



Laboratory Supply Catalog

Pump Tubes | Transmission Tubing | Sample Cups | Digestion Tubes | Centrifuge Tubes and more...



Welcome to Pulse Instrumentation!

Pulse Instrumentation is your source for top quality, factory compatible consumables and repair parts for **Segmented Flow Analyzers, Continuous Flow Analyzers** and **Block Digestion Systems**. Pulse has been supplying parts and consumables to laboratories around the world since 1992 and has a reputation for outstanding service at unbeatable prices. We are located in Wisconsin, USA and have the knowledge to ship your analyzer essentials to any location around the globe.

We supply

- Pump Tubes
- Flared End Pump Tubes
- Bulk Peristaltic Pump Tubing
- Glassware
- Repair Parts
- Laboratory Consumables and more

We also stock the AIM600 Block digestion systems along with Thomas Cain digestion blocks and automated sample preparation systems. For more information visit our websites listed below.

General Information

We require no minimum orders on items we regularly have on hand.

Orders for items on hand are processed within 24 hours during the business week. **Fast turnaround!**

- We ship using UPS, FedEx and DHL. We can also ship with third party freight carriers.
- Our Canadian customers enjoy no duties and taxes if they choose to ship on Pulse' UPS or DHL account.
- Emergency shipments can be processed until 2:30pm, CST (subject to change) and shipped Next Day/2nd Day.

Returns

Order the wrong part? Pulse accepts item returns for unused and normally stocked items within 14 days of receipt. Returns outside of this scope may be subject to a restocking fee.

Resellers

Are you a reseller or do you utilize a large volume of consumables? Quantity discounts are available; contact us for more details!

Need a quote?

Simply go online to www.pulseinstrumentation.com, add the desired items to your cart and then create login to submit your quote to us.

ALL OF US AT PULSE INSTRUMENTATION LOOK FORWARD TO YOUR CONTINUED SUPPORT.

To place your order

Please call +1 (262) 643-4670 or fax +1 (262) 643-4679

or email us at pulse@pulseinstrumentation.com

Our brands:

www.pulseinstrumentation.com | www.flaredtubing.com | www.blockdigestion.com

Other brands we support:

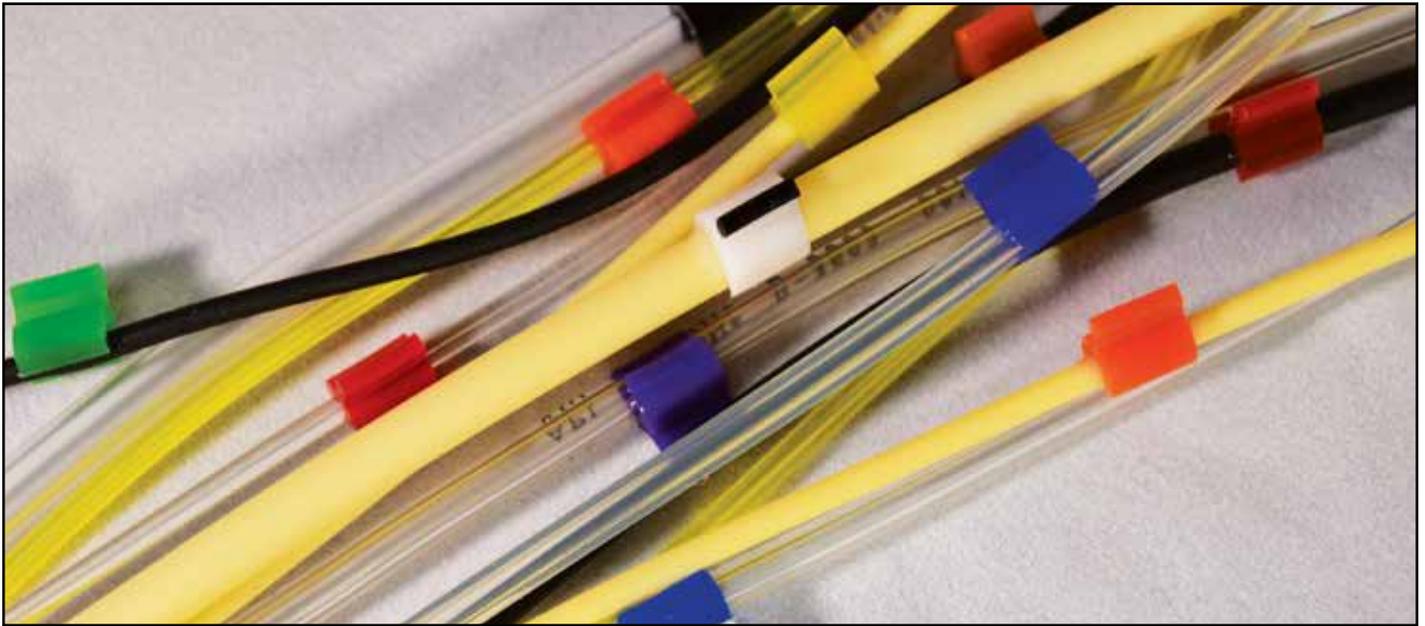
www.thomascaininc.com



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Pump Tubes from Pulse Instrumentation

3



We offer different pump tube materials for all varieties of peristaltic pump applications. The materials are designed with good handling and life expectancy in mind.

Our pump tubes come in the following materials:

- PVC – Phthalate-free Polyvinyl Chloride, ideal for most peristaltic pumps
- PVC Solva – Solvent resistant phthalate-free PVC
- Silicone – Peroxide Cured, medical grade; high strength
- Santoprene® – Medical grade thermoplastic rubber; Autoclavable upon request
- Viton® – DuPont based Fluoroelastomer with great elasticity and resistant to organic acids
- Coming soon: Pharmaprene® (a direct replacement to Santoprene®) – great in vacuum environments with very smooth bore ideal for life science applications

Our Tygon™ branded pump tubes come in the following material:

- Tygon™ LMT-55 – Non-DEHP laboratory formula, phthalate-free for auto-analyzer instruments and more
- Tygon S3® E-3603 – Bio-based and phthalate-free laboratory tubing
- Tygon S3® - E-LFL – Bio-based and phthalate-free long flexible life tubing for micro peristaltic pump dispensing
- Pharmed® BPT – Life science application tubing
- Tygon® Dispense – Coextruded tubing with chemical-resistant, plasticizer-free liner
- Tygon® F-4040-A – Hydrocarbon resistant tubing
- Versilic® SPX-50 – Flexible and resilient peroxide-cured silicone tubing

All of the tubing listed above is available in two and three bridge configurations as well as bulk transmission tubing for macrobore peristaltic pump applications.

If you can't find the tubing you are looking for, call or e-mail us with your request for tubing and we'll do our best to meet your needs.

Tygon® Tubing from Pulse Instrumentation

We offer a broad range of Tygon® tubing for different industry needs, including:

- Water treatment
- Industrial
- Laboratory
- Chemicals, fuels and more

We offer the following types of Tygon® tubing in macrobore and microbore sizes. Let us know what size and material you are looking for and we will provide you with a great price!

Tygon® Laboratory Tubing – LMT-55 • Phthalate Free Tubing	Tygon S3™ E-3603 Laboratory Tubing • Environmentally Friendly
Tygon® F-4040-A Fuel and Lubricant Tubing • Excellent Solvent Resistance	Versilon™ F-5500-A Severe Environment Tubing • Excellent Organic Acid Resistance
Tygon® PharMed® BPT Tubing • Long Life Pump Tubing	Versilon™ NT-80 Flexible Reinforced PVC Tubing
Tygon® LP-1200 Low Permeation Fuel Tubing	Versilon™ 2001 Plasticizer Free Tubing
Tygon® LP-1100 and LP-1500 CARB Rated Tubing	Versilon™ R-3400 UV Resistant Tubing
Tygon S3™ E-LFL Long Flex Life Pump Tubing	Versilon™ SE-200 Inert Tubing
Tygon® non-DEHP Medical/Surgical Tubing • Formulation ND-100-65	Versilon™ Silver Tubing
Tygon® non-DEHP Microbore Tubing • Formulation ND-100-65	Versilon™ C-210-A Precision Polyurethane Tubing
Tygon® High Purity Tubing • Formulation 2475 • Formulation 2475 I.B.	Versilon™ C-544-A-IB Polyurethane Pressure Tubing
Tygon® A-60-F Food Process Tubing	Versilon™ Flexible Vinyl Tubing
Tygon® A-60-F-IB Pressure Tubing	Chemfluor® PTFE Tubing
Tygon® A-60-G Industrial Grade Tubing	Tygon® E-1000 Ultra Soft Tubing
Tygon S3™ B-44-3 Beverage Tubing	Tygon® Chemical Tubing
Tygon S3™ B-44-4X Food, Milk and Dairy Tubing	Tygon® 2375 Ultra Chemical Resistant Tubing
Tygon S3™ B-44-4X-IB Pressure Tubing	Tygon® XL-60 Pump Tubing

PVC Pump Tubes

PVC (Polyvinyl Chloride) is produced by polymerization of Vinyl Chloride Monomer. In order to produce commercial grades of the polymer - which meet various specification requirements - it is compounded with other additives using extrusion and mixing techniques. Depending on the additives used, properties such as flexibility, clarity, color, heat stability, density and chemical resistance can be controlled and modified. This compound can be produced in granular or powder form. PVC has been used across all industries, including medical, for the last 50 years. It is one of the most widely researched and used thermoplastic materials today.

Historically, PVC has been used as a replacement material for rubbers and glass components. Other uses have developed rapidly due to its ability to optimize performance and safety requirements at a low cost. PVC is characterized by a high degree of biocompatibility, transparency - where needed - and flexibility under changing temperatures and humidities. PVC is easily sterilized to meet a number of industry and medical standards. It also has excellent water and chemical resistance. Phthalate free and DEHP FREE to meet stringent European REACH standards.

Product:

Phthalate Free PVC

Full Name:

Polyvinyl Chloride

Applications:

Peristaltic Pump, Laboratory and Pharmaceutical

Characteristics:

Supple, Strong

Excellent Pumping Life
Good Handling Characteristics
Low Permeability

Temperature Range

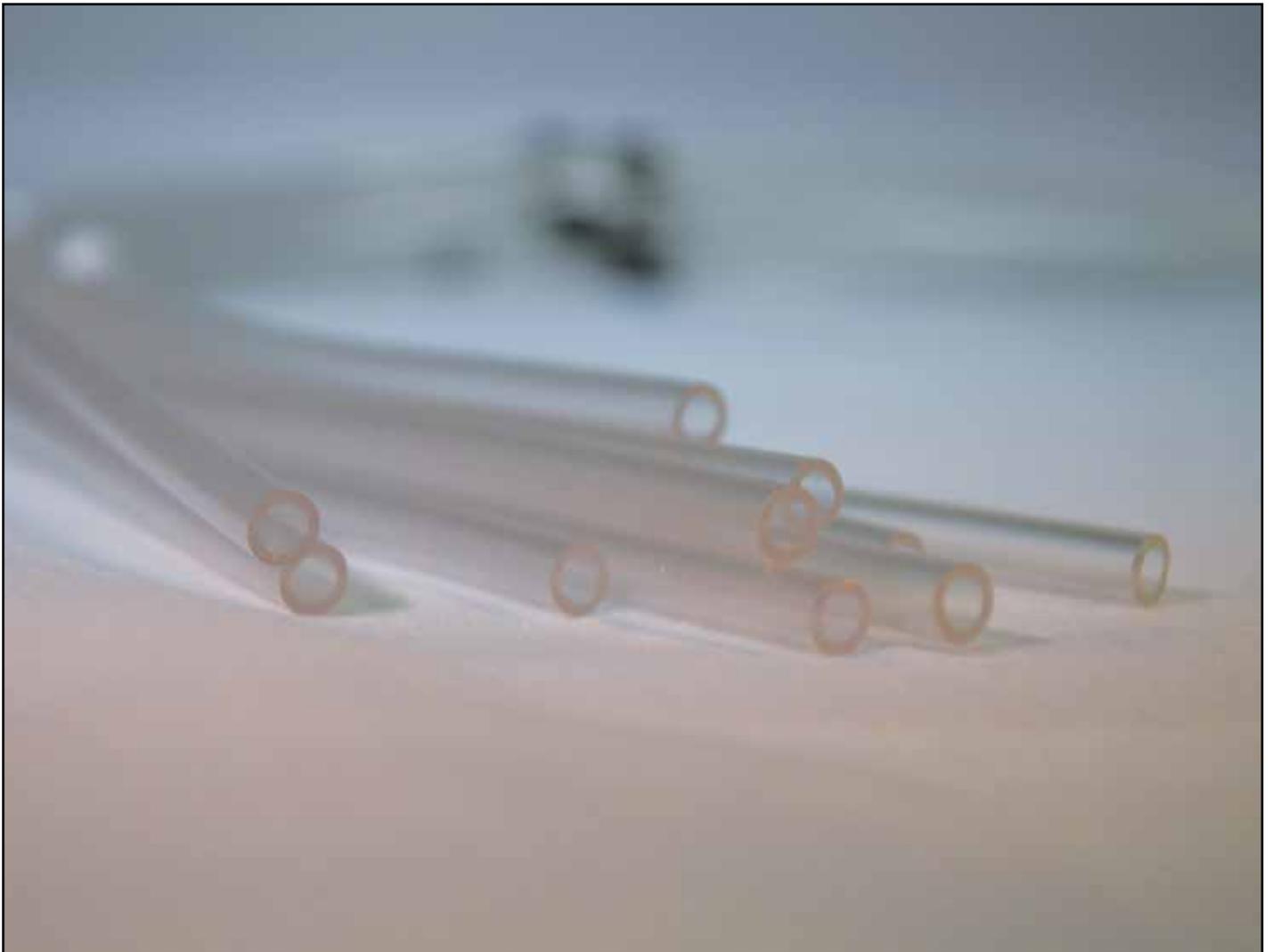
-73°C to +74°C (-99°F to +165°F)

Sterilizations:
Ethylene Oxide
Autoclave
Hardness:

59 Shore A

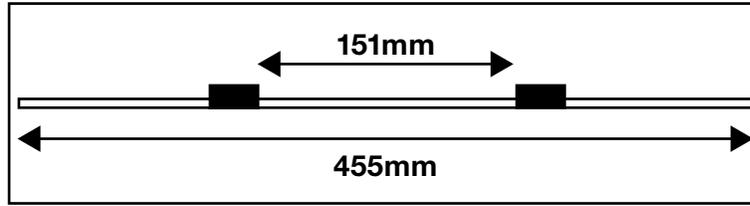
Elongation at Break:

400% - 470%

Certification:
Meets USP Class VI and BS2463
US Pharmacopoeia Tested and Certified

116-0549-XX/SC00XX Series 2 Bridge PVC Standard Pump Tubes

Available in packs of 12 tubes



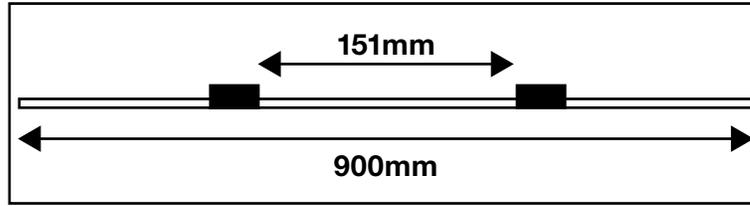
For Flared tubing place an "F" in front of the part number. For example: F116-0549-21/FSC0019

Metric I.D.	Description	Part No.*	Color Code		
0.13mm	Orange/Black	116-0549-01	Orange	Black	
0.19mm	Orange/Red	116-0549-02	Orange	Red	
0.25mm	Orange/Blue	116-0549-03	Orange	Blue	
0.28mm	White/Blue		White	Blue	
0.31mm	Red/Blue	116-0549-20	Red	Blue	
0.33mm	Brown/Blue		Brown	Blue	
0.36mm	Brown/Black		Brown	Black	
0.38mm	Orange/Green	116-0549-04	Orange	Green	
0.44mm	Green/Yellow	SC0004	Green	Yellow	
0.51mm	Orange/Yellow	116-0549-05	Orange	Yellow	
0.57mm	White/Yellow	SC0006	White	Yellow	
0.64mm	Orange/White	116-0549-06	Orange	White	
0.76mm	Black/Black	116-0549-07	Black	Black	
0.89mm	Orange/Orange	116-0549-08	Orange	Orange	
0.95mm	White/Black	SC0010	White	Black	
1.02mm	White/White	116-0549-09	White	White	
1.09mm	White/Red	SC0012	White	Red	
1.14mm	Red/Red	116-0549-10	Red	Red	
1.22mm	Red/Grey	SC0014	Red	Grey	
1.30mm	Grey/Grey	116-0549-11	Grey	Grey	
1.42mm	Yellow/Yellow	116-0549-12	Yellow	Yellow	
1.52mm	Yellow/Blue	116-0549-19	Yellow	Blue	
1.65mm	Blue/Blue	116-0549-13	Blue	Blue	
1.75mm	Blue/Green	SC0019	Blue	Green	
1.85mm	Green/Green	116-0549-14	Green	Green	
2.06mm	Purple/Purple	116-0549-15	Purple	Purple	
2.29mm	Purple/Black	116-0549-16	Purple	Black	
2.54mm	Purple/Orange	116-0549-17	Purple	Orange	
2.79mm	Purple/White	116-0549-18	Purple	White	
3.18mm	Black/White	116-0549-21	Black	White	

* Blank Part numbers or numbers with an asterisk at the end are special ordered items which may result in an minimum order requirement, longer lead times or may not be available.

A170-0596-XX Series PVC 2 Bridge Long Length Pump Tubes

Available in packs of 12 tubes



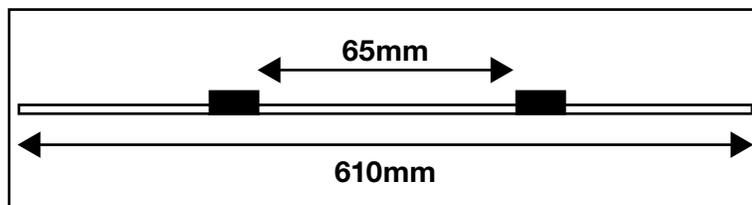
For Flared tubing place an "F" in front of the 170-0596-XX part number. For example: F170-0596-09

Metric I.D.	Description	Part No.*	Color Code		
0.13mm	Orange/Black	A170-0596-01*	Orange		Black
0.19mm	Orange/Red	A170-0596-02*	Orange		Red
0.25mm	Orange/Blue	A170-0596-03	Orange		Blue
0.28mm	White/Blue				Blue
0.31mm	Red/Blue	A170-0596-20	Red		Blue
0.33mm	Brown/Blue		Brown		Blue
0.36mm	Brown/Black		Brown		Black
0.38mm	Orange/Green	A170-0596-04	Orange		Green
0.44mm	Green/Yellow		Green		Yellow
0.51mm	Orange/Yellow	A170-0596-05	Orange		Yellow
0.57mm	White/Yellow				Yellow
0.64mm	Orange/White	A170-0596-06	Orange		White
0.76mm	Black/Black	A170-0596-07	Black		Black
0.89mm	Orange/Orange	A170-0596-08	Orange		Orange
0.95mm	White/Black				Black
1.02mm	White/White	A170-0596-09			White
1.09mm	White/Red				Red
1.14mm	Red/Red	A170-0596-10	Red		Red
1.22mm	Red/Grey		Red		Grey
1.30mm	Grey/Grey	A170-0596-11	Grey		Grey
1.42mm	Yellow/Yellow	A170-0596-12	Yellow		Yellow
1.52mm	Yellow/Blue	A170-0596-19	Yellow		Blue
1.65mm	Blue/Blue	A170-0596-13	Blue		Blue
1.75mm	Blue/Green		Blue		Green
1.85mm	Green/Green	A170-0596-14	Green		Green
2.06mm	Purple/Purple	A170-0596-15	Purple		Purple
2.29mm	Purple/Black	A170-0596-16	Purple		Black
2.54mm	Purple/Orange	A170-0596-17*	Purple		Orange
2.79mm	Purple/White	A170-0596-18	Purple		White
3.18mm	Black/White		Black		White

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178-3748-XX Series PVC 2 Bridge Analytical Pump Tubes

Available in packs of 12 tubes



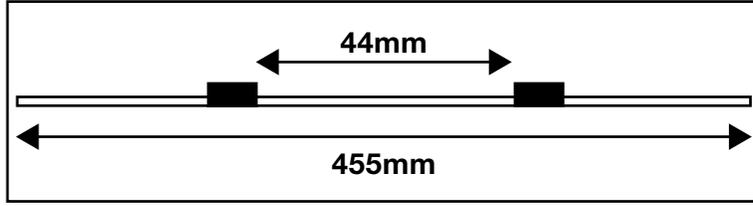
For Flared Tubing place an "F" in front of the 178-3748-XX series part number. For example: F178-3748-10

Metric I.D.	Description	Part No.*	Color Code		
0.13mm	Orange/Black	A178-3748-01*	Orange		Black
0.19mm	Orange/Red	A178-3748-02*	Orange		Red
0.25mm	Orange/Blue	A178-3748-03	Orange		Blue
0.28mm	White/Blue				Blue
0.31mm	Red/Blue	A178-3748-20	Red		Blue
0.33mm	Brown/Blue		Brown		Blue
0.36mm	Brown/Black		Brown		Black
0.38mm	Orange/Green	A178-3748-04	Orange		Green
0.44mm	Green/Yellow		Green		Yellow
0.51mm	Orange/Yellow	A178-3748-05	Orange		Yellow
0.57mm	White/Yellow				Yellow
0.64mm	Orange/White	A178-3748-06	Orange		White
0.76mm	Black/Black	A178-3748-07	Black		Black
0.89mm	Orange/Orange	A178-3748-08	Orange		Orange
0.95mm	White/Black				Black
1.02mm	White/White	A178-3748-09			White
1.09mm	White/Red				Red
1.14mm	Red/Red	A178-3748-10	Red		Red
1.22mm	Red/Grey		Red		Grey
1.30mm	Grey/Grey	A178-3748-11	Grey		Grey
1.42mm	Yellow/Yellow	A178-3748-12	Yellow		Yellow
1.52mm	Yellow/Blue	A178-3748-19	Yellow		Blue
1.65mm	Blue/Blue	A178-3748-13	Blue		Blue
1.75mm	Blue/Green		Blue		Green
1.85mm	Green/Green	A178-3748-14	Green		Green
2.06mm	Purple/Purple	A178-3748-15	Purple		Purple
2.29mm	Purple/Black	A178-3748-16	Purple		Black
2.54mm	Purple/Orange	A178-3748-17*	Purple		Orange
2.79mm	Purple/White	A178-3748-18	Purple		White
3.18mm	Black/White		Black		White

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190-0427-XX Series 2 Bridge PVC Pump Tubes

Available in packs of 12 tubes



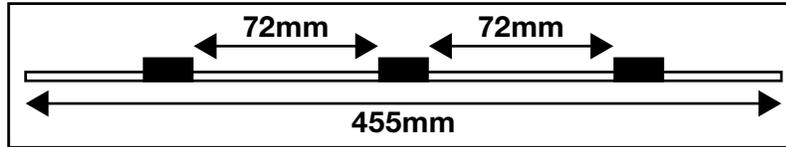
For Flared Tubing place an "F" in front of the 190-0427-XX series part number. For example: F190-0427-08

Metric I.D.	Description	Part No.*	Color Code			
0.13mm	Orange/Black	190-0427-01*	Orange		Black	
0.19mm	Orange/Red	190-0427-02*	Orange		Red	
0.25mm	Orange/Blue	190-0427-03	Orange		Blue	
0.28mm	White/Blue		White		Blue	
0.31mm	Red/Blue		Red		Blue	
0.33mm	Brown/Blue		Brown		Blue	
0.36mm	Brown/Black		Brown		Black	
0.38mm	Orange/Green	190-0427-04	Orange		Green	
0.44mm	Green/Yellow		Green		Yellow	
0.51mm	Orange/Yellow	190-0427-05	Orange		Yellow	
0.57mm	White/Yellow		White		Yellow	
0.64mm	Orange/White	190-0427-06	Orange		White	
0.76mm	Black/Black	190-0427-07	Black		Black	
0.89mm	Orange/Orange	190-0427-08	Orange		Orange	
0.95mm	White/Black		White		Black	
1.02mm	White/White	190-0427-09	White		White	
1.09mm	White/Red		White		Red	
1.14mm	Red/Red	190-0427-10	Red		Red	
1.22mm	Red/Grey		Red		Grey	
1.30mm	Grey/Grey	190-0427-11	Grey		Grey	
1.42mm	Yellow/Yellow	190-0427-12	Yellow		Yellow	
1.52mm	Yellow/Blue	190-0427-19	Yellow		Blue	
1.65mm	Blue/Blue	190-0427-13	Blue		Blue	
1.75mm	Blue/Green		Blue		Green	
1.85mm	Green/Green	190-0427-14	Green		Green	
2.06mm	Purple/Purple	190-0427-15	Purple		Purple	
2.29mm	Purple/Black	190-0427-16	Purple		Black	
2.54mm	Purple/Orange	190-0427-17*	Purple		Orange	
2.79mm	Purple/White	190-0427-18	Purple		White	
3.18mm	Black/White		Black		White	

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SC00XX Series 3 Bridge PVC Pump Tubes

Available in packs of 12 tubes



For Flared Tubing place an "F" in front of the SC00XX series part number. For example: FSC0059

Metric I.D.	Description	Part No.*	Color Code			
0.13mm	Orange/Black/Orange	SC0189	Orange	Black	Orange	
0.19mm	Orange/Red/Orange	SC0049	Orange	Red	Orange	
0.25mm	Orange/Blue/Orange	SC0050	Orange	Blue	Orange	
0.28mm	White/Blue/White		White	Blue	White	
0.31mm	Red/Blue/Red		Red	Blue	Red	
0.33mm	Brown/Blue/Brown		Brown	Blue	Brown	
0.36mm	Brown/Black/Brown		Brown	Black	Brown	
0.38mm	Orange/Green/Orange	SC0051	Orange	Green	Orange	
0.44mm	Green/Yellow/Green	SC0052	Green	Yellow	Green	
0.51mm	Orange/Yellow/Orange	SC0053	Orange	Yellow	Orange	
0.57mm	White/Yellow/White	SC0054	White	Yellow	White	
0.64mm	Orange/White/Orange	SC0055	Orange	White	Orange	
0.76mm	Black/Black/Black	SC0056	Black	Black	Black	
0.89mm	Orange/Orange/Orange	SC0057	Orange	Orange	Orange	
0.95mm	White/Black/White	SC0058	White	Black	White	
1.02mm	White/White/White	SC0059	White	White	White	
1.09mm	White/Red/White	SC0060	White	Red	White	
1.14mm	Red/Red/Red	SC0061	Red	Red	Red	
1.22mm	Red/Grey/Red	SC0062	Red	Grey	Red	
1.30mm	Grey/Grey/Grey	SC0063	Grey	Grey	Grey	
1.42mm	Yellow/Yellow/Yellow	SC0064	Yellow	Yellow	Yellow	
1.52mm	Yellow/Blue/Yellow	SC0065	Yellow	Blue	Yellow	
1.65mm	Blue/Blue/Blue	SC0066	Blue	Blue	Blue	
1.75mm	Blue/Green/Blue	SC0067	Blue	Green	Blue	
1.85mm	Green/Green/Green	SC0068	Green	Green	Green	
2.06mm	Purple/Purple/Purple	SC0069	Purple	Purple	Purple	
2.29mm	Purple/Black/Purple	SC0070	Purple	Black	Purple	
2.54mm	Purple/Orange/Purple	SC0071	Purple	Orange	Purple	
2.79mm	Purple/White/Purple	SC0072	Purple	White	Purple	
3.18mm	Black/White/Black	SC0073	Black	White	Black	

* Blank Part numbers or numbers with an asterisk at the end are special ordered items which may result in an minimum order requirement, longer lead times or may not be available.

PVC Solva Pump Tubes

PVC Solva is a range of small bore tubing to meet a wide range of applications. It can be used in conjunction with aromatic oils, inks, petroleum compound, solvents and many other applications. It is Phthalate Free, which meets the requirements of the REACH regulation. Solva has similar chemical resistance to Viton tubing, but is more competitively priced. The PVC contains a TOTM plasticizer which maintains the integrity of the Solva during transportation of any oils that you are using. It also has a low gas permeability. It is flexible, translucent for any visual needs, but also bright yellow to contrast standard PVC. It is designed to offer a best-in-class pumping life and a wide compatibility with most pumping systems.

Product:

Phthalate Free Solvent Resistant
Medical Grade PVC, highly extraction resistant

Full Name:

Polyvinyl Chloride

Applications:

Laboratory and Industrial
For use with Peristaltic Pumps, with Solvent
and Aromatic Oils

Characteristics:

Good Chemical Resistance
Excellent Pumping Life
Good Handling Characteristics
Low Permeability

Temperature Range:

-50°C to +74°C (-58°F to +165°F)

Sterilizations:

Ethylene Oxide
Autoclave

Hardness:

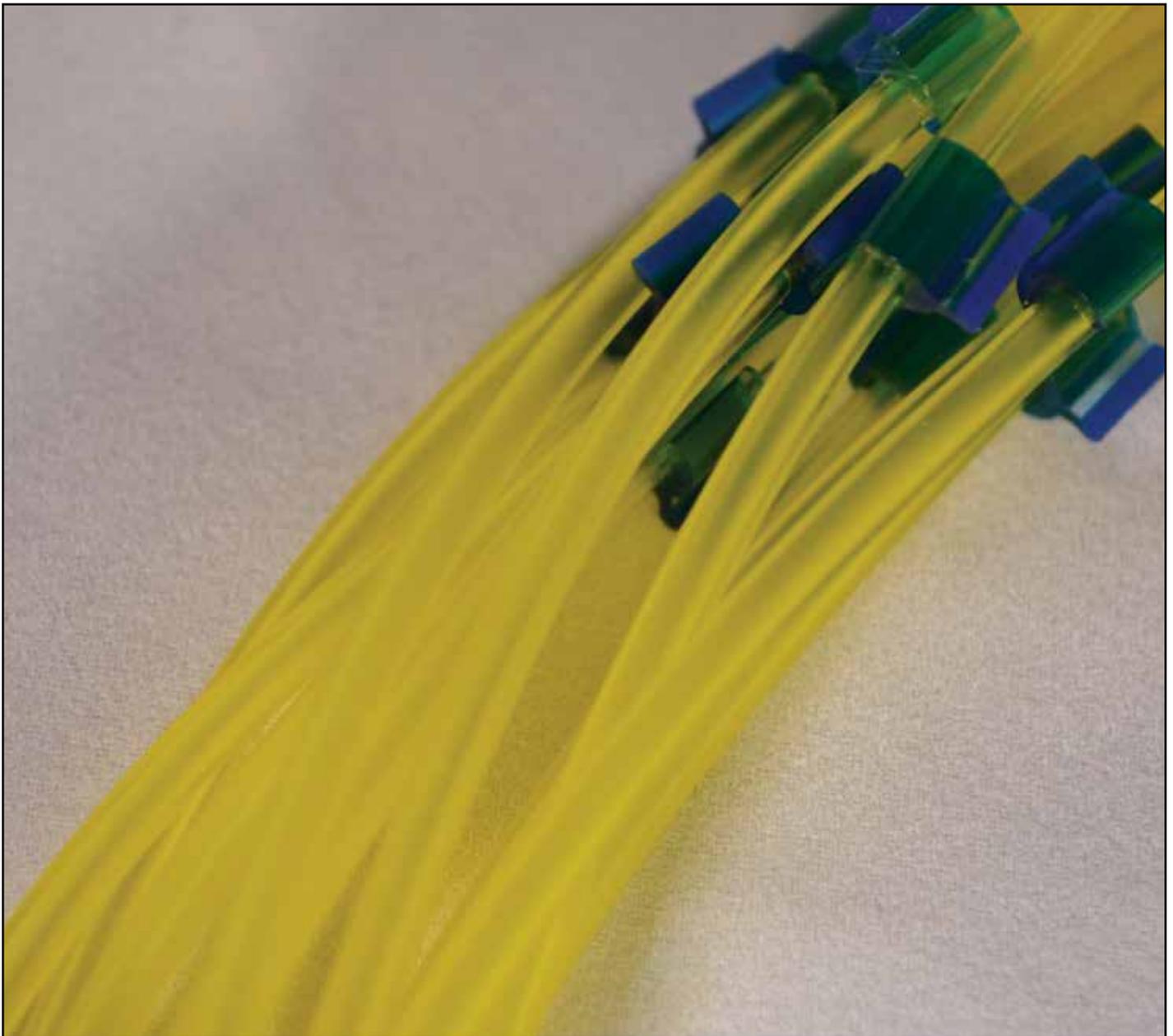
64 Shore A

Elongation at Break:

435%

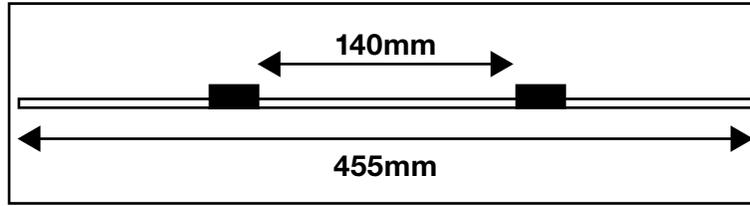
Certification:

Meets USP Class VI and BS2463
Including Low Zinc Content & Low UV
Absorption
US Pharmacopoeia Tested and Certified



116-0533-XX Series PVC Solva 2 Bridge Pump Tubes

Available in packs of 12 tubes



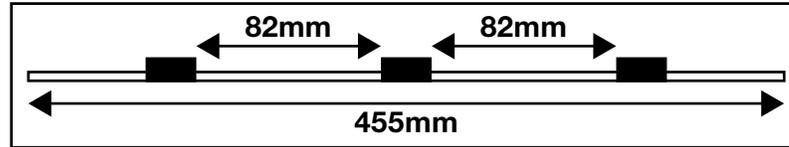
For Flared Tubing place an "F" in front of the 116-0533-XX series part number. For example: F116-0533-11

Metric I.D.	Description	Part No.*	Color Code		
0.13mm	Orange/Black	116-0533-01	Orange	Black	
0.19mm	Orange/Red	116-0533-02	Orange	Red	
0.25mm	Orange/Blue	116-0533-03	Orange	Blue	
0.28mm	White/Blue		White	Blue	
0.31mm	Red/Blue		Red	Blue	
0.33mm	Brown/Blue		Brown	Blue	
0.36mm	Brown/Black		Brown	Black	
0.38mm	Orange/Green	116-0533-04	Orange	Green	
0.44mm	Green/Yellow	116-0533-44	Green	Yellow	
0.51mm	Orange/Yellow	116-0533-05	Orange	Yellow	
0.57mm	White/Yellow	116-0533-57	White	Yellow	
0.64mm	Orange/White	116-0533-06	Orange	White	
0.76mm	Black/Black	116-0533-07	Black	Black	
0.89mm	Orange/Orange	116-0533-08	Orange	Orange	
0.95mm	White/Black		White	Black	
1.02mm	White/White	116-0533-09	White	White	
1.09mm	White/Red	116-0533-109*	White	Red	
1.14mm	Red/Red	116-0533-10	Red	Red	
1.22mm	Red/Grey		Red	Grey	
1.30mm	Grey/Grey	116-0533-11	Grey	Grey	
1.42mm	Yellow/Yellow	116-0533-12	Yellow	Yellow	
1.52mm	Yellow/Blue	116-0533-19	Yellow	Blue	
1.65mm	Blue/Blue	116-0533-13	Blue	Blue	
1.75mm	Blue/Green	SC9919	Blue	Green	
1.85mm	Green/Green	116-0533-14	Green	Green	
2.06mm	Purple/Purple	116-0533-15	Purple	Purple	
2.29mm	Purple/Black	116-0533-16	Purple	Black	
2.54mm	Purple/Orange	116-0533-17	Purple	Orange	
2.79mm	Purple/White	116-0533-18	Purple	White	
3.18mm	Black/White	116-0533-21	Black	White	

* Blank Part numbers or numbers with an asterisk at the end are special ordered items which may result in an minimum order requirement, longer lead times or may not be available.

SC0XXX Series PVC Solva 3 Bridge Pump Tubes

Available in packs of 12 tubes



For Flared Tubing place an "F" in front of the SC00XX series part number. For example: FSC0097

Metric I.D.	Description	Part No.*	Color Code			
0.13mm	Orange/Black/Orange	SC0189S*	Orange	Black	Orange	
0.19mm	Orange/Red/Orange		Orange	Red	Orange	
0.25mm	Orange/Blue/Orange	SC0286	Orange	Blue	Orange	
0.28mm	White/Blue/White		White	Blue	White	
0.31mm	Red/Blue/Red		Red	Blue	Red	
0.33mm	Brown/Blue/Brown		Brown	Blue	Brown	
0.36mm	Brown/Black/Brown		Brown	Black	Brown	
0.38mm	Orange/Green/Orange	SC0287	Orange	Green	Orange	
0.44mm	Green/Yellow/Green		Green	Yellow	Green	
0.51mm	Orange/Yellow/Orange	SC0288	Orange	Yellow	Orange	
0.57mm	White/Yellow/White		White	Yellow	White	
0.64mm	Orange/White/Orange	SC0289	Orange	White	Orange	
0.76mm	Black/Black/Black	SC0290	Black	Black	Black	
0.89mm	Orange/Orange/Orange	SC0291	Orange	Orange	Orange	
0.95mm	White/Black/White		White	Black	White	
1.02mm	White/White/White	SC0292	White	White	White	
1.09mm	White/Red/White		White	Red	White	
1.14mm	Red/Red/Red	SC0293	Red	Red	Red	
1.22mm	Red/Grey/Red		Red	Grey	Red	
1.30mm	Grey/Grey/Grey	SC0294	Grey	Grey	Grey	
1.42mm	Yellow/Yellow/Yellow	SC0295	Yellow	Yellow	Yellow	
1.52mm	Yellow/Blue/Yellow	SC0296	Yellow	Blue	Yellow	
1.65mm	Blue/Blue/Blue	SC0297	Blue	Blue	Blue	
1.75mm	Blue/Green/Blue		Blue	Green	Blue	
1.85mm	Green/Green/Green	SC0298	Green	Green	Green	
2.06mm	Purple/Purple/Purple	SC0299	Purple	Purple	Purple	
2.29mm	Purple/Black/Purple	SC0300	Purple	Black	Purple	
2.54mm	Purple/Orange/Purple	SC0301	Purple	Orange	Purple	
2.79mm	Purple/White/Purple	SC0302	Purple	White	Purple	
3.18mm	Black/White/Black	4062-6125	Black	White	Black	

* Blank Part numbers or numbers with an asterisk at the end are special ordered items which may result in a minimum order requirement, longer lead times or may not be available.

Silicone Pump Tubes

Silicone is a synthetic polymer and is produced by a crosslinked polymer reinforced with silica. Further cross-linking takes place by heating with a particular catalyst (i.e. peroxide), to produce the required properties. Silicone has good environmental resistance to heat, cold, ozone, UV, humidity and abrasion. It has outstanding heat resistance, to over 230°C. Electrical resistance is also excellent, and Silicone is frequently used in high voltage/high current applications. However, Silicone can be modified with additives to make it electrically conductive. Silicone does not support microbiological growth, which makes it very useful in pharmaceutical and medical environments. Silicone is a high performance polymer and necessarily more expensive because of its properties. It is made in lower quantities and requires expensive equipment for the compound and the final product's manufacture. Silicone is highly permeable to gas, which can be a useful property. Silicone is not classed as hazardous waste, and therefore can be disposed of according to local regulations. Flared ends is available upon request. Platinum cured Silicone in the same sizes as the standard Silicone is also available upon request and is a Special Ordered item.

Product:

Medical Grade Silicone, Peroxide Cured

Full Name:

Silicone

Applications:

 Medical, Pharmaceutical & Industrial Users,
High Strength for use on Peristaltic Pumps

Characteristics:

 Good Chemical Resistance
Wide Operating Temperature Range
Excellent Pumping Characteristics
Flexible, Kink Resistant, Odorless
Non-Toxic, Low Compression Set

Temperature Range:

-50°C to +230°C (-58°F to +446°F)

Sterilizations:

 Ethylene Oxide
Gamma Irradiation
Autoclave (Unbridged Tubing)

Hardness:

60 Shore A

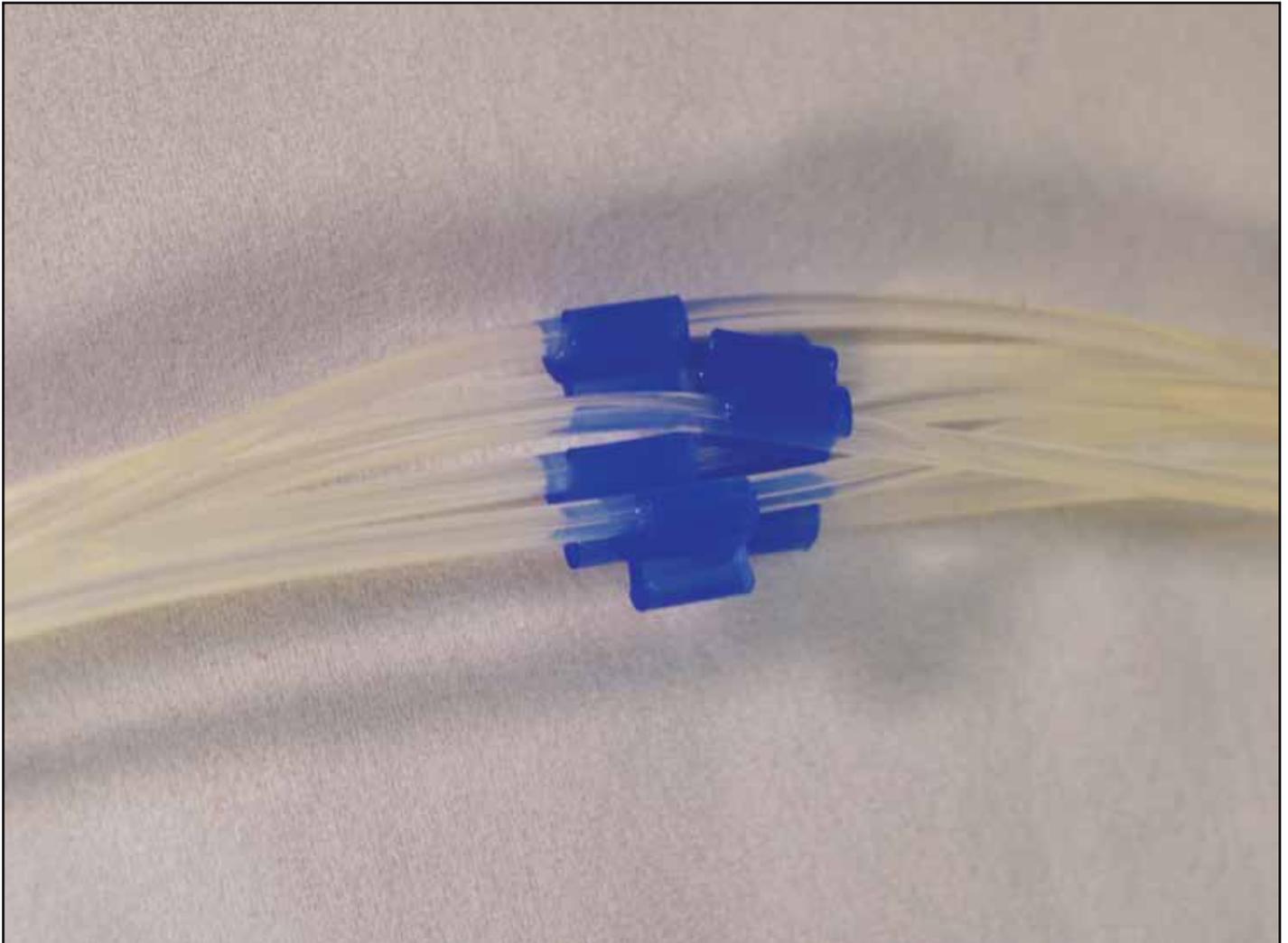
Elongation at Break:

450% - 540%

Tear Strength:

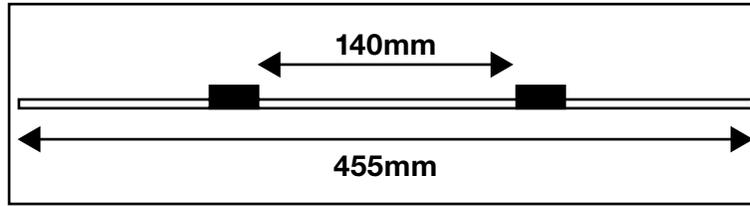
34Kn/m

Certification:

 Meets USP Class VI
US Pharmacopoeia Tested and Certified


116-0497-XX Series 2 Bridge Silicone Pump Tubes

Available in packs of 6 tubes



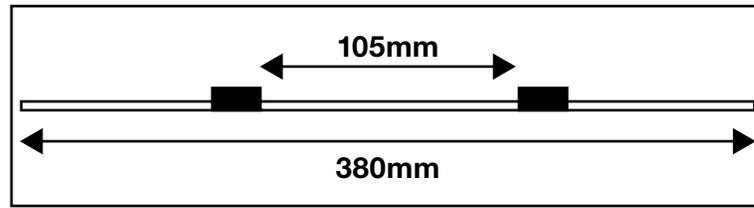
For Flared Tubing place an "F" in front of the 116-0497-XX series part number. For example: F116-0497-12

Metric I.D.	Description	Part No.*	Color Code		
0.13mm	Orange/Black	116-0497-01	Orange	Black	
0.19mm	Orange/Red		Orange	Red	
0.25mm	Orange/Blue	116-0497-04	Orange	Blue	
0.28mm	White/Blue		White	Blue	
0.31mm	Red/Blue		Red	Blue	
0.33mm	Brown/Blue		Brown	Blue	
0.36mm	Brown/Black		Brown	Black	
0.38mm	Orange/Green	116-0497-05	Orange	Green	
0.44mm	Green/Yellow		Green	Yellow	
0.51mm	Orange/Yellow	116-0497-06	Orange	Yellow	
0.57mm	White/Yellow		White	Yellow	
0.64mm	Orange/White	116-0497-07	Orange	White	
0.76mm	Black/Black	116-0497-08	Black	Black	
0.89mm	Orange/Orange	116-0497-09	Orange	Orange	
0.95mm	White/Black		White	Black	
1.02mm	White/White	116-0497-10	White	White	
1.09mm	White/Red		White	Red	
1.14mm	Red/Red	116-0497-11	Red	Red	
1.22mm	Red/Grey		Red	Grey	
1.30mm	Grey/Grey	116-0497-12	Grey	Grey	
1.42mm	Yellow/Yellow	116-0497-13	Yellow	Yellow	
1.52mm	Yellow/Blue	116-0497-14	Yellow	Blue	
1.65mm	Blue/Blue	116-0497-15	Blue	Blue	
1.75mm	Blue/Green		Blue	Green	
1.85mm	Green/Green	116-0497-16	Green	Green	
2.06mm	Purple/Purple	116-0497-17	Purple	Purple	
2.29mm	Purple/Black	116-0497-18	Purple	Black	
2.54mm	Purple/Orange	116-0497-19	Purple	Orange	
2.79mm	Purple/White	116-0497-20	Purple	White	
3.18mm	Black/White	116-0497-21	Black	White	

* Blank Part numbers or numbers with an asterisk at the end are special ordered items which may result in an minimum order requirement, longer lead times or may not be available.

116-0581-XX Series 2 Bridge Silicone Pump Tubes

Available in packs of 6 tubes



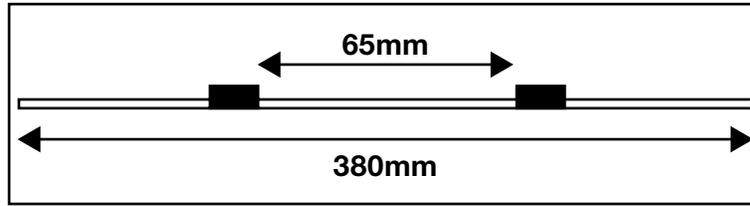
For Flared Tubing place an "F" in front of the 116-0581-XX series part number. For example: F116-0581-10

Metric I.D.	Description	Part No.*	Color Code			
0.13mm	Orange/Black			Orange		Black
0.19mm	Orange/Red			Orange		Red
0.25mm	Orange/Blue			Orange		Blue
0.28mm	White/Blue			White		Blue
0.31mm	Red/Blue			Red		Blue
0.33mm	Brown/Blue	116-0581-14		Brown		Blue
0.36mm	Brown/Black	116-0581-15		Brown		Black
0.38mm	Orange/Green	116-0581-11		Orange		Green
0.44mm	Green/Yellow			Green		Yellow
0.51mm	Orange/Yellow	116-0581-12		Orange		Yellow
0.57mm	White/Yellow			White		Yellow
0.64mm	Orange/White	116-0581-04		Orange		White
0.76mm	Black/Black	116-0581-13		Black		Black
0.89mm	Orange/Orange	116-0581-05		Orange		Orange
0.95mm	White/Black			White		Black
1.02mm	White/White			White		White
1.09mm	White/Red			White		Red
1.14mm	Red/Red	116-0581-02		Red		Red
1.22mm	Red/Grey			Red		Grey
1.30mm	Grey/Grey	116-0581-03		Grey		Grey
1.42mm	Yellow/Yellow	116-0581-06		Yellow		Yellow
1.52mm	Yellow/Blue			Yellow		Blue
1.65mm	Blue/Blue	116-0581-08		Blue		Blue
1.75mm	Blue/Green			Blue		Green
1.85mm	Green/Green	116-0581-08		Green		Green
2.06mm	Purple/Purple			Purple		Purple
2.29mm	Purple/Black			Purple		Black
2.54mm	Purple/Orange	116-0581-09		Purple		Orange
2.79mm	Purple/White	116-0581-10		Purple		White
3.18mm	Black/White			Black		White

* Blank Part numbers or numbers with an asterisk at the end are special ordered items which may result in a minimum order requirement, longer lead times or may not be available.

116-0559-XX Series 2 Bridge Silicone Pump Tubes

Available in packs of 12 tubes



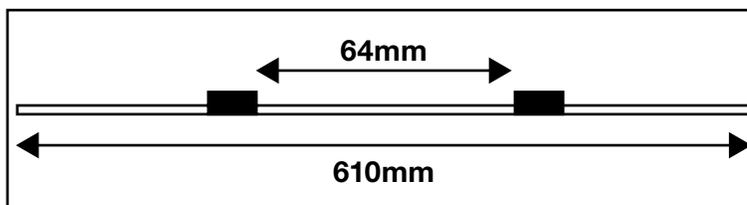
For Flared Tubing place an "F" in front of the 116-0559-XX series part number. For example: F116-0559-14

Metric I.D.	Description	Part No.*	Color Code		
0.13mm	Orange/Black		Orange		Black
0.19mm	Orange/Red		Orange		Red
0.25mm	Orange/Blue	116-0559-01	Orange		Blue
0.28mm	White/Blue	116-0559-05*			Blue
0.31mm	Red/Blue		Red		Blue
0.33mm	Brown/Blue	116-0559-14*	Brown		Blue
0.36mm	Brown/Black	116-0559-15*	Brown		Black
0.38mm	Orange/Green		Orange		Green
0.44mm	Green/Yellow		Green		Yellow
0.51mm	Orange/Yellow	116-0559-01*	Orange		Yellow
0.57mm	White/Yellow				Yellow
0.64mm	Orange/White	116-0559-06*	Orange		White
0.76mm	Black/Black		Black		Black
0.89mm	Orange/Orange		Orange		Orange
0.95mm	White/Black				Black
1.02mm	White/White				White
1.09mm	White/Red				Red
1.14mm	Red/Red		Red		Red
1.22mm	Red/Grey		Red		Grey
1.30mm	Grey/Grey		Grey		Grey
1.42mm	Yellow/Yellow		Yellow		Yellow
1.52mm	Yellow/Blue		Yellow		Blue
1.65mm	Blue/Blue		Blue		Blue
1.75mm	Blue/Green		Blue		Green
1.85mm	Green/Green		Green		Green
2.06mm	Purple/Purple		Purple		Purple
2.29mm	Purple/Black		Purple		Black
2.54mm	Purple/Orange		Purple		Orange
2.79mm	Purple/White	116-0559-16*	Purple		White
3.18mm	Black/White		Black		White

* Blank Part numbers or numbers with an asterisk at the end are special ordered items which may result in an minimum order requirement, longer lead times or may not be available.

188-0132-XX Series 2 Bridge Silicone Pump Tubes

Available in packs of 12 tubes



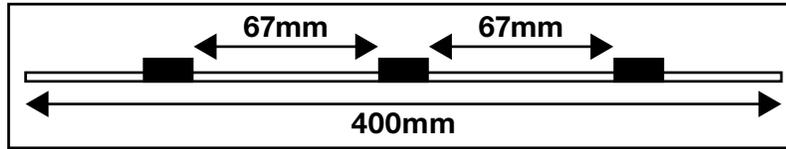
For Flared Tubing place an "F" in front of the 188-0132-XX series part number. For example: F188-0132-07

Metric I.D.	Description	Part No.*	Color Code			
0.13mm	Orange/Black					
0.19mm	Orange/Red	188-0132-02				
0.25mm	Orange/Blue	188-0132-03				
0.28mm	White/Blue					
0.31mm	Red/Blue					
0.33mm	Brown/Blue					
0.36mm	Brown/Black					
0.38mm	Orange/Green					
0.44mm	Green/Yellow					
0.51mm	Orange/Yellow					
0.57mm	White/Yellow					
0.64mm	Orange/White	188-0132-06				
0.76mm	Black/Black	188-0132-07				
0.89mm	Orange/Orange	188-0132-08				
0.95mm	White/Black					
1.02mm	White/White	188-0132-09				
1.09mm	White/Red					
1.14mm	Red/Red	188-0132-10				
1.22mm	Red/Grey					
1.30mm	Grey/Grey	188-0132-11				
1.42mm	Yellow/Yellow	188-0132-12				
1.52mm	Yellow/Blue	188-0132-19				
1.65mm	Blue/Blue	188-0132-13				
1.75mm	Blue/Green					
1.85mm	Green/Green	188-0132-14				
2.06mm	Purple/Purple	188-0132-15				
2.29mm	Purple/Black	188-0132-16				
2.54mm	Purple/Orange					
2.79mm	Purple/White					
3.18mm	Black/White					

* Blank Part numbers or numbers with an asterisk at the end are special ordered items which may result in a minimum order requirement, longer lead times or may not be available.

SC0XXX Series 3 Bridge Silicone Pump Tubes

Available in packs of 12 tubes



For Flared Tubing place an "F" in front of the FSC0XXX series part number. For example: FSC0110

Metric I.D.	Description	Part No.*	Color Code			
0.13mm	Orange/Black/Orange		Orange	Black	Orange	
0.19mm	Orange/Red/Orange		Orange	Red	Orange	
0.25mm	Orange/Blue/Orange	SC0497-04	Orange	Blue	Orange	
0.28mm	White/Blue/White		White	Blue	White	
0.31mm	Red/Blue/Red		Red	Blue	Red	
0.33mm	Brown/Blue/Brown		Brown	Blue	Brown	
0.36mm	Brown/Black/Brown		Brown	Black	Brown	
0.38mm	Orange/Green/Orange		Orange	Green	Orange	
0.44mm	Green/Yellow/Green		Green	Yellow	Green	
0.51mm	Orange/Yellow/Orange	SC0497-06	Orange	Yellow	Orange	
0.57mm	White/Yellow/White		White	Yellow	White	
0.64mm	Orange/White/Orange	SC0106	Orange	White	Orange	
0.76mm	Black/Black/Black	SC0107	Black	Black	Black	
0.89mm	Orange/Orange/Orange	SC0108	Orange	Orange	Orange	
0.95mm	White/Black/White		White	Black	White	
1.02mm	White/White/White	SC109	White	White	White	
1.09mm	White/Red/White		White	Red	White	
1.14mm	Red/Red/Red	SC0110	Red	Red	Red	
1.22mm	Red/Grey/Red		Red	Grey	Red	
1.30mm	Grey/Grey/Grey	SC0111	Grey	Grey	Grey	
1.42mm	Yellow/Yellow/Yellow	SC0112	Yellow	Yellow	Yellow	
1.52mm	Yellow/Blue/Yellow	SC0113	Yellow	Blue	Yellow	
1.65mm	Blue/Blue/Blue	SC0114	Blue	Blue	Blue	
1.75mm	Blue/Green/Blue		Blue	Green	Blue	
1.85mm	Green/Green/Green	SC0115	Green	Green	Green	
2.06mm	Purple/Purple/Purple	SC0116	Purple	Purple	Purple	
2.29mm	Purple/Black/Purple	SC0117	Purple	Black	Purple	
2.54mm	Purple/Orange/Purple	SC0118	Purple	Orange	Purple	
2.79mm	Purple/White/Purple	SC0119	Purple	White	Purple	
3.18mm	Black/White/Black		Black	White	Black	

* Blank Part numbers or numbers with an asterisk at the end are special ordered items which may result in an minimum order requirement, longer lead times or may not be available.

Santoprene® Pump Tubes

Santoprene® is a proprietary type of thermoplastic rubber elastomer, manufactured by Advanced Elastomer Systems L.P. Santoprene® is a polyolefinic material, produced by a proprietary dynamic vulcanization which produces rubber particles dispersed throughout a continuous matrix of thermoplastic.. This material combines the performance characteristics of vulcanized rubber and the processing ease of thermoplastics. Santoprene® has properties that make it very tolerant of temperatures, chemicals and environmental abrasion. Santoprene® is available in a range of hardnesses. The most popular hardness grade for small-bore peristaltic pump use is 64 Shore A. This gives the best combination of easy occlusion and good material recovery for effective long-life pumping. Other grades are available for alternative applications. Medical grades of Santoprene® have a DMF file lodged with the US FDA, and are approved to USP Class.

Product:

Medical Grade Thermoplastic Rubber

Full Name:

Santoprene®

Applications:

Medical, Pharmaceutical, Laboratory & Industrial Users,
For use with Peristaltic Pumps

Characteristics:

Good Chemical Resistance, Flexible and Strong
Good Handling Characteristics
Abrasion Resistant, Non-toxic
Excellent Pumping Life

Temperature Range:

-50°C to +135°C (-58°F to +275°F)

Sterilizations:

Gamma Irradiation
Autoclave (Unbridged Tubing)

Hardness:

60 Shore A

Elongation at Break:

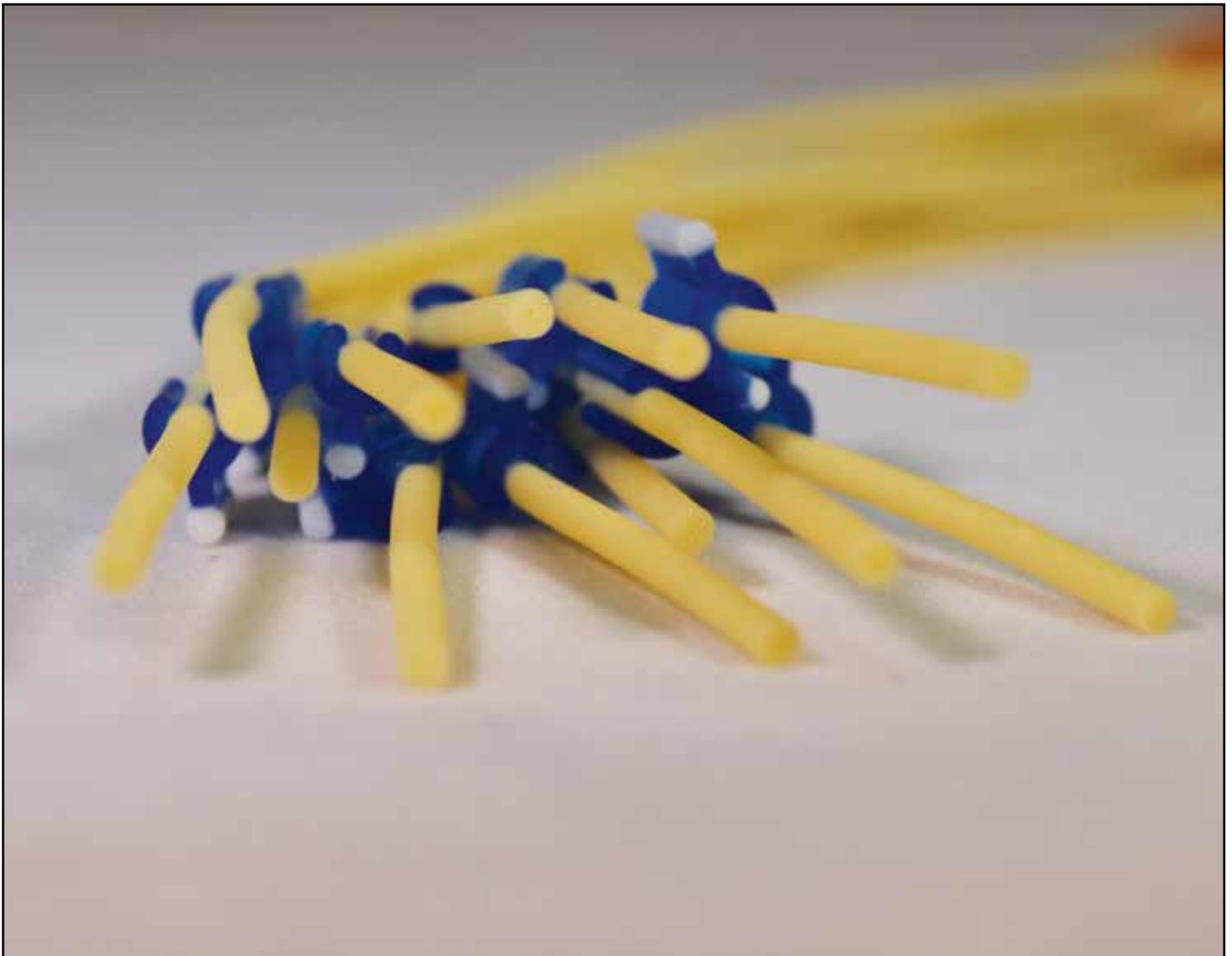
440%

Tear Strength:

25Kn/m

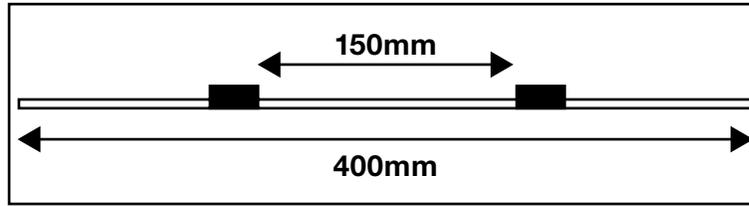
Certification:

Meets USP Class VI
US Pharmacopoeia Approved and Certified
FDA Approved DMF No17690
Santoprene® is a Registered Trade Mark of
Advanced Elastomer Systems, L.P.



SC03XX Series 2 Bridge Santoprene® Pump Tubes

Available in packs of 12 tubes



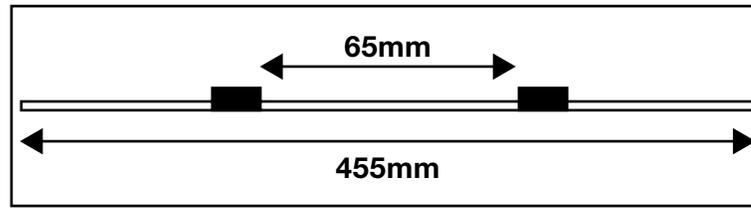
For Flared Tubing place an "F" in front of the SC0325 series part number. For example: FSC0327

Metric I.D.	Description	Part No.*	Color Code		
0.13mm	Orange/Black	SC0301SAN*	Orange	Black	
0.19mm	Orange/Red		Orange	Red	
0.25mm	Orange/Blue	SC0320*	Orange	Blue	
0.28mm	White/Blue		White	Blue	
0.31mm	Red/Blue		Red	Blue	
0.33mm	Brown/Blue		Brown	Blue	
0.36mm	Brown/Black		Brown	Black	
0.38mm	Orange/Green	SC0321	Orange	Green	
0.44mm	Green/Yellow		Green	Yellow	
0.51mm	Orange/Yellow	SC3222*	Orange	Yellow	
0.57mm	White/Yellow		White	Yellow	
0.64mm	Orange/White	SC0323	Orange	White	
0.76mm	Black/Black	SC0324	Black	Black	
0.89mm	Orange/Orange	SC0325*	Orange	Orange	
0.95mm	White/Black		White	Black	
1.02mm	White/White	SC0326	White	White	
1.09mm	White/Red		White	Red	
1.14mm	Red/Red	SC0327	Red	Red	
1.22mm	Red/Grey		Red	Grey	
1.30mm	Grey/Grey		Grey	Grey	
1.42mm	Yellow/Yellow	SC0328	Yellow	Yellow	
1.52mm	Yellow/Blue	SC0329	Yellow	Blue	
1.65mm	Blue/Blue	SC0330	Blue	Blue	
1.75mm	Blue/Green		Blue	Green	
1.85mm	Green/Green		Green	Green	
2.06mm	Purple/Purple	SC0332	Purple	Purple	
2.29mm	Purple/Black	SC0333	Purple	Black	
2.54mm	Purple/Orange	SC0334	Purple	Orange	
2.79mm	Purple/White	SC0335	Purple	White	
3.18mm	Black/White	SAN-318-01*	Black	White	

* Blank Part numbers or numbers with an asterisk at the end are special ordered items which may result in an minimum order requirement, longer lead times or may not be available.

178+0539-XX Series 2 Bridge Santoprene® Pump Tubes

Available in packs of 12 tubes



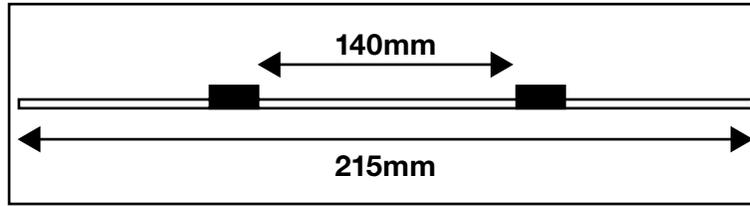
For Flared Tubing place an "F" in front of the 178+0539-XX series part number. For example: F178+0539-16

Metric I.D.	Description	Part No.*	Color Code		
0.13mm	Orange/Black		Orange	Black	
0.19mm	Orange/Red		Orange	Red	
0.25mm	Orange/Blue	178+0539-03	Orange	Blue	
0.28mm	White/Blue		White	Blue	
0.31mm	Red/Blue		Red	Blue	
0.33mm	Brown/Blue		Brown	Blue	
0.36mm	Brown/Black		Brown	Black	
0.38mm	Orange/Green	178+0539-04	Orange	Green	
0.44mm	Green/Yellow		Green	Yellow	
0.51mm	Orange/Yellow	178+0539-05	Orange	Yellow	
0.57mm	White/Yellow		White	Yellow	
0.64mm	Orange/White	178+0539-06	Orange	White	
0.76mm	Black/Black	178+0539-07	Black	Black	
0.89mm	Orange/Orange	178+0539-08	Orange	Orange	
0.95mm	White/Black		White	Black	
1.02mm	White/White	178+0539-09	White	White	
1.09mm	White/Red		White	Red	
1.14mm	Red/Red	178+0539-10	Red	Red	
1.22mm	Red/Grey		Red	Grey	
1.30mm	Grey/Grey	178+0539-11	Grey	Grey	
1.42mm	Yellow/Yellow	178+0539-12	Yellow	Yellow	
1.52mm	Yellow/Blue	178+0539-19	Yellow	Blue	
1.65mm	Blue/Blue	178+0539-13	Blue	Blue	
1.75mm	Blue/Green		Blue	Green	
1.85mm	Green/Green	178+0539-14	Green	Green	
2.06mm	Purple/Purple	178+0539-15	Purple	Purple	
2.29mm	Purple/Black	178+0539-16	Purple	Black	
2.54mm	Purple/Orange	178+0539-17	Purple	Orange	
2.79mm	Purple/White		Purple	White	
3.18mm	Black/White		Black	White	

* Blank Part numbers or numbers with an asterisk at the end are special ordered items which may result in a minimum order requirement, longer lead times or may not be available.

116-0539-XX Series 2 Bridge Santoprene® Pump Tubes

Available in packs of 12 tubes



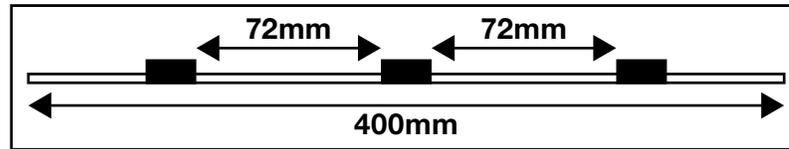
For Flared Tubing place an "F" in front of the 116-0539-XX series part number. For example: F116-0539-10

Metric I.D.	Description	Part No.*	Color Code		
0.13mm	Orange/Black	116-0539-01	Orange	Black	
0.19mm	Orange/Red		Orange	Red	
0.25mm	Orange/Blue	116-0539-03	Orange	Blue	
0.28mm	White/Blue		White	Blue	
0.31mm	Red/Blue		Red	Blue	
0.33mm	Brown/Blue		Brown	Blue	
0.36mm	Brown/Black		Brown	Black	
0.38mm	Orange/Green	116-0539-04	Orange	Green	
0.44mm	Green/Yellow		Green	Yellow	
0.51mm	Orange/Yellow	116-0539-05	Orange	Yellow	
0.57mm	White/Yellow		White	Yellow	
0.64mm	Orange/White		Orange	White	
0.76mm	Black/Black	116-0539-07	Black	Black	
0.89mm	Orange/Orange	116-0539-08	Orange	Orange	
0.95mm	White/Black		White	Black	
1.02mm	White/White		White	White	
1.09mm	White/Red		White	Red	
1.14mm	Red/Red	116-0539-10	Red	Red	
1.22mm	Red/Grey		Red	Grey	
1.30mm	Grey/Grey	116-0539-11	Grey	Grey	
1.42mm	Yellow/Yellow	116-0539-12	Yellow	Yellow	
1.52mm	Yellow/Blue	116-0539-19	Yellow	Blue	
1.65mm	Blue/Blue	116-0539-13	Blue	Blue	
1.75mm	Blue/Green		Blue	Green	
1.85mm	Green/Green	116-0539-14	Green	Green	
2.06mm	Purple/Purple	116-0539-15	Purple	Purple	
2.29mm	Purple/Black		Purple	Black	
2.54mm	Purple/Orange	116-0539-17	Purple	Orange	
2.79mm	Purple/White		Purple	White	
3.18mm	Black/White		Black	White	

* Blank Part numbers or numbers with an asterisk at the end are special ordered items which may result in an minimum order requirement, longer lead times or may not be available.

SC03XX Series 3 Bridge Santoprene® Pump Tubes

Available in packs of 12 tubes



For Flared Tubing place an "F" in front of the FSC03XX series part number. For example: FSC0311

Metric I.D.	Description	Part No.*	Color Code			
0.13mm	Orange/Black/Orange		Orange	Black	Orange	
0.19mm	Orange/Red/Orange		Orange	Red	Orange	
0.25mm	Orange/Blue/Orange	SC0303	Orange	Blue	Orange	
0.28mm	White/Blue/White		White	Blue	White	
0.31mm	Red/Blue/Red		Red	Blue	Red	
0.33mm	Brown/Blue/Brown		Brown	Blue	Brown	
0.36mm	Brown/Black/Brown		Brown	Black	Brown	
0.38mm	Orange/Green/Orange	SC0304	Orange	Green	Orange	
0.44mm	Green/Yellow/Green		Green	Yellow	Green	
0.51mm	Orange/Yellow/Orange	SC0305	Orange	Yellow	Orange	
0.57mm	White/Yellow/White		White	Yellow	White	
0.64mm	Orange/White/Orange	SC0306	Orange	White	Orange	
0.76mm	Black/Black/Black	SC0307	Black	Black	Black	
0.89mm	Orange/Orange/Orange	SC0308	Orange	Orange	Orange	
0.95mm	White/Black/White		White	Black	White	
1.02mm	White/White/White	SC0309	White	White	White	
1.09mm	White/Red/White		White	Red	White	
1.14mm	Red/Red/Red	SC0310	Red	Red	Red	
1.22mm	Red/Grey/Red		Red	Grey	Red	
1.30mm	Grey/Grey/Grey	SC0311	Grey	Grey	Grey	
1.42mm	Yellow/Yellow/Yellow	SC0312	Yellow	Yellow	Yellow	
1.52mm	Yellow/Blue/Yellow	SC0313	Yellow	Blue	Yellow	
1.65mm	Blue/Blue/Blue	SC0314	Blue	Blue	Blue	
1.75mm	Blue/Green/Blue		Blue	Green	Blue	
1.85mm	Green/Green/Green	SC0315	Green	Green	Green	
2.06mm	Purple/Purple/Purple	SC0316	Purple	Purple	Purple	
2.29mm	Purple/Black/Purple	SC0317	Purple	Black	Purple	
2.54mm	Purple/Orange/Purple	SC0318	Purple	Orange	Purple	
2.79mm	Purple/White/Purple	SC3019	Purple	White	Purple	
3.18mm	Black/White/Black	SC0337	Black	White	Black	

* Blank Part numbers or numbers with an asterisk at the end are special ordered items which may result in a minimum order requirement, longer lead times or may not be available.

Pharmaprene® Pump Tubes

Pharmaprene is designed as a replacement for Santoprene® which is being discontinued. It has many similar visible properties to Santoprene®. Characteristics include very good chemical resistance to alcohols, ozone, aqueous systems etc. It also showcases good flow consistency for peristaltic pump applications. It is ideal for under vacuum conditions. Furthermore it is anti-aging and tough tubing with a wide temperature range. It is available free of latex and is fully RoHS compliant and contains no Substances of Very High Concern (SVHC's) as classified by the REACH environmental regulations.

Product:

Pharmaprene® - Phthalate Free, Flexible TPE
Medical Extrusion Compound

Full Name:

Pharmaprene®

Applications:

Peristaltic Pump, Laboratory and Medical
Directly replaces Santoprene®

Characteristics:

Very good chemical resistance
Excellent pump life
Anti-aging and tough

Temperature Range (approx.)

-50°C to +135°C (-58°F to +275°F)

Sterilizations:

Gamma Irradiation
ETO (Ethylene Oxide Gas)
Autoclave (unbridged tubing)

Hardness:

64 Shore A

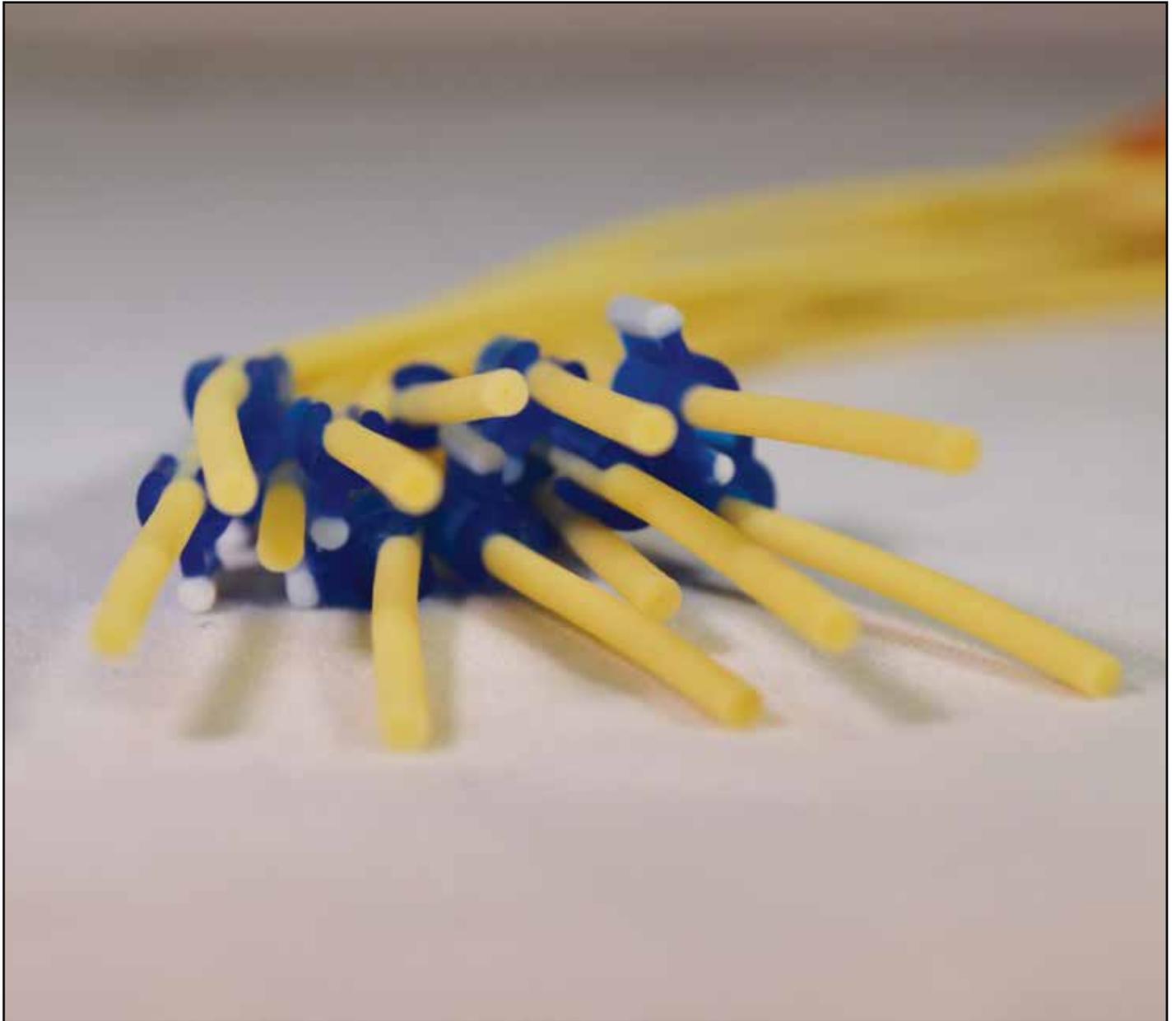
Elongation at Break:

440%

Certification:

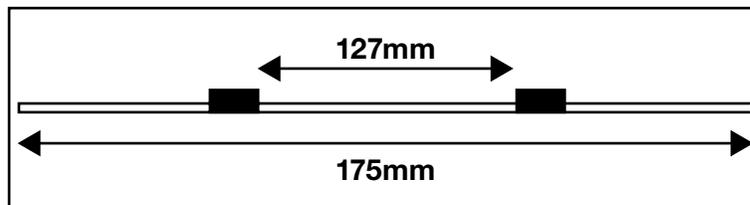
US Pharmacopoeia Biological Test for Plastics
Class IV
Part XXIII
FDA Drug Master File 17690

EU and China RoHS compliant, REACH
Compliant, no SVHCs



PSC03XX Series 2 Bridge Pharmaprene® Pump Tubes

Available in packs of 12 tubes



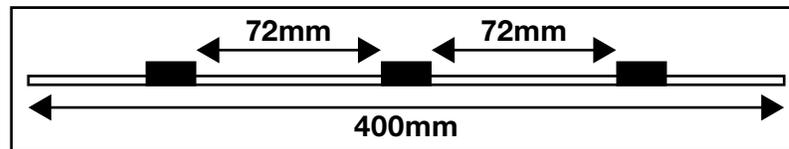
For Flared Tubing place an "F" in front of the PSC03XX series part number. For example: FPSC0326

Metric I.D.	Description	Part No.*	Color Code		
0.13mm	Orange/Black		Orange	Black	
0.19mm	Orange/Red		Orange	Red	
0.25mm	Orange/Blue	PSC0320	Orange	Blue	
0.28mm	White/Blue		White	Blue	
0.31mm	Red/Blue		Red	Blue	
0.33mm	Brown/Blue		Brown	Blue	
0.36mm	Brown/Black		Brown	Black	
0.38mm	Orange/Green	PSC0321	Orange	Green	
0.44mm	Green/Yellow		Green	Yellow	
0.51mm	Orange/Yellow	PSC0322	Orange	Yellow	
0.57mm	White/Yellow		White	Yellow	
0.64mm	Orange/White	PSC0323	Orange	White	
0.76mm	Black/Black	PSC0324	Black	Black	
0.89mm	Orange/Orange	PSC0325	Orange	Orange	
0.95mm	White/Black		White	Black	
1.02mm	White/White	PSC0326	White	White	
1.09mm	White/Red		White	Red	
1.14mm	Red/Red	PSC0327	Red	Red	
1.22mm	Red/Grey		Red	Grey	
1.30mm	Grey/Grey	PSC0328	Grey	Grey	
1.42mm	Yellow/Yellow	PSC0329	Yellow	Yellow	
1.52mm	Yellow/Blue	PSC0330	Yellow	Blue	
1.65mm	Blue/Blue	PSC0331	Blue	Blue	
1.75mm	Blue/Green		Blue	Green	
1.85mm	Green/Green	PSC0332	Green	Green	
2.06mm	Purple/Purple	PSC0333	Purple	Purple	
2.29mm	Purple/Black	PSC0334	Purple	Black	
2.54mm	Purple/Orange	PSC0335	Purple	Orange	
2.79mm	Purple/White	PSC0336	Purple	White	
3.18mm	Black/White		Black	White	

* Blank Part numbers or numbers with an asterisk at the end are special ordered items which may result in an minimum order requirement, longer lead times or may not be available.

PSC03XX Series 3 Bridge Pharmaprene® Pump Tubes

Available in packs of 12 tubes



For Flared Tubing place an "F" in front of the FSC03XX series part number. For example: FSC0311

Metric I.D.	Description	Part No.*	Color Code			
0.13mm	Orange/Black/Orange		Orange	Black	Orange	
0.19mm	Orange/Red/Orange		Orange	Red	Orange	
0.25mm	Orange/Blue/Orange	PSC0303	Orange	Blue	Orange	
0.28mm	White/Blue/White		White	Blue	White	
0.31mm	Red/Blue/Red		Red	Blue	Red	
0.33mm	Brown/Blue/Brown		Brown	Blue	Brown	
0.36mm	Brown/Black/Brown		Brown	Black	Brown	
0.38mm	Orange/Green/Orange	PSC0304	Orange	Green	Orange	
0.44mm	Green/Yellow/Green		Green	Yellow	Green	
0.51mm	Orange/Yellow/Orange	PSC0305	Orange	Yellow	Orange	
0.57mm	White/Yellow/White		White	Yellow	White	
0.64mm	Orange/White/Orange	PSC0306	Orange	White	Orange	
0.76mm	Black/Black/Black	PSC0307	Black	Black	Black	
0.89mm	Orange/Orange/Orange	PSC0308	Orange	Orange	Orange	
0.95mm	White/Black/White		White	Black	White	
1.02mm	White/White/White	PSC0309	White	White	White	
1.09mm	White/Red/White		White	Red	White	
1.14mm	Red/Red/Red	PSC0310	Red	Red	Red	
1.22mm	Red/Grey/Red		Red	Grey	Red	
1.30mm	Grey/Grey/Grey	PSC0311	Grey	Grey	Grey	
1.42mm	Yellow/Yellow/Yellow	PSC0312	Yellow	Yellow	Yellow	
1.52mm	Yellow/Blue/Yellow	PSC0313	Yellow	Blue	Yellow	
1.65mm	Blue/Blue/Blue	PSC0314	Blue	Blue	Blue	
1.75mm	Blue/Green/Blue		Blue	Green	Blue	
1.85mm	Green/Green/Green	PSC0315	Green	Green	Green	
2.06mm	Purple/Purple/Purple	PSC0316	Purple	Purple	Purple	
2.29mm	Purple/Black/Purple	PSC0317	Purple	Black	Purple	
2.54mm	Purple/Orange/Purple	PSC0318	Purple	Orange	Purple	
2.79mm	Purple/White/Purple	PSC0319	Purple	White	Purple	
3.18mm	Black/White/Black	PSC0337	Black	White	Black	

* Blank Part numbers or numbers with an asterisk at the end are special ordered items which may result in a minimum order requirement, longer lead times or may not be available.

Viton® Pump Tubes

Viton® is a proprietary type of fluoroelastomer rubber, manufactured by DuPont Industries. Viton® has one of the broadest ranges of chemical resistance in industry. We use Viton® B grade, which is regarded as an ideal type for peristaltic pump use. This combines excellent flexibility with high chemical resistance and anti-aging properties over a wide range of environmental conditions. Viton® B is specified as a terpolymer of vinylidene fluoride, hexafluoropropylene and tetrafluoroethylene and has a higher fluid resistance than Viton® A. Viton® B is FDA approved where compliance is required.

Product:
DuPont Viton® B Fluoroelastomer

Full Name:
Viton®

Applications:
Industrial & Laboratory
Ideal for Fuel and Oil Lines
Aromatic Oils

Characteristics:
Exceptional Chemical Resistance
Excellent Flexibility
Wide Temperature Range
Good Peristaltic Pumping Characteristics

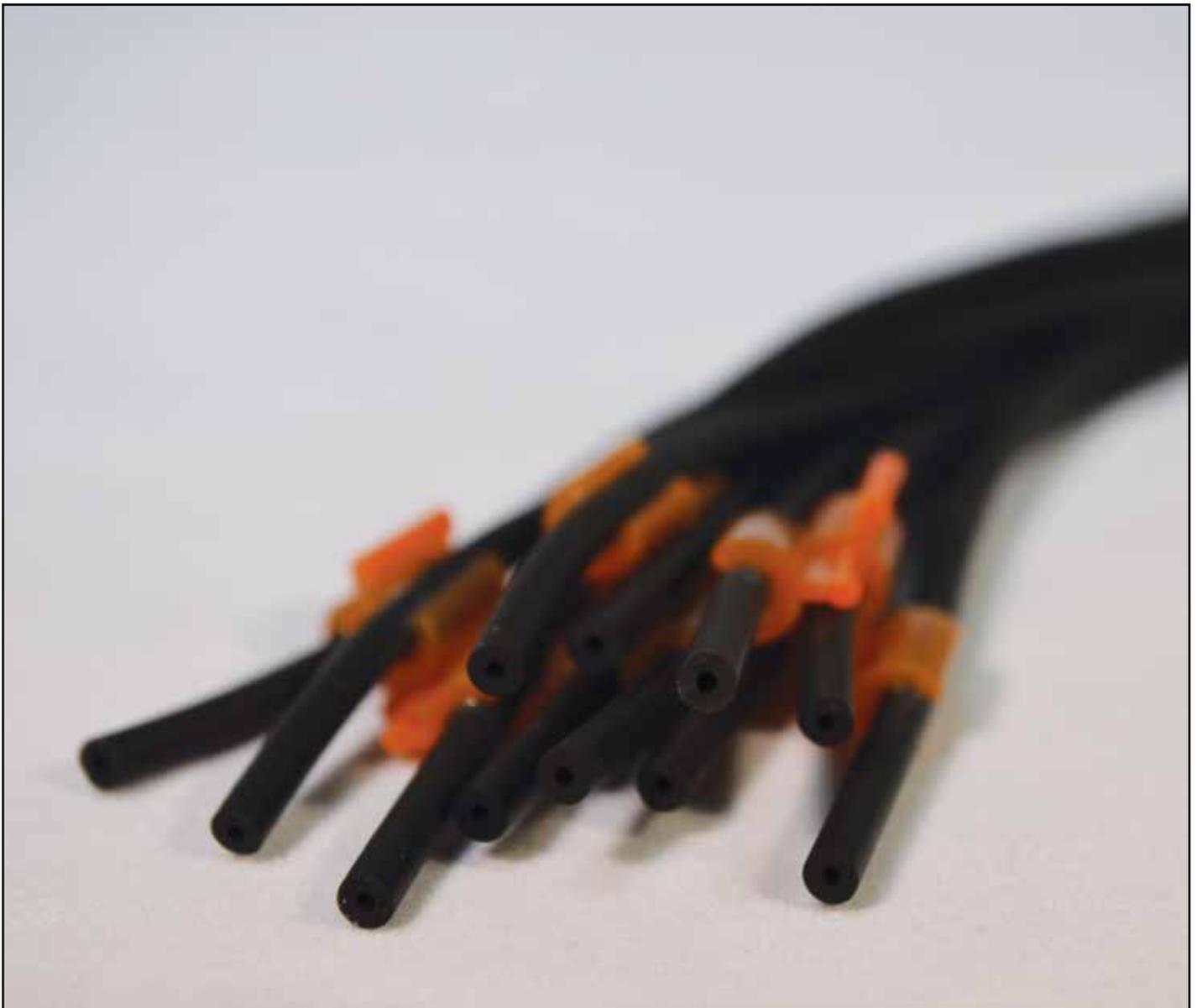
Excellent Anti-Aging Properties
Environmentally Tough

Temperature Range
-20°C to +200°C (-4°F to +392°F)

Sterilizations:
Not Recommended

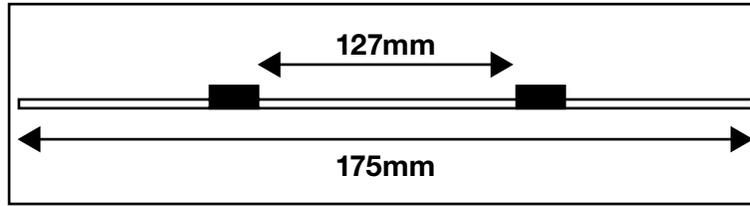
Hardness:
60 Shore A
70 on 6mm ID and above

Elongation at Break:
150% - 250%



116-0651-XX Series 2 Bridge Viton® Pump Tubes

Available in packs of 12 tubes



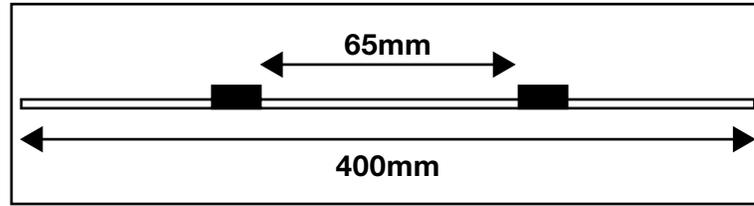
For Flared Tubing place an "F" in front of the 116-0651-XX series part number. For example: F116-0651-13

Metric I.D.	Description	Part No.*	Color Code		
0.13mm	Orange/Black		Orange		Black
0.19mm	Orange/Red		Orange		Red
0.25mm	Orange/Blue		Orange		Blue
0.28mm	White/Blue				Blue
0.31mm	Red/Blue		Red		Blue
0.33mm	Brown/Blue		Brown		Blue
0.36mm	Brown/Black		Brown		Black
0.38mm	Orange/Green	116-0651-04	Orange		Green
0.44mm	Green/Yellow		Green		Yellow
0.51mm	Orange/Yellow	116-0651-05	Orange		Yellow
0.57mm	White/Yellow				Yellow
0.64mm	Orange/White	116-0651-06	Orange		White
0.76mm	Black/Black	116-0651-07	Black		Black
0.89mm	Orange/Orange	116-0651-08	Orange		Orange
0.95mm	White/Black				Black
1.02mm	White/White	116-0651-09			White
1.09mm	White/Red				Red
1.14mm	Red/Red	116-0651-10	Red		Red
1.22mm	Red/Grey		Red		Grey
1.30mm	Grey/Grey	116-0651-11	Grey		Grey
1.42mm	Yellow/Yellow	116-0651-12	Yellow		Yellow
1.52mm	Yellow/Blue	116-0651-19	Yellow		Blue
1.65mm	Blue/Blue	116-0651-13	Blue		Blue
1.75mm	Blue/Green		Blue		Green
1.85mm	Green/Green	116-0651-14	Green		Green
2.06mm	Purple/Purple	116-0651-15	Purple		Purple
2.29mm	Purple/Black	116-0651-16	Purple		Black
2.54mm	Purple/Orange	116-0651-17	Purple		Orange
2.79mm	Purple/White	116-0651-18	Purple		White
3.18mm	Black/White		Black		White

* Blank Part numbers or numbers with an asterisk at the end are special ordered items which may result in an minimum order requirement, longer lead times or may not be available.

188-0133-XX Series 2 Bridge Viton® Pump Tubes

Available in packs of 12 tubes



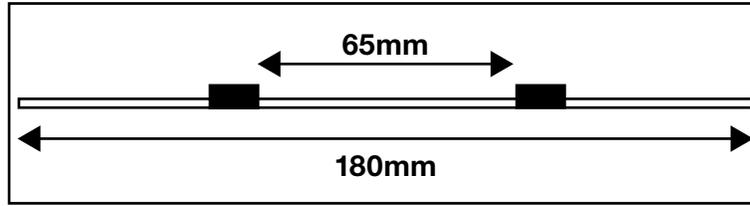
For Flared Tubing place an "F" in front of the 188-0133-XX series part number. For example: F188-0133-05

Metric I.D.	Description	Part No.*	Color Code		
0.13mm	Orange/Black		Orange	Black	
0.19mm	Orange/Red		Orange	Red	
0.25mm	Orange/Blue		Orange	Blue	
0.28mm	White/Blue		White	Blue	
0.31mm	Red/Blue		Red	Blue	
0.33mm	Brown/Blue		Brown	Blue	
0.36mm	Brown/Black		Brown	Black	
0.38mm	Orange/Green	188-0133-04*	Orange	Green	
0.44mm	Green/Yellow		Green	Yellow	
0.51mm	Orange/Yellow	188-0133-05*	Orange	Yellow	
0.57mm	White/Yellow		White	Yellow	
0.64mm	Orange/White	188-0133-06*	Orange	White	
0.76mm	Black/Black	188-0133-07*	Black	Black	
0.89mm	Orange/Orange	188-0133-08*	Orange	Orange	
0.95mm	White/Black		White	Black	
1.02mm	White/White	188-0133-09*	White	White	
1.09mm	White/Red		White	Red	
1.14mm	Red/Red	188-0133-10*	Red	Red	
1.22mm	Red/Grey		Red	Grey	
1.30mm	Grey/Grey	188-0133-11*	Grey	Grey	
1.42mm	Yellow/Yellow	188-0133-12*	Yellow	Yellow	
1.52mm	Yellow/Blue		Yellow	Blue	
1.65mm	Blue/Blue	188-0133-13*	Blue	Blue	
1.75mm	Blue/Green		Blue	Green	
1.85mm	Green/Green	188-0133-14*	Green	Green	
2.06mm	Purple/Purple	188-0133-15*	Purple	Purple	
2.29mm	Purple/Black		Purple	Black	
2.54mm	Purple/Orange		Purple	Orange	
2.79mm	Purple/White		Purple	White	
3.18mm	Black/White		Black	White	

* Blank Part numbers or numbers with an asterisk at the end are special ordered items which may result in a minimum order requirement, longer lead times or may not be available.

116-0830-XX Series 2 Bridge Viton® Pump Tubes

Available in packs of 12 tubes



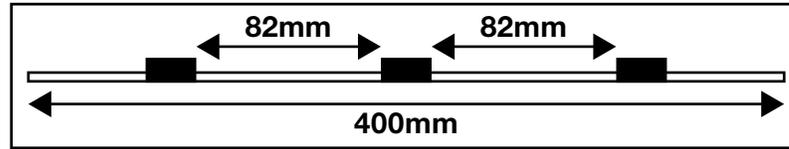
For Flared Tubing place an "F" in front of the 116-0380-XX series part number. For example: F116-0830-17

Metric I.D.	Description	Part No.*	Color Code		
0.13mm	Orange/Black		Orange		Black
0.19mm	Orange/Red		Orange		Red
0.25mm	Orange/Blue		Orange		Blue
0.28mm	White/Blue				Blue
0.31mm	Red/Blue		Red		Blue
0.33mm	Brown/Blue		Brown		Blue
0.36mm	Brown/Black		Brown		Black
0.38mm	Orange/Green	116-0830-04*	Orange		Green
0.44mm	Green/Yellow		Green		Yellow
0.51mm	Orange/Yellow	116-0830-05*	Orange		Yellow
0.57mm	White/Yellow				Yellow
0.64mm	Orange/White	116-0830-06*	Orange		White
0.76mm	Black/Black	116-0830-07*	Black		Black
0.89mm	Orange/Orange	116-0830-08*	Orange		Orange
0.95mm	White/Black				Black
1.02mm	White/White	116-0830-09*			White
1.09mm	White/Red				Red
1.14mm	Red/Red	116-0830-10*	Red		Red
1.22mm	Red/Grey		Red		Grey
1.30mm	Grey/Grey	116-0830-11*	Grey		Grey
1.42mm	Yellow/Yellow	116-0830-12*	Yellow		Yellow
1.52mm	Yellow/Blue		Yellow		Blue
1.65mm	Blue/Blue	116-0830-13*	Blue		Blue
1.75mm	Blue/Green		Blue		Green
1.85mm	Green/Green	116-0830-14*	Green		Green
2.06mm	Purple/Purple	116-0830-15*	Purple		Purple
2.29mm	Purple/Black		Purple		Black
2.54mm	Purple/Orange		Purple		Orange
2.79mm	Purple/White		Purple		White
3.18mm	Black/White		Black		White

* Blank Part numbers or numbers with an asterisk at the end are special ordered items which may result in an minimum order requirement, longer lead times or may not be available.

SC02XX Series 3 Bridge Viton® Pump Tubes

Available in packs of 12 tubes



For Flared Tubing place an "F" in front of the FSC02XX series part number. For example: FSC0257

Metric I.D.	Description	Part No.*	Color Code			
0.13mm	Orange/Black/Orange		Orange	Black	Orange	
0.19mm	Orange/Red/Orange		Orange	Red	Orange	
0.25mm	Orange/Blue/Orange		Orange	Blue	Orange	
0.28mm	White/Blue/White		White	Blue	White	
0.31mm	Red/Blue/Red		Red	Blue	Red	
0.33mm	Brown/Blue/Brown		Brown	Blue	Brown	
0.36mm	Brown/Black/Brown		Brown	Black	Brown	
0.38mm	Orange/Green/Orange	SC0254*	Orange	Green	Orange	
0.44mm	Green/Yellow/Green		Green	Yellow	Green	
0.51mm	Orange/Yellow/Orange	SC0255	Orange	Yellow	Orange	
0.57mm	White/Yellow/White		White	Yellow	White	
0.64mm	Orange/White/Orange	SC0256	Orange	White	Orange	
0.76mm	Black/Black/Black	SC0257	Black	Black	Black	
0.89mm	Orange/Orange/Orange	SC0258	Orange	Orange	Orange	
0.95mm	White/Black/White		White	Black	White	
1.02mm	White/White/White	SC0259	White	White	White	
1.09mm	White/Red/White		White	Red	White	
1.14mm	Red/Red/Red	SC0260	Red	Red	Red	
1.22mm	Red/Grey/Red		Red	Grey	Red	
1.30mm	Grey/Grey/Grey	SC0261	Grey	Grey	Grey	
1.42mm	Yellow/Yellow/Yellow	SC0262	Yellow	Yellow	Yellow	
1.52mm	Yellow/Blue/Yellow	SC0263	Yellow	Blue	Yellow	
1.65mm	Blue/Blue/Blue	SC0264	Blue	Blue	Blue	
1.75mm	Blue/Green/Blue		Blue	Green	Blue	
1.85mm	Green/Green/Green	SC0265	Green	Green	Green	
2.06mm	Purple/Purple/Purple	SC0266	Purple	Purple	Purple	
2.29mm	Purple/Black/Purple	SC0267	Purple	Black	Purple	
2.54mm	Purple/Orange/Purple	SC0268	Purple	Orange	Purple	
2.79mm	Purple/White/Purple	SC0269	Purple	White	Purple	
3.18mm	Black/White/Black		Black	White	Black	

* Blank Part numbers or numbers with an asterisk at the end are special ordered items which may result in a minimum order requirement, longer lead times or may not be available.

Tygon® PVC Standard Pump Tubes

Tygon® brand Phthalate Free PVC or AutoAnalysis Tubing is a micro-bore diameter tubing used in AutoAnalyzer instruments and micro-bore peristaltic pumps. This tubing is great for harsh reagents and is clear with an excellent chemical resistance.

Product:

Phthalate Free Tygon® PVC

Full Name:

Tygon® PVC

Applications:

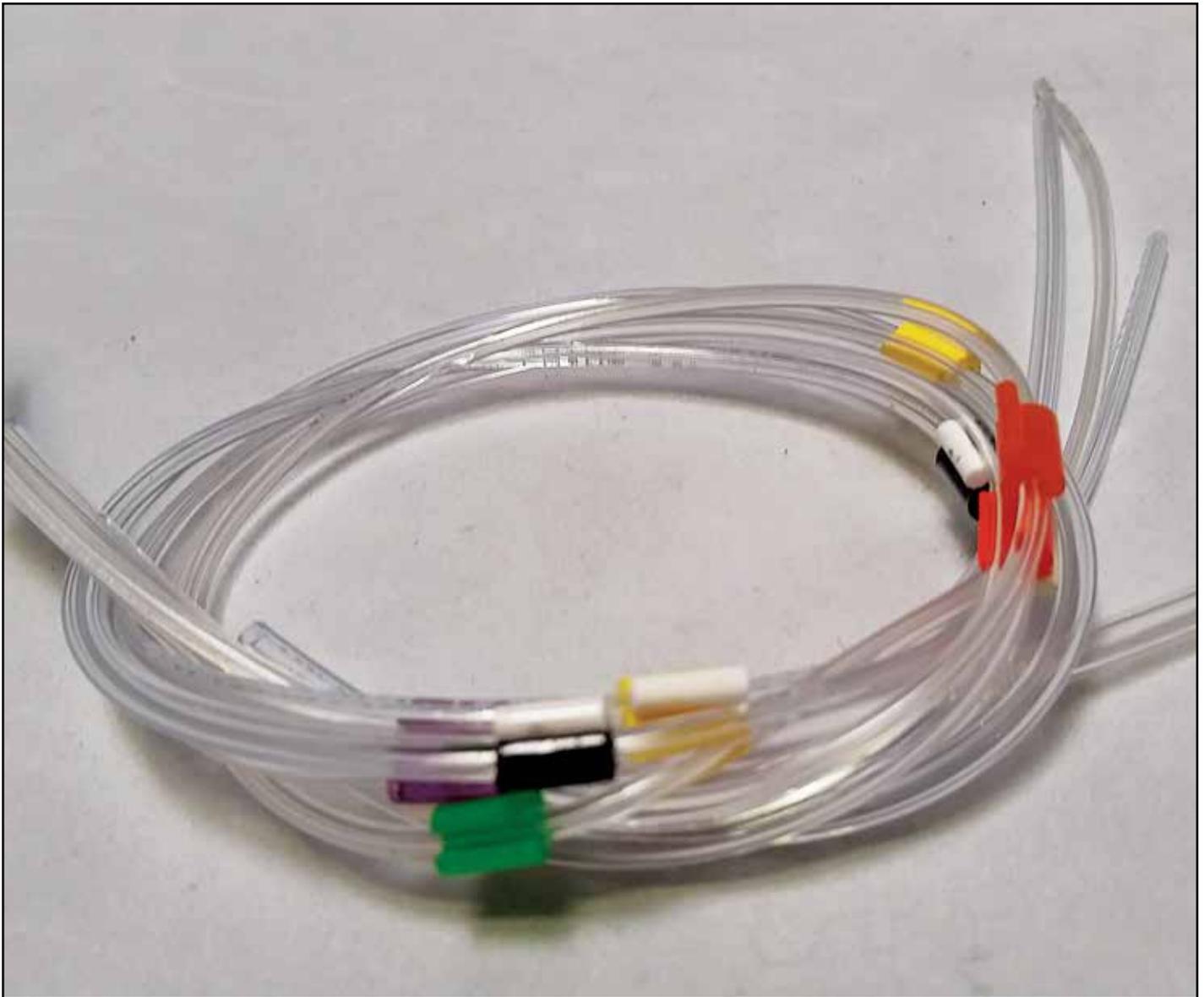
Peristaltic Pump, Laboratory and Pharmaceutical

Characteristics:Supple, Strong
Excellent Pumping Life
Good Handling Characteristics
Crack Resistant
Smooth and Polished Inner Wall**Sterilizations:**Ethylene Oxide
Autoclave**Hardness:**

55 Shore A

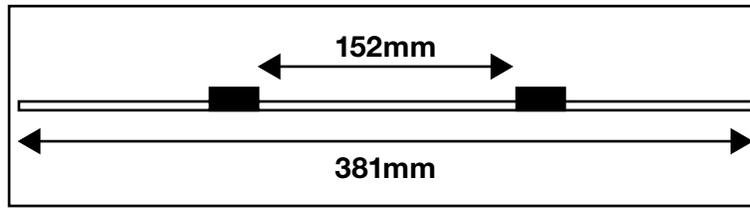
Elongation at Break:

450%

Certification:Meets USP Class VI
US Pharmacopoeia Tested and Certified

P116-0549-XX Series Tygon® PVC 2 Bridge Pump Tubes

Available in packs of 12 tubes



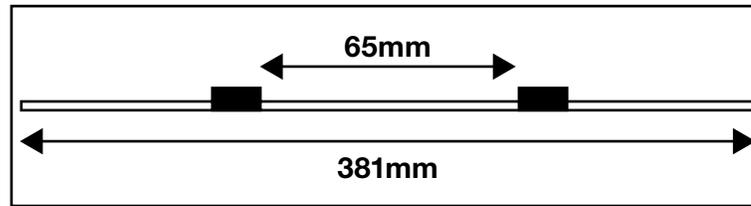
For Flared tubing place an "F" in front of the P116-0549-XX part number. For example: FP116-0549-08

Metric I.D.	Description	Part No.*	Color Code			
0.13mm	Orange/Black	P116-0549-01*	Orange		Black	
0.19mm	Orange/Red	P116-0549-02	Orange		Red	
0.25mm	Orange/Blue	P116-0549-03	Orange		Blue	
0.28mm**	White/Blue				Blue	
0.31mm**	Red/Blue	P116-0549-20*	Red		Blue	
0.33mm**	Brown/Blue		Brown		Blue	
0.36mm**	Brown/Black		Brown		Black	
0.38mm	Orange/Green	P116-0549-04	Orange		Green	
0.44mm	Green/Yellow		Green		Yellow	
0.51mm	Orange/Yellow	P116-0549-05	Orange		Yellow	
0.57mm	White/Yellow				Yellow	
0.64mm	Orange/White	P116-0549-06	Orange		White	
0.69mm	Black/Black	P116-0549-07	Black		Black	
0.89mm	Orange/Orange	P116-0549-08	Orange		Orange	
0.95mm	White/Black				Black	
1.02mm	White/White	P116-0549-09			White	
1.09mm	White/Red				Red	
1.14mm	Red/Red	P116-0549-10	Red		Red	
1.22mm	Red/Grey		Red		Grey	
1.25mm	Grey/Grey	P116-0549-11	Grey		Grey	
1.42mm	Yellow/Yellow	P116-0549-12	Yellow		Yellow	
1.49mm	Yellow/Blue	P116-0549-19	Yellow		Blue	
1.60mm	Blue/Blue	P116-0549-13	Blue		Blue	
1.75mm	Blue/Green		Blue		Green	
1.81mm	Green/Green	P116-0549-14	Green		Green	
2.06mm	Purple/Purple	P116-0549-15	Purple		Purple	
2.20mm	Purple/Black	P116-0549-16	Purple		Black	
2.54mm	Purple/Orange	P116-0549-17	Purple		Orange	
2.79mm	Purple/White	P116-0549-18	Purple		White	
3.17mm	Black/White	P116-0549-21	Black		White	

*Blank Part numbers or numbers with an asterisk at the end are special ordered items which may result in an minimum order requirement, longer lead times or may not be available. **Inner diameter of this tubing may be different than what is listed by no more than +/- .03mm

P178-3748-XX Series Tygon® PVC 2 Bridge Pump Tubes

Available in packs of 12 tubes



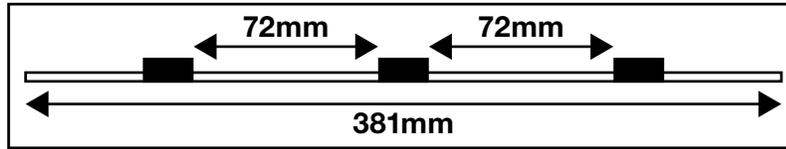
For Flared tubing place an "F" in front of the P178-3748-XX part number. For example: FP178-3748-12

Metric I.D.	Description	Part No.*	Color Code		
0.13mm	Orange/Black	P178-3748-01*	Orange	Black	
0.19mm	Orange/Red	P178-3748-02	Orange	Red	
0.25mm	Orange/Blue	P178-3748-03	Orange	Blue	
0.28mm**	White/Blue		White	Blue	
0.31mm**	Red/Blue		Red	Blue	
0.33mm**	Brown/Blue		Brown	Blue	
0.36mm**	Brown/Black		Brown	Black	
0.38mm	Orange/Green	P178-3748-04	Orange	Green	
0.44mm	Green/Yellow		Green	Yellow	
0.51mm	Orange/Yellow	P178-3748-05	Orange	Yellow	
0.57mm	White/Yellow		White	Yellow	
0.64mm	Orange/White	P178-3748-06	Orange	White	
0.69mm	Black/Black	P178-3748-07	Black	Black	
0.89mm	Orange/Orange	P178-3748-08	Orange	Orange	
0.95mm	White/Black		White	Black	
1.02mm	White/White	P178-3748-09	White	White	
1.09mm	White/Red		White	Red	
1.14mm	Red/Red	P178-3748-10	Red	Red	
1.22mm	Red/Grey		Red	Grey	
1.25mm	Grey/Grey	P178-3748-11	Grey	Grey	
1.42mm	Yellow/Yellow	P178-3748-12	Yellow	Yellow	
1.49mm	Yellow/Blue	P178-3748-19	Yellow	Blue	
1.60mm	Blue/Blue	P178-3748-13	Blue	Blue	
1.75mm	Blue/Green		Blue	Green	
1.81mm	Green/Green	P178-3748-14	Green	Green	
2.06mm	Purple/Purple	P178-3748-15	Purple	Purple	
2.20mm	Purple/Black	P178-3748-16	Purple	Black	
2.54mm	Purple/Orange	P178-3748-17	Purple	Orange	
2.79mm	Purple/White	P178-3748-18	Purple	White	
3.17mm	Black/White		Black	White	

*Blank Part numbers or numbers with an asterisk at the end are special ordered items which may result in an minimum order requirement, longer lead times or may not be available. **Inner diameter of this tubing may be different than what is listed by no more than +/- .03mm

TSC00XX Series 3 Bridge Tygon® Pump Tubes

Available in packs of 12 tubes



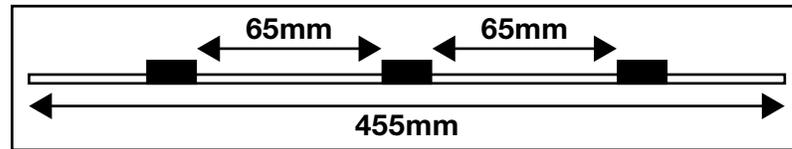
For Flared Tubing place an "F" in front of the TSC00XX series part number. For example: FTSC0061

Metric I.D.	Description	Part No.*	Color Code			
0.13mm	Orange/Black/Orange		Orange	Black	Orange	
0.19mm	Orange/Red/Orange	TSC0049*	Orange	Red	Orange	
0.25mm	Orange/Blue/Orange	TSC0050	Orange	Blue	Orange	
0.28mm**	White/Blue/White		White	Blue	White	
0.31mm**	Red/Blue/Red		Red	Blue	Red	
0.33mm**	Brown/Blue/Brown		Brown	Blue	Brown	
0.36mm**	Brown/Black/Brown		Brown	Black	Brown	
0.38mm	Orange/Green/Orange		Orange	Green	Orange	
0.44mm	Green/Yellow/Green		Green	Yellow	Green	
0.51mm	Orange/Yellow/Orange	TSC0053	Orange	Yellow	Orange	
0.57mm	White/Yellow/White		White	Yellow	White	
0.64mm	Orange/White/Orange	TSC0055	Orange	White	Orange	
0.69mm	Black/Black/Black	TSC0056	Black	Black	Black	
0.89mm	Orange/Orange/Orange	TSC0057	Orange	Orange	Orange	
0.95mm	White/Black/White	TSC0058*	White	Black	White	
1.02mm	White/White/White	TSC0059	White	White	White	
1.09mm	White/Red/White		White	Red	White	
1.14mm	Red/Red/Red	TSC0061	Red	Red	Red	
1.22mm	Red/Grey/Red		Red	Grey	Red	
1.25mm	Grey/Grey/Grey	TSC0063	Grey	Grey	Grey	
1.42mm	Yellow/Yellow/Yellow	TSC0064	Yellow	Yellow	Yellow	
1.49mm	Yellow/Blue/Yellow	TSC0065	Yellow	Blue	Yellow	
1.60mm	Blue/Blue/Blue	TSC0066	Blue	Blue	Blue	
1.75mm	Blue/Green/Blue		Blue	Green	Blue	
1.81mm	Green/Green/Green	TSC0068	Green	Green	Green	
2.06mm	Purple/Purple/Purple	TSC0069	Purple	Purple	Purple	
2.20mm	Purple/Black/Purple	TSC0070	Purple	Black	Purple	
2.54mm	Purple/Orange/Purple	TSC0071	Purple	Orange	Purple	
2.79mm	Purple/White/Purple	TSC0024*	Purple	White	Purple	
3.17mm	Black/White/Black	TSC0073	Black	White	Black	

*Blank Part numbers or numbers with an asterisk at the end are special ordered items which may result in an minimum order requirement, longer lead times or may not be available. **Inner diameter of this tubing may be different than what is listed by no more than +/- .03mm

SK00XX Series Skalar 3 Bridge Pump Tubes

Available in packs of 12 tubes



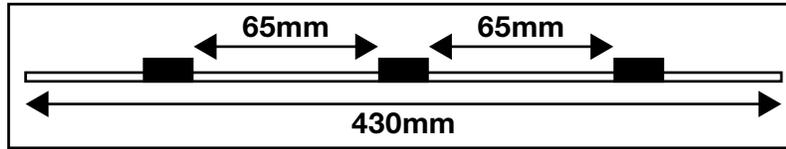
For Flared Tubing place an "F" in front of the FSK00XX series part number. For example: FSK0066

Metric I.D.	Description	Part No.*	Color Code			
0.13mm	Orange/Black/Orange		Orange	Black	Orange	
0.19mm	Orange/Red/Orange	SK0049	Orange	Red	Orange	
0.25mm	Orange/Blue/Orange	SK0050	Orange	Blue	Orange	
0.28mm	White/Blue/White		White	Blue	White	
0.31mm	Red/Blue/Red		Red	Blue	Red	
0.33mm	Brown/Blue/Brown		Brown	Blue	Brown	
0.36mm	Brown/Black/Brown		Brown	Black	Brown	
0.38mm	Orange/Green/Orange	SK0051	Orange	Green	Orange	
0.44mm	Green/Yellow/Green	SK0052	Green	Yellow	Green	
0.51mm	Orange/Yellow/Orange	SK0053	Orange	Yellow	Orange	
0.57mm	White/Yellow/White		White	Yellow	White	
0.64mm	Orange/White/Orange	SK0055	Orange	White	Orange	
0.76mm	Black/Black/Black	SK0056	Black	Black	Black	
0.89mm	Orange/Orange/Orange	SK0057	Orange	Orange	Orange	
0.95mm	White/Black/White		White	Black	White	
1.02mm	White/White/White	SK0059	White	White	White	
1.09mm	White/Red/White		White	Red	White	
1.14mm	Red/Red/Red	SK0061	Red	Red	Red	
1.22mm	Red/Grey/Red		Red	Grey	Red	
1.30mm	Grey/Grey/Grey	SK0063	Grey	Grey	Grey	
1.42mm	Yellow/Yellow/Yellow	SK0064	Yellow	Yellow	Yellow	
1.52mm	Yellow/Blue/Yellow	SK0065	Yellow	Blue	Yellow	
1.65mm	Blue/Blue/Blue	SK0066	Blue	Blue	Blue	
1.75mm	Blue/Green/Blue		Blue	Green	Blue	
1.85mm	Green/Green/Green	SK0068	Green	Green	Green	
2.06mm	Purple/Purple/Purple	SK0069	Purple	Purple	Purple	
2.29mm	Purple/Black/Purple	SK0070	Purple	Black	Purple	
2.54mm	Purple/Orange/Purple	SK0071	Purple	Orange	Purple	
2.79mm	Purple/White/Purple	SK0072	Purple	White	Purple	
3.18mm	Black/White/Black	SK0073	Black	White	Black	

*Blank Part numbers or numbers with an asterisk at the end are special ordered items which may result in an minimum order requirement, longer lead times or may not be available.

TSK00XX Series Tygon® Skalar 3 Bridge Pump Tubes

Available in packs of 12 tubes



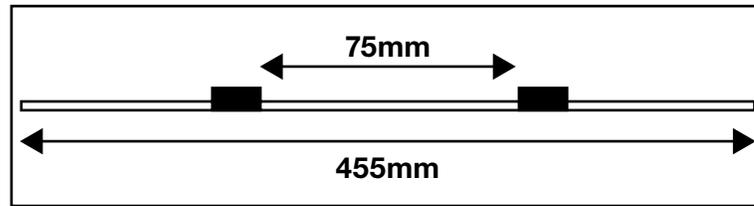
For Flared Tubing place an "F" in front of the FTSK00XX series part number. For example: FTSK0070

Metric I.D.	Description	Part No.*	Color Code			
0.13mm	Orange/Black/Orange	TSK0060*	Orange	Black	Orange	
0.19mm	Orange/Red/Orange		Orange	Red	Orange	
0.25mm	Orange/Blue/Orange		Orange	Blue	Orange	
0.28mm**	White/Blue/White			Blue		
0.31mm**	Red/Blue/Red		Red	Blue	Red	
0.33mm**	Brown/Blue/Brown		Brown	Blue	Brown	
0.36mm**	Brown/Black/Brown		Brown	Black	Brown	
0.38mm	Orange/Green/Orange	TSK0051*	Orange	Green	Orange	
0.44mm	Green/Yellow/Green		Green	Yellow	Green	
0.51mm	Orange/Yellow/Orange	TSK0053*	Orange	Yellow	Orange	
0.57mm	White/Yellow/White			Yellow		
0.64mm	Orange/White/Orange	TSK0055*	Orange	White	Orange	
0.69mm	Black/Black/Black	TSK0056*	Black	Black	Black	
0.89mm	Orange/Orange/Orange	TSK0057*	Orange	Orange	Orange	
0.95mm	White/Black/White			Black		
1.02mm	White/White/White	TSK0059*				
1.09mm	White/Red/White			Red		
1.14mm	Red/Red/Red	TSK0061*	Red	Red	Red	
1.22mm	Red/Grey/Red		Red	Grey	Red	
1.25mm	Grey/Grey/Grey	TSK0063*	Grey	Grey	Grey	
1.42mm	Yellow/Yellow/Yellow	TSK0064*	Yellow	Yellow	Yellow	
1.49mm	Yellow/Blue/Yellow	TSK0065*	Yellow	Blue	Yellow	
1.60mm	Blue/Blue/Blue	TSK0066*	Blue	Blue	Blue	
1.75mm	Blue/Green/Blue		Blue	Green	Blue	
1.81mm	Green/Green/Green	TSK0068*	Green	Green	Green	
2.06mm	Purple/Purple/Purple	TSK0069*	Purple	Purple	Purple	
2.20mm	Purple/Black/Purple	TSK0070*	Purple	Black	Purple	
2.54mm	Purple/Orange/Purple	TSK0071*	Purple	Orange	Purple	
2.79mm	Purple/White/Purple	TSK0072*	Purple	White	Purple	
3.17mm	Black/White/Black		Black	White	Black	

*Blank Part numbers or numbers with an asterisk at the end are special ordered items which may result in an minimum order requirement, longer lead times or may not be available. **Inner diameter of this tubing may be different than what is listed by no more than +/- .03mm

FUT-0651-XX Series Viton® Pump Tubes

Available in individual tubes



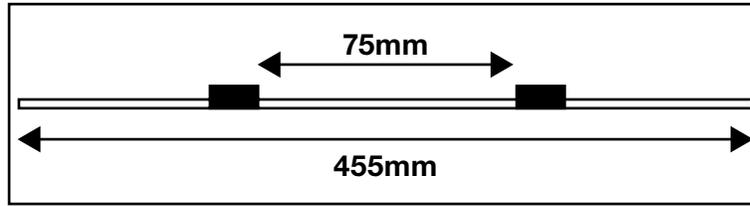
For Flared tubing place an "F" in the back of the FUT-0651-XX part number. For example: FUT-0651-10-F

Metric I.D.	Description	Part No.*	Color Code		
0.13mm	Orange/Black		Orange		Black
0.19mm	Orange/Red		Orange		Red
0.25mm	Orange/Blue	FUT-0651-03*	Orange		Blue
0.28mm	White/Blue				Blue
0.31mm	Red/Blue		Red		Blue
0.33mm	Brown/Blue		Brown		Blue
0.36mm	Brown/Black		Brown		Black
0.38mm	Orange/Green	FUT-0651-04*	Orange		Green
0.44mm	Green/Yellow		Green		Yellow
0.51mm	Orange/Yellow	FUT-0651-05	Orange		Yellow
0.57mm	White/Yellow				Yellow
0.64mm	Orange/White	FUT-0651-06	Orange		White
0.76mm	Black/Black	FUT-0651-07	Black		Black
0.89mm	Orange/Orange	FUT-0651-08	Orange		Orange
0.95mm	White/Black				Black
1.02mm	White/White	FUT-0651-09			White
1.09mm	White/Red				Red
1.14mm	Red/Red	FUT-0651-10	Red		Red
1.22mm	Red/Grey		Red		Grey
1.30mm	Grey/Grey	FUT-0651-11	Grey		Grey
1.42mm	Yellow/Yellow	FUT-0651-12	Yellow		Yellow
1.52mm	Yellow/Blue	FUT-0651-19	Yellow		Blue
1.65mm	Blue/Blue	FUT-0651-13	Blue		Blue
1.75mm	Blue/Green		Blue		Green
1.85mm	Green/Green	FUT-0651-14	Green		Green
2.06mm	Purple/Purple	FUT-0651-15	Purple		Purple
2.29mm	Purple/Black	FUT-0651-16	Purple		Black
2.54mm	Purple/Orange	FUT-0651-17*	Purple		Orange
2.79mm	Purple/White	FUT-0651-18	Purple		White
3.18mm	Black/White		Black		White

* Blank Part numbers or numbers with an asterisk at the end are special ordered items which may result in a minimum order requirement, longer lead times or may not be available.

FUT-3748-XX Series Futura PVC Pump Tubes

Available in packs of 12 tubes



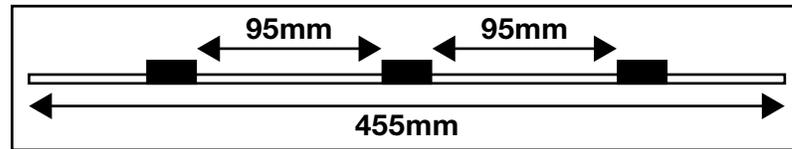
For Flared tubing place an "F" in the back of the FUT-3748-XX part number. For example: FUT-3748-10-F

Metric I.D.	Description	Part No.*	Color Code		
0.13mm	Orange/Black		Orange		Black
0.19mm	Orange/Red		Orange		Red
0.25mm	Orange/Blue	FUT-3748-03	Orange		Blue
0.28mm	White/Blue				Blue
0.31mm	Red/Blue		Red		Blue
0.33mm	Brown/Blue		Brown		Blue
0.36mm	Brown/Black		Brown		Black
0.38mm	Orange/Green	FUT-3748-04	Orange		Green
0.44mm	Green/Yellow		Green		Yellow
0.51mm	Orange/Yellow	FUT-3748-05	Orange		Yellow
0.57mm	White/Yellow				Yellow
0.64mm	Orange/White	FUT-3748-06	Orange		White
0.76mm	Black/Black	FUT-3748-07	Black		Black
0.89mm	Orange/Orange	FUT-3748-08	Orange		Orange
0.95mm	White/Black				Black
1.02mm	White/White	FUT-3748-09			White
1.09mm	White/Red				Red
1.14mm	Red/Red	FUT-3748-10	Red		Red
1.22mm	Red/Grey		Red		Grey
1.30mm	Grey/Grey	FUT-3748-11	Grey		Grey
1.42mm	Yellow/Yellow	FUT-3748-12	Yellow		Yellow
1.52mm	Yellow/Blue	FUT-3748-19	Yellow		Blue
1.65mm	Blue/Blue	FUT-3748-13	Blue		Blue
1.75mm	Blue/Green		Blue		Green
1.85mm	Green/Green	FUT-3748-14	Green		Green
2.06mm	Purple/Purple	FUT-3748-15	Purple		Purple
2.29mm	Purple/Black	FUT-3748-16	Purple		Black
2.54mm	Purple/Orange	FUT-3748-17	Purple		Orange
2.79mm	Purple/White	FUT-3748-18	Purple		White
3.18mm	Black/White		Black		White

* Blank Part numbers or numbers with an asterisk at the end are special ordered items which may result in an minimum order requirement, longer lead times or may not be available.

TS-95-XX Series 3 Bridge Pump Tubes

Available in packs of 12 tubes



Available in PVC, Solva, Silicone, Santoprene®, Pharmaprene® and Viton® materials

For Flared tubing place an "F" in the back of the TS-95-XX part number. For example: TS-95-09-F

Add an -S for Solva, -SN for Santoprene, -V for Viton, -SI for Silicone and -Ph for Pharmaprene at the end of each part number to designate the material type.

Metric I.D.	Description	Part No.*	Color Code			
0.13mm	Orange/Black/Orange	TS-95-01	Orange	Black	Orange	
0.19mm	Orange/Red/Orange		Orange	Red	Orange	
0.25mm	Orange/Blue/Orange	TS-95-03	Orange	Blue	Orange	
0.28mm	White/Blue/White		White	Blue	White	
0.31mm	Red/Blue/Red	TS-95-20	Red	Blue	Red	
0.33mm	Brown/Blue/Brown		Brown	Blue	Brown	
0.36mm	Brown/Black/Brown		Brown	Black	Brown	
0.38mm	Orange/Green/Orange	TS-95-04	Orange	Green	Orange	
0.44mm	Green/Yellow/Green		Green	Yellow	Green	
0.51mm	Orange/Yellow/Orange	TS-95-05	Orange	Yellow	Orange	
0.57mm	White/Yellow/White		White	Yellow	White	
0.64mm	Orange/White/Orange	TS-95-06	Orange	White	Orange	
0.76mm	Black/Black/Black	TS-95-07	Black	Black	Black	
0.89mm	Orange/Orange/Orange	TS-95-08	Orange	Orange	Orange	
0.95mm	White/Black/White		White	Black	White	
1.02mm	White/White/White	TS-95-09	White	White	White	
1.09mm	White/Red/White		White	Red	White	
1.14mm	Red/Red/Red	TS-95-10	Red	Red	Red	
1.22mm	Red/Grey/Red		Red	Grey	Red	
1.30mm	Grey/Grey/Grey	TS-95-11	Grey	Grey	Grey	
1.42mm	Yellow/Yellow/Yellow	TS-95-12	Yellow	Yellow	Yellow	
1.52mm	Yellow/Blue/Yellow	TS-95-19	Yellow	Blue	Yellow	
1.65mm	Blue/Blue/Blue	TS-95-13	Blue	Blue	Blue	
1.75mm	Blue/Green/Blue		Blue	Green	Blue	
1.85mm	Green/Green/Green	TS-95-14	Green	Green	Green	
2.06mm	Purple/Purple/Purple	TS-95-15	Purple	Purple	Purple	
2.29mm	Purple/Black/Purple	TS-95-16	Purple	Black	Purple	
2.54mm	Purple/Orange/Purple	TS-95-17	Purple	Orange	Purple	
2.79mm	Purple/White/Purple	TS-95-18	Purple	White	Purple	
3.18mm	Black/White/Black	TS-95-21	Black	White	Black	

* Blank Part numbers or numbers with an asterisk at the end are special ordered items which may result in a minimum order requirement, longer lead times or may not be available.

Bulk Transmission Tubing: Available in 1 meter increments

Pulse Instrumentation offers bulk transmission tubing (also known as macro-bore pump tubing) for our customers. We carry many different sizes of tubing for a variety of different peristaltic pump applications. Note: The PVC tubing is the only tubing that has the size of the tubing printed on the tubing.

Metric I.D.	PVC Transmission Tubing Part No.*	Print Color	Solva Transmission Tubing Part No.*	Silicone Transmission Tubing Part No.*	Santoprene® Transmission Tubing Part No.*	Pharmaprene® Transmission Tubing Part No.*	Viton® Transmission Tubing Part No.*
0.13mm	116-0536-01M		116-0537-01*		GPR-0013-008M	PPR-0013-008M	
0.19mm	116-0536-02M		116-0537-02*				
0.25mm	116-0536-03M		116-0537-03*		GPR-0025-008M	PPR-0025-008M	
0.28mm							
0.31mm	116-0536-20M*						
0.33mm							
0.36mm							
0.38mm	116-0536-04M		116-0537-04M	HS-0038-009M	GPR-0038-008M	PPR-0038-008M	116-0538-04M*
0.44mm							
0.51mm	116-0536-05M		116-0537-05M	HS-0051-009M	GPR-0051-008M	PPR-0051-008M	116-0538-05M
0.57mm							
0.64mm	116-0536-06M		116-0537-06M	HS-0064-009M	GPR-0064-008M	PPR-0064-008M	116-0538-06M
0.76mm	116-0536-07M		116-0537-07M	HS-0076-009M	GPR-0076-008M	PPR-0076-008M	116-0538-07M
0.89mm	116-0536-08M		116-0537-08M	HS-0089-009M	GPR-0089-008M	PPR-0089-008M	116-0538-08M
0.95mm							
1.02mm	116-0536-09M		116-0537-09M	HS-0102-009M	GPR-0102-008M	PPR-0102-008M	116-0538-09M
1.09mm							
1.14mm	116-0536-10M		116-0537-10M	HS-0114-009M	GPR-0114-008M	PPR-0114-008M	116-0538-10M
1.22mm							
1.30mm	116-0536-11M		116-0537-11M	HS-0130-009M	GPR-0130-008M	PPR-0130-008M	116-0538-11M
1.42mm	116-0536-12M		116-0537-12M	HS-0142-009M	GPR-0142-008M	PPR-0142-008M	116-0538-12M
1.52mm	116-0536-19M		116-0537-19M	HS-0152-009M	GPR-0152-008M	PPR-0152-008M	116-0538-19M
1.65mm	116-0536-13M		116-0537-13M	HS-0165-009M	GPR-0165-008M	PPR-0165-008M	116-0538-13M
1.75mm							
1.85mm	116-0536-14M		116-0537-14M	HS-0185-009M	GPR-0185-008M	PPR-0185-008M	116-0538-14M
2.06mm	116-0536-15M		116-0537-15M	HS-0206-009M	GPR-0206-008M	PPR-0206-008M	116-0538-15M
2.29mm	116-0536-16M		116-0537-16M	HS-0229-009M	GPR-0229-008M	PPR-0229-008M	116-0538-16M
2.54mm	116-0536-17M		116-0537-17M	HS-0254-009M	GPR-0254-008M	PPR-0254-008M	116-0538-17M
2.79mm	116-0536-18M		116-0537-18M	HS-0279-009M	GPR-0279-008M	PPR-0279-008M	116-0538-18M
3.18mm	116-0536-21M		116-0537-21M*				

* Blank Part numbers or numbers with an asterisk at the end are special ordered items which may result in a minimum order requirement, longer lead times or may not be available.

Tygon® Transmission Tubing - Phthalate Free

Pulse Instrumentation offers bulk transmission tubing (also known as continuous tubing) for our customers. We carry many different sizes of tubing for different peristaltic pump applications. Our bulk tubing sold by the meter and is the Phthalate Free LMT-55 formula.

Metric I.D.	Tygon® Transmission Tubing Part No.*
0.13mm	P116-0536-01M
0.19mm	P116-0536-02M
0.25mm	P116-0536-03M
0.28mm	
0.31mm	
0.33mm	
0.36mm	
0.38mm	P116-0536-04M
0.44mm	
0.50mm	P116-0536-05M
0.57mm	
0.64mm	P116-0536-06M
0.76mm	P116-0536-07M
0.89mm	P116-0536-08M
0.95mm	
1.02mm	P116-0536-09M
1.09mm	
1.14mm	P116-0536-10M
1.22mm	
1.30mm	P116-0536-11M
1.42mm	P116-0536-12M
1.52mm	P116-0536-19M
1.65mm	P116-0536-13M
1.75mm	
1.85mm	P116-0536-14M
2.06mm	P116-0536-15M
2.20mm	P116-0536-16M
2.54mm	P116-0536-17M
2.79mm	P116-0536-18M
3.17mm	

*Blank Part numbers or numbers with an asterisk at the end are special ordered items which may result in a minimum order requirement, longer lead times or may not be available.



250ml and 75ml constricted tubes shown

We offer 3 different ml volume sizes of borosilicate glass digestion tubes for various block systems.

They are available in: 250ml, 100ml and 75ml sizes and can be ordered as a straight or constricted tube.

Part Number	Description	Unit of Measurement
114-0024-04	75ml Digestion Tube – Constricted	PK40
114-0024-040	75ml Digestion Tube – Constricted	Each
114-0024-09	75ml Digestion Tube – Straight	PK40
114-0024-090	75ml Digestion Tube – Straight	Each
114-0024-06	100ml Digestion Tube – Constricted	PK40
114-0024-060	100ml Digestion Tube – Constricted	Each
114-0024-07	100ml Digestion Tube – Straight	PK40
114-0024-070	100ml Digestion Tube – Straight	Each
114-0024-03	250ml Digestion Tube – Constricted	PK40
114-0024-030	250ml Digestion Tube – Constricted	Each
114-0024-08	250ml Digestion Tube – Constricted	PK40
114-0024-080	250ml Digestion Tube – Constricted	Each

Transfer Pipets

We offer an extensive line of Transfer Pipets for different industry needs, including wide bore, non-graduated, narrow stems, blood bank pipets and more. The pipets are made from LDPE (low-density polyethylene) which is easy to grip with a glove. Pipets are used to draw and dispense liquids in controlled and reproducible drop sizes. Looking for different pipets? Let us know and we'll do our best to offer you a quote with a great price!

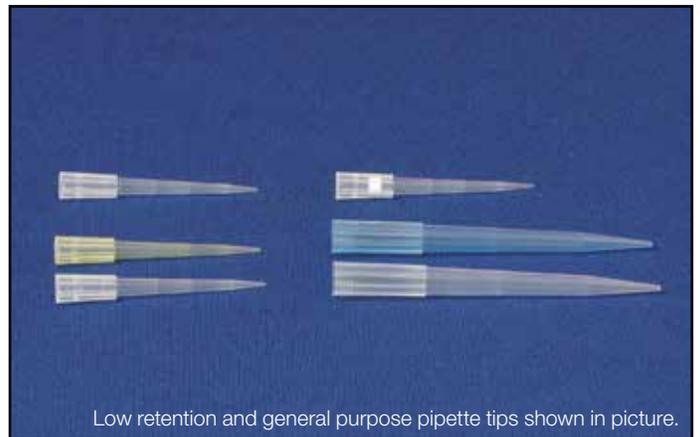
Technical Information: 196°C to 90°C, Can be gas (EtO) sterilized



Part Number	Description	Unit of Measurement	Dimensions	Drops/ml	Comments
130-03-G	3.0ml Graduated Pipets	Pack of 500, Dispenser Box	140mm total length	25	Graduation marks to 1.0ml with increments of .25ml Sterile Pipets available upon request
130-05-G	5.0ml Graduated Pipets	Pack of 500, Dispenser Box	145mm total length	24	Graduation marks to 1.0ml with increments of .25ml Sterile Pipets available upon request
130-07-G	7.0ml Graduated Pipets	Pack of 500, Dispenser Box	160mm total length	20	Graduation marks to 1.0ml with increments of .5ml Sterile Pipets available upon request

Pipette Tips

Manufactured in a cleanroom using automated equipment, these pipette tips from Pulse Instrumentation are designed to fit the majority of pipettor brands. They are Certified free from Human DNA, DNase, RNase, Pyrogens and PCR Inhibitors. The pipette tips are made from virgin polypropylene (PP). They are all graduated for accurate measurements and available in self-standing bags, racks and reloading stacks. Sterile and non-sterile options are available. Let us know if you don't see your size or type in the picture and we will do our best to off you a quote at a great price!

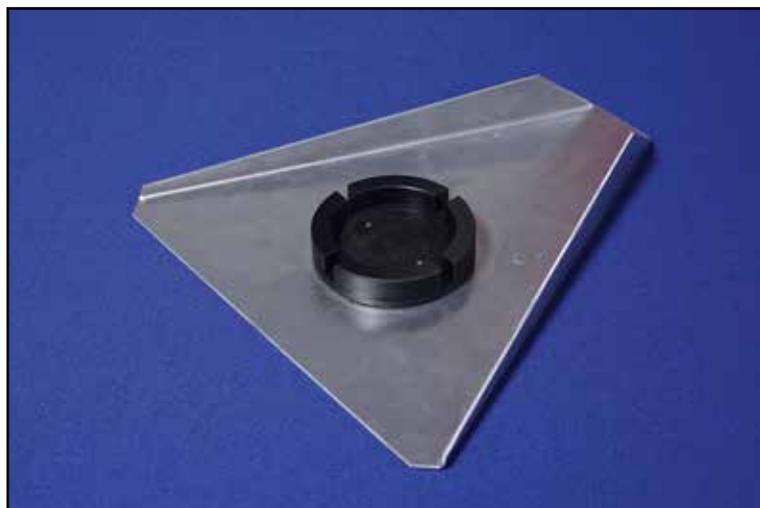


Low retention and general purpose pipette tips shown in picture.

Part Number	Description	Unit of Measurement	Comments
150-08	1-200µl Low Retention Graduated Pipette Tip – Natural Color	1000 Tips/Bag or 96 Tips/Rack, 10 Racks/Box	Time Length is 31mm (additional length options of 45, 54 and 84mm are also available) Available in Sterile and non-sterile options
150-03-Y	1-200µl General Purpose Graduated Pipette Tip – Yellow	1000 Tips/Bag or 96 Tips/Rack, 10 Racks/Box	Tip Length is 54mm (additional length options of 31, 45 and 84mm are also available) Available in Sterile and non-sterile options
150-03	1-200µl General Purpose Graduated Pipette Tip – Natural	1000 Tips/Bag or 96 Tips/Rack, 10 Racks/Box	Tip Length is 54mm (additional length options of 31, 45 and 84mm are also available) Available in Sterile and non-sterile options
150-05-544	1-20µl Low Retention Graduated Filter Pipette Tip	96 Tips/Rack, 10 Racks/Box	Tip Length is 54mm; Natural Color and Sterile Available in 31, 45 and 84mm tip lengths
150-04-B	100-1250µl General Purpose Graduated Pipette Tip – Blue Colored	1000 Tips/Bag or 96 Tips/Rack, 6 Racks/Box	Tip Length is 84mm (additional length options of 31, 45 and 54mm are also available) Available is Sterile and non-sterile options
150-04	100-1250µl General Purpose Graduated Pipette Tip – Natural Colored	1000 Tips/Bag or 96 Tips/Rack, 6 Racks/Box	Tip Length is 84mm (additional length options of 31, 45 and 54mm are also available) Available is Sterile and non-sterile options

NIR Closed Cup Assembly and Accessories

- We offer NIR Closed Cup Assemblies along with the accessories to assist with sample presentation and handling.
- The NIR Closed Cup is designed for the sample presentation of powders and granulated samples of smaller particle size. The closed cup allows for easy filling and uniform/compact presentation of the sample.
- The Slide Cup is best used with liquid egg. The sample is placed in the middle of the cup and is covered with a microscopic slide. The cup has 4 small studs to keep the slide in place.



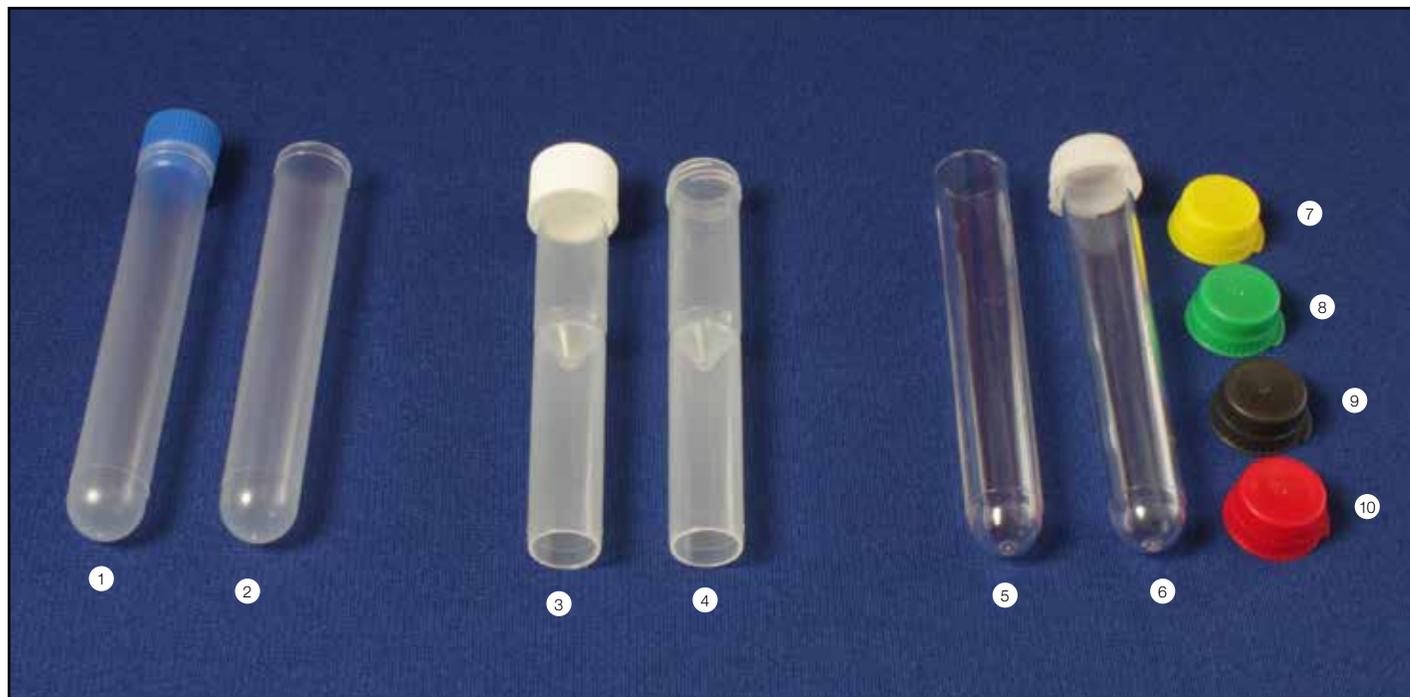
Part Number	Description	Unit of Measurement	Comments
560-2102-01	Scoopula	Each	<ul style="list-style-type: none"> • Made with a Wood handle and stainless steel utensil • Used with the loading tray to remove extra sample powder and create a level surface for the analyzer
189-B090-02	Closed Cup NIR Assembly	Each	<ul style="list-style-type: none"> • Compatible with many different NIR Analyzers • Natural Quartz • Linear Transmission from 270nm to 2100nm
189-B090-03	Closed Cup NIR Assembly	Each	<ul style="list-style-type: none"> • Natural Quartz • Linear Transmission from 270nm to 2100nm • Over 3x reduction in total cross sections of all bubbles compared to 189-B090-02
189-B090-05	Closed Cup NIR Assembly	Each	<ul style="list-style-type: none"> • Highest Quality of Quartz • Half the total cross sections of all bubbles compared to 189-B090-03 • Linear transmission from 210nm to 2750nm & 3000nm to 3300nm • Synthetic fused silica
189-1667-01	Slide Cup	Each	<ul style="list-style-type: none"> • Known as a "British Cup" • Available in a .5mm deep aluminum or .3mm deep stainless steel version
189-B121-01	Sample Loading Tray	Each	<ul style="list-style-type: none"> • Used for the loading of samples for the closed cup NIR assembly • Made of aluminum material



Centrifuge Tubes

We offer a variety of different sized centrifuge tubes for your laboratory consumable needs. Quantity discounts are available.

Ref #	Part Number	Description	Unit of Measurement	Comments:
1	CT-30ST-01	30ml Self-Standing tubes, conical bottom	500	<ul style="list-style-type: none"> Available in both Polystyrene and Polypropylene Non-sterile Dimensions: 25mm x 90mm without cap Dimensions: 30mm x 94mm with cap
2	CT-50ST-01	50ml Self-Standing, conical bottom with white cap (metal free)	500	<ul style="list-style-type: none"> Tube is made of polypropylene Cap is High Density Polyethylene (HDPE) Spin rate is 5000rpm Dimensions: 30 x 115mm Autoclavable (without screwcap)
3	CT-50ST	50ml Sterile Self-Standing, conical bottom with the red cap	25 per bag	<ul style="list-style-type: none"> Tube is made of polypropylene Cap is High Density Polyethylene (HDPE) Spin rate is 5000rpm Dimensions: 30 x 115mm Autoclavable (without screwcap) RNase/DNase and Pyrogen free
4	CT-50CB-01	50ml Conical bottom Centrifuge Tubes with light blue cap	500	<ul style="list-style-type: none"> Polypropylene tubes with graduation marks RCF is 10,000 x g
5	CT-50CB-02	50ml Conical bottom Centrifuge Tubes with blue cap	500	<ul style="list-style-type: none"> Polypropylene tubes with graduation marks Cap is High Density Polyethylene (HDPE) Dimensions: 30mm x 115mm Spin rate is 8500 RCF Available in sterile upon request Autoclavable (without screwcap)
6	CT-10S-01	10ml Sterile Centrifuge Tubes, Conical Bottom with yellow cap	100	<ul style="list-style-type: none"> Tube and cap: Polypropylene Dimensions: 16 x 100mm Spin rate is 3000 RCF Non-sterile option available upon request, quantities of 500
7	CT-015-G	1.5ml Microcentrifuge Tubes	1000	<ul style="list-style-type: none"> Graduation marks Max RPM is 26,000 2ml option available upon request Autoclavable at 130°C



Miscellaneous Tubes

The culture tubes are molded from polystyrene for clarity or polypropylene for strength and stability to common acids, alkalis and solvents. They are designed to fit the majority of laboratory applications.

False Bottom Tubes are designed for smaller volume sampling. Fits most standard 17 x 100mm false bottom racks.

Single Tab Snap Caps are designed to fit the 16mm diameter tubes (Part number 080-070-02). The single tab allows the tubes to be closely placed next to each other on the rack while still providing an easy removal of the cap.

Don't see the size tubing that use? Let us know and we'll do our best to find a different sized tube.

Ref #	Part Number	Description	Unit of Measurement	Comments
1	080-070-10C	16ml Culture Tubes with Blue Cap	Pack of 1000	Polyethylene tube; Dimensions: 17 x 100mm
2	080-070-10	16ml Culture Tubes without cap	Pack of 1000	Polyethylene tube; Dimensions: 17 x 100mm
3	080-070-03C	5ml False Bottom Tubes with White Cap	Pack of 1000	Polypropylene; Dimensions: 16 x 100mm
4	080-070-03	5ml False Bottom Tubes without cap	Pack of 1000	Polypropylene; Dimensions: 16 x 100mm
NS	080-070-01	12ml Culture Tube	Pack of 1000	Polystyrene; Dimensions : 16 x 100mm
5	080-070-02	16ml Culture Tube	Pack of 2000	Polystyrene; Dimensions : 16 x 100mm
6	080-070-02W	16mm Single Tab, White Snap Cap	Pack of 1000	Polyethylene; Fits: 080-070-02 tubes
7	080-070-02Y	16mm Single Tab, Yellow Snap Cap	Pack of 1000	Polyethylene; Fits: 080-070-02 tubes
8	080-070-02G	16mm Single Tab, Green Snap Cap	Pack of 1000	Polyethylene; Fits: 080-070-02 tubes
9	080-070-02BK	16mm Single Tab, Black Snap Cap	Pack of 1000	Polyethylene; Fits: 080-070-02 tubes
10	080-070-02R	16mm Single Tab, Red Snap Cap	Pack of 1000	Polyethylene; Fits: 080-070-02 tubes
NS	080-070-02BL	16mm Single Tab, Blue Snap Cap	Pack of 1000	Polyethylene; Fits: 080-070-02 tubes
NS	080-070-02L	16mm Single Tab, Lavender Snap Cap	Pack of 1000	Polyethylene; Fits: 080-070-02 tubes
NS	080-070-02N	16mm Single Tab, Natural Snap Cap	Pack of 1000	Polyethylene; Fits: 080-070-02 tubes

Digestion Tubes

68ml digestion tube designed for most standard hot block systems. They have graduation marks on the side and a molded shoulder for easy racking.

The watch glass is ribbed and made of polypropylene and designed for easy viewing of reagents. Additionally, the watch glass allows for venting around the edges as it sits on top of the digestion tube.

The reflux caps are designed to keep reagents from bubbling up and over and allows for the addition of reagents as needed during your digestion process.



Part Number	Description	Unit of Measurement	Comments
0560008	68ml Digestion Tube	Each or in packs of 500	Polyethylene based tube with flat bottom and cap
0560010	Watch Glass	Each and in packs of 400	50/100ml compatible
0560007	Reflux Caps	Each or in packs of 1000	Polypropylene homopolymer with a high temperature resistance

Digestion Tubes with and without rack locks

Ref #	Part Number	Description	Unit of Measurement
1	0560012	<ul style="list-style-type: none"> • 100ml Digestion Tube with cap and rack lock • Features with graduations marks • Polypropylene 	Each
2	0560002	<ul style="list-style-type: none"> • 50ml Digestion Tube with graduation marks • No caps • No rack lock • Polypropylene 	Each



Sera Clear Filters - White

For use in removing fibrin and macro particles from samples to prevent line clogging.

Part Number	Description	Features	Unit of Measurement
510-4055-01	5ml Sera Clear Filters	<ul style="list-style-type: none"> • 16mm wide and 2.5" long • Graduated barrel allows for you see how much liquid has been filtered • Also available in Orange (Reference Part Number: 510-4055-02) 	1000 packs (Consisting of 10 packs of 100)



GHS Wash Bottles

- GHS (Global Harmonized Symbols) compliant Wash Bottles with the NFPA diamond, risk phrases and safety information
- Meets latest requirements of OSHA HAZCOM 29 CFR 1910.1200 for workplace labels
- Bottles are fully assembled and feature a jet-tip for easy controlled use
- Multi-lingual in English, Spanish and French
- Produced from low density polyethylene (LDPE)
- Available in a non-vented or safety vented caps
- Also available in 250ml bottles and a variety pack of 5 bottles (one each of Distilled Water, Acetone, Methanol, Isopropanol and Ethanol)
- Deionized Water bottle is also available upon request
- Sold individually, however optional 5 packs are available

Part Number	Description	Unit of Measurement
GHS-WB-D	500ml Distilled Water, White Cap	Each
GHS-WB-A	500ml Acetone, Red Cap	Each
GHS-WB-M	500ml Methanol, Green Cap	Each
GHS-WB-I	500ml Isopropanol, Yellow Cap	Each
GHS-WB-E	500ml Ethanol, Orange Cap	Each



Liquid Chromatography Vials with Caps and Septa

Designed for liquid chromatography applications and samples. Sealed pierceable Septa is ideal for analyses of solvents. Caps are sold separately.

Dimensions:

- 12mm x 32mm



Part Number	Description	Unit of Measurement	Comments
9-0923	1.5ml Graduated Vial, Wide Opening	Packs of 100	9mm diameter opening; 2ml capacity
9-0917	1.5ml Vial, Wide Opening	Packs of 100	9mm diameter opening; 2ml capacity
9-0945	1.5ml Graduated Amber Vial, Wide Opening	Packs of 100	9mm diameter opening; 2ml capacity
9-0092	Polypropylene Blue Cap	Packs of 100	Fits all 9mm diameter vials
9-91191	Pre-Slit White PTFE/Red Silicone Septa Cap	Packs of 100	Fits all 9mm diameter vials
9-92291	Pre-Slit Red PTFE/White Silicone Septa Cap	Packs of 100	Fits all 9mm diameter vials
9-9191	White PTFE/ Red Silicone Septa Cap	Packs of 100	Fits all 9mm diameter vials
9-9291	Red PTFE/White Silicone Septa Cap	Packs of 100	Fits all 9mm diameter vials



Sample Cups

Pulse Instrumentation offers a variety of different sized sample cups for use with auto-analyzers.

We offer colored sample cups along with sample cups in Polystyrene (PS) and Polyethylene (PE) materials. Quantity discounts are available. Don't see the sample cups that you use? Let us know and we will do our best to offer you a quote at a great price!

Ref #	Part Number	Description	Unit of Measurement	Comments:
1	127-0090-02	2ml Blue Sample Cups	Bag of 1000	Self-Standing, Conical Bottom, Polystyrene (PS)
2	127-0018-02	4ml Blue Sample Cups	Bag of 1000	Self-Standing, Conical Bottom, Polystyrene (PS)
3	127-0090-100	2ml Sample Cups	Bag of 1000	Self-Standing, Standard base, Polyethylene (PE)
4	127-0020-01	4ml Sample Cups	Bag of 1000	Self-Standing, Standard base, Polyethylene (PE)
5	171-0354-01	5ml Sample Cups	Bag of 1000	Self-Standing, Conical Bottom, Polystyrene (PS)
6	S-6015	2ml Sample Cups	Bag of 1000	Conical Bottom, Polyethylene (PE)
7	127-0019-01	4ml Sample Cup Caps	Bag of 1000	Polyethylene (PE) Fits: 127-0090-02; 127-0018-02; 127-0090-100; 127-0020-01
8	127-0090-01	2ml Sample Cups	Bag of 1000	Self-Standing, Conical Bottom, Polystyrene (PS)
9	127-0080-01	8.5ml Beaker Cups	Bag of 1000	Designed for Sampler II Instrument; Polystyrene (PS)
10	127-0018-01	4ml Sample Cups	Bag of 1000	Self-Standing, Conical Bottom, Polystyrene (PS)
11	127-0090-03	2ml Red Sample Cups	Bag of 1000	Self-Standing, Conical Bottom, Polystyrene (PS)
12	127-0018-04	4ml Red Sample Cups	Bag of 1000	Self-Standing, Conical Bottom, Polystyrene (PS)



Transport Sample Cups and Tubes along with Screw caps

Screw Caps are sold separately

Pulse Instrumentation offers a variety of different sized sample tubes designed for the storage and transport of biological material. Produced from non-toxic polypropylene (PP), they offer a high degree of strength. We offer 2ml to 5ml sizes in addition to what you see in the picture along with the racks for both holding and transport options.

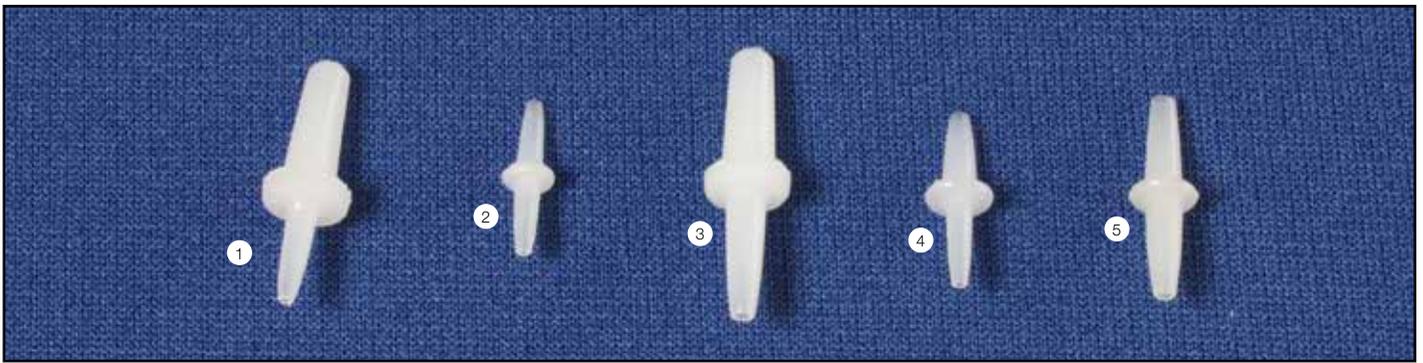
Tube Specifics:

- Autoclavable (121°C) in an upright position with caps loosened
- Withstand temperatures from -196°C to +121°C
- Available with or without graduation marks
- Optional rounded bottom tubes are also available in a variety of sizes upon request

Screw Cap Specifics:

- Polypropylene (PP) material
- Designed to be secured or removed with one simple turn
- Caps are available with or without a Silicone O-ring

Ref #	Part Number	Description	Unit of Measurement	Comments:
1	S-5385	1.2ml Sample Cup	2000 per bag	Polypropylene material; disposable, Self-standing with a small conical bottom; Note: Does not fit the caps associated in the picture.
2	S-6000	1.2ml Sample Tubes	1000 per bag	40.7mm with caps; 12.3mm Outer Diameter; Self-standing, conical bottom
3	S-6010-G	1.2ml Sample Tubes	1000 per bag	40.7mm with caps; 12.3mm Outer Diameter; Self-standing, conical bottom with graduation marks
4	S-6001-CB	Sample Tube Caps – Blue Color	1000 per bag	Available with optional Silicone O-Ring
5	S-6001-CG	Sample Tube Caps – Grey Color	1000 per bag	Available with optional Silicone O-Ring
6	S-6001-CO	Sample Tube Caps – Orange Color	1000 per bag	Available with optional Silicone O-Ring
7	S-6001-CY	Sample Tube Caps – Yellow Color	1000 per bag	Available with optional Silicone O-Ring
8	S-6001-CL	Sample Tube Caps – Lilac Color	1000 per bag	Available with optional Silicone O-Ring
9	S-6001-CR	Sample Tube Caps – Red Color	1000 per bag	Available with optional Silicone O-Ring
10	S-6001-CG	Sample Tube Caps – Green Color	1000 per bag	Available with optional Silicone O-Ring
11	S-6001-CW	Sample Tube Caps – White Color	1000 per bag	Available with optional Silicone O-Ring



Nipple Connectors

Our connectors are molded from high density polyethylene for long life and structural strength. The connectors are designed with a smooth concentric and have no flashing. This eliminates bubble pattern break-up. They are designed to prevent popping of transmission lines and are chemically clean.

All connectors are sold in packs of 6. We also offer special order platinum and stainless steel connectors upon request.

Ref #	Part Number	Description	Unit of Measurement
1	116-0002-01	Nipple N5, Small Tubing to Glass	Packs of 6
2	116-0003-01	Nipple N8, Small Tubing to Small Tubing	Packs of 6
3	116-0004-01	Nipple N6, Large Tubing to Glass	Packs of 6
4	116-0005-01	Nipple N7, Small Tubing to Large Tubing	Packs of 6
5	116-0010-01	Nipple N9, General Large Tubing Use	Packs of 6

Reduction Coils

Reduction coils are designed to reduce Nitrate to Nitrite for Nitrate analyses. They are used on continuous flow auto-analyzer instruments. They are sold individually with a tube connector (not shown in the picture.)

Part Number	Description	Unit of Measurement	Comments
165-0301-01	Reduction Coil - 12"	Each	Red coated tubing
165-0301-02	Reduction Coil - 24"	Each	Red coated tubing
165-0301-03	Reduction Coil - 12"	Each	Purple coated tubing



24" Red Coated Tubing shown

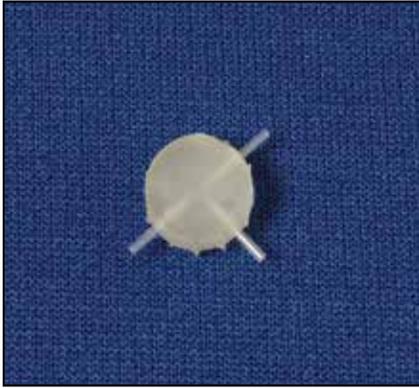
Dialyzer Membranes

Designed to assist in the separation of gas and/or chemicals in continuous flow analyzers. For use in the laboratory, pharmaceutical and industrial applications.

Ref #	Part Number	Description	Unit of Measurement
1	170-0472-02	Dialyzer Membranes 12"	Packs of 12
2	170-0406-02	Dialyzer Membranes 6"	Packs of 12
3	157-B129-01	CO2 Dialyzer Membrane	Each



3 Way Sapphire Splitter



Part Number	116-B332-01
Description	This splitter is designed for splitting the sample line. The sapphire helps to reduce sample carryover.
Unit of Measure	Each

Blue Lead Bulbs



Part Number	112-B007-01
Description	A replacement long life lamp for the SCIC Colorimeter (AA2).
Unit of Measure	Packs of 6

TrAAcs Lamp 800/2000



Part Number	165-B032-01
Description	Replacement lamp for original TrAAcs instrument.
Unit of Measure	Each

Phototube



Part Number	199-B021-01
Description	Designed for SCIC Colorimeter (AA2)
Unit of Measure	Each

In-line Filters

Reagent filters and Hydrophilic PES (Polyethersulfone) Syringe Filters are used for a variety of life science applications. The filters are designed to remove macro particles from samples.

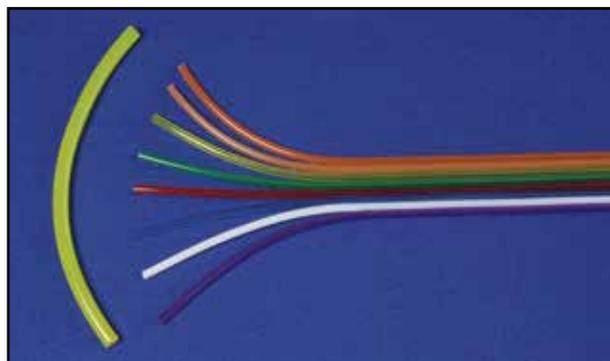
Ref #	Part Number	Description	Unit of Measurement
1	518+3000-01	Hydrophilic PES (Polyethersulfone) Syringe Filters with barbs. The PES membrane has fast flow, high-throughput characteristics. Can be used with a variety of laboratory applications. Best suited for life science applications. .45µm (micrometer) pour size.	Each
2	518-3093-01	A Reagent Filter with a 3/16" inlet, 2 3/8 Length. Ideal for liquids and with a polyethylene housing.	Each



Ribbon Tubing

We offer Ribbon Tubing as a visual tool to help you identify the different reagents for peristaltic pump tubing applications. They are PVC based with a 60 Shore A Hardness. We sell the ribbon tubing by the meter.

Part Number	Metric ID	Number of Tubes and Colors							
		1	2	3	4	5	6	7	8
178-3993-02M	.76mm	Green	Yellow	Red	Blue				
178-3993-01M	.64mm	Yellow	Blue	Red					
178-3993-03M	1.14mm	Green	Yellow	Red	Blue				
190-B159-04M	1.65mm	Red	Blue		Purple				
190-B159-06M	1.65mm	Yellow	Green	Red	Blue		Purple		
190-B159-01M	1.65mm	Red	Orange	Yellow	Green	Red	Blue		Purple



Reagent Bottle with Filter and Straw

These bottles are made of durable polypropylene with excellent chemical resistance. Ideal for chemical solution storage in the lab, they come with a straw and filter for easy straining of large particles.



Part Number	Description	Unit of Measurement
178-3365-02	1.4 liter reagent bottle	Each
178-B651-01	Use with the reagent bottle. The filter eliminates the larger particles in your reagent	Each

Chemical Resistance

Note: The data provided in these tables are for reference and are not binding. We recommend conducting your own testing to be sure that the medium will be compatible with the pump tube material.

Example Test: Place a sample pump tube in the medium to be delivered for 48 hours. If there is a loss in weight and / or elasticity the pump tube is not compatible. (Test Pump Tubes are available on request.)

Medium	PVC	Silicone	Viton	PVC Solva	Santoprene
Acetaldehyde	U	X	U	X	X
Acetates (low mol. wt.)	U	0	U	X	X
Acetic acid (< 5 %)	X	X	X	X	X
Acetic acid (> 5 %)	X	U	0	X	X
Acetic anhydride	0	0	U	X	U
Acetone	U	X	U	U	U
Acetyl bromide	U			X	
Acetyl chloride	U	X			
Air	X	X	X	X	X
Alcohols	X	X	X	X	
Aliphatic hydrocarbons	X	0	U	U	
Aluminium chloride	X	0	X	X	
Aluminium sulfate	X	X	X	X	X
Alums	X	X	X		
Ammonia (gas-liquid)	0	X	U	X	X
Ammonium acetate	X			X	
Ammonium carbonate	X	X			
Ammonium chloride	X	X	X		
Ammonium hydroxide	0	X	X	X	X
Ammonium nitrate	X	0	X		
Ammonium phosphate	X	X	X		
Ammonium sulfate	X	X	X	X	X
Amyl acetate	U	U	U	U	U
Amyl alcohol	X	U	X	U	X
Amyl chloride	0	U	X	U	
Aniline	0	U	0	X	X
Aniline hydrochloride	0	U	X	X	
Animal oils	U	0	X	X	X
Antimony salts	X	0	X		
Aqua regia	U	0	X	U	
Aromatic hydrocarbons	U	0	X	U	
Arsenic salts	X	X	X	X	
Barium salts	X	X	X	X	X
Benzaldehyde	U	U	U	U	X
Benzene	0	U	X	U	U
Benzene sulfonic acid	0		X	X	
Benzoic acid	X	0	X	U	U
Benzyl alcohol	X		X	U	X
Bleaching liquors	X	0	X	X	X
Boric acid	X	X	X	X	X
Bromine	X	U	X	X	U
Butane	0	U	X	U	U
Butanol	X	0	X		
Butyl acetate	U		U	U	U
Butyric acid	U		0	X	X
Calcium salts	X	0	X	X	X
Carbon bisulfide	U		X	U	
Carbon dioxide	X	0	X	X	X
Carbon tetrachloride	0	U	X	X	U
Chloracetic acid	U		U	X	U
Chlorobenzene	U		X	U	U

Medium	PVC	Silicone	Viton	PVC Solva	Santoprene
Chlorine (wet)	0	U	X	X	U
Chlorine (dry)	0	U	U	X	U
Chloroform	0	U	X	U	U
Chlorsulfonic acid	0	U	U	X	U
Chromatic acid	X	U	X		X
Chromium salts	X			X	X
Copper salts	X	X	X	X	X
Cresol	0	X	X	U	U
Cyclohexanone	U	U	X	U	U
Essential oils	0			X	X
Ethers	0	U	0	U	U
Ethyl acetate	U	0	U	U	U
Ethyl alcohol	0	0	X	X	X
Ethyl bromide	U		X	X	
Ethyl chloride	U	U	X	X	U
Ethylamine	U		U	X	
Ethylene chlorohydrin	U	U	X	X	U
Ethylene di-chloride	U	U	X	X	U
Ethylene glycol	X	X	X	X	X
Fatty acids	0	0	X	X	
Ferric chloride	X	0	X	X	
Ferric sulfate	X	0	X	X	X
Ferrous chloride	X	0	X	X	
Ferrous sulfate	X	0	X	X	
Fluoborate salts	X	X	X		
Fluoboric acid	X	X	X		
Fluo-silicic acid	X	X	X		
Formaldehyde	X	0	U	X	X
Formic acid	X	0	U	X	X
Freon	U	U	0	U	U
Gasoline (non-aromatic)	U	U	X	U	U
Gasoline (high aromatic)	U	U	X	U	
Glucose	X	X	X	X	X
Glue	X		X	X	
Glycerine	X	X	X	X	X
Hydriodic acid	X		X	X	
Hydro-bromic-acid	X	U	X	X	X
Hydrochloric acid (dil.)	X	U	X	X	X
Hydrochloric acid (med.cone.)	X	U	X	X	X
Hydrochloric (cone.)	0	U	X	X	X
Hydrocyanic acid	X	U	X	X	X
Hydrofluoric acid	0	U	X	X	0
Hydrogen peroxide (dil.)	X	X	X	X	U
Hydrogen peroxyde (cone.)	U	U	0	X	U
Hydrogen sulfide	X	U	U	X	X
Hypochlorous acid	X		X	X	X
Iodin and solutions	X		X	U	X

Medium	PVC	Silicone	Viton	PVC Solva	Santoprene
Kerosene	U	U	X	U	
Ketones	U	U	U	U	
Laquer solvents	U	U	U	X	U
Lactic acid	0	X	U	0	
Lead acetate	X	U	U	X	
Linseed oil	X	X	X	U	X
Magnesium chloride	X	X	X	X	
Magnesium sulfate	X	X	X	X	
Malic acid	X	X	X	X	X
Manganese salts	X	X	X	X	X
Mercury salts	X	X	X	X	
Mixed acid 1)	0	X	X		
Naphtha	0	U	X	X	U
Natural gas	X	X	X	U	X
Nickel salts	X	X	X	X	X
Nitric acid (dil.)	X	0	X	X	0
Nitric acid (med. cone.)	0	U	X	X	0
Nitric acid (cone.)	0	U	0	X	0
Nitrobenzene	U	U	X	U	U
Nitrogen oxides	X	0	0	X	X
Nitrous acid	X	0	X	U	
Oils, animal	U	0	X	X	X
Oils, mineral	U	0	X	U	X
Oils, vegetable	0	X	X	X	X
Oleic acid	U	U	0	X	0
Oxalic acid	X	0	X	X	X
Oxygen (gas)	X	X		X	X
Perchloric acid	U	U	X	X	X
Phenol	0	U	X	U	U
Phosphoric acid (ortho.)	X	0	X	X	X
Phtalic acid	X	X	X	U	X
Plating solutions	X	U	X	X	X
Potassium carbonate	X	X	X		
Potassium chlorate	X	X	X		
Potassium hydroxyde	0	0	X	X	X
Potassium iodide	X	X	X		
Pyridine	U	U	U	X	U
Silver nitrate	X	X	X	X	X
Soap solutions	X	X	X	X	X
Sodium bicarbonate	X	X	X	X	X
Sodium bisulfate	X		X	X	X
Sodium bisulfite	X	X	X	X	X
Sodium borate	X	X	X	X	X
Sodium carbonate	X	X	X	X	X
Sodium chlorate	X		X	X	X
Sodium chloride	X	X	X	X	X
Sodium ferrocyanide	X		X	X	X
Sodium hydrosulfite	X	0	X	X	
Sodium hydroxide (dil.)	X	0	X	X	0
Sodium hydroxide (med.cone.)	0	0	X	X	0
Sodium hydroxide (cone.)	0	0	0	X	0
Sodium hypochlorite	X		X	X	X
Sodium nitrate	X	U		X	X
Sodium silicate	X		X	X	X
Sodium sulfide	X	X	X	X	
Sodium sulphite	X	X	X	X	X
Stearic acid	X	0		X	X

Medium	PVC	Silicone	Viton	PVC Solva	Santoprene
Sulfur chloride	0	U	X	X	U
Sulfur dioxide	X	0	X	X	X
Sulfur trioxide	X	0	X	X	X
Sulfuric acid (dil.)	X	U	X	X	0
Sulfuric acid (Med. cone.)	X	U	X	X	0
Sulfuric acid (cone.)	0	U	X	X	0
Sulfurous acid	X	U	X	X	X
Tannic acid	X	0	X	X	X
Tanning extracts	X		X	X	X
Tartaric acid	X	0	X	X	
Tin salts	X			X	
Titanium salts	X			X	
Toluol	X	U	X	U	
Trichloroacetic acid	U		U	X	
Tri-sodium phosphate	U	X	X	X	
Turpentine	X	U	X	U	
Urea	X	X	X	X	X
Uric acid	X			X	X
Water	X	X	X	X	X
Water (brine)	X	X	X	X	X
Xylol	U	U	X	U	U
Zinc chloride	X				
Food products	0				
Alcohol	0	X			0
Beer	0				X
Brandy	X	X			0
Butter	X				0
Carrot	X				0
Cerio	X				0
Chocolate Syrup	X				0
Citric acid	X				0
Fish	X				0
Fruit Juices	X				0
Karo Syrup	X				0
Mayonnaise	X				0
Milk	X				0
Milk of Magnesia	X				0
Molasses	X				0
Sauerkraut	X				0
Sea Foods	X				0
Sugar	X				0
Tomato	X				0
Vegetable oil	X	X			0
Vinegar	X	X			0
Whiskey	0	X			0
Wines	0				0
1) 40% Sulphuric , 15% Nitric					

Legend:

X = Satisfactory

O = Use only after testing

U = Unsatisfactory

= No data available



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