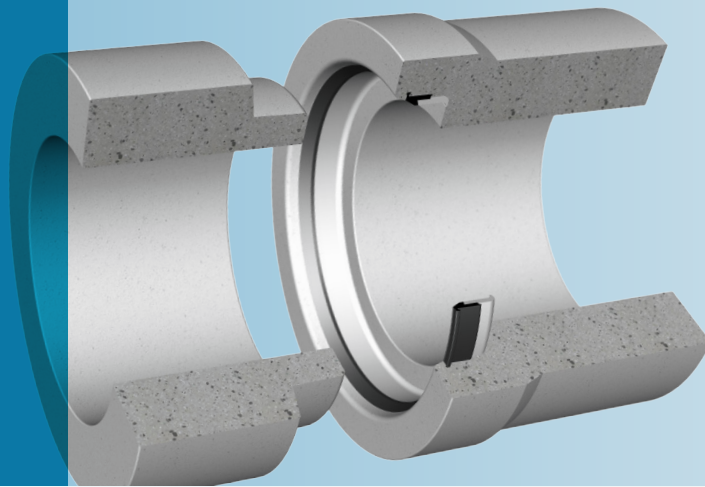


Forsheda 103

Glipp Sealing System

Integrated seal for
concrete pipe and
manhole systems



SEAL DESIGN AND FUNCTION

Forsheda 103 is an integrated sealing system that is cast into the socket during pipe or manhole manufacture. The system can also be used for concrete pipe connections to manholes. Pallet and joint drawings are available from Trelleborg Pipe Seals on request.

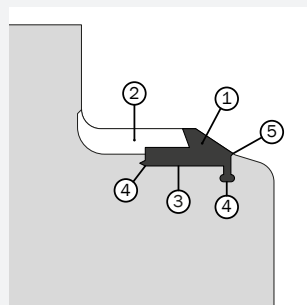
1. The elastomeric sealing element is a combined lip and compression seal.

2. The cast in protective strip of cellular plastic forms part of the system together with the rubber sealing element. During manufacture, storage, transport and handling the protective strip remains in the pipe socket. It prevents sand, clay, ice or snow entering the sealing area. It is removed in the trench before the pipes are assembled.

3. The compression section absorbs transverse shear load in the joint and prevents concrete to concrete contact.

4. The retaining elements or anchors are cast into the concrete during pipe manufacture and secure the seal in the correct position.

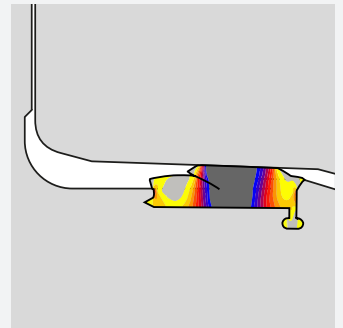
5. The slurry lip seals against the pallet preventing ingress during concrete compaction.



Typical joint design

SEAL PERFORMANCE

The Forsheda 103 meets all relevant European standards. Joint performance is dependent on dimensional accuracy and surface finish of the socket and spigot. Test reports are available from Trelleborg Pipe Seals on request.



MATERIAL

Synthetic SBR or EPDM rubber

Hardness 40±5 IRHD

Approved in accordance with EN 681-1

Protected against ozone

Oil resistant grades are available on request

QUALITY ASSURANCE

ISO 9001

British Standard "Kitemark"

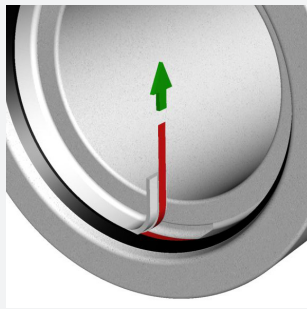
CE-marking

JOINT ASSEMBLY

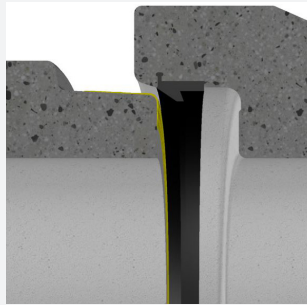
Inspect the pipes and ensure they are in good condition. The white protective strip in the socket helps to keep the sealing area free from dirt, mud and gravel.



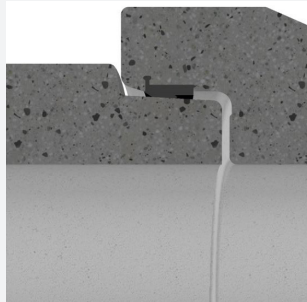
Remove the protective strip by gripping the tape and pulling towards the centre of the pipe. Small parts of the strip can remain in the pipe without affecting the joint performance.



Ensure the spigot and socket are clean. Apply lubricant to the spigot. This should be spread evenly over the entire surface paying special attention to the front radius of the spigot.

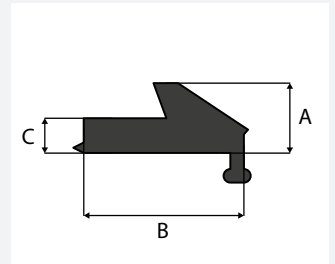


Centre the spigot into the socket and push the pipes together. The socket design and wedge shaped seal provide a funnel action and help centre the pipes.



SEAL MARKING AND BOX LABELS

Each seal is marked with seal dimensions as well as the manufacturing date. The box is labelled with the corresponding data.



EXAMPLES OF SIZES (MM)

| Pipe DN | A - mm | B - mm | C - mm |
|-----------|--------|--------|--------|
| 150-200 | 10.0 | 24.5 | 5.0 |
| 225-300 | 12.0 | 28.5 | 6.0 |
| 300-675 | 14.0 | 33.8 | 7.0 |
| 700-1200 | 18.0 | 43.4 | 9.0 |
| 1200-1600 | 22.0 | 53.0 | 11.0 |
| 1800-2100 | 26.0 | 62.4 | 13.0 |
| >2100 | 30.0 | 72.0 | 15.0 |

Please contact Trelleborg Pipe Seals for technical advice and joint design recommendations to meet your performance requirements. Manholes and pipes with Forsheda 103 shall always be laid in accordance with applicable standards and regulations.

Examples of authorities Trelleborg Pipe Seals cooperates with:



WWW.TRELLEBORG.COM/PIPE-SEALS