

New!

Funke FHS[®]-Coupling



reducible – form-fit – leak-proof



The FHS®-Coupling connects wastewater pipes made of different materials and with different outside diameters and surface structures.

The FHS®-Coupling for

The Background

Taking the facts and figures from Germany as an example, the figures show that the connection rate of the population to the public sewage system is 96 %. More than 40 million households have pipes in a wide range of nominal diameters and materials, through which an average of more than 120 litres of wastewater flows per capita per day. In particular, when renovating unpressurised sewage pipes and repairing damage, installers depend on products that are easy to handle on site – for example, when it comes to connecting pipes with different outside diameters and materials.

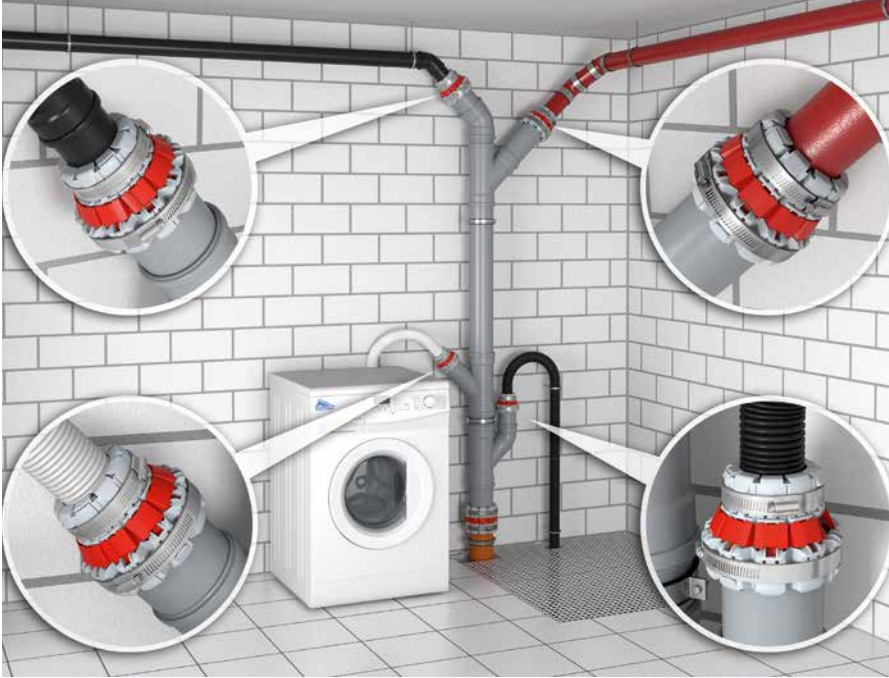
Funke offers a fast, flexible and tight solution with the Funke FHS®-Coupling 40 – 110 mm that can be used both inside and outside buildings.

The product

The newly developed grey-red-grey Funke FHS®-Coupling – which easily withstands a test pressure of 1.5 bar – is suitable for connecting wastewater pipes made of different materials and with different outside diameters and surface structures. The FHS®-Coupling is tested according to DIN EN 16397.

Depending on the clamping range, pipe connections with different outside diameters and/or different nominal diameters are also possible, e.g. high temperature pipes DN 40 (outside diameter 40 mm) can be connected with cast iron pipes DN 50





Item No.	clamping range	width	max. reduction	insertion depth
FHS40	40 – 65 mm	85 mm	25 mm	40 mm
FHS50	50 – 80 mm	85 mm	30 mm	40 mm
FHS75	75 – 110 mm	85 mm	35 mm	40 mm

For larger nominal diameters, Funke offers alternative solutions on request.

(outside diameter 58 mm). The FHS®-Coupling can be installed both horizontally and vertically and can be used in the ground as well as under plaster. Pipes made of all common materials such as cast iron, steel, PP, PE, PVC, clay and other smooth or corrugated pipes can be joined in nominal diameter ranges from DN/OD 40 to DN/OD 110. The possible clamping ranges in the above nominal diameters are 40 to 65 mm, 50 to 80 mm and 75 to 110 mm.



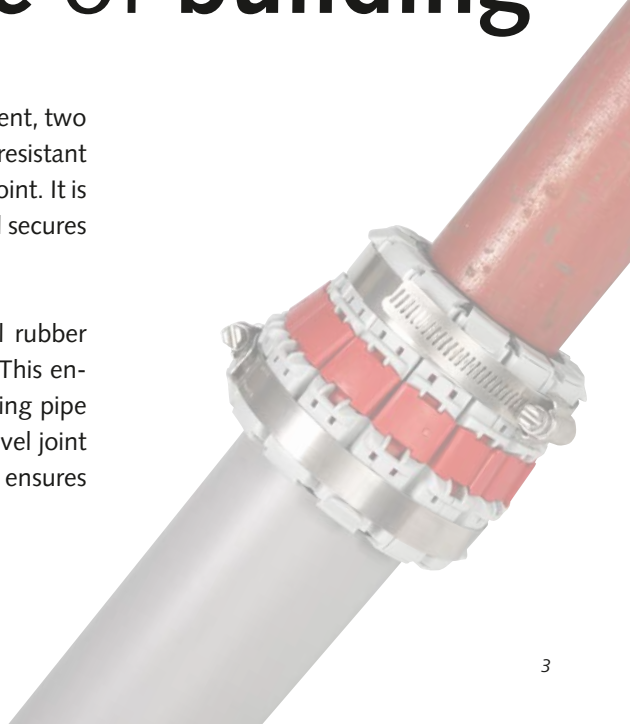
A separately available reducer for insertion into the FHS75 enables a nominal width reduction from 110 to 50 mm.

Pipe connections inside and outside of building

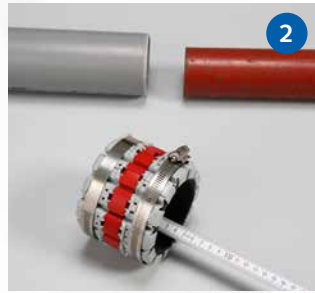
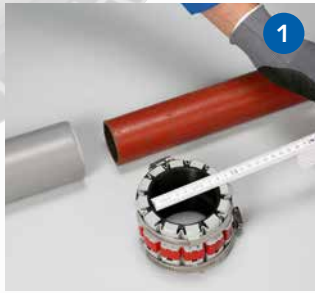
Extremely flexible with simultaneous shear load safety

The three-part swivel joint coupling consists of a special EPDM sealing element, two clamping clamps and a three-part, adaptable fixing body made of impact-resistant plastic segments, which are connected to each other via a positive-locking joint. It is extremely flexible due to its design, has a high shear load capacity, fixes and secures the pipes to be connected perfectly and can be reduced to a maximum.

Due to the special construction of the plastic segments and the internal rubber sleeve, the pipe stop automatically adjusts to different outside diameters. This ensures a perfect fit and optimum adaptation of the component to the existing pipe geometries. After the plastic segments have been hand-tightened, the swivel joint coupling fits positively against the pipes to be connected. The rubber sleeve ensures the required tightness.



Installation of the Funke FHS®-Coupling



Outside diameters of the pipes to be connected are measured and compared with the clamping range of the FHS®-Coupling (1). The clamping range can be taken from the installation instructions (see also table on page 3) or determined by direct measurement on the coupling.



The required insertion depth of the pipe into the FHS®-Coupling can be determined by measuring the coupling (2). The rule of thumb is: When connecting pipes with the same outside diameters, the insertion depth is approx. 40 mm in each case – the pipes are then "butted" in the coupling.

TIP: After determining the insertion depth, an appropriate marking can be made on the pipe (3).



When connecting pipes with different outside diameters, the FHS®-Coupling can be tightened by tightening the tensioning straps adapted to the respective outside diameters. The pipe stop for the larger pipe is formed automatically due to the centric reduction in each case. It can be inserted into the FHS®-Coupling as far as it will go and tightened hand-tight. The smaller pipe can be pushed in up to the stop or up to the previously marked insertion depth (approx. 40 mm) and also tightened (4 – 7).

To facilitate the insertion of the pipes into the FHS®-Coupling, the enclosed lubricant should be applied to the tips of the pipes as required.



Finally, the two turnbuckles are tightened with a torque of at least 8 Nm. A hexagon socket wrench (SW = 8 mm) with a T-handle (8) is suitable for this purpose. For frequent use, we recommend the use of a reversible ratchet set.



FHS®-Coupling in cardboard packaging



socket wrench

