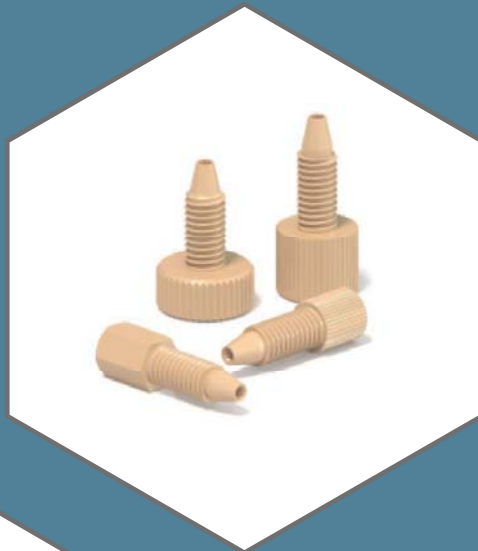


FITTINGS & TUBING





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PEEK FITTINGS

NOTES

The following information applies to the data provided in the Comprehensive Performance Test Report.

Pull-off strength: Refers to the force that the tube comes off when it is connected to the receiving port.

Test method: Install and tighten the fitting-tube assembly into the torque fixture. Increase the torque until the tube comes off.

Pressure values: The pressure values we provide are all safety pressures, which is 70% of the critical pressure at which the tube or joint starts to leak under the pressure test.

Test method: Bubble leak test to evaluate critical pressure value.

Deformation Degree: Deformed Tubing ID ÷ Initial Tubing ID

Unless otherwise specified, all tests refer to fittings are done with water at room temperature. Results may vary depending on connecting port, tube material, tube diameter (tolerances), temperature and solvent used. **Data is for reference only.**

MATERIAL CHARACTERISTICS

PEEK High-performance thermoplastic material, 30% carbon fiber reinforced polyacrylate ketone (PEEK). Suitable for applications requiring higher strength and stiffness in static or dynamic systems. Good wear resistance, low coefficient of friction, low coefficient of thermal expansion and chemical resistance to corrosive environments.

Applicable temperature range: -100°C ~ 250°C

PTFE Polytetrafluoroethylene, with typical excellent properties of gas plastic resin. It has good tensile properties, chemical resistance and low friction.

Applicable temperature range: -50°C ~ 100°C

PFA Copolymer made from a small amount of heptafluoropropyl trifluorovinyl ether and polytetrafluoroethylene. Melt bonding is improved while solution viscosity is reduced and there is no change in performance compared to polytetrafluoroethylene.

Applicable temperature range: -50°C ~ 100°C

ETFE It is a fluoropolymer with hydrolysis stability and weather resistance, excellent wear resistance and chemical resistance.

Applicable temperature range: -80°C ~ 150°C

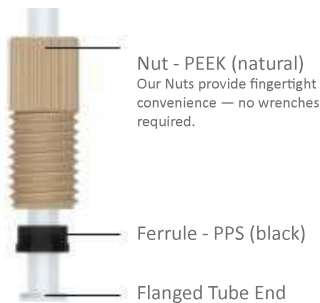


PEEK FLANGED FITTINGS - TWO-PIECE SET

Thread 1/4-28 UNF | M6

01

PEEK FITTINGS

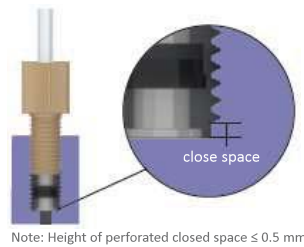


Nut - PEEK (natural)
Our Nuts provide fingertight convenience — no wrenches required.

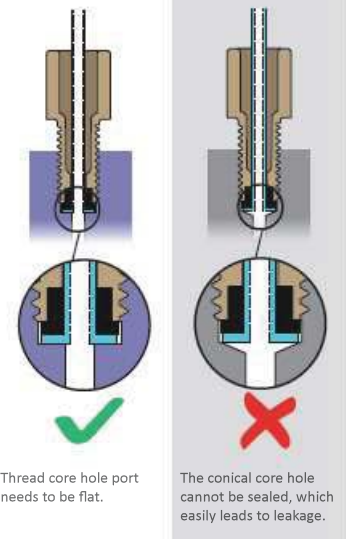
Ferrule - PPS (black)

Flanged Tube End

- Make sure the ferrule is oriented correctly! The narrow end of the ferrule should towards the nut.
- Flange the tubing with exclusive flange tools, flanged tube end $\leq \Phi 5$ mm.



Note: Height of perforated closed space ≤ 0.5 mm



- Traditional flat-bottomed fitting.
- The deformed tube end is compressed in the thread by the ferrule and the PEEK connector, so that an airtight connection is achieved.
- No change in tube diameter.
- No effect on flow rate.
- More stable flow rate.
- Can be disassembled repeatedly without affecting its sealing.
- Long-term working temperature range: -50°C to $+150^{\circ}\text{C}$.
- Thread: 1/4-28 UNF flat bottom, M6.

Application Note

Step 1. Flange the tubing with exclusive flange tools, tubing can be flanged one end or both two ends, depending on specific application requirements.

Step 2. When tubing flanged in two ends, 2 pieces clips and 2 pieces nuts need to be slid into the tubing before both ends flanged; when tubing flanged in one end, 1 piece clip and 1 piece nut can be slid into tubing before or after the one end flanged.

Step 3. Insert the assembly into the receiving port, pushing the tubing into the port until it bottoms out.

Step 4. Finger tighten the fittings into the port until snug.

Step 5. After several uses (especially at high pressure) the flanged tube should be replaced.

Ferrule No.	Tubing Size O.D.	Color	Material
B-RP-200001-PS-BK	1.6 mm	Black	PPS
B-RP-200002-PS-BK	2.0 mm	Black	PPS

Ferrule for 1.6 mm | 2.0 mm O.D. tube

Unit: mm



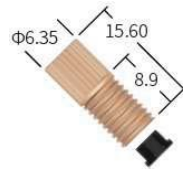
Ferrule No.	Tubing Size O.D.	Color	Material
B-RP-200003-PS-BK	2.5 mm	Black	PPS
B-RP-200004-PS-BK	3.0 / 3.2 mm	Black	PPS

Ferrule for 2.5 mm | 3.0 / 3.2 mm O.D. tube

Unit: mm



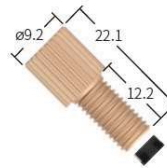
**Compact Flangeless Nut with Ferrule
Two-piece set**



Unit: mm

Product No.	Thread	Tubing Size O.D.	Pull-off Strength	Pressure Rating	Material
B-RP-100001	1/4-28 UNF	1.6 mm	2.00 kgf	67.4 bar (977 psi)	PEEK+PPS
B-RP-100002	1/4-28 UNF	2.0 mm	2.79 kgf	73.5 bar (1066 psi)	PEEK+PPS
B-RP-100005	1/4-28 UNF	2.5 mm	3.48 kgf	43.9 bar (636 psi)	PEEK+PPS
B-RP-100006	1/4-28 UNF	3.0 / 3.2 mm	6.11 kgf	34.6 bar (501 psi)	PEEK+PPS
B-RP-100009	M6	1.6 mm	1.38 kgf	72.1 bar (1045 psi)	PEEK+PPS
B-RP-100010	M6	2.0 mm	2.69 kgf	84.5 bar (1225 psi)	PEEK+PPS

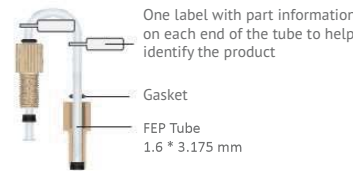
**Flangeless Nut with Ferrule
Two-piece set**



Unit: mm

Product No.	Thread	Tubing Size O.D.	Pull-off Strength	Pressure Rating	Material
B-RP-100003	1/4-28 UNF	1.6 mm	2.63 kgf	67.4 bar (977psi)	PEEK+PPS
B-RP-100004	1/4-28 UNF	2.0 mm	2.68 kgf	47.4 bar (687 psi)	PEEK+PPS
B-RP-100007	1/4-28 UNF	2.5 mm	2.44 kgf	47.6 bar (690 psi)	PEEK+PPS
B-RP-100008	1/4-28 UNF	3.0 / 3.2 mm	5.60 kgf	42.7 bar (619 psi)	PEEK+PPS
B-RP-100011	M6	1.6 mm	2.20 kgf	73.7 bar (1068 psi)	PEEK+PPS
B-RP-100012	M6	2.0 mm	2.54 kgf	54.0 bar (783 psi)	PEEK+PPS

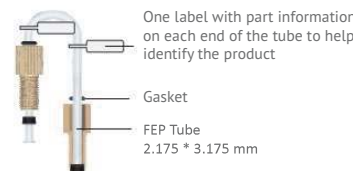
**Compact Flangeless Nut with Ferrule &
Tube FEP**



Unit: mm

Product No.	Thread	Tubing Size I.D. * O.D.	Tube length	Pull-off Strength	Pressure Rating	Material
B-RP-101006	1/4-28 UNF	1.6 mm * 3.175 mm	0.2 m	6.11 kgf	34.6 bar (501 psi)	PEEK+PPS+FEP
B-RP-101007	1/4-28 UNF	1.6 mm * 3.175 mm	0.3 m	6.11 kgf	34.6 bar (501 psi)	PEEK+PPS+FEP
B-RP-101008	1/4-28 UNF	1.6 mm * 3.175 mm	0.5 m	6.11 kgf	34.6 bar (501 psi)	PEEK+PPS+FEP
B-RP-101009	1/4-28 UNF	1.6 mm * 3.175 mm	1.0 m	6.11 kgf	34.6 bar (501 psi)	PEEK+PPS+FEP
B-RP-101010	1/4-28 UNF	1.6 mm * 3.175 mm	2.0 m	6.11 kgf	34.6 bar (501 psi)	PEEK+PPS+FEP

Flangeless Nut with Ferrule & Tube FEP



Unit: mm

Product No.	Thread	Tubing Size I.D. * O.D.	Tube length	Pull-off Strength	Pressure Rating	Material
B-RP-101001	1/4-28 UNF	2.175 mm * 3.175 mm	0.2 m	5.60 kgf	42.7 bar (619 psi)	PEEK+PPS+FEP
B-RP-101002	1/4-28 UNF	2.175 mm * 3.175 mm	0.3 m	5.60 kgf	42.7 bar (619 psi)	PEEK+PPS+FEP
B-RP-101003	1/4-28 UNF	2.175 mm * 3.175 mm	0.5 m	5.60 kgf	42.7 bar (619 psi)	PEEK+PPS+FEP
B-RP-101004	1/4-28 UNF	2.175 mm * 3.175 mm	1.0 m	5.60 kgf	42.7 bar (619 psi)	PEEK+PPS+FEP
B-RP-101005	1/4-28 UNF	2.175 mm * 3.175 mm	2.0 m	5.60 kgf	42.7 bar (619 psi)	PEEK+PPS+FEP

Note: Please contact us if you need a customized tube-fitting assembly.

PEEK FLANGELESS FITTINGS - TWO-PIECE SET

Thread 1/4-28 UNF | M6



- Standard fittings with straight threads.
- Tool-free assembly - simply slip the nut and ferrule on the tube, screwing them into the tube.
- Need to use with ETFE ferrule.
- Long-term working temperature range: -80°C ~ +150°C.
- Used for standard rigid tubing OD 1.6/2.0/2.5/3.0/3.2 mm, easy and fast installation.
- Thread: 1/4-28 UNF flat bottom, M6.



Nut - PEEK (natural)
Our Nuts provide fingertight convenience — no wrenches required.

Ferrule - ETFE (yellow)
Our Ferrules provide a leak-proof seal. There is no need to spend time flanging the tubing.

- Make sure the ferrule is oriented correctly! The narrow end of the ferrule should towards the nut.

Application Note

Step 1. Slide the PEEK nut, followed by the ETFE ferrule, at least 3/16" (4.7625 mm) from the end of clean cut tubing.

Step 2. Insert the assembly into the receiving port, pushing the tubing into the port until it bottoms out.

Step 3. Finger tighten the fittings into the port until snug.

Step 4. After several uses (especially at high pressure) the ferrules should be replaced.

Ferrule No.	Tubing Size O.D.	Color	Material
B-RP-200012-ET-YE	1.6 mm	Yellow	ETFE
B-RP-200011-ET-YE	2.0 mm	Yellow	ETFE

Ferrule for 1.6 mm | 2.0 mm O.D. tube

Unit: mm



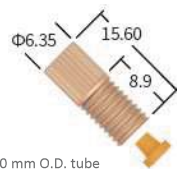
Ferrule No.	Tubing Size O.D.	Color	Material
B-RP-200013-ET-YE	2.5 mm	Yellow	ETFE
B-RP-200014-ET-YE	3.0 mm	Yellow	ETFE
B-RP-200015-ET-YE	3.2 mm	Yellow	ETFE

Ferrule for 2.5 | 3.0 | 3.2 mm O.D. tube

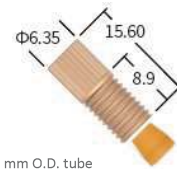
Unit: mm



Compact Flangeless Nut with Ferrule Two-piece set



For 1.6 mm, 2.0 mm O.D. tube

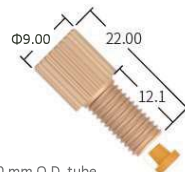


For 2.5 mm, 3.0 mm & 3.5 mm O.D. tube

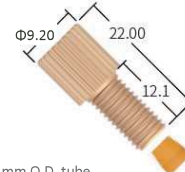
Unit: mm

Product No.	Thread	Tubing Size O.D.	Pull-off Strength	Pressure Rating	Deformation Degree	Material
B-RP-103005	1/4-28 UNF	1.6 mm	1.86 kgf	59.6 bar (864 psi)	0.9	PEEK+ETFE
B-RP-103004	1/4-28 UNF	2.0 mm	1.94 kgf	68.7 bar (996 psi)	0.76	PEEK+ETFE
B-RP-103003	1/4-28 UNF	2.5 mm	2.92 kgf	46.7 bar (677 psi)	0.867	PEEK+ETFE
B-RP-103002	1/4-28 UNF	3.0 mm	4.05 kgf	41.2 bar (597 psi)	0.83	PEEK+ETFE
B-RP-103001	1/4-28 UNF	3.2 mm	4.05 kgf	63.3 bar (918 psi)	0.74	PEEK+ETFE
B-RP-103011	M6	1.6 mm	2.21 kgf	63.6 bar (922 psi)	0.8	PEEK+ETFE
B-RP-103012	M6	2.0 mm	2.74 kgf	66.9 bar (970 psi)	0.73	PEEK+ETFE
B-RP-103013	M6	2.5 mm	3.49 kgf	37.5 bar (543 psi)	0.82	PEEK+ETFE
B-RP-103014	M6	3.0 mm	4.29 kgf	34.5 bar (500 psi)	0.8	PEEK+ETFE
B-RP-103015	M6	3.2 mm	3.91 kgf	51.9 bar (752 psi)	0.74	PEEK+ETFE

Flangeless Nut with Ferrule Two-piece set



For 1.6 mm, 2.0 mm O.D. tube

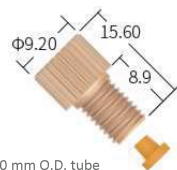


For 2.5 mm, 3.0 mm & 3.5 mm O.D. tube

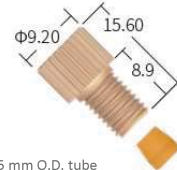
Unit: mm

Product No.	Thread	Tubing Size O.D.	Pull-off Strength	Pressure Rating	Deformation Degree	Material
B-RP-103025	1/4-28 UNF	1.6 mm	1.93 kgf	67.3 bar (976 psi)	0.79	PEEK+ETFE
B-RP-103026	1/4-28 UNF	2.0 mm	2.02 kgf	68.7 bar (996 psi)	0.85	PEEK+ETFE
B-RP-103008	1/4-28 UNF	2.5 mm	3.41 kgf	47 bar (681 psi)	0.8	PEEK+ETFE
B-RP-103009	1/4-28 UNF	3.0 mm	3.48 kgf	37.1 bar (538 psi)	0.8	PEEK+ETFE
B-RP-103010	1/4-28 UNF	3.2 mm	3.94 kgf	53.3 bar (773 psi)	0.72	PEEK+ETFE
B-RP-103006	M6	1.6 mm	2.39 kgf	66.6 bar (965 psi)	0.73	PEEK+ETFE
B-RP-103007	M6	2.0 mm	1.80 kgf	71.4 bar (1035 psi)	0.73	PEEK+ETFE
B-RP-103022	M6	2.5 mm	3.34 kgf	51.3 bar (744 psi)	0.7	PEEK+ETFE
B-RP-103023	M6	3.0 mm	3.84 kgf	37.2 bar (539 psi)	0.82	PEEK+ETFE
B-RP-103024	M6	3.2 mm	4.14 kgf	51.9 bar (752 psi)	0.72	PEEK+ETFE

Short Flangeless Nut with Ferrule Two-piece set



For 1.6 mm, 2.0 mm O.D. tube



For 2.5 mm, 3.0 mm & 3.5 mm O.D. tube

Unit: mm

Product No.	Thread	Tubing Size O.D.	Pull-off Strength	Pressure Rating	Deformation Degree	Material
B-RP-103027	1/4-28 UNF	1.6 mm	1.34 kgf	70.6 bar (1023 psi)	0.84	PEEK+ETFE
B-RP-103028	1/4-28 UNF	2.0 mm	2.65 kgf	73.3 bar (1063 psi)	0.73	PEEK+ETFE
B-RP-103016	1/4-28 UNF	2.5 mm	3.61 kgf	38.2 bar (554 psi)	0.77	PEEK+ETFE
B-RP-103017	1/4-28 UNF	3.0 mm	3.85 kgf	39.5 bar (572 psi)	0.8	PEEK+ETFE
B-RP-103018	1/4-28 UNF	3.2 mm	4.43 kgf	50.8 bar (736 psi)	0.72	PEEK+ETFE
B-RP-103029	M6	1.6 mm	2.14 kgf	59.2 bar (858 psi)	0.75	PEEK+ETFE
B-RP-103030	M6	2.0 mm	2.21 kgf	71.5 bar (1037 psi)	0.8	PEEK+ETFE
B-RP-103019	M6	2.5 mm	3.43 kgf	41.8 bar (606 psi)	0.78	PEEK+ETFE
B-RP-103020	M6	3.0 mm	4.07 kgf	39.4 bar (571 psi)	0.76	PEEK+ETFE
B-RP-103021	M6	3.2 mm	4.04 kgf	50.8 bar (736 psi)	0.72	PEEK+ETFE

PEEK FLANGELESS FITTINGS - THREE-PIECE SET

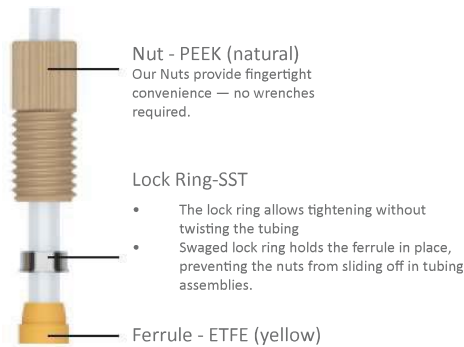
Thread 1/4-28 UNF | M6

01

PEEK FITTINGS



- Standard fittings with straight threads.
- Tool-free assembly - simply slip the nut and ferrule on the tube, screwing them into the tube.
- Need to use with ETFE ferrule.
- With stainless steel sleeve, the rigid tube does not follow the rotation during screwing the nut.
- Efficiently elimination of loose fittings in the tube resulting from twisting.
- This type of fitting is well-suited for pre-assembled tubing and situations where frequent disconnections are necessary.
- Long-term working temperature range: -80°C ~ +150°C.
- Used for standard rigid tubing OD 1.6/2.0/2.5/3.0/3.2 mm, easy and fast installation.
- Thread: 1/4-28 UNF flat bottom, M6.



- Nut - PEEK (natural)
Our Nuts provide fingertight convenience — no wrenches required.
- Lock Ring-SST
 - The lock ring allows tightening without twisting the tubing
 - Swaged lock ring holds the ferrule in place, preventing the nuts from sliding off in tubing assemblies.
- Ferrule - ETFE (yellow)

Application Note

Step 1. Slide the PEEK nut, followed by the 316 SST sleeve and ETFE ferrule, at least 3/16" (4.7625 mm) from the end of clean cut tubing.

Step 2. Insert the assembly into the receiving port, pushing the tubing into the port until it bottoms out.

Step 3. Finger tighten the fittings into the port until snug.

Lock Ring No.	Tubing Size O.D.	Material
B-RP-200016-SS-NA	1.6 mm 2.0 mm	SUS316
B-RP-200017-SS-NA	2.5 mm 3.0 mm 3.2 mm	SUS316



Unit: mm

Ferrule No.	Tubing Size O.D.	Color	Material
B-RP-200012-ET-YE	1.6 mm	Yellow	ETFE
B-RP-200011-ET-YE	2.0 mm	Yellow	ETFE

Ferrule for 1.6 mm | 2.0 mm O.D. tube



Unit: mm

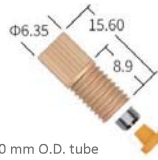
Ferrule No.	Tubing Size O.D.	Color	Material
B-RP-200008-ET-YE	2.5 mm	Yellow	ETFE
B-RP-200009-ET-YE	3.0 mm	Yellow	ETFE
B-RP-200010-ET-YE	3.2 mm	Yellow	ETFE

Ferrule for 2.5 | 3.0 | 3.2 mm O.D. tube

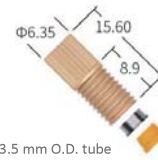


Unit: mm

**Compact Flangeless Nut with Ferrule
Three-piece set**



For 1.6 mm, 2.0 mm O.D. tube

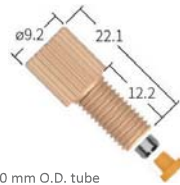


For 2.5 mm, 3.0 mm & 3.5 mm O.D. tube

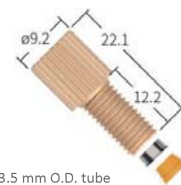
Unit: mm

Product No.	Thread	Tubing Size O.D.	Pull-off Strength	Pressure Rating	Deformation Degree	Material
B-RP-102001	1/4-28 UNF	1.6 mm	2.17 kgf	70.6 bar (1023 psi)	0.76	PEEK+ETFE+SU316
B-RP-102002	1/4-28 UNF	2.0 mm	3.01 kgf	75.3 bar (1092 psi)	0.7	PEEK+ETFE+SU316
B-RP-102003	1/4-28 UNF	2.5 mm	3.89 kgf	47 bar (681 psi)	0.91	PEEK+ETFE+SU316
B-RP-102004	1/4-28 UNF	3.0 mm	3.89 kgf	40.9 bar (593 psi)	0.93	PEEK+ETFE+SU316
B-RP-102005	1/4-28 UNF	3.2 mm	5.69 kgf	48.3 bar (700 psi)	0.79	PEEK+ETFE+SU316
B-RP-102011	M6	1.6 mm	2.43 kgf	71.1 bar (1031 psi)	0.788	PEEK+ETFE+SU316
B-RP-102012	M6	2.0 mm	3.05 kgf	79.2 bar (1148 psi)	0.67	PEEK+ETFE+SU316

**Flangeless Nut with Ferrule
Three-piece set**



For 1.6 mm, 2.0 mm O.D. tube



For 2.5 mm, 3.0 mm & 3.5 mm O.D. tube

Unit: mm

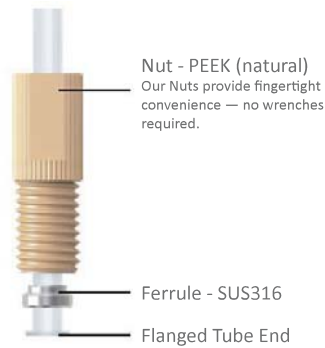
Product No.	Thread	Tubing Size O.D.	Pull-off Strength	Pressure Rating	Deformation Degree	Material
B-RP-102006	1/4-28 UNF	1.6 mm	2.85 kgf	74.9 bar (1086 psi)	0.788	PEEK+ETFE+SU316
B-RP-102007	1/4-28 UNF	2.0 mm	2.74 kgf	63.3 bar (918 psi)	0.73	PEEK+ETFE+SU316
B-RP-102008	1/4-28 UNF	2.5 mm	2.78 kgf	49.5 bar (717 psi)	0.77	PEEK+ETFE+SU316
B-RP-102009	1/4-28 UNF	3.0 mm	3.99 kgf	36.8 bar (533 psi)	0.81	PEEK+ETFE+SU316
B-RP-102010	1/4-28 UNF	3.2 mm	5.69 kgf	50.5 bar (732 psi)	0.769	PEEK+ETFE+SU316
B-RP-102013	M6	1.6 mm	2.86 kgf	72.2 bar (1047 psi)	0.75	PEEK+ETFE+SU316
B-RP-102014	M6	2.0 mm	3.05 kgf	76 bar (1102 psi)	0.72	PEEK+ETFE+SU316

ULTRA MINI PEEK FLANGED FITTINGS - TWO-PIECE SET

Thread 6-40 UNF



- Ultra compact flat-bottomed fitting.
- The deformed tube end is compressed in the thread by the ferrule and the PEEK connector, so that an airtight connection is achieved.
- No change in tube diameter.
- No effect on flow rate.
- More stable flow rate.
- Can be disassembled repeatedly without affecting its sealing.
- Long-term working temperature range: -80°C to +220°C.
- Used for standard rigid tubing O.D. 1.6 mm, easy and fast installation.
- Thread: 6-40 UNF flat bottom.



- Make sure the ferrule is oriented correctly! The narrow end of the ferrule should towards the nut.
- Flange the tubing with exclusive flange tools, flanged tube end $\leq \Phi 2.5$ mm

Application Note

Step 1. Flange the tubing with exclusive flange tools, tubing can be flanged one end or both two ends, depending on specific application requirements.

Step 2. When tubing flanged in two ends, 2 pieces clips and 2 pieces nuts need to be slid into the tubing before both ends flanged; when tubing flanged in one end, 1 piece clip and 1 piece nut can be slid into tubing before or after the one end flanged.

Step 3. Insert the assembly into the receiving port, pushing the tubing into the port until it bottoms out.

Step 4. Finger tighten the fittings into the port until snug.

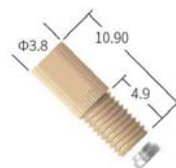
Step 5. After several uses (especially at high pressure) the flanged tube should be replace.

Ferrule No.	Tubing Size O.D.	Material
B-RP-200023-SS-NA	1.6 mm	SUS316



Unit: mm

Ultra Mini PEEK Flanged Fittings Two-piece set



Unit: mm

Product No.	Thread	Tubing Size O.D.	Pull-off Strength	Pressure Rating	Material
B-RP-106002	6-40 UNF	1.6 mm	1.72 kgf	57.9 bar (839 psi)	PEEK+SUS316

ULTRA MINI PEEK FLANGED FITTINGS - THREE-PIECE SET

Thread 6-40 UNF



- Ultra compact flat-bottomed fitting.
- Tool-free assembly - simply slip the nut and ferrule on the tube, screwing them into the tube.
- Need to use with PEEK ferrule.
- With stainless steel sleeve, the rigid pipe does not follow the rotation during screwing the nut.
- Efficiently elimination of loose fittings in the tube resulting from twisting.
- This type of fitting is well-suited for pre-assembled tubing and situations where frequent disconnections are necessary.
- Long-term working temperature range: -80°C ~ +220°C.
- Used for standard rigid tubing O.D. 1.6 mm, easy and fast installation.
- Thread: 6-40 UNF flat bottom.



Nut - PEEK (natural)
Our Nuts provide fingertight convenience — no wrenches required.

Lock Ring-SST

- The lock ring allows tightening without twisting the tubing.
- Swaged lock ring holds the ferrule in place, preventing the nuts from sliding off in tubing assemblies.

Ferrule - PEEK (natural)

- Make sure the locking ring is oriented correctly! The flattened end of the ring should face towards the nut with the narrow end of the ferrule towards the ring.

Fig.1: Flangeless Fitting - Inner diameter deformation

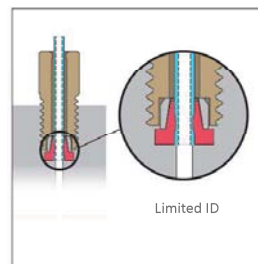
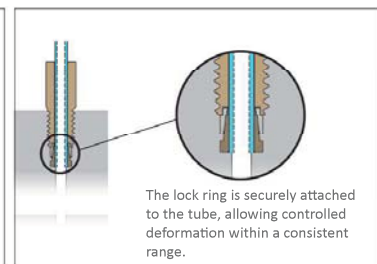


Fig.2: Ultra Mini Flangeless Fittings - No deformation of the inner diameter



Application Note

Step 1. Slide the PEEK nut, followed by the 316 SST sleeve and ETFE ferrule, at least 3/16" (4.7625 mm) from the end of clean cut tubing.

Step 3. Finger tighten the fittings into the port until snug.

Step 2. Insert the assembly into the receiving port, pushing the tubing into the port until it bottoms out.

Lock Ring No.	Tubing Size O.D.	Material
B-RP-200024-SS-NA	1.6 mm	SUS316



Unit: mm

B-RP-200024-SS-NA

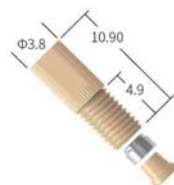
Ferrule No.	Tubing Size O.D.	Material
B-RP-200027-PK-NA	1.6 mm	PEEK



Unit: mm

B-RP-200027-PK-NA

Ultra Mini PEEK Flanged Fittings Two-piece set



Unit: mm

Product No.	Thread	Tubing Size O.D.	Pull-off Strength	Pressure Rating	Material
B-RP-107001	6-40 UNF	1.6 mm	2.75 kgf	47.9 bar (694 psi)	PEEK+SUS316

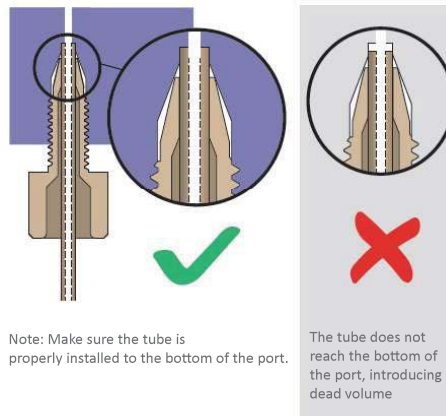
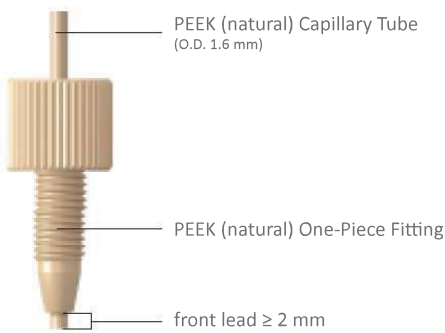
PEEK ONE-PIECE HAND TIGHTENING FITTINGS

Thread 10-32 UNF



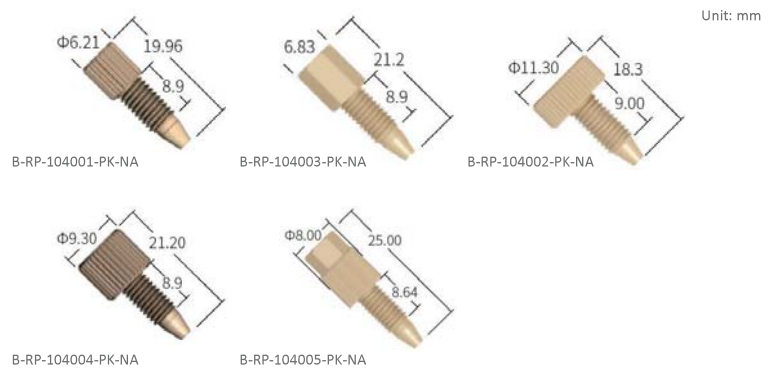
- Original one-piece hand tightening fittings.
- Used for standard rigid tubing (PEEK/PTFE/ETFE/FEP) O.D. 1.6 mm.
- Long-term working temperature range: -100°C to +250°C.
- Thread: 10-32 UNF coned.

Application Note



Note: Make sure the tube is properly installed to the bottom of the port

PEEK One-piece Hand Tightening Fittings



Product No.	Thread	Tubing Size O.D.	Pull-off Strength	Pressure Rating	Deformation Degree	Material
B-RP-104001-PK-NA	10-32 UNF	1.6 mm	10.52 kgf	177.5 bar (2574 psi)	0.84	PEEK
B-RP-104003-PK-NA	10-32 UNF	1.6 mm	10.17 kgf	154.5 bar (2240 psi)	0.84	PEEK
B-RP-104002-PK-NA	10-32 UNF	1.6 mm	10.34 kgf	177.5 bar (2574 psi)	0.84	PEEK
B-RP-104004-PK-NA	10-32 UNF	1.6 mm	-	-	-	PEEK
B-RP-104005-PK-NA	10-32 UNF	1.6 mm	-	-	-	PEEK

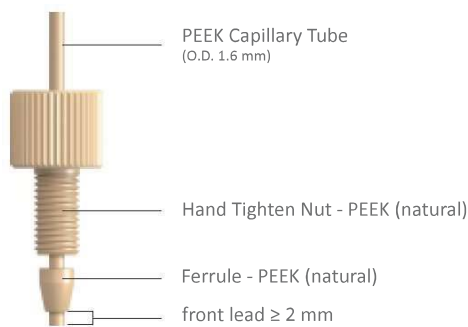
PEEK TWO-PIECE HAND TIGHTENING FITTINGS

Thread 10-32 UNF



- Two-piece design: Economical and practical - only need to replace the flangeless nut.
- Used for standard rigid tubing (PEEK/PTFE/ETFE/FEP) O.D. 1.6 mm.
- Long-term working temperature range: -100°C to +250°C
- Thread: 10-32 UNF coned.

Application Note



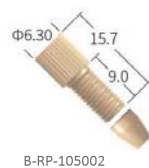
- Other installation considerations are the same as for PEEK one-piece fittings.

Ferrule No.	Tubing Size O.D.	Material
B-RP-200007-PK-NA	1.6 mm	PEEK

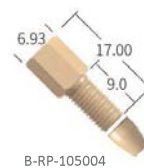


Unit: mm

PEEK Two-Piece Hand Tightening Fittings



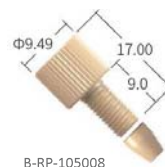
B-RP-105002



B-RP-105004



B-RP-105006



B-RP-105008

Unit: mm

Product No.	Thread	Tubing Size O.D.	Pull-off Strength	Pressure Rating	Material
B-RP-105002	10-32 UNF	1.6 mm	2.03 kgf	71 bar (1029 psi)	PEEK
B-RP-105004	10-32 UNF	1.6 mm	1.98 kgf	74 bar (1073 psi)	PEEK
B-RP-105006	10-32 UNF	1.6 mm	11.76 kgf	-	PEEK
B-RP-105008	10-32 UNF	1.6 mm	-	63 bar (913 psi)	PEEK

HIGH PRESSURE PEEK FITTINGS

Thread 10-32 UNF

High Pressure PEEK Fingertight Fittings



- For tubes and capillaries with an outer diameter of 1.6 mm (1/16").
- For use in HPLC or GC for pressures up to 250 bar.
- Material: PEEK (Graphite processing).
- Thread: 10-32 UNF conical.

Product No.	Thread	Tubing Size O.D.	Operating Pressure	Color	Material
B-SC-100002-PK-BK	10-32 UNF	1.6 mm	250 bar (3625 psi)	Black	PEEK (Graphite)

High Pressure PEEK Fittings



- For tubes and capillaries with an outer diameter of 1.6 mm (1/16").
- For use in HPLC or GC for pressures up to 250 bar.
- Material: PEEK (Graphite processing).
- Thread: 10-32 UNF conical.

Product No.	Thread	Tubing Size O.D.	Operating Pressure	Color	Material
B-SC-100001-PK-BK	10-32 UNF	1.6 mm	250 bar (3625 psi)	Black	PEEK (Graphite)

High Pressure PEEK Fingertight Plugs

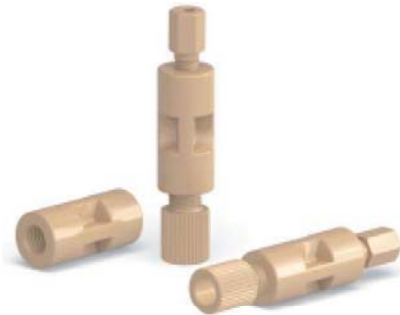


- For use in HPLC or GC for pressures up to 250 bar.
- Thread: 10-32 UNF conical.

Product No.	Thread	Tubing Size O.D.	Operating Pressure	Color	Material
B-SP-100001-PK-BK	10-32 UNF	1.6 mm	250 bar (3625 psi)	Black	PEEK (Graphite)

PEEK FEMALE THREAD STRAIGHT ADAPTER

Thread 1/4-28 UNF | 10-32 UNF

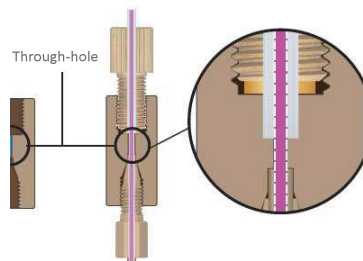


- Connecting two fittings with the same or different threads together.
- Long-term working temperature range: -100°C ~ +250°C.
- Thread: 10-32 UNF coned, 1/4-28 UNF flat bottom.

Application Note



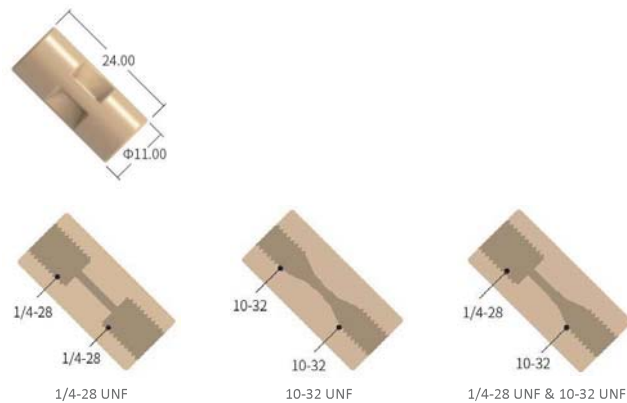
- 8 mm 1/4-28 UNF female thread
6.5 mm 10-32 UNF female thread
- No dead volume docking can be achieved when the diameter of the flow path is the same as the inner diameter of the tube.



The internal volume is shown in the figure for the volume of the threaded port connection channel.

PEEK Female Thread Straight Adapter

Unit: mm



Product No.	Thread	Channel Diameter	Internal Volume	Material
B-RP-300003-PK-NA	1/4-28 UNF	0.8 mm	4.02 mm ³	PEEK
B-RP-300004-PK-NA	1/4-28 UNF	1.25 mm	9.82 mm ³	PEEK
B-RP-300005-PK-NA	1/4-28 UNF	2.0 mm	25.13 mm ³	PEEK
B-RP-300006-PK-NA	10-32 UNF	0.8 mm	0.94 mm ³	PEEK
B-RP-300007-PK-NA	10-32 UNF	1.25 mm	2.30 mm ³	PEEK
B-RP-300001-PK-NA	1/4-28 UNF & 10-32 UNF	0.8 mm	2.50 mm ³	PEEK
B-RP-300002-PK-NA	1/4-28 UNF & 10-32 UNF	1.25 mm	6.10 mm ³	PEEK

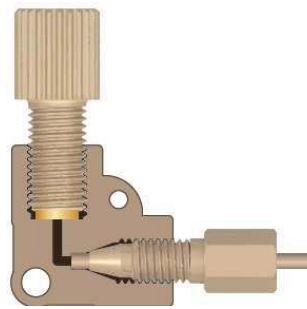
PEEK FEMALE THREAD ELBOW ADAPTER

Thread 1/4-28 UNF | 10-32 UNF



- Connecting two fittings with the same or different threads together.
- Long-term working temperature range: -100°C ~ +250°C.
- Thread: 10-32 UNF coned, 1/4-28 UNF flat bottom.

Application Note

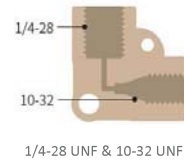
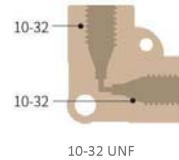
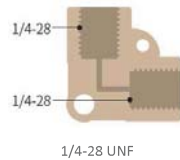


- 8 mm 1/4-28 UNF female thread
6.5 mm 10-32 UNF female thread

PEEK Female Thread Elbow Adapter



Unit: mm



Product No.	Thread	Channel Diameter	Internal Volume	Material
B-RP-304001-PK-NA	1/4-28 UNF	0.8 mm	4.76 mm ³	PEEK
B-RP-304002-PK-NA	1/4-28 UNF	1.25 mm	11.77 mm ³	PEEK
B-RP-304003-PK-NA	1/4-28 UNF	2.0 mm	29.56 mm ³	PEEK
B-RP-304004-PK-NA	10-32 UNF	0.8 mm	1.68 mm ³	PEEK
B-RP-304005-PK-NA	10-32 UNF	1.25 mm	4.14 mm ³	PEEK
B-RP-304006-PK-NA	1/4-28 UNF & 10-32 UNF	0.8 mm	3.22 mm ³	PEEK
B-RP-304007-PK-NA	1/4-28 UNF & 10-32 UNF	1.25 mm	7.96 mm ³	PEEK

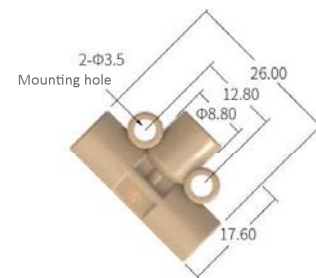
PEEK FEMALE THREAD T-ADAPTER

Thread 1/4-28 UNF | 10-32 UNF



- Connecting three fittings with the same or different threads together.
- Designed to separate a fluid or mix two fluids together.
- Long-term working temperature range: -100°C ~ +250°C.
- Thread: 10-32 UNF coned, 1/4-28 UNF flat bottom.

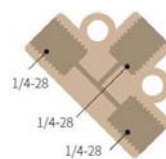
Application Note



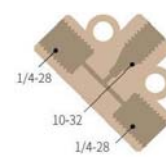
Unit: mm

8 mm 1/4-28 UNF female thread
6.5 mm 10-32 UNF female thread

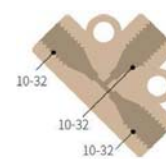
PEEK Female Thread T-Adapter



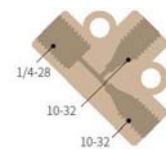
B-RP-301001-PK-NA
B-RP-301002-PK-NA
B-RP-301003-PK-NA



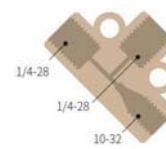
B-RP-301004-PK-NA
B-RP-301005-PK-NA



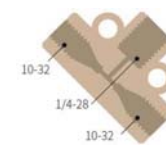
B-RP-301006-PK-NA
B-RP-301007-PK-NA



B-RP-301008-PK-NA
B-RP-301009-PK-NA



B-RP-301010-PK-NA
B-RP-301011-PK-NA



B-RP-301012-PK-NA
B-RP-301013-PK-NA

Product No.	Thread	Channel Diameter	Internal Volume	Material
B-RP-301001-PK-NA	1/4-28 UNF (*3)	0.8 mm	7.47 mm ³	PEEK
B-RP-301002-PK-NA	1/4-28 UNF (*3)	1.25 mm	18.29 mm ³	PEEK
B-RP-301003-PK-NA	1/4-28 UNF (*3)	2.0 mm	45.09 mm ³	PEEK
B-RP-301004-PK-NA	1/4-28 UNF (*2) & 10-32 UNF	0.8 mm	5.94 mm ³	PEEK
B-RP-301005-PK-NA	1/4-28 UNF (*2) & 10-32 UNF	1.25 mm	14.48 mm ³	PEEK
B-RP-301006-PK-NA	10-32 UNF (*3)	0.8 mm	2.87 mm ³	PEEK
B-RP-301007-PK-NA	10-32 UNF (*3)	1.25 mm	6.86 mm ³	PEEK
B-RP-301008-PK-NA	1/4-28 UNF & 10-32 UNF (*2)	0.8 mm	4.40 mm ³	PEEK
B-RP-301009-PK-NA	1/4-28 UNF & 10-32 UNF (*2)	1.25 mm	10.67 mm ³	PEEK
B-RP-301010-PK-NA	1/4-28 UNF (*2) & 10-32 UNF	0.8 mm	5.94 mm ³	PEEK
B-RP-301011-PK-NA	1/4-28 UNF (*2) & 10-32 UNF	1.25 mm	14.48 mm ³	PEEK
B-RP-301012-PK-NA	1/4-28 UNF & 10-32 UNF (*2)	0.8 mm	4.40 mm ³	PEEK
B-RP-301013-PK-NA	1/4-28 UNF & 10-32 UNF (*2)	1.25 mm	10.68 mm ³	PEEK

PEEK FEMALE THREAD Y-ADAPTER

Thread 1/4-28 UNF | 10-32 UNF

01

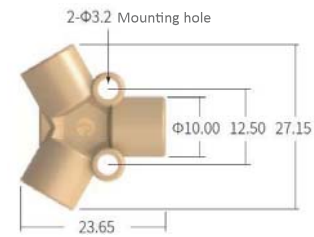
PEEK FITTINGS



- Connecting three fittings with the same or different threads together.
- Designed to separate a fluid or mix two fluids together.
- Y-connection geometry reduces turbulence and baseline noise, increasing sensitivity and improving analysis results.
- Long-term working temperature range: -100°C ~ +250°C.
- Thread: 10-32 UNF coned, 1/4-28 UNF flat bottom.

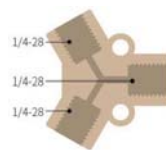
Application Note

Unit: mm

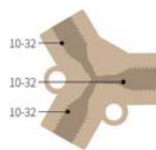


8 mm 1/4-28 UNF female thread
6.5 mm 10-32 UNF female thread

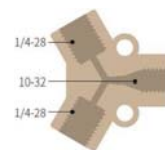
PEEK Female Thread Y-Adapter



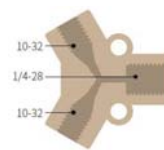
B-RP-303001-PK-NA
B-RP-303002-PK-NA
B-RP-303003-PK-NA



B-RP-303004-PK-NA
B-RP-303005-PK-NA



B-RP-301006-PK-NA
B-RP-301007-PK-NA



B-RP-303008-PK-NA
B-RP-303009-PK-NA

Product No.	Thread	Channel Diameter	Internal Volume	Material
B-RP-303001-PK-NA	1/4-28 UNF(*3)	0.8 mm	7.39 mm ³	PEEK
B-RP-303002-PK-NA	1/4-28 UNF(*3)	1.25 mm	18.13 mm ³	PEEK
B-RP-303003-PK-NA	1/4-28 UNF(*3)	2.0 mm	44.81. mm ³	PEEK
B-RP-303004-PK-NA	10-32 UNF(*3)	0.8 mm	2.78 mm ³	PEEK
B-RP-303005-PK-NA	10-32 UNF(*3)	1.25 mm	6.68 mm ³	PEEK
B-RP-303006-PK-NA	1/4-28 UNF(*2) & 10-32 UNF	0.8 mm	5.85 mm ³	PEEK
B-RP-303007-PK-NA	1/4-28 UNF(*2) & 10-32 UNF	1.25 mm	14.31 mm ³	PEEK
B-RP-303008-PK-NA	1/4-28 UNF & 10-32 UNF(*2)	0.8 mm	4.42 mm ³	PEEK
B-RP-303009-PK-NA	1/4-28 UNF & 10-32 UNF(*2)	1.25 mm	10.5 mm ³	PEEK

PEEK FEMALE THREAD LUER ADAPTER

Thread 1/4-28 UNF | 10-32 UNF

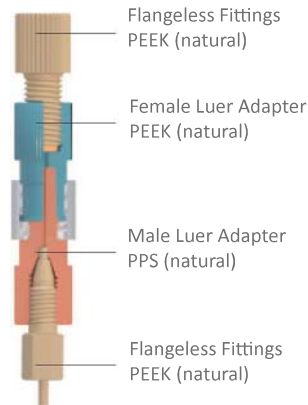
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PEEK FITTINGS

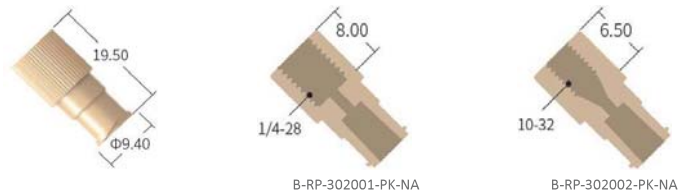


- Designed to connect Luer-Adapters to 10-32 UNF or 1/4-28 UNF threaded ports.
- Long-term working temperature range: -100°C ~ +250°C.
- Thread: 10-32 UNF coned, 1/4-28 UNF flat bottom.

Application Note

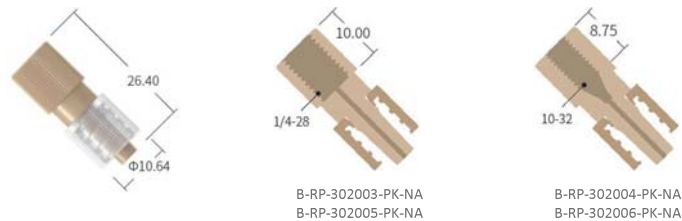


PEEK Female Luer Adapter



Unit: mm

PEEK Male Luer Adapter



Unit: mm

Product No.	Thread	Channel Diameter	Pressure Rating	Material
B-RP-302001-PK-NA	1/4-28 UNF	•	4 bar (58 psi)	PEEK
B-RP-302002-PK-NA	10-32 UNF	•	4 bar (58 psi)	PEEK
B-RP-302003-PK-NA	1/4-28 UNF	0.8 mm	•	PEEK+PP
B-RP-302005-PK-NA	1/4-28 UNF	1.2 mm	•	PEEK+PP
B-RP-302004-PK-NA	10-32 UNF	0.8 mm	•	PEEK+PP
B-RP-302006-PK-NA	10-32 UNF	1.2 mm	•	PEEK+PP

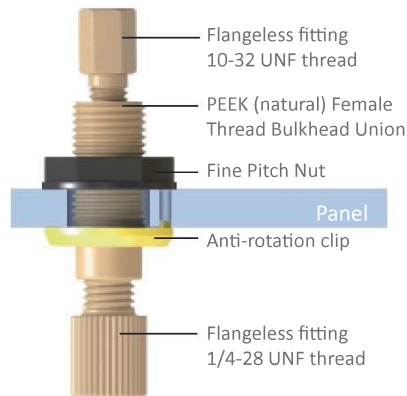
PEEK FEMALE THREAD BULKHEAD UNION

Thread 1/4-28 UNF | 10-32 UNF



- Designed to pass through the device front panel and connect the internal tubing to the outside.
- Through-panel union with male thread M10*1, PPS nut and PP anti-rotation clip.
- Consider using distinct colors to enhance differentiation.
- Long-term working temperature range: -100°C ~ +250°C.
- Thread: 10-32 UNF coned, 1/4-28 UNF flat bottom.

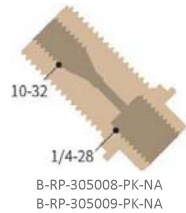
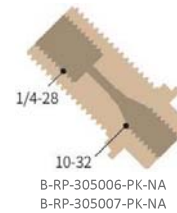
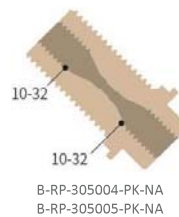
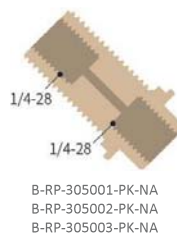
Application Note



8 mm 1/4-28 UNF female thread
6.5 mm 10-32 UNF female thread

Unit: mm

PEEK Female Thread Bulkhead Union



Product No.	Thread	Channel Diameter	Internal Volume	Material
B-RP-305001-PK-NA	1/4-28 UNF	0.8 mm	4.02 mm ³	PEEK+PPS black+PP
B-RP-305002-PK-NA	1/4-28 UNF	1.25 mm	9.98 mm ³	PEEK+PPS black+PP
B-RP-305003-PK-NA	1/4-28 UNF	2.0 mm	25.13 mm ³	PEEK+PPS black+PP
B-RP-305004-PK-NA	10-32 UNF	0.8 mm	0.94 mm ³	PEEK+PPS black+PP
B-RP-305005-PK-NA	10-32 UNF	1.25 mm	2.33 mm ³	PEEK+PPS black+PP
B-RP-305006-PK-NA	1/4-28 UNF & 10-32 UNF	0.8 mm	2.48 mm ³	PEEK+PPS black+PP
B-RP-305007-PK-NA	1/4-28 UNF & 10-32 UNF	1.25 mm	6.16 mm ³	PEEK+PPS black+PP
B-RP-305008-PK-NA	1/4-28 UNF & 10-32 UNF	0.8 mm	2.48 mm ³	PEEK+PPS black+PP
B-RP-305009-PK-NA	1/4-28 UNF & 10-32 UNF	1.25 mm	6.16 mm ³	PEEK+PPS black+PP

*Different colors of anti-rotation clips on request

PEEK BIG BORE FLANGELESS FITTINGS - TWO-PIECE SET

Thread 5/16-24 UNF, 1/2-20 UNF



- Standard fittings with straight threads, which are tool-free and durable.
- Simply slip the nut and ferrule on the tube, screwing them into the tube.
- Need to use with ETFE ferrule.
- Long-term working temperature range: -80°C ~ +150°C.
- Used for standard rigid tubing OD 4.8/6.4 mm, easy and fast installation.
- Thread: 5/16-24 UNF, 1/2-20 UNF.



- Make sure the locking ring is oriented correctly! The flattened end of the ring should face towards the nut with the narrow end of the ferrule towards the ring.

Application Note

Step 1. Slide the PEEK nut, followed by the ETFE ferrule, at least 3/16" (4.7625 mm) from the end of clean cut tubing.

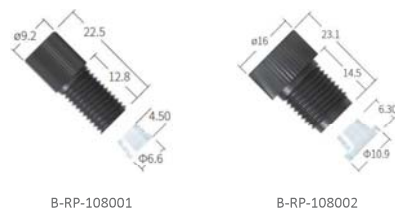
Step 3. Finger tighten the fittings into the port until snug.

Step 2. Insert the assembly into the receiving port, pushing the tubing into the port until it bottoms out.

Step 4. After several uses (especially at high pressure) the ferrules should be replaced.

PEEK Big Bore Flangeless Fittings Two-piece set

Unit: mm



Product No.	Thread	Tubing Size O.D.	Pull-off Strength	Pressure Rating	Material
B-RP-108001	5/16-24 UNF	4.8 mm	7.27 kg	39.6 bar (574 psi)	PEEK+ETFE
B-RP-108002	1/2-20 UNF	6.4 mm	11.89 kgf	30.6 bar (443 psi)	PEEK+ETFE

THREADED FITTINGS

MATERIAL CHARACTERISTICS

PP Polypropylene is a polymer made by the polymerization of propylene. It is transparent and light in appearance, resistant to acids, alkalis, salts and many organic solvents below 80°. It is a UL approved material and meets FDA food contact standards.

Applicable temperature range: 13°C ~ 66°C

PPS It is a polyphenylene sulfide PPS filled with 40% glass reinforcement, which has high strength, high toughness, excellent heat and chemical resistance, good electrical properties and inherent flame retardancy, high strength and rigidity at high temperatures which ensures good load bearing properties.

Applicable temperature range: -50°C~150°C

PFA Copolymer made from a small amount of heptafluoropropyl trifluorovinyl ether and polytetrafluoroethylene. Melt bonding is improved while solution viscosity is reduced and there is no change in performance compared to polytetrafluoroethylene.

Applicable temperature range: -50°C ~ 100°C

PTFE Polytetrafluoroethylene, with typical excellent properties of gas plastic resin. It has good tensile properties, chemical resistance and low friction.

Applicable temperature range: -50°C ~ 100°C

ETFE It is a fluoropolymer with hydrolysis stability and weather resistance, excellent wear resistance and chemical resistance.

Applicable temperature range: -80°C ~ 150°C

PVDF Kynar® PVDF is a fluorinated thermoplastic homopolymer that complies with FDA and USP Class VI standard. It can be disinfected by gamma ray; the color will be changed to some extent if disinfected by high-dose gamma ray.

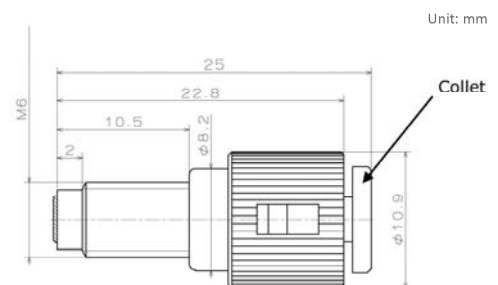
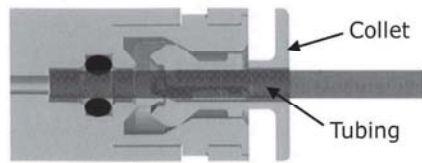
Applicable temperature range: -27°C ~ 107°C

PUSH-IN FITTINGS

For rigid tubing O.D. 2.0 mm



- Push-In Fittings for Life-Science applications.
- Tool-free connection - simply push in the tubing onto the connector.
- Easy (re-)connecting the tube without unscrewing the fitting using the push-in connection.
- Used for standard rigid tubing OD 2.0 mm.
- Fluid temperature up to 100°C
- Working pressure up to 7.0 bar at 20°C and 4.5 bar at 100°C.
- Wetted materials: PPS & FPM
- Thread: M6.



Product No.	Thread	Tubing Size O.D.	Color	Material
PFM6-20RF PPS	M6	2.0 mm	Natural	PPS

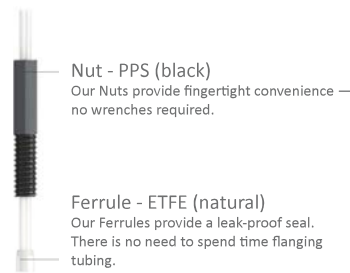
ANTI-TWIST FLANGELESS FITTINGS - TWO-PIECE SET

1/4-28 UNF flat bottom



The flangeless nut and the ferrule are a fixed product combination depending on the outside diameter of the rigid tubing. The tubing does not follow the rotation during screwing nut, which effectively eliminates the loosening of the fitting caused by the twisting of the tube.

- Need to use with special ETFE ferrule.
- Used for standard rigid tubing OD 1.6/2.0/2.5/3.0/3.2 mm.
- Thread: 1/4-28 UNF flat bottom.



Make sure the ferrule is oriented correctly! The narrow end of the ferrule should towards the nut.

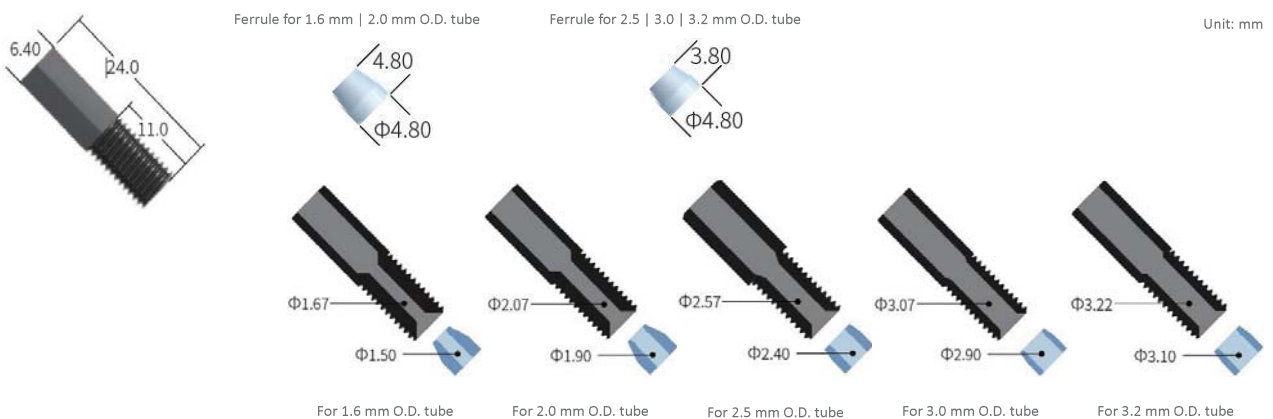
Application Note

Step 1. Slide the nut, followed by the ferrule, at least 3/16" (4.7625 mm) from the end of clean cut tubing.

Step 3. Finger tighten the fittings into the port until snug.

Step 2. Insert the assembly into the receiving port, pushing the tubing into the port until it bottoms out.

Step 4. After disassembling, the ferrules should be replaced in next assembly and connection.



Product No.	Thread	Tubing Size O.D.	Pull-off Strength	Pressure Rating	Material
B-RA-106001	1/4-28 UNF	1.6 mm	1.58 kgf	69.7 bar (1010 psi)	PPS+ETFE
B-RA-106002	1/4-28 UNF	2.0 mm	3.06 kgf	75.7 bar (1097 psi)	PPS+ETFE
B-RA-106003	1/4-28 UNF	2.5 mm	2.52 kgf	46 bar (667 psi)	PPS+ETFE
B-RA-106004	1/4-28 UNF	3.0 mm	4.90 kgf	50.8 bar (736 psi)	PPS+ETFE
B-RA-106005	1/4-28 UNF	3.2 mm	6.15 kgf	73.2 bar (1061 psi)	PPS+ETFE

FLANGELESS FITTINGS

For rigid tubing



- Standard fittings with straight threads.
- Tool-free assembly - simply slip the nut and ferrule on the tube, screwing them into the tube.
- Need to use with ETFE ferrule.
- Long-term working temperature range: -27°C ~ +107°C (PVDF+ETFE), -50°C ~ +150°C (PPS+ETFE).
- Used for standard rigid tubing OD 1.6/2.0/2.5/3.0/3.2 mm, easy and fast installation.
- Thread: 1/4-28 UNF flat bottom.



Nut - PPS (black) | PVDF (natural)
Our Nuts provide fingertight convenience — no wrenches required.

Ferrule - ETFE (natural)
Our Ferrules provide a leak-proof seal. There is no need to spend time flanging tubing.

- Make sure the locking ring is oriented correctly! The flattened end of the ring should face towards the nut with the narrow end of the ferrule towards the ring.

Application Note

Step 1. Slide the PPS | PVDF nut, followed by the ETFE ferrule, at least 3/16" (4.7625 mm) from the end of clean cut tubing.

Step 2. Insert the assembly into the receiving port, pushing the tubing into the port until it bottoms out.

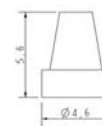
Step 3. Finger tighten the fittings into the port until snug.

Step 4. After several uses (especially at high pressure) the ferrules should be replaced.

Ferrule No.	Tubing Size O.D.	Material
B-FF-100010	1.6 mm	ETFE
B-FF-100011	2.0 mm	ETFE
B-FF-100012	2.5 mm	ETFE
B-FF-100013	3.0 mm	ETFE
B-FF-100014	3.2 mm	ETFE



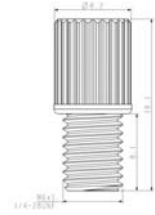
B-FF-100011
B-FF-100012
B-FF-100013
B-FF-100014



B-FF-100010

Unit: mm

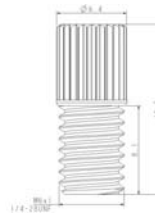
Flangeless Fitting 1/4-28 UNF



Unit: mm

Product No.	Thread	Tubing Size O.D.	Color	Material
B-FF-100001-PV-NA	1/4-28 UNF	1.6 mm	Natural	PVDF
B-FF-100001-PS-BK	1/4-28 UNF	1.6 mm	Black	PPS
B-FF-100002-PV-NA	1/4-28 UNF	2.0 mm 2.5 mm 3.0 mm 3.2 mm	Natural	PVDF
B-FF-100002-PS-BK	1/4-28 UNF	2.0 mm 2.5 mm 3.0 mm 3.2 mm	Black	PPS

Compact Flangeless Fitting 1/4-28 UNF



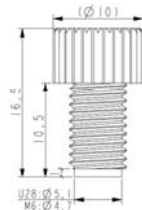
Unit: mm

Product No.	Thread	Tubing Size O.D.	Color	Material
B-FF-100004-PV-NA	1/4-28 UNF	1.6 mm	Natural	PVDF
B-FF-100004-PS-BK	1/4-28 UNF	1.6 mm	Black	PPS
B-FF-100003-PV-NA	1/4-28 UNF	2.0 mm 2.5 mm 3.0 mm 3.2 mm	Natural	PVDF
B-FF-100003-PS-BK	1/4-28 UNF	2.0 mm 2.5 mm 3.0 mm 3.2 mm	Black	PPS

Plug Fitting 1/4-28 UNF, M6



B-FP-100001



Unit: mm



B-FP-100002



Unit: mm

Product No.	Thread	Color	Material
B-FP-100001-PV-NA	1/4-28 UNF	Natural	PVDF
B-FP-100002-PS-BK	1/4-28 UNF	Black	PPS
B-FP-100003-PS-BK	M6	Black	PPS

PRE-TORQUE FLANGELESS FITTINGS

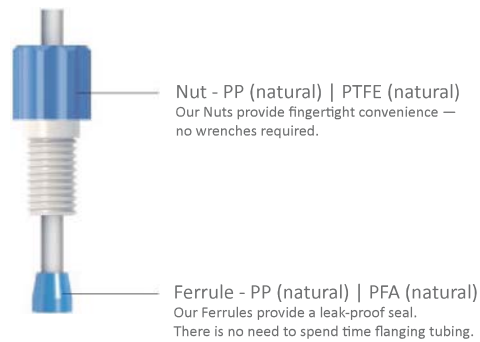
1/4-28 UNF flat bottom, M6



Pre-torque flangeless fittings enable safe and easy installation with defined torque. As the fitting is tightened, the resistance of the cap increases until the correct torque is reached, which is noticeable when the cap clicks. This feature enables users to manually tighten the fittings without the need for tools.

These screw connections can be reused several times and consist of two parts, the threaded nut and the ferrule.

- Available in PP and PTFE + PFA material combinations.
- Need to use with PP or PFA ferrule.
- Used for standard rigid tubing OD 1.6/2.0/2.5/3.0/3.2 mm
- Thread: 1/4-28 UNF flat bottom, M6.



- Make sure the ferrule is oriented correctly! The narrow end of the ferrule should towards the nut.

Application Note

Step 1. Slide the nut, followed by the ferrule, at least 3/16" (4.7625mm) from the end of clean cut tubing.

Step 2. Insert the assembly into the receiving port, pushing the tubing into the port until it bottoms out.

Step 3. Finger tighten the fittings into the port until snug.

Step 4. After disassembling, the ferrules should be replaced in next assembly and connection

Ferrule No.	Tubing Size O.D.	Material
B-RA-200005	1.6 mm	PP PFA
B-RA-200004	2.0 mm	PP PFA
B-RA-200003	2.5 mm	PP PFA
B-RA-200002	3.0 mm	PP PFA
B-RA-200001	3.2 mm	PP PFA



Ferrule for 1.6 mm O.D. tube

Unit: mm



Ferrule for 2.0 mm O.D. tube



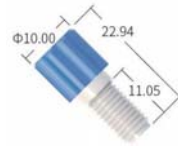
Ferrule for 2.5 mm | 3.0 mm | 3.2 mm O.D. tube

Use environment

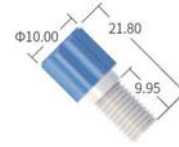
0.11 ~ 0.15 Nm - WT ≤ 0.5 mm at room temperature
 0.15 ~ 0.20 Nm - WT > 0.5 mm at room temperature
 0.20 ~ 0.25 Nm - Use temperature > 100°C, or pressure > 8kg



Pre-torque flangeless fittings - Waved



For 1.6 mm | 2.0 mm O.D. tube

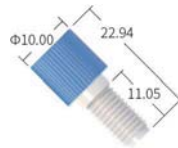


For 2.5 mm | 3.0 mm | 3.2 mm O.D. tube

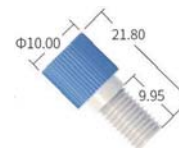
Unit: mm

Product No.	Thread	Tubing Size O.D.	Torque (Color)	Material
B-RA-102010	1/4-28 UNF	1.6 mm 2.0 mm	0.11 ~ 0.15 Nm (Blue) 0.15 ~ 0.20 Nm (Yellow) 0.20 ~ 0.25 Nm (Red)	PTFE PP
B-RA-102011	M6	1.6 mm 2.0 mm	0.11 ~ 0.15 Nm (Blue) 0.15 ~ 0.20 Nm (Yellow) 0.20 ~ 0.25 Nm (Red)	PTFE
B-RA-102004	1/4-28 UNF	2.5 mm 3.0 mm 3.2 mm	0.11 ~ 0.15 Nm (Blue) 0.15 ~ 0.20 Nm (Yellow) 0.20 ~ 0.25 Nm (Red)	PTFE PP
B-RA-102005	M6	2.5 mm 3.0 mm 3.2 mm	0.11 ~ 0.15 Nm (Blue) 0.15 ~ 0.20 Nm (Yellow) 0.20 ~ 0.25 Nm (Red)	PTFE PP

Pre-torque flangeless fittings - Knurled



For 1.6 mm | 2.0 mm O.D. tube

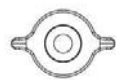


For 2.5 mm | 3.0 mm | 3.2 mm O.D. tube

Unit: mm

Product No.	Thread	Tubing Size O.D.	Torque (Color)	Material
B-RA-102006	1/4-28 UNF	1.6 mm 2.0 mm	0.11 ~ 0.15 Nm (Blue) 0.15 ~ 0.20 Nm (Yellow) 0.20 ~ 0.25 Nm (Red)	PTFE PP
B-RA-102007	M6	1.6 mm 2.0 mm	0.11 ~ 0.15 Nm (Blue)	PTFE PP
B-RA-102001	1/4-28 UNF	2.5 mm 3.0 mm 3.2 mm	0.11 ~ 0.15 Nm (Blue) 0.15 ~ 0.20 Nm (Yellow) 0.20 ~ 0.25 Nm (Red)	PTFE PP
B-RA-102002	M6	2.5 mm 3.0 mm 3.2 mm	0.11 ~ 0.15 Nm (Blue) 0.15 ~ 0.20 Nm (Yellow) 0.20 ~ 0.25 Nm (Red)	PTFE PP

Pre-torque flangeless fittings - Double-Winged



For 1.6 mm | 2.0 mm O.D. tube



For 2.5 mm | 3.0 mm | 3.2 mm O.D. tube

Unit: mm

Product No.	Thread	Tubing Size O.D.	Torque (Color)	Material
B-RA-102008	1/4-28 UNF	1.6 mm 2.0 mm	0.11 ~ 0.15 Nm (Blue) 0.15 ~ 0.20 Nm (Yellow) 0.20 ~ 0.25 Nm (Red)	PP
B-RA-102009	M6	1.6 mm 2.0 mm	0.11 ~ 0.15 Nm (Blue)	PTFE
B-RA-102003	1/4-28 UNF	2.5 mm 3.0 mm 3.2 mm	0.11 ~ 0.15 Nm (Blue) 0.15 ~ 0.20 Nm (Yellow) 0.20 ~ 0.25 Nm (Red)	PTFE PP

CAPILLARY FITTINGS

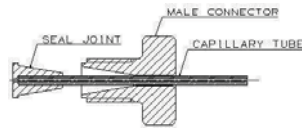
Custom fittings for glass and PEEK capillaries.



The fittings for capillaries made of glass or PEEK are made to customer specifications and offer an easy option for connection with microfluidic components such as pumps and valves.

The pressure range is between -900 and 7000 mbar, with a temperature range of 5 to 60°C as standard.

By simply screwing these fittings into a female connector, capillaries can be connected to other components. We would be happy to adapt the fittings to the sizes of your capillaries.



Examples of our standard models

Product No.	Thread	Capillary Outside Diameter (O.D.)	Capillary Inner Diameter (I.D.)	Inner Diameter Seal Joint Connection
CJM4-0375	M4	0.375 mm	0.1 - 0.15 mm	0.2 mm
CJM6-1/32	M6	0.79 mm (1/32 inch)	0.3 - 0.4 mm (0.012 - 0.016 inch)	0.4 mm

BARBED FITTINGS

F-Series

MATERIAL CHARACTERISTICS

PP Polypropylene is a polymer made by the polymerization of propylene. It is transparent and light in appearance, resistant to acids, alkalis, salts and many organic solvents below 80°. It is a UL approved material and meets FDA food contact standards.

Applicable temperature range: 13°C ~ 66°C

PVDF Kynar® PVDF is a fluorinated thermoplastic homopolymer that complies with FDA and USP Class VI standard. It can be disinfected by gamma ray; the color may change to some extent if disinfected by high-dose gamma ray.

Applicable temperature range: -27°C ~ 107°C

THREADED ADAPTERS BOTTOM SEALING

Rotating



Product No.	Thread	Tubing Size I.D.	Color	Material
B-FC-100001	M5	2.4 mm (3/32")	Natural	PP PVDF
B-FC-100002	1/4-28 UNF	1.6 mm (1/16")	Natural	PP PVDF
B-FC-100003	1/4-28 UNF	2.4 mm (3/32")	Natural	PP PVDF
B-FC-100004	1/4-28 UNF	3.2 mm (1/8")	Natural	PP PVDF
B-FC-100005	M6	4.0 mm (5/32")	Natural	PP PVDF
B-FC-100010	1/4-28 UNF	4.0 mm (5/32")	Natural	PP PVDF

BARBED FITTINGS

R-Series

MATERIAL SELECTION

Natural Kynar® - PVDF (NK7)

- USP Class VI
- Lot traceable
- Temperature range -62°C bis 107°C
- Pressure 17.9 bar at 21°C.

Kynar (PVDF) material can be autoclaved to 140 °C and meets USP Class VI requirements. Generally, chemically resistant to: most acids, salts, weak bases, halogenated solvents, alcohols, nuclear and UV radiation, oxidants, ozone and deionized water.

CrystaVu™ (CVU)

- USP Class VI
- Lot traceable

A clear transparent alternative to polycarbonate containing no Bisphenol-A (BPA) - will not deform at temperatures to 180°C. Autoclavable - enhanced characteristics compared with polycarbonate include: superior chemical resistance; no crazing with multiple autoclave cycles plus gamma and EtO Sterilization compatibility - USP Class VI, EU 2002/72/EC.

White Polypropylene (WP)

- Temperature range -22°C to 66°C
- Pressure 8.6 bar at 21°C

White Polypropylene has the same physical and chemical resistance properties as Natural Polypropylene, but is less expensive. WP fittings contain recycled runner material produced during virgin material, Natural Polypropylene production runs. White Polypropylene fittings are manufactured to the same tolerances and quality standards as our Natural Polypropylene fittings - WP is not a USP Class VI material and is not lot traceable.

Gray Kynar (PVDF)

- Temperature range -62°C to 107°C
- Pressure 17.9 bar at 21°C.

Gray PVDF fittings exhibit the same physical and chemical resistance properties as Natural Kynar®. PVDF fittings contain recycled runner material produced during virgin material, Natural Kynar® production runs. For applications that do not require lot traceability or a material that meets USP Class VI requirements, PVDF fittings represent an excellent value.

Non-Animal Derived Polypropylene (PP)

- USP Class VI
- Lot traceable
- Temperature range -22°C to 66°C
- Pressure 8.6 bar to 21°C

Polypropylene meets FDA requirements 21 CFR 177.1520(a)(3)(i) and (c)3.1a. PP material has a Drug Master File listing. It is radiation stable and is resistant to solvents, chemicals, water and other inorganic environments. It resists most strong mineral acids and bases; however, it is subject to attack by oxidizing agents.

Nylon - Natural (NN) & Medical (MN)

- Lot traceable
- Temperature range -45°C to 135°C
- Pressure 8.6 bar at 21°C

6/6 Nylons exhibit good tensile strength, moderate stiffness and high impact resistance. They're resistant to fuels, lubricants and many chemicals, but vulnerable to attack by phenols, strong acids and oxidizing agents. White Medical Nylon is made from the same resin as Natural Nylon, but has an FDA compliant white colorant added.

Black Nylon (BN)

- Lot traceable
- Temperature range -45°C to 135°C
- Pressure 10 bar at 21°C
- Automotive Approvals

Made from 6/6 nylon - exhibits strength, moderate stiffness, high service temperature, high impact resistance and tensile strength. Resistant to fuels, lubricants and many chemicals, but vulnerable to attack by phenols, strong acids and oxidizing agents. Used in fuel line, vacuum systems and general purpose applications: automotive industry approvals.

White Nylon (WN)

- Temperature range -45°C to 135°C
- Pressure 8.6 bar at 21°C

White Nylon has the same chemical and physical properties as Natural Nylon. WN fittings contain recycled runner material produced during virgin material, Natural Nylon production runs. White Nylon fittings are manufactured to the same tolerances and quality standards as our Natural Nylon fittings. Lot traceability certificates are not available for White Nylon.

BARBED FITTINGS

R-Series

MATERIAL SELECTION

Stainless Steel (SS)

- Lot traceable

Fittings produced with 316L alloy perform well in high temperature, harsh physical environments. 316L molybdenum bearing stainless steel has excellent impact and chemical resistance, but is less resistant than other types of stainless steel to highly oxidizing acids, such as nitric acid. The material has wide application in pharmaceutical and dairy processing and is used extensively in brewery, beverage and bioprocess industries.

Glass-Filled Black Nylon (GFBN)

- Lot traceable
- Temperature range -45°C to 135°C
- Pressure 10 bar at 21°C
- Heat Deflection Temperature - ASTM D64: 246 °C bei 18,2 bar (264 psi)
- Automotive Approvals

GFBN is a standard material used in automotive and marine under-the-hood, heater and coolant applications. GFBN's enhanced impact resistance results from inclusion of uniformly dispersed glass fibers that add strength to the resin: automotive industry approvals.

High Density Polyethylene (HDPE)

- Lot traceable

HDPE complies with FDA 21 CFR 177.1520 when used unmodified for the manufacture of food contact articles. HDPE has various applications for use in medical products and devices. It has excellent resistance to chemicals, but exhibits lower thermal resistance than other materials. It is a softer material than nylon or polypropylene and much softer than Kynar®.



COUPLERS

For flexible tubing

EQUAL - COUPLERS



Type Tubing Size I.D.	Product No.				
	STRAIGHT	TEES	90° ELBOWS	Y-FITTINGS	CROSS FITTINGS
1.6 mm (1/16")	B-EC-100003	B-ET-100003	B-EL-100003	B-EY-100003	B-EX-100003
2.4 mm (3/32")	B-EC-100001	B-ET-100001	B-EL-100001	B-EY-100001	B-EX-100001
3.2 mm (1/8")	B-EC-100007	B-ET-100007	B-EL-100007	B-EY-100007	B-EX-100007
4.0 mm (5/32")	B-EC-100006	B-ET-100006	B-EL-100006	B-EY-100006	B-EX-100006
4.8 mm (3/16")	B-EC-100008	B-ET-100008	B-EL-100008	B-EY-100008	B-EX-100008
6.4 mm (1/4")	B-EC-100009	B-ET-100009	B-EL-100009	B-EY-100009	B-EX-100009
8.0 mm (5/16")	B-EC-100010	B-ET-100010	B-EL-100010	B-EY-100010	B-EX-100010
9.5 mm (3/8")	B-EC-100011	B-ET-100011	B-EL-100011	B-EY-100011	B-EX-100011
12.7 mm (1/2")	B-EC-100012	B-ET-100012	B-EL-100012	B-EY-100012	B-EX-100012
16 mm (5/8")	B-EC-100002	B-ET-100002	B-EL-100002	B-EY-100002	•
19 mm (3/4")	B-EC-100004	B-ET-100004	B-EL-100004	B-EY-100004	•
25.4 mm (1")	B-EC-100005	B-ET-100005	B-EL-100005	B-EY-100005	•

REDUCTION - COUPLERS



STRAIGHT - REDUCTION

Tubing Size I.D.	Product No.										
	1.6 mm (1/16")	2.4 mm (3/32")	3.2 mm (1/8")	4.0 mm (5/32")	4.8 mm (3/16")	6.4 mm (1/4")	8.0 mm (5/16")	9.5 mm (3/8")	12.7 mm (1/2")	16.0 mm (5/8")	19.0 mm (3/4")
2.4 mm (3/32")	B-EC-100013	•	•	•	•	•	•	•	•	•	•
3.2 mm (1/8")	B-EC-100027	B-EC-100026	•	•	•	•	•	•	•	•	•
4.0 mm (5/32")	•	B-EC-100024	B-EC-100025	•	•	•	•	•	•	•	•
4.8 mm (3/16")	B-EC-100029	B-EC-100028	B-EC-100031	B-EC-100030	•	•	•	•	•	•	•
6.4 mm (1/4")	B-EC-100033	B-EC-100032	B-EC-100035	B-EC-100034	B-EC-100036	•	•	•	•	•	•
8.0 mm (5/16")	•	•	B-EC-100038	B-EC-100037	B-EC-100039	B-EC-100040	•	•	•	•	•
9.5 mm (3/8")	•	•	B-EC-100042	B-EC-100041	•	B-EC-100043	B-EC-100044	•	•	•	•
12.7 mm (1/2")	•	•	•	•	•	B-EC-100045	B-EC-100046	B-EC-100047	•	•	•
16.0 mm (5/8")	•	•	•	•	•	B-EC-100014	B-EC-100015	B-EC-100016	B-EC-100017	•	•
19.0 mm (3/4")	•	•	•	•	•	•	•	B-EC-100019	B-EC-100020	B-EC-100018	•
25.4 mm (1")	•	•	•	•	•	•	•	•	B-EC-100023	B-EC-100021	B-EC-100022



ELBOWS - REDUCTION

Tubing Size I.D.	Product No.					
	1.6 mm (1/16")	2.4 mm (3/32")	3.2 mm (1/8")	6.4 mm (1/4")	8.0 mm (5/16")	9.5 mm (3/8")
2.4 mm (3/32")	B-ER-100001	•	•	•	•	•
3.2 mm (1/8")	B-ER-100002	B-ER-100062	•	•	•	•
4.8 mm (3/16")	•	•	B-ER-100003	•	•	•
6.4 mm (1/4")	•	•	B-ER-100004	•	•	•
8.0 mm (5/16")	•	•	•	B-ER-100005	•	•
9.5 mm (3/8")	•	•	•	B-ER-100006	•	•
12.7 mm (1/2")	•	•	•	B-ER-100007	•	B-ER-100008



TEES - REDUCTION

Tubing Size I.D.	Product No.									
	1.6 mm (1/16")	2.4 mm (3/32")	3.2 mm (1/8")	4.0 mm (5/32")	4.8 mm (3/16")	6.4 mm (1/4")	8.0 mm (5/16")	9.5 mm (3/8")	12.7 mm (1/2")	16.0 mm (5/8")
1.6 mm (1/16")	•	B-ER-100028	B-ER-100030	•	•	•	•	•	•	•
3.2 mm (1/8")	B-ER-100039	B-ER-100038	•	B-ER-100040	B-ER-100041	B-ER-100042	•	•	•	•
4.0 mm (5/32")	•	•	•	•	•	•	•	B-ER-100036	•	•
6.4 mm (1/4")	•	B-ER-100044	B-ER-100046	•	B-ER-100047	•	•	B-ER-100048	•	B-ER-100045
8.0 mm (5/16")	•	•	•	•	•	•	•	•	•	•
9.5 mm (3/8")	•	•	•	B-ER-100050	•	B-ER-100051	•	•	•	•
12.7 mm (1/2")	•	•	•	•	•	B-ER-100053	B-ER-100054	B-ER-100055	•	•
16.0 mm (5/8")	•	•	•	•	•	•	B-ER-100026	B-ER-100027	•	•
19.0 mm (3/4")	•	•	•	•	•	•	•	B-ER-100031	B-ER-100032	B-ER-100029
25.4 mm (1")	•	•	•	•	•	•	•	•	B-ER-100035	B-ER-100034



Y-FITTINGS - REDUCTION

Tubing Size I.D.	Product No.						
	6.4 mm (1/4")	8.0 mm (5/16")	9.5 mm (3/8")	12.7 mm (1/2")	16.0 mm (5/8")	19.0 mm (3/4")	25.4 mm (1")
3.2 mm (1/8")	B-ER-100057	•	•	•	•	•	•
4.8 mm (3/16")	•	B-ER-100058	•	•	•	•	•
6.4 mm (1/4")	•	•	B-ER-100059	•	•	•	•
9.5 mm (3/8")	•	•	•	B-ER-100060	•	•	•
12.7 mm (1/2")	•	•	•	•	B-ER-100061	•	•
16.0 mm (5/8")	•	•	•	•	•	B-ER-100056	•
19.0 mm (3/4")	•	•	•	•	•	•	B-ER-100064

BARBED PLUGS



Product No.							
1.6 mm (1/16")	2.4 mm (3/32")	3.2 mm (1/8")	4.0 mm (5/32")	4.8 mm (3/16")	6.4 mm (1/4")	9.5 mm (3/8")	12.7 mm (1/2")
B-EP-100004	B-EP-100002	B-EP-100006	B-EP-100005	B-EP-100007	B-EP-100008	B-EP-100009	B-EP-100010

UNF, M6 THREADED ADAPTERS

UNF, M6 THREADED ADAPTERS



Thread Tubing Size I.D.	Product No.			
	10-32 UNF	10-32 Taper	1/4-28 UNF	M6X1
1.6 mm (1/16")	B-EA-100002	B-EA-100007	B-EA-100027	•
2.4 mm (3/32")	B-EA-100001	B-EA-100006	B-EA-100026	B-EA-100067
3.2 mm (1/8")	B-EA-100004	B-EA-100008	B-EA-100029	B-EA-100068
4.0 mm (5/32")	B-EA-100003	•	B-EA-100028	B-EA-100069
4.8 mm (3/16")	•	•	B-EA-100030	•

UNF, M6 THREADED ELBOWS



Thread Tubing Size I.D.	Product No.		
	10-32 UNF	10-32 Taper	1/4-28 UNF
1.6 mm (1/16")	B-EL-100135	•	•
2.4 mm (3/32")	B-EL-100013	•	•
3.2 mm (1/8")	B-EL-100014	B-EL-100016	B-EL-100023
4.8 mm (3/16")	•	•	B-EL-100136

UNF THREADED PLUGS



Thread	Product No.	
	10-32 UNF	1/4-28 UNF
	B-EP-100011	B-EP-100013

NPT THREADED ADAPTERS

NPT THREADED ADAPTERS



Thread Tubing Size I.D.	Product No.						
	1/6" NPT	1/8" NPT	1/4" NPT	3/8" NPT	1/2" NPT	3/4" NPT	1" NPT
3.2 mm (1/8")	•	B-EA-100033	B-EA-100044	•	•	•	•
4.0 mm (5/32")	•	B-EA-100032	B-EA-100043	•	•	•	•
4.8 mm (3/16")	B-EA-100024	B-EA-100034	B-EA-100045	•	•	•	•
6.4 mm (1/4")	B-EA-100025	B-EA-100035	B-EA-100046	B-EA-100059	B-EA-100072	B-EA-100015	•
8.0 mm (5/16")	•	B-EA-100076	B-EA-100047	B-EA-100060	B-EA-100073	•	•
9.5 mm (3/8")	•	B-EA-100036	B-EA-100048	B-EA-100061	B-EA-100074	B-EA-100016	•
12.7 mm (1/2")	•	•	B-EA-100049	B-EA-100062	B-EA-100075	B-EA-100017	•
16 mm (5/8")	•	•	•	•	B-EA-100070	B-EA-100012	•
19 mm (3/4")	•	•	•	•	B-EA-100071	B-EA-100013	•
25.4 mm (1")	•	•	•	•	•	B-EA-100014	B-EA-100031

NPT THREADED ELBOWS



Thread Tubing Size I.D.	Product No.					
	1/8" NPT	1/4" NPT	3/8" NPT	1/2" NPT	3/4" NPT	1" NPT
1.6 mm (1/16")	B-EL-100138	•	•	•	•	•
2.4 mm (3/32")	B-EL-100026	•	•	•	•	•
3.2 mm (1/8")	B-EL-100028	B-EL-100040	•	•	•	•
4.0 mm (5/32")	B-EL-100027	B-EL-100039	•	•	•	•
4.8 mm (3/16")	B-EL-100029	B-EL-100041	•	•	•	•
6.4 mm (1/4")	B-EL-100030	B-EL-100042	B-EL-100053	B-EL-100063	B-EA-100020	•
8.0 mm (5/16")	B-EL-100031	B-EL-100043	B-EL-100054	•	•	•
9.5 mm (3/8")	B-EL-100032	B-EA-100044	B-EL-100055	B-EL-100064	B-EA-100021	•
12.7 mm (1/2")	•	B-EA-100045	B-EL-100056	B-EL-100065	B-EA-100022	•
16 mm (5/8")	•	•	•	B-EL-100061	B-EA-100017	•
19 mm (3/4")	•	•	•	B-EL-100062	B-EA-100018	B-EA-100024
25.4 mm (1")	•	•	•	•	B-EA-100019	B-EA-100025

NPT THREADED TEES



Thread Tubing Size I.D.	Product No.					
	1/8" NPT	1/4" NPT	3/8" NPT	1/2" NPT	3/4" NPT	1" NPT
3.2 mm (1/8")	B-ET-100021	B-ET-100030	•	•	•	•
4.0 mm (5/32")	B-ET-100020	B-ET-100029	•	•	•	•
4.8 mm (3/16")	B-ET-100022	B-ET-100031	•	•	•	•
6.4 mm (1/4")	B-ET-100023	B-ET-100032	B-ET-100042	B-ET-100052	B-ET-100015	•
8.0 mm (5/16")	B-ET-100024	B-ET-100033	B-ET-100043	•	•	•
9.5 mm (3/8")	B-ET-100025	B-ET-100034	B-ET-100044	B-ET-100053	B-ET-100016	•
12.7 mm (1/2")	•	B-ET-100035	B-ET-100045	B-ET-100054	B-ET-100017	•
16 mm (5/8")	•	•	•	B-ET-100050	B-ET-100013	•
19 mm (3/4")	•	•	•	B-ET-100051	B-ET-100055	B-ET-100018
25.4 mm (1")	•	•	•	•	B-ET-100014	B-ET-100019

NPT THREADED CONNECTORS



Thread	Product No.					
	1/8" NPT	1/4" NPT	3/8" NPT	1/2" NPT	3/4" NPT	1" NPT
	B-EN-100004	B-EN-100005	B-EN-100006	B-EN-100007	B-EN-100001	B-EN-100003

NPT THREADED REDUCTION



Thread	Product No.			
	1/8" NPT	1/4" NPT	3/8" NPT	3/4" NPT
1/4" NPT	B-ER-100020	•	•	•
3/8" NPT	B-ER-100021	B-ER-100022	•	•
1/2" NPT	B-ER-100023	B-ER-100024	B-ER-100025	•
1" NPT	•	•	•	B-ER-100019

NPT THREADED PLUGS



Thread	Product No.					
	1/8" NPT	1/4" NPT	3/8" NPT	1/2" NPT	3/4" NPT	1" NPT
	B-EP-100075	B-EP-100076	B-EP-100077	B-EP-100018	B-EP-100012	B-EP-100014

BSPT THREADED ADAPTERS

BSPT THREADED ADAPTERS



Thread Tubing Size I.D.	Product No.		
	1/8" BSPT	1/4" BSPT	3/8" BSPT
3.2 mm (1/8")	B-EA-100038	B-EA-100051	•
4.0 mm (5/32")	B-EA-100037	B-EA-100050	•
4.8 mm (3/16")	•	B-EA-100052	•
6.4 mm (1/4")	B-EA-100040	B-EA-100053	B-EA-100063
8.0 mm (5/16")	B-EA-100041	B-EA-100054	B-EA-100064
9.5 mm (3/8")	B-EA-100042	B-EA-100055	B-EA-100065
12.7 mm (1/2")	•	B-EA-100056	B-EA-100066

BSPT THREADED ELBOWS



Thread Tubing Size I.D.	Product No.		
	1/8" BSPT	1/4" BSPT	3/8" BSPT
3.2 mm (1/8")	B-EL-100034	B-EL-100047	•
4.0 mm (5/32")	B-EL-100033	B-EL-100046	•
4.8 mm (3/16")	•	B-EL-100048	•
6.4 mm (1/4")	B-EL-100036	B-EL-100049	B-EL-100057
8.0 mm (5/16")	B-EL-100037	B-EL-100050	B-EL-100058
9.5 mm (3/8")	B-EL-100038	B-EL-100051	B-EL-100059
12.7 mm (1/2")	•	B-EL-100052	B-EL-100060

BSPT THREADED TEES



Thread Tubing Size I.D.	Product No.		
	1/8" BSPT	1/4" BSPT	3/8" BSPT
4.0 mm (5/32")	B-ET-100026	B-ET-100036	•
4.8 mm (3/16")	•	B-ET-100037	•
6.4 mm (1/4")	B-ET-100027	B-ET-100038	B-ET-100046
8.0 mm (5/16")	•	B-ET-100039	B-ET-100047
9.5 mm (3/8")	B-ET-100028	B-ET-100040	B-ET-100048
12.7 mm (1/2")	•	B-ET-100041	B-ET-100049

BSPT THREADED PLUGS



Thread	Product No.		
	1/8" BSPT	1/4" BSPT	3/8" BSPT
	B-EP-100015	B-EP-100016	B-EP-100017

BULKHEAD & PANEL MOUNTS

STRAIGHT 10-32 UNF - BULKHEAD



Tubing Size I.D. Thread	Product No.			
	1.6 mm (1/16")	2.4 mm (3/32")	3.2 mm (1/8")	4.8 mm (3/16")
10-32 UNF	B-EB-100023	B-EB-100001	B-EB-100002	B-EB-100005

ELBOWS - BULKHEAD



Tubing Size I.D. Thread	Product No.	
	3.2 mm (1/8")	4.8 mm (3/16")
10-32 UNF	B-EB-100016	•
5/16-24 UNF	•	B-EB-100017

STRAIGHT 1/4" NPSM ADAPTERS - BULKHEAD



Tubing Size I.D.	Product No.						
	6.4 x 6.4 mm (1/4" x 1/4")	8.0 x 6.4 mm (5/16" x 1/4")	8.0 x 8.0 mm (5/16" x 5/16")	9.5 x 6.4 mm (3/8" x 1/4")	9.5 x 8.0 mm (3/8" x 5/16")	9.5 x 9.5 mm (3/8" x 3/8")	4.8 x 4.8 mm (3/16" x 3/16")
	B-EB-100010	B-EB-100011	B-EB-100012	B-EB-100013	B-EB-100014	B-EB-100015	B-EB-100005

PANEL MOUNT ADAPTERS



Tubing Size I.D. Thread	Product No.							
	1.6 mm (1/16")	2.4 mm (3/32")	4.0 mm (5/32")	4.8 mm (3/16")	6.4 mm (1/4")	8.0 mm (5/16")	9.5 mm (3/8")	12.7 mm (1/2")
1/4-28 UNF	B-EP-100036	B-EP-100035	B-EP-100037	B-EP-100038	•	•	•	•
1/4" NPSM	•	•	B-EP-100040	B-EP-100041	B-EP-100042	B-EP-100043	B-EP-100044	B-EP-100045
1/8" NPSM	•	•	•	•	B-EP-100039	•	•	•

PANEL MOUNT NUTS



Thread	Product No.			
	10-32 UNF	1/4-28 UNF	5/16-24 UNF	1/4" NPSF
	B-EE-100022	B-EE-100025	B-EE-100023	B-EE-100024

LUER CONNECTORS

THREADED FEMALE LUER



Type	Thread	Product No.		
	Female	1/4-28UNF	B-EL-100140	10-32 Taper B-EL-100141

LUER - SOFT TOUCH



Female

Male

Type	Tubing Size I.D.	Product No.				
	Female	1.6 mm (1/16")	2.4 mm (3/32")	3.2 mm (1/8")	4.0 mm (5/32")	4.8 mm (3/16")
Male	B-EL-100076	B-EL-100075	B-EL-100078	B-EL-100077	B-EL-100079	B-EL-100080
	B-EL-100090	B-EL-100089	B-EL-100092	B-EL-100091	B-EL-100093	B-EL-100094

FEMALE LUER ELBOWS



Type	Tubing Size I.D.	Product No.	
	Female	3/32"	B-EL-100145

FEMALE LUER PANEL MOUNT



Type	Tubing Size I.D.	Product No.		
	Female	3/32"	B-EL-100083	1/16" B-EL-100084

COUPLERS



Female Luer Elbow
B-EL-100143



Female Luer (2x) Tee to Male
B-EL-100147



Female Luer Tee
B-EL-100148



Luer Coupler
B-EL-100081

STATIONARY MALE LUER

Tubing Size I.D. Type	Product No.					
	1.6 mm (1/16")	2.4 mm (3/32")	3.2 mm (1/8")	4.0 mm (5/32")	4.8 mm (3/16")	6.4 mm (1/4")
Male	B-EL-100116	B-EL-100115	B-EL-100118	B-EL-100117	B-EL-100119	B-EL-100120

STATIONARY MALE LUER SET WITH NUT*

Nut and body are locked and rotate as a single unit.



Tubing Size I.D. Type	Product No.					
	1.6 mm (1/16")	2.4 mm (3/32")	3.2 mm (1/8")	4.0 mm (5/32")	4.8 mm (3/16")	6.4 mm (1/4")
Male	B-EL-100122	B-EL-100121	B-EL-100124	B-EL-100123	B-EL-100125	B-EL-100126

ROTATING MALE LUER

Tubing Size I.D. Type	Product No.					
	1.6 mm (1/16")	2.4 mm (3/32")	3.2 mm (1/8")	4.0 mm (5/32")	4.8 mm (3/16")	6.4 mm (1/4")
Male	B-EL-100097	B-EL-100096	B-EL-100199	B-EL-100198	B-EL-100100	B-EL-100101

ROTATING MALE LUER SET WITH NUT*

Nut and body rotate independently during connection.



Tubing Size I.D. Type	Product No.					
	1.6 mm (1/16")	2.4 mm (3/32")	3.2 mm (1/8")	4.0 mm (5/32")	4.8 mm (3/16")	6.4 mm (1/4")
Male	B-EL-100103	B-EL-100102	B-EL-100105	B-EL-100104	B-EL-100106	B-EL-100107



Snap Lock Nut*
B-EL-100144

MALE SLIP LUERS TO BARB



Tubing Size I.D. Type	Product No.					
	1.6 mm (1/16")	2.4 mm (3/32")	3.2 mm (1/8")	4.0 mm (5/32")	4.8 mm (3/16")	6.4 mm (1/4")
Male	B-EL-100110	B-EL-100109	B-EL-100112	B-EL-100111	B-EL-100113	B-EL-100114



Luer Slip Elbow
B-EL-100134

* other colors on request

WINGED LUERS



Female Luer Winged
0.120" to 0.150"
B-EL-100087



Male Luer Winged
0.120" to 0.150"
B-EL-100131



Female Luer Winged
0.154" to 0.192"
B-EL-100088



Male Luer Winged
0.154" to 0.192"
B-EL-100032

LARGE BORE LUERS



Female



Male

Type	Product No.		
	4.8 mm (3/16")	6.4 mm (1/4")	8.0 mm (5/16")
Male	B-EL-100072	B-EL-100073	B-EL-100074
Female	B-EL-100067	B-EL-100068	B-EL-100069

LUER - PLUGS



Luer Female Plug
B-EL-100082



Luer Male Plug
B-EL-100095



Large Bore Female Plug
B-EL-100070



Large Bore Male Plug
B-EL-100071



Luer Locking Plug*
B-EL-100127



Rotating Luer Plug*
B-EL-100108



Luer Slip Male Plug
B-EL-100129

LUER - LOCK NUTS



Luer Lock Nut*
B-EN-100002

* other colors on request

TUBING & CAPILLARY

MATERIAL CHARACTERISTICS

PEEK



- High Accuracy PEEK capillary
- Inner and outer diameters tolerances: ± 0.03 mm
- Environmental temperature: +260°C
- Pressure up to 343 bar (depending on wall thickness)

TPE121



Autoclavable · USP Class VI
Biomedical · Pharmaceutical · Bioprocess
Tubing

- Peristaltic pump tubing
- Ultra-low extractables / leachables
- ISO 10993-5, ISO 10993-4, USP 661, BPOG tested
- Low gas and oxygen permeability

316 Stainless Steel



- High-precision stainless steel capillary
- Inner and outer diameters tolerances: ± 0.03 mm
- Special cutting process so that there is no damage or deformation
- Pressure up to 800 bar

TPE135



Autoclavable · USP Class VI
Biomedical · Pharmaceutical · Bioprocess
Tubing

- Peristaltic pump tubing
- Silicone Alternative
- Ultra-low extractables / leachables
- ISO 10993-5, ISO 10993-4, USP 661, BPOG tested
- Low gas and oxygen permeability

PTFE & FEP



- FDA & USP Class VI compliant
Biomedical - Life-Science
- Very smooth internal surfaces
 - Tight dimensional tolerances
 - Excellent chemical resistance
 - Reduced gas diffusion

Platinum-cured Silicone



Autoclavable · USP Class VI (Biosicone)
Biomedical · Pharmaceutical · Bioprocess
Tubing (Biosicone)

- Peristaltic pump tubing
- Ultra-low extractables / leachables
- Ultra-smooth inner surface
- Good flexibility and a wide temperature range
- FDA regulations 21 CFR 177.2600 Certified, NSF 51 Certified (Biosicone)

EJ Prene



Autoclavable · USP Class VI
Biomedical · Pharmaceutical · Bioprocess
Tubing

- Peristaltic pump tubing
- Very good chemical resistance
- Ultra-low extractables / leachables
- ISO 10993-5, ISO 10993-4, USP 661, BPOG tested
- Low gas and oxygen permeability

PEEK CAPILLARY, STAINLESS STEEL PIPES & SAMPLE LOOPS

Chromatography Tubing (PEEK)



The PEEK capillaries are characterized by an extremely smooth inner surface and high accuracy.

- High Accuracy Liquid Chromatography PEEK Tubing.
- Environmental temperature: +260°C.
- Inner and outer diameters tolerances: ± 0.03 mm.
- Outer diameter: 1.6 mm (1/16")

Product No.	Tubing Size I.D.	Tubing Size O.D.	Wall Thickness W.T.	Operating Pressure	Material
B-TPK-01316	0.13 mm	1.6 mm (1/16")	0.73 mm	343 bar (4974 psi)	PEEK
B-TPK-01816	0.18 mm	1.6 mm (1/16")	0.70 mm	343 bar (4974 psi)	PEEK
B-TPK-02516	0.25 mm	1.6 mm (1/16")	0.67 mm	343 bar (4974 psi)	PEEK
B-TPK-05016	0.5 mm	1.6 mm (1/16")	0.55 mm	343 bar (4974 psi)	PEEK
B-TPK-07516	0.75 mm	1.6 mm (1/16")	0.42 mm	274 bar (3974 psi)	PEEK
B-TPK-10016	1.0 mm	1.6 mm (1/16")	0.30 mm	165 bar (2393 psi)	PEEK

Stainless Steel Tubing



The stainless steel capillary pipes are manufactured using a special cutting process so that there is no damage or deformation of the tubes on the cut surfaces. The surface is polished and flat.

- High-precision stainless steel capillary tubes for chromatography.
- Max. Pressure: 800 bar.
- Outer diameter: 1.6 mm (1/16").
- Inner and outer diameters tolerances: ± 0.03 mm.
- Stainless-steel 316

Product No.	Tubing Size I.D.	Tubing Size O.D.	Operating Pressure	Material
B-TSS-02516	0.25 mm	1.6 mm (1/16")	800 bar (11603 psi)	316 Stainless Steel
B-TSS-05016	0.50 mm	1.6 mm (1/16")	800 bar (11603 psi)	316 Stainless Steel
B-TSS-07516	0.75 mm	1.6 mm (1/16")	800 bar (11603 psi)	316 Stainless Steel
B-TSS-10016	1.0 mm	1.6 mm (1/16")	800 bar (11603 psi)	316 Stainless Steel

Stainless Steel Sample loops

- In customer-specific lengths
- max. pressure: 800 bar
- Outer diameter: 1.6 mm (1/16")
- Inner and outer diameter tolerances: ± 0.03 mm
- Inner diameter: 0.25 mm, 0.50 mm, 0.75 mm, 1.0 mm
- Stainless-steel 316



Contact us for customized solutions.

PTFE & FEP TUBING

FDA & USP Class VI compliant



Product Features:

- Good optical clarity (96% UV transmission)
- Continuous operating temperature:
-51 - 50°C (FEP)
-100 - 150°C (PTFE)
- Very smooth internal surfaces
- Reduced gas diffusion
- Excellent chemical resistance
- Ideal for thermoforming
- Tight dimensional tolerances
- Biocompatible
- FDA & USP Class VI compliant
- Gamma & ETO sterilizable

Note: The above data were measured at room temperature 20°C, at atmospheric pressure and the test fluid was a neutral liquid.

Product No.	Tubing Size I.D.	Tubing Size O.D.	Wall Thickness W.T.	Material
B-RT-100001-0816	0.8 mm	1.6 mm	0.4 mm	PTFE
B-RT-100003-1020	1.0 mm	2.0 mm	0.5 mm	PTFE
B-RT-100004-1525	1.5 mm	2.5 mm	0.5 mm	PTFE
B-RT-100007-1632	1.6 mm	3.2 mm	0.8 mm	PTFE
B-RT-100006-2030	2.0 mm	3.0 mm	0.5 mm	PTFE
B-RT-100002-2040	2.0 mm	4.0 mm	1.0 mm	PTFE
B-RT-100009-2232	2.175 mm	3.175 mm	0.5 mm	PTFE
B-RT-100008-3040	3.0 mm	4.0 mm	0.5 mm	PTFE
B-RT-100013-3248	3.2 mm	4.8 mm	0.8 mm	PTFE
B-RT-100011-4060	4.0 mm	6.0 mm	1.0 mm	PTFE
B-RT-100010-4363	4.35 mm	6.35 mm	1.0 mm	PTFE
B-RT-100012-5080	5.0 mm	8.0 mm	1.5 mm	PTFE
B-RT-101016-0516	0.5 mm	1.6 mm	0.55 mm	FEP
B-RT-101001-0816	0.8 mm	1.6 mm	0.4 mm	FEP
B-RT-101003-1020	1.0 mm	2.0 mm	0.5 mm	FEP
B-RT-101015-1230	1.2 mm	3.0 mm	0.9 mm	FEP
B-RT-101004-1525	1.5 mm	2.5 mm	0.5 mm	FEP
B-RT-101007-1632	1.6 mm	3.2 mm	0.8 mm	FEP
B-RT-101006-2030	2.0 mm	3.0 mm	0.5 mm	FEP
B-RT-101002-2040	2.0 mm	4.0 mm	1.0 mm	FEP
B-RT-101009-2232	2.175 mm	3.175 mm	0.5 mm	FEP
B-RT-101014-2640	2.65 mm	4.0 mm	0.675 mm	FEP
B-RT-101008-3040	3.0 mm	4.0 mm	0.5 mm	FEP
B-RT-101013-3248	3.2 mm	4.8 mm	0.8 mm	FEP
B-RT-101011-4060	4.0 mm	6.0 mm	1.0 mm	FEP
B-RT-101010-4363	4.35 mm	6.35 mm	1.0 mm	FEP
B-RT-101017-6080	6.0 mm	8.0 mm	1.0 mm	FEP

Customized tube sizes on request.

EJ PRENE-TUBING

EJ Prene is designed for peristaltic pump applications offering durability with excellent pump life - reducing production downtime due to tube failure. Lightweight, EJ Prene tubing is flexible with very good chemical compatibility and can be used in a wide range of applications. This high-performance elastomer exhibits similar properties as rubber.

Product Features:

- Superior Performance in Peristaltic Pumps
- Precise Flow Rate
- Opaque to visible and UV light
- Soft and flexible - 70 Shore A
- High Chemical Resistance: Compatible with most CIP solutions and SIP
- Material Certificate and Lot Traceability
- Low gas and oxygen permeability
- Ultra-low Extractables / Leachables
- Meets USP Class VI
- USP 661 Compliant
- ISO 10993-4 – non-hemolytic
- ISO 10993-5 – non-cytotoxic
- Non-animal derived – BSE/TSE compliant
- Contains no DEHP phthalates or plasticizers



Sterilization:

- E-beam/Gamma 25 to 45 kGy, no deficiencies, may color shift at higher doses.
- Ethylene Oxide (ETO), no issues, can safely be used.
- Autoclave Up to 135°C - Multiple autoclave cycles can be re-sterilized and reused.

Product No.	Tubing Size I.D.	Tubing Size O.D.	Wall Thickness W.T.	Operating Pressure
EJP5-1.5	0.8 mm (1/32")	2.4 mm (3/32")	0.8 mm (1/32")	3.52 bar (51 psi)
EJP1-2	1.6 mm (1/16")	3.2 mm (1/8")	0.8 mm (1/32")	2.41 bar (35 psi)
EJP1.5-2.5	2.4 mm (3/32")	4.0 mm (5/32")	0.8 mm (1/32")	1.79 bar (26 psi)
EJP2-3	3.2 mm (1/8")	4.8 mm (3/16")	0.8 mm (1/32")	1.45 bar (21 psi)
EJP2-4	3.2 mm (1/8")	6.4 mm (1/4")	1.6 mm (1/16")	2.41 bar (35 psi)
EJP3-4	4.8 mm (3/16")	6.4 mm (1/4")	0.8 mm (1/32")	0.97 bar (14 psi)
EJP3-5	4.8 mm (3/16")	8.0 mm (5/16")	1.6 mm (1/16")	1.72 bar (25 psi)
EJP3-6	4.8 mm (3/16")	9.5 mm (3/8")	2.4 mm (3/32")	2.28 bar (33 psi)
EJP4-6	6.4 mm (1/4")	9.5 mm (3/8")	1.6 mm (1/16")	2.07 bar (30 psi)
EJP4-7	6.4 mm (1/4")	11.2 mm (7/16")	2.4 mm (3/32")	1.79 bar (26 psi)
EJP4-8	6.4 mm (1/4")	12.7 mm (1/2")	3.2 mm (1/8")	2.14 bar (31 psi)
EJP5-7	8.0 mm (5/16")	11.2 mm (7/16")	1.6 mm (1/16")	1.24 bar (18 psi)
EJP6-8	9.5 mm (3/8")	12.7 mm (1/2")	1.6 mm (1/16")	0.90 bar (13 psi)
EJP6-10	9.5 mm (3/8")	16 mm (5/8")	3.2 mm (1/8")	1.66 bar (24 psi)
EJP8-12	12.7 mm (1/2")	19 mm (3/4")	3.2 mm (1/8")	1.38 bar (20 psi)

Customized sizes on request

TPE121-TUBING - SHORE-A 54



TPE121-Tubing has been developed to meet the critical demands of bioprocess, medical and laboratory applications. It is flexible, a good alternative to silicone and an excellent choice for the use in peristaltic pumps and pinch valves applications. Sterilized by Ethylene Oxide (EtO), Gamma resistance to 45 kGy, Autoclave to 121°C, temperature range -50°C to 121°C.

Product Features:

- Superior Bio Compatibility
- Extremely Flexible with excellent resilience and bend radius – 54 Shore A
- Ultra-Pure Medical Grade
- Ultra-low Extractables / Leachables
- USP 661 Compliant
- ISO 10993-5 – Non-cytotoxic
- ISO 10993-4 – Non-hemolytic
- PVC-Free – No DEHP Additives
- Low Gas and Oxygen Permeability
- No Halogens or Phthalates
- Low Protein Binding
- Non-pyrogenic Material
- Thermally Weldable
- Non-animal derived – BSE/TSE compliant
- Material Certificate and Lot Traceability

Product No.	Tubing Size I.D.	Tubing Size O.D.	Wall Thickness W.T.	Operating Pressure
TPE121-5-1.5	0.8 mm (1/32")	2.4 mm (3/32")	0.8 mm (1/32")	0.80 bar (30 psi)
TPE121-1mm-2mm	1.0 mm	2.0 mm	0.5 mm	•
TPE121-1-2	1.6 mm (1/16")	3.2 mm (1/8")	0.8 mm (1/32")	1.41 bar (20 psi)
TPE121-2mm-4mm	2.0 mm	4.0 mm	1.0 mm	•
TPE121-1.5-2.5	2.4 mm (3/32")	4.0 mm (5/32")	0.8 mm (1/32")	1.03 bar (15 psi)
TPE121-2-3	3.2 mm (1/8")	4.8 mm (3/16")	0.8 mm (1/32")	0.79 bar (12 psi)
TPE121-2-4	3.2 mm (1/8")	6.4 mm (1/4")	1.6 mm (1/16")	1.31 bar (19 psi)
TPE121-3-4	4.8 mm (3/16")	6.4 mm (1/4")	0.8 mm (1/32")	0.61 bar (9 psi)
TPE121-3-5	4.8 mm (3/16")	8.0 mm (5/16")	1.6 mm (1/16")	0.95 bar (14 psi)
TPE121-3-6	4.8 mm (3/16")	9.5 mm (3/8")	2.4 mm (3/32")	1.31 bar (19 psi)
TPE121-4-6	6.4 mm (1/4")	9.5 mm (3/8")	1.6 mm (1/16")	0.73bar (11 psi)
TPE121-4-7	6.4 mm (1/4")	11.2 mm (7/16")	2.4 mm (3/32")	1.03 bar (15 psi)
TPE121-4-8	6.4 mm (1/4")	12.7 mm (1/2")	3.2 mm (1/8")	1.19 bar (17 psi)
TPE121-5-7	8.0 mm (5/16")	11.2 mm (7/16")	1.6 mm (1/16")	0.62 bar (9 psi)
TPE121-5-8	8.0 mm (5/16")	12.7 mm (1/2")	2.4 mm (3/32")	•
TPE121-6-8	9.5 mm (3/8")	12.7 mm (1/2")	1.6 mm (1/16")	0.58bar (8 psi)
TPE121-6-9	9.5 mm (3/8")	14.3 mm (9/16")	2.4 mm (3/32")	•
TPE121-6-10	9.5 mm (3/8")	16.0 mm (5/8")	3.2 mm (1/8")	0.89 bar (13 psi)
TPE121-8-12	12.7 mm (1/2")	19.0 mm (3/4")	3.2 mm (1/8")	0.72 bar (10 psi)
TPE121-10-14	16.0 mm (5/8")	22.2 mm (7/8")	3.2 mm (1/8")	0.60 bar (9 psi)
TPE121-12-16	19.0 mm (3/4")	25.4 mm (1")	3.2 mm (1/8")	0.55 bar (8 psi)
TPE121-12-20	19.0 mm (3/4")	31.75 mm (1 1/4")	3.2 mm (1/8")	•
TPE121-16-20	25.4 mm (1")	31.75 mm (1 1/4")	3.2 mm (1/8")	0.42 bar (6 psi)

Customized sizes on request

TPE135-TUBING - SHORE-A 68

TPE135-Tubing has been developed to meet the critical demands of bioprocess, medical and laboratory applications. This formulated TPE (thermoplastic elastomer) tubing is an excellent alternative to silicone. It is durable and an excellent choice for the use in peristaltic pumps applications. Sterilized by Ethylene Oxide (EtO), Gamma resistance to 45 kGy, Autoclave to 135°C, temperature range -80°C to 135°C.



Product Features:

- Superior Bio Compatibility
- Extremely Flexible with excellent resilience and bend radius – 68 Shore A
- Ultra-Pure Medical Grade
- Ultra-low Extractables / Leachables
- USP 661 Compliant
- ISO 10993-5 – Non-cytotoxic
- ISO 10993-4 – Non-hemolytic
- PVC-Free – No DEHP Additives
- Low Gas and Oxygen Permeability
- No Halogens or Phthalates
- Low Protein Binding
- Non-pyrogenic Material
- Thermally Weldable
- Non-animal derived – BSE/TSE compliant
- Material Certificate and Lot Traceability

Product No.	Tubing Size I.D.	Tubing Size O.D.	Wall Thickness W.T.	Operating Pressure
TPE135-5-1.5	0.8 mm (1/32")	2.4 mm (3/32")	0.8 mm (1/32")	3.38 bar (49 psi)
TPE135-1mm-2mm	1.0 mm	2.0 mm	0.5 mm	•
TPE135-1-2	1.6 mm (1/16")	3.2 mm (1/8")	0.8 mm (1/32")	2.25 bar (33 psi)
TPE135-2mm-4mm	2.0 mm	4.0 mm	1.0 mm	•
TPE135-1.5-2.5	2.4 mm (3/32")	4.0 mm (5/32")	0.8 mm (1/32")	1.73 bar (25 psi)
TPE135-2-3	3.2 mm (1/8")	4.8 mm (3/16")	0.8 mm (1/32")	1.20 bar (18 psi)
TPE135-2-4	3.2 mm (1/8")	6.4 mm (1/4")	1.6 mm (1/16")	2.35bar (34 psi)
TPE135-3-4	4.8 mm (3/16")	6.4 mm (1/4")	0.8 mm (1/32")	0.92 bar (13 psi)
TPE135-3-5	4.8 mm (3/16")	8.0 mm (5/16")	1.6 mm (1/16")	1.59 bar (23 psi)
TPE135-3-6	4.8 mm (3/16")	9.5 mm (3/8")	2.4 mm (3/32")	2.30 bar (33 psi)
TPE135-4-6	6.4 mm (1/4")	9.5 mm (3/8")	1.6 mm (1/16")	1.25 bar (18 psi)
TPE135-4-7	6.4 mm (1/4")	11.2 mm (7/16")	2.4 mm (3/32")	1.65 bar (24 psi)
TPE135-4-8	6.4 mm (1/4")	12.7 mm (1/2")	3.2 mm (1/8")	1.99 bar (29 psi)
TPE135-5-7	8.0 mm (5/16")	11.2 mm (7/16")	1.6 mm (1/16")	1.09 bar (16 psi)
TPE135-5-8	8.0 mm (5/16")	12.7 mm (1/2")	2.4 mm (3/32")	•
TPE135-6-8	9.5 mm (3/8")	12.7 mm (1/2")	1.6 mm (1/16")	0.99 bar (14 psi)
TPE135-6-9	9.5 mm (3/8")	14.3 mm (9/16")	2.4 mm (3/32")	•
TPE135-6-10	9.5 mm (3/8")	16.0 mm (5/8")	3.2 mm (1/8")	1.51 bar (22 psi)
TPE135-8-12	12.7 mm (1/2")	19.0 mm (3/4")	3.2 mm (1/8")	1.34 bar (19 psi)
TPE135-10-14	16.0 mm (5/8")	22.2 mm (7/8")	3.2 mm (1/8")	1.06 bar (15 psi)
TPE135-12-16	19.0 mm (3/4")	25.4 mm (1")	3.2 mm (1/8")	0.97 bar (14 psi)
TPE135-12-20	19.0 mm (3/4")	31.75 mm (1 1/4")	3.2 mm (1/8")	1.41 bar (20 psi)
TPE135-16-20	25.4 mm (1")	31.75 mm (1 1/4")	3.2 mm (1/8")	0.57 bar (8 psi)

Customized sizes on request

PLATINUM-CURED SILICONE-TUBING

Biocompatible silicone version available (Biosicon)



The platinum-cured silicone tubing we offer has an ultra-smooth inner surface with extremely low leachables, low protein absorption, good flexibility and a wide temperature range. Due to the strong restitutorial resilience the silicone tubing is not easy to deform after compression and therefore it is an optimal tubing for peristaltic pumps and pinch valves.

- Temperature range: -30°C – 238°C
- Can be sterilized repeatedly by high temperature and ultraviolet

Biocompatible silicone tubing (BS-)

The biocompatible silicone tubing is used in biomedical and pharmaceutical applications and has the following certifications:

- Clean room fabrication
- Double bagged following GMP pharmaceutical Guidelines
- USP Class VI Certified
- FDA regulations 21 CFR 177.2600 Certified
- NSF 51 Certified
- Material Certificate and Lot Traceability

Product No.		No.	Tubing Size I.D.	Tubing Size O.D.	Wall Thickness W.T.	Operating Pressure
Standard	Biosicon					
S-0508	•	•	0.5 mm	2.1 mm	0.8 mm (1/32")	1.0 bar (14 psi)
S-0817-13	•	13	0.8 mm (1/32")	4.2 mm	1.7 mm	1.7 bar (24 psi)
S-1010	•	•	1.0 mm	3.0 mm	1.0 mm	1.0 bar (14 psi)
S-1617-14	BS-1617-14	14	1.6 mm (1/16")	5.0 mm	1.7 mm	1.7 bar (24 psi)
S-2010	•	•	2.0 mm	4.0 mm (5/32")	1.0 mm	1.0 bar (14 psi)
S-2417-19	BS-2417-19	19	2.4 mm (3/32")	5.8 mm	1.7 mm	1.7 bar (24 psi)
S-2408	•	•	2.4 mm (3/32")	4.0 mm (5/32")	0.8 mm (1/32")	1.0 bar (14 psi)
S-3010	•	•	3.0 mm	5.0 mm	1.0 mm	1.0 bar (14 psi)
S-3216-16	BS-3216-16	16	3.2 mm (1/8")	6.4 mm (1/4")	1.6 mm (1/16")	1.7 bar (24 psi)
S-4816-25	BS-4816-25	25	4.8 mm (3/16")	8.0 mm (5/16")	1.6 mm (1/16")	1.4 bar (20 psi)
S-6416-17	BS-6416-17	17	6.4 mm (1/4")	9.6 mm (3/8")	1.6 mm (1/16")	1.0 bar (14 psi)
S-7916-18	BS-7916-18	18	7.9 mm (5/16")	6.4 mm (1/4")	1.6 mm (1/16")	0.7 bar (10 psi)
S-4824-15	BS-4824-15	15	4.8 mm (3/16")	7.9 mm (5/16")	2.4 mm (3/32")	1.7 bar (24 psi)
S-6424-24	BS-6424-24	24	6.4 mm (1/4")	11.2 mm	2.4 mm (3/32")	1.7 bar (24 psi)
•	BS-6432-26	26	6.4 mm (1/4")	12.8 mm	3.2 mm (1/8")	•
S-7924-35	BS-7924-35	35	7.9 mm (5/16")	12.7 mm (1/2")	2.4 mm (3/32")	1.4 bar (20 psi)
•	BS-8040-185	185	8.0 mm	16.0 mm	4.0 mm	•
S-9624-36	BS-9624-36	36	9.6 mm (3/8")	14.4 mm	2.4 mm (3/32")	1.4 bar (20 psi)
•	BS-9533-73	73	9.5 mm	16.1 mm	3.3 mm	•
•	BS-12040-186	186	12.0 mm	20.0 mm	4.0 mm	•
•	BS-12733-82	82	12.7 mm	19.3 mm	3.3 mm	•
•	BS-15933-184	184	15.9 mm	22.5 mm	3.3 mm	•
•	BS-16040-187	187	16.0 mm	24.9 mm	4.0 mm	•
•	BS-17040-188	188	17.0 mm	25.0 mm	4.0 mm	•

CUSTOM ASSEMBLIES



Our custom tubing assemblies have established themselves as essential components for manufacturers, providing customized solutions to meet the unique requirements of complex instruments and systems. These assemblies, comprised of carefully selected materials, connectors and configurations, are designed to ensure the seamless flow of liquids and gases. With a Class 7 clean room for the production of connectors, tubing and packaged assemblies, it is possible to produce high-quality products from USP Class VI polymers.

Take advantage of our broad product and manufacturing options:

- Colored or natural tube options
- Colored Luer connections for line distinction
- Large selection of connectors and quick couplings (no spill)
- LaserWeld™ products available with T-piece, cross and Y-barbed fittings, and mini and 1" flange connectors
- Pre-coiled tubing for space-saving
- Filtration assemblies
- Tubing assemblies for peristaltic pumps
- Laser Clamp® welding technology
- Manufacturing and packaging in a clean room
- Single use and autoclavable
- Individual packaging solutions



Laser Clamp

- Lower joining cost
- No Particulate means less contamination
- Snag-free clamping with smooth weld beads
- Less part stress
- Precision weld joints for small sensitive parts
- Can join 3D complex shapes

LaserWeld Product

- Short run custom fittings
- Faster to market custom fittings with minimal setup costs
- Can join 3D complex shapes
- Precision weld joints for small sensitive parts

Laser Clamp® welding technology is available with TPE135 tubing and polypropylene fittings only. LaserWeld™ products are available with polypropylene fittings only.



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