sealing of annulus gaps / gaps between Conlit casing and wall/ ceiling, clearance ≤ 50 mm
- sealing of annulus gaps / gaps with complete mineral wool insulation wall / ceiling, clearance ≤ 50 mm

Note: Detailed information about the fields of use and purpose of the design can be found in the General Technical Approval (abZ) or General Appraisal Certificate (abP) of the product.

pipe external diameter [mm]	1 - 32	33 - 63	64 - 110	111 - 160
Approx. material consumption (filled 10 mm on both sides, annulus 25 mm)	ca. 1/4 cartridge	ca. 1/2 cartridge	ca. 3/4 cartridge	ca. 1 cartridge

Contents: 300 ml / cartridge

Curaflam® Schottsystem Stein

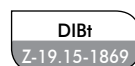
Firestops for pipes / cables

- flexibly adjustable firestop material for large openings
- ideal for square wall openings



Product benefits

- flexible combi-firestop
- dust-free assembly / fibre-free
- easily adjustable
- space-saving and time-saving application
- can be retrospectively applied



25
Years
Guarantee

Uses

- walls made of masonry, concrete, reinforced concrete, porous concrete
- light partition walls
- ceilings made of concrete, reinforced concrete, porous concrete

Scope of license

- electrical cables of all kinds and diameters (even fibre optic cables) with the exception of wave-duct cables
- individual cables made of steel or plastic pipes for control purposes up to OD 15 mm
- cable carrier constructions (cable trays, cable racks, cable ladders) made of steel, aluminium or plastic profiles
- non-flammable pipes made of steel, stainless steel and cast iron up to a max. OD of 168.3 mm and pipe thicknesses up to 14.2 mm (pay attention to insulation, see license for particulars)
- electrical installation pipes made of plastic up to OD 20 mm, with and without wiring

Fields of use for Curaflam® Schottsystem Stein

- temporary or permanent firestop for electrical cables of all kinds and diameters
- non-flammable pipes up to OD 168.3 mm (plus insulation)
- electrical installation pipes made of plastic up to OD 20 mm

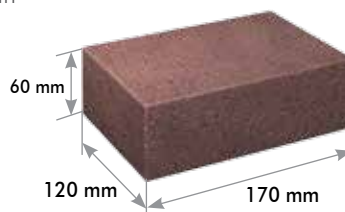
Licensing

The Curaflam® Schottsystem Stein is licensed by the Deutsches Institut für Bautechnik (DIBt) in accordance with Z-19.15-1869.

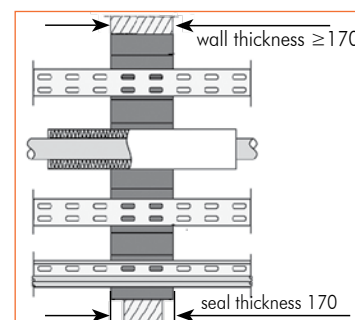
Please see the license for more information.

wall and ceiling thickness	for S 30	for S 90
solid walls	from 50 mm	from 100 mm
light partition walls (LTW)	from 75 mm	from 100 mm
solid ceilings	from 150 mm	
Max. dimensions		
S 30 / S 90		
solid walls (B/H)	1000 mm x 1000 mm	
light partition walls (B/H) bzw. (H/B)	575 mm x 875 mm	
solid ceilings (B/H)	700 mm x unlimited length	

Seal thicknesses	for S 30	for S 90
light partition walls	from 120 mm	from 170 mm
light partition walls (LTW)		
solid ceilings		

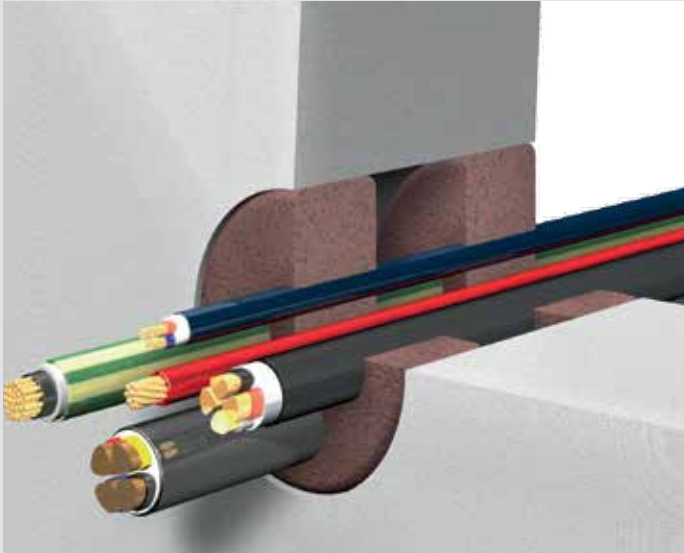


Dimensions of Curaflam® Stein



Fire Protection

- flexibly adjustable firestop material for openings
- ideal for round wall and ceiling openings



Product benefits

- flexible seal
- dust-free assembly / fibre-free
- easily adjustable
- space-saving and time-saving application
- can be retrospectively applied



Uses

- walls made of masonry, concrete, reinforced concrete, porous concrete
- light partition walls
- ceilings made of concrete, reinforced concrete, porous concrete

Scope of license

- electrical cables of all kinds and diameters (even fibre optic cables) with the exception of wave-duct cables
- individual cables made of steel or plastic pipes for control purposes up to ed 15 mm
- cable carrier constructions (cable trays, cable racks, cable ladders) made of steel, aluminium or plastic profiles
- electrical installation pipes made of plastic up to OD 20 mm, with and without wiring

Fields of use for Curafam® Schottsystem Stopfen

- temporary or permanent firestop for electrical cables of all kinds and diameters
- individual cables made of steel or plastic pipes for control purposes up to OD 15 mm
- round wall and ceiling penetrations with cables that are frequently changed

Licensing

The Curafam® Schottsystem Stopfen is licensed by the Deutsches Institut für Bautechnik (DIBt) in accordance with Z-19.15-1867.

Please see the license for more information.

wall and ceiling thickness	for S 30	for S 90
solid walls	from 50 mm	from 100 mm
light partition walls (LTW)	from 75 mm	from 100 mm
solid ceilings	from 150 mm	

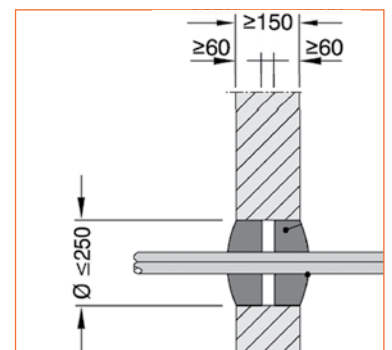
Seal thicknesses	for S 30	for S 90
solid walls	from 120 mm	from 150 mm
light partition walls (LTW)		
solid ceilings		

max. core drilling or structural opening in mm	≤ 67	≤ 80	≤ 109	≤ 124	≤ 136	≤ 170	≤ 207	≤ 250
xxx for item number	065	078	107	122	134	165	200	250

Table of plugs for solid walls, ceilings and light partition walls



Diameter of Curafam® plug

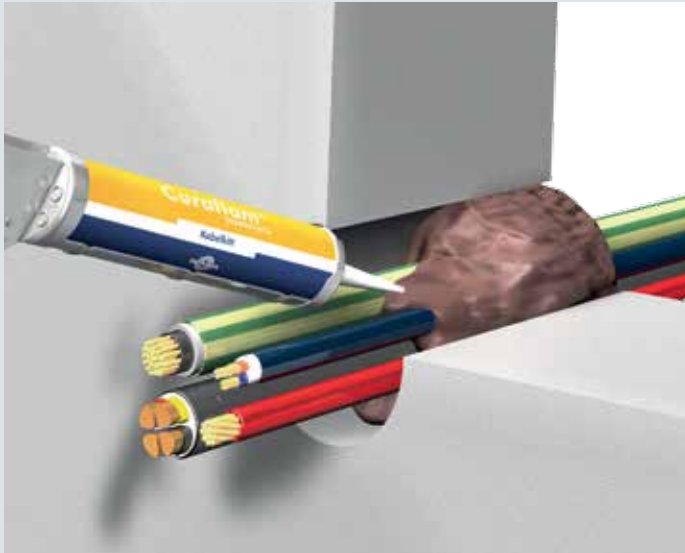


We reserve the right to make changes. Graphics sometimes shown with accessories. 06/15

Curaflam® Schottsystem Kabelkitt

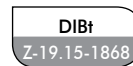
Firestops for cables

- easy-to-use cartridge
- to seal the spaces at the bottom of the pipes and clearances of the stone and plug system



Product benefits

- extremely easy application
- easy to adjust
- space-saving and flexible



Uses

- walls made of masonry, concrete, reinforced concrete, porous concrete
- light partition walls (in connection with formwork pipe or hard shell)
- ceilings made of concrete, reinforced concrete, porous concrete
- maximum diameter of opening 80 mm

System benefits

- particularly suitable for small and medium cable penetrations
- cartridge can be used with conventional cartridge guns
- simple and time-saving handling
- dust-free and fibre-free application
- solvent-free, no plasticiser and halogens

Scope of license

- electrical cables of all kinds and diameters (even fibre optic cables) with the exception of wave-duct cables
- the total number of cross sections of all cables can be up to 60% of the structural opening.

Fields of use for Curaflam® Schottsystem Cable Kit

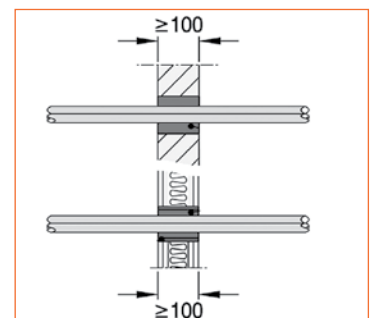
- permeant firestop for electrical cables up to a diameter of 18 mm
- particularly suitable for very small firestops in solid walls and ceilings,
- certified for fire resistance class S 90.

Licensing

The Curaflam® Schottsystem Cable Kit is licensed by the Deutsches Institut für Bautechnik (DIBt) in accordance with Z-19.15-1868.

Please see the license for more information.

wall and ceiling thickness	for S 90
solid walls	from 100 mm
light partition walls (LTW)	from 100 mm
solid ceilings	from 150 mm
seal thicknesses	for S 90
solid walls	from 100 mm
light partition walls (LTW)	from 100 mm
solid ceilings	from 150 mm



Fire Protection

Curaflam® 12.500 BSRB
Curaflam® 12.500 BSRN
 Firestops for flammable / non-flammable pipes

- seal is integrated **invisibly into the wall / ceiling**
- for **dry rooms**



Product benefits

- combination of sealing and firestop system
- for visible areas, e.g. cleanrooms, hospitals, etc. Fire protection integrated fully into the wall / ceiling
- many flammable / non-flammable pipe materials are possible
- with acoustic decoupling

DIBt
Z-19.17-416

IBMB
P-3025/0158

25
Years
Guarantee

Uses

- penetration in interior rooms with fire protection R 90 / R 120
- for flammable pipes Curaflam® 12.500 BSRB
 - Licensed up to OD 160 mm
- for non-flammable pipes Curaflam® 12.500 BSRN
 - Licensed up to OD 160 mm

This firestop consists of

- 1 socket pipe
- 2 rosettes
- 1 seal
- 1 fire protection pack

Notes: For non-flammable pipe, insulate on both sides with thickness of 80 mm, length 700 mm, density 80 kg/m³.

For wall thicknesses > 400 mm, 2 fire protection packs will be required.

Curaflam® accessories

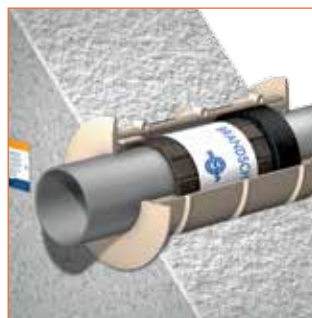
- adhesive (17010), pack volume 50 ml.
- to adhere screw caps to the socket pipe.

License / test certificate

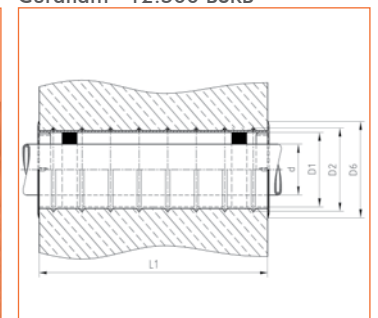
The penetration is licensed for flammable pipes (Z-19.17-416) by the Deutsches Institut für Bautechnik (DIBt) and checked for non-flammable pipes (P-3025/0158).

Please see the license or test certification for more details.

pipe OD d [mm]	ID socket pipe D1 [mm]	OD socket pipe D2 [mm]	OD socket pipe D6 [mm]
bis 29	42	45	60
30 - 39	51	54	70
40 - 49	61	64	80
50 - 69	85	89	100
70 - 78	106	110	120
12.500 BSRB flammable pipes	12.500 BSRN non-flammable pipes		
80 - 107	71 - 104	121	125
108 - 124	105 - 140	155	160
125 - 140	141 - 160	175	180
141 - 160	-	210	219
L₁ (standard length) [mm] 300; other lengths available.			



Curaflam® 12.500 BSRB

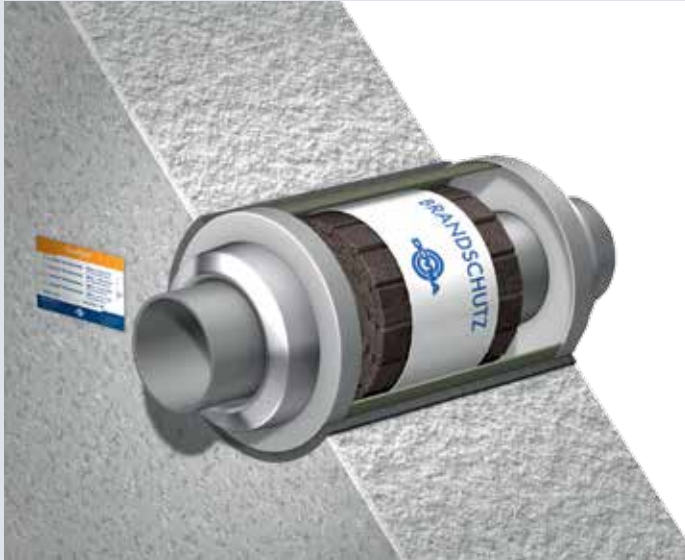


Curaflam® 12.500 BSRN

Curaflam® 49.950 BSRB Curaflam® 49.950 BSRN

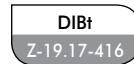
Firestops for flammable / non-flammable pipes

- seal is integrated **invisibly** into the wall / ceiling
- for **wet** and **dry** rooms



Product benefits

- combination of sealing and firestop system
- for visible areas, e.g. cleanrooms, hospitals, etc. Fire protection integrated fully into the wall / ceiling
- many flammable / non-flammable pipe materials are possible
- with acoustic decoupling



Uses

- water-proof and gas-proof penetration in interior rooms with fire protection R 90 / R 120
- for flammable pipes Curaflam® 49.950 BSRB
- for non-flammable pipes Curaflam® 49.950 BSRN
Both licensed up to OD 90 mm

This firestop consists of

- 1 socket pipe
- 2 screw caps with stainless steel cladding, ABS core and seal
- 1 fire protection pack

For installation in walls with wall thicknesses ≥ 400 mm, 2 fire protection packs should be used.

Notes: For non-flammable pipe, insulate on both sides with thickness of 80 mm, length 700 mm, density 80 kg/m³.

For wall thicknesses > 400 mm, 2 fire protection packs will be required.

Curaflam® accessories

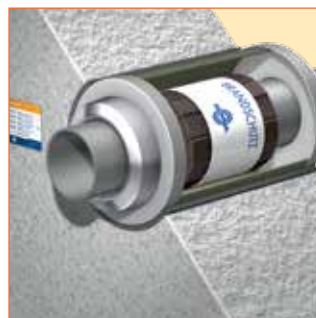
- adhesive (17010), pack volume 50 ml.
- to adhere screw caps to the socket pipe.

The penetration is licensed for flammable pipes (Z-19.17-416) by the Deutsches Institut für Bautechnik (DIBt) and checked for non-flammable pipes (P-3025/0158).

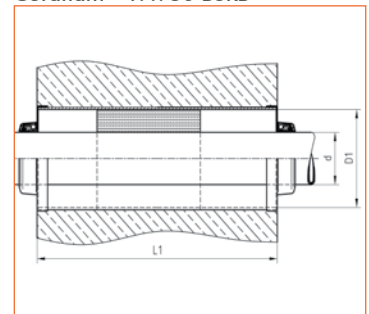
Please see the license or test certification for more details.

pipe OD d [mm]	socket OD D ₂ [mm]
5 - 13	32
14 - 15	40
16 - 23	54
24 - 28	70
29 - 35	80
36 - 43	90
44 - 49	103
50 - 61	115
62 - 77	135
78 - 90	151

L₁ (standard length) [mm] 300; other lengths available.



Curaflam® 49.950 BSRB



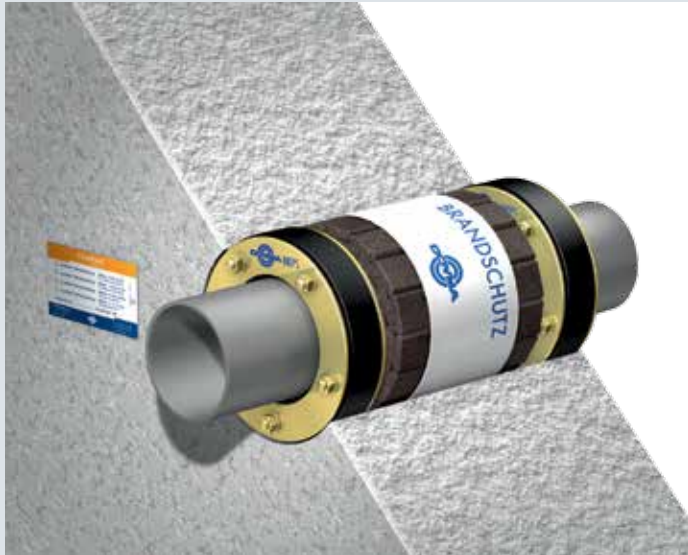
Curaflam® 49.950 BSRN

Curaflam® 2 x A BSHB

Curaflam® 2 x A BSHN

Firestops for flammable / non-flammable pipes

- water-proof and gas-proof seal for pipes
- integrated invisibly into the wall / ceiling
- for installation in the core drilling



Product benefits

- combination of sealing and firestop system
- for visible areas, e.g. cleanrooms, hospitals, etc. Fire protection integrated fully into the wall / ceiling
- many flammable / non-flammable pipe materials are possible

DIBt
Z-19.17-324

IBMB
P-3024/0148

25
Years
Guarantee

Uses

- pipe penetration with fire protection R 90 / R 120
- for flammable pipes Curaflam® 2 x A BSHB
 - Licensed up to OD 180 mm
- for non-flammable pipes Curaflam® 2 x A BSHN
 - Licensed up to OD 325 mm
- gas-proof and water pressure-tight

This firestop consists of

- 2 Curaflex® sealing inserts A with DPS*
- 1 fire protection pack
- DPS up to KB/NB 350

Notes: For non-flammable pipe, insulate on both sides with thickness of 80 mm, length 700 mm, density 80 kg/m³.

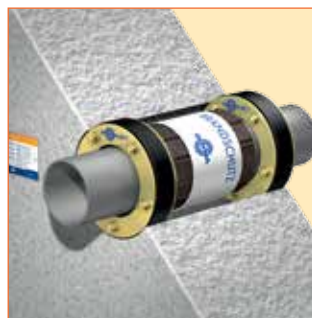
For wall thicknesses > 400 mm, 2 fire protection packs will be required.

License / test certificate

The penetration is licensed for flammable pipes (Z-19.17-324) by the Deutsches Institut für Bautechnik (DIBt) and checked for non-flammable pipes (P-3024/0148).

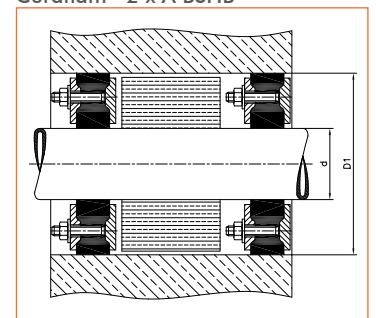
Please see the license or test certification for more details.

pipe OD d [mm]		core bore D ₁ [NB in mm]
non-flammable pipes	flammable pipes	
1 - 40		80
41 - 57	41 - 56	100
58 - 77	57 - 77	125
78 - 104		150
105 - 145		200
146 - 190	146 - 180	250
191 - 225	-	300
226 - 250	-	350
251 - 315	-	400
316 - 325	-	450



Curaflam® 2 x A BSHN

Curaflam® 2 x A BSHB



Curaflam® A + B BSHB

Curaflam® A + B BSHN

Firestops for flammable / non-flammable pipes

- water-proof and gas-proof for pipes
- integrated invisibly into the wall / ceiling
- for installation in the core drilling
- with additional large ring for axial attachment



Product benefits

- combination of sealing and firestop system
- for visible areas, e.g. cleanrooms, hospitals, etc. Fire protection integrated fully into the wall / ceiling
- many flammable / non-flammable pipe materials are possible

DIBt
Z-19.17-324

IBMB
P-3024/0148

25
Years
Guarantee

Uses

- pipe penetration with fire protection R 90 / R 120
- for flammable pipes Curaflam® A+B BSHB
 - Licensed up to OD 180 mm
- for non-flammable pipes Curaflam® A+B BSHN
 - Licensed up to OD 325 mm
- gas-proof and water pressure-tight

This firestop consists of

- 1 Curaflex® sealing insert A and 1 B with DPS*
- 1 fire protection pack
- DPS up to KB/NB 350

Notes: For non-flammable pipe, insulate on both sides with thickness of 80 mm, length 700 mm, density 80 kg/m³.

For wall thicknesses > 400 mm, 2 fire protection packs will be required.

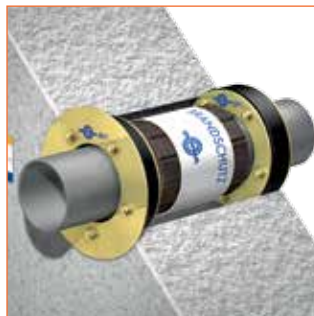
License / test certificate

The penetration is licensed for flammable pipes (Z-19.17-324) by the Deutsches Institut für Bautechnik (DIBt) and checked for non-flammable pipes (P-3024/0148).

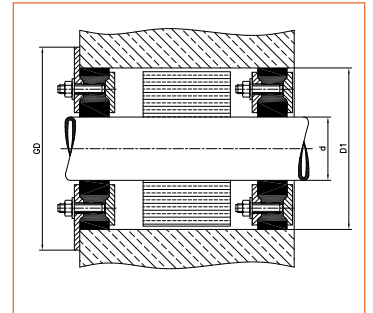
Please see the license or test certification for more details.

pipe OD d [mm]		core bore D ₁ [NB in mm]	large ring OD G _D [mm]
non-flammable pipe	flammable pipe		
1 - 40		80	98
41 - 57	41 - 56	100	120
58 - 77	57 - 77	125	145
78 - 104		150	170
105 - 145		200	240
146 - 190	146 - 180	250	290
191 - 225	-	300	340
226 - 250	-	350	390
251 - 315	-	400	440
316 - 325	-	450	490

Curaflam® A + B BSHN



Curaflam® A + B BSHB



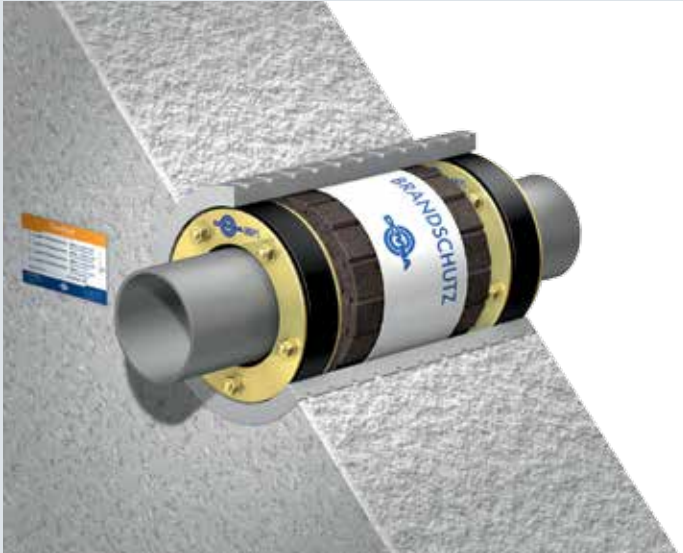
Fire Protection

Curaflex® 3110 BSHB

Curaflex® 3110 BSHN

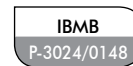
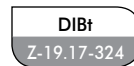
Firestops for flammable / non-flammable pipes

- water-proof and gas-proof seal for pipes
- integrated invisibly into the wall / ceiling
- for installation in the casing tube



Product benefits

- combination of sealing and firestop system
- for visible areas, e.g. cleanrooms, hospitals, etc. Fire protection integrated fully into the wall / ceiling
- many flammable / non-flammable pipe materials are possible



Uses

- pipe penetration with fire protection R 90 / R 120
- For flammable pipes Curaflex® 3110 BSHB
 - Licensed up to OD 180 mm
- for non-flammable pipes Curaflex® 3110 BSHN
 - Licensed up to OD 325 mm
 - Licensed for district heating pipes up to OD 315 mm
- gas-proof and water pressure-tight

This firestop consists of

- 2 Curaflex® sealing inserts A with DPS*
- 1 special fibre-cement casing tube 3000
- 1 fire protection pack
- DPS up to KB/NB 350

Notes: For non-flammable pipe (except district heating pipes), insulate on both sides with thickness of 80 mm, length 700 mm, density 80 kg/m³.

For wall thicknesses > 400 mm, 2 fire protection packs will be required.

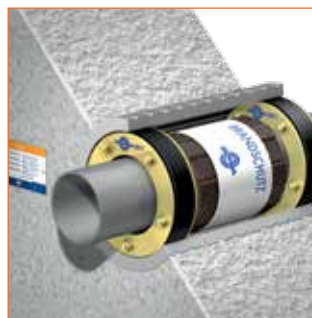
License / test certificate

The penetration is licensed for flammable pipes (Z-19.17-324) by the Deutsches Institut für Bautechnik (DIBt), checked for non-flammable pipes (P-3024/0148) and checked for non-flammable insulated district heating pipes (P-3439/4398).

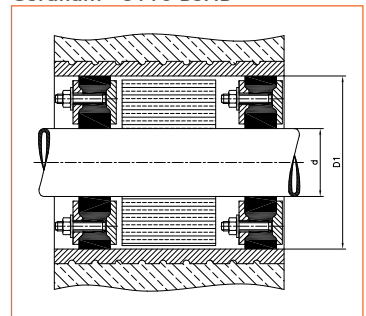
Please see the license or test certification for more details.

pipe OD d [mm]			core bore D ₁ [NB in mm]
non-flammable pipes	district heating pipes*	flammable pipes	
1 - 40			80
41 - 57		41 - 56	100
58 - 77		57 - 77	125
78 - 104			150
105 - 145			200
146 - 190		146 - 180	250
191 - 225		-	300
226 - 250		-	350
251 - 315		-	400
316 - 325	-	-	450

* with district heating: d = OD casing tube



Curaflex® 3110 BSHB



Curaflex® 3110 BSHN

- **simple fire protection seal** for wall / ceiling openings
- manual and pump-operated **application**



Product benefits

- high application volume – 15 kg bucket produces approx. 10 litres of wet grout
- thanks to the high stability, easy application in hard-to-reach places and large openings
- due to fine consistency, easy application with low wear-and-tear of grout pump
- early smoothing possible due to binding properties and stability

25
Years
Guarantee

Uses

- grout to provide firestops and seals for wall and ceiling openings
- grouting of fire doors, ventilation hatches and installation channels
- firestop for flammable pipes connected with fire protection collars and tapes
- firestop for non-flammable pipes with flammable insulation in connection with fire protection bandages
- firestop for non-flammable pipes with non-flammable sectional insulation (e.g. Rockwool systems, Isover systems, etc.)
- firestop for flammable, non-flammable pipes and electrical cables in line with the LAR

Volume: Bucket with 15 kg of Curaflam® grout



Experts for sealing and fire protection systems

Our credo: JUST SIMPLY SAFE

DOYMA is a family business being continued in the second generation.

As a medium-sized company, we have the knowledge, skills and flexibility needed to offer our customers the greatest security:

Our sealing and fire protection systems protect against humidity, fire and smoke permanently and reliably. For this reason, we provide a 25-year guarantee on all DOYMA products.

We are proud of our corporate culture as we trust in the principle of "promote and prompt":

We make room for ideas and independent actions by the employees.

Professional and social ability, will to work and dedication are success factors for excellent DOYMA market performances.

Great appreciation for individuals, flat hierarchies, continuous training and togetherness are firm building blocks of our corporate activities. We are proud of the fact that our company is regarded as an attractive employer beyond the region. We recognise voluntary social activities, employee-friendly working time regulations and health promotion as a part of our social responsibility.

We commit ourselves to that every day. Today and in the future.



Whether special design or serial production: We cherish precision.

Extreme dimensional accuracy, constantly high and consistent quality level provide reliable functioning of DOYMA precision products. The entire production process is geared towards that.

Constantly available serial products on stock are produced in line with these principles in the same way as customised component special designs.

“Computer Integrated Manufacturing” (CIM) networks production as early as the construction phase making the manufacture extremely fast and efficient. Thanks to CIM, the construction department at DOYMA is very closely connected to production.

The construction data is fed directly into the corresponding CNC machine.

The accurately sized components of our products are immediately ready for final assembly.

Our staff very efficiently execute the technical order processing, the commissioning, the manufacturing, the packaging and loading of the products in time at all.

80 % of all orders leave our premises on the same day. Technically demanding special designs are in most cases completed within five working days.

DOYMA production know-how includes metal, plastic, elastomer and fibre cement process-

ing to water jet cutting units, precision turning machines, special rubber-cutting machines and laser cutting-off equipment. In final assembly, we configure complex units to the finished product.

The DOYMA machinery includes:

- Laser cutting-off equipment with fibre technology
- CNC machines for milling, turning and welding; bolt-cutting equipment
- MIG/MAG and WIG welding machines
- Circular welding tables
- Water jet cutting equipment





SEALING | SYSTEMS



FIRE PROTECTION | SYSTEMS



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