

ASTM B280
UL 723
UL 94
ASTM C411
UV Retardant

BlackMamba^{Linesets}Twin

BLACKMAMBA SINGULAR INSULATED COPPER TUBE BLACKMAMBA TWIN INSULATED COPPER TUBE

APPLICATIONS

- Suitable for mini-split systems and heat pumps
- Conveyance of refrigerant fluids (R410A, R407C, R32)

COPPER TUBE FEATURES

- Cu-DHP phosphorized copper (Cu 99,9%, $0,015\% \leq P \leq 0,040\%$), with properties and dimensional tolerances in compliance with the Standard ASTM B280
- Physical condition annealed R220 N/mm² surface quality characterized by an amount of residue <38mg/m² of the inner surface area

INSULATION COATING SPECIFICATIONS

- Extruded closed-cell polyethylene foam
- Color: black insulation coating with outer protective film in embossed LDPE
- Tested in accordance with UL723. Passed 0/50 (FSI/SDI)
- Tested in accordance with UL94. Passed HF1 rating ACHIEVED
- High insulating performance $\lambda=0,038W/(m^{\circ}K)$ average temperature detected at 40°C
- Vapour Permeability $\mu \geq 11.000$ for the best anti-condensation performance
- According to ASTM C411 tested performed at 220°F

POLYETHYLENE INSULATION "R" VALUE

R VALUES (H* FT* °F / BTU Δ THERMAL CONDUCTIVITY W/M*K = 0.0357
A 24°C 0.248 BTU - IN / H * FT 2+°F)

Pipe insulation ID size	Insulation thickness 1/2"	Insulation thickness 3/4"
1/4"	4.1	6.6
3/8"	3.6	5.9
1/2"	3.3	5.4
5/8"	3.1	5.1
3/4"	3.0	4.8
7/8"	3.0	4.6

BLACKMAMBA / BLACKMAMBA TWIN LINESETS

Copper tube is made according to ASTM B280 and covered with Ebrille's foamed polyethylene, obtained by extrusion using environmentally friendly gases. Cleaned inside and sealed at the ends under a pressure of more than 70 tons.

Ebrilsplit and Twinsplit features tight fitting insulation with a high R value eliminating condensation problems. These products are the ideal solution for air conditioning systems.



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TECHNICAL DATA BLACKMAMBA LINESETS							
Copper tube OD	inch	1/4"	3/8"	1/2"	5/8"	3/4"	7/8"
Copper tube thickness	inch	0,03	0,032	0,032	0,035	0,035	0,045
Main PE foam insulation thickness	inch	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
Thermal conductivity at 75°F	0,0357 W/mk (0,248 Btu · in /h *sq. Ft * °F)						
P = allowable pressure at 200°F (ASME B31)	psi	1125	787	700*	700*	700*	700*
Outer PE skin thickness	µm	200	200	200	200	200	200
Roll lengths	ft	50	50	50	50	50	50
		164	164	164	164	82	82
		15; 25; 35	15; 25; 35	15; 25; 35	15; 25; 35	15; 25; 35	15; 25; 35
* experimental working pressures							

TECHNICAL DATA BLACKMAMBA TWIN LINESETS							
First copper tube OD	inch	1/4"	1/4"	1/4"	3/8"	3/8"	3/8"
Second copper tube OD	inch	3/8"	1/2"	5/8"	1/2"	5/8"	3/4"
First copper tube thickness	inch	0,03	0,03	0,03	0,032	0,032	0,032
Second copper tube thickness	inch	0,032	0,032	0,035	0,032	0,035	0,035
P = allowable pressure at 200°F (ASME B31)first copper tube	psi	1125	1125	1125	787	787	787
P = allowable pressure at 200°F (ASME B31)second copper tube	psi	787	700*	700*	700*	700*	700*
Main PE foam insulation thickness	inch	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
Thermal conductivity at 75°F	0,0357 W/mk (0,248 Btu - in /h *sq. Ft * °F)						
Outer PE skin thickness	µm	200	200	200	200	200	200
Roll lengths	ft	50	50	50	50	50	50
		25	25	25	25	25	25
* experimental working pressures							