A HIGH-PERFORMANCE PRE-INSULATED PIPE SYSTEM FOR BURIED HEAT NETWORKS
ROBUST AND EFFICIENT

Hiline e-Flex is a pre-insulated PE-Xa pipe system that’s perfect for low-temperature heating applications. Whether it’s connecting two buildings or a large-scale district heating network, the system provides outstanding thermal performance coupled with high levels of integrity – resulting in a long and trouble-free operational life.

PE-Xa Service Pipe
The cross-linked polyethylene (PE-Xa) service pipe offers exceptional performance at temperatures up to 95°C and pressures up to 6 bar, making it perfect for district heating. Available in single and twin service pipe configurations, an integral EVOH barrier prevents oxygen diffusion into the media.

Tough and Flexible Outer Casing
With its corrugated LDPE outer casing, Hiline e-Flex can be buried directly in the ground and its flexibility allows for on-site obstacles to be easily worked around.

High-performance Insulation
A layer of CFC-free flexible polyurethane foam puts the insulation in a league of its own – with minimal heat loss – Lambda value of 0.0216 W/mK (at 50°C). Unlike inferior pipe systems with an air gap, Hiline e-Flex’s composite construction – with its service pipe and outer casing bonded together by the foam insulation – means that thermal expansion can be ignored. Series 2 increased thickness insulation is also available.

Simple Installation
Delivered to site coiled in continuous lengths of up to 1,000 metres, on-site joints can be kept to a minimum making installation a quick process.

Complete System
The Hiline e-Flex system has a comprehensive range of fittings and accessories to ensure that it can be adapted to suit all possible configurations – including transitions to pre-insulated pipe systems with different types of service pipe – such as steel.

Robust and Adaptable Joints
The PEX-LOK axial compression service pipe jointing system is a fit-and-forget solution that offers the very highest levels of joint tightness and reliability.

Shell Sleeves
Casing joints are similarly easy with shell sleeve kits that are supplied with all the necessary components to ensure quick and easy installation.
**System Specifications**

A highly-efficient pre-insulated pipe system that’s perfect for district heating and cooling applications.

- **Maximum continuous operating temperature:** 80°C
- **Maximum temperature (peak):** 95°C
- **Maximum operating pressure:** 6 bar at 80°C
- **Thermal conductivity:** ≤ 0.0210 W/mK

**Service pipe:** cross-linked polyethylene (PE-Xa)

**Insulation:** PUR (CFC-free) - available in Series 1 and 2 insulation thicknesses

**Outer casing:** seamlessly extruded corrugated LDPE

**Standards**
- Pipe System: EN 15632-1/2
- Service Pipe: EN 12318-2, DIN 16892 & DIN 16893

**Coils:** The delivered coil dimensions will vary according to lengths ordered, but will be no larger than 2.8m in diameter and between 800 and 1,200mm wide.

**Higher Temperatures and Pressures?**

If your project requires higher operating temperatures and pressures, you may wish to consider the Hiline FibreFlex system with its reinforced polymer service pipes.

**Available Dimensions**

**Hiline e-Flex, UNO**

<table>
<thead>
<tr>
<th>Size</th>
<th>Service pipe</th>
<th>Nominal</th>
<th>Outer casing</th>
<th>Minimum bending radius</th>
<th>Max length</th>
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<tbody>
<tr>
<td></td>
<td>d x s (mm)</td>
<td>DN (mm)</td>
<td>D (mm)</td>
<td>(m)</td>
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<td>40/91</td>
<td>40 x 3.7</td>
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<td>63/126</td>
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<td>128 x 2.7</td>
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<td>140/202</td>
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**Hiline e-Flex, DUO**

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<td>25 + 25/91</td>
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Complete Range
Hiline e-Flex is part of the wider Hiline range of pre-insulated pipe systems that include the following service pipes:

- Steel
- Polypropylene
- Copper
- Glass-Reinforced Epoxy (GRE)
- Polyethylene
- Reinforced polymers
- Stainless steel

World-Class Support
The Hiline range is backed by world-class support services that include assistance with:

- System design and stress analysis
- Planning and drawing support
- Technical support and on-site advice
- Installation training
- Commissioning and operational support services
- Tool hire

CPV is a member of the following organisations:

Available from: