# Multilayer pipe PE-Xc / Al / PE-Xb <br> P193 

## / Description

PE-Xc / Al / PE-Xb multilayer pipe with butt-welded aluminum inner sheet with a minimum thickness of 0.3 mm , suitable for sanitary, heating and radiant systems. Operating temperature $70^{\circ} \mathrm{C} / 10$ bar, $\max 95^{\circ} \mathrm{C}$.

In compliance with DVGW W542.


## / Applicazions

- Floor heating systems
- Sanitary water Installations
- Radiator connection


## / Products

| Code | Size |
| :--- | :--- |
| 88P193GH20099 | $16 \times 2$ |
| 88P193GH50099 | $16 \times 2$ |
| 88P193BQ10099 | $20 \times 2$ |
| 88P193GP05099 | $26 \times 3$ |
| 88P193GQ05099 | $32 \times 3$ |

## / Technical features

| Characteristics | Unit | Value |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Pipe dimension | mm . | $16 \times 2$ | 20x2 | $26 \times 3$ | $32 \times 3$ |
| Outer diameter | mm . | 16 | 20 | 26 | 32 |
| Wall thickness | mm . | 2 |  | 3 |  |
| Internal diameter | mm . | 12 | 16 | 20 | 26 |
| Aluminium tickness | mm . | 0,3 | 0,4 | 0,6 | 0,8 |
| Pipe weight | $\mathrm{g} / \mathrm{m}$ | 125 | 166 | 298 | 393 |
| Pipe weight with water | $\mathrm{g} / \mathrm{m}$ | 238 | 358 | 612 | 924 |
| Thermal conductivity | W/m $\cdot \mathrm{K}$ | 0,43 |  |  |  |
| Expansion coefficient | $\mathrm{mm} / \mathrm{m} \cdot \mathrm{K}$ | 0,024 |  |  |  |
| Internal pipe roughness | $\mu \mathrm{m}$ | 1,5 |  |  |  |
| Oxygen diffusion | $\mathrm{mg} /\left(\mathrm{m}^{2} \cdot \mathrm{~d}\right)$ | 0 |  |  |  |
| Max. working temperature | ${ }^{\circ} \mathrm{C}$ | 95 |  |  |  |
| Max. working pressure at $95^{\circ} \mathrm{C}$ | bar | 10 |  |  |  |
| Brevi carichi di pressione a $95^{\circ} \mathrm{C}$ | bar | 15 |  |  |  |
| Minimum bending radius | mm | $\geq 5 \cdot \mathrm{D}$ |  |  |  |
| Minimum bending radius with tool | mm | $\geq 1.5 \cdot \mathrm{D}$ | $\geq 3,5 \cdot D$ |  |  |

## / Volume of pipes in liters per meter

| Size | Volume liters/meter |
| :--- | :--- |
| $16 \times 2$ | 0,113 |
| $20 \times 2$ | 0.201 |
| $26 \times 3$ | 0,314 |
| $32 \times 3$ | 0,531 |

## Layers



## / Quality control

Pe-Xc / Al / Pe-Xb multilayer pipes production is subjected to continuous quality controls that allow to ensure product manufacturing in compliance with current standards.
The main controls concern the following characteristics:

- Dimensional (external, internal diameter, thickness): during production and on the finished product according to the EN ISO 3126 standard.


## / Warnings

Store the pipe in its original packaging avoiding exposure to solar radiation, which could compromise the quality of the pipe. Avoid contact / impact with blunt materials that could damage the pipe, both during transport and during construction. The minimum degree of curvature during installation must not be less than 5 times the external diameter of the pipe. Do not use chemical solvents or similar when installing the pipe.

