

# Polyflex PTFE Tubing



- Flexible fluoropolymer tubing with unmatched chemical resistance and a non-stick surface that facilitates flow and eliminates media build up.
- Low coefficient of friction, anti stick surface.
- Inert material that is non-wetting and non-leachable.
- Temperature range -240°C to +260°C.
- Can be sterilised with Ethylene Oxide or autoclave.
- Odourless, non-toxic, translucent tube with low permeability.



## Contact

[www.parker.com/polyflex](http://www.parker.com/polyflex)  
[www.parker.com/medical](http://www.parker.com/medical)  
[pfde\\_dso@parker.com](mailto:pfde_dso@parker.com)

## Benefits

- Flexible tube
- High operating temperatures
- Handles aggressive Chemicals
- Can be identified by colour or stripe
- Non-stick and easy to clean
- Non-contaminating
- Fluid flow is visible through tube walls

## Applications

### Life Science

- General Laboratory tubing
- Fire Resistant applications
- Catheters
- Minimal Invasive Surgery equipment

### Others

- Pneumatic lines
- Aggressive chemical handling
- Electrical insulators



ENGINEERING YOUR SUCCESS.

# Polyflex PTFE Tubing

## MAIN FEATURES:

- Manufactured in a factory with ISO 9001 and ISO 13485.
- Materials comply with ASTM D3295.
- Listed as UL 94 V0 passes the UL 83 vertical flame test.
- Meets FDA requirements and USP 23 class VI.

## CONSTRUCTION:

- Poly Tetra Fluoro Ethylene material.

## REMARKS:

- Convoluted and corrugated versions are available on request.
- Black tubing is conductive. Industrial grade conductivity conforms to AMS-H-27267 having a minimum conductance of 10-20 micro amps with 1,000 vdc applied over a 14" length.
- Tubing is sold in 30 m boxes.
- Tubes supplied as standard in Natural colour.
- Other lengths, sizes (metric and imperial) , striped tubings and colours are available on a made to order basis with MOQ's.

## SIZES AND DATA:

Part Number	Tube O.D. x wall thickness	Maximum working pressure MPa	Weight g/m
<b>Polyflex PTFE Industrial Wall Fractional Size Tubing</b>			
101-0125031-NT-100	1/8 x 0.31	2.0	13
101-0156031-NT-100	5/32 x 0.31	1.5	17
101-0188031-NT-100	3/16 x 0.31	1.2	21
101-0250031-NT-100	1/4 x 0.31	0.9	30
101-0312031-NT-100	5/16 x 0.31	0.7	38
101-0375031-NT-100	3/8 x 0.31	0.6	47
101-0438031-NT-100	7/16 x 0.31	0.5	55
101-0500031-NT-100	1/2 x 0.31	0.4	63
101-0625031-NT-100	5/8 x 0.31	0.3	80
101-0750032-NT-100	3/4 x 0.31	0.3	97

## Polyflex PTFE Heavy Wall Fractional Size Tubing

101-0250047-NT-100	1/4 x 0.047	1.4	42
101-0250062-NT-100	1/4 x 0.062	2.0	51
101-0312062-NT-100	5/16 x 0.062	1.5	68
101-0375062-NT-100	3/8 x 0.062	1.2	85
101-0500062-NT-100	1/2 x 0.062	0.9	118

## Metric Polyflex PTFE Tubing

201-0400100-NT-100	4mm x 1mm	2.0	20
201-0500100-NT-100	5mm x 1mm	1.5	27
201-0600100-NT-100	6mm x 1mm	1.2	34
201-0700100-NT-100	7mm x 1mm	1.0	41
201-0800100-NT-100	8mm x 1mm	0.9	47
201-0900100-NT-100	9mm x 1mm	0.8	54
201-1000100-NT-100	10mm x 1mm	0.7	61
201-1200100-NT-100	12mm x 1mm	0.6	74
201-1400100-NT-100	14mm x 1mm	0.5	88
201-1600100-NT-100	16mm x 1mm	0.4	101

Notes: Vacuum operation to -1 Bar.

## TECHNICAL SPECIFICATIONS :

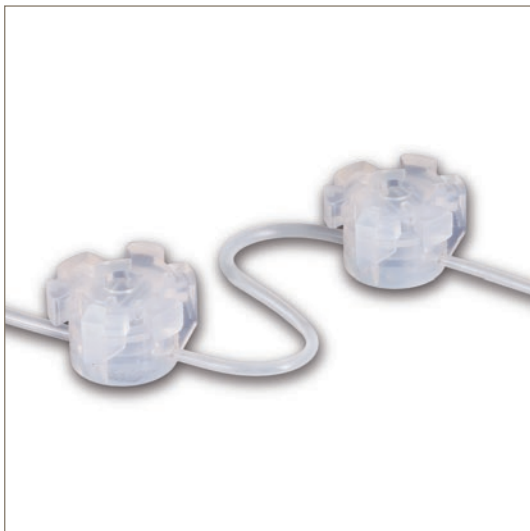
PTFE tubing	value / rating	ASTM or Unit
Specific gravity	2.13 - 2.22	D792
Hardness Durometer Shore D	50 - 65	D2240
Tensile strength (psi)	2,000 - 7,000	D638
Elongation %	200 - 450	D638
Water Absorbtion 24h, %	< 0.01	D570
Upper service temperature (20000h) in °C	260	-
Sterilization method - autoclavable steam	yes	-
Sterilization method - gas	yes	-
Sterilization method - radiation	no	-
Compliant with following regulations:	AMS 3653E; VW-1, UL-83 (natural); FDA Compliant USP Class VI Compliant	



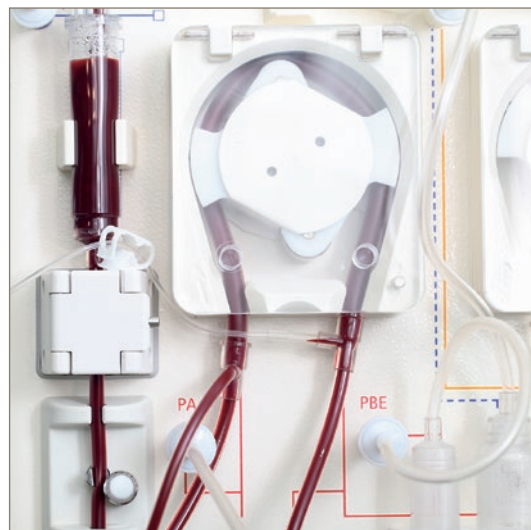
**Filling  
Machine**



**Blood Pressure  
monitoring**



**Bioreactors**



**Peristaltic  
Pumps**

# Technical Information

## Summary of Properties for all PFDE Life Science Tubing.

Product	Silicone tubing	PTFE tubing	PFA tubing	FEP tubing
<b>Material Type</b>	Platinum cured Silicone	PTFE	PFA	FEP
<b>Sizes</b>	Inch & Metric	Inch & Metric	Inch & Metric	Inch & Metric
<b>Medical grade USP 23 Class VI</b>	Yes	Yes	Yes	Yes
<b>ISO 10993 (Material)</b>	Yes			
<b>Sterilisable by Gamma, ETO or Steam Autoclave</b>	All	ETO & Steam	All	All
<b>Temperature Range</b>	-60 °C to +200 °C	-73 °C to +260 °C	-73 °C to +260 °C	-73 °C to +205 °C
<b>Density</b>	1.18g/cm <sup>3</sup>	1.12g/cm <sup>3</sup>	1.12g/cm <sup>3</sup>	1.12g/cm <sup>3</sup>
<b>Flex Life</b>	++	+++++	+++	++
<b>Abrasion Resistance</b>	++	+++	++	+++
<b>Packaging</b>	25m bagged	30 m, 150m and 300m bagged	30 m, 150m and 300m bagged	30 m, 150m and 300m bagged
<b>Appearance</b>	Translucent	Translucent-white	Transparent	Transparent
<b>Extractable Content</b>	++++	++	+++++	+++
<b>Chemical Resistance</b>	++++	+++++	+++++	+++++
<b>Working Pressure Mpa for 1/4 inch OD with 1/32 wall</b>		0.9	1.6	1.4
<b>Additional Information</b>	Platinum cured with post extrusion curing. Can be coloured.	Non stick easy to clean lubricious (5+)	Non stick easy to clean lubricious (4+)	Non stick easy to clean lubricious (4+)
<b>Applications</b>	Pharmaceutical, Biomedical and Medical	Medical	Medical & Laboratory. High Purity PFA for Semicon	Laboratory & Pharmaceutical

### Also available:

- Etched tubing for good bonding with other materials
- Flexible Convolutated Tubing
- Very Flexible Corrugated Tubing
- Heatshrink tubing
- Spiral cut cable wrap
- Retractable Coiled Tubing
- Braided Hoses and assemblies

