

# Fitting Systems


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**BIO•CHEM  
FLUIDICS**

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### Plastics

ETFE = ethylene tetrafluoroethylene  
 PTFE = polytetrafluoroethylene  
 PEEK™ = polyetheretherketone  
 PP = polypropylene  
 PC = polycarbonate

### Trademarks

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 Click-N-Seal™ is a trademark of Diba Industries Inc.

# Fitting Systems Selection Guide

In the table below:

1. Locate the outer diameter (OD) of the tubing you wish to connect;
2. Choose the maximum pressure rating you require;
3. Locate the type of threads your port has;
4. Turn to the pages indicated to see full details and ordering information for each system.

Tubing OD	Max pressure		Port threads		
	psi	bar	¼"-28 UNF	M6	⅝"-24 UNF
⅛"	250	17	Omni-Lok™ Inverted Cone (p8)	Omni-Lok™ Inverted Cone (p8)	
			Click-N-Seal™ Inverted Cone (p15)	Click-N-Seal™ Inverted Cone (p15)	
			Omni-Lok™ Flanged (p10)		
	500	34	Omni-Lok™ Type S (p6)	Omni-Lok™ Type S (p6)	
			Click-N-Seal™ Type S (p15)	Click-N-Seal™ Type S (p15)	
	1000	69	Omni-Lok™ Type P (p4)	Omni-Lok™ Type P (p4)	
			Gripper (p12)	Click-N-Seal™ Type P (p15)	
			Click-N-Seal™ Type P (p15)		
	2.0mm	250	17	Omni-Lok™ Inverted Cone (p8)	Click-N-Seal™ Inverted Cone (p15)
Click-N-Seal™ Inverted Cone (p15)					
2.5mm	250	17	Omni-Lok™ Inverted Cone (p8)	Click-N-Seal™ Inverted Cone (p15)	
			Click-N-Seal™ Inverted Cone (p15)		
3.0mm	250	17	Omni-Lok™ Inverted Cone (p8)	Click-N-Seal™ Inverted Cone (p15)	
			Click-N-Seal™ Inverted Cone (p15)		
⅜"	250	17	Omni-Lok™ Inverted Cone (p8)	Click-N-Seal™ Inverted Cone (p15)	
			High Temp Inverted Cone (p9)		
			Omni-Lok™ Flanged (p10)		
			Click-N-Seal™ Inverted Cone (p15)		
	500	34	Omni-Lok™ Type S (p6)	Omni-Lok™ Type S (p6)	
			Click-N-Seal™ Type S (p15)	Click-N-Seal™ Type S (p15)	
	1000	69	Omni-Lok™ Type P (p4)	Omni-Lok™ Type P (p4)	
			Gripper (p12)	High Temp Gripper (p13)	
			High Temp Gripper (p13)	Click-N-Seal™ Type P (p15)	
Click-N-Seal™ Type P (p15)					
⅝"	30	2			Omni-Lok™ Inverted Cone (p8)
	120	8			Omni-Lok™ Type S (ETFE) (p6)
	200	14			Omni-Lok™ Type S (PEEK™) (p6)
					Omni-Lok™ Type P (p4)

## OMNI-LOK™ TYPE P

**Chemically inert flangeless fitting with permanently attached PTFE ferrule ideal for repeat connect/disconnect**

- Pressure rated up to 1000psi (69 bar)
- For 1/16", 1/8" or 3/16" OD semi-rigid tubing e.g. PTFE, ETFE, FEP
- For flat-bottom 1/4"-28 UNF, M6 or 5/16"-24 UNF ports

The Omni-Lok™ Type P fitting system uses a one-piece ferrule which fits permanently onto the outside of semi-rigid tubing. Ferrules have an inner PTFE sealing face ensuring that only PTFE is in the fluid path.

The fitting nut can spin freely, eliminating tubing twist. A recess in the fitting houses the ferrule, allowing maximum thread engagement with the port. This ensures the system stays sealed up to 1000psi (69 bar) pressure, even in shallow PTFE ports. Note: Omni-Lok™ Type P for 3/16" OD tubing and 5/16"-24 UNF flat-bottom ports is pressure rated up to 200 psi (14 bar).

Compact head fitting nuts, in glass-filled polypropylene, are available in a range of different colors for easy line identification. Other options are a longer length nut for applications where accessibility is an issue (1/8" OD tubing only) and standard head nuts in PEEK™ for higher temperatures.

Assembly of Omni-Lok™ type P fittings onto tubing requires the use of simple tooling. See the assembly instructions on our website for full details.

### For 1/16" OD Tubing

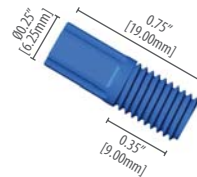
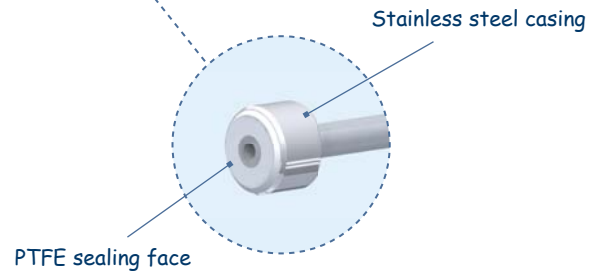
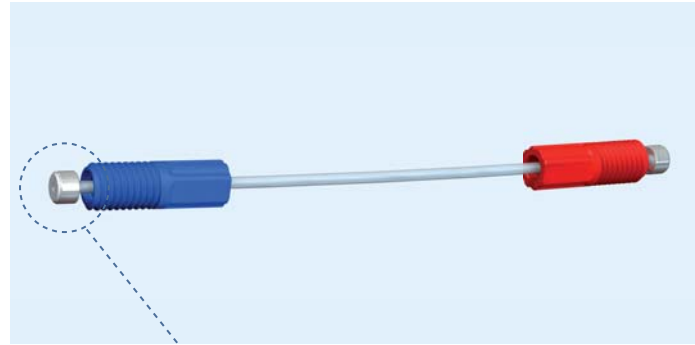
#### FERRULES FOR 1/16" OD TUBING

PART NUMBER	DESCRIPTION	QTY
008FT16	One piece PTFE ferrule for 1/4•28 and M6 nuts	10pk

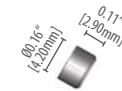
#### NUTS FOR 1/16" OD TUBING

PART NUMBER	MATERIAL	COLOR	THREAD	QTY
008NF16-YC5B	PP	Black	1/4•28	10pk
008NF16-YC5U	PP	Blue	1/4•28	10pk
008NF16-YC5A	PP	Gray	1/4•28	10pk
008NF16-YC5G	PP	Green	1/4•28	10pk
008NF16-YC5N	PP	Orange	1/4•28	10pk
008NF16-YC5R	PP	Red	1/4•28	10pk
008NF16-YC5H	PP	White	1/4•28	10pk
008NF16-YC5Y	PP	Yellow	1/4•28	10pk
008NF16-YC6B	PP	Black	M6	10pk
002122S	PEEK™	Natural	1/4•28	ea

### SPECIFICATIONS



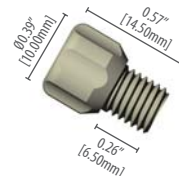
**008NF16-YC5U**  
Nut for 1/16" OD tubing  
1/4•28, blue



**008FT16**  
Type P ferrule  
for 1/16" OD tubing



**008NF16-YC6B**  
Nut for 1/16" OD tubing  
M6, black



**002122S**  
PEEK™ nut  
for 1/16" OD tubing, 1/4•28

For 1/8" OD Tubing

FERRULES FOR 1/8" OD TUBING

PART NUMBER	DESCRIPTION	QTY
008FT32	One piece PTFE ferrule for 1/4•28 and M6 nuts	10pk

NUTS FOR 1/8" OD TUBING

PART NUMBER	MATERIAL	COLOR	THREAD	QTY
008NF32-YC5B	PP	Black	1/4•28	10pk
008NF32-YC5U	PP	Blue	1/4•28	10pk
008NF32-YC5A	PP	Gray	1/4•28	10pk
008NF32-YC5G	PP	Green	1/4•28	10pk
008NF32-YC5N	PP	Orange	1/4•28	10pk
008NF32-YC5R	PP	Red	1/4•28	10pk
008NF32-YC5H	PP	White	1/4•28	10pk
008NF32-YC5Y	PP	Yellow	1/4•28	10pk
008NF32-YL5B	PP	Black	1/4•28	10pk
008NF32-YC6B	PP	Black	M6	10pk
002222S	PEEK™	Natural	1/4•28	ea

For 3/16" OD Tubing

FERRULES FOR 3/16" OD TUBING

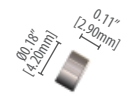
PART NUMBER	DESCRIPTION	QTY
008FT47	One piece PTFE ferrule for 5/16•24 nuts	10pk

NUTS FOR 3/16" OD TUBING

PART NUMBER	MATERIAL	COLOR	THREAD	QTY
008NF47-YC7B	PP	Black	5/16•24	10pk



**008NF47-YC7B**  
Nut for 3/16" OD tubing  
5/16•24, black



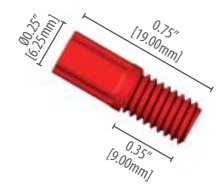
**008FT47**  
Type P ferrule  
for 3/16" OD tubing

Blanking Plugs

ETFE nut with PTFE sealing face designed to seal unused ports. These blanking plugs can be used in any flat-bottom 1/4"-28 UNF port.

BLANKING PLUG FOR 1/4•28 FLAT-BOTTOM PORTS

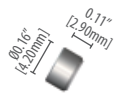
PART NUMBER	MATERIAL	COLOR	THREAD	QTY
002320	ETFE	Natural	1/4•28	2pk



**008NF32-YC5R**  
Nut for 1/8" OD tubing  
1/4•28, red



**008NF32-YC6B**  
Nut for 1/8" OD tubing  
M6, black



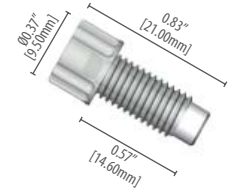
**008FT32**  
Type P ferrule  
for 1/8" OD tubing



**008NF32-YL5B**  
Long nut for 1/8" OD tubing,  
1/4•28, black



**002222S**  
PEEK™ nut  
for 1/8" OD tubing, 1/4•28



**002320**  
ETFE plug  
for 1/4•28 ports

TECH TIP:

Problems with shallow or PTFE ports?

Some shallow ports, especially those found in solenoid valves, may offer limited thread engagement for most standard fittings. Ports machined from PTFE can also be slippery and difficult to seal, with fittings becoming loose and "backing out". With glass-filled polypropylene and a recessed ferrule, Omni-Lok™ fittings are specifically designed for use in shallow and PTFE ports to ensure maximum security and a leak-free seal.

## OMNI-LOK™ TYPE S

Chemically inert flangeless fitting with permanently attached PEEK™ or ETFE ferrules, ideal for repeated connect/disconnect

- Pressure rated up to 500psi (34 bar)
- For 1/16", 1/8" or 3/16" OD semi-rigid tubing e.g. PTFE, ETFE, FEP
- For flat-bottom 1/4"-28 UNF, M6 or 5/16"-24 UNF ports
- PEEK™ ferrules can be used with rigid tubing, e.g. PEEK™

The Omni-Lok™ Type S fitting system uses a two-piece ferrule which fits permanently to the outside of the tubing. Two-part ferrules consist of an inner PEEK™ or ETFE sealing surface surrounded by a stainless steel lock ring with only the inner portion in the fluid path.

The fitting nut can spin freely against the ferrule, eliminating tubing twist and subsequent loosening of the nut. A recess in the fitting houses the ferrule, allowing maximum thread engagement with the port ensuring the system stays sealed up to 500psi (34 bar) pressure even in shallow PTFE ports. Note: The Omni-Lok™ Type S for 3/16" OD tubing and 5/16"-24 UNF flat-bottom ports is pressure rated up to 200 psi (14 bar).

Compact head fitting nuts in glass-filled polypropylene, are available in a range of different colors for easy line identification. Other options are a longer length nut for applications where accessibility is an issue (1/8" OD tubing only) and standard head nuts in PEEK™ for higher temperatures. The Type S PEEK™ ferrule can be used with rigid PEEK™ tubing and a PEEK™ fitting nut to create a robust, high temperature assembly.

### For 1/16" OD Tubing

#### FERRULES FOR 1/16" OD TUBING

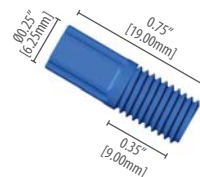
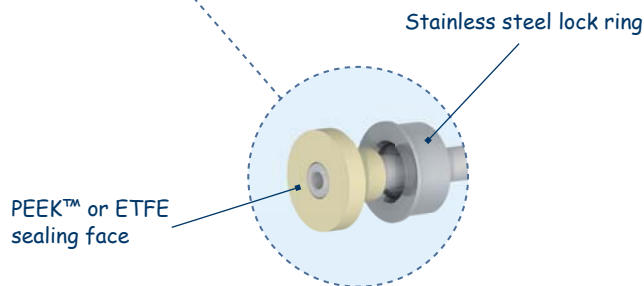
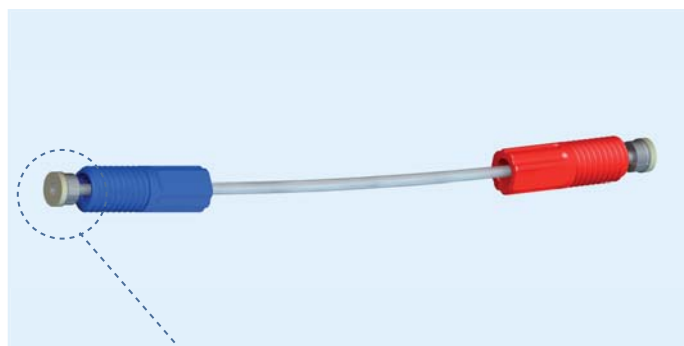
PART NUMBER	DESCRIPTION	QTY
008FK16	PEEK™ ferrule and SS lock ring	10pk
008FZ16	ETFE ferrule and SS lock ring	10pk

008FK16 & 008FZ16 ferrules can be used with all nuts listed and either 1/4"-28 and M6 flat-bottom ports.

#### NUTS FOR 1/16" OD TUBING

PART NUMBER	MATERIAL	COLOR	THREAD	QTY
008NF16-YC5B	PP	Black	1/4"•28	10pk
008NF16-YC5U	PP	Blue	1/4"•28	10pk
008NF16-YC5A	PP	Gray	1/4"•28	10pk
008NF16-YC5G	PP	Green	1/4"•28	10pk
008NF16-YC5N	PP	Orange	1/4"•28	10pk
008NF16-YC5R	PP	Red	1/4"•28	10pk
008NF16-YC5H	PP	White	1/4"•28	10pk
008NF16-YC5Y	PP	Yellow	1/4"•28	10pk
008NF16-YC6B	PP	Black	M6	10pk
002122S	PEEK™	Natural	1/4"•28	ea

### SPECIFICATIONS



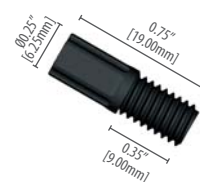
**008NF16-YC5U**  
Nut for 1/16" OD tubing,  
1/4"•28, blue



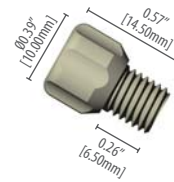
**008FK16**  
Two-part ferrule, PEEK™



**008FZ16**  
Two-part ferrule, ETFE



**008NF16-YC6B**  
Nut for 1/16" OD tubing  
M6, black



**002122S**  
PEEK™ nut for 1/16" OD tubing  
1/4"•28, natural

### TECH TIP:

#### Need a completely PEEK™ connection?

An all-PEEK™ fitting and tubing system can be obtained using the Omni-Lok™ Type S ferrule in PEEK™, with PEEK™ tubing and the PEEK™ fitting nuts shown. Perfect for higher temperature applications or harsh environments.

For 1/8" OD Tubing

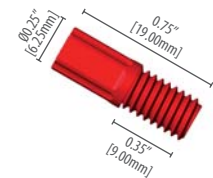
FERRULES FOR 1/8" OD TUBING

PART NUMBER	DESCRIPTION	QTY
008FK32	PEEK™ ferrule and SS lock ring	10pk
008FZ32	ETFE ferrule and SS lock ring	10pk

008FK32 & 008FZ32 ferrules can be used with all nuts listed and either 1/4•28 and M6 flat-bottom ports.

NUTS FOR 1/8" OD TUBING

PART NUMBER	MATERIAL	COLOR	THREAD	QTY
008NF32-YC5B	PP	Black	1/4•28	10pk
008NF32-YC5U	PP	Blue	1/4•28	10pk
008NF32-YC5A	PP	Gray	1/4•28	10pk
008NF32-YC5G	PP	Green	1/4•28	10pk
008NF32-YC5N	PP	Orange	1/4•28	10pk
008NF32-YC5R	PP	Red	1/4•28	10pk
008NF32-YC5H	PP	White	1/4•28	10pk
008NF32-YC5Y	PP	Yellow	1/4•28	10pk
008NF32-YL5B	PP	Black	1/4•28	10pk
008NF32-YC6B	PP	Black	M6	10pk
002222S	PEEK™	Natural	1/4•28	ea



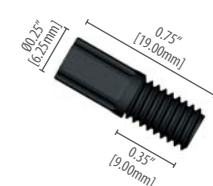
**008NF32-YC5R**  
Nut for 1/8" OD tubing  
1/4•28, red



**008FK32**  
Two-part ferrule, PEEK™



**008FZ32**  
Two-part ferrule, ETFE



**008NF32-YC6B**  
Nut for 1/8" OD tubing  
M6, black



**002222S**  
PEEK™ nut  
for 1/8" OD tubing, 1/4•28



**008NF32-YL5B**  
Long nut for 1/8" OD tubing,  
1/4•28, black

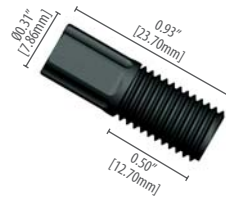
For 3/16" OD Tubing

FERRULES FOR 3/16" OD TUBING

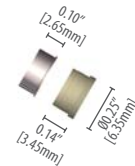
PART NUMBER	DESCRIPTION	QTY
008FK47	PEEK™ ferrule and SS lock ring	10pk
008FZ47	ETFE ferrule and SS lock ring	10pk

NUTS FOR 3/16" OD TUBING

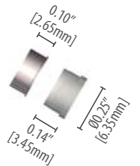
PART NUMBER	MATERIAL	COLOR	THREAD	QTY
008NF47-YC7B	PP	Black	5/16•24	10pk



**008NF47-YC7B**  
Nut for 3/16" OD tubing  
5/16•24, black



**008FK47**  
Two-part ferrule, PEEK™



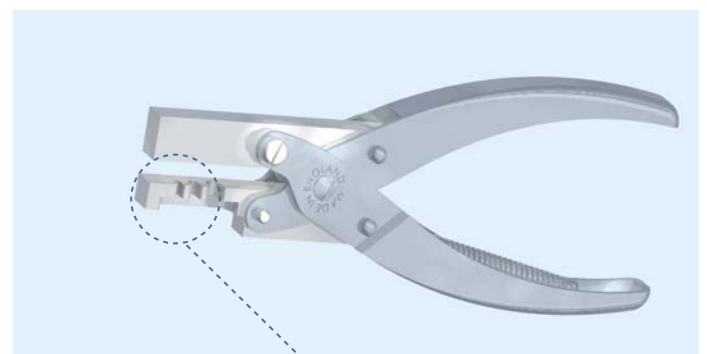
**008FZ47**  
Two-part ferrule, ETFE

Omni-Lok™ Type S Assembly Tool

The Omni-Lok™ Type S two-piece ferrule is easily assembled onto tubing using this tool. Simply cut the tube end square, then fit the Omni-Lok™ ferrule and lock ring onto the squarely cut tube end, load into the assembly tool and squeeze the tool handles together to press the lock ring onto the ferrule. Full instructions are provided with the tool and on our website.

OMNI-LOK™ TYPE S ASSEMBLY TOOL

PART NUMBER	DESCRIPTION	QTY
008AT	Assembly tool	ea



## OMNI-LOK™ INVERTED CONE FITTINGS

Removable and reusable system for quick and convenient low-pressure connections

- Pressure rated up to 250psi (17 bar)
- For 1/16", 1/8" or 3/16" OD and metric sizes 2.0, 2.5 or 3.0mm OD semi-rigid tubing e.g. PTFE, ETFE, FEP
- For flat-bottom 1/4"-28 UNF, M6 or 5/16"-24 UNF ports

Omni-Lok™ inverted cone fittings provide a simple, easy to use low-pressure connection. Only the ETFE cone is in the fluid path.

No tools are required to assemble a flangeless fitting quickly and economically - just slip the fitting nut and the ETFE cone over the tubing and screw into the port. None of the parts are permanently attached to the tubing, so both fittings and inverted cones can easily be removed and re-used. A recess in the fitting houses the inverted cone, allowing maximum thread engagement with the port ensuring the system stays sealed up to 250psi (17 bar) pressure even in shallow PTFE ports. Note: The Omni-Lok™ inverted cone and fitting nut for 3/16" OD tubing and 5/16"-24 UNF flat-bottom ports is pressure rated up to 30 psi (2 bar).

Fitting nuts in robust, glass-filled polypropylene are available in a range of different colors for easy line identification. Nuts are also available in PEEK™ with standard and compact head designs or with shorter thread length for shallow ports.

### For 1/16" OD Tubing

#### INVERTED CONES FOR 1/16" OD TUBING

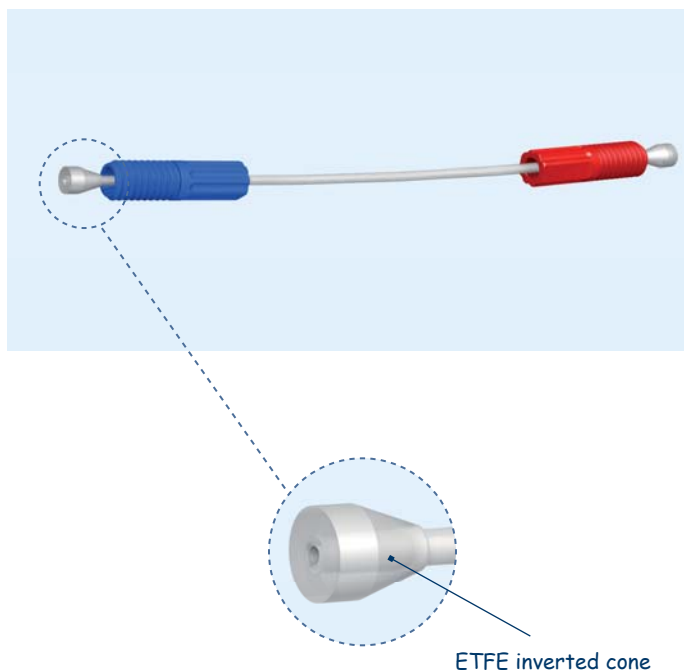
PART NUMBER	DESCRIPTION	QTY
008CZ16	ETFE inverted cone	10pk

008CZ16 inverted cones can be used with all nuts listed below.

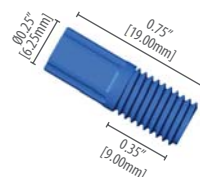
#### NUTS FOR 1/16" OD TUBING

PART NUMBER	Material	Color	Thread	QTY
008NC16-YC5U	PP	Blue	1/4•28	10pk
008NC16-YC5G	PP	Green	1/4•28	10pk
008NC16-YC6U	PP	Blue	M6	10pk
002144	PEEK™	Natural	1/4•28	ea
002144S	PEEK™	Natural	1/4•28	ea
002145	PEEK™	Natural	1/4•28	ea

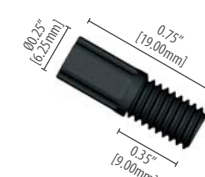
### SPECIFICATIONS



ETFE inverted cone



**008NC16-YC5U**  
Nut for 1/16" OD tubing  
1/4•28, blue



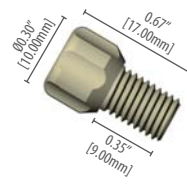
**008NC16-YC6B**  
Nut for 1/16" OD tubing  
M6, black



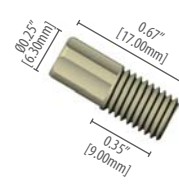
**008CZ16**  
Omni-Lok™ inverted cone for 1/16" OD tubing



**002144S**  
PEEK™ nut for 1/16" OD tubing,  
1/4•28



**002144**  
PEEK™ nut for 1/16" OD tubing,  
1/4•28



**002145**  
Compact PEEK™ nut for 1/16" OD tubing, 1/4•28



For 1/8" OD Tubing

INVERTED CONES FOR 1/8" OD TUBING

PART NUMBER	DESCRIPTION	QTY
001545	ETFE inverted cone	10pk

PEEK™ NUTS FOR 1/8" OD TUBING

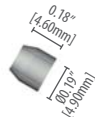
PART NUMBER	HEAD	LENGTH	MATERIAL	COLOR	THREAD	QTY
002244	Standard	Standard	PEEK™	Natural	1/4•28	ea
002244S	Standard	Short	PEEK™	Natural	1/4•28	ea
002245	Compact	Standard	PEEK™	Natural	1/4•28	ea



**002244**  
PEEK™ nut for 1/8" OD tubing  
1/4•28, natural



**002245**  
Compact PEEK™ nut  
for 1/8" OD tubing, 1/4•28



**001545**  
ETFE inverted cone  
for 1/8" OD tubing



**002244S**  
Shorter thread PEEK™ nut  
for 1/8" OD tubing, 1/4•28

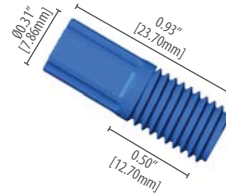
For 3/16" OD Tubing

INVERTED CONE FOR 3/16" OD TUBING

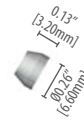
PART NUMBER	DESCRIPTION	QTY
008CZ47	ETFE inverted cone	10pk

NUTS FOR 3/16" OD TUBING

PART NUMBER	MATERIAL	COLOR	THREAD	QTY
008NC47-YC7U	PP	Blue	5/16•24	10pk



**008NC47-YC7U**  
Nut for 3/16" OD tubing  
5/16•24, blue



**008CZ47**  
Omni-Lok™ inverted cone  
for 3/16" OD tubing

For 1/8", 2.0, 2.5 and 3.0mm OD Tubing

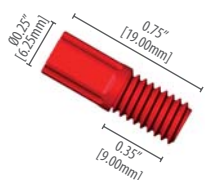
INVERTED CONES FOR 1/8", 2.0, 2.5 & 3.0MM OD TUBING

PART NUMBER	MATERIAL	TO FIT TUBE OD	QTY
008CZ19	ETFE	1.8 - 2.0mm	10pk
008CZ25	ETFE	2.5mm	10pk
008CZ30	ETFE	3.0mm	10pk
008CZ32	ETFE	1/8" (3.2mm)	10pk

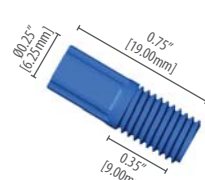
NUTS FOR 1/8", 2.0, 2.5 & 3.0MM OD TUBING

PART NUMBER	MATERIAL	COLOR	THREAD	QTY
008NC32-YC5U	PP	Blue	1/4•28	10pk
008NC32-YC5G	PP	Green	1/4•28	10pk
008NC32-YC5N	PP	Orange	1/4•28	10pk
008NC32-YC5R	PP	Red	1/4•28	10pk
008NC32-YC5Y	PP	Yellow	1/4•28	10pk
008NC32-YC6U	PP	Blue	M6	10pk

The 008NC32 nuts can be used with all tube sizes and inverted cones listed above



**008NC32-YC5R**  
Nut for 1/8" OD tubing  
1/4•28, red



**008NC32-YC6U**  
Nut for 1/8" OD tubing  
M6, blue



**008CZ-32**  
Omni-Lok™ inverted  
cone for 1/8" OD tubing

TECH TIP:

Frequent connection / disconnection?

For applications needing repeated connect / disconnect we recommend a permanently attached ferrule with stainless steel collar. Choose from our Omni-Lok™ Type P and S, or Gripper ranges.

## OMNI-LOK™ FLANGED

Flanged (flared) tubing system for economical low-pressure connections

- Pressure rated up to 250psi (17 bar)
- For 1/16", 1/8" or 3/16" OD semi-rigid tubing, e.g. PTFE
- For flat-bottom 1/4"-28 UNF ports
- Removeable and reusable

Omni-Lok™ flanged fittings require the end of hardwall tubing to be formed into a flange (flare). A flanging washer is placed between the flange and the fitting nut. When screwed into a flat-bottom, the flange is compressed against the bottom of the port to produce a seal. Only the tubing is in the fluid path.

Omni-Lok™ flanged fitting nuts and washers permit maximum thread engagement between the port and the robust, glass-filled polypropylene fitting nuts. This ensures that the system stays sealed up to 250psi (17 bar) pressure, even in shallow PTFE ports.

PEEK™ flanging washers and nuts are designed to provide a simple, easy to use low-pressure connection for use in environments where harsh chemicals or higher temperature preclude the use of a polypropylene fitting.

Omni-Lok™ Flanged Fittings requires tubing to be flanged prior to use. We recommend our Flanging Kit for quick and easy heat-free flange forming - see page 11.

### For 1/16" OD Tubing

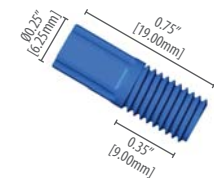
#### FLANGING WASHER FOR 1/16" OD TUBING

PART NUMBER	DESCRIPTION	QTY
008FW16	PP flanging washer	10 pk

The 008FW16 flanging washer can be used with all nuts listed and either 1/4•28 or M6 flat-bottom ports.

#### NUTS FOR 1/16" OD TUBING

PART NUMBER	MATERIAL	COLOR	THREAD	QTY
008NF16-YC5B	PP	Black	1/4•28	10pk
008NF16-YC5U	PP	Blue	1/4•28	10pk
008NF16-YC5A	PP	Gray	1/4•28	10pk
008NF16-YC5G	PP	Green	1/4•28	10pk
008NF16-YC5N	PP	Orange	1/4•28	10pk
008NF16-YC5R	PP	Red	1/4•28	10pk
008NF16-YC5H	PP	White	1/4•28	10pk
008NF16-YC5Y	PP	Yellow	1/4•28	10pk
008NF16-YC6B	PP	Black	M6	10pk



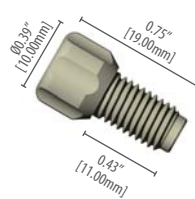
**008NF16-YC5U**  
Nut for 1/16" OD tubing  
1/4•28, blue



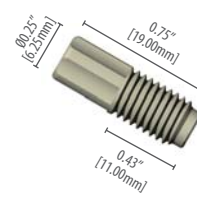
**008NF16-YC6B**  
Nut for 1/16" OD tubing  
M6, black



**008FW16**  
Flanging washer  
for 1/16" OD tubing



**002123**  
PEEK™ nut for 1/16" OD tubing  
1/4•28, natural

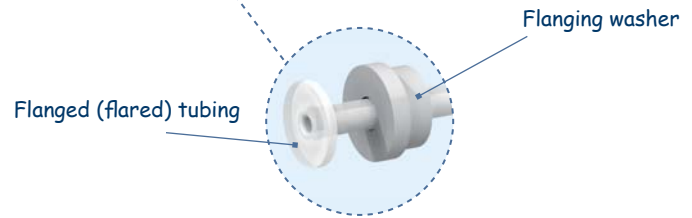
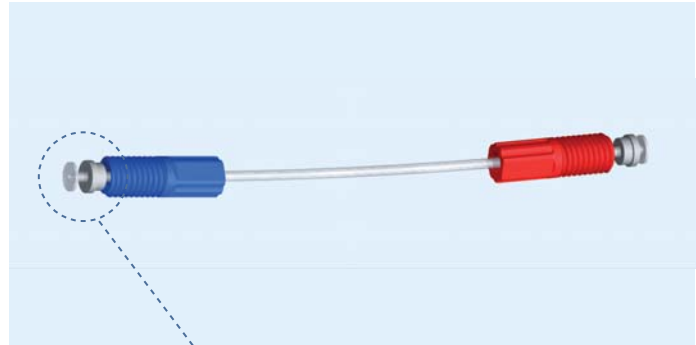


**002124**  
Compact PEEK™ nut  
for 1/16" OD tubing, 1/4•28



**002123FN**  
PEEK™ flanging washer  
for 1/16" OD tubing

### SPECIFICATIONS



### For 1/16" OD Tubing

#### FLANGING WASHER FOR 1/16" OD TUBING

PART NUMBER	DESCRIPTION	QTY
002123FN	PEEK™ flanging washer	10pk

#### NUTS FOR 1/16" OD TUBING

PART NUMBER	MATERIAL	COLOR	THREAD	QTY
002123	PEEK™	Natural	1/4•28	10pk
002124	PEEK™	Natural	1/4•28	10pk

For 1/8" OD Tubing

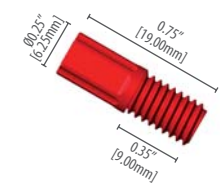
FLANGING WASHER FOR 1/8" OD TUBING

PART NUMBER	DESCRIPTION	QTY
008FW32	PP flanging washer	10pk

The 008FW32 flanging washer can be used with all nuts listed and either 1/4"28 or M6 flat-bottom ports.

NUTS FOR 1/8" OD TUBING

PART NUMBER	MATERIAL	COLOR	THREAD	QTY
008NF32-YC5B	PP	Black	1/4"28	10pk
008NF32-YC5U	PP	Blue	1/4"28	10pk
008NF32-YC5A	PP	Gray	1/4"28	10pk
008NF32-YC5G	PP	Green	1/4"28	10pk
008NF32-YC5N	PP	Orange	1/4"28	10pk
008NF32-YC5R	PP	Red	1/4"28	10pk
008NF32-YC5H	PP	White	1/4"28	10pk
008NF32-YC5Y	PP	Yellow	1/4"28	10pk
008NF32-YL5B	PP	Black	1/4"28	10pk
008NF32-YC6B	PP	Black	M6	10pk



**008NF32-YC5R**  
Nut for 1/8" OD tubing  
1/4"28, red



**008NF32-YC6B**  
Nut for 1/8" OD tubing  
M6, black



**008FW32**  
Flanging washer  
for 1/8" OD tubing



**008NF32-YL5B**  
Long nut for 1/8" OD tubing,  
1/4"28, black

For 1/8" OD Tubing

FLANGING WASHER FOR 1/8" OD TUBING

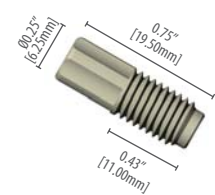
PART NUMBER	DESCRIPTION	QTY
002223FN	PEEK flanging washer	10pk

NUTS FOR 1/8" OD TUBING

PART NUMBER	MATERIAL	COLOR	THREAD	QTY
002223	PEEK	Natural	1/4"28	10pk
002224	PEEK	Natural	1/4"28	10pk



**002223**  
PEEK™ nut for 1/8" OD tubing  
1/4"28, natural



**002224**  
Compact PEEK™ nut  
for 1/8" OD tubing, 1/4"28



**002223FN**  
PEEK™ flanging washer  
for 1/8" OD tubing

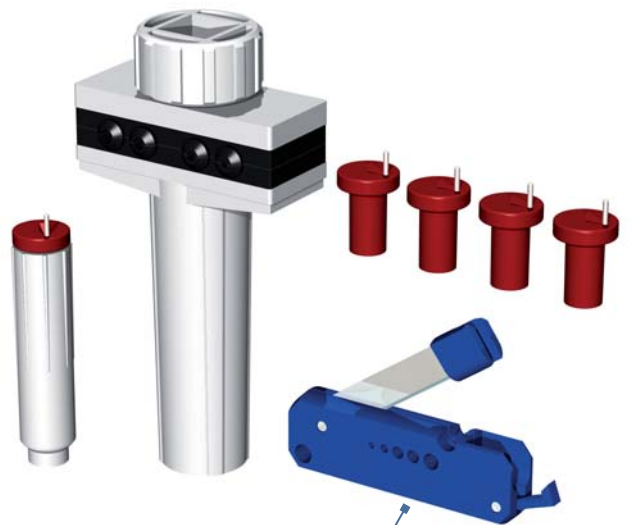
FLANGING KIT

- Quick and easy production of perfect flanges every time

The flanging kit includes the flanging tool and tips for 0.5mm, 0.8mm and 1.3mm ID tubing. The flanging tool creates a perfect flange by mechanically forming the flange without heat stressing the tube material. The flanging tool is safe to use being non-electrical and not heated, especially important with organic solvents around. Full instructions are provided with the kit.

FLANGING KIT

PART NUMBER	DESCRIPTION	QTY
007003	Flanging kit	ea
007-201536	Flanging disc with 1.3mm polymer pin	ea
007-201537	Flanging disc with 1.3mm titanium pin	ea
007-201541	Flanging disc with 0.8mm polymer pin	ea
007-201554	Flanging disc with 0.8mm titanium pin	ea
007-202235	Flanging disc with 0.5mm SS pin	ea



Tubing Cutter p/n 003062 available separately (see page 14)

TECH TIP:

Frequent connection / disconnection?

Flanges can distort over time after prolonged use or repeated connect / disconnect. This can cause leaking and may increase dead volume. Omni-Lok™ Type P and Type S offer a robust alternative to flanging with simple assembly and leak-free seals for repeated use.

## OMNIFIT® GRIPPER

**Chemically inert flangeless fitting with permanently attached PTFE ferrule ideal for repeat connect/disconnect**

- Pressure rated up to 1000psi (69 bar)
- For 1/16" or 1/8" OD semi-rigid tubing
- For 1/4"-28 UNF or M6 flat-bottom ports

The Omnifit® Gripper fitting system uses a one-piece ferrule which fits permanently onto the outside of semi-rigid tubing. Ferrules have an inner PTFE sealing face ensuring that only PTFE is in the fluid path. The fitting nut can spin freely, eliminating tubing twist and allowing easy repeat connect/disconnect. The system is pressure rated up to 1000psi (69 bar).

A range of different colored polypropylene nuts are available to connect 1/16" or 1/8" OD tubing into 1/4"-28 UNF flat-bottom ports. Mixed color packs include all 10 colors for easy line identification. PEEK™ fitting nuts for use in higher temperatures are available in standard or compact head styles and with 1/4"-28 UNF or M6 threads.

Assembly of the Omnifit® Gripper onto tubing requires the use of simple tooling. See the assembly instructions on our website for full details.

### For 1/16" OD Tubing

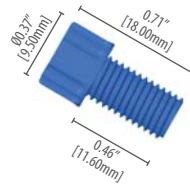
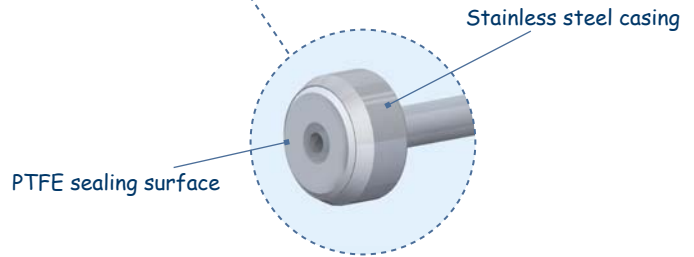
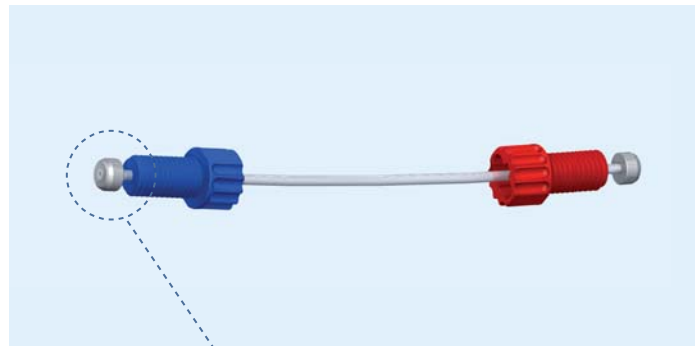
#### GRIPPERS FOR 1/16" OD TUBING

PART NUMBER	DESCRIPTION	QTY
002310	One piece PTFE ferrule for 1/4•28 nuts	10pk
002313	One piece PTFE ferrule for M6 fitting nuts	10pk

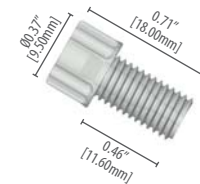
#### NUTS FOR 1/16" OD TUBING

PART NUMBER	MATERIAL	COLOR	THREAD	QTY
002100	PP	Black	1/4•28	10pk
002101	PP	Brown	1/4•28	10pk
002102	PP	Red	1/4•28	10pk
002103	PP	Orange	1/4•28	10pk
002104	PP	Yellow	1/4•28	10pk
002105	PP	Green	1/4•28	10pk
002106	PP	Blue	1/4•28	10pk
002107	PP	Violet	1/4•28	10pk
002108	PP	Gray	1/4•28	10pk
002109	PP	White	1/4•28	10pk
002110	PP	Mixed	1/4•28	10pk
002130	ETFE	Natural	1/4•28	10pk
002119	PEEK™	Natural	1/4•28	ea
002122	PEEK™	Natural	1/4•28	ea
002135	PEEK™	Natural	M6	ea

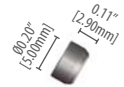
### SPECIFICATIONS



**002106**  
Nut for 1/16" OD tubing  
1/4•28, blue



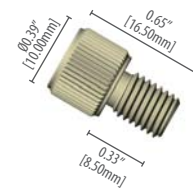
**002130**  
ETFE nut for 1/16" OD tubing  
1/4•28, natural



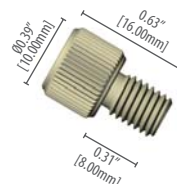
**002310**  
Gripper ferrule  
for 1/16" OD tubing



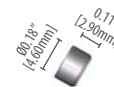
**002119**  
Compact PEEK™ nut  
for 1/16" OD tubing, 1/4•28



**002122**  
PEEK™ nut  
for 1/16" OD tubing, 1/4•28



**002135**  
PEEK™ nut  
for 1/16" OD tubing, M6



**002313**  
Gripper ferrule  
for 1/16" OD tubing, M6

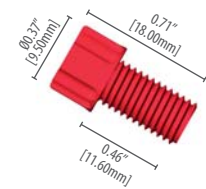
For 1/8" OD Tubing

GRIPPERS FOR 1/8" OD TUBING

PART NUMBER	DESCRIPTION	QTY
002312	One piece PTFE ferrule for 1/4•28 fitting nuts	10pk
002314	One piece PTFE ferrule for M6 fitting nuts	10pk

NUTS FOR 1/8" OD TUBING

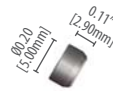
PART NUMBER	MATERIAL	COLOR	THREAD	QTY
002200	PP	Black	1/4•28	10pk
002201	PP	Brown	1/4•28	10pk
002202	PP	Red	1/4•28	10pk
002203	PP	Orange	1/4•28	10pk
002204	PP	Yellow	1/4•28	10pk
002205	PP	Green	1/4•28	10pk
002206	PP	Blue	1/4•28	10pk
002207	PP	Violet	1/4•28	10pk
002208	PP	Gray	1/4•28	10pk
002209	PP	White	1/4•28	10pk
002210	PP	Mixed	1/4•28	10pk
002230	ETFE	Natural	1/4•28	10pk
002219	PEEK™	Natural	1/4•28	ea
002222	PEEK™	Natural	1/4•28	ea



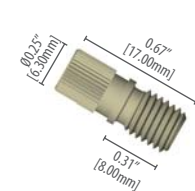
**002202**  
Nut for 1/8" OD tubing  
1/4•28, red



**002230**  
ETFE nut for 1/8" OD tubing  
1/4•28, natural



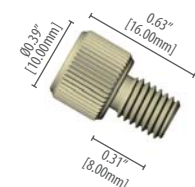
**002312**  
Gripper ferrule  
for 1/8" OD tubing



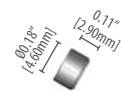
**002219**  
Compact PEEK™ nut  
for 1/8" OD tubing, 1/4•28



**002222**  
PEEK™ nut  
for 1/8" OD tubing, 1/4•28



**002235**  
PEEK™ nut  
for 1/8" OD tubing, M6



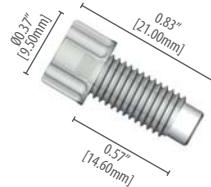
**002314**  
Gripper ferrule  
for 1/8" OD tubing, M6

Blanking Plugs

This ETFE nut has a PTFE sealing face designed to seal unused ports. These blanking plugs can be used in any flat-bottom 1/4"-28 UNF port.

BLANKING PLUG FOR 1/4•28 FLAT-BOTTOM PORTS

PART NUMBER	HEAD STYLE	MATERIAL	COLOR	THREAD	QTY
002320	Standard	ETFE	Natural	1/4•28	2pk



**002320**  
ETFE plug  
for 1/4•28 ports

In-line connectors

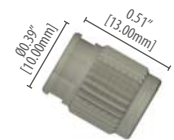
Compact in-line connectors using the Omnifit™ Gripper are ideal when space is limited. A tubing line is secured into the connector using an Omnifit® Gripper ferrule. The connector then effectively becomes a 1/4"-28 UNF threaded female port that accepts a standard threaded fitting from a second fluid line.

IN-LINE CONNECTORS

PART NUMBER	MATERIAL	COLOR	TUBE OD	THREAD	QTY
002333	PEEK™	Natural	1/16"	1/4•28 F	ea
002334	PEEK™	Natural	1/8"	1/4•28 F	ea



**002333**  
PEEK™ in-line connector for  
1/4•28 F threads, 1/16" OD tube



**002334**  
PEEK™ in-line connector for  
1/4•28 F threads, 1/8" OD tube

TECH TIP:

Problems with shallow or PTFE ports?

Some shallow ports, especially those found in solenoid valves, may lack sufficient threading to allow effective use of the Gripper fitting. Ports machined from PTFE can also be slippery and difficult to seal. We recommend Omni-Lok™ fittings for use in shallow and PTFE ports to ensure maximum security and a leak-free seal.

## OMNIFIT® FITTING TOOL

Quick, convenient access to your Omnifit® fittings wherever they're located

- Fitting extension to reach nuts in remote locations
- Accessibility for closely packed fittings

The Omnifit® fitting tool gives instant accessibility to large and compact headed nuts, wherever they are located. The tool provides an extension to the fitting, enabling nuts to be hand-tightened remotely. The tool is also ideal for accessing individual nuts when close packing means they are difficult to handle.

Tools are available to fit standard head sizes, such as the Omnifit® Gripper and compact head Omni-Lok™ fittings.

## OMNIFIT® TORQUE TOOL

Ensure your Omni-Lok fittings are connected at the correct torque every time for a reliable, leak-free seal

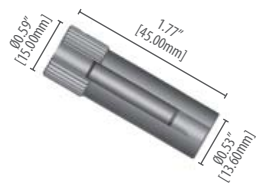
- Accessibility for remote or closely packed fittings
- Torque control to ensure nuts are not over-tightened

The Omnifit® Torque Tool provides quick and easy connection of fittings to exactly the right torque required for a leak-free seal. Using a clutch-based mechanism, the tool ensures that connections are leak-free, but not over-tightened.

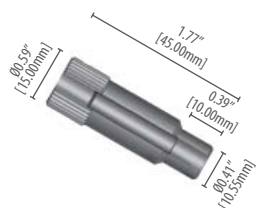
Tools are available to fit compact or standard head fittings and with torque ratings suitable for PTFE or non-PTFE ports.

FITTING TOOLS			
PART NUMBER	TO SUIT FITTINGS:		
	FITTING TYPE	THREAD	QTY
008FTL-5M	Gripper	¼•28	ea
008FTC-56M	Omni-Lok™	¼•28 or M6	ea
008FTC-7M	Omni-Lok™	⅝•24	ea

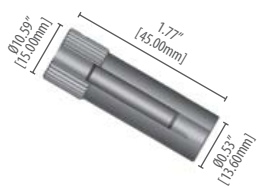
TORQUE TOOLS				
PART NUMBER	TO SUIT FITTINGS AND PORTS:			
	FITTING TYPE	THREAD	PORT MATERIAL	QTY
008TTL-5MP	Gripper	¼•28	PTFE	ea
008TTL-5M	Gripper	¼•28	Non-PTFE	ea
008TTL-56MP	Omni-Lok™	¼•28 or M6	PTFE	ea
008TTL-56M	Omni-Lok™	¼•28 or M6	Non-PTFE	ea
008TTL-7MP	Omni-Lok™	⅝•24	PTFE	ea
008TTL-7M	Omni-Lok™	⅝•24	Non-PTFE	ea



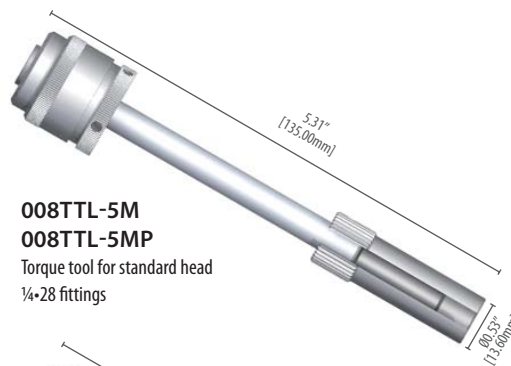
**008FTL-5M**  
Fitting tool for standard head  
¼•28 fittings



**008FTC-56M**  
Fitting tool for compact head  
¼•28 or M6 fittings



**008FTC-7M**  
Fitting tool for compact head  
⅝•24 fittings



**008TTL-5M**  
**008TTL-5MP**  
Torque tool for standard head  
¼•28 fittings



**008TTC-56M**  
**008TTC-56MP**  
Torque tool for compact head  
¼•28 or M6 fittings



**008TTC-7M**  
**008TTC-7MP**  
Torque tool for compact head  
⅝•24 fittings

NB. All drawings on this page are 1:2 scale

## CLICK-N-SEAL™

### Hand-tight fittings without the guesswork

- For Omni-Lok™ Type P & Type S ferrules or inverted cones
- For 1/16" or 1/8" OD semi-rigid tubing
- Feel and hear when the fitting is properly installed

Click-N-Seal™ offers a unique system for hand-tight fittings. As the fitting is tightened, the resistance of the cap increases until the correct torque is reached; at which point, the cap clicks. The user is able to hand-tighten the fittings without tools or guesswork and be confident that the fitting is properly seated, creating a secure seal. The fitting can be unscrewed and reused.

### Click-N-Seal™ Fittings for Omni-Lok™ Type P & Type S For 1/16" OD Tubing

FERRULES FOR 1/16" OD TUBING				
PART NUMBER	DESCRIPTION			QTY
008FT16	Omni-Lok™ Type P ferrule			10pk
008FK16	Omni-Lok™ Type S ferrule, PEEK™			10pk
008FZ16	Omni-Lok™ Type S ferrule, ETFE			10pk

CLICK-N-SEAL™ FITTINGS FOR 1/16" OD TUBING				
PART NUMBER	MATERIAL	COLOR	THREAD	QTY
008NF16-CS5R	PC	Red	1/4•28	ea
008NF16-CS6R	PC	Red	M6	ea

### For 1/8" OD Tubing

FERRULES FOR 1/8" OD TUBING				
PART NUMBER	DESCRIPTION			QTY
008FT32	Omni-Lok™ Type P ferrule			10pk
008FK32	Omni-Lok™ Type S ferrule, PEEK™			10pk
008FZ32	Omni-Lok™ Type S ferrule, ETFE			10pk

CLICK-N-SEAL™ FITTINGS FOR 1/8" OD TUBING				
PART NUMBER	MATERIAL	COLOR	THREAD	QTY
008NF32-CS5R	PC	Red	1/4•28	ea
008NF32-CS6R	PC	Red	M6	ea

**008FT-16**  
Type P ferrule for 1/16" OD tubing

**008FK16**  
Type S ferrule PEEK™ for 1/16" OD tubing

**008FZ16**  
Type S ferrule ETFE for 1/16" OD tubing

**008NF16-CS5R**  
Click-N-Seal™ Nut for 1/16" OD tubing, 1/4•28, red

**008FT-32**  
Type P ferrule for 1/8" OD tubing

**008FK32**  
Type S ferrule, PEEK™

**008NF32-CS5R**  
Click-N-Seal™ Nut for 1/8" OD tubing, 1/4•28, red

**008FZ32**  
Type S ferrule, ETFE

### Click-N-Seal™ fittings for Omni-Lok™ Inverted Cones For 1/16" OD Tubing

INVERTED CONES FOR 1/16" OD TUBING				
PART NUMBER	DESCRIPTION			QTY
008CZ16	ETFE inverted cone			10pk

CLICK-N-SEAL™ FITTINGS FOR 1/16" OD TUBING				
PART NUMBER	MATERIAL	COLOR	THREAD	QTY
008NC16-CS5R	PC	Red	1/4•28	ea
008NC16-CS6R	PC	Red	M6	ea

### For 1/8", 2.0, 2.5 & 3.0mm OD Tubing

INVERTED CONES FOR 1/8", 2.0, 2.5 & 3.0MM OD TUBING				
PART NUMBER	MATERIAL	TO FIT TUBE OD		QTY
008CZ19	ETFE	1.8 - 2.0mm		10pk
008CZ25	ETFE	2.5mm		10pk
008CZ30	ETFE	3.0mm		10pk
008CZ32	ETFE	1/8" (3.2mm)		10pk

CLICK-N-SEAL™ FITTINGS FOR 1/8", 2.0, 2.5 & 3.0MM OD TUBING				
PART NUMBER	MATERIAL	COLOR	THREAD	QTY
008NC32-CS5R	PC	Red	1/4•28	ea
008NC32-CS6R	PC	Red	M6	ea

The 008NC32 Click-N-Seal™ nuts can be used with all tube sizes and inverted cones listed above

**008NC16-CS5R**  
Click-N-Seal™ Nut for 1/16" OD tubing, 1/4•28, red

**008CZ-16**  
Omni-Lok™ inverted cone for 1/16" OD tubing

**008CZ-32**  
Omni-Lok™ inverted cone for 1/8" OD tubing

**FACTORY ASSEMBLED CUSTOM TUBING SETS**

Save time and assembly costs and simplify your purchasing and inventory management by choosing pre-assembled tubing sets to your exact specifications

- Assembled with any of our chemically-resistant PTFE, PEEK™ or ETFE Omni-Lok™ ferrules, partnered with our robust Omni-Lok™ nuts
- Kits to plumb complete instruments can be supplied loose or mesh-wrapped in bundles

Omni-Lok™ pre-assembled tubing sets are designed to provide significant improvements over assembly of your own fittings. Our tubing sets are assembled to your specifications by our skilled production staff, ensuring a perfect, leak-free connection every time. You simply specify your choices of fitting nut, ferrule and tubing and whether you require fittings at one or both ends of the tube and we do the rest. With a wide range of ferrule types, fitting nut designs and colors, thread types, tubing sizes and materials, we can deliver an Omni-Lok™ tubing set to suit any application. The options are endless!

**Options available:****Ferrule types**

Our Omni-Lok™ ferrule options give you a choice of permanently attached ferrules, depending on your requirements for pressure rating and chemical compatibility.

**Nuts**

Our standard head fitting nut is suitable for most applications, or choose a compact or low profile head for restricted spaces, all in tough glass-filled polypropylene.

**Thread types**

Fitting nuts are available in ¼"-28 UNF, M6 or ⅝"-24 UNF thread types, all designed for flat-bottom ports.

**Color**

Fitting nuts are available in a range of colors so you can color-code your tubing sets for easy line identification.

**Tubing**

We offer tubing in PTFE and FEP, with ¼", ⅜" or ½" outer diameters and a range of inner bores.

**Multi-tube bundles**

We can supply single tubes or sets of multiple tubes bundled and mesh-wrapped to provide a neatly packaged one-piece assembly. This eliminates unmanageable and untidy loose tubing within an instrument making manufacture and servicing easier. We will allocate a single part number to your assembly, simplifying ordering and inventory management.

Bundled tubing sets can be specified with any combination of colored fitting nuts, tubing and ferrule types, specific to your needs.

**SPECIFICATIONS**

Choose single tubing sets with fittings on one or both ends, or bundle a number of sets together to completely plumb an instrument

- Choose different colored fitting nuts for easy line identification
- Mix tubing sizes and ferrule types to custom configure your ideal tubing connections
- Mesh wrapping simplifies tubing management within an instrument

**How to Order**

With so many variations possible, we need to quote your tubing sets specifically for you. Please contact the factory to discuss your options with one of our engineers.

*For North America, Canada and S.E. Asia contact our US office:*

Call: (973) 263 3001 or email: [sales.us@biochemfluidics.com](mailto:sales.us@biochemfluidics.com)

*For Europe and all other locations contact our UK office:*

Call: +44 (0) 1223 416 612 or email: [sales.eu@biochemfluidics.com](mailto:sales.eu@biochemfluidics.com)

**TECH TIP:****Not quite what you need?**

For other ferrule or nut types offered outside our Omni-Lok™ range, call the factory. We can custom assemble any of our fittings into a tubing set for your needs. For high temperature or aggressive environments, we can make up tubing sets using our PEEK™ nuts and Gripper fittings.



## TUBING

### Chemically resistant softwall and semi-rigid tubing for demanding applications

- Semi-rigid PTFE tubing
- Softwall Silicone Select™ and Bio-Chem (C-Flex®) tubing

### Semi-rigid PTFE

Almost totally inert, PTFE tubing can be used with virtually all chemicals, solvents and corrosive materials, even at elevated temperatures. It can be sterilised in-line by steam, chemical methods, or autoclaving. PTFE tubing is ideal for use with Gripper, Omni-Lok™ or inverted cone fittings. Available in 1/16" or 1/8" outer diameters and a range of inner bore sizes.

#### PTFE TUBING

PART NUMBER	OD	ID	LENGTH	QTY
008T16-030-20	1.6mm (1/16")	0.3mm (.012")	20m	ea
008T16-030-200	1.6mm (1/16")	0.3mm (.012")	200m	ea
008T16-050-20	1.6mm (1/16")	0.5mm (.020")	20m	ea
008T16-050-200	1.6mm (1/16")	0.5mm (.020")	200m	ea
008T16-080-20	1.6mm (1/16")	0.8mm (.031")	20m	ea
008T16-080-200	1.6mm (1/16")	0.8mm (.031")	200m	ea
008T16-100-20	1.6mm (1/16")	1.0mm (.039")	20m	ea
008T16-100-200	1.6mm (1/16")	1.0mm (.039")	200m	ea
008T32-150-10	3.2mm (1/8")	1.5mm (.059")	10m	ea
008T32-150-100	3.2mm (1/8")	1.5mm (.059")	100m	ea
008T47-032-10	4.7mm (3/16")	3.2mm (1/8")	10m	ea
008T47-032-100	4.7mm (3/16")	3.2mm (1/8")	100m	ea

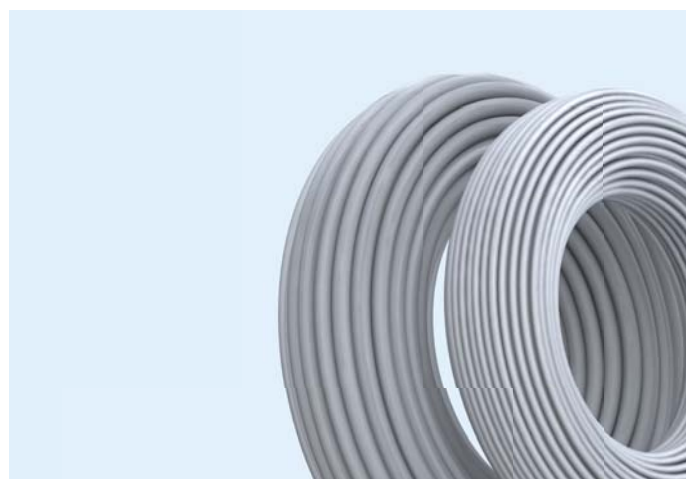
### Softwall Silicone Select™

Silicone Select™ tubing is platinum cured silicone tubing designed for high-purity medical grade applications. It complies with USP XXII, Class VI, FDA and USDA standards and is FDA master file listed. This tubing has been specially developed to withstand the rigors of usage with pinch valves and is recommended for most pinch valve applications.

#### SILICONE SELECT™ TUBING

PART NUMBER	OD	ID	LENGTH	QTY
10025-10S	0.093" (2.36mm)	0.010" (0.25mm)	50ft	ea
10025-23S	0.093" (2.36mm)	0.023" (0.58mm)	50ft	ea
10025-50S	0.134" (3.40mm)	0.050" (1.27mm)	50ft	ea
10025-01S	3/32" (2.38mm)	1/32" (0.79mm)	50ft	ea
10025-02S	1/8" (3.17mm)	1/16" (1.59mm)	50ft	ea
10025-03S	3/16" (4.76mm)	1/16" (1.59mm)	50ft	ea
10025-04S	1/4" (6.35mm)	3/16" (4.76mm)	50ft	ea
10025-05S	1/4" (6.35mm)	1/8" (3.17mm)	50ft	ea
10025-06S	3/8" (9.52mm)	1/4" (6.35mm)	50ft	ea
10025-07S	7/16" (11.1mm)	5/16" (7.94mm)	50ft	ea

## SPECIFICATIONS



### Softwall Bio-Chem (C-Flex®) Tubing

Bio-Chem (C-Flex®) tubing is designed for high-purity medical grade applications, complies with USP XXII, Class VI, FDA and USDA standards and is FDA master file listed. This tubing has been specially developed to withstand the rigors of usage with pinch valves and is recommended for pinch valve applications where gas permeability is an issue.

#### BIO-CHEM (C-FLEX®) TUBING

PART NUMBER	OD	ID	LENGTH	QTY
10025-23B	0.093" (2.36mm)	0.023" (0.58mm)	50ft	ea
10025-01B	3/32" (2.38mm)	1/32" (0.79mm)	50ft	ea
10025-02B	1/8" (3.17mm)	1/16" (1.59mm)	50ft	ea
10025-03B	3/16" (4.76mm)	1/16" (1.59mm)	50ft	ea
10025-05B	1/4" (6.35mm)	1/8" (3.17mm)	50ft	ea
10025-06B	3/8" (9.52mm)	1/4" (6.35mm)	50ft	ea
10025-07B	7/16" (11.1mm)	5/16" (7.94mm)	50ft	ea

#### TUBING CUTTER

PART NUMBER	DESCRIPTION	QTY
003062	Tubing cutter	ea
003063	Replacement blade	ea

**BARBED ADAPTORS**

**Thread to barb adaptors to connect softwall tubing to threaded ports or to semi-rigid tubing**

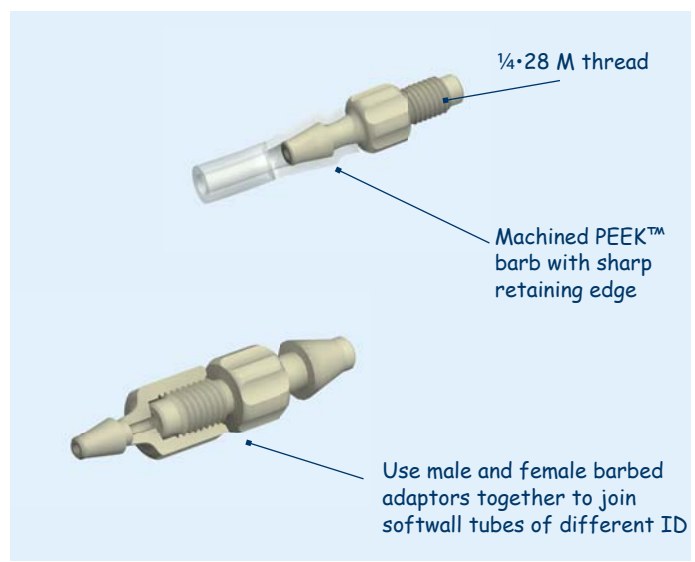
Omnifit® barbed adaptors are designed for use with soft-wall tubing. Machined from chemically resistant PEEK™ they have a superior barb with a crisp edge that retains soft wall tubing more securely than molded adaptors.

To connect softwall tubing into any female 1/4"-28 UNF port, use a male 1/4"-28 UNF to barb adaptor. The male thread screws into the port and tubing can then be pushed over the barb.

To connect softwall tubing to any male 1/4"-28 UNF thread, use a female 1/4"-28 UNF to barb adaptor. The barb is inserted into the softwall tubing and the female 1/4"-28 UNF port is available to receive any 1/4"-28 UNF threaded fitting.

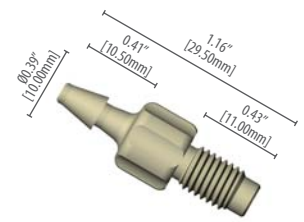
A tight, leak-free connection can be ensured by matching the ID of your tubing to the barb size of the adaptor. If there is not an exact match, always choose the barb size that is just larger than your tubing ID.

**SPECIFICATIONS**

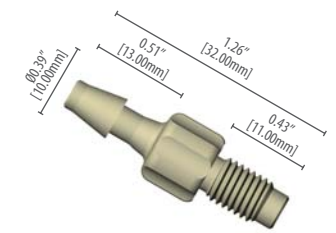


**MALE 1/4"-28 UNF TO BARB ADAPTOR**

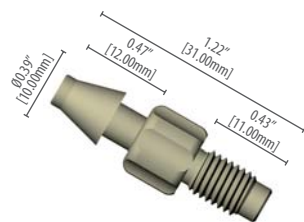
PART NUMBER	MATERIAL	COLOR	THREAD	TUBE ID	QTY
001070	PEEK™	Natural	1/4•28 M	1.0 mm	ea
001064	PEEK™	Natural	1/4•28 M	1.5 mm	ea
001065	PEEK™	Natural	1/4•28 M	2.0 mm	ea
001066	PEEK™	Natural	1/4•28 M	2.5 mm	ea
001071	PEEK™	Natural	1/4•28 M	3.0 mm	ea
001069	PEEK™	Natural	1/4•28 M	3.2 mm	ea
001072	PEEK™	Natural	1/4•28 M	4.0 mm	ea
001073	PEEK™	Natural	1/4•28 M	6.0 mm	ea
001074	PEEK™	Natural	1/4•28 M	8.0 mm	ea



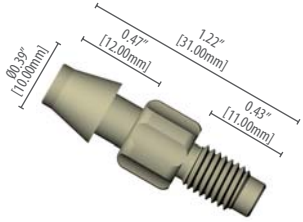
**001071**  
1/4•28 M to 3.0 mm barb



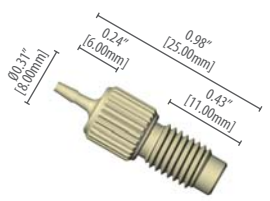
**001069**  
1/4•28 M to 3.2 mm barb



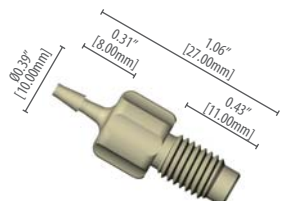
**001072**  
1/4•28 M to 4.0 mm barb



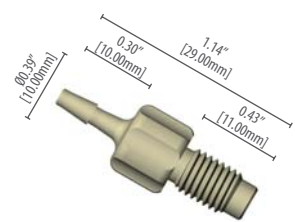
**001073**  
1/4•28 M to 6.0 mm barb



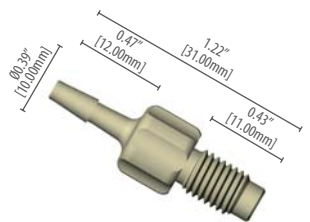
**001070**  
1/4•28 M to 1.0 mm barb



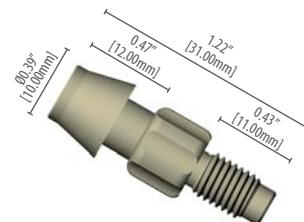
**001064**  
1/4•28 M to 1.5 mm barb



**001065**  
1/4•28 M to 2.0 mm barb



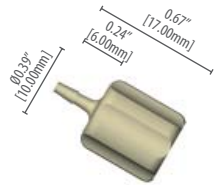
**001066**  
1/4•28 M to 2.5 mm barb



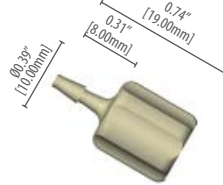
**001074**  
1/4•28 M to 8.0 mm barb

## FEMALE 1/4"-28 UNF TO BARB ADAPTOR

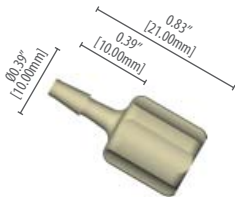
PART NUMBER	MATERIAL	COLOR	THREAD	TUBE ID	QTY
001070F	PEEK™	Natural	1/4•28 F	1.0 mm	ea
0001064F	PEEK™	Natural	1/4•28 F	1.5 mm	ea
001065F	PEEK™	Natural	1/4•28 F	2.0 mm	ea
001066F	PEEK™	Natural	1/4•28 F	2.5 mm	ea
001071F	PEEK™	Natural	1/4•28 F	3.0 mm	ea
001069F	PEEK™	Natural	1/4•28 F	3.2 mm	ea



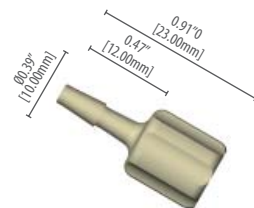
**001070F**  
1/4•28 F to 1.0 mm barb



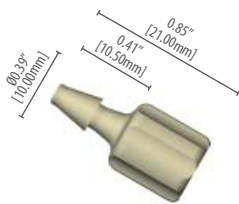
**001064F**  
1/4•28 F to 1.5 mm barb



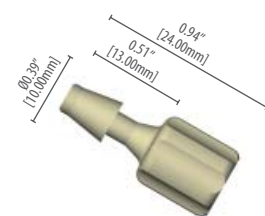
**001065F**  
1/4•28 F to 2.0 mm barb



**001066F**  
1/4•28 F to 2.5 mm barb



**001071F**  
1/4•28 F to 3.0 mm barb



**001069F**  
1/4•28 F to 3.2 mm barb

## CLICK-N-SEAL™ BARBED ADAPTORS

Thread to barb connections that can't be overtightened!

- For 1/16, 1/8 or 5/32" ID softwall tubing
- For 1/4"-28 UNF or M6 threaded ports
- Re-useable and reliable

Click-N-Seal™ allows you to feel and hear when the fitting is properly installed, giving an audible click when the correct torque is reached. This thread to barb adaptor version enables connection of softwall tubing to a threaded port.

## CLICK-N-SEAL™ MALE 1/4"-28 UNF TO BARB ADAPTOR

PART NUMBER	MATERIAL	COLOR	THREAD	TUBE ID	QTY
008NB16-CS5R	PC	Red	1/4•28 M	1/16" (1.57mm)	ea
008NB16-CS6R	PC	Red	M6 M	1/16" (1.57mm)	ea
008NB32-CS5R	PC	Red	1/4•28 M	1/8" (3.18mm)	ea
008NB32-CS6R	PC	Red	M6 M	1/8" (3.18mm)	ea
008NB40-CS5R	PC	Red	1/4•28 M	5/32" (3.96mm)	ea
008NB40-CS6R	PC	Red	M6 M	5/32" (3.96mm)	ea



**008NB16-CS5R**  
Click-N-Seal™ Thread to Barb  
for 1/16" ID tubing, 1/4•28, red

*Note: Overall dimensions are the same for all part numbers listed. Only barb sizes vary.*

Click-N-Seal™ is a trademark of Diba Industries Inc.

## TECH TIP:

Can't find a barb to fit your tubing?

To ensure a tight, leak-free connection, match the ID of your tubing to the barb size of the adaptor. If there is not an exact match, always choose the barb size that is just larger than your tubing ID. Most tubing is flexible enough to be pushed over a barb that is larger than the tube ID.

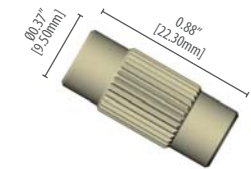
THREADED ADAPTORS

A useful range of "problem-solving" parts to convert thread sizes quickly and easily

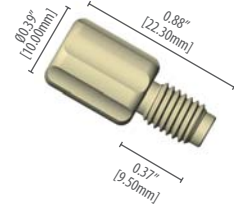
Omnifit® threaded adaptors are a useful range of 'problem solving' parts that enable you to convert thread sizes quickly and easily, accepting a 1/4"-28 UNF male fitting at one end and a range of male and female thread types at the other.

TWO-WAY ADAPTORS, PEEK™

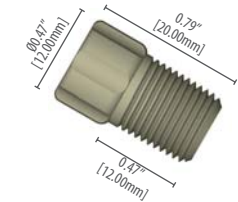
PART NUMBER	MATERIAL	COLOR	THREAD 1	THREAD 2	QTY
002306	PEEK™	Natural	1/4•28 F	10-32 F	ea
002352	PEEK™	Natural	1/4•28 F	M6 M	ea
002354	PEEK™	Natural	1/4•28 F	1/8" NPT M	ea
002356	PEEK™	Natural	1/4•28 F	3/8" NPT M	ea
002357	PEEK™	Natural	1/4•28 F	1/8" BSPT M	ea



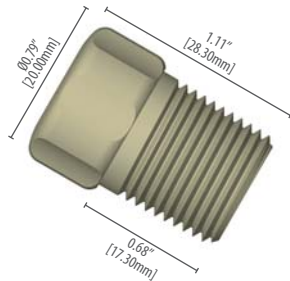
**002306**  
PEEK™ adaptor for 1/4•28 M and 10-32 M threads



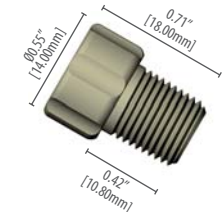
**002352**  
PEEK™ adaptor for 1/4•28 F to M6 M threads



**002354**  
PEEK™ adaptor for 1/4•28 F to 1/8" NPT M threads



**002356**  
PEEK™ coupling for 1/4•28 F to 3/8" NPT M threads



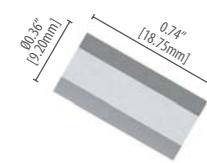
**002357**  
PEEK™ coupling for 1/4•28 F to 1/8" BSPT M threads

COUPLINGS & CONNECTORS

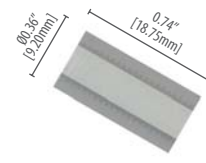
Couplings to connect two or three fitting lines using the same thread type

TWO-WAY COUPLINGS

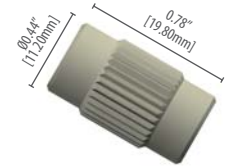
PART NUMBER	MATERIAL	COLOR	THREAD 1	THREAD 2	QTY
002301	PP	White	1/4•28 F	1/4•28 F	ea
002302	ETFE	Natural	1/4•28 F	1/4•28 F	ea
002307	PEEK™	Natural	1/4•28 F	1/4•28 F	ea



**002301**  
PP coupling for 1/4•28 M threads



**002302**  
ETFE coupling for 1/4•28 M threads



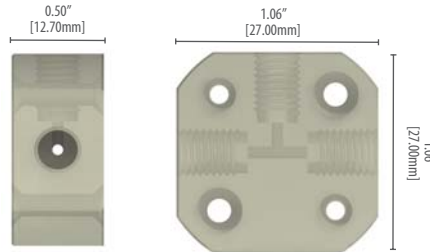
**002307**  
PEEK™ coupling for 1/4•28 M threads

Mountable block connectors

The 3-way and 4-way block connectors have an internal bore of 1.5mm. They are mountable and when used with Omnifit Gripper fittings or Omni-Lok Type P or S fittings, provide an inert fluid path with zero dead volume.

THREE-WAY & FOUR-WAY BLOCK CONNECTORS

PART NUMBER	MATERIAL	COLOR	CONFIGURATION	THREADS	QTY
001057	PEEK™	Natural	3-way	1/4•28 F	ea
001058	PEEK™	Natural	4-way	1/4•28 F	ea



**001057**  
3-way PEEK™ block connector for 1/4•28 F threads

In-line connectors ideal for where space is limited

A tubing line is connected into the connector using an Omnifit® Gripper ferrule. The connector then effectively becomes a 1/4"-28 UNF threaded female port that accepts a standard threaded fitting from a second fluid line.

IN-LINE CONNECTORS

PART NUMBER	MATERIAL	COLOR	TUBE OD	THREAD	QTY
002333	PEEK™	Natural	1/16"	1/4•28 F	ea
002334	PEEK™	Natural	1/8"	1/4•28 F	ea



**002333**  
PEEK™ in-line connector for 1/4•28 F threads, 1/16" OD tube



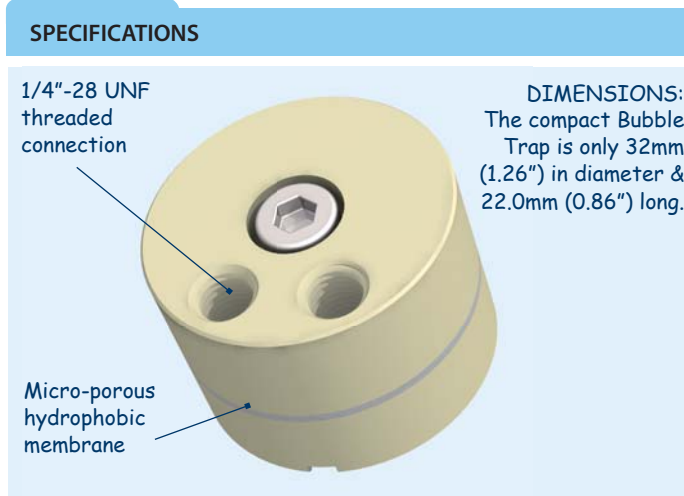
**002334**  
PEEK™ in-line connector for 1/4•28 F threads, 1/8" OD tube

## BUBBLE TRAP

### Effective, in-line removal of bubbles

- Pressure rated up to 30 psi
- Effective de-bubbling of aqueous solutions

The Omnifit® Bubble Trap effectively removes bubbles from aqueous solutions. The unit is quickly and easily connected in-line using the 1/4"-28 UNF female threaded ports and fittings such as Omni-Lok™. Spare membranes are available.



### Operation

When a fluid containing bubbles flows through the unit, the bubbles are forced through a micro-porous, hydrophobic membrane whilst aqueous fluid is retained within the Trap. Because the membrane function depends on its hydrophobicity, the Trap is only suitable for use with aqueous systems and NOT with organic solvents.

### Flow

Maximum flow rate is dependent upon the amount of bubbles in the liquid. Typical operating range is 0.5 - 2.0ml/min, but up to 6ml/min can be achieved if few bubbles are present in the liquid.

### Pressure

The unit is pressure rated up to 30psi. De-bubbling is effected under positive pressure. It is not possible to pull liquid through the unit under vacuum as this would introduce bubbles into the fluid. If the system back-pressure is insufficient for the unit to function, a length of tube can be fitted on the outlet side to create more back-pressure.

### Maintenance

The lifetime of the membranes strongly depends on the kind of fluid being used. For pure water, the lifetime may be several months or years. If buffer solutions are used, the life will be reduced and it is advisable to flush the unit with de-ionized/distilled water after use to prevent salt crystals forming.

INLINE BUBBLE TRAP					
PART NUMBER	FILTER MATERIAL	POROSITY	CONNECTION 1	CONNECTION 2	QTY
006BT	PTFE	25 µm	1/4•28 M	1/4•28 F	ea

REPLACEMENT FILTER ELEMENTS			
PART NUMBER	FILTER MATERIAL	POROSITY	QTY
006BTF	PTFE	25 µm	ea

## IN-LINE FILTERS

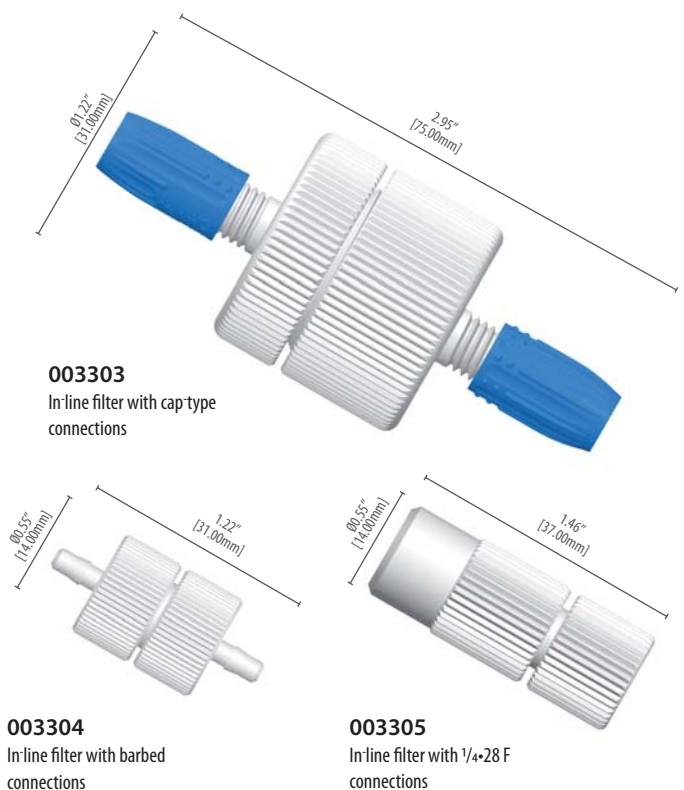
### Inert microporous filters remove particulates and protect solenoid valves and sensitive instruments

- Inert flow path with all PTFE wetted parts
- Simple filter replacement
- Fluid distribution pattern for optimum filtration
- Easy installation in-line

These all-PTFE in-line filter units offer a highly inert flow path suitable to applications involving aggressive and high-purity fluids. The filters ensure that particulates are removed from the medium, protecting downstream instrumentation from particulate damage. PTFE solenoid valves for example, are inherently susceptible to damage from particulates.

Each filter unit comprises an all PTFE housing which holds a removable 100µm PTFE filter. The filter element can be easily and economically replaced, making the filters an excellent investment to ensure the long-term functioning of your solenoid valves and analytical instruments. A distribution pattern machined into the filter housing ensures that liquid is spread across the entire filter surface, giving maximum usage of the filter area. This distribution pattern is present on both sides of the filter housing, meaning that the filters are bi-directional with either port able to act as the inlet. However, once installed, flow direction should not be reversed, as contamination may result.

INLINE FILTERS					
PART NUMBER	FILTER MATERIAL	POROSITY	CONNECTION 1	CONNECTION 2	QTY
003303	PTFE	100µm	Omnifit® cap	Omnifit® cap	ea
003304	PTFE	25µm	Barb	Barb	ea
003305	PTFE	25µm	1/4•28 F	1/4•28 F	ea



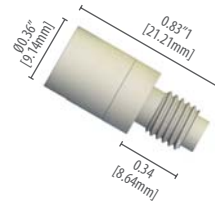
### BIO-CHEK™ IN-LINE CHECK VALVES

Inert, low pressure check valves with 1/4"-28 UNF threads for quick, easy connection in-line

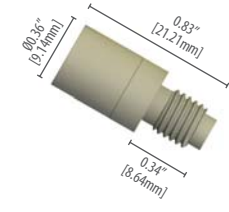
- Operating pressure up to 50psi
- Backpressure up to 100psi
- Cracking pressures ≤ 1psi
- Inert flow path with no metal parts

Bio-Chek™ self-sealing in-line check valves offer an inert flow path, no metal components and zero maintenance, ideal for high-purity, low-pressure applications. Unlike spring-actuated check valves that can restrict or impede the flow path causing content (product) damage, the Bio-Chek™ in-line check valve has a smooth flow path to minimize shear and turbulence.

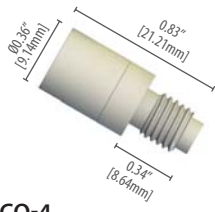
The Bio-Chek™ valve provides a flow rate equivalent to a 0.030" orifice, a cracking pressure of 1psi or less and can check against back flow pressure up to 100psi. A choice of housing and check element materials and several flow configurations are available, all offering standard 1/4"-28 UNF connections.



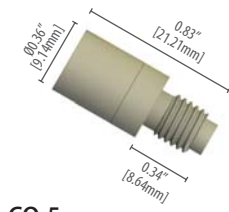
CI-4 BIO-CHEK™ inlet type check valve, PPS



CI-5 BIO-CHEK™ inlet type check valve, PEEK™



CO-4 BIO-CHEK™ outlet type check valve, PPS



CO-5 BIO-CHEK™ outlet type check valve, PEEK™

### OMNIFIT® VARIBORE CHECK VALVES

Low pressure check valves with versatile "cap" connections for tubing sizes up to 4mm OD

- All PTFE body
- For use with rigid and semi-rigid tubing
- Cracking pressures up to 10psi

Omnifit® in-line check valves offer a versatile connection method for many tubing sizes and materials, including stainless steel. Integral FKM O-rings, or PTFE cones (available separately) can be used to make a simple compression fitting direct to the OD of the tubing. Alternatively, the internal thread of the colored cap is a standard 1/4"-28 UNF female, enabling connection using any standard 1/4"-28 UNF threaded fitting, such as Omni-Lok™ or Grippers.

#### OMNIFIT® VARIBORE CHECK VALVE

PART NUMBER	BODY	CHECK ELEMENT	CRACKING PRESSURE	QTY
0011340	PTFE	FKM	0.1psi	2
0011341	PTFE	FKM	0.5psi	2
0011342	PTFE	FKM	1.5psi	2
0011343	PTFE	FKM	3.0psi	2
0011344	PTFE	FKM	10.0psi	2

#### DUAL FEMALE BIO-CHEK™ CHECK VALVE

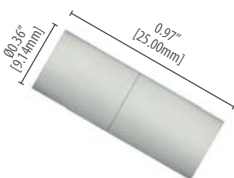
PART NUMBER	HOUSING	CHECK ELEMENT	INLET	OUTLET	CRACKING PRESSURE	INTERNAL VOLUME	QTY
CF-4C	PPS	FFKM	1/4•28 F	1/4•28 F	0.3psi	49µl	ea
CF-4E	PPS	EPDM	1/4•28 F	1/4•28 F	1.0psi	49µl	ea
CF-4V	PPS	FKM	1/4•28 F	1/4•28 F	0.8psi	49µl	ea
CF-5C	PEEK™	FFKM	1/4•28 F	1/4•28 F	0.3psi	49µl	ea
CF-5E	PEEK™	EPDM	1/4•28 F	1/4•28 F	1.0psi	49µl	ea
CF-5V	PEEK™	FKM	1/4•28 F	1/4•28 F	0.8psi	49µl	ea

#### INLET TYPE BIO-CHEK™ CHECK VALVE

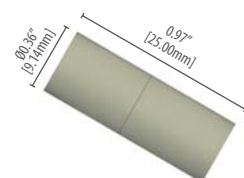
CI-4C	PPS	FFKM	1/4•28 F	1/4•28 M	0.3psi	60µl	ea
CI-4E	PPS	EPDM	1/4•28 F	1/4•28 M	1.0psi	60µl	ea
CI-4V	PPS	FKM	1/4•28 F	1/4•28 M	0.8psi	60µl	ea
CI-5C	PEEK™	FFKM	1/4•28 F	1/4•28 M	0.3psi	60µl	ea
CI-5E	PEEK™	EPDM	1/4•28 F	1/4•28 M	1.0psi	60µl	ea
CI-5V	PEEK™	FKM	1/4•28 F	1/4•28 M	0.8psi	60µl	ea

#### OUTLET TYPE BIO-CHEK™ CHECK VALVE

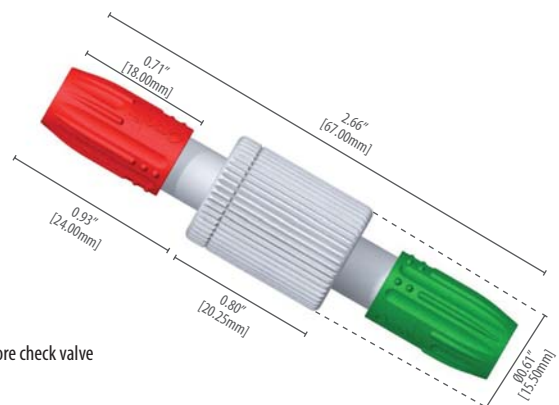
CO-4C	PPS	FFKM	1/4•28 M	1/4•28 F	0.3psi	68µl	ea
CO-4E	PPS	EPDM	1/4•28 M	1/4•28 F	1.0psi	68µl	ea
CO-4V	PPS	FKM	1/4•28 M	1/4•28 F	0.8psi	68µl	ea
CO-5C	PEEK™	FFKM	1/4•28 M	1/4•28 F	0.3psi	68µl	ea
CO-5E	PEEK™	EPDM	1/4•28 M	1/4•28 F	1.0psi	68µl	ea
CO-5V	PEEK™	FKM	1/4•28 M	1/4•28 F	0.8psi	68µl	ea



CF-4 BIO-CHEK™ dual female check valve, PPS



CF-5 BIO-CHEK™ dual female check valve, PEEK™



0011340  
0011341  
0011342  
0011343  
0011344  
Omnifit® varibore check valve

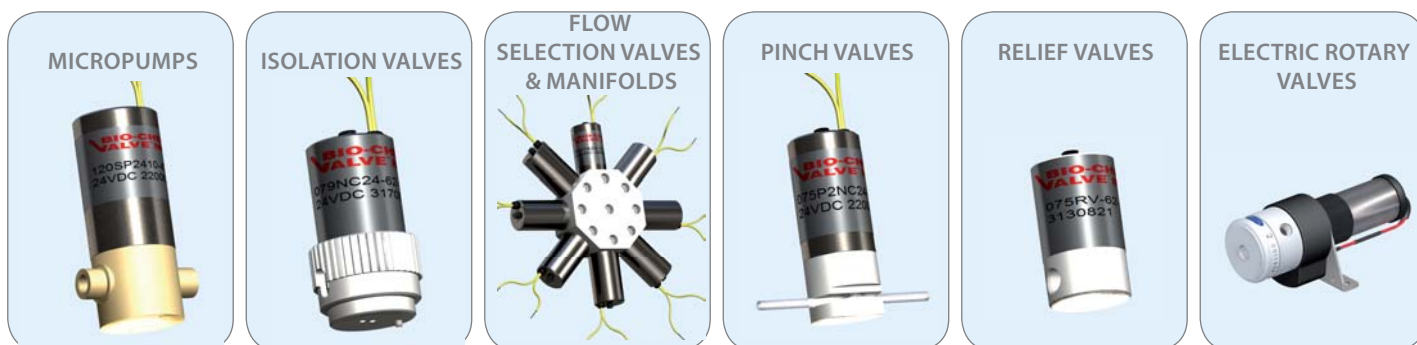
## THE BIO-CHEM FLUIDICS BRAND FAMILY

Bio-Chem Fluidics is dedicated to providing instrument manufacturers and laboratories with the industry's best choice of inert, miniature fluid handling components.

Under our Bio-Chem Valve™ and Omnifit® brands we offer a complete fluid system solution for a wide range of industries including analytical chemistry, clinical diagnostics and medical device manufacturers as well as a world-class labware portfolio for the scientific community.

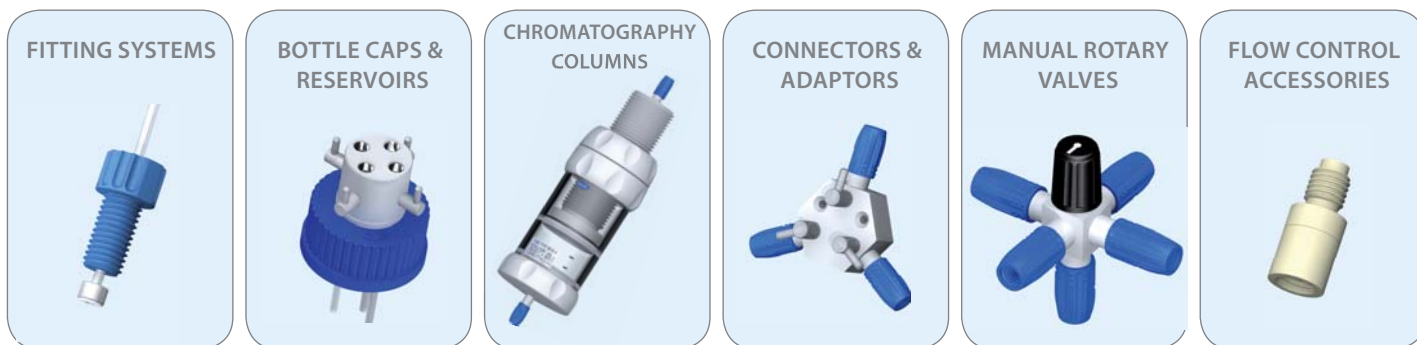
# BIO-CHEM VALVE

## INERT SOLENOID VALVES, ELECTRIC ROTARY VALVES AND PUMPS



# Omnifit

## INERT FLUID HANDLING COMPONENTS AND LABWARE



## CUSTOMIZED SOLUTIONS

We understand that many applications require customized solutions. Our design and prototyping expertise enables us to offer simple modifications of standard products as well as completely customized designs.

We look forward to working with you to meet your design engineering objectives!