

TUBING



METAL AND POLYMERIC

We offer chromatography grade tubing in a variety of polymers as well as stainless steel. Outside diameters are 360 µm, 1/32", 1/16", 1/8", and 1/4".

TUBING INDEX

PEEK TUBING

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STAINLESS STEEL TUBING

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! DISCLAIMER

The maximum holding pressure for any type of connections involving tubing and a ferrule varies considerably with the tubing material, the ferrule material, the clearance between tubing OD and ferrule ID, and the shape of the fitting detail.

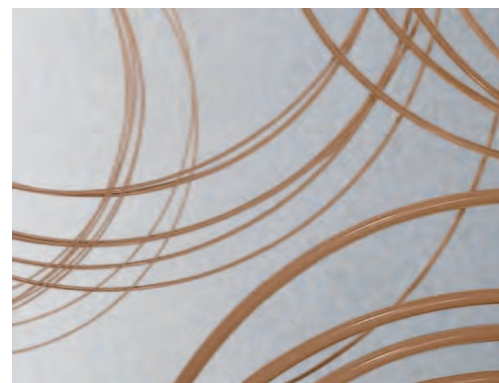
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NATURAL PEEK TUBING

PEEK tubing has the strength required to withstand continuous use at HPLC pressure without swelling or bursting, and is not affected by halide salts, high strength buffers, or other aggressive mobile phases that corrode stainless steel. The polymer surface will not leach metal ions into the eluent or extract metal-sensitive components from the sample. Note however that dichloromethane, THF, and DMSO may cause swelling in PEEK, and concentrated acids like nitric and sulphuric acid will attack PEEK.



NATURAL PEEK TUBING
shown with ODs of
1/8", 1/16", 1/32", and 360 µm

i PEEK TUBING TOLERANCES

Due to tighter tolerances, VICI Jour PEEK tubing is the best choice for chromatography applications in which exact flow rates or tube volume are of importance. The tighter tolerance ensures a more consistent internal volume of transfer lines.

Tubing OD	OD and ID (±)
1/32"	0.025 mm
1/16"	0.025 mm
1/8"	0.075 mm
1/4"	0.100 mm

t TECH TIP

- A clean burr-free perpendicular cut can be achieved with our Clean-cut cutter for polymeric tubing . . . 100
- To bend PEEK tubing at the optimal radius, use our tubing elbows . . . 100

➔ MORE INFO

- About PEEK® 113
- Chemical resistance PEEK 110-112
- PEEK at higher temperatures 110
- Maximum working pressure 108
- Tubing ID chart: volume per length . . . 107
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- Easy-Flange kit 99
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- PEEK tubing elbows . . . 100

SPECIFICATIONS

MAXIMUM RECOMMENDED WORKING TEMPERATURE
100°C (continuous) for 1/16" OD tubing with ID up to 0.75 mm

MAX WORKING PRESSURES AT ROOM TEMPERATURE
See page 108

OPTIONS

- Contact your distributor for more information about:
- Longer bulk tubing lengths
 - Customized ODs and IDs

PEEK tubing – natural

OD	ID (mm)	1.5 m	3 m	10 m
		Product No.	Product No.	Product No.
1/32"	0.13	JR-T-5993-M1.5	JR-T-5993-M3	JR-T-5993-M10
	0.15	JR-T-5706-M1.5 NEW	JR-T-5706-M3 NEW	JR-T-5706-M10 NEW
1/8"	0.75	—	JR-T-60041-M3	JR-T-60041-M10
	1.59	—	JR-T-6004-M3	JR-T-6004-M10
	2.00	—	JR-T-60042-M3	JR-T-60042-M10

OD	ID (mm)	per meter	
		Product No.	Tubing tolerance: OD ± 0.037 mm; ID ± 0.0013 mm
1/16"	0.064	JR-T-5998-0005 NEW	
	0.38	JR-T-62015	
1/4"	3.17	JR-T-6006	

↔ CONVERSIONS

75 µm = .003"
0.013 mm = .0005"
0.025 mm = .001"
0.064 mm = .0025"
0.075 mm = .003"
0.100 mm = .004"
0.13 mm = .005"
0.15 mm = .006"
0.38 mm = .015"
0.75 mm = .03"
1.59 mm = 1/16"
2.00 mm = .08"
3.17 mm = 1/8"
1.5 m = 4.92'
3.0 m = 9.84'
10.0 m = 32.8'

? WHICH PEEK TUBING FOR WHICH APPLICATION?

Application	Tubing
Standard HPLC*	1/16" OD x 0.25 mm ID
High pressure semi-prep LC*	1/8" OD
Agilent 1100 LC systems**	1/32"
Most capillary systems	360 µm

* Smaller ID for low flow rates/higher ID for high flow rates. Note that a low linear flow rate causes peak broadening.

**For some 1100 LC systems with high pressure flow paths

t TECH TIP: STRAIGHTENING PEEK TUBING

1. Start with stainless steel tubing:
ID slightly larger than OD of PEEK
Length = 2 cm shorter than PEEK
2. Slide PEEK tubing into stainless tubing, extending 1 cm out each end of the stainless
3. Place sleeved PEEK tubing into oven:
220°C for 30 minutes, or
180°C for 60 minutes
4. Allow sleeved tubing to cool in oven to ambient temperature
5. Once tubing is cooled, remove PEEK tubing from the SS sleeve
6. Check for straightness
7. Repeat if necessary



STRIPED COLOR-CODED PEEK TUBING

We recommend striped PEEK tubing for easy color-coded identification of tubing ID, with maximum chemical resistance and biocompatibility. The stripe is added to the outside, so dye never contacts the fluid stream.

All colorants used in the manufacture of this tubing are RoHS-compliant. (Restriction of Hazardous Substances)

SPECIFICATIONS

MAXIMUM RECOMMENDED WORKING TEMPERATURE
100°C (continuous) for 1/16" OD tubing with ID up to 0.75 mm

MAX WORKING PRESSURES AT ROOM TEMPERATURE
See page 108

TUBING TOLERANCES

Tubing OD	OD and ID (±)
1/32"	0.025 mm
1/16"	0.025 mm

OPTIONS

Contact your distributor or VICI about:

- Longer bulk tubing lengths
- Customized ODs and IDs

1/32" OD

PRE-CUT LENGTHS

ID (mm)	Color	1 m	NEW 1.5 m	3 m
		Product No.	Product No.	Product No.
0.050	Orange	JR-T-5702-M1	JR-T-5702-M1.5	JR-T-5702-M3
0.064	Red	JR-T-5764-M1	JR-T-5764-M1.5	JR-T-5764-M3
0.075	Green	JR-T-5703-M1	JR-T-5703-M1.5	JR-T-5703-M3
0.10	Black	JR-T-5704-M1	JR-T-5704-M1.5	JR-T-5704-M3
0.13	Red	JR-T-5705-M1	JR-T-5705-M1.5	JR-T-5705-M3
0.18	Yellow	JR-T-5707-M1	JR-T-5707-M1.5	JR-T-5707-M3
0.20	Orange	JR-T-5708-M1	JR-T-5708-M1.5	JR-T-5708-M3
0.25	Blue	JR-T-5710-M1	JR-T-5710-M1.5	JR-T-5710-M3
0.50	Orange	JR-T-5720-M1	JR-T-5720-M1.5	JR-T-5720-M3



1/16" OD

PRE-CUT LENGTHS

ID (mm)	Color	NEW 1.5 m	3 m	5 m	10 m	NEW 15 m	25 m
		Product No.	Product No.	Product No.	Product No.	Product No.	Product No.
0.050	Orange	JR-T-5802-M1.5	JR-T-5802-M3	JR-T-5802-M5	JR-T-5802-M10	JR-T-5802-M15	JR-T-5802-M25
0.075	Green	JR-T-5803-M1.5	JR-T-5803-M3	JR-T-5803-M5	JR-T-5803-M10	JR-T-5803-M15	JR-T-5803-M25
0.10	Black	JR-T-5804-M1.5	JR-T-5804-M3	JR-T-5804-M5	JR-T-5804-M10	JR-T-5804-M15	JR-T-5804-M25
0.13	Red	JR-T-5999-M1.5	JR-T-5999-M3	JR-T-5999-M5	JR-T-5999-M10	JR-T-5999-M15	JR-T-5999-M25
0.18	Yellow	JR-T-6000-M1.5	JR-T-6000-M3	JR-T-6000-M5	JR-T-6000-M10	JR-T-6000-M15	JR-T-6000-M25
0.25	Blue	JR-T-6001-M1.5	JR-T-6001-M3	JR-T-6001-M5	JR-T-6001-M10	JR-T-6001-M15	JR-T-6001-M25
0.50	Orange	JR-T-6002-M1.5	JR-T-6002-M3	JR-T-6002-M5	JR-T-6002-M10	JR-T-6002-M15	JR-T-6002-M25
0.75	Green	JR-T-6003-M1.5	JR-T-6003-M3	JR-T-6003-M5	JR-T-6003-M10	JR-T-6003-M15	JR-T-6003-M25
1.00	Grey	JR-T-60031-M1.5	JR-T-60031-M3	JR-T-60031-M5	JR-T-60031-M10	JR-T-60031-M15	JR-T-60031-M25
1.40	Black	JR-T-60032-M1.5	JR-T-60032-M3	JR-T-60032-M5	JR-T-60032-M10	JR-T-60032-M15	JR-T-60032-M25

CONVERSIONS

50 µm = .002"	0.20 mm = .008"
75 µm = .003"	0.25 mm = .01"
100 µm = .004"	0.50 mm = .02"
125 µm = .005"	0.75 mm = .03"
150 µm = .006"	1.00 mm = .04"
0.013 mm = .0005"	1.40 mm = .055"
0.025 mm = .001"	
0.050 mm = .002"	1.5 m = 4.92'
0.064 mm = .0025"	3.0 m = 9.84'
0.075 mm = .003"	5.0 m = 16.40'
0.10 mm = .004"	10.0 m = 32.80'
0.13 mm = .005"	15.0 m = 49.21'
0.18 mm = .007"	25.0 m = 82.02'

TECH TIP

VICI Jour sample loops for analytical applications are made of PEEK striped color-coded tubing.
PEEK loops 95

SEE ALSO

Clean-cut polymeric tubing cutter 100
Easy-Flange kit 99
PEEK fittings
High pressure . . . 24-35
Low pressure . 48, 50-53
PEEK tubing elbows . . 100



SPECIFICATIONS

MAXIMUM RECOMMENDED WORKING TEMPERATURE
100°C (continuous)

TUBING TOLERANCES

Tubing OD	OD and ID (±)
1/16"	0.025 mm

OPTIONS

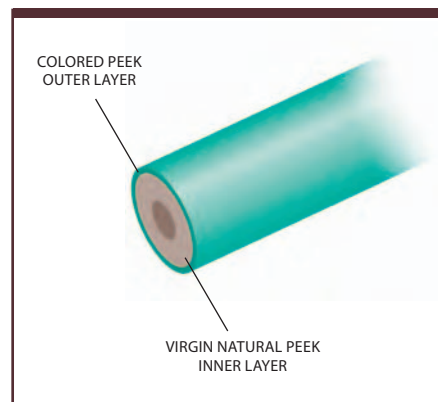
Contact your distributor or VICI about:

- Longer bulk tubing lengths
- Customized ODs and IDs

DUAL LAYER COLOR-CODED PEEK TUBING

- Inner layer of natural PEEK, outer layer of color-coded PEEK
- No possibility of stream coming in contact with coloring agents
- Pressure performance equivalent to single layer tubing
- 1/16" OD, IDs from 0.10 to 0.75 mm

Our dual layer PEEK tubing eliminates any concern that a critical sample stream could be contaminated by pigments used to color code the tubing. It looks like any other color-coded tubing at first glance, but a closer look reveals that the pigmented layer* surrounds a separate but integrally-bonded inner layer of natural PEEK. Only natural PEEK is in contact with the fluid stream.



*All colorants used in the manufacture of this tubing are RoHS-compliant. (Restriction of Hazardous Substances)

1/16" OD

PRE-CUT LENGTHS

ID (mm)	Color	bar	psi	NEW			NEW	
				1.5 m	3 m	10 m	15 m	25 m
				Product No.	Product No.	Product No.	Product No.	Product No.
0.10	Black	460	6700	JR-TD-5804-M1.5	JR-TD-5804-M3	JR-TD-5804-M10	JR-TD-5804-M15	JR-TD-5804-M25
0.13	Red	420	6100	JR-TD-6007-M1.5	JR-TD-6007-M3	JR-TD-6007-M10	JR-TD-6007-M15	JR-TD-6007-M25
0.18	Yellow	400	5800	JR-TD-6008-M1.5	JR-TD-6008-M3	JR-TD-6008-M10	JR-TD-6008-M15	JR-TD-6008-M25
0.25	Blue	386	5600	JR-TD-6009-M1.5	JR-TD-6009-M3	JR-TD-6009-M10	JR-TD-6009-M15	JR-TD-6009-M25
0.50	Orange	350	4500	JR-TD-6010-M1.5	JR-TD-6010-M3	JR-TD-6010-M10	JR-TD-6010-M15	JR-TD-6010-M25
0.75	Green	240	3500	JR-TD-6011-M1.5	JR-TD-6011-M3	JR-TD-6011-M10	JR-TD-6011-M15	JR-TD-6011-M25

➔ MORE INFO

- About PEEK® 113
- Chemical resistance
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- Tubing tolerances . . . 109

➔ SEE ALSO

- Solid color-coded PEEK tubing 12
- Clean-cut polymeric tubing cutter 100



SOLID COLOR-CODED PEEK TUBING

Color-coding identifies the ID of your PEEK tubing – each ID is coded with a different color. Solid colored tubing is made of pre-dyed raw material.

All colorants used in the manufacture of this tubing are RoHS-compliant. (Restriction of Hazardous Substances)

1/32" OD

PRE-CUT LENGTHS

For natural PEEK tubing, see page 9.

ID (mm)	Color	1 m	3 m
		Product No.	Product No.
0.050	Orange	JR-T-5602-M1	JR-T-5602-M3
0.064	Red	JR-T-5664-M1	JR-T-5664-M3
0.075	Green	JR-T-5603-M1	JR-T-5603-M3
0.10	Black	JR-T-5604-M1	JR-T-5604-M3
0.13	Red	JR-T-5605-M1	JR-T-5605-M3
0.15	Purple	JR-T-5606-M1	JR-T-5606-M3
0.18	Yellow	JR-T-5607-M1	JR-T-5607-M3
0.20	Orange	JR-T-5608-M1	JR-T-5608-M3
0.25	Blue	JR-T-5610-M1	JR-T-5610-M3
0.50	Orange	JR-T-5620-M1	JR-T-5620-M3

SPECIFICATIONS

MAXIMUM RECOMMENDED WORKING TEMPERATURE

100°C (continuous) for 1/16" OD tubing with ID up to 0.75 mm

MAX WORKING PRESSURES AT ROOM TEMPERATURE

See page 108

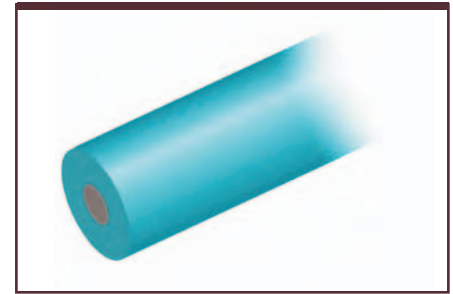
TUBING TOLERANCES

Tubing OD	OD and ID (±)
1/32"	0.025 mm
1/16"	0.025 mm

OPTIONS

Contact your distributor or VICI about:

- Longer bulk tubing lengths
- Customized ODs and IDs



1/16" OD

PRE-CUT LENGTHS

For natural PEEK tubing, see page 9.

ID (mm)	Color	NEW 1.5 m	3 m	10 m	NEW 15 m	25 m
		Prod No	Prod No	Prod No	Product No.	Product No.
0.10	Black	JR-T-6020-M1.5	JR-T-6020-M3	JR-T-6020-M10	JR-T-6020-M15	JR-T-6020-M25
0.13	Red	JR-T-6007-M1.5	JR-T-6007-M3	JR-T-6007-M10	JR-T-6007-M15	JR-T-6007-M25
0.15	Purple	JR-T-6030-M1.5	JR-T-6030-M3	JR-T-6030-M10	JR-T-6030-M15	JR-T-6030-M25
0.18	Yellow	JR-T-6008-M1.5	JR-T-6008-M3	JR-T-6008-M10	JR-T-6008-M15	JR-T-6008-M25
0.25	Blue	JR-T-6009-M1.5	JR-T-6009-M3	JR-T-6009-M10	JR-T-6009-M15	JR-T-6009-M25
0.38	Grey	JR-T-6040-M1.5	JR-T-6040-M3	JR-T-6040-M10	JR-T-6040-M15	JR-T-6040-M25
0.50	Orange	JR-T-6010-M1.5	JR-T-6010-M3	JR-T-6010-M10	JR-T-6010-M15	JR-T-6010-M25
0.75	Green	JR-T-6011-M1.5	JR-T-6011-M3	JR-T-6011-M10	JR-T-6011-M15	JR-T-6011-M25

TECH TIP

See our dual layer PEEK tubing for solid colored PEEK tubing with no possibility of stream coming into contact with coloring agents. 11

MORE INFO

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 PEEK fittings
 High pressure . . . 24-35
 Low pressure . 48, 50-53
 PEEK tubing elbows . . 100



**SPECIFICATIONS –
ETFE AND PFA**

MAX WORKING PRESSURES

See page 108

TUBING TOLERANCES

Tubing OD	OD and ID (±)
1/16" *	0.05 mm
1/8"	0.10 mm
1/4"	0.10 mm OD
	0.20 mm ID

* ETFE with 0.20 mm ID:
OD ± 0.07
Wall ± 0.08

OPTIONS

Contact your distributor or VICI about:

- Longer tubing lengths at competitive bulk prices
- Customized ODs and IDs

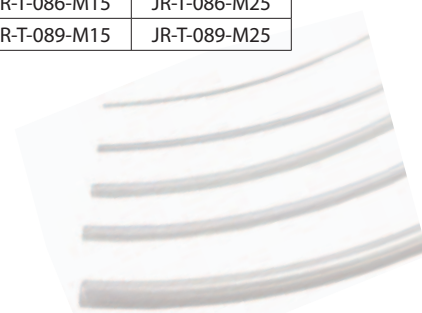
ETFE TUBING

ETFE (ethyltrifluoroethylene) tubing is particularly suitable for HPLC, since it has a higher burst pressure as compared to PTFE. 1/16" OD x 0.25 mm ID tubing will withstand up to 186 bar (2700 psi) with water as mobile phase. However, it is important to note that when used with organic solvents, ETFE tubing may swell, reducing that maximum pressure to 70 bar (1000 psi).

This is the ideal polymer for applications with chloride salts, which typically corrode stainless steel.

OD	ID (mm)	NEW			NEW	
		1.5 m	3 m	10 m	15 m	25 m
Product No.	Product No.	Product No.	Product No.	Product No.	Product No.	Product No.
1/32"	0.25	JR-T-084-M1.5	JR-T-084-M3	JR-T-084-M10	JR-T-084-M15	JR-T-084-M25
1/16"	0.20	JR-T-079-M1.5	JR-T-079-M3	JR-T-079-M10	JR-T-079-M15	JR-T-079-M25
	0.25	JR-T-080-M1.5	JR-T-080-M3	JR-T-080-M10	JR-T-080-M15	JR-T-080-M25
	0.50	JR-T-082-M1.5	JR-T-082-M3	JR-T-082-M10	JR-T-082-M15	JR-T-082-M25
	0.75	JR-T-083-M1.5	JR-T-083-M3	JR-T-083-M10	JR-T-083-M15	JR-T-083-M25
	1.00	JR-T-085-M1.5	JR-T-085-M3	JR-T-085-M10	JR-T-085-M15	JR-T-085-M25
1/8"	1.59	JR-T-086-M1.5	JR-T-086-M3	JR-T-086-M10	JR-T-086-M15	JR-T-086-M25
	2.40	JR-T-089-M1.5	JR-T-089-M3	JR-T-089-M10	JR-T-089-M15	JR-T-089-M25

OD	ID (mm)	1 m	3 m
		Product No.	Product No.
3.0 mm	1.0	JR-T-087-M1	JR-T-087-M3
6.0 mm	4.0	JR-T-088-M1	JR-T-088-M3
6.4 mm	4.8	JR-T-090-M1 NEW	JR-T-090-M3 NEW



PFA TUBING

PFA (perfluoroalkoxy) tubing from VICI Jour has excellent chemical stability and mechanical strength. 1/16" OD high purity tubing has a maximum pressure rating of up to 100 bar (1450 psi), while 1/8" OD tubing can be used at up to 72 bar (1050 psi).

Always use PFA instead of PTFE if gas permeability is an issue.

OD	ID (mm)	NEW			NEW	
		1.5 m	3 m	10 m	15 m	25 m
Product No.	Product No.	Product No.	Product No.	Product No.	Product No.	Product No.
1/16"	0.50	JR-T-4001-M1.5	JR-T-4001-M3	JR-T-4001-M10	JR-T-4001-M15	JR-T-4001-M25
	0.75	JR-T-4002-M1.5	JR-T-4002-M3	JR-T-4002-M10	JR-T-4002-M15	JR-T-4002-M25
	1.00	JR-T-4007-M1.5	JR-T-4007-M3	JR-T-4007-M10	JR-T-4007-M15	JR-T-4007-M25
1/8"	1.59	JR-T-4003-M1.5	JR-T-4003-M3	JR-T-4003-M10	JR-T-4003-M15	JR-T-4003-M25

OD	ID (mm)	per meter
		Product No.
1/8"	1.70	JR-T-4005
3/16"	3.20	JR-T-4009
1/4"	3.97	JR-T-4006 NEW
	4.35	JR-T-4004
	4.80	JR-T-4008 NEW



TECH TIP

- When selecting tubing for low pressure applications, give careful consideration to gas permeability characteristics.
- Use PFA instead of PTFE if gas permeability is an issue.

MORE INFO

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Low pressure fittings 46-55
Solviflex coiled PFA tubing 84

CONVERSIONS

50 µm = .002"	0.13 mm = .005"	3.97 mm = .156"
75 µm = .003"	0.15 mm = .006"	4.0 mm = .16"
100 µm = .004"	0.18 mm = .007"	4.35 mm = .17"
125 µm = .005"	0.20 mm = .008"	4.8 mm = .19"
150 µm = .006"	0.25 mm = .01"	1.0 m = 3.28'
0.013 mm = .0005"	0.38 mm = .015"	1.5 m = 4.92'
0.025 mm = .001"	0.50 mm = .02"	3.0 m = 9.84'
0.050 mm = .002"	0.75 mm = .03"	5.0 m = 16.40'
0.064 mm = .0025"	1.00 mm = .04"	10.0 m = 32.80'
0.075 mm = .003"	1.59 mm = 1/16"	15.0 m = 49.21'
0.07 mm = .0027"	1.70 mm = .067"	25.0 m = 82.02'
0.08 mm = .0031"	2.40 mm = .094"	
0.10 mm = .004"	3.20 mm = .126"	



PTFE TUBING

PTFE (polytetrafluoroethylene) tubing is chemically inert and suitable for lower pressure applications. Typically 1/16" OD tubing holds up to 62 bar (900 psi) and 1/8" up to 35 bar (500 psi). Maximum continuous operating temperature is 100°C.

PTFE tubing – solid color-coded

Solid colors identify the tubing ID.

Black PTFE, available in two IDs, is recommended for light sensitive applications such as enzymatic reactions, luminescent reactions, connecting to a flow cell, and radioactive HPLC.

OD	ID (mm)	Color	3 m	10 m	25 m
			Product No.	Product No.	Product No.
1/16"	0.25	Blue	JR-T-4011C-M3	JR-T-4011C-M10	JR-T-4011C-M25
	0.25	Black	JR-T-6808-M3	JR-T-6808-M10	JR-T-6808-M25
	0.50	Black	JR-T-6811-M3	JR-T-6811-M10	JR-T-6811-M25
	0.50	Orange	JR-T-4183C-M3	JR-T-4183C-M10	JR-T-4183C-M25
	0.75	Green	JR-T-4036C-M3	JR-T-4036C-M10	JR-T-4036C-M25



SPECIFICATIONS

MAXIMUM RECOMMENDED WORKING TEMPERATURE

100°C (continuous)

MAX WORKING PRESSURES AT ROOM TEMPERATURE

See page 108

TUBING TOLERANCES

Tubing OD	OD and ID (±)
1/16"	0.05 mm
1/8"	0.10 mm
1/4"	0.10 mm
1/2"	0.20 mm

OPTIONS

Contact your distributor or VICI about:

- Longer tubing lengths at competitive bulk prices
- Customized ODs and IDs

t TECH TIP

Use PFA instead of PTFE if gas permeability is an issue.

t TECH TIP

Use black PTFE for light sensitive applications such as enzymatic reactions, luminescent reactions, connecting to a flow cell, and radioactive HPLC.

➔ MORE INFO

About PTFE. 104
 Chemical resistance . . 110
 Maximum working pressure 108
 Tubing ID chart:
 volume per length . . 107
 Tubing tolerances . . . 109

➔ SEE ALSO

Clean-cut polymeric tubing cutter 100
 Easy-Flange kit 99
 Flanged fittings. . . . 47, 49
 Flangeless fittings . . 47-48

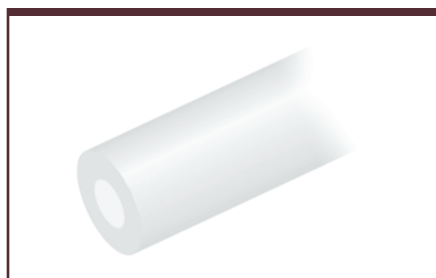


PTFE tubing – natural color

OD	ID (mm)	NEW			NEW		
		1.5 m	3 m	5 m	10 m	15 m	25 m
		Product No.	Product No.	Product No.	Product No.	Product No.	Product No.
1/16"	0.18	JR-T-6805-M1.5	JR-T-6805-M3	JR-T-6805-M5	JR-T-6805-M10	JR-T-6805-M15	JR-T-6805-M25
	0.25	JR-T-4011-M1.5	JR-T-4011-M3	JR-T-4011-M5	JR-T-4011-M10	JR-T-4011-M15	JR-T-4011-M25
	0.50	JR-T-4183-M1.5	JR-T-4183-M3	JR-T-4183-M5	JR-T-4183-M10	JR-T-4183-M15	JR-T-4183-M25
	0.75	JR-T-4036-M1.5	JR-T-4036-M3	JR-T-4036-M5	JR-T-4036-M10	JR-T-4036-M15	JR-T-4036-M25
	1.00	JR-T-6807-M1.5	JR-T-6807-M3	JR-T-6807-M5	JR-T-6807-M10	JR-T-6807-M15	JR-T-6807-M25
1/8"	1.59	JR-T-6800-M1.5	JR-T-6800-M3	JR-T-6800-M5	JR-T-6800-M10	JR-T-6800-M15	JR-T-6800-M25
	2.40	JR-T-4037-M1.5	JR-T-4037-M3	JR-T-4037-M5	JR-T-4037-M10	JR-T-4037-M15	JR-T-4037-M25

OD	ID (mm)	NEW			NEW	
		1.5 m	3 m	10 m	15 m	25 m
		Product No.	Product No.	Product No.	Product No.	Product No.
2 mm	1.70	JR-T-6801-M1.5	JR-T-6801-M3	JR-T-6801-M10	JR-T-6801-M15	JR-T-6801-M25
4 mm	3.00	JR-T-4039-M1.5	JR-T-4039-M3	JR-T-4039-M10	—	—

Tubing OD		ID	per meter Product No.
in.	mm		
3/16"	4.76	3.76 mm	JR-T-4041
0.236"	6.00	4.00	JR-T-4042 NEW
1/4"	6.35	4.76 mm	JR-T-6810 NEW
0.315"	8.00	6.00 mm	JR-T-4050 NEW
1/2"	12.7	9.53 mm	JR-T-4043 NEW


CONVERSIONS

50 µm = .002"	0.13 mm = .005"	3.97 mm = .156"
75 µm = .003"	0.15 mm = .006"	4.0 mm = .16"
100 µm = .004"	0.18 mm = .007"	4.35 mm = .17"
125 µm = .005"	0.20 mm = .008"	4.8 mm = .19"
150 µm = .006"	0.25 mm = .01"	1.0 m = 3.28'
0.013 mm = .0005"	0.38 mm = .015"	1.5 m = 4.92'
0.025 mm = .001"	0.50 mm = .02"	3.0 m = 9.84'
0.050 mm = .002"	0.75 mm = .03"	5.0 m = 16.40'
0.064 mm = .0025"	1.00 mm = .04"	10.0 m = 32.80'
0.075 mm = .003"	1.59 mm = 1/16"	15.0 m = 49.21'
0.07 mm = .0027"	1.70 mm = .067"	25.0 m = 82.02'
0.08 mm = .0031"	2.40 mm = .094"	
0.10 mm = .004"	3.20 mm = .126"	



FEP TUBING

FEP (FluorinatedEthylenePropylene) tubing is chemically inert to most HPLC solvents, and is recommended for low pressure applications. Typically 1/16" OD tubing holds up to 117 bar (1700 psi), and 1/8" OD holds up to 70 bar (1000 psi).

We recommend FEP for ion chromatography applications.

OD	ID (mm)	1 m Product No.	3 m Product No.	10 m Product No.
1/32"	0.13	JR-T-6605-M1	JR-T-6605-M3	JR-T-6605-M10
	0.15	JR-T-6606-M1	JR-T-6606-M3	JR-T-6606-M10
	0.18	JR-T-6607-M1	JR-T-6607-M3	JR-T-6607-M10
	0.20	JR-T-6797-M1	JR-T-6797-M3	JR-T-6797-M10
	0.25	JR-T-6610-M1	JR-T-6610-M3	JR-T-6610-M10
	0.38	JR-T-6615-M1	JR-T-6615-M3	JR-T-6615-M10
	0.40	JR-T-6798-M1	JR-T-6798-M3	JR-T-6798-M10
	0.50	JR-T-6620-M1	JR-T-6620-M3	JR-T-6620-M10

OD	ID (mm)	NEW 1.5 m Product No.	3 m Product No.	10 m Product No.	NEW 15 m Product No.	25 m Product No.
1/16"	0.25	JR-T-6812-M1.5	JR-T-6812-M3	JR-T-6812-M10	JR-T-6812-M15	JR-T-6812-M25
	0.30	JR-T-6702-M1.5	JR-T-6702-M3	JR-T-6702-M10	JR-T-6702-M15	JR-T-6702-M25
	0.50	JR-T-6802-M1.5	JR-T-6802-M3	JR-T-6802-M10	JR-T-6802-M15	JR-T-6802-M25
	0.75	JR-T-6803-M1.5	JR-T-6803-M3	JR-T-6803-M10	JR-T-6803-M15	JR-T-6803-M25
	1.00	JR-T-6806-M1.5	JR-T-6806-M3	JR-T-6806-M10	JR-T-6806-M15	JR-T-6806-M25
1/8"	1.59	JR-T-6804-M1.5	JR-T-6804-M3	JR-T-6804-M10	JR-T-6804-M15	JR-T-6804-M25
	2.10	JR-T-6813-M1.5	JR-T-6813-M3	JR-T-6813-M10	JR-T-6813-M15	JR-T-6813-M25
3/16"	3.18	JR-T-6835-M1.5	JR-T-6835-M3	JR-T-6835-M10	JR-T-6835-M15	JR-T-6835-M25
1 mm	0.50	JR-T-6105-M1.5	JR-T-6105-M3	JR-T-6105-M10	JR-T-6105-M15	JR-T-6105-M25
2 mm	1.00	JR-T-6210-M1.5	JR-T-6210-M3	JR-T-6210-M10	JR-T-6210-M15	JR-T-6210-M25
3 mm	1.00	JR-T-6310-M1.5	JR-T-6310-M3	JR-T-6310-M10	JR-T-6310-M15	JR-T-6310-M25
	2.00	JR-T-6320-M1.5	JR-T-6320-M3	JR-T-6320-M10	JR-T-6320-M15	JR-T-6320-M25

OD	ID (mm)	Product No.	
4 mm	3.00	JR-T-6860	NEW
1/4"	3.96	JR-T-6840	NEW
	4.35	JR-T-6809	
	3/16"	JR-T-6841	NEW
5/16"	1/4"	JR-T-6650	NEW

CONVERSIONS

0.05 mm = .002"	0.50 mm = .02"	3.76 mm = .15"	1.0 m = 3.28'
0.10 mm = .004"	0.75 mm = .03"	3.96 mm = .156"	1.5 m = 4.92'
0.13 mm = .005"	1.00 mm = .04"	4.00 mm = .157"	3.0 m = 9.84'
0.15 mm = .006"	1.59 mm = 1/16"	4.35 mm = .17"	5.0 m = 16.40'
0.18 mm = .007"	1.70 mm = .067"	4.76 mm = 3/16"	10.0 m = 32.80'
0.20 mm = .008"	2.00 mm = .08"	4.80 mm = .189"	15.0 m = 49.21'
0.25 mm = .01"	2.10 mm = .083"	6.00 mm = .24"	25.0 m = 82.02'
0.30 mm = .012"	2.40 mm = .094"	6.35 mm = 1/4"	
0.38 mm = .015"	3.00 mm = .12"	7.94 mm = 5/16"	
0.40 mm = .016"	3.18 mm = 1/8"	9.35 mm = 3/8"	

SPECIFICATIONS

MAXIMUM RECOMMENDED WORKING TEMPERATURE

80°C (continuous)

MAX WORKING PRESSURES AT ROOM TEMPERATURE

See page 108

TUBING TOLERANCES

Tubing OD	OD and ID (±)
1/32"	0.025 mm
1/16"	0.08 mm
1/8"	0.10 mm
1/4"	0.10 mm OD
	0.20 mm ID

OPTIONS

Contact your distributor or VICI about:

- Longer tubing lengths at competitive bulk prices
- Customized ODs and IDs



TECH TIP

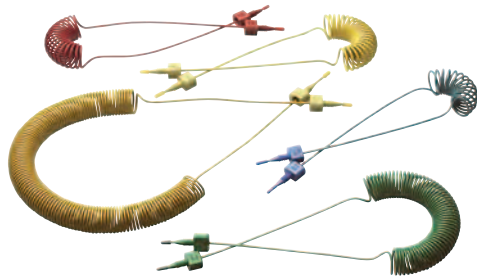
When selecting tubing for low pressure applications, give careful consideration to gas permeability characteristics.

MORE INFO

About FEP.....113
 Chemical resistance ..110
 Maximum working pressure108
 Tubing ID chart:
 volume per length ..107
 Tubing tolerances109

SEE ALSO

Clean-cut polymeric tubing cutter100
 Easy-Flange kit99
 Low pressure fittings46-55



THERMO-FORMED POLYMERIC TUBING

- Available in a variety of polymers
- Provides axial flexibility
- Telephone cables or customer-specified shapes

VICI Jour offers thermo-formed tubing in various geometric shapes and polymers. The form will maintain its shape so long as the temperature does not exceed 100°C.

Straight tubing, spirals, or even more complex forms – just define your form and material on a drawing for us.

FOR PRICING
 Contact VICI or your local distributor for more information or a quotation.

SPECIFICATIONS

PRESSURE

Low pressure only

TUBING

1/8" OD 1.65 mm ID

TOLERANCES

±0.05 mm (.002")
 OD and ID

MATERIALS

Tubing: FEP coated with PVDF
 Insert PCTFE
 Ferrule ETFE
 Fitting PPS

OPTIONS

Contact us for more info about longer tubing lengths at competitive bulk prices.

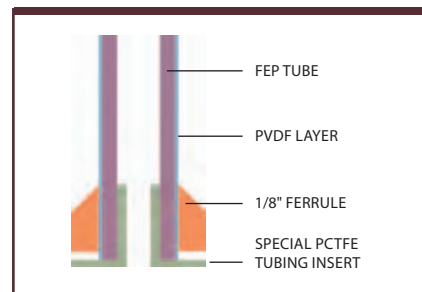
IMPERMEABLE POLYMERIC TUBING

- FEP coated with PVDF
- Excellent chemical resistance
- For technical applications
- Prevents "re-gassing" after degassing in LC applications

PTFE and FEP have very good chemical resistance, but are too permeable to be suitable for mobile phase transfer lines. PVDF, on the other hand, lacks chemical resistance but is a very tight polymer with no observable micropores. Our impermeable tubing is produced by co-extruding PVDF over FEP to combine the best features of both polymers, ensuring that degassed solvent will stay degassed until it reaches the HPLC pump.

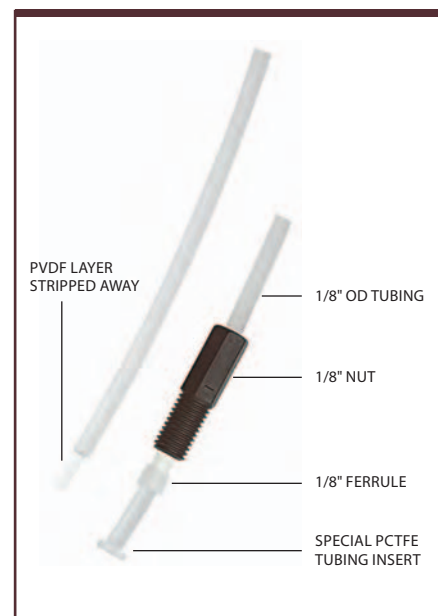
The PVDF layer can easily be stripped away with our Clean-Cut tubing cutter or a razor blade, leaving a length of exposed FEP to extend into the solvent reservoir.

When making connections, a special PCTFE tubing insert fits into the ID of the tubing and seals against the bottom of the port, preventing the solvent from contacting the PVDF layer at the end of the tube.



	3 m <i>Product No.</i>	10 m <i>Product No.</i>
Impermeable tubing, 1/8" OD x 1.65 mm ID	JR-T-6130-M3	JR-T-6130-M10

	<i>Qty/pkg</i>	<i>Product No.</i>
Additional spare parts		
PCTFE tubing inserts	10	JR-6141-10
1/8" PPS nuts	10	JR-55071-10
1/8" ETFE ferrules	10	JR-051-10
Fitting kit	<i>Contains:</i>	
	PCTFE tubing inserts	2
	1/8" PPS nuts	2
	1/8" ETFE ferrules	2
		JR-6140



t TECH TIP

Use FEP or PFA tubing inside the solvent reservoir, since PVDF has limited chemical resistance.

t TECH TIP

Always use the specially-designed tubing insert to prevent solvent contact with the PVDF layer.

➔ MORE INFO

- About FEP 113
- About PVDF 114
- Chemical resistance . . 110
- Tubing ID chart:
 volume per length . . 107
- Tubing tolerances . . . 109

➔ SEE ALSO

- Clean-cut polymeric tubing cutter 100
- Color-sleeve fingertight adapters . 23



FUSED SILICA CAPILLARY TUBING **NEW**

Untreated fused silica (FS) capillaries

FS capillaries are manufactured by coating fused silica with a layer of polyimide, and consist of synthetically manufactured quartz glass in amorphous (non-crystalline) form.

Due to the polyimide coating, the tubing is flexible and robust. The tubing is stable at temperatures up to 350°C, and is ideal for applications in Micro- and Nano-LC.

FS capillaries are chemically inert. They can be used with organic solvents and in the pH range from 0 – 10.

Sold by the meter.

OD	ID	per meter Product No.
360 µm	25 µm	JR-T-7360-025
	50 µm	JR-T-7360-050
	75 µm	JR-T-7360-075
	100 µm	JR-T-7360-100
	150 µm	JR-T-7360-150
	180 µm	JR-T-7360-180



SPECIFICATIONS

MAXIMUM RECOMMENDED WORKING TEMPERATURE
350°C

PRESSURE RATING
Up to 6000 bar
(87,000 psi)

TOLERANCES
OD ± 5 µm (.002")
ID ± 5 µm (.002")

Note: Parameters for temperature and pressure ratings **are strongly dependent on bending, chemicals used, pressure, and temperature.**

t TECH TIP

Use our 360 µm Nanovolume® fittings to connect this tubing free of dead volume.

PEEK fittings 44
Stainless fittings 45

↔ CONVERSIONS

50 µm = .002"
75 µm = .003"
100 µm = .004"
0.13 mm = .005"
0.18 mm = .007"
0.25 mm = .01"
0.38 mm = .015"
0.50 mm = .02"
0.75 mm = .03"
1.00 mm = .04"
1.52 mm = XXXX
1.59 mm = 1/16"
1.70 mm = .067"
2.10 mm = .083"
2.16 mm = .XXX"
4.65 mm = .XXX"



STAINLESS STEEL TUBING

This is the standard tubing material for chromatography, suitable for a wide variety of applications. Close tolerances are held on both ID and OD.

Note that bulk tubing is roughly cut with tubing pliers, so the ends must be properly cut before use. For electrolytically-cut premium SS tubing, please order our pre-cut tubing (pages 20-21). Pre-cut tubing is steam cleaned and offers burr-free ends – ready to use for high end LC applications.

Stainless tubing – premium grade

UHPLC, HPLC, GC

SPECIFICATIONS

PRESSURE RATING

Values shown are minimum; rating varies with ID; (see page 107)

OD	bar	psi
360 µm	679	9857
1/32"	400	5800
1/16"	365	5300
1/8"	315	4600

TOLERANCES

Tubing ID	OD and ID (±)
50 µm	0.010 mm
75 µm	0.010 mm
100 µm	0.010 mm
all other ID's	0.025 mm

OPTIONS

Contact us for more info about longer tubing lengths at competitive bulk prices.

- Cold drawn, seamless Type 316 stainless steel
- Variety of sizes for UHPLC, HPLC, and GC applications
- Smooth internal surface
- Soft annealed OD for easy ferrule connections

Our premium grade seamless stainless steel tubing is the base for all high pressure and ultra-high pressure lines in your equipment.

OD	ID (mm)	Product No.			per meter Product No.
		1.5 m	3 m	10 m	
1/32"	0.13	JR-TSS.505-M1.5	JR-TSS.505-M3	JR-TSS.505-M10	360 µm
	0.18	JR-TSS.507-M1.5	JR-TSS.507-M3	JR-TSS.507-M10	
	0.25	JR-TSS.510-M1.5	JR-TSS.510-M3	JR-TSS.510-M10	150
	0.50	JR-TSS.520-M1.5	JR-TSS.520-M3	JR-TSS.520-M10	
1/16"	0.13	JR-TSS105-M1.5	JR-TSS105-M3	JR-TSS105-M10	per meter Product No.
	0.25	JR-TSS110-M1.5	JR-TSS110-M3	JR-TSS110-M10	
	0.38	JR-TSS115-M1.5	JR-TSS115-M3	JR-TSS115-M10	
	0.50	JR-TSS120-M1.5	JR-TSS120-M3	JR-TSS120-M10	
	0.75	JR-TSS130-M1.5	JR-TSS130-M3	JR-TSS130-M10	
	1.00	JR-TSS140-M1.5	JR-TSS140-M3	JR-TSS140-M10	
1/8"	0.75	JR-TSS230-M1.5	JR-TSS230-M3	JR-TSS230-M10	per meter Product No.
	1.00	JR-TSS240-M1.5	JR-TSS240-M3	JR-TSS240-M10	
	1.52	JR-TSS260-M1.5	JR-TSS260-M3	JR-TSS260-M10	
	1.70	JR-TSS267-M1.5	JR-TSS267-M3	JR-TSS267-M10	
	2.16	JR-TSS285-M1.5	JR-TSS285-M3	JR-TSS285-M10	

TECH TIP

For zero dead volume connections, we strongly recommend pre-cut stainless steel tubing . . . 20

NOTE

ID dimensions in mm are converted from nominal inch dimensions.

MORE INFO

About Type 316 stainless steel 114
Maximum working pressure 107
Tubing ID chart: volume per length . . 107

SEE ALSO

Pre-cut SS tubing . . . 20-21
Stainless steel tubing cutter 101
Stainless fittings 36-41

SPECIFICATIONS

PRESSURE RATING

Values shown are minimum; rating varies with ID; (see page 93)

OD	bar	psi
1/16"	315	4600
1/8"	315	4600

TOLERANCES

OD	± 0.05mm (.002")
ID	± 0.05mm (.002")

OPTIONS

Contact us for more info about longer tubing lengths at competitive bulk prices.

Stainless tubing – standard grade

HPLC, GC

- Type 316 stainless steel, welded under inert gas
- Variety of sizes for HPLC and GC applications
- Smooth internal surface
- Soft annealed OD for easy ferrule connections

OD	ID (mm)	Product No.		
		1.5 m	3 m	10 m
1/16"	0.10	JR-T-625-03-M1.5 NEW	JR-T-625-03-M3 NEW	JR-T-625-03-M10 NEW
	0.13	JR-T-625-04-M1.5	JR-T-625-04-M3	JR-T-625-04-M10
	0.18	JR-T-625-05-M1.5	JR-T-625-05-M3	JR-T-625-05-M10
	0.25	JR-T-625-10-M1.5	JR-T-625-10-M3	JR-T-625-10-M10
	0.50	JR-T-625-20-M1.5	JR-T-625-20-M3	JR-T-625-20-M10
	0.75	JR-T-625-30-M1.5	JR-T-625-30-M3	JR-T-625-30-M10
1/8"	1.00	JR-T-625-40-M1.5	JR-T-625-40-M3	JR-T-625-40-M10
1/8"	2.1	JR-T-626-00-M1.5	JR-T-626-00-M3	JR-T-626-00-M10

OD	ID (mm)	per meter Product No.
1/4"	4.65	JR-T-628-00



Stainless steel tubing – pre-cut

- For zero dead volume connections
- Steam-cleaned and ready to use
- Soft annealed OD for easy ferrule connections
- Color bands for quick identification of tubing ID



VICI Jour offers pre-cut 1/32" and 1/16" stainless steel tubing in lengths most commonly required in UHPLC and HPLC systems. The tubes are cut to square, burr-free ends for zero dead volume connections. Colored bands allow quick ID identification. VICI pre-cut tubing is specially cleaned with steam from micro-filtered deionized water, which removes both organic and inorganic contaminants. Longer tubes that cannot be steam-cleaned are cleaned with liquid hexane. Softener-free polyethylene caps are used to prevent any contamination during shipment and storage.

SPECIFICATIONS

PRESSURE RATING

Varies with ID; minimum is 365 bar (5300 psi) (see page 107)

TOLERANCES

Tubing OD	OD and ID (±)
1/32"	0.01 mm
1/16"	± 0.05 mm OD
	± 0.025 mm ID

PRE-CUT TUBING FOR STANDARD HPLC

OD	ID (mm)	Color	NEW		
			50 mm Product No.	100 mm Product No.	130 mm Product No.
1/16"	0.13	Red	JR-T-97005	JR-T-97010	JR-T-97012
	0.18	Yellow	JR-T-97025	JR-T-97030	JR-T-97032
	0.25	Blue	JR-T-97045	JR-T-97055	JR-T-97057
	0.50	Orange	JR-T-97075	JR-T-97080	JR-T-97082
	0.75	Green	JR-T-97095	JR-T-97100	JR-T-97102

OD	ID (mm)	Color	NEW		
			180 mm Product No.	200 mm Product No.	300 mm Product No.
1/16"	0.13	Red	JR-T-97013	JR-T-97015	JR-T-97020
	0.18	Yellow	JR-T-97033	JR-T-97035	JR-T-97040
	0.25	Blue	JR-T-97058	JR-T-97060	JR-T-97065
	0.50	Orange	JR-T-97083	JR-T-97085	JR-T-97090
	0.75	Green	JR-T-97103	JR-T-97105	JR-T-97110

PRE-CUT TUBING FOR MICRO LC **NEW**

Use with 1/32" Nanovolume fittings, page 43.

OD	ID (mm)	Color	NEW		
			50 mm Product No.	100 mm Product No.	130 mm Product No.
1/32" NEW	0.050	Blue	JR-T-91050	JR-T-91100	JR-T-91130
	0.075	Black	JR-T-92050	JR-T-92100	JR-T-92130

OD	ID (mm)	Color	NEW		
			180 mm Product No.	200 mm Product No.	300 mm Product No.
1/32" NEW	0.050	Blue	JR-T-91180	JR-T-91200	JR-T-91300
	0.075	Black	JR-T-92180	JR-T-92200	JR-T-92300

! NOTE

Do not bend Micro LC tubing more than 90° to avoid closure.

t TECH TIP

Contact your local distributor or VICI for custom lengths.

↔ CONVERSIONS

- 50 µm = .002"
- 75 µm = .003"
- 100 µm = .004"
- 125 µm = .005"
- 150 µm = .006"
- 0.13 mm = .005"
- 0.18 mm = .007"
- 0.25 mm = .01"
- 0.50 mm = .02"
- 0.75 mm = .03"



SPECIFICATIONS

PRESSURE RATING

Varies with ID; minimum is 365 bar (5300 psi) (see page 107)

TOLERANCES

OD ±0.05mm (.002")
ID ±0.025mm (.001")

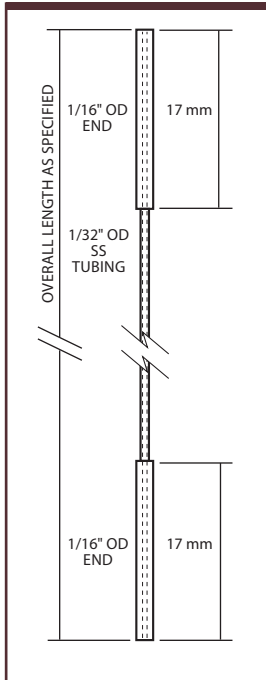
Stainless steel tubing – pre-cut flexible

- Seamless 1/32" tubing with 1/16" laser-welded ends
- For zero dead volume connections
- Steam-cleaned and ready to use
- Soft annealed OD for easy ferrule connections
- Color bands for quick identification

Our flexible pre-cut stainless steel tubing is made of 1/32" premium grade 316 stainless steel tubing with ends laser-welded into 1/16" tubing of the same premium grade.

The tubes are cut to square, burr-free ends for zero dead volume connections. Colored bands allow quick ID identification.

VICI pre-cut tubing is specially cleaned with steam from micro-filtered deionized water, which removes both organic and inorganic contaminants. Longer tubes that cannot be steam-cleaned are cleaned with liquid hexane. Softener-free polyethylene caps are used to prevent any contamination during shipment and storage.



PRE-CUT FLEXIBLE TUBING FOR STANDARD HPLC

OD	ID (mm)	Color	105 mm	<i>NEW</i> 130 mm	150 mm	<i>NEW</i> 180 mm	200 mm
			Product No.	Product No.	Product No.	Product No.	Product No.
1/16"	0.13	Red	JR-T-96005	JR-T-96008	JR-T-96010	JR-T-96013	JR-T-96015
	0.18	Yellow	JR-T-96105	JR-T-96108	JR-T-96110	JR-T-96113	JR-T-96115
	0.25	Blue	JR-T-96205	JR-T-96208	JR-T-96210	JR-T-96213	JR-T-96215
	0.50	Orange	JR-T-96305	JR-T-96308	JR-T-96310	JR-T-96313	JR-T-96315

OD	ID (mm)	Color	280 mm	400 mm	600 mm	700 mm	900 mm
			Product No.	Product No.	Product No.	Product No.	Product No.
1/16"	0.13	Red	JR-T-96020	JR-T-96025	JR-T-96030	JR-T-96035	—
	0.18	Yellow	JR-T-96120	JR-T-96125	JR-T-96130	JR-T-96135	JR-T-96145
	0.25	Blue	JR-T-96220	JR-T-96225	JR-T-96230	JR-T-96235	—
	0.50	Orange	JR-T-96320	JR-T-96325	JR-T-96330	JR-T-96335	—

