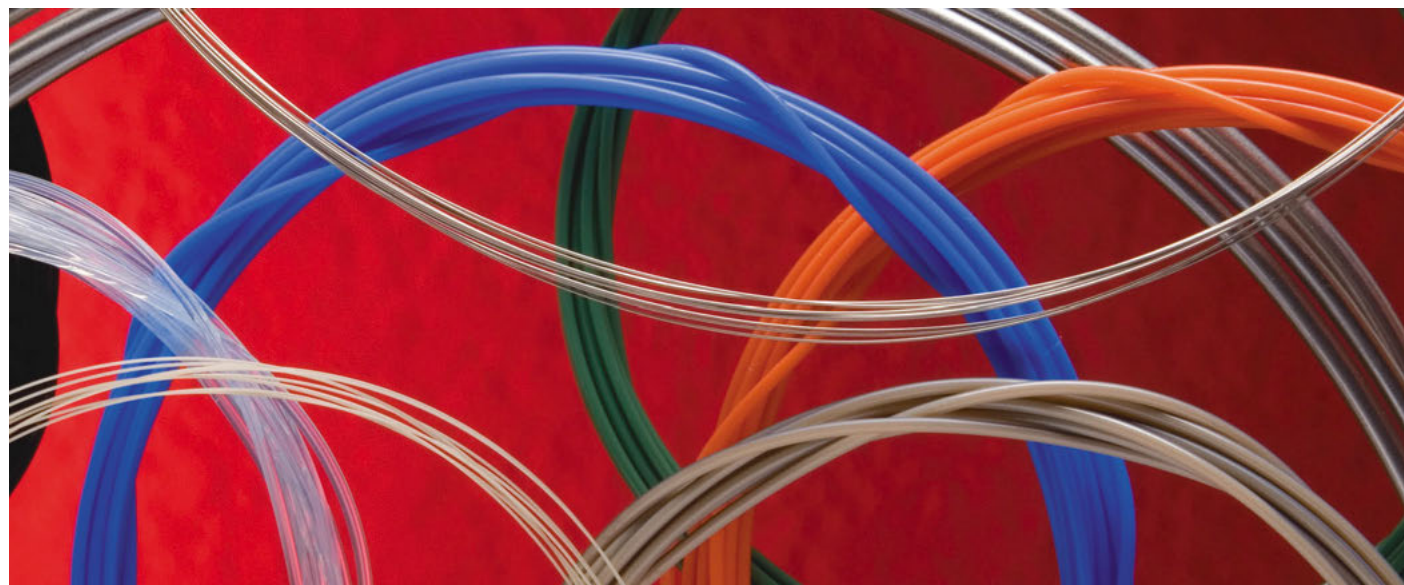


# TUBING



## 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

|  |        |
|--|--------|
| Natural PEEK . . . . .   | page 9 |
| Available in ODs from 360 micron to 1/4", in custom lengths (priced per meter) and packages of 1.5m, 3m, and 10m   |        |
| Striped color-coded PEEK . . . . .   | 10     |
| A stripe is added to the outside of the tubing, so dye never contacts the fluid stream.  |        |
| Dual-layer PEEK . . . . .  | 11     |
| With an inner layer of natural PEEK and an outer layer of color-coded PEEK, there is no possibility of stream contents coming in contact with coloring agents. |        |
| Solid color-coded PEEK . . . . .   | 12     |
| Color coding identifies the ID or your PEEK tubing. Each ID is coded with a different color.   |        |

### OTHER POLYMERIC TUBING

|   |    |
|---|----|
| PFA . . . . .   | 13 |
| ETFE . . . . .  | 13 |
| PTFE  |    |
| Solid color-coded . . . . .   | 14 |
| Natural . . . . .   | 15 |
| FEP . . . . .   | 16 |
| Thermo-formed polymeric tubing . . . . .  | 17 |
| Impermeable tubing . . . . .  | 17 |
| FEP coated with PVDF combines the chemical resistance of FEP with the tight, impermeable structure of PVDF. |    |

### STAINLESS STEEL TUBING

|                                       |    |
|---------------------------------------|----|
| Bulk SS tubing                        |    |
| Premium grade, seamless . . . . .     | 19 |
| Standard grade, welded seam . . . . . | 19 |
| Pre-cut SS tubing                     |    |
| Standard . . . . .                    | 20 |
| Flexible . . . . .                    | 21 |

### 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.

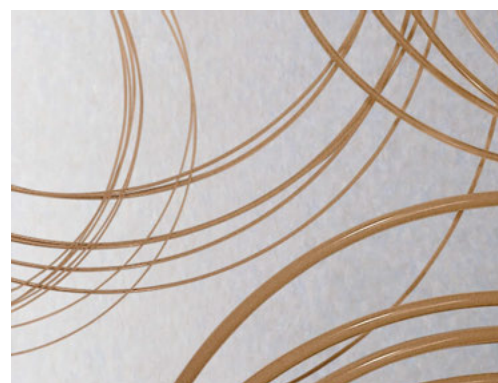
### SEE ALSO

|   |     |
|---|-----|
| SolviFlex                                       |     |
| coiled tubing . . . . .                         | 84  |
| <b>Tubing tools and accessories</b>             |     |
| Easy-Flange kit . . . . .                       | 99  |
| Easy-Flange combi kit . . . . .                 | 99  |
| PEEK tubing elbows . . . . .                    | 100 |
| Tubing cutters for:                             |     |
| Polymeric tubing                                |     |
| Clean-cut . . . . .                             | 100 |
| Guillotine . . . . .                            | 100 |
| Stainless tubing                                |     |
| Wheel type . . . . .                            | 101 |
| Plier type . . . . .                            | 101 |
| Tubing clip – the LC tubing organizer . . . . . | 100 |



## 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
- Tubing tolerances . . . . . 109

### **➔** 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) 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<br><b>NEW</b> | JR-T-5706-M3<br><b>NEW</b> | JR-T-5706-M10<br><b>NEW</b> |
| 1/16" | 0.064   | JR-T-5998-M1.5               | JR-T-5998-M3               | JR-T-5998-M10               |
| 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                    | Tubing tolerance:<br>OD ± 0.037 mm; ID ± 0.0013 mm |
|-------|---------|------------------------------|--|
|       |         | Product No.                  |  |
| 1/16" | 0.064   | JR-T-5998-0005<br><b>NEW</b> |  |
|       | 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  | NEW          |                |              |
|---------|--------|--------------|----------------|--------------|
|         |        | 1 m          | 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             | 3 m           | 5 m           | 10 m           | NEW            | 25 m           |
|---------|--------|-----------------|---------------|---------------|----------------|----------------|----------------|
|         |        | 1.5 m           | Product No.   | Product No.   | Product No.    | 15 m           | Product No.    |
|         |        | 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**

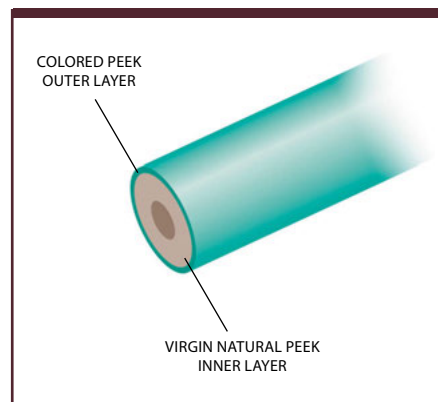
Contact your distributor or VICI about:

- 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            |                | 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  
PEEK . . . . .110=112
- PEEK at higher temperatures . . . . .110
- Maximum working pressure . . . . .108
- Tubing ID chart:  
volume per length . . . . .107
- 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)

#### 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:

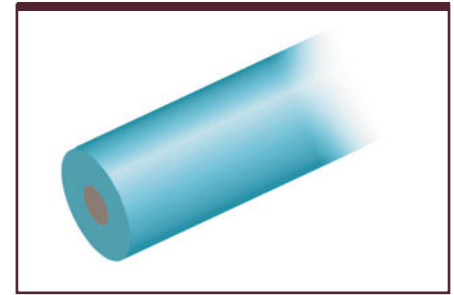
- Longer bulk tubing lengths
- Customized ODs and IDs

### 1/32" OD

#### PRE-CUT LENGTHS

For natural PEEK tubing, see page 9.

| ID (mm) | Color  | 1 m<br>Product No. | 3 m<br>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       |



### 1/16" OD

#### PRE-CUT LENGTHS

For natural PEEK tubing, see page 9.

| ID (mm) | Color  | <b>NEW</b><br>1.5 m<br>Prod No | 3 m<br>Prod No | 10 m<br>Prod No | <b>NEW</b><br>15 m<br>Product No. | 25 m<br>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       |

#### **t** 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

About PEEK® . ....113  
Chemical resistance PEEK . .... 110-112  
PEEK at higher temperatures . . . . .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  
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          |              | 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<br><b>NEW</b> | JR-T-090-M3<br><b>NEW</b> |



**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           |               | 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<br><b>NEW</b> |
|       | 4.35    | JR-T-4004               |
|       | 4.80    | JR-T-4008<br><b>NEW</b> |



**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**

- About ETFE. ....113
- 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
- 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

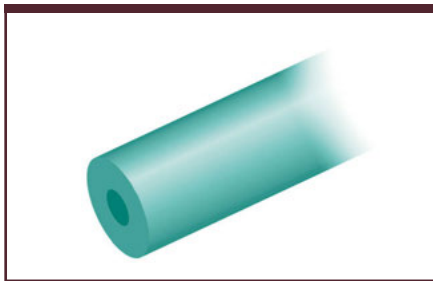
PTFE (polytetrafluoroethylene) tubing is chemically inert and suitable for lower pressure applications. Typically 1/16" OD tubing holds up to 62 bar (900 psi) and 1/8" up to 35 bar (500 psi). Maximum continuous operating temperature is 100°C.

### 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<br>Product No. | 10 m<br>Product No. | 25 m<br>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

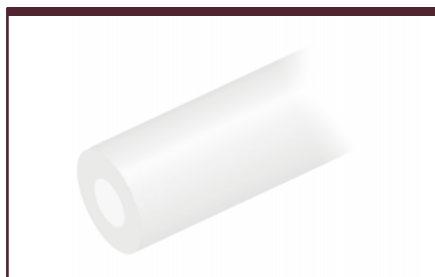


## PTFE tubing – natural color

| OD    | ID (mm) | <b>NEW</b>     |              |              | <b>NEW</b>    |               |               |
|-------|---------|----------------|--------------|--------------|---------------|---------------|---------------|
|       |         | 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) | <b>NEW</b>     |              |               | <b>NEW</b>    |               |
|------|---------|----------------|--------------|---------------|---------------|---------------|
|      |         | 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<br>Product No. |
|-----------|------|---------|--------------------------|
| in.       | mm   |         |                          |
| 3/16"     | 4.76 | 3.76 mm | JR-T-4041                |
| 0.236"    | 6.00 | 4.00    | JR-T-4042<br><b>NEW</b>  |
| 1/4"      | 6.35 | 4.76 mm | JR-T-6810<br><b>NEW</b>  |
| 0.315"    | 8.00 | 6.00 mm | JR-T-4050<br><b>NEW</b>  |
| 1/2"      | 12.7 | 9.53 mm | JR-T-4043<br><b>NEW</b>  |



## 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<br>Product No. | 3 m<br>Product No. | 10 m<br>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<br>1.5 m<br>Product No. | 3 m<br>Product No. | 10 m<br>Product No. | NEW<br>15 m<br>Product No. | 25 m<br>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. | per meter |
|-------|---------|-------------|-----------|
| 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

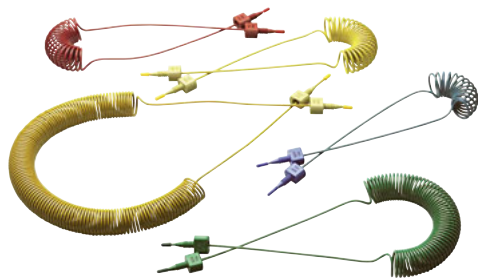
When selecting tubing for low pressure applications, give careful consideration to gas permeability characteristics.

### MORE INFO

About FEP. ....113  
 Chemical resistance ..110  
 Maximum working pressure . ....108  
 Tubing ID chart:  
 volume per length ..107  
 Tubing tolerances ...109

### SEE ALSO

Clean-cut polymeric tubing cutter . ....100  
 Easy-Flange kit . .... 99  
 Low pressure fittings . ....46-55



### 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

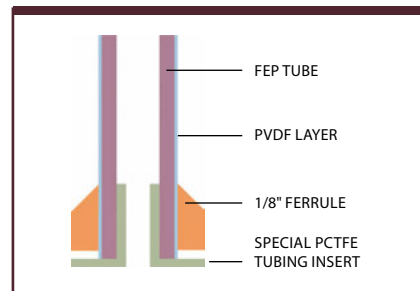
#### OPTIONS

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.

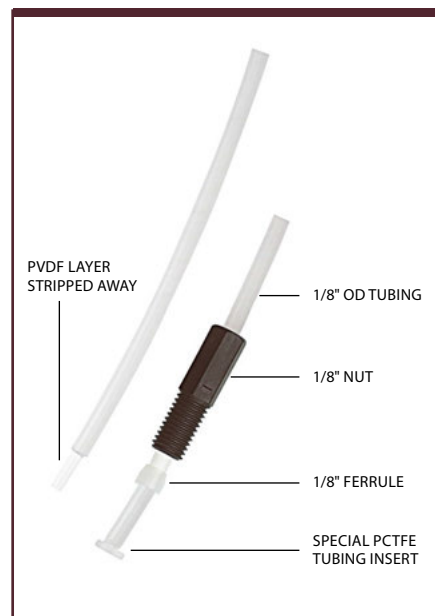


The PVDF layer can easily be stripped away with our Clean-Cut tubing cutter or a razor blade, leaving a length of exposed FEP to extend into the solvent reservoir.

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

|                               | Qty/pkg              | Product No. |
|-------------------------------|----------------------|-------------|
| <b>Additional spare parts</b> |                      |             |
| 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              |             |



#### TECH TIP

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

#### 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



**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<br>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)     | NEW             |               |                | per meter                 |
|-------------|-------------|-----------------|---------------|----------------|---------------------------|
|             |             | 1.5 m           | 3 m           | 10 m           |                           |
| Product No. | Product No. | Product No.     | Product No.   | Product No.    |                           |
| 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  | JR-T-623-03<br><b>NEW</b> |
|             | 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  | JR-T-623-06<br><b>NEW</b> |
|             | 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

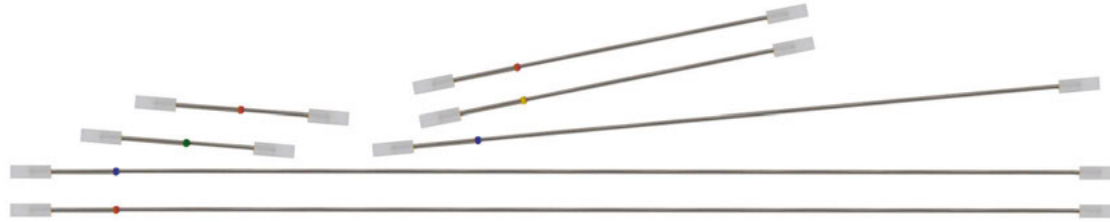
| OD          | ID (mm)     | NEW              |                |                 |
|-------------|-------------|------------------|----------------|-----------------|
|             |             | 1.5 m            | 3 m            | 10 m            |
| Product No. | Product No. | Product No.      | Product No.    | Product No.     |
| 1/16"       | 0.10        | JR-T-625-03-M1.5 | JR-T-625-03-M3 | JR-T-625-03-M10 |
|             | 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 |
|             | 2.1         | JR-T-626-00-M1.5 | JR-T-626-00-M3 | JR-T-626-00-M10 |

| OD   | ID (mm) | per meter   |
|------|---------|-------------|
| 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<br>Product No. | 100 mm<br>Product No. | 130 mm<br>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<br>Product No. | 200 mm<br>Product No. | 300 mm<br>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<br>Product No. | 100 mm<br>Product No. | 130 mm<br>Product No. |
| 1/32"<br><b>NEW</b> | 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<br>Product No. | 200 mm<br>Product No. | 300 mm<br>Product No. |
| 1/32"<br><b>NEW</b> | 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.

#### 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")

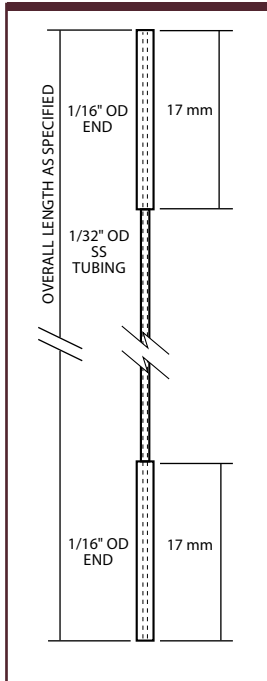
**Stainless steel tubing – pre-cut flexible**

- 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  | NEW                   |                       |                       |                       |                       |
|-------|---------|--------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|       |         |        | 105 mm<br>Product No. | 130 mm<br>Product No. | 150 mm<br>Product No. | 180 mm<br>Product No. | 200 mm<br>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  | NEW                   |                       |                       |                       |                       |
|-------|---------|--------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|       |         |        | 280 mm<br>Product No. | 400 mm<br>Product No. | 600 mm<br>Product No. | 700 mm<br>Product No. | 900 mm<br>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            | —                     |

