



GORE™ Reinforced Silicone Hose

FOR HIGH-PRESSURE APPLICATIONS

Ultra-Pure Fluid Transfer for High Pressure and Vacuum Applications

Product Description

GORE™ Reinforced Silicone Hose is offered with a variety of different options including wire, fabric, double-braid and single-braid reinforcement for enhanced performance in high pressure and vacuum applications. All GORE™ Reinforced Silicone Hose products are manufactured with an inner layer of platinum-cured silicone for ultra-pure fluid transfer. Engineered with superior flexibility, these products allow for excellent hose resilience and bend radius. To meet a diverse range of application needs, GORE™ Reinforced Silicone Hose is constructed to prevent kinking and compression and can withstand temperature and pressure extremes. All hose products are carefully controlled and fully traceable throughout the manufacturing process.

Quality Assurance

GORE™ Reinforced Silicone Hose is compounded to meet the most demanding requirements of biocompatibility and manufactured using pharmaceutical grade materials that meet or exceed the test requirements of the following:

- USP Class VI for Plastics
- USP <661> Physicochemical Tests
- FDA 21 CFR 177.2600
- EP 3.1.9. — Silicone elastomer for closures and tubing

Critical properties are controlled throughout the manufacturing process, which operates under a quality system based on applicable current Good Manufacturing Practices (cGMP). Additionally, GORE™ Reinforced Silicone Hose is manufactured with contact surface materials that are animal derived component free (ADCF).

Materials of Construction

Single and Double Braid Hose . . . Platinum-cured silicone (PCS)
Polyester (PET)

Wire Reinforced Hose Platinum-cured silicone (PCS)
316 Stainless Steel (SS)
Four ply Polyester (PET)

Fabric Reinforced Hose Platinum-cured silicone (PCS)
Four ply Polyester (PET)

Chemical Compatibility Guidelines

	Acids		Bases		Salts	Alcohols	Ketones
	Strong	Weak	Strong	Weak			
PCS	N	Y	N	Y	Y	Y	Y
PET	N	Y	N	Y	Y	Y	Y
SS	N	Y	Y	Y	Y	Y	Y

Y = Yes N = No



Benefits of GORE™ Reinforced Silicone Hose

- Provides extremely high pressure and vacuum ratings due to reinforced hose constructions
- Allows for hose resilience and adaptability within processes because of excellent flexibility and bend radius
- Offers versatility in processing with the ability to customize hose lengths
- Meets connection requirements with reusable and integrated stainless steel and molded-end connections
- Enables identification and differentiation of fluid transfer paths with custom color-coding, including colored braid striping as well as molded and printed labels
- Imparts no odors or taste to transported fluids due to an inner diameter of ultra-pure platinum-cured silicone

Typical Applications

- Pharmaceutical and biotech processing
- High volume ultra-pure fluid transfer
- Purification processes
- High pressure and bulk liquid transfers
- Load cells
- Skid transfer
- Process lines



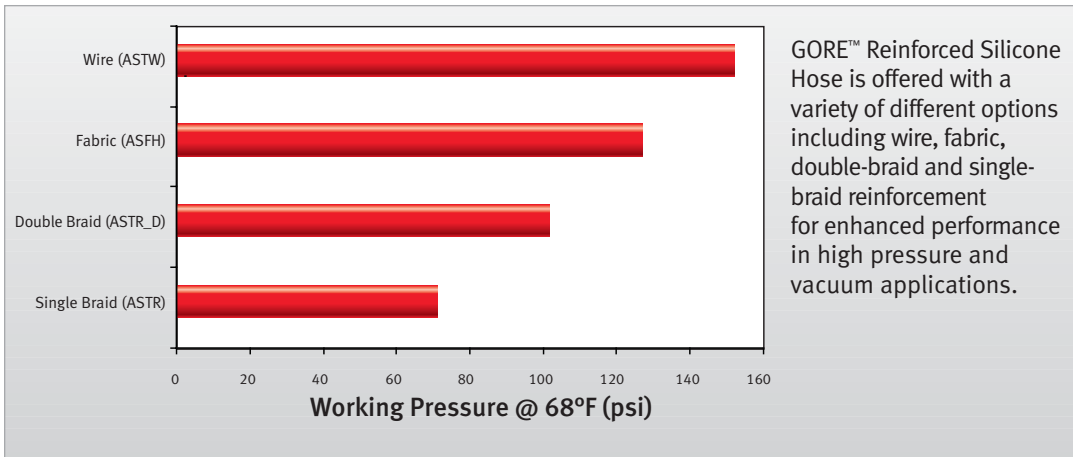
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Typical Physical Properties

Property	ASTM Method	Specifications			
		Single Braid (ASTR)	Double Braid (ASTR_D)	Fabric (ASFH)	Wire (ASTW)
Durometer hardness, Shore A	D2240	65	65	65	65
Ultimate elongation, 100%	D412	710			
Modulus at 100%, 200%, 300% psi	D412	173, 205, 288			
Tear Resistance, lb-f/inch	D624 – Die B	208	190		
Tensile Strength, psi	D412	1300	1200		
Color	—	Translucent	White	White	White
Specific Gravity	D297	1.17 to 1.3			
Temperature Range, °F	—	-80 to 350			

GORE™ Reinforced Silicone Hose Comparative Working Pressure Recommendations*



* Pressure Recommendations based on 1.000" ID Hose. It is the end-user's responsibility to validate working pressures for GORE™ Reinforced Silicone Hose. The end-user should conduct testing if temperature, exposure duration, and other conditions vary and/or if minor property changes could affect application performance.

Choosing a GORE™ Reinforced Silicone Hose

What is your pressure requirement?

- Moderate pressure fluid transfer — choose single braid reinforced silicone hose (ASTR)
- High pressure fluid transfer — choose double braid reinforced (ASTR_D) or fabric reinforced silicone hose (ASFH)
- Highest pressure fluid transfer and vacuum applications — choose wire reinforced silicone hose (ASTW) for added assurance



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GORE™ Reinforced Silicone Hose — Single and Double Braided (ASTR & ASTR_D): Ordering Information

Part Number	I.D. (inches)	O.D. (inches)	Wall Thickness (inches)	Minimum Bend Radius (inches)	Minimum Burst Pressure at 68°F (psi)
ASTR125-A65	0.125	0.345	0.110	1.00	700
ASTR187-A65	0.187	0.407	0.110	1.25	650
ASTR250-A65	0.250	0.490	0.120	1.50	625
ASTR312-A65	0.312	0.592	0.140	2.00	Consult Plant
ASTR375-A65	0.375	0.625	0.125	1.75	550
ASTR500-A65	0.500	0.800	0.150	2.00	500
ASTR625-A65	0.625	0.965	0.170	2.50	420
ASTR750-A65	0.750	1.100	0.175	3.00	350
ASTR875-A65	0.875	1.235	0.180	3.50	270
ASTR1000-A65	1.000	1.360	0.180	4.00	220
ASTR1250-A65	1.250	1.610	0.180	4.50	130
ASTR1500-A65	1.500	1.900	0.200	6.00	Consult Plant
ASTR500-A65DWHCV*	0.500	0.940	0.220	2.50	Consult Plant
ASTR750-A65DWHCV*	0.750	1.250	0.250	3.00	Consult Plant
ASTR1000-A65DWHCV*	1.000	1.470	0.235	3.50	Consult Plant

* Comes standard with white cover, other cover colors available upon request.

GORE™ Reinforced Silicone Hose — Fabric (ASFH): Ordering Information

Part Number	I.D. (inches)	O.D. (inches)	Wall Thickness (inches)	Minimum Bend Radius (inches)	Minimum Burst Pressure at 68°F (psi)
ASFH-0500	0.500	0.860	0.180	3	500
ASFH-0750	0.750	1.110	0.180	4	500
ASFH-1000	1.000	1.360	0.180	7	450
ASFH-1500	1.500	1.860	0.180	12	400
ASFH-2000	2.000	2.360	0.180	30	300
ASFH-2500	2.500	2.880	0.190	Consult Plant	Consult Plant

Available in continuous lengths up to 24 ft.

GORE™ Reinforced Silicone Hose — Wire (ASTW): Ordering Information

Part Number	I.D. (inches)	O.D. (inches)	Wall Thickness (inches)	Minimum Bend Radius (inches)	Minimum Burst Pressure at 68°F (psi)
ASTW-0500	0.500	0.860	0.190	3	800
ASTW-0750	0.750	1.110	0.190	5	800
ASTW-1000	1.000	1.360	0.190	7	800
ASTW-1250	1.250	1.610	0.190	Consult Plant	Consult Plant
ASTW-1500	1.500	1.860	0.190	9	500
ASTW-2000	2.000	2.360	0.190	11	400
ASTW-2500	2.500	2.860	0.190	12	350
ASTW-3000	3.000	3.360	0.190	14	350
ASTW-4000	4.000	4.360	0.190	Consult Plant	Consult Plant

Available in continuous lengths up to 24 ft.

Sterilization

It is the end-user's responsibility to validate a sterilization method when using GORE™ Reinforced Silicone Hose. The end-user should conduct testing if sterilization conditions vary and/or if minor property changes could affect application performance.

Recommended sterilization methods include:

- Autoclave — steam 30 to 35 minutes at 15 psi (250°F)
- Gas — ethylene oxide
- Radiation — up to 35 kGy / 3.5 mRad

Shelf Life

When stored in the original unopened packaging at standard conditions, GORE™ Reinforced Silicone Hose has a recommended shelf life of five years from the production date. When gamma irradiated, GORE™ Reinforced Silicone Hose has a recommended shelf life of three years from the production date.



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Connections and Fittings

GORE™ Reinforced Silicone Hose is available with a variety of sanitary end connections, including:

- Molded silicone
- Crimped stainless steel
- Reusable stainless steel

Custom line sets that enable GORE™ Reinforced Silicone Hose to be integrated into your bioprocess are also available. Visit www.gore.com/bioprocess-configurator/ to start a design or contact a Gore representative for details.

Customization Options

Building on a strong heritage of technical leadership and innovation, Gore continues to meet the demands of the marketplace by offering customers the ability to customize product offerings to meet specific needs.



Customization options for GORE™ Reinforced Silicone Hose include:

- Custom printing and colors
- Molded labels
- Custom sizes available
- Two and four ply wrapped styles available
- Stainless steel end fitting etching for traceability

Hose Assembly Part Numbers | Ordering Information

To order, select from the columns in this table.

EXAMPLE					OPTIONAL LABELS						
16	B	16TC		16TC	—	0036	BL	ML			
HOSE ID	HOSE TYPE	SIZE AND STYLE OF END FITTINGS (316SS)		END FITTING		OVERALL HOSE LENGTH	COLOR		LABELING		
4	1/4"	B	Braid Reinforced	TC	Sanitary Clamp	See List to the left	Hose length in inches	CL	Clear	ML	Molded Label
6	3/8"	DB	Double Braid	MT	Male Pipe Thread			BL	Blue	MB	Molded Band
8	1/2"	F	Fabric Reinforced	FT	Female Pipe Thread			RD	Red		
10	5/8"	W	Wire Reinforced	AF	ANSI Flange			YL	Yellow		
12	3/4"			TB	Tube End			OR	Orange		
14	7/8"			CA	Compression Adapter			BK	Black		
16	1"			RU	Reusable Ends			GR	Green		
24	1 1/2"							GY	Gray		
32	2"							PR	Purple		
40	2 1/2"							WH	White		
48	3"					BR	Brown				
64	4"										

Part number 16B16TC16TC-0036 would be a one inch I.D. braid reinforced hose with one inch stainless steel sanitary end fittings on both sides of the hose, with an overall length of 36 inches and with blue molded labels.

Contact Us

For detailed selection criteria, technical assistance and installation guidelines, please contact a Gore representative.

To the best of our knowledge, the information contained herein is accurate. Final determination of the suitability of any information or material for the use contemplated and the manner of use is the sole responsibility of the user. The above information gives typical properties only.

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DISTRIBUTOR INFORMATION

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