

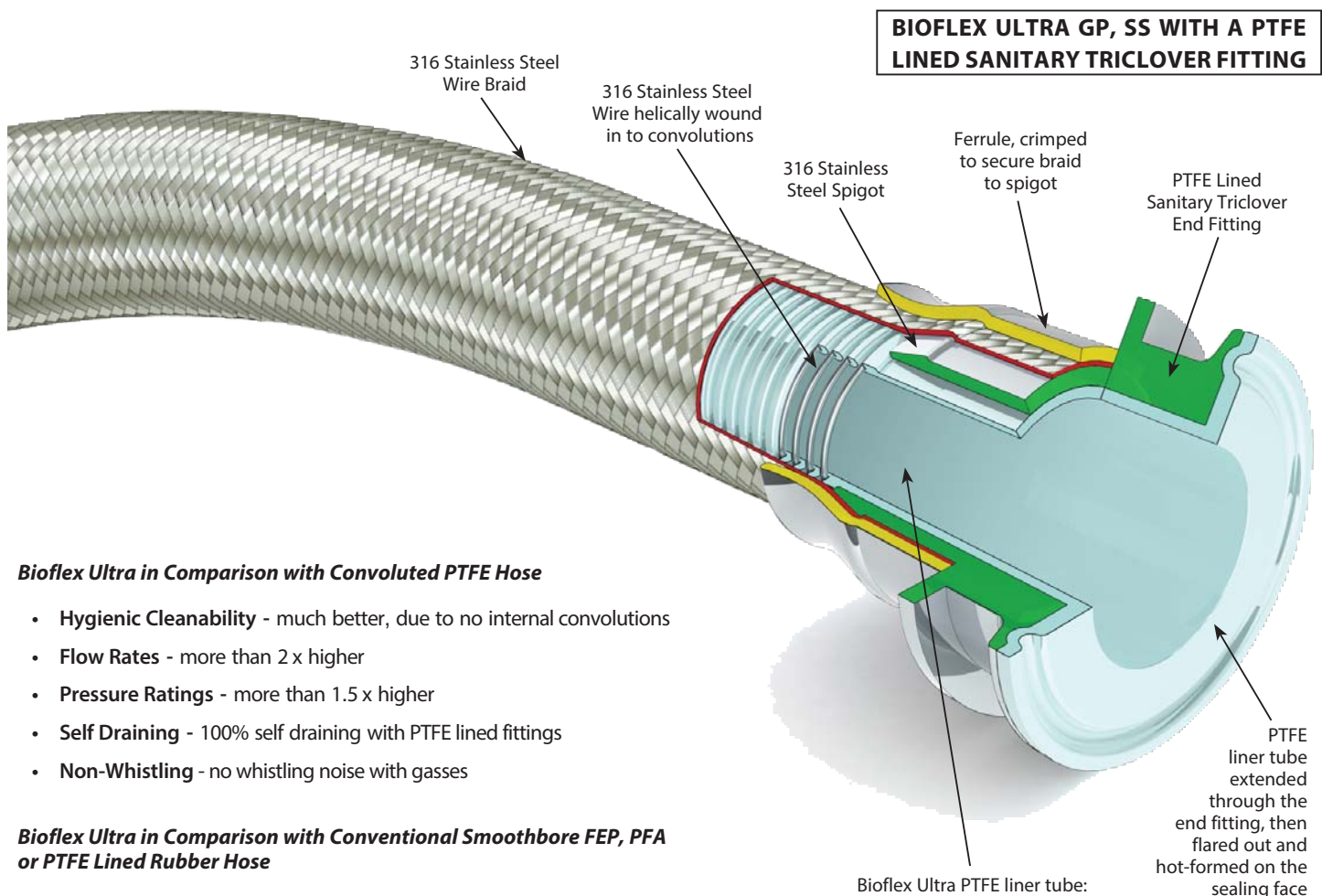
Bioflex Ultra Hose Design and Comparative Properties

Bioflex Ultra Hose Design Options

Bioflex Ultra Hose Grades are made up by combining the Design Options, which are defined by 2 letters as shown below, and fully described on the indicated pages.

For example, "Bioflex Ultra AS, PB, SG" defines a hose with an Antistatic PTFE liner (AS) and a Polypropylene braid (PB) and an outer "Safeguard" (SG) spiral HDPE protection sleeve.

PTFE Liner Tube Options -	GP (Natural PTFE) and AS (Antistatic PTFE) -	Page 14
Braid Options -	TO (Tube Only, No Braid), SS (316 SS Wire), and PB (Polypropylene) -	Page 15
Rubber Cover Options -	RC (Blue EPDM), BK (Black EPDM) and SI (Silicone Rubber) -	Page 16
External Protection Options -	SR (Scuff Rings), SG (Safeguard Spiral) and PC (SS Wire Coil) -	Page 17



Bioflex Ultra in Comparison with Convuluted PTFE Hose

- **Hygienic Cleanability** - much better, due to no internal convolutions
- **Flow Rates** - more than 2 x higher
- **Pressure Ratings** - more than 1.5 x higher
- **Self Draining** - 100% self draining with PTFE lined fittings
- **Non-Whistling** - no whistling noise with gasses

Bioflex Ultra in Comparison with Conventional Smoothbore FEP, PFA or PTFE Lined Rubber Hose

- **No Adhesives** - No toxic adhesives used in the Bioflex Ultra construction, eliminating the possibilities of Process Fluid contamination in service
- **Flexibility** - Much better flexibility
- **Internal Shape Control** - No distortions in bore when flexed

Bioflex Ultra in Comparison with Silicone Rubber Hose

- **Hygienic Cleanability** - much better, due to the non-stick PTFE Liner
- **Chemical Resistance** - considerably improved, particularly to strong oxidising acids and bases
- **Temperature & Pressure Ratings** - much higher temperature and pressure capability
- **Steam Resistance** - permanently resistant to steam sterilising (unlike silicone hose, which has a limited life)

Bioflex Ultra PTFE liner tube:

- Externally convoluted
 - Smoothbore, with slight ripples
- Mirror smooth internal surface finish generated by hot polishing during manufacture

PTFE liner tube extended through the end fitting, then flared out and hot-formed on the sealing face