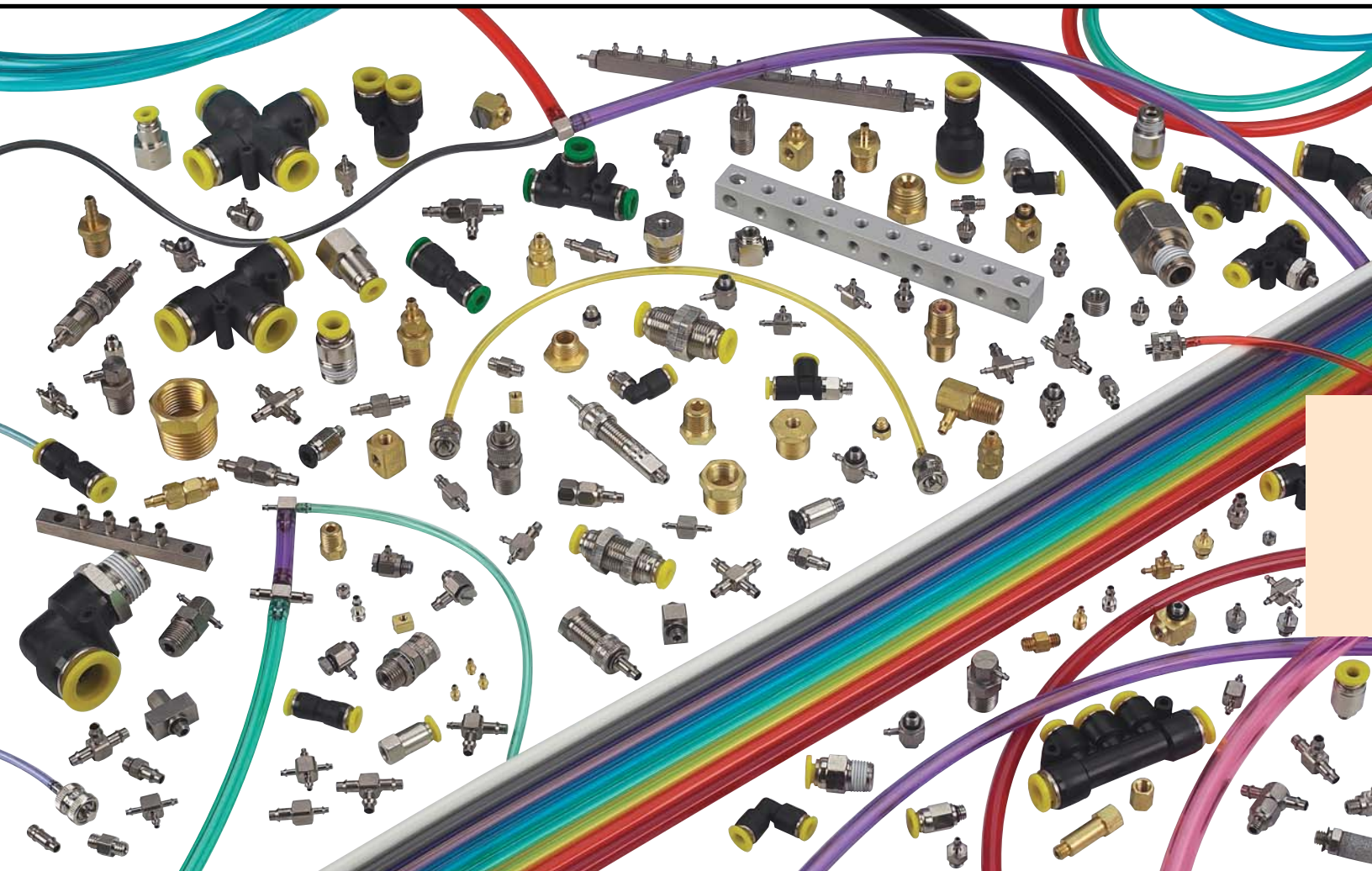


<u>PUSH-QUICK FITTINGS</u>	307 - 314
<u>MINIATURE PUSH-QUICK FITTINGS</u>	312 - 314
<u>SLIP-ON FITTINGS</u>	315 - 320
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For ease in construction of pneumatic logic control and fluid power systems, you will find in the Clippard line an extensive choice of useful fittings. Clippard fittings are designed for the greatest flexibility, practical usefulness and for savings in time, cost and space.

Why Clippard Miniature Fluid Power Fittings?



While others were thinking about large fittings, Clippard was thinking big about smaller fittings. Smaller valves and cylinders created the need for smaller fittings. Clippard was the first to develop ports utilizing the #10-32 thread. This thread has become an industry standard in the marketplace. Because of their compact size, #10-32 fittings when properly gasketed and/or sealed with anaerobic sealant, can withstand pressures well beyond those required for pneumatic applications.

All Clippard fittings are made to the same high standards as our valves and cylinders. Precision machining and finishing processes insure that all fittings are held to the tightest tolerances. What does this mean to you? It means quality... quality that leads to ease in assembly, and consistent, trouble free performance.

Clippard precision fittings will save you time, space, and money when designing versatile, productive, trouble free, pneumatic circuits. Our endless variety of fittings insure that you find just the right "fit" when plumbing pneumatic circuits or assemblies. These fittings are small in size but large in performance, allowing for streamlining of pneumatic assemblies and eliminating the need for larger, more expensive, cumbersome fittings.

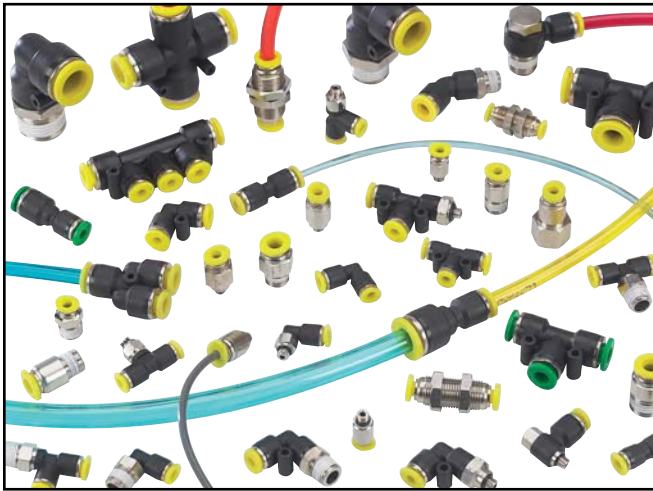


Options

Clippard brass fittings come standard with a bright finish for added corrosion resistance. Most brass fittings are also available with nickel plating. Clippard slip-on fittings come standard with Electroless Nickel Plating. Some fittings are also available with metric threads. Refer to each item in the catalog for available options.

To order a brass fitting with the Electroless Nickel Plating option, add a -ENP following the catalog fitting number. To order a fitting with the M5 metric thread option, add a -M5 following the catalog fitting number.





Clippard Push-Quick Fittings provide a simple method of connecting pneumatic components to each other and system piping. They are designed for use with both flexible hose and stiff tubing made of nylon, urethane, polyethylene or polypropylene.

- Pressure Range:** 0 - 150 psig @ 130°F
- Vacuum:** 0 to 29.5" Hg
- Temperature Range:** 32 to 140°F
- Media:** Air, Non-corrosive water
- Tube Pull Out Force:** >20 lb. @ 75°F (non-pressurized)
- Burst Pressure:** 350 psig @ 75°F
- Materials:** Body - Plastic Resin
Metal Stud - Nickel Plated Brass
Gripper Ring - Stainless Steel
Seals - Buna N

Push-Quick Fittings generally provide higher flows than barbed fittings. The Push-Quick fitting allows full flow through the hose/tubing I.D. with no smaller orifice required as in barb fittings. The chart shows the comparison between barb and push in fittings for various tubing/hose sizes. Push-Quick Fittings are available in five sizes for 1/8", 5/32", 6 mm, 1/4" and 3/8" O.D. tubing. The 5/32" fittings may also be used with 4 mm O.D. tubing.

Installation of Tubing into fitting

1. Slowly push a clean and perpendicularly cut tubing into the fitting until it comes to a dead stop.
2. Pull the tubing back gently until the Gripper Ring of the fitting grips onto the tubing and has a good seal.

Removal of Tubing from fitting

1. Push in evenly on the two long oval sides of the Release Button.
2. Pull out the tubing while keeping the Release Button depressed.
3. To reuse the tubing; cut off the lodged portion of the previously used tubing evenly and perpendicularly.

Installation of Pipe Fittings with Pre-Applied sealant

1. Tighten fitting by hand, then turn it 2 or 3 turns with a wrench until it reaches the desired torque listed.
2. If the fitting is used and the sealant coating is not in good condition, apply Teflon® sealant tape to the threads.



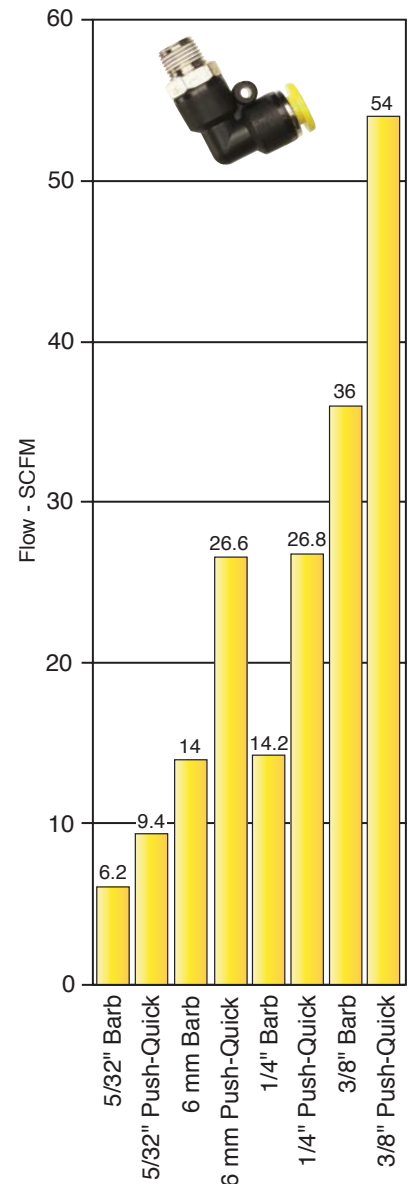
* 6 mm size fittings have a green release button

Thread Size	#10-32	1/8" NPT, R1/8	1/4" NPT, R1/4	3/8" NPT	1/2" NPT
Torque lb. - ft.	1.0 - 1.5	5.0 - 6.5	8.5 - 10.0	16.0 - 17.5	20 - 21.5

Tubing Material	Polyurethane	Polyethylene	Polypropylene	Nylon
Specified Size	+/- 0.005"	+/- 0.004"	+/- 0.004"	+/- 0.004"
Hardness (Durometer)	Shore A85 or higher	Shore D 44 or higher	Shore D 44 or higher	Shore D 44

see pages 333 through 338 for hose and tubing

Barb vs Push-Quick Fittings Flow Comparison @ 100 psig





PUSH-QUICK FITTINGS



- | | | | | |
|--------------------------------|----------------------------------|-----------------------------|----------------------------|---------------------|
| BC - Bulkhead Connector | MA - Male Angle Connector | RU - Reduced Union | Tubing Size (O.D.) | N - #10-32 |
| BT - Branch Tee | MC - Male Connector | SC - Stem Coupler | | 5 - M5 Thd. |
| BU - Bulkhead Union | ME - Male Elbow | SE - Stack Elbow | 04 - 1/8" (0.125") | 6 - M6 Thd. |
| CC - Compact Male Conn. | MM - Male Manifold | SR - Stem Reducer | 04M - 4 mm (0.157") | P - 1/8" NPT |
| CU - Cross Union | MU - Manifold Union | SU - Straight Union | 05 - 5/32" (0.156") | R - R1/8 |
| EE - Extended Elbow | PE - Plug-In Elbow | TU - Tee Union | 06M - 6 mm (0.236") | Q - 1/4" NPT |
| ER - Elbow Reducer | PG - Plug | TR - Tube Reducer | 08 - 1/4" (0.250") | 2 - R1/4 |
| EU - Elbow Union | RB - Reduced Branch | UE - Universal Elbow | 08M - 8 mm (0.313") | W - 3/8" NPT |
| FC - Female Connector | RT - Run Tee | YC - Y Connector | 10 - 5/16" (0.313") | 3 - R3/8 |
| FE - Female Elbow | | YU - Y Union | 12 - 3/8" (0.375") | Z - 1/2" NPT |
| | | | 16 - 1/2" (0.500") | |








Threaded Fittings

Tube	Thread	Female Connector FC	Male Compact Connector CC	Male Connector MC	Female Elbow FE	Male Elbow ME	Extended Elbow EE	Run Tee RT
1/8"	#10-32 1/8" NPT	1/4" NPT	PQ-CC04N PQ-CC04P	PQ-MC04N PQ-MC04P	PQ-FE04N PQ-FE04P PQ-MC04Q	PQ-ME04N PQ-ME04P		PQ-RT04P
5/32"	#10-32 1/8" NPT 1/4" NPT	PQ-FC05N PQ-FC05P	PQ-CC05N PQ-CC05P	PQ-MC05N PQ-MC05P PQ-MC05Q	PQ-FE05N PQ-FE05P PQ-FE05Q	PQ-ME05N PQ-ME05P PQ-ME05Q	PQ-EE05N PQ-EE05P	PQ-RT05N PQ-RT05P
4 mm*	M5 thd. R1/8	PQ-FC04M5 PQ-FC04MR		PQ-MC04M5 PQ-MC04MR		PQ-ME04M5 PQ-ME04MR		PQ-RT04M5 PQ-RT04MR
6 mm*	M5 thd. R1/8 R1/4	PQ-FC06MR PQ-FC06M2		PQ-MC06M5 PQ-MC06MR PQ-MC06M2		PQ-ME06M5 PQ-ME06MR PQ-ME06M2		PQ-RT06M5 PQ-RT06MR PQ-RT06M2
1/4"	#10-32 1/8" NPT 1/4" NPT 3/8" NPT	PQ-FC08P PQ-FC08Q	PQ-CC08N PQ-CC08P PQ-CC08Q	PQ-MC08N PQ-MC08P PQ-MC08Q PQ-MC08W	PQ-FE08N PQ-FE08P PQ-FE08Q	PQ-ME08N PQ-ME08P PQ-ME08Q PQ-ME08W	PQ-EE08N PQ-EE08P PQ-EE08Q PQ-EE08W	PQ-RT08N PQ-RT08P PQ-RT08Q
5/16"	1/8" NPT 1/4" NPT 3/8" NPT	PQ-FC10P PQ-FC10Q PQ-FC10W		PQ-MC10P PQ-MC10Q PQ-MC10W	PQ-FE10P PQ-FE10Q	PQ-ME10P PQ-ME10Q PQ-ME10W	PQ-EE10P PQ-EE10Q PQ-EE10W	PQ-RT10P PQ-RT10Q PQ-RT10W
8 mm*	M5 R1/8 R1/4 R3/8	PQ-FC08MR PQ-FC08M2 PQ-FC08M3		PQ-MC08M5 PQ-MC08MR PQ-MC08M2 PQ-MC08M3		PQ-ME08MR PQ-ME08M2 PQ-ME08M3		PQ-RT08MR PQ-RT08M2 PQ-RT08M3
3/8"	1/8" NPT 1/4" NPT 3/8" NPT 1/2" NPT	PQ-FC12Q PQ-FC12W	PQ-CC12Q PQ-CC12W	PQ-MC12P PQ-MC12Q PQ-MC12W PQ-MC12Z	PQ-FE12Q PQ-FE12W	PQ-ME12P PQ-ME12Q PQ-ME12W PQ-ME12Z	PQ-EE12Q PQ-EE12W PQ-EE12Z	PQ-RT12P PQ-RT12Q PQ-RT12W
1/2"	1/4" NPT 3/8" NPT 1/2" NPT			PQ-MC16Q PQ-MC16W PQ-MC16Z		PQ-ME16Q PQ-ME16W PQ-ME16Z	PQ-EE16W PQ-EE16Z	





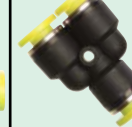


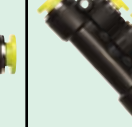
* Fittings have a green release button.

Note: Fittings with pipe thread NPT, R1/8, R1/4 and R3/8 are supplied with pre-applied sealant.

Threaded Fittings Cont'd.

								
Tube	Thread	Branch T BT	Y Connector YC	Universal Elbow UE	Stack Elbow SE	Manifold Mount MM	Male Angle Connector MA	Bulkhead Connector BC
1/8"	#10-32 1/8" NPT		PQ-YC04N PQ-YC04P				PQ-MA04N PQ-MA04P	PQ-BC04P
5/32"	#10-32 1/8" NPT 1/4" NPT	PQ-BT05N PQ-BT05P	PQ-YC05N PQ-YC05P	PQ-UE05N PQ-UE05P	PQ-SE05N PQ-SE05P	PQ-MM0805P PQ-MM1005Q	PQ-MA05N PQ-MA05P	PQ-BC05P
4 mm*	M5 R1/8	PQ-BT04M5 PQ-BT04MR		PQ-UE04M5 PQ-UE04MR			PQ-MA04M5 PQ-MA04MR	PQ-BC04MR
6 mm*	M5 thd. R1/8 R1/4	PQ-BT06M5 PQ-BT06MR PQ-BT06M2		PQ-UE06M5 PQ-UE06MR PQ-UE06M2			PQ-MA06M5 PQ-MA06MR PQ-MA06M2	PQ-BC06MR PQ-BC06M2
1/4"	#10-32 1/8" NPT 1/4" NPT 3/8" NPT	PQ-BT08N PQ-BT08P PQ-BT08Q	PQ-YC08N PQ-YC08P PQ-YC08Q	PQ-UE08N PQ-UE08P PQ-UE08Q	PQ-SE08N PQ-SE08P PQ-SE08Q	PQ-MM1008Q	PQ-MA08N PQ-MA08P PQ-MA08Q PQ-MA08W	PQ-BC08P PQ-BC08Q
5/16"	1/8" NPT 1/4" NPT 3/8" NPT	PQ-BT10P PQ-BT10Q	PQ-YC10P PQ-YC10Q	PQ-UE10P PQ-UE10Q PQ-UE10W	PQ-SE10Q PQ-SE10W		PQ-MA10P PQ-MA10Q	PQ-BC10P PQ-BC10Q
8 mm*	M5 R1/8 R1/4 R3/8	PQ-BT08MR PQ-BT08M2 PQ-BT08M3		PQ-UE08MR PQ-UE08M2 PQ-UE08M3				PQ-BC08MR PQ-BC08M2
3/8"	1/8" NPT 1/4" NPT 3/8" NPT	PQ-BT12P PQ-BT12Q PQ-BT12W	PQ-YC12Q PQ-YC12W	PQ-UE12Q PQ-UE12W	PQ-SE12Q PQ-SE12W		PQ-MA12P PQ-MA12Q PQ-MA12W	PQ-BC12Q PQ-BC12W
1/2"	1/4" NPT 3/8" NPT 1/2" NPT		PQ-YC16W PQ-YC16Z		PQ-SE16W PQ-SE16Z		PQ-MA16Q PQ-MA16W PQ-MA16Z	PQ-BC16Z

Non-Threaded Fittings

									
Tube Size		Straight Union SU	Reduced Union RU	Elbow Union EU	Tee Union TU	Y Union YU	Reduced Branch RB	Cross Union CU	Manifold Union MU**
1/8"		PQ-SU04		PQ-EU04	PQ-TU04	PQ-YU04		PQ-CU04	
5/32"		PQ-SU05	PQ-RU0504	PQ-EU05	PQ-TU05	PQ-YU05	PQ-RB0504	PQ-CU05	PQ-MU0504
6 mm*		PQ-SU06M	PQ-RU06M04M	PQ-EU06M	PQ-TU06M	PQ-YU06M		PQ-CU06M	PQ-MU06M04M
1/4"		PQ-SU08	PQ-RU0804 PQ-RU0805	PQ-EU08	PQ-TU08	PQ-YU08	PQ-RB0805	PQ-CU08	PQ-MU0805
5/16"		PQ-SU10	PQ-RU1008	PQ-EU10	PQ-TU10	PQ-YU10	PQ-RB1008	PQ-CU10	PQ-MU1008
3/8"		PQ-SU12	PQ-RU1208	PQ-EU12	PQ-TU12	PQ-YU12	PQ-RB1208	PQ-CU12	PQ-MU1208
1/2"		PQ-SU16	PQ-RU1612	PQ-EU16	PQ-TU16	PQ-YU16	PQ-RB1612		

* Fittings have a green release button.

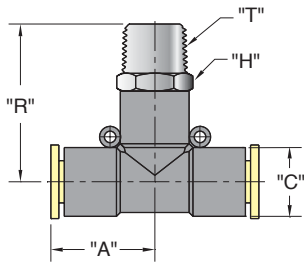
Note: Fittings with pipe thread NPT, R1/8, R1/4 and R3/8 are supplied with pre-applied sealant.



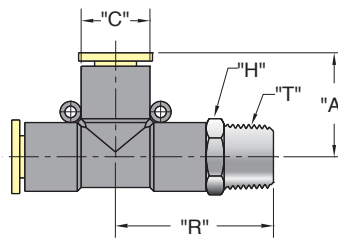
PUSH-QUICK FITTINGS

Non-Threaded Fittings

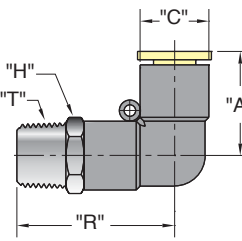
Tube Size	Bulkhead Union BU	Elbow Reducer ER	Plug-In Elbow PE	Stem Reducer SR	Tube Reducer TR	Stem Coupler SC	Tube Reducer (Stem) TRS
1/8"	PQ-BU04	PQ-ER0405	PQ-PE04	PQ-SR0405		PQ-SC04	
5/32"	PQ-BU05	PQ-ER0508	PQ-PE05	PQ-SR0508	PQ-TR0504	PQ-SC05	PQ-TRS0405
6 mm*	PQ-BU06M						
1/4"	PQ-BU08	PQ-ER0810	PQ-PE08	PQ-SR0810 PQ-SR0812	PQ-TR0805	PQ-SC08	PQ-TRS0508
5/16"	PQ-BU10	PQ-ER1012	PQ-PE10		PQ-TR1008		PQ-TRS0810
3/8"	PQ-BU12	PQ-ER1216	PQ-PE12	PQ-SR1216	PQ-TR1208		PQ-TRS0812
1/2"	PQ-BU16		PQ-PE16		PQ-TR1612		PQ-TRS1216



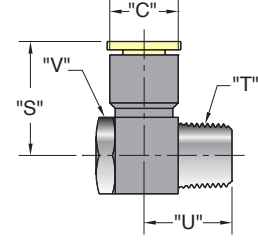
BT



RT

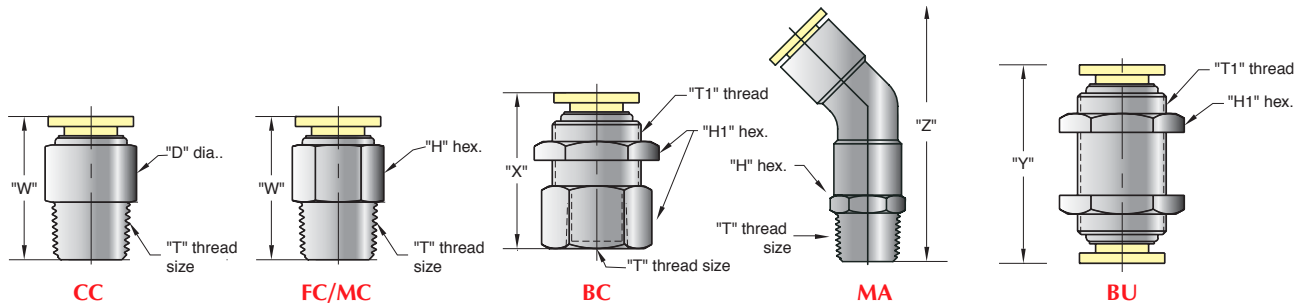


ME

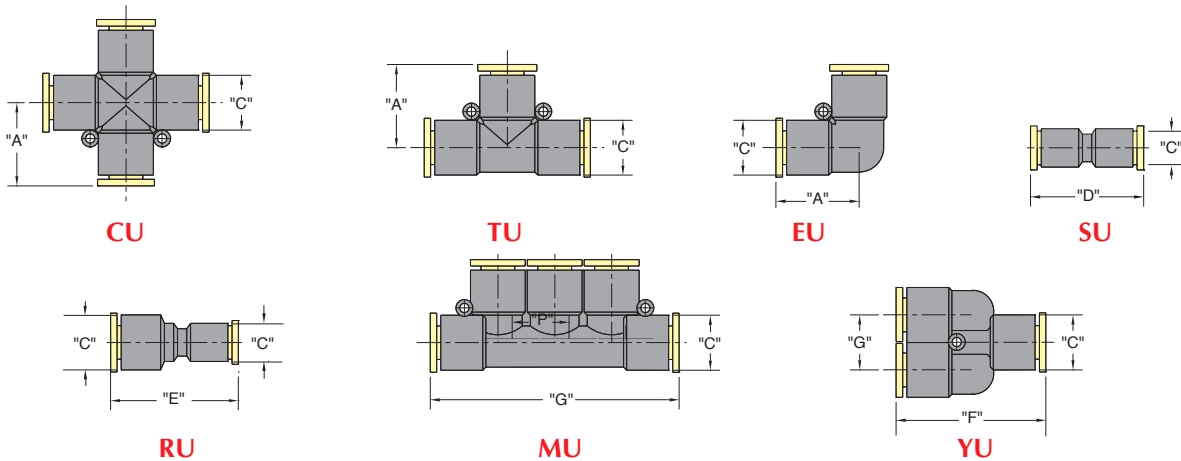


UE

Tube Size	Thread Size "T"	"A"	"C"	"H"	"R"	"S"	"U"	"V"
1/8"	#10-32	0.722"	0.410"	7/16"	0.900"			
1/8"	1/8" NPT	0.722"	0.410"	7/16"	0.980"			
5/32"	#10-32	0.722"	0.410"	7/16"	0.900"	0.820"	0.440"	5/16"
5/32"	1/8" NPT	0.722"	0.410"	7/16"	0.980"	0.920"	0.570"	7/16"
5/32"	1/4" NPT	0.722"	0.410"	7/16"	1.130"			
4 mm	M5 x 0.8	0.722"	0.410"	10 mm	0.900"	0.831"	0.449"	8 mm
4 mm	R1/8	0.722"	0.410"	10 mm	0.980"	0.921"	0.563"	10 mm
6 mm	M5 x 0.8	0.830"	0.524"	12 mm	1.030"	0.953"	0.500"	12 mm
6 mm	R1/8	0.830"	0.524"	12 mm	1.100"	0.976"	0.587"	12 mm
6 mm	R1/4	0.830"	0.524"	14 mm	1.140"	1.059"	0.654"	14 mm
1/4"	#10-32	0.840"	0.524"	1/2"	1.030"	0.940"	0.480"	1/2"
1/4"	1/8" NPT	0.840"	0.524"	1/2"	1.100"	0.990"	0.600"	1/2"
1/4"	1/4" NPT	0.840"	0.524"	9/16"	1.230"	1.120"	0.740"	9/16"
1/4"	3/8" NPT	0.840"	0.524"	11/16"	1.290"			
5/16"	1/8" NPT	0.880"	0.580"	9/16"	1.100"	1.120"	0.740"	9/16"
5/16"	1/4" NPT	0.880"	0.580"	9/16"	1.230"	1.120"	0.740"	9/16"
5/16"	3/8" NPT	0.880"	0.580"	11/16"	1.290"	1.120"	0.740"	11/16"
8 mm	M5	0.880"	0.580"	14 mm	1.290"	1.120"	0.740"	14 mm
8 mm	R1/8	0.880"	0.580"	14 mm	1.290"	1.120"	0.740"	14 mm
8 mm	R1/4	0.880"	0.580"	14 mm	1.290"	1.120"	0.740"	14 mm
8 mm	R3/8	0.880"	0.580"	14 mm	1.290"	1.120"	0.740"	14 mm
3/8"	1/8" NPT	1.100"	0.720"	11/16"	1.350"			
3/8"	1/4" NPT	1.100"	0.720"	11/16"	1.470"	1.320"	0.800"	11/16"
3/8"	3/8" NPT	1.100"	0.720"	11/16"	1.160"	1.550"	0.900"	11/16"
1/2"	1/4" NPT	1.160"	0.850"	7/8"	1.550"			
1/2"	3/8" NPT	1.160"	0.850"	7/8"	1.580"			
1/2"	1/2" NPT	1.160"	0.850"	7/8"	1.670"			



Tube Size	Thread Size "T"	"D"	"H"	"H1"	"T1"	"W"	"X"	"Y"	"Z"
1/8"	#10-32	0.410"			7/16"	0.880"			1.454"
1/8"	1/8" NPT	0.410"			7/16"	0.860"			1.474"
5/32"	#10-32	0.410"	7/16"		7/16"	0.890"	0.820"	0.440"	1.454"
5/32"	1/8" NPT	0.410"	7/16"	5/8"	7/16"	0.840"	0.920"	0.570"	1.474"
5/32"	1/4" NPT		9/16"			0.920"			
4 mm	M5 x 0.8		10 mm		10 mm	0.900"	0.830"	0.450"	1.454"
4 mm	R1/8		10 mm	14 mm	10 mm	0.840"	0.920"	0.563"	1.474"
6 mm	M5 X 0.8		12 mm		12 mm	0.950"	0.953"	0.500"	1.556"
6 mm	R1/8		10 mm	17 mm	12 mm	0.880"	0.976"	0.587"	1.556"
6 mm	R1/4		14 mm	17 mm	14 mm	0.875"	1.059"	0.654"	1.616"
1/4"	#10-32	0.470"	1/2"		1/2"	0.913"	0.940"	0.480"	1.620"
1/4"	1/8" NPT	0.470"	1/2"	3/4"	1/2"	0.913"	0.990"	0.600"	1.620"
1/4"	1/4" NPT	0.530"	9/16"	3/4"	9/16"	0.965"	1.120"	0.740"	1.682"
1/4"	3/8" NPT		11/16"		11/16"	0.965"			1.722"
5/16"	1/8" NPT	0.550"	9/16"	3/4"		1.09"	1.610"	1.390"	1.800"
5/16"	1/4" NPT	0.550"	9/16"	3/4"	5/8"	1.09"	1.610"	1.390"	1.800"
5/16"	3/8" NPT	0.670"	11/16"	3/4"	5/8"	1.09"	1.610"	1.390"	1.800"
8 mm	M5				5/8"	1.09"	1.610"	1.390"	1.800"
8 mm	R1/8	0.550"	14 mm	19 mm	5/8"	1.09"	1.610"	1.390"	1.800"
8 mm	R1/4	0.550"	14 mm	19 mm	5/8"	1.09"	1.610"	1.390"	1.800"
8 mm	R3/8	0.670"	17 mm	19 mm		1.09"	1.610"	1.390"	1.800"
3/8"	1/8" NPT		11/16"		11/16"	1.280"			1.823"
3/8"	1/4" NPT	0.670"	11/16"	15/16"	11/16"	1.342"	1.320"	0.800"	1.923"
3/8"	3/8" NPT	0.670"	11/16"	15/16"	11/16"	1.241"	1.320"	0.900"	1.943"
1/2"	1/4" NPT		7/8"		7/8"	1.380"			1.965"
1/2"	3/8" NPT		7/8"		7/8"	1.320"			2.125"
1/2"	1/2" NPT		7/8"		7/8"	1.320"			2.195"



Tube Size	"A"	"C"	"D"	"E"	"F"	"G"
1/8"	0.710"	0.420"	1.240"			
5/32" / 4 mm	0.722"	0.410"	1.239"	1.230"	1.318"	2.312"
6 mm	0.830"	0.524"	1.500"	1.367"	1.495"	2.435"
1/4"	0.840"	0.524"	1.500"	1.666"	1.495"	2.435"
5/16" / 8 mm	0.880"	0.580"	1.540"	1.540"	1.495"	2.435"
3/8"	1.100"	0.720"	1.851"	1.666"	2.017"	2.312"
1/2"	1.130"	0.850"	1.810"	1.810"	2.070"	



MINIATURE PUSH-QUICK FITTINGS

P Q M -      

Push Quick
Miniature

Fitting Type

Tubing Size (O.D.)

Thread Size
Blank- No Thread
N - #10-32
P - 1/8" NPT

- BT - Branch Tee
- BU - Bulkhead Union
- CC - Compact Male Conn.
- EE - Extended Elbow
- EU - Elbow Union
- FC - Female Connector
- MC - Male Connector
- ME - Male Elbow
- RT - Run Tee
- SU - Straight Union
- TU - Tee Union

- 04 - 1/8" (0.125")
- 05 - 5/32" (0.156") (4 mm)
- 08 - 1/4" (0.250")








Like Clippard's larger series Push-Quick Fittings available on the previous pages, the Miniature Push-Quick Fittings speed tube insertion for assembling pneumatic circuits. The fittings provide a simple method to connect pneumatic components and accept both flexible hose and rigid tubing.

New, Much
Smaller in Size!

Available in 5/32" (4 mm) and 1/4" O.D. tubing, the fittings permit full flow through the I.D. and there is no small orifice as required with barb fittings. They are available in many configurations with preapplied thread sealant.





Pressure Range: 0 to 150 psig @ 130°F
Vacuum: 0 to 29.5" Hg
Temperature Range: 32 to 140°F
Media: Air, Non-corrosive water
Tube Pull Out Force: >20 lb. @ 75°F (non-pressurized)
Burst Pressure: 350 psig @ 75°F
Materials: Body - Plastic Resin
 Metal Stud - Nickel Plated Brass
 Gripper Ring - Stainless Steel
 Seals - Buna N

Threaded Fittings

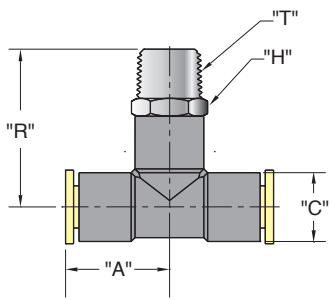
								
Tube	Thread	Male Compact Connector CC	Male Connector MC	Male Elbow ME	Run Tee RT	Branch Tee BT	Extended Elbow EE	Female Connector FC
1/8"	#10-32	PQM-CC04N	PQM-MC04N	PQM-ME04N	PQM-RT04N	PQM-BT04N	PQM-EE04N	PQM-FC04N
	1/8" NPT	PQM-CC04P	PQM-MC04P	PQM-ME04P	PQM-RT04P	PQM-BT04P	PQM-EE04P	PQM-FC04P
5/32"	#10-32	PQM-CC05N	PQM-MC05N	PQM-ME05N	PQM-RT05N	PQM-BT05N	PQM-EE05N	PQM-FC05N
	1/8" NPT	PQM-CC05P	PQM-MC05P	PQM-ME05P	PQM-RT05P	PQM-BT05P	PQM-EE05P	PQM-FC05P
1/4"	#10-32	PQM-CC08N	PQM-MC08N	PQM-ME08N	PQM-RT08N	PQM-BT08N	PQM-EE08N	PQM-FC08N
	1/8" NPT	PQM-CC08P	PQM-MC08P	PQM-ME08P	PQM-RT08P	PQM-BT08P	PQM-EE08P	PQM-FC08P

Note: Fittings with pipe thread NPT are supplied with pre-applied sealant.

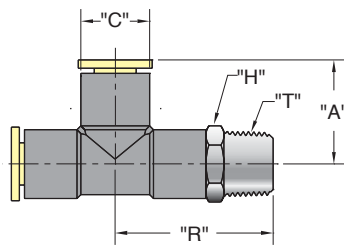
Non-Threaded Fittings

				
Tube Size	Straight Union SU	Elbow Union EU	Tee Union TU	Bulkhead Union BU
1/8"	PQM-SU04	PQM-EU04	PQM-TU04	PQM-BU04
5/32"	PQM-SU05	PQM-EU05	PQM-TU05	PQM-BU05
1/4"	PQM-SU08	PQM-EU08	PQM-TU08	PQM-BU08

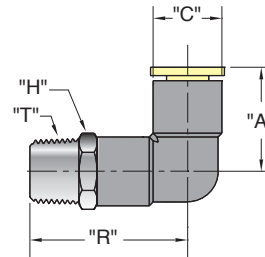
MINIATURE PUSH-QUICK FITTINGS



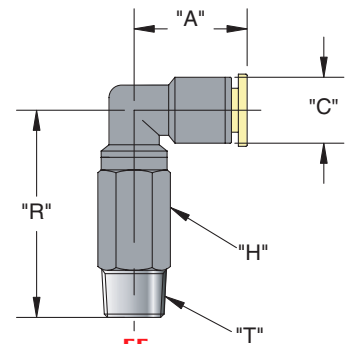
BT



RT

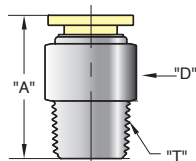


ME

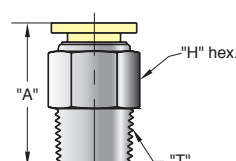


EE

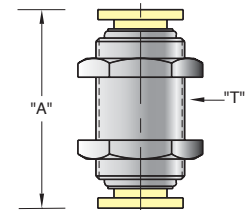
Part Number	Tubing Size	"T" Thread	"A"	"C"	"H"	"R"	Part Number	Tubing Size	"T" Thread	"A"	"C"	"H"	"R"
PQM-BT05N	5/32"	#10-32	0.593"	0.335"	5/16"	0.645"	PQM-ME05N	5/32"	#10-32	0.618"	0.335"	5/16"	0.512"
PQM-BT05P	5/32"	1/8" NPT	0.593"	0.335"	13/32"	0.783"	PQM-ME05P	5/32"	1/8" NPT	0.618"	0.335"	13/32"	0.650"
PQM-BT08N	1/4"	#10-32	0.700"	0.413"	13/32"	0.787"	PQM-ME08N	1/4"	#10-32	0.700"	0.413"	13/32"	0.807"
PQM-BT08P	1/4"	1/8" NPT	0.700"	0.413"	13/32"	0.846"	PQM-ME08P	1/4"	1/8" NPT	0.700"	0.413"	13/32"	0.866"
PQM-RT05N	5/32"	#10-32	0.551"	0.335"	5/16"	0.622"	PQM-EE05N	5/32"	#10-32	0.680"	0.450"	7/16"	1.340"
PQM-RT05P	5/32"	1/8" NPT	0.551"	0.335"	13/32"	0.760"	PQM-EE05P	5/32"	1/8" NPT	0.680"	0.450"	7/16"	1.450"
PQM-RT08N	1/4"	#10-32	0.669"	0.413"	13/32"	0.807"	PQM-EE08N	1/4"	#10-32	0.850"	0.550"	1/2"	1.650"
PQM-RT08P	1/4"	1/8" NPT	0.669"	0.413"	13/32"	0.866"	PQM-EE08P	1/4"	1/8" NPT	0.850"	0.550"	1/2"	1.650"



CC



FC/MC

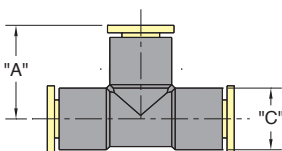


BU

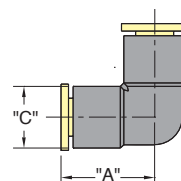
Tubing Size	"T" Thread	"A"	"D"
5/32"	#10-32	0.708"	5/16"
5/32"	1/8" NPT	0.865"	13/32"
1/4"	#10-32	0.780"	13/32"
1/4"	1/8" NPT	0.783"	13/32"

Tubing Size	"T" Thread	"A"	"H"
5/32"	#10-32	0.693"	5/16"
5/32"	1/8" NPT	0.712"	13/32"
1/4"	#10-32	0.748"	13/32"
5/32"	1/8" NPT	0.768"	13/32"

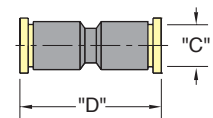
Tubing Size	"T" Thread	"A"
5/32"	M12x1	1.375"
1/4"	M14x1	1.410"



TU



EU



SU

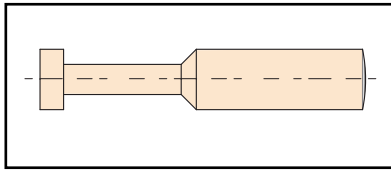
Tubing Size	"A"	"C"
5/32"	0.539"	0.335"
1/4"	0.720"	0.413"

Tubing Size	"A"	"C"
5/32"	0.618"	0.452"
1/4"	0.700"	0.539"

Tubing Size	"C"	"D"
5/32"	0.335"	1.200"
1/4"	0.413"	1.450"



PUSH-QUICK FITTINGS



Push-Quick Plugs

Clippard offers a variety of Push-Quick Plugs in sizes to fit

1/8" through 3/8" O.D. tubing. These plastic plugs may be used to plug the port of a Push-Quick Fitting for later use.

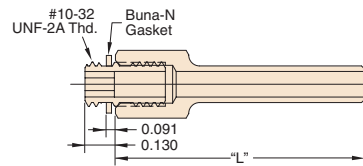
Used as a temporary plug, they may later be removed and tubing inserted to connect to an additional line of a circuit.

Part No.	Description	Part No.	Description
PQ-PG04	1/8" O.D. Tube	PQ-PG08	1/4" O.D. Tube
PQ-PG05	5/32" O.D. Tube	PQ-PG10	5/16" O.D. Tube
PQ-PG06M	6 mm O.D. Tube	PQ-PG12	3/8" O.D. Tube

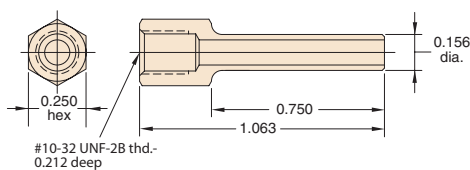
Push-Quick Fitting Adapters

Clippard offers a variety of accessories that are designed for use with Push-Quick Fittings. These include special #10-32 threaded adapters in both male (p/n [11674](#)) and female (p/n [11675](#)) thread configurations and adapters that can be used to plug a Push-Quick fitting.

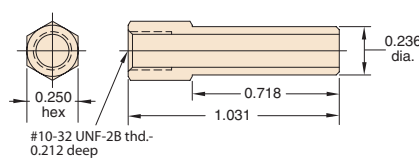
The threaded adapters insert into Push-Quick Fittings and provide either a male or female thread that can be used to mount any Clippard product with a #10-32 threaded inlet. This allows the direct attachment of the product to a Push-Quick Fitting without hoses or additional fittings.



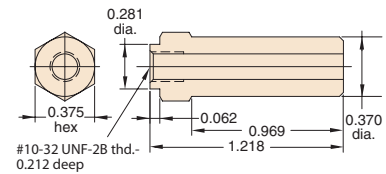
Part No.	"L"	Tube Size
11674-05	1.063"	5/32" OD
11674-08	1.031"	1/4" OD
11674-12	1.218"	3/8" OD



11675-05
5/32" OD Tube



11675-08
1/4" OD Tube

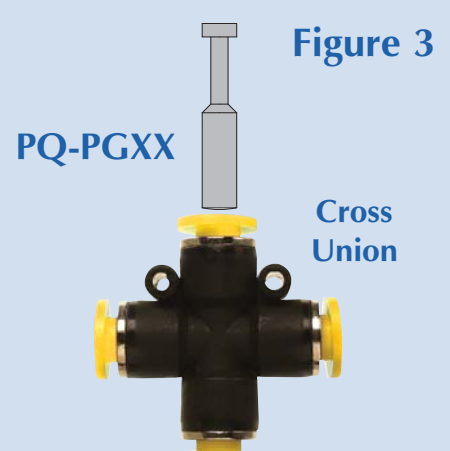


11675-12
3/8" OD Tube

Figure 1 shows an MAV-3 3-Way Valve connected to a PQ-RT05P Run Tee using a [11674-05](#) Adapter. In this example, the Run Tee is connected to a 1/8" NPT supply pipe.

Figure 2 shows an IND-1M-WH Pressure Indicator connected to a PQ-TU08 Tee Union using a [11675-08](#) Adapter. If one of the branches of a Push-Quick Fitting is to be used as a temporary pressure gauge port, the PQ-PGXX series of Plugs can be used when the gauge is not in place. Plugs may also be used if Push-Quick Fitting branches are intended for future additions to the circuit, but have no current need.

Figure 3 shows a PQ-CU Cross Union with one branch plugged with a PQ-PG08 Plug.





Minimatic slip-on fittings provide a flexible, easy alternative to ferrule and push-to-connect design fittings.

Clippard Minimatic slip-on fittings are designed to be used with Clippard urethane hose. The flexibility and strength of urethane hose and the compact design of the fittings are ideal for pneumatic applications where convenience and size are considerations. The Minimatic slip-on fitting used with Clippard urethane hose will provide a leak free connection that will hold well beyond the working pressure of the hose without the need for additional clamps.







Minimatic slip-on fittings are available in a wide variety of

configurations in a number of styles including tee, connectors, crosses, swivel, and universal. Barb sizes can be mixed on the same fitting for applications requiring multiple tubing sizes. The electroless nickel plating of Minimatic slip-on fittings provides corrosion resistance in applications involving high moisture, while enabling the fittings to retain their original, lustrous appearance. Buna-N gasket included with #10-32 threads except when ordered in bulk.





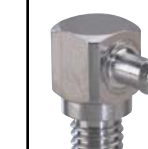

Features

- Single barb design for quick and easy positive seal
- Miniature size provides low profile
- Multiple configurations for every need
- Brass Electroless nickel plating
- Available with 1/16", 3/32" or 1/8" hose barb
- Available with #10-32 thread and 1/8" NPT
- Holds to the burst pressure of polyurethane hose

CONNECTOR FITTINGS

<p>C22</p>  <p>(2) 1/16" I.D. hose barb 0.656 1/4" sq.</p>	<p>C32</p>  <p>3/32" I.D. hose barb 0.684 1/4" sq. 1/16" I.D. hose barb</p>	<p>C33</p>  <p>(2) 3/32" I.D. hose barb 0.712 1/4" sq.</p>
<p>C42</p>  <p>1/16" I.D. hose barb 0.750 1/4" sq. 1/8" I.D. hose barb</p>	<p>C43</p>  <p>3/32" I.D. hose barb 0.762 1/4" sq. 1/8" I.D. hose barb</p>	<p>C44</p>  <p>0.875 1/4" hex. (2) 1/8" I.D. hose barb</p>

#10-32 to Hose Connectors

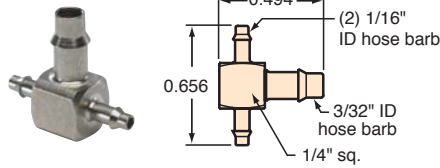
<p>CT2</p> <p>Gasket comes pre-installed</p>  <p>1/16" I.D. hose barb 0.468 1/4" hex. #10-32 thd.</p>	<p>CT3</p> <p>Gasket comes pre-installed</p>  <p>3/32" I.D. hose barb 0.523 1/4" hex. #10-32 thd.</p>	<p>CT4</p> <p>Gasket comes pre-installed</p>  <p>1/8" I.D. hose barb 0.562 1/4" hex. #10-32 thd.</p>
<p>CT0-2</p> <p>Gasket included. Not installed</p>  <p>1/4" sq. 0.468 1/16" I.D. hose barb #10-32 thd.</p>	<p>CT0-3</p> <p>Gasket included. Not installed</p>  <p>1/4" sq. 0.468 0.493 3/32" I.D. hose barb #10-32 thd.</p>	<p>CT0-4</p> <p>Gasket included. Not installed</p>  <p>1/4" sq. 0.468 0.562 1/8" I.D. hose barb #10-32 thd.</p>



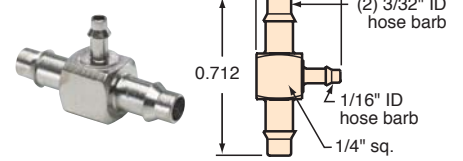
MINIMATIC® SLIP-ON FITTINGS

"T" FITTINGS

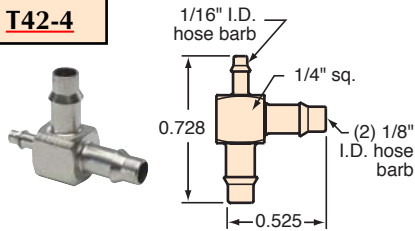
T22-3



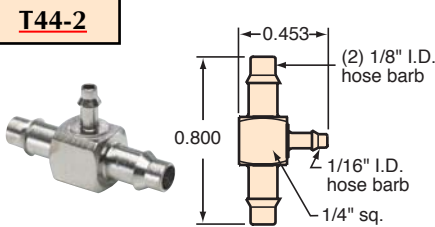
T33-2



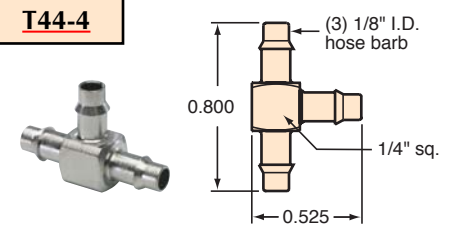
T42-4



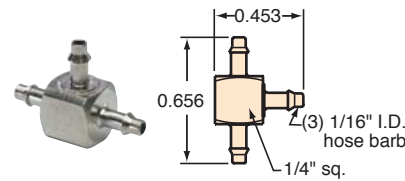
T44-2



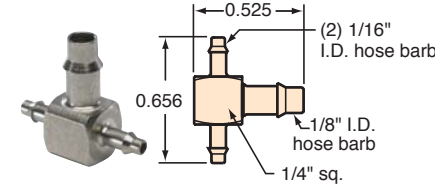
T44-4



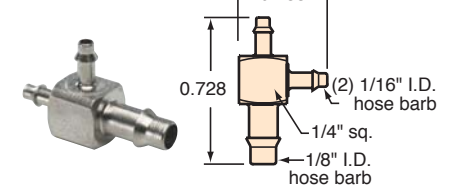
T22-2



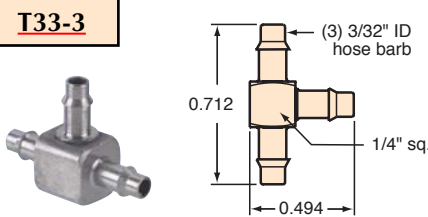
T22-4



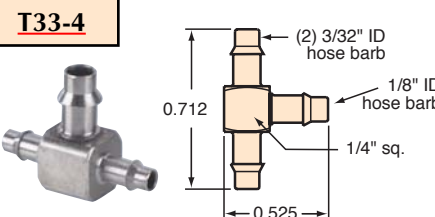
T42-2



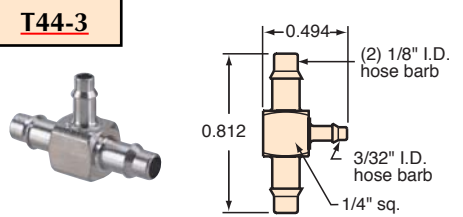
T33-3



T33-4



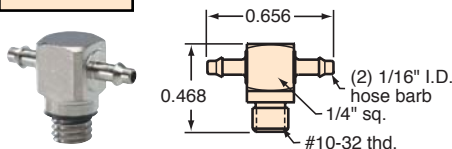
T44-3



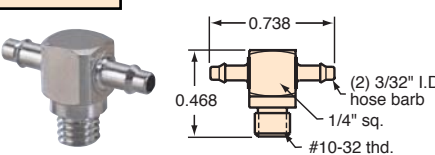
#10-32 to "T" Fittings

Gasket: Buna-N gasket included (not installed)

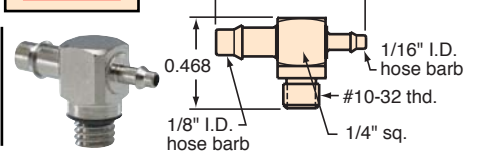
TT0-202



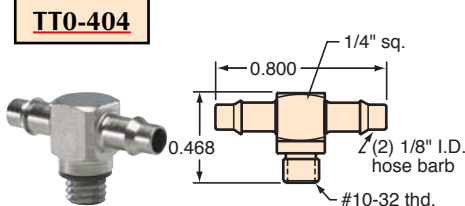
TT0-303



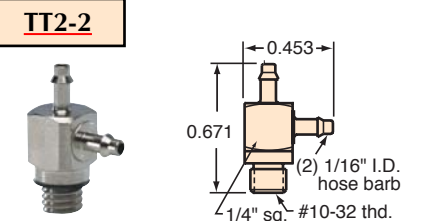
TT0-402



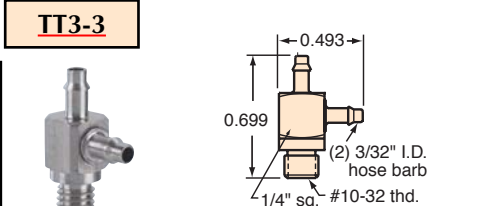
TT0-404



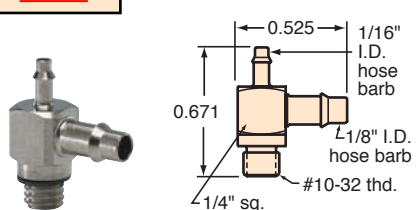
TT2-2



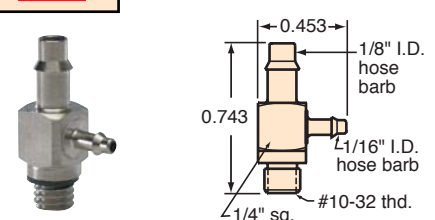
TT3-3



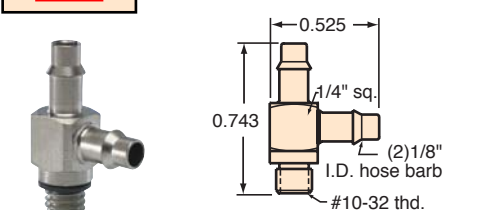
TT2-4



TT4-2

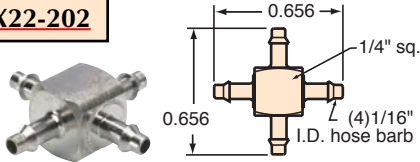


TT4-4

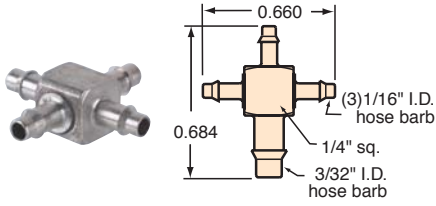


"X" FITTINGS

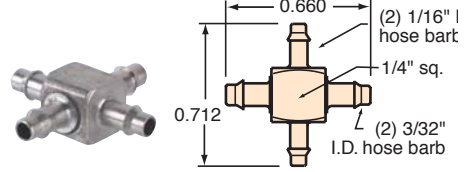
X22-202



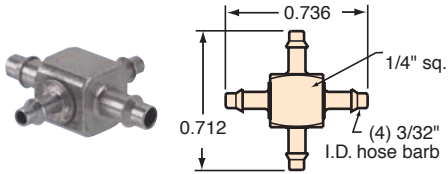
X32-202



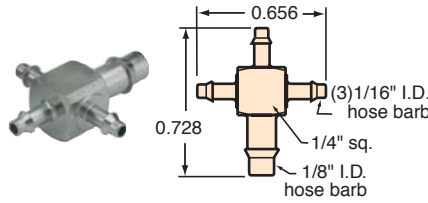
X33-202



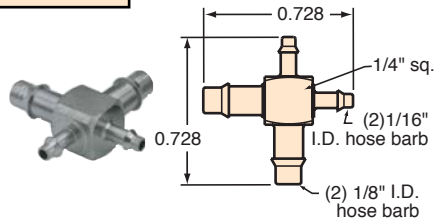
X33-303



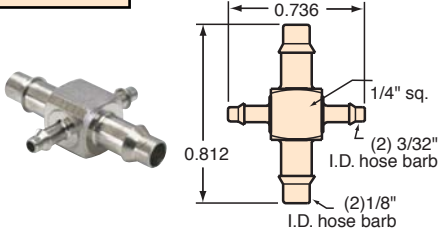
X42-202



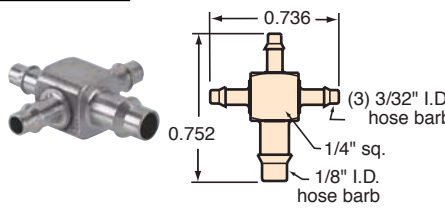
X42-402



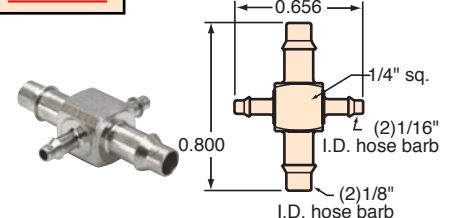
X44-303



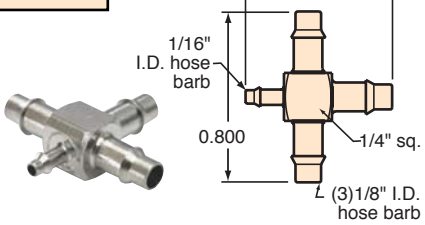
X43-303



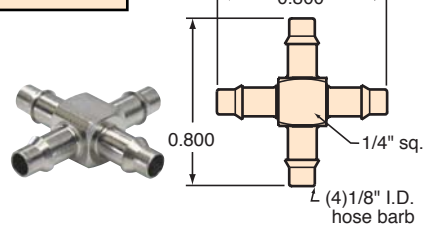
X44-202



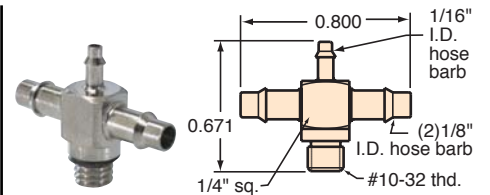
X44-402



X44-404



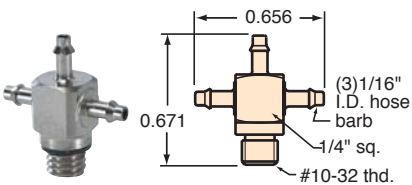
XT2-404



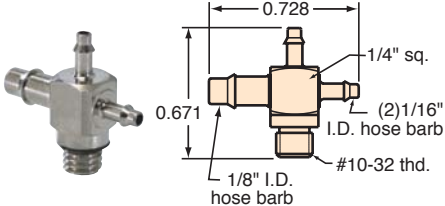
#10-32 to Hose "X" Fittings

Gasket: Buna-N gasket included (not installed)

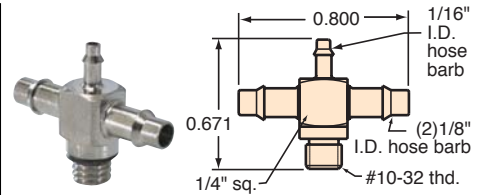
XT2-202



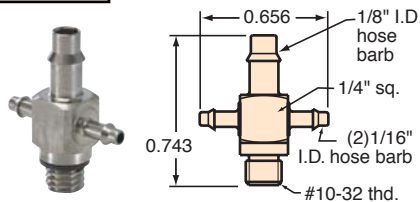
XT2-402



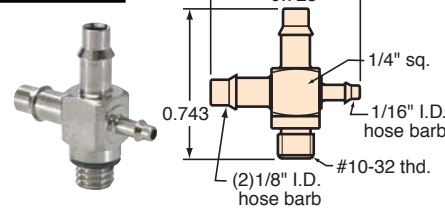
XT2-404



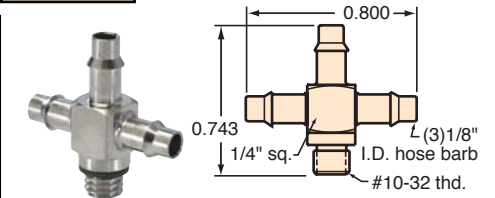
XT4-202



XT4-402



XT4-404





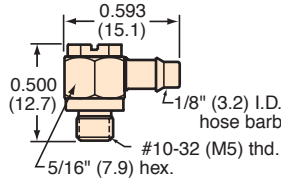
MINIMATIC® SLIP-ON FITTINGS

UNIVERSAL FITTINGS

Buna-N o-ring included with universal fittings

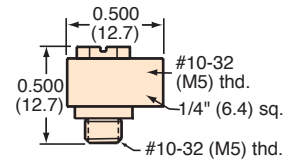
UT0-4

UT0-4-M5



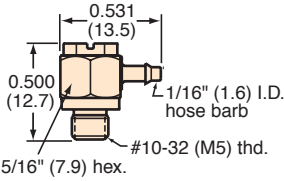
UT0-F

UT0-F-M5

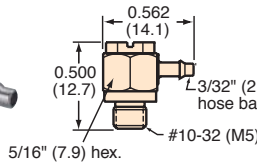


UT0-2

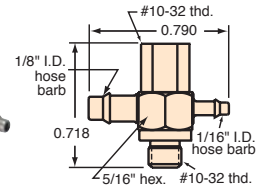
UT0-2-M5



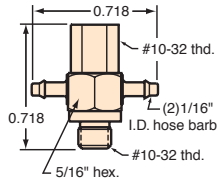
UT0-3



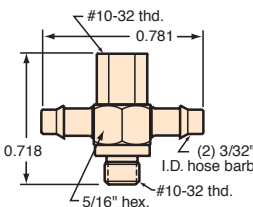
UTF-4002



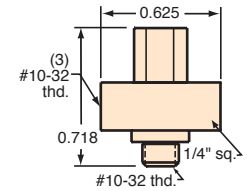
UTF-2002



UTF-3003

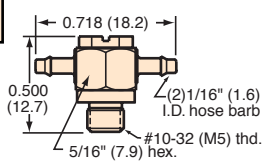


UTF-F0F

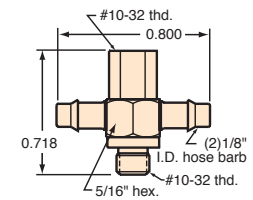


UT0-2002

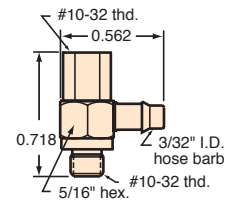
UT0-2002-M5



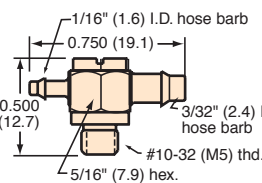
UTF-4004



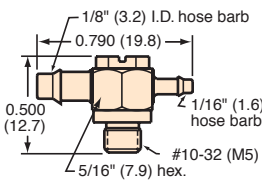
UTF-3



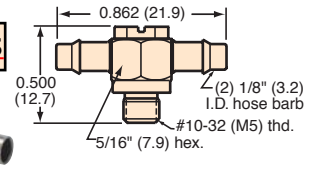
UT0-3002



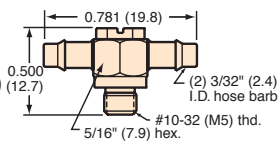
UT0-4002



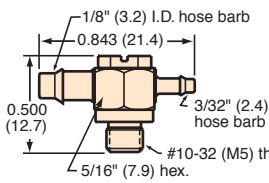
UT0-4004



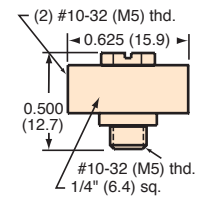
UT0-3003



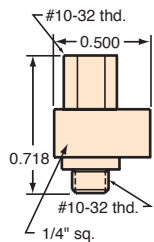
UT0-4003



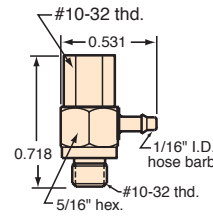
UT0-F0F



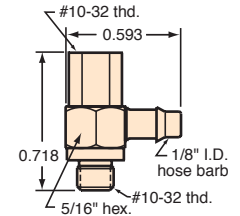
UTF-F




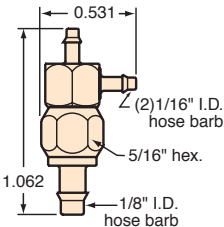

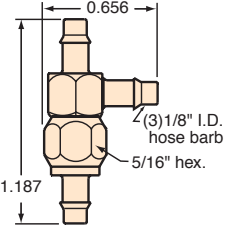

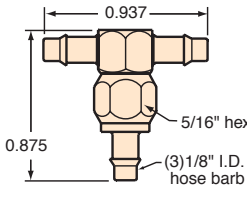
UTF-2




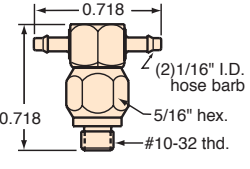

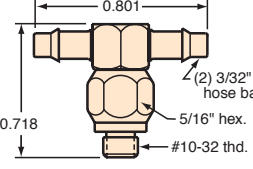

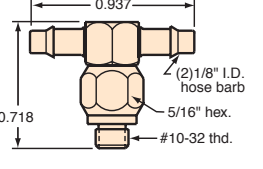

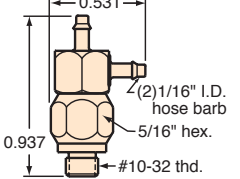

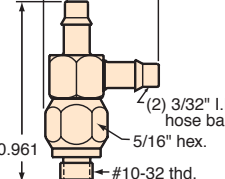

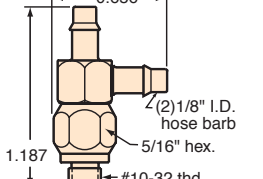

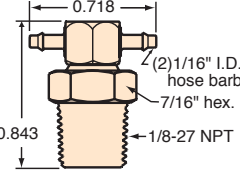

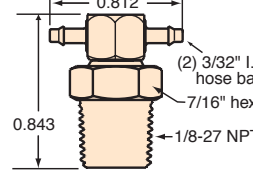

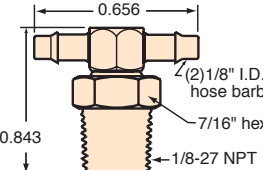

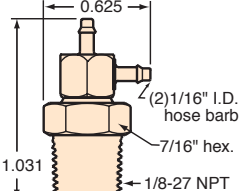

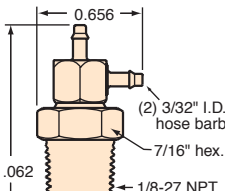

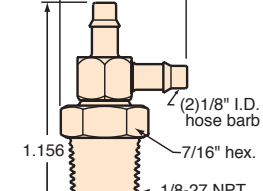
UTF-4



SWIVEL FITTINGS

S42-2	 	S44-4	 	S40-4004	 
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#10-32 to Hose Swivel "T" Fittings

ST0-2002*	 	ST0-3003*	 	ST0-4004*	 
ST2-2*	 	ST3-3*	 	ST4-4*	 
SP0-2002	 	SP0-3003	 	SP0-4004	 
SP2-2	 	SP3-3	 	SP4-4	 

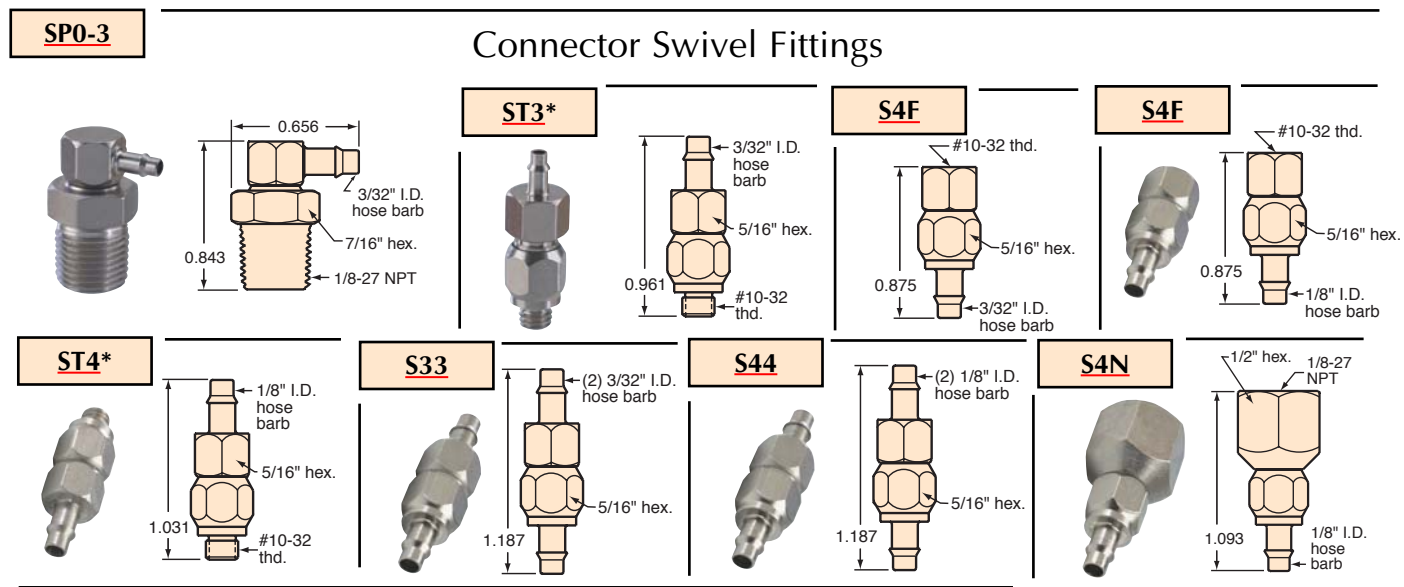
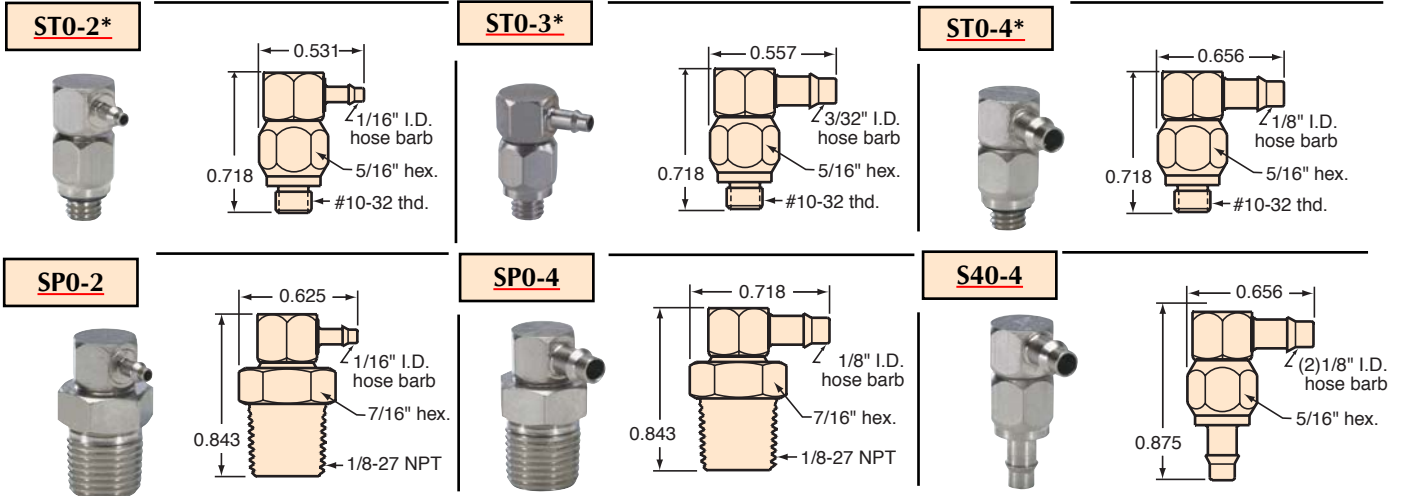
* Gasket included, not installed

Tip Most Clippard #10-32 threaded fittings require no more than 9" pounds of torque to seal. We recommend that this force not be exceeded.



MINIMATIC® SLIP-ON FITTINGS

#10-32 to Hose Swivel "L" Fittings



* Gasket included, not installed

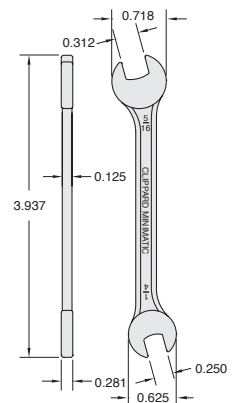
11770 Material: Chrome plated steel

Tips On Using Slip-On Fittings

Hose or Tubing Size. The use of different sizes of hose or tubing in your circuits deserves some care and consideration. In general, follow the manufacturer's guide for the size of hose or tubing you use. For air logic circuits, we recommend 1/16" I.D. for pilots and 1/8" I.D. for supplies and outputs.

Swivel Fittings. Minimatic® swivel connector fittings are very efficient in applications where joints need to be disconnected and reconnected frequently. Made with a threaded connection on one end and a swivel connection on the other, these fittings provide a true cost savings on pneumatic circuit designs. They are valuable also where short lengths of hose are being connected. Note: These are not rotating joints. They are for assembly benefits . . . not as a constant rotation connection.

Tightening #10-32 Fittings. TIGHTEN WITH CARE. Often a "finger tight" connection between Clippard fittings with anaerobic sealant is all that is required. When using a gasket, most Clippard #10-32 threaded fittings require no more than 9" pounds of torque to seal. We recommend that this force not be exceeded. Use wrench #11770 with a 1/4" and 5/16" open-end.



BRASS BARB TO #10-32 FITTINGS



Material: Brass

Gasket: Buna-N furnished in package only
Replacement [11761-2](#)

Options: (-ENP), (-M5 on [11752-2](#), [11752-3](#), [11752-4](#) and [11752-5](#))

Hose Barb		
1/16" ID	3/32" ID	1/8" ID
12841*	12843*	12842*
11752-2 & 11752-2-M5 (metric)	11752-8	11752-1
	<p>* Gasket not required; use thread sealant.</p> <p>Tighten by hand for flush mounting in #10-32 threaded holes.</p>	<p>#1 Recommended</p>
11752-5 & 11752-5-M5 (metric)		11752-4 & 11752-4-M5 (metric)
		11752-3 & 11752-3-M5 (metric)

BRASS BARB TO #10-32 FITTINGS WITH CAPTIVATED O-RINGS

Material: Brass

Seal: Buna-N o-ring furnished installed

Options: (-ENP)

Hose Barb		
1/16" ID	3/32" ID	1/8" ID
11792-5	11792-8	11792-4



BRASS BARB TO PIPE FITTINGS

Material: Brass

Thread: Standard Pipe Thread

Options: (-ENP)

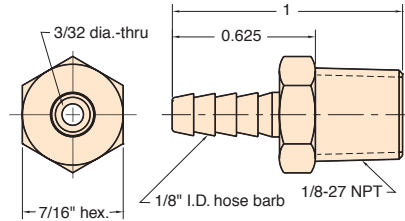


Hose Barb(s)	External Thread				
	1/16" NPT (5/16" Hex.)	1/8" NPT (7/16" Hex.)	1/4" NPT (9/16" Hex.)	3/8" NPT (11/16" Hex.)	1/2" NPT (13/16" Hex.)
1/16" ID					
Part No.	1C12	2CP2	4CQ2	6CW2	8CZ2
3/32" ID					
Part No.	1C13	2CP3	4CQ3	6CW3	8CZ3
1/8" ID					
Part No.	11924-2	2CP4	11924-1*	6CW4	8CZ4
1/4" ID				*Also available with G1/8 thread. Add -MG to the part number.	
Part No.		12844	12845		

11924-1



1/8" NPT to 1/8" I.D. Hose Fitting



Material: Brass

Thread: 1/8" NPT

Use: Joins standard pipe to 1/8" I.D. hose

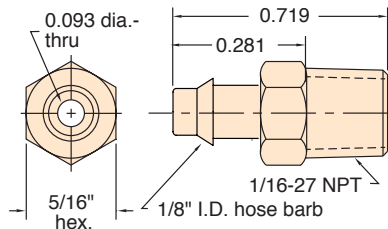
Options: (-ENP), (-MG)



11924-2



1/16" NPT to 1/8" I.D. Hose Fitting



Material: Brass

Thread: 1/16" NPT

Use: Joins standard pipe to 1/16" I.D. hose

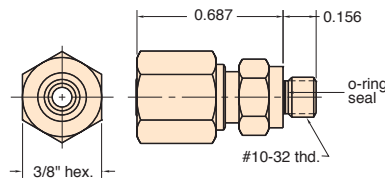
Options: (-ENP)



11923



#10-32 to 1/8" O.D. Tube Compression Fitting



Material: Brass

Thread: #10-32

For Tubing: [3811-1-RL](#) copper
NYT1-0403-CLT nylon

Options: (-ENP)

Features: One-piece ferrule and nut for fast, easy insertion of tube. Captivated o-ring seal.

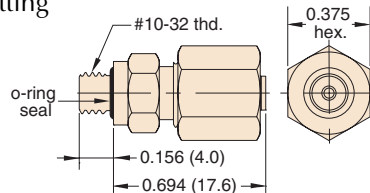
Replacement Ferrule and nut [#15155](#)



15160



#10-32 to 1/16" O.D. Tube Compression Fitting



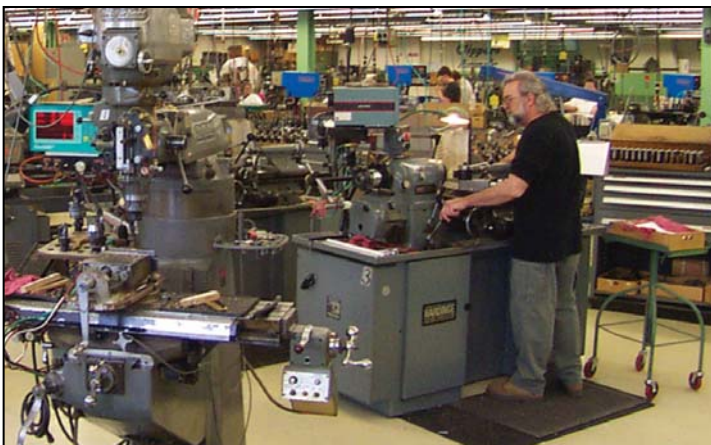
Material: Brass, Buna-N seal

Thread: #10-32

For Tubing: 1/16" O.D. copper or stainless steel

Options: (-ENP)

Features: One-piece ferrule and nut for fast, easy insertion of tube. Captivated o-ring seal.



Clippard's reputation of building jigs, fixtures and machines as well as modifying existing machines to improve productivity is carried on in its well equipped machine shop. New product prototypes are crafted by experienced engineers and machinists.

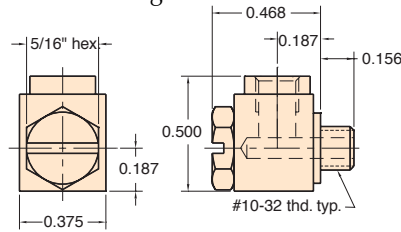


MINIMATIC® X T L FITTINGS

15002-1



Adjustable "L" Fitting



Material: Brass body, stainless steel stud

Stud: Stainless steel hex head with screwdriver slot (12292)

Thread: #10-32

Seals: Buna-N o-ring furnished

Use: Permits port to be aimed 360° in one plane, then secured by tightening screw. Also useful in connecting and disconnecting hose in hard-to-reach locations.

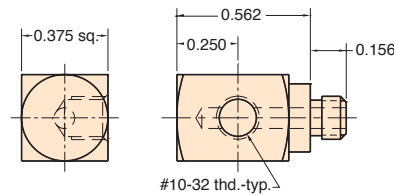
Options: (-ENP)



15002-2



"L" Fitting



Material: Brass

Thread: #10-32

Gasket: Buna-N furnished in package only

Use: Allows ports to be brought out 90° to the side. For exact positioning use thread sealant

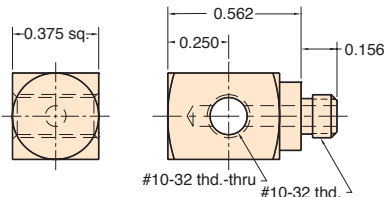
Options: (-ENP)



15002-3



"T" Fitting



Material: Brass

Thread: #10-32

Gasket: Buna-N furnished in package only

Use: Like the "L" fitting, except ports out both sides. For precise positioning use thread sealant

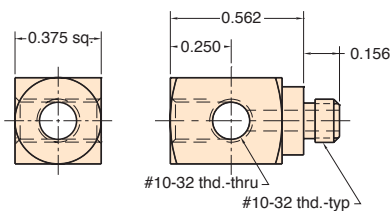
Options: (-ENP)



15002-4



"X" Fitting



Material: Brass

Thread: #10-32

Gasket: Buna-N furnished in package only

Use: May be used as a miniature manifold, or "L" or "T" fitting by plugging unused ports with screw plug 11755. For precise positioning use thread sealant

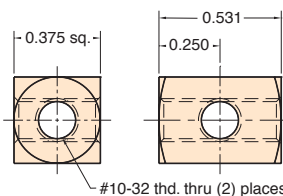
Options: (-ENP)



15002-5



"X" Coupling



Material: Brass

Thread: #10-32

Use: Ideal as small manifold.

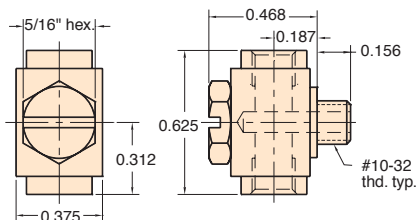
Options: (-ENP)



15002-6



Adjustable "T" Fitting



Material: Brass

Thread: #10-32

Stud: Stainless steel hex head with screwdriver slot (12292)

Seals: Buna-N o-ring furnished

Use: Permits ports to be aimed in any direction 360° in one plane then secured by tightening screw. Also useful for connecting or disconnecting hose in tight spots.

Note: Same dimensions as 15002-1 "L" fitting, except length, which is 5/8"

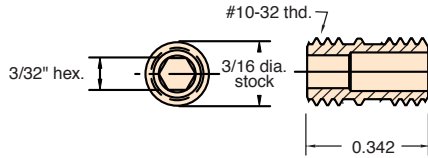
Options: (-ENP)



15453



Male #10-32 Coupling



Material: Stainless steel

Thread: #10-32

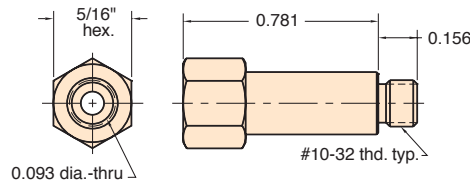
Seals: Loctite necessary

Use: Excellent for a surface to surface connection of female #10-32 products

15010



#10-32 Extension Fitting



Material: Brass

Thread: #10-32

Gasket: Buna-N furnished

Use: To provide extension for convenience in assembling components

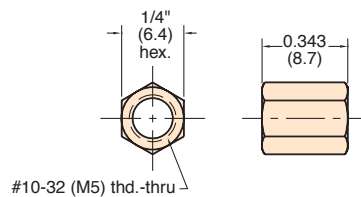
Options: (-ENP)



15004



#10-32 Female Hex Coupling



Material: Brass

Thread: #10-32 tapped (M5)

Use: For coupling two #10-32 (M5) male fittings

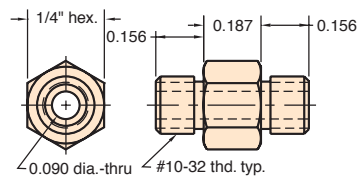
Options: (-M5), (-ENP)



11999



#10-32 Male Connector



Material: Brass

Thread: #10-32 both ends

Gaskets: Buna-N 2 furnished

Use: For coupling cylinders directly to valves, and many other coupling arrangements

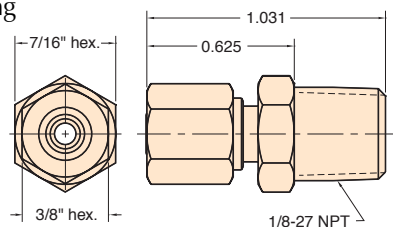
Options: (-ENP)



3810-1



1/8" NPT to 1/8" O.D. Tube Compression Fitting



Material: Brass

Thread: 1/8" NPT

Use: Joins standard size pipe to [3811-1-RL](#) copper or NYT1-0403-CLT nylon tubing

Replacement Ferrule & Nut: [#15155](#)

Options: (-ENP)

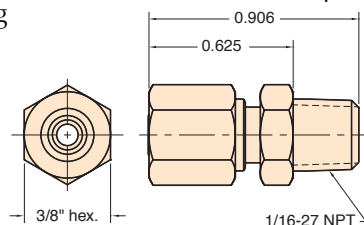
Features: One piece ferrule and nut for fast, easy insertion of tube



3810-2



1/16" NPT to 1/8" O.D. Tube Compression Fitting



Material: Brass

Thread: 1/16" NPT

Use: Joins standard size pipe to [3811-1-RL](#) copper or NYT1-0403-CLT nylon tubing

Replacement Ferrule & Nut: [#15155](#)

Options: (-ENP)

Features: One piece ferrule and nut for fast, easy insertion of tube





BRASS FITTINGS

SWIVEL FITTINGS

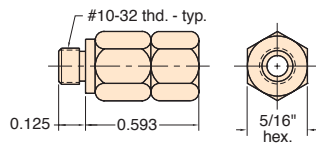
Minimatic® swivel connector fittings are very efficient in applications where joints need to be disconnected and reconnected frequently. Made with a threaded connection on one end and a swivel connection on the other, these fittings provide a true cost savings on pneumatic circuit designs. They are valuable also where short lengths of hose are being connected.

Note: These are not rotating joints. They are assembly benefits . . . not to be used as a constant rotation junction.

15040



#10-32 Swivel Fitting



Material: Brass

Thread: #10-32

Seals: Buna-N o-ring (gasket furnished package only)

Use: Allows connection to rotate for tightening in confined spaces

Note: Used for positioning not for rotary connector

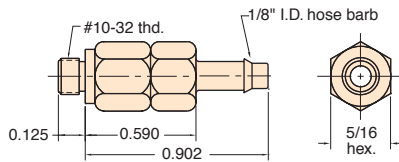
Options: (-ENP)



15045



#10-32 to 1/8" I.D. Hose Swivel Fitting



Material: Brass

Thread: #10-32

Seals: Buna-N o-ring (gasket furnished package only)
Use: Allows connection to rotate for tightening in confined spaces

Hose Barb: 1/8" I.D. hose

Note: Used for positioning not for rotary connector

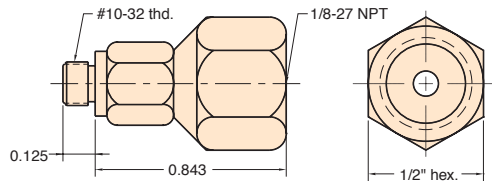
Options: (-ENP)



15050



1/8" NPT to #10-32 Swivel Adapter



Material: Brass

Thread: #10-32 and tapped for 1/8-27 NPT

Seals: Buna-N o-ring (gasket furnished package only)

Use: Allow connection to rotate for tightening in confined spaces

Note: Used for positioning not for rotary connector

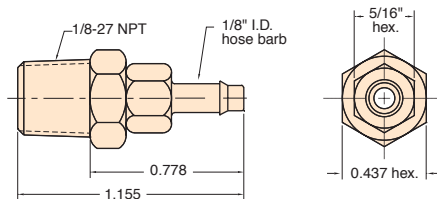
Options: (-ENP)



15055



1/8" NPT to 1/8" I.D. Hose Swivel Fitting



Material: Brass

Thread: 1/8-27 NPT

Seals: Buna-N o-ring

Use: Allows connection to rotate for tightening in confined spaces

Hose Barb: 1/8" I.D. hose

Note: Used for positioning not for rotary connector

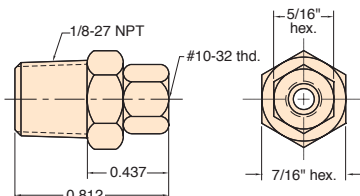
Options: (-ENP)



15060



1/8" NPT to #10-32 Swivel Adapter



Material: Brass

Thread: 1/8-27 NPT male and #10-32 tapped

Seals: Buna-N o-ring

Use: Allows connection to rotate for tightening in confined spaces.

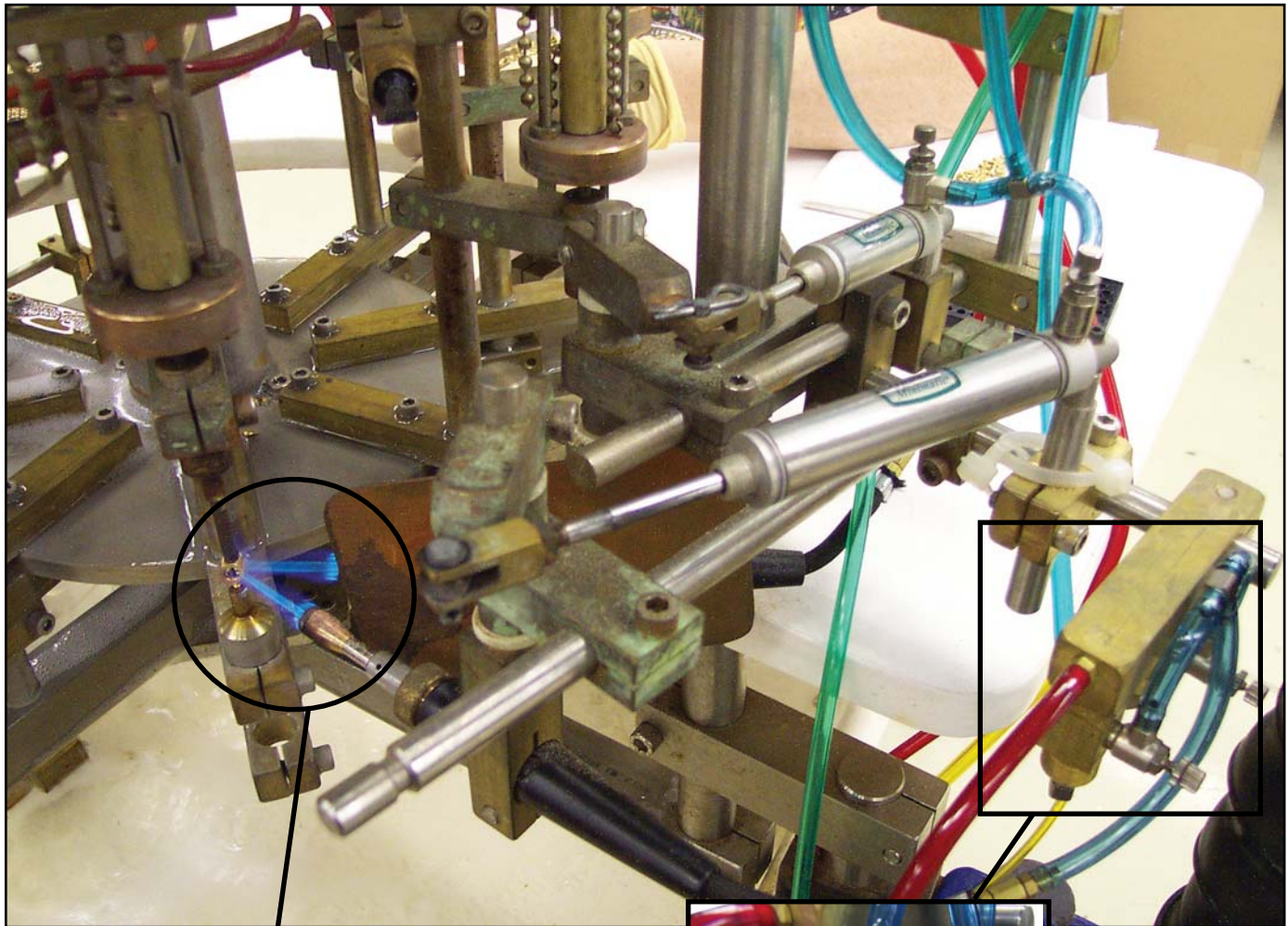
Note: Used for positioning not for rotary connector

Options: (-ENP)

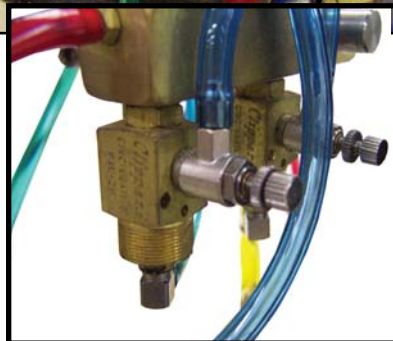


Clippard Slip-on Fitting Assembly

This semi-automatic rotary solder machine was designed and built in-house for the Clippard slip-on fitting product line. Incorporated into the design are Clippard modular valves, stainless steel cylinders, brass valves, flow controls, slip-on fittings, hose and super structure providing framework, control, indexing and parts handling.



The machine consists of a rotating center carousel with eight stations. The individual components of each slip-on fitting are loaded into clamp fixtures mounted on the carousel. The carousel indexes to each of the process stations: load, heat, cool, quench, and unload. The control and timing of the machine is accomplished using Clippard modular valves and brass limit valves. Each clamp fixture has its own control circuit for manual and automatic control. Sensors are also incorporated at each clamp fixture to sense the presence of a part.



The heat station uses MFC-3AK2's to meter propane, while PAV-2's turn the propane on and off. In addition, the torches are connected to cylinders so they are able to rotate for the heat cycle.

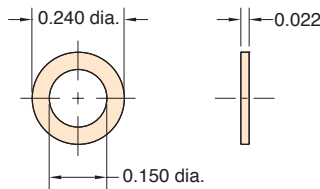


GASKETS

BUNA-N GASKET



Part No.	Description
<u>11761-2</u>	Buna Gasket



Material: Buna-N

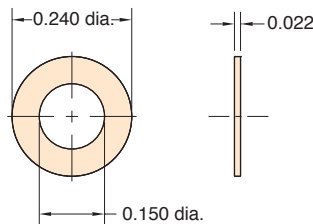
Use: Buna-N gasket is designed for use with #10-32 threads; included with packaged Clippard fittings; replaces 11761-5

Temperature Range: -40 to 250°F

VITON GASKET



Part No.	Description
<u>11761-8</u>	Viton Gasket



Material: Viton

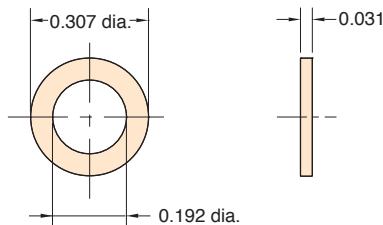
Use: Designed for use with #10-32 threads in high temperature applications

Temperature Range: -20 to 450°F

NYLON GASKET



Part No.	Description
<u>11761-4</u>	Nylon Gasket



Material: Nylon

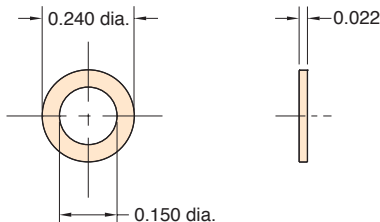
Use: Designed for use with #10-32 threads in applications that require nylon for chemical compatibility

Temperature Range: 40 to 200°F

EPDM GASKET



Part No.	Description
<u>11761-7</u>	EPDM Gasket



Material: EPDM

Use: Designed for use with #10-32 threads in applications that require EPDM for low temperature or chemical compatibility; do not use with petroleum-based lubricants

Temperature Range: -60 to 300°F

Gasket Tips

Gaskets are recommended for use with Clippard fittings. They provide snug, dependable seals without extra effort or materials. The most popular gasket for static sealing of #10-32 threads is the 11761-2 Buna-N Gasket. This gasket is included with packaged fittings and comes installed on a variety of Minimatic® slip-on fittings. Overtightening fittings with gaskets may have a tendency to extrude the gasket. While this may be a concern, the actual sealing is being accomplished by a small piece of the gasket at the base of the threads.

Sealants

There are a number of brands of anaerobic sealants that may be used with Clippard fittings. Anaerobic sealants are applied wet and harden when no longer exposed to air. Their proper use results in a very effective, low cost seal. There are several alternate sealing methods:

1. sealant alone
2. gasket alone
3. gasket and sealant combination

The first two methods will provide adequate sealing for normal air pressures. When extra resistance to vibration is necessary or a permanent orientation of the fitting is required, use of the combination of both gasket and sealant is recommended.

Material: Brass **Thread:** M2.5 - 0.45 (#3-56 US equiv.) **Use:** Threads into Clippard subminiature cylinder; fits 1/16" I.D. hose

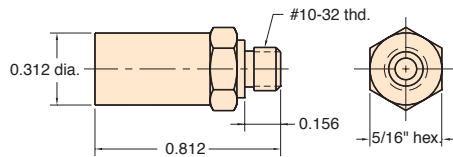
11750-2

11749-2

11749-1

11749-3

#10-32 MUFFLER



Material: Electroless nickel plated brass body sintered stainless steel muffler (60 micron)

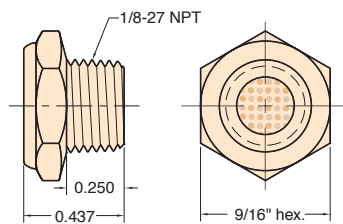
Thread: #10-32

Gasket: Buna-N furnished

Use: To muffle exhausts for quiet system operation

Part No.	Description
15070	#10-32 Muffler

1/8" NPT MUFFLER



Material: Solid brass body; sintered stainless steel insert (100 micron)

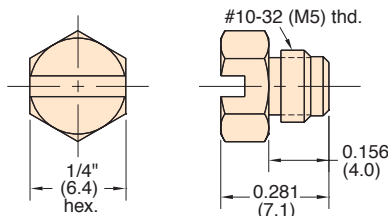
Thread: 1/8" NPT

Use: To muffle exhaust for quiet system operation

Options: (-ENP)

Part No.	Description
15080	1/8" NPT Muffler

#10-32 SCREW PLUG



Material: Brass

Thread: #10-32 (M5)

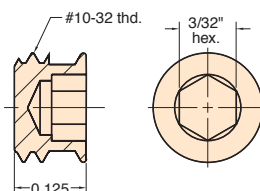
Gasket: Buna-N furnished package only

Use: For plugging unused ports in manifolds, air lines and other devices

Options: (-ENP), (-M5)

Part No.	Description
11755	Screw Plug

HEADLESS SCREW PLUG



Material: Stainless Steel screw plug

Thread: #10-32

Use: For plugging unused ports in manifold, air lines and other devices that require a flush surface plug; use 3/32 Allen hex wrench to install

Note: Thread sealant recommended

Part No.	Description
0035-2	Screw Plug






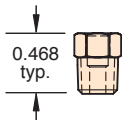
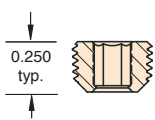
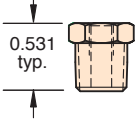
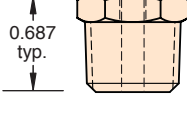
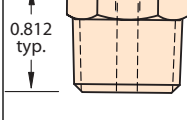


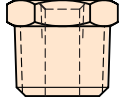
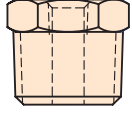

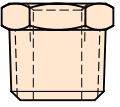
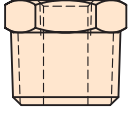
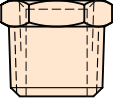
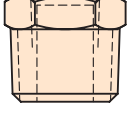
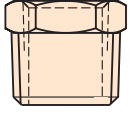


PIPE REDUCER BUSHINGS

Material: Brass

Use: Will adapt standard pipe to fittings and Clippard miniature components

Option: (-ENP)

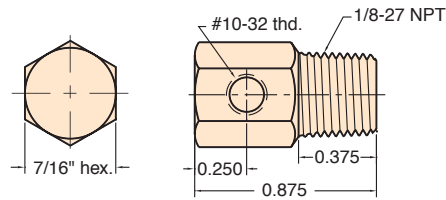
	External Thread					
	1/16" NPT (5/16" Hex.)	1/8" NPT (7/16" Hex.)	1/4" NPT (9/16" Hex.)	3/8" NPT (11/16" Hex.)	1/2" NPT (13/16" Hex.)	
Internal Thread						
#10-32						
Part No.	<u>1CIF</u>	<u>15036*</u>	<u>2CPF</u>	<u>4CQF</u>	<u>6CWF</u>	<u>8CZF</u>
1/16" NPT						
Part No.		<u>2CPK</u>	<u>4CQK</u>	<u>6CWK</u>	<u>8CZK</u>	
1/8" NPT						
Part No.			<u>4CQN</u>	<u>6CWN</u>	<u>8CZN</u>	
1/4" NPT						
Part No.				<u>6CWY</u>	<u>8CZY</u>	
3/8" NPT						
Part No.					<u>8CZD</u>	

* Nickel-plated

15090-1



1/8" NPT to #10-32 "L" Fitting



Material: Brass

Thread: 1/8" NPT to #10-32

Use: To provide connections between the two thread sizes with mounting convenience

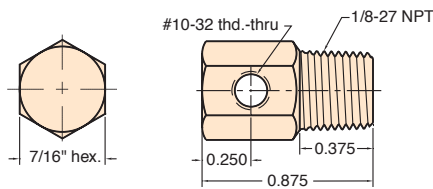
Options: (-ENP)



15090-2



1/8" NPT to #10-32 "T" Fitting



Material: Brass

Thread: 1/8" NPT to #10-32

Use: To provide connections between the two thread sizes with extra mounting convenience

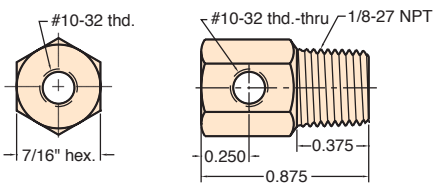
Options: (-ENP)



15090-3



1/8" NPT to #10-32 "X" Cross Fitting



Material: Brass

Thread: 1/8" NPT to #10-32

Use: To provide connections between the two thread sizes; can be used as a miniature manifold

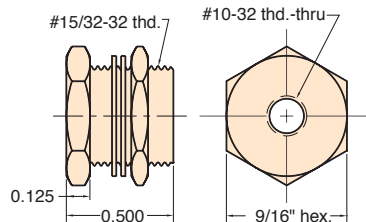
Options: (-ENP)



15027



#10-32 Bulkhead Fitting



Material: Brass

Thread: #10-32 tapped both ends

Locking Nut: 9/16" furnished with two steel lockwashers

Use: Provides rigid connection thru panels or bulkheads up to 1/4" thick; use with any Clippard #10-32 threaded fitting or connector

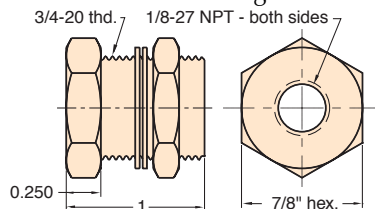
Options: (-ENP)



15029-1



1/8" NPT Bulkhead Fitting



Material: Brass

Thread: O.D. - 3/4 - 20, I.D. 1/8" NPT

Locking Nut: 7/8" hex furnished with two steel lockwashers

Use: Provides rigid connection thru panels or bulkheads up to 1/2" thick

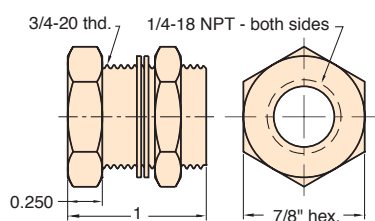
Options: (-ENP)



15029-2



1/4" NPT Bulkhead Fitting



Material: Brass

Thread: O.D. - 3/4 - 20, I.D. 1/4" NPT

Locking Nut: 7/8" hex furnished with two steel lockwashers

Use: Provides rigid connection thru panels or bulkheads up to 1/2" thick

Options: (-ENP)



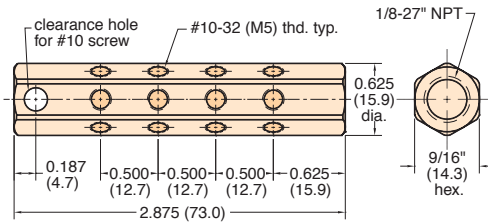


MANIFOLDS

MAN-12



12-Port Manifold



Material: Brass

Thread: Tapped ports: 1/8" standard pipe tapped inlet

Mounting: 13/64" diameter mounting hole

Use: May be mounted on jigs, fixtures or machinery to provide up to 12 convenient #10-32 outlets from one standard 1/8" pipe connection; may be used with any Clippard #10-32 fittings, quick connects and many other devices; unused ports can be plugged with screw plug [11755](#)

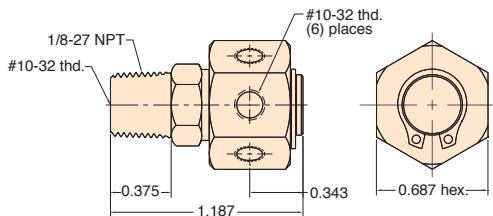
Options: (-ENP)



MRM-6



6-Port Rotary Manifold



Material: Brass and stainless steel

Thread: 1/8" NPT for inlet is also tapped #10-32; outlet consists of 6 ports tapped #10-32

Seals: Buna-N o-ring furnished

Working Range: 250 psig max.

Air Flow: 5.9 scfm @ 50 psig

Use: May be used either as a rotary joint or as a stationary manifold; ideal for distributing air or liquid from center column onto a rotary index table; unused ports may be plugged with screw plug [11755](#) and gasket

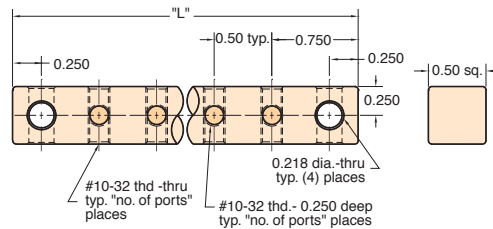
Low RPM applications

15028-□



Miniature Terminal Blocks

X to be replaced with: 4, 6, 8, 10



Material: Anodized aluminum

Thread: #10-32 tapped ports

Mounting: With two 7/32: diameter mounting holes

Use: To help organize connections in circuit boxes, control panels and machine piping; cross drilled mounting holes permit mounting of "T" in any direction; use screw plug [11755](#) to plug unused ports

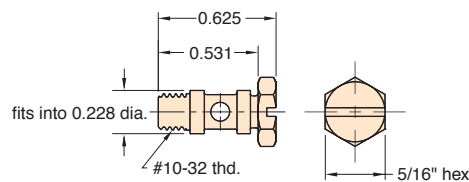
Model #	# of Ports	A	L
15028-4	4	2 1/2"	3"
15028-6	6	3 1/2"	4"
15028-8	8	4 1/2"	5"
15028-10	10	5 1/2"	6"

15028-4 pictured above

12292



Miniature Manifold Stud



Material: Stainless steel

Thread: #10-32

Seals: Buna-N o-ring and gasket furnished

Use: This hollow, cross-drilled stud is useful for connecting specially made manifolds to multiple ports of valves or cylinders, eliminating need for external fittings with hose

IN-LINE MANIFOLDS

Clippard's aluminum pipe thread manifolds are an economical and efficient choice for grouping pneumatic valves and other components in applications where space is limited. In addition, manifolds help to reduce potential leak points and allow for faster installation, all with one common air supply and less piping.

A unique feature of this series of manifolds is a bottom T-slot mounting system which allows for secure mounting using only two carriage bolts on any center distance along the length of the manifold. Hardware Kit ordered separately.

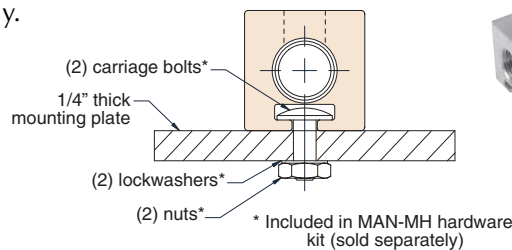
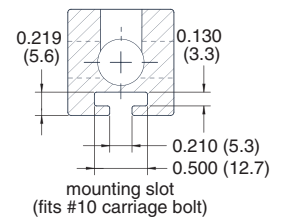
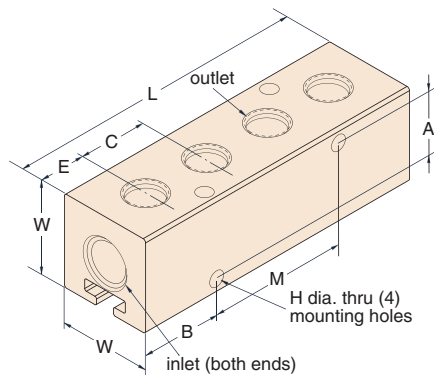
Medium: Air or Liquid

Material: Clear Anodized Aluminum

Outlet Ports (Top Ports): 1/8" NPT or 1/4" NPT

Inlet Ports (End Ports): 1/4" NPT or 3/8" NPT

Mounting: Top-to-bottom and front-to-back mounting Holes as well as bottom T-slot mounting system



Part No.	Stations **	Width "W"	End Inlets	Top Outlets	Center "C" **	End "E"	Length "L"	Mtg. "M"	"A"	"B"	Hole* "H"
MAN-ASF1-04	4						3.250"	1.500"			
MAN-ASF1-06	6	1"	1/4" NPT	1/8" NPT	0.750"	0.500"	4.750"	3.000"	0.700"	0.875"	0.172"
MAN-ASF1-08	8	Sq.					6.250"	4.500"			(#8)
MAN-ASF1-10	10						7.750"	6.000"			screw)
MAN-ALF1-04	4						3.250"	1.500"			
MAN-ALF1-06	6	1 1/4"	3/8" NPT	1/8" NPT	0.750"	0.500"	4.750"	3.000"	0.875"	0.875"	0.201"
MAN-ALF1-08	8	Sq.					6.250"	4.500"			(#10)
MAN-ALF1-10	10						7.750"	6.000"			screw)
MAN-ALF2-04	4						4.125"	1.750"			
MAN-ALF2-06	6	1 1/4"	3/8" NPT	1/8" NPT	0.875"	0.750"	5.875"	3.500"	0.875"	1.187"	0.201"
MAN-ALF2-08	8	Sq.					7.625"	5.250"			(#10)
MAN-ALF2-10	10						9.375"	7.000"			screw)
MAN-ALY2-04	4						3.875"	1.750"			
MAN-ALY2-06	6	1 1/4"	3/8" NPT	1/4" NPT	0.875"	0.625"	5.625"	3.500"	0.875"	1.062"	0.201"
MAN-ALY2-08	8	Sq.					7.375"	5.250"			(#10)
MAN-ALY2-10	10						9.125"	7.000"			screw)
MAN-ALY6-04	4						5.875"	2.750"			
MAN-ALY6-06	6	1 1/4"	3/8" NPT	1/4" NPT	1.375"	0.875"	8.625"	5.500"	0.875"	1.562"	0.201"
MAN-ALY6-08	8	Sq.					11.375"	6.250"			(#10)
MAN-ALY6-10	10						14.125"	11.000"			screw)

* 0.172" can be tapped by the user for #10-32 thread; 0.201" may be tapped by user for 1/4"-20 thread for mounting.

** Variations available—consult factory.

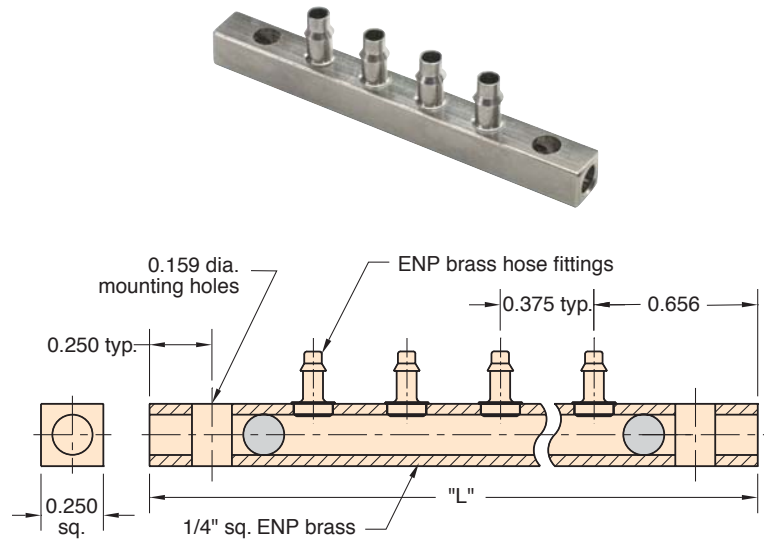


MANIFOLDS

BLOCK MANIFOLDS

The BHH series has mounting holes for #6 screws at each end. One of the stations must be used as the air supply to the manifold.

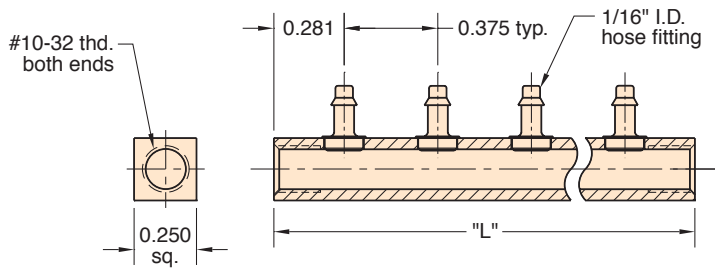
Part #	# of Stations	Fitting Size
BHH2-04	4	1/16" I.D. Hose Barb
BHH2-06	6	
BHH2-08	8	
BHH2-10	10	
BHH2-12	12	
BHH4-04	4	1/8" I.D. Hose Barb
BHH4-06	6	
BHH4-08	8	
BHH4-10	10	
BHH4-12	12	



The BTT series Block Manifold has #10-32 holes at each end for inline mounting. One end may be used as the air supply to the manifold and the other end plugged.



Part #	# of Stations	Fitting Size
BTT2-04	4	1/16" I.D. Hose Barb
BTT2-06	6	
BTT2-08	8	
BTT2-12	12	
BTT4-04	4	1/8" I.D. Hose Barb
BTT4-06	6	
BTT4-08	8	
BTT4-10	10	
BTT4-12	12	



The Minimatic J-Series quick connect consists of two component parts that are joined to form the complete connector. The valve body contains a 2-way spring-loaded poppet valve that is generally connected to the main air supply. When the poppet is not depressed, the air supply is shut-off by this valve. The Cap contains a valve depressor that when assembled to the valve body, depresses the poppet allowing air to flow from the main supply to circuitry or equipment downstream. Valve body & cap assemblies contain both components.

M J Q C - □ □ □ □

Cap

- B4** - 1/8" hose barb
- FT** - #10-32 female thread
- PF** - Panel mount #10-32 female thread
- PB** - Panel mount 1/8" hose barb
- MP** - 1/8" male NPT thread
- MQ** - 1/4" male NPT thread

Valve Body

- B4** - 1/8" hose barb
- FT** - #10-32 female thd.
- MT** - #10-32 male thd.
- MP** - 1/8" male NPT thd.
- FP** - 1/8" female NPT thd.
- MQ** - 1/4" male NPT thd.

To order just the cap

M J Q C - C □ □

To order just the valve body

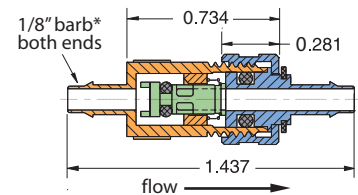
M J Q C - V □ □

VALVE BODY & CAP ASSEMBLIES

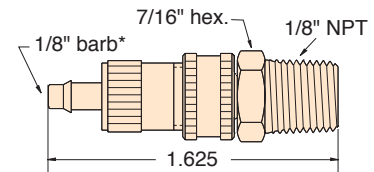
*1/8" Barb - fits 1/8" I.D. hose. Ideal for use with Clippard URH1-0804 polyurethane hose.

- High flow of 14 scfm @ 100 psig
- Space saving attractive miniature design
- Wide variety of connectors
- Adds convenience to equipment and circuits
- Brass body, electroless nickel plated
- Non-corrosive - Delrin® poppet
- Fills the gap between clumsy, large quick connects and smaller quick connects with less flow
- Buna-N seals, positive shut off
- Positive threaded connection, stays connected
- Medium: Air, Oil, or Water
- Working Pressure: 0 to 150 psig max.

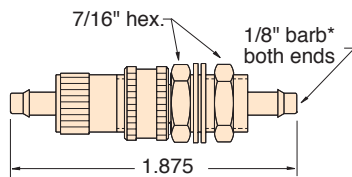
Minimatic J-Series quick connect fittings are very compact yet provide a very high flow. The electroless nickel plated brass body is available with #10-32 threads (M or F), 1/8" NPT threads (M or F), 1/4" NPT threads (M) or a 1/8" hose single barb configuration.



Part No.	Description
MIQC-B4B4	... 1/8" Barb Outlet, 1/8" Barb Inlet (MJQC-VB4/MJQC-CB4 Combo)

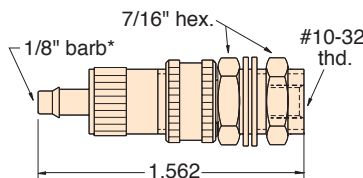


Part No.	Description
MIQC-MPB4	... 1/8" Barb Outlet, 1/8" NPT Inlet (MJQC-VB4/MJQC-CMP Combo)



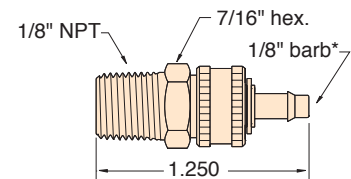
Part No.	Description
MIQC-PBB4	... 1/8" Barb Outlet, 1/8" Barb Inlet with Thread (MJQC-VB4/MJQC-CPB Combo)

(supplied with mounting nut and two washers)



Part No.	Description
MIQC-PFB4	... 1/8" Barb Outlet, #10-32 Inlet (MJQC-VB4/MJQC-CPF Combo)

(supplied with mounting nut and two washers)



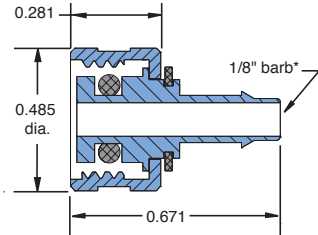
Part No.	Description
MIQC-B4MP	... 1/8" NPT Outlet, 1/8" Barb Inlet (MJQC-VMP/MJQC-CB4 Combo)



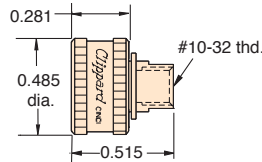
MINIMATIC® J-SERIES QUICK CONNECT FITTINGS

CAPS WITH OPEN FLOW PATH

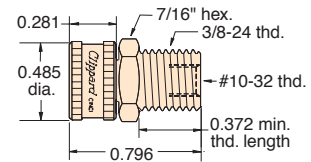
Minimatic J-Series quick connect fittings are ideal for use in jigs, fixtures, feeding devices, logic control circuitry and automatic or semi-automatic machinery. Assembly is simple, and the tightening of the knurled cap assures a positive, leakproof, high pressure connection that will stay connected.



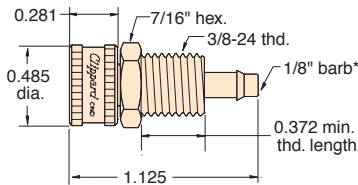
Part No. MIQC-CB41/8" Barb



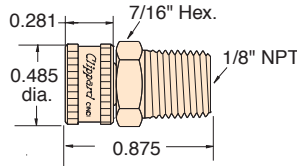
Part No. MIQC-CFT#10-32



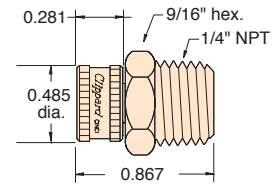
Part No. MIQC-CPF3/8" Thread



Part No. MIQC-CPB1/8" Barb
(supplied with mounting nut and two washers)



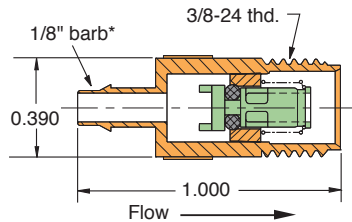
Part No. MIQC-CMP1/8" NPT



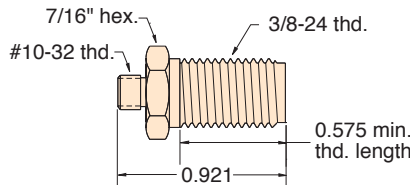
Part No. MIQC-CMQ1/4" NPT

VALVE BODIES WITH SHUT-OFF VALVE

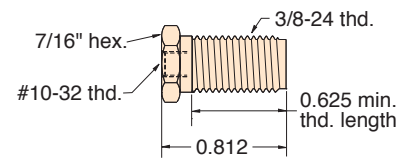
Minimatic J-Series quick connect fittings are very compact yet provide a high flow of 14 scfm @ 100 psig. The electroless nickel plated brass body is available with #10-32 threads (M or F), 1/8" NPT threads (M or F), 1/4" NPT threads (M) or a 1/8 hose single barb configuration that is ideal for use with Clippard URH1-0804 polyurethane hose.



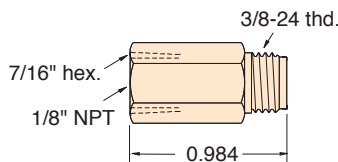
Part No. MIQC-VB41/8" Barb, 3/8-24 Thd.



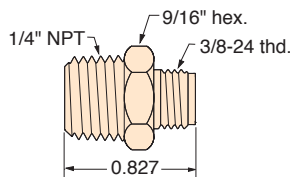
Part No. MIQC-VMT#10-32 Male, 3/8-24 Thd.
(supplied with mounting nut and two washers)



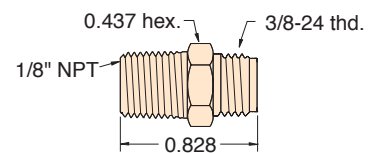
Part No. MIQC-VFT#10-32 Female, 3/8-24 Thd.
(supplied with mounting nut and two washers)



Part No. MIQC-VFP1/8" NPT Female, 3/8-24 Thd.



Part No. MIQC-VMQ1/4" NPT Male, 3/8-24 Thd.



Part No. MIQC-VMP1/8" NPT Male, 3/8-24 Thd.

*1/8 Barb - fits 1/8" I.D. hose. Ideal for use with Clippard [URH1-0804](#) polyurethane hose.

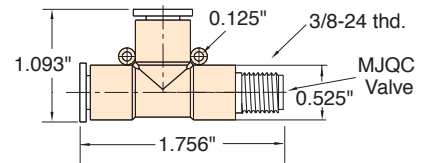
PUSH-QUICK FITTINGS WITH MJQC QUICK-CONNECT PORT



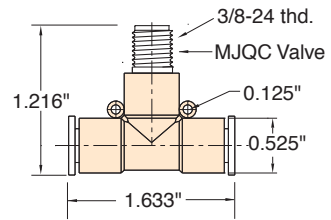
These 1/4" fittings combine the quick, easy Push-Quick functionality with the flexibility and security of the Quick-Connect series with no circuit interruption. MJQC Quick-Connect Caps (ordered separately above) attach to the threaded port allowing for a variety of uses.

Part No.	Description
PQ-RT08QC	Run T with 3/8-24 Thread
PQ-BT08QC	Branch T with 3/8-24 Thread

- Serves as an easy connection point for temporary functions/circuitry
- Quickly test for air flow
- Easy connection to valves, cylinders, hose, etc.
- Check air pressure via a gauge
- Use as a dump valve/vent



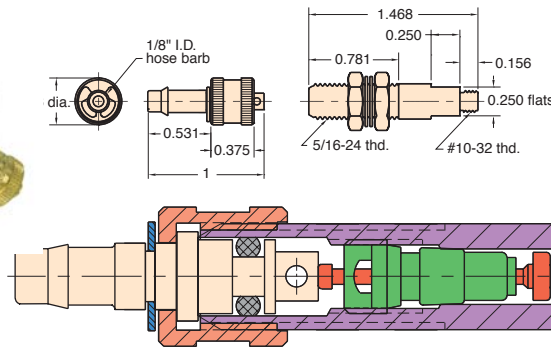
PQ-RT08QC



PQ-BT08QC

MQC-2S

Quick Connect Assembly



Flow ←

Type: One way check quick connect assembly of valve body [MQC-V2](#) and hose connector [MQC-F](#)

Material: Body- brass, Stem- brass

Seals: Buna-N

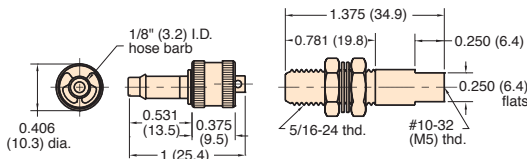
Working Pressure: 0 to 300 psig

Air Flow: 3.0 scfm @ 50 psig
5.8 scfm @ 100 psig

Triple Barb: Order [MQC-2](#)

MQC-3S

Quick Connect Assembly



Type: One way check quick connect assembly of valve body [MQC-V3](#) and hose connector [MQC-F](#)

Material: Body- brass, Stem- brass

Seals: Buna-N

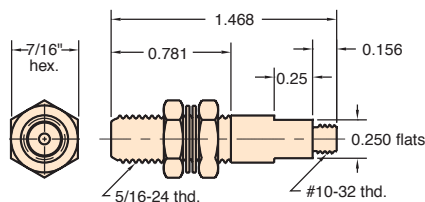
Working Pressure: 0 to 300 psig

Air Flow: 3.0 scfm @ 50 psig
5.8 scfm @ 100 psig

Triple Barb: Order [MQC-3](#) or [MQC-3-M5](#) (metric)

MQC-V2

Valve Body



Material: Brass

Thread: #10-32 male

Mounting: In panel or bracket to 1/4" thick with two 7/16" mounting nuts and lockwashers furnished; also screws directly into operative unit or manifold

Seals: Buna-N

Use: For connection with external shut-off to external hose, use hose connectors: [MQC-F](#), [MQC-FT](#), [MQC-F2](#)

Options: (-ENP)



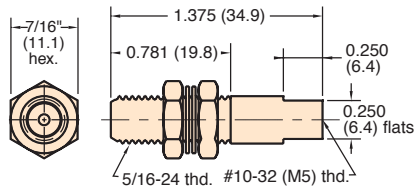


MINIMATIC® QUICK CONNECT

MQC-V3



Valve Body




Material: Brass

Thread: Tapped #10-32

Mounting: In panel or bracket to 1/4" thick with two 7/16" mounting nuts and lockwashers furnished; like MQC-V2, but end is tapped #10-32 instead of threaded

Seals: Buna-N

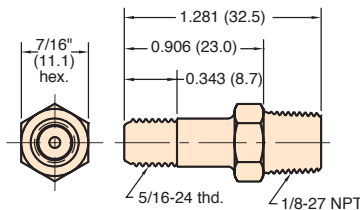
Use: For connection with external shut-off to external hose, use hose connectors: [MQC-F](#), [MQC-FT](#), [MQC-F2](#)

Options: (-ENP), (-M5) 

MQC-VP



Valve Body



Material: Brass

Thread: 1/8" NPT base; 5/16-24 body

Use: For connection with external shut-off to external hose, use hose connectors: [MQC-F](#), [MQC-FT](#), [MQC-F2](#)

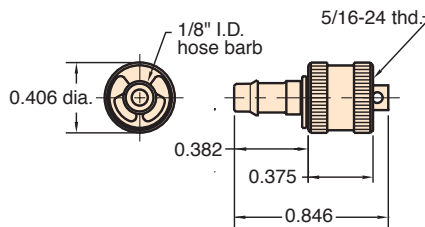
Seals: Buna-N

Options: (-ENP), (-MR)

MQC-FS



1/8" Hose Connector



Material: Brass

Thread: I.D. of knurled end screws onto male end of valve bodies

For Use With: 1/8" I.D. Vinyl, Buna-N or braided hose

Installation: Simply push hose onto barbed end and secure with hose clamp [5000-1](#), [5000-2](#) or [5000-1A](#).

Seals: Buna-N

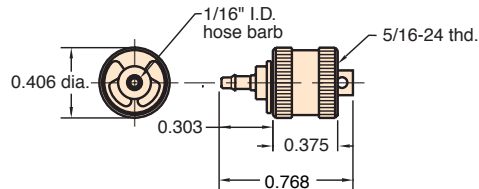
Options: (-ENP)

Triple Barb: Order [MQC-F](#)

MQC-F2S



1/16" Hose Connector



Material: Brass

Thread: I.D. of knurled end screws onto male end of valve bodies

For Use With: Subminiature VYH1-0402-CLT 1/16" ID vinyl hose

Installation: Simply push hose onto barbed end and secure with slip-over hose clamp furnished

Seals: Buna-N

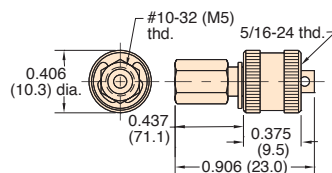
Options: (-ENP)

Triple Barb: Order [MQC-F2](#) 

MQC-FT



#10-32 (M5) Tapped Connector




Material: Brass

Thread: Outlet is tapped #10-32 or M5 Metric. I.D. of knurled end screws onto male end of valve bodies: [MQC-V2](#), [MQC-V3](#), [MQC-VP](#)

Mounting: Outlet mounts with #10-32 (M5) short coupling 11999

Seals: Buna-N

Options: (-ENP), (-M5) 

Tip

When assembling #10-32 threaded fittings with gaskets, turn the fitting in until the gasket contacts the surface. Then give the fitting less than a 1/4 turn to achieve a good seal.



For the ultimate in convenience, have a selection of helpful fittings available for every need. Keeping a supply of fittings on hand can save money and time, allowing projects, prototypes, circuits, and repairs to be finished quickly and avoiding delays.

These Minimatic fittings kits contain a variety of the most commonly used fittings and quick connects. The kit saves time ordering and additional parts or replacements can be ordered at any time. Each kit comes in a sturdy plastic case.



MINIMATIC SLIP-ON FITTINGS KIT



- UTO-FOF (T) Universal M #10-32 to F #10-32
- UTO-F (L) Universal M #10-32 to F #10-32
- UTF-F (T) Universal M #10-32 to F #10-32
- UTF-FOF (X) Universal M #10-32 to F #10-32

• In-Line Connectors

- C44 1/8" I.D. Hose to 1/8" I.D. Hose
- C42 1/8" I.D. Hose to 1/16" I.D. Hose
- C22 1/16" I.D. Hose to 1/16" I.D. Hose
- T22-4 1/8" I.D. Hose T to 1/16" I.D. Hoses
- T44-2 1/16" I.D. Hose T to 1/8" I.D. Hoses
- X44-404 1/8" I.D. Hose X
- X22-202 1/16" I.D. Hose X

- SPO-4 1/8" M NPT to L 1/8" I.D. Hose
- SPO-2 1/8" M NPT to L 1/16" I.D. Hose
- SPO-4004 1/8" M NPT to T 1/8" I.D. Hose
- SPO-2002 1/8" M NPT to T 1/16" I.D. Hose
- T22-2 1/16" I.D. Hose T

- T44-4 1/8" I.D. Hose T
- XT4-404 1/8" I.D. Hose X with M #10-32
- XT2-202 1/16" I.D. Hose X with M #10-32
- CT2 1/16" I.D. Hose to M #10-32
- CT4 1/8" I.D. Hose to M #10-32

• Inline Swivel Connectors

- S44 1/8" I.D. Hose to 1/8" I.D. Hose
- ST4 1/8" I.D. Hose to M #10-32
- S4F 1/8" I.D. Hose to F #10-32

Contains:

- CT0-2 Connector L 1/16" I.D. Hose to M #10-32
- UT0-2 Universal L 1/16" I.D. Hose to M #10-32
- ST0-2 Swivel L 1/16" I.D. Hose to M #10-32
- CT0-4 Connector L 1/8" I.D. Hose to M #10-32
- UT0-4 Universal L 1/8" I.D. Hose to M #10-32
- ST0-4 Swivel L 1/8" I.D. Hose to M #10-32
- TT0-202 Connector 1/16" I.D. Hose T with M #10-32
- UT0-2002 Universal 1/16" I.D. Hose T with M #10-32
- ST0-2002 Swivel 1/16" I.D. Hose T with M #10-32
- TT0-404 Connector 1/8" I.D. Hose T with M #10-32
- UT0-4004 Universal 1/8" I.D. Hose T with M #10-32
- ST0-4004 Swivel 1/8" I.D. Hose T with M #10-32
- Clippard 1/4" & 5/16" Wrench 11770
- 11761-2 Gasket
- Hose Samples

Part No.	Description
<u>17555-SF1</u>	Slip-On Fittings Kit



MINIMATIC® FITTINGS KITS

MINIMATIC FITTINGS KIT



Contains:

- 1/8" NPT to #10-32 L 15090-1
- #10-32 L Fitting 15002-2
- #10-32 Screw Plug 11755
- #10-32 to 1/16" I.D. Hose Fitting 11752-2

- #10-32 Extension Fitting 15010
- 1/8" M NPT to 1/8" I.D. Hose Adapter 11924-1
- Adjustable #10-32 L Fitting 15002-1
- #10-32 X Fitting 15002-4
- Female #10-32 Hex Connector 15004
- #10-32 M to 1/8" I.D. Hose with Swivel 15045
- 1/4" M NPT to #10-32 F Adapter 15006-3
- 1/8" NPT to #10-32 T 15090-2
- #10-32 T Fitting 15002-3
- #10-32 M Short Coupling 11999
- #10-32 to 1/8" I.D. Hose Fitting 11752-3
- Gasket 11761-2
- 12 Port Manifold MAN-12
- Clippard 1/4" & 5/16" Wrench 11770
- 1/8" M NPT to #10-32 F Adaptor 15006-1

Part No.	Description
17555	Minimatic Fittings Kit

MINIMATIC QUICK CONNECT FITTINGS KIT



Contains:

- 1/8" I.D. T Connector T44-4
- Panel Mount #10-32 F Cap MJQC-CFP
- Panel Mount 1/8" I.D. Hose Cap MJQC-CPB

- 3/8-24 Nuts 0107-48
- Lockwasher 0302-43
- 1/8" F NPT Valve MJQC-VFP
- 1/4" M NPT Valve MJQC-VMQ
- 1/8" M NPT Valve MJQC-VMP
- 1/8" M NPT Cap MJQC-CMP
- 1/4" M NPT Cap MJQC-CMQ
- 1/8" I.D. Hose Valve MJQC-VB4
- Panel Mount #10-32 F Valve MJQC-VFT
- Panel Mount #10-32 M Valve MJQC-VMT
- #10-32 F Cap MJQC-CFT
- 1/8" I.D. Hose Cap MJQC-CB4
- Gasket 11761-2
- Hose Samples
- Clippard 1/4" & 5/16" Wrench 11770
- #10-32 M to 1/8" I.D. CT4
- UTO-4 UTO-4004

Part No.	Description
17555-QC1	Quick Connect Fittings Kit

hose \`hōz \ n : a flexible tube for conveying gases or fluids

tubing \`t(y)u-bing \ n : a stiff material in the form of a tube used for conveying gases or fluids

Do you use a garden tube?

The answer to the question of whether to call it a tube or a hose rests on a fine line, one many people have gotten tangled up in. In both definitions it clearly states that a tube and a hose are used for conveying fluids, yet sometimes one word seems to fit the situation (and the application) better than the other. So remember...

It's a hose when it's flexible and a tube when it's not.

Clippard offers a variety of miniature hose and tubing from copper and nylon tubing to flexible urethane, vinyl and Buna-N hose. The chart below lists these products and their available colors and lengths.



<p>Hose or Tubing Type</p> <p>NYT1 - Single Nylon Tubing</p> <p>VYH1 - Single Vinyl Hose</p> <p>VYH2 - Dual Vinyl Hose</p> <p>URH1 - Single 85 Duro. Polyurethane Hose</p> <p>URH2 - Dual 85 Duro. Polyurethane Hose</p> <p>URH8 - Ribbon 85 Duro. Polyurethane Hose</p> <p>URT1 - Single 95 Duro. Polyurethane Tubing</p> <p>PET1 - Single Polyethylene Tubing</p>	<p>Size: O.D. x I.D.</p> <p>0402 - 1/8" x 1/16"</p> <p>0403 - 1/8" x 3/32"</p> <p>0503 - 5/32" x 3/32"</p> <p>0804 - 1/4" x 1/8"</p> <p>0805 - 1/4" x 0.160"</p> <p>1208 - 3/8" x 1/4"</p> <p>1610 - 1/2" x 0.320"</p> <p>Metric Sizes</p> <p>0604M - 6 mm x 4 mm</p> <p>0805M - 8 mm x 5 mm</p>	<p>Colors: Solid</p> <p>BLS - Blue</p> <p>BKS - Black</p> <p>BRS - Brown</p> <p>GNS - Green</p> <p>GYS - Gray</p> <p>NAS - Natural</p> <p>ORS - Orange</p> <p>RDS - Red</p> <p>WHS - White</p> <p>YLS - Yellow</p> <p>01S - Gray/Black (dual only)</p>	<p>Translucent</p> <p>BLT - Blue</p> <p>CLT - Clear</p> <p>GNT - Green</p> <p>PUT - Purple</p> <p>ORT - Orange</p> <p>RDT - Red</p> <p>YLT - Yellow</p> <p>02T - BLT/GNT/GYS/ORT/PUT/RDT/WHS/YLT (ribbon only)</p>	<p>Available Lengths</p> <p>050 - 50' Roll</p> <p>500 - 500' Spool</p>
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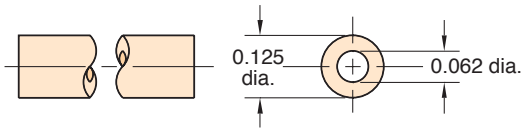
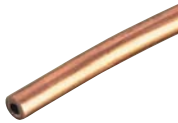
This chart is to be used as an explanation of our ordering system. See individual listings following this page for sizes and colors available.



CLIPPARD HOSE & TUBING

3811-1-RL

1/8" O.D. Copper Tubing



Material: High pressure copper

Working Pressures: to 2,500 psig

Static Burst Pressure: over 10,000 psig

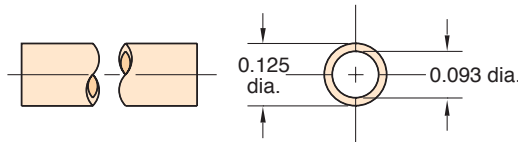
Lengths Available: 50'

Bend Radius: 3/8"

Use With: Ferrule tubing connectors: [3810-1](#), [3810-2](#), [11923](#)

NYT1-0403-CLT-□

3/32" I.D. Nylon Tubing



Material: Semi-flexible nylon tubing

Color: Clear / Translucent

Working Range: to 250 psig

Static Burst Pressure: Approx. 1,000 psig

Use With: Ferrule tubing connectors: [11923](#), [3810-1](#), [3810-2](#)

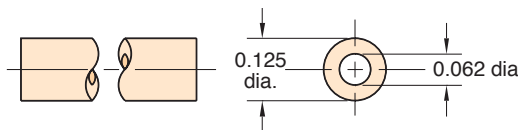
Forming: May be formed into sharp corners with heat

Lengths Available: 50' and 500'

Bend Radius: 3/8"

VYH1-0402-CLT-□

1/16" I.D. 80A Vinyl Hose



Note:

Consult factory for custom colors

Type: Flexible, durable vinyl plastic hose

Working Range: 0 to 105 psig at 70°F maximum 60 psig at 80°F or above (max. temp. 100°F)

Use With: Hose fittings: [11752-2](#) and clamp [5000-4](#)

Bend Radius: 3x hose dia.

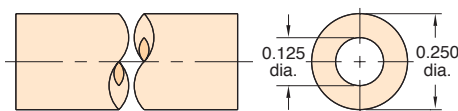
Color: Translucent: Clear

Lengths Available: 50' and 500'

Bend Radius: 3/8"

VYH1-0804-CLT-□

1/8" I.D. 80A Vinyl Hose



Note:

Consult factory for custom colors

Working Range: 0 to 105 psig at 70°F maximum 60 psig at 80°F or above (max. temp. 100°F)

Use With: Hose fittings: [11752-1](#), [11752-3](#) and [11924](#)
Hose clamps: [5000-2](#)

Bend Radius: 3x hose dia.

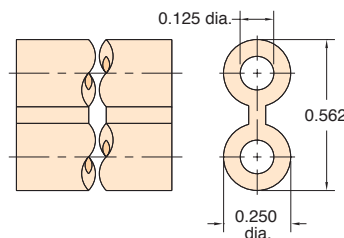
Color: Translucent: Clear

Lengths Available: 50' and 500'

Bend Radius: 1/2"

VYH2-0804-GYS-□

1/8" I.D. Twin Vinyl Hose



Type: Flexible, durable vinyl plastic hose, but two hoses molded together, one side has rib entire length for identification

Color: Solid: Gray/Gray

Use Clamp: [5000-1](#)

Working Range: 0 to 150 psig at 70°F maximum 60 psig at 80°F or above (max. temp. 100°F)

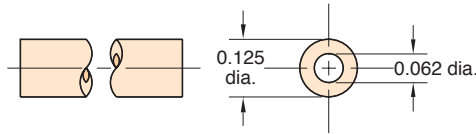
Use: Ideal for feeding supply in on one line and out on the other, reduces labor; makes neat assembly; may be parted with any sharp cutting edge

Lengths Available: 50' and 500'

Bend Radius: 1/2"

URH1-0402-□-□

1/16" I.D. 85A Polyurethane Hose



Working Range: 0 to 105 psig at 100°F Maximum 120°F

Static Burst Pressure: Over 500 psig at 70°F

Color: Solid: Black, brown, white, gray, orange
Translucent: Clear, blue, green, red, yellow

Lengths Available: 50' and 500'

Bend Radius: 3/16"

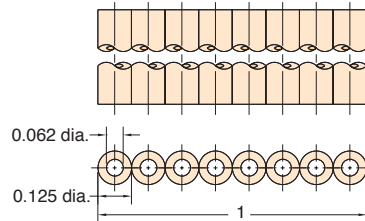
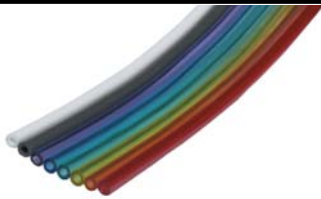
Note: In normal application hose clamps are not required with hose when used with Clippard hose barb fittings

Note:

Specify color on order, and use full product number (including code letters for color) as shown in Price List. If no color is specified, clear will be furnished.

URH8-0402-02T-050

1/16" I.D. 85A Polyurethane Ribbon Hose



Type: Flexible, durable urethane hose

Working Range: 0 to 105 psig at 100°F maximum 120°F

Static Burst Pressure: Over 500 psig at 70°F

Color: Solid: Gray, white
Translucent: Blue, green, orange, purple, red, yellow

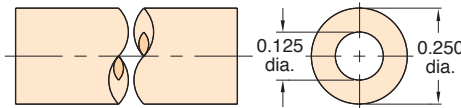
Lengths Available: 50'

Bend Radius: 3/16"

Note: In normal application, hose clamps are not required with hose when used with Clippard hose barb fittings

URH1-0804-□-□

1/8" I.D. 85A Polyurethane Hose



Working Range: 0 to 105 psig at 100°F Maximum 120°F

Static Burst Pressure: Approximately 425 psig at 70°F

Color: Solid: Black, brown, white, gray, orange
Translucent: Clear, blue, green, red, yellow

Lengths Available: 50' and 500'

Bend Radius: 3/8"

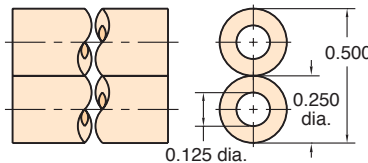
Note: In normal application hose clamps are not required with hose when used with Clippard hose barb fittings

Note:

Specify color on order, and use full product number (including code letters for color) as shown in Price List. If no color is specified, clear will be furnished.

URH2-0804-01S-□

Twin 1/8" I.D. 85A Polyurethane Hose



Working Range: 0 to 105 psig at 100°F

Static Burst Pressure: Approximately 425 psig at 70°F

Color: Solid: Gray and black combination

Lengths Available: 50' and 500'

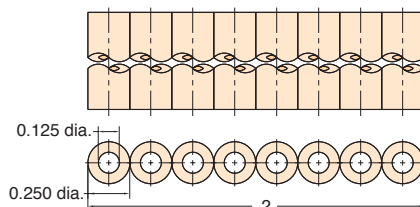
Bend Radius: 3/8"

Use: Ideal for feeding supply in on one line and out on the other; reduces labor; makes neat assembly; may be parted with any sharp cutting edge

Note: In normal application, hose clamps are not required with URH2-0804-01S hose when used with Clippard hose barb fittings

URH8-0804-02T-050

1/8" I.D. 85A Polyurethane Ribbon Hose



Type: Flexible, durable urethane hose

Working Range: 0 to 105 psig at 100°F maximum 120°F

Static Burst Pressure: Over 500 psig at 70°F

Color: Solid: Gray, white
Translucent: Blue, green, orange, purple, red, yellow

Lengths Available: 50'

Bend Radius: 3/8"

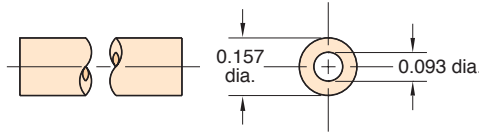
Note: In normal application, hose clamps are not required with hose when used with Clippard hose barb fittings



CLIPPARD HOSE & TUBING

URT1-0503-□-□

5/32" O.D. 95A Polyurethane Tubing
Flexible, durable ether based tubing



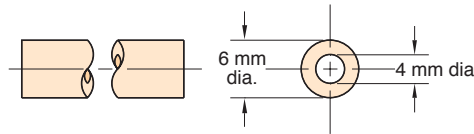
Working Range: 0 to 105 psig at 100°F Maximum 120°F
Static Burst Pressure: Over 500 psig at 70°F
Color: Solid: Black, gray, orange, red, white
Translucent: Blue, clear, green, red, yellow
Lengths Available: 50' and 500'
Bend Radius: 3/8"
Note: Designed for use with [push-in fittings](#).

Note:

Specify color on order, and use full product number (including code letters for color) as shown in Price List. If no color is specified, clear will be furnished.

URT1-0604M-□-□

6 mm O.D. 95A Polyurethane Tubing
Flexible, durable ether based tubing



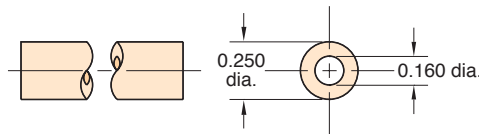
Working Range: 0 to 105 psig at 100°F Maximum 120°F
Static Burst Pressure: Over 450 psig at 70°F
Color: Solid: Black
Translucent: Blue, clear, green, red
Lengths Available: 50' and 500'
Bend Radius: 1/2"
Note: Designed for use with [push-in fittings](#).

Note:

Specify color on order, and use full product number (including code letters for color) as shown in Price List. If no color is specified, clear will be furnished.

URT1-0805-□-□

1/4" O.D. 95A Polyurethane Tubing
Flexible, durable ether based tubing



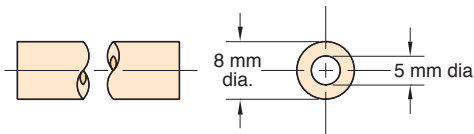
Working Range: 0 to 105 psig at 100°F Maximum 120°F
Static Burst Pressure: Over 450 psig at 70°F
Color: Solid: Black, gray, orange, red, white
Translucent: Blue, clear, green, red, yellow
Lengths Available: 50' and 500'
Bend Radius: 1/2"
Note: Designed for use with [push-in fittings](#).

Note:

Specify color on order, and use full product number (including code letters for color) as shown in Price List. If no color is specified, clear will be furnished.

URT1-0805M-CLT-□

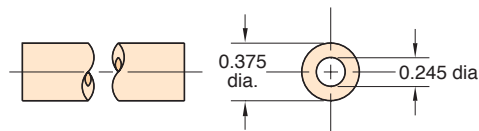
8 mm O.D. 95A Polyurethane Tubing
Flexible, durable ether based tubing



Working Range: 0 to 105 psig at 100°F Maximum 120°F
Static Burst Pressure: Over 465 psig at 75°F
Color: Clear
Lengths Available: 50' and 500'
Bend Radius: 3/4"
Note: Designed for use with [push-in fittings](#).

URT1-1208-□-□

3/8" O.D. 95A Polyurethane Tubing
Flexible, durable ether based tubing



Working Range: 0 to 105 psig at 100°F Maximum 120°F
Static Burst Pressure: Over 440 psig at 75°F
Color: Solid: Black
Translucent: Blue, clear, green, red
Lengths Available: 50' and 500'
Bend Radius: 7/8"
Note: Designed for use with [push-in fittings](#).

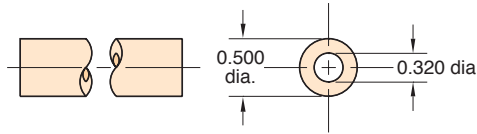
Note:

Specify color on order, and use full product number (including code letters for color) as shown in Price List. If no color is specified, clear will be furnished.

URT1-1610-CLT-□



1/2" O.D. 95A Polyurethane Tubing
Flexible, durable ether based tubing



Working Range: 0 to 105 psig at 100°F Maximum 120°F

Static Burst Pressure: Over 420 psig at 75°F

Color: Clear

Lengths Available: 50' and 500'

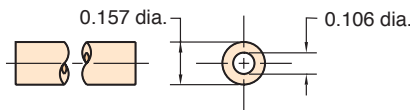
Bend Radius: 1 1/8"

Note: Designed for use with push-in fittings.

PET1-0503-□-□



5/32" O.D. 50D Polyethylene Tubing
Linear low density tubing



Working Range: 0 to 105 psig at 100°F Maximum 120°F

Static Burst Pressure: Over 540 psig at 75°F

Colors: Solid: Black or Natural

Lengths Available: 50' and 500'

Bend Radius: 1/2"

Note: Designed for use with push-in fittings.

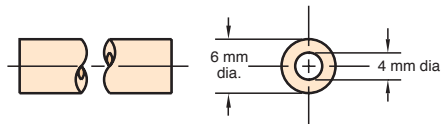
Note:

Specify color on order, and use full product number (including code letters for color) as shown in Price List. If no color is specified, natural will be furnished.

PET1-0604M-□-□



6 mm O.D. 50D Polyethylene Tubing
Linear low density tubing



Working Range: 0 to 105 psig at 100°F Maximum 120°F

Static Burst Pressure: Approximately 560 psig at 75°F

Colors: Solid: Black or Natural

Lengths Available: 50' and 500'

Bend Radius: 1 1/4"

Note: Designed for use with push-in fittings.

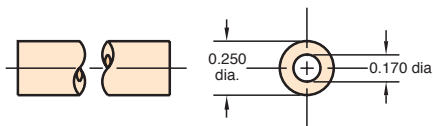
Note:

Specify color on order, and use full product number (including code letters for color) as shown in Price List. If no color is specified, natural will be furnished.

PET1-0805-□-□



1/4" O.D. 50D Polyethylene Tubing
Linear low density tubing



Working Range: 0 to 105 psig at 100°F Maximum 120°F

Static Burst Pressure: Approximately 480 psig at 75°F

Colors: Solid: Black or Natural

Lengths Available: 50' and 500'

Bend Radius: 1 1/4"

Note: Designed for use with push-in fittings.

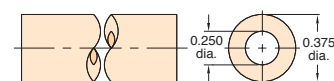
Note:

Specify color on order, and use full product number (including code letters for color) as shown in Price List. If no color is specified, natural will be furnished.

PET1-1208-□-□



3/8" O.D. 50D Polyethylene Tubing
Linear low density tubing



Working Range: 0 to 105 psig at 100°F Maximum 120°F

Static Burst Pressure: Approximately 600 psig at 75°F

Colors: Solid: Black or Natural

Lengths Available: 50' and 500'

Bend Radius: 2"

Note: Designed for use with push-in fittings.

Note:

Specify color on order, and use full product number (including code letters for color) as shown in Price List. If no color is specified, natural will be furnished.

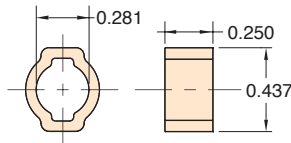


CLIPPARD CLAMPS

5000-1

Quick Set Hose Clamps

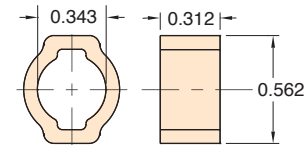
Type: Zinc plated steel
Use: 5000-1 with twin vinyl hose



5000-1A

Quick Set Hose Clamps

Type: Zinc plated steel
Use: 5000-1A with braided hose



5000-2

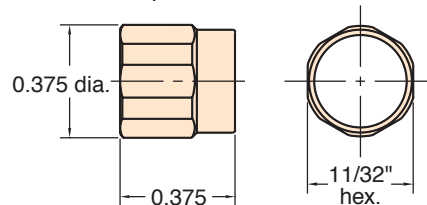
Reusable Hose Clamps

Material: Brass, self-threading, reusable

Use With: 11765 Buna-N hose VYH1-0804-CLT vinyl hose and Clippard hose fittings

Installation: Slip sleeve over hose, push onto fitting, then screw into place; tighten with wrench

Options: (-ENP)



5000-4

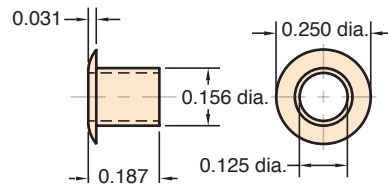
Press-On Hose Clamp

Material: Brass, press-on hose clamp

Use: for VYH1-0402-CLT hose 1/16" I.D. vinyl

Installation: Simply place hose clamp over hose with flange end out; then press hose partially onto fitting, then slide clamp back toward fitting to secure

Options: (-ENP)



Polyethylene vs Vinyl vs Polyurethane

Polyurethane offers a wider range of chemical compatibility than Vinyl, it may be used at much higher temperatures and clamps are not needed when used with barb fittings. Linear low density polyethylene offers a lower cost alternative to polyurethane and superior environmental stress crack resistance over standard polyethylene. Both polyurethane and polyethylene are FDA approved.

Typical Hose & Tubing Bend Radii

When using hose or tubing, care should always be taken to avoid sharp bends to prevent compressing the inside diameter of the hose or tubing and restricting flow. For extremely close connections, allow a short loop of hose to avoid crimping.

Clippard Hose & Tubing		I.D.	O.D.	Min. Bend Radius
3811-1-RL	Copper Tube	1/16"	1/8"	3/8"
NYT1-XXX	Nylon Tubing	3/32"	1/8"	3/8"
VYH1-XXX	80A Duro. Vinyl Hose	1/16"	1/8"	3/8"
VYH1-XXX	80A Duro. Vinyl Hose	1/8"	1/4"	1/2"
VYH2-XXX	Dual Vinyl Hose	1/8"	1/4"	1/2"
URH1-XXX	85A Duro. Polyurethane Hose	1/16"	1/8"	3/16"
URH8-XXX	Ribbon 85A Duro. Polyurethane	1/16"	1/8"	3/16"
URH1-XXX	85A Duro. Polyurethane Hose	1/8"	1/4"	3/8"
URH2-XXX	Dual 85A Duro. Polyurethane	1/8"	1/4"	3/8"
URH8-0804-XXX	Ribbon 85A Duro. Polyurethane	1/8"	1/4"	3/8"
URT1-0503-XXX	95A Duro. Polyurethane Tubing	3/32"	5/32"	3/8"
URT1-0604M-XXX	95A Duro. Polyurethane Tubing	4 mm	6 mm	1/2"
URT1-0805-XXX	95A Duro. Polyurethane Tubing	0.160"	1/4"	1/2"
URT1-0805M-CLT	95A Duro. Polyurethane Tubing	5 mm	8 mm	3/4"
URT1-1208-XXX	95A Duro. Polyurethane Tubing	0.245"	3/8"	7/8"
URT1-1610-XXX	95A Duro. Polyurethane Tubing	0.320"	1/2"	1 1/8"
PET1-0503-XXX	50D Duro. Polyethylene Tubing	0.106"	5/32"	1/2"
PET1-0604M-XXX	50D Duro. Polyethylene Tubing	4 mm	6 mm	1 1/4"
PET1-0805-XXX	50D Duro. Polyethylene Tubing	0.170"	1/4"	1 1/4"
PET1-1208-XXX	50D Duro. Polyethylene Tubing	1/4"	3/8"	2"