



PE-X/AL/PE-X

Multilayer Pipe

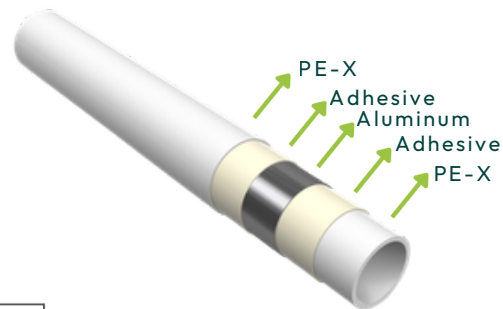
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Physical Properties

Material	Cross-linked polyethylene (PE-X)
Density	$\geq 0.948 \text{ g/cm}^3$
O ₂ permeability	$< 0.0010 \text{ g/m}^3\cdot\text{d}$
Oxidation Induction Time (OIT)	$\geq 30 \text{ min}$
Roughness	0.007 mm

Thermal Properties

Working temperature range according Standard: EN ISO 21003	20 °C to 90 °C
Operating Temperature Range	-10 °C to 90 °C
Heat reversal (120 °C, 1 hour)	$\leq 3.0 \%$
Thermal conductivity	0.43 W/m*K
Coefficient of thermal expansion	0.025 mm/m*K



Dimensions

Dimensions (mm)	Diameter tolerance (mm)	Thickness tolerance (mm)	Capacity (l/m)
16 x 2	16.0 – 16.3	1.9 – 2.35	0.113
18 x 2	18.0 – 18.3	1.9 – 2.35	0.154
20 x 2	20.0 – 20.3	1.9 – 2.35	0.201
20 x 2.25	20.0 – 20.3	2.05 – 2.65	0.189
25 x 2.5	25.0 – 25.3	2.3 – 2.9	0.314
26 x 3	26.0 – 26.3	2.8 – 3.4	0.314
32 x 3	32.0 – 32.3	2.8 – 3.4	0.531
40 x 4	40.0 – 40.4	3.8 – 4.4	0.804
50 x 4.5	50.0 – 50.5	4.3 – 5.0	1.320
63 x 6	63.0 – 63.6	5.7 – 6.5	1.810

Others dimensions and colours are available under request

Standard

- EN ISO 21003

Applications

- Underfloor heating/cooling
- Radiator heating
- Cooling system
- Ice and snow removal systems on surfaces
- Hot and cold water distribution
- Industrial facilities

Classification according to service conditions

Class and Application	Design Temperature TD	Time TD (years)	Tmax	Time Tmax (years)	Tmal	Time Tmal (hours)
Class 1 - Supply hot water (60 °C)	60 °C	49	80	1	95	100
Class 2 - Supply hot water (70 °C)	70 °C	49	80	1	95	100
Class 4 - Radiant floor heating and low-temperature radiators	20 °C followed by 40 °C followed by 60 °C	2.5 followed by 20 followed by 25	70	2.5	100	100
Class 5 - High-temperature radiators	20 °C followed by 60 °C followed by 80 °C	14 followed by 25 followed by 10	90	1	100	100

PE-X AL PE-X ENGL 052026

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