Technical Data Sheet

UNAVELD PE

Polyethylene 5 Layer Pipes



Polyethylene 5 Layer pipes produced according to: DIN 4726, ISO 10508, DVGW W270, +95°C - 6 bar

Max. working temperature: +95°C

Available in: 16-18 mm

The mentioned values are these which have been measured in our laboratory, under typical conditions. They can be modified without prior notice. You are kindly requested to assert their validity before any special use.

Polyethylene 5 Layer Pipes made in Germany

for Sanitary & Heating Applications

- Polyethylene (PE-RT) inner layer without colouring substances, friendly and suitable for human health.
- 2. Adhesive Layer.
- 3. Oxygen Barrier Layer (EVOH).
- 4. Adhesive Layer.
- Polyethylene (PE-RT) outer layer, black coloured, which provides 100% Protection from UV radiation.

Benefits

- Permanent protection from oxygen penetration in the installation & full network protection against corrosion
- Increased resistance to high temperature (up to +95°C) and pressure (up to 6 bar)
- Improved aging properties
- Minimal thermal contraction, with values from 0.3% to 0.7%
- Protection from oxygen diffusion up to +80°C
- Thanks to PE-RT outer layer, oxygen barrier is protected from wear during transport and/or installation
- Easy to install
- Particularly suitable for industrial applications, heating installations (underfloor or with radiators), as well as drinking water networks
- Fully certified product range

| External Diameter | Internal Diameter | Thickness | Meters/coil | |
|---------------------------|-------------------|-----------|-------------|--|
| Polyethylene 5 Layer Pipe | | | | |
| Φ16 | 12 mm | 2 mm | 100 m | |
| Ф18 | 14 mm | 2 mm | 100 m | |
| Φ18 | 13 mm | 2,5 mm | 100 m | |

Solar

Energy

Applications





Diagram of Resistance to Pressure and Temperature

| Technical Characteristics | | |
|---|--|--|
| Maximum Operating Temperature | +95°C / +110°C (1 year) | |
| Operating Conditions for Heating Installations (Class 4, Class 5) | 6 bar at +95°C with minimum lifetime 50 years | |
| Operating Conditions for Hot Water Supply Installations (Class 1, Class 2) | 10 bar at +60°C with minimum lifetime 50 years | |
| Thermal Conductivity Coefficient | 0,04 w/mk | |
| Linear Expansion Percentage | 0.3% at +50°C 0.7% at +90°C | |
| Oxygen Permeability | 0.01 g/m³d (According to DIN 4726) | |
| Radius | Φ 6-18 diameter pipe x 5, Φ 18-32 diameter pipe x 8 | |
| | | |

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