



**ecotech** FlexPipe

EUROPEAN COMPANY OF PRE-INSULATED PIPES



**Pre-Insulated Flexible  
Pipe Systems for District  
Heating & Cooling**

# ECOPEX Range

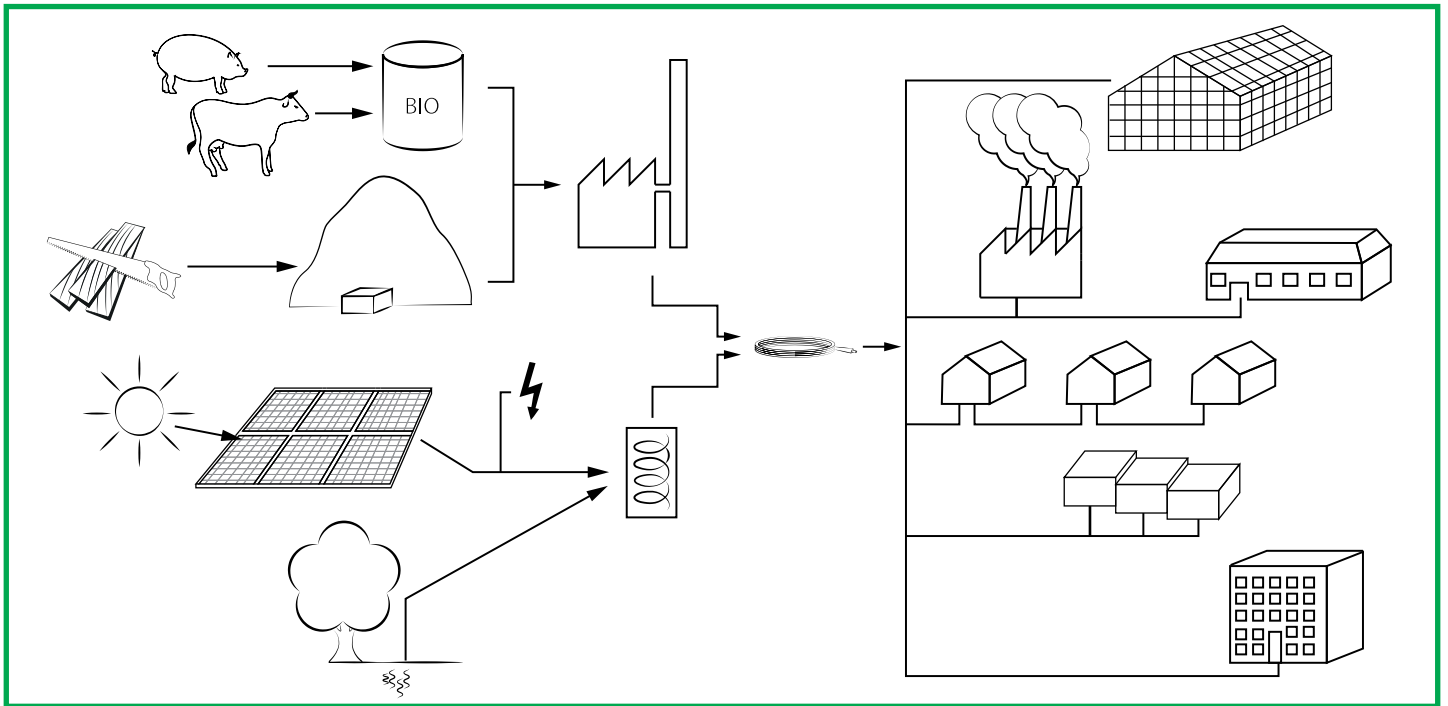
## For civil and industrial district heating networks

Ecopex pre-insulated pipe systems consists of a cross linked main pipe, PUR foam insulation and polyethylene jacket (PE-LD). Their low weight and outstanding flexibility allows for laying the network most easily and quickly even in presence of possible obstacles. No special tools are required to install the fittings.

The pipe made from PE-Xa has been equipped with an oxygen diffusion barrier EVOH. It is perfect for transporting various kinds of fluids and provides full corrosion protection.

## Application Fields

<b>System types:</b> Heat pump Geothermal energy Industry Biomass Biogas Solar system Gas di scarica	<b>Distribution:</b>  ECOPEX FlexPipes	<b>Consumers:</b> Schools Small -and medium- sized enterprises Sports centres Detached houses Aziende orticole Villages Terraced and clusters houses
---	--	---





## Advantages of the ECOPEX system:


✓  Excellent heat insulation properties  $<0.022 \text{ W/m.K}$

✓  Outstanding flexibility

✓  Up to 100 meters without connections possible

✓  Minimizes expenditures for excavation and fill

✓  No corrosion or scaling

✓  Complete product range, including joints and fittings

## More benefits:

- We produce in accordance with en 15632-1/-2
- Main pipes made from polyethylene pe-xa
- Over-jacket from pe-ld for best mechanical protection
- Screw, expansion and welded joints as part of the standard range
- No thermal compensation required
- Professionally wound rolls for simple and safe laying
- Special insulation available upon request
- Special customized components available within a minimum of time

## General

### 1. General Specification

Ecopex systems are perfect to realize small- and medium district heating networks in industrial and civil projects.

The main pipes of Ecopex systems are made of cross linked polyethylene PE-Xa. This material is highly appreciated for its excellent thermal and mechanical properties. Moreover, it is anti-corrosive and resistant to chemicals, free from hazardous substances, eco-friendly and can be easily to use.

The PE-Xa pipe in the heating series has been equipped with an oxygen diffusion barrier (EVOH).

Heat insulation is ensured through cyclopentane PUR foam. Being flexible and CFC-free, this material has excellent thermal and insulating properties.

The Ecopex piping range has been designed for fully water-proof systems. The three materials used (PE-Xa, PUR foam, PELD) have been combined with each other to form a bonded system. The low value of the elasticity module in the medium pipe causes a minimum of tension.

In the field, this tension will be additionally decreased, which is the reason why Ecopex systems will show nearly no thermal expansion at all.

Laying Ecopex pipes thus does not require any planning of compensation elements or fix point. Ecopex pipes will be delivered on rolls or spools of the length required. The outstanding lengths available facilitate joint-free laying.

Screw, expansion and polyfusion (welding) joints can be realized simply and reliably.

A broad range of fittings and accessories ensures best solutions for all kinds of requirements.

The flexible, pre-insulated Ecopex pipes are produced in accordance with applicable standards (EN 15632-1/-2).

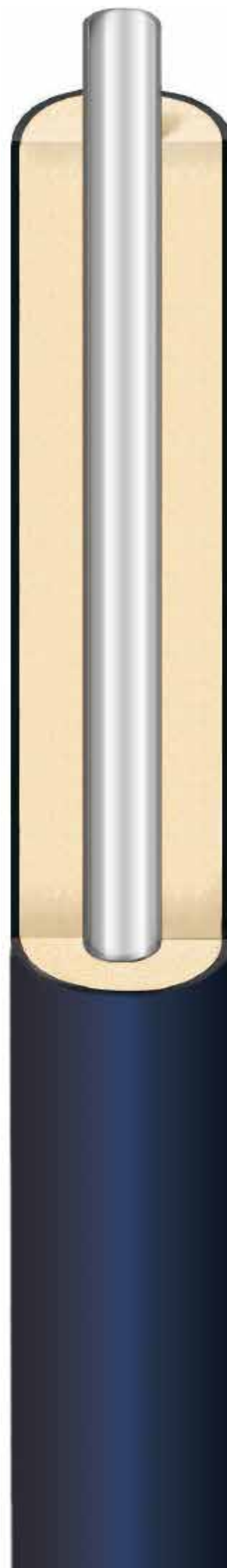
### 2. Application Fields

Heating (SDR 11):

Max. continuous operating temperature Tmax	80°C
Max. temperature Tmax	95°C (variable flow rate)
Max. pressure p:	max. 6 bar

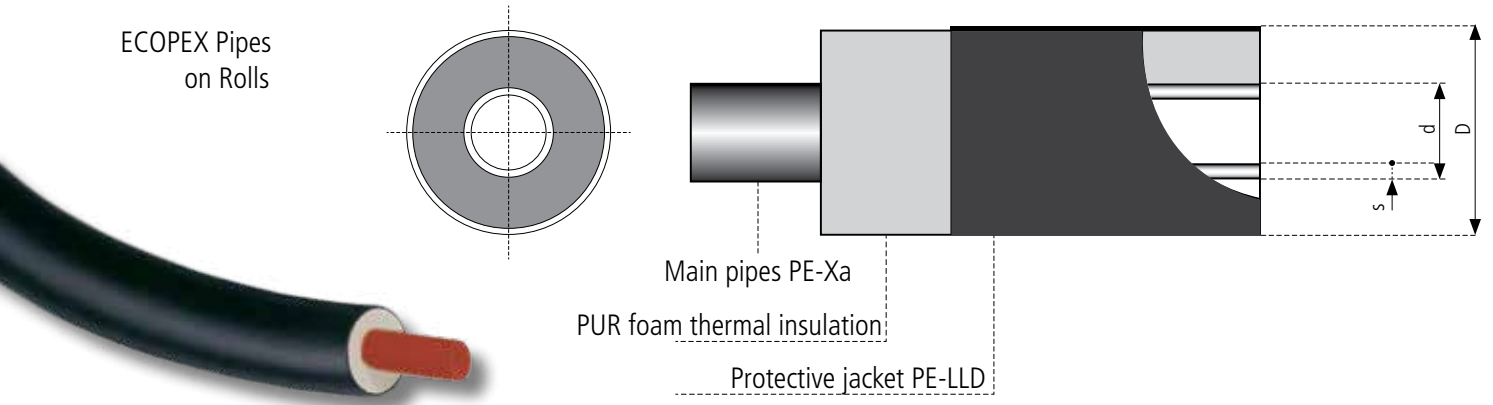
Sanitary (SDR 7.4):

Max. continuous operating temperature Tmax	80°C
Max. temperature Tmax	95°C (variable flow rate)
Max. pressure p:	max. 10 bar



# ECOPEX UNO Heating

ECOPEX Pipes  
on Rolls



## ECOPEX UNO heating 6 bar with **standard** heat insulation

TYPE d/D	DN	Inch "	Main pipe PEXa - d x s mm	Smallest bending radius m	Main pipe volume l/m	Weight kg/m	Max. available length* m
25/75	20	¾	25x2.3	0.70	0.32	0.90	700
32/75	25	1	32x2.9	0.80	0.53	1.00	700
40/90	32	1 ¼	40x3.7	0.80	0.83	1.39	450
50/110	40	1 ½	50x4.6	0.90	1.30	1.97	300
63/125	50	2	63x5.8	1.00	2.07	2.60	192
75/140	65	2 ½	75x6.8	1.10	2.96	3.39	160
90/160	80	3	90x8.2	1.20	4.25	4.56	92
110/160	100	4	110x10.0	1.40	6.36	5.10	92

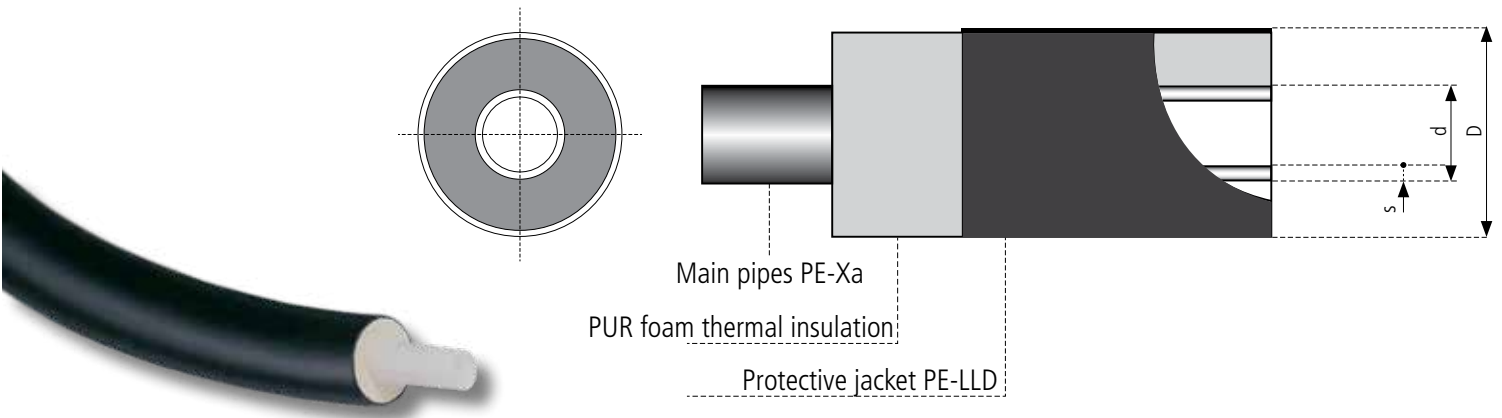
## ECOPEX UNO heating 6 bar with **Plus** heat insulation

TYPE d/D	DN	Inch "	Main pipe PEXa - d x s mm	Smallest bending radius m	Main pipe volume l/m	Weight kg/m	Max. available length* m
25/90	20	¾	25x2.3	0.80	0.32	1.00	450
32/90	25	1	32x2.9	0.80	0.53	1.38	450
40/110	32	1 ¼	40x3.7	0.90	0.83	1.98	300
50/125	40	1 ½	50x4.6	1.00	1.30	2.20	192
63/140	50	2	63x5.8	1.10	2.07	3.49	160
75/160	65	2 ½	75x6.8	1.20	2.96	4.35	92
90/180	80	3	90x8.2	1.40	4.25	4.90	52
110/180	100	4	110x10.0	1.60	6.36	5.68	52

\* The pipes are available on rolls of the requested length; the length supplied might vary by +/- 5 %.

- The pipe range listed in the chart is in stock; for lengths exceeding 500 meters, alternative solutions are available.
- Longer or shorter lengths can be supplied on drums on loan upon request.
- Roll dimensions: outer diameter 2800 mm x 800 mm (width)

# Product Range ECOPEX UNO Sanitary



## ECOPEX UNO Sanitary 10 bar

TYPE d/D	DN	Inch "	Main pipe PEXa - d x s mm	Smallest bending radius m	Main pipe volume l/m	Weight kg/m	Max. available length* m
22/75	16	1/2	22x3.0	0.70	0.201	0.96	700
28/75	20	3/4	28x4.0	0.70	0.314	1.06	700
32/75	25	1	32x4.4	0.80	0.423	1.12	700
40/90	32	1 1/4	40x5.5	0.80	0.660	1.56	450
50/110	40	1 1/2	50x6.9	0.90	1.029	2.25	300
63/125	50	2	63x8.7	1.00	1.633	3.06	192

\* The pipes are available on rolls of the requested length; the length supplied might vary by +/- 5 %.

- The pipe range listed in the chart is in stock; for lengths exceeding 500 meters, alternative solutions are available.
- Longer or shorter lengths can be supplied on drums on loan upon request.
- Roll dimensions: outer diameter 2800 mm x 800 mm (width)



# ECO-COOL Range

## For civil and industrial district cooling networks

---

### Distribution networks for cold and cooling water

#### The solution for cooling networks

Cooling systems for buildings increasingly gain in significance.

Piping system Eco-Cool allows for supplying buildings with cold water easily and efficiently. The distribution system is installed quickly and efficiently even if the conditions on-site are challenging. The cooling system can be used for the cold water supply in cooling circuits as well as in air-conditioning systems. Other possible application fields are to convey water to heat pumps with subsequent cooling or to supply various buildings with cold water coming from a central cooling unit (chiller). The system also facilitates the supply with cold drinking water at sites that do not allow for pipe laying underneath the frostline.

## General

### 1. General Specification

The Eco-Cool piping system consists of a main pipe PE-HD (PE100) and produced in accordance with EN 12201-2. These PE-HD pipes are perfect as both, drinking water as well as sewage pipeline. The medium pipe joints can be realized butt-welded or by electrically welded joints.

Heat insulation is ensured through cyclopentane PUR foam, which is flexible and CFC-free and has excellent thermal and insulating properties.

Eco-Cool is available in the length requested, wound on rolls or wooden drums.

The remarkable lengths available facilitate joint-free pipe laying in the excavated ground, which allows for significantly narrower trenches.

As a result, significant costs can be saved by less excavation works being required and by quick and easy laying.

### 2. Application Fields

Max. continuous operating temperature  $T_{Bmax}$ :

-20 a +40 °C

Max. operating pressure  $p_{max}$ : 16 bar

## COOL-FLEX

Modello	DN	Inch	Smallest bending radius	Weight
		"	m	kg/m
25/75	20	3/4"	0.80	0.90
32/75	25	1"	0.90	1.00
40/90	32	1 1/4"	0.90	1.39
50/90	40	1 1/2"	1.00	1.94
63/125	50	2"	1.10	2.60
75/125	65	2 1/2"	1.20	2.75
90/160	80	3"	1.40	4.56
110/160	100	4"	1.40	5.69



# ECOTECH

EUROPEAN COMPANY OF PRE-INSULATED PIPES

ECOTECH S.r.l. - Ufficio Commerciale

Via Trieste, 66 - 25018 Montichiari (BS) - ITALY

Tel. +39 030 961562 - Fax +39 030 961599 - E-mail: [info@ecoline.it](mailto:info@ecoline.it) - [www.ecoline.it](http://www.ecoline.it)