

APSH - Silicone Tubing

Description/Construction

The APSH silicone hose from AdvantaPure® is a particularly high-quality, platinum-cured 70 shore silicone hose (quality NI 202) with a polyester fabric insert and a transparent silicone cover. The silicone liner is manufactured in a certified ISO class 7 (C) clean room. The embedded polyester fabric insert ensures high compressive strength and flexibility. The hose complies to DIN EN 16821:2017-10.

Chemical Resistance

Platinum-cured silicone hoses are generally characterized by high chemical resistance, including the hose is resistant to UV radiation and ozone.

The APSH silicone hose is suitable for autoclaving, for gamma radiation sterilization and for CIP cleaning. However, continuous steam use accelerates the natural aging process of the silicone material.

With the APSH tubing, **200 autoclaves** were performed at 260 F (126.7 °C) at 25 PSI (1.72 bar) and a cycle of 30 minutes each. Subsequent investigations revealed no discoloration of the hose, no detachment from the hose and no signs of wear.

Specifications/Dimensions

These comply with DIN EN 16821:2017-10.

On the back you will find the technical data.

The APSH silicone hoses can be used in a temperature range from -70 $^{\circ}$ C to +200 $^{\circ}$ C and are conditionally vacuum-resistant. The temperature depends on the operating pressure - see also the note below the table.

Hose Assembly

All sizes of the APSH silicone tubing are available in lengths of up to 15.24 m and can be assembled with special stainless steel press fittings on request.

Molded Tri-Clamps

In the case of the APSH silicone tubing, in addition to the integration with pressed fittings, there is another variant - the modeling of a tri-clamp made of silicone with the core hose (injection molding). Available in sizes OD 25.0mm and OD 50.5mm. The Tri-Clamps are reinforced by support caps made of stainless steel (AISI 304) or polysulfone.

The great advantage of this connection technology is the guaranteed freedom from dead space.

The silicone heads are made from liquid silicone (NI 206).









Caution:

The APSH range is not suitable for use as an implant material.

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Specification

The APSH silicone tubing (NI 202) meets the following guidelines, among others:

- FDA 21 CFR 177.2600
- USP-Class <85>, <87>, <88>, <381>, <661>
- ISO 10993-3, -4, 10, -11
- EP 3.1.9
- Sanitary Standard 3 A
- EPA 6010 A

You can request a validation package based on the silicone liner (NI 202).

Special Features

With the APSH silicone tubing, a single-colored tracer thread can be woven into the polyester fabric

Label

For the APSH silicone tubing line, there is the option of additional marking on the hose.

For example, a combination of two color bands and a label with a maximum of 5 lines of text.

This is protected by a transparent silicone coating that is vulcanized directly onto the silicone cover.

Color Bands are available in: Red, Orange, Yellow, Green, Blue, Purple, Brown, Black, Gray and White.





APSH - Tubing Chart

Nominal Diameter		Inner Diameter	Outer Diameter	Max. Operating Pressure at 20 °C	Burst Pressure at 20 °C	Min. Bending Radius	Weight / m	Article Number
DN	in	mm	mm	bar	bar	mm	ca. kg	
06	1/4	6.35	12.70	9	36	25.4	0.12	APSH06
10	3/8	9.53	15.88	9	36	25.4	0.15	APSH10
12	1/2	12.70	22.23	7	28	76.2	0.31	APSH12
16	5/8	15.88	25.15	6.75	27	76.2	0.36	APSH16
20	3/4	19.05	28.58	6	24	101.6	0.43	APSH20
25	1	25.40	35.69	3.75	15	152.4	0.60	APSH25

Note: From a temperature of +20 °C, the bursting pressure must be reduced by 10% for each increase of 35 °C. All values refer to the hose sold by the metre. In the case of ready-to-install hose lines, we ask you to consider any pressure-limiting connections.

The restrictions on use stated are always to be understood as a guide only. Such a list can never account for (all possible factors) the wide variety of different applications.