

Hiline

e-FLEX



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

 **CPV**
Engineering Pipework Solutions

www.cpv.co.uk

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

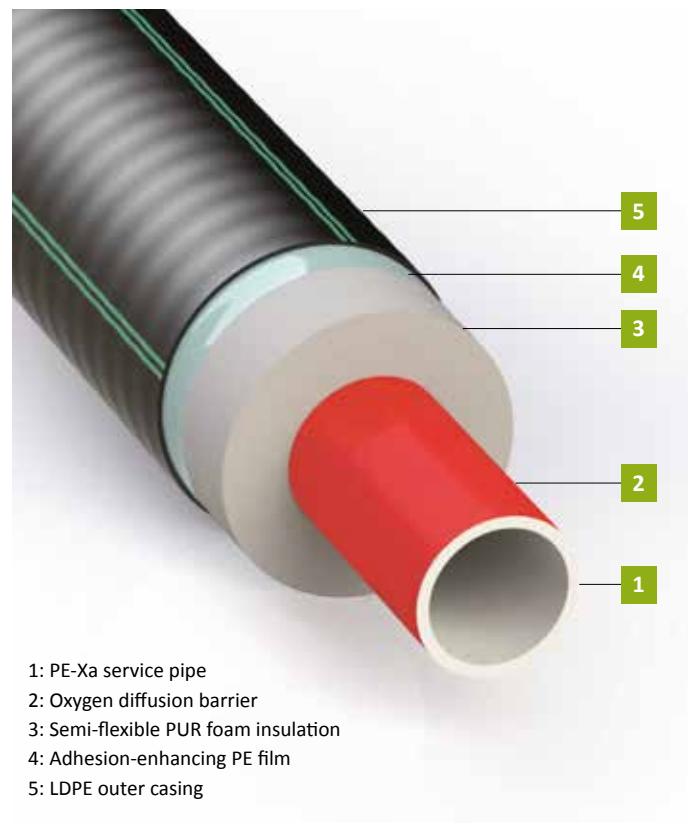
Pipe System: EN 15632-1/2

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.



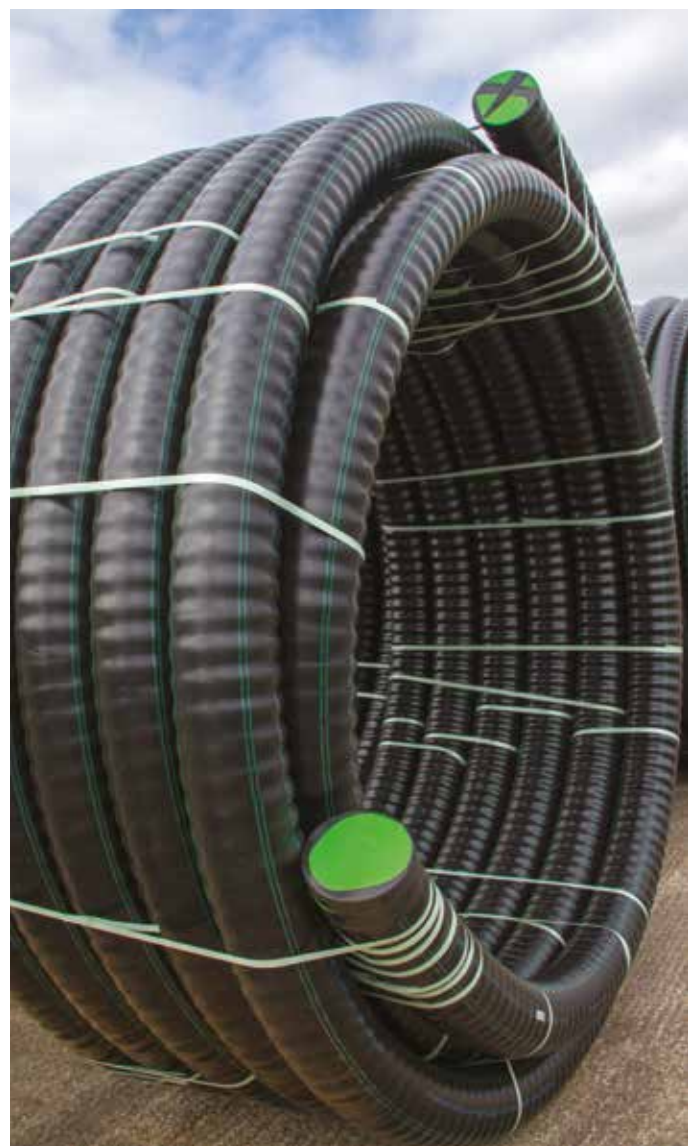
Available Dimensions

Hiline e-Flex, UNO

Size	Service pipe	Nominal	Outer casing	Minimum bending radius	Max length
	d x s (mm)	DN (mm)	D (mm)	(m)	(m)
25/ 76	25 x 2.3	20.4	78 x 1.9	0.70	807
32/ 76	32 x 2.9	26.2	78 x 1.9	0.70	807
40/ 91	40 x 3.7	32.6	93 x 2.1	0.80	590
50/111	50 x 4.6	40.8	113 x 2.3	0.90	429
63/126	63 x 5.8	51.4	128 x 2.7	1.00	305
75/142	75 x 6.8	61.4	143 x 2.9	1.10	229
90/162	90 x 8.2	73.6	163 x 3.2	1.20	149
110/162	110 x 10.0	90.0	163 x 3.2	1.20	149
125/182	125 x 11.4	102.2	183 x 3.3	1.40	86
140/202	140 x 12.7	114.6	202 x 3.3	1.60	80
160/250	160 x 14.6	130.8	250 x 3.9	1.60	40

Hiline e-Flex, DUO

Size	Service pipes	Nominal	Outer casing	Minimum bending radius	Max length
	d x s (mm)	DN (mm)	D (mm)	(m)	(m)
25 + 25/ 91	2 x 25 x 2.3	20.4 + 20.4	93 x 2.1	0.80	590
32 + 32/111	2 x 32 x 2.9	26.2 + 26.2	113 x 2.3	0.90	429
40 + 40/126	2 x 40 x 3.7	32.6 + 32.6	128 x 2.7	1.00	305
50 + 50/162	2 x 50 x 4.6	40.8 + 40.8	163 x 3.2	1.20	149
63 + 63/182	2 x 63 x 5.8	51.4 + 51.4	183 x 3.3	1.40	86
75 + 75/202	2 x 75 x 6.8	61.4 + 61.4	202 x 3.3	1.60	80



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:



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