

# Tubings and Fittings

Precision Liquid Handling Solution

**Tubing  
Assemblies**

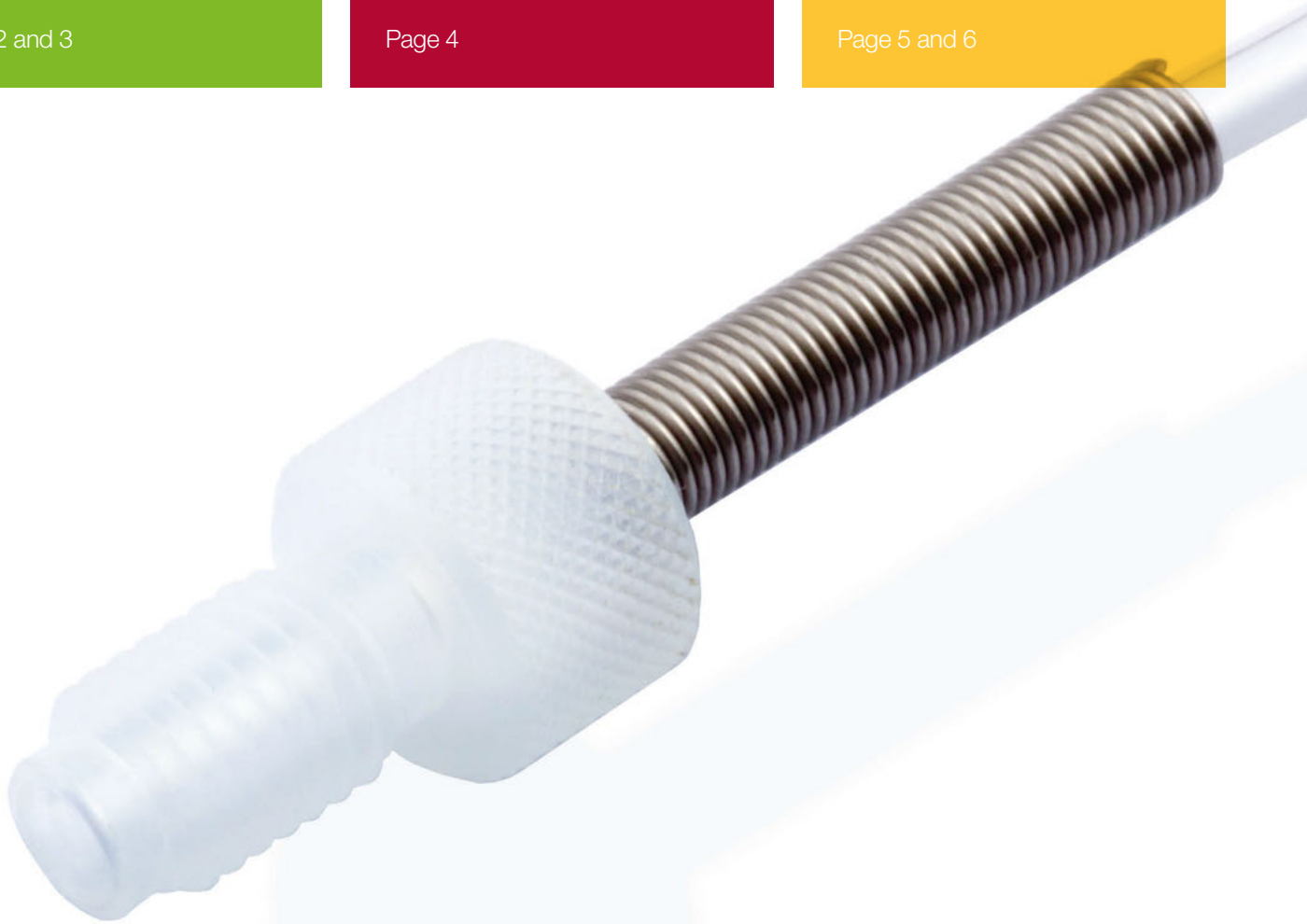
Page 2 and 3

**Luer Lock Hub  
Tubing Assemblies  
and Tubings**

Page 4

**General  
Laboratory Fittings  
and Adapters**

Page 5 and 6



# Tubing Assemblies

## 1/4"-28



Hamilton offers a wide variety of chemically inert tubing assemblies for specific fluid applications. Different gauges, lengths, hub assemblies, and fittings are available according to standard or customer specification.

To build your own assemblies, Hamilton offers fitting kits and tubings (see page 4). Hamilton fittings and adapters are installed finger tight and provide leak tight seal rated to 0.6 MPa.

### USE FOR

- > Fluidic System
- > Microlab 600 Valves
- > PSD Valves
- > Hamilton HV Valves

### Ordering Information

1/4"-28 Tubing assemblies	Description	Material	Length [mm]	12 Gauge 2.9mm x 2mm	18 Gauge 2mm x 1mm	22 Gauge 1.17mm x 0.71mm	
 Single Hub Assemblies	Tapered End	TUB FEP 1372mm TAP	FEP	1372	240133	240134	
		TUB FEP **mm TAP	FEP	**	1171-02	1173-02	
		TUB ** **X**X**	**	**	240084	240084	240084 <sup>3</sup>
	Blunt End	TUB FEP 1219mm	FEP	1219	61614-01	61615-01	
		TUB FEP 600mm	FEP	600	88988 <sup>1</sup>	88987 <sup>2</sup>	88986 <sup>3</sup>
		TUB FEP **mm	FEP	**	1172-02	1174-02	
 Dual Hub Assemblies	TUB 300mm	FEP	300	88918 <sup>1</sup>	88917		
	TUB ** **X**X**	**	**	240083	240083	240083 <sup>3</sup>	
	Tub ** M6 **X**X**	**	**	240081	240081	240081 <sup>3</sup>	
	Kit Fitting + Kel-F Washer 5pcs <sup>4</sup>	Kel-F			249985 <sup>3</sup>	249989 <sup>3</sup>	249987 <sup>3</sup>
	Kit Fitting + Metal Washer 10pcs <sup>4</sup>	Kel-F			88807	88806	
	Kit Fitting + Kel-F Washer + Support Spring 10pcs <sup>4</sup>	Kel-F			209721	209722	
Reference Pictures (not to scale)	<sup>1</sup> PTFE gauge 13 (2.54mmx1.945mm) / <sup>2</sup> PTFE / <sup>3</sup> No Support Spring / <sup>4</sup> Find raw tubings with 30 to 7 gauge on page 4 TUB ** **X**X**": specify tubing material, gauge, length, and whether tapered and/or coiled. Maximum length: 5 meters						

# M6

Tubing assemblies are available with support spring which protects the tubing from kinking at the interface between the tubing and the fitting. The assemblies are made of FEP or PTFE tubing and Kel-F (PCTFE) threaded fittings (unless otherwise specified). The flanged tubing assemblies provide the perfect seal including minimized dead volume for 1/4"-28 UNF or M6 flat bottom valve ports.



Hamilton fittings and adapters are installed finger tight and provide leak tight seal rated to 0.6 MPa.

USE FOR

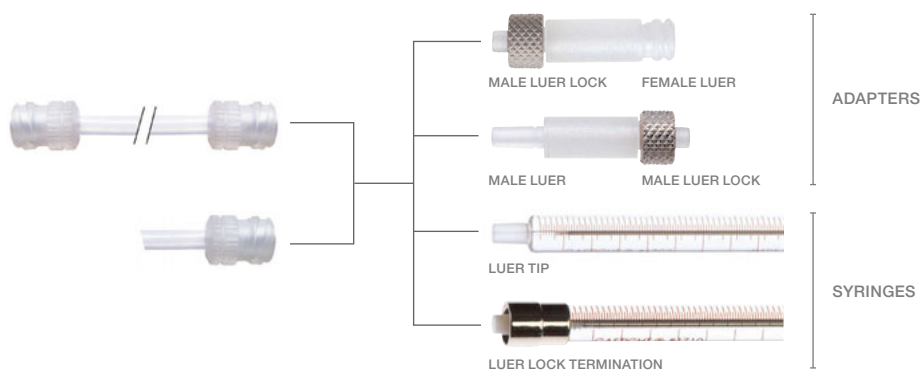
- > Fluidic System
- > Microlab 500 Valves

## Ordering Information




M6 Tubing assemblies		Description	Material	Length [mm]	12 Gauge 2.9mm x 2mm	2.5mm x 1.5mm	18 Gauge 2mm x 1mm	22 Gauge 1.17mm x 0.71mm
Single Hub Assemblies 	Tapered End	Tub FEP 900mm tap.	FEP	900	240360		240130	
		Tub ** **X**X**	**	**	240082	240082	240082	240082
	Blunt End	Tub FEP 650mm	FEP	650	240000		240010	
		Tub FEP 900mm	FEP	900	240320 <sup>2</sup>		240310	
		Tub FEP 1300mm	FEP	1300	240260			
		Tub FEP 500mm	FEP	500		240440 <sup>2</sup>		
		TUB PTFE 1000mm	PTFE	1000				240710 <sup>1,2</sup>
		Tub ** **X**X**	**	**	240082	240082	240082	240082
Dual Hub Assemblies 		Tub ** **X**X**	**	**	240085	240085	240085	240085
		Kit Fitting + Washer 5pcs <sup>3</sup>	Kel-F		249981	249984	249980	249982
Reference Pictures (not to scale)	<sup>1</sup> PTFE / <sup>2</sup> No strain relief / <sup>3</sup> Find raw tubings with 30 to 7 gauge on page 4 TUB ** **X**X**: specify tubing material, gauge, length, and whether tapered and/or coiled. Maximum length: 5 meters							

# Luer Lock Hub Tubing Assemblies and Tubings

Hamilton Luer Lock tubing assemblies are ideal for quickly connecting and disconnecting components with male luer locks.



## Ordering Information

Luer Hub Tubing Assemblies							
Gauge	OD [mm]	ID [mm]	Material	Tubing only <sup>1</sup>	One hub 300mm <sup>2</sup>	One hub <sup>1</sup>	Two hubs <sup>1</sup>
30	0.75	0.35	PTFE	20930	90630	90680	86510 240008 <sup>4</sup>
28	0.86	0.40	PTFE	20928	90628	90678	86510
26	0.91	0.46	PTFE	20926	-	90676	86510
24	1.12	0.59	PTFE	20924	90624	90674	86510
22	1.23	0.71	PTFE	20922	90622	90672	86510
20	1.50	0.91	PTFE	20920	90620	90670	86510
19	1.83	1.02	PTFE	20919	90619	90669	86510
18	2.00	1.00	FEP	20942	-	-	86510
18	1.68	1.07	PTFE	20918	90618	90668	86510 240018 <sup>3</sup>
17	1.62	1.02	PTFE	20917	90617	90667	86510
16	2.02	1.42	PTFE	20916	90616	90666	86510
15	2.17	1.57	PTFE	20915	90615	90665	86510
14	2.35	1.75	PTFE	20914	90614	90664	86510
13	2.54	1.95	PTFE	-	90613	90663	86510
12	2.90	2.00	FEP	20943	-	-	86510
12	2.77	2.16	PTFE	20912	90612	90662	86510
11	3.04	2.44	PTFE	20911	90611	90661	86510
10	3.33	2.72	PTFE	20910	90610	90660	86510
9	3.76	3.02	PTFE	20909	90609	90659	86510
8	4.19	3.43	PTFE	20908	90608	90658	86510
7	4.60	3.84	PTFE	20907	90607	90657	86510
1/8"	3.18	1.59	PTFE	20941	-	90691	86510

Reference Pictures (not to scale)















<sup>1</sup> Specify tubing length at the time of the order. Maximum length: 5 meters  
<sup>2</sup> The tubing is 300mm in length but can be trimmed shorter to a desired length / <sup>3</sup> 500mm / <sup>4</sup> 400mm  
 OD: Outer diameter, ID: Inner diameter

# General Laboratory Fittings and

# 1

Use female luer, male luer, luer lock and barbed fittings to connect syringes, equipment or other devices to valves.

## Ordering Information

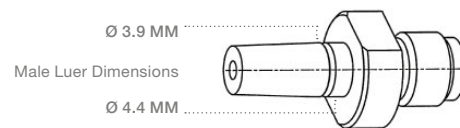
Valve Fittings Port Diameter	1/4"-28 UNF Threads		M6 Threads		Compatible with Thread depth	
	1.5mm	3mm	1.5mm	2mm	≤ 6mm	≤ 8mm
 Female Luer	35031	35071			✓	
	32834		32874	230223		✓
 Male Luer	35030	35070			✓	
	32835			230222		✓
 Male Luer Lock <sup>1</sup>	35033	35073	32876		✓	
	32836					✓
 Female M6	R32821					✓
 1/8" Barb	35032 <sup>2</sup>	35072			✓	
1/4"-NPT	32823					✓
1/8"-NPT	32822					✓
 Plug (10pcs)		88802		88852		✓
 Union (10pcs)	88800					✓
 Swivel Union <sup>1</sup>	35037				✓	
 SS 1/16" Tube Adapters <sup>1</sup>	32805					
<b>3 Way Threaded Junctions</b>						
 3 Way "T"	32810				✓	
 3 Way "Y"	32814	165736 <sup>2</sup>	32864		✓	
<b>Needle Bushings and Needles</b>						
 Bushing for "RN" type needles	35035				✓	
 Bushing for "HAT" type needles	35056				✓	
 Needles SS 304 "HAT" type (3pcs) <sup>3</sup>	18 Gauge	90818				
	20 Gauge	90820				
	23 Gauge	90823				
Reference Pictures (not to scale)	<sup>1</sup> Kel-F and Metal / <sup>2</sup> 2mm Port Diameter / <sup>3</sup> Use with Bushing p/n 35056 NPT: National Pipe Thread / SS: Stainless Steel					
















# Adapters

## 2

Some fittings are offered in two port diameters for fluid optimization. Fittings and adapters are Kel-F (PCTFE) unless otherwise noted. Hamilton fittings and adapters are installed finger tight and provide a leak tight seal rated to 0.6 MPa.



### Ordering Information

Valve Fittings Port Diameter	Port Diameter 1.5mm
 Female Luer/Female Luer	86505
 Female Luer/Male Luer	86507
 Female Luer/Male Luer Lock	86513
 Female Luer/1/4"-20 UNC	86542
 Female Luer Cap	16801
 Male Luer/Male Luer	86506
 Male Luer Lock/Male Luer	86512
 Male Luer Lock/Male Luer Lock	86511
 Male Luer Lock/1/8"-NPT	86536 <sup>2</sup>
<b>Removable (RN) Adapters</b> for 250µL RN needle syringes and larger	
 Female Luer	35081
 Male Luer	35080
 Male Luer Lock	35083
 Inert Gas Sampling Valve	86580 <sup>1</sup>
Reference Pictures (not to scale)	<sup>1</sup> 1mm Port Diameter. Lever actuated on/off valve. Autoclavable / <sup>2</sup> Compatible with thread depth ≤ 8 mm NPT: National Pipe Thread / UNC: United National Course

**BGB** GC|LC  
MS|CE

[www.bgb-shop.com/hamilton-syringes](http://www.bgb-shop.com/hamilton-syringes)

© 2015 Hamilton Bonaduz AG. All rights reserved.  
All trademarks are owned and/or registered by Hamilton Bonaduz AG.  
Lit. No. 691162/01 – 12/2015

**HAMILTON** 

Web: [www.hamiltoncompany.com](http://www.hamiltoncompany.com)

USA: 800-648-5950

Europe: +41-58-610-10-10

#### Hamilton Americas & Pacific Rim

4970 Energy Way  
Reno, Nevada 89502 USA  
Tel: +1-775-858-3000  
Fax: +1-775-856-7259  
[sales@hamiltoncompany.com](mailto:sales@hamiltoncompany.com)

#### Hamilton Europe, Asia & Africa

DJ 691 No. Km8+390m dreapta  
307210 Giarmata/Romania  
Phone: +40-356-635-050  
Fax: +40-356-635-060  
[contact.lab.ro@hamilton.ch](mailto:contact.lab.ro@hamilton.ch)

To find a representative in your area, please visit [www.hamiltoncompany.com](http://www.hamiltoncompany.com).