

Modular Aluminum Compressed Air Piping

SIZES RANGE FROM: ¾" - 1" - 1½" - 2" - 3" - 4" - 6"

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" - 3" **Compression Type**



(see page 11 for detailed instructions)









(see page 12 for detailed instructions)

Technical Specs

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

General **System** Ratings

- Fire resistant to flammability standard UL94HB
- OSHA Compliant



Aluminum Pipe Specs 3/4" - 6"

- Allov 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-rina: Nitrile

Fittings Specs 3"

- Diecast Aluminum Allov
- Bite ring: stainless steel
- O-rina: Nitrile
- Electrocoated

Fittings Specs 4" - 6"

- Diecast Aluminum Allov
- Seal: Nitrile
- Powder Coat



Fittings Parts A.O-Ring B.Backer C.SS Bite Ring D.Collet



F. Tension O-Rina*

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





SIZE

4"

6"

Spare Parts Kit (Includes A & C)

SIZE	PART NUMBER
3/4"	F1076
1″	F2076
1/2"	F4076
2″	F5076
3″	FI7076



SEAL

FI8076

FI9076





Pipe

Blue

SIZE	MM	PART #	OUTSIDE	INSIDE	LENGTH	WEIGHT
3/4"	20mm	F1000	.79 in.	.69 in.	19 ft. 2 in.	2.6 lbs.
1"	25mm	F2000	.98 in.	.87 in.	19 ft. 2 in.	4.2 lbs.
11⁄2″	40mm	F4000	1.57 in.	1.43 in.	19 ft. 2 in.	8.8 lbs.
2″	50mm	F5000	1.97 in.	1.81 in.	19 ft. 2 in.	10.1 lbs.
3"	80mm	FI7000	3.15 in.	2.98 in.	19 ft. 2 in.	21.0 lbs.



Green

SIZE	MM	PART #	OUTSIDE	INSIDE	LENGTH	WEIGHT
3/4"	20mm	F1000G	.79 in.	.69 in.	19 ft. 2 in.	2.6 lbs.
1"	25mm	F2000G	.98 in.	.87 in.	19 ft. 2 in.	4.2 lbs.
11/2"	40mm	F4000G	1.57 in.	1.43 in.	19 ft. 2 in.	8.8 lbs.
2″	50mm	F5000G	1.97 in.	1.81 in.	19 ft. 2 in.	10.1 lbs.



SIZE	ММ	PART #	OUTSIDE	INSIDE	LENGTH	WEIGHT
					19 ft. 2 in.	
6"	150mm	FI9000	6.04 in.	5.76 in.	19 ft. 2 in.	64.5 lbs.

Union







PART NUMBER SIZE 3/4" F1002 1″ F2002 11/2" F4002 2″ F5002

SIZE PART NUMBER 3″ FI7002

SIZE PART NUMBER 4" FI8002 6" FI9002

Reducing Union



SIZE	PART NUMBER
1" x 3/4"	F2121
11⁄2″ x 3/4″	F4223
11⁄2″ x 1″	F4221
2" x 3/4"	F5223
2" x 1"	F5221
2" x 1½"	F5421



SIZE	PART NUMBER
6" x 4"	FI9821

90° Elbow







SIZE	PART NUMBER
3/4"	F1003
1"	F2003
11/2"	F4003
2"	F5003

D" EIZOOD	ZE	PART NUMBER
3 F17003	3″	FI7003

SIZE	PART NUMBER
4"	FI8003
6"	FI9003

45° Elbow





100	SIZE	PART NUMBER
	4"	FI8004
1	6"	FI9004

SIZE	PART NUMBER
1″	F2004
11/2″	F4004
2″	F5004

T



Inline Valve



SIZE	PART NUMBER
3/4"	F1111
1"	F2222
11/2″	F4444
2″	F5555



PART NUMBER

FI7777

3/4" NPT

PART #

F1073

F1093

F2073

F2093

F2083



SIZE	PART NUMBER
4"	FI8888
6"	F19999





90° Reduci



ing	3	Elbow NP		
-		SIZE	DROP SIZE FEMALE	
		3/4"	1/4" NPT	
1		3/4"	1/2" NPT	
<u> </u>		1″	1/4" NPT	
		1″	1/2" NPT	

1″

SIZE

3"



Equal Tee

SIZE

3/4"

1″

11/2"

2″

MAIN

SIZE

3/4"

3/4"

1″

1″

1″

11/2"

11/2"

2″

2″







PART NUMBER SIZE 4" FI8005 6" FI9005

F5005 **Reducing Tee NPT**

PART

NUMBER

F1007

F1009

F2007

F2009

F2008

F4009

F4008

F5009

F5008

PART NUMBER

F1005

F2005

F4005



DROP SIZE

FEMALE

1/4" NPT

1/2" NPT

1/4" NPT

1/2" NPT

3/4" NPT

1/2" NPT

3/4" NPT

1/2" NPT





MAIN DROP SIZE PART SIZE FEMALE NUMBER 2" NPT FI7509

MAIN SIZE	DROP SIZE FEMALE	
4"	2" NPT	FI8221
4"	3" NPT	FI8321
6"	2" NPT	FI9221
6"	3" NPT	FI9331

3/4" NPT **Reducing Tee**



MAIN SIZE	DROP SIZE	PART NUMBER
1″	3/4"	F2107
11/2"	3/4"	F4206
11/2"	1″	F4207
2″	3/4"	F5206
2″	1"	F5207



3"



SIZE	PART NUMBER
3/4"	F1051
1″	F2051
11⁄2″	F4051
2″	F5051



Flange Gasket







SIZE	PART NUMBER
3"	FI7905
4"	FI8905
6"	FI9905

SIZE	PART NUMBER
3″	FI7900

SIZE	PART NUMBER
4"	FI8900
6"	FI9900

ANSI Class 150 Flange Dimensions



SIZE	Α	В	С	BOLT HOLES
3"	7.50	6.00	5.00	4
4"	9.00	7.50	6.18	8
6"	11.00	9.50	8.50	8

Flange Connections

Expansion Joints







FEMALE NPT X FEMALE NPT

SIZE	PART NUMBER
1″	F0615
11⁄2″	F0616
2"	E0617

FEMALE NPT X FEMALE NPT SIZE PART NUMBER F0619 3"

FLANGE X FLANGE

SIZE	PART NUMBER
4"	F0621
6"	F0622

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 nonconditioned buildings

ТЕМР		MAXIMUM STRAIGHT RUN DISTANCE								
CHANGE	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.			

6



Threaded Male Nipple

PART NUMBER

F1018

F1118

F2018

F2118

F2218

F4218

F4418

F5418

F5518



MALE THREAD

1/2" NPT

3/4" NPT

1/2" NPT

3/4" NPT

1" NPT

1" NPT

11/2" NPT

11/2" NPT

2" NPT

MAIN

3/4"

3/4"

1″

1″

1″

11/2"

11/2"

2″

2″



MAIN SIZE MALE THREAD PART NUMBER 3" NPT 3" FI7718



Threaded Female Nipple



MAIN SIZE FEMALE THREAD PART NUMBER 3/4" 3/4" NPT F1120 1″ 1" NPT F2220 11/2" 11/2" NPT F4420

Jumper Hose



MALE NPT X SWIVEL FEMALE NPT

MAIN SIZE PART LENGTH NUMBER 11/2" 18" F0225 11/2" 36" F0226 2″ 36" F0227 3″ 36" F0228



MALE NPT X SWIVEL FEMALE NPT

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

MAIN SIZE	FEMALE THREAD	PART NUMBER
3/4"	1/2" NPT	F1221
1"	1/2" NPT	F2221
11⁄2″	1/2" NPT	F4241
1"	3/4" NPT	F2231
11⁄2″	3/4" NPT	F4231
11⁄2″	1/2" NPT	F4241
2"	3/4" NPT	F5231
2″	1/2" NPT	F5241

STAINLESS STEEL

FLANGE

MAIN SIZE	LENGTH	PART NUMBER
4"	36"	F0234
6"	36"	F0236

End Cap





3"

F2024

PART NUMBER

FI7006



SIZE PART NUMBER 3/4" F1006 1″ F2006 11/2" F4006 2″ F5006

Wall Outlet

(HAS BOTTOM MOISTURE DRAIN)

1"

PA NUN K9231

K9241



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

(4x) 1/2" NPT





в

5/16"

3/16" | Type M

Type H

PART NUMBER

FI8006

FI9006

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

INDUSTRIAL STYLE

5/16"

7/16"

SIZE

4"

6″

Thru Wall Or Outside Outlet



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

Quick Coupler



K9230

K9240

3/8" NPT

1/2" NPT

0	CFM	INDUST	RIAL	STYI	LE	TYPE	м

3/8" NPT

1/2" NPT

PART NUMBER	MALE THREAD SIZE		PART NUMBER	FEMALE THREAD SIZE	PART NUMBER	MALE THREAD SIZE	PART NUMBER	FEMALE THREAD SIZ
K7221	1/4" NPT		K7220	1/4" NPT	K5221	1/4" NPT	K5220	1/4" NPT
K7241	1/2" NPT							
70 CFM IN	DUSTRIAL STY	LE	ТҮРЕ Н		PART	MALE	PART	FEMALE
PART	MALE		PART	FEMALE	NUMBER	THREAD SIZE	NUMBER	THREAD SIZ
NUMBER	THREAD SIZE		NUMBER	THREAD SIZE	K8221	1/4" NPT	K8220	1/4" NPT

K8231

K8241

DIMENSION

30 CFM

1/4 Body

70 CFM

3/8 Body

Quick Coupler Plugs

MALE HREAD SIZE	PART NUMBER	FEMALE THREAD SIZE
1/4" NPT	K5220	1/4" NPT
MALE HREAD SIZE	PART NUMBER	FEMALE THREAD SIZE
HREAD SIZE	NUMBER	THREAD SIZE





Saddle Drop



MAIN SIZE	DROP SIZE	PART NUMBER
1″	1"	F2210
11/2"	3/4"	F4110
11/2"	1″	F4210
2″	3/4"	F5110
2″	1"	F5210

P

MAIN SIZE	DROP SIZE	PART NUMBER
3"	3/4"	FI7110
3"	1″	FI7210

MAIN PART DROP SIZE SIZE

NUMBER 4" FI8312 6" FI9312

DROP SIZE

1" NPT

1" NPT

PART

NUMBER

FI8312

FI9312

Saddle Drop NPT



MAIN SIZE	DROP SIZE	PART NUMBER
1″	1/4" NPT	F2011
1″	1/2" NPT	F2012
1″	3/4" NPT	F2112
11/2"	1/4" NPT	F4011
11/2"	1/2" NPT	F4012
11/2	3/4" NPT	F4112
2″	1/4" NPT	F5011
2″	1/2" NPT	F5012
2″	3/4" NPT	F5112



DRILL BIT	GASKET
9/16" F0043	F2210C
3/4" F0044	F4210C
3/4" F0044	F5210C
3/4" F0044	FI7210C
15/16" F0045	
15/16" F0045	
	9/16" F0043 3/4" F0044 3/4" F0044 3/4" F0044 15/16" F0045



MAIN SIZE	DROP SIZE	PART NUMBER
3"	1/2" NPT	FI7012
3″	3/4" NPT	FI7112
3″	1" NPT	FI7312



MAIN

SIZE

4"

6"

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

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"
11⁄2″	F4022 - 10 10/pk	115/16"
2"	F5022 - 10 10/pk	13/4"
3″	FI7022 each	13/8″

Beam Clamp

Loop hanger

гod

• 3/8" threaded



Hanging Installation



- 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

MAIN SIZE PART NUMBER F0019 11/2" F0020 2″ F0024 3″ F0030 4" FI0031 6″ FI0032

















10







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)





Mark end of pipe

3/4" Fittinas:

1" Fittings:

1¹/₂" Fittings:

for the proper insertion depth

2 inches 2 - 3/4inches

4 inches

4 - 3/4 inches

4 - 1/2 inches



3/4" - 3'

Insert pipe into fitting until pipe bottoms out Hand tighten fitting LOOK INSIDE EACH FITTING FOR INNER PARTS Fully tighten fitting with (inner parts, o-ring, stainless FastPipe spanner wrenches



GREASE LUBRICANT

Wet end of pipe

DO NOT USE ANY OIL OR

with very diluted soapy water



Loosen FITTING CONE

NUT PARTIALLY

steel bite rina)

TAB MUST ALIGN TO NOTCH

Tool Set



MAIN SIZE	PART NUMBER
3/4"	F0136
1″	F0137
11/2"	F0138
2″	F0145
3″	FI0146





F1020 each

F2020 each

F4020 each

F5020 each

FI7020 each

(2) REOUIRED **Spray Bottle**

PART NUMBER

F0139

3/4"

1″

11/2″

2″

3"





ELECTRIC DRILL REQUIRED





%" THRU 2" PART NUMBER F0140 3" PART NUMBER

FI0148

Deburr Tool MAIN SIZE PART NUMBER 3" FI0153

FastPipe Installation



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



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







Lug the end of pipe DO NOT OVERLAP THE LUGS

Deburr Tool







MAIN SIZE	PART NUMBER
4" - 6"	FI9021

5

Wet end of pipe with very diluted soapy water and assemble seal and fitting DO NOT USE ANY OIL OR **GREASE LUBRICANT**

PART #

FI0154

FI0155

Pipe Cutter (4" thru 6")



PART NUI	MBER
FI014	9

Cordless Lugging Tool



PART NUMBER





Add marks for lugs Use the locating notches on the outer edge of the deburr head to add marks for the location of the lugs on the pipe. 4" Fittings: 5 lugs | 6" Fittings: 8 lugs



Tighten bolts per sequence shown 15 ft. lbs - 20 ft. lbs max DO NOT USE AN IMPACT











12



AWarnings

- Compressed air is DANGEROUS if not used properly
- Always use EYE PROTECTION when using compressed air 🕄
- DO NOT POINT compressed air at vour body or any person
- Pressurize system SLOWLY
- TURN OFF air compressor when not in use
- CHECK local building codes before installation

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

- 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

- For environments of caustic or corrosive chemicals

- A 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 Thread 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 or 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



- · 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.



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



VERTICAL

REGULATOR

FILTER

PUSH ON RUBBER HOSE

HDPE

Aluminu

HDPE

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

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

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.	



HOSE

3/8"

3/8"

1/2"

F0243

F0244

F0252







THREAD SIZE	PART NUMBER	SIZE	LENGTH
1/4" NPT	R-03050	3/8"	50 ft.
3/8" NPT	R-03075	3/8"	75 ft.
1/2" NPT	R-05050	1/2"	50 ft.
1/2" NPT	R-05100	1/2"	100 ft.



ALUMINUM MANIFOLDS

F0231 1/2	I/ZINPI	R-03100 1	14
PART NUMBER	INLET SIZE	# OF PORTS	С
H-50-25-4	1/2" NPT	4	
H-50-25-5	1/2" NPT	5	
H-50-50-4	1/2" NPT	4	
H-50-50-5	1/2" NPT	5	
H-75-50-3	3/4" NPT	3	
H-75-50-4	3/4" NPT	4	
H-75-50-5	3/4" NPT	5	
H-75-75-3	3/4" NPT	3	
H-75-75-4	3/4" NPT	4	

H-75-75-3	3/4" NPT	
H-75-75-4	3/4" NPT	
H-75-75-5	3/4" NPT	
H-100-75-3	1" NPT	
H-100-75-4	1" NPT	

1" NPT



4

OUTLET PORTS

1/4" NPT

1/4" NPT

1/2" NPT

1/2" NPT 1/2" NPT

1/2" NPT

1/2" NPT

3/4" NPT

3/4" NPT

3/4" NPT

3/4" NPT

1/4" NPT F0240 1/2" NPT F0241

1/2" NPT

THREAD PART NUMBER SIZE SIZE 3/8

F0242

E0251

H-100-75-5

3/8

3/8"

1/2"

MALE NPT		HOS
HOSE THREAD		PAR



Ask us about our new RapidAir System Designer

Design your air system in minutes!

