



Silicone hoses






Introduction

The Markert Group specialises in the development and manufacture of customised industrial hose assemblies for demanding applications. Based on our employees' many years of extensive experience today we are one of the leading suppliers in the chemical, pharmaceutical and foodstuffs industries as well as in the related mechanical and plant engineering.

Due to their specific properties  **marsoflex**® silicone hoses have a wide range of applications. Among other things, silicone hoses have a high resistance against bases, diluted acids and cleaning agents. In addition, silicone hoses are resistant to weather, ageing and ozone, autoclavable and physiologically safe.  **marsoflex**® silicone hoses are successfully used in the pharmaceutical, medical, cosmetics, and foodstuffs industries.

We manufacture  **marsoflex**® silicone hoses as process- and system-specific hose assemblies. For this purpose, the required fittings are crimped to the hose or reliably fitted by means of novel reusable fittings.

All components for the reusable fittings are also available individually. Assembly instructions for in-house production are enclosed. Furthermore we offer our customers training courses on how to safely produce and use hose assemblies.

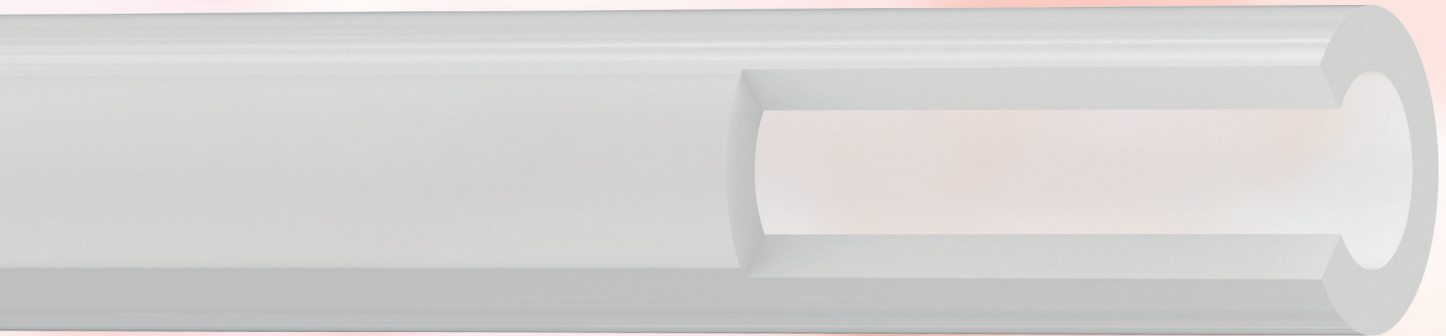



Content



Type SIL100 Ultra-pure silicone hose	4
Type SIL200 Fabric-reinforced silicone hose	6
Type SIL300 Wire-reinforced silicone hose	8
Fittings and aseptic fittings for the foodstuffs, chemical, and pharmaceutical industries	10
The reusable fittings	11





Product name	 marsoflex [®] Type SIL100
Description	The ultra-pure silicone hose is suitable for use in processes of the cosmetics and pharmaceuticals industries as well as in biotechnology. The silicone hose resists extreme temperatures, ozone, radiation, humidity, compression, weather and chemical impacts and transfers neither odour nor taste to the fluids transported in it. The type SIL100 resists repeated autoclaving and prevents adherence of blood products and other pharmaceutical fluids.
Hose tube	Silicone, translucent
Hose cover	Silicone, smooth, translucent, resistant to heat, ageing, ozone, abrasion, glossy
Temperature range:	-62°C to +260°C

Order number	Inside [Ø in mm]	Outside [Ø in mm]	Operating pressure [bar]	Bending radii [mm]
SIL1006X3	6	12	0.8	80
SIL1008X3	8	14	0.7	100
SIL10010X3	10	16	0.6	120
SIL10013X3	13	19	0.5	150
SIL10015X3	15	21	0.4	170
SIL10019X3	19	25	0.2	200
SIL10025X4	25	33	0.1	230

Other dimensions on request.
Coloured versions are possible.

Ultra-pure silicone hose type SIL100

Liner properties:

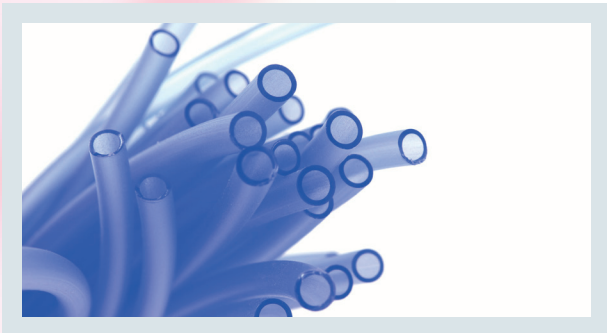
- ultra-pure silicone
- ultra-flexible
- autoclavable and sterilisable
- tasteless and odourless

Technical specification:

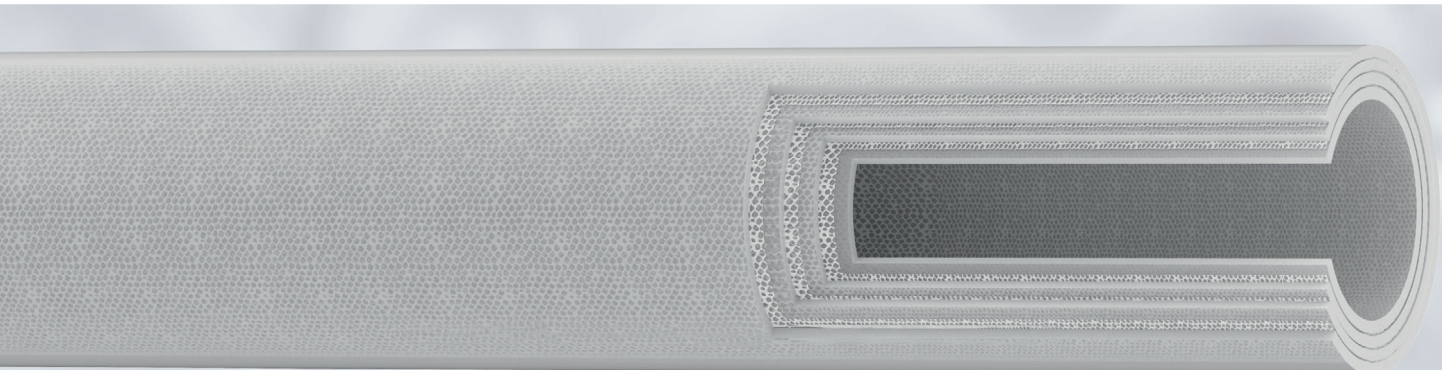
- FDA 21 CFR 177.2600
- USP Class VI
- ISO 10993
- 3A Sanitary Standard



Fittings:

- aseptic fittings
- crimped stainless steel fittings
- reusable Tri-Clamp fittings



Technical specifications are subject to change without notice.



Product name	 marsoflex [®] Type SIL200
Description	Our  marsoflex [®] type SIL200 with fabric-reinforcement is a highly flexible, pure silicone hose for applications under high pressure. It is suitable for use in processes in the cosmetics and pharmaceuticals industries as well as in biotechnology. Not suitable for use with blood and other body fluids.
Hose tube	Silicone, translucent
Hose insert	High temperature-resistant textile insert
Hose cover	Silicone, smooth, translucent, resistant to heat, ageing, ozone, abrasion, glossy
Temperature range:	-60°C to +200°C

Order number	Inside [Ø in mm]	Outside [Ø in mm]	Operating pressure [bar]	Bending radii [mm]
SIL20010X6	10	22	16	70
SIL20013X6	13	25	15	80
SIL20016X6	16	28	14	100
SIL20019X6	19	31	13	150
SIL20025X6	25	37	10	185
SIL20032X6	32	44	8	220
SIL20038X6,5	38	51	7	260
SIL20051X6,5	51	64	6	350
SIL20063,5X7,5	63.5	78.5	5	-
SIL20076X7,5	76	91	4	-
SIL200102X7,5	102	117	3	-

Fabric-reinforced silicone hose type SIL200

Liner properties:

- non-toxic
- temperature-stable for CIP and SIP cycles
- hydrophobic (water-repellent)
- saturated steam-stable

Technical specification:

- FDA 21 CFR 177.2600
- USP Class VI
- ISO 10993
- 3A Sanitary Standard
- 1935/2004/CE



Fittings:

- aseptic fittings
- crimped stainless steel fittings
- reusable Tri-Clamp fittings



Technical specifications are subject to change without notice.



Product name	 marsoflex ® Type SIL300
Description	Our  marsoflex ® type SIL300 consists of several layers of fabric reinforcement and a stainless steel wire spiral. This gives it unrivalled flexibility while maintaining pressure resistance with full vacuum suitability. It is suitable for use in both vacuum and pressure processes in the cosmetics and pharmaceuticals industries as well as in biotechnology. Not suitable for use with blood and other body fluids.
Hose tube	Silicone, translucent
Hose insert	High temperature-resistant textile insert, stainless steel wire spiral
Hose cover	Silicone, smooth, translucent, resistant to heat, ageing, ozone, abrasion, glossy
Temperature range:	-60°C to +200°C

Order number	Inside [Ø in mm]	Outside [Ø in mm]	Operating pressure [bar]	Bending radii [mm]
SIL30013X6	13	25	15	60
SIL30016X6	16	28	14	70
SIL30019X6	19	31	13	80
SIL30025X6	25	37	10	100
SIL30032X6	32	44	8	130
SIL30038X6,5	38	51	7	155
SIL30051X6,5	51	64	6	210
SIL30063,5X7,5	63.5	78.5	5	260
SIL30076X7,5	76	91	4	310
SIL300102X7,5	102	117	3	420

Wire-reinforced silicone hose type SIL300

Liner properties:

- non-toxic
- temperature-stable for CIP and SIP cycles
- hydrophobic (water-repellent)
- saturated steam-stable
- high pressure- and vacuum resistance

Technical specification:

- FDA 21 CFR 177.2600
- USP Class VI
- ISO 10993
- 3A Sanitary Standard
- 1935/2004/CE

Fittings:

- aseptic fittings
- crimped stainless steel fittings
- reusable Tri-Clamp fittings



Technical specifications are subject to change without notice.

Fittings and aseptic fittings for the foodstuffs, chemical, and pharmaceutical industries


Suitable for 16 bar operating pressure (PN 16) according to EN 14420 and DIN 11887 or DIN 11864.

Hose connector with aseptic pipe fitting according to DIN 11864 form A with external thread or lock nut.

Hose connectors with aseptic pipe flange according to DIN 11864-2 form A.

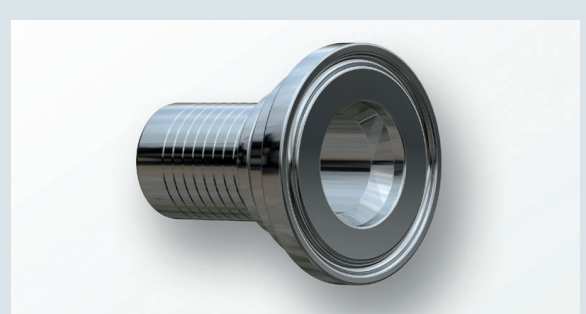
Tri-Clamp fittings according to DIN 32676 and ISO 2852.

Other materials on request.

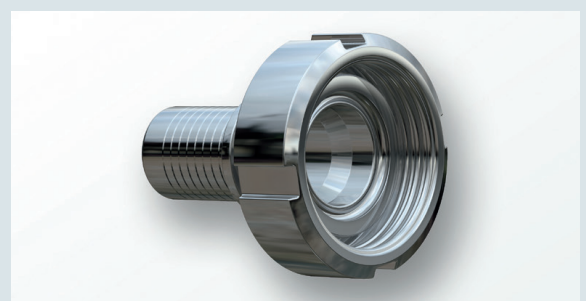
For more information refer to our  **marsoflex**[®] catalogue "Couplings and Fittings".



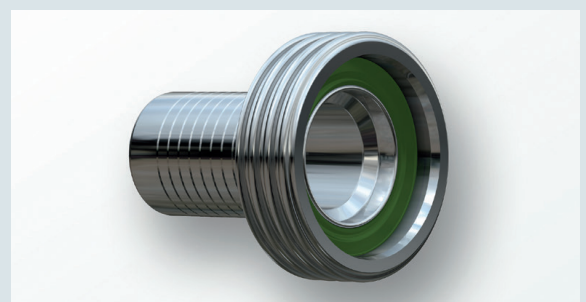
Hose connector with aseptic flange according to DIN 11864-2 form A.



Tri-Clamp fitting according to DIN 32676



Hose connector with aseptic pipe fitting with lock nut according to DIN 11864-2 form A.



Hose connector with aseptic pipe fitting with external thread according to DIN 11887.

The reusable fitting



The reusable **marsoflex**[®] fitting, especially developed for our silicone hose series, enables you to cut and assemble hose bulk stock yourself. The special thread geometry of the connector allows for easy replacement of the hose.

The reusable **marsoflex**[®] fitting can be combined with all customary fittings used in the foodstuffs, chemical, and pharmaceutical industries.

The reusable **marsoflex**[®] fitting is suitable for silicone-fabric hoses at an operating pressure of 10 bar and at a burst pressure of 45 bar. They are made of stainless steel 1.4404 (other materials available on request).



 **marsoflex**[®]
Hose and Coupling Technology

Markert Marsoflex GmbH
Gadelander Str. 135
24539 Neumünster | Germany

P +49 4321 8701-0
info@markert-group.com
www.markert-group.com