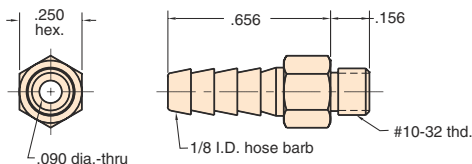


11752-1



10-32 to 1/8" ID Hose Fitting



Material: Brass

Thread: 10-32

Gasket: Buna-N gasket furnished in package only. Not included when ordered in bulk.

For Hose: 1/8" ID

Replacement Gasket: #11761-2

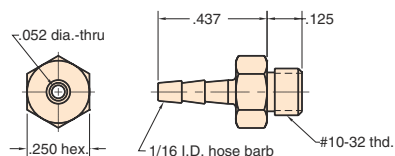
Options: (-NP)



11752-2



10-32 to 1/16" ID Hose Fitting



Material: Brass

Thread: 10-32

Gasket: Buna-N gasket furnished in package only. Not included when ordered in bulk.

For Hose: 1/16" ID

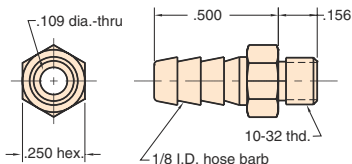
Options: (-NP), (-M5)



11752-3



10-32 to 1/8" ID Hose Fitting



Material: Brass

Thread: 10-32

Gasket: Buna-N gasket furnished in package only. Not included when ordered in bulk.

For Hose: 1/8" ID

Options: (-NP), (-M5)

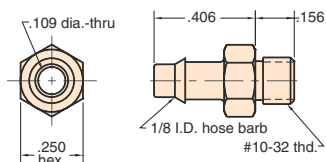


11752-4

#1 Recommended



10-32 to 1/8" ID Hose Fitting



Material: Brass

Thread: 10-32

Gasket: Buna-N gasket furnished in package only. Not included when ordered in bulk.

For Hose: 1/8" ID

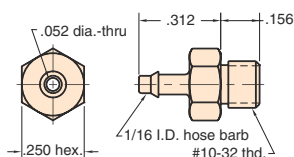
Options: (-NP), (-M5)



11752-5



10-32 to 1/16" ID Hose Fitting



Material: Brass

Thread: 10-32

Gasket: Buna-N gasket furnished in package only. Not included when ordered in bulk.

For Hose: 1/16" ID

Options: (-NP), (-M5)

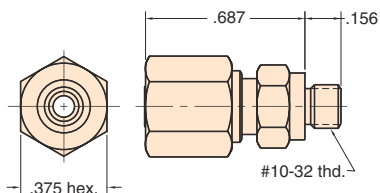


11923

Replacement Ferrule & nut #15155



10-32 to 1/8" OD Tube Compression Fitting



Material: Brass

Thread: 10-32

For Tubing: 3811-1 copper
3814-2 nylon

Gasket: Buna-N gasket furnished in package only. Not included when ordered in bulk.

Options: (-NP)

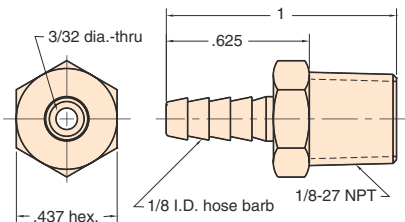
Features: One piece ferrule and nut for fast, easy insertion of tube



11924-1



1/8 NPT to 1/8" ID Hose Fitting



Material: Brass

Thread: 1/8 NPT

Use: Joins standard pipe to 1/8" ID hose

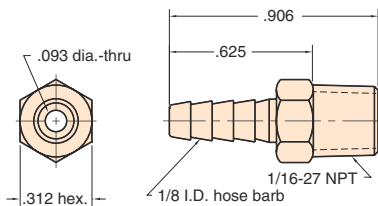
Options: (-NP), (-MG)



11924-2



1/16 NPT to 1/8" ID Hose Fitting



Material: Brass

Thread: 1/16 NPT

Use: Joins standard pipe to 1/16" ID hose

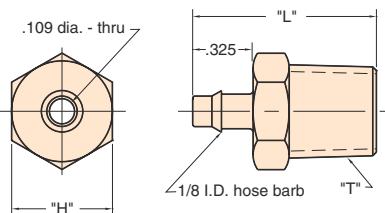
Options: (-NP)



□ C □ 4



NPT to 1/8" ID Hose Connector



Material: Brass

Use: Joins standard pipe to 1/8" ID hose

Options: (-NP), (-MG)

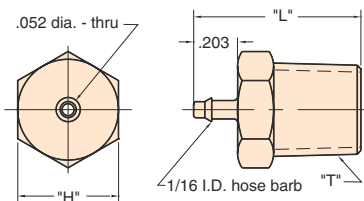
	1CJ4	2CP4	4CQ4	6CW4	8CZ4
"T" Thread	1/16 NPT	1/8 NPT	1/4 NPT	3/8 NPT	1/2 NPT
"H" Hex	5/16	7/16	9/16	11/16	13/16
"L" Length	.800	.860	.890	1.020	1.140



□ C □ 2



NPT to 1/16" ID Hose Connector



Material: Brass

Use: Joins standard pipe to 1/16" ID hose

Options: (-NP)

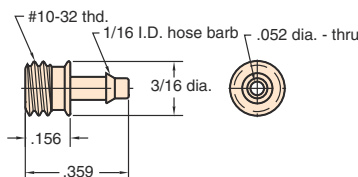
	1CJ2	2CP2	4CQ2	6CW2	8CZ2
"T" Thread	1/16 NPT	1/8 NPT	1/4 NPT	3/8 NPT	1/2 NPT
"H" Hex	5/16	7/16	9/16	11/16	13/16
"L" Length	.490	.740	.770	.890	1.020



12841



10-32 to 1/16" ID hose fitting



Material: Brass

Thread: 10-32

Seals: Gasket not required; use thread sealant

Use: Tighten by hand for flush mounting in 10-32 threaded holes

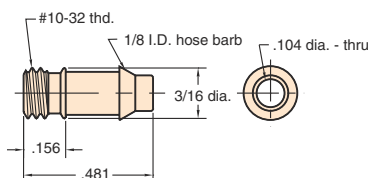
Options: (-NP)



12842



10-32 to 1/8" ID hose fitting



Material: Brass

Thread: 10-32

Seals: Gasket not required; use thread sealant

Use: Tighten by hand for flush mounting in 10-32 threaded holes

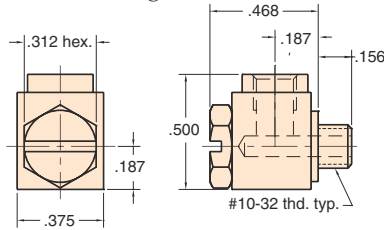
Options: (-NP)



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.

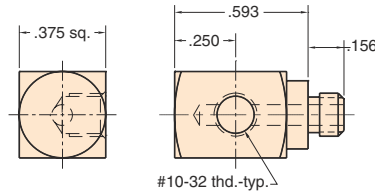
Options: (-NP)



15002-2



"L" Fitting



Material: Brass

Thread: 10-32

Gasket: Buna-N gasket furnished in package only. Not included when ordered in bulk.

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

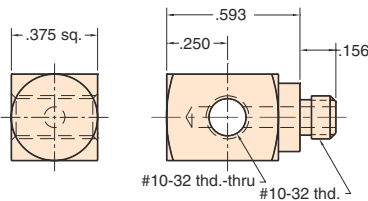
Options: (-NP)



15002-3



"T" Fitting



Material: Brass

Thread: 10-32

Gasket: Buna-N gasket furnished in package only. Not included when ordered in bulk.

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

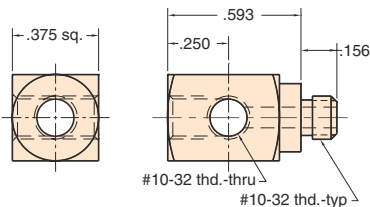
Options: (-NP)



15002-4



"X" Fitting



Material: Brass

Thread: 10-32

Gasket: Buna-N gasket furnished in package only. Not included when ordered in bulk.

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

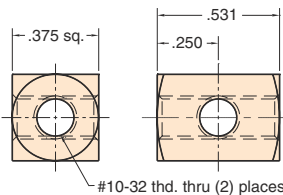
Options: (-NP)



15002-5



"X" Coupling



Material: Brass

Thread: 10-32

Use: Ideal as small manifold.

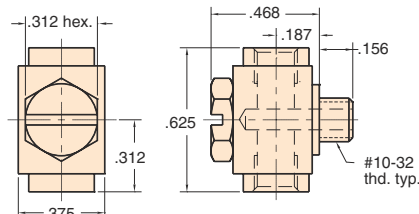
Options: (-NP)



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"

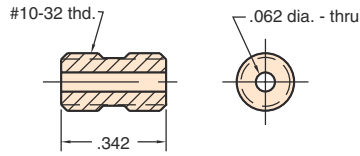
Options: (-NP)



15453



Male 10-32 Coupling



Material: Stainless steel

Thread: 10-32

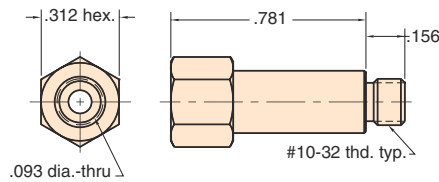
Seals: Loctite necessary

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 gasket furnished in package only. Not included when ordered in bulk.

Use: To provide extension for convenience in assembling components

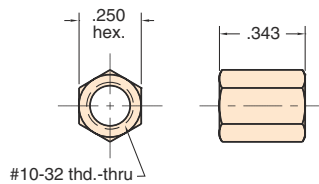
Options: (-NP)



15004



10-32 Female Hex Coupling



Material: Brass

Thread: 10-32 tapped

Use: For coupling two 10-32 male fittings

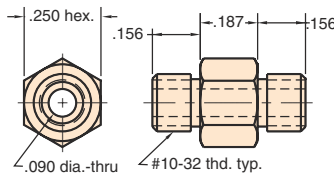
Options: (-NP)



11999



10-32 Male Connector



Material: Brass

Thread: 10-32 both ends

Gasket: (2) Buna-N gaskets furnished in package only. Not included when ordered in bulk.

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

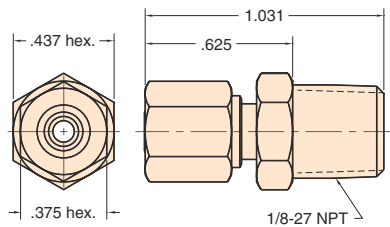
Options: (-NP)



3810-1



1/8 NPT to 1/8" OD Tube Compression Fitting



Material: Brass

Thread: 1/8 NPT

Use: Joins standard size pipe to 3811-1 copper or 3814-2 nylon tubing

Replacement Ferrule & Nut: 15155

Options: (-NP)

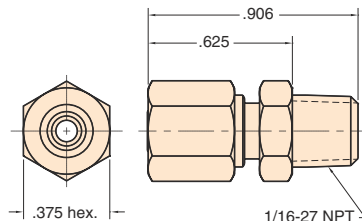
Features: One piece ferrule and nut for fast, easy insertion of tube



3810-2



1/16 NPT to 1/8" OD Tube Compression Fitting



Material: Brass

Thread: 1/16 NPT

Use: Joins standard size pipe to 3811-1 copper or 3814-2 nylon tubing

Replacement Ferrule & Nut: #15155

Options: (-NP)

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



SWIVEL FITTINGS

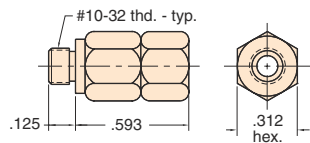
Minimatic® swivel connector fittings are very efficient in applications where joints need to be disconnected and reconnected frequently. Made with a threaded connection on one end and a swivel connection on the other, these fittings provide a true cost savings on pneumatic circuit designs. They are valuable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

Gasket: Buna-N gasket furnished in package only. Not included when ordered in bulk.

Use: Allows connection to rotate for tightening in confined spaces

Note: Used for positioning not for rotary connector

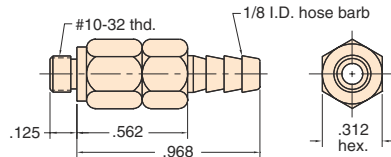
Options: (-NP)



15045



10-32 to 1/8" ID Hose Swivel Fitting



Material: Brass

Thread: 10-32

Gasket: Buna-N gasket furnished in package only. Not included when ordered in bulk.

Use: Allows connection to rotate for tightening in confined spaces

Hose Barb: 1/8" ID hose

Note: Used for positioning not for rotary connector

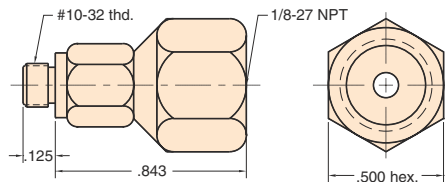
Options: (-NP)



15050



1/8 NPT to 10-32 Swivel Adaptor



Material: Brass

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

Gasket: Buna-N gasket furnished in package only. Not included when ordered in bulk.

Use: Allow connection to rotate for tightening in confined spaces

Note: Used for positioning not for rotary connector

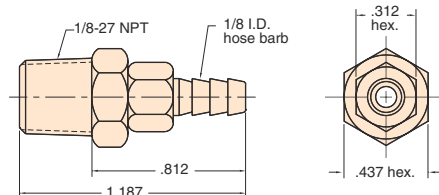
Options: (-NP)



15055



1/8 NPT to 1/8" ID 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" ID hose

Note: Used for positioning not for rotary connector

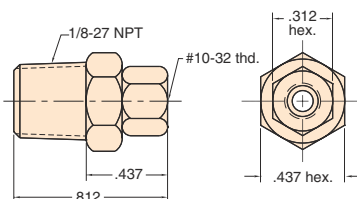
Options: (-NP)



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.

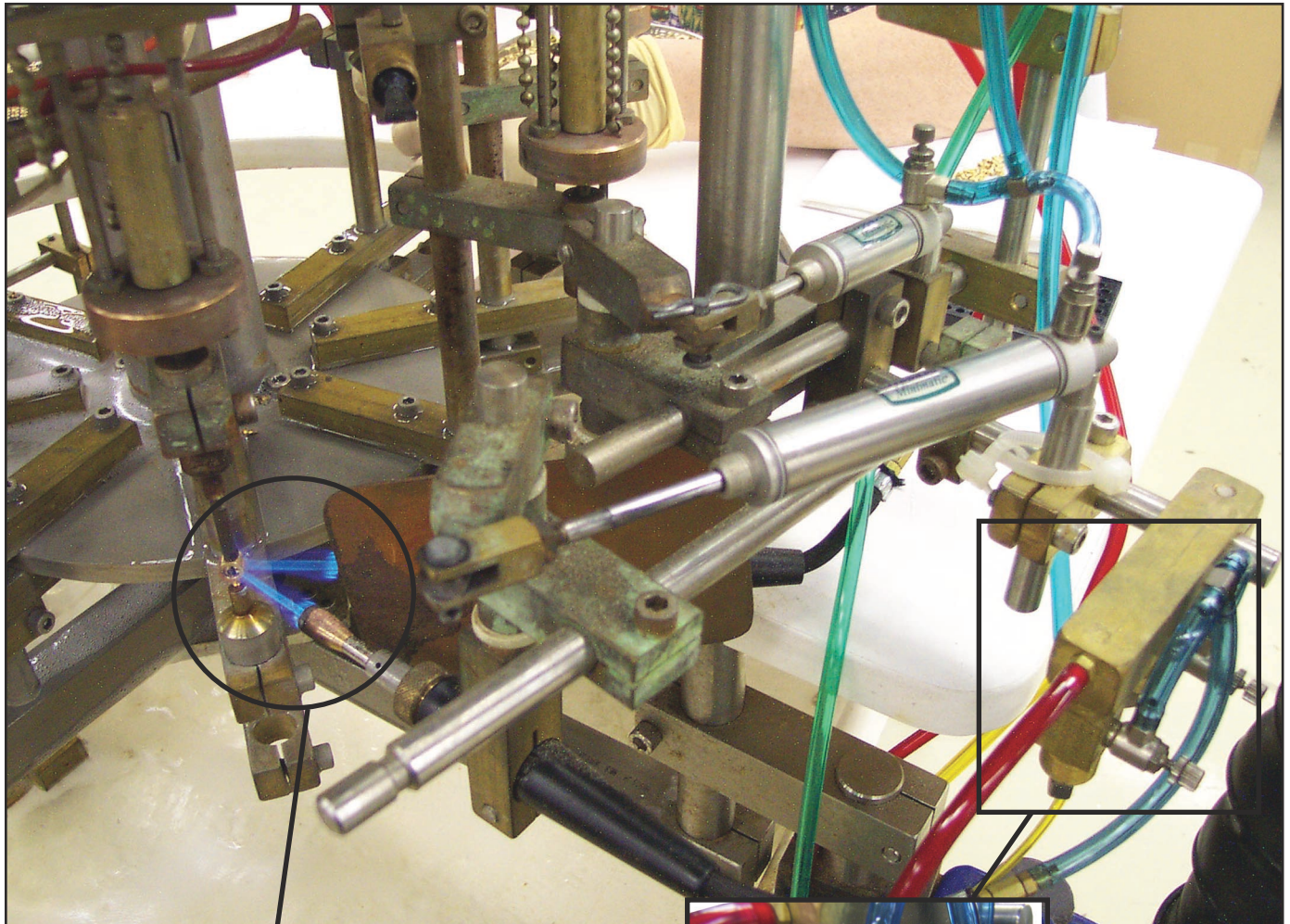
Note: Used for positioning not for rotary connector

Options: (-NP)



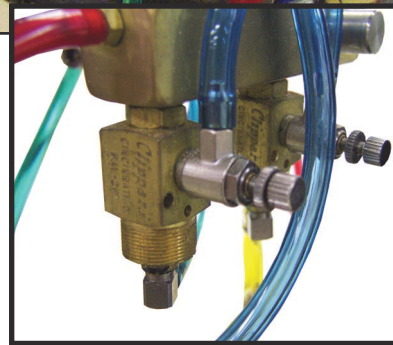
Clippard Slip-on Fitting Assembly

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.

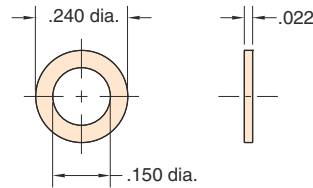


GASKETS

11761-2



Buna-N Gasket

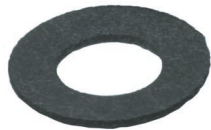


Material: Buna-N

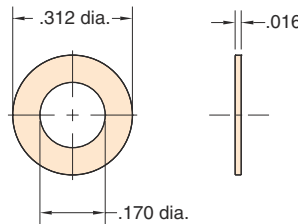
Use: Buna-N gasket is designed for use with 10-32 threads; included with packaged Clippard fittings; replaces 11761-5

Temperature Range: -40 to +250° F

11761-3



Fiber Gasket



Material: Cellulose fiber & SBR latex

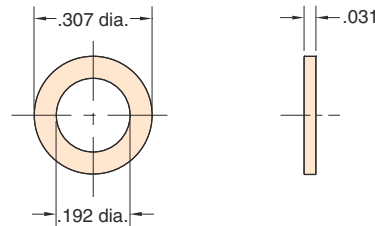
Use: Designed for use with 10-32 threads in high temperature applications

Temperature Range: -40 to +350° F

11761-4



Nylon Gasket



Material: Nylon

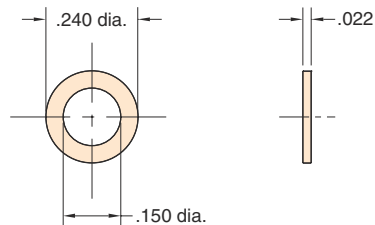
Use: Designed for use with 10-32 threads in applications that require nylon for chemical compatibility

Temperature Range: +40 to +200° F

11761-7



EPDM



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. home alone (just kidding)
4. gasket and sealant combination

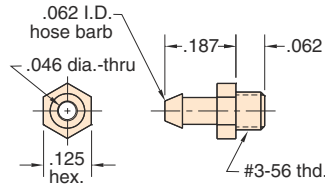
The first two methods will provide adequate sealing for normal air pressures. When extra resistance to vibration is necessary or a permanent orientation of the fitting is required, use of the combination of both gasket and sealant is recommended.

Material: Brass

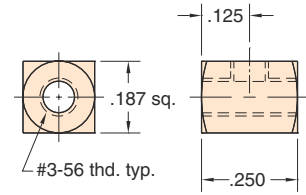
Thread: M2.5 - 0.45 (3-56 US equiv.)

Use: Threads into Clippard subminiature cylinder; fits 1/16" I.D. hose

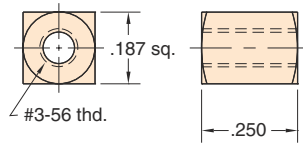
11750-2



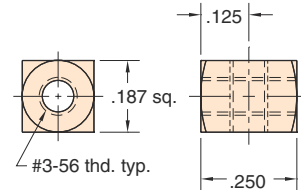
11749-2



11749-1

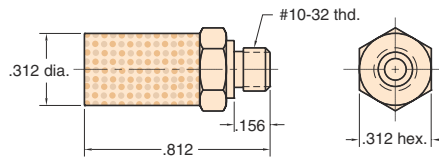


11749-3



15070

10-32 Muffler



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

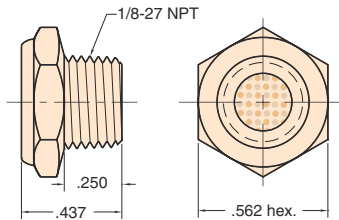
Thread: 10-32

Gasket: Buna-N gasket furnished in package only. Not included when ordered in bulk.

Use: To muffle exhausts for quiet system operation

15080

1/8 NPT Muffler



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

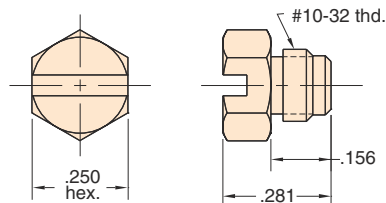
Thread: 1/8 NPT

Use: To muffle exhaust for quiet system operation

Options: (-NP)

11755

10-32 Screw Plug



Material: Brass

Thread: 10-32

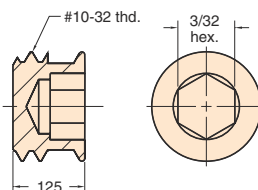
Gasket: Buna-N gasket furnished in package only. Not included when ordered in bulk.

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

Options: (-NP), (M5)

0035-2

10-32 Headless Screw Plug



Material: Stainless Steel screw plug

Thread: 10-32

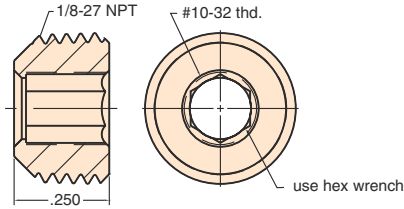
Use: For plugging unused ports in manifold, air lines and other devices that require a flush surface plug; use 3/32 Allen hex wrench to install

Note: Thread sealant recommended

15036



1/8" NPT to 10-32 Female Bushing



Material: Nickel plated brass

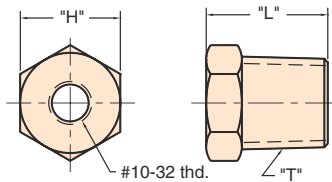
Thread: 1/8 NPT & 10-32 female

Use: Thread sealant
To convert 1/8" NPT to 10-32 flush thread use thread sealant

□ C □ F



NPT to 10-32 Female Bushing



Material: Brass

Thread: NPT & 10-32 female

Use: Will adapt standard pipe to 10-32 fittings and Clippard miniature components

Options: (-NP)

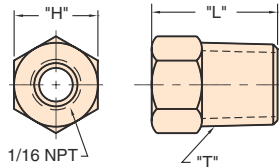
	1CJF	2CPF	4CQF	6CWF	8CZF
"T" Thread	1/16 NPT	1/8 NPT	1/4 NPT	3/8 NPT	1/2 NPT
"H" Hex	5/16	7/16	9/16	11/16	13/16
"L" Length	.468	.531	.562	.687	.812



□ C □ K



NPT to 1/16 NPT Female Bushing



Material: Brass

Thread: NPT & 1/16 NPT female

Use: Will adapt standard pipe to 1/16 NPT fittings and Clippard miniature components

Options: (-NP)

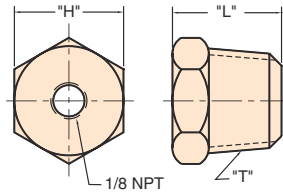
	2CPK	4CQK	6CWK	8CZK
"T" Thread	1/8 NPT	1/4 NPT	3/8 NPT	1/2 NPT
"H" Hex	7/16	9/16	11/16	13/16
"L" Length	.531	.562	.687	.812



□ C □ N



NPT to 1/8 NPT Female Bushing



Material: Brass

Thread: NPT & 1/8 NPT female

Use: Will adapt standard pipe to 1/8 NPT fittings and Clippard miniature components

Options: (-NP)

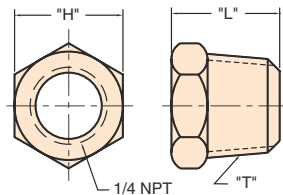
	4CQN	6CWN	8CZN
"T" Thread	1/4 NPT	3/8 NPT	1/2 NPT
"H" Hex	9/16	11/16	13/16
"L" Length	.562	.687	.812



□ C □ Y



NPT to 1/4 NPT Female Bushing



Material: Brass

Thread: NPT & 1/4 NPT female

Use: Will adapt standard pipe to 1/4 NPT fittings and Clippard miniature components

Seals: Buna-N o-ring and gasket furnished

Options: (-NP)

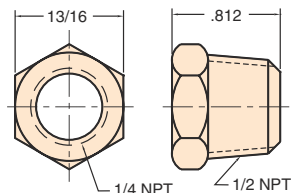
	6CWY	8CZY
"T" Thread	3/8 NPT	1/2 NPT
"H" Hex	11/16	13/16
"L" Length	.687	.812



8CZD



1/2" NPT to 3/8" NPT Female Bushing



Material: Brass

Thread: 1/2 NPT & 3/8 NPT female

Seals: Buna-N o-ring and gasket furnished

Use: Will adapt standard pipe to 3/8 NPT fittings and Clippard miniature components

Options: (-NP)



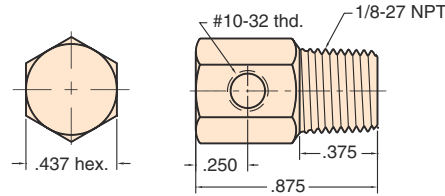
ADAPTER & BULKHEAD FITTINGS



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

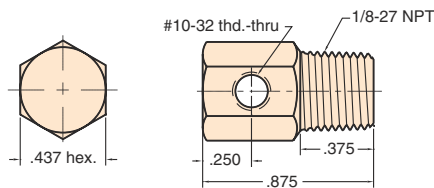
Options: (-NP)



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

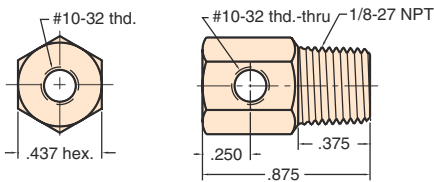
Options: (-NP)



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

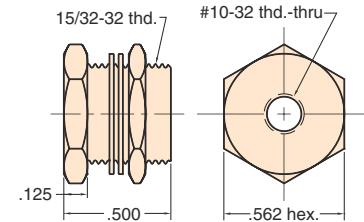
Options: (-NP)



15027



10-32 Bulkhead Fitting



Material: Brass

Thread: 10-32 tapped both ends

Locking Nut: 9/16" furnished with 2 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

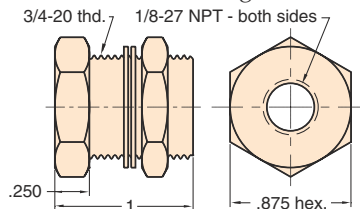
Options: (-NP)



15029-1



1/8 NPT Bulkhead Fitting



Material: Brass

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

Locking Nut: 7/8" hex furnished with 2 steel lockwashers

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

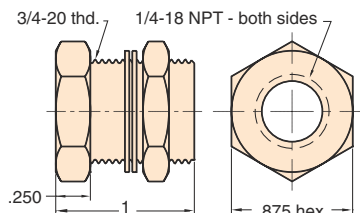
Options: (-NP)



15029-2



1/4 NPT Bulkhead Fitting



Material: Brass

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

Locking Nut: 7/8" hex furnished with 2 steel lockwashers

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

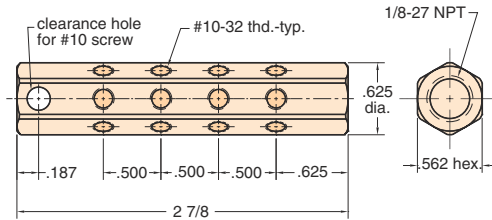
Options: (-NP)



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

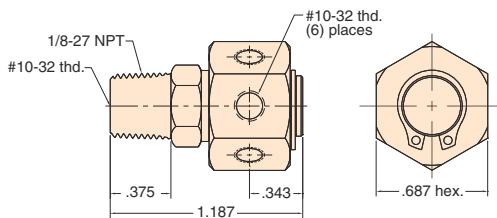
Options: (-NP)



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 psi 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

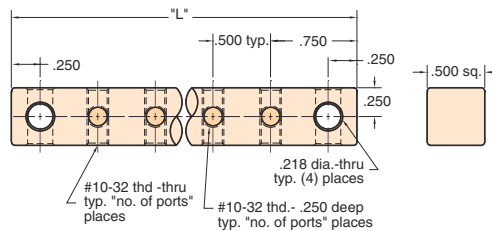
Low RPM applications

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

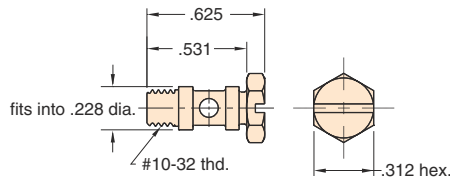
Model #	# of Ports	A	L
15028-4	4	2 1/2"	3"
15028-6	6	3 1/2"	4"
15028-8	8	4 1/2"	5"
15028-10	10	5 1/2"	6"

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

Tips On Using Minimatic® Fittings

Hose or Tubing Size

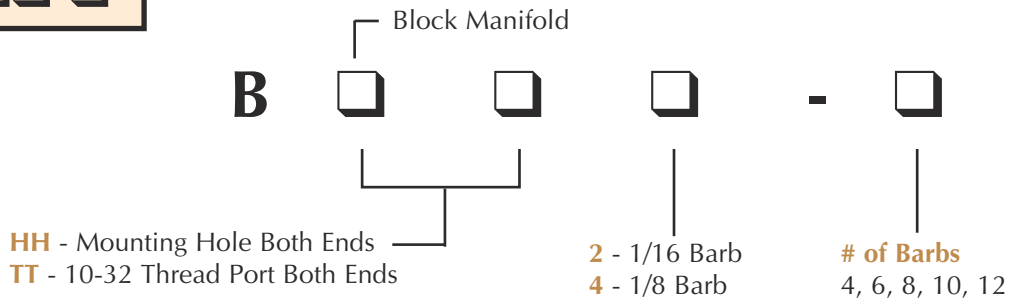
The use of different sizes of hose or tubing in your circuits deserves some care and consideration. In general, follow this guide for the size of hose or tubing you use.

For air logic circuits, we recommend:

1/16" ID for pilots

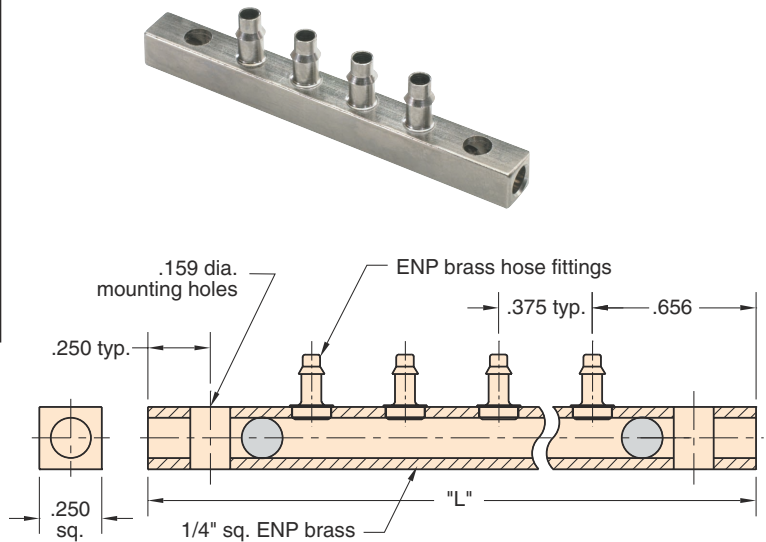
1/8" ID for supplies and outputs

B□□□-□

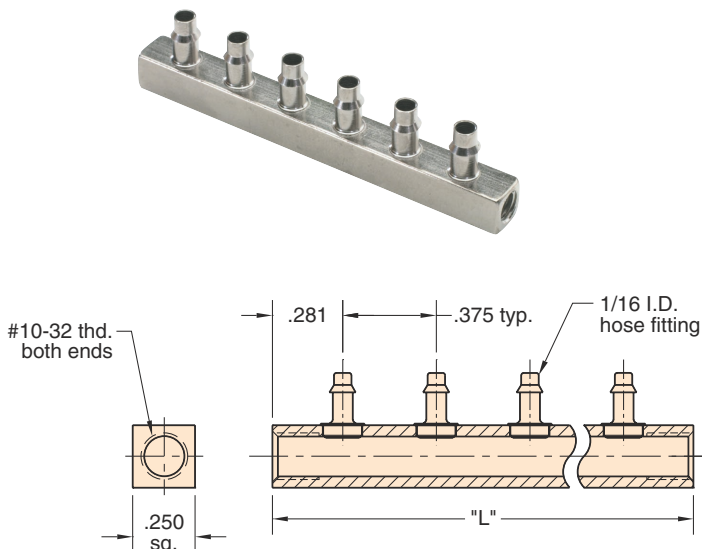


Part #	# of Stations	Fitting Size
BHH2-04	4	1/16" ID Hose Barb
BHH2-06	6	
BHH2-08	8	
BHH2-10	10	
BHH2-12	12	
BHH4-04	4	1/8" ID Hose Barb
BHH4-06	6	
BHH4-08	8	
BHH4-10	10	
BHH4-12	12	

The BHH series has mounting holes for #8 screws at each end. One of the stations must be used as the air supply to the manifold.



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



The BTT series 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.