

Assembly and installation instructions

LORO-XML steel discharge pipes, DN 250/DN 300

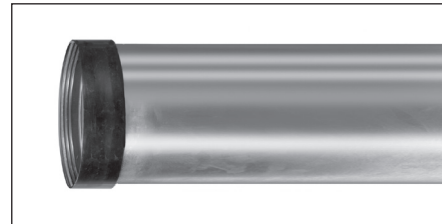
Technical status: April 2018.
Subject to technical changes.

Follow the assembly instructions and notes below for the professional assembly of LORO-XML pipes.

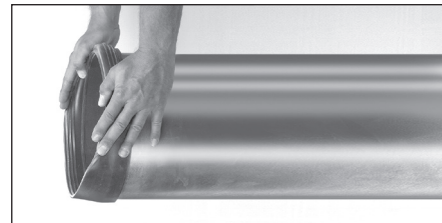
Particular attention should be paid to the notes regarding the longitudinal force fit of the connections for pressurised pipes as well as the fastenings of the pipes.

1. Making the LORO-XML pipe connection

1.1 Push the EPDM sealing sleeve onto the end of the pipe. The internal spacer ring must rest evenly on the pipe rim.



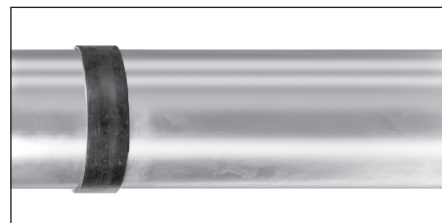
1.2 Turn the top half of the sealing sleeve inside out.
Attention: please check whether the central lip lies between both pipe ends.



1.3 Place the next pipe or fitting flush and centrally against the spacer ring.



1.4 Fold back the inverted half of the sealing sleeve the right way around.



1.5 Place the clamping sleeve around the sealing sleeve. Tighten the two clamping screws alternately, evenly with a tightening torque of 15 - 20 Nm. The guide and threaded plates of the closure must push themselves together parallel to one another.



2. Cutting the pipes to length

LORO-XML pipes are supplied in the nominal diameters DN 250 and DN 300 and in lengths of 1.0 and 3.0 m. They can be cut using pipe cutters, electric hacksaws or angle grinders.

The cut surfaces must be deburred.

Important: The cut must be implemented at a right-angle to the pipe axis.

3. Connection using CV connectors

The connection consists of two parts: The clamping sleeve made of rustproof steel and the sealing sleeve made of EPDM.

Tools for making the connection: screwdriver, box spanner, impact screwdriver and torque wrench.

4. Fastening LORO-XML pipes

The distances between the fastenings should be as even as possible and should not exceed a distance of 2.0 m. Pipes of 2.0 m or more in length must be fastened twice, shorter pipes at least once.

The fastenings should be mounted at even distances between the connectors, wherein the distance of 750 mm before and after a connection is not to be exceeded.

Downpipes are to be additionally supported by a downpipe support before the transition to an underground pipe or to a turn to the horizontal. In the case of longer downpipes, downpipe supports are to be installed at distances of 12.0 m.

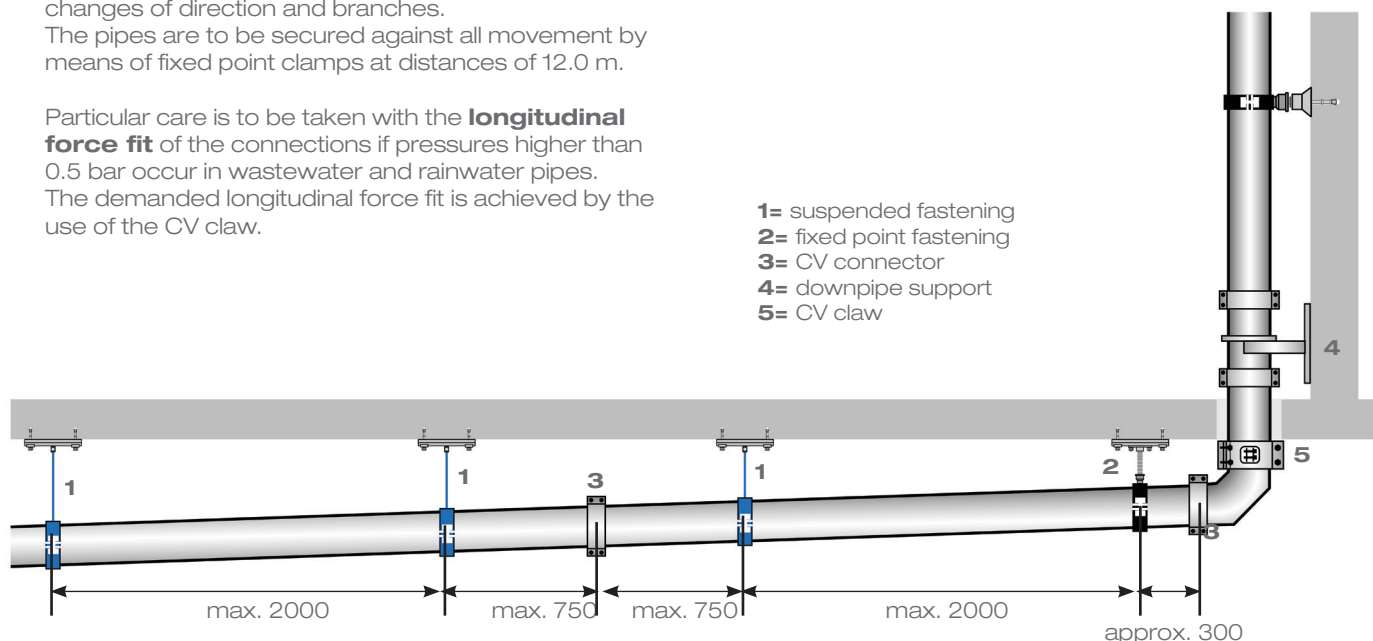
Horizontal pipes must be adequately fastened at all changes of direction and branches.

The pipes are to be secured against all movement by means of fixed point clamps at distances of 12.0 m.

Particular care is to be taken with the **longitudinal force fit** of the connections if pressures higher than 0.5 bar occur in wastewater and rainwater pipes. The demanded longitudinal force fit is achieved by the use of the CV claw.

LORO-XML pipes in the LORO-DRAINJET[®] rapid drainage system must be secured with **CV claws** according to the "LORO DRAINJET[®]" installation instructions.

Pipe clips, CV connectors, CV claws and downpipe supports are included in the LORO-X sleeveless steel discharge pipe range. Accessories such as rail mounting systems, downpipe support holders and fixed point clamps are not supplied by LOROWERK. We would refer you here to companies such as Bis-Walraven and Hilti.



- 1= suspended fastening
- 2= fixed point fastening
- 3= CV connector
- 4= downpipe support
- 5= CV claw

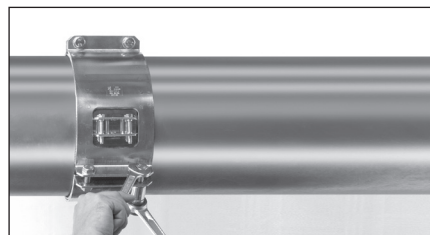
Weight in kg/m	DN 250	DN 300
LORO-XML pipe	24.2	31.7
LORO-XML pipe completely filled with water	81.7	110.0

5. Assembly instructions for CV claw

Place the individual segments of the CV claw with a cut-out over the screw connection of the CV connector and bolt loosely. The claw tips of the CV connector must seize the pipe and not the edge of the CV connector.

In order to ensure even seating of the CV claw, the bolts are tightened alternately and diagonally; the distance between clamping parts should as far as possible be the same and parallel afterwards.

The tightening torque is 60 - 65 Nm.



6. Trace heating

Roof drains and pipes in areas endangered by frost are recommended to be completed by a trace heating by customer (see EN 12056, Part 1, or DIN 1986, Part 100).

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