

Vena® SIL 650/V LASTIC

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Applications

It is especially recommended for the transport of liquid or semi-liquid fluids in the food, cosmetic, chemical and pharmaceutical industries. It offers an extremely broad field of applications. The design ensures a balance between strength and lightness, making it easy to handle.

It is recommended especially when a smaller bending radius is required; even smaller bending radius can be achieved compared with the standard 650/V. 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.

Properties

- Odorless, tasteless and completely non-toxic.
- Translucent and smooth inner appearance, white or colored and smooth outer appearance.
- Special silicone, formulated by Venair®, with excellent elastic properties.
- Very low bending radius; more than two times flexible than standard 650/V.
- Can be equipped with 316L stainless steel fittings on each end with a roughness value of less than 0.8 µm (or 0.5 µm 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).

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
- USP Class VI <88> in vivo tests
- ResAp 2004 (5), according to Reg 1935/2004/EEC, and Reg 10/2011/EEC

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

Technical Specifications



Inner Diameter		Wall thickness		Working Pressure ISO 1402/2009		Bursting Pressure ISO 1402/2009		Bending Radius ISO 1746/2000	
mm	inch	+1/-0.5 mm	+0.04/-0.02 inch	Bar at 20°C	Psi at 68°F	Bar at 20°C	Psi at 68°F	mm	inch
6	¼	5.5	0.22	23.5	340.7	70.5	1022.1	15	0.6
8	5/16	5.5	0.22	21.4	310.3	64.2	931.0	15	0.6
10	3/8	5.5	0.22	19.8	286.8	59.3	860.3	15	0.6
13	½	5.5	0.22	17.9	259.1	53.6	777.2	15	0.6
16	5/8	5.5	0.22	16.3	237.1	49.0	711.4	15	0.6
19	¾	5.5	0.22	15.1	219.0	45.3	657.0	15	0.6
22	7/8	5.5	0.22	14.0	203.5	42.1	610.5	15	0.6
25	1	5.5	0.22	13.1	190.0	39.3	570.0	25	1.0
32	1 ¼	5.5	0.22	11.3	163.9	33.9	491.8	49	1.9
38	1 ½	5.5	0.22	10.1	145.8	30.2	437.4	69	2.7
51	2	5.5	0.22	7.9	114.7	23.7	344.1	114	4.5
63	2 ½	5.5	0.22	6.4	92.4	19.1	277.2	155	6.1
76	3	6.0	0.24	5.0	72.6	15.0	217.8	200	7.9
102	4	6.0	0.24	2.9	41.5	8.6	124.6	290	11.4

Construction

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

SIL 650/V AC: The hoses are equipped with a copper wire fitted parallel to the stainless steel wire spring to improve static electricity discharge¹.

1. The hose must be properly earthed to allow the current dissipation of the static charge, earthing 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.