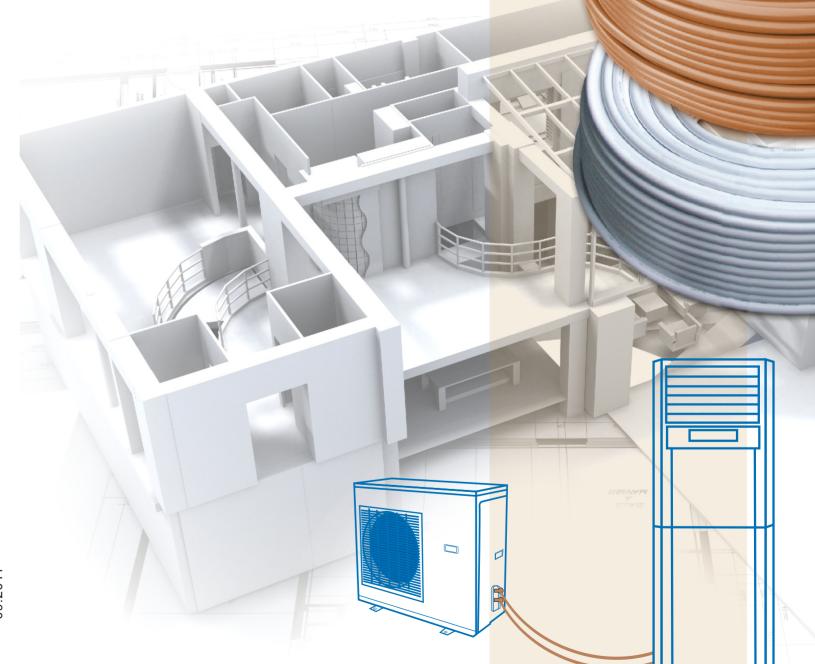


## AIR-CONDITIONING PIPING SYSTEMS





5/F Rifeng Building, 16 Zumiao Road, Foshan, Guangdong, China

 Tel
 +86-757-8223 7822

 Fax
 +86-757-8213 8120

 Web
 www.rifeng.com

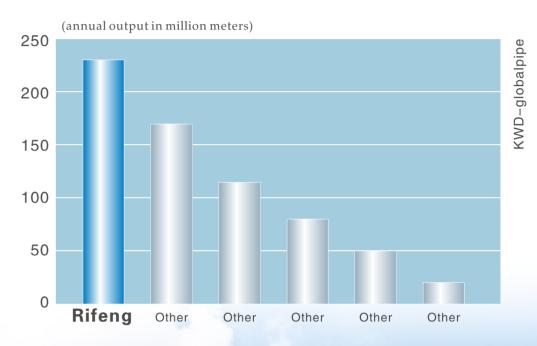
 Email
 overseas@rifeng.com

### **Contents**

Company Profile	- 01
	01
Air-Conditioning Piping System Introduction	0.2
	- 02
Pifena Air-Conditioning Pine	
Rifeng Air-Conditioning Pipe	- 03
Rifeng Air-Conditioning Fitting	- 05
Products	- 06
Pipes —	- 06
Fittings —	- 07
Tools —	07
10013	U/
Installation	- 08
	- 00
Services	
	- 09

## Company Profile

- The Biggest Multilayer and Pex Piping Systems Manufacturer in the World
- The First and the Exclusive Manufacturer of Air-conditioning Multilayer Piping System in the world



- \* 48 Extruders--Multilayer pipes 700,000 meters per day
- \* 3 Fitting factories 200,000 matched fittings per day
- \* 20,000 square meters warehouse



### Rifeng Air-conditioning Piping System Introduction

The multilayer pipe is the new trend for application in air-conditioning system, by comparison with the copper pipe, multilayer pipe is the new generation that unites the advantages of plastic and metal pipes and offers the high degree of flexibility and toughness, coupled with high pressure and temperature resistance.

Rifeng multilayer pipe provides you the same performance as the copper pipe does but much lower price. By connecting with our relevant fittings, Rifeng multilayer pipe can switch to work as the copper pipes in popular sizes (such as 1/4, 3/8, 1/2 and 5/8), the installation can be easily finished only by spanners.



- Same performance but much lower price
- Thermal conductivity is 0.45w/m.k, which is far more efficiency than copper pipe 379.14w/m.k.
- Relevant fittings for switching to different copper pipe sizes
- Easy installation

# Rifeng Air-conditioning Pipe

Rifeng air-conditioning multilayer pipe is five-layer composite pipe that combines the advantages of a metal and plastic pipe and eliminates the disadvantages of both materials at the same time. The aluminum core is absolutely diffusion tight; it reliably prevents oxygen/gas from permeating into pipe. It compensates and reduces snap-back forces and heat expansion with changes of temperature.

Working codition: for all popular refrigerants (R410A,R22,R407C etc)

■Tmax=60°C, Pmax=3.8Mpa



### Rifeng Air-conditioning pipe characteristic

The advantages for air-conditioning system are:



- Clean and easy to install, no welding, soldering, thread cutting or bonding
- Easy to bend
- Low weight
- Corrosion resistant
- Excellent long-time rupture strength offers safety in daily use
- Minimal roughness k=0.007mm ensuring less pipe friction and lower pressure losses
- Heat expansion similar to that of metals, enabling larger pipe clip distances
- Maximum temperature up to 60°C

02

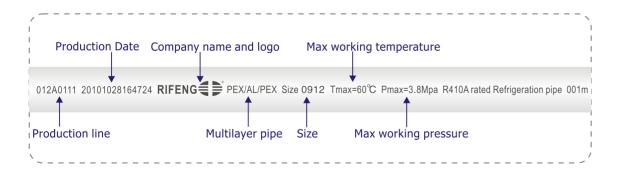
There are three specifications such as 0912, 1216, 1620 for Air–conditioning system. The dimensions are shown as below:

Nominal size	0912	1216	1620
Outside diameter (mm)	12	16	20
Inside diameter (mm)	9	12	16

FOR AIR-CONDITIONER		COPPER PIPE		VALVE JOINT	RIFENG MULTILAYER AIR-CON SYSTE	
НР	BTU/h	Inch	mm	UNF Thread	Pipe	Fitting
1/2HP,3/4HP	4500~11000	1/4	6.35	7/16'-20UNF	H-0912	F1-S0912*7/16 (20UNF) C
& 1HP		3/8	9. 52	5/8'-18UNF	H-0912	F1-S0912*5/8 (18UNF) C
1.5HP & 2HP	11000~20000	1/4	6.35	7/16'-20UNF	H-0912	F1-S0912*7/16 (20UNF) C
1.500 & 200		1/2	12.7	3/4'-16UNF	H-1216	F1-S1216*3/4 (16UNF) C
2.5HP	20000~24000	1/4	6.35	7/16'-20UNF	H-0912	F1-S0912*7/16 (20UNF) C
2.588		5/8	15.88	7/8'-14UNF	H-1620	F1-S1620*7/8 (14UNF) C
2UD 8 4UD	24000~36000	3/8	9.52	5/8'-18UNF	H-0912	F1-S0912*5/8 (18UNF) C
3HP &4HP		5/8	15.88	7/8'-14UNF	H-1620	F1-S1620*7/8 (14UNF) C
5HP, 6HP & 7HP	36000~52000	5/8	15.88	7/8'-14UNF	H-1620	F1-S1620*7/8(14UNF)C

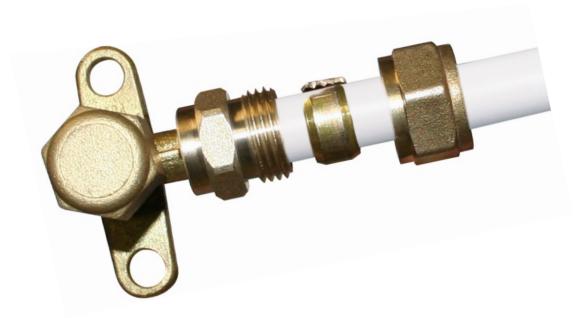
Working condition: for popular refrigerants (R410A,R22,R407C etc), Tmax=60℃, Pmax=3.8Mpa

### Pipe marking



# Rifeng F1 Compression Fittings

F1 compression fittings are ideal for air-conditioning system. They are hot-forged for superior durability and strength.



### Rifeng Air-conditioning fitting characteristic

- Specially designed for Rifeng PEX/AL/PEX Air-conditioning pipes
- ■Artistic design with high-pressure and corrosion resistance
- ■EPDM O-ring and liquid leak-proof
- ■Easily installed and disassembled with spanner
- Recycle to save resource.

04

## **Products**



PEX-AL-PEX Color: white	For air–conditioning system, Tmax=60℃, Pmax=3. 8Mpa.			
	Specifications	Packing Specif.(m)		
RIFENG € €	H-0912 H-1216 H-1620	200/100 200/100 200/100		

PEX-AL-PEX Color: brass					
	Specifications	Packing Specif.(m)			
RIFNG	H-0912 H-1216 H-1620	200/100 200/100 200/100			





Air-conditioning fittings	Made of brass. Multilayer pipe on one end. With female- threaded adaptor for service valve of the air-condition.		
	Specifications	pcs/box	pcs/ctn.
	F1-S0912*7/16(20UNF) C	56	448
	F1-S0912*5/18(18UNF) C	42	336
	F1-S1216*3/4(16UNF) C	30	240
	F1-S1620*7/8(14UNF) C	28	224



		OCLO			
Pipe cutter	Cutting tools for use with Rifeng multi-layer pipe.				
	Specifications	pcs/box	pcs/ctn.		
	GJIII	1	50		

Plastic reamer	Installation tool for bevelling and rounding pipes of size no bigger than 2025.		
	Specifications	pcs/box	pcs/ctn.
	ZYD2-12-16-25		200
	ZYD2-16-20-25		200

6) 07

## Installation



#### Step 1:

Cut the pipe vertically and precisely with Rifeng pipe cutter.



#### Step 2:

Round and bevel the end holes with the Rifeng plastic reamer.



#### Step 3:

Choose the right size fitting according to the pipe, put the nut over the pipe, side the compression ring over the pipe, make sure the mouth of the nut and the pipe faces the same direction.



#### Step 4:

Screw the fitting body into the service valve of the air-conditioner



#### Step 5:

Use a spanner to screw the fitting tight.



#### Step 6:

Push the pipe into the shoulder of fitting, beware not to damage the O-ring



#### Step 7:

Use the spanner to screw the nut of fitting tight.



#### Step 8:

Cover the insulation pipe, done.



# Want a design? Have technical questions? Talk to the experts...

Rifeng boasts strong capacity for system solution designing and R & D, which is backed by a team of well-qualified and experienced specialists, many of whom had over decades of practice in the industry. Their professional service and our level of expertise will be at customers' disposal when require. So whenever you are in need of a design or having any sorts of technical questions, We are here for you.

#### **Installation Practice**

We are available to provide technical supports and resolve any type of installation problem. There is a range of installation manuals at customers' disposal that offer simpler explanations and instructions on different systems. Helping you to achieve easier and faster installation is our goal.

### Training

Our product is only as good as the technician who installs them. We provide full training course to your staff which allows them to learn more about our system both on theoretical level and during hands-on practice. On-site expertise and training service is also available if necessary. We spare no efforts to ensure that best results can be delivered to our end user.

### The Rifeng Quality

Across all of Rifeng's production departments and for all of its production process, Rifeng introduced the Quality System in compliance with the Standard DIN EN ISO 9001/2000. Germany's TÜV Rheinland Group certified this system in January 2001. So far Rifeng has acquired 61 product approvals across the world. It is worth mentioning the ISO14001:2004 Environment Certification obtained in March 2005. With over 15 years experience in thermoplastic piping manufacturing, you can count on Rifeng to delivery quality.

08