

VENAIR
INDUS-
TRIAL

FLEXIBLE SILICONE HOSES
FOR INDUSTRIAL ENGINES



venair



Sistema de
Gestión
ISO 9001:2015
ISO 14001:2015



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Management
System
IATF 16949:2016



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VENAIR



VENAIR IS AN INTERNATIONAL GROUP LEADER IN ENGINEERING AND MANUFACTURING OF SILICONE HOSES FOR THE MOST DEMANDING INDUSTRIES SUCH AS THE AEROSPACE, MILITARY, FUEL CELLS AND ENERGY GENERATION, MOTORSPORT, VENTILATION, ABRASIVE PARTICLES, MARINE OR INDUSTRIAL ENGINES.

With more than 30 years of history, Venair has created an extensive international network that has led to open three manufacturing centers in Spain, Vietnam and Romania and 32 delegations distributed in Europe, America and Asia. Thanks to Venair's internationalization strategy, accompanied by a commitment to deliver high-quality products and a constant focus on the customer's needs, today we market our wide range of products worldwide.

Whatever the nature of the fluid you convey, its temperature, concentration, working pressure or even the type of cleaning cycles used in your process, Venair emerges as the specialist in the transfer of liquid, pasty products or even solids offering a wide range of flexible solutions and customized pieces in silicone and other materials. To further strengthen our image, we hold the management certificates ISO 9001, ISO 14001, EMAS, IATF and also several product standardizations.

CUSTOMIZATION IS OUR ADDED VALUE

Our technical & engineering team is responsible for safeguarding the interests of our clients in designing the optimal product for each application. Together with the inventions that come out from our R&D department, we have developed and patented a wide range of products and we have more than 70 registered trademarks that support our innovative activity. We can produce different hoses and ducting solutions made of silicone and other materials such as aramid, fiberglass, neoprene, polyurethane and many others to fulfill every demand. In the industrial section, group Venair works for companies like New Flyer, Porsche, Audi, Williams, Fiat, Bosch and Iveco, among others.



Watch our
corporate video

VENA[®] SIL 200/240

Straight hose



> MATERIAL:
Silicone VMQ (Vinyl Methyl Quality)

> CERTIFICATIONS:

- > SAE J20 R1 Class A.
- > Material used is in accordance with EU Directive 2015/863 for Restriction of the use of hazardous substances (RoHS 3).

> CONSTRUCTION:

- **SIL 200:**
3 plies of polyester fabric.
- **SIL 240:**
4 plies of polyester fabric.
- It can also be supplied with another type of textile reinforcement (Aramid,

fiberglass).

> STANDARD WALL THICKNESS:

- SIL 200: 4,3mm (+1/-0,5mm) | 0,17" (+0,04/-0,02")
- SIL 240: 5,3mm (+1/-0,5mm) | 0,20" (+0,04/-0,02")

> STANDARD LENGTH:

From 1 to 4m (3,8 to 13,12ft). Can be cut to smaller lengths upon customer request.

> OUTER APPEARANCE:

Smooth outer and inner appearance.

APPLICATIONS:

Suitable for use in straight lengths, with no bending requirements. It is especially recommended for pressurized air or water conduction at high temperatures, it can be used in vehicles and in the industrial sector. For use in cooling and heating systems in buses, coaches, trucks, industrial vehicles, cooling systems in cogeneration units and marine engines, and transport of high temperature fluids in general industry.

* Not indicated for working at vacuum applications.



TEMPERATURE RANGE:
-55°C / +180°C
(-67°F / +356°F)



**TECHNICAL TABLE
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STRAIGHT REDUCER

Standard length:
100mm/150mm
(4"/6")



ELBOW 90° / 45° / 135°

Standard length:
Length of legs:
100mm/150mm/200mm
(4"/6"/8")



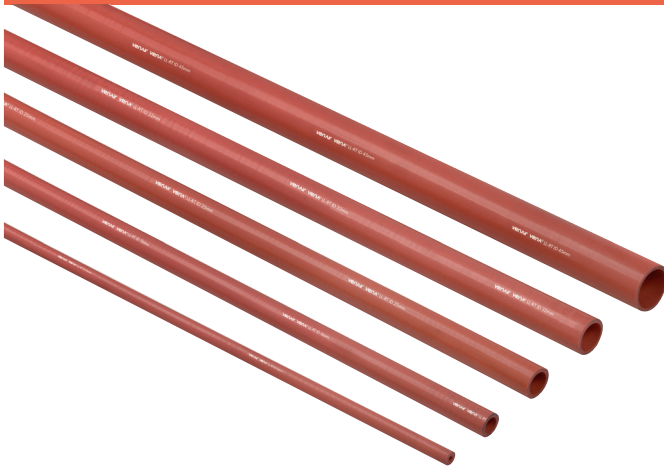
REDUCER ELBOW 90°

Standard length:
Length of legs:
100mm/150mm
(4"/6")



VENA[®] LL-RT

High-tech construction straight hose



APPLICATIONS:

VENA[®] LL-RT is the best solution for cooling systems where the hoses stand hard-working conditions. It is highly recommended for cooling systems in buses, coaches, lorries and industrial vehicles. Its construction is specifically designed to suit EURO 5 and EURO 6 engines since it has several textile reinforcements and it stands out for its high thermal and mechanical resistance. The silicone formulation of Vena[®] LL-RT is highly recommended for these applications and intended for all the cooling liquids from the market. It is used by the largest Transportation Authorities and Fleet Companies worldwide to reduce warranty and maintenance down time in their cooling system connections.



> MATERIAL:

Silicone VMQ (Vinyl Methyl Quality)

> CERTIFICATIONS:

- O.A.T Specific coolant straight hose, SAE J20 R1 Class A.
- Pulse Pressure Fatigue Test during 1391 hours, 500.000 cycles. Pressure test shows no pressure resistance loss after aging, no signs of chemical incompatibility with the coolant, small/regular opening angle, no diametric expansion after work.

> Material used is in accordance with EU Directive 2015/863 for Restriction of the use of hazardous substances (RoHS 3).

> CONSTRUCTION:

Venair LL-RT construction is the most technically advanced solution

STRAIGHT REDUCER

Standard length:
100mm/150mm (4"/6")

ELBOW 90° / 45° / 135°

Standard length:
100mm/150mm (4"/6")

REDUCER ELBOW 90°

Standard length:
100mm/150mm (4"/6")

to extreme operating conditions and resistance to the modern aggressive coolants in the market, thanks to its several textile reinforcements.

> STANDARD WALL THICKNESS:

- SIL 200: 4,3mm (+1/-0,5mm) | 0,17" (+0,04/-0,02")
- SIL 240: 5,3mm (+1/-0,5mm) | 0,21" (+0,04/-0,02")

> STANDARD LENGTH:

From 1 to 4m (3,8 to 13,12ft).
Can be cut to smaller lengths upon customer request.

> OUTER APPEARANCE:

Smooth and red tile color.



TEMPERATURE RANGE:

-55°C / +200°C
(peaks up to 220°C)
(-67°F / 392°F)
(peaks up to 428°F)



TECHNICAL TABLE
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VENA® TECHNOSIL®-HEATER HOSE



> MATERIAL:

Silicone VMQ (Vinyl Methyl Quality).

> CERTIFICATIONS:

SAE J20R3 Class A

> Material used is in accordance with EU Directive 2015/863 for Restriction of the use of hazardous substances (RoHS 3).

> CONSTRUCTION:

Polyester braiding

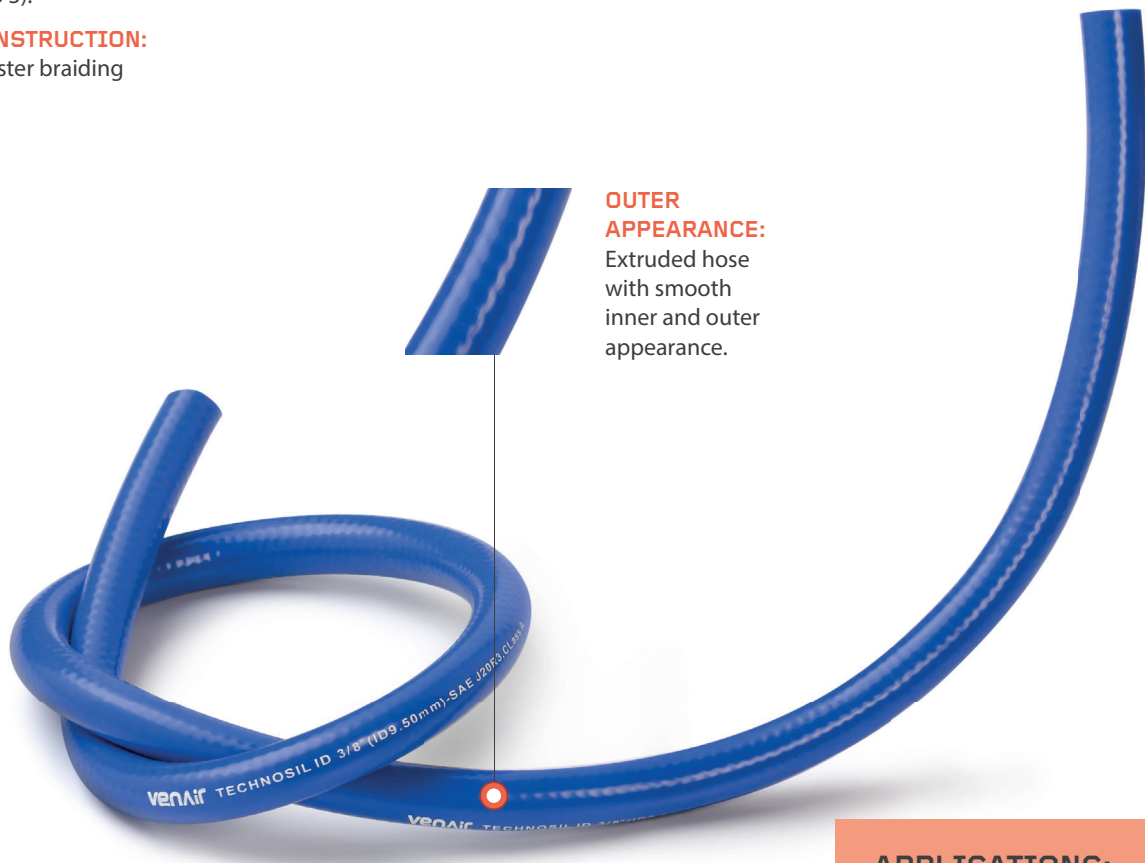
> STANDARD WALL THICKNESS:

Depending on diameter.

> STANDARD LENGTH:

Standard rolls of 76,2m (250 ft.) delivered on a plastic spool. Other lengths are possible upon request.

For cooling systems in
the automotive industry



OUTER APPEARANCE:

Extruded hose with smooth inner and outer appearance.



TEMPERATURE RANGE:

-55°C / +180°C
(-67°F / +356°F)



TECHNICAL TABLE
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APPLICATIONS:

It is especially recommended for use in water and ethylene glycol-based engine coolant system applications. This type of hose is used in connecting heater systems and other components in the coolant circulating systems of ground vehicles (for example in heavy duty truck and bus engines).

TELCRA®

Insulating material for silicone hoses



> MATERIAL:

TELCRA® is an innovative and unique material in the market with excellent insulation characteristics. This material possesses low thermal conductivity and low density, for this reason it can achieve excellent insulation with a low thickness. It forms chemical bond with silicone materials. Telcra can be applied in the outer layer of any of Venair products.

> CONSTRUCTION:

Telcra® presents an adhesive-free chemical adhesion with silicone materials, so it can be applied to any of the products of Venair's catalogue.

> **DENSITY:** 500 kg/m³

> **THICKNESS:** Customizable

> **THERMAL CONDUCTIVITY:** 0.12 (W/m.K)

> ADVANTAGES:

- **ULTRA LIGHT:** Lightweight material with a density of 500 kg/m³.
- **EASY INSTALLATION:** Super flexible material. Contours easily to complex forms.
- **ADHESION TO SILICONE:** Telcra® presents an adhesive-free chemical adhesion with silicone materials.
- **ENVIRONMENTALLY SAFE:** Odorless, tasteless and completely non-toxic.

APPLICATIONS:

TELCRA® has the best thermal insulation and a low thermal conductivity for improved efficiency. When the hose is properly installed in the correct thickness, it eliminates condensation problems on cold surfaces.

It is suitable for very cold or frozen liquids and semi-liquids. It helps maintaining the temperature of the product inside.



TEMPERATURE RANGE:

-55°C/+180°C
(-67°F/+356°F)



OUTER APPEARANCE:
Smooth and blue or white color.

Check out how it works



VENA[®] SIL 700V



> MATERIAL:

Silicone VMQ (Vinyl Methyl Quality).



TEMPERATURE SCALE:

-55°C/+180°C (-67°F/+356°F)

> ALTERNATIVE:

SIL 700V FR-HL for railway HL2 (EN-45545 R22 & R23)

SIL 700V Lastic: With much higher elasticity for very small bend radius



TECHNICAL TABLE ON PAGE: 26

> OUTER APPEARANCE:

Smooth inner and outer appearance.

Highly flexible smooth silicone hose

APPLICATIONS:

Suitable for use where a small bending radius is required. It is capable for vacuuming applications thanks to its wire spiral.

> CERTIFICATIONS:

SAE J20R2 Class A

> Material used is in accordance with EU Directive 2015/863 for Restriction of the use of hazardous substances (RoHS 3).

> CONSTRUCTION:

Spiral steel wire between two plies of polyester fabric covered in blue silicone.

> STANDARD WALL THICKNESS:

Depending on diameter.

> STANDARD LENGTH:

From 1 to 4m (3,8 to 13,12ft). Can be cut to smaller lengths upon customer request.

VENA[®] SIL 700V-PL



> MATERIAL:

Silicone VMQ (Vinyl Methyl Quality).



> CERTIFICATIONS:

SAE J20R2 Class A

> Material used is in accordance with EU Directive 2015/863 for Restriction of the use of hazardous substances (RoHS 3).

> CONSTRUCTION:

Plastic spiral between two plies of polyester fabric covered in blue silicone.

> STANDARD WALL THICKNESS:

Depending on diameter.

> STANDARD LENGTH:

From 1 to 4m (3,8 to 13,12ft). Can be cut to smaller lengths upon customer request.

> OUTER APPEARANCE:

Smooth inner and outer appearance.



TEMPERATURE SCALE:

-55°C / +180°C
(-67°F / +356°F)

Highly flexible plastic spiral hose

APPLICATIONS:

> Its high flexibility thanks to the plastic spiral makes this product suitable for use where a small bending radius is required. The plastic spiral makes it ideal in cases where metal detection is required. Light hose ideal to avoid interferences due to magnetic field. Vena Sil 700 V- PL guarantees safe manipulation to the plan operators.

VENA[®] SIL TURBO

Turbocharger



> MATERIAL:

Silicone VMQ (Vinyl Methyl Quality) outside and FVMQ (Fluor-Vinyl Methyl Quality) inside.

> CONSTRUCTION:

Several Aramid plies

Alternatives:

- Inner liner of FKM material.
- Inner liner of VMQ material.

> STANDARD WALL THICKNESS:

It depends on the diameter and the number of plies. Please consult.

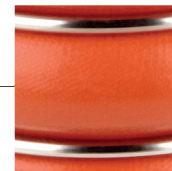
> STANDARD LENGTH:

All our standard or customized products can be produced with this option.



APPLICATIONS:

Specifically used in turbocharger systems for industrial vehicles, due to its high capacity to withstand hydrocarbons and/or oil particles in the cooling pressurized air.



OUTER APPEARANCE:

Smooth piece with convolutions.



TEMPERATURE RANGE:

-55°C / +200°C (peaks up to 220°C)
-67°F / 392°F (peaks up to 428°F)



**TECHNICAL TABLE
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OTHER AVAILABLE OPTIONS



**REDUCER
TURBOCHARGER**



**STRAIGHT
CONNECTOR**



**REDUCER
ELBOW 90°**

VENA[®] TURBOLASTIC[®]

NEW CAC hose design



> **MATERIAL:** This reference is manufactured with aramid textile reinforcements specially formulated with high elasticity properties.

> **CERTIFICATIONS:**

Material used is in accordance with EU Directive 2015/863 for Restriction of the use of hazardous substances (RoHS 3).

> **CONSTRUCTION:**

Two aramid fabric reinforcement. The inner layer can be orange when it is VMQ, blue when it is FVMQ and black when it is FKM.

> **STANDARD WALL THICKNESS:**

It depends on the diameter and the number of plies. Please consult.

> **STANDARD LENGTH:**

4m (13.12 ft). Some diameters can be produced up to 6m (19.69 ft).

APPLICATIONS:

Straight hoses with no convolutions, ideally suited to resist tension and tightness of vibration at high temperatures. Highly resistant to hardening, Turbolastic[®] guarantees up to 10% compression without collapsing. It is able to absorb vibrations between connected parts and it avoids tension and noise without the assembling of the external stainless steel rings. This product is not recommended for the transport or abrasive particles.



Check out
how it works



**OUTER
APPEARANCE:**

Smooth and
orange colored.



TEMPERATURE RANGE:

-55°C / +200°C
(peaks up to 220°C)
-67°F / 392°F
(peaks up to 428°F)

VENA[®] SIL 500

Marinewetexhaustsystems

ISO 13363 & SAE J2006
(LLOYD'S)



APPLICATIONS:

This product is recommended to be used in the nautical industry and in the evacuation of humid gas in propulsion marine systems.



> MATERIAL:
Silicone VMQ (Vinyl Methyl Quality).

> CERTIFICATIONS:

This product has the Type Approval Certificate (TAC) number 12/00066 issued by Lloyd's Register, which certify the compliance with the SAE J2006 for the three styles R1, R2 and R3 and also with the ISO/DIN 13363 for silicone pieces used in the marine wet exhaust system.

> Material used is in accordance with EU Directive 2015/863 for Restriction of the use of hazardous substances (RoHS 3).

> CONSTRUCTION:

Wide range of inner diameter (6 to 508 mm or 1/4" to 20") for straight hoses, elbows and sleeves with convolutions.

> STANDARD WALL THICKNESS:

> R1 & R3

Depending on diameters:

- **Ø6 to Ø35mm:**
4.3mm (+1.0/-0.5 mm)
3 PLIES OF POLYESTER
- **Ø38 to Ø150mm:**
5.3mm (+1.0/-0.5 mm)
4 PLIES OF POLYESTER
- **Ø151 to Ø300mm:**

7.0mm (+1.5/-0.7 mm)
5 PLIES OF POLYESTER

- **Ø301 to Ø508mm:**
10.0mm (+1.5/-0.7 mm)
6 PLIES OF POLYESTER

> STANDARD LENGTH:

- Straight hoses:
from 1000 to 4000 mm.
- Convoluted hoses:
100, 160, 170, 200, 220, 250,
300, 350 mm.
- Elbows (legs):
100x100, 150x150, and
200x200 mm.

- Range of diameters:
from 6mm (1/4") to 508 mm
(20").

> PROPERTIES:

Not affected by anti-freeze or antirust liquids.

- Highly resistant to hardening with very good compression characteristics.
- Excellent flexibility during the assembly process.
- Excellent resistance to thermal aging and oxidizing agents.



OUTER APPEARANCE:
Smooth and blue.



TEMPERATURE RANGE:

-55°C/+180°C
(-67°F/+356°F)

FUEL CELLS®



> **MATERIAL:** Silicone + textile reinforcements



Fuel Cell Silicone Hoses

APPLICATIONS:

The most efficient customized solution for each specific process in Fuel Cell systems.

- High flexibility
- High purity (Pharma quality)
- Low permeability
- Low weight



TEMPERATURE RANGE:

-60°C/+180°C
(-76°F/+356°F)

HYDROGEN LINE (ANODE):

> Low permeability fkm hose for the most efficient hydrogen upload system in Fuel Cell engines.

OXYGEN LINE (CATHODE):

> High purity platinum cured silicone hose for air intake in Fuel Cell engines.

WATER LINE:

> High purity platinum cured silicone hose specially designed for the transfer of water and coolants in the cooling system of Fuel Cell engines.

VENA® SIL FR-V0 (UL94)

> **CERTIFICATIONS:**

Meets or exceeds the UL94 V0 rating.

> Material used is in accordance with EU Directive 2015/863 for Restriction of the use of hazardous substances (RoHS 3).

VENA® SIL FR-HL (EN-45545)

> **CERTIFICATIONS:**

Meets or exceeds the EN-45545-2 HL2 (R22 & R23) rating.



> **MATERIAL:**

Special silicone formulation.

> **CONSTRUCTION:**

Flame retardant silicone hose built with several textile reinforcements, specially designed to comply with the most demanding Flammability Standards. It can also be manufactured with steel wire spiral as the Vena Sil 700V.

> **STANDARD WALL THICKNESS:**

3.7mm (+1.0/-0.5mm), 4.5mm (+1.0/-0.5mm), 5.5mm (+1.5/-0.7mm) with wire.

> **STANDARD LENGTH:**

From 1 to 4m (3,8 to 13,12ft). All our standard or customized products can be produced with this option.



TEMPERATURE RANGE:

-55°C / +200°C
(peaks up to 220°C)
-67°F / +392°F
(peaks up to 428°F)



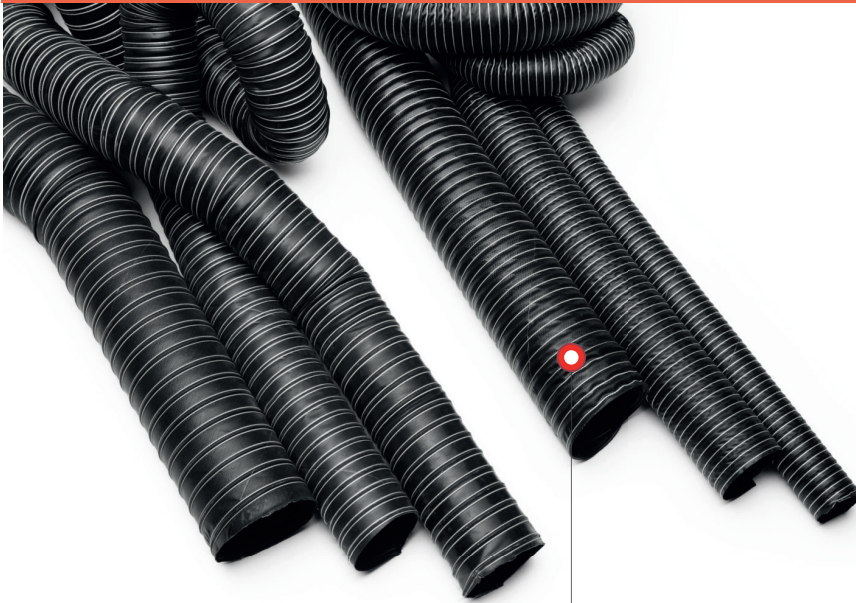
**TECHNICAL TABLE
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APPLICATIONS:

Specifically used for cooling and turbocharger systems and other liquid or air conduction systems in any kind of engine or vehicle subjected to special Flammability Regulations (Railway industry).

VENA® MT/MTD/ECO

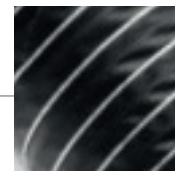
Medium temperature
hose



APPLICATIONS:

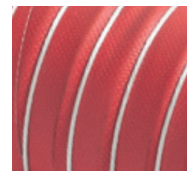
This product is ideal to be used in the cooling of electronic units, in the transport of hot air in printing machines and plastic bag production machines and for extraction of engine fumes.

OUTER APPEARANCE:



STANDARD

Corrugated and black.



ECO EN-45545

Corrugated and pink.



> MATERIAL:

Neoprene and fiberglass.

> CERTIFICATIONS:

> Material used is in accordance with EU Directive 2015/863 for Restriction of the use of hazardous substances (RoHS 3).

Vena® MTD ECO meets the EN-45545-2 HL3 (R22 & R23) and the UL94VO rating.

> CONSTRUCTION:

• **MT:** One layer of fiberglass with neoprene and visible steel wire spiral inside the hose.

- **MTD:** Two layers of fiberglass with neoprene and steel wire spiral between the layers.
- **MTD ECO:** Fiberglass with pink color neoprene; HL3 (EN-45545 R22 and R23); and V0 (UL94).

> STANDARD LENGTH:

4m. Diameters between 13 and 300mm (1/2" to 12").



TEMPERATURE RANGE:

-55°C/+125°C
(-67°F/+257°F)



TECHNICAL TABLE
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VENA[®] HT/HTD

High temperature hose



APPLICATIONS:

This product is recommended for the extraction of hot air from ceramic kilns. Suitable for its use in heating airplane or helicopter cockpits, ventilation and climate control on board ships, covering of pipes transporting hot air and protection of electricity cables that run through very hot places.



> MATERIAL:

Silicone VMQ (Vinyl Methyl Quality) and fiberglass.

> CERTIFICATIONS:

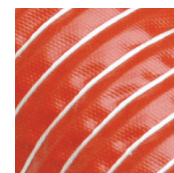
> Material used is in accordance with EU Directive 2015/863 for Restriction of the use of hazardous substances (RoHS 3).

> CONSTRUCTION:

- **HT:** One layer of fiberglass with silicone and visible steel wire spiral inside the hose.
- **HTD:** Two layers of fiberglass with silicone and steel wire spiral between the layers.

> STANDARD LENGTH:

4m. Diameters between 13 and 300mm (1/2" to 12").



OUTER APPEARANCE:

Corrugated and red.



TEMPERATURE RANGE:

-55°C / +260°C
(peaks up to 300°C)
-67°F / +500°F
(peaks up to 572°F)



TECHNICAL TABLE
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VENA[®] TECHNIPUR[®]

Ductings
for abrasive
products



TEMPERATURE RANGE:

-18°C / +80°C
(peaks up to 100°C)
-0.4°F / +176°F
(peaks up to 212°F)



**TECHNICAL TABLE
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> CERTIFICATIONS:

Material used is in accordance with EU Directive 2015/863 for Restriction of the use of hazardous substances (RoHS 3).

> MATERIAL:

Polyurethane

> STANDARD LENGTH:

10m. Other dimensions under request.

> OUTER APPEARANCE:

Translucent and corrugated.

> PROPERTIES:

- Polyurethane is 10 times more resistant to abrasion than PVC.
- It is highly flexible.
- It is appropriate for the aspiration of all kind of abrasive particles.
- Highly resistant to ageing.
- It does not contain cadmium.
- The hoses can be ordered with wire fitted parallel to the spiral wire, to improve static electricity discharge.

> ALTERNATIVES:

- Antistatic: with a copper wire parallel to the wire spiral for better electrostatic discharge.
- Conductive: with electrical resistivity < 10⁹ Ohm · m
- Technipur range can also be supplied in food grade polyurethane.

VENA[®] TECHNIPUR[®]

APPLICATIONS:

This reference is suitable for suction of all types of abrasive particles, such as sawdust, granular products, powder of all types including cement. This reference is specially recommended for all types of machinery for the woodworking industry.

> CONSTRUCTION:

Two overlapping sheets of polyurethane with copper or brass-plated steel wire between.

> **STANDARD WALL THICKNESS:**
0.5mm (0.02 inch).

VENA[®] TECHNIPUR[®]-S

APPLICATIONS:

More resistant to pressure and depression than Technipur, this S version is suitable for suction of all types of abrasive particles, such as sawdust, chips, granular products, salt, sugar and powder of all types, including cement. Ideal for all types of machinery for the wood and paper working industry.

> CONSTRUCTION:

Two overlapping sheets of polyurethane with white PVC covered steel wire between both sheets.

> **STANDARD WALL THICKNESS:**
0.8mm (0.03 inch).

VENA[®] TECHNIPUR[®]-VAC

APPLICATIONS:

This reference is also suitable for suction of all types of abrasive particles but has greater resistance to vacuum.

> CONSTRUCTION:

Two overlapping sheets of polyurethane with white PVC covered steel wire between both sheets.

> **STANDARD WALL THICKNESS:**
1.2mm (0.05 inch).

VENA® WYREM®

Robust ducting for fumes and particle extraction



> **MATERIAL:**
Chloroprene

> **CONSTRUCTION:**

Two reinforced layers of chloroprene coated cotton and two spring steel helices.

> **STANDARD LENGTH:**

6m (19.69 ft.)

> **OUTER APPEARANCE:**

Corrugated and black. The inner helix is visible.

> **PROPERTIES:**

Chloroprene offers high resistance to chemical attack in both acidic and basic solutions. Cotton has better mechanical strength than glass fiber fabric. It is extremely durable and hard wearing hose. It offers excellent flexibility, highly resistance to ozone and good vacuum resistance.



APPLICATIONS:

Vena® WYREM® flexible hoses are recommended for the transference of air, fumes and particle extraction and suction, dust and exhaust gases, and ventilation in general industries.



TEMPERATURE RANGE:

-20°C/+100°C
(-4°F/+212°F)



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VENA® INDUSTRIA

Medium or high temperature air ductings for large flow volumes of air

> **STANDARD LENGTH:**

10m. Different manufacturing diameters of between 100 and 750mm.

> **OUTER APPEARANCE:**

Corrugated and black.

> **PROPERTIES:**

Extremely light and flexible.



HPH

> **CONSTRUCTION:**

High tensile wire helix sewn spirally into a black/grey Hypalon coated nylon fabric with wear strip. Sewn with synthetic thread.

> **TEMPERATURE RANGE:**

-55°C to +155°C (-67°F to 311°F)

SGS

> **CONSTRUCTION:**

Fiberglass fabric covered with silicone, with an exterior steel spiral covered with a silicone section.

> **TEMPERATURE RANGE:**

-55°C to +300°C (-67°F to 572°F)

APPLICATIONS:

Suitable for its use in air conditioning systems and big flow ventilation.

SPECIAL APPLICATIONS ENGINEERED AND MANUFACTURED TO YOUR EXACT SPECIFICATIONS.

Venair's main added value is the capacity to manufacture and deliver any kind of custom made product and piece to suit the market requirements. As so, we offer different kind of solutions that can be applied to any of the products from the industrial catalogue.

ALU PROTECTIONS

> CONSTRUCTION:

Special aluminum coated fiberglass designed to protect a specific area or the whole silicone hose where focused high temperatures are present.



APPLICATIONS:

This solution is used mainly to reflect the heat radiation when the hose is very near to the heat focus, which grants a longer life to the product.

CUSTOM ENGINEERED HOSE-FITTING COMBINATION

> CONSTRUCTION:

Custom engineered connections

APPLICATIONS:

Fasteners which loosen due to vibration are a challenge in well-supported engine blocks. To keep engine blocks sealed and prevent leaks we offer different types of hose/fitting combinations, which help to withstand extreme heat and vibration, while reducing cost, assembly and warranty issues.



CUSTOM ENGINEERED SHAPES AND DUCTING

> CONSTRUCTION:

- We produce hoses with a wide variety of constructions, with different characteristics and mechanical properties.
- Custom engineered ducting is produced with layers of fiberglass coated with silicone or neoprene with steel wire spiral inside the hose. Light-weight construction in combination with high mechanical strength, flexibility, temperature resistance.



APPLICATIONS:

Our silicone shapes are engineered and manufactured according to the customer's needs, so that we deliver in accordance to drawing specifications or samples supplied by the customer in specific applications.



VENA[®] SIL GLASS

Straight silicone hose
for high temperatures



APPLICATIONS:

This reference is recommended for the transport of clean air by impulsion and as a metal fitting connection, specially indicated to resist tension and tightness of vibrations at high temperatures. Suitable for use in straight lengths, with no bending requirements. It can be used in cooling and heating systems in buses, coaches, trucks, industrial vehicles, cooling systems in cogeneration units and marine engines, and transport of high temperature fluids in general industry.



> MATERIAL:

High temperature resistant silicone.



OUTER APPEARANCE:

Smooth and blue.

> CERTIFICATIONS:

Material used is in accordance with EU Directive 2015/863 for Restriction of the use of hazardous substances (RoHS 3).

> CONSTRUCTION:

This reference is manufactured with three glass fiber fabric reinforcements.

> STANDARD WALL THICKNESS:

It is possible to produce any special shaped hose (e.g. elbow, reducer, etc.) upon request.

> STANDARD LENGTH:

From 1 to 4m (3 to 13ft). Can be cut to shorter lengths upon request.



TEMPERATURE RANGE:

-55°C / +235°C
(peaks up to 250°C)
-67°F / +455°F
(peaks up to 482°F)

VENA® VITOSIL

Oil and Hydrocarbon resistant silicone hose



> **MATERIAL:**
Silicone VMQ (Vinyl Methyl Quality) and FKM.



> **TEMPERATURE RANGE:**

Polyester reinforcement:
-55°C / +180°C
(peaks up to 200°C)
-67°F / 356°F
(peaks up to 392°F)
Aramid reinforcement:
-55°C / +200°C
(peaks up to 220°C)
-67°F / 392°F
(peaks up to 428°F)

> **APPLICATIONS:**

It is specially recommended for the transport of liquids or semi-liquids chemical products in the industrial sector, such as fuel, oils or any aggressive fluids when there are problems with silicone compatibility.

> **CERTIFICATIONS:**

> Material used is in accordance with EU Directive 2015/863 for Restriction of the use of hazardous substances (RoHS 3).

> **CONSTRUCTION:**

Silicone hose with an inner layer of black FKM (fluoroelastomer) and three (Sil 200 construction) or four (Sil 240 construction) fabric reinforcements (polyester or aramid).

> **STANDARD LENGTH:**

From 1 to 4m (3 to 13ft). Can be cut to smaller lengths upon request.

> **OUTER APPEARANCE:**

Adaptable to the product where it is applied.



TECHNICAL TABLE ON PAGE: Polyester reinforcement, Pg. 22 (Same as Vena® Sil 200/240)
Aramid reinforcement, Pg. 33

VENA® SIL 200 R/A

Oil-resistant silicone hose



> **MATERIAL:**
Silicone VMQ (Vinyl Methyl Quality) in the outer layer and Silicone R/A (Oil-Resistant) in the inner layer.

> **CONSTRUCTION:**
3 plies of polyester fabric

> **STANDARD WALL THICKNESS:**
4,3mm (+1/-0,5mm) / 0,17"
(+0,04/-0,02")

> **STANDARD LENGTH:**
From 1 to 4m (3 to 13ft). Can be cut to smaller lengths upon request.

> **OUTER APPEARANCE:**
Smooth and blue.

> **APPLICATIONS:**

Suitable for use in straight lengths with no bending requirements. Suitable for engine oils and other mineral oils. It is good for conveying oil particles.



TEMPERATURE RANGE:
-55°C / +150°C
(-67°F / +302°F)



TECHNICAL TABLE ON PAGE: 22 (same as Vena Sil 200/240)

VENA® SIL 200/240

INNER DIAMETER*		WORKING PRESSURE**				BURSTING PRESSURE			
		ISO 1402/2009				ISO 1402/2009			
mm	inch	bar (SIL200)	psi (SIL200)	bar (SIL240)	psi (SIL240)	bar (SIL200)	psi (SIL200)	bar (SIL240)	psi (SIL240)
6	1/4	16,1	234	21,2	309	48,5	703	63,5	928
13	1/2	9,7	141	12	174	29,1	422	36	522
19	3/4	7,2	104	9,3	135	21,8	316	28	406
25	1	5,9	86	7,6	110	17,7	257	23	334
32	1 1/4	4,9	71	6,3	91	14,7	213	19	276
38	1 1/2	4,3	62	5,6	81	12,9	187	17	247
45	1 3/4	3,7	54	5	73	11,3	164	15	218
51	2	3,4	49	4,6	67	10,3	149	14	203
57	2 1/4	3,1	45	4,3	62	9,4	136	13	189
63	2 1/2	2,9	42	4	58	8,8	128	12	174
70	2 3/4	2,7	39	3,6	52	8,1	117	11	160
76	3	2,5	36	3,3	48	7,5	109	10	145
80	3 1/8	2,3	33	3,3	48	6,9	100	10	145
90	3 1/2	1,9	28	3	44	5,7	83	9	131
100	4	1,6	23	2,6	38	5	73	8	116

* Other diameters can also be manufactured. Please consult.

** Pressure data is noted at ambient temperature. Pressure values should be reduced by 20% for each increase of 100°C (212°F).

REDUCER ELBOW 90°

DIAMETER*		DIAMETER*	
mm	inch	mm	inch
25/19	1 > 3/4	60/50	2 3/8 > 2
32/25	1 1/4 > 1	63/51	2 1/2 > 2
38/25	1 1/2 > 1	70/50	2 3/4 > 2
38/32	1 1/2 > 1 1/4	70/60	2 3/4 > 2 3/8
38/35	1 1/2 > 1 3/8	76/51	3 > 2
51/45	2 > 1 3/4	76/63	3 > 2 1/2

* Other diameters and leg lengths are available.

STRAIGHT REDUCER

DIAMETER*		DIAMETER*		DIAMETER*	
mm	inch	mm	inch	mm	inch
18/13	5/7 > 1/2	38/25	1 1/2 > 1	67/51	2 5/8 > 2
19/16	3/4 > 5/8	38/28	1 1/2 > 1 1/9	70/50	2 3/4 > 2
22/18	6/7 > 5/7	38/32	1 1/2 > 1 1/4	70/57	2 3/4 > 2 1/4
22/19	7/8 > 3/4	38/36	1 1/2 > 1 3/7	70/60	2 3/4 > 2 3/8
28/22	1 1/9 > 6/7	40/35	1 4/7 > 1 3/8	76/51	3 > 2
28/26	1 1/8 > 1	45/32	1 7/9 > 1 1/4	76/63	3 > 2 1/2
32/26	1 1/4 > 1	45/38	1 3/4 > 1 1/2	76/67	3 > 2 5/8
32/28	1 1/4 > 1 1/9	51/38	2 > 1 1/2	80/70	3 1/8 > 2 3/4
35/28	1 3/8 > 1 1/9	51/45	2 > 1 3/4	90/80	3 1/2 > 3 1/8
36/26	1 3/7 > 1	54/51	2 1/8 > 2	102/76	4 > 3
36/32	1 3/7 > 1 1/4	60/50	2 3/8 > 2	127/100	5 > 4
38/22	1 1/2 > 6/7	63/51	2 1/2 > 2		

*Other diameters and lengths are available under request.

ELBOW 90°

DIAMETER*		DIAMETER*		DIAMETER*	
mm	inch	mm	inch	mm	inch
6	1/4	38	1 1/2	76	3
8	1/3	40	1 9/16	80	3 1/8
10	2/5	41	1 3/5	90	3 1/2
13	1/2	45	1 3/4	95	3 3/4
16	5/8	48	1 7/8	102	4
19	3/4	51	2	110	4 1/3
22	7/8	55	2 1/8		
25	1	57	2 1/4		
28	1 1/8	60	2 1/3		
30	1 3/16	63	2 1/2		
32	1 1/4	67	2 5/8		
35	1 3/8	70	2 3/4		

*Other diameters and leg lengths are available.

VENA® SIL LL-RT® 200

INNER DIAMETER		WALL THICKNESS		WORKING PRESSURE		BURSTING PRESSURE	
				ISO 1402/2009		ISO 1402/2009	
mm	inch	+1/-0,5 mm	+0,04/-0,02 inch	bar at 20°C	psi at 68°F	bar at 20°C	psi at 68°F
18	11/16	4,3	0,15	13,4	194,3	40,3	584,4
25	1	4,3	0,15	8,4	121,8	25,3	366,9
35	1 3/8	4,3	0,15	5,5	79,2	16,2	237,5
38	1 1/2	4,3	0,15	4,6	66,7	13,7	198,7
48	1 7/8	4,3	0,15	4,1	59,5	12,3	178,4
60	2 3/8	4,3	0,15	3,5	51,2	10,6	153,7
65	2 9/16	4,3	0,15	3,3	47,9	9,9	143,6
70	2 3/4	4,3	0,15	3,1	44,5	9,2	133,4
75	3	4,3	0,15	2,8	40,6	8,4	121,8
80	3 1/8	4,3	0,15	2,6	37,2	7,7	111,7
90	3 1/2	4,3	0,15	2,1	30,5	6,3	91,4

* Other diameters can also be manufactured. Please consult.

** Pressure data is noted at ambient temperature. Pressure values should be reduced by 20% for each increase of 100°C (212°F).

VENA® SIL LL-RT® 240

INNER DIAMETER		WALL THICKNESS		WORKING PRESSURE		BURSTING PRESSURE	
				ISO 1402/2009		ISO 1402/2009	
mm	inch	+1/-0,5 mm	+0,04/-0,02 inch	bar at 20°C	psi at 68°F	bar at 20°C	psi at 68°F
18	11/16	5,3	0,18	14,6	211,7	43,8	635,1
25	1	5,3	0,18	10,4	150,8	31,3	453,9
35	1 3/8	5,3	0,18	8,4	122,2	22,7	366,8
38	1 1/2	5,3	0,18	7,8	113,1	23,5	340,8
48	1 7/8	5,3	0,18	6,1	88,5	18,3	265,4
60	2 3/8	5,3	0,18	5,4	78,3	16,1	233,5
65	2 9/16	5,3	0,18	5,0	72,5	15,0	217,5
70	2 3/4	5,3	0,18	4,7	68,2	14,1	204,5
75	3	5,3	0,18	4,4	63,8	13,4	194,3
80	3 1/8	5,3	0,18	4,2	60,9	12,6	182,7
90	3 1/2	5,3	0,18	3,7	53,7	11,2	162,4
100	4	5,3	0,18	2,2	31,9	6,5	94,3

* Other diameters can also be manufactured. Please consult.

** Pressure data is noted at ambient temperature. Pressure values should be reduced by 20% for each increase of 100°C (212°F).

VENA® TECHNOSIL® - HEATER HOSE

INNER DIAMETER		OUTER DIAMETER		WORKING PRESSURE**		BURSTING PRESSURE	
				ISO 1402/2009		ISO 1402/2009	
mm	inch	+1/-0,5 mm	+0,04/-0,02 inch	bar at 20°C	psi at 68°F	bar at 20°C	psi at 68°F
6,3	1/4	13,2	1/2	9,6	139	28,8	418
7,9	1/3	15	3/5	8,8	128	26,5	384
9,5	3/8	16,6	2/3	7,7	112	23	334
12,7	1/2	20,3	4/5	6,8	99	20,3	294
15,8	5/8	24,5	1	5,9	86	17,8	258
19	3/4	27,9	1	5,1	74	15,2	220
22	7/8	31,3	1 1/4	5	73	15	218
25,4	1	34,5	1 1/3	4,9	71	14,8	215
28	1 1/8	38	1 1/2	4,4	64	13,2	191
32	1 1/4	43	1 2/3	3,9	57	11,8	171

*Other diameters can also be manufactured. Please consult.

** Pressure data is noted at ambient temperature. Pressure values should be reduced by 20% for each increase of 100°C (212°F).

VENA® SIL 700/V LASTIC

INNER DIAMETER		WALL THICKNESS		WORKING PRESSURE		BURSTING PRESSURE		BENDING RADIUS	
				ISO 1402/2009		ISO 1402/2009		ISO 1746/2000	
mm	inch	+1/-0,5 mm	+0,04/-0,02 inch	bar at 20°C	psi at 68°F	bar at 20°C	psi at 68°F	mm	inch
6	1/4	5.00	0.20	19.6	283.9	58.7	851.8	10	0.4
10	3/8	5.00	0.20	16.6	240.5	49.7	721.4	10	0.4
13	1/2	5.00	0.20	15.0	218.1	45.1	654.4	10	0.4
19	3/4	5.00	0.20	12.8	185.9	38.4	557.6	23	0.9
25	1	5.00	0.20	11.2	162.5	33.6	487.6	36	1.4
30	13/16	5.00	0.20	10.1	147.0	30.4	441.0	46	1.8
38	1 1/2	5.00	0.20	8.7	126.9	26.2	380.7	62	2.4
51	2	5.00	0.20	7.0	101.9	21.1	305.6	87	3.4
63	2 1/2	5.00	0.20	5.8	83.9	17.4	251.7	108	4.3
76	3	5.00	0.20	4.7	67.9	14.1	203.8	130	5.1
90	3 1/2	5.00	0.20	3.7	53.6	11.1	160.7	151	6.0
100	4	5.00	0.20	3.1	44.6	9.2	133.8	158	6.2

VENA® SIL 700V

INNER DIAMETER*		WORKING PRESSURE**		BURSTING PRESSURE**		BENDING RADIUS	
		ISO 1402/2009		ISO 1402/2009		ISO 1746/2000	
mm	inch	bar	psi	bar at 20°C	psi at 68°F	mm	inch
6	1/4	18,8	272,9	56,4	818,7	21	0,8
10	3/8	17,5	253,3	52,4	760,0	28	1,1
13	1/2	16,5	239,3	49,5	717,8	34	1,3
19	3/4	14,7	212,7	44,0	638,2	49	1,9
25	1	13,0	188,3	38,9	564,8	66	2,6
30	1 3/16	11,7	169,5	35,1	508,5	82	3,2
38	1 1/2	9,8	142,5	29,5	427,4	113	4,4
51	2	7,3	106,6	22,0	319,7	173	6,8
63	2 1/2	5,7	82,1	17,0	246,4	239	9,4
76	3	4,5	65,2	13,5	195,5	324	12,7
90	3 1/2	4,0	57,9	12	173,7	429	16,9
100	4	4,1	59,7	12,3	179,1	513	20,2

VENA® SIL 700/ V PLASTIC

INNER DIAMETER*		WALL THICKNESS		WORKING PRESSURE**		BURSTING PRESSURE**		BENDING RADIUS	
				ISO 1402/2009		ISO 1402/2009		ISO 1746/2000	
mm	inch	+1/-0.5 mm	+0.04/-0.02 inch	Bar at 20°C	Psi at 68°F	Bar at 20°C	Psi at 68°F	mm	inch
6	1/4	5.00	0.20	22.9	331.7	68.6	995.2	19	0.7
10	3/8	5.00	0.20	18.9	273.9	56.7	821.7	25	1.0
13	1/2	5.00	0.20	16.8	244.2	50.5	732.6	31	1.2
16	5/8	5.00	0.20	15.2	220.7	45.6	662.0	51	2.0
19	3/4	5.00	0.20	13.9	201.2	41.6	603.7	71	2.8
25	1	5.00	0.20	11.7	170.2	35.2	510.5	106	4.2
30	1 3/16	5.00	0.20	10.3	149.5	30.9	448.5	133	5.2
38	1 1/2	5.00	0.20	8.5	122.7	25.4	368.2	171	6.7
40	1 9/16	5.00	0.20	8.1	116.9	24.2	350.8	179	7.0
45	1 3/4	5.00	0.20	7.1	103.6	21.4	310.8	198	7.8
48	1 7/8	5.00	0.20	6.6	96.3	19.9	288.9	208	8.2
51	2	5.00	0.20	6.2	89.4	18.5	268.3	217	8.5

* Other diameters can also be manufactured. Please consult.

** Pressure data is noted at ambient temperature. Pressure values should be reduced by 20% for each increase of 100°C (212°F).

VENA® SIL TURBO - TURBOLOADER

INNER DIAMETER*		RINGS	HUMPS	TOTAL LENGTH		CUFFS	
mm	inch			mm	inch	mm	inch
63	2 1/2"	3	2	152	6	45	1,8
63	2 1/2"	5	4	230	9,1	58	2,3
70	2 3/4"	4	3	178	7	45	1,8
70	2 3/4"	5	4	203	8	45	1,8
76	3"	2	1	152	6	63	2,5
76	3"	3	2	152	6	45	1,8
80	3 1/8"	3	2	152	6	38	1,5
82	3 1/4"	3	2	152	6	45	1,8
89	3 1/2"	2	1	152	6	57	2,2
89	3 1/2"	3	2	152	6	57	2,2
89	3 1/2"	5	4	216	8,5	63	2,5
89	3 1/2"	6	5	267	10,5	57	2,2
102	4"	2	1	152	6	57	2,2
102	4"	3	2	152	6	45	1,8
102	4"	3	2	178	7	57	2,2
102	4"	3	2	203	8	63	2,5
102	4"	5	6	229	9	45	1,8
102	4"	7	6	318	12,5	76	3
114	4 1/2"	3	2	152	6	45	1,8
127	5"	3	2	152	6	45	1,8

*Other diameters can also be manufactured. Please consult.

VENA® SIL TURBO - REDUCER

INNER DIAMETER*		HUMPS	RINGS	TOTAL LENGTH	
mm	inch			mm	inch
76/51	3 > 2	1	2	127	5
89/63	3 1/2 > 2 1/2	2	3	152	6
89/76	3 1/2 > 3	2	3	152	6
102/76	4 > 3	2	3	152	6
102/76	4 > 3	1	2	127	5
102/89	4 > 3 1/2	1	2	102	4
102/89	4 > 3 1/2	2	3	152	6

*Other diameters can also be manufactured. Please consult.

VENA® SIL 200 FR-VO

INNER DIAMETER		WALL THICKNESS		WORKING PRESSURE		BURSTING PRESSURE	
				ISO 1402/2009		ISO 1402/2009	
mm	inch	+1/ -0,5 mm	+0,04/ -0,02 inch	bar at 20°C	psi at 68°F	bar at 20°C	psi at 68°F
18	11/16	3,70	0,15	13,4	194,3	40,3	584,4
25	1	3,70	0,15	8,4	121,8	25,3	366,9
35	1 3/8	3,70	0,15	5,5	79,2	16,2	237,5
38	1 1/2	3,70	0,15	4,6	66,7	13,7	198,7
48	1 7/8	3,70	0,15	4,1	59,5	12,3	178,4
60	2 3/8	3,70	0,15	3,5	51,2	10,6	153,7
65	2 9/16	3,70	0,15	3,3	47,9	9,9	143,6
70	2 3/4	3,70	0,15	3,1	44,5	9,2	133,4
75	3	3,70	0,15	2,8	40,6	8,4	121,8
80	3 1/8	3,70	0,15	2,6	37,2	7,7	111,7
90	3 1/2	3,70	0,15	2,1	30,5	6,3	91,4

* Other diameters can also be manufactured. Please consult.

** Pressure data is noted at ambient temperature. Pressure values should be reduced by 20% for each increase of 100°C (21°F).

VENA® SIL 240 FR-VO

INNER DIAMETER		WALL THICKNESS		WORKING PRESSURE		BURSTING PRESSURE	
				ISO 1402/2009		ISO 1402/2009	
mm	inch	+1/ -0,5 mm	+0,04/ -0,02 inch	bar at 20°C	psi at 68°F	bar at 20°C	psi at 68°F
18	11/16	4,50	0,18	14,6	211,7	43,8	635,1
25	1	4,50	0,18	10,4	150,8	31,3	453,9
35	1 3/8	4,50	0,18	8,4	122,2	22,7	366,8
38	1 1/2	4,50	0,18	7,8	113,1	23,5	340,8
48	1 7/8	4,50	0,18	6,1	88,5	18,3	265,4
60	2 3/8	4,50	0,18	5,4	78,3	16,1	233,5
65	2 9/16	4,50	0,18	5,0	72,5	15,0	217,5
70	2 3/4	4,50	0,18	4,7	68,2	14,1	204,5
75	3	4,50	0,18	4,4	63,8	13,4	194,3
80	3 1/8	4,50	0,18	4,2	60,9	12,6	182,7
90	3 1/2	4,50	0,18	3,7	53,7	11,2	162,4
100	4	4,50	0,18	2,2	31,9	6,5	94,3

* Other diameters can also be manufactured. Please consult.

** Pressure data is noted at ambient temperature. Pressure values should be reduced by 20% for each increase of 100°C (212°F).

VENA® SIL 200 FR-HL

INNER DIAMETER		WALL THICKNESS		WORKING PRESSURE		BURSTING PRESSURE	
				ISO 1402/2009		ISO 1402/2009	
mm	inch	+1/ -0,5 mm	+0,04/ -0,02 inch	bar at 20°C	psi at 68°F	bar at 20°C	psi at 68°F
18	11/16	3,70	0,15	13,4	194,3	40,3	584,4
25	1	3,70	0,15	8,4	121,8	25,3	366,9
35	1 3/8	3,70	0,15	5,5	79,2	16,2	237,5
38	1 1/2	3,70	0,15	4,6	66,7	13,7	198,7
48	1 7/8	3,70	0,15	4,1	59,5	12,3	178,4
60	2 3/8	3,70	0,15	3,5	51,2	10,6	153,7
65	2 9/16	3,70	0,15	3,3	47,9	9,9	143,6
70	2 3/4	3,70	0,15	3,1	44,5	9,2	133,4
75	3	3,70	0,15	2,8	40,6	8,4	121,8
80	3 1/8	3,70	0,15	2,6	37,2	7,7	111,7
90	3 1/2	3,70	0,15	2,1	30,5	6,3	91,4

* Other diameters can also be manufactured. Please consult.

** Pressure data is noted at ambient temperature. Pressure values should be reduced by 20% for each increase of 100°C (212°F).

VENA® SIL 240 FR-HL

INNER DIAMETER		WALL THICKNESS		WORKING PRESSURE		BURSTING PRESSURE	
				ISO 1402/2009		ISO 1402/2009	
mm	inch	+1/ -0,5 mm	+0,04/ -0,02 inch	bar at 20°C	psi at 68°F	bar at 20°C	psi at 68°F
18	11/16	4,50	0,18	14,6	211,7	43,8	635,1
25	1	4,50	0,18	10,4	150,8	31,3	453,9
35	1 3/8	4,50	0,18	8,4	122,2	22,7	366,8
38	1 1/2	4,50	0,18	7,8	113,1	23,5	340,8
48	1 7/8	4,50	0,18	6,1	88,5	18,3	265,4
60	2 3/8	4,50	0,18	5,4	78,3	16,1	233,5
65	2 9/16	4,50	0,18	5,0	72,5	15,0	217,5
70	2 3/4	4,50	0,18	4,7	68,2	14,1	204,5
75	3	4,50	0,18	4,4	63,8	13,4	194,3
80	3 1/8	4,50	0,18	4,2	60,9	12,6	182,7
90	3 1/2	4,50	0,18	3,7	53,7	11,2	162,4
100	4	4,50	0,18	2,2	31,9	6,5	94,3

* Other diameters can also be manufactured. Please consult.

** Pressure data is noted at ambient temperature. Pressure values should be reduced by 20% for each increase of 100°C (212°F).

VENA® HT-MT

INNER DIAMETER		WORKING PRESSURE		WEIGHT	VACUUM RESISTANCE		BENDING RADIUS	
		ISO 1402/2009			ISO 7233/2016			
mm	inch	bar	psi	g/m +-5%	bar	psi	mm	inch
25	1	1,76	25,53	104	0,54	7,77	34	1,36
38	1 1/2	1,58	22,89	185	0,47	6,76	52	2,04
51	2 1/64	1,42	20,52	265	0,41	5,88	69	2,72
63	2 31/64	1,28	18,55	339	0,36	5,17	85	3,36
76	3	1,15	16,63	420	0,31	4,5	103	4,04
80	3 5/32	1,11	16,08	444	0,3	4,31	108	4,25
102	4 1/64	0,92	13,37	581	0,24	3,41	137	5,41
180	7 3/32	0,48	6,94	1063	0,1	1,48	242	9,51
200	7 7/8	0,4	5,87	1187	0,08	1,19	268	10,56
250	9 27/32	0,27	3,86	1496	0,05	0,7	335	13,19
300	11 13/16	0,17	2,53	1805	0,03	0,41	402	15,82

VENA® HTD-MTD

INNER DIAMETER		WORKING PRESSURE		WEIGHT	VACUUM RESISTANCE		BENDING RADIUS	
		ISO 1402/2009			ISO 7233/2016			
mm	inch	bar	psi	g/m +-5%	bar	psi	mm	inch
25	1	2,27	32,87	233	0,66	9,6	38	1,49
38	1 1/2	2,01	29,12	319	0,58	8,43	57	2,26
51	2 1/64	1,78	25,81	405	0,51	7,4	77	3,03
63	2 31/64	1,59	23,08	484	0,45	6,56	95	3,74
76	3	1,41	20,45	570	0,4	5,76	115	4,51
90	3 35/64	1,24	17,96	663	0,35	5,01	136	5,35
102	4 1/64	1,11	16,06	742	0,31	4,44	154	6,06
180	7 3/32	0,54	7,78	1257	0,14	2,04	271	10,69
200	7 7/8	0,45	6,46	1389	0,12	1,67	302	11,87
250	9 27/32	0,28	4,06	1720	0,07	1,01	377	14,84
300	11 13/16	0,18	2,55	2050	0,04	0,61	452	17,81

VENA® TECHNIPUR®

INTERNAL DIAMETER		WORKING PRESSURE		BURST PRESSURE		VACUUM RESISTANCE		BENDING RADIUS	
		ISO 1402/2009		ISO 1402/2009		ISO 7233/2016		ISO 1746/2000	
mm	inch	Bar at 20°C	Psi at 68°F	Bar at 20°C	Psi at 68°F	Bar at 20°C	Psi at 68°F	mm	inch
50	1,97	0,56	8,12	1,68	24,36	0,22	3,19	60	2,36
60	2,36	0,43	6,24	1,29	18,71	0,18	2,61	70	2,76
70	2,76	0,34	4,93	1,02	14,79	0,15	2,18	80	3,15
80	3,15	0,28	4,06	0,84	12,18	0,12	1,74	90	3,54
90	3,54	0,23	3,34	0,69	10,01	0,11	1,60	100	3,94
100	3,94	0,2	2,90	0,60	8,70	0,09	1,31	110	4,33
110	4,33	0,17	2,47	0,51	7,40	0,08	1,16	120	4,72
120	4,72	0,15	2,18	0,45	6,53	0,08	1,16	130	5,12
130	5,12	0,14	2,03	0,42	6,09	0,07	1,02	140	5,51
140	5,51	0,12	1,74	0,36	5,22	0,06	0,87	150	5,91
150	5,91	0,11	1,60	0,33	4,79	0,06	0,87	160	6,30
160	6,30	0,1	1,45	0,30	4,35	0,05	0,73	170	6,69
180	7,09	0,08	1,16	0,24	3,48	0,05	0,73	190	7,48
200	7,87	0,07	1,02	0,21	3,05	0,04	0,58	210	8,27
225	8,86	0,06	0,87	0,18	2,61	0,03	0,44	235	9,25
250	9,84	0,05	0,73	0,15	2,18	0,03	0,44	260	10,24

VENA® TECHNIPUR®-S

INTERNAL DIAMETER		WORKING PRESSURE		BURST PRESSURE		VACUUM RESISTANCE		BENDING RADIUS	
		ISO 1402/2009		ISO 1402/2009		ISO 7233/2016		ISO 1746/2000	
mm	inch	Bar at 20°C	Psi at 68°F	Bar at 20°C	Psi at 68°F	Bar at 20°C	Psi at 68°F	mm	inch
40	1,57	1,48	21,47	4,44	64,40	0,44	6,38	60	2,36
50	1,97	1,18	17,11	3,54	51,34	0,35	5,08	73	2,87
60	2,36	0,98	14,21	2,94	42,64	0,29	4,21	85	3,35
70	2,76	0,84	12,18	2,52	36,55	0,25	3,63	98	3,86
80	3,15	0,73	10,59	2,19	31,76	0,22	3,19	110	4,33
90	3,54	0,65	9,43	1,95	28,28	0,19	2,76	123	4,84
100	3,94	0,58	8,41	1,74	25,24	0,17	2,47	135	5,31
120	4,72	0,48	6,96	1,44	20,89	0,14	2,03	160	6,30
130	5,12	0,45	6,53	1,35	19,58	0,13	1,89	173	6,81
140	5,51	0,41	5,95	1,23	17,84	0,12	1,74	185	7,28
150	5,91	0,39	5,66	1,17	16,97	0,11	1,60	198	7,80
160	6,30	0,36	5,22	1,08	15,66	0,11	1,60	210	8,27
180	7,09	0,32	4,64	0,96	13,92	0,09	1,31	235	9,25
200	7,87	0,29	4,21	0,87	12,62	0,08	1,16	260	10,24
225	8,86	0,25	3,63	0,75	10,88	0,07	1,02	291	11,46
250	9,84	0,23	3,34	0,69	10,01	0,07	1,02	323	12,72

VENA® TECHNIPUR® -VAC

INNER DIAMETER		WORKING PRESSURE		BURST PRESSURE		VACUUM RESISTANCE		BENDING RADIUS	
		ISO 1402/2009		ISO 1402/2009		ISO 7233/2016		ISO 1746/2000	
mm	inch	bar at 20°C	psi at 68°F	bar at 20°C	psi at 68°F	bar at 20°C	psi at 68°F	mm	inch
40	1,57	2,6	37,70	7,80	113,10	0,76	11,02	70	2,76
50	1,97	2,07	30,02	6,21	90,05	0,61	8,85	85	3,35
60	2,36	1,71	24,80	5,13	74,39	0,51	7,40	100	3,94
70	2,76	1,46	21,17	4,38	63,51	0,43	6,24	115	4,53
80	3,15	1,28	18,56	3,84	55,68	0,38	5,51	130	5,12
90	3,54	1,13	16,39	3,39	49,16	0,34	4,93	145	5,7
100	3,94	1,01	14,65	3,03	43,94	0,3	4,35	160	6,3
120	4,72	0,84	12,18	2,52	36,54	0,25	3,63	190	7,48
130	5,12	0,77	11,17	2,31	33,50	0,23	3,34	205	8,07
140	5,51	0,72	10,44	2,16	31,32	0,22	3,19	220	8,66
150	5,91	0,67	9,72	2,01	29,15	0,2	2,90	235	9,25
160	6,30	0,63	9,14	1,89	27,41	0,19	2,76	250	9,84
170	6,69	0,59	8,56	1,77	25,67	0,18	2,61	265	10,43
180	7,09	0,55	7,98	1,65	23,93	0,17	2,47	280	11,02
190	7,48	0,52	7,54	1,56	22,62	0,16	2,32	295	11,61
200	7,87	0,5	7,25	1,50	21,75	0,15	2,18	310	12,20
225	8,86	0,44	6,38	1,32	19,14	0,13	1,89	348	13,7
250	9,84	0,4	5,80	1,20	17,40	0,12	1,74	385	15,16

VENA® WYREM®

INNER DIAMETER		WORKING PRESSURE		VACUUM RESISTANCE		MIN. BENDING RADIUS		WEIGHT
		ISO 1402/2009				ISO 1746/2000		
mm	inch	bar at 20°C	psi at 68°F	bar at 20°C	psi at 68°F	mm	inch	g/m
25	0,98	0,35	5,08	0,45	6,53	60	2,36	420
38	1,5	0,35	5,08	0,40	5,80	65	2,56	570
45	1,77	0,35	5,08	0,35	5,08	68	2,68	650
51	2,01	0,35	5,08	0,35	5,08	71	2,8	720
63,5	2,5	0,35	5,08	0,30	4,35	77	3,03	770
76	2,99	0,35	5,08	0,30	4,35	84	3,31	850
80	3,15	0,35	5,08	0,25	3,63	87	3,43	880
90	3,54	0,35	5,08	0,25	3,63	93	3,66	970
102	4,02	0,35	5,08	0,20	2,90	100	3,94	1100
127	5	0,35	5,08	0,10	1,45	119	4,69	1460
152	5,98	0,35	5,08	0,10	1,45	139	5,47	1920
203	7,99	0,35	5,08	0,05	0,73	189	7,44	3230
254	10	0,35	5,08	0,05	0,73	250	9,84	4990
304	11,97	0,35	5,08	0,05	0,73	319	12,56	7180

VITOSIL® 200 - ARAMID

INNER DIAMETER		WALL THICKNESS		WORKING PRESSURE		BURSTING PRESSURE	
				ISO 1402/2009		ISO 1402/2009	
mm	inch	+1/ -0,5 mm	+0,04/ -0,02 inch	bar at 20°C	psi at 68°F	bar at 20°C	psi at 68°F
18	5/7	3.70	0.15	13.4	194.3	40.3	584.4
25	1	3.70	0.15	8.4	121.8	25.3	366.9
35	1 3/8	3.70	0.15	5.5	79.2	16.2	237.5
38	1 1/2	3.70	0.15	4.6	66.7	13.7	198.7
48	1 7/8	3.70	0.15	4.1	59.5	12.3	178.4
60	2 3/8	3.70	0.15	3.5	51.2	10.6	153.7
65	2 9/16	3.70	0.15	3.3	47.9	9.9	143.6
70	2 3/4	3.70	0.15	3.1	44.5	9.2	133.4
75	3	3.70	0.15	2.8	40.6	8.4	121.8
80	3 1/8	3.70	0.15	2.6	37.2	7.7	111.7
90	3 1/2	3.70	0.15	2.1	30.5	6.3	91.4

VENA® VITOSIL® 240 - ARAMID

INNER DIAMETER		WALL THICKNESS		WORKING PRESSURE		BURSTING PRESSURE	
				ISO 1402/2009		ISO 1402/2009	
mm	inch	+1/ -0,5 mm	+0,04/ -0,02 inch	bar at 20°C	psi at 68°F	bar at 20°C	psi at 68°F
18	5/7	4.50	0.18	14.6	211.7	43.8	635.1
25	1	4.50	0.18	10.4	150.8	31.3	453.9
35	1 3/8	4.50	0.18	8.4	122.2	22.7	366.8
38	1 1/2	4.50	0.18	7.8	113.1	23.5	340.8
48	1 7/8	4.50	0.18	6.1	88.5	18.3	265.4
60	2 3/8	4.50	0.18	5.4	78.3	16.1	233.5
65	2 9/16	4.50	0.18	5.0	72.5	15.0	217.5
70	2 3/4	4.50	0.18	4.7	68.2	14.1	204.5
75	3	4.50	0.18	4.4	63.8	13.4	194.3
80	3 1/8	4.50	0.18	4.2	60.9	12.6	182.7
90	3 1/2	4.50	0.18	3.7	53.7	11.2	162.4
100	4	4.50	0.18	2.2	31.9	6.5	94.3



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