

Product Information

VESTAMID® FOR AUTOMOTIVE AIR CONDITIONING SYSTEMS



**A COOL PATH
TO COST
EFFECTIVENESS!**

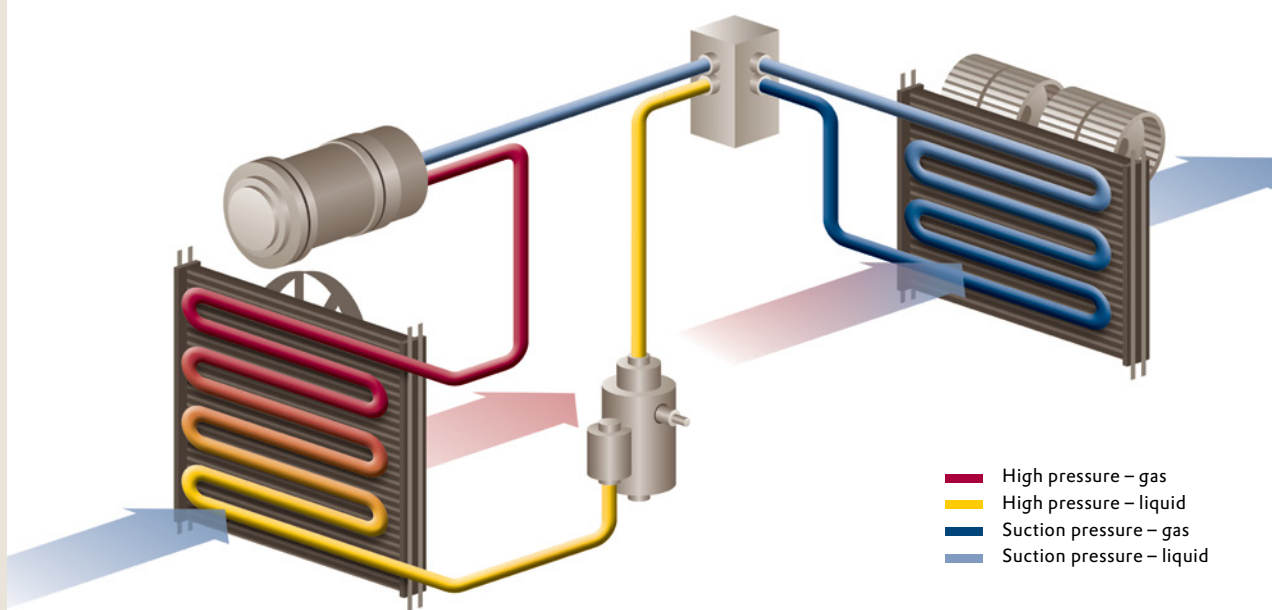
Connector designed by Pass GmbH

Automotive air conditioning (AC) lines are heavy, complex and ready for disruption. AC line specifications and requirements have been updated by the Society of Automotive Engineers (SAE) and several major OEMs to meet increased sustainability and environmental needs. With VESTAMID® solutions we provide simplified AC tubing systems, with less weight and part numbers that provide a lower CO₂ footprint for a more sustainable solution.

Choosing Evonik's VESTAMID® thermoplastic solutions provide a wide range of benefits and the right balance of performance and simplicity for your next generation AC line requirements:

- Simple extrusion of thermoplastic tubes – eliminates the need for mandrel, vulcanization leading to lower labor costs and reduces scrap
- Eliminating vulcanization reduces energy costs and CO₂ footprint
- VESTAMID® based connectors are laser welded directly to tube, which eliminates need for crimping and easier assembly at OEMs

- Brazing of metal tubes is replaced by simple and efficient thermoplastic welding process
- VESTAMID® tubes can be thermoformed into complex geometries to achieve better packaging under the hood
- Tubes and hoses made with VESTAMID® offer inherently clean inner surfaces that do not require post flushing operations
- Weight savings of more than 50% compared to existing systems (Rubber/Aluminum)



VESTAMID® AC tubing systems meet all relevant requirements of international specifications including SAE J3062, SAE J3143, SAE J2064, SAE J2260.

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* registered trademark

Properties*	Requirement	Measured values
Assembly permeation test	max 1.5 kg/m ² /year	0.21 kg/m ² /year
	min 7.9 MPag at 90°C	11.6 MPag at 90 °C
Assembly bursting strength for liquid line	min 10.0 MPag at RT	26.4 MPag at RT
Extraction test	max 118 g /m ²	Pass
Vacuum flattening		Pass
Thermal cycle / connecting integrity		Pass
Zink chloride test	acc. to SAE J2260	Pass
Moisture ingress (change in water content)	max 1.5%	Pass
Tensile strength of fittings for liquid line	min 950 N	2700 N
Impulse test with compressor oil PAG		Pass
Compatible with various refrigerants (incl. R-1234yf) and lubricants (PAG, POE compressor oils)		

* Tubing size: 10 mm OD and 6 mm ID

OUR MATERIALS
FOR AC SOLUTIONS
Tube VESTAMID® DX9305
Connector VESTAMID® D DP10283

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