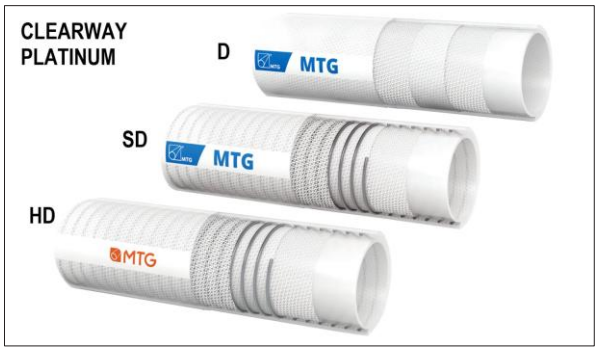
Silicone hoses for food and pharmaceutical applications



CLEARWAY PLATINUM D / SD / HD

Platinum-cured silicone pressure hose for food and pharmaceutical applications

Inner layer: semi-transparent silicone
Reinforcement: - synthetic fabric layers
- AISI 302 stainless steel spiral (only SD and HD versions)
Cover: semi-transparent silicone
Working temperature: from -60°C to +200°C

High-quality platinum-cured silicone hose. Available in three design versions: **CLEARWAY PLATINUM D** – delivery hose, without steel spiral, **CLEARWAY PLATINUM SD** – suction and delivery hose, with steel spiral, and **CLEARWAY PLATINUM HD** – HEAVY DUTY suction and delivery hose, with thickened wall and stronger construction, for heavier duty use and even greater durability. All versions are reinforced with spirally arranged layers of high-strength, light, white synthetic fabric. CLEARWAY PLATINUM hose features a smooth, non-stick, pore-free inner surface, preventing product particles from settling and bacteria from developing, and facilitating hose cleaning. Outer layer smooth, minimally corrugated for versions with spiral, easy to clean with a mild detergent.

The hose is intended for conveying high-purity products, food substances, liquids with alcohol content up to 96%. Widely used in the food, pharmaceutical and cosmetic industries.

The hose material, semi-translucent silicone (PT3362) of food and pharmaceutical grade, is odourless and tasteless. It meets hygiene and food-contact requirements: FDA, BfR, European Pharmacopoeia 3.1.9, USP Class VI, 3-A, ISO 10993, D.M. 21/03/73 (Italy), Arrete du 25 Novembre 1992 (France). Compliant with European requirements 1935/2004/EC, 2023/2006/EC (GMP), tested with fluids B and D1 (for hydrated, acidic and dairy products). The hose is produced in a certified clean room (*cleanroom*) of class 8 (ISO 14644-1) with full process traceability. The production process is free of substances of animal origin, phthalates, adipates, nitrosamines and restricted materials, compliant with the RoHS material directive 2011/65/EU and REACH regulation 1907/2006/EU.

Sterilisation: with steam up to +135°C at 3.5 bar for max. 90 min, or with hot air up to +200°C for max. 30 min. To avoid impairing the hose's mechanical properties, sterilisation should not be repeated sooner than one hour after the last cleaning.

Cleaning: water up to 95°C; sodium hydroxide 1%, 80°C; nitric / phosphoric / peracetic acid 1%, 20°C; hydrochloric acid, sodium hypochlorite 200 ppm, 80°, max. 20 min.

index	diameter inner* [mm]	diameter outer [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]
CLEARWAY PLATINUM D									
MT-CLEARWAY-D-13	13	23	5	10	40	-	-	0,37	30
MT-CLEARWAY-D-19	19	30	5,5	10	40	-	-	0,49	30
MT-CLEARWAY-D-25	25	35	5	10	40	-	-	0,58	30
MT-CLEARWAY-D-32	32	43	5,5	10	40	-	-	0,73	30
MT-CLEARWAY-D-38	38	48	5	10	40	-	-	0,86	30
MT-CLEARWAY-D-51	51	62	5,5	7	28	-	-	1,22	30
CLEARWAY PLATINUM SD									
MT-CLEARWAY-SD-10	10	20	5	10	30	0,9	30	0,31	30
MT-CLEARWAY-SD-13	13	23	5	10	30	0,9	40	0,38	30
MT-CLEARWAY-SD-16	16	26	5	10	30	0,9	45	0,45	30
MT-CLEARWAY-SD-19	19	29	5	10	30	0,9	55	0,51	30
MT-CLEARWAY-SD-25	25	35	5	10	30	0,9	65	0,72	30
MT-CLEARWAY-SD-32	32	42	5	10	30	0,9	95	0,88	30
MT-CLEARWAY-SD-38	38	48	5	10	30	0,9	110	1,04	30
MT-CLEARWAY-SD-51	51	61	5	10	30	0,9	150	1,53	30
MT-CLEARWAY-SD-63	63,5	74,5	5,5	8	24	0,9	190	1,76	20
MT-CLEARWAY-SD-76	76	88	6	7	21	0,9	240	2,70	20
MT-CLEARWAY-SD-100	100	112	6	5	15	0,9	360	3,55	20

* Inner diameter tolerance: ISO 1307; wall thickness tolerance: +1 / -0.5 mm; ** - at 100°C the working pressure must be reduced by 20%

Ends and ferrules for SILICONE STAR and CLEARWAY PLATINUM hoses

The standard ends are hygienic stainless steel AISI 316 ends of various types: TRICLOVER (NH-TCR-…), DIN11851 (NH-DWR-…, NH-DZR-…), SMS (NH-SWR-…, NH-SZR-…), IDF and others. The TI-LS1-…, TI-LS2-… ferrules are made of AISI 304 steel. The selection of ends and ferrules for a given hose type and size is shown in the table. Other ends may be used (ends designed for SAFETY CLAMP clamps (EN 14420), e.g. GD-VSLB, GD-MSLB, CAMLOCK. Note whether a hygienic finish of the end tail is required. Other end and ferrule solutions may also be developed – to the customer's needs – contact Tubes International.



1 – TRICLOVER end of stainless steel AISI 316; 2 – ferrule type TI-LS1 or TI-LS2; 3 – SILICONE STAR or CLEARWAY PLATINUM hose

DN	SILICONE STAR hose		ferrule (AISI 304)	CLEARWAY PLATINUM hose		hose end (AISI 316)	instructions
	index	size	index	size	index	index	
10 (3/8")	SO-SILICONESTAR-D-10	10,0 x 19,8	**TI-LS1-22-06-SS**	-	-	*contact Tubes Int.*	*IT-136 and contact Tubes Int.*
	SO-SILICONESTAR-SD-10	10,0 x 21,2	**TI-LS1-22-06-SS**	10,0 x 20	MT-CLEARWAY-SD-10		
	SO-SILICONESTAR-HD-010	10,0 x 23,8	**TI-LS2-24-06-SS**	10,0 x 22	MT-CLEARWAY-HD-10		
13 (1/2")	SO-SILICONESTAR-D-13	12,7 x 22,5	**TI-LS1-24-08-SS**	13 x 23	MT-CLEARWAY-D-13	NH-TCR-…-...013 NH-DWR-015 GD-VSLBT-…-013-SS and other similar…	IT-136
	SO-SILICONESTAR-SD-13	12,7 x 23,9	**TI-LS1-24-08-SS**	13 x 23	MT-CLEARWAY-SD-13		
	SO-SILICONESTAR-HD-013	12,7 x 26,5	**TI-LS2-28-08-SS**	13 x 25	MT-CLEARWAY-HD-13		
16 (5/8")	-	-	-	-	-	*contact Tubes Int.*	*IT-136 and contact Tubes Int*
	-	-	**TI-LS1-28-10-SS**	16 x 26	MT-CLEARWAY-SD-16		
	-	-	**TI-LS2-30-10-SS**	16 x 29	MT-CLEARWAY-HD-16		
19 (3/4")	SO-SILICONESTAR-D-19	19,05 x 28,85	**TI-LS1-30-12-SS**	19 x 30	MT-CLEARWAY-D-19	NH-TCR-…-...019 NH-DWR-020 GD-VSLBT-…-019-SS and other similar…	IT-136
	SO-SILICONESTAR-SD-19	19,05 x 30,25	**TI-LS1-30-12-SS**	19 x 29	MT-CLEARWAY-SD-19		
	SO-SILICONESTAR-HD-019	19,05 x 32,85	**TI-LS2-34-12-SS**	19 x 31	MT-CLEARWAY-HD-19		
25 (1")	SO-SILICONESTAR-D-25	25,4 x 35,2	**TI-LS1-37-16-SS**	25 x 35	MT-CLEARWAY-D-25	NH-TCR-…-...025 NH-DWR-025 GD-VSLBT-…-025-SS and other similar…	IT-136
	SO-SILICONESTAR-SD-25	25,4 x 36,6	**TI-LS1-37-16-SS**	25 x 35	MT-CLEARWAY-SD-25		
	SO-SILICONESTAR-HD-025	25,4 x 39,2	**TI-LS2-40-16-SS**	25 x 38	MT-CLEARWAY-HD-25		
32 (1.1/4")	SO-SILICONESTAR-D-32	31,8 x 41,6	**TI-LS1-44-20-SS**	32 x 43	MT-CLEARWAY-D-32	NH-TCR-…-...032 NH-DWR-032 GD-VSLBT-…-032-SS and other similar…	IT-136
	SO-SILICONESTAR-SD-32	31,8 x 43,0	**TI-LS1-44-20-SS**	32 x 42	MT-CLEARWAY-SD-32		
	SO-SILICONESTAR-HD-032	31,8 x 45,6	**TI-LS2-47-20-SS**	32 x 45	MT-CLEARWAY-HD-32		
38 (1.1/2")	SO-SILICONESTAR-D-38	38,1 x 47,9	**TI-LS1-50-24-SS**	38 x 48	MT-CLEARWAY-D-38	NH-TCR-…-...038 NH-DWR-038 GD-VSLBT-…-038-SS and other similar…	IT-136
	SO-SILICONESTAR-SD-38	38,1 x 49,3	**TI-LS1-50-24-SS**	38 x 48	MT-CLEARWAY-SD-38		
	SO-SILICONESTAR-HD-038	38,1 x 51,9	**TI-LS2-53-24-SS**	38 x 52	MT-CLEARWAY-HD-38		
50 (2")	SO-SILICONESTAR-D-51	50,8 x 60,6	**TI-LS1-63-32-SS**	51 x 62	MT-CLEARWAY-D-51	NH-TCR-…-...-050, -051 NH-DWR-050, -051 GD-VSLBT-…-050-SS and other similar…	IT-136
	SO-SILICONESTAR-SD-51	50,8 x 62,0	**TI-LS1-63-32-SS**	51 x 61	MT-CLEARWAY-SD-51		
	SO-SILICONESTAR-HD-051	50,8 x 64,6	**TI-LS2-66-32-SS**	51 x 65	MT-CLEARWAY-HD-51		
63 (2.1/2")	SO-SILICONESTAR-D-63	63,0 x 72,8	**TI-LS1-76-40-SS**	-	-	NH-TCR-…-...063 NH-DWR-063 GD-VSLBT-…-065-SS and other similar…	IT-136
	SO-SILICONESTAR-SD-63	63,0 x 74,2	**TI-LS1-76-40-SS**	63,5 x 74,5	MT-CLEARWAY-SD-63		
	SO-SILICONESTAR-HD-063	63,0 x 76,8	**TI-LS2-79-40-SS**	63,5 x 77,5	MT-CLEARWAY-HD-63		
76 (3")	SO-SILICONESTAR-D-76	76,0 x 85,8	**TI-LS1-89-48-SS**	-	-	NH-TCR-…-...076 NH-DWR-075 GD-VSLBT-…-075-SS and other similar…	IT-136
	SO-SILICONESTAR-SD-76	76,0 x 87,2	**TI-LS1-89-48-SS**	76 x 88	MT-CLEARWAY-SD-76		
	SO-SILICONESTAR-HD-076	76,0 x 89,8	**TI-LS2-92-48-SS**	76 x 90	MT-CLEARWAY-HD-76		
100 (4")	SO-SILICONESTAR-D-102	102,0 x 111,8	**TI-LS1-114-64-SS**	-	-	NH-TCR-…-...076 NH-DWR-100, -102 GD-VSLBT-…-100-SS and other similar…	IT-136
	SO-SILICONESTAR-SD-102	102,0 x 113,2	**TI-LS1-114-64-SS**	100 x 112	MT-CLEARWAY-SD-100		
	SO-SILICONESTAR-HD-102	102,0 x 115,8	**TI-LS2-117-64-SS**	100 x 114	MT-CLEARWAY-HD-100		

Tubes International supplies complete silicone lines (hoses with ends) SILICONE STAR and CLEARWAY PLATINUM for the food, cosmetics and pharmaceutical industries. Proper shaping and assembly of the stainless steel ends ensures unobstructed flow and a high degree of hygiene. The lines are marked, traceable and suitably packaged.

