PRE INSULATED HEATING PIPE

AUTONOM

v2.1

PRE INSULATED HEATING PIPE

By terrendis

Highly flexible, pre-insulated pipe systems, can combining both the flow and the return carrier pipes in the same jacket pipe, primarily intended for the transport of heating water, or other heat-transfer media, in underground distribution networks.

The carrier pipes are made from cross-linked PE-Xa with an orange coloured oxygen-diffusion barrier for the flow line, and a blue coloured for the return. The colour code enables easy identification of flow and return during installation, even with mounted shrink end caps.

The multi-layer thermal insulation is made from cross-linked, microcellular PE-X foam with a water-repellent closed cell structure, characterised by its durable, **non-ageing insulation performance**, and its permanent elasticity, maximizing the thickness of the insulation layer, even after bending multiple times.

The high-grade, **double walled**, corrugated HDPE sleeve shields the pre-insulated pipe system against mechanical impacts and moisture, whilst maintaining maximum flexibility.

		DN	Medium pipe ⌀int	Jacket pipe ⌀ext	Bending radius[1]	Water content[2]	Heat capacity[3]	U value[4]
	ITEM no.	*in*	*mm*	*mm*	*m*	*L / m*	*kW*	*W / mK*
DOUBLE HEATING	AHD14025	3/4	20.4	140	0.35	0.654	10 - 30	0.243
	AHD14032	1	26.2		0.40	1.078	30 - 60	0.306
	AHD16040	1 1/4	32.6	160	0.60	1.670	40 - 100	0.316
	AHD16050	1 1/2	40.8			2.614	70 - 180	0.442
	AHD20063	2	51.4	200	1.20	4.150	100 - 350	0.481
SINGLE HEATING	AH16075	2 1/2	61.4	160	0.75	2.961	200 - 500	0.275
	AH16090	3	73.6		1.00	4.254	275 - 700	0.353
	AH200110	3 1/2	90.0	200	1.20	6.362	400 - 1100	0.347
	AH225125	4	102.2	225	1.40	8.203	500 - 1500	0.340

(1) The indicated minimum Bending Radius can be applied permanently without affecting the system's quality or performance
(2) The Water Content is expressed in liters per meter length of pre-insulated pipe, including flow + return volume (gal.us/100': **3/4**" = 5.3, **1**" = 8.7, **1-1/4**" = 13.4, **1-1/2**" = 21.0, **2**" = 33.4, **2-1/2**" = 23.8, **3**" = 34.3, **3-1/2**" = 51.2, **4**" = 66.1)
(3) Average Heat Capacity in kW for the carrier pipe (at Twater of 80°C with a Δ T of 20°C)
(4) The U-value enables easy heat loss calculation, as a function of the driving temperature difference

The installation of adequately anchored Fix Points at the system's extremities (typical at wall penetrations) is mandatory. This to secure the connected plumbing against the potential impact of the system's dilatation forces (thermal expansion/retraction).
Failing to do so involves a genuine damage risk, and automatically voids the system warranty.

To prevent ingress of (ground)water, the EN 15632-3 standard prescribes the usage of Shrink End Caps to seal the non-bonded system layers at underground connections.
Failing to do so involves a genuine damage risk, and automatically voids the system warranty.

- ✓ Carrier pipes: PE-Xa/SDR 11/PN6
- ✓ EVOH Oxygen barrier in accordance with DIN 4726
- ✓ Max fluid temperature: + 95 °C
- ✓ PE-X insulation foam: < 1% water absorption
- ✓ Full coil length, all dimensions: 100 m
- ✓ CFC-free production process

ONLY 0.22°F HEAT LOSS PER 100FT

CONNECTORS and ACCESSORIES

PE-X terminal connectors

PE-X x PE-X connectors

Fix points

Dust end cap

Shrink end cap

Seal chain for non-pressurized water

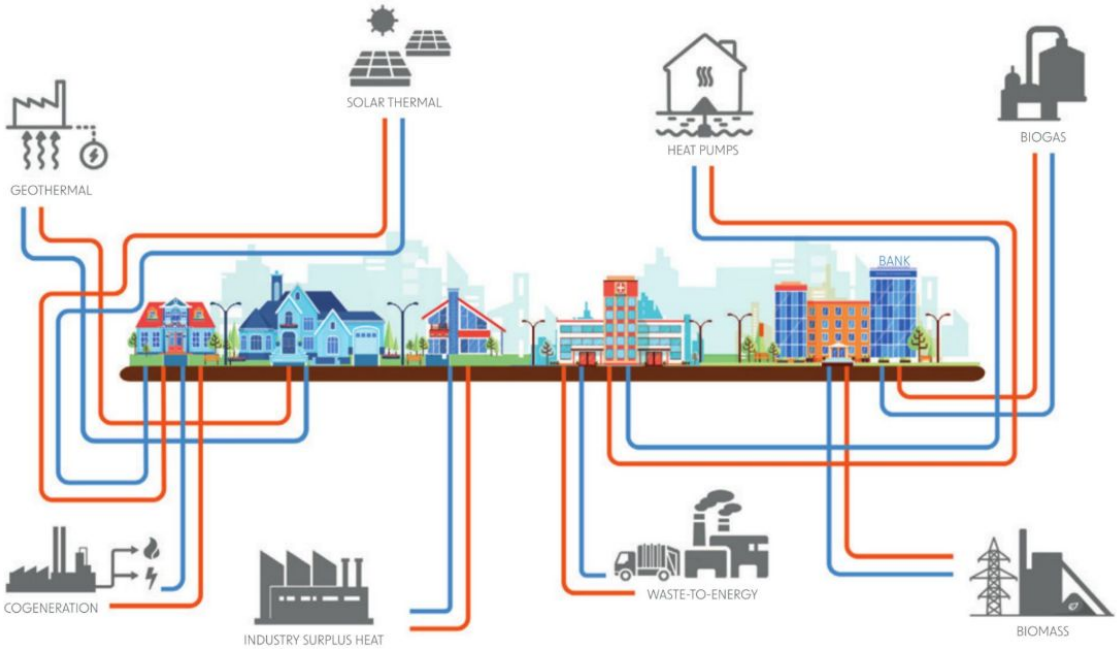
Ring seal for pressurized water

T - insulation kit

Underground inspection chamber

I - straight insulation sleeve

APPLICATIONS



AUTONOM

LES CHAUDIÈRES AUTONOM / AUTONOM BOILERS
670, avenue J-A Doyon Saint-Joseph-de-Beauce (Québec) G0S 2V0
www.autonomboilers.com info@autonomboilers.com
+1 418-397-4300