



VENA®

SIL FLEX

(VENA® SIL 700/V)

Primarily designed for coolants (water & glycol) in water-cooling systems where high resistance to pressure and elevated temperatures is required. Highly flexible hose for installations where tight bending radius are required. The silicone material, along with textile reinforcements and an embedded metal spiral, ensures dimensional stability and durability in systems subjected to continuous thermal cycling and highly frequent movements and vibrations. It is suitable for transporting liquid or semi-liquid by impulsion or suction, since their design could resist pressure or vacuum.

- **Cooling and heating systems** in buses, coaches, trucks, and heavy machinery.
- **Cooling systems** in cogeneration units and marine engines.
- **Transfer of high-temperature fluids** in general industrial processes.

PROPERTIES

- **Chemical Compatibility:** Not affected by anti-freeze or anti-rust liquids.
- **Mechanical Performance:** Highly resistant to hardening, with excellent compression characteristics. Highly flexible. Vacuum resistance: 0.80 bar (11.60 psi).
- **Assembly Flexibility:** Excellent elasticity facilitates easy installation and assembly.
- **Appearance:** Smooth inner and outer surfaces, standard blue color. Other colors (red, green, black, etc.) available upon request.
- **Thermal and Environmental Resistance:** Excellent resistance to thermal aging and oxidizing agents such as oxygen, ozone, and UV radiation.
- **Operating Temperature Range:** From -60°C (-75°F) up to +180°C (356°F), with short-term resistance up to 200°C (392°F).
- **Standard Length:** Manufactured in standard 4m (13.12 ft) lengths. Custom shorter lengths available upon request.
- **Customization:** Elbows, reducers, and other special configurations can be supplied with the same construction.

CONSTRUCTION MATERIALS

VMQ Silicone with two polyester fabric reinforcements and encapsulated steel spring wire.

Alternatives:

- **VENA SIL FLEX RA:** Inner layer of brown-red R/A silicone, which resists oil drops.
- **VENA SIL FLEX FVMQ:** Inner layer of black FVMQ silicone, which withstand hydrocarbon and oil particles.
- **VENA SIL FLEX FKM:** Inner layer of black FKM, for a higher resistance to oil and hydrocarbons.
- **SIL 700/V PLASTIC:** Manufactured with a plastic spring wire, which avoids oxidation and possible accidents for operators during cutting or manipulation.

QUALITY AND COMPLIANCE

- Meets or exceeds operating requirements of SAE J20 R2 Class A.
- The silicone rubber 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		Bursting Pressure		Bending radius	
				ISO 1402		ISO 1402		ISO 1746	
mm	inch	+1.0/ -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	1/4	5.00	0.20	18.8	272.9	56.4	818.7	21	0.8
8	5/16	5.00	0.20	18.1	263.0	54.4	789.0	24	0.9
10	3/8	5.00	0.20	17.5	253.3	52.4	760.0	28	1.1
13	1/2	5.00	0.20	16.5	239.3	49.5	717.8	34	1.3
16	5/8	5.00	0.20	15.6	225.7	46.7	677.2	41	1.6
18	5/7	5.00	0.20	15.0	217.0	44.9	651.0	46	1.8
19	3/4	5.00	0.20	14.7	212.7	44.0	638.2	49	1.9
22	7/8	5.00	0.20	13.8	200.2	41.4	600.7	57	2.2
25	1	5.00	0.20	13.0	188.3	38.9	564.8	66	2.6
28	1 1/8	5.00	0.20	12.2	176.8	36.6	530.5	76	3.0
30	1 3/16	5.00	0.20	11.7	169.5	35.1	508.5	82	3.2
32	1 1/4	5.00	0.20	11.1	161.0	33.3	483.0	92	3.6
35	1 3/8	5.00	0.20	10.5	152.2	31.5	456.5	101	4.0
38	1 1/2	5.00	0.20	9.8	142.5	29.5	427.4	113	4.4
40	1 9/16	5.00	0.20	9.4	136.3	28.2	408.9	121	4.8
45	1 3/4	5.00	0.20	8.4	121.9	25.2	365.7	143	5.6
48	1 7/8	5.00	0.20	7.9	114.0	23.6	341.9	158	6.2
51	2	5.00	0.20	7.3	106.6	22.0	319.7	173	6.8
55	2 1/8	5.00	0.20	6.7	97.5	20.2	292.4	193	7.6
60	2 3/8	5.00	0.20	6.0	87.5	18.1	262.4	221	8.7
63	2 1/2	5.00	0.20	5.7	82.1	17.0	246.4	239	9.4
70	2 3/4	5.00	0.20	4.9	71.8	14.8	215.3	283	11.1
76	3	5.00	0.20	4.5	65.2	13.5	195.5	324	12.7
80	3 1/8	5.00	0.20	4.3	61.9	12.8	185.7	352	13.9
85	3 1/3	5.00	0.20	4.1	59.2	12.2	177.5	390	15.3
90	3 1/2	5.00	0.20	4.0	57.9	12.0	173.7	429	16.9
100	4	5.00	0.20	4.1	59.7	12.3	179.1	513	20.2

LIMITATIONS

Respect the bending radius and work pressure established values.

Hydrocarbon and oil stains do not damage the hose, but it should not be used to transport fuel or oil, nor be submerged in these liquids.

It is not recommended for the transport of abrasive particles.

CONTACT



IMPORTANT: The Company reserves the right to change, amend, modify, suspend, continue or terminate all or any part of this Document at any time without notice. It is the user's responsibility to ensure the suitability and safety of the VENAIR products for all intended uses. All the tests must be conducted in accordance with applicable regulatory requirements in order to determine the safety and effectiveness for use of the hoses in any particular application.

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