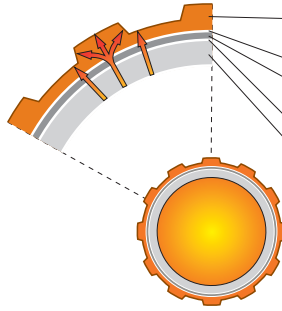


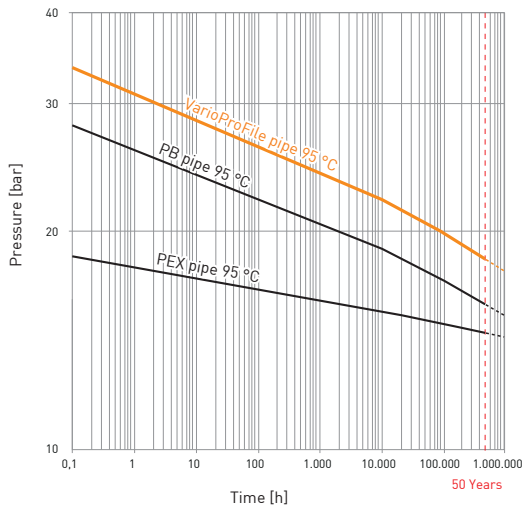
15% larger surface

- optimised heat transfer
- better plaster adhesion



- Raised-temperature-resistance polyethylene (PE-RT) with profiled surface structure
- Adhesive layer
- Homogeneous laser-welded, solid aluminium pipe (0.18 mm)
- Adhesive layer
- Raised-temperature-resistance polyethylene (PE-RT)

Creep behaviour



Advantages

- Profiled surface structure guarantees optimum heat transfer
- Fully corrosion-free
- Optimum behaviour under long-term stress
- As light as a plastic pipe
- 10-year guarantee with certificate
- Flexible, easy to bend, extremely good hydrostatic stability
- Resistant to hot water additives (inhibitors, antifreeze)
- Mirror-smooth inner surface – less pressure loss – no encrustation
- High pressure and temperature resistance (10 bar, +95 °C)
- 100% oxygen diffusion-tight
- Lower linear coefficient of expansion, lower heat expansion forces
- Tested as per EN 21003, SKZ A 397

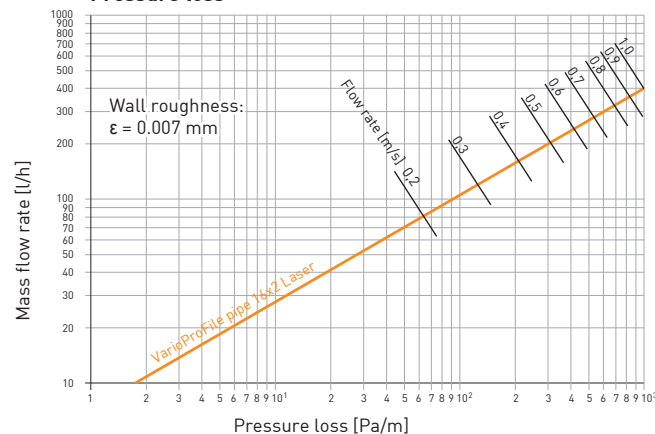
Elongation of different tubings with 10 m and temperature difference Δt 25 °C (e.g. 20 °C to 45 °C)

Tubings	Elongation
Plastics	
PEX	50.00 mm
PP	42.50 mm
PB	32.50 mm
PVC	20.00 mm
VarioProFile pipe	5.75 mm
Metal	
Cu	4.20 mm
Stainless steel	3.50 mm
Steel	2.88 mm

Homogeneous plastic pipes produce high stress levels in the device because of their expansion coefficient.

The VarioProFile pipe combines the minor elongation and thermal expansion. So it is perfect for surface heating- and -cooling pipes.

Pressure loss



Technical data

Pipe diameter:	16 mm
Pipe wall thickness:	2 mm
Aluminium pipe thickness:	0.18 mm
Roll length:	100/300/500 m
Water content:	0.113 l/m
Special narrow bending radius:	40 mm (use a suitable bending device)
Max. operating temperature:	$t_{max} = 95 \text{ °C}$
Short-term resistant:	$t_{mat} = 110 \text{ °C}$
Max. operating pressure:	$p_{max} = 10 \text{ bar}$
Linear expansion coefficient:	$2.3 \times 10^{-5} \text{ [K}^{-1}\text{]}$
Mean heat conduction coefficient:	$\lambda = 0.45 \text{ W/mK}$
Heat transmission resistance:	$R_{\lambda} = 0.0045 \text{ m}^2\text{K/W}$