

Reinforced Tubing

Reinforced tubing refers to the tubing with polymer medical materials as the inner layer, stainless steel and nickel titanium wire or polymer fiber wires, braided or coiled, or a combination of the braiding and coiling as the reinforcing layer, and polymer medical materials as the outer layer. Reinforced medical polymer tubing has excellent mechanical properties; for example, it can improve kink and crush resistance, burst pressure resistance, column strength and torque transmission. The materials of the inner and outer polymer layers can be composed of PA, Pebax, TPU, PE, PTFE and other thermoplastics.



Key Features

- Superior Mechanics: Reinforced tubing with excellent mechanical properties and torsion control.
- Color Customization: Superior surface properties, available in custom colors.
- Processing Range: Custom single-lumen tubes from 0.5 mm to 5 mm, with ±0.02 mm tolerance.
- Fast Lead Time: Standard single-lumen tubing delivered within 2 weeks.
- Multi-Lumen Customization: Collaborative development for double, triple, quadruple, and multi-lumen tubes.

Applications

 It can be used in series of flexible endoscopes for digestive tract, respiratory tract, biliary tract, urinary tract, etc.

| Technical Data | Unit | Typical Value |
|----------------|-----------|---|
| Material | | PA, PEBAX, PE, TPU, PTFE , SS wire, nitinol wire, polymer fiber |
| Inner diameter | mm (inch) | 0.4 ~ 5 (0.0157 ~ 0.1969) |
| Wall thickess | mm (inch) | 0.25 ~ 1 (0.0098 ~ 0.0394) |
| Tolerance | mm (inch) | Both inner and outer diameters ± 0.02 (0.0008) |

Quality Management

PT&C implements a strict ISO13485 quality management system and builds a standardized ISO Class 8 clean room to ensure that the products meet the biological requirements of medical devices. At the same time, advanced manufacturing equipment and precision measuring instruments, as well as strict inspection and testing methods, ensure that the quality of the products meets the requirements for the use of high-end medical devices.

Ordering Information

Our experts can guide you in material selection, tubing/filament specifications, and custom-cut lengths to fit your specific biodegradable tubing/filament requirements.