

KAPTECH

FLEXIBLE SMOOTH BORE PTFE HOSE ASSEMBLIES

BIOFLEX

- **Unique combination of smooth-bore and high flexibility.**
- **Excellent chemical resistance**
Inert to all but a handful of uncommon chemicals.
- **Self-cleaning**
The non-stick nature of the tube prevents product adhering to the tube wall.
- **Hygienic**
Manufactured from FDA-approved PTFE.
- **Low flow-resistance**
Highly polished bore gives flow rates more than twice those of conventional convoluted hose.
- **Durable**
Tough outer braid protects against abrasion and damage.
- **Heat-resistant**
Usable up to 230°C, dependent on specification.
- **Vacuum resistant**
Usable with full vacuum (up to 1" size, max 130°C).
- **Sizes:** 1/2" up to 2" nb.
- **Wide range of end fittings:** BSP, NPT, flanges, hygienic type, etc.



FS 28046



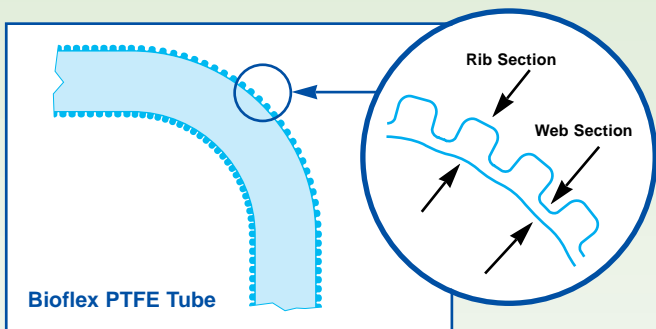
For capabilities and general technical data, see overleaf

KAPTECH

BIOFLEX FLEXIBLE SMOOTH BORE
PTFE HOSE ASSEMBLIES

Kaptech Bioflex flexible PTFE hose offers a unique solution to the need for a smooth bore hose with the flexibility of a convoluted hose.

The Bioflex PTFE tube design incorporates integral external rib sections which support the tube against kinking, vacuum and pressure. Highly compressed web sections give a smooth inner surface with excellent flexibility. Compared to conventional convoluted PTFE, Bioflex gives much improved performance: flow rate 2 to 3 times, gas permeation resistance 2.5 times, and flexing cycle life up to 50 times greater.



Anti-static: In addition to the standard translucent tube, Kaptech Bioflex hose is also available with an anti-static black PTFE tube (AS). This is designed for applications where fluids with a high electrical resistance such as solvents and fuels are passed through the hose and allows the dissipation of any static charge in accordance with BS2050: 1978.

Tube Only: An unbraided tube-only option (TO) is also available for applications where a translucent, low-pressure hose is required. Other specialist PTFE tubes are available to special order.



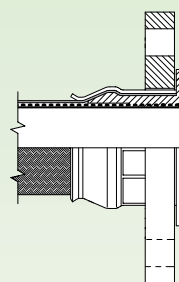
Braid Options:
Kaptech Bioflex PTFE hose is provided as standard with an external stainless steel braid. It is also available



with a polymer braid (PB) manufactured from a polypropylene yarn which provides a lightweight braid with excellent chemical resistance and comfortable handling characteristics. Other specialist braids and covers are available to special order.

End Fittings.

Kaptech Bioflex hose assemblies can be fitted with all conventional types of end fittings. Standard types include BSP and NPT threaded fittings in zinc-plated mild steel and 316SS; swivel flanges in 304, 316SS and polypropylene are also options. A full range of hygienic type end fittings such as RJT, IDF and Tri-clamp are available, and these can be PTFE-lined where the sealing technique allows. Cuffed ends suitable for customers to attach their own fittings are available to special order.



Stainless Steel Braided

| Bore Size | Minimum Bend Radius | Maximum Working Pressure | Weight Per Metre | Maximum Cont. Length | Minimum Used Straight | Minimum Flexed at 90° |
|-----------|---------------------|--------------------------|------------------|----------------------|-----------------------|-----------------------|
| Inches | mm | bar | kg | m | mm | mm |
| 1/2 | 38 | 70 | 0.290 | 20 | 150 | 150 |
| 3/4 | 50 | 60 | 0.400 | 20 | 150 | 150 |
| 1 | 70 | 50 | 0.630 | 20 | 180 | 230 |
| 1 1/4 | 100 | 45 | 0.850 | 20 | 180 | 250 |
| 1 1/2 | 140 | 40 | 1.100 | 17 | 180 | 350 |
| 2 | 200 | 30 | 1.900 | 10 | 200 | 450 |

Pressure range.

Bioflex-SS: As table above.

Bioflex-PB: Reduce SS pressures by 50%.

Bioflex-TO: Refer to Guyson Technical Department.

Temperature range.

Bioflex-SS: -70°C up to +230°C.

Bioflex-PB: -30°C up to +90°C.

Bioflex-TO: Refer to Guyson Technical Department.

Maximum working pressures are based on a 4:1 factor of safety on the burst pressures.

The maximum working pressures listed are for temperatures up to 130°C only. Above 130°C, the maximum working pressure & vacuum resistance must be reduced by 1% for each 1°C above 130°C.

Other Kaptech PTFE hoses available include: PTFE 1000 smooth bore, PTFE 3000 convoluted (industrial applications) and PTFE 5000 Corroflon convoluted (process applications). PTFE moulded & 'V' type bellows are also available to special order.



GUYSON INTERNATIONAL LIMITED **HOSE & COUPLINGS DIVISION**
Southview Business Park, Guiseley, Leeds LS20 9PR Tel: 01943 870044 Fax: 01943 870066
Email: leeds@guyson.co.uk Web: www.guyson.co.uk



FS 28046