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Catheter Tubing

Catheter Materials Comparison

All catheter materials available have both advantages and disadvantages and the choice of catheter material is often application dependent. While both polyurethane and silicone are biocompatible and are good choices for long-term catheterization, a generalization of advantages and disadvantages as shown below may be helpful in determining which catheter material is most appropriate for your particular application. In cases where compounds show incompatibility with both polyurethane and silicone, the use of less favorable catheter materials such as polyethylene, Teflon® and PVC may be necessary.

Characteristics	Silicone	Polyurethane	PolyEthylene	Teflon/PTFE
ID Ratio	Thicker Wall/ ID Smaller	Thinner Wall/ ID Larger	Thicker Wall	Thicker Wall
Biocompatibility	Excellent	Excellent	Fair	Fair
Compatibility	Non-Reactive	Non-Reactive	Non-Reactive	Non-Reactive
Heat Sensitivity	Excellent	Poor	Excellent	Excellent
Stiffness	Soft	Softens in Body	Stiff	Stiff
Ease of Insertion	More Difficult	Moderately Easy	Easy	Easy
Ease of Modifying	Easy	Fair	Poor	Difficult
Memory	Excellent	Poor	Poor	Poor
Tensile Strength	Fair	Excellent	Good	Excellent
Flexibility	Excellent	Moderate	Poor-Rigid	Poor-Rigid
Coefficient of Friction	Fair	Excellent	Good	Excellent
Coating Option	More Difficult	Hydromer	n/a	n/a
Sterilization method	Autoclave or EtO	EtO	Autoclave or EtO	Autoclave or EtO

Ordering Information

Catheter tubing can be supplied on 25 foot spools non- sterile (BC series) or in sterile cut lengths (CNC series). Sterile cut lengths are available with or without modifications as shown further back. To assist you with your catheter dimension choice, you will find a catheter specification and conversion chart

Examples: The catalog number BC - 3P indicates a 25'/7.6m spool of 3 French polyurethane tubing, non-sterile. The catalog number BC - 5S indicates a 25'/7.6m spool of 5 French silicone tubing. Examples: To order cut lengths use prefix CNC. The catalog number CNC-2S indicates a sterile cut length of 2 French silicone tubing and CNC-1P indicates a sterile length of 1 French polyurethane.



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To order bulk catheter tubing specify the material and French size with the prefix BC (Bulk Catheter). To order sterile cut lengths, specify the material, length, tip configuration (round or blunt), and modifications required with the prefix CNC.

Co-Extruded External Infusion Tubing

Co-extruded tubing is extruded with PE on the inside lumen for compound compatibility and PVC on the outside for durability. It is available in 2 sizes.

the ideal catheter MATERIAL

- high tensile strength
- soft and pliable
- inherently chemical resistant
- biocompatible
- meet flow requirements *while maintaining a minimally invasive circumference or French profile.*

Gauge & French Size Comparison

Silicone/Si - Rounded (I/Intisil) or Blunt tipped - Sterile Cut Lengths or Bulk Non-Sterile								
	Gauge	Inner	Outer	Cut Lengths		Bulk tubing	Volume	Clear or Radiopaque Cut length catheters are provided with 2 moveable suture retention beads as a standard feature. See our catheter modifications.
Size		Diameter	Diameter	Round Tip	Blunt Tip	7,6 m	µl/cm	
1	27	0,2 mm	0,4 mm	N/A	CNC-1S	BC-1S	0,3	
2	23	0,3 mm	0,6 mm	CNC-2IS	CNC-2S	BC-2S	0,7	
3	20	0,5 mm	0,9 mm	CNC-3IS	CNC-3S	BC-3S	2,0	
4	18	0,6 mm	1,2 mm	CNC-4IS	CNC-4S	BC-4S	3,2	
5	16	0,7 mm	1,7 mm	CNC-5IS	CNC-5S	BC-5S	4,5	
7	13	1,3 mm	2,4 mm	CNC-7IS	CNC-7S	BC-7S	12,7	
9	11	1,6 mm	3,2 mm	CNC-9IS	CNC-9S	BC-9S	19,5	
Polyurethaan/PU - Rounded, Hydrcoat or Blunt tipped - Sterile Cut Lengths or Bulk Non-Sterile								
	Gauge	Inner	Outer	Cut Lengths		Bulk tubing	Volume	
Size		Diameter	Diameter	Round Tip	Blunt Tip	Hydrocoat	7,6 m	µl/cm
1	27	0,2 mm	0,4 mm	N/A	CNC-1P	N/A	BC-1P	0,3
2	23	0,3 mm	0,6 mm	CNC-2PR	CNC-2P	CNC-2H	BC-2P	0,7
3	20	0,6 mm	0,9 mm	CNC-3PR	CNC-3P	CNC-3H	BC-3P	2,7
3,5	18	0,6 mm	1,1 mm	CNC-3,5PR	CNC-3,5P	CNC-3,5H	BC-3,5P	3,2
5	16	1,0 mm	1,7 mm	CNC-5PR	CNC-5P	CNC-5H	BC-5P	8,1
7	13	1,5 mm	2,4 mm	CNC-7PR	CNC-7P	CNC-7H	BC-7P	17,0
Polyethyleen/PE - Blunt tipped - Sterile Cut Lengths or Bulk Non-Sterile								
Part	+/- Fr	Inner	Outer	Cut Length	Bulk tubing	Volume		
No.	Size	Diameter	Diameter	Blunt Tip	7,6 m	µl/cm		



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10	2	0,2 mm	0,6 mm	CNC-PE10	BC-PE10	0,6	The Low Density formulation of our PolyEthylene tubing does not contain plasticizers. It has excellent chemical and gas resistance, is non-radiopaque and non-reactive to tissue.
20	3,5	0,4 mm	1,1 mm	CNC-PE20	BC-PE20	1,1	
50	3	0,6 mm	1,0 mm	CNC-PE50	BC-PE50	2,7	
60	3,5	0,7 mm	1,2 mm	CNC-PE60	BC-PE60	4,5	
90	3,5	0,8 mm	1,3 mm	CNC-PE90	BC-PE90	5,8	
100	5	0,8 mm	1,5 mm	CNC-PE100	BC-PE100	5,8	
160	5	1,1 mm	1,6 mm	CNC-PE160	BC-PE160	10,2	
190	5	1,2 mm	1,7 mm	CNC-PE190	BC-PE190	11,1	

Teflon ®/PTFE - Blunt tipped - Sterile Cut Lengths or Bulk Non-Sterile

Part	+/- FR	Inner	Outer	Cut Length	Bulk tubing	Volume	This medical grade Teflon®/ PTFE tubing absorbs practically no common acids, bases or solvents. It is chemically inert.
No.	Size	Diameter	Diameter	Blunt Tip	7,6 m	µl/cm	
T11	2	0,3 mm	0,8 mm	CNC-T11	BC-T11	0,7	
T21	3	0,6 mm	1,1 mm	CNC-T21	BC-T21	2,4	
T31	4	0,8 mm	1,4 mm	CNC-T31	BC-T31	5,2	
T41	5	1,1 mm	1,7 mm	CNC-T41	BC-T41	8,9	
T51	7	1,3 mm	1,9 mm	CNC-T51	BC-T51	13,7	



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