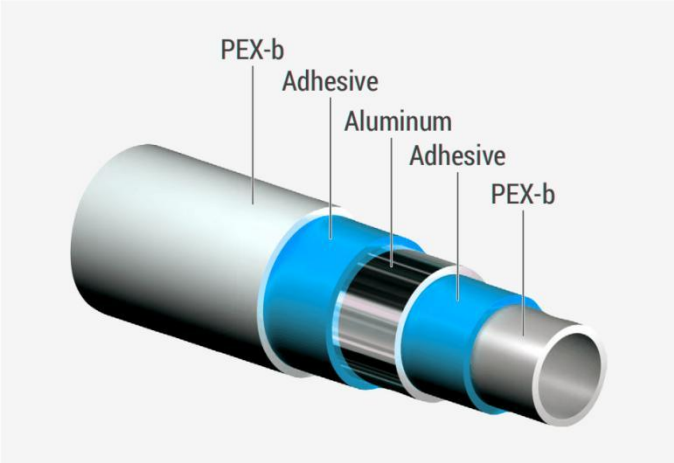
PEX/Al/PEX multilayer Pipes

DATASHEET

Multilayer pipes consist of an inner PEX-b layer (polyethylene mesh), an aluminum middle layer welded lengthwise (head-head) with laser/TIG technology and an outer white PEX-b layer. The adhesive middle layers join the aluminum and PEX-b layers homogeneously.
The aluminum layer provides a safe barrier against oxygen and other gases along with an outstanding resistance to crushing.
Multilayer pipes are fit for domestic water, heating and cooling systems according to standard EN 21003.

Technical Data

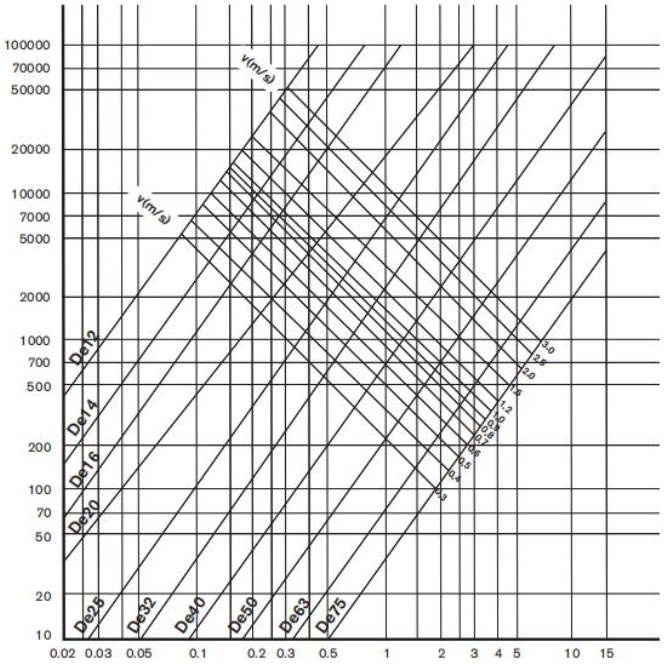
- Application classes (EN ISO 21003): 1, 2, 4, 5
- Min. working temperature: -60 °C (but always above freezing temperature of transfer fluid)
- Max. working temperature (EN ISO 21003): 95°C
- Max. working pressure (EN ISO 21003): 10 bar
- Density at 23 °C: > 0,950 g/cm3 (polyethylene mesh)
- Softening temperature: 135 °C
- Thermal expansion coefficient: 0,026 mm/m K
- Thermal conductivity: 0,42-0,52 W/m K
- Surface roughness: 0,007 mm
- Permeability to oxygen: 0 mg/l
- Reaction to fire (EN 13501-1): C-s2,d0



Technical data of overlapped welded multilayer pipes (PEX-Al-PEX)				
Normal Size		20*2.0	25*2.5	32*3.0
Outside Diameter (mm)		20	25	32
Inside Diameter (mm)		16	20	26
Tolerance of Pipe Thickness (mm)	Min	2.0	2.5	3.0
	Max	2.3	2.8	3.3
Burst Pressure (mpa)	Min	6.0	5.0	4.0
Minimum Thickness of Aluminum (mm)		0.25	0.35	0.5
Long Term Hydrostatic Strength (mpa)		2.7	2.3	2.1

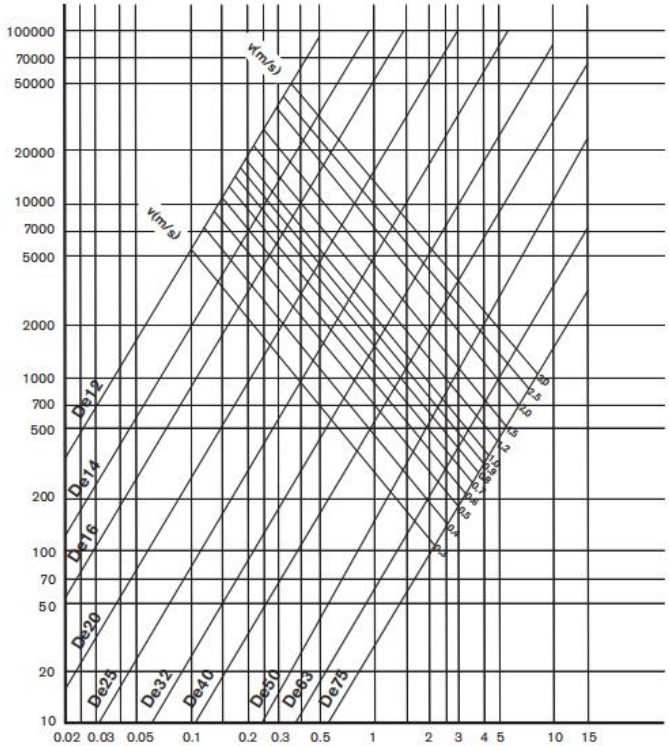
Losses of pressure

TEMPERATURE = 10 °C



Flux L/s

TEMPERATURE = 65 °C



Flux L/s