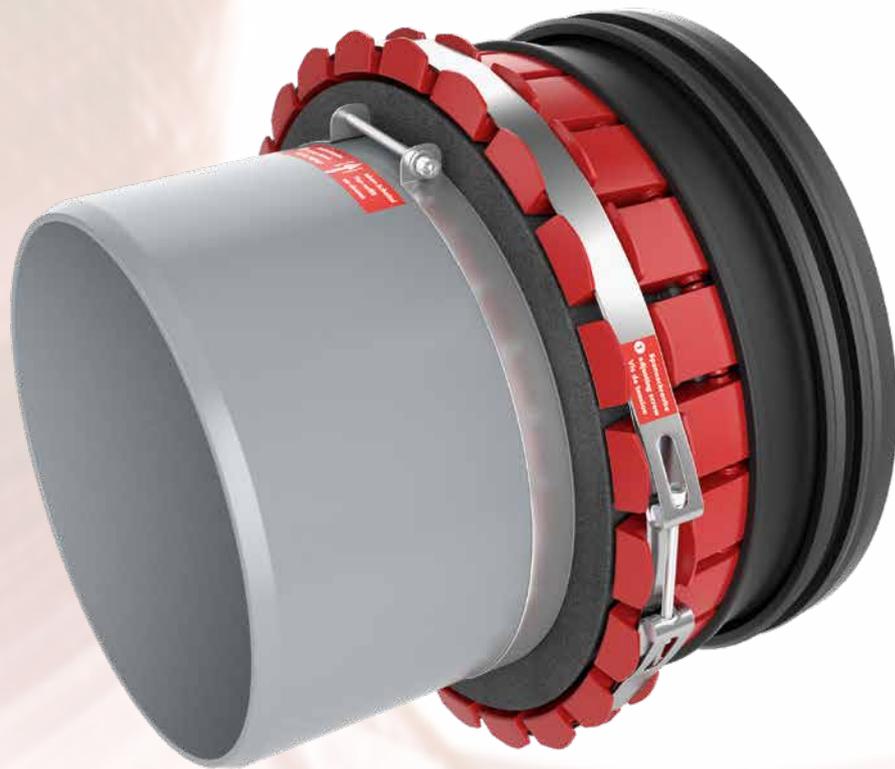


Funke BSM-Adapter®

Connection of PVC pipes with concrete sockets, clay sockets and chambers



easy – flexible – fast

Level-invert with the **Funke**

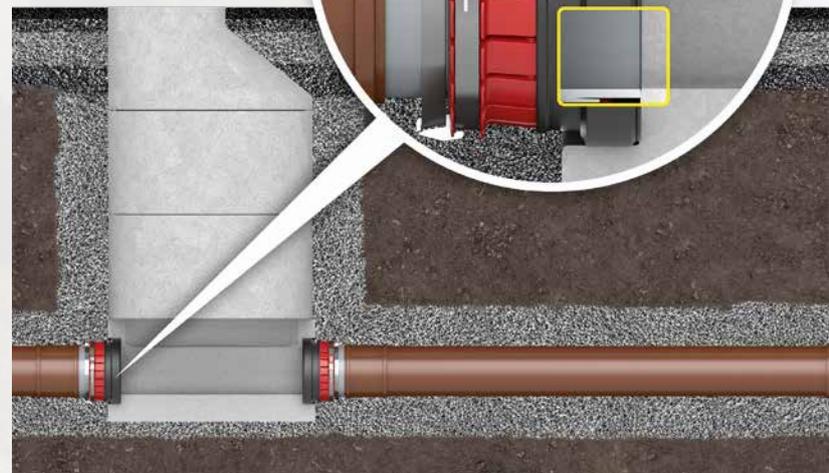
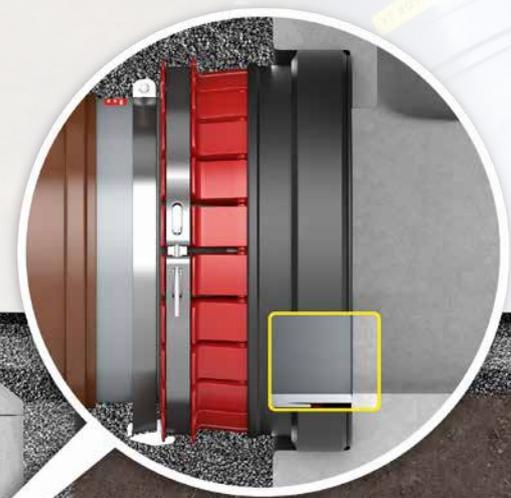
With the BSM-Adapter, Funke is introducing a solution to the market that enables level-invert transitions from pipes to chambers as well as from pipes to pipe sockets made of rigid materials such as clay and concrete. The BSM-Adapter is universally applicable to concrete or clay sockets of any design with a given nominal diameter. This solution makes it possible to set up transitions to concrete bell sockets with or without integrated seals as well as transitions to high-load or normal-load sockets made of clay. As such, it does not matter whether the socket to which the connection will be made features an integrated seal.

T-socket wrench

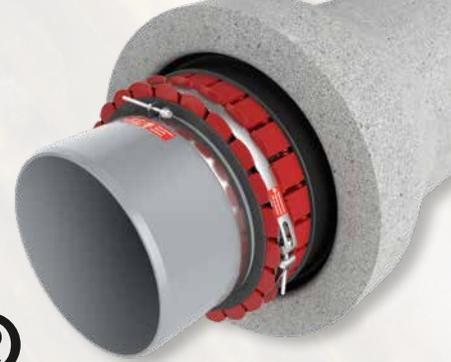


Cost and time savings

Using the BSM-Adapter on site ensures efficient construction processes in pipe trenches: In the past, the pipe socket had to be cut to a spigot in order to create a transition to the socket end of an old pipe. This step was time-consuming and costly – and now the BSM-Adapter makes it unnecessary. This component also pays off when it comes to replacing old pipelines. Integrating the new pipes into existing chamber structures is usually difficult; however, the BSM-Adapter enables the tight connection of the new pipes directly to the old chamber sockets as required by DIN EN 1610.



transition BSM-Adapter®



Nominal Diameters	Code	Socket-Internal-Diameter (Clamping Range) mm	Torque Clamping Bolt (Nm)
DN 250	BSM250	315 – 350	6
DN 300	BSM300	370 – 405	7
DN 400	BSM400	480 – 520	9
DN 500	BSM500	580 – 645	12

Additional diameters are in preparation.

The product

The Funke BSM-Adapter® consists of a body encircled by a row of toggles, which are contracted with the help of a robust stainless steel clamp – the seal encircling the device expands and is compressed into the clay or concrete socket. It is important to note that the toggle structure features a very large clamping range. It can accommodate changes in the diameter of the clamp seal of 35 to 40 mm, depending on the nominal diameter.

Moreover, the eccentric arrangement of the toggles ensures that the transition is always at level-invert. The adaptors extremely large clamping range, which is available in nominal diameters of DN 250 to DN 500, also means that this system can be used for many different applications.

Each BSM-Adapter is supplied with a pre-assembled jacketed gasket, a 6 mm T-socket Allen wrench and the installation instructions.



Level-invert transitions: After pre-tensioning the clamping screws, the T-socket wrench is applied to the set screw on the top (arrow) to bring the components to invert-level. This also ensures the absorption of shear forces, thanks to the design. Please note the detailed installation instructions enclosed with the BSM-Adapter.



Installation of the Funke BSM-Adapter®



Cleaning/visual inspection/repairing the socket

In the first step, check that the inner diameter of the socket is within the clamping range according to the table (1). For concrete sockets with an integrated seal, the inner dimension of the seal is decisive. Remove dirt from the socket using a hand brush, cleaning rag and/or wire brush (2). It may be possible to mend any chipping or denting in the socket using appropriate filler material. The BSM-Adapter cannot be used in the event of visible cracks in or considerable damage to the socket.

Insert the BSM-Adapter into the socket (without lubricant!)

First, place the BSM-Adapter at the bottom of the socket (3), and then lift it until it comes to rest fully against the back of the socket. If the BSM-Adapter is too big, the jacketed gasket must be removed (4), (does not apply to concrete pipe sockets without a seal). Slight pressure during installation ensures that the socket opening is constant around the circumference and kept as small as possible.

Applying pre-tension

The two clamping bolts (on the right and left on the clamping strip) are alternately tightened by five (5) turns each, until slight resistance is felt in the T-socket wrench. The BSM-Adapter fit must be so tight that it remains stuck in the socket when it is let go. Perform a visual inspection (14) and, with

your fingers, check (10) that the socket opening is as small as possible and the same all around the circumference.

Setting the height of the pipe invert

Now, using the set screw, adjust the height of the pipe invert of the BSM-Adapter with respect to the pipe (or chamber) that is to be connected (6). Also see Figure 14 (prior to the adjustment of the pipe invert) and Figure 15 (after adjusting the pipe invert).

IMPORTANT NOTE: In any case, the set screw must be turned until the bottom of the BSM-Adapter moves up slightly against the pipe bottom or until there is clear resistance at the set screw. Only then the height adjustment/shear-load safety is activated.

Clamping the BSM-Adapter

Check the match between the pipe bottom and the pipe invert of the BSM-Adapter again visually (14) and using your fingers (10). Then alternately tighten the clamping bolts by about five turns, until clear resistance can be felt in the wrench (7). Subsequently tighten both clamping bolts according to the table using a torque wrench (8–9). Finally, check whether the BSM-Adapter fits properly (14)/(10). Transitions to other pipe materials can be realised by means of a Funke VPC® Pipe Coupling, for example (13).

