

FAST PIPE[®]
BY RAPIDAIR



**Modular Aluminum
Compressed Air
Piping**

SIZES RANGE FROM:

$\frac{3}{4}$ " - 1" - 1 $\frac{1}{2}$ " - 2"

(3" - 4" - 6" AVAILABLE)

Today's Improved Compressed Air Piping Method

Fast Installation

- Compression style fittings make installation simple
- Aluminum piping is easy to cut and lift
- O-ring seals ensure a leak free system
- No gluing, threading, or soldering
- Installs in half the time as some traditional methods

Diverse

- Install in small shops to industrial plants
- Connect to any existing piping system
- Expand or modify the system with ease

Superior Air Quality

- No corrosion in the pipe and fitting means longer tool life
- Cools hot compressed air quickly for better filter performance

Energy Efficient

- Smooth inner wall and free flowing fittings lower compressed air costs
- Sealed connections means your compressor run time is less

3/4" - 2" Compression Type

— Step 1 —



(see page 8 for detailed instructions)

— Step 2 —

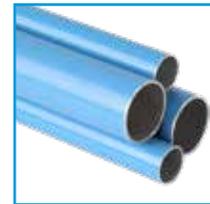


— Step 3 —



Technical Specs

- 190 psi working pressure
- 0° F to 140° F
- Compatible with all types of compressor lubricants
- Compressed air, vacuum, inert gas



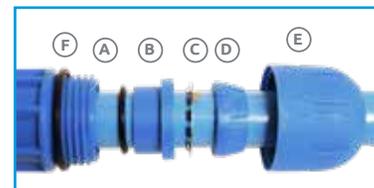
Aluminum Pipe Specs 3/4" - 2"

- Alloy grade
- Extruded to ASTM B221, B429
- Blue powder coat, RAL5012 outside
- Green powder coat, RAL6018 outside
- Non-chromate conversion coating inside



Fittings Specs 3/4" - 2"

- Nylon 6 base with fiberglass reinforcement
- Bite ring: stainless steel
- O-ring: Nitrile



Fittings Parts

- A. O-Ring
- B. Backer
- C. SS Bite Ring
- D. Collet
- E. Cone Nut
- F. Tension O-Ring*

Tension O-ring (F) is found on the 3/4" & 1" sizes only

General System Ratings

- Fire resistant to flammability standard UL94HB
- OSHA Compliant



Spare Parts Kit (Includes A & C)

SIZE	PART NUMBER
3/4"	F1076
1"	F2076
1/2"	F4076
2"	F5076



Pipe



Blue

SIZE	MM	PART #	OUTSIDE	INSIDE	LENGTH	WEIGHT
3/4"	20mm	F1000	.79 in.	.69 in.	19 ft. 8 in.	2.6 lbs.
1"	25mm	F2000	.98 in.	.87 in.	19 ft. 8 in.	4.2 lbs.
1½"	40mm	F4000	1.57 in.	1.43 in.	19 ft. 8 in.	8.8 lbs.
2"	50mm	F5000	1.97 in.	1.81 in.	19 ft. 8 in.	10.1 lbs.



Green

SIZE	MM	PART #	OUTSIDE	INSIDE	LENGTH	WEIGHT
3/4"	20mm	F1000G	.79 in.	.69 in.	19 ft. 8 in.	2.6 lbs.
1"	25mm	F2000G	.98 in.	.87 in.	19 ft. 8 in.	4.2 lbs.
1½"	40mm	F4000G	1.57 in.	1.43 in.	19 ft. 8 in.	8.8 lbs.
2"	50mm	F5000G	1.97 in.	1.81 in.	19 ft. 8 in.	10.1 lbs.

Union



SIZE	PART NUMBER
3/4"	F1002
1"	F2002
1½"	F4002
2"	F5002

Reducing Union



SIZE	PART NUMBER
1" x 3/4"	F2121
1½" x 3/4"	F4223
1½" x 1"	F4221
2" x 3/4"	F5223
2" x 1"	F5221
2" x 1½"	F5421

Inline Valve



SIZE	PART NUMBER
3/4"	F1111
1"	F2222
1½"	F4444
2"	F5555

90° Elbow



SIZE	PART NUMBER
3/4"	F1003
1"	F2003
1½"	F4003
2"	F5003

45° Elbow



SIZE	PART NUMBER
1"	F2004
1½"	F4004
2"	F5004

90° Reducing Elbow NPT



SIZE	DROP SIZE FEMALE	PART #
3/4"	1/4" NPT	F1073
3/4"	1/2" NPT	F1093
1"	1/4" NPT	F2073
1"	1/2" NPT	F2093
1"	3/4" NPT	F2083

Equal Tee



SIZE	PART NUMBER
3/4"	F1005
1"	F2005
1½"	F4005
2"	F5005

Reducing Tee



MAIN SIZE	DROP SIZE	PART NUMBER
1"	3/4"	F2107
1½"	3/4"	F4206
1½"	1"	F4207
2"	3/4"	F5206
2"	1"	F5207

Reducing Tee NPT



MAIN SIZE	DROP SIZE FEMALE	PART NUMBER
3/4"	1/4" NPT	F1007
3/4"	1/2" NPT	F1009
1"	1/4" NPT	F2007
1"	1/2" NPT	F2009
1"	3/4" NPT	F2008
1½"	1/2" NPT	F4009
1½"	3/4" NPT	F4008
2"	1/2" NPT	F5009
2"	3/4" NPT	F5008

Cross



SIZE	PART NUMBER
3/4"	F1051
1"	F2051
1½"	F4051
2"	F5051

Expansion Joints

Any piping system will expand and contract with temperature changes, use this guide for installation of expansion joints to compensate for this movement of aluminum pipe in non-conditioned buildings



SIZE	PART #
1"	F0615
1½"	F0616
2"	F0617

TEMP CHANGE	MAXIMUM STRAIGHT RUN DISTANCE						
	3/4"	1"	1½"	2"	3"	4"	6"
10°F	700 ft.	600 ft.	550 ft.	500 ft.	300 ft.	250 ft.	225 ft.
20°F	500 ft.	460 ft.	420 ft.	370 ft.	230 ft.	190 ft.	175 ft.
35°F	350 ft.	310 ft.	280 ft.	250 ft.	150 ft.	125 ft.	100 ft.
55°F	260 ft.	230 ft.	200 ft.	190 ft.	120 ft.	95 ft.	75 ft.
70°F	200 ft.	190 ft.	170 ft.	150 ft.	100 ft.	75 ft.	50 ft.

Threaded Nipple



Male

MAIN SIZE	MALE THREAD	PART NUMBER
3/4"	1/2" NPT	F1018
3/4"	3/4" NPT	F1118
1"	1/2" NPT	F2018
1"	3/4" NPT	F2118
1"	1" NPT	F2218
1½"	1" NPT	F4218
1½"	1½" NPT	F4418
2"	1½" NPT	F5418
2"	2" NPT	F5518



Female

MAIN SIZE	FEMALE THREAD	PART NUMBER
3/4"	3/4" NPT	F1120
1"	1" NPT	F2220
1½"	1½" NPT	F4420



Female

MAIN SIZE	FEMALE THREAD	PART NUMBER
3/4"	1/2" NPT	F1221
1"	1/2" NPT	F2221
1½"	1/2" NPT	F4241
1"	3/4" NPT	F2231
1½"	3/4" NPT	F4231
1½"	1/2" NPT	F4241
2"	3/4" NPT	F5231
2"	1/2" NPT	F5241

Jumper Hose



MALE NPT X SWIVEL FEMALE NPT
RUBBER

MAIN SIZE	LENGTH	PART NUMBER
1/2"	2 ft.	F0212
1/2"	3 ft.	F0213
3/4"	2 ft.	F0214
3/4"	3 ft.	F0215
3/4"	5 ft.	F0221
1"	2 ft.	F0216
1"	3 ft.	F0217



MALE NPT X SWIVEL FEMALE NPT
STAINLESS STEEL

MAIN SIZE	LENGTH	PART NUMBER
1 1/2"	18"	F0225
1 1/2"	36"	F0226
2"	36"	F0227

End Cap



SIZE	PART NUMBER
3/4"	F1006
1"	F2006
1 1/2"	F4006
2"	F5006

Quick Coupler



30 CFM INDUSTRIAL STYLE TYPE M

PART NUMBER	MALE THREAD SIZE
K7221	1/4" NPT
K7241	1/2" NPT

Quick Coupler Plugs



PART NUMBER	FEMALE THREAD SIZE
K7220	1/4" NPT



INDUSTRIAL STYLE

DIMENSION	A	B	Type
30 CFM 1/4" Body	5/16"	3/16"	Type M
70 CFM 3/8" Body	7/16"	5/16"	Type H

70 CFM INDUSTRIAL STYLE TYPE H

PART NUMBER	MALE THREAD SIZE
K9231	3/8" NPT
K9241	1/2" NPT

PART NUMBER	FEMALE THREAD SIZE
K9230	3/8" NPT
K9240	1/2" NPT

PART NUMBER	MALE THREAD SIZE
K8221	1/4" NPT
K8231	3/8" NPT
K8241	1/2" NPT

PART NUMBER	FEMALE THREAD SIZE
K8220	1/4" NPT
K8230	3/8" NPT
K8240	1/2" NPT

Wall Outlet

(HAS BOTTOM MOISTURE DRAIN)



Each side of outlet has an extra 1/2" NPT port 2 plug included



TOP INLET	OUTLET SIZE FEMALE	PART NUMBER
3/4"	(4x) 1/2" NPT	F1024
1"	(4x) 1/2" NPT	F2024

Wall Outlet w/ Shutoff

(HAS BOTTOM MOISTURE DRAIN)



TOP INLET	OUTLET SIZE FEMALE	PART NUMBER
3/4"	(4x) 1/2" NPT	F1024V
1"	(4x) 1/2" NPT	F2024V

Thru Wall Or Outside Outlet



CUSTOMER SUPPLIED 1/2" NPT NIPPLE LENGTH VARIES PER WALL THICKNESS

MAIN SIZE	OUTLET SIZE FEMALE	PART NUMBER
3/4"	(1x) 1/2" NPT	F1024W
1"	(1x) 1/2" NPT	F2024W

Saddle Drop



MAIN SIZE	DROP SIZE	PART NUMBER
1"	1"	F2210
1 1/2"	3/4"	F4110
1 1/2"	1"	F4210
2"	3/4"	F5110
2"	1"	F5210

Saddle Drop NPT



MAIN SIZE	DRILL BIT	GASKET
1"	9/16" F0043	F2210C
1 1/2"	3/4" F0044	F4210C
2"	3/4" F0044	F5210C
3"	3/4" F0044	F17210C



MAIN SIZE	DROP SIZE	PART NUMBER
1"	1/4" NPT	F2011
1"	1/2" NPT	F2012
1"	3/4" NPT	F2112
1 1/2"	1/4" NPT	F4011
1 1/2"	1/2" NPT	F4012
1 1/2"	3/4" NPT	F4112
2"	1/4" NPT	F5011
2"	1/2" NPT	F5012
2"	3/4" NPT	F5112

Saddle Drop Installation

- System must be de-pressurized before installing
 - To prevent chips from entering the pipe interior, stop drilling occasionally and blow out chips, grease the end of the drilling tool
1. Position saddle drop opposite the side of the pipe that needs the hole. Tighten securely and mark the pipe by the raised locating mark on the fitting. Mark the pipe both horizontally & vertically along the fitting edge
 2. Drill thru one side of the pipe with the drill bit, using the hole in the fitting as a locator
 3. Insert the saddle drop gasket into the molded cavity
 4. Position the saddle drop over the drilled hole with aligning marks, tighten securely
 5. Attach the necessary drop pipe or threaded adapter



STEP 1



STEP 2



STEP 3



STEP 4



Flat Surface Installation

- Use pipe clips to secure pipe to any flat surface with mounting screw
- Ceiling or wall mount
- Clip has 5/16" thru hole and hex bore for a 5/16" hex nut
- Hex nut serves as a backer for screws
- Use #10 Drywall Screw or Tapcon
- In horizontal installations, mount clip pivot tab up



MAIN SIZE	PART NUMBER	X DIMENSION
3/4"	F1022 - 10 10/pk	15/16"
1"	F2022 - 10 10/pk	7/8"
1 1/2"	F4022 - 10 10/pk	1 15/16"
2"	F5022 - 10 10/pk	1 3/4"

Hanging Installation



- Beam Clamp- Pipe Clip
- 5/16" threaded rod
- Pipe Clip



- Beam Clamp
- 3/8" threaded rod
- Loop hanger



3/8 Threaded Rod x 6ft.

3/8 Hex Nut (100 Pack)

PART NUMBER
F0028

PART NUMBER
F0029



- Hangers or mounting clips should be no more than 10 ft. apart and one must be at least 6" from a fitting
- Do not over tighten cantilever type tube supports, pipe must be allowed to expand and contract slightly in length
- See page 6 for expansion joint guidelines

Beam Clamp

- Thru hole design
- Works for both 5/16" and 3/8" threaded rod
- 3/4" width opening



PART NUMBER

F0018

Cantilever Strut Arm

- 12" overall length
- 1 5/8" standard strut



PART NUMBER

F0021

Loop Hanger

For 3/8" - 16 standard strut

MAIN SIZE	PART NUMBER
3/4" & 1"	F0019
1 1/2"	F0020
2"	F0024



Strut Cushion Clamp

For 1 5/8" standard strut

MAIN SIZE	PART NUMBER
3/4"	F0017
1"	F0022
1 1/2"	F0023
2"	F0025



FastPipe Installation



Cut Pipe to length with tubing cutter (cut must be square) (DO NOT USE HACK SAW)



Deburr the end of the pipe outside and inside (a smooth edge allows easy fitting assembly and no damage to the fitting O-ring)

3/4" - 2"



Mark end of pipe for the proper insertion depth

3/4" Fittings:	2 inches
1" Fittings:	2 - 3/4 inches
1 1/2" Fittings:	4 inches
2" Fittings:	4 - 3/4 inches



Wet end of pipe with very diluted soapy water (DO NOT USE ANY OIL OR GREASE LUBRICANT)



Loosen FITTING CONE NUT PARTIALLY (LOOK INSIDE EACH FITTING FOR INNER PARTS (inner parts, o-ring, stainless steel bite ring))



Insert pipe into fitting until pipe bottoms out (Hand tighten fitting with FastPipe spanner wrenches)



Depth mark for cutting location



TAB MUST ALIGN TO NOTCH

Tool Set



MAIN SIZE	PART NUMBER
3/4"	F0136
1"	F0137
1 1/2"	F0138
2"	F0145

Spanner Wrench



MAIN SIZE	PART NUMBER
3/4"	F1020 each
1"	F2020 each
1 1/2"	F4020 each
2"	F5020 each

(2) REQUIRED

Deburr Tool



MAIN SIZE	PART NUMBER
3/4" & 1"	F0142
3/4" thru 2"	F0141

Pipe Cutter



3/4" THRU 2" PART NUMBER
F0140



Spray Bottle

PART NUMBER

F0139

⚠ Warnings

- Compressed air is DANGEROUS if not used properly
- Always use EYE PROTECTION when using compressed air
- DO NOT POINT compressed air at your body or any person
- Pressurize system SLOWLY
- TURN OFF air compressor when not in use
- CHECK local building codes before installation
- ALWAYS RELIEVE the system pressure when installing or performing maintenance
- Systems must have a SAFETY RELIEF valve installed at the compressed air source to prevent over pressurization
- When using FastPipe in direct sunlight, cover or paint the polymer fittings to protect from UV exposure (Pipe needs no covering and can be exposed)
- Keep children away from the system

FastPipe is NOT designed:

- For underground burial
- To electrically ground equipment
- To be welded
- To take violent impacts
- To be used where the compressed air temperature is above 140° F
- For environments of caustic or corrosive chemicals

⚠ WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov. Wash hands after handling. CONTAINS LEAD: MAY BE HARMFUL IF EATEN OR CHEWED. MAY GENERATE DUST CONTAINING LEAD. KEEP OUT OF THE REACH OF CHILDREN.

Installation Tips & Recommendations

Care must be taken on any installation of the FastPipe system. Pipes will be carrying compressed air/gas up to 190 psi. The FastPipe system is only as safe as a thorough installation. Read all installation instructions and watch videos before starting. Below are some tips for a safe installation.

We strongly recommend that the installer contact our tech department for installation questions PRIOR to the installation.

- Assemble all NPT PIPE THREADS with two wraps of Teflon tape and then pipe sealant which prevents thread galling.
- Support the pipe with clips/ hangers a maximum of 10 FT. SPACING and on ONE SIDE OF EACH FITTING.
- FastPipe can be bent to a maximum of 15° DO NOT OVER BEND. 3/4" Fastpipe can be bent to 45°
- Any machine/compressor plumbed to the FastPipe must have a JUMPER HOSE to reduce vibration.
- Any piping system will expand and contract with temperature changes. Use EXPANSION JOINTS to compensate for this movement of aluminum pipe in non-conditioned buildings.
- DO NOT USE FastPipe for PULSING desiccant dryers or other like equipment.
- CAUTION installing inert gas bulk tank systems, gas must be warmed up to FastPipe temperature range.
- Use a strain relief attached to the building for any rubber hose drops attached to the piping.
- DO NOT connect quick couplings for air hoses to reducing elbows or tee fittings. The constant connecting/ disconnecting and pulling on air hoses could loosen the fitting. Use the FastPipe WALL OUTLET which can be secured to a wall or post. Any hoses attached in the ceiling area to a fitting must use a strain relief attached to the building structure.
- CHECK that all fittings are tightened before pressurizing the system for the first time.
- For initial installation, pressurize system SLOWLY to 50 psi and check for leaks, then pressurize slowly to MAX 190 psi.
- AFTER 24 HOURS of being pressurized, depressurize the system and RETIGHTEN the compression nuts. Some settling of components may have occurred. This is not optional, it must be done.
- Make sure compressor output temperature does not exceed 140° F.

PRODUCTS MANUFACTURED BY THE SELLER CARRY A LIMITED ONE YEAR WARRANTY. SEE WWW.RAPIDAIRPRODUCTS.COM FOR MORE DETAILS.

MAXLINE[®]

BY RAPIDAIR



A great alternative for drops and long continuous runs, see our website, www.rapidairproducts.com, for more details.

- 1/2", 3/4", 1", 2"
 - Multi-Layer Semi Flexible Tubing
 - Inner and Outer Layer - HDPE
 - Center Layer - Aluminum
 - Sizes Measured on Inside Diameter
- MAXLINE FITTINGS DO NOT INTERCHANGE DIRECTLY WITH FASTPIPE, BUT CAN CONNECT THRU PIPE THREAD ADAPTERS FITTINGS.



FILTER REGULATOR

PART NUMBER	PORT SIZE
K93215	3/8" NPT
K93216	1/2" NPT
K93217	3/4" NPT
K93218	1" NPT



VERTICAL FILTER REGULATOR

PART NUMBER	PORT SIZE
K96075	3/4" NPT
K96050	1/2" NPT



PUSH ON RUBBER HOSE

PART NUMBER	SIZE	LENGTH
F0238-160	3/8"	160 ft.
F0238-FT	3/8"	By the ft.
F0250-160	1/2"	160 ft.
F0250-FT	1/2"	By the ft.



FEMALE SWIVEL NPT

PART NUMBER	HOSE SIZE	THREAD SIZE
F0243	3/8"	1/4" NPT
F0244	3/8"	1/2" NPT
F0252	1/2"	1/2" NPT



MALE NPT

PART NUMBER	HOSE SIZE	THREAD SIZE
F0240	3/8"	1/4" NPT
F0241	3/8"	3/8" NPT
F0242	3/8"	1/2" NPT
F0251	1/2"	1/2" NPT



HOSE REEL

PART NUMBER	SIZE	LENGTH
R-03050	3/8"	50 ft.
R-03075	3/8"	75 ft.
R-05050	1/2"	50 ft.
R-05100	1/2"	100 ft.



ALUMINUM MANIFOLDS

PART NUMBER	INLET SIZE	# OF PORTS	OUTLET PORTS
H-50-25-4	1/2" NPT	4	1/4" NPT
H-50-25-5	1/2" NPT	5	1/4" NPT
H-50-50-4	1/2" NPT	4	1/2" NPT
H-50-50-5	1/2" NPT	5	1/2" NPT
H-75-50-3	3/4" NPT	3	1/2" NPT
H-75-50-4	3/4" NPT	4	1/2" NPT
H-75-50-5	3/4" NPT	5	1/2" NPT
H-75-75-3	3/4" NPT	3	3/4" NPT
H-75-75-4	3/4" NPT	4	3/4" NPT
H-75-75-5	3/4" NPT	5	3/4" NPT
H-100-75-3	1" NPT	3	3/4" NPT
H-100-75-4	1" NPT	4	3/4" NPT
H-100-75-5	1" NPT	5	3/4" NPT

FAST PIPE[®]

BY RAPIDAIR



**Ask us about our new
RapidAir System Designer**

Design your air system in minutes!

