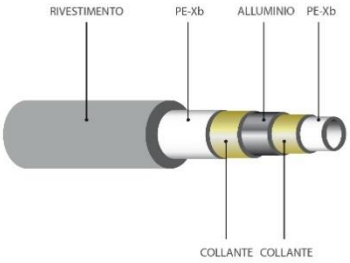
Product specifications

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 µm. 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 complies with the Ministerial Decree of 5 March 2005, as subsequently amended and supplemented. Reaction to fire Class B_L-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	/	13	13	13
Diameter pipe + sheath (cooling)	mm	36	38	/	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

HEAD OFFICE
VIA G.GOZZANO 8
25068 SAREZZO(BS)
ITALIA

WAREHOUSE
VIA SALVELLA 20/22
25038 ROVATO(BS)
ITALIA

kiwa CERTIFIED ISO 9001 nr.14274a-A

WEB SITE
ape-raccorderie.com

PHONE +39 030 8920912
ape-raccorderie@pec.it
info@ape-raccorderie.com

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^3	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	years	50
Resistance to diffusion of water vapour	µ	5482
Reaction to fire (UNI EN 13823)		B_L-s1, d0
Presence of HCFC - CFC		No
Storage		Avoid prolonged exposure to direct sunlight
Minimum bend radius (**)		5 times the diameter

(**) Take the thickness of the sheath into account when bending a pipe with a bender.
e.g.: Ø16 sheath: total thickness = 28 mm, use bender with Ø 26 profile.

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

HEAD OFFICE
VIA G.GOZZANO 8
25068 SAREZZO(BS)
ITALIA

WAREHOUSE
VIA SALVELLA 20/22
25038 ROVATO(BS)
ITALIA

kiwa CERTIFIED ISO 9001 nr.14274a-A

WEB SITE
ape-raccorderie.com

PHONE +39 030 8920912
ape-raccorderie@pec.it
info@ape-raccorderie.com