TEFLON (PTFE) HOSE

INDUSTRIAL FLUID MANAGEMENT SOLUTIONS



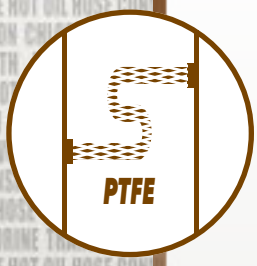
U.S. HOSE & COUPLING

TEFLON-PTFE

STAINLESS STEEL BRAIDED TEFLON

U.S. Hose & Coupling's **Teflon Division** focuses on long-term solutions for the everyday application to the more demanding fluid management systems. Whether your setup requires the handling of corrosive media, extreme temperatures, constant pulsing & flexing, or is under pressure/vacuum, our Teflon (PTFE) products are sure to prove to be rugged, dependable and of quality craftsmanship.

PTFE (Polytetrafluoroethylene) is an engineered fluoropolymer whose unparalleled resistance to chemicals is but one of PTFE's exclusive attributes. Compared to its hydraulic, industrial rubber and metal hose counterparts, teflon has many advantages including:



- **CHEMICALLY INERT:** a virtually universal hose which handles the broadest range of media and will not break down or deteriorate in service.
- **TEMPERATURE RESISTANCE:** from steam down to cryogenic systems, one hose for all environments and easy to clean.
- **MOISTURE RESISTANCE:** inherently low dew-point for pneumatics and compressed air.
- **FLEXIBILITY:** no "flex-fatigue" from continuous pulsing and vibration.
- **SHELF-LIFE:** teflon inner-core will not degrade with time or weather exposure.

INDUSTRIES SERVED

Teflon has assimilated itself into every market due to its "one-hose-for-all-situations" reputation. With a very low coefficient of friction, PTFE provides a non-stick surface that excellent for both paint manufacturers and air compressor systems alike; a broad temperature range makes this material ideal for Robotics and Reaction Injection Molding.; the Food & Beverage industry relies heavily on teflon due not only to its ease of cleaning (inert to steam & caustic) but also because PTFE is FDA-approved. You simply won't find an application where our Stainless Steel Braided Teflon isn't found.

AUTOCLAVES
AUTOMOTIVE / BUSSES / MARINE
BREWERY / WINERY / DISTILLERY
CHEMICALS / CHLORINE
CIRCUITRY / ELECTRONICS
CNG / LPG / COMPRESSED GAS
HOT PRESSES / PLYWOOD / LAMINATES
MACHINERY / PUMPS / TURBINES / ENGINES
MEDICAL / PHARMACEUTICAL
MOLTEN PLASTICS / RIM / EXTRUSION
PAPER / PULP / DEHYDRATORS
WATER PURIFICATION / REVERSE OSMOSIS

CONVOLUTED PTFE

A RELIABLE INDUSTRY WORKHORSE MADE OF AN EXTRUDED, SEAMLESS, VACUUM-FORMED TUBE OF OPEN PITCH CONVOLUTED PTFE REINFORCED BY A TOUGH STAINLESS STEEL BRAIDING FOR KINK AND ABRASION RESISTANCE.



PART NUMBER (Non-Conductive)	PART NUMBER (Conductive)	I.D. (in)	O.D. (in)	MAX WP (psi)	BURST PSI (psi)	BEND RADIUS (in)	WEIGHT (lbs/ft)
CTW-04	CTB-04	0.28	0.484	2000	7500	1.0	0.12
CTW-06	CTB-06	0.37	0.56	1850	7400	2.0	0.23
CTW-08	CTB-08	0.50	0.75	1500	6000	3.0	0.27
CTW-10*	CTB-10*	0.63	0.87	1200	5500	3.0	0.35
CTW-12	CTB-12	0.75	1.01	1300	5200	3.5	0.43
CTW-16	CTB-16	1.00	1.30	1000	4000	4.0	0.63
CTW-20	CTB-20	1.25	1.57	900	3600	4.5	0.75
CTW-24	CTB-24	1.50	1.89	700	2800	4.5	0.88
CTW-32	CTB-32	2.00	2.38	500	2000	5.0	1.11

*MADE TO ORDER - All pressures and vacuum ratings were calculated at 70°F

FITTINGS & FEATURES

- Temperature Range: -65°F to 450°F (-54°C to 230°C)
- Black tube "BC" series is static dissipative
- Open pitch aids in cleaning & self-draining
- Inert to steam cleaning and thermal cycling; hose will not delaminate
- Excellent for acids transfer, caustic sodas & steam applications
- Extremely flexible and easy to handle
- Can be autoclaved: zero absorption of any moisture and zero leakage over entire length of assembly



We stock a full-line of standard and specialty fittings for your convoluted teflon assemblies. These include flange, flange retainer, teflon-lined, male pipe, and JIC. Our fittings are permanently attached offering the customer a leak-proof assembly. Smaller, lighter in weight, and boasting the highest pull-off pressure rating in the market, U.S. Hose & Coupling's convoluted fittings will save you weight and space all while being more reliable and safer than their re-useable counterparts.

SMOOTH BORE - MEDIUM PRESSURE



NON-CONDUCTIVE



CONDUCTIVE

PRIZED FOR ITS EASE OF CLEANING, HIGH DEGREE OF FLEXIBILITY AND UNINTERRUPTED FLOW, OUR SMOOTH BORE HOSE IS IDEAL FOR THOSE APPLICATIONS WHERE THE UNIQUE QUALITY OF PTFE IS REQUIRED.

PART NUMBER (Non-Conductive)	PART NUMBER (Conductive)	I.D. (in)	O.D. (in)	MAX WP (psi)	BURST PSI (psi)	MINIMUM BEND (in)	WEIGHT (lbs/ft)
SB-04	SBB-04	0.188	0.312	3000	12,000	2.00	0.06
SB-05	SBB-05*	1/4"	0.375	3000	12,000	3.00	0.08
SB-06	SBB-06	0.313	0.445	2500	10,000	4.00	0.10
SB-07	SBB-07*	3/8"	0.503	2250	9,000	4.50	0.11
SB-08	SBB-08	0.410	0.549	2000	8000	5.20	0.13
SB-10	SBB-10*	1/2"	0.648	1500	6000	6.50	0.16
SB-12	SBB-12	0.636	0.778	1200	4800	7.70	0.19
SB-14	SBB-14*	3/4"	0.886	1100	4400	8.20	0.21
SB-16	SBB-16	0.875	1.030	1000	4000	9.00	0.28

*MADE TO ORDER - All pressures and vacuum ratings were calculated at 70°F

FITTINGS & FEATURES

U.S. Hose & Coupling stocks a wide selection of brass and stainless steel couplings for your smooth bore hose assemblies. These include compression tube end, hex male pipe, and female JIC swivel with back up hex. Our crimped fittings are permanently attached offering the customer a leak proof assembly over its entire length. This is not only safer, but inherently has less maintenance than re-useable fittings and thus lower operating costs.







- Temperature Range: -85°F to 500°F (-65°C to 260°C)
- Black tube "SBB" series is static dissipative
- SS304 wire braid reinforcement: -04 thru -10 are rated for full vacuum.
- Manufactured from fine powder Phthalate-free PTFE
- Inert to chlorine, acids and solvents
- Outstanding non-stick performance make this hose optimal for compressed air and engine compartment applications
- FDA-approved and steam cleanable

SMOOTH BORE - ULTRA HIGH PRESSURE

SMOOTH BORE ANTI-STATIC TRANSFER HOSE FOR HIGH PRESSURE AND HIGH TEMPERATURE SITUATIONS. RUGGED LAYERS OF HIGH TENSILE 304 STAINLESS STEEL BRAIDING MAKE THIS HOSE IDEAL FOR TOUGH GAS, CHEMICALS AND FLUIDS.



NOMINAL SPECIFICATIONS

PART NUMBER	SIZE (in)	I.D. (in)	O.D. (in)	MAX WP (psi)	BURST PSI (psi)	MIN BEND RADIUS (in)	WEIGHT (lbs/ft)
SBHP-04	1/4	0.222	0.375	5000	15000	1.5	0.10
SBHP-06	3/8	0.308	0.475	5000	15000	2.5	0.16
SBHP-08	1/2	0.403	0.600	5000	15000	2.87	0.23
SBHP-10	5/8	0.505	0.715	5000	15000	3.25	0.32
SBHP-12	3/4	0.630	0.970	5000	15000	3.87	0.66
SBHP-16	1	0.867	1.250	5000	15000	5.00	1.02

All pressures and vacuum ratings were calculated at 70°F

FITTINGS & FEATURES

- Temperature Range: -65°F to 400°F (-54°C to 204°C)
- Conductive PTFE inner-core eliminates risk of static burn in high-flow applications
- SS braiding eliminates need for spiral wraps, thereby reducing weight and increasing flexibility
- Additional braid layer on sizes -12 and above
- Phthalate-free, non-stick and non-leaching make this hose excellent for demanding conditions

INDUSTRIAL APPLICATIONS

Compressed Air - higher pressure and temperature rating, and greater resistance to system vibration when compared to rigid metal and rubber hose.

Robotics - superior chafe resistance and extreme flexibility make for reliable and accurate hydraulic lines when dealing with fluids and hot oils.

Plastics - zero "shot" material contamination in RIM and Extrusion processing systems.

Aircraft / Aerospace - no leakage and zero absorption of moisture in high pressure, high heat autoclaves.



All high-pressure PTFE assemblies are crimped so that the inner-core and fitting stem form a permanent assembly. This positive braid locking ensures hose integrity such that any strain is absorbed by the braid itself and not the teflon inner-core.

CHLORINE TRANSFER HOSE



- Temperature Range: -40°F to 120°F (-40°C to 49°C)
- Meets or exceeds the Chlorine Institute guidelines
- Extremely flexible with shallow, helical convolutions for fast and easy draining and cleaning
- Inert to chlorine, acids and solvents compared to metal hose
- Suitable for all Chlorine / Bromine related applications: loading hose, transfer hose, and sniffer hose
- Multi-purpose hose for pulp & paper manufacturing: rated for steam, condensate, and black liquor.

Chlorine is an incredibly important chemical whose "dry" and "wet" organic and inorganic derivations are found virtually everywhere from the paper and pulp industry to the processing of food & drug additives. However, Chlorine is one of the most difficult and hazardous chemicals to handle. Our special transfer hose is made of a Chlorine-inert convoluted PTFE inner-core, wrapped in a protective PVDF layer and covered in a Chlorinated Polyethylene (CPE) braid. Robust and reliable, our Chlorine transfer hose will stand up to your most demanding applications.

MADE TO ORDER - CALL FOR DETAILS

HOT OIL HOSE

Specially designed for hot fluid transfers, U.S. Hose & Coupling's hot oil hose is constructed with a smooth bore PTFE inner-core, reinforced with a stainless steel braid and finished with a silicone outer wrap. Capable of handling liquids to 500°F (260°C), this unique transfer hose features a tight bend radius offering the end user un-paralleled flexibility in cramped kitchen environments.

MADE TO ORDER - CALL FOR DETAILS



- Inert to oils and cleaning agents
- Non-stick FDA inner-core provides for easy and drainage and cleaning
- Working pressure: 1500 psi
- Burst pressure: 6000 psi
- Fitting options: 37° Female JIC Swivel, Male NPT Swivel, Male NPT Rigid

HOSE COVER OPTIONS

Sleeves and covers provide additional protection for your investment; a longer service-life translates to lower operating costs. **Armor Guard**'s metal wrap is as heavy duty as it is flexible. **Nylon**'s abrasion resistant weave strengthens as it is worn. **Heat Shrink** is ideal for situations that demand cleanliness. **Fire Sleeve** wraps the hose in fiberglass with a bonded silicon cover to protect against extreme temperatures. Reduce kinking from severe flexing, dragging and bending with **Spring Guard**. Even color-coding hoses for quick reference is an option with our deep range of **Expandable Sleeve** color choices.



PRESSURE TESTING AND TAGGING

U.S. Hose & Coupling's warehouses are equipped with custom-built pressure testing stations and we offer hydrostatic testing to 1.5 times the working pressure for all of our teflon hose assemblies as well as customizable stainless steel tagging. Tags are permanently attached and can contain any pertinent information such as fabrication date, hose ID, or working pressure. These services are available upon request and do not come standard.

PACKAGING / SHIPPING

All teflon hose assemblies are built in their own cell to negate cross-contamination from other parts of the warehouse. Finished assemblies are wrapped, bagged and carefully packed to prevent kinking during shipment. Protection is a priority and our threaded ends are routinely capped.

OEM HOSE SUPPLIER

As your OEM we help you solve key issues:

- Reduce your manpower
- Keep prices under control
- Keep inventory low with bi-monthly or monthly releases
- No wasted inventory (products received direct for resale)
- Product can be kitted to make easier for your staff
- All hoses assembled by certified hose technicians

We help you make your products better!



BUILD YOUR OWN ASSEMBLY

We are proud to offer our distribution network their very own **online assembly builder** with which to build custom assemblies for a quick-turnaround. This value-added benefit is part of our extensive network of services that include stocking, fabricating, welding, engineering, and inventory management.

BUILD YOUR OWN ASSEMBLY

OUR MISSION

A team driven to provide quality hose solutions through ingenuity, passion and commitment.

OUR VISION

The industry leader of quality hose assembly technology.



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Visit U.S. HOSE & COUPLING online at

www.USHOSECO.com

Register with us today and access our online wholesaler pricing, use our custom assembly builder, upload a print to our engineers, download spec sheets and so much more.