Silicone hoses for food and pharmaceutical applications



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SILICONE STAR D / SD / HD

Platinum-cured silicone pressure hose for food and pharmaceutical applications

Inner layer: semi-transparent silicone
Reinforcement: - 4 layers of polyester fabric
- AISI 316 stainless steel spiral (SD and HD versions only)
Cover: semi-transparent silicone
Working temperature: from -60°C to +180°C

High-quality platinum-cured silicone hose. The inner layer is made in a clean zone (*cleanroom*), extruded (DN10, 63, 76, 102 - formed – *handbuilt*). Available in three constructions: **SILICONE STAR D** – delivery hose, without steel spiral, **SILICONE STAR SD** – suction and delivery hose, with steel spiral, and **SILCONE STAR HD** – HEAVY DUTY suction and delivery hose, with a thicker wall and an extra silicone layer, for heavier duty. All versions are reinforced with 4 longitudinally arranged layers of high-strength, light white polyester fabric. The SILICONE STAR hose features a very smooth, glossy inner and outer surface, preventing product particles from settling and bacteria from developing, and facilitating internal and external cleaning of the hose.

Hose widely used in the food, cosmetic and pharmaceutical industries.

Inner and outer layers compliant with FDA requirements 21 CFR 177.2600, USP XXVI Class VI, BfR XV, BfR LII, France Journal Officiel - Brochure 1227, European Pharmacopoeia 3.1.9, ISO 10993-5, -6,-10, -11 and directives 1935/2004/EC, 2023/2006/EC (GMP) and ResAP (2004) 5, tested with simulant fluids B and D1 (for hydrated, acidic and dairy products). Compliant with the material directive RoHS 2011/65/EU and the REACH regulation 1907/2006/EU - contains no hazardous or banned substances. Steam sterilisation max. +135°C at 3.5 bar for max. 90 min. To avoid impairing the hose's mechanical properties, sterilisation should not be repeated sooner than one hour after the last cleaning.

At working temperatures above +100°C, the maximum working pressure given in the tables must be reduced by 1% per each 1°C rise in temperature. Pressure safety factor 4:1.

index	diameter inner [mm] ± 0.3 mm	diameter external* [mm]	wall wall* [mm]	pressure working** 20°C [bar]	pressure burst 20°C [bar]	vacuum [bar]	bending radius [mm]	weight [kg/m]	length max. [m]
SILICONE STAR D									
SO-SILICONESTAR-D-10	10,0	19,8	4,9	9	36	-	50***	0,303	4
SO-SILICONESTAR-D-13	12,7	22,5	4,9	8,5	34	-	50***	0,325	4
SO-SILICONESTAR-D-19	19,05	28,85	4,9	8	32	-	50***	0,432	4
SO-SILICONESTAR-D-25	25,4	35,2	4,9	7,5	30	-	75***	0,665	4
SO-SILICONESTAR-D-32	31,8	41,6	4,9	7,5	30	-	96***	0,725	4
SO-SILICONESTAR-D-38	38,1	47,9	4,9	6,75	27	-	110***	0,805	4
SO-SILICONESTAR-D-51	50,8	60,6	4,9	6,25	25	-	170***	1,050	4
SO-SILICONESTAR-D-63	63,0	72,8	4,9	5	20	-	210***	~1,26	4
SO-SILICONESTAR-D-76	76,0	85,8	4,9	4,5	18	-	250***	~1,51	4
SO-SILICONESTAR-D-102	102,0	111,8	4,9	4	16	-	300***	~2,00	4
SILICONE STAR SD									
SO-SILICONESTAR-SD-10	10,0	21,2	5,6	21,5	86	0,97	50	0,338	4
SO-SILICONESTAR-SD-13	12,7	23,9	5,6	20,25	81	0,97	50	0,400	4
SO-SILICONESTAR-SD-19	19,05	30,25	5,6	15,75	63	0,97	50	0,540	4
SO-SILICONESTAR-SD-25	25,4	36,6	5,6	15,75	63	0,97	75	0,671	4
SO-SILICONESTAR-SD-32	31,8	43,0	5,6	20,25	81	0,97	96	0,818	4
SO-SILICONESTAR-SD-38	38,1	49,3	5,6	12,75	51	0,97	110	1,100	4
SO-SILICONESTAR-SD-51	50,8	62,0	5,6	11,5	46	0,97	170	1,454	4
SO-SILICONESTAR-SD-63	63,0	74,2	5,6	14,25	57	0,97	210	~1,70	4
SO-SILICONESTAR-SD-76	76,0	87,2	5,6	8,25	33	0,97	250	~2,03	4
SO-SILICONESTAR-SD-102	102,0	113,2	5,6	6,25	25	0,97	300	~2,68	4

* - wall thickness tolerance: +/- 0.5 mm (type D), +/- 0.6 mm (type SD); resulting outer diameter
**- working pressure determined relative to burst pressure at a safety factor of 4:1
*** - for hose without spiral (SILICONE STAR D) theoretical minimum bend radius at internal hose pressure (≥ 1 bar)