# **Technical Datasheet**



Vena® SIL 655

Ref: DO 03.10 FT 06. Rev. 12 Date: 29/05/2017



# **Applications**

It is especially recommended for the transport of liquid or semi-liquid fluids in the food, cosmetic, chemical and pharmaceutical industries.

This is a hose with a high level of strength. It is extremely flexible, even in large diameters. It has been designed for the use at specific points where there may be sudden high pressure surges (hammering).

This hose is the one with the highest level of strength and robustness of our standard range.

#### Limitations

Respect the bending radius and work pressure established values.

Mind the chemical compatibility of the fluid with the silicone.

This product is not recommended for the transport of abrasive particles

#### Regulations

Platinum cured silicone produced in compliance with:

- US FDA Standard 21 CFR 177.2600
- German BfR Standard part XV
- USP Class VI <88> in vivo tests,
  121°C
- ISO 10993-4, 5, 6 & 10
- ResAp 2004 (5), according to Reg 1935/2004/EEC, and Reg 10/2011/EEC
- European Pharmacopoeia 3.1.9
- 3A Sanitary Standard 18-03Class I (material)
- 3A Sanitary Standard 62.02 (fitted hoses)

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

## **Properties**

- Odorless, tasteless and completely non-toxic.
- Translucent and smooth inner appearance, white or colored and smooth outer appearance.
- Can be equipped with 316L stainless steel fittings on each end with a roughness value of less than 0.8  $\mu$ m (or 0.5  $\mu$ m on request).
- Operational temperature range from -60°C (-75 F) to +180°C (356 F), it may reach up to 200°C (392 F) during short periods of time.
- The standard manufacturing length is 4 meters long (13.12 ft.), but in specific diameters a length of 6 meters (19.69 ft) can be manufactured.
- The vacuum resistance for this hose is 0.91 bar (13.23 psi).

## **Technical Specifications**



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Inner Diameter		Wall thickness		Working Pressure ISO 1402/2009		Bursting Pressure ISO 1402/2009		<b>Bending radius</b> ISO 1746/2000	
mm	inch	+1/ -0.5 mm	+0.04/ -0.02 inch	Bar at 20°C	Psi at 68ºF	Bar at 20°C	Psi at 68ºF	mm	inch
6	1/4	5.5	0.26	31.5	456.9	94.5	1370.6	43	1.69
8	5/16	5.5	0.26	29.0	420.6	87.0	1261.8	46	1.81
10	3/8	5.5	0.26	27.0	391.6	81.0	1174.8	49	1.93
13	1/2	5.5	0.26	24.5	355.3	73.5	1066.0	54	2.13
16	5/8	5.5	0.26	22.5	326.3	67.5	979.0	59	2.32
19	3/4	5.5	0.26	20.5	297.3	61.5	892.0	68	2.68
22	7/8	5.5	0.26	20.0	290.1	60.0	870.2	72	2.83
25	1	5.5	0.26	18.5	268.3	55.5	805.0	80	3.15
32	1 1/4	5.5	0.26	16.5	239.3	49.5	717.9	100	3.94
38	1 1/2	6.5	0.28	15.0	217.6	45.0	652.7	121	4.76
51	2	6.5	0.28	12.0	174.0	36.0	522.1	185	7.28
63	2 1/2	6.5	0.28	10.0	145.0	30.0	435.1	273	10.75
76	3	6.5	0.28	7.1	102.7	21.3	308.2	318	12.52
102	4	6.5	0.28	5.0	72.5	15.0	217.6	423	16.65

### Construction

This reference is manufactured with three polyester fabric reinforcements and two stainless steel wire springs, everything encased inside the hose.

**SIL 655 AC:** The hoses can be equipped with a copper wire fitted parallel to the stainless steel wire spring to improve static electricity discharge<sup>1</sup>

1. The hose must be properly earthed to allow the current dissipation of the static charge, earthling the hose metallic fittings or directly the copper wire of both ends of the hose.

### **Use Precautions**

- The extreme working conditions or the use of materials with low compatibility with the silicone can attack the inner surface of the hose. It is advisable to inspect the inner appearance for cracks or swelling, and replacement of the hose, if necessary.
- Hose cover: Should be inspected over the entire length for signs of hardening, abrasion, cuts, kinking or crushing.