

VENA®SIL 630

Transparent wire-reinforced silicone hose



> MATERIAL:

Platinum cured silicone produced in accordance with the main food and pharm certifications.

> CERTIFICATIONS:

- US FDA Standard 21 CFR 177.2600.
- German BfR Standard part XV.
- USP Class VI standard (121°C) <88> Biological Reactivity Tests, In Vivo.
- European Pharmacopeia 3.1.9.
- ISO 10993-4, -5, -6, -10, -18.
- 1935/2004/EC Regulation and European Council Resolution AP 2004 (5).
- 3A Sanitary Standard 18-03 Class I (hose).

> FABRIC REINFORCEMENT: No

> STAINLESS STEEL INSIDE:

Stainless steel wire spring encased inside the hose wall.

> INNER APPEARANCE:

Transparent and completely smooth.

> MAXIMUM LENGTH OF MANUFACTURE:

The standard length of manufacture is 4m (13'). Upon request, 6m length hoses (19' 8") can be manufactured for some diameters.



TEMPERATURE SCALE:

-60°C / +180°C
(-76°F / +392°F)



VACUUM PRESSURE:

0.80 bar (116 psi)



TECHNICAL TABLE
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APPLICATIONS:



OUTER APPEARANCE:
Transparent and smooth.

VENA® SIL 630 is suitable for the transport by suction or impulsion of liquid, semi-liquid or solid products in the food, cosmetic, pharm and biotech industries. Its high flexibility and tight bending radius make it suitable for repetitive movements in dosing and filling machines. It is specifically designed to absorb vibrations and to compensate level differences. Its high translucence allows a perfect view of the conveyed product.

Under request, this product can be manufactured with Vensil Pharma grade silicone, which includes a complete Validation Package. Check page 23.

VENA®SIL 640

Polyester fabric reinforced silicone hose



> MATERIAL:

Platinum cured silicone produced in accordance with the main food and pharm certifications.



OUTER APPEARANCE:
Translucent, white or colored, and smooth.

APPLICATIONS:

VENA® SIL 640 is suitable for the transport by impulsion of liquid, semi-liquid or solid products in the food, cosmetic, pharm and biotech industries. It is recommended dosing and filling machines in straight sections. This model is often used in straight sections equipped with metal fittings terminals, where flexibility is not

required and to detect metal particles which may occur during filling of food products such as cream or baby food. This model is not recommended for vacuum.

> CERTIFICATIONS:

- US FDA Standard 21 CFR 177.2600.
- German BfR Standard part XV.
- USP Class VI standard (121°C) <88> Biological Reactivity Tests, In Vivo.
- European Pharmacopeia 3.1.9.
- ISO 10993-4, -5, -6, -10, -18.
- 1935/2004/EC Regulation and European Council Resolution AP 2004 (5).
- 3A Sanitary Standard 18-03 Class I (hose).

> FABRIC REINFORCEMENT:

Polyester fabric reinforcement.

> STAINLESS STEEL INSIDE: No

> INNER APPEARANCE:

Translucent and smooth.

> MAXIMUM LENGTH OF MANUFACTURE:

The standard length of manufacture is 4m (13'). Upon request, 6m length hoses (19' 8") can be manufactured for some diameters.



TEMPERATURE SCALE:

-60°C / +180°C
(-76°F / +356°F)



TECHNICAL TABLE
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Under request, this product can be manufactured with Vensil Pharma grade silicone, which includes a complete Validation Package. Check page 23.

VENA®SIL 650V

Fabric and wire reinforced silicone hose



> MATERIAL:

Platinum cured silicone produced in accordance with the main food and pharm certifications.

> CERTIFICATIONS:

- US FDA Standard 21 CFR 177.2600.
- German BfR Standard part XV.
- USP Class VI standard (121°C) <88> Biological Reactivity Tests, In Vivo.
- European Pharmacopeia 3.1.9.
- ISO 10993-4, -5, -6, -10, -18.
- 1935/2004/EC Regulation and European Council Resolution AP 2004 (5).
- 3A Sanitary Standard 18-03 Class I (hose).
- 3A Sanitary Standard 62-02 (fitted hoses).

> FABRIC REINFORCEMENT:

Polyester fabric reinforcements.

> STAINLESS STEEL INSIDE:

Stainless steel wire spring encased inside the hose wall.

> INNER APPEARANCE:

Translucent and smooth.

> MAXIMUM LENGTH OF MANUFACTURE:

The standard length of manufacture is 4m (13'). Upon request, 6m length hoses (19' 8") can be manufactured for some diameters.



TEMPERATURE SCALE:

-60°C / +180°C
(-76°F / +356°F)

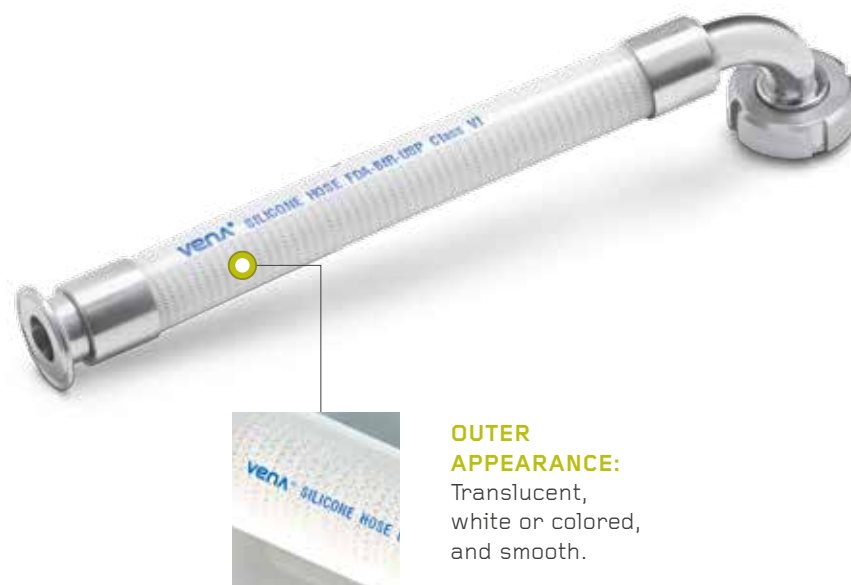


VACUUM PRESSURE:

0.91 bar (13.23 psi)



TECHNICAL TABLE
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OUTER APPEARANCE:

Translucent, white or colored, and smooth.

APPLICATIONS:

VENA® SIL 650V is the most popular hose of this range since it offers a perfect balance between its construction and flexibility and its pressure resistance. It is suitable for the transport by suction or impulsion of liquid, semi-liquid or solid products in the food, cosmetic, pharm and biotech industries.

Its high flexibility and tight bending radius make it suitable for repetitive movements in dosing and filling machines. It is specifically designed to absorb vibrations and to compensate level differences.

Under request, this product can be manufactured with Vensil Pharma grade silicone, which includes a complete Validation Package. Check page 23.

VENA®SIL 655

Fabric and double wire spring reinforced silicone hose



> MATERIAL:

Platinum cured silicone produced in accordance with the main food and pharm certifications.

> CERTIFICATIONS:

Same Certifications as Vena Sil 650V.

> FABRIC REINFORCEMENT:

Polyester fabric reinforcement.

> STAINLESS STEEL INSIDE:

Double stainless steel wire spring encased inside the hose wall at different levels.

> INNER APPEARANCE:

Translucent and smooth.

> MAXIMUM LENGTH OF MANUFACTURE:

The standard length of manufacture is 4m (13'). Upon request, 6m length hoses (19' 8") can be manufactured for some diameters.



APPLICATIONS:

It is the most pressure resistant hose of the VENA® SIL range since it has a double wire reinforcement. Designed for use at specific situations where there may be sudden high pressure surges (hammering).

OUTER APPEARANCE:

Translucent, white or colored, and smooth.



TEMPERATURE SCALE:

-60°C / +180°C
(-76°F / +356°F)



VACUUM PRESSURE:

0.91 bar (13.23 psi)



TECHNICAL TABLE
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Full Validation Package available for the Vensil® Pharma.

VENA®SIL FDA-X

Conductive silicone hose

All our standard hoses from the Vena Sil range can be modified externally in order to reduce the Electrical Surface Resistivity.

- Electrical Surface Resistance is <10³ Ohm according to the specification indicated in part 26.13 of EN 60079-0:2006.
- The hose must be properly grounded, to permit the correct dissipation of the static charge (grounding the hose metal fittings or directly the copper wire of both ends of the hose). Will be customer's responsibility to properly ground the hose.
- Vena Sil FDA-X is suitable for its use in ATEX certified zones*.

> MAXIMUM LENGTH OF MANUFACTURE:

The standard length of manufacture is 4m (13'). Upon request, 6m length hoses (19' 8") can be manufactured for some diameters.



OUTER APPEARANCE:

Black and smooth.

*This product can be mounted in ATEX installations (Explosive Atmospheres) which must, in any case, be certified retrospectively by the relevant competent authority.

VENA® TECHNOEX

Translucent silicone tubing



> MATERIAL:

Platinum cured silicone produced in accordance with the main food and pharm certifications.

CERTIFICATIONS:

- US FDA Standard 21 CFR 177.2600.
- German BfR Standard part XV.
- USP Class VI standard (121°C) <88> Biological Reactivity Tests, In Vivo.
- European Pharmacopeia 3.1.9.
- ISO 10993-4, -5, -6, -10, -18.
- 1935/2004/EC Regulation and European Council Resolution AP 2004 (5).
- 3A Sanitary Standard 18-03 Class I (hose).

> FABRIC REINFORCEMENT:

No

> STAINLESS STEEL INSIDE:

No

> INNER APPEARANCE:

Translucent and smooth.

> STANDARD LENGTH OF MANUFACTURE:

50ft (15,24m) and 100ft (30,48m). Other lengths on demand.



TEMPERATURE SCALE:

-50°C / +200°C
(-58°F / +392°F)

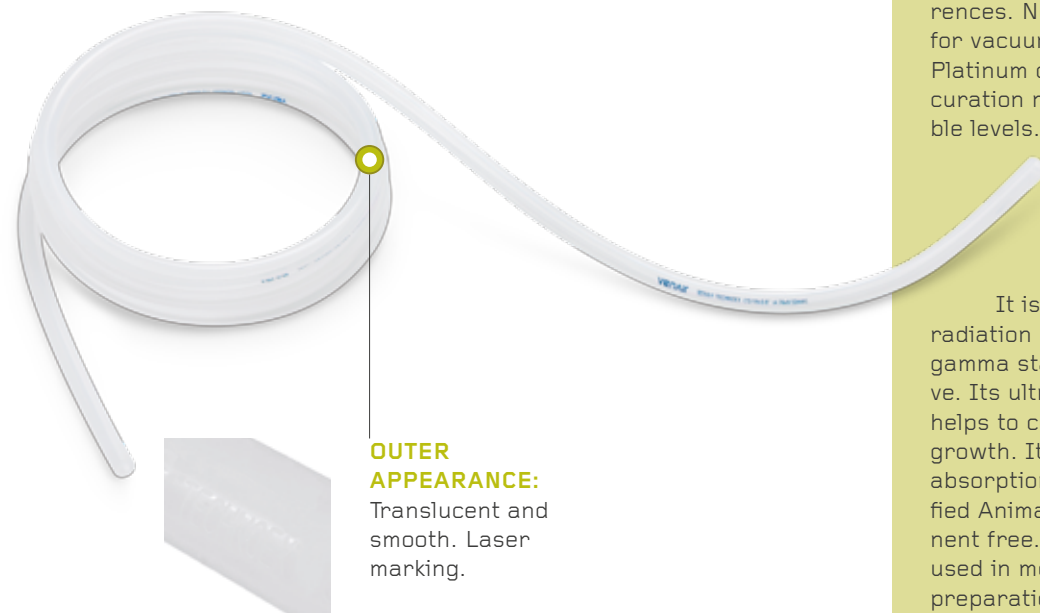


TECHNICAL TABLE
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APPLICATIONS:

It is recommended for the transfer of fluids at low pressure in filling processes of liquids and semi-liquids. It compensates vibration and level differences. Not recommended for vacuum pressures. Its Platinum curation and post curation reduces extractable levels.

It is resistant to UV, radiation and ozone. It is gamma stable and autoclave. Its ultra-smooth bore helps to control bacterial growth. It has low water absorption and it is certified Animal derived component free. Technoex is also used in media and buffer preparation and distribution in biopharmaceuticals manufacturing.



OUTER APPEARANCE:

Translucent and smooth. Laser marking.

Under request, this product can be manufactured with Vensil Pharma grade silicone, which includes a complete Validation Package. Check page 23.

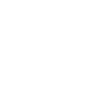
VENA® TECHNOSIL®

Polyester braided silicone tubing



> MATERIAL:

Platinum cured silicone produced in accordance with the main food and pharm certifications.



TECHNICAL TABLE
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APPLICATIONS:

Technosil is suitable for the transport by impulsion of liquid, semi-liquid or solid products in the food, cosmetic, pharm and biotech industries. It is recommended for repetitive movements in dosing and filling machines where no tight bending radius is needed. It is used in applications which require long lengths. It is recommended for downstream processes in the pharma and biopharma industries. It is resistant to UV, radiation and ozone. It is gamma stable and autoclave. Its ultra-smooth bore helps to control bacterial growth. Its Platinum curation and post-curation reduces extractable levels. It has low water absorption and it is certified Animal derived component free.



OUTER APPEARANCE:

Translucent, white or colored, and smooth.

CERTIFICATIONS:

- US FDA Standard 21 CFR 177.2600.
- German BfR Standard part XV.
- USP Class VI standard (121°C) <88> Biological Reactivity Tests, In Vivo.
- European Pharmacopeia 3.1.9.
- ISO 10993-4, -5, -6, -10, -18.
- 1935/2004/EC Regulation and European Council Resolution AP 2004 (5).
- 3A Sanitary Standard 18-03 Class I (hose).
- 3A Sanitary Standard 62-02 (fitted hoses).

> FABRIC REINFORCEMENT:

Polyester braiding.

> STAINLESS STEEL INSIDE:

No

> INNER APPEARANCE:

Translucent and smooth.

> OUTER APPEARANCE:

Translucent or colored, and smooth.

> STANDARD LENGTH OF MANUFACTURE:

10m and 20m (33ft and 66ft).



TEMPERATURE SCALE:

-60°C / +180°C
(-76°F / +356°F)



TECHNICAL TABLE
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Under request, this product can be manufactured with Vensil Pharma grade silicone, which includes a complete Validation Package. Check page 23.

VENA® TECHNOSIL® DB

Double polyester
braided silicone tubing



> MATERIAL:
Platinum cured silicone produced in accordance with the main food and pharm certifications.



TEMPERATURE SCALE:
-60°C/+180°C
(-76°F/+356°F)



**TECHNICAL TABLE
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CERTIFICATIONS:

- US FDA Standard 21 CFR 177.2600.
- German BfR Standard part XV.
- USP Class VI standard (121°C) <88> Biological Reactivity Tests, In Vivo.
- European Pharmacopeia 3.1.9.
- ISO 10993-4, -5, -6, -10, -18.
- 1935/2004/EC Regulation and European Council Resolution AP 2004 (5).
- 3A Sanitary Standard 18-03 Class I (hose).
- 3A Sanitary Standard 62-02 (fitted hoses).

> FABRIC REINFORCEMENT:

Double polyester braiding.

> STAINLESS STEEL INSIDE: No

> INNER APPEARANCE:

Translucent and smooth.

> STANDARD LENGTH OF

MANUFACTURE:
10m (33ft) and 20m (66ft).



OUTER APPEARANCE:
White and smooth.

APPLICATIONS:

Due to its special construction, this product is specially recommended for applications where a high pressure resistance and a small bending radius are required. It is not recommended for vacuum.

It is resistant to UV, radiation and ozone. It is gamma stable and autoclave. Its ultra-smooth bore helps to control bacterial growth. It has low water absorption and it is certified Animal derived component free. Its Platinum curation and post-curation reduces extractable levels.

Under request, this product can be manufactured with Vensil Pharma grade silicone, which includes a complete Validation Package. Check page 23.

VENAFLO® HF

PFA silicone hose

VENAFLO: THE BEST SOLUTIONS TO CONVEY AGGRESSIVE PRODUCTS



> MATERIAL:
Platinum cured silicone hose with an inner liner of PFA fluoropolymer which is in accordance with the main food and pharm certifications.



APPLICATIONS:

The inner layer of PFA makes the hose very resistant to liquids and semi liquids and aggressive chemical products. The construction of this hose allows the conveying of products at high temperatures by suction or discharge, as the new design makes it resistant to pressure and vacuum.

>> CERTIFICATIONS OF THE INNER LAYER:

- US FDA Standard 21 CFR 177.1550.
- USP Class VI standard.
- Commission Regulation 10/2011/ECC, according to Regulation 1935/2004/EEC.

> FABRIC REINFORCEMENT: Yes

> STAINLESS STEEL INSIDE:

Stainless steel wire spring encased inside the hose wall.

> INNER APPEARANCE:

White and smooth.

> MAXIMUM LENGTH OF MANUFACTURE:

20m (65.62ft) with INOX 316L connections (and others under demand).



TEMPERATURE SCALE:
-30°C/+150°C
(-22°F/+302°F)



VACUUM RESISTANCE:
0.9 bar (13.05 psi)



**TECHNICAL TABLE
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OUTER APPEARANCE:
White and smooth.

Full Validation Package available.

VENAFLO[®] HF-X

Conductive PFA silicone hose

VENAFLO[®]: THE BEST SOLUTIONS TO CONVEY AGGRESSIVE PRODUCTS



> MATERIAL:
Platinum cured silicone hose with inner liner of conductive black-colored layer of PFA fluoropolymer in accordance with the main food and pharm certifications.

> CERTIFICATIONS OF THE INNER LAYER:

- US FDA Standard 21 CFR 177.1550.
- USP Class VI standard.

> ELECTRICAL PROPERTIES:

- Venaflon[®] HF-X is suitable for its use in ATEX certified zones*.

> FABRIC REINFORCEMENT: Yes

> STAINLESS STEEL INSIDE:

Stainless steel wire spring encased inside the hose wall.

> INNER APPEARANCE:

Black and smooth.

> MAXIMUM LENGTH OF MANUFACTURE:

20m (65.62ft) with INOX 316L connections (and others under demand).

> RESISTIVITY:

The inner PFA layer of this hose presents a low resistivity ($R < 10^6 \Omega$).



TEMPERATURE SCALE:
-30°C/+150°C
(-22°F/+302°F)



VACUUM RESISTANCE:
0.9 bar (13.05 psi)



TECHNICAL TABLE ON PAGE: 37

APPLICATIONS:

This hose present a wide field of application due to its construction which gives it a balance between strength and lightness. The inner layer for this hose is made of antistatic PFA (Perfluoroalkoxy) which has a high compatibility with highly aggressive chemicals. This hose is able to transport liquid or semi-liquid food-stuffs by impulsion or suction, since its design can resist either pressure or vacuum. This product is specifically recommended to food and pharma applications where it is required a high conductivity to avoid electrostatic charge of the hose.



OUTER APPEARANCE:
White and smooth.

*This product can be mounted in ATEX installations (Explosive Atmospheres) which must, in any case, be certified retrospectively by the relevant competent authority.

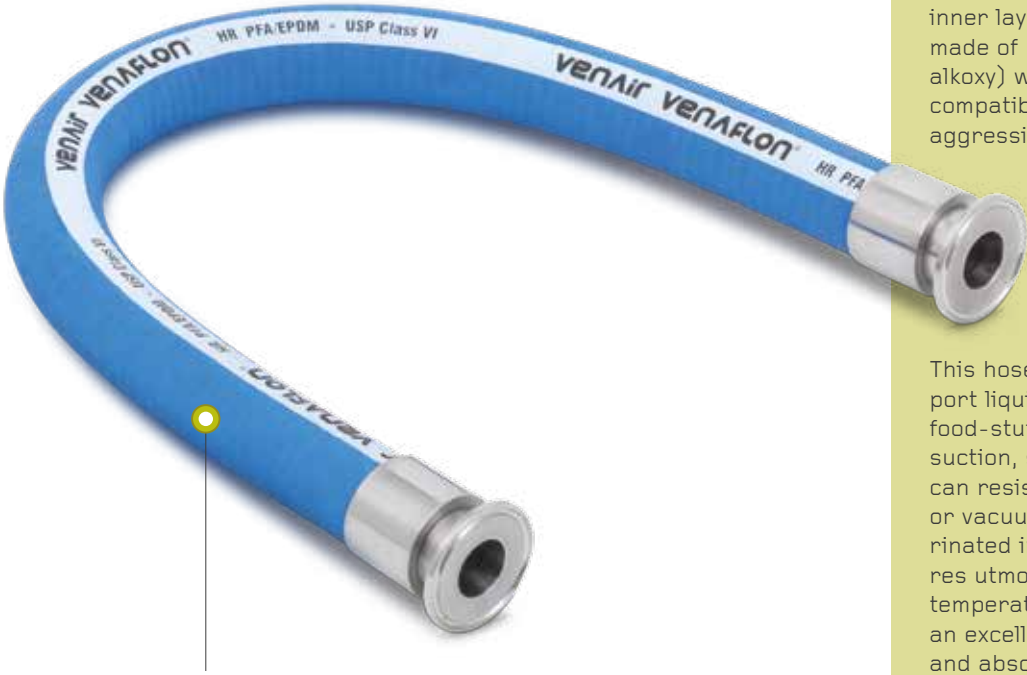
VENAFLO[®] HR

Highly resistant PFA hose

VENAFLO[®]: THE BEST SOLUTIONS TO CONVEY AGGRESSIVE PRODUCTS



> MATERIAL:
EPDM blue color rubber with inner liner of PFA fluoropolymer in accordance with the main food and pharm certifications.



OUTER APPEARANCE:
Blue color and smooth.

> CERTIFICATIONS OF THE INNER LAYER:

- US FDA Standard.
- USP Class VI Standard.
- ISO 10993.
- Commission Regulation 10/2011/ECC, according to Regulation 1935/2004/EEC.

> FABRIC REINFORCEMENT: Yes

> STAINLESS STEEL INSIDE:

Stainless steel wire spring encased inside the hose wall.

> INNER APPEARANCE:

White and smooth.

> MAXIMUM LENGTH OF MANUFACTURE:

20m (65.62ft) with INOX 316L connections (and others under demand).

APPLICATIONS:

VENAFLO[®] HR is an excellent solution to withstand dynamic stress during the transfer of high purity fluids. It is suitable for use in filling machines and it is resistant to abrasion. The inner layer for this hose is made of PFA (Perfluoroalkoxy) which has a high compatibility with highly aggressive chemicals.

This hose is able to transport liquid or semi-liquid food-stuffs by impulsion or suction, since its design can resist either pressure or vacuum. The perfluorinated inner liner ensures utmost chemical and temperature resistance, an excellent impermeability and absolutely hygienic and contamination-free delivery of fluid.



TEMPERATURE SCALE:
-40°C/+150°C
(-40°F/+302°F)



TECHNICAL TABLE ON PAGE: 39

VENAFLO[®] FULL-X

Conductive rubber hose

VENAFLO[®]: THE BEST SOLUTIONS TO CONVEY AGGRESSIVE PRODUCTS



> MATERIAL:

Synthetic black rubber hose with inner liner of black-colored layer of PFA fluoropolymer in accordance with the main food and pharm certifications.

> CERTIFICATIONS OF THE INNER LAYER:

- US FDA Standard.
- USP Class VI Standard.
- ISO 10993.
- Commission Regulation 10/2011/ECC, according to Regulation 1935/2004/EEC.

> ELECTRICAL PROPERTIES:

- ISO 8031:2009 / EN12115 (if is complete with end fittings) $R < 10^9 \Omega$.
- Venaflon[®] FULL-X is suitable for its use in ATEX certified zones*.

> FABRIC REINFORCEMENT:

Yes
Stainless steel wire spring encased inside the hose wall.

> INNER APPEARANCE:

Black and smooth.

> MAXIMUM LENGTH OF MANUFACTURE:

20m (65.62ft) with INOX 316L connections (and others under demand).

> RESISTIVITY:

The hose presents a resistivity lower than $10^9 \Omega$.



TEMPERATURE SCALE:

-20°C/+65°C in accordance with EN 12115:2011



VACUUM RESISTANCE:

0.9 bar (13.05 psi)



TECHNICAL TABLE ON PAGE: 39

APPLICATIONS:

VENAFLO[®] FULL-X is a highly flexible universal hose and its main characteristic is that it is conductive and, therefore, suitable for working areas requiring utmost safety. It is specially recommended for the transport of liquid or semi-liquid fluids, specially, when the chemical products are highly flammable.

This hose is able to transport liquid or semi-liquid food-stuffs by impulsion or suction, since its design can resist either pressure or vacuum. The perfluorinated inner liner ensures utmost chemical and temperature resistance, an excellent impermeability and absolutely hygienic and contamination-free delivery of fluid. The hose is resistant to abrasion, weather, oils and fats.



OUTER APPEARANCE:
Black and smooth.

*This product can be mounted in ATEX installations (Explosive Atmospheres) which must, in any case, be certified retrospectively by the relevant competent authority.

VITOSIL[®]

FKM silicone hose



> MATERIAL:

Platinum cured silicone hose with inner liner of white, Class A FKM in accordance with the main food and pharm certifications.

> CERTIFICATIONS OF THE INNER LINER:

US FDA Standard 21 CFR 177.2600 (fitted hoses).

> FABRIC REINFORCEMENT:

Yes

> STAINLESS STEEL INSIDE:

Stainless steel wire spring encased inside the hose wall.

> INNER APPEARANCE:

White and smooth.

> OUTER APPEARANCE:

White and smooth.

Alternatives: all the Vena Sil range of products can be manufactured with an inner layer of FKM.

> MAXIMUM LENGTH OF MANUFACTURE:

The standard length of manufacture is 4m (13'). Upon request, 6m length hoses (19' 8") can be manufactured for some diameters.

> APPLICATIONS:

Due to the inner FKM layer it is especially recommended to convey aggressive fluids that are not compatible with silicone. These hoses are able to transport liquid or semi-liquid foodstuffs at high temperatures by impulsion or suction, since their design can resist pressure or vacuum.



TEMPERATURE SCALE:

-30°C/+180°C
(-75°F/+356°F)



VENA[®] MF-L

Multishape silicone Hose



> MATERIAL:

Platinum cured silicone produced in accordance with the main food and pharm certifications.

> CERTIFICATIONS:

Same Certifications as Adaptsil (pag. 16).

> FABRIC REINFORCEMENT:

Yes

> STAINLESS STEEL INSIDE:

Stainless steel wire spring encased inside the hose wall and reinforced couplings to avoid tears or grooves during installation.

> INNER APPEARANCE:

White and completely smooth.

> OUTER APPEARANCE:

White and smooth.

> MAXIMUM LENGTH OF MANUFACTURE:

Tailor made.

> APPLICATIONS:

Has the attribute of acquiring a certain shape and maintaining it even under extreme working conditions. It is straight-shape made but can be manually conformed to obtain the desired

shape. The hose can be handily moulded in all its area except for the delimited couplings zone. This reference is equipped with INOX 316L couplings which are reinforced twice in order to avoid breaks or grooves on the silicone during installation.



TEMPERATURE SCALE:

-60°C/+180°C
(-76°F/+356°F)



ADAPTSIL®

Special silicone shapes



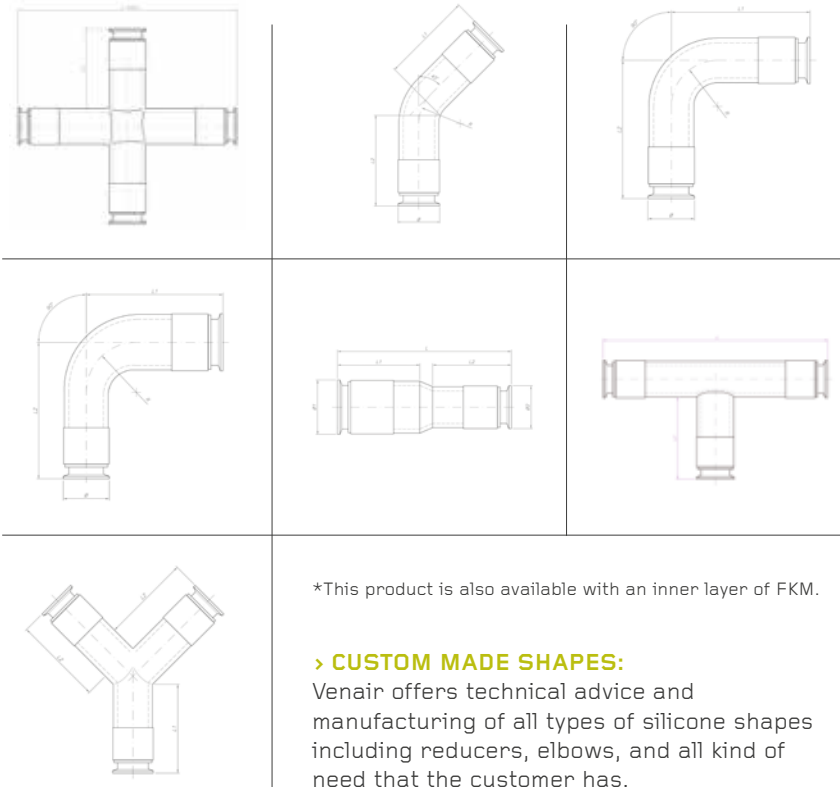
> MATERIAL:
Platinum cured silicone produced in accordance with the main food and pharm certifications.

- > CERTIFICATIONS:**
- US FDA Standard 21 CFR 177.2600.
 - German BfR Standard part XV.
 - USP Class VI standard (121°C) <88> Biological Reactivity Tests, In Vivo.
 - European Pharmacopeia 3.1.9.
 - ISO 10993-4, -5, -6, -10, -18.
 - 1935/2004/EC Regulation and European Council Resolution AP 2004 (5).
 - 3A Sanitary Standard 18-03 Class I (hose).

> STAINLESS STEEL INSIDE: No


> OUTER APPEARANCE:
Translucent and smooth.

> INNER APPEARANCE:
Translucent and smooth.



*This product is also available with an inner layer of FKM.

> CUSTOM MADE SHAPES:
Venair offers technical advice and manufacturing of all types of silicone shapes including reducers, elbows, and all kind of need that the customer has.

 **TEMPERATURE SCALE:**
-60°C/+180°C
(-76°F/+356°F)

 **TECHNICAL TABLE ON PAGE: 42**

APPLICATIONS:

ADAPTSIL® offers 7 different standard geometrical configurations but we can customize any piece according to the customer's needs. ADAPTSIL® is recommended to:

- Compensate system vibrations as well as to optimize the overall life of the hose or tube connections.
- Solve handling system miss-alignments as well as increased ease in hose or tube installation.
- Offer sound dampening characteristics in your process systems due to its elastic and flexible construction.

SILICONE SLEEVES

Perfect vision of the conveyed product



> MATERIAL:
Platinum cured silicone produced in accordance with the main food and pharm certifications.



TEMPERATURE SCALE:
-60°C / +180°C
(-76°F / +356°F)

- > CERTIFICATIONS:**
- US FDA Standard 21 CFR 177.2600.
 - German BfR Standard part XV.
 - USP Class VI standard (121°C) <88> Biological Reactivity Tests, In Vivo.
 - European Pharmacopeia 3.1.9.
 - ISO 10993-4, -5, -6, -10, -18.
 - 1935/2004/EC Regulation and European Council Resolution AP 2004 (5).
 - 3A Sanitary Standard 18-03 Class I (hose).

> STANDARD CONSTRUCTIONS:
• Sleeve without textile reinforcement with a wall

thickness of 1,3mm (+1/-0,5mm) / 0,05 inches (+0,04/-0,002 inches).

- Sleeve with 1 textile reinforcement with a wall thickness of 2,3mm (+1/-0,5mm) / 0,09 inches (+0,04/-0,002 inches).

> STAINLESS STEEL INSIDE:
No

> INNER APPEARANCE:
Translucent and completely smooth.

> MAXIMUM LENGTH OF MANUFACTURE:
4m (13ft).



OUTER APPEARANCE:
Translucent and smooth.

APPLICATIONS:

Silicone sleeves are suitable to convey liquids, semi liquids and powders at low pressure (gravity drop) or protecting against contamination outer-inner or inner-outer in areas of product handling.

The high flexibility allows a perfect absorption of vibrations. The translucent aspect allows a visual of the conveyed product.

This product is able to compensate small vibrations and level differences. You can avoid fluid contamination by using a Venair silicone sleeve, e.g. to protect juices from any contact with metallic parts.

PHARMALoader®

Smooth silicone compensator



> MATERIAL:
Platinum cured silicone produced in accordance with the main food and pharm certifications.

- > CERTIFICATIONS:**
- US FDA Standard 21 CFR 177.2600.
 - German BfR Standard part XV.
 - USP Class VI standard (121°C) <88> Biological Reactivity Tests, In Vivo.
 - European Pharmacopeia 3.1.9.
 - ISO 10993-4, -5, -6, -10, -18.
 - 1935/2004/EC Regulation and European Council Resolution AP 2004 (5).
 - 3A Sanitary Standard 18-03 Class I (hose).

> FABRIC REINFORCEMENT:
It is made with polyester reinforcements between the silicone layers. To obtain the correct elastic compensation, it is fitted with stainless steel rings, which also prevent volumetric expansion.

- > STAINLESS STEEL INSIDE:**
No
- > INNER APPEARANCE:**
Translucent and completely smooth.
- > OUTER APPEARANCE:**
Translucent, and smooth or corrugated.
- > MAXIMUM LENGTH OF MANUFACTURE:**
Tailor made.


> ALTERNATIVES:
Pharmaloder can be manufactured in a construction resistant to high pressure. This product is also available with an inner layer of FKM.

APPLICATIONS:

THE PHARMALoader® is a elastic compensator for the pharmaceutical and food industries. This product is a standard element fitted with molded Tri-Clamp seals at the ends of the compensator. The counter-flange elements are made from INOX 304L steel. It is the ideal solution for all tank, hopper, pump and weighing tank outlets to compensate vibrations and level differences. Autoclavable and sterilizable.



CUSTOM-MADE COMPENSATORS:
Venair offers a wide range of silicone compensators which are corrugated in the inside to better withstand vibrations and level differences.

 **TEMPERATURE SCALE:**
-60°C/+180°C
(-76°F/+356°F)

 **TECHNICAL TABLE ON PAGE: 36**

HEATED HOSE

Electrical heated silicone hose



> MATERIAL:
Platinum cured silicone produced in accordance with the main food and pharm certifications.

- > CERTIFICATIONS:**
- US FDA Standard 21 CFR 177.2600.
 - German BfR Standard part XV.
 - USP Class VI standard (121°C) <88> Biological Reactivity Tests, In Vivo.
 - European Pharmacopeia 3.1.9.
 - ISO 10993-4, -5, -6, -10, -18.
 - 1935/2004/EC Regulation and European Council Resolution AP 2004 (5).
 - 3A Sanitary Standard 18-03 Class I (hose).

> CONSTRUCTION:
Silicone hose equipped with an electrical resistance encased inside the wall in order to provide a regular temperature to the hose for an optimum fluidity of the conveyed product. Inner cable is connected to an electronic regulator and is also equipped with a PT 100 Ohm gauge connected to the regulator through a cooled end.

- > ALTERNATIVES:**
This hose can be manufactured without heating up to the ends to maintain high flexibility and lightness.
- > FABRIC REINFORCEMENT:** Yes
- > STAINLESS STEEL INSIDE:**
Stainless steel wire spring encased inside the hose wall.
- > INNER APPEARANCE:**
White and completely smooth.
- > MAXIMUM LENGTH OF MANUFACTURE:**
Tailor made.
- > VOLTAGE:**
Depending on specific user needs.



TEMPERATURE SCALE:
Polyester fabric
5°C (41°F)
+150°C (302°F)
Aramide fabric
5°C (41°F)
+200°C (392°F)

APPLICATIONS:

It is specially recommended for applications which needed to ensure a constant temperature to help maintain the fluidity of the product conducted through it in the food, cosmetic, chemical and pharmaceutical industries. It is suitable for conveying viscous products that needs to maintain a regular temperature during the production process, such as caramel, glycerin or chocolate.



OUTER APPEARANCE:
White and smooth.

COOLING HOSE

Spiral tubing rolled along the silicone hose



> MATERIAL:

Platinum cured silicone produced in accordance with the main food and pharm certifications.



OUTER APPEARANCE:
White and convoluted.

APPLICATIONS:

For conveying products that require a stable temperature, this silicone hose is equipped with a cylindrical conduit encased in spiral along the length of the hose. Fittings are assembled on both ends. This system provides a regular temperature of the conveyed product by steam or hot water through the inside of the conduit for heating, and nitrogen or cold water for cooling.

> CERTIFICATIONS:

- US FDA Standard 21 CFR 177.2600.
- German BfR Standard part XV.
- USP Class VI standard (121°C) <88> Biological Reactivity Tests, In Vivo.
- European Pharmacopeia 3.1.9.
- ISO 10993-4, -5, -6, -10, -18.
- 1935/2004/EC Regulation and European Council Resolution AP 2004 (5).
- 3A Sanitary Standard 18-03 Class I (hose).

> FABRIC REINFORCEMENT:

Yes

> STAINLESS STEEL INSIDE:

Stainless steel wire spring encased inside the hose wall.

> INNER APPEARANCE:

White and completely smooth.

> MAXIMUM LENGTH OF MANUFACTURE:

Tailor made.



TEMPERATURE SCALE:

Polyester fabric
5°C (41°F)
+150°C (302°F)
Aramide fabric
5°C (41°F)
+200°C (392°F)

VENA® VIEW

Sight flow indicators



> MATERIAL:

Fluoropolymer hose (PFA or FEP) in accordance with the main food and pharm certifications.

> CERTIFICATIONS:

- US FDA Standard 21 CFR 177.1550.
- German BfR Standard part XV.
- USP Class VI standard (70°C) <88> Biological Reactivity Tests, In Vivo.
- ISO 10993-6, 10993-10, 10993-11.
- 1935/2004/EC Regulation and European Council Resolution AP 2004 (5) – silicones and 10/2011/EC (Migration Test).

> STAINLESS STEEL INSIDE: No

> INNER APPEARANCE:

Translucent and completely smooth.

> MAXIMUM LENGTH OF MANUFACTURE:

Under demand (3m/10ft maximum).

> ALTERNATIVES:

This hose can be manufactured with PFA or FEP fluoropolymers or with silicone.



TEMPERATURE SCALE:

-60°C / +180°C
(-76°F / +356°F)



TECHNICAL TABLE ON PAGE: 42



OUTER APPEARANCE:
Smooth non-sticky surface.

APPLICATIONS:

Food Grade translucent fluoropolymer with aseptic fittings for applications where visual inspection of the conveyed material is required. It can be mounted in-line and makes it very easy to view product flow in any process or system. FEP/PFA is compatible with many chemical and aggressive products, which makes this product a very resistant and durable option, capable for extended uses.

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. TELCRA® forms chemical bond with silicone materials. Telcra can be applied in the outer layer of any of Venair products.

> **DENSITY (KG/M³):** 500

> **THICKNESS:** Customizable

> **THERMAL CONDUCTIVITY (W·K-1·M-1):** 0.12

> ADVANTAGES

- **ULTRALIGHT:** 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.



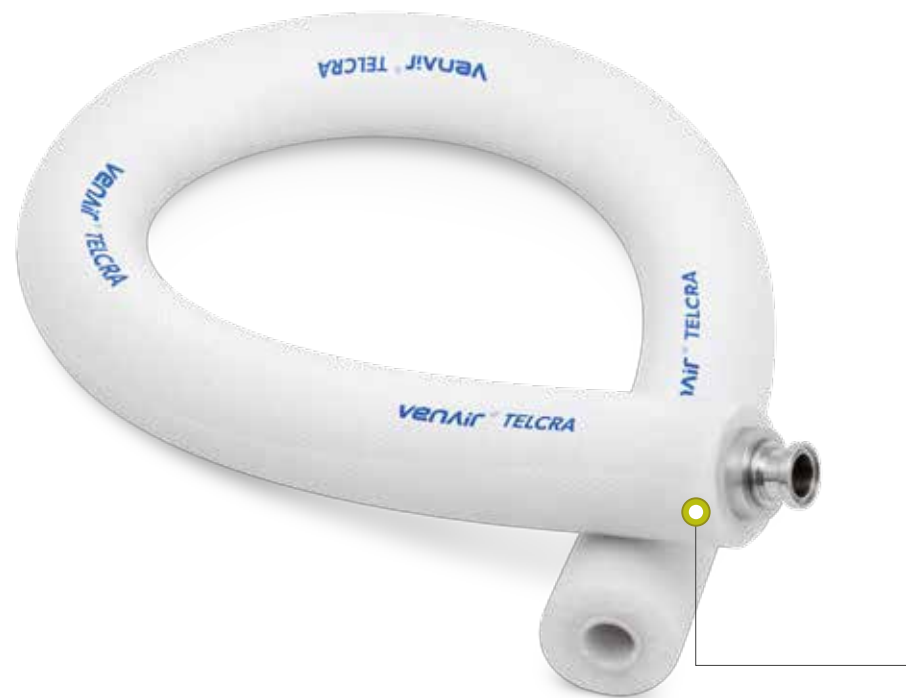
TEMPERATURE SCALE:

-30°C / +180°C
(-22°F / +356°F)

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 in the food, pharmaceutical and biotech industries. It also helps to maintain the product temperature inside the hose.

OUTER APPEARANCE:
White and smooth.



VENSIL® PHARMA

THE REQUIRED SILICONE FOR THE PHARMACEUTICAL AND BIOTECH INDUSTRY DEVELOPED BY VENAIR TECHLAB INCLUDES VALIDATION PACKAGE.

VENSIL® PHARMA has been developed for the pharmaceutical and biotech industries assuring improved features such as better performance and better attributes.

Venair counts with a complete Validation Package provided under demand that certifies the compliance with the most demanding certifications.

All our silicone products can be manufactured with VENSIL® PHARMA grade silicone.

APPLICATIONS:

- Pharmaceutical and cosmetic processing with low extractable levels required.
- Cell harvest and media process systems.
- Sterile fill lines.
- Water injection (WFI) transfer.
- Liquid chromatography.

> THE VALIDATION PACKAGE ASSURES THAT VENSIL® PHARMA COMPLIES WITH THE FOLLOWING CERTIFICATES:

- FDA 21 CFR 177.2600.
- BfR recommendation XV.
- United States Pharmacopoeia <87>.
- United States Pharmacopoeia <88>.
- ISO 10993-6.
- ISO 10993-10.
- ISO 10993-11.
- 3A 18-03.
- European Pharmacopoeia 3.1.9.
- Extractables study.

> CHARACTERISTICS:

- Animal derived component free (ADCF).
- Platinum cured and post cured to reduce extractables levels.
- Gamma stable and autoclavable.
- Low water absorption and low gas permeability rating.
- Minimal extractables help maintain fluid integrity
- Documented biocompatibility for sensitive applications.



ALL THE VENAIR CRIMPED HOSES COUNT WITH THE BATCH NUMBER MARKED IN THE FITTINGS.

Venair also offers other traceability solutions in order to improve the data reading. Various solutions make it possible to obtain all information related to the hose during the manufacturing process, e.g. raw materials, product codes and components, lot number, appropriate certificates, production and sale date and related orders. **The QR code can be marked in any FDA silicone hose. Marking silicone hoses with the QR codes does not distort any characteristic of the hose.** It maintains flexibility, pressure resistance and range of temperature.



> QR MARKING

The QR code assures 100% traceability of the hose. QR code is presented as an alternative to the chip that is commonly used in the market to assure hoses traceability.

- QR code is marked on the silicone with a laser which makes it indelible.
- It does not need any additional software.
- QR code can be read with all kind of mobile device which has downloaded an app to read codes.
- Applications to read QR codes are completely free for any device.
- QR code can provide all kind of information about the product.
- Data content in the code are completely customizable.

> IDENTIFICATION BY COLOR

Labels:
Silicone labels can be placed over any hose in order to mark specific information required by the client. Labels offer clear identification, cleanliness and permanence in the silicone hose. Venair silicone labels can be customized to meet your specific needs such as part number, manufactured date, replacement date, or any specific information that you consider to be important.

Features:

- The label does not touch the inner liquid.
- It is made of permanent vulcanized silicone.
- Certified free of animal-derived ingredients.
- Handles clean-in-place (CIP) or steam-in-place (SIP) processes.
- Autoclavable.
- More than 15 colors available.



VENA® TECHNIPUR® VAC FDA



> MATERIAL:

Polyurethane in food quality, produced in accordance with the main food and pharm certifications.

High flexible polyurethane hose



APPLICATIONS:

Transparent polyurethane hose recommended for the transport of bulk or powder materials for the food, pharmaceutical and chemical industries. Generally acceptable for pneumatic transport of bulk materials and for vacuum of all types of abrasive particles.



OUTER APPEARANCE:
Translucent and corrugated.

> CERTIFICATIONS:

- US FDA (Foods and Drugs Administration) Standard 21 CFR 177.1680 and CFR 177.2600.
- 1935/2004/EC Regulation and 10/2011/EC (Migration Test).
- BPA (Bisphenol – A) and Phthalates free.

> FABRIC REINFORCEMENT: No

> STAINLESS STEEL INSIDE:

PVC coated steel wire encased inside the walls. Upon request it can be manufactured with stainless steel wire spring.

> INNER APPEARANCE:

Translucent and quite smooth.

> MAXIMUM LENGTH OF MANUFACTURE:

10 m (33 ft).

> ALTERNATIVES:

VENA TECHNIPUR VAC FDA X: It is recommended for chemical industry and when a low electrical surface resistivity is required. This polyurethane material has an electrical surface resistivity, according to IEC/TS 60079-32-1, of $<10^9 [\Omega \cdot m]$. It is manufactured with stainless steel wire encased inside the walls.



TEMPERATURE SCALE:

-20°C / +80°C
(-4°F / +176°F)



TECHNICAL TABLE
ON PAGE: 40

VENA® TECHNIPUR® S100/S200



> MATERIAL:

Food quality polyurethane, produced in accordance with the main food and pharm certifications.

> CERTIFICATIONS:

- US FDA (Foods and Drugs Administration) Standard 21 CFR 177.1680 and CFR 177.2600.
- 1935/2004/EC Regulation and European Council Resolution AP 2004 (5) – silicones and 10/2011/EC (Migration Test).

> STAINLESS STEEL INSIDE:

316L stainless steel wire spring (can be equipped with 316L stainless steel fittings on each end).

> INNER APPEARANCE:

Translucent and smooth.

> MAXIMUM LENGTH OF MANUFACTURE:

4 m (13 ft).

> ALTERNATIVES:

VENA TECHNIPUR X S100 AND X S200: It is the conductive version which has an electrical surface resistivity of $<10^9 [\Omega \cdot m]$ according to IEC/TS 60079-32-1.

Smooth mandrel-made polyurethane hose



TEMPERATURE SCALE:

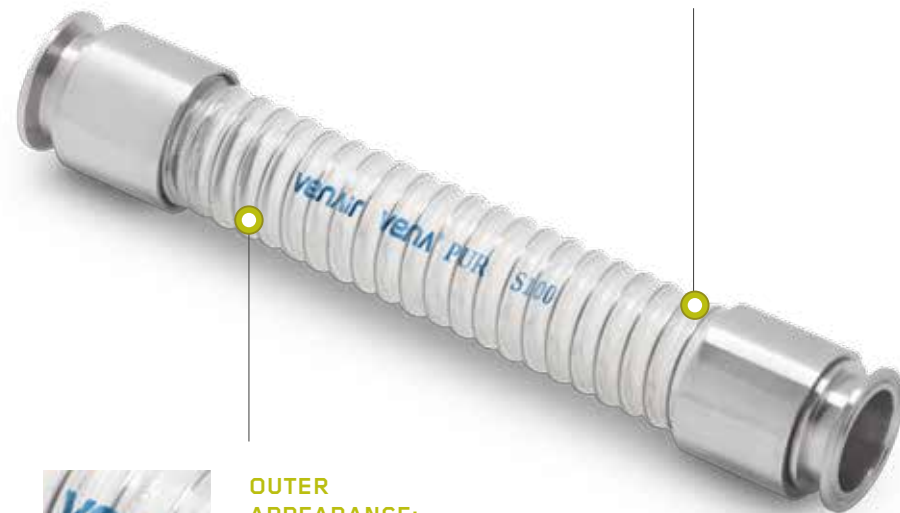
-20°C / +80°C
(-4°F / +176°F)



TECHNICAL TABLE
ON PAGE: 38/39

OUTER APPEARANCE:

VENA® TECHNIPUR® S200 is translucent and smooth.



OUTER APPEARANCE:

VENA® TECHNIPUR® S100 is translucent and corrugated.



APPLICATIONS:

It is recommended especially when the inner product is abrasive or has to be seen to control the flow.

VENA® BUTYLFOOD®

Butyl rubber hose



> MATERIAL:

EPDM rubber hose with inner layer of butylic rubber in accordance with the main food and pharm certifications.

> CERTIFICATIONS OF THE INNER LAYER:

- US FDA (Foods and Drugs Administration) Standard 21 CFR 177.2600.
- 1935/2004/EC Regulation and European Council Resolution AP 2004 (5) – silicones and 10/2011/EC (Migration Test).
- German BfR Standard part XXI Cat 2.
- 3A Sanitary Standard 18-03 Class III.

> FABRIC REINFORCEMENT: Yes

> STEEL INSIDE:

Steel wire spring encased inside the hose wall.

> OUTER APPEARANCE:

Violet and smooth.

> INNER APPEARANCE:

White and smooth.

> MAXIMUM LENGTH OF MANUFACTURE:

40 meters (131ft).



TEMPERATURE SCALE:

-20°C / +100°C
(-46°F / +212°F)



TECHNICAL TABLE
ON PAGE: 37



APPLICATIONS:

The Butylfood flexible hose is recommended for all types of food products, even at high temperatures (milk, chocolate, drinking water, fruit juice, fresh cream, oil, cosmetic cream, alcohol, etc.). These hoses have a strong, durable construction that can withstand excessive physical handling.

VENA® BLUE

EPDM rubber hose



> MATERIAL:

EPDM rubber hose with inner layer of food-grade EPDM produced in accordance with the main food and pharm certifications.

> CERTIFICATIONS:

- US FDA (Foods and Drugs Administration) Standard 21 CFR 177.2600.
- German BfR Standard part XXI Cat. 2.
- 1935/2004/EC Regulation and European Council Resolution AP 2004 (5) – silicones and 10/2011/EC (Migration Test).
- 3A Sanitary Standard 18-03 Class III.

> STAINLESS STEEL INSIDE: No

> FABRIC REINFORCEMENT: Yes

> OUTER APPEARANCE:

Blue and smooth.

> INNER APPEARANCE:

White and smooth.

> MAXIMUM LENGTH OF MANUFACTURE:

40 meters (131ft).

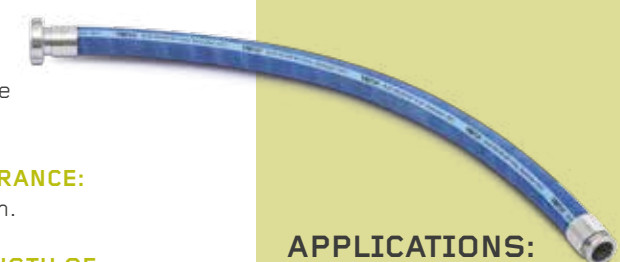


TEMPERATURE SCALE:

-20°C / +100°C
(-46°F / +212°F)



TECHNICAL TABLE
ON PAGE: 37



APPLICATIONS:

Specially recommended for the transport and tank truck unloading of milk, liquor, fruit juice and all types of animal and vegetal origin food products. It is not recommended to work in vacuum. It is highly resistant to thermal aging, ozone agents, abrasion and, due to its strong and durable construction, it is suitable against floor friction and bad weather conditions.

MOLDED CLAMPS

VENAIR® molded silicone clamps are well-suited for critical applications in high purity industries. These assemblies are manufactured with the same raw material than this is used to manufacture hoses and tubing. Reduce installation time (no gaskets), improve cleanliness (no retention zone) and retain the benefits of the silicone.

VENAIR® molded silicone clamps are available in mini and standard Tri-Clamp fitting styles and are supplied with integrated gaskets molded directly to the face of the clamps. Protective backup cups (thermoplastic or stainless steel) provide a stable clamping surface and safeguard the clamps during installation and use.

- Platinum-cured silicone.
- Completely smooth transition from the tubing or the hose through the clamp.
- Constant diameter. No internal reductions.
- Autoclavable and sterilizable CIP and SIP.
 - Meets USP Class VI, FDA and BfR standards*.
 - Easy installation. Reduces assembly time.
- Temperature resistance: -60°C to 180°C.
- No product contact with metallic materials.
- Molded clamps can be supplied on any Venair silicone tubing or hose construction.



* Under request, molded assemblies can meet all the certifications set out in the Validation Package.

SZR SYSTEM

(WITHOUT RETENTION ZONE) AND 3A HOSE ASSEMBLIES

The SZR assembly system ensures a higher level of non-retention in the flexible hoses, as well as greater safety of use. Moreover, our crimped hoses can be Certified according to the 3A Sanitary Standard 62-02 for hose assemblies.

QUALITY OF FINISH

The roughness of the inner surface of the SZR* fittings presents a maximum rugosity of 0.8 microns and can be improved on request. The batch number for the raw material used is indicated on each fitting. All connections are manufactured in a single block, without welds, and the flexed 45°or 90°connections are secured by an orbital weld.

STERILIZATION

ALL FLEXIBLE HOSES MUST BE STERILIZED BEFORE USE AND MUST ONLY BE USED FOR THE INTENDED PURPOSE FOR WHICH THEY WERE DESIGNED.

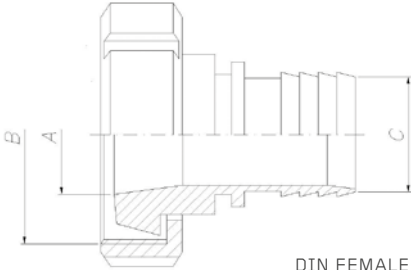
All silicone hoses can be hot-air sterilized at a temperature of +250° C (+482°F) or steam sterilized at +135° C (+275°F) and a pressure of with 3.5 bars. Recommended maximum time: 1.5 hours +135° C (+275°F). A minimum of 1 hour must be left between successive sterilization treatments in order for the hose to stabilize. It is important to note that steam alters the mechanical and volumetric properties of the silicone elastomer. We therefore recommend that all hoses are examined after 150 hours of steam sterilization treatments. The product may suffer from the effects of hydrolysis if the sterilization time is exceeded.

STAINLESS STEEL FITTINGS 316L

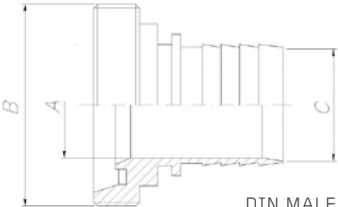
Available in 316L stainless steel, with the exception of the nuts and ferrules which are made of 304 stainless steel. Other fittings can be assembled upon request (RJT, FIL, ISS, MACON, GAS JIC, flanges). Clamps and auxiliary parts for welding can also be manufactured.

DIN 11851

DN	A	B (DIN 405)	C
	mm	thread	mm
10	10	28 x 1/8"	10
15	16	34 x 1/8"	15
20	20	44 x 1/6"	20
25	26	52 x 1/6"	25
32	32	58 x 1/6"	32
40	38	65 x 1/6"	38
50	50	78 x 1/6"	50
65	66	95 x 1/6"	63
80	81	110 x 1/4"	75
100	100	130 x 1/4"	102
125	125	160 x 1/4"	127
150	150	190 x 1/4"	152



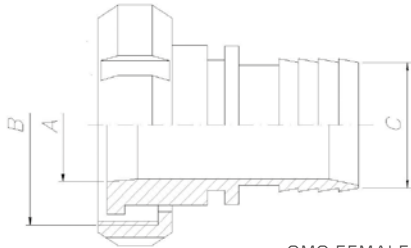
DIN FEMALE



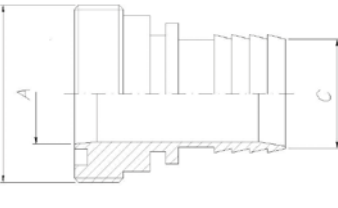
DIN MALE

SMS

DN	A	B	C
	mm	thread	mm
25	22,5	39,7 x 1/6"	25
38	35,5	59,8 x 1/6"	38
51	48,5	69,8 x 1/6"	50
63	60,5	84,8 x 1/6"	63
76	72,8	97,5 x 1/6"	75
101,6	97,6	132 x 1/6"	102
104	100	124,4 x 1/6"	102



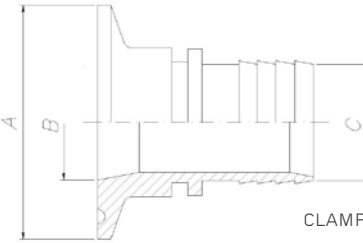
SMS FEMALE



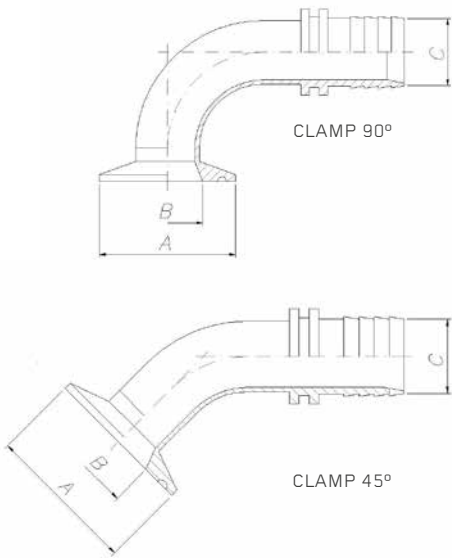
SMS MALE

TRI - CLAMP

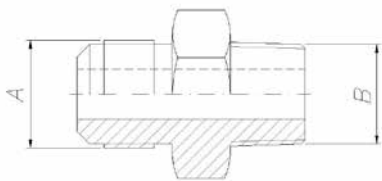
A	B	C
mm	mm	mm
25	6	6
34	8	8
50	8	8
25	10	10
34	10	10
50	10	10
25	10	13
34	10	13
25	13	13
34	13	13
50	13	13
25	16	16
34	16	16
50	16	16
25	16	20
50	16	20
34	18	18
50	18	18
34	20	20
50	20	20
50	22,5	18
50	22,5	20
50	22,5	25
64	22,5	25
50	29	32
64	32	32
50	35,5	20
50	35,5	25
50	35,5	38
64	35,5	38
64	38	38
64	48,5	50
77	60,3	63
91	72,9	76
119	101	102



TRI - CLAMP IMPERIAL					
DN	A		B	C	
inch	mm	inch	mm	mm	inch
1/2	25	1	9,5	6,35	1/4
3/4	25	1	15,8	6,35	1/4
1/2	25	1	9,5	9,52	3/8
3/4	25	1	15,8	9,52	3/8
1/2	25	1	9,5	12,7	1/2
3/4	25	1	15,8	12,7	1/2
1/2	25	1	9,5	19,05	3/4
3/4	25	1	15,8	19,05	3/4
1	50	2	22,1	6,35	1/4
1 1/2	50	2	34,8	6,35	1/4
1	50	2	22,1	9,52	3/8
1 1/2	50	2	34,8	9,52	3/8
1	50	2	22,1	12,7	1/2
1 1/2	50	2	34,8	12,7	1/2
1	50	2	22,1	19,05	3/4
1 1/2	50	2	34,8	19,05	3/4
1	50	2	22,1	25,4	1
1 1/2	50	2	34,8	25,4	1
2	64	2 1/2	47,5	25,4	1
1 1/2	50	2	34,8	38,1	1 1/2
2	64	2 1/2	47,5	38,1	1 1/2
2	64	2 1/2	47,5	50,8	2
2 1/2	77	3	60,2	50,8	2
2 1/2	77	3	60,2	63,5	2 1/2
3	91	3 9/16	72,9	63,5	2
3	91	3 9/16	72,9	76,2	3
4	119	4 11/16	97,4	101,6	4



MALE JIC X MALE NPTF ADAPTOR	
A MALE JIC	B MALE NPT
7/16	1/4
1/2	1/4
3/4	3/8
7/8	1/2
11/16	3/4
15/16	1
15/8	1 1/4
17/8	1 1/2



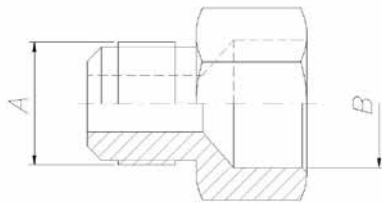
MALE JIC X MALE NPTF ADAPTOR

FEMALE JIC STRAIGHT INSERT		
A	B Ø FOR HOSE	
inch	inch	mm
7/16	1/4	6,35
1/2	1/4	6,35
3/4	3/8	9,52
7/8	1/2	12,7
11/16	3/4	19,05
15/16	1	25,4
15/8	1 1/4	31,75
17/8	1 1/2	38,1



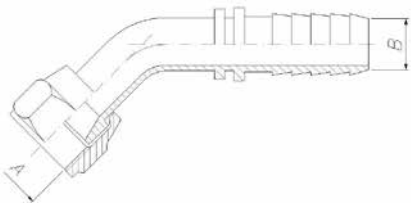
FEMALE JIC STRAIGHT INSERT

MALE JIC X FEMALE NPTF ADAPTOR	
A MALE JIC	B MALE NPT
7/16	1/4
1/2	1/4
3/4	3/8
7/8	1/2
11/16	3/4
15/16	1
15/8	1 1/4
17/8	1 1/2



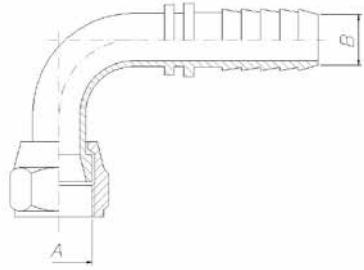
MALE JIC X FEMALE NPTF ADAPTOR

FEMALE JIC ELBOW 45°INSERT		
A	B Ø FOR HOSE	
inch	inch	mm
7/16	1/4	6,35
1/2	1/4	6,35
3/4	3/8	9,52
7/8	1/2	12,7
11/16	3/4	19,05
15/16	1	25,4
15/8	11/4	31,75
17/8	11/2	38,1



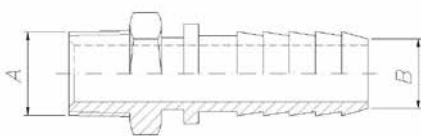
FEMALE JIC ELBOW 45° INSERT

INSERT FEMALE JIC ELBOW 90°		
A	B Ø FOR HOSE	
inch	inch	mm
7/16	1/4	6,35
1/2	1/4	6,35
3/4	3/8	9,52
7/8	1/2	12,7
11/16	3/4	19,05
15/16	1	25,4
15/8	11/4	31,75
17/8	11/2	38,1



INSERT FEMALE JIC ELBOW 90°

INSERT MALE NPT		
A	B Ø FOR HOSE	
inch	inch	mm
7/16	1/4	6,35
1/2	1/4	6,35
3/4	3/8	9,52
7/8	1/2	12,7
11/16	3/4	19,05
15/16	1	25,4
15/8	11/4	31,75
17/8	11/2	38,1



INSERT MALE NPT

MALE GAS / FEMALE GAS	
A	B
thread	mm
1/4"	6
3/8"	8
3/8"	10
1/2"	10
1/2"	13
5/8"	16
3/4"	19
1"	25
1 1/2"	38



MALE GAS



FEMALE GAS

VENA® SIL 630

Ø INT		WALL THICKNESS		WORKING PRESSURE*		BURSTING PRESSURE		BENDING RADIUS	
				ISO 1402/2009		ISO 1402/2009		ISO 1746/2000	
mm	inch	+1/-0.5mm	+0.04/-0.02''	Bar at 20°C	Psi at 68°F	Bar at 20°C	Psi at 68°F	mm	ft
25	1	5,7	0,22	3,9	57	15,7	227	121	0,4
32	1 1/4	5,7	0,22	3,36	49	14,6	211	137	0,45
38	1 1/2	5,7	0,22	3,14	46	14	202	163	0,54
51	2	5,7	0,22	2,4	35	12,1	175	238	0,78
63	2 1/2	5,7	0,22	2,24	33	11,1	161	337	1,11
76	3	5,7	0,22	1,78	26	9,5	138	491	1,61
102	4	5,7	0,22	1	15	6,7	97	557	1,83

* At the indicated working pressure, the hose may experience an elongation up to 20%. Other diameters can also be manufactured. Please consult.

VENA® SIL 640

Ø INT		WALL THICKNESS		WORKING PRESSURE*		BURSTING PRESSURE	
				ISO 1402/2009		ISO 1402/2009	
mm	inch	+1/-0.5mm	+0.04/-0.02''	Bar at 20°C	Psi at 68°F	Bar at 20°C	Psi at 68°F
6	1/4	4.5	0,18	11,7	169	35	508
10	3/8	4.5	0,18	9,7	140	29	421
13	1/2	4.5	0,18	8,7	126	26	377
19	3/4	4.5	0,18	7,7	111	23	334
25	1	4.5	0,18	6,7	97	20	290
32	11/4	4.5	0,18	5,7	82	17	247
38	11/2	4.5	0,18	5	73	15	218
51	2	4.5	0,18	4	58	12	174
63	2 1/2	4.5	0,18	3,3	48	10	145
76	3	4.5	0,18	2,7	39	8	116
102	4	4.5	0,18	1,7	24	5	73

* Pressure data hold at room temperature. Please reduce pressure values by 20% for each increase of 100°C / 212°F. Other diameters can also be manufactured. Please consult.

VENA® SIL 650V

Ø INT		WALL THICKNESS		WORKING PRESSURE*		BURSTING PRESSURE		BENDING RADIUS		VACUUM RESISTANCE
				ISO 1402/2009		ISO 1402/2009		ISO 1746/2000		
mm	inch	+1/-0.5mm	+0.04/-0.02''	Bar at 20°C	Psi at 68°F	Bar at 20°C	Psi at 68°F	mm	inch	684 Torr (mmHg) 0,91 bar 13,23 psi 26,93 inHg 9,29 M H ₂ O
6	1/4	5.5	0,22	26	377	77,9	1130	29	1,14	
10	3/8	5.5	0,22	22	318	65,9	955	34	1,34	
13	1/2	5.5	0,22	19,9	289	59,7	866	39	1,54	
19	3/4	5.5	0,22	16,5	240	49,6	719	54	2,13	
25	1	5.5	0,22	14,8	214	44,3	643	68	2,68	
32	1 1/4	5.5	0,22	12,8	186	38,5	558	94	3,7	
38	1 1/2	5.5	0,22	11,5	167	34,5	500	112	4,41	
51	2	5.5	0,22	9,2	133	27,5	399	144	5,67	
63	2 1/2	5.5	0,22	7,5	109	22,6	327	181	7,13	
76	3	6	0,24	6,1	88	18,2	263	232	9,13	
102	4	6	0,24	3,7	54	11,2	163	367	14,45	

* Pressure data hold at room temperature. Please reduce pressure values by 20% for each increase of 100°C / 212°F.
Other diameters can also be manufactured. Please consult.

VENA® SIL 655

Ø INT		WALL THICKNESS		WORKING PRESSURE*		BURSTING PRESSURE		BENDING RADIUS		VACUUM RESISTANCE
				ISO 1402/2009		ISO 1402/2009		ISO 1746/2000		
mm	inch	+1/-0.5mm	+0.04/-0.02''	Bar at 20°C	Psi at 68°F	Bar at 20°C	Psi at 68°F	mm	inch	684 Torr (mmHg) 0,91 bar 13,23 psi 26,93 inHg 9,29 M H ₂ O
6	1/4	5,5	0,26	31,5	456	94,5	1370	43	1,69	
10	3/8	5,5	0,26	27	392	81	1174	49	1,93	
13	1/2	5,5	0,26	24,5	355	73,5	1066	54	2,13	
19	3/4	5,5	0,26	20,5	297	61,5	892	68	2,68	
25	1	5,5	0,26	18,5	268	55,5	805	80	3,15	
32	11/4	5,5	0,26	16,5	239	49,5	718	100	3,94	
38	11/2	6,5	0,28	15	218	45	653	121	4,76	
51	2	6,5	0,28	12	174	36	522	185	7,28	
63	21/2	6,5	0,28	10	145	30	435	273	10,75	
76	3	6,5	0,28	7,1	103	21,3	308	318	12,52	
102	4	6,5	0,28	5	73	15	218	423	16,65	

* Pressure data hold at room temperature. Please reduce pressure values by 20% for each increase of 100°C / 212°F.
Other diameters can also be manufactured. Please consult.

VENA® TECHNOSIL®

Ø INT		OUTER DIAMETER		WORKING PRESSURE*		BURSTING PRESSURE		BENDING RADIUS	
				ISO 1402/2009		ISO 1402/2009		ISO 1746/2000	
mm	inch	mm	inch	Bar at 20°C	Psi at 68°F	Bar at 20°C	Psi at 68°F	mm	inch
6,35	1/4	13,2	0,52	9,3	135	28	406	40	0,13
7,93	5/16	15	0,59	7,7	111	23	334	45	0,15
9,52	3/8	16,6	0,65	7	102	21	305	55	0,18
12,7	1/2	20,3	0,8	5,7	82	17	247	70	0,23
15,88	5/8	24,5	0,96	4,3	63	13	189	85	0,28
19,05	3/4	27,9	1,1	3,7	53	11	160	95	0,31
22,22	7/8	31,3	1,23	3,3	48	10	145	110	0,36
25,4	1	34,5	1,36	3	44	9	131	135	0,44
31,75	1 1/4	40,8	1,61	2,3	34	7	102	160	0,52

* Pressure data hold at room temperature. Please reduce pressure values by 20% for each increase of 100°C / 212°F.
Technosil product is supplied with double bag packaging. References above are standard dimensions in stock for USP grade.
Other sizes available under demand.

VENA® TECHNOSIL® DB

Ø INT		OUTER DIAMETER		WORKING PRESSURE*		BURSTING PRESSURE		BENDING RADIUS		VACUUM PRESSURE	
				ISO 1402/2009		ISO 1402/2009		ISO 1746/2000			
mm	inch	mm	inch	Bar at 20°C	Psi at 68°F	Bar at 20°C	Psi at 68°F	mm	inch	Bar	Psi
6,35	1/4	16	0,63	23,7	344	71,2	1033	34	1,36	1	14,5
7,93	5/16	18	0,71	22,8	331	68,5	994	37	1,48	1	14,5
9,52	3/8	20	0,79	22,3	324	66,9	971	46	1,84	0,95	13,78
12,7	1/2	23	0,91	19,4	282	58,3	846	51	2,04	0,95	13,78
15,88	5/8	27	1,06	17	246	50,9	739	65	2,6	0,9	13,05
19,05	3/4	30,5	1,2	15,6	226	46,8	678	76	3,04	0,8	11,6
22,22	7/8	33	1,3	14	202	41,9	607	99	3,96	0,5	7,25
25,4	1	37	1,46	12,5	181	37,5	544	118	4,72	0,4	5,8
28.00	1 7/64	5.00	0.20	11.67	169.21	35.00	507.64	160.00	6.40	0.15	2.18
31.75	1 1/4	7.13	0.28	10.07	146.01	30.20	438.02	181.00	7.24	0.15	2.18

* Pressure data hold at room temperature. Please reduce pressure values by 20% for each increase of 100°C / 212°F.
Technosil DB product is supplied with double bag packaging. References above are standard dimensions in stock for USP grade.
Other sizes available under demand.

VENA® TECHNOEX

INNER DIAMETER		OUTER DIAMETER		BOXED	
mm	inch	mm	inch	50ft	100ft
1,59	0,06	4,76	0,19	√	√
2,38	0,09	5,55	0,22	√	√
3,18	0,13	6,35	0,25	√	√
3,18	0,13	7,9	0,31	√	√
3,18	0,13	9,52	0,37	√	√
4,76	0,19	7,9	0,31	√	√
4,76	0,19	9,52	0,37	√	√
4,76	0,19	11,11	0,44	√	√
6,35	0,25	9,52	0,37	√	
6,35	0,25	12,7	0,5	√	
7,93	0,31	12,7	0,5	√	
9,52	0,37	14,3	0,56	√	
9,52	0,37	15,9	0,63	√	
11,11	0,44	14,3	0,59	√	
12,7	0,5	19	0,75	√	
15,88	0,62	22,2	0,87		
19,05	0,75	25,4	1		

Technoex product is supplied with double bag packaging.
References above are standard dimensions in stock for USP grade.
Other sizes available under demand.

PHARMALoader®

NOMINAL CLAMP Ø	CLAMP HEAD Ø	INNER Ø	OVERALL LENGHT		WORKING PRESSURE	
inch	mm	mm	inch	mm	Bar	Psi
1	50,5	22,1	4	102	1	14
1 1/2	50,5	34,7	4	102	0,9	13
2	64	47,5	4	102	0,8	11
2 1/2	77,5	60	4	102	0,7	10
3	91	73	6	152	0,6	8
4	119	97,6	6	152	0,5	7
5	155	125	7	178	0,4	5
6	183	150	7	178	0,35	5
8	233,5	200	7	178	0,2	3
10	270	250	8	204	0,1	1

VENA® BUTYLFOOD®

INNER DIAMETER		OUTER DIAMETER		BENDING RADIUS		WORKING PRESSURE		BURSTING PRESSURE	
mm	inch	mm	inch	mm	inch	Bar at 20°C	Psi at 68°F	Bar at 20°C	Psi at 68°F
16	5/8	26	1	96	3,78	10	145	30	435
19	3/4	29	1 1/8	115	4,53	10	145	30	435
25	1	37	2 1/6	150	5,91	10	145	30	435
32	1 1/4	45	1 3/4	200	7,87	10	145	30	435
38	1 1/2	51	2	230	9,06	10	145	30	435
51	2	65	2 9/16	300	11,81	10	145	30	435
63	2 1/2	78	3 1/6	380	14,96	10	145	30	435
76	3	92	3 5/8	450	17,72	10	145	30	435
102	4	120	4 3/4	600	23,62	10	145	30	435

VENA® BLUE

ID - INNER DIAMETER		OD - OUTER DIAMETER		WORKING PRESSURE		BURSTING PRESSURE	
mm	inch	mm	inch	Bar at 20°C	Psi at 68°F	Bar at 20°C	Psi at 68°F
19	0,75	30	1,18	10	145	30	435
25	0,98	36	1,42	10	145	30	435
32	1,26	43	1,69	10	145	30	435
38	1,5	49	1,93	10	145	30	435
51	2,01	63	2,48	10	145	30	435
63	2,48	75	2,95	10	145	30	435
76	2,99	89	3,5	10	145	30	435
102	4,02	116	4,57	10	145	30	435

VENAFLON® HF / HF-X

INNER DIAMETER		WALL THICKNESS		WORKING PRESSURE				BENDING RADIUS			
				ISO 1402/2009 (BAR AT 20°C)		ISO 1402/2009 (PSI AT 68°F)		ISO 1746/1998 (MM)		ISO 1746/1998 (INCH)	
mm	inch	+1/ -0.5 mm	+0.04/- 0.02 inch	HF	HF-X	HF	HF-X	HF	HF-X	HF	HF-X
13	1/2	6.0	0.20	10	10	145	145	45	120	1,77	4,72
16	5/8	6.0	0.24	10	10	145	145	55	120	2,17	4,72
19	3/4	6.0	0.24	10	10	145	145	65	120	2,56	4,72
25	1	6.0	0.24	10	10	145	145	85	150	3,35	5,91
32	1 1/4	6.0	0.24	10	10	145	145	120	200	4,72	7,87
38	1 1/2	6.5	0.26	10	8	145	116	140	250	5,51	9,84
51	2	8.0	0.31	10	8	145	116	180	300	7,09	11,81
63	2 1/2	8.0	0.31	8	-	116	-	320	-	12,6	-
76	3	8.0	0.31	6	-	87	-	380	-	14,96	-

VENA®TECHNIPUR® S100

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
20	0,79	3,6	0,14	10,73	155,51	32,18	466,54
25	0,98	3,6	0,14	9,75	141,43	29,26	424,29
30	1,18	3,6	0,14	8,83	128,02	26,49	384,06
32	1,26	3,6	0,14	8,47	122,85	25,42	368,54
35	1,38	3,6	0,14	7,95	115,29	23,85	345,87
38	1,5	3,6	0,14	7,45	107,98	22,34	323,93
40	1,57	3,6	0,14	7,12	103,24	21,36	309,71
45	1,77	3,6	0,14	6,34	91,86	19,01	275,58
51	2,01	3,6	0,14	5,46	79,1	16,37	237,3
60	2,36	3,6	0,14	4,26	61,79	12,78	185,36
63,5	2,5	3,6	0,14	3,84	55,64	11,51	166,93
70	2,76	3,6	0,14	3,11	45,12	9,34	135,36
76	2,99	3,6	0,14	2,51	36,42	7,54	109,26
82	3,23	3,6	0,14	1,98	28,69	5,94	86,08
90	3,54	3,6	0,14	1,37	19,91	4,12	59,73
102	4,02	3,6	0,14	0,69	9,98	2,06	29,94
114	4,49	3,6	0,14	0,27	3,95	0,82	11,84
127	5	3,6	0,14	0,12	1,81	0,37	5,43
152	5,98	3,6	0,14	N/A	N/A	N/A	N/A
180	7,09	3,6	0,14	N/A	N/A	N/A	N/A
203	7,99	3,6	0,14	N/A	N/A	N/A	N/A
220	8,66	3,6	0,14	N/A	N/A	N/A	N/A
225	8,86	3,6	0,14	N/A	N/A	N/A	N/A
254	10	3,6	0,14	N/A	N/A	N/A	N/A
302	11,89	3,6	0,14	N/A	N/A	N/A	N/A

* N/A: Not available

VENA®TECHNIPUR® S200

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	ISO 1402/2009 Bar at 20°C	ISO 1402/2009 Psi at 68°F	ISO 1402/2009 Bar at 20°C	ISO 1402/2009 Psi at 68°F
13.00	0.51	4.50	0.18	12.17	176.47	36.50	529.25
16.00	0.63	4.50	0.18	11.54	167.33	34.61	501.84
20	0,79	4.50	0.18	10,73	155,51	32,18	466,54
25	0,98	4.50	0.18	9,75	141,43	29,26	424,29
30	1,18	4.50	0.18	8,83	128,02	26,49	384,06
32	1,26	4.50	0.18	8,47	122,85	25,42	368,54
35	1,38	4.50	0.18	7,95	115,29	23,85	345,87
38	1,5	4.50	0.18	7,45	107,98	22,34	323,93

VENAFLON® HR

INNER DIAMETER		WALL THICKNESS		WORKING PRESSURE		BENDING RADIUS	
				ISO 1402/2009		ISO 1746/1998	
mm	inch	+1/-0.5 mm	+0.04/-0.02 inch	ISO 1402/2009 Bar at 20°C	ISO 1402/2009 Psi at 68°F	ISO 1746/1998 mm	ISO 1746/1998 inch
13	1/2	6	0,24	10	145	45	1,77
19	3/4	6	0,24	10	145	65	2,55
25	1	6	0,24	10	145	85	3,34
32	1 1/4	6,5	0,26	10	145	120	4,72
38	1 1/2	6,5	0,26	10	145	140	5,51
51	2	7,25	0,28	10	145	180	7,08
63,5	2,5	8	0,31	10	145	250	9,84
76	3,00	8	0,31	10	145	350	13,77

VENAFLON® FULL-X

INNER DIAMETER		WALL THICKNESS		WORKING PRESSURE		BENDING RADIUS	
				ISO 1402/2009		ISO 1746/1998	
mm	inch	+1/-0.5 mm	+0.04/-0.02 inch	ISO 1402/2009 Bar at 20°C	ISO 1402/2009 Psi at 68°F	ISO 1746/1998 mm	ISO 1746/1998 inch
13	1/2	6	0,24	10	145	135	5,31
19	3/4	6	0,24	10	145	188	7,4
25	1	6	0,24	10	145	225	8,85
32	1 1/4	6,5	0,26	10	145	262	10,31
38	1 1/2	6,5	0,26	10	145	338	13,3
51	2	7,25	0,28	10	145	412	16,22
63,5	2,5	8	0,31	10	145	450	17,71
76	3,00	8	0,31	10	145	525	20,66

VENA®TECHNIPUR® VAC FDA

INNER DIAMETER		WALL THICKNESS		WORKING PRESSURE		BURSTING PRESSURE		VACUUM RESISTANCE		BENDING RADIUS	
				ISO 1402/2009		ISO 1402/2009		ISO 7233/2006		ISO 1746/2000	
mm	inch	+0.04/ -0.02 mm	+1.57x10 ⁻³ / -7.87x10 ⁻⁴ inch	Bar a 20°C	Psi a 68F	Bar a 20°C	Psi a 68F	Bar a 20°C	Psi a 68F	mm	inch
50	1.97	1.20	0.05	2.07	30.02	6.21	90.05	0.61	8.85	85	0.28
55	2.17	1.20	0.05	1.87	27.12	5.61	81.35	0.55	7.98	93	0.31
60	2.36	1.20	0.05	1.71	24.80	5.13	74.39	0.51	7.40	100	0.33
65	2.56	1.20	0.05	1.58	22.91	4.74	68.73	0.47	6.82	108	0.35
70	2.76	1.20	0.05	1.46	21.17	4.38	63.51	0.43	6.24	115	0.38
75	2.95	1.20	0.05	1.36	19.72	4.08	59.16	0.4	5.80	123	0.40
80	3.15	1.20	0.05	1.28	18.56	3.84	55.68	0.38	5.51	130	0.43
85	3.35	1.20	0.05	1.2	17.40	3.60	52.20	0.36	5.22	138	0.45
90	3.54	1.20	0.05	1.13	16.39	3.39	49.16	0.34	4.93	145	0.48
95	3.74	1.20	0.05	1.07	15.52	3.21	46.55	0.32	4.64	153	0.50
100	3.94	1.20	0.05	1.01	14.65	3.03	43.94	0.3	4.35	160	0.52
105	4.13	1.20	0.05	0.96	13.92	2.88	41.76	0.29	4.21	168	0.55
110	4.33	1.20	0.05	0.92	13.34	2.76	40.02	0.27	3.92	175	0.57
115	4.53	1.20	0.05	0.88	12.76	2.64	38.28	0.26	3.77	183	0.60
120	4.72	1.20	0.05	0.84	12.18	2.52	36.54	0.25	3.63	190	0.62
125	4.92	1.20	0.05	0.81	11.75	2.43	35.24	0.24	3.48	198	0.65
130	5.12	1.20	0.05	0.77	11.17	2.31	33.50	0.23	3.34	205	0.67
135	5.31	1.20	0.05	0.75	10.88	2.25	32.63	0.22	3.19	213	0.70
140	5.51	1.20	0.05	0.72	10.44	2.16	31.32	0.22	3.19	220	0.72
145	5.71	1.20	0.05	0.69	10.01	2.07	30.02	0.21	3.05	228	0.75
150	5.91	1.20	0.05	0.67	9.72	2.01	29.15	0.2	2.90	235	0.77
155	6.10	1.20	0.05	0.65	9.43	1.95	28.28	0.19	2.76	243	0.80
160	6.30	1.20	0.05	0.63	9.14	1.89	27.41	0.19	2.76	250	0.82
165	6.50	1.20	0.05	0.61	8.85	1.83	26.54	0.18	2.61	258	0.85
170	6.69	1.20	0.05	0.59	8.56	1.77	25.67	0.18	2.61	265	0.87
175	6.89	1.20	0.05	0.57	8.27	1.71	24.80	0.17	2.47	273	0.90
180	7.09	1.20	0.05	0.55	7.98	1.65	23.93	0.17	2.47	280	0.92
185	7.28	1.20	0.05	0.54	7.83	1.62	23.49	0.16	2.32	288	0.94
190	7.48	1.20	0.05	0.52	7.54	1.56	22.62	0.16	2.32	295	0.97
195	7.68	1.20	0.05	0.51	7.40	1.53	22.19	0.15	2.18	303	0.99
200	7.87	1.20	0.05	0.5	7.25	1.50	21.75	0.15	2.18	310	1.02
205	8.07	1.20	0.05	0.49	7.11	1.47	21.32	0.15	2.18	318	1.04
210	8.27	1.20	0.05	0.47	6.82	1.41	20.45	0.14	2.03	325	1.07
215	8.46	1.20	0.05	0.46	6.67	1.38	20.01	0.14	2.03	333	1.09
220	8.66	1.20	0.05	0.45	6.53	1.35	19.58	0.14	2.03	340	1.12
225	8.86	1.20	0.05	0.44	6.38	1.32	19.14	0.13	1.89	348	1.14
230	9.06	1.20	0.05	0.43	6.24	1.29	18.71	0.13	1.89	355	1.16

›Continued on the next page.

INNER DIAMETER		WALL THICKNESS		WORKING PRESSURE		BURSTING PRESSURE		VACUUM RESISTANCE		BENDING RADIUS	
				ISO 1402/2009		ISO 1402/2009		ISO 7233/2006		ISO 1746/2000	
mm	inch	+0.04/ -0.02 mm	+1.57x10 ⁻³ / -7.87x10 ⁻⁴ inch	Bar a 20°C	Psi a 68F	Bar a 20°C	Psi a 68F	Bar a 20°C	Psi a 68F	mm	inch
235	9.25	1.20	0.05	0.42	6.09	1.26	18.27	0.13	1.89	363	1.19
240	9.45	1.20	0.05	0.41	5.95	1.23	17.84	0.13	1.89	370	1.21
245	9.65	1.20	0.05	0.4	5.80	1.20	17.40	0.12	1.74	378	1.24
250	9.84	1.20	0.05	0.4	5.80	1.20	17.40	0.12	1.74	385	1.26
255	10.04	1.20	0.05	0.39	5.66	1.17	16.97	0.12	1.74	393	1.29
260	10.24	1.20	0.05	0.38	5.51	1.14	16.53	0.12	1.74	400	1.31
265	10.43	1.20	0.05	0.37	5.37	1.11	16.10	0.11	1.60	408	1.34
270	10.63	1.20	0.05	0.37	5.37	1.11	16.10	0.11	1.60	415	1.36
275	10.83	1.20	0.05	0.36	5.22	1.08	15.66	0.11	1.60	423	1.39
280	11.02	1.20	0.05	0.35	5.08	1.05	15.23	0.11	1.60	430	1.41
285	11.22	1.20	0.05	0.35	5.08	1.05	15.23	0.11	1.60	438	1.44
290	11.42	1.20	0.05	0.34	4.93	1.02	14.79	0.1	1.45	445	1.46
295	11.61	1.20	0.05	0.33	4.79	0.99	14.36	0.1	1.45	453	1.49
300	11.81	1.20	0.05	0.33	4.79	0.99	14.36	0.1	1.45	460	1.51
305	12.01	1.20	0.05	0.32	4.64	0.96	13.92	0.1	1.45	468	1.54
310	12.20	1.20	0.05	0.32	4.64	0.96	13.92	0.1	1.45	475	1.56
315	12.40	1.20	0.05	0.31	4.50	0.93	13.49	0.1	1.45	483	1.58
320	12.60	1.20	0.05	0.31	4.50	0.93	13.49	0.09	1.31	490	1.61
325	12.80	1.20	0.05	0.3	4.35	0.90	13.05	0.09	1.31	498	1.63
330	12.99	1.20	0.05	0.3	4.35	0.90	13.05	0.09	1.31	505	1.66
335	13.19	1.20	0.05	0.29	4.21	0.87	12.62	0.09	1.31	513	1.68
340	13.39	1.20	0.05	0.29	4.21	0.87	12.62	0.09	1.31	520	1.71
345	13.58	1.20	0.05	0.28	4.06	0.84	12.18	0.09	1.31	528	1.73
350	13.78	1.20	0.05	0.28	4.06	0.84	12.18	0.09	1.31	535	1.75
355	13.98	1.20	0.05	0.28	4.06	0.84	12.18	0.08	1.16	543	1.78
360	14.17	1.20	0.05	0.27	3.92	0.81	11.75	0.08	1.16	550	1.80
365	14.37	1.20	0.05	0.27	3.92	0.81	11.75	0.08	1.16	558	1.83
370	14.57	1.20	0.05	0.26	3.77	0.78	11.31	0.08	1.16	565	1.85
375	14.76	1.20	0.05	0.26	3.77	0.78	11.31	0.08	1.16	573	1.88
380	14.96	1.20	0.05	0.26	3.77	0.78	11.31	0.08	1.16	580	1.90
385	15.16	1.20	0.05	0.25	3.63	0.75	10.88	0.08	1.16	588	1.93
390	15.35	1.20	0.05	0.25	3.63	0.75	10.88	0.08	1.16	595	1.95
395	15.55	1.20	0.05	0.25	3.63	0.75	10.88	0.08	1.16	603	1.98
400	15.75	1.20	0.05	0.24	3.48	0.72	10.44	0.07	1.02	610	2.00
410	16.14	1.20	0.05	0.24	3.48	0.72	10.44	0.07	1.02	625	2.05
420	16.54	1.20	0.05	0.23	3.34	0.69	10.01	0.07	1.02	640	2.10
430	16.93	1.20	0.05	0.23	3.34	0.69	10.01	0.07	1.02	655	2.15
440	17.32	1.20	0.05	0.22	3.19	0.66	9.57	0.07	1.02	670	2.20
450	17.72	1.20	0.05	0.22	3.19	0.66	9.57	0.07	1.02	685	2.25

VENA® VIEW

INNER DIAMETER		WORKING PRESSURE		BURSTING PRESSURE		WORKING PRESSURE WITH HOUSING		BURSTING PRESSURE WITH HOUSING	
mm	inch	Bar	Psi	Bar	Psi	Bar	Psi	Bar	Psi
25	0,98	8	116	32	464	12	174	48	696
51	2	5	72	22	319	10	145	47	681
63	2,48	5	72	22	319	10	145	40	580
76	2,99	5	72	20	290	9	130	36	522
102	4,02	4	58	16	232	7	101	14	203

ADAPTSIL®

Ø INT		WALL THICKNESS		WORKING PRESSURE		BURSTING PRESSURE	
				ISO 1402/2009		ISO 1402/2009	
mm	inch	+1/-0.5mm	+0.04/-0.02''	Bar at 20°C	Psi at 68°F	Bar at 20°C	Psi at 68°F
13	1/2	5,8	0,23	16,1	234	48,3	701
19	3/4	5,8	0,23	14	204	42,1	611
25	1	5,8	0,23	13,4	194	40,1	582
38	1 1/2	5,8	0,23	10,4	151	31,2	453
51	2	5,8	0,23	8,3	120	24,8	360
63	2 1/2	5,8	0,23	6,1	89	18,4	267
76	3	5,8	0,23	4,9	72	14,8	215