

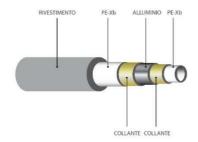
## **Product specifications**

APE MULTYLAYER (PE-xB/Al/PE-xB) is an insulated multilayer pipe for heating and cooling applications. This pipe consists of a double inner and outer layer of crosslinked polyethylene PE-xB (silane method - B) bound by a special adhesive to a longitudinally welded (TIG butt welded) intermediate aluminium alloy layer and a closed cell polyethylene foam insulating sheath (PE- LD) protected by a scratch resistant PE-LD layer. The pipe is highly shapeable, provides a complete barrier to oxygen, ensures total hygiene and high corrosion resistance since fluids come in contact only with the inner PE-xB layer.

Maximum operating temperature: 95°C. Maximum peak temperature: 110°C. Max pressure at 95°C: 10 bar. Oxygen permeability: 0 mg/l. Roughness: 7  $\mu$ m. UNI EN ISO 21003 and DIN 4726 compliant.

Sheath thermal conductivity at 40°C: 0.04 W/mK. The thickness of the pipe insulating layers are compliant with D.P.R. no. 412 1993. The insulated pipe is approved according to the Ministerial Decrees June 26, 1984 and September 3, 2001.Reaction to fire Class CL-s1, d0.





## **Dimensional characteristics**

Codes	UOM code	9MR02 1620	9MR03 1820	9MR02 2020	9MR03 2020	9MR04 2630	9MR45 3230
Outer Diameter	mm	16	18	20	20	26	32
Sheath thickness for heating	mm	6	6	6	6 - 9	10	10
Diameter pipe + sheath (heating)	mm	28	30	32	32 - 38	46	52
Sheath thickness for cooling	mm	10	10	1	13	13	13
Diameter pipe + sheath (cooling)	mm	36	38	1	46	52	58
Aluminium thickness	mm	0.2	0.3	0.2	0.3	0.4	0.45
Roll length	m	50F, 100F	50F, 100F	50 SF	50F, 50SF	50F	25F















## **Technical characteristics**

Volume of water	l/m	0.113	0.154	0.201	0.201	0.314	0.531
Internal roughness	μm	7					
Sheath thermal conductivity at 40°C	W/mK	0.0397					
Sheath density	kg/m <sup>3</sup>	35 to 45					
Degree of crosslinking	%	> 65%					
Oxygen permeability	mg/l	0					
Colour		Gray for heating; red and blue for domestic use; white for cooling					

## **Technical specifications**

Pipe material		PE-xB/Al/PE-xB Multilayer pipe	
Sheath material		closed-cell polyethylene foam PE-LD	
Scratch-resistant finish layer		closed-cell polyethylene foam PE-LD	
Field of application		Plumbing in civil, industrial and commercial applications.	
Fluid		Potable water, technical water, and water glycol (*).	
Continuous use temperature	°C	95	
Max. peak temperature	°C	110	
Maximum operating pressure at 95°C	bar	10	
Maximum operating pressure at 20°C	bar	30	
Duration at 95°C and 10 bar	year s	50	
Resistance to diffusion of water vapour	μ	5000	
Reaction to fire (UNI EN 13823)		<b>C</b> <sub>L</sub> -s1,d0	
Presence of HCFC - CFC		No	
Storage		Avoid prolonged exposure to direct sunlight	
Minimum bend radius (**)		5 times the diameter	

<sup>(\*)</sup> In the case of water glycol, in order to define the minimum operating temperature, it is necessary to know the elements of the mixture and the various concentrations, never exceed the value of 30%

**RECOMMENDATIONS:** Avoid outdoor installation and/or in unheated environments.

APEPIPE\_INSULATED\_EN\_0524













<sup>(\*\*)</sup> Take the thickness of the sheath into account when bending a pipe with a bender.