

# 9

## Pressure drop test for drinking water installations

### 9.1 Pressure test and flushing according to DIN 1988, part 2

Drinking water installations must always be checked for the pressure drop. The pressure test protocol must be completed, dated and signed by the installer and the contractor or his representative, in order to be able to claim the Jentro guarantee.

The pressure test is carried out as described in the DIN 1988, it is a contract between the installer and the contractor, and it avoids discussions afterwards when the pipes are damaged by third parties on the building site.

A flushing for corrosion protection, with a mixture of air and water, is not necessary. The pipeline system is thoroughly flushed with water after installation, in order to remove impurities that have entered the pipelines during installation.

### 9.2 Execution of the pressure test

**Important:** The pipes and couplings must be exposed and visible, completely filled with water, and free of air. Vent all outlets for this until water without air is coming out.

The test as described in the DIN 1988 consists of a preliminary and a main test.

#### Preliminary test:

During the preliminary test, a test pressure is applied corresponding to the permissible operating overpressure (10 bars) plus 5 bars, that must be regenerated twice within a period of 30 minutes at intervals of 10 minutes. After the next 30 minutes, the test pressure is not allowed to have dropped more than 0.6 bar and no leaks must have been detected.

#### Main test:

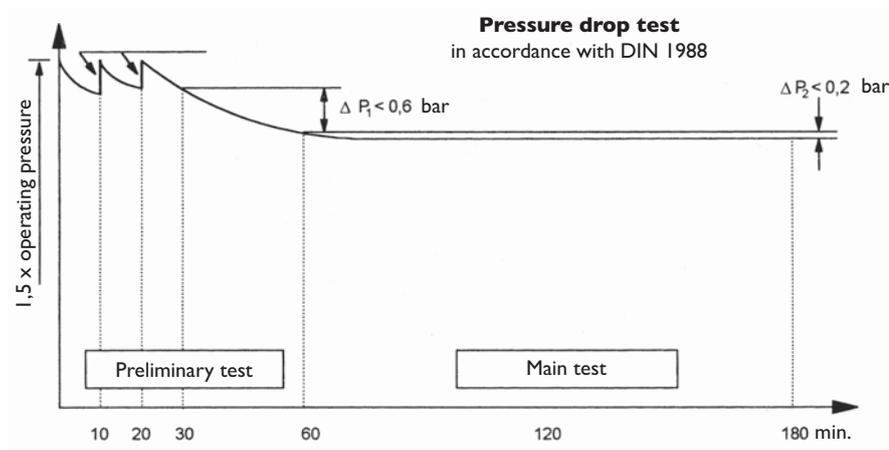
Immediately after the preliminary test, the main test must be carried out. The test duration is 2 hours. In this test, the pressure measured after the preliminary test must not have dropped more than 0.2 bar after two hours. No single part of the tested installation must display leaks.

#### Remarks:

The temperature difference between the pipe and the test medium can affect the test results as well, due to the high thermal expansion coefficient of plastic pipes. A temperature variation of 10 K corresponds to a pressure variation of 0.5 to 1 bar. During pressure tests of the installation components with plastic pipes, it is therefore necessary to strive

for a test medium temperature as constant as possible.

It must be remarked here that, besides the pressure test, a visual check of all joints is very important. Small leaks cannot always be detected by means of the pressure gauge. After the pressure test, the drinking water pipelines must be thoroughly flushed.



▲ Fig. 110: Pressure test diagram



## 9.4 Pressure test according to DIN 1988 Part 2 for drinking water installation system with Jentro compression sleeve joints.

### Building site details:

- 1.1 Address of site: .....
- Installation location: .....
- 1.2 Client: .....
- 1.3 Address of Client: .....
- 1.4 Postal code, municipality: .....
- 1.5 Country: .....

### Executing preliminary test at CONSTANT temperature.

- 2.1 Pressure test ..... bar ( 1.5 x the operating pressure = max. 15 bar test pressure)
- 2.2 Pressure measured after 10 min. .... bar (afterwards restore test pressure)
- 2.3 Pressure measured after 20 min. .... bar (afterwards restore test pressure))
- 2.4 Pressure measured after 30 min. .... bar
- 2.5 Pressure measured after 60 min. .... bar (permissible pressure loss < 0.6 bar)

### Executing main test at CONSTANT temperature.

- 3.1 Test starts .....hours End .....hours
- 3.2 Pressure test starts with ..... bar (result of the preliminary test, see point 2.5)
- 3.3 Pressure after 2 hours ..... bar (permissible pressure loss < 0.2 bar)
- 3.4 Comments regarding the performed pressure test.
- .....
- .....
- .....

Remark: the pipes must still be under the maximum operating pressure when the cover floor is laid, in order to detect any leaks immediately. Checking all joints is also very important!

### 4 Signing of the test report.

- 4.1 For the contractor, name:..... 4.2 For the installer, name:.....

Signature

Signature

Date,.....

Any remarks or appendices:.....

