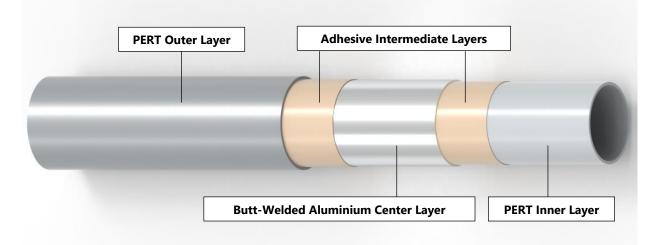
#### 1. PRODUCT DESCRIPTION

The FLEXIO multilayer pipe, in dimension 16 x 2 mm, is made up of an inner layer of PERT polyethylene, a central butt-welded aluminium layer, and an outer layer of PERT polyethylene and **is exclusively used for underfloor heating installations**.



#### **Guaranteed Quality**

Pipe manufactured in accordance with the European standard UNE-EN-ISO 21003.

## 2. PROPERTIES OF FLEXIO MULTILAYER PIPE

- Multilayer pipe specifically designed for underfloor heating.
- The outer layer is made of PERT polyethylene that provides the pipe with excellent flexibility, along with high durability and resistance. Its resistance to scratching allows you to work on the pipe once it has been installed, without the risk of damaging it.
- Aluminium acts as a barrier to oxygen, improves the resistance to pressure and the ductility of the pipe, making the pipe maintain the given shape once it is bent and making tighter curves than possible with a totally plastic pipe.
- The chosen aluminium for the central layer of the FLEXIO multilayer pipe, whose alloy is specially designed for this application, gives the pipe outstanding flexibility, which greatly facilitates its handling and the distribution of the circuits in underfloor heating installations.
- Blansol multilayer pipes have their aluminium layer butt-welded, which makes them more resistant to pressure and to the stresses that are generated when the pipes are bent.
- The chosen material for the inner layer of the pipe, PERT polyethylene, gives the pipe excellent flexibility, high thermal conductivity and good behaviour against stress cracking.

# TECHNICAL DATASHEET FLEXIO MULTILAYER PIPE (Special for Underfloor Heating)

# 3. CHARACTERISTICS

Physical and Mechanical Characteristics	
Colour	Silver Grey
Nominal Diameter (mm)	16
Inner Diameter (mm)	12
Internal Volume (I/m)	0,11
Min. radius of curvature without spring (mm)	80
Weight per meter (Kg/m)	0,1
Roughness E (mm)	0,0004
Linear Expansion (mm/m·K)	0,025
Thermal Conductivity R (W/m·K)	0,4
Density (gr/cm <sup>3</sup> )	1,47
Oxygen Permeability (mg/l*d)	0
Maximum Working Temperature (°C)	70
Punctual Maximum Temperature (°C)	70
Maximum Working Pressure at 70°C (bar)	10

# 4. DIMENSIONS AND PRESENTATION

# Colour: Silver Grey

Code	Dimension (mm)	Coil (m)
MULPPTF162024	16×2	240
MULPPTF162050	16×2	500

## 5. ADVANTAGES OF FLEXIO MULTILAYER PIPE

- Special for intensive assemblies
- Great flexibility
- Resistant to damage by friction in the outer layer
- High stability against bending
- Excellent thermal conductivity
- 100% impermeable to oxygen
- Does not produce any type of galvanic corrosion

# 6. <u>REQUIREMENTS</u>

FLEXIO multilayer pipes are produced according to the European Norm UNE EN ISO 21003.

## 7. <u>RECOMMENDATIONS</u>

- Cut the pipe with a suitable pair of scissors making sure that the cut is clean and the section is straight.
- Check that the end of the pipe is free of burrs.



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## 8. FLEXIO MULTILAYER PIPES WITH SELF-FIXING TAPE

The multilayer pipe is covered with the male side of the Velcro, which allows it to adhere to the smooth self-fastening plates, which are coated with the female side of the fixing tape. Thanks to this self-fixing, the multilayer pipes have the following advantages:

- Considerable savings in the cost of the material: the stud plates become more expensive with the new regulations that do not consider the stud as part of the insulation, which makes it necessary to increase the thickness of the stud plates compared to a smooth insulation plate.
- Comfortable and easy installation: Being more ergonomic, it saves up to 30% of installation time compared to traditional systems.
- The pipe maintains its great flexibility and shape stability. The fixing tape wrapped around it allows it to be fixed on the insulating panels with a light pressure and with absolute freedom to choose the passage distance.
- The pipe is placed on the insulating panel without needing any tools.
- When laying the self-fixing pipe, a clear separation between the different works is obtained and the annoying leakage of the pipe is avoided even when the mortar is already spread. And it can be used with different insulation thicknesses.
- In terms of cost, self-fixing is up to 18% more economical.
- Self-fixing is a sustainable radiant heating and cooling system because it reduces reaction times from start-up to room comfort temperature. The heating speed increase differential is 30% higher than with a plug-in plate, achieving the ideal temperature in less than 24 hours.

