

# Low Pressure test / Test control / Measuring of the pressures / Test record.

## pressure test / test control

Acc. to the

⇒ Technical Rules for Potable Water  
Installations DIN 1988

have to be (while still visible) hydraulically pressure tested all pipelines. The test pressure has to be 1.5 times of the operating pressure.

Due to the material properties of aquatherm PPR - pipes a pressurization causes an expansion of the pipe. Different temperatures of pipe and test medium lead to alterations of pressure. A temperature change of 10 K corresponds to a pressure difference of 0.5 to 1 bar.

The pressure test of aquatherm PPR - pipe systems should be made with a constant temperature of the medium.

The hydraulic pressure test requires a preliminary, principal and final test.

In the preliminary test the system is pressurized with the 1.5 times of the maximum operating pressure.

This test pressure has to be re-established twice within 30 minutes within an interval of 10 minutes. After a test time of a further 30 minutes the test pressure must not drop more than 0.6 bar. No leakage may appear.

The preliminary test is to be followed directly by the principal test. Test time is 2 hours. Now the test pressure taken from the preliminary test may not fall more than 0.2 bar.

The final test is made with a changing pressure of 1 bar and 10 bars according to the diagramm on page 36 . The pipe system must be unpressurized between each test cycle.

Between each test course the pressure has to be released.

No leakage must appear at any point of the tested installation system.

## Measuring of the test pressures

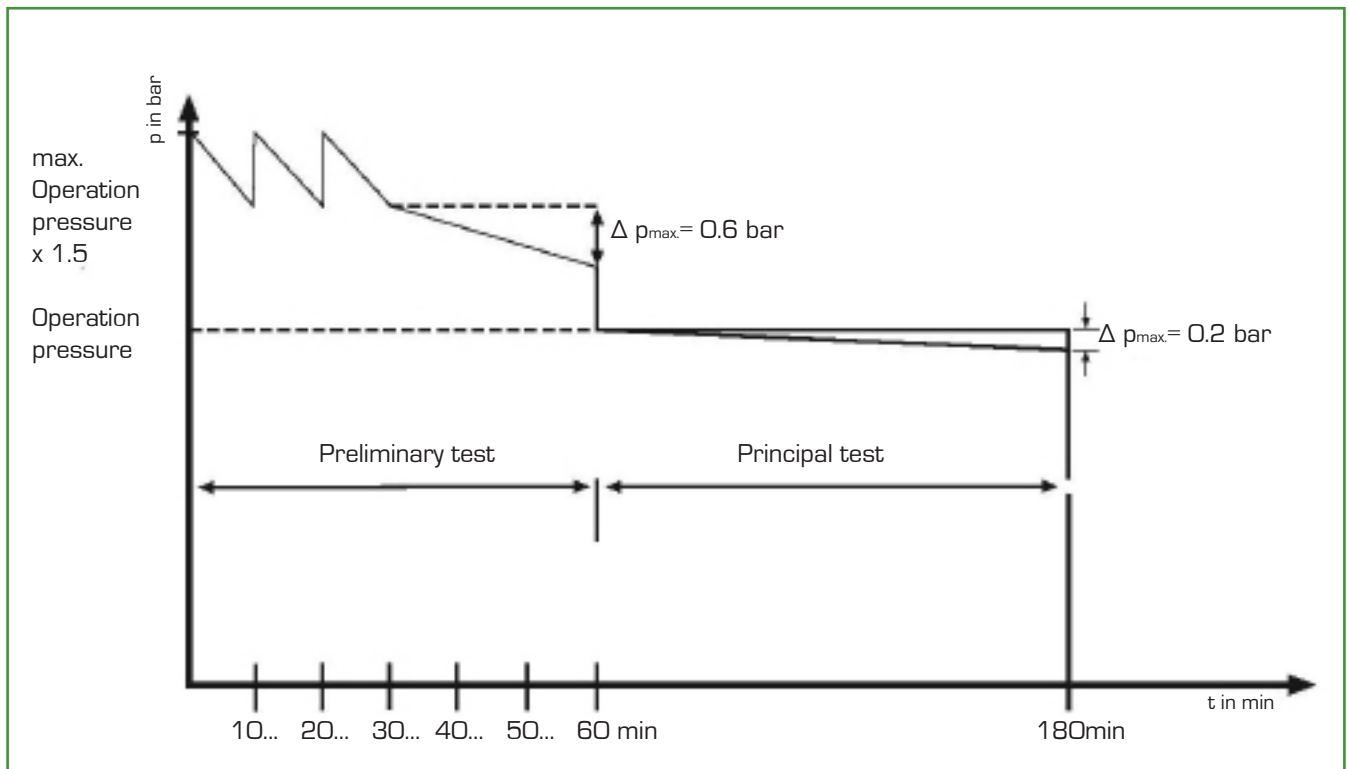
Measuring has to be done with a manometer allowing a perfect reading of a pressure change of 0.1 bar. The manometer has to be placed at the deepest point of the installation.

## Test record

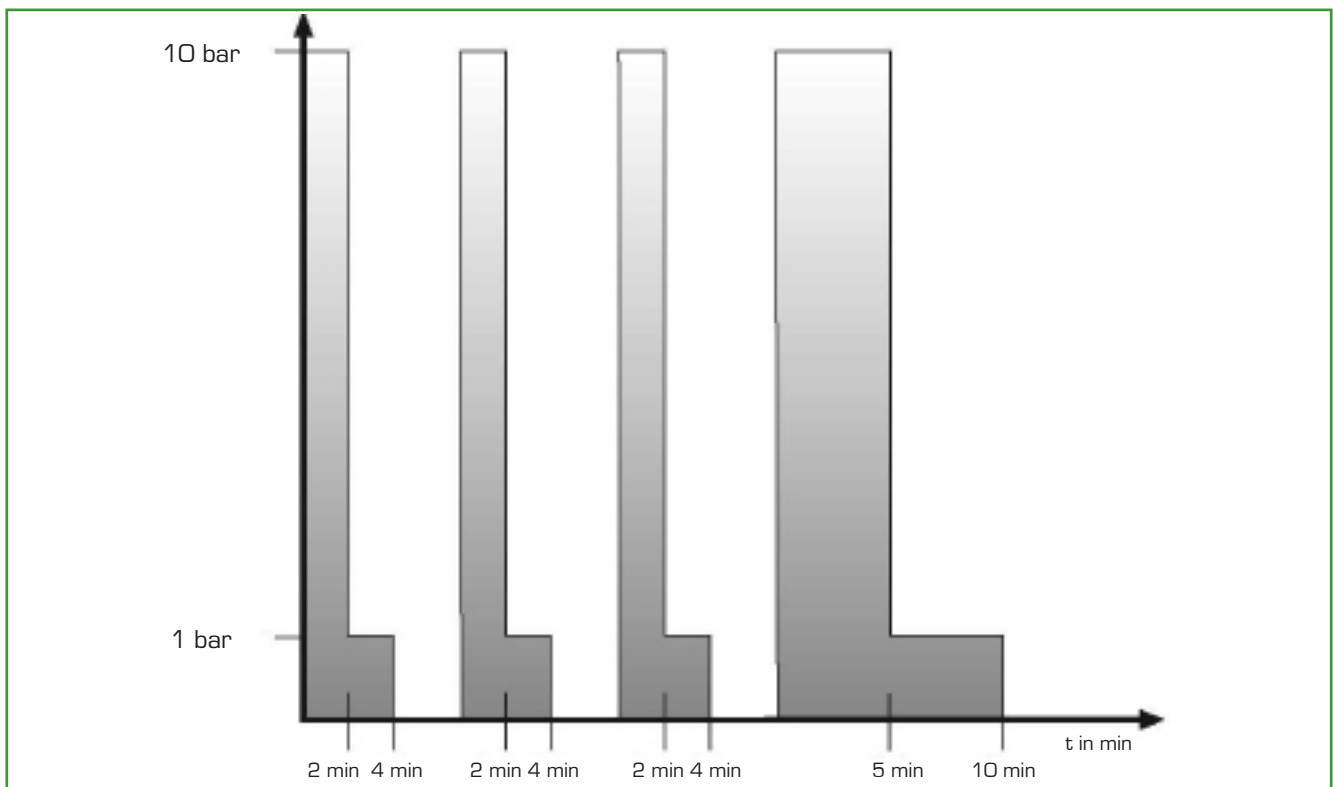
A record of the hydraulic pressure test has to be prepared and signed by the client and contractor stating place and date.

# Low Pressure test / Test control

## Preliminary - and principal test



## Final test



# Test record - aquatherm PPR - pipe installation

Low pressure

Description of the Installation			Preliminary test		
Street Address			max working pressure x 1.5:	bar	
Suburb					
City			Pressure drop after 30 minutes:	bar	
			[max 0.6 bar]		
Type of Installation	Domestic		Results preliminary test:		
	Commercial		<b>Principal test</b>		
Type of Pipe	aquatherm green pipe		Working pressure	bar	
	aquatherm blue pipe		[result preliminary test]		
	aquatherm lilac pipe				
	aquatherm red pipe		Pressure after 2 hours	bar	
	aquatherm grey pipe		[max 0.2 bar]		
	aquatherm orange system		Results principal test		
			<b>Final test</b>		
Pipe Length			1.	Working pressure 10 bar at least 2 minutes then	bar
Ø 16 mm		m		Working pressure 1 bar at least 2 minutes	bar
Ø 20 mm		m			
Ø 25 mm		m	2.	Working pressure 10 bar at least 2 minutes then	bar
Ø 32 mm		m		Working pressure 1 bar at least 2 minutes	bar
Ø 40 mm		m			
Ø 50 mm		m	3.	Working pressure 10 bar at least 2 minutes then	bar
Ø 63 mm		m		Working pressure 1 bar at least 2 minutes	bar
Ø 75 mm		m			
Ø 90 mm		m	4.	Working pressure 10 bar at least 5 minutes then	bar
Ø 110 mm		m		Working pressure 1 bar at least 5 minutes	bar
Ø 125 mm		m	* Unpressurise the pipe between each cycle		
Ø 160 mm		m	Client:		
Ø 200 mm		m			
Ø 250 mm		m	Contractor		
Ø 315 mm		m			
Ø 355 mm		m	Stamp/Signature		
Highest Point		m			
[over manometer]					
Time testing Started					
Time testing finished					
Test period (minutes)					

