



Funke VPS Turbo

DN/OD 160

Create sewer connections –
now even safer and faster

- ✓ with DIBt approval: Z-84.2-19
- ✓ bio-attributed PVC-U*

Funke VPS Turbo

Precise connection from DN 300 to 2400



Connection to concrete pipe



Connection to vitrified clay pipe



Connection to plastic pipe

Background

The lateral connection of sewer connection pipes to existing main pipes is an essential factor in drainage systems. Precise execution and a permanently tight and mechanically resilient connection are particularly important for retrofitted connections. The challenge lies in the different pipe materials, such as concrete, vitrified clay or plastic, as well as in varying wall thicknesses and pipe dimensions.

The product

The Funke VPS Turbo is a solution for such tasks, designed for retrofitting into sewer pipes with nominal diameters from DN 300 to DN 2400 – regardless of the wall thickness and material of the main pipe.

Even if the main pipe is not standardized and/or cannot be precisely defined in advance, lateral connection with the Funke VPS Turbo is quick and easy. Installation requires no special tools, only a cordless drill (at least 18V battery) with an SW19 socket. A specially developed shear bolt ensures the required tightening torque and thus the contact pressure of the seal.

Form-fitting and force-fitting

The design of the Funke VPS Turbo is based on a combination of a support structure, a sealing collar and a specially constructed seal. The sealing collar adapts continuously to the inner contour of the drill hole edge in the main pipe. This adaptation allows it to follow the curvature along the



Funke VPS Turbo Type A and Type B



Connection to profiled pipe



Scope of delivery: Funke VPS Turbo, special lubricant, brush and installation instructions

Funke VPS Turbo

Item description	Pipe wall thickness min. max.		Main pipes DN	Core bore mm	Connection DN/OD
Funke VPS Turbo Type A DN/OD 160	50 mm	120 mm*	300–2400	187–189	160
Funke VPS Turbo Type B DN/OD 160	7 mm	80 mm*			

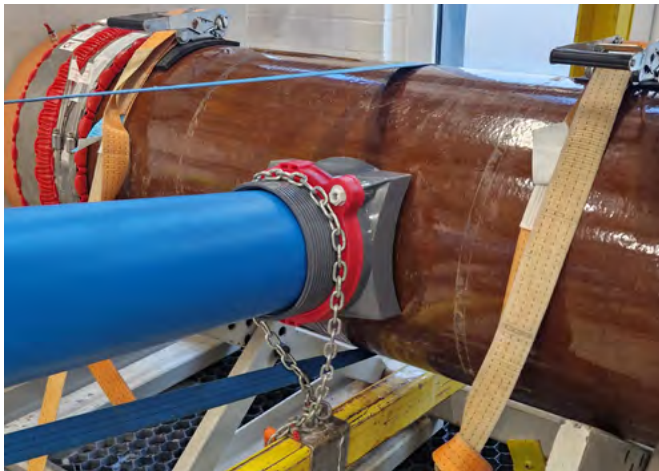
* Above this pipe wall thickness, at least one extension piece must be used.

Extension piece

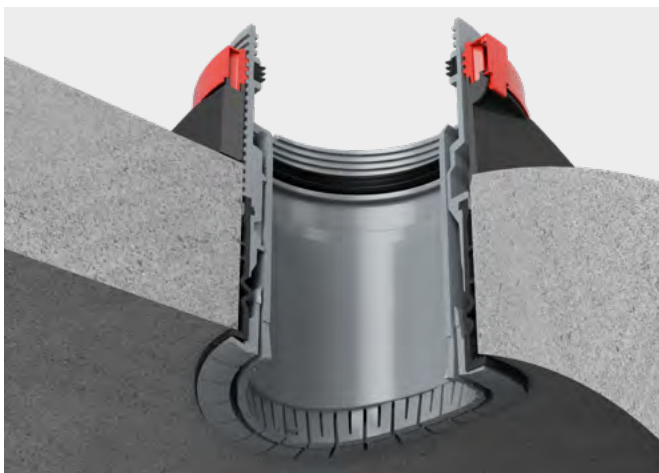
Item description	Useful length
Funke VPS extension piece DN/OD 160	70 mm

Advantages

- Retrofitting into sewer pipes with nominal diameters of DN 300–2400
- For wall thicknesses from 7 mm
- Suitable for almost all wall thicknesses, wall geometries and pipe materials
- Compact design
- Core bore size DN/OD 160: 187–189 mm
- The connection is form- and force fitting to the main pipe and cannot be pulled out
- The flexible sealing collar is adjustable in three-dimensions
- The connection pipe of the socket can be angled continuously from 0° to 7°
- Simple, quick and secure installation using a cordless drill



Leak test in accordance with DIN 4060



Optimal fit of the Funke VPS Turbo in the drill hole

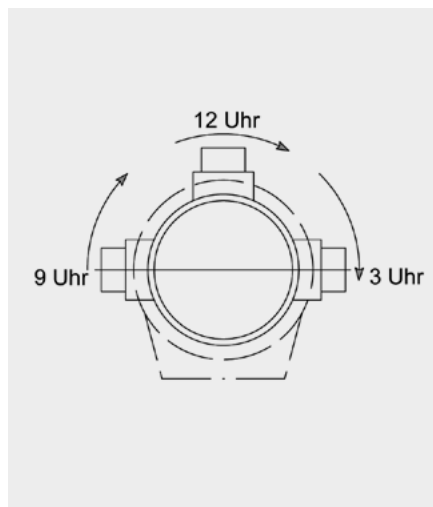
drill edge and form an even surface. This creates a seamless connection that also has a stabilizing effect. A seal is located below the flexible sealing collar, which is pressed evenly and flat during installation.

The interaction of these components results in a form-fitting and force-fitting connection with the main pipe. This supports both the tightness and the mechanical safety of the connection. It also prevents the connection from being pulled out of the main pipe.

Funke VPS Turbo

Quick guide to installation

You can find all the
information on Funke sewer
connections made from
bio-attributed PVC-U here:



Installation is particularly convenient. It requires no special tools and can be performed directly with a cordless drill/driver (SW19). Once the correct tightening torque is reached, the specially designed shear screw breaks off automatically. This ensures optimal contact pressure for the seal. This saves time and immediately ensures a tight and secure result.

For plastic and fiberglass-reinforced plastic (FRP) pipes, the hole is drilled using a drill bit and centering pin at a 90° angle to the pipe axis. It is important to ensure the correct position between 9 and 3 o'clock; for reinforced pipes, 9, 12, or 3 o'clock is preferred. The Funke VPS Turbo must not be installed below the 3 or 9 o'clock positions. After marking and pre-drilling, core drilling is performed, followed by deburring the edges and checking the diameter. For concrete and vitrified clay pipes, guided, fixed drilling

is absolutely required. The feed rate is reduced at the end of drilling to prevent chipping. In reinforced concrete, the exposed rebar must be protected. For pipes with greater wall thicknesses, extension pieces are required.

Before installation, apply lubricant to the seal and the bore. Press the fitting into place while aligning the push rod at a 90° angle so that the seal seats properly and does not slip. The fitting is then moved to its final position using the push rod, until it audibly clicks into place. Check that the seal and—for Type B—the centering tabs are correctly positioned. Finally, remove the push rod and perform a final inspection of the seal's fit, both inside and out.

For more information, please refer to the detailed installation instructions.



What does bio-attributed PVC-U mean?

*Bio-attributed PVC-U means that the proportion of bio-based raw material is allocated to the product using a mass balance method. For every product purchased with this attribute, we buy and process the corresponding quantity of bio-attributed PVC-U. In this way, we reduce the proportion of conventional fossil resources in our production chain.

Since 1 January 2025, we have been using bio-attributed PVC-U for all our sewer connections.

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Scope of application
Sewer connections

