High Performance Industry

venair

Flexible silicone hoses for industrial engines



ABOUT US

At **Venair**, we design and create fluid transfer solutions that help top leading companies run all their operations with precision and reliability.

Today, we present more than 35 years of experience manufacturing custom high-quality product and delivering direct assistance to the most demanding industries across the world.

Together, we will achieve the maximum operability for your critical applications.







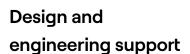
+35 years of meaningful innovation

We're involved in each part of the creation, design and engineering of the solution.

Material research and product development

Research of new materials

Development of new products or improvement of existing ones



Design advice

Specialized in the design of customized parts

Quality assurance

Tailor-made testing for each application

Product certifications required for each
market or customer

Custom manufacturing

Custom pieces

Process automation for series production









High Performance Industry

In Venair we work in the High performance industry sector where you can find solutions for railway, bus & trucks, aerospace, industrial vechicles, ventilation and marine.

Having and offering products for all kind of applications, from water cooling systems to turbo & intercooler systems.













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1. Products

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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).

APPLICATIONS

For use in water cooling and heating systems in buses, coaches, trucks, industrial vehicles, railway, marine, aerospace, cogeneration units, and transport of high temperature fluids in general industry.

CERTIFICATIONS

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



CONFIGURATIONS

- → SIL MRLN: Special construction for high pressure resistance.
- → SIL 200/240-X: Conductive silicone material.



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 MANUFACTURING → LENGTH

From 1 to 4m (3,28 to 13,12ft). Can be cut to smaller lengths upon customer request.

APPEARANCE

Smooth outer and inner appearance.





Material

Blue Silicone VMQ (Vinyl Methyl Quality)

- + Polyester fabric
- + Steel wire spring



Temperature

-55°C / +180°C (-67°F / +356°F)



CONSTRUCTION

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



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



CONFIGURATIONS

SIL 700V-X: Conductive silicone material.



STANDARD WALL THICKNESS

Depending on diameter.



STANDARD MANUFACTURING → LENGTH

From 1 to 4m (3,28 to 13,12ft). Can be cut to smaller lengths upon customer request.



APPEARANCE

Smooth outer and inner appearance.



Technical Table See on page: 21



CONSTRUCTION

Venair LL-RT construction is the most technically advanced solution to extreme operating conditions and resistance to the modern aggresive coolants in the market, thanks to its several textile reinforcements.

APPLICATIONS

Specially recommended for OAT (organic acid technology) coolants. 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 5-6 engines since it's made with several special textile reinforcements and it stands out for its high thermal and mechanical resistance.



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



STANDARD WALL THICKNESS

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



STANDARD MANUFACTURING LENGTH

From 1 to 4m (3,28 to 13,12ft). Can be cut to smaller lengths upon customer request.



Technical Table See on page: 22





Braided silicone tubing

VENA® TECHNOSIL - HEATER HOSE





APPLICATIONS

This product is used in connecting heater systems and other components in the coolant circulating systems of ground vehicles.



CERTIFICATIONS

- → SAE J20R3 Class A.
- → Material used in accordance with EU Directive 2015/863 for Restriction of the use of hazardous substances (RoHS 3).



STANDARD WALL THICKNESS

Depending on diameter.



STANDARD MANUFACTURING LENGTH

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



APPEARANCE

Extruded hose with smooth inner and outer appearance.





Silicone hoses for wet exhaust systems in marine industry (Lloyd's approved)

VENA® SIL 500

inner layer + Blue VMQ (Vinyl Methyl Quality) + Polyester fabric



Temperature

-55°C / +180°C (-67°F / +356°F)



CONSTRUCTION

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



APPLICATIONS

Used in boats and yachts for water cooled exhaust systems.



CERTIFICATIONS

- → This product has the Type Approval Certificate (TAC) number 12/00066 issued by Lloyd's Register, which certify the compliance with the SAE 2006 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).



STANDARD WALL THICKNESS

Depending on diameters:

- → 06 to 035mm:
 - 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 MANUFACTURING LENGTH

- → Straight hoses:
 - From 1000 to 4000 mm (3.28ft to 13.12ft)
- → 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").



CONSTRUCTION

Special silicone formulation built with several textile reinforcements, specially designed to comply with the most demanding Flammability Standards. Can be manufactured with steel wire spiral. Class. V0 (UL-94).



APPLICATIONS

For cooling and turbocharger systems and other liquid or air conduction systems in any kind of engine or vehicle subjected to special Flammability Regulations.



CERTIFICATIONS

→ This reference is classified as V0 by the flammability specification UL-94 (flame retardant and self extinguishing).



CONFIGURATIONS

→ Customized shapes also available.





STANDARD WALL THICKNESS

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



STANDARD MANUFACTURING LENGTH

From 1 to 4m (3,28 to 13,12ft). All our standard or customized products can be produced with this option.



CONSTRUCTION

Special silicone formulation built with several textile reinforcements, specially designed to comply with the most demanding Flammability Standards. Can be manufactured with steel wire spiral.

Class. HL2 R22 & R23 (EN-45545-2).

APPLICATIONS

For cooling and turbocharger systems and other liquid or air conduction systems in any kind of engine or vehicle subjected to special Flammability Regulations.

CERTIFICATIONS

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

CONFIGURATIONS

→ Customized shapes also available.





STANDARD WALL THICKNESS

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

✓ STANDARD MANUFACTURING → LENGTH

From 1 to 4m (3,28 to 13,12ft). All our standard or customized products can be produced with this option.



Silicone hoses for turbocharger -Intercooler / CAC hoses

VENA® SIL TURBO



Material

Silicone VMQ (Vinyl Methyl Quality) +FVMQ (Fluor - Vinyl Methyl Quality) Inside.



Temperature

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

CONSTRUCTION

Several Aramid plies

Alternatives:

- → Inner liner of FKM material
- → Inner liner of VMQ material

Customized product.

LENGTH

STANDARD MANUFACTURING

APPLICATIONS

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



STANDARD WALL THICKNESS

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





CERTIFICATIONS

Silicone rubber used is in accordance with EU Directive 2002/95/ECC for Restriction of the use of hazardous substances (RoHS 3).



APPEARANCE

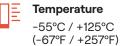
Smooth piece with convolutions.

OTHER AVAILABLE OPTIONS:

- → REDUCER TURBOLOADER
- → STRAIGHT CONNECTOR
- → REDUCER ELBOW 90



Material
Neoprene
and fiberglass.



VENA® MT/MTD

CONSTRUCTION

- → MT: One layer of fiberglass with neoprene and visible steel wire spiral inside.
- → MTD: Two layers of fiberglass with neoprene and steel wire spiral between layers.

APPLICATIONS

To transport hot air in printing machines and plastic bag production machines and for extraction of engine fumes.

CERTIFICATIONS

Material used is in accordance with EU Directive 2015/863 for Restriction of the use of hazardous substances (RoHS3).

✓ STANDARD MANUFACTURING → LENGTH

4m (13.12ft). Diameters between 13 and 300mm (1/2" to 12").

OUTER APPEARANCE

→ STANDARD: Corrugated and black.







Neoprene ducting for high temperature air

VENA® HT/HTD



Material

Silicone VMQ (Vinyl Methyl Quality) and fiberglas.



Temperature

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

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 MANUFACTURING LENGTH

4m (13.12ft). Diameters between 13 and 300mm.

0

APPLICATIONS

For the extraction of hot air from ceramic kilns. Suitable for its use in heating airplane or helicopter cockpits, ventilation and climate control in any kind of vehicles.



APPEARANCE

 \rightarrow Corrugated and red.



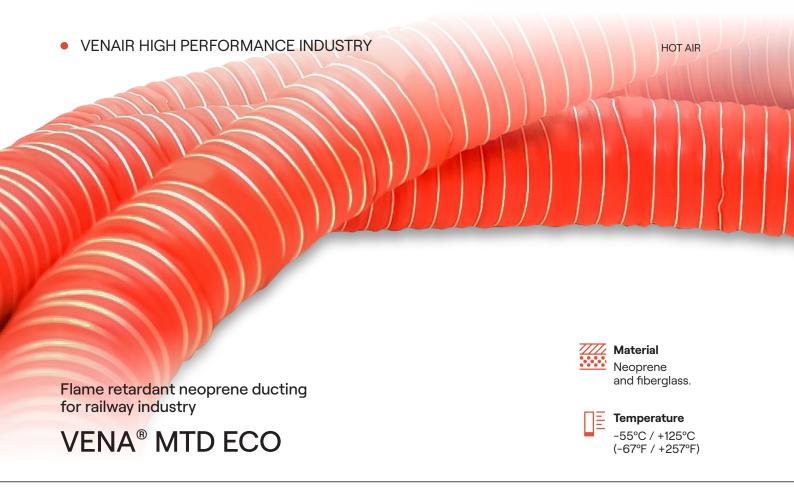


CERTIFICATIONS

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



Technical Table See on page: 26



CONSTRUCTION

→ Fiberglass with pink color neoprene; HL3 R22 & R23 (EN-45545-2) and VO (UL94)

APPLICATIONS

To be used in air ventilation in trains, 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.

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 VO (UL94) rating.



4m (13.12ft). Diameters between 13 and 300mm.

APPEARANCE

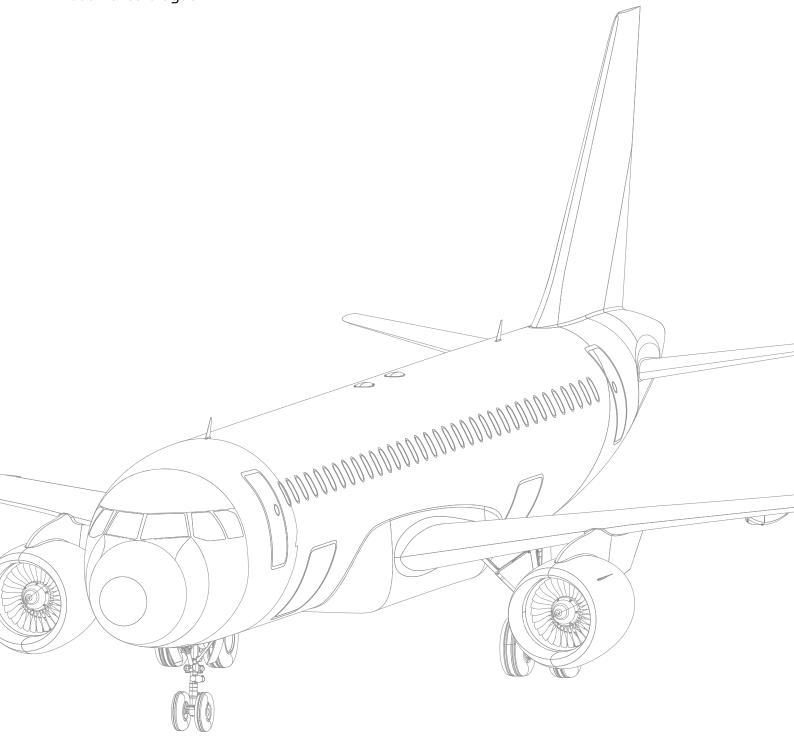
 \rightarrow ECO EN-45545: Corrugated and pink.



2. Special custom engineered solutions

Venair's main added value is the capacity to manufacture and deliver any kind of custom made product 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.



High Temperature insulation

TELCRA® HT



MATERIAL - CONSTRUCTION

Ultralight insulation material covered by silicone.



APPLICATIONS

For insulating silicone hoses with both cold and hot liquids or semi-liquids for improving the system efficiency and for protecting from high temperatures when needed.

- Ligthweight material with a very low thermal conductivity (0.12 W/m.K).
- This product can be applied to any Venair silicone hose.



Aluminum protection foil for specific focus of temperature

ALU PROTECTIONS



MATERIAL - CONSTRUCTION

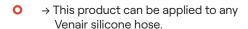
Special Aluminum coated fiberglass.



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 connections

HOSE-FITTING COMBINATION



MATERIAL - CONSTRUCTION

Any material can be used (Inox, Aluminum, plastic...). Standard or custom design.

APPLICATIONS

For improving the connection systems, reducing the leaks and increasing efficiency against extreme working conditions while reducing time assembly and warranty issues.

- O → Custom design for maximizing efficiency.
- O → Crimped or embedded on the hose.



CUSTOM SHAPES AND DUCTINGS



MATERIAL - CONSTRUCTION

Wide variety of materials and constructions adapted to each requirement.

APPLICATIONS

Manufactured according to customer's needs for any industrial application.

- O → Custom design for maximizing efficiency
- O → Customized product.



CUSTOM MARKING



Laser marking.

APPLICATIONS

Marking can be customized according to customer's needs.

- → Any customer reference and additional logotype can be added to the Venair standard marking.
- → All our silicone products and metal connections can be marked by laser.



3. Specification Charts

VENA® SIL 200/240

ININED DI	^^		WORKING	PRESSURE		BURSTING PRESSURE			
INNER DI	AIVIE I EK.		ISO 140	2/2009		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	36.0	522
19	3/4	7.2	104	9.3	135	21.8	316	28.0	406
25	1	5.9	86	7.6	110	17.7	257	23.0	334
32	1 1/4	4.9	71	6.3	91	14.7	213	19.0	276
38	1 1/2	4.3	62	5.6	81	12.9	187	17.0	247
45	1 3/4	3.7	54	5.0	73	11.3	164	15.0	218
51	2	3.4	49	4.6	67	10.3	149	14.0	203
57	2 1/4	3.1	45	4.3	62	9.4	136	13.0	189
63	2 1/2	2.9	42	4.0	58	8.8	128	12.0	174
70	2 3/4	2.7	39	3.6	52	8.1	117	11.0	160
76	3	2.5	36	3.3	48	7.5	109	10.0	145
80	3 1/8	2.3	33	3.3	48	6.9	100	10.0	145
90	3 1/2	1.9	28	3.0	44	5.7	83	9.0	131
100	4	1.6	23	2.6	38	5.0	73	8.0	116

VENA® SIL 700V

INNED DI	INNED DIAMETED*		WORKING PRESSURE		BURSTING PRESSURE		BENDING RADIUS	
INNER DIAMETER*		ISO 1402/2009		ISO 1402/2009		ISO 10619-1		
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	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	638.2	49	1.9	
25	1	13	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	

^{*}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).

^{*}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 LL-RT 200

INNER DIAMETER*		WALL THICKNESS		WORKING PRESSURE		BURSTING PRESSURE	
				ISO 140	ISO 1402/2009		2/2009
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	0.17	13.4	194.3	40.3	584.4
25	1	4.3	0.17	8.4	121.8	25.3	366.9
35	1 3/8	4.3	0.17	5.5	79.2	16.2	237.5
38	1 1/2	4.3	0.17	4.6	66.7	13.7	198.7
48	1 7/8	4.3	0.17	4.1	59.5	12.3	178.4
60	2 3/8	4.3	0.17	3.5	51.2	10.6	153.7
65	2 9/16	4.3	0.17	3.3	47.9	9.9	143.6
70	2 3/4	4.3	0.17	3.1	44.5	9.2	133.4
75	3	4.3	0.17	2.8	40.6	8.4	121.8
80	3 1/8	4.3	0.17	2.6	37.2	7.7	111.7
90	3 1/2	4.3	0.17	2.1	30.5	6.3	91.4

VENA® SIL LL-RT 240

INNER DIAMETER*		WALL THIO//NEO		WORKING PRESSURE		BURSTING PRESSURE	
INNER DI	INNER DIAMETER"		WALL THICKNESS		ISO 1402/2009		2/2009
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	0.21	14.6	211.7	43.8	635.1
25	1	5.3	0.21	10.4	150.8	31.3	453.9
35	1 3/8	5.3	0.21	8.4	122.2	22.7	366.8
38	1 1/2	5.3	0.21	7.8	113.1	23.5	340.8
48	1 7/8	5.3	0.21	6.1	88.5	18.3	265.4
60	2 3/8	5.3	0.21	5.4	78.3	16.1	233.5
65	2 9/16	5.3	0.21	5	72.5	15	217.5
70	2 3/4	5.3	0.21	4.7	68.2	14.1	204.5
75	3	5.3	0.21	4.4	63.8	13.4	194.3
80	3 1/8	5.3	0.21	4.2	60.9	12.6	182.7
90	3 1/2	5.3	0.21	3.7	53.7	11.2	162.4
100	4	5.3	0.21	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 (21°F).

^{*}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® TECHNOSIL - HEATER HOSE

ININED DIAMETER*		OUTED DIAMETED		WORKING PRESSURE		BURSTING PRESSURE		
INNER DI	INNER DIAMETER*		OUTER DIAMETER		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	12/3	3.9	57	11.8	171	

VENA® SIL 200 FR-V0

ININED DIAMETED*		WALL THIOKNESS		WORKING PRESSURE		BURSTING PRESSURE	
INNER DI	INNER DIAMETER*		WALL THICKNESS		ISO 1402/2009		2/2009
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	3.7	0.15	13.4	194.3	40.3	584.4
25	1	3.7	0.15	8.4	121.8	25.3	366.9
35	1 3/8	3.7	0.15	5.5	79.2	16.2	237.5
38	1 1/2	3.7	0.15	4.6	66.7	13.7	198.7
48	1 7/8	3.7	0.15	4.1	59.5	12.3	178.4
60	2 3/8	3.7	0.15	3.5	51.2	10.6	153.7
65	2 9/16	3.7	0.15	3.3	47.9	9.9	143.6
70	2 3/4	3.7	0.15	3.1	44.5	9.2	133.4
75	3	3.7	0.15	2.8	40.6	8.4	121.8
80	3 1/8	3.7	0.15	2.6	37.2	7.7	111.7
90	3 1/2	3.7	0.15	2.1	30.5	6.3	91.4

^{*}Other diameters can also be manufactured. Please consult.

^{*}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).

^{**} 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

INNED DI	INNER DIAMETER*		WALL THICKNESS		WORKING PRESSURE		BURSTING PRESSURE	
INNER DI					ISO 1402/2009		2/2009	
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	4.5	0.18	14.6	211.7	43.8	635.1	
25	1	4.5	0.18	10.4	150.8	31.3	453.9	
35	13/8	4.5	0.18	8.4	122.2	22.7	366.8	
38	1 1/2	4.5	0.18	7.8	113.1	23.5	340.8	
48	1 7/8	4.5	0.18	6.1	88.5	18.3	265.4	
60	2 3/8	4.5	0.18	5.4	78.3	16.1	233.5	
65	2 9/16	4.5	0.18	5	72.5	15	217.5	
70	2 3/4	4.5	0.18	4.7	68.2	14.1	204.5	
75	3	4.5	0.18	4.4	63.8	13.4	194.3	
80	3 1/8	4.5	0.18	4.2	60.9	12.6	182.7	
90	3 1/2	4.5	0.18	3.7	53.7	11.2	162.4	
100	4	4.5	0.18	2.2	31.9	6.5	94.3	

VENA® SIL 200 FR-HL

INNER DIAMETER*		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		WORKING PRESSURE		BURSTING PRESSURE		
INNER DI	INNER DIAMETER*		WALL THICKNESS		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	3.7	0.15	13.4	194.3	40.3	584.4	
25	1	3.7	0.15	8.4	121.8	25.3	366.9	
35	1 3/8	3.7	0.15	5.5	79.2	16.2	237.5	
38	1 1/2	3.7	0.15	4.6	66.7	13.7	198.7	
48	1 7/8	3.7	0.15	4.1	59.5	12.3	178.4	
60	2 3/8	3.7	0.15	3.5	51.2	10.6	153.7	
65	2 9/16	3.7	0.15	3.3	47.9	9.9	143.6	
70	2 3/4	3.7	0.15	3.1	44.5	9.2	133.4	
75	3	3.7	0.15	2.8	40.6	8.4	121.8	
80	3 1/8	3.7	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).

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** 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-HL

INNED DI	INNER DIAMETER*		WALL THICKNESS		WORKING PRESSURE		BURSTING PRESSURE	
INNER DI					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	4.5	0.18	14.6	211.7	43.8	635.1	
25	1	4.5	0.18	10.4	150.8	31.3	453.9	
35	1 3/8	4.5	0.18	8.4	122.2	22.7	366.8	
38	1 1/2	4.5	0.18	7.8	113.1	23.5	340.8	
48	1 7/8	4.5	0.18	6.1	88.5	18.3	265.4	
60	2 3/8	4.5	0.18	5.4	78.3	16.1	233.5	
65	2 9/16	4.5	0.18	5	72.5	15	217.5	
70	2 3/4	4.5	0.18	4.7	68.2	14.1	204.5	
75	3	4.5	0.18	4.4	63.8	13.4	194.3	
80	3 1/8	4.5	0.18	4.2	60.9	12.6	182.7	
90	3 1/2	4.5	0.18	3.7	53.7	11.2	162.4	
100	4	4.5	0.18	2.2	31.9	6.5	94.3	

VENA® MTD ECO

INNER DIAMETER*		WALL THICKNESS		WORKING PRESSURE		BURSTING PRESSURE		VACUUM RESISTANCE		BENDING RADIUS	
				ISO 1402/2009		ISO 1402/2009		ISO 7233/2006		ISO 10619-1	
mm	inch	+0.04/- 0.02 mm	+1.57x10 ⁻³ / -7.87x10 ⁻⁴ 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
25	1	2.36	0.091	2.27	32.92	6.81	98.75	0.66	9.57	38	1.50
50	1 31/32	2.36	0.091	1.80	26.10	5.4	78.3	0.52	7.54	75	2.95
75	2 61/64	2.70	0.106	1.42	20.59	4.26	61.77	0.40	5.8	113	4.45
100	3 15/16	3.00	0.118	1.130	16.39	3.39	49.16	0.31	4.5	151	5.94
130	5 1/8	3.00	0.118	0.85	12.33	2.55	36.98	0.23	3.34	196	7.72
200	7 7/8	3.20	0.126	0.45	6.53	1.35	19.58	0.12	1.74	302	11.89
300	11 13/16	3.20	0.126	0.18	2.61	0.54	7.83	0.04	0.58	452	17.80

^{*}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).

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VENA® MTD / VENA® HTD

INNER DIAMETER*		WALL THICKNESS		WORKING PRESSURE		BURSTING PRESSURE		VACUUM RESISTANCE		BENDING RADIUS	
				ISO 1402/2009		ISO 1402/2009		ISO 7233/2006		ISO 10619-1	
mm	inch	+0.04/- 0.02 mm	+1.57x10 ⁻³ / -7.87x10 ⁻⁴ 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
25	1	2.16	0.085	2.27	32.87	6.8	98.60	0.66	9.6	38	1.49
34	1 11/32	216	0.085	2.08	30.23	6.25	90.68	0.61	8.77	51	2.02
50	1 31/32	2.16	0.085	1.8	26.05	5.39	78.15	0.52	7.48	75	2.97
75	2 61/64	2.5	0.098	1.42	20.64	4.27	61.93	0.4	5.82	113	4.46
100	3 15/16	2.8	0.11	1.13	16.36	3.39	49.09	0.31	4.53	151	5.94
150	5 29/32	2.8	0.11	0.78	11.28	2.33	33.84	0.21	3.04	211	8.31
200	7 7/8	3	0.118	0.45	6.46	1.34	19.37	0.12	1.67	302	11.87
300	11 13/16	3	0.118	0.18	2.55	0.53	7.64	0.04	0.61	452	17.81

^{*}Other diameters can also be manufactured. Please consult.

VENA® MT/ VENA® HT

INNER DIAMETER*		WALL THICKNESS		WORKING PRESSURE		BURSTING PRESSURE		VACUUM RESISTANCE		BENDING RADIUS	
				ISO 1402/2009		ISO 1402/2009		ISO 7233/2006		ISO 10619-1	
mm	inch	+0.04/- 0.02 mm	+1.57x10 ⁻³ / -7.87x10 ⁻⁴ 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
25	1	1.56	0.061	1.76	25.53	5.28	76.59	0.54	7.77	34	1.36
34	1 11/32	1.56	0.061	1.63	23.67	4.9	71.01	0.49	7.05	46	1.83
50	1 31/32	1.56	0.061	1.43	20.69	4.28	62.08	0.41	5.94	68	2.67
75	2 61/64	1.9	0.075	1.16	16.77	3.47	50.32	0.31	4.55	101	3.99
100	3 15/16	2.2	0.087	0.94	13.6	2.81	40.79	0.24	3.48	135	5.3
150	5 29/32	2.2	0.087	0.62	8.93	1.85	26.8	0.14	2.04	201	7.93
200	7 7/8	2.4	0.094	0.4	5.87	1.21	17.61	0.08	1.19	268	10.56
300	11 13/16	2.4	0.094	0.17	2.53	0.52	7.6	0.03	0.41	402	15.82

^{*}Other diameters can also be manufactured. Please consult.

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

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