

ANTI-TWIST FITTINGS - TWO-PIECE SET

1/4-28 UNF flat bottom



The 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.

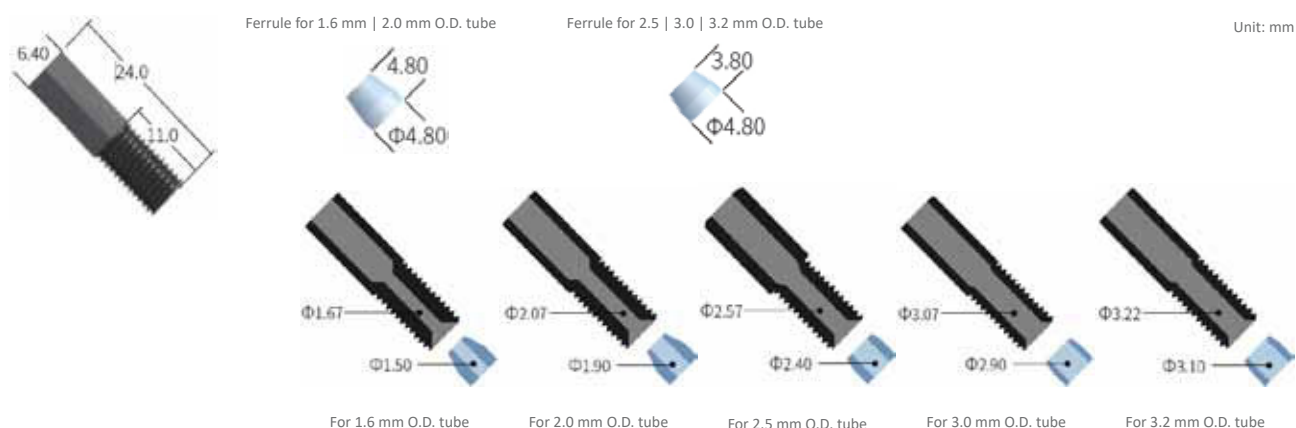
Application Note

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

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

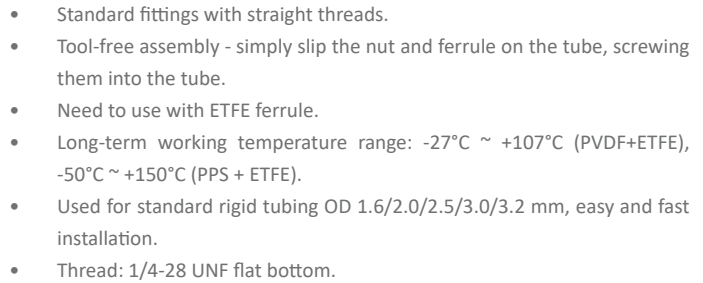
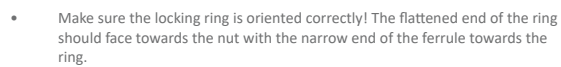
Step 3. Hand tighten the fittings into the port until snug.

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

F-Series | For rigid tubing



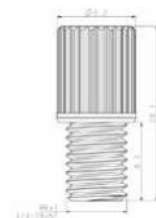
Step 4. After several uses (especially at high pressure) the ferrules should be replaced.

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

B-FF-100010



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

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THREADED FITTINGS

Compact 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

FLANGED FITTINGS

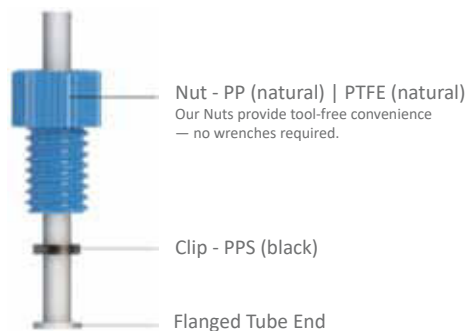
R-Series | 1/4-28 UNF flat bottom, M6



The fitting requires a flat flanged end and a gasket/clip located between the flanged tube and the flat bottom fitting. Sealing achieved through tightening the nut, by deforming the bottom of the tube, the bottom of the tube then compressed to form an airtight rigid tube connection system. The wetted part is the tubing itself: a matching washer(gasket) is required.

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

- Resistant to chemicals and organics, including PP, PTFE, PPS and other-materials
- Used for standard rigid tubing OD 1.6/2.0/2.5/3.0/3.2/4.0 mm
- Thread: 1/4-28 UNF flat bottom, M6.



Flange the tubing with exclusive flange tools, flanged Tube End ≤ Φ5 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. Hand 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-200018-PS-BK	1.6 mm	PPS
B-RP-200019-PS-BK	2.0 mm	PPS
B-RP-200020-PS-BK	2.5 mm	PPS
B-RP-200021-PS-BK	3.0 mm	PPS
B-RP-200022-PS-BK	3.2 mm	PPS

Unit: mm



Clip for 1.6 mm O.D. tube



Clip for 2.0 mm O.D. tube



Clip for 2.5 mm O.D. tube



Clip for 3.0 mm O.D. tube



Clip for 3.2 mm O.D. tube

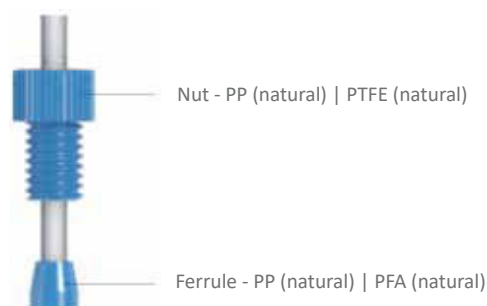
FLANGED FITTINGS

R-Series | 1/4-28 UNF, M6



Standard fittings with straight threads, which are tool-free and durable. Simply slide the nut and ferrule on the tube, screwing them into the tube. The fittings need to use with ferrule.

- Resistant to chemicals and organics, including PP, PTFE, PPS and other
- Used for standard rigid tubing OD 1.6/2.0/2.5/3.0/3.2 mm
- Thread: 1/4-28 UNF, M6.



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

Application Note

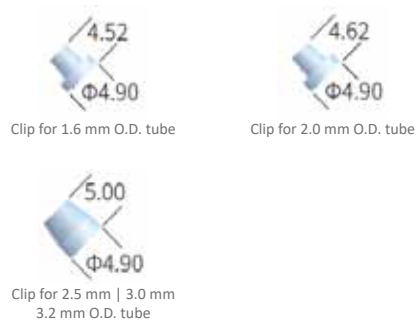
Step 1. Slide the nut, followed by the ferrule, at least 3/16" (4.7625 mm) from the end of clean cut tubing.

Step 2. Insert the assembly into the receiving port, pushing the tubing into the port.

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

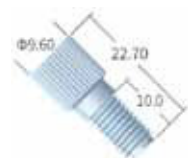
Step 4. After disassembling, the ferrules should be replaced in next assembly and connection.

Ferrule No.	Tubing Size O.D.	Material
B-RA-200006	1.6 mm	PP PFA
B-RA-200007	2.0 mm	PP PFA
B-RA-200003	2.5 mm	PFA
B-RA-200002	3.0 mm	PFA
B-RA-200001	3.2 mm	PFA

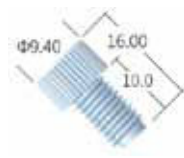


Unit: mm

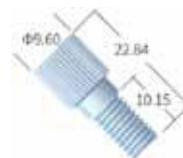
Knurled Nut



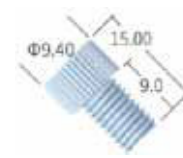
B-RA-100001 | B-RA-100002



B-RA-100003 | B-RA-100004



B-RA-100016 | B-RA-100017

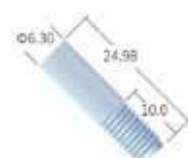


B-RA-100018 | B-RA-100019

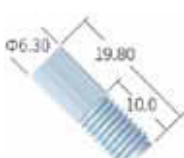
Unit: mm

Product No.	Thread	Tubing Size O.D.	Material
B-RA-100001	1/4-28 UNF	1.6 mm 2.0 mm	PTFE PP
B-RA-100002	M6	1.6 mm 2.0 mm	PTFE PP
B-RA-100003	1/4-28 UNF	1.6 mm 2.0 mm	PTFE PP
B-RA-100004	M6	1.6 mm 2.0 mm	PTFE PP
B-RA-100016	1/4-28 UNF	2.5 mm 3.0 mm 3.2 mm	PTFE PP
B-RA-100017	M6	2.5 mm 3.0 mm 3.2 mm	PTFE PP
B-RA-100018	1/4-28 UNF	2.5 mm 3.0 mm 3.2 mm	PTFE PP
B-RA-100019	M6	2.5 mm 3.0 mm 3.2 mm	PTFE PP

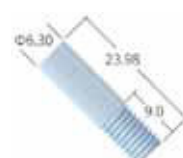
Compact Knurled Nut



B-RA-100005 | B-RA-100006



B-RA-100007 | B-RA-100008



B-RA-100020 | B-RA-100021

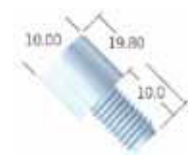


B-RA-100022 | B-RA-100023

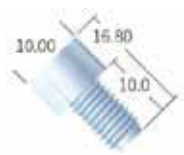
Unit: mm

Product No.	Thread	Tubing Size O.D.	Material
B-RA-100005	1/4-28 UNF	1.6 mm 2.0 mm	PTFE PP
B-RA-100006	M6	1.6 mm 2.0 mm	PTFE PP
B-RA-100007	1/4-28 UNF	1.6 mm 2.0 mm	PTFE PP
B-RA-100008	M6	1.6 mm 2.0 mm	PTFE PP
B-RA-100020	1/4-28 UNF	2.5 mm 3.0 mm 3.2 mm	PTFE PP
B-RA-100021	M6	2.5 mm 3.0 mm 3.2 mm	PTFE PP
B-RA-100022	1/4-28 UNF	2.5 mm 3.0 mm 3.2 mm	PTFE PP
B-RA-100023	M6	2.5 mm 3.0 mm 3.2 mm	PTFE PP

Winged Nut



B-RA-100012 | B-RA-100013



B-RA-100014 | B-RA-100015



B-RA-100028 | B-RA-100029

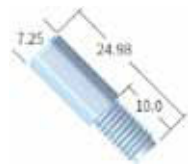


B-RA-100030 | B-RA-100031

Unit: mm

Product No.	Thread	Tubing Size O.D.	Material
B-RA-100012	1/4-28 UNF	1.6 mm 2.0 mm	PTFE PP
B-RA-100013	M6	1.6 mm 2.0 mm	PP
B-RA-100014	1/4-28 UNF	1.6 mm 2.0 mm	PTFE PP
B-RA-100015	M6	1.6 mm 2.0 mm	PTFE PP
B-RA-100028	1/4-28 UNF	2.5 mm 3.0 mm 3.2 mm	PTFE PP
B-RA-100029	M6	2.5 mm 3.0 mm 3.2 mm	PTFE PP
B-RA-100030	1/4-28 UNF	2.5 mm 3.0 mm 3.2 mm	PTFE PP
B-RA-100031	M6	2.5 mm 3.0 mm 3.2 mm	PTFE PP

5/16" Hex Nut



B-RA-100009



B-RA-100007 | B-RA-100008



B-RA-100024 | B-RA-100025



B-RA-100026 | B-RA-100027

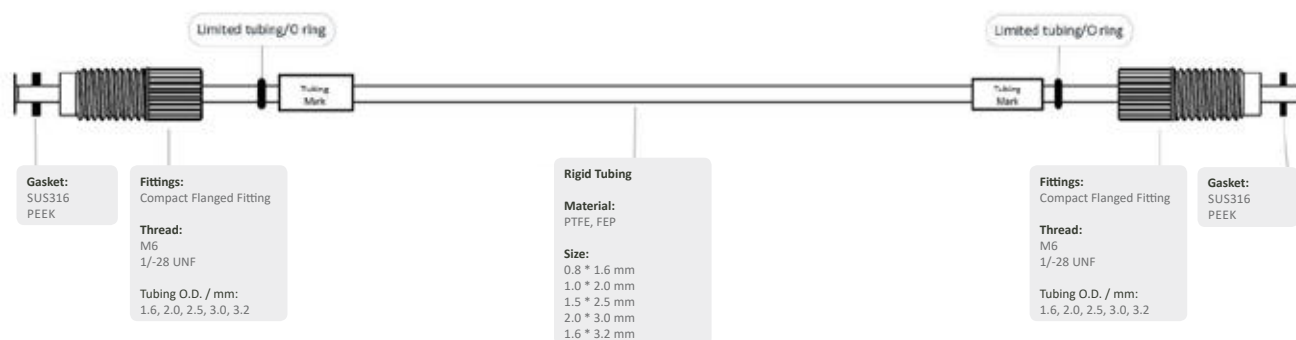
Unit: mm

Product No.	Thread	Tubing Size O.D.	Material
B-RA-100009	1/4-28 UNF	1.6 mm 2.0 mm	PP
B-RA-100010	1/4-28 UNF	1.6 mm 2.0 mm	PTFE PP
B-RA-100011	M6	1.6 mm 2.0 mm	PTFE PP
B-RA-100024	1/4-28 UNF	2.5 mm 3.0 mm 3.2 mm	PTFE PP
B-RA-100025	M6	2.5 mm 3.0 mm 3.2 mm	PTFE PP
B-RA-100026	1/4-28 UNF	2.5 mm 3.0 mm 3.2 mm	PTFE PP
B-RA-100027	M6	2.5 mm 3.0 mm 3.2 mm	PTFE PP

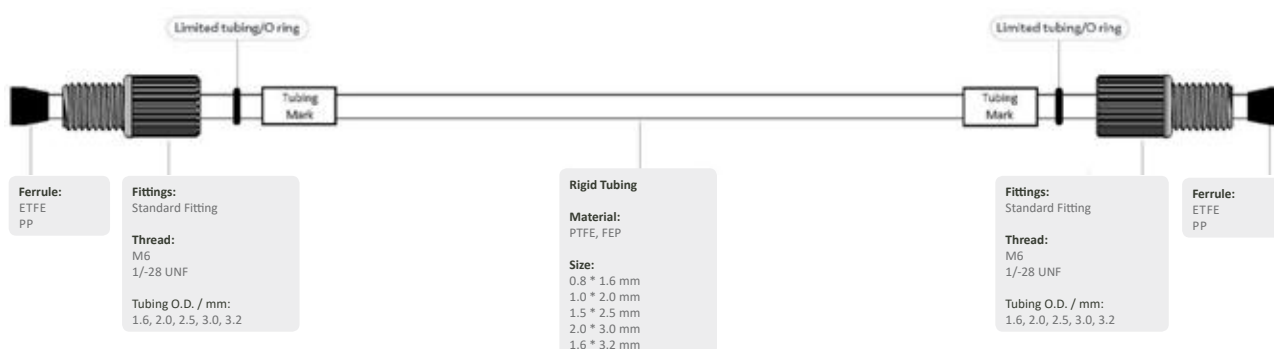
CUSTOM FLANGED | TUBING ASSEMBLIES

Customize the tubing length according to your needs

CUSTOM FLANGED TUBING ASSEMBLIES



CUSTOM TUBING ASSEMBLIES



COLOR FITTINGS - TWO-PIECE SET

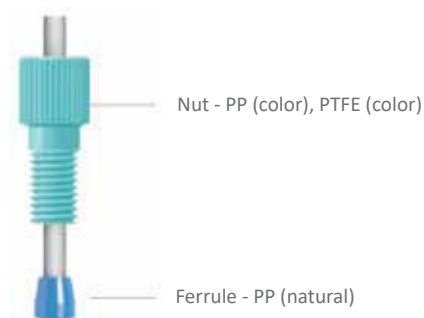
1/4-28 UNF, M6



Standard fittings with straight threads, which are tool-free and durable. Simply slide the nut and ferrule on the tube, screwing them into the tube. The fittings need to use with ferrule.

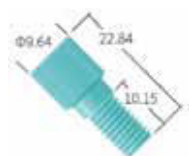
These screw connections can be reused several times and consist of two parts, the threaded nut and the ferrule.

- Resistant to chemicals and organics
- Used for standard rigid tubing OD 1.6/2.0/2.5/3.0/3.2 mm, easy and fast installation.
- Different fitting colors for easy differentiation of flow paths
- Thread: 1/4-28 UNF, M6.



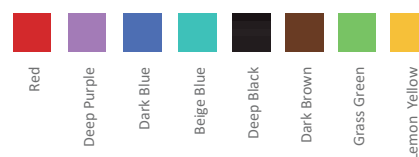
Make sure the ferrule is oriented correctly! The narrow end of the ferrule should owards the nut.

Nut



B-RA-100016 | B-RA-100017

Colors available



Product No.	Thread	Tubing Size O.D.	Material
B-RA-100016	1/4-28 UNF	1.6 mm 2.0 mm 2.5 mm 3.0 mm 3.2 mm	PTFE PP
B-RA-100017	M6	1.6 mm 2.0 mm 2.5 mm 3.0 mm 3.2 mm	PTFE PP

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



Ferrule for 1.6 mm | 2.0 mm | 2.5 mm
3.0 mm | 3.2 mm O.D. tube

Unit: mm

PLUGS

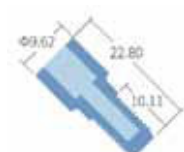
For 1/4-28 UNF flat bottom fittings



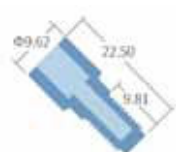
For blocking the flow of liquids and gases

- Fittings available in PP, PPS, PVDF and PTFE
- Suitable for M6 or 1/4-28 UNF flat bottom threaded fittings

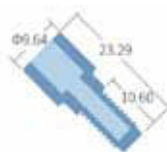
R-Series | Plugs



B-RA-103001-PP



B-RA-103001-PT



B-RA-103002

Unit: mm

Product No.	Thread	Material
B-RA-103001-PP	1/4-28 UNF	PP
B-RA-103001-PT	1/4-28 UNF	PTFE
B-RA-103002-PP	M6	PP
B-RA-103002-PT	M6	PTFE

F-Series | Plugs



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

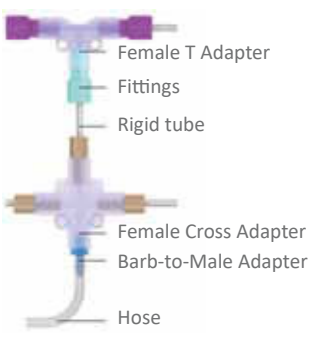
FEMALE THREAD ADAPTER

For 1/4-28 UNF flat bottom threaded fittings



Standard threads and curvature, no gap, no wobble and good sealing with the corresponding threads

- Imported raw material, non-toxic, tasteless, heat and corrosion resistant. PP material is widely used in biomedical, environmental protection and food industries; PTFE material is also suitable for chemical industry and other fields.
- Fittings available in PP and PTFE, non-toxic, odourless, heat resistant, resistant to chemicals and organic substances
- Suitable for standard 1/4-28 UNF flat bottom threaded fittings



Can be connected to 1/4-28 UNF male threaded fittings to allow for any connection between rigid tube and rigid tube, rigid tube and hose, hose and hose of the same or different tube diameters.

Female Thread Adapter



B-RA-103001



B-RA-104002



B-RA-104003



B-RA-104004

Unit: mm

Product No.	Thread	Material
B-RA-104001	1/4-28 UNF	PP PTFE
B-RA-104002	1/4-28 UNF	PP PTFE
B-RA-104003	1/4-28 UNF	PP PTFE
B-RA-104004	1/4-28 UNF	PP PTFE

LOW PRESSURE MALE UNION

1/4-28 UNF



Standard threads and curvature, no gap, no wobble and good sealing with the corresponding threads

- The PPS material has high strength, high toughness, excellent heat and chemical resistance,
- Suitable temperature range -50°C ~ 150°C
- Thread: 1/4-28 UNF



Can be used with female threaded fittings and threaded bulkhead union to achieve connection of different tubes.

Low Pressure Male Union



B-RA-104005-PS

Unit: mm

Product No.	Thread	Material
B-RA-104005-PS	1/4-28 UNF	PPS

BULKHEAD TWO-PIECE UNION

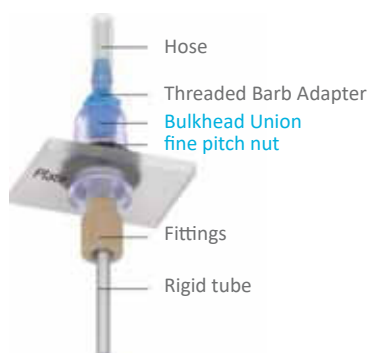
1/4-28 UNF



Designed to connect internal tubing to the outside through the equipment enclosure; the installation requires the panel to be pre-drilled.

Interchangeable internal and external threads for leak-free connection with flexible and rigid pipe connection system.

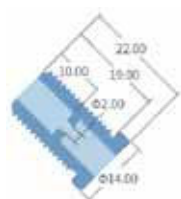
- Fittings are available in PP and PTFE materials, non-toxic, odourless, heat resistant, resistant to chemical corrosion and various organic substances; thin fine pitch nut is available in PPS and PTFE materials
- Suitable for standard 1/4-28 UNF flat bottom threaded fittings



Panel thickness ≤ 14 mm



Bulkhead Two-piece Union



Unit: mm

Product No.	Thread	Material
B-RA-105004	1/4-28 UNF female thread	PP + PPS
B-RA-105005	1/4-28 UNF female thread	PP + PTFE
B-RA-105006	1/4-28 UNF female thread	PTFE + PPS
B-RA-105007	1/4-28 UNF female thread	PP + PTFE

BULKHEAD THREE-PIECE UNION

1/4-28 UNF

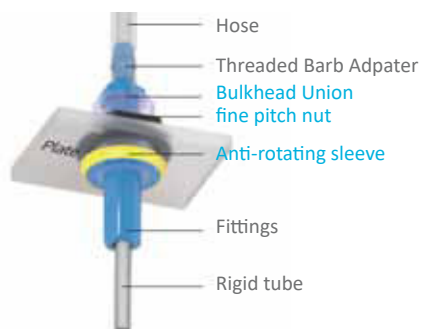


Anti-rotation sleeve has been added to prevent fitting from rotation.

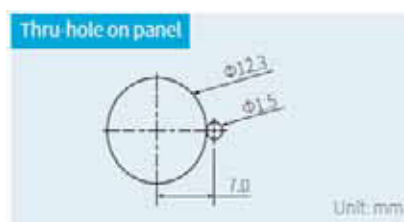
Designed to connect internal tubing to the outside through the equipment enclosure; the installation requires the panel to be pre-drilled.

Interchangeable internal and external threads for leak-free connection with flexible and rigid pipe connection system.

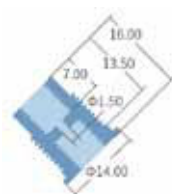
- Fittings are available in PP and PTFE materials, non-toxic, odourless, heat resistant, resistant to chemical corrosion and various organic substances; thin fine pitch nut is available in PPS and PTFE materials
- Suitable for standard 1/4-28 UNF flat bottom threaded fittings



Panel thickness ≤ 9 mm

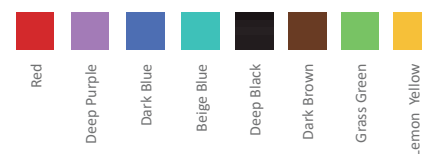


Bulkhead Three-piece Union



Unit: mm

Colors available



Product No.	Thread	Material
B-RA-105002	1/4-28 UNF female thread	PP + PPS
B-RA-105003	1/4-28 UNF female thread	PTFE + PTFE