

Consumables - Tubing

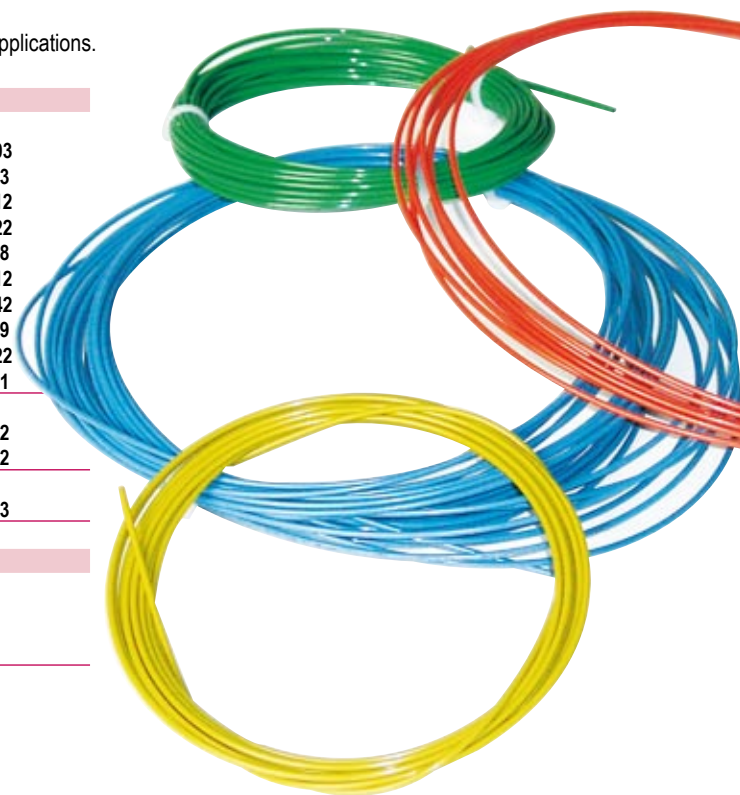
Low pressure

PTFE Tubing

PTFE (PolyTetraFluoroEthylene) is chemically inert (biocompatible) and suitable for lower pressure applications.

OD	ID	Color	Max Pressure	3 M	10 M	25 M
1/16"	0.18mm / 0.007" 0.25mm / 0.010"	Natural	62 B / 900 PSI	U89500	U89502	U89503
		Natural	55 B / 800 PSI	182490	182492	182493
		Blue	55 B / 800 PSI	U88510	U88511	U88512
	0.50mm / 0.020"	Black	55 B / 800 PSI	U89520	U89521	U89522
		Natural	50 B / 700 PSI	182484	182485	182488
		Orange	50 B / 700 PSI	U88610	U88611	U88612
		Black	50 B / 700 PSI	U89540	U89541	U89542
	0.75mm / 0.030"	Natural	37 B / 550 PSI	186780	186788	186789
		Green	37 B / 550 PSI	U88520	U88521	U88522
	1.00mm / 0.039"	Natural	25 B / 350 PSI	178000	178003	178001
1/8"	1.59mm / 0.062"	Natural	35 B / 500 PSI	189500	189504	189502
	2.40mm / 0.094"	Natural	18 B / 250 PSI	177990	177991	177992
2mm	1.70mm / 0.067"	Natural	10 B / 150 PSI	847150	847152	847153
OD	ID	Color	Max Pressure	1 M		
4mm	3.00mm / 0.118"	Natural	17 B / 250 PSI	U88530		
4.76mm	3.76mm / 0.148"	Natural	14 B / 200 PSI	898480		
½"	4.75mm / 0.187"	Natural	17 B / 250 PSI	732260		

Tolerance : For OD 1/16" tubing : OD & ID : ± 0.05 mm (0.02") / For OD 1/8" tubing : OD & ID : ± 0.10 mm (0.04")



835910

Consumables - Tubing

Low pressure

Nylon or Polyamide tubing

- Resistance to a wide range of chemicals
- Good flexibility
- Ideally suited for use with push in fittings

OD - ID	Max. Pressure	Red	Yellow	Blue	Green	Black	White	Length
1/8" - 1.9 mm	30 Bar	875571	922721	887371	922701	965811	841351	15 M
1/4" - 4.3 mm	40 Bar	327712	AA0290	AA0270	S30490	859500	279550	15 M



Technical Tip

Color code for gas :

- : inflammable : Hydrogen
- : Oxidant
- : Nitrogen
- : Oxygen, Air

Consumables - Tubing

High pressure

Stainless Steel Tubing

- Variety of sizes for HPLC and GC applications
- Stainless steel 316, smooth internal surface, high quality
- Pre-cut stainless steel tubing for zero dead volume connections

OD	ID	Tolerances	3 M (coil)	10 M (coil)
1/16"	0.13 mm / 0.005"	± 0.05 mm	383952	383954
	0.18 mm / 0.007"	± 0.05 mm	383943	383944
	0.25 mm / 0.010"	± 0.05 mm	177873	177874
	0.50 mm / 0.020"	± 0.05 mm	186243	186249
	0.75 mm / 0.030"	± 0.05 mm	177893	177899
	1.00 mm / 0.039"	± 0.05 mm	217433	217434
1/8"	0.75 mm / 0.03"	± 0.025 mm	170142	170143
	1.00 mm / 0.04"	± 0.025 mm	AA2631	AA2632
	1.52 mm / 0.06"	± 0.025 mm	I52511	I52512
	1.78 mm / 0.07"	± 0.025 mm	U05702	U05703
	2.10 mm / 0.08"	± 0.05 mm	177923	177926
	2.16 mm / 0.085"	± 0.025 mm	17792C	17792D



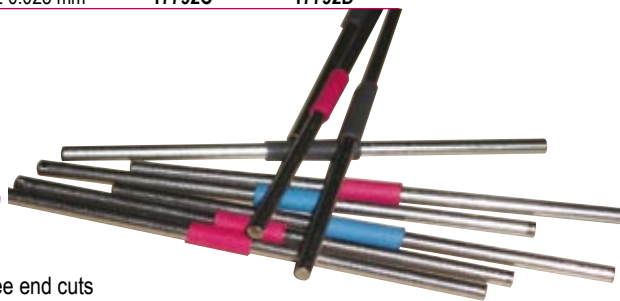
Technical Tip

Impact of inner diameter on dead volume

i.d.	µl / cm
0.05	0.02
0.064	0.03
0.075	0.04
0.1	0.08
0.13	0.13
0.15	0.18
0.17	0.23
0.2	0.32
0.25	0.49
0.5	1.96
0.75	4.42
1	7.85
1.59	19.86

Pre-cut tubing 1/16"

- Precision pre-cut lengths
- Perfectly perpendicular, burr free end cuts
- Color coding for easier identification



ID	Color code	5 cm	10 cm	20 cm	30 cm
0.13 mm	Red	U90150	U90160	547964	U90170
0.18 mm	Yellow	U90180	559811	559821	U90190
0.25 mm	Blue	292071	292081	560761	U90200
0.50 mm	Orange	U90210	390191	U90220	U90230
0.75 mm	Green	U90240	U90250	U90260	U90270
1.00 mm		572040	572050	572060	572070
1.17 mm		AD9920	AE5990	AC9350	AC9070



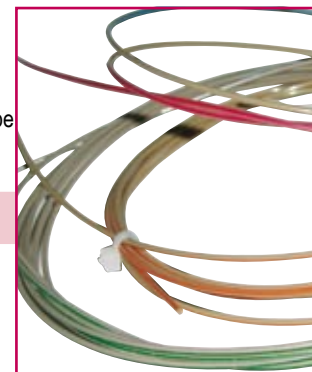
Stainless Steel
Capillaries
Magic Box
PN : BZ3310

Consumables - Tubing

High pressure

PEEK Tubing

PEEK (PolyEtherEtherKetone) polymer tubing is biocompatible, chemically inert and can be used to replace stainless steel tubing. Manufactured to exact tolerances and color coded for easy identification of the tubing's inner diameter. PEEK tubing is flexible, and can be easily cut to desired lengths.- Compatible with most commonly used solvents in HPLC.



OD tolerance	ID	Striped color	Max. Pressure	3 M ± 0.05 mm	10 M ± 0.05 mm	3 M ± 0.025 mm	10 M ± 0.025 mm
1/16" (1.6 mm)	0.064 mm / 0.0025"	Pink	435 Bar / 6300 PSI			BG2960	BG2961
	0.13 mm / 0.005"	Red	420 Bar / 6100 PSI	566440	566441	BG2970	BG2971
	0.17 mm / 0.007"	Yellow	400 Bar / 5800 PSI	767110	767111	BG2980	BG2981
	0.25 mm / 0.010"	Blue	386 Bar / 5600 PSI	767120	767121	BG2990	BG2991
	0.50 mm / 0.020"	Orange	350 Bar / 4500 PSI	767130	767131		
	0.75 mm / 0.030"	Green	240 Bar / 3500 PSI	767140	767143		
	1.00 mm / 0.039"	Gray	165 Bar / 2400 PSI	676810	676811		
	1.40 mm / 0.055"	Black	62 Bar / 750 PSI	382690	382691		
1/32" (0.8 mm)	0.13 mm / 0.005"		379 Bar / 5500 PSI	T78580	T78581		
	0.18 mm / 0.007"		351 Bar / 5100 PSI	T78590	T78591		
	0.25 mm / 0.010"		310 Bar / 4500 PSI	T78600	T78601		
1/8" (3.2 mm)	0.75 mm / 0.030"		345 Bar / 5000 PSI	676940	676941		
	1.59 mm / 0.062"		224 Bar / 3250 PSI	803770	803771		
	2.00 mm / 0.079"		165 Bar / 2400 PSI	676950	676951		

Technical Tip

Recommended tubing ID's between Injector and detector

Flow rate (ml / min)	Tubing ID (mm)
0.005 to 0.2	0.13 mm
0.2 to 0.5	0.13 to 0.17 mm
0.5 to 1.0	0.17 to 0.25 mm
2.0 to 10	0.25 mm
10 to 25	0.25 to 0.50 mm
50 to 100	0.50 to 0.75 mm



PEEK Capillaries
Magic Box
PN : BZ3310

Consumables - Tubing

Deactivated fused silica tubing

Length (M)	ID (mm)	OD (mm)	non deactivated	Deactivated tubing		
				Methyl	Phenylmethyl	PEG
10	0.005	0.285	062456			
10	0.010	0.285	062458			
10	0.025	0.285	062460			
10	0.050	0.220	062463			
10	0.075	0.190	062466			
1	0.030	0.360	062801			
1	0.050	0.360	062803			
1	0.075	0.360	062813			
1	0.100	0.360	062823			
10	0.100	0.320	062469			
10	0.150	0.220	062472			
10	0.220	0.320	062475			
10	0.250	0.350	062492			
25	0.250	0.350	062494			
25	0.320	0.430	062479			
10	0.530	0.680	062481			
25	0.530	0.680	062482			
2	0.025	0.582		062442		
2	0.05	0.220		062444		
2	0.06	0.220		062445		
2	0.075	0.190		0624450		
25	0.1	0.320		0624455		
2	0.11	0.170		062446		
5	0.15	0.220		0624461		
2	0.15	0.320		0624465		
2	0.22	0.320		0624469		
5	0.22	0.320		062447	064102	
25	0.22	0.320		0624474		
2	0.32	0.430		0624470		
5	0.32	0.430		0624471	064108	064200
25	0.32	0.430		0624473	064110	
2	0.53	0.680		0624479		064112
5	0.53	0.680		062448	064114	064204
25	0.53	0.680		064034		

Fused silica

(100% Methyl or Phenyl deactivated)

An essential ingredient in maintaining a high performance chromatography system.

- 0.025-0.53 mm ID
- Quality guaranteed
- Chemically inert and thermally stable
- Suitable for organic and aqueous solvents
- Ideal for biotechnology applications
- Custom-made tubing available upon request
- Tubing protected with a high temperature polyimide resin (+400°C)



Capillary Electrophoresis Tubing

Length (M)	ID (mm)	OD (mm)	Untreated	ES2 Treated	ES20 Treated
1	0.030	0.363	0620801		
1	0.050	0.363	062803		062881
1	0.075	0.363	062813	062812	
1	0.100	0.363	062823		

Consumables - Tubing

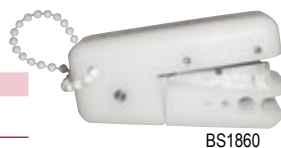
Cutting tools

Polymeric tubing cutter

Upti Cut : 1/16" to 1/4" OD

- Ensures a zero dead volume connection
- Cuts a square end without blocking the opening
- Safe and simple operation

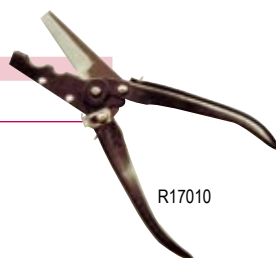
Upti-Cut	Replacement blades
BS1860	BS1870



BS1860

*** Soft tube cutter : up to 18 mm OD tubing**

Soft tube cutter
R17010



R17010

Capillary tubing cutter

- Clean & straight cuts - fused silica capillary column
- Magnifying lens for checking the cut

GC Shortix	CE Shortix
583381	787141



Metal cutter

P/N	Description	OD tubing	Characteristics
745830	Tubing pliers	1/16"	Quick cuts
D42821	Terry tool tubing cutter	1/16"	Accuracy
097733	Heavy duty tubing cutter	1/8" to 1 1/8"	Robustness



745830



097733



D42821

Reamer

Tubing	1/32"	1/16"	1/8"	1/4"	3/8"
Inner reamer	AA5530	AA5530	164111	164111	164111
Outer reamer		AA5560	AA5570	AA5570	



AA5560



164111