

The FABEKUN[®] Junction with adjustable socket

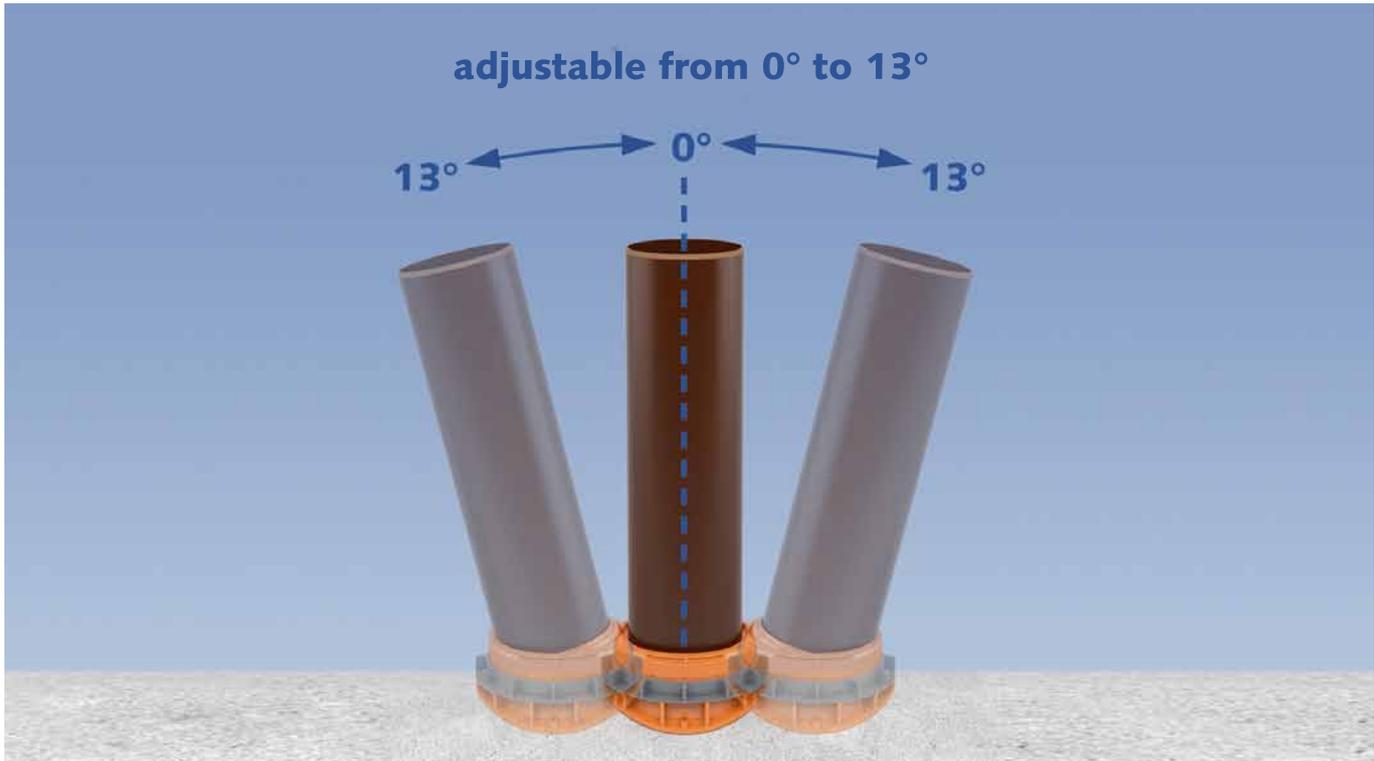
wrc
approved™
PT/357/1213



adjustable from 0° to 13°

FABEKUN® Junction

Creating tension-free sewer connections



The FABEKUN® Junction with an adjustable socket of DN/OD 160 can be adjusted between 0° – 13°.

The FABEKUN® Junction with DN/OD 160 and DN/OD 200 sockets is suitable for the connection to concrete or reinforced concrete pipes (EN 1917) and – starting from a wall thickness of 30 mm – also for clay pipes. Thanks to its three dimensional seals it adapts ideally to the inner radius of the main pipe.

The adjustable socket allows the connection to be bend within a range from 0° to 13° and compensates the different settlement behaviour of the main pipe and the lateral pipe. Thus, the requirements of many national standards such as **DWA-A 139** are fulfilled.

Easy to handle, it is suitable for all regular pipe diameters (DN 250 – DN 1800, with a DN 160 connection, DN 400 – DN 2400 with a DN 200 connection).

*Including
DIBt Approval
Z-42.1-306*



DIBt approval of the German Institute for building technology and also approved in the U.K. by WRC, Anglian Water, Thames Water, United Utilities, Northumbrian Water, Yorkshire Water, Severn Trent Water, Southern Water, Welsh Water and South West Water. For more details contact water companies or supplier.

The advantages in practice:

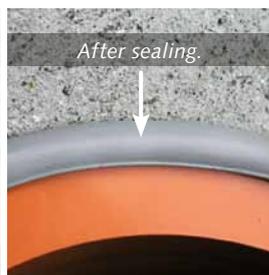
- Tension-free lateral connections
- Bedding for pipes remains preserved upon installation
- No interruption to sewerage operations during installation
- Protection of the entire bore hole
- Resistant against sheering loads after compaction
- Steel reinforcement protected against corrosion



Correct Coredrilling.



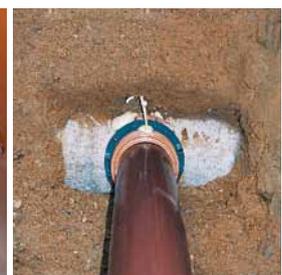
Junction is in the right position but not compressed.



Junction is compressed and the sealing is complete.



Correct installation of the junction.



Junction is installed in a concrete pipe connecting a DN 160 mm diameter HS-Pipe Sewer.



Cross section through a test piece.



Steel surface below the expansion resin layer in an immersion trial.



Unprotected steel surface subjected to an immersion trial.



With a cartridge and a mixing tube, the resin can be filled in directly via the filling opening in the distance ring.



Corrosion protection tested by Federal Institute for Material Research and Testing, Berlin (BAM).

The FABEKUN® Junction with adjustable socket can be used for concrete pipes in accordance with DIN 4032 (BS5911 UK standard) and for ferroconcrete pipes in accordance with DIN 4035 vitrified clay pipe to BS EN 295. Using the injected two-part resin, the junction is firmly anchored into the drilled hole in the concrete pipes and the exposed reinforcement in

the curvature of ferroconcrete pipes is protected so that no corrosion can occur. This has been proven by a range of tests at the Federal Institute for Material Research and Testing, Berlin (BAM) and confirmed by the Institute for Building Technology, Berlin (Certificate No.: Z-42.1-306).

Each junction is packaged in a box as a set. Spanners for the threaded ring, and the cartridge gun can be obtained from the manufacturer.



Installation kit

Supply Range and Accessories



Supply range

Code	Main Pipe DN	Branch HS/KG DN/OD	DI Ø Internal Diameter mm	Bore Hole ± 1 mm	Pipe Wall Thickness min. mm	Pipe Wall Thickness max. mm
FAS250150	250	160	160	200	30	105
FAS300150	300	160	160	200	30	85
FAS300150L	300 L	160	160	200	85	170
FAS400150	400	160	160	200	30	115
FAS400150L	400 L	160	160	200	115	170
FAS500150	500-600	160	160	200	30	125
FAS500150L	500 L	160	160	200	115	180
FAS700150	700-1800	160	160	200	30	185
FAS700150L	700-1800 L	160	160	200	185	300
FAS400200	400	200	200	257	50	100
FAS500200	500-600	200	200	257	50	120
FAS700200	700-1100	200	200	257	50	200
FAS1200200	1200-2400	200	200	257	50	230
FASGW200	GW 200	200	200	257	50	230

For main pipe DN 450 use uniTec or contact Funke or a national Funke distributor. Junctions for thicker walls on request.

FABEKUN Accessories:

Code	Description	Code	Description	Code	Description
FAGEWINDES	Spanner 160	FAGEWINDS2	Spanner 200	KPISTOLE	Cartridge Gun

Installation instructions

FABEKUN® Junction with adjustable socket DN/OD 160

The drilled hole should be made centrally at 90 degrees. We recommend that pipes with a flat base be drilled at 9, 12 or 3 o'clock and fully round pipes between 9 and 3 o'clock (1+2). After correctly completing the core drilling (200 ± 1 mm for connecting a DN 160 saddle), the edges at the bottom end of the bore must be deburred. The drilling must be always carried out without any flaking. For the last third of the drilling, halve the feed of the drill bit. Clean the drilled hole (3). Before installation always check the nominal sizes of the junction and the main pipe (stamped on the base). Smear the seal and thread with the lubricant provided (4+5). Further work steps: Raise the distance ring, grip the threaded ring and push the junction piece into the hole (6+7). The arrow in Picture 6 shows the filling hole in the distance ring for the ASSIL expansion resin. Pull up the junction saddle piece with one hand and with the other screw down the grey threaded ring (8). With DN 160 junction, the direction of flow is shown by the curvature of the distance ring. The direction of flow in the pipe must match the radius of the junction. The groove in the junction piece acts as a guide for the distance ring and must face upwards (6). Tighten the threaded ring with the threaded ring spanner so that the bottom seal is compressed firmly between the junction and the pipe (9). The threaded-ring spanner can be obtained from the manufacturer. Check that the bottom seal and the top distance ring are seated correctly (10). The junction is fitted with a coupler for DN 160 HS pipes and EN 1401 UD (Underground Drainage) pipes. Adapters are available for other pipes.

Applying the ASSIL expansion resin

The bonding surfaces must be free of grease and dust. Remove the dust cap on the cartridge, screw on the mixer tube and fit the cartridge into the gun (11). Insert the black adaptor (one in every carton). Insert the point of the mixer tube into the 8 mm Ø hole in the distance ring and quickly empty the cartridge using a uniform pressure (12). Excessive resin will force itself outwards. Leave the cartridge and the mixing tube in the filling hole until resin has been uniformly distributed, after around five minutes (13). Carry out a "touch test". If expansion resin has escaped inwards, tighten once more with the threaded-ring spanner (14). For site protection or pressure tests.

The following quantities of expansion resin are needed:

DN 250 – 600/160 junctions = 1 cartridge

DN 700 – 1200/160 junctions = 2 cartridges

Attention!

Store the junction and cartridges in a dry frost-free place. When using, the temperature of the material should not go below +5°C. After about 20 minutes the resin is no longer tacky and after two hours it is completely hardened. Fresh resin splashes can be removed with PU cleaner, Acetone etc. Work can continue immediately as the reaction of the resin is not impaired by the construction work.

