PRESSURE TEST / PRESS TEST LOG

Pressure test with water / compressed air

The UNICOUPLING Pipeconnectors must be pressure-tested after installation and before plastering or screed work. **Pressure testing can be carried out using water or compressed air and is a two-step process for all UNICOUPLING Pipeconnectors: Firstly, the installation is tested for leak-tightness and secondly for strength.**

1. Impermeability test and visual inspection

Water
ZVSHK advisory leaflet

2. Strength test for drinking water and heating installations

Water
DIN EN 806-4

Water
DIN 18380

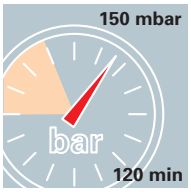
Pressure testing with water:

1. The UNICOUPLING Pipeconnectors must be visually inspected for leakages during and after filling and testing the system with water.

2. A successful impermeability test is followed by a **strength test** using water for drinking water installations according to DIN 806-4 at **min. 11 bar for 30 min** and for heating systems according to DIN 18380 at **4 to max. 6 bar for 60 min.**

VDI directive 6023 specifies that drinking water systems should be put into operation immediately after water pressure testing and subsequent flushing, i. e. without downtime, for reasons of hygiene! We recommend a pressure test using compressed air if installations are started later.

1. Impermeability test and visual inspection



Air
ZVSHK advisory leaflet

2. Strength test for drinking water and heating installations

Air
ZVSHK advisory leaflet

Pressure test using compressed air:

1. **Impermeability testing** is carried out at **150 mbar** according to the ZVSHK advisory leaflet. Test time for 100 litres of pipe volume is at least **120 minutes. Increase test time by 20 minutes** for every additional **100 litres.**

2. A successful impermeability test without pressure drop is followed by a **strength test** according to the ZVSHK advisory leaflet for drinking water installations and heating systems at **max. 3 bar** ≤ 63 x 4.5 mm and at **max. 1 bar** > 63 x 4.5 mm at a test time of **10 min.**

Note ZVSHK advisory leaflet "Impermeability Testing for Drinking Water Installations with Compressed Air, Inert Gas or Water".

All information and contents are subject to change without liability, errors and changes reserved.

PRESSURE TEST LOG WITH THE TEST MEDIUM WATER FOR HEATING AND DRINKING WATER

For all UNICOUPLING pipe connections

Building projekt: _____

Building phase: _____

Customer (represented by): _____

Supplier (represented by): _____

System pressure: ____ bar Water temperature ____ °C Difference ____ °C

The system ☐ / _____ section(s) ☐ have been pressure tested

Metal plugs, caps, blanking plates or blind flanges must be used to seal all pipes. Apparatuses, pressure tanks or water heaters for drinking water must be disconnected from the pipes. **The system or pipeline section to be tested must be filled with filtered water, rinsed and completely bleeded.** Visually check that all pipe are properly connected.

The ZVSHK advisory leaflet "Impermeability Testing for Drinking Water Installations with Compressed Air, Inert Gas or Water" and VDI 6023 Sheet 1 "Hygiene for Drinking Water Supply Systems" must be taken into consideration.

1. Impermeability test in accordance with the ZVSHK advisory leaflet

A large temperature difference (at least 10 K) between the ambient temperature and the water temperature requires a 30-minute waiting period to allow the temperature to equalize.
The pressure corresponds to the available supply pressure of _____ bar, **but at least 1 bar and not more than 6.5 bar!**

- ☐ The visual inspection of the system has been completed.
- ☐ A manometer was used for the test.*
- ☐ No leaks were found during the test period.
- ☐ No pressure drop* was observed during the test period.

2. Strength test/Determination of strength

☐ Plumbing system acc. to DIN 1988-2

- ☐ The drinking water system has been pressure tested at a minimum pressure of **15 bar**; the test is performed over a **10-minute** period.
- ☐ No leaks were found over the test period.
- ☐ No pressure drop* was observed during the test period.

☐ Heating system acc. to DIN 18380

- ☐ The heating system has been cold-water pressure tested at a test pressure **of min. 4 and max. 6 bar**; The test is performed over a **60-minute** period.
- ☐ No leaks were found over the test period.
- ☐ No pressure drop* was observed during the test period.

☐ The piping system has been proven to be leak-tight.

Place, date _____

_____ _____

(Customer signature/customer representative signature) (Supplier signature/supplier representative signature)

* Manometers must be capable of accurately measuring the pressure to the nearest 0.1 bar.