## RBM TITA-FIX MULTI-LAYER PIPE WITH ANTI-CONDENSATION INSULATION - Suitable for hydronic cooling and heating systems -





	Code		External diameter	Pipe thickness	Thickness of the aluminium layer	Thickness of the insulation layer	Length	Water Speed	Maximum working pressure**
	PE-XC	PE-RI ^	[mm]	լՠՠյ	[mm]	[mm]	լայ	[m/s]	[bar]
COIL	1541.16.40 (V) 1541.20.40 (V)	1544.16.40 (V) 1544.20.40 (V)	16 20	2	0,20 0,30	10***	50	See diagram concerning pressure losses The recommended speed range is shown by marked lines	10
	1541.26.40 (V)	1544.26.40 (V)	26	3	0,40				
	1541.32.40 <b>(V)</b>	1544.32.40 <b>(V)</b>	32		0,40		25		
(V) =	Insulation color: Green								

## CHARACTERISTICS

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The RBM Tita-fix multilayer pipe insulated with an anti-condensate, thermal insulating conduit assures a dramatic decrease of heat losses in consideration of the low thermal conductivity, thus making the pipe suitable for hydronic refrigeration and heating installations.

The insulating conduit is in self-extinguishing, closed cell CFC-free polyethylene foam, with thicknesses compliant with It. law 10/91 for pipes running in heated rooms and/or within structures that do not face either the outside or unheated rooms.

## Characteristics of the insulation sheath

Density:

Thermal conductivity at 40°C:
 sheath only:

sheath only: 0.038 W/mK sheath and pipe (average value): 0.062 W/mK

Class 1 - BL-s2-d0

35 kg/m<sup>3</sup>

Permeability to vapour: 5482 µ

Fire reaction:

Characteristics of the multi-layer pipe

They are the same as those of RBM Tita-Fix multi-layer pipes.

MARKING EXAMPLE The indications given should make it possible to quickly read product characteristics. The marking can be different from the one shown in the example							
Wilti-layer pipe         RBM TITA-FIX PE-Xc Ø16X2.0 - CLASSE 1 - BL-s2-d0 - LEGGE 10/91 - ANTICONDENSA - XX00X - Made in Italy - ()/(							
Multi-layer pipe         RBM TITA-FIX PE-RT/AI/PE-RT Ø16X2.0 - CLASSE 1 - BL-s2-d0 - LEGGE 10/91 - ANTICONDENSA - XX00X - Made in Italy -           PE-RT         ()/()/() - () = ()							
RBM TITA-FIX PE-Xc RBM TITA-FIX PE-RT/AI/PE-RT	Name of the producer and trade mark						
Ø16X2.0	External diameter and wall thickness						
CLASSE 1 – BL-s2-d0	Fire resistance class.						
	Reference to law no. 10 of 9 January 1991: Standards for the implementation of the National Energy						
LEGGE 10/91	Plan concerning a rational use of Energy, Energy consumption and the development of renewable						
	Energy sources.						
ANTICONDENSA	Reference to the use of the sheath						
XX00X	Series number						
Made in Italy	Identification of the country of production						
()/()/() <del>-</del> ():()	Production date and time						
X0.00.000.00	Batch number						
[LINEA]	Reference to the production line						
000m – >I<	Number of metres						

**RAPID EVALUATION OF HEAT LOSSES** 

°C

29,6

30,4

31,1

60°C

W/m

10,6

12,0

14,1

The table shows the heat loss per metre, obtainable using the insulation supplied expressed in Watts and the consequent temperature value reached on the external layer.

The values refer to pipes conveying hot water at 2 different temperatures laid in rooms having a temperature of 20°C.

The values marked with (\*) in the table refer to cooled water and to pipes laid in rooms having a temperature of  $30^{\circ}$ C.

For example, an insulated 20x2 pipe conveying water at 10°C (average between 7 and 12.5°C) loses 6.0 W per metre and the surface temperature corresponds to about  $25^{\circ}$ C.

The latter value must be higher than the dewpoint temperature of the environment in order to avoid the formation of surface condensation.

\* Multilayer pipe PE-RT/AI/PE-RT certificate SKZ HR 3.12 according to the specifications

10°C (\*)

°C

25,0

24,7

24,4

W/m

-5,2

-6,0

-7,0

Thermal flow and surface temperature

40°C

°C

25,1

25,5

25,8

W/m

5.2

5,9

6,9

\*\*\* The working pressure varies according to the use class to which the multi-layer pipe belongs: the maximum working pressure shown is valid for a class 1 *RBM Tita-Fix* tube. Please consult the appropriate section of this data sheet for further details.
\*\*\* Thicknesses in compliance with Law no. 10 of 9 January 1991: Standards for the implementation of the national energy plan concerning a rational use of energy, energy saving

\*\*\* Thicknesses in compliance with Law no. 10 of 9 January 1991: Standards for the implementation of the national energy plan concerning a rational use of energy, energy saving and the development of renewable sources of energy.

Size

16x2

20x2

26x3