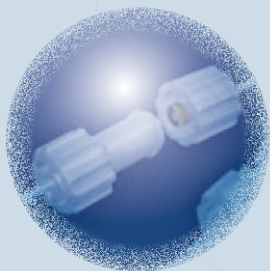
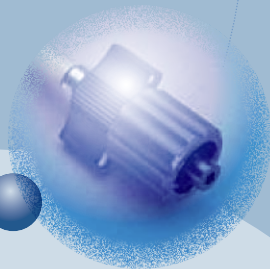


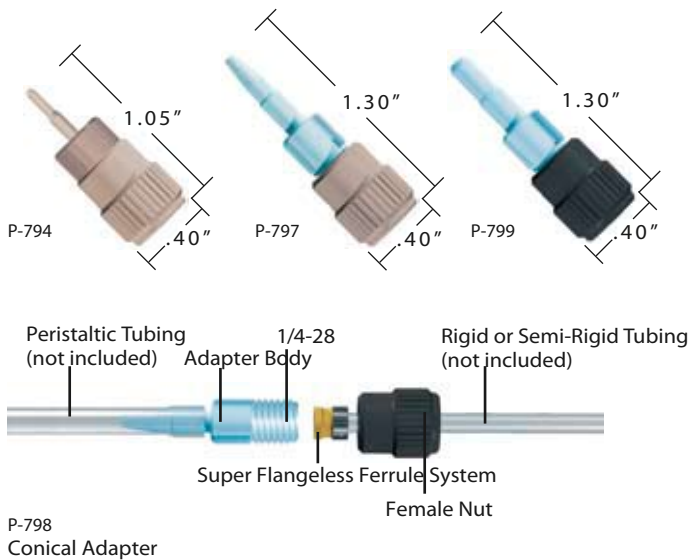
Upchurch®
ADAPTERS



CONICAL ADAPTERS

- * Direct Connect 1/16" and 1/8" OD Rigid and Semi-Rigid Tubing to Peristaltic Tubing
- * Accept .020" — 1/8" (.50 – 3.2mm) ID Peristaltic Tubing
- * Biocompatible Flowpath With Excellent Chemical Compatibility

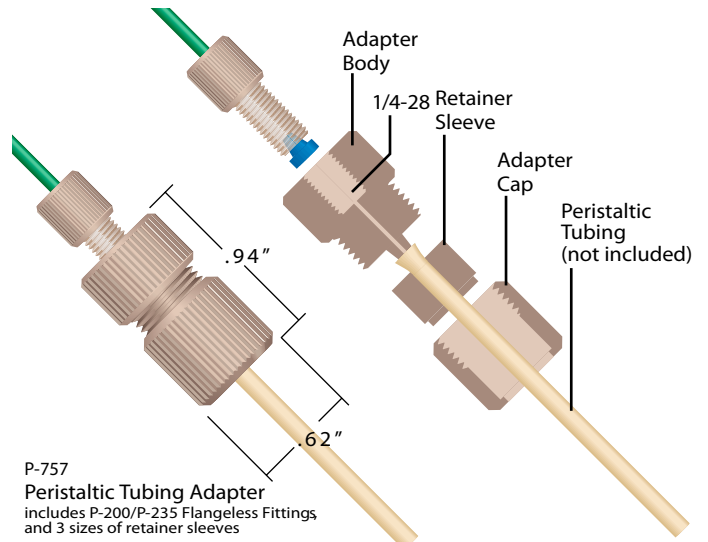
Upchurch Scientific® Conical Adapters provide a reliable connection between rigid/semi-rigid tubing and peristaltic-type flexible tubing, such as Tygon® and PharMed®. These adapters are composed of a PEEK™ polymer female nut, our Super Flangeless ferrule system and a Tefzel (ETFE) or PEEK conical adapter body. The narrow coned end of the adapter body allows peristaltic tubing to slide on easier than it does onto conventional barbed adapters. Peristaltic tubing is also easier to remove from our Conical Adapters, since no cutting or excessive pulling is required.



PERISTALTIC TUBING ADAPTERS

These unique adapters connect peristaltic tubing to standard 1/16" or 1/8" OD tubing. A specially-designed nose allows the peristaltic tubing to be press fit and sealed by both the small barbs on the nose and the retainer sleeve. Your 1/16" OD tubing may then be connected with the Flangeless Fittings supplied with the adapter. To connect your peristaltic tubing to 1/8" OD tubing, simply replace the supplied fittings with your choice of flangeless fittings.

One popular application for these adapters is to use them as "stops" for your peristaltic pump. By doing so, you can reduce the amount of peristaltic tubing to slide on easier than it does onto conventional barbed adapters. required for your flowpath, thus reducing cost.



P-757
Peristaltic Tubing Adapter
includes P-200/P-235 Flangeless Fittings
and 3 sizes of retainer sleeves

Connecting with Conical Adapters:

Sizes Accommodated

Part #	Rigid/Semi-rigid Tubing OD	Peristaltic Tubing ID	Conical Adapter Thru-hole
P-794	1/16"	.020" (.50mm) .030" (.75mm)	.020" (.50mm)
P-797	1/16"	1/16" (1.55mm) 3/32" (2.40mm)	.040" (1.0mm)
P-798	1/8"	1/16" (1.55mm) 3/32" (2.40mm)	.040" (1.0mm)
P-799	1/8"	3/32" (2.40mm) 1/8" (3.20mm)	.060" (1.5mm)

Application Note

Use the adapters on this page to connect rigid and semi-rigid tubing to the Ismatec® Peristaltic Pumps and tubing

CONICAL ADAPTER ASSEMBLIES

- P-794** **Conical Adapter**
Connects 1/16" OD rigid to .020"-.030" (.50-.75mm) ID peristaltic tubing
- P-797** **Conical Adapter**
Connects 1/16" OD rigid to 1/16"-3/32" (1.55-2.40mm) ID peristaltic tubing
- P-798** **Conical Adapter**
Connects 1/8" OD rigid to 1/16"-3/32" (1.55-2.40mm) ID peristaltic tubing
- P-799** **Conical Adapter**
Connects 1/8" OD rigid to 3/32"-1/8" (2.40-3.20mm) ID peristaltic tubing

CONICAL ADAPTER REPLACEMENT PARTS

- F-156** **Female Nut**, 1/8" for P-798 and P-799, 1/4-28, Black PEEK
- P-420** **Female Nut**, 1/16" for P-794 and P-797, 1/4-28, Natural PEEK
- P-259** **Super Flangeless Ferrule**, 1/16" ETFE ferrule with stainless steel lock ring
- P-359** **Super Flangeless Ferrule**, 1/8" ETFE ferrule with stainless steel lock ring
- P-690** **Conical Adapter Body for P-797 and P-798**, Natural ETFE
- P-691** **Conical Adapter Body for P-799**, Natural ETFE
- P-692** **Conical Adapter Body for P-794**, Natural PEEK

PERISTALTIC TUBING ADAPTERS

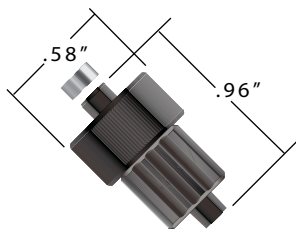
- P-757** **Adapter (pkg. of 2)** for use with .048" - .110" (1.20 - 2.80mm) ID tubing with ODs up to .180" (4.55mm)
- P-767** **Large Bore Adapter (pkg. of 2)** for use with .100" - .150" (2.55 - 3.80mm) ID tubing with ODs up to .250" (6.35mm)

SUPER FLANGELESS™ TO LUER ADAPTERS

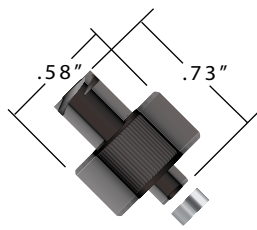
Upchurch Scientific® Super Flangeless to Luer Adapters offer higher pressure holding capabilities than other luer adapters on the market, holding 1/8" OD tubing to pressures in excess of 1,200 psi (83 bar)! Made of PEEK™ polymer, these connectors are durable, biocompatible and offer excellent solvent resistance. The Super Flangeless lock ring is made of 316 stainless steel and does not contact the fluid path.

Super Flangeless to Luer Adapters are designed to be used on semi-rigid and rigid tubing, such as Teflon®, Tefzel® (ETFE), PEEK and stainless steel. Unlike most other luer adapters, these products do not require additional nuts and ferrules.

Please Note: assembly of this fittings system requires a special swaging tool, T-100. Please contact us for more information.



P-687
Super Flangeless to Male Luer
for 1/8" OD tubing



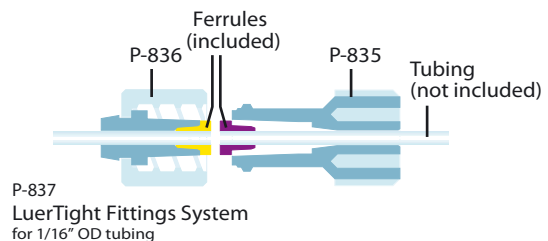
P-688
Super Flangeless to Female Luer
for 1/8" OD tubing

LUERTIGHT™ FITTINGS

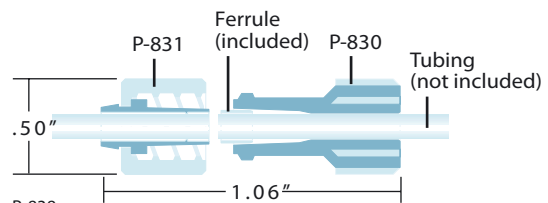
- * Luer Fittings for Teflon and Tefzel Tubing
- * Quick Disconnect and Barbless
- * For 1/16" and 1/8" OD Tubing

Upchurch Scientific LuerTight fittings are specifically designed to connect semi-rigid fluoropolymer tubing without barbs or nuts! By integrating ferrules into the luer bodies, LuerTights will reliably hold your Teflon or Tefzel tubing in place while giving you the convenience of a luer connection – a great improvement over barbed luer connections. An inline set of LuerTight fittings provides a quick and easy disconnection option. LuerTight connections are also less bulky and more economical than nut-to-luer style fittings.

The bodies of these products are manufactured from polypropylene and the ferrules are made of Tefzel (ETFE). Each LuerTight fitting conforms to ISO requirements for medical luer taper configuration and performance (45 psi/3.1 bar).



P-837
LuerTight Fittings System
for 1/16" OD tubing



P-838
LuerTight Fittings System
for 1/8" OD tubing

LUERTIGHT FITTINGS SYSTEMS

- P-837** LuerTight System for 1/16" OD tubing
Contains (1) P-835 Fitting, (1) P-836 Fitting and (1) P-830T Set Plug
- P-838** LuerTight System for 1/8" OD tubing
Contains (1) P-830 Fitting, (1) P-831 Fitting and (1) P-830T Set Plug

LUERTIGHT FITTING COMPONENTS

- P-830** Female Fitting for 1/8" OD tubing w/ (1) ferrule
- P-830T** Set Plug to swage ferrules into P-835 and P-830
- P-831** Male Fitting for 1/8" OD tubing, no ferrule required
- P-835** Female Fitting for 1/16" OD tubing w/ (1) ferrule
- P-836** Male Fitting for 1/16" OD tubing w/ (1) ferrule

Female = Internal threads; Male = External threads.

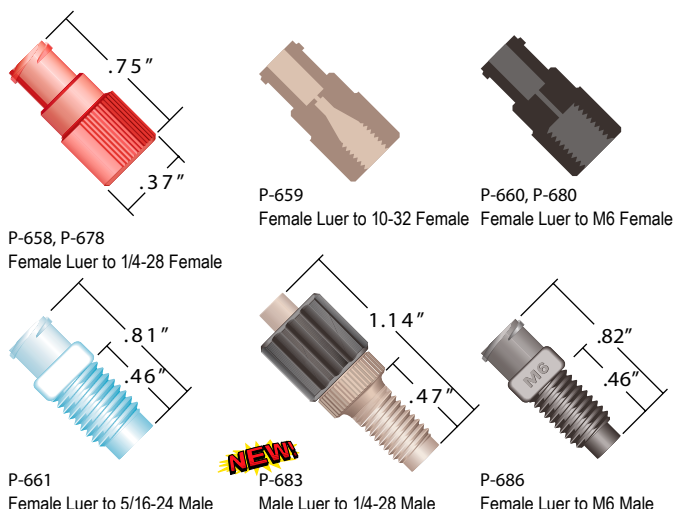
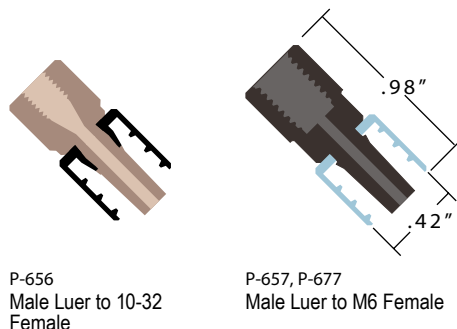
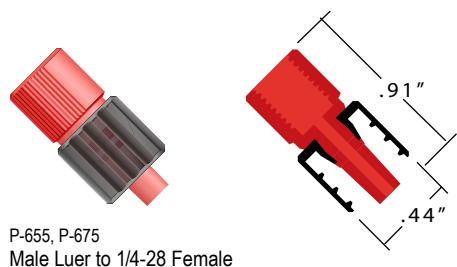
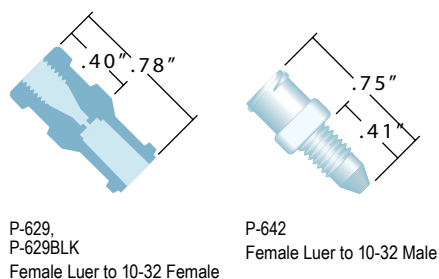
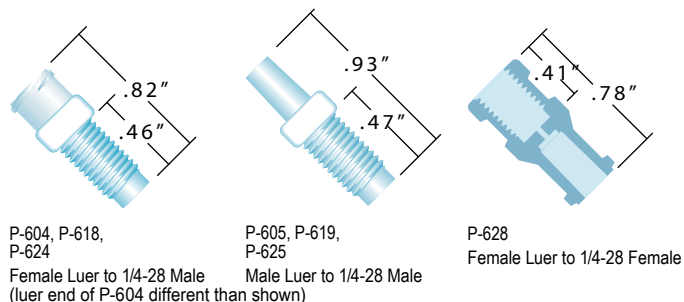


QUICK CONNECT LUER ADAPTERS

* **Derlin®, Polypropylene, Tefzel® (ETFE) and PEEK™ Versions**
* **1/4-28, 10-32, 5/16-24 and M6 Threaded Ports**

These luer adapters were designed to work in a variety of applications. By connecting any male luer to any female luer, you can create your own quick connect union or adapter. Each Upchurch Scientific® Quick Connect Luer Adapter has a .04" (1.0mm) or a .05" (1.3mm) thru-hole and conforms to ISO requirements for medical luer taper configuration and performance (45 psi/3.1 bar).

Find fittings to connect tubing to the threaded ports of these adapters in the High Pressure (10-32) or Low Pressure (1/4-28, 5/16-24 and M6) chapters, starting on pages 8 and 54, respectively. Please Note: Our Female Quick Connect Luer Adapters can be used with any of the Male Luers on this page, i.e., those with and without lock hubs.



Application Note

>> Our A-626 Bottle Cap Plug can be used to plug any of the female luer adapters on this page. To prevent a chemical spill when disconnecting your solvent reservoir tubing from the pump, try our Quick-Stop Luer Check Valve.

>> To economically prime an HPLC pump, simply remove the 10-32 fitting on the outlet check valve (standard on most models), insert a P-642 luer adapter, attach a syringe (such as our B-310) and draw the mobile phase through the pump head.

>> See our Capillary to Luer Adapter

QUICK CONNECT LUER ADAPTERS

		Body Material	Lock Hub Material	Thru-hole
P-604	F Luer to 1/4-28 M ¹	Nat. Delrin	N/A	.05" (1.3mm)
P-605	M Luer to 1/4-28 M ¹	Nat. Delrin	None (Slip-type)	.05" (1.3mm)
P-618	F Luer to 1/4-28 M ¹	Nat. PP	N/A	.05" (1.3mm)
P-619	M Luer to 1/4-28 M ¹	Nat. PP	None (Slip-type)	.05" (1.3mm)
P-624	F Luer to 1/4-28 M ¹	Nat. ETFE	N/A	.05" (1.3mm)
P-625	M Luer to 1/4-28 M ¹	Nat. ETFE	None (Slip-type)	.04" (1.0mm)
P-628	F Luer to 1/4-28 F ¹	Nat. ETFE	N/A	.04" (1.0mm)
P-629	F Luer to 10-32 F ²	Nat. ETFE	N/A	.04" (1.0mm)
P-629Blk	F Luer to 10-32 F ²	Black ETFE	N/A	.04" (1.0mm)
P-642	F Luer to 10-32 M ²	Nat. ETFE	N/A	.05" (1.3mm)
P-655	M Luer to 1/4-28 F ¹	Red PEEK	Black PEEK	.04" (1.3mm)
P-656	M Luer to 10-32 F ²	Nat. PEEK	Black PEEK	.05" (1.3mm)
P-657	M Luer to M6 F ¹	Black PEEK	Black PEEK	.05" (1.3mm)
P-658	F Luer to 1/4-28 F ¹	Red PEEK	N/A	.05" (1.3mm)
P-659	F Luer to 10-32 F ²	Nat. PEEK	N/A	.05" (1.3mm)
P-660	F Luer to M6 F ¹	Black PEEK	N/A	.05" (1.3mm)
P-661	F Luer to 5/16-24 M ¹	Nat. ETFE	N/A	.05" (1.3mm)
P-675	M Luer to 1/4-28 F ¹	Red ETFE	Nat. PP	.05" (1.3mm)
P-677	M Luer to M6 F ¹	Black ETFE	Nat. PP	.05" (1.3mm)
P-678	F Luer to 1/4-28 F ¹	Red ETFE	N/A	.05" (1.3mm)
P-680	F Luer to M6 F ¹	Black ETFE	N/A	.05" (1.3mm)
P-683	M Luer to 1/4-28 M ¹	Nat. PEEK	Black PEEK	.04" (1.0mm)
P-686	F Luer to M6 M ¹	Black ETFE	N/A	.05" (1.3mm)

SYRINGE WITH MALE LUER LOCK

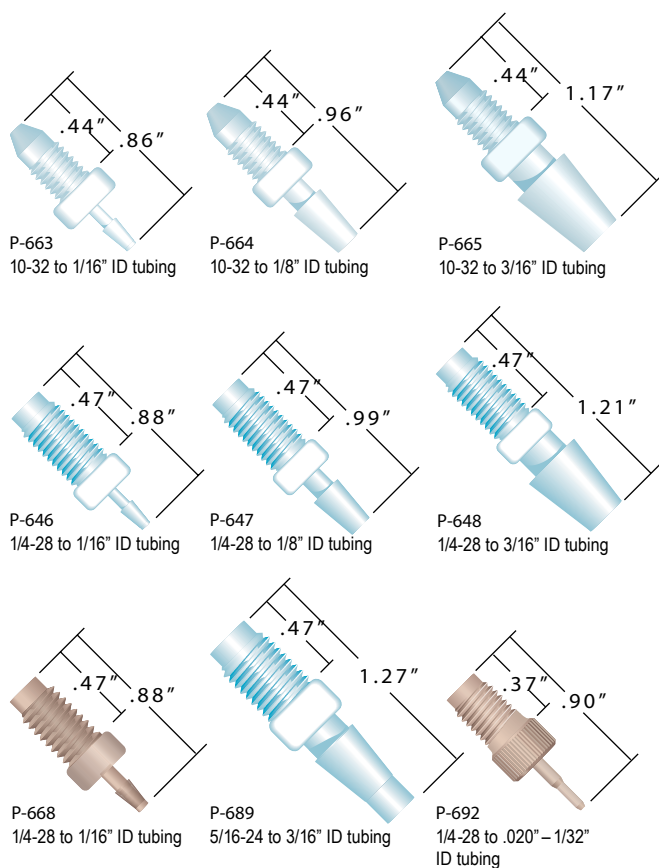
		Thru-hole
B-310	10cc Disposable Luer-Lock Syringe For use with any Female Luer Adapter	.05" (1.3mm)

F = Female (internal) threads; M = Male (external) threads; Nat. = Natural; N/A = Not Applicable; PP = Polypropylene
¹ Threaded end of this adapter has a flat-bottom configuration.
² Threaded end of this adapter has a coned configuration.

BARBED ADAPTERS

- * Three Barb Sizes, for 1/16", 1/8" and 3/16" ID Flexible Tubing
- * Adapt to 1/4-28 Flat-Bottom, 5/16-24 Flat-Bottom or 10-32 Coned Receiving Ports
- * Available with .04", .08" and .10" Thru-holes

These Upchurch Scientific® adapters make it easy to connect flexible tubing to any standard 1/4-28 or 10-32 receiving port. Simply thread the adapter into a receiving port and slip tubing over the barbed stem to create a reliable low pressure connection.

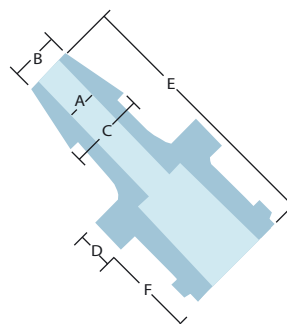


FEMALE LUER-TO-BARB ADAPTERS

- * Three Barb Sizes for 1/16", 3/32", and 1/8" ID Flexible Tubing
- * Adapt to Any Male Luer
- * Made of Tefzel (ETFE)

Connect peristaltic tubing easily with Upchurch Scientific Female Luer-to-Barb Adapters. Made of ETFE, these products have excellent resistance to most solvents used in analytical analyses, and are especially well suited for SPE applications. These adapters can be used at up to 80°C, compared to only 40°C for similar polypropylene products.

Each adapter conforms to ISO requirements for medical luer taper configuration and performance (45 psi/3.1 bar), and will work with both slip-type male luers and luer lock connectors.



Luer-to-Barb Adapters

BARBED TO 10-32 CONED MALE ADAPTERS

	Material	Thru-hole
P-663 For use with 1/16" (1.55mm) ID tubing	ETFE	.04" (1.0mm)
P-664 For use with 1/8" (3.20mm) ID tubing	ETFE	.04" (1.0mm)
P-665 For use with 3/16" (4.75mm) ID tubing	ETFE	.04" (1.0mm)

BARBED TO 1/4-28 FLAT-BOTTOM MALE ADAPTERS

	Material	Thru-hole
P-646 For use with 1/16" (1.55mm) ID tubing	ETFE	.04" (1.0mm)
P-647 For use with 1/8" (3.20mm) ID tubing	ETFE	.08" (2.0mm)
P-648 For use with 3/16" (4.75mm) ID tubing	ETFE	.10" (2.5mm)
P-668 For use with 1/16" (1.55mm) ID tubing	PEEK™	.04" (1.0mm)
P-692 For use with .020" to 1/32" (.5 to .80mm) ID tubing	PEEK	.02" (0.5mm)

BARBED TO 5/16-24 FLAT-BOTTOM MALE ADAPTER

	Material	Thru-hole
P-689 For use with 3/16" (4.75mm) ID tubing	ETFE	.10" (2.5mm)

FEMALE LUER-TO-BARB ADAPTERS

	Material	Thru-hole
P-870 For use with 1/16" (1.55mm) ID tubing A=.030" B=.063" C=.106" D=.100" E=.598" F=.253"	ETFE	.030" (0.76mm)
P-871 For use with 3/32" (2.40mm) ID tubing A=.056" B=.102" C=.145" D=.100" E=.648" F=.253"	ETFE	.056" (1.42mm)
P-872 For use with 1/8" (3.20mm) ID tubing A=.080" B=.137" C=.187" D=.100" E=.733" F=.253"	ETFE	.080" (2.03mm)

Note

>> To connect Teflon® and Tefzel® tubing, try our LuerTight™ Adapters.

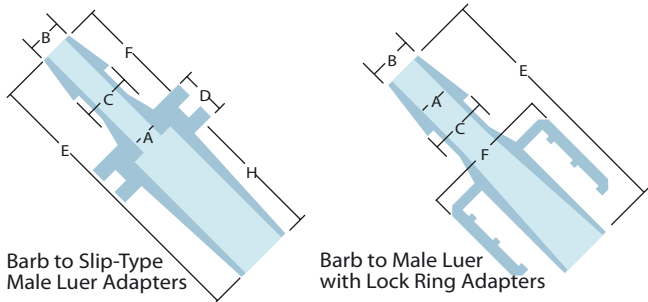
>> To connect peristaltic tubing to Teflon and Tefzel tubing,



POLYPROPYLENE BARBED ADAPTERS

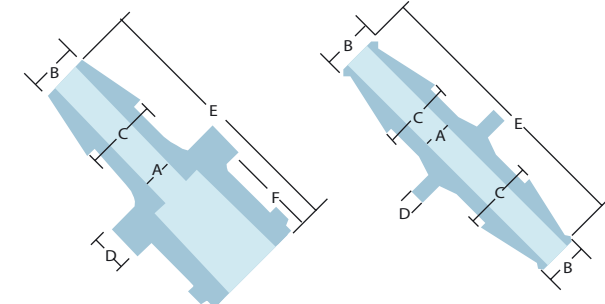
Use these barbed adapters to connect peristaltic-type flexible tubing for general, low pressure applications, such as plumbing ISMATEC® Peristaltic Pumps.

Polypropylene is a Class VI material. Due to the low melt point of polypropylene, these adapters are not autoclavable, however, they can be sterilized via gamma radiation.



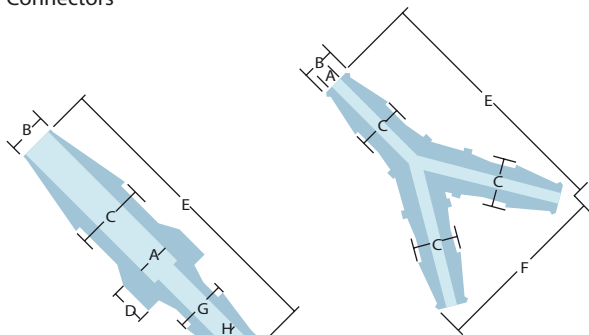
Barb to Slip-Type Male Luer Adapters

Barb to Male Luer with Lock Ring Adapters



Barb to Female Luer-Lock Connectors

Barbed Union Connectors



Barbed Reducing Adapters

"Y" Barbed Connectors

BARB TO SLIP-TYPE MALE LUER ADAPTERS (10-pack)

- P-854x Male Luers (Slip-type)** for use with 1/16" ID (1.55mm) tubing
A=.046" B=.064" C=.090" D=.129" E=.711" F=.198" H=.384"
- P-855x Male Luers (Slip-type)** for use with 3/32" ID (2.40mm) tubing
A=.069" B=.097" C=.138" D=.128" E=.803" F=.290" H=.385"
- P-856x Male Luers (Slip-type)** for use with 1/8" ID (3.20mm) tubing
A=.096" B=.129" C=.182" D=.129" E=.889" F=.383" H=.377"

These slip-type male luer fittings are for use in systems for which luer lock rings are not desired.

BARB TO MALE LUER WITH LOCK RING ADAPTERS (10-pack)

- P-850x Male Luers with Lock Ring** for use with 1/16" ID (1.55mm) tubing
A=.049" B=.065" C=.090" E=.583" F=.434"
- P-851x Male Luers with Lock Ring** for use with 3/32" ID (2.40mm) tubing
A=.071" B=.100" C=.139" E=.681" F=.436"
- P-852x Male Luers with Lock Ring** for use with 1/8" ID (3.20mm) tubing
A=.099" B=.132" C=.184" E=.777" F=.436"
- P-853x Male Luers with Lock Ring** for use with 5/32" ID (4.00mm) tubing
A=.108" B=.164" C=.231" E=.874" F=.436"

BARB TO FEMALE LUER-LOCK CONNECTORS (10-pack)

- P-857x Female Luer Connectors** for use with 1/16" ID (1.55mm) tubing
A=.030" B=.063" C=.106" D=.100" E=.598" F=.253"
- P-858x Female Luer Connectors** for use with 3/32" ID (2.40mm) tubing
A=.056" B=.102" C=.145" D=.100" E=.648" F=.253"
- P-859x Female Luer Connectors** for use with 1/8" ID (3.20mm) tubing
A=.080" B=.135" C=.187" D=.100" E=.733" F=.253"

BARBED UNION CONNECTORS (10-pack)

- P-801x Barbed Connectors**
to connect 1/16" ID (1.55mm) tubing to 1/16" ID (1.55mm) tubing
A=.046" B=.063" C=.101" D=.100" E=.658"
- P-802x Barbed Connectors**
to connect 1/8" ID (3.20mm) tubing to 1/8" ID (3.20mm) tubing
A=.085" B=.126" C=.182" D=.098" E=.791"
- P-803x Barbed Connectors**
to connect 3/16" ID (4.75mm) tubing to 3/16" ID (4.75mm) tubing
A=.122" B=.157" C=.275" D=.126" E=.1179"
- P-804x Barbed Connectors**
to connect 1/4" ID (6.35mm) tubing to 1/4" ID (6.35mm) tubing
A=.185" B=.247" C=.342" D=.163" E=.1279"
- P-805x Barbed Connectors**
to connect 3/8" ID (9.55mm) tubing to 3/8" ID (9.55mm) tubing
A=.248" B=.373" C=.466" D=.249" E=.2103"
- P-806x Barbed Connectors**
to connect 1/2" ID (12.7mm) tubing to 1/2" ID (12.7mm) tubing
A=.390" B=.496" C=.598" D=.249" E=.2047"

BARBED REDUCING ADAPTERS (10-pack)

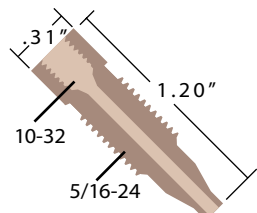
- P-807x Barbed Reducing Adapters**
to connect 1/8" ID (3.20mm) tubing to 1/16" ID (1.55mm) tubing
A=.081" B=.120" C=.170" D=.104" E=.755" G=.102" H=.048" I=.067"
- P-808x Barbed Reducing Adapters**
to connect 3/16" ID (4.75mm) tubing to 1/8" ID (3.20mm) tubing
A=.126" B=.187" C=.285" D=.131" E=.1245" G=.181" H=.085" I=.125"
- P-809x Barbed Reducing Adapters**
to connect 1/4" ID (6.35mm) tubing to 3/16" ID (4.75mm) tubing
A=.139" B=.209" C=.355" D=.125" E=.1561" G=.270" H=.139" I=.184"
- P-810x Barbed Reducing Adapters**
to connect 3/8" ID (9.55mm) tubing to 1/4" ID (6.35mm) tubing
A=.248" B=.371" C=.466" D=.249" E=.2057" G=.345" H=.188" I=.249"

"Y" BARBED CONNECTORS (10-pack)

- P-860x "Y" Barbed Connectors** for use with 1/16" ID (1.55mm) tubing
A=.047" B=.066" C=.092" E=.508" F=.345"
- P-861x "Y" Barbed Connectors** for use with 3/32" ID (2.40mm) tubing
A=.070" B=.099" C=.137" E=.757" F=.521"
- P-862x "Y" Barbed Connectors** for use with 1/8" ID (3.20mm) tubing
A=.095" B=.126" C=.183" E=.1017" F=.70"
- P-863x "Y" Barbed Connectors** for use with 3/16" ID (4.75mm) tubing
A=.157" B=.197" C=.280" E=.1470" F=.1051"
- P-864x "Y" Barbed Connectors** for use with 1/4" ID (6.35mm) tubing
A=.189" B=.266" C=.372" E=.2040" F=.1405"

ENGLISH THREADED ADAPTERS

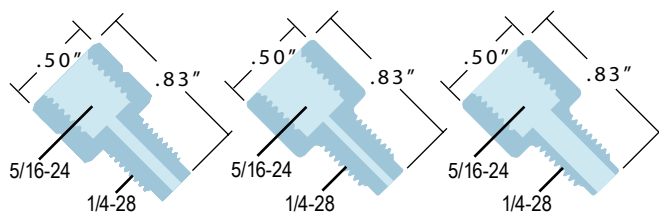
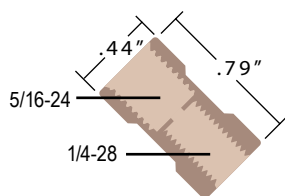
5/16-24 and 1/2-20 Adapters



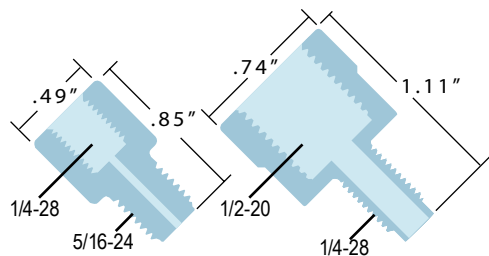
6000-076
.066" (1.70mm) thru-hole



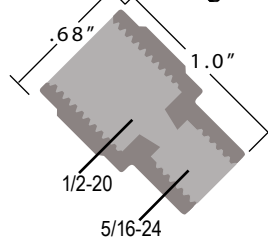
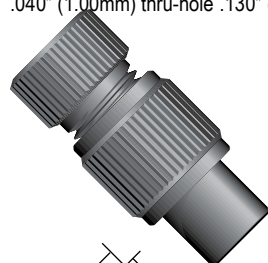
P-135
.080" (2.05mm) thru-hole



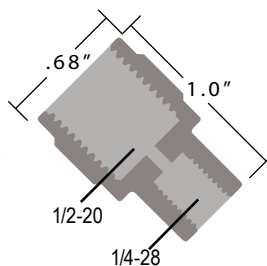
P-649 .063" (1.60mm) thru-hole
P-674 .040" (1.00mm) thru-hole
P-681 .125" (3.20mm) thru-hole



P-718 .040" (1.00mm) thru-hole
P-684 .130" (3.30mm) thru-hole

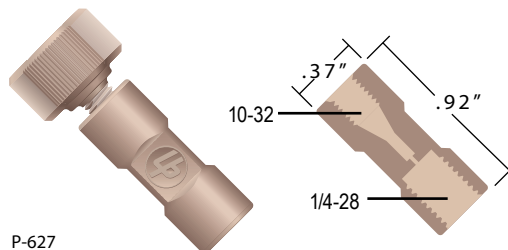


U-659
Tapered thru-hole²
Includes (1) U-650/U-655
for 1/4" OD tubing

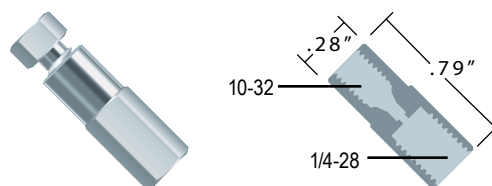


U-665
.063" (1.60mm) thru-hole
Includes (1) U-650/U-655
for 1/4" OD tubing

Female 10-32 to 1/4-28 Adapters



P-627
.020" (0.50mm) thru-hole
Includes (1) F-300
for 1/16" OD tubing



1583
.040" (1.00mm) thru-hole
Includes (1) U-400/U-401
for 1/16" OD tubing

Note

>> Please refer to our Connections Reference Chart on for assistance with choosing the right product for your needs.

>> You may not need an adapter to make your desired connection. For low pressure connections, try our unions. For high pressure applications, try our unions on.

>> Use the Rheodyne® 6000-076 Adapter to connect 1/16" OD tubing to the Rheodyne Preparative-Scale Injector Valve.

ENGLISH THREADED ADAPTERS

5/16-24 and 1/2-20 Adapters		Material	Thru-hole	Swept Volume	Pressure Rating (psi/bar)
6000-076 ¹	5/16-24 M to 10-32 F	PEEK™	.066"	49.8µL	3,000/207
P-135	5/16-24 F to 1/4-28 F	PEEK	.080"	4.1µL	1,000/69
P-649	5/16-24 F to 1/4-28 M	Kel-F®	.063"	24.5µL	1,000/69
P-674	5/16-24 F to 1/4-28 M	Kel-F	.040"	9.9µL	1,000/69
P-681	5/16-24 F to 1/4-28 M	Kel-F	.125"	96.6µL	1,000/69
P-718	5/16-24 M to 1/4-28 F	Kel-F	.040"	10.3µL	1,000/69
P-684	1/2-20 F to 1/4-28 M	Kel-F	.130"	121.7µL	250/17
U-659	5/16-24 F to 1/2-20 F	PEEK	Tapered ²	42.0µL	250/17
Includes (1) U-650 / U-655 Fittings					
U-665	1/2-20 F to 1/4-28 F	PEEK	.063"	6.6µL	250/17
Includes (1) U-650 / U-655 Fittings					
Female 10-32 Coned to 1/4-28 Adapters					
P-627	10-32 F to 1/4-28 F	PEEK	.020"	0.30µL	1,000/69
Includes (1) F-300 Fitting					
1583	10-32 F to 1/4-28 F	SST	.040"	0.60µL *	
Includes (1) U-400/U-401 Fittings					

F = Female (internal) threads; M = Male (external) threads

¹ For use with Rheodyne Preparative-Scale Injector Valves (page 87).

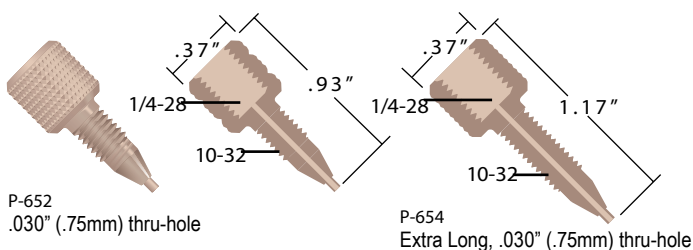
² Thru-hole tapers from .188" to .125".

* The pressure rating of this stainless steel adapter exceeds the pressure holding ability of the fittings and tubing used with it.



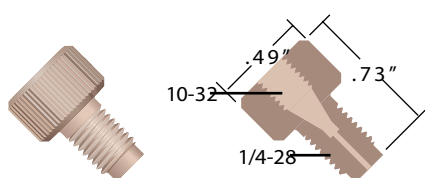
ENGLISH THREADED ADAPTERS

Female to Male 10-32 to 1/4-28 Adapters

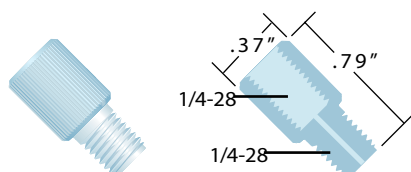


P-652
.030" (.75mm) thru-hole

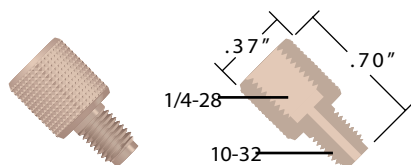
P-654
Extra Long, .030" (.75mm) thru-hole



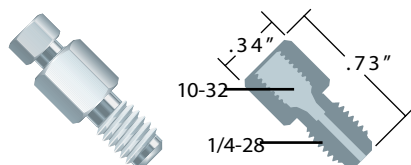
P-669-01
.040" (1.00mm) thru-hole



P-671
.040" (1.00mm) thru-hole



P-672
.050" (1.25mm) thru-hole



1591
.040" (1.00mm) thru-hole
Includes (1) U-400 / U-401
for 1/16" OD tubing

Application Note

Here are application ideas using two of our popular adapters:

>> Many injection valves used in HPLC systems have 10-32 coned ports designed to accept 1/16" OD tubing. However, this may be a problem if large injection volumes are required (in excess of 10mL). The most popular loops for large volume samples are made from 1/8" OD tubing, making it impossible to connect these larger volume loops to your injection valve. The solution: use our P-654 Adapter and the appropriate fittings for your sample loop. This set-up allows connection of 1/8" OD sample loop leads to your injection valve.

>> Another potential application is connecting tubing to low-pressure solenoid valves with 1/4-28 flat bottom ports. Most low-pressure valves of this type have very shallow threaded ports, which typically preclude the use of our Flangeless Fittings. However, by first threading our P-671 Adapter into the valve port(s), you can effectively use standard 1/4-28 fittings to connect your tubing into the backside of the adapter body. This also saves "wear and tear" on the threads in the valve ports.

Note

>> When using an adapter with male (external) threads, we recommend you first attach the adapter body into the receiving port, and then connect your tubing and fitting into the head of the adapter body.

* You may not need an adapter to connect 1/16" OD tubing into your flat-bottom port. A less expensive alternative is to use a Flangeless Nut and Ferrule or a Super Flangeless™ Nut and Ferrule. Our Connections Reference chart is also a good resource to consult when making connections.

* Find adapters for micro fluidic connections

ENGLISH THREADED ADAPTERS

		Material	Thru-hole	Swept Volume	Pressure Rating (psi/bar)
Female to Male 10-32 to 1/4-28 Adapters					
P-652	1/4-28 F to 10-32 M	PEEK™	.030"	6.7µL	1,000/69
P-654	1/4-28 F to 10-32 M, XL	PEEK	.030"	9.5µL	1,000/69
P-669-01	10-32 F to 1/4-28 M	PEEK	.040"	6.6µL	1,000/69
P-671	1/4-28 F to 1/4-28 M	Dupont Teflon® brand resin	.040"	8.0µL	1,000/69
P-672	1/4-28 F to 10-32 Flat M	PEEK	.050"	11.4µL	1,000/69
P-693	1/4-28 F to 1/4-28 M Long	Teflon	.040"	16.27µL	1,000/69
1591	10-32 F to 1/4-28 M	SST	.040"	6.0µL	*
Includes (1) U-400 and (1) U-401 Fittings					

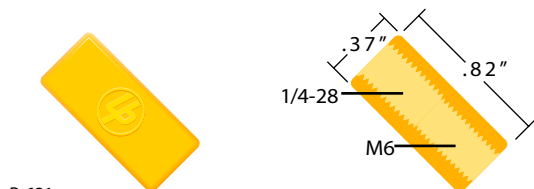
F = Female (internal) threads; M = Male (external) threads; XL = extra long

* The pressure ratings of these adapters exceed the pressure holding ability of the fittings and tubing used with them.

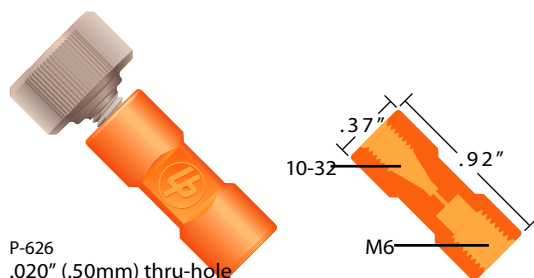
METRIC THREADED ADAPTERS

* Good for Adapting Pharmacia® Columns with Hardware from Other Manufacturers

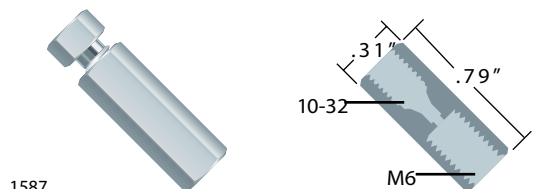
Female M6 Adapters



P-621

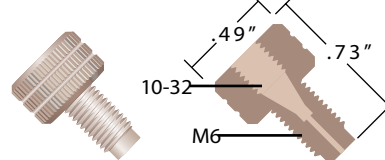


P-626
.020" (.50mm) thru-hole
Includes (1) F-300
for 1/16" OD tubing

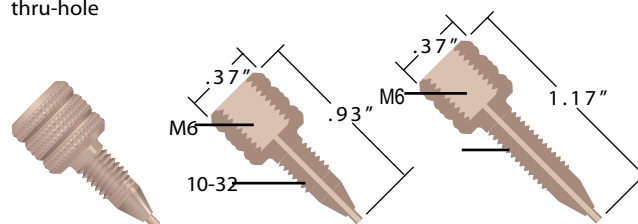


1587
.040" (1.00mm) thru-hole
Includes (1) U-400 / U-401
for 1/16" OD tubing

Female to Male M6 Adapters

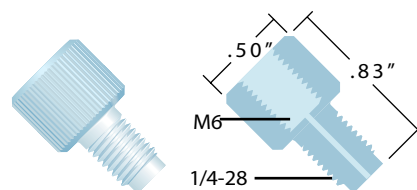


P-920-01
.040" (1.00mm)
thru-hole

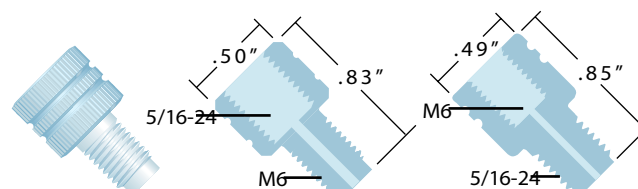


P-650
.030" (.75mm) thru-hole

P-653
Extra Long
.030" (.75mm) thru-hole



P-670
.030" (.75mm) thru-hole



P-673
.040" (1.00mm) thru-hole

P-724
.040" (1.00mm) thru-hole

Note

>> For an alternative to the Female M6 Adapters presented in the left column of this page, try a P-602 or P-622 Low Pressure Metric Union, along with the appropriate Metric Flangeless Fittings.

>> To direct connect your tubing into a flat-bottom port, find the appropriate Flangeless or Super Flangeless™ Fittings respectively.

>> Need metric fittings for your connections?

METRIC M6 THREADED ADAPTERS

		Material	Thru-hole	Swept Volume	Pressure Rating (psi/bar)
Female M6 Adapters					
P-621 ¹	1/4-28 F to M6 F	Tefzel®	N/A	N/A	1,000/69
P-626	10-32 F to M6 F w/F-300 Fitting	PEEK™	.020"	0.3µL	1,000/69
1587	10-32 F to M6 F w/U-400/U-401	SST	.040"	0.6µL	*
Female to Male M6 Adapters					
P-920-01	10-32 F to M6 M	PEEK	.040"	8.0µL	1,000/69
P-650	M6 F to 10-32 M Standard	PEEK	.030"	6.7µL	1,000/69
P-651	M6 F to 10-32 M Waters®-compatible	PEEK	.030"	7.2µL	1,000/69
P-653	M6 F to 10-32 M Extra Long	PEEK	.030"	9.5µL	1,000/69
P-670	M6 F to 1/4-28 M	Kel-F®	.030"	2.6µL	1,000/69
P-673	5/16-24 F to M6 M	Kel-F	.040"	9.9µL	1,000/69
P-724	M6 F to 5/16-24 M	Kel-F	.040"	10.3µL	1,000/69

F = Female (internal) threads; M = Male (external) threads

¹ Do not use Tefzel nuts with P-621.

* The pressure rating of this adapter exceeds the pressure holding ability of the fittings and tubing used with it.

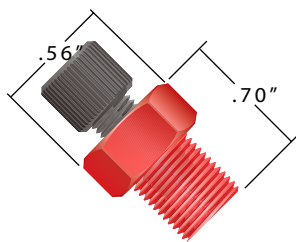


EXTERNAL NATIONAL PIPE THREAD ADAPTERS

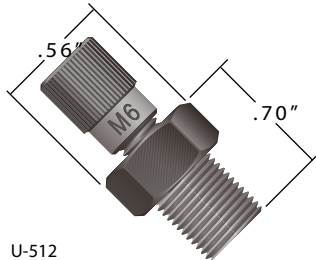
These injection-molded adapters make connections to female 1/8" and 1/4" National Pipe Thread (NPT) ports. Molded from PEEK™ polymer, Upchurch Scientific® NPT Adapters are durable and chemically resistant. We provide a variety of female (internal) threads, as well as a male (external) threaded version, suitable for most low pressure fittings on the market today.

All of our NPT adapters have a .062" (1.60mm) thru-hole, except U-504 and U-514 which have .125" (3.18mm) thru-holes. All included fittings are for 1/8" OD tubing, except U-504 and U-514, which come with fittings for 3/16" OD tubing.

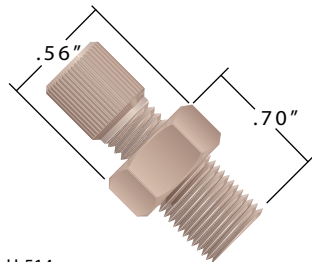
Please Note: Wrap the threads on the NPT side of these adapters with Teflon tape to ensure a leak-free seal.



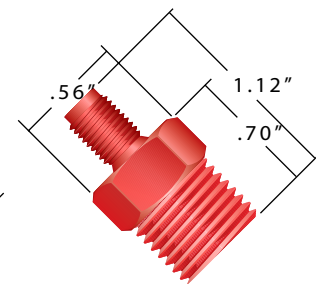
U-510
1/8" NPT to 1/4-28 Flat-Bottom
Female Adapter
Includes (1) P-300/P-308 Fittings
for 1/8" OD tubing



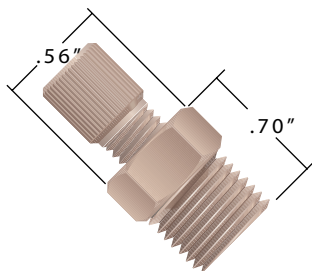
U-512
1/8" NPT to M6 Flat-Bottom
Female Adapter
Includes (1) P-300/P-307 Fittings
for 1/8" OD tubing



U-514
1/8" NPT to 5/16-24 Flat-Bottom
Female Adapter
Includes (1) P-133/P-132 Fittings
for 3/16" OD tubing



U-501
1/4" NPT to 1/4-28 Flat-Bottom
Male Adapter



U-503
1/4" NPT to 5/16-24 Flat-Bottom
Female Adapter
Includes (1) P-360/P-131 Fittings
for 1/8" OD tubing

Application Note

Our U-500 and U-510 NPT Adapters are great for attaching 1/8" OD Teflon sparging lines to sparging gas tank regulating valves. Simply thread the appropriately-sized NPT Adapter into the valve's receiving port and then attach your sparging tubing to the adapter body using the fittings provided.

Note

Replacement fittings for these adapters are located on the pages indicated below:

- 1/4-28 for 1/8" OD tubing
- M6 for 1/8" OD tubing
- 5/16-24 for 1/8" OD tubing
- 5/16-24 for 3/16" OD tubing

Other tubing/fitting combinations are available. For more information, please contact your local Distributor or Upchurch Scientific directly.

1/8" MALE NPT ADAPTERS

		Swept Volume	Tubing OD
U-510	1/8" NPT M to 1/4-28 F Adapter, Red PEEK Includes (1) P-300/P-308 Fittings	17.3µL	1/8"
U-511	1/8" NPT M to 1/4-28 M Adapter, Red PEEK	40.2µL	N/A
U-512	1/8" NPT M to M6 F Adapter, Black PEEK Includes (1) P-300/P-307 Fittings	17.3µL	1/8"
U-513	1/8" NPT M to 5/16-24 F Adapter, Natural PEEK Includes (1) P-360/P-131 Fittings	17.3µL	1/8"
U-514	1/8" NPT M to 5/16-24 F Adapter, Natural PEEK Includes (1) P-133/P-132 Fittings	70.4µL	3/16"

1/4" MALE NPT ADAPTERS

		Swept Volume	Tubing OD
U-500	1/4" NPT M to 1/4-28 F Adapter, Red PEEK Includes (1) P-300/P-308 Fittings	17.3µL	1/8"
U-501	1/4" NPT M to 1/4-28 M Adapter, Red PEEK	40.2µL	N/A
U-502	1/4" NPT M to M6 F Adapter, Black PEEK Includes (1) P-300/P-307 Fittings	17.3µL	1/8"
U-503	1/4" NPT M to 5/16-24 F Adapter, Natural PEEK Includes (1) P-360/P-131 Fittings	17.3µL	1/8"
U-504	1/4" NPT M to 5/16-24 F Adapter, Natural PEEK Includes (1) P-133/P-132 Fittings	70.4µL	3/16"

F = Female (internal) threads; M = Male (external) threads