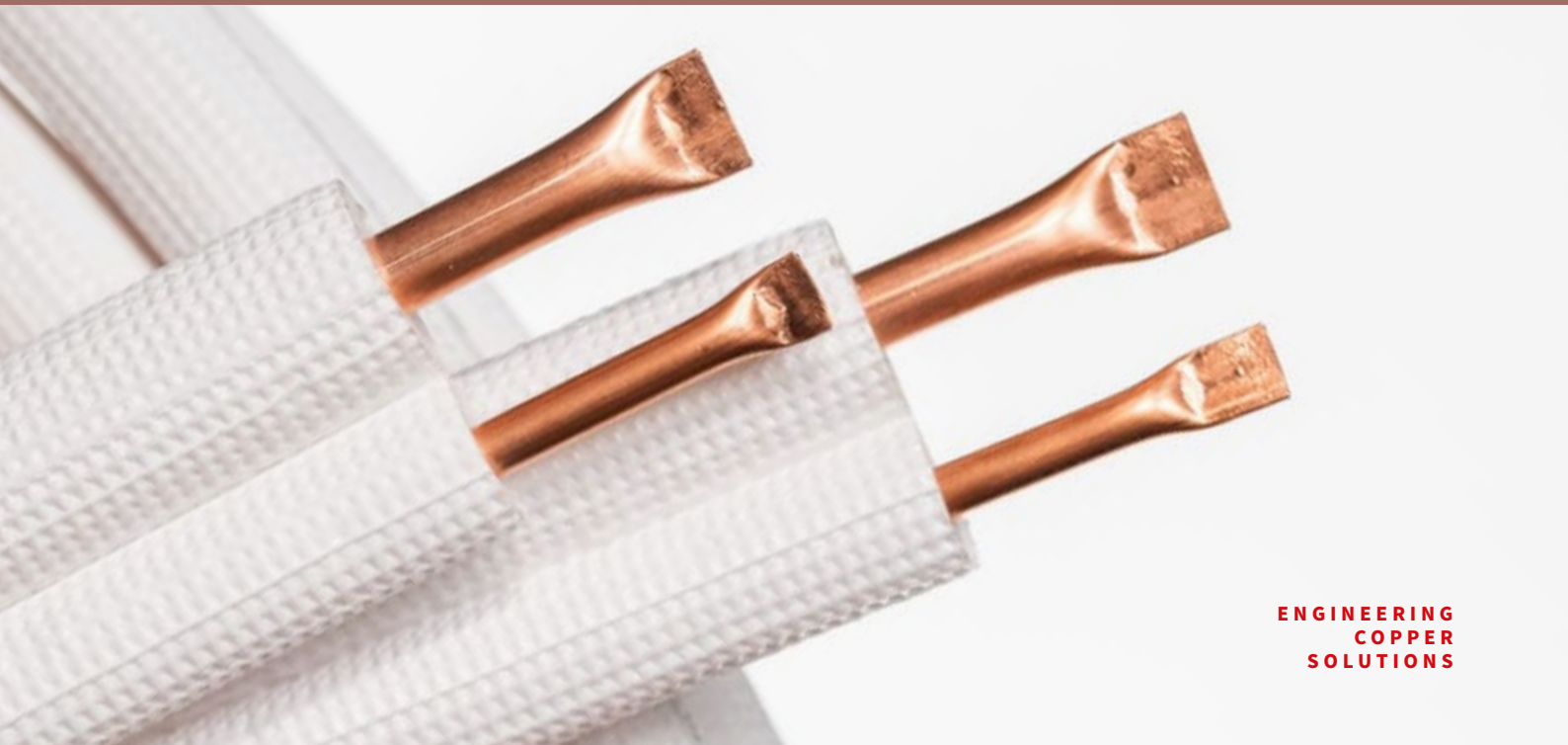
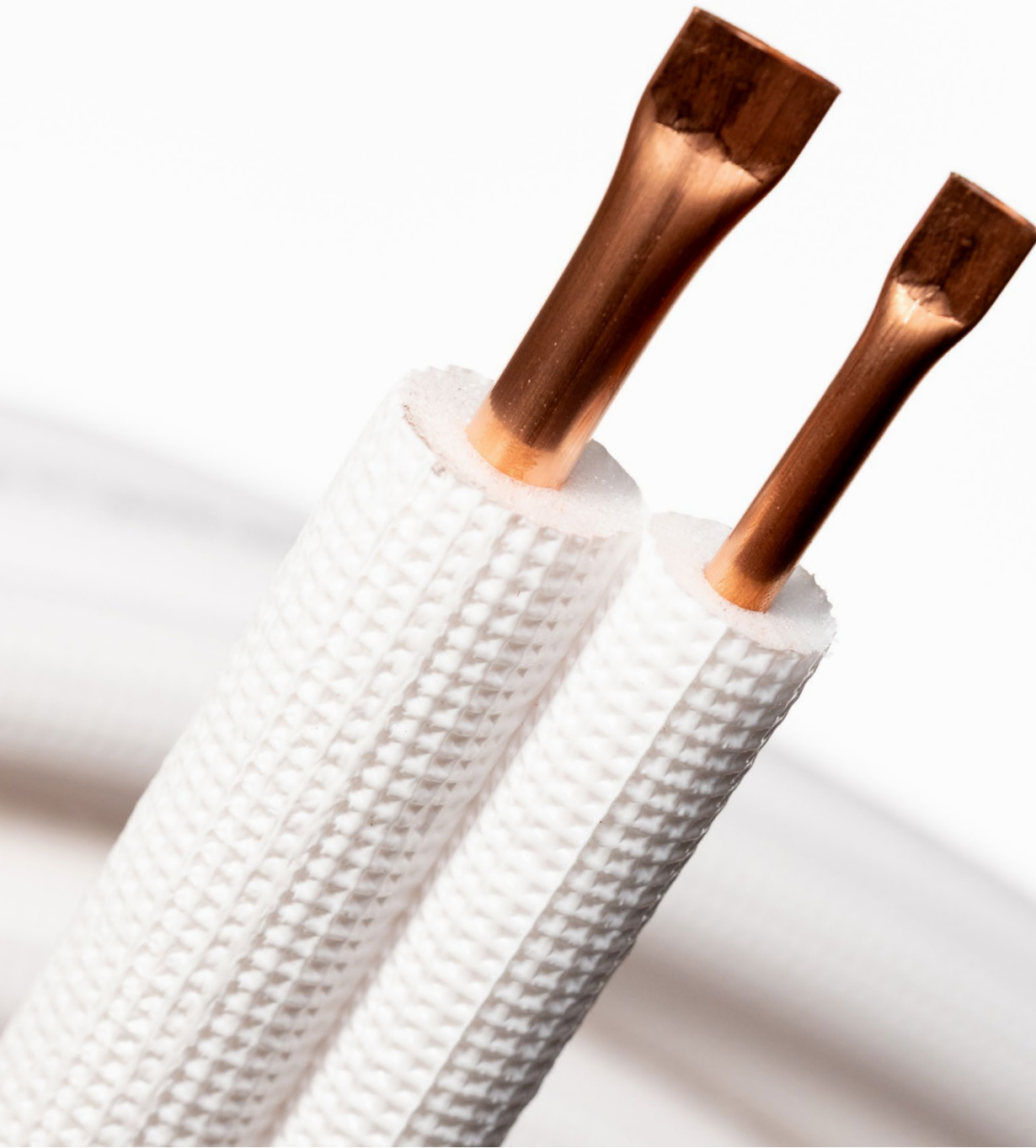


# SMISOL<sup>®</sup> Clim Duo

PRACTICAL AND  
PROFESSIONAL

Serravalle Copper Tubes  
COPPER DIVISION  
[EN]

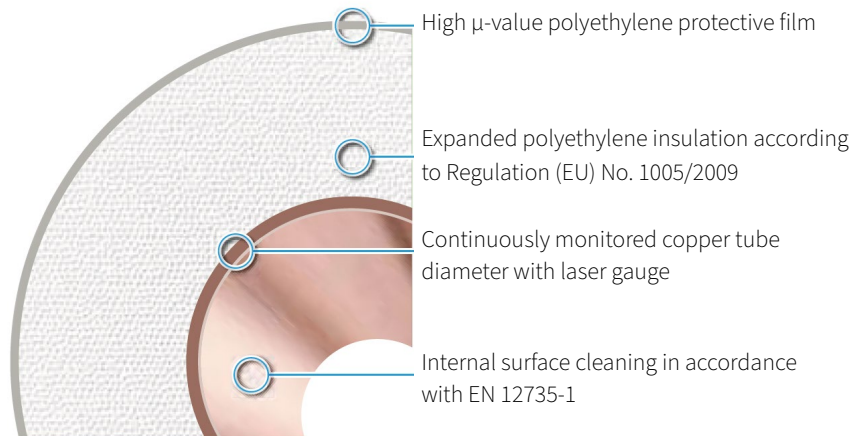




# SMISOL<sup>®</sup> Clim Duo

PRACTICAL AND  
PROFESSIONAL

Dimensions Outer diameter x Wall thickness (mm) (inches)		Insulation thickness (mm)	Burst pressure (MPa)	Working pressure (MPa)
6.35 x 0.8 - 9.52 x 0.8	1/4" - 3/8"	6 - 8	56.54 - 37,71	14.14 - 9.43
6.35 x 0.8 - 12.70 x 0.8	1/4" - 1/2"	6 - 10	56.54 - 28,27	14.14 - 7.07
6.35 x 0.8 - 15.87 x 1	1/4" - 5/8"	6 - 10	56.54 - 28,28	14.14 - 8.83
9.52 x 0.8 - 15.87 x 1	3/8" - 5/8"	8 - 10	37.71 - 28,28	9.43 - 8.83



#### APPLICATION FIELDS:

- Air conditioning
- Transport of refrigerant gases (R290, R32, ...)

**SMISOL® Clim Duo** consists of two annealed copper tubes bonded together, compliant with EN 12735-1. The tubes are pre-insulated with a closed-cell expanded polyethylene insulation and externally protected by a white corrugated film. Thanks to their shiny, dry, and clean internal surface, these tubes ensure safe transport of refrigerants, in compliance with the strictest regulations. The tube ends are factory-sealed to preserve the tube integrity until installation. Furthermore, the insulation is CFC- and HCFC-free, compliant with Regulation (EU) No. 1005/2009, and rated BL-s1-d0 for fire reaction.

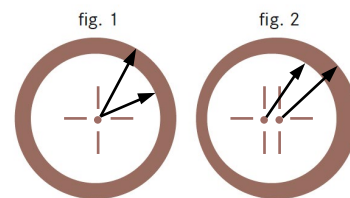
The connection system of the insulated tubes allows for simple and tool-free interconnection, enabling fast installation. **SMISOL® Clim Duo** tubes represent an innovative solution in the ACR connection field, combining efficiency, safety, and ease of use on-site.

The original inline coating process provides superior malleability compared to similar products on the market, placing it at the top of its category. This feature is preserved by a wider coil radius to avoid altering the product's flexibility.

This copper tube stands out due to its closed-cell expanded polyethylene insulation, with regular and evenly distributed cell sizes in accordance with EN 15758:2016. Designed for optimal performance, the insulating sheath is compliant with Regulation (EU) No. 1005/2009, which mandates the use of expanded insulation sheaths free of CFCs and HCFCs - chemicals known to be harmful to health and the environment. The sheath thickness is carefully dimensioned to meet the diverse needs of installations, ensuring both safety and high performance.

#### ECCENTRICITY

Low eccentricity (please see fig. 1 vs. fig. 2) ensures uniform thickness around the tube circumference. This is essential for flaring or swaging operations and provides more secure connections with fittings.



#### CIRCULAR CROSS-SECTION INSULATION

The circular cross-section insulation is designed to perfectly fit the copper tube surface. This shape ensures greater contact area between insulation and tube, reducing the risk of voids that could impair the insulating effectiveness. Good adhesion is essential to prevent heat loss, condensation formation, and to improve overall system efficiency.

#### INTERNAL CLEANING

Internal cleaning of copper tubes is crucial to ensure the efficiency and safety of any system. High cleanliness levels prevent the accumulation of contaminants and deposits, ensuring proper operation of the systems.





#### COATING CHARACTERISTICS

- Thermal conductivity:  $\lambda \leq 0.038 \text{ W/m}^\circ\text{C}$  at  $40^\circ\text{C}$ .
- Average water vapor diffusion resistance factor “ $\mu$ ”  $> 15,000$ .
- Fire behavior: BLs1d0 (EN 13501-1)
- Average coating density:  $30 \text{ kg/m}^3$ .
- Free from ammonia residues.
- Excellent resistance to external chemical agents.
- CFC- and HCFC-free according to Regulation (EU) No. 1005/2009.
- Halogen-free flame retardant.

#### COPPER TUBE CHARACTERISTICS

- Alloy: Cu DHP – CW024A
- Dimensions and tolerances: according to EN 12735-1
- Absolute roughness  $e$ :  $e = 0.0015 \text{ mm}$
- Thermal conductivity at  $20^\circ\text{C}$ :  $364 \text{ W/m}^\circ\text{C}$
- Linear thermal expansion:  $0.0166 \text{ mm/m}^\circ\text{C}$
- Elongation A5 min  $> 40\%$
- Temper: R220
- Carbon residue:  $0.38 \text{ mg/dm}^2$





### EPD DECLARATION

Environmental sustainability is playing an increasingly important role in today's landscape and influencing the decisions of companies, consumers, and planners. In this context, the **EPD (Environmental Product Declaration)** is of fundamental importance for several reasons. **SMISOL® Clim Duo** has EPD certification, which provides objective and verified information about a product's environmental impact throughout its entire life cycle, from manufacture to disposal.

This data is crucial for understanding how a product interacts with the environment and for making informed decisions during the purchasing and design phases. The adoption of international standards such as ISO 14025 ensures that the information is comparable and reliable, making it easier to choose more sustainable solutions.

This is particularly true in the construction sector, where products with EPDs are often preferred in public and private tenders. Tenders increasingly require minimum environmental criteria (MEC), and having an EPD can be a significant competitive advantage. Furthermore, the availability of an EPD declaration is becoming an essential prerequisite for obtaining renowned certifications such as LEED, BREEAM, or WELL.

No less important is the fact that in many countries, EPDs are necessary in order to comply with environmental regulations and gain access to tax breaks and relief. This legal and financial dimension makes the EPD not only a technical document, but also a competitive advantage in improving the quality of services offered to end users.

Certificate EPD-IES-0025027 is available at [www.environdec.com/library](http://www.environdec.com/library)



Further information

# WWW.SCTUBES.COM

Contact information:

**Serravalle Copper Tubes S.r.l.**

Via Cassano, 113 15069 Serravalle Scrivia (AL) ITALY

info-plumbing@sctubes.com www.sctubes.com www.kme.com/sctubes

Follow us on LinkedIn:



[linkedin.com/company/sctubes](https://www.linkedin.com/company/sctubes)

Follow us on Instagram:



[sctubes](https://www.instagram.com/sctubes)