## LK Heating Pipe

# LK HEATING PIPE FOR INSTALLATION IN FLOOR HEATING SYSTEMS



LK UFH Pipe dim 6 bar 60°/70°C, EN 22391 Oxygen barrier acc. to DIN 4726

Highest continuous operating pressure	6,0 bar
Highest continuous operating temperature	+60 °C
Highest instantaneous temperature	+70 °C
Oxygen barrier	DIN 4726
PE pipe complies with manufacturer's standard	EN ISO 22391

LK Heating Pipe is marked "LK UFH Pipe" and is intended for installation in heating systems. The pipe must not be used in tap water systems. Make sure the correct pipe is used.

Check the pipe upon reception. Any transport damage must be reported to the conveyer. The pipe should not be stored or installed in places where it will be exposed to direct sunlight for prolonged periods of time.

The pipe is to be cut square with a pipe cutter, e.g. LK Pipe Cutter, Article 187 87 69. The pipe should be joined with compression fittings or alternatively PressPex PV fittings. We refer to the product range for LK Floor Heating or LK Ground Heating depending on which pipe and fitting system have been chosen.

Installation work must be carried out according to instructions for LK Floor Heating or LK Ground Heating.

#### TIGHTNESS TESTING OF PIPES

Tightness testing with water or gas should be carried out in compliance with national law regulations. Tightness testing with gas should only be carried out in exceptional cases as this testing method may involve risks to individual safety. Please note that tightness testing may only be carried out by accredited personnel/companies.



Tightness testing should be conducted with 9 bars of water pressure. The pressure should be maintained for 30 minutes and then lowered to 4.5 bars. This pressure shall remain for 90 minutes without drop in the pressure. However, minor variations in pressure can occur due to temperature changes of medium and environment and because of the plastic pipe elasticity.

If press fittings are used should the leak test above be preceded by an extra tightness control in accordance with the Swedish Industry Rules on Safe Water Installation Ch. 4.1.1. The pipe system is pressurized to a control pressure of 3 bar for at least 30 minutes. All joints should be inspected. The pressure must not drop during the control time. Then proceed with tightness testing as above.

- Appoint a qualified person who will lead the work and establish testing protocol. The protocol must be attached documents regarding operation and maintenance.
- Ensure that the installation and all the fixings, support, etc. Tolerate the loads at inspection.
- If there is a risk of freezing the system should be protected against frost.

  NB! Pay particular attention to the risk of freezing when embedding in concrete. Use only glycol intended for heating systems (Note! Not glycol intended for cars.) The system can be protected with a mix of ethylene or propylene glycol. An ethanol mix can also be used, however you should consider the resistance to ethanol mix of the heating system's other components. The mix ratio should be according to the manufacturer's instructions.



- Before start up the system should be flushed clean of any anti-freeze, as the mix will otherwise reduce the system's heat emission.
   Note that other devices in the heating system can be frost protected from the factory and contain small amounts of antifreeze.
   Remember to dispose the flushed out glycol emulsion in an environmentally friendly manner.
- Make sure that all possible joints are visible and dry.
- Make sure the measuring equipment works properly.
- When pressure testing using water, the system must be filled with water, air-bled and then subjected to the prescribed pressure.

The pipe coils must be pressurised during embedding in concrete and screed to ensure that no damage occures during this operation. When embedding is finished, pressure may be released once the screed has cured. We recommend the pipe to be pressurised when laying floor covering on wood joists, floating floors and other floor constructions.

Guidance for installation in existing heating systems. If the new installation can not be separated from the existing heating system during leak testing, should the tightness testing be carried out with the heating system's existing operating pressure.

### OFFCUT MATERIAL / RECYCLING

Waste material from the pipe can be disposed of as standard construction waste. The pipe is not classed as hazardous waste. Energy can be recovered from the LK PE Heating Pipe without any risk of environmentally harmful emissions.

#### **ENVIRONMENT AND HEALTH**

LK's products have been declared safe. Visit our website: www.lksystems.se.

