



Flame retardant silicone hoses according to UL-94

Applications

This reference is recommended for its use in cooling & heating systems in any kind of diesel or electric vehicle (buses, trucks, trains...). It is also recommended for cooling systems in any kind of engine or any electric and electronic device.

This reference is manufactured with textile reinforcements. The silicone rubber compound is a special formulation that remains stable and unmoved when fire is applied; it does not drip and does not emit fumes.

Limitations

Respect the work pressure established values.

Gas oil and oil stains do not damage the tubes, but they should not be used to transport fuel or oil, nor be submerged in these liquids.

This type of tube is not recommended for applications with negative pressure (vacuum).

This product is not recommended for the transport of abrasive particles.

Regulations

- This reference is classified as V0 by the flammability specification UL-94 (flame retardant and self-extinguishing).
- Silicone rubber used is in accordance with EU Directive 2002/95/ECC for Restriction of the use of hazardous substances (RoHS).

Properties

- Not affected by anti-freeze or antirust liquids.
- Highly resistant to hardening with very good compression characteristics.
- Excellent flexibility during the assembly process.
- Smooth inner and outer appearance, and blue color. Upon request, it can also be supplied in other colors (red, green, black...).
- Excellent resistance to thermal aging and oxidizing agents (oxygen, ozone, UV).
- Operational temperature range from -60°C (-75 F) to +200°C (392 F), it may reach up to 220°C (428 F) during short periods of time.
- The standard manufacturing length is 4 meters long (13.12 ft.), although it is available in shorter lengths if necessary.
- Manufactured with inner diameters ranging between 6mm and 100mm, in straight lengths from 1 to 4 m (13.12 ft), elbows or any required special shape.

Construction

This reference is manufactured with three, four or five fabric reinforcements.

Technical Datasheet

Vena® SIL FR-V0

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Technical Specifications

Straight hoses with 3 reinforcements:

Inner Diameter		Wall thickness		Working Pressure ISO 1402/2009		Bursting Pressure ISO 1402/2009	
<i>mm</i>	<i>inch</i>	<i>+1/-0.5 mm</i>	<i>+0.04/-0.02 inch</i>	<i>Bar at 20°C</i>	<i>Psi at 68°F</i>	<i>Bar at 20°C</i>	<i>Psi at 68°F</i>
18	5/7	3.70	0.15	13.4	194.3	40.3	584.4
25	1	3.70	0.15	8.4	121.8	25.3	366.9
35	1 3/8	3.70	0.15	5.5	79.2	16.2	237.5
38	1 1/2	3.70	0.15	4.6	66.7	13.7	198.7
48	1 7/8	3.70	0.15	4.1	59.5	12.3	178.4
60	2 3/8	3.70	0.15	3.5	51.2	10.6	153.7
65	2 9/16	3.70	0.15	3.3	47.9	9.9	143.6
70	2 3/4	3.70	0.15	3.1	44.5	9.2	133.4
75	3	3.70	0.15	2.8	40.6	8.4	121.8
80	3 1/8	3.70	0.15	2.6	37.2	7.7	111.7
90	3 1/2	3.70	0.15	2.1	30.5	6.3	91.4

Straight hoses with 4 reinforcements:

Inner Diameter		Wall thickness		Working Pressure ISO 1402/2009		Bursting Pressure ISO 1402/2009	
<i>mm</i>	<i>inch</i>	<i>+1/-0.5 mm</i>	<i>+0.04/-0.02 inch</i>	<i>Bar at 20°C</i>	<i>Psi at 68°F</i>	<i>Bar at 20°C</i>	<i>Psi at 68°F</i>
18	5/7	4.50	0.18	14.6	211.7	43.8	635.1
25	1	4.50	0.18	10.4	150.8	31.3	453.9
35	1 3/8	4.50	0.18	8.4	122.2	22.7	366.8
38	1 1/2	4.50	0.18	7.8	113.1	23.5	340.8
48	1 7/8	4.50	0.18	6.1	88.5	18.3	265.4
60	2 3/8	4.50	0.18	5.4	78.3	16.1	233.5
65	2 9/16	4.50	0.18	5.0	72.5	15.0	217.5
70	2 3/4	4.50	0.18	4.7	68.2	14.1	204.5
75	3	4.50	0.18	4.4	63.8	13.4	194.3
80	3 1/8	4.50	0.18	4.2	60.9	12.6	182.7
90	3 1/2	4.50	0.18	3.7	53.7	11.2	162.4
100	4	4.50	0.18	2.2	31.9	6.5	94.3

For the five reinforcement construction and for elbows and shapes, please contact your sales office.