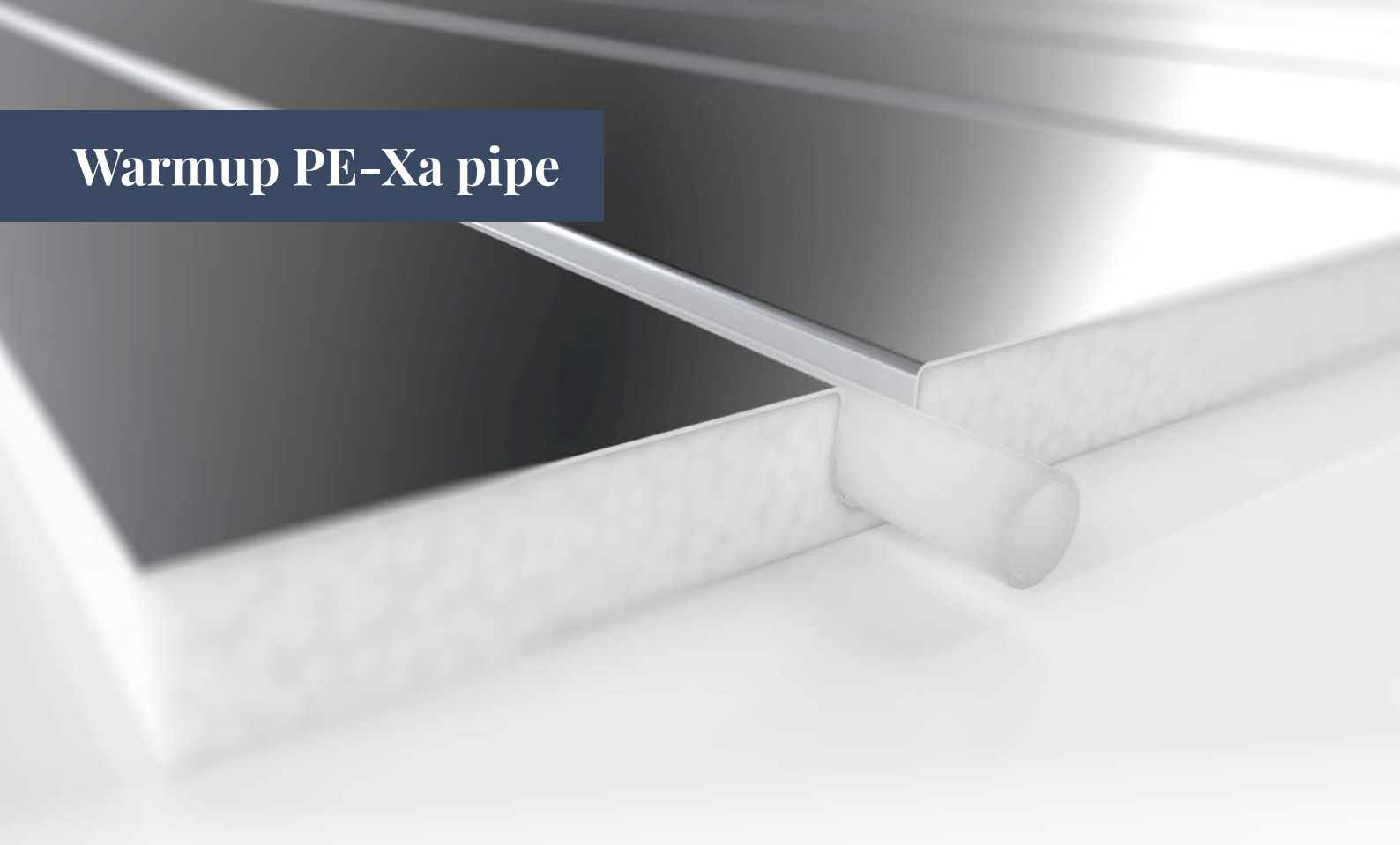
Warmup PE-Xa pipe



Lightweight and flexible
PE-Xa is lightweight and extremely flexible, bends easily into place for fast installation

Multi-purpose
Primarily used for hydronic underfloor heating but can be used for hot and cold water sanitary/distribution systems and various heating systems

Oxygen diffusion barrier
5 layer construction, contains EVOH layer protecting system components from corrosion

Excellent thermal properties
Thermal conductivity: 0.35 - 0.38 W / m·K
Thermal expansion coefficient: 0.026 mm/m·K

Overview

Warmup PE-Xa (Cross linked Polyethylene) pipe is extremely flexible with excellent long-term stress resistant properties combined with long-term strength at elevated temperatures. The pipe guarantees leak free performance with a smooth internal structure for improved flow, reduced pressure loss and deposit formation.

Warmup PE-Xa pipe is ideal for underfloor heating systems as well as being suitable for hot and cold water sanitary and distribution systems and various heating systems for domestic, commercial & industrial applications.

Warmup PE-Xa pipe incorporates an EVOH oxygen diffusion barrier layer sandwiched within the wall of the pipe, protecting the EVOH layer from physical damage. The EVOH layer, which complies with EN 1264-4, renders the pipe virtually impervious to oxygen and other gases by adding a ethyl-vinyl alcohol copolymer layer that prevents the permeability of the tube to oxygen diffusion.

PE-Xa pipes retain flexibility at freezing temperatures and therefore do not break in sub-zero conditions. Pipes are produced and tested according to UNE-EN ISO 15875, DIN4726.

Technical Specifications



Pipe layers

1	Cross-linked Polyethylene inner pipe layer (PE-Xa)
2	Adhesive layer bonding the inner pipe layer to the oxygen barrier
3	Ethylene vinyl alcohol copolymer (EVOH) oxygen barrier layer
4	Adhesive layer bonding the outer pipe layer to the oxygen barrier
5	Polyethylene outer pipe layer (PE-RT)

Pipe dimensions

Code	Outer diameter	Wall thickness	Lengths
WHS-P-PEXA-x	16 mm	2 mm	25 m, 50 - 120 m (in 10 m increments), 200m, 300m, 500m

x = Pipe length in meters

Technical data

Thermal expansion coefficient: 0.026 mm/m·K	**Maximum operating temperature:** 110°C
Thermal conductivity: 0.35 - 0.38 W / m·K	**Working temperature range:** -20ºC to 95ºC
Heat reversion (120ºC, 1 hour): <2.5%	**O2 Permeability:** 0.08 G/M³.d
Specific heat (23ºC): 2.3 KJ/kgK	**Tensile strength:** > 22 N/mm²
Elongation at break: >400%	**Modulus of elasticity (20ºC):** >800 N/mm²
Density: >0,951 g/m³	**Crosslinking degree:** >70%
Oxidation Induction Time (OIT): > 40 min	**Volume:** 0,13 l/m
Roughness: 0.007 mm	**Weight:** 96 g/m
16 mm pipe minimum bending radius, unsupported: 112 mm	**Maximum operating pressure:** As per table below

Maximum operating pressure (MOP)

Application classes		Temperature	MOP (Bar)	Warranty
Class 4	Radiant floor and radiators low temperature	60°C	8.0	Lifetime*

* *When installed as per Warmup hUFH installation manuals with a operating pressure of no more than 8 bar a Lifetime warranty is provided*

Applications

Radiant floor heating	Industrial facilities
Cooling systems	Ice and snow melting systems
Hot and cold water distributions	Surface heating/cooling (floor, wall and ceiling)

Certifications*

AENOR (Spain), SKZ (Germany), DIN CERTCO(Germany), IIP (Italy), KOMO (Netherlands), AFNOR (France), QB (France), WRAS (UK), SINTEF (Scandinavia)

* *Standardised certifications according to UNE-EN ISO 15875*

Contact

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