

Funke VPC® Pipe Coupling

*with DIBt Approval
Z-42.5-450
for nominal diameters
100 - 1070!*



100 – 1070 mm



Resistant
to oil and petrol
Tensioning hoop
made of V4A
(1.4404)

The perfect connection for non-pressure pipes!

The Funke VPC® Materials per

The Product

The new Funke VPC® Pipe Coupling allows pipes of the same nominal diameters made of different materials to be connected to one another safely, reliably, and with the best possible results – despite having different outer diameters incurred by the design type! The Funke VPC® Pipe Coupling consists of a reducible sealing sleeve made of elastomer rubber, a centrally reducible securing cage made of plastic, and two stainless-steel bands for applying force to achieve a uniform circumferential adjustment.

The **sealing sleeve** – It is made of ethylene-propylene-diene (monomer) rubber (EPDM) in accordance with DIN EN 681-1 WC/60, and has a multiple double sealing profile for really reliable sealing in accordance with DIN EN 1610. Radial circumferential cut-outs in the material, and single compartments, mean that meshed engagement of the securing cage into the rubber can be achieved with complete reliability.

The **securing cage** consists of a highly impact-resistant plastic, stable under breaking stress, and resistant to both heat and cold. Its conically deformable middle section and the integrated band guide channels on both sides allow for centric and stepless reduction adjustment of the individual orientation of both contact areas. The reduction process takes place uniformly over the entire circumference, while the jointed middle section enables a separate reduction to be obtained on each side of the Pipe Coupling.

Securing cage and sealing sleeve are designed in such a way that any movement or distortion of the rubber during the

diameter adjustment is avoided. The sleeve matches up to the different outer diameters of the different pipe materials while the **tension bands** made of corrosion-free stainless steel are being tightened. Sealing sleeve and securing cage, together with the two tension bands, form a compact, stable shaped, and yet still flexible unit.

The VPC® Pipe Coupling is available in two design formats. In the standard version, the components are made of V2A stainless steel, highly rust-resistant (material No. 1.4301). The special design, with V4A steel (material No. 1.4404) is resistant to hydrocarbons as well, and particularly resistant to aggressive substances in the soil.

The stock volumes for Funke VPC® Pipe Couplings can be reduced to just a few types, because the component covers a wide range of diameter differences. So, for example, we can have ...



... an SN 4 PVC U-pipe and a corrugated pipe ...

Product advantages

- Bedding channel on both sides for secure band guidance
- Cylindrical contact and sealing area
- Multiple double sealing profile
- No distortion in the rubber, thanks to the securing cage and sealing sleeve maintaining a neutral position
- Easy, fast, and secure assembly
- Tough, compact, and secure when it comes to handling

Practical advantages

- Connects pipes of different outside diameters and pipes made of different materials and different structural designs
- Bridging large diameter differentials without the use of additional compensation rings (bushes)
- Stepless adjustment on both sides, while maintaining complete security against shear loads
- Large surface cylindrical contact area or meshing of the pipes
- Center stop for accuracy in assembly (up to VPC 270)

Pipe Coupling: fectly connected



... an SN 8 PVC U-pipe and a vitrified clay pipe ...



... or an SN 12 (HS®) PVC U-pipe and a ribbed pipe.

| VPC Article No. | Outer diameter range/ clamping range | | Max. Reduction mm |
|-----------------|---|-------|-------------------|
| | from mm | to mm | |
| VPC 100 | 102 | 133 | 31 |
| VPC 125 | 123 | 161 | 38 |
| VPC 150 | 160 | 192 | 32 |
| VPC 150 B | 183 | 226 | 43 |
| VPC 150 BF | 200 | 261 | 61 |
| VPC 200 K | 183 | 226 | 43 |
| VPC 200 G* | Only 200 with Eccentric Ring | 261 | 61 |
| | From 220 without Eccentric Ring | | 41 |
| VPC 220 | 220 | 261 | 41 |
| VPC 250* | Only 250 with Eccentric Ring | 324 | 74 |
| | From 270 without Eccentric Ring | | 54 |
| VPC 270 | 270 | 324 | 54 |
| VPC 275 | 275 | 330 | 55 |
| VPC 290 | 240 | 290 | 50 |
| VPC 310 | 255 | 310 | 55 |
| VPC 325 | 265 | 325 | 60 |
| VPC 345 | 285 | 345 | 60 |
| VPC 360 | 295 | 360 | 65 |
| VPC 382 | 315 | 382 | 67 |
| VPC 400 | 330 | 400 | 70 |
| VPC 415 | 345 | 415 | 70 |
| VPC 430 | 360 | 430 | 70 |
| VPC 455 | 385 | 455 | 70 |
| VPC 465 | 395 | 465 | 70 |
| VPC 485 | 415 | 485 | 70 |
| VPC 500 | 430 | 500 | 70 |
| VPC 520 | 450 | 520 | 70 |
| VPC 535 | 465 | 535 | 70 |
| VPC 555 | 485 | 555 | 70 |

| VPC Article No. | Outer diameter range/ clamping range | | Max. Reduction mm |
|-----------------|---|-------|-------------------|
| | from mm | to mm | |
| VPC 565 | 495 | 565 | 70 |
| VPC 590 | 520 | 590 | 70 |
| VPC 605 | 535 | 605 | 70 |
| VPC 625 | 555 | 625 | 70 |
| VPC 640 | 570 | 640 | 70 |
| VPC 660 | 590 | 660 | 70 |
| VPC 675 | 605 | 675 | 70 |
| VPC 690 | 620 | 690 | 70 |
| VPC 710 | 640 | 710 | 70 |
| VPC 730 | 660 | 730 | 70 |
| VPC 745 | 675 | 745 | 70 |
| VPC 765 | 695 | 765 | 70 |
| VPC 780 | 710 | 780 | 70 |
| VPC 805 | 735 | 805 | 70 |
| VPC 820 | 750 | 820 | 70 |
| VPC 835 | 765 | 835 | 70 |
| VPC 850 | 780 | 850 | 70 |
| VPC 870 | 800 | 870 | 70 |
| VPC 890 | 820 | 890 | 70 |
| VPC 905 | 835 | 905 | 70 |
| VPC 925 | 855 | 925 | 70 |
| VPC 940 | 870 | 940 | 70 |
| VPC 960 | 890 | 960 | 70 |
| VPC 980 | 910 | 980 | 70 |
| VPC 995 | 925 | 995 | 70 |
| VPC 1010 | 960 | 1010 | 50 |
| VPC 1030 | 980 | 1030 | 50 |
| VPC 1045 | 995 | 1045 | 50 |
| VPC 1070 | 1020 | 1070 | 50 |

Connects all pipes within the listed outer diameter ranges (for corrugated and ripped pipes check pipe geometry and load bearing capacities)

*Eccentric ring for smooth pipes (PVC, PP, PE) for a level invert connection included in the scope of supply.

13 advantages at a glance

Low stock storage costs, because only a few types are needed to meet all operational situations.

The reduction process takes place centrally, uniformly, and separately on each side of the Pipe Coupling (two dimensional).

Multiple double sealing profile on each side.

A bedding channel on both sides for the tension bands ensures reliable and secure band guidance.

Thanks to the design of the tension bands and the size of the contact surface at the securing cage (min. 60 mm wide), the force application during the diameter adaptation process is spread evenly onto the pipe over the entire circumference.

Insertion is limited by a central protruding rubber lip (100 – 270).

No additional compensation rings are needed to bridge even substantial diameter differences with the same nominal diameter (left OD 160, right OD 190).

Large-surface cylindrical contact and sealing area (60 mm per side).

Sealing tightness up to 2.5 bar – MPA tested (up to VPC 850).

2 or 4 tension bands respectively, made of stainless steel with click locking, ensure reliable, rapid, and uniform assembly.

Securing cage and sealing sleeve retain a neutral position during the diameter adjustment process, which means that sliding or folding of the rubber can be reliably avoided.

Stepless adjustment on both sides, with permanent securing against shear loads, tested in accordance with DIN 4060 and DIN EN 295 respectively.

Level invert transition area for connecting the same nominal diameters of the same or different materials with different outer structures (corrugated, ribbed, and smooth pipes).





The VPC® Pipe Coupling special type protects against oil and corrosion.

Reliable and not easy to degrade

In the oil-resistant version, the components of the VPC® Pipe Coupling are made of V4A stainless steel (material No. 1.4404). This means that the special steel used is one of the steel grades which is particularly effective in its resistance to corrosion and acids. The moulded part is resistant to oil and petrol, and particularly effective in resisting the corrosive substances in waste water and in soil.

Funke introduced this special design as a response to the demands of the market. Clients can take advantage of the product when the soil surrounding a sewer pipe contains particularly corrosive constituents (such as salty soils in coastal areas), or if the waste water contains substances which could attack pipes and seals made of conventional materials, such as sleeves made of EPDM (ethylene-propylene-diene rubber), which is the case, for example, with pipes in the area of fuel filling stations. This is why we use NBR (acrylonitrile butadiene rubber), for Pipe Couplings which are particularly

| VPC | Outer diameter range | | Article No. |
|------------|---------------------------------|-------|--------------|
| | from mm | to mm | |
| 100 OEL | 102 | 133 | VPC 100 OEL |
| 125 OEL | 123 | 161 | VPC 125 OEL |
| 150 OEL | 160 | 192 | VPC 150 OEL |
| 200 K OEL | 183 | 226 | VPC 200K OEL |
| 200 G OEL* | Only 200 with Eccentric Ring | 261 | VPC 200G OEL |
| | From 220 without Eccentric Ring | | |
| 250 OEL* | Only 250 with Eccentric Ring | 324 | VPC 250 OEL |
| | From 270 without Eccentric Ring | | |
| 382 OEL | 315 | 382 | VPC 382 OEL |

*Eccentric ring for smooth pipes (PVC, PP, PE) for a level invert connection included in the scope of supply.

resistant to oil and petrol. With the oil-resistant design, the spring cage is grey.





Repair – Upgrade – New construction

VPC provides a whole range of advantages, right where you need them – in the trench

A new moulded part from Funke takes care of particular problems in the civil engineering pipelaying sector. The VPC® Pipe Coupling allows for pipes of the same nominal diameter but made of different materials to be connected to one another securely and with best possible results, an advantage which more and more project managers and contracting companies involved in pipe upgrading work are really coming to appreciate.

For contractors this is already becoming an almost everyday situation. Take, for example, connecting the existing house connection pipes for rain water and waste water to the collecting pipe for the sewage system. On private properties, there is often a right old mix-up of materials present. And because different materials as a rule also feature different diameters, up to now there has had to be a lot of “make do and mend” involved, in trying to come up with a reasonable solution to making the transition. One example might be

the use of additional compensation rings. But all that's in the past, now that the VPC® Pipe Coupling has arrived.

Whether it's an upgrade, a repair, or laying a new pipe, the design advantages of the new moulded component make installation with different outer diameters so much easier.



Retrofitting a branch element into an existing vitrified clay pipe



Repairing defective pipes





Closure element

The VPC® Pipe Coupling consists of a sealing sleeve made of elastomer rubber, a securing cage made of plastic, and two special stainless steel bands, which form the closure element. The element is a click-in closure design (no welding or toxing).

When the screws of the special steel bands are tightened with a torque wrench during assembly, in accordance with the manufacturers' instructions – from a tightening range \geq DN 290, the use of what is known as a tangential spanner is recommended – the sleeve will match up steplessly to the different outer diameters of the different pipe materials. The securing cage and sealing sleeve are designed in such a way that there is no risk of the rubber slipping or distorting during the diameter adaptation.



Compensation Rings (Bushes)

Compensation rings can be used with VPC® Pipe Couplings that have a clamping range greater than 300. They are designed to fit the product in such a way that they don't affect the Pipe Coupling's function or tightness. We manufacture custom-made compensation rings with a thickness of 15 mm on request.

They are available in all cut lengths and diameters and, if required, can be delivered at very short notice with the corresponding VPC® Pipe Coupling. Do not install more than three rings on top of each other during assembly.



The VPC® Pipe Coupling on the test stand: Shear load, angular deflection capacity, tightness

According to DIN 4060 (1998), **proof of tightness** must be provided with an opposite angular deflection as well as under shear load. In this context, proof of tightness of the connector is required up to an internal water pressure of 0.5 bar. For this purpose, the VPC® Pipe Coupling is third party tested in accordance with DIN 4060, at an angular deflection of 2% to 5% (depending on the nominal diameter) and under a shear load which corresponds to 10 times the nominal diameter in Newtons; for example, with a nominal diameter of DN 200, this is 2000 N = 2 kN = 200 kg.

Shear load

The effect of the shear load is carried out as a pipe line test on two pipes with one connector (in this case the VPC® Pipe Coupling). One pipe is mounted in a securely fixed position and the other is subjected to load (e.g. with weights). This causes a load to be imposed in the area between the two pipes, which must be borne by the connector without it suffering any damage. In the long-term test, the shear load is maintained for three months, and the connector is then again tested for water tightness.

Angular deflection

The test of the angular deflection is likewise carried out as a string test on two pipes with a connector. When the test is carried out, one pipe is securely mounted and the other secured at an angle at the free end. In this situation, for example, a value of 2% corresponds to an angular deflection of 20 mm per metre of pipe.

Tightness

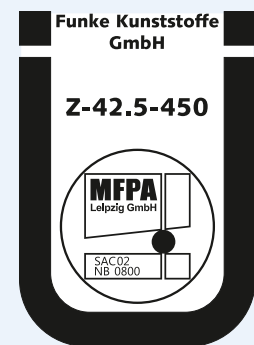
As a departure from DIN 4060, the water pressure with the VPC® Pipe Coupling, instead of up to 0.5 bar, is increased up to 2.5 bar without deflection.

DIN 4060 applies to pipe connectors with elastomeric seals of all kinds. In addition to this, when two vitrified clay pipes are connected the somewhat more "stringently" formulated DIN EN 295 comes into effect. In this case, a shear load of 25 times the nominal diameter in Newtons is taken as the basis; with a nominal diameter of DN 200, this amounts to $25 \times 200 = 5,000 \text{ N} = 5 \text{ kN} = 500 \text{ kg}$. And likewise, with nominal diameters up to DN 200, the angular deflection increases from 5% to 8%.



High pressure jetting test according to DIN 19523 at iro GmbH institute in Oldenburg (Germany)

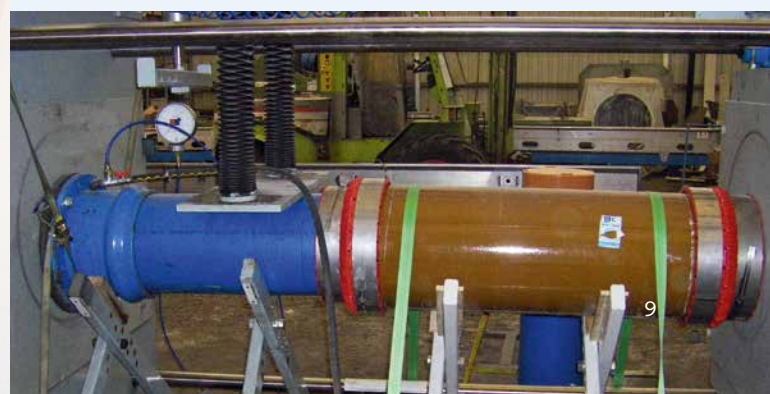
Third Party Testing and Approval



with DIBt Approval Z-42.5-450 for nominal diameters 100 – 1070

VPC® Pipe Coupling from Funke have been awarded the General Construction Supervisory Approval from the German Institute for Construction Technology (DIBt) for the nominal diameters 100 – 1070. These approvals are issued for building products and construction types in the scope of application of the Provincial building ordinances for which there are no generally recognised rules of the art, in particular no DIN Standards, or which deviate from them.

This means that the suitability for use and application of the moulded part in the meaning of the Provincial building ordinances has been conclusively proved – an added safety bonus for both clients and contractors alike.



Available in sizes
100 – 1070 mm!



The Complete Set

The VPC® Pipe Coupling in design formats 100 – 220 comes supplied in a carrying bag made of plastic film, which, as well as the product itself, also contains instructions for installation and for the correct application of the lubricant agents required. The four-language instructions (German, French, English, and Polish) provide an easy to follow guide to the different installation steps, based on clearly illustrative photos.

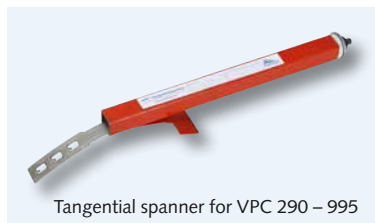
VPC® Pipe Couplings in formats from 250 and larger are delivered in a sturdy carton, and in larger numbers come on a pallet.



Accessories



Box spanner for VPC 100 – 150



Tangential spanner for VPC 290 – 995



Set of reversible ratchets for
VPC 100 – 270



Torque wrench for VPC 100 – 1070



Set of accessories in the assembly kit box

Installation Recommendation

○ VPC 100/125/150/200K/220/270

Measure the outer diameters of both pipes (1) and compare them with the range of the Funke VPC® Pipe Coupling.

The range of the Funke VPC® Pipe Coupling is shown on the label (2), or can be determined by measuring the inner diameter of the coupling. Measure the insertion depth of the Funke VPC® Pipe Coupling as far as the protruding lip on the inside (3) and mark this on the larger pipe (4).

Important: Once the outer diameters have been determined of both pipes which are to be connected, bring the Funke VPC® Pipe Coupling up to the larger pipe diameter by alternating rotation of the two pipe hangers (5).

If necessary, apply the lubricant thinly onto the spigot end of the pipe which is to be connected (e.g. concrete or vitrified clay pipes).



Push the Funke VPC® Pipe Coupling onto the spigot end of the larger pipe as far as the marking, making sure that the screws of the tension sleeve are facing upwards (6+7).

The joint in the connection is to be maintained in accordance with the specific instructions from the individual pipe manufacturers (a small gap is to be recommended with regard to the angular deflection capacity and expansion). Once the Funke VPC® Pipe Coupling has been aligned, first tighten the tension sleeve on the larger pipe to 17 Nm (9). If possible, check this with a torque wrench. Next, tighten the opposite tension sleeve to the same torque value (10).

We recommend the use of a hexagonal box spanner (8 mm) with a T-grip (11) as an aid, or a set of interchangeable ratchets (12) in cases of frequent use.





Installation Recommendation

○ VPC 200 G / 250

For pipes with DN/OD 200 (outer diameter 200 mm) and DN/OD 250 (outer diameter 250 mm), an eccentric ring is required (included in the scope of supply) in order to achieve a level invert connection.

As a departure from the installation instructions described on page 11, the following preparations need to be made:

Measure the insertion depth of the Funke VPC® Pipe Coupling as far as the centre stop on the inside (3) and mark this on the pipe with the larger outer diameter (4).

Then carry out points 5 + 7.

Draw the eccentric ring onto the spigot end of the DN/OD 200 pipe (outer diameter 200 mm) as far as the inside stop, or onto the DN/OD 250 pipe (outer diameter 250 mm) (16).

Then lead the pipe prepared in this way, with the eccentric ring fitted, to the Funke VPC® Pipe Coupling, making sure that the red marking always remains visible on the apex (17).

Push the pipe in until the eccentric ring closes on the outside flush with the Funke VPC® Pipe Coupling (18).

Then continue as described under Points 9-12 of the laying instructions, and tighten the screws on the tension sleeves to 17 Nm.



15



16



17



18

Special case: Pipe repair:

When it comes to repairing a pipe, first push the two Funke VPC® Pipe Couplings complete onto the pipe spigot which is to be inserted (13). Then introduce the repair piece into the open pipe line, and push the Funke VPC® Pipe Coupling onto the pipe end presented (14), in accordance with the installation instructions already described (points 3-12). This is of particular advantage with vitrified clay pipes.



13



14

When profiled, corrugated, or ribbed pipes are involved, make sure that the load carrying capacity of the pipe/profile is sufficient, and check the contact areas at the seal surface of the Funke VPC® Pipe Coupling. The slot openings must be free of dirt or stones during the reduction process, so that the diameter adjustment to the individual pipe which is to be connected in each case can be carried out unimpeded. The backfill and compaction of the pipe bed is to be carried out with suitable material, in accordance with the applicable installation guidelines – Standard EN 1610.

Storage

In enclosed areas, ensure there is adequate ventilation, and if stored in the open/outside, protect against intense sunlight/UV radiation.

Installation Recommendation

○ with Tangential Spanner from VPC 290

With ranges from VPC 290 to VPC 995, the use of what is referred to as a Tangential Spanner makes the installation of the VPC® Pipe Coupling considerably easier. First, the range of the pipes which are to be connected is determined, and the sleeve required for this is chosen. The spigot ends are coated with lubricant and then fitted onto the pipe with the larger nominal diameter. Once the Pipe Coupling has been aligned, the VPC® Tangential Spanner with the retaining foot is pushed under the tension sleeves. The spoon of the draw

arm is then hooked into the retaining eye and tightened with a torque wrench. Next, the two tension sleeves are tightened alternately. This procedure is repeated accordingly with the introduction of the other pipe (the right to introduce technical modifications is reserved). The VPC® Tangential Spanner and detailed installation instructions are available from Funke (see the table below for the tightening torque values). For mounting of the versions VPC 1010 to 1070, hybrid tensioners are integrated in the VPC® Pipe Couplings.



Stepless diameter adaptation

| VPC nominal diameter | 290 – 590 mm | 600 – 790 mm | 800 – 995 mm |
|----------------------------------|--------------|--------------|--------------|
| Torque on VPC Tangential Spanner | 17 Nm | 20 Nm | 22 Nm |
| Torque on the tensions sleeves | 9 Nm | 10 Nm | 11 Nm |

Torque setting, right to introduce technical modifications reserved



Whether round or with a foot Perfect transition

Circular concrete pipe transition onto plastic 150 – 800



Adapter for DN 150 special solution

Adapter for transition from plastic (PE, PP, PVC) to circular concrete pipe, DN 250 – DN 800.

VPC® Pipe Coupling

An adapter is available for connecting plastic pipes to circular concrete pipes in nominal diameters DN 250 to 800, which compensates for the substantial difference in the thickness of the pipe wall inevitably incurred by the material.

For connecting plastic pipes to circular concrete pipes with nominal diameter of DN 150, a special solution is available in the form of a small adapter.

Adapter and sleeve for the nominal diameter ranges from DN 250 to DN 800 are available individually. The transition element to a circular concrete pipe with DN 150 is provided in the set (Article No. VPC 150 B).

| Transition | | Product-Code VPC Pipe Coupling | | Product-Code VPC-Adapter KB | Clamping range of VPC Pipe Coupling |
|---|---|--------------------------------|---|-----------------------------|-------------------------------------|
| DN 250 Concrete to DN/OD 250 Plastic | = | VPC 382 | + | VPCBA250 | 315 – 382 mm |
| DN 300 Concrete to DN/OD 315 Plastic | = | VPC 455 | + | VPCBA300 | 385 – 455 mm |
| DN 400 Concrete KW ¹⁾ to DN/OD 400 Plastic | = | VPC 565 | + | VPCBA400 | 495 – 565 mm |
| DN 500 Concrete KW ¹⁾ to DN/OD 500 Plastic | = | VPC 690 | + | VPCBA500 | 620 – 690 mm |
| DN 600 Concrete KW ¹⁾ to DN/OD 630 Plastic | = | VPC 805 | + | VPCBA600 | 735 – 805 mm |
| DN 700 Concrete KW ¹⁾ to DN/OD 710 Plastic | = | VPC 940 | + | VPCBA700 | 870 – 940 mm |
| DN 800 Concrete KW ¹⁾ to DN/OD 800 Plastic | = | VPC 1070 | + | VPCBA800 | 1020 – 1070 mm |

Order-Form for transitions from plastic to concrete (circular) pipes with VPC® Pipe Coupling and VPC®-Adapter KB

¹⁾ KW = circular, increased wall thicknesses



The result: Inside view – centric tight transition!



onto concrete

Transition for concrete pipe with foot (base), DN 150



VPC®-Adapter KB



VPC® Pipe Coupling



VPC®-Adapter 150 BF

The Funke VPC® Pipe Coupling in the VPC 150 BF version (for concrete pipes with outer diameters from 210 to 215 mm) can also be used for connection with a concrete pipe with a foot (base). For this, the VPC®-Adapter 150 BF is needed in addition to the VPC®-Adapter KB.

During installation, the VPC®-Adapter 150 BF is placed onto the existing concrete pipe with a foot in such a way that it closes flush with the edge of the concrete. The VPC® Pipe Coupling is then pushed on, and fitted as described in the installation instructions. The VPC®-Adapter KB is then positioned in front of the concrete pipe and connected in accordance with the installation instructions provided. Both components are available as a set within the scope of supply.



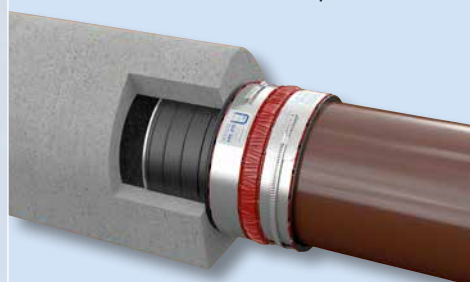
Concrete pipe with foot, with VPC®-Adapter 150 BF drawn on ...



... and in the next step, with the VPC® Pipe Coupling.

Funke BI-Adapter®

To connect pipes with non-circular outer geometry use the Funke BI-Adapter® available from DN 100 up to DN 1000.



Coupling/adaptor for ovoid (egg-shaped) pipe up on request



DN 150 to DN 1000



DN 100 - 200

Table of pipe outer diameters

| | Article-No. | VPC 100 | VPC 125 | VPC 150 | VPC 150 B | VPC 150 BF | VPC 200K | VPC 200G | VPC 220 | VPC 250 | VPC 270 | VPC 382 | VPC 455 | VPC 500 |
|-------------------------|------------------------|------------------|--------------|------------------|--------------|--------------|--------------|-----------------|--------------|-----------------|--------------|--------------|-------------------|--------------|
| Pipe type | Standard | 102-133 mm | 123-161 mm | 160-192 mm | 183-226 mm | 200-261 mm | 183-226 mm | 200, 220-261 mm | 220-261 mm | 250, 270-324 mm | 270-324 mm | 315-382 mm | 385-455 mm | 430-500 mm |
| PVC-U Drainage | DIN EN 1401 | 110 | 125 | 160 | | | 200 | 200 E | | 250 E | | 315 | 400 | 500 |
| KG 2000 | DIN EN 14758 | 110 | 125 | 160 | | | 200 | 200 E | | 250 E | | 315 | 400 | |
| PP | DIN EN 1852 | 110 | 125 | 160 | | | 200 | 200 E | | 250 E | | 315 | 400 | 500 |
| HDPE | DIN EN 12666 | 110 | 125 | 160 | | | 200 | 200 E | | 250 E | | 315 | 400 | 500 |
| GRP | DIN EN 16556/16865 | 116 (DN 100) | 142 (DN 125) | 167 (DN 150) | | | 220 (DN 200) | 220 (DN 200) | 220 (DN 200) | 272 (DN 250) | 272 (DN 250) | 324 (DN 300) | 427 (DN 400) | |
| Ultra Rib | DIN EN 13467 | | | 170 (DN 150) | | | 225 (DN 200) | 225 (DN 200) | 225 (DN 200) | 280 (DN 250) | 280 (DN 250) | 335 (DN 300) | 450 (DN 400) | |
| Robukan PP | DIN EN 13467 | | | 174 (DN 150) | | | | 235 (DN 200) | 235 (DN 200) | 292 (DN 250) | 292 (DN 250) | 346 (DN 300) | | 461 (DN 400) |
| GCI*1 | DIN EN 598 | 118 (DN 100) | 144 (DN 125) | 170 (DN 150) | | | 222 (DN 200) | 222 (DN 200) | 222 (DN 200) | 274 (DN 250) | 274 (DN 250) | 326 (DN 300) | 429 (DN 400) | |
| SML | | 110 (DN 100) | 135 (DN 125) | 160 (DN 150) | | | 210 (DN 200) | | | 274 (DN 250) | 274 (DN 250) | 326 (DN 300) | 429 (DN 400) | |
| VCP*2 N | DIN EN 295 | 122-131 (DN 100) | 159 (DN 125) | 178-186 (DN 150) | | | | 242 (DN 200) | 242 (DN 200) | 299 (DN 250) | 299 (DN 250) | 355 (DN 300) | | 486 (DN 400) |
| VCP*2 H | DIN EN 295 | | | | | | | 254 (DN 200) | 254 (DN 200) | 318 (DN 250) | 318 (DN 250) | 376 (DN 300) | | 492 (DN 400) |
| VCP*2 Clay Jacking Pipe | | | | | 213 (DN 150) | | | | | 276 (DN 200) | 276 (DN 200) | 355 (DN 250) | | |
| FZ Kl. B Fibre Cement | | 118 (DN 100) | 143 (DN 125) | 170 (DN 150) | | | 222 (DN 200) | 222 (DN 200) | 222 (DN 200) | 274 (DN 250) | 274 (DN 250) | 328 (DN 300) | 448 (DN 400) | |
| FZ Kl. A Fibre Cement | | 116 (DN 100) | 141 (DN 125) | 168 (DN 150) | | | 220 (DN 200) | | | | | | 442 (DN 400) | |
| AC | | 116 (DN 100) | 141 (DN 125) | 168 (DN 150) | | | 220 (DN 200) | 220 (DN 200) | 220 (DN 200) | 274 (DN 250) | 274 (DN 250) | 328 (DN 300) | 432 (DN 400) | |
| CCP*3 Concrete Pipe | DIN EN 1916/V1201/4032 | | 144 (DN 100) | | 198 (DN 150) | 215 (DN 150) | 198 (DN 150) | 252 (DN 200) | 252 (DN 200) | 310 (DN 250) | 310 (DN 250) | | 420-455* (DN 300) | |

| | Article-No. | VPC 565 | VPC 590 | VPC 625 | VPC 690 | VPC 730 | VPC 805 | VPC 850 | VPC 905 | VPC 940 | VPC 980 | VPC 1010 | VPC 1070 |
|-------------------------|-------------------|-------------------|--------------|--------------|------------------|--------------|------------------|--------------|-------------------|-------------------|--------------|--------------------|---------------------|
| Pipe type | Standard | 495-565 mm | 520-590 mm | 555-625 mm | 620-690 mm | 660-730 mm | 735-805 mm | 780-850 mm | 835-905 mm | 870-940 mm | 910-980 mm | 960-1010 mm | 1020-1070 mm |
| PVC-U Drainage | DIN EN 1401 | 500 | | | 630 | 710 | 800 | | 900 | 900 | | 1000 | |
| KG 2000 | DIN EN 14758 | | | | | | | | | | | | |
| PP | DIN EN 1852 | 500 | | | 630 | 710 | 800 | | 900 | 900 | | 1000 | |
| HDPE | DIN EN 12666 | 500 | | | 630 | 710 | 800 | | 900 | 900 | | 1000 | |
| GRP | DIN EN 14364 | 530 (DN 500) | 530 (DN 500) | 616 (DN 600) | | 718 (DN 700) | | 820 (DN 800) | | 924 (DN 900) | 924 (DN 900) | | 1026 (DN 1000) |
| Ultra Rib | DIN EN 13467 | 560 (DN 500) | 560 (DN 500) | | | | | | | | | | |
| Robukan PP | DIN EN 13467 | | 585 (DN 500) | 585 (DN 500) | | 693 (DN 600) | | | | | | | |
| GCI*1 | DIN EN 598 | 532 (DN 500) | 532 (DN 500) | | 635 (DN 600) | | 738 (DN 700) | 842 (DN 800) | 842 (DN 800) | | 945 (DN 900) | | 1048 (DN 1000) |
| SML | | 532 (DN 500) | 532 (DN 500) | | 635 (DN 600) | | | | | | | | |
| VCP*2 N | DIN EN 295 | | 581 (DN 500) | 581 (DN 500) | 687 (DN 600) | | 795 (DN 700) | 795 (DN 700) | | 895 (DN 800) | | 1008 (DN 900) | |
| VCP*2 H | DIN EN 295 | | | 609 (DN 500) | | 725 (DN 600) | | 831 (DN 700) | | | 941 (DN 800) | | |
| VCP*2 Clay Jacking Pipe | | 556 (DN 400) | 556 (DN 400) | 556 (DN 400) | 658 (DN 500) | | | | 862 (DN 800) | | | 970 (DN 800) | |
| FZ Kl. B Fibre Cement | | 556 (DN 500) | 556 (DN 500) | 556 (DN 500) | 664 (DN 600) | | 778 (DN 700) | | 888 (DN 800) | 888 (DN 800) | | 998 (DN 900) | |
| FZ Kl. A Fibre Cement | | 552 (DN 500) | 552 (DN 500) | | 658 (DN 500) | | 768 (DN 700) | | 876 (DN 800) | 876 (DN 800) | 961 (DN 900) | | 1068 (DN 1000) |
| AC | | 540 (DN 500) | 540 (DN 500) | | 646 (DN 500) | | 750 (DN 700) | | 856 (DN 800) | | 961 (DN 900) | | 1068 (DN 1000) |
| CCP*3 Concrete Pipe | DIN EN 1916/V1201 | 530-565* (DN 400) | | | 640-690 (DN 500) | | 760-800 (DN 600) | | 835-905* (DN 700) | 870-930* (DN 700) | | 980-1010* (DN 800) | 1000-1070* (DN 800) |

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GCI*1 = grey cast iron
 VCP*2 = vitrified clay pipe
 CCP*3 = circular concrete pipe
 *Varying dimensions due to regional requirements possible.

Values in mm, E = Eccentric ring
 The dimensions correspond to the standards and guidelines specified. Maximum tolerances have not been taken into account. Tolerances inevitably incurred by the manufacturers are also possible.