

## PE-XA PIPE SYSTEM



## **HILINE FLEX<sup>®</sup>**

A flexible pre-insulated pipe system for district heating and cooling applications

## INTRODUCTION

Hiline Flex® is a pre-insulated PE-Xa pipe system that's perfect for heating and cooling applications. Whether it's connecting two buildings or a large-scale 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 distinctive green corrugated LDPE outer casing, Hiline 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 other systems with inferior insulation and an air gap, Hiline Flex's composite construction – with its service pipe and outer casing bonded together by the foam insulation – means that thermal expansion can be ignored.

### 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 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. Heat-shrink HDPE casing joints are also available.

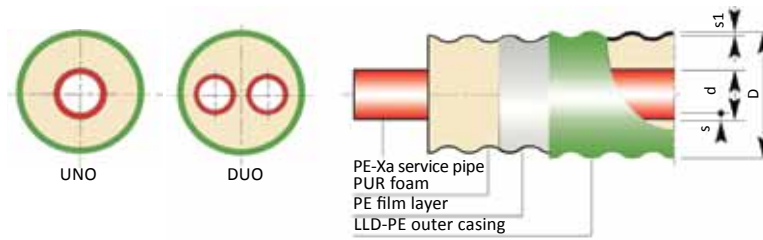
# AVAILABLE DIMENSIONS

## Operating Range

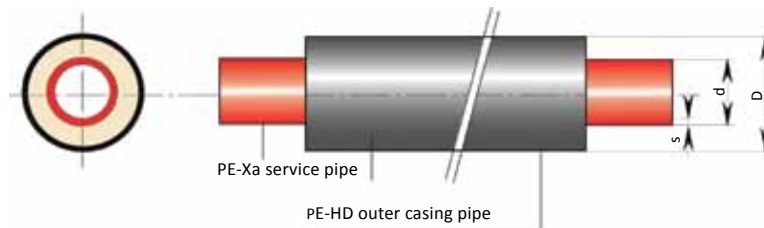
Maximum Temperature (continuous): 80°C  
 Maximum Temperature (allowable peaks): 95°C  
 Maximum operating pressure: 6 bar

### Heating, 6 bar

Hiline Flex in coils:  
 Dimensions:  
 HF 25/76 - 140/202



Hiline Flex in straight lengths:  
 Dimensions:  
 HF 160/250



### Hiline Flex heating, 6 bar, UNO

Type	Service pipe	Nominal	Outer casing	Minimum	Volume	Weight	Max length	Part Number
	<b>d x s</b>	<b>DN</b>	<b>D x s1</b>	<b>bending radius</b>	<b>Service pipe</b>			
	mm		mm	m	l/m	kg/m	m	
25/ 76	25 x 2.3	20.4	78 x 1.9	0.45	0.32	0.90	1000	HF.2576.PU-/GN
32/ 76	32 x 2.9	26.2	78 x 1.9	0.50	0.53	1.00	1000	HF.3276.PU-/GN
40/ 91	40 x 3.7	32.6	93 x 2.1	0.55	0.83	1.39	715	HF.4091.PU-/GN
50/111	50 x 4.6	40.8	113 x 2.3	0.60	1.30	1.97	450	HF.50111.PU-/GN
63/126	63 x 5.8	51.4	128 x 2.7	1.00	2.07	2.60	291	HF.63126.PU-/GN
75/142	75 x 6.8	61.4	143 x 2.9	0.70	2.96	3.39	260	HF.75142.PU-/GN
90/162	90 x 8.2	73.6	163 x 3.2	1.00	4.25	4.56	149	HF.90162.PU-/GN
110/162	110 x 10.0	90	163 x 3.2	1.10	6.36	5.10	149	HF.110162.PU-/GN
110/182	110 x 10.0	90	183 x 3.3	1.20	6.36	5.68	86	HF.110182.PU-/GN
125/182	125 x 11.4	102.2	183 x 3.3	1.30	8.20	6.37	86	HF.125182.PU-/GN
140/202	140 x 12.7	114.6	202 x 3.3	1.40	10.31	7.60	80	HF.140202.PU-/GN
160/250	160 x 14.6	130.8	250 x 3.9	-	13.43	11.31	12*	HF.160250.PU-/BK

\*Straight lengths

### Hiline Flex heating, 6 bar, DUO

Type	HFX service pipe	Nominal	Outer casing	Minimum	Volume	Weight	Max length	Part Number
	<b>d x s</b>	<b>DN</b>	<b>D x s1</b>	<b>bending radius</b>	<b>Service pipe</b>			
	mm		mm	m	l/m	kg/m	m	
25 + 25/ 91	2 x 25 x 2.3	20.4 + 20.4	93 x 2.1	0.55	2 x 0.32	1.34	715	HF.252591.PD-/GN
32 + 32/111	2 x 32 x 2.9	26.2 + 26.2	113 x 2.3	0.60	2 x 0.53	1.87	450	HF.3232111.PD-/GN
40 + 40/126	2 x 40 x 3.7	32.6 + 32.6	128 x 2.7	1.00	2 x 0.83	2.48	291	HF.4040126.PD-/GN
50 + 50/162	2 x 50 x 4.6	40.8 + 40.8	163 x 3.2	1.10	2 x 1.30	3.96	149	HF.5050162.PD-/GN
63 + 63/182	2 x 63 x 5.8	51.4 + 51.4	183 x 3.3	1.20	2 x 2.07	5.28	86	HF.6363182.PD-/GN

\* Supplied cut to customer-specified lengths  
 The delivered coil length may vary (+/- 5%)

- The delivered coil dimensions will vary according to lengths ordered, but will be no larger than 2,800mm in diameter and 800 to 1,200mm wide

## Standards

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

## Complete Range

Hiline Flex® is part of the wider Hiline range of preinsulated pipe systems that include the following service pipes:

- Steel
- Polypropylene
- Copper
- Glass-Reinforced Epoxy (GRE)
- Polyethylene
- ABS

## 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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