

HAM-LET PTFE Hoses

General

PTFE stainless steel braided hose is an ideal solution for permanent or temporary connections of gases or liquid line. It makes fabrication easier, and it facilitates connect/disconnect and cleaning. Variable length, high flexibility, high pressures and broad chemical compatibility are among the features that make this hose the preferred solution for many applications.

HAM-LET PTFE hoses are available in smooth, convoluted or conductive carbon lined core with stainless-steel braid or silicon covered stainless-steel braided.

Testing & Packing

All Hoses are Hydrostatically tested at 1000 psi (69 bar) or maximum working pressure.

All Hoses packed individually in a plastic bag, end connections are capped.

Features

- PTFE core with all stainless steel braid and connections
- Non-contaminating, Non-absorbent, will not impart taste or odor
- Non-aging & non-stick surface
- Easy to clean, drain easily
- True I.D., Low friction
- LET-LOK®, ONE-LOK®, Male & Female NPT, Mini Sanitary Flange.
- ID Sizes: 1/4" up to 2".
- Max. pressure 3250 psi (224 bar), safety factor 1 to 4.
- Working temperature: -100° ~ +450° F (-73° ~ + 232°C)
- Pack and Validated for high purity service:
 1. Approved U.S. Pharmacopoeia Class VI
 2. Approved Food and Drug Administration (FDA) 21CFR177.1550
 3. Exceeds 3A Sanitary Standards
 4. U.S.D.A. Approved

Where Can A PTFE Hose Be Used?

Almost anywhere! It can handle high pressures; it withstands hundreds of thousands of flex cycles; it is unaffected by weather or age; and it conveys almost any media. PTFE is non-stick and temperature resistant. There is no limit to steam clean/sterilization cycles.

There is no material with a broader range of chemical compatibility than PTFE. The only known classes of chemicals that attack PTFE are molten alkali metals such as Sodium, Lithium, and Potassium. Halogenated chemicals such as fluorine gas or chlorine tri-fluoride are not recommended because certain Halogen compounds such as Freon can permeate (diffuse) through the PTFE tubing.

Chemical Compatibility:

PTFE has one of the highest levels of chemical compatibility. Following is the list of materials that require some level of consideration:

The following materials are not recommended for use with PTFE hosing:

- Elemental Sodium
- Elemental Potassium
- Elemental Lithium

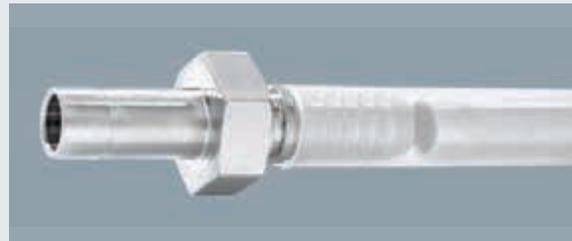
The materials listed below are only questionable if conveyed in conjunction with high temperature and pressure and/or a combination thereof:

- Fluorine (F2)
- Chlorine Tri-Fluoride (ClF3)
- Borane (B2H6) (Only at 400°F to 500°F)
- Iodine Pentafluoride
- Oxygen Difluoride
- Chlorine Difluoride
- 80% and over Sodium Hydroxide
- Bromine (Br2) - only at 400°F to 500°F
- Aluminum Chloride (at elevated temps)
- Ammonia (NH3)
- Aluminum (R-NH2) - at elevated Temperature
- Imines (R-NH)
- 70% Nitric Acid

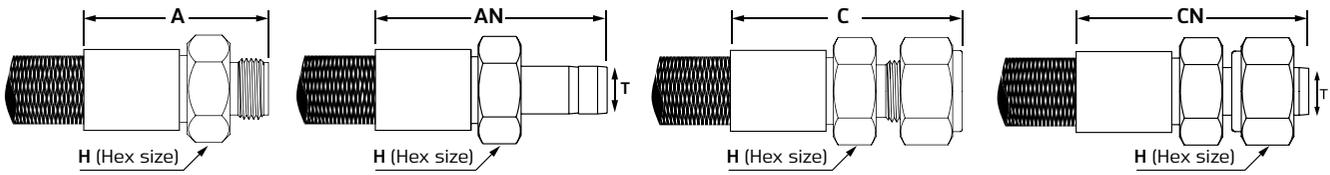
Full Size Inside Diameter:

- Not tube size!
- 1/4" is 0.250 (1/4") inside diameter - not 0.187 (3/16") id and 1/2" is 0.500 (1/2") not 0.406 (13/32")
- HAM-LET hose yields the highest flow rate per size because of its full size tube so fittings can be machined with a bigger inside diameter; a diameter that mates identically with connected tubing.

The result is minimal or no pressure drop due to dimensional differences. The internal surface of the fitting can be machined with no steps, which is where corrosion starts, bacterial growth begins and flow is disrupted.



End Connector Dimensions



Hose Size	Minimum Flow Diameter	T Diameter	A Length	An Length	C Length	Cn Length	H Hex Size
in	in	in	in	in	in	in	in
1/4	0.190	1/4	1.48	1.70	1.73	1.70	0.562
3/8	0.280	3/8	1.78	2.00	2.08	2.00	0.687
1/2	0.375	1/2	2.07	2.53	2.48	2.53	0.875
3/4	0.630	3/4	2.50	3.04	2.81	3.04	1.125
1	0.860	1	2.75	3.28	2.96	3.28	1.375

