

VENA® THERMIC FLOW

Vena® Thermic Flow is designed for primary cooling loops in modern data center infrastructures, where high coolant volumes and efficient heat transfer are required. It is the optimal solution for connections between chillers, cooling towers, and CDU systems, supporting large-scale thermal management.

With larger internal diameters (IDs), this hose enables maximum flow capacity while maintaining flexibility for easier installation across infrastructure-level layouts. It ensures stable thermal performance across the system, contributing to efficient heat dissipation in high-load environments.

Engineered for durability, Vena® Thermic Flow withstands continuous operation while offering excellent chemical compatibility with a wide range of modern coolants. Its construction prevents material degradation and ensures long-term system reliability, even in demanding cooling applications where fire certification is not required.

PROPERTIES

- Black colour and smooth inner appearance, made from EPDM peroxide-cured synthetic rubber.
- Brick red colour and smooth outer appearance,
- Good flexibility and anti-twist properties
- Weather resistance and antifouling.
- Reinforced by a synthetic textile with an embedded steel helix.
- Operational temperature ranges from -40°C (-40° F) to +120°C (248° F). It can be sterilized at +130°C (266° F) for a maximum time of 30 minutes.
- Can be equippedwith 316L stainless steel fittings on each end with a roughness value of less than 0.8 µm. The roughness value can be reduced to 0.375 µm under request.
- Available at a maximum length of 40m (131.23ft).
- Vacuum resistance: 0,9 bar (13,05 psi)

CONSTRUCTION MATERIALS

This product is manufactured with inner black peroxide-cured EPDM quality rubber and outer brick red EPDM cover; it is equipped with textile reinforcements inside the wall of the tube and, in the inner diameter equal to or greater than 25.4mm, a stainless-steel wire spire between layers.

REGULATIONS

EPDM rubber produced in compliance with:

- ResAp 2004 (5), according to Reg 1935/2004/EEC, and Reg 10/2011/EEC
- This reference is in accordance with the RoHS Directive 2002/95/EC and its subsequent amendments including the RoHS2 Directive 2011/65/EU and RoHS3 Directive 2015/863.
- Safety is a non-negotiable requirement for in-rack components. Vena® Thermic Core is UL-94 V0 certified, ensuring the hose meets strict flame-retardant standards. This certification aligns with international fire safety regulations for electronics and data processing equipment.

TECHNICAL SPECIFICATIONS

INNER DIAMETER		OUTSIDE DIAMETER		WORKING PRESSURE ISO 1402		BURSTING PRESSURE ISO 1402		BENDING RADIUS
mm	**Inch**	**mm**	**Inch**	bar at 20°C	psi at 68°F	bar at 20°C	psi at 68°F	mm
15.9	5/8	25	0.98	10	145.04	30	435.11	55
19	3/4	30	1.18	10	145.04	30	435.11	65
25.4	1	37	1.46	10	145.04	30	435.11	90
31.8	1 1/4	44.5	1.75	10	145.04	30	435.11	110
38	1 1/2	52	2.05	10	145.04	30	435.11	135
50.8	2	66	2.59	10	145.04	30	435.11	180
63.5	2 1/2	79.5	3.13	10	145.04	30	435.11	220
76.2	3	92	3.62	10	145.04	30	435.11	270
89.0	3 1/2	106	4.17	10	145.04	30	435.11	315
101.6	4	118.6	4.67	10	145.04	30	435.11	360

LIMITATIONS

- Respect the work pressureestablished values.
- Mind the chemical compatibility of the fluid with EPDM rubber.

CONTACT

IMPORTANT: The Company reserves the right to change, amend, modify, suspend, continue or terminate all or any part of this Document at any time without notice. It is the user's responsibility to ensure the suitability and safety of the VENAIR products for all intended uses. All the tests must be conducted in accordance with applicable regulatory requirements in order to determine the safety and effectiveness for use of the hoses in any particular application.

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venair
Fluid solutions. Solid performance.