

Sanitary hose & Fittings



USP
High Purity Silicone

500
EU Pharmacopoeia 3.1.9

EU Pharmacopoeia

High P

High Purity Silicone
Class VI
FDA 21 CFR 178.2.2

Radial Crimp Sanitary Fittings

Sanitary clamp fittings are secured to the hose by a collar with a 360° circumferential crimp.

COMPRESSION SEAL This 360° seal and the particular internal chamfer design assures cleanliness and prevents contamination or material buildup at the point where the fitting insert meets the hose.

MARKING Crimp ferrules may be permanently marked for full traceability or operating parameter.

SURFACE FINISH the internal surface finish meets or exceeds the Pharmacopoeia standards.



SANITARY CLAMP FRACTIONAL
Available in size from 1/4"



SANITARY CLAMP
Sanitary clamp fitting in size from 1"-1 1/2"-2" I.D. available at stock manufactured to specifications beyond 3A and normal pharma specifications.



CLAMP ADAPTOR
Sanitary adaptors facilitate connections between a variety of fittings and hoses



BUTT WELD FITTINGS
Butt weld fittings maintain full flow through the I.D.



MALE OR FEMALE PIPE THREAD
Male and female NPT or GAS pipe thread fittings are internally finished to sanitary quality and incorporate the internal chamfer feature.



AR Inox offers a complete line of stainless steel fittings including hose assemblies. All AR Inox fittings are constructed from 316L stainless steel, have a standard surface finish of Ra<0,5 micron, and are secured to the hose by a collar with a 360° circumferential crimp. AR Inox hose stems feature an interlock technology that locks the crimp collar with the mating hose stem. This interlock technology prevents fitting blow-off at elevated temperature and pressure.

Each hose crimp design has been performance tested by our QC.

As an option, a pressure test certificate can be provided for the hose assemblies. A low impact radial crimp technique ensures smooth hose to fitting transition thereby minimizing bacteria traps and product hold-up. Hose assemblies can be sanitized with short-term CIP/SIP cycles.

Various hose fitting style available:

- Sanitary clamp fractional
- Sanitary clamp
- Clamp adaptor and elbows
- Butt weld fittings
- Male or female pipe thread

Please call us with your hose assembly requirements.

Total Traceability

text information to suit customer's requirements

Stainless steel
Heat Number



Silicone hose lot number

Assembly data

Re-Flex

Re-usable Clamp Fittings



Made in stainless steel AISI 316L for flexible silicon hoses in pharmaceutical use.

Designed for fitting flexible silicone hoses straight from the client without the need for special lengths. Offering both benefits of cost as well as simplicity of use, the connectors and clamping ring nuts can be reused again and again simply by re-heading or renewing the flexible hose when necessary. To clamp the flexible hose, apply pressure to the stainless steel external clamping ring nut over the thread of the internal stainless steel connector (using a non gauling sleeve). Its special design guarantees perfect internal alignment and uniformity, which in turn stops the formation of stagnation points.

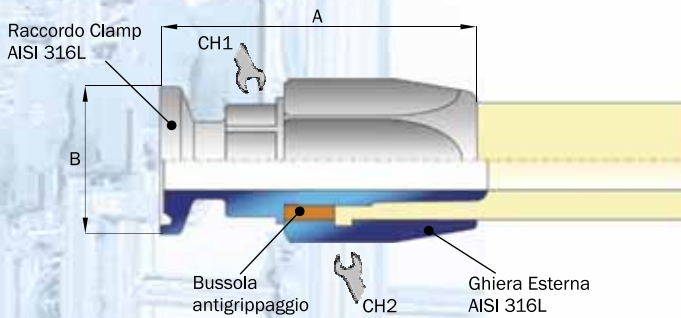
RE-FLEX connections are not suitable for attaching to hose with a diameter or thickness other than those listed in the table.

Note

Exposure to repeated steam sterilization, or long-term elevated temperature or pressure, will cause deterioration of silicone hose. The inspection check and maintenance intervals can depends from operating conditions as temperature, pressure and type of fluid, but is better keep to the following :

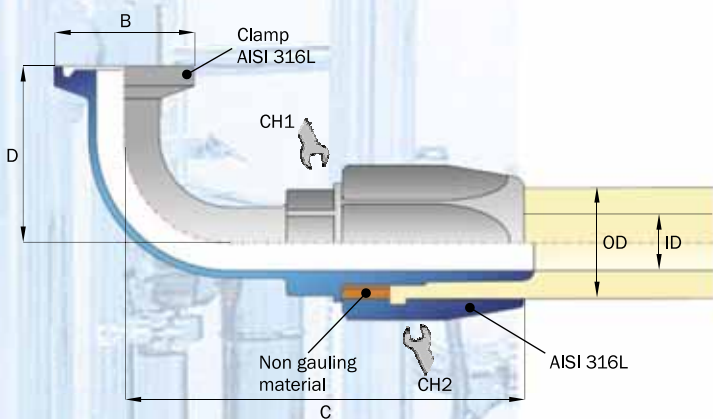
Inspection intervals:

- for water use with temperature < 100°C = every 500 hours
- for steam use with max. temp 150°C = every 150 hours



Dimensioni - Esecuzione lineare

Overall dimensions - Linear execution



Dimensioni - Esecuzione a 90°

Overall dimensions - 90° execution

Warranty:

This product is warranted for a period of 180 days from the date of delivery to purchaser to be free from defects of material and workmanship when used in a normal manner, and excludes all implied warranties, including those of merchantability and providing periodic inspection is conducted to maintain Good Manufacturing practice. The liability of the warrantor excludes consequential damage to persons or property of all types and is limited, at warrantor's option, to replace or repair or refund, as applicable.

Platinum cured SMP Series Silicone hose

Physical properties

- Platinum Cured
- **4-PLY polyester fabric**
- Hardness, Shore A 60
- OPERATING TEMPERATURE
Minimum -10 °C
Maximum 150 °C (It is recommended for short time only, for example sterilization cycles with steam)
- 4,00 meter standard lengths (12 Ft.)
- Optional: 7,32 meter lengths (1/2" - 2") on request available.

Features

- Bio Pharmaceutical Grade
- Ultra-Smooth Bore
- Autoclavable / Sterilizable
- Will not support Bacteria Growth
- Imparts no Taste or odor



SMP Series - 4 ply polyester reinforced

Code	ID Hose inches	OD Hose mm	Minimum bend radius mm	Full vacuum	Working pressure Bar
ULPSMP050	.500"	22,50	50	Yes	8
ULPSMP0750	.750"	28,90	75	0,8	7
ULPSMP100	1.00"	35,20	100	0,7	6,5
ULPSMP150	1.50"	47,90	N/A	0,6	4,5

Burst pressure is 5 x Working pressure

NOTE: Burst pressure will decrease by 5% for each 100 °F increase up to 500 °F (maximum temp. for SMP Series Hose)

All sizes have extruded liners for superior internal surface finish.

Platinum Cured Silicone 4-ply reinforced hose has a 60 shore A hardness after post cure for health care applications.

It is a very purity Silicone with virtually no extractable, the only by-product during the process of curing is H₂O.

Conventional Peroxide hose has a high level of DCBA leaching out of the wall of the hose.

(DCBA Dichlorobenzoic Acid) This leachable can contaminate pharmaceutical batches with catastrophic consequences.



Each hose (4 meter length) comes with a lot number identification imbedded in the hose.

Approvals

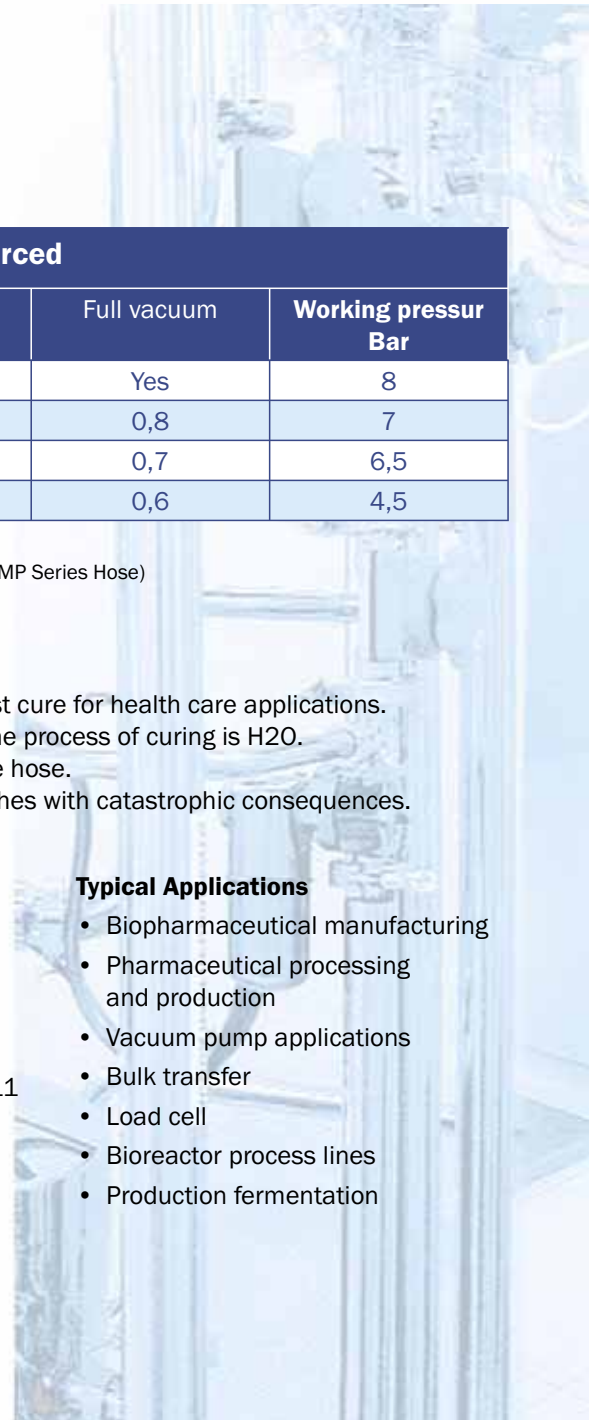
- FDA CFR 21 177.2600
- European Pharmacopoeia 3.1.9.
- USP Class VI
- 3A standards
- ISO10993 sections -5, -6, -10, -11
- Build under ISO9001: 2000 Quality M. System

Assemblies

Consult us about 316L stainless steel fittings and assemblies.

Typical Applications

- Biopharmaceutical manufacturing
- Pharmaceutical processing and production
- Vacuum pump applications
- Bulk transfer
- Load cell
- Bioreactor process lines
- Production fermentation



Platinum cured SWP wire-reinforced Silicone hose

Physical properties

- Platinum Cured
- **4-PLY polyester reinforced with Stainless Steel wire**
- Hardness, Shore A 60
- OPERATING TEMPERATURE
Minimum -10 °C
Maximum 150 °C (It is recommended for short time only, for example sterilization cycles with steam)
- 4,00 meter standard lengths (12 Ft.)
- Optional: 7,32 meter lengths (1/2" - 2") on request available.

All sizes have extruded liners for superior internal surface finish.

Platinum Cured Silicone 4-ply reinforced hose with stainless steel wire has a 60 shore A hardness after post cure for health care applications. It is a very purity Silicone with virtually no extractable, the only by-product during the process of curing is H2O. The stainless wire is 316SS and is 1,2 mm thick. The 2,5 inch 3 inch and 4 inch ID hoses have all mandrel build internal liners. These sizes are only available for ULPSWP series.



SWP Series - 4 ply polyester reinforced + SS helix wire

Code	ID Hose inches	OD Hose mm	Minimum bend radius mm	Full vacuum	Working pressure Bar
ULPSMP050	5/16"	22,50	50	Yes	10
ULPSMP0750	3/8"	28,90	75	Yes	10
ULPSMP100	1/2"	35,20	100	Yes	10
ULPSMP150	3/4"	47,90	125	Yes	10
ULPSMP200	1"	60,60	152	Yes	8,5

Burst pressure is 5 x Working pressure

NOTE: Burst pressure will decrease by 5% for each 200°F increase up to 500°F (maximum temp. for SWP Series Hose)



How to order

1 2 3 4 5

Esempio - Example

RTC - 3/4" - PR-FLEX - SWP 0750 - 400

Ends stile

RTC clamp
RTCa clamp adapter
RTCc clamp elbow
RTCca clamp adapter elbow
RBW butt weld
RBSP BSP thread

Size fittings ends
1/2"
3/4"
1"
1 1/2"
2"

Type of assemblies
RE-FLEX re-usable
PR-FLEX crimped

Hose Type
SWP 4-ply reinforced with stainless steel wire
SMP 4-ply reinforced

Hose Size
0500 OD 22,50 mm
0750 OD 28,90 mm
1000 OD 35,20 mm
1500 OD 47,90 mm
2000 OD 60,60 mm

Overall assembly length in mm
To be specify