

PLUMBING &
HEATING SYSTEM



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PROFESSIONAL INSTALLATION LIMITED WARRANTY



ABOUT RIIFO

RIIFO is a leading multinational corporation, providing one-stop piping solutions applied in residential, commercial, agricultural, industrial, and infrastructural sectors. Persistently reinventing since 1996, with over 8,000 employees, 70 branches & subsidiaries, and 300,000 distributors, we have served customers in more than 100 countries and regions.

With an integrated value chain, from R&D to manufacturing and retail distribution, we strive to fulfill our mission of offering ideal piping products and services to everyone.

8,000

Employees

300,000

Distributors worldwide

100+

Serving over 100 countries & regions

70

Branches & Subsidiaries



INNOVATION

Believing that innovation is the key to go beyond the ordinary, RIIFO has founded world-class labs recognised and certified by CNAS. Over 600 innovation talents are sparing no effort to challenge industrial boundaries, achieving 923 patents and 20 technology awards.

This passion for innovation shows in our high quality products and our ability to offer ideal piping solutions across all sectors.

SCALE

We adopt highly automated production lines with the most rigorous and comprehensive production control and management systems to facilitate such large scale capacity.

Facility

11

global production bases

5,200+

production staffs

200

hectares area totally

4,000+

automated production lines

Capacity

Production Capacity

- Pipe: **3.2 billion** m/yr
- Fitting: **1.3 billion** pcs/yr

Storage Capacity

- **1,735,000 m3** ≈ 61,950 TEU (20 GP Containers)

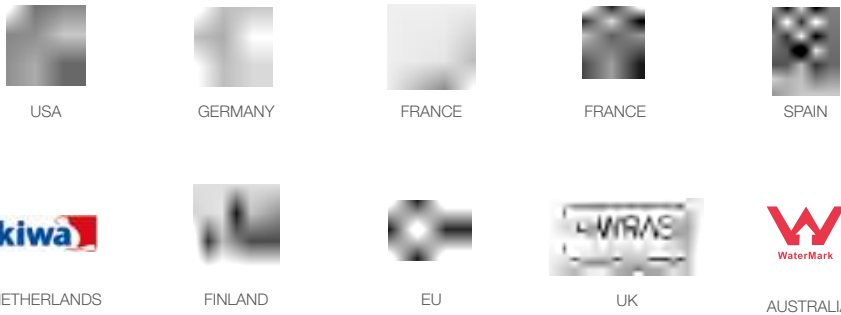
RIIFO APPROVALS

RIIFO products are produced under rigorous quality control. To date, we have gained over 50 certificates such as NSF, DVGW, AENOR, WRAS etc. These international standards underline our technical and quality know-how and we provide a 25-year system warranty backed by an international insurance schem.

Company Accreditations



Piping Systems





PROJECT REFERENCE

PROJECT REFERENCE



Baku, Azerbaijan

Project: National Cancer
Hospital
Type: Health
Year: 2009
Product: Multilayer Plumbing
System



Kazakh region, Azerbaijan

Project: Gazakh Olympic Sports
Complex
Type: Sport
Year: 2007
Product: Multilayer Plumbing
System

PROJECT REFERENCE

Sheki, Azerbaijan

Project: Marxal Resort & Spa
Type: Hotels
Year: 2016
Product: Multilayer Plumbing System



Parnu, Estonia

Project: Hedon Spa & Hotel
Type: Hotels
Year: 2014
Product: Multilayer Plumbing System



Atlas, Ethiopia

Project: Dodi Extension Tower
Type: Residential
Year: 2017
Product: Multilayer Plumbing System+PVC



Tallinn, Estonia

Project: MAXIMA Locistics Centre
Type: Commercial
Year: 2019
Product: Multilayer Plumbing System



Utrecht, Netherlands

Project: Domkerk Domtoren
Type: Public Buildings
Year: 2008
Product: Multilayer Plumbing System



PROJECT REFERENCE



Malmo, Sweden

Project: HSB Turning Torso
Type: Residential
Year: 2005
Product: Multilayer Plumbing System



Lund, Sweden

Project: Max-Lab
Type: Science
Year: 2016
Product: Multilayer Plumbing System



Monterrey, Mexico

Project: Torre Kima
Type: Hotels
Year: 2017
Product: Multilayer Plumbing System



Durban, South Africa

Project: Discovery Building
Type: Commercial
Year: 2017
Product: Multilayer Plumbing System



Durban, South Africa

Project: Park square
Type: Commercial
Year: 2018
Product: Multilayer Plumbing System



SYSTEM OVERVIEW



SYSTEM OVERVIEW

RIIFO provides multilayer pipe that unites the advantages of a plastic and metal pipe and offers a high degree of flexibility and toughness, coupled with high pressure and temperature resistance. The RIIFO multilayer pipe consists of an inner and outer layer in between which there is a layer of overlap welded or butt welded aluminum, and the three layers are made to form a permanent structure by means of special bonding layers. The aluminum layer ensures that the pipe maintains its shape and prevents the oxygen penetration from the atmosphere and gives the pipe sufficient strength and shape retention. This construction has good thermal shock resistance (due to its very low coefficient of linear expansion) and can be adapted to harsh working environments with large temperature variations, comparable to copper tubes.

The RIIFO multilayer pipes satisfy the highest demands. All pipes are food-safe and completely free of physiological risks. To ensure safe in drinking water installations, the pipes are delivered with end caps to protect against

contamination during transport, storage or on site. The pipes are 100% impermeable to oxygen, which is particularly important for heating installations. The RIIFO multilayer pipes can be delivered as coils or as straight lengths.

The RIIFO PEX/AL/PEX pipe consists of a longitudinal welded aluminium pipe, to which an inner and outer layer of crosslinked polyethylene (PEX) is applied.

Crosslinked means 'bound together' or 'interconnected'. Polyethylene consists of polymer chains and crosslinking is the process of forming bonds to join these polymer chains together. RIIFO applies the silane crosslinking technology to connect the polymer chains. This results in a superior mechanical performance and an increased temperature and pressure resistance.

Technical data and delivery dimensions




Advantages


- 

Corrosion resistance
- 


Resistent to temperature and pressure (95°C/10bar)
- 

Impermeable to oxygen and light
- 

Very flexible yet dimensionally stable
- 

Life expectancy of 50 years
- 

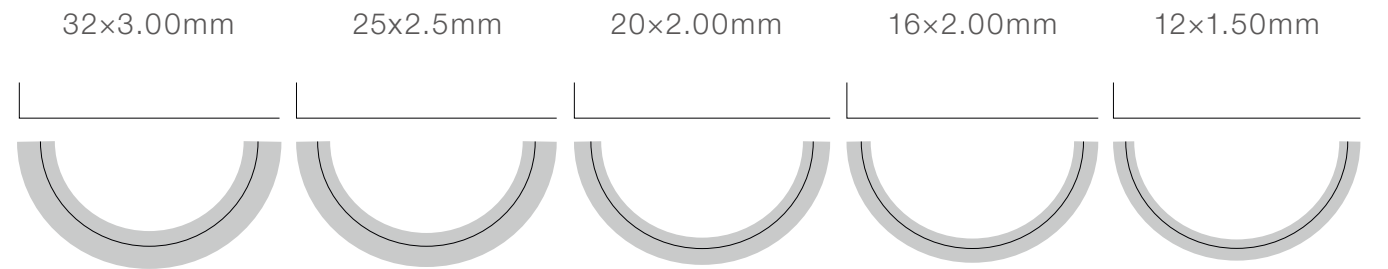
Light in weight, easy to install, time saving
- 

Low thermal expansion, similar to metals
- 

Smooth inner pipe ensures low pressure loss
- 


Hygienic

Nominal size(D x e)		12×1.5	16×2.0	18×2.0	20×2.0	25×2.5	32×3.0
Outside diameter (mm)		12	16	18	20	25	32
Tolerance of Outer diameter (mm)	Min	12.00	16.00	18.00	20.00	25.00	32.00
	Max	12.25	16.20	18.20	20.20	25.20	32.20
Pipe thickness (mm)		1.7	2	2	2	2.5	3
Tolerance of pipe thickness (mm)	Min	1.7	2.00	2.00	2.00	2.40	2.90
	Max	2.0	2.25	2.25	2.25	2.70	3.20
Roughness(mm)		0.0007					
Density(g/cm3)		0.926~0.959					
Modulus of elasticity(MPa)		7200					
Thermal conductivity(w/mK)		0.45					
Coefficient of thermal expansion(mm/mK)		0.025					




Applications


The RIIFO multilayer pipes can be used for different applications. Key applications include plumbing and heating systems for residential, commercial or industrial building:




Drinking water:
As a pipe for hot and cold water distribution of potable and food-safe water.




Compressed air:
As a compressed air pipe in systems with preceding oil filter (oil-free).




Heating:
As a pipe for radiator-fed high temperature heating systems within the prescribed load values. System separation is required for specific systems such as solar and district heating.



Rain water:
As a rain water piping system inside buildings and seperately installed from the drinking water installation. The pH-value of the water must be higher than 6.



Radiant heating and cooling systems:
As a pipe for low temperature heating and cooling systems.



Other applications:
The pipe can be used for many other applications and with other media.

Classification of Service Conditions

The performance requirements for multilayer piping systems conforming to ISO 21003 are specified for four different application classes.

The selection of the applicable class conforming to the table shall be agreed upon by the parties concerned for any application. Each application class shall be combined with a design pressure, P_D, of 4 bar, 6 bar, 8 bar or 10 bar, as applicable (1 bar = 0,1 MPa).

Application class/Design Pressure (Bar) for RIIFO products: 1/10; 2/10; 4/10; 5/6

Application class	Design temperature T _D °C	Time ^b at T _D	T _{max}	Time at T _{max}	T _{mal}	Time at T _{mal}	Typical field of application
1a	60	49	80	1	95	100	Hot water supply(60°C)
2a	70	49	80	1	95	100	Hot water supply(70°C)
4b	20 plus cumulative	2,5	70	2,5	100	100	Underfloor heating and low-temperature radiators
	40 plus cumulative	20					
	60	25					
5b	20 plus cumulative	14	90	1	100	100	High-temperature radiators
	60 plus cumulative	20					
	80	10					

A. A country may select either class 1 or class 2 in conformity with its national regulations.

B. Where more than one design temperature for time and associated temperature appears for any class, they should be aggregated. ""Plus cumulative"" in the table implies a temperature profile of the mentioned temperature over time (e.g. the design temperature profile for 50 years for class 5 is 20 °C for 14 years followed by 60 °C for 25 years, 80 °C for 10 years, 90 °C for 1 year and 100 °C for 100 h).

NOTE - For values of T_D, T_{max} and T_{mal} in excess of those in the table, this International Standard does not apply.

Technical data and raw material

Material	Test item	Requirement
PEX	Melt flow index	HDPE, MDPE≥0.1 g/10min (190,2.16kg)
	Tensile strength	HDPE≥21MPa; MDPE≥14MPa
	Enlongation	≥400%
	Vicat soft point	Vicat soft point≥105°C
	Cross-linking degree	≥65%
	ESCR	≥165h
	Moisture content	≤0.15%
	Appearance	Uniform granual
	Volatile content	≤0.5%
	Density	≥0.93 g/cm3
Catalyst	Melt flow index	≥0.9 g/10min (190°C , 5.00kg)
	Volatile content	≤0.35%
Adhesive resin	Appearance	Uniform granual
	Density	≥0.926 g/cm3;
	Melt flow index	2.0~6.0 g/10min (190°C , 2.16kg)
	Vicat soft point	Vicat soft point≥105°C
	T peeling strength	≥70N/25mm
Aluminum	Surface quality	Water brush test≥class
	Tensile strength	105MPa ~ 125MPa
	Appearance	Without oil on surface
	Hardness(HV)	28 ~ 33
	T peeling strength	Minimum value≥60N/25mm

SUSTAINABILITY OF PLASTICS IN CONSTRUCTION

Plastic are becoming increasingly popular in construction materials because they have many advantages that traditional construction materials do not have. These properties make plastics an ideal building product and an important component of a sustainable built environment.

Materials in buildings are often expected to last 30 to 50 years without replacement, with plastic materials lasting even longer. PVC drainage pipes, for example, will still work well after 60 years of use. Longer building life, low maintenance costs and the assurance that the overall structural and thermal properties will remain unchanged over time ensure low energy requirements and therefore lower CO₂ emissions. Plastic building materials are also easy to install and have stable physical properties and high chemical stability, reducing the risk of failure.

Light weight

Lightweight plastic building materials can significantly reduce energy consumption for transport.

Performance

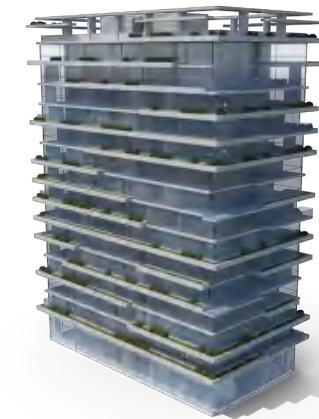
Plastics are generally highly weather resistant. Modern plastic insulation materials, offer better insulation properties than traditional materials, which can create space and save material when using plastics. In addition, plastic waterproofing materials are widely used to seal buildings. Plastic is a good material to stop the movement of moisture and water.

Flexible installation Performance

Plastic pipes offer unparalleled ease of installation due to their flexibility; they can also be adapted to a wide range of housing designs.

RIIFO PLUMBING & HEATING SOLUTIONS

Apartments



Commecial



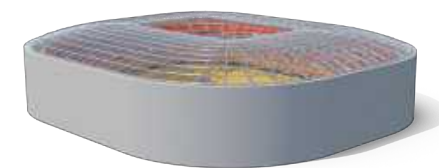
Healthcare



Industrial



Stadium



Hotel



Residential Buildings



Education







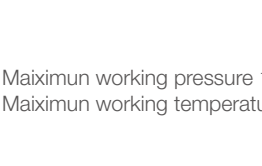
RIIFO B1 PEX-AL-PEX Multilayer Piping System

B1 PEX/AL/PEX Pipes

	Part/Article Number	Specification	Length	Pack Qty
	1100044539	16x2.0mm	4m	120m
	1100044540	20x2.0mm	4m	80m
	1100044541	25x2.5mm	4m	40m
	1100044542	32x3.0mm	4m	28m




Maiximun working pressure 10 bar
Maiximun working temperature 95°C

B1 PEX/AL/PEX Pipes

	Part/Article Number	Specification	Pack Qty
	1100042672	12x1.5mm	160m
	1100044543	16x2.0mm	50m
	1100044544	16x2.0mm	75m
	1100042673	16x2.0mm	100m
	1100042674	16x2.0mm	150m
	1100041605	16x2.0mm	200m
	1100042675	16x2.0mm	500m
	1100042676	20x2.0mm	50m
	1100044545	20x2.0mm	100m
	1100041606	20x2.0mm	200m
	1100042677	25x2.5mm	25m
	1100042678	25x2.5mm	50m
	1100044546	32x3.0mm	25m
	1100044547	32x3.0mm	50m



Maiximun working pressure 10 bar
Maiximun working temperature 95°C

B1 PEX/AL/PEX Pipes Pre-Insulated

	Part/Article Number	Specification	Pack Qty
	1100044442	16x2.0mm Red	100m
	1100044443	16x2.0mm Blue	100m
	1100044444	20x2.0mm Red	50m
	1100044445	20x2.0mm Blue	50m
	1100030423	20x2.0mm Grey	50m
	1100044954	25x2.5mm Red	50m
	1100044985	25x2.5mm Blue	50m
	1100052100	25x2.5mm Red	80m
	1100052101	25x2.5mm Blue	80m
	1100044446	32x3.0mm Red	25m
	1100044447	32x3.0mm Blue	25m

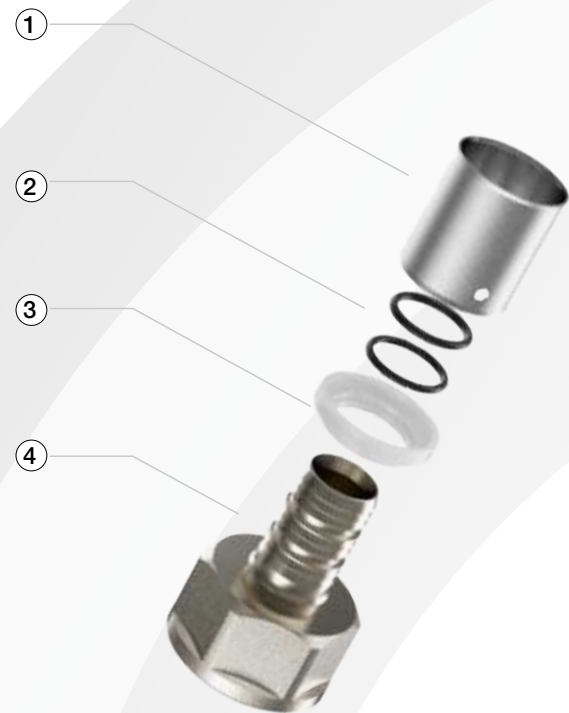
Maiximun working pressure 10 bar
Maiximun working temperature 95°C

B1 PEX/AL/PEX Pipes in Corrugated Conduit

	Part/Article Number	Specification	Pack Qty
	1100042684	16x2.0mm Grey	50m
	1100044448	16x2.0mm Red	50m
	1100044449	16x2.0mm Blue	50m
	1100044450	20x2.0mm Red	50m
	1100044451	20x2.0mm Blue	50m
	1100044452	25x2.5mm Red	50m
	1100044453	25x2.5mm Blue	50m
	1100044454	32x3.0mm Red	50m
	1100044455	32x3.0mm Blue	50m

Maiximun working pressure 10 bar
Maiximun working temperature 95°C

RIIFO F5 Press-Fit System



- 1 Sleeve**
Material: Stainless steel 304
- 2 O ring**
Material: EPDM
- 3 Collar**
Material: PE
- 4 Fitting main body**
Material: Brass

Advantages

- U pressing profile
- Ease and security of installation
- Excellent sealing performance with double O-ring
- Nickel plated contributes to good corrosion resistance
- The stress and risk of cracking is eliminated by the annealing process
- Machined by special horizontal machining centre, with surface finish degree of no more than Ra3.2µm

F5 Couplers

U Profile Press Fitting

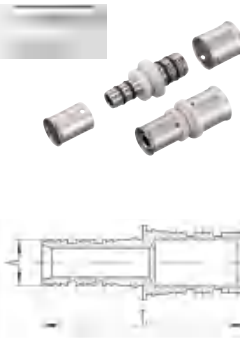


SAP Code	Specification	Carton Qty	A	B	L
1100047876	12mm	360	8.4	8.4	53
1100041649	16mm	320	11.8	11.8	53
1100041650	20mm	224	15.8	15.8	53
1100042294	25mm	120	19.8	19.8	66.2
1100044456	32mm	90	25.8	25.8	66.2

Maiximun working pressure 10 bar
Maiximun working temperature 95°C

F5 Reducing Couplers

U Profile Press Fitting

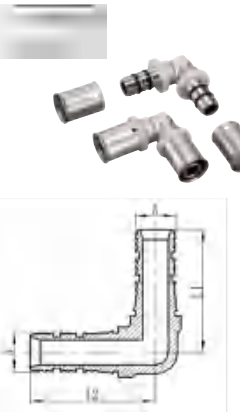


SAP Code	Specification	Carton Qty	A	B	L
1100044457	16x12mm	320	8.4	11.8	53
1100041895	20x16mm	280	11.8	15.8	53
1100042293	25x16mm	120	11.8	19.8	59.6
1100044458	25x20mm	120	15.8	19.8	59.6
1100044459	32x16mm	80	11.8	25.8	59.6
1100044460	32x20mm	80	15.8	25.8	59.6
1100044461	32x25mm	80	19.8	25.8	66.2

Maiximun working pressure 10 bar
Maiximun working temperature 95°C

F5 90° Elbows

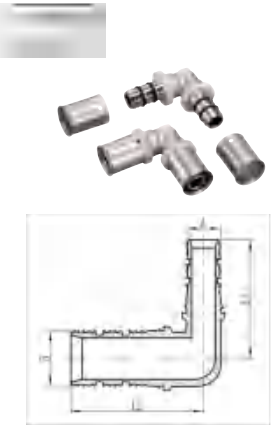
U Profile Press Fitting



SAP Code	Specification	Carton Qty	A	B	L1	L2
1100044462	16mm	192	11.8	11.8	37	37
1100044463	20mm	144	15.8	15.8	40.5	40.5
1100042298	25mm	80	19.8	19.8	49	49
1100042299	32mm	45	25.8	25.8	52	52

Maiximun working pressure 10 bar
Maiximun working temperature 95°C

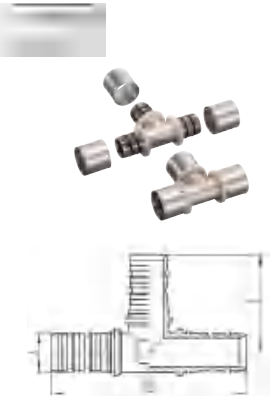
F5 Reducing 90° Elbows
U Profile Press Fitting



SAP Code	Specification	Carton Qty	A	B	L1	L2
1100044468	20x16mm	144	15.8	11.8	38.5	40.5
1100044470	25x16mm	96	19.8	11.8	42.5	45.5
1100044469	25x20mm	80	19.8	15.8	42.5	47.5
1100044471	32x20mm	80	25.8	15.8	46	47.5

Maiximun working pressure 10 bar
Maiximun working temperature 95°C

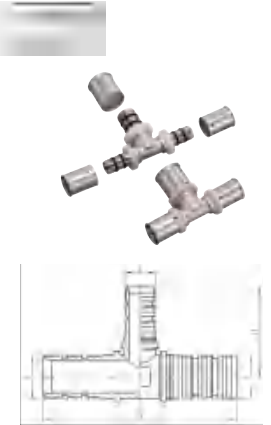
F5 Tees
U Profile Press Fitting



SAP Code	Specification	Carton Qty	A	L1	L2
1100044472	16mm	120	11.8	37	74
1100044473	20mm	120	15.8	40	80
1100044982	25mm	64	20.8	47.5	95
1100044475	32mm	30	25.8	50.5	101

Maiximun working pressure 10 bar
Maiximun working temperature 95°C

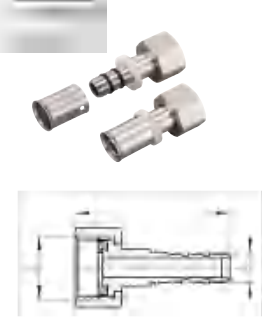
F5 Reducing Tees
U Profile Press Fitting



Maiximun working pressure 10 bar
Maiximun working temperature 95°C

SAP Code	Specification	Carton Qty	A	B	C	L1	L2
1100044476	16x20x16mm	120	11.8	15.8	11.8	39	78
1100044983	16x25x16mm	96	11.8	19.8	11.8	45	83
1100044478	20x16x16mm	120	15.8	11.8	11.8	40	76
1100044480	20x16x20mm	120	15.8	11.8	15.8	40	76
1100044481	20x20x16mm	120	15.8	15.8	11.8	40	80
1100044984	20x25x20mm	96	15.8	19.8	15.8	45.5	83
1100042301	25x16x16mm	96	19.8	11.8	11.8	41.5	80.5
1100044483	25x16x20mm	96	19.8	11.8	15.8	45.5	83
1100042302	25x16x25mm	70	19.8	11.8	19.8	41.5	87
1100044484	25x20x16mm	70	19.8	15.8	11.8	41.5	84.5
1100042303	25x20x20mm	70	19.8	15.8	15.8	41.5	84.5
1100042304	25x20x25mm	70	19.8	15.8	19.8	41.5	91
1100042305	25x25x16mm	70	19.8	19.8	11.8	49.5	92.5
1100042306	25x25x20mm	70	19.8	19.8	15.8	49	91
1100044485	32x16x32mm	48	25.8	11.8	25.8	44.5	87
1100042307	32x20x32mm	48	25.8	15.8	25.8	44.5	91
1100044486	32x25x25mm	40	25.8	19.8	19.8	50	97
1100042308	32x25x32mm	36	25.8	19.8	25.8	50	97

F5 Female Couplers (Swivel)
U Profile Press Fitting



SAP Code	Specification	Carton Qty	A	B	L	L1
1100041656	16mm x 1/2"	320	11.8	G1/2	51	31.5
1100044496	16mm x 3/4"	200	11.8	G3/4	52	33.5
1100044497	20mm x 1/2"	240	15.8	G1/2	52	33.5
1100041658	20mm x 3/4"	160	15.8	G3/4	52.5	35.5
1100044498	25mm x 3/4"	120	19.8	G3/4	58.5	36
1100044499	25mm x 1"	96	19.8	G1	61	37
1100044500	32mm x 1"	90	25.8	G1	61	39

Maiximun working pressure 10 bar
Maiximun working temperature 95°C

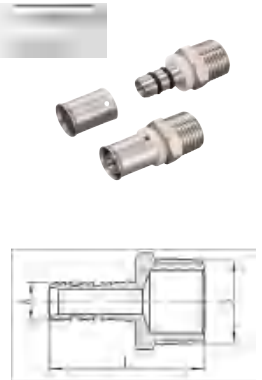
F5 Female Couplers
U Profile Press Fitting



SAP Code	Specification	Carton Qty	A	B	L
1100041897	16mm x 1/2"	280	11.8	G1/2	42.5
1100044491	16mm x 3/4"	160	11.8	G3/4	44
1100041898	20mm x 1/2"	240	15.8	G1/2	42.5
1100041666	20mm x 3/4"	160	15.8	G3/4	44
1100044492	25mm x 1/2"	120	19.8	G1/2	49
1100042295	25mm x 3/4"	120	19.8	G3/4	50.5
1100044493	25mm x 1"	96	19.8	G1	52
1100044494	32mm x 1"	96	25.8	G1	52
1100044495	32mm x 1 1/4"	84	25.8	G1 1/4	54.5

Maiximun working pressure 10 bar
Maiximun working temperature 95°C

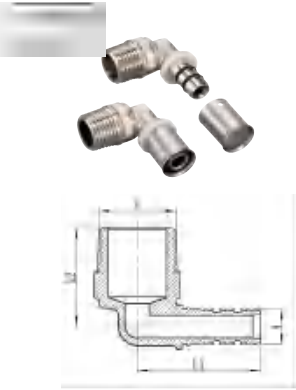
F5 Male Couplers
U Profile Press Fitting



SAP Code	Specification	Carton Qty	A	B	L
1100041651	16mm x 1/2"	360	11.8	R1/2	46
1100042296	16mm x 3/4"	200	11.8	R3/4	47
1100041899	20mm x 1/2"	280	15.8	R1/2	46
1100041663	20mm x 3/4"	200	15.8	R3/4	47
1100044487	25mm x 1/2"	120	19.8	R1/2	52.6
1100044488	25mm x 3/4"	120	19.8	R3/4	54
1100044489	25mm x 1"	120	19.8	R1	55
1100043774	32mm x 3/4"	96	25.8	R3/4	54
1100044490	32mm x 1"	96	25.8	R1	55
1100042297	32mm x 1 1/4"	90	25.8	R1 1/4	58.5

Maiximun working pressure 10 bar
Maiximun working temperature 95°C

F5 Male Elbows
U Profile Press Fitting



SAP Code	Specification	Carton Qty	A	B	L	L1
1100044501	16mm x 1/2"	192	11.8	R1/2	38.5	31.5
1100044502	16mm x 3/4"	120	11.8	R3/4	41	33.5
1100041904	20mm x 1/2"	192	15.8	R1/2	38.5	33.5
1100044503	20mm x 3/4"	120	15.8	R3/4	41	35.5
1100044504	25mm x 1/2"	80	19.8	R1/2	45	36
1100044505	25mm x 3/4"	80	19.8	R3/4	48	37
1100044506	25mm x 1"	96	19.8	R1	52	39
1100044507	32mm x 1"	60	25.8	R1	52	43

Maiximun working pressure 10 bar
Maiximun working temperature 95°C

F5 Female Elbows
U Profile Press Fitting



SAP Code	Specification	Carton Qty	A	B	L	L1
1100044508	16mm x 1/2"	200	11.8	G1/2	41	23
1100044509	16mm x 3/4"	120	11.8	G3/4	44	24
1100041903	20mm x 1/2"	160	15.8	G1/2	41	25
1100044510	20mm x 3/4"	120	15.8	G3/4	44	26
1100044511	25mm x 1/2"	80	19.8	G1/2	48	26
1100044512	25mm x 3/4"	80	19.8	G3/4	51	27
1100044513	25mm x 1"	72	19.8	G1	55	28
1100044514	32mm x 1"	60	25.8	G1	55	30.5

Maiximun working pressure 10 bar
Maiximun working temperature 95°C

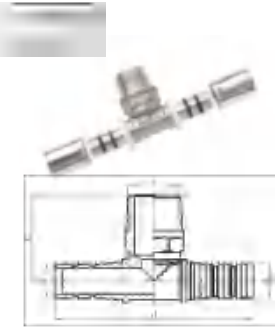
F5 Wall Plate Elbows
U Profile Press Fitting



SAP Code	Specification	Carton Qty	A	B	L	L1
1100042300	16mm x 1/2"(2 feet)	112	11.8	G1/2	41.5	38.5
1100044515	20mm x 1/2"(2 feet)	96	15.8	G1/2	41.5	43
1100044516	20mm x 3/4"(2 feet)	96	15.8	G3/4	44	44
1100044517	16mm x 1/2"(3 feet)	80	11.8	G1/2	41.5	39
1100044518	20mm x 1/2"(3 feet)	64	15.8	G1/2	41.5	43
1100044519	20mm x 3/4"(3 feet)	96	15.8	G3/4	44	44

Maiximun working pressure 10 bar
Maiximun working temperature 95°C

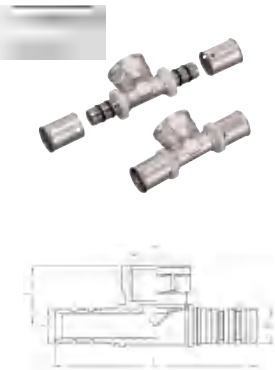
F5 Male Tees
U Profile Press Fitting



SAP Code	Specification	Carton Qty	A	B	C	D	L1	L2
1100044520	16x1/2"x16mm	120	11.8	11.8	R1/2	77	32.5	35
1100044521	20x1/2"x20mm	120	15.8	15.8	R1/2	77	34.5	39

Maiximun working pressure 10 bar
Maiximun working temperature 95°C

F5 Female Tees
U Profile Press Fitting



SAP Code	Specification	Carton Qty	A	B	L	L1	L2
1100044522	20x1/2"x20mm	80	15.8	15.8	G1/2	82	25
1100044523	20x3/4"x20mm	96	15.8	15.8	G3/4	88	26
1100044524	25x1/2"x25mm	72	19.8	19.8	G1/2	96	26
1100044525	25x3/4"x25mm	64	19.8	19.8	G3/4	102	27
1100044526	32x1/2"x32mm	48	25.8	25.8	G1/2	96	30
1100044527	32x3/4"x32mm	40	25.8	25.8	G3/4	102	30
1100044528	32x1"x32mm	36	25.8	25.8	G1	110	31

Maiximun working pressure 10 bar
Maiximun working temperature 95°C

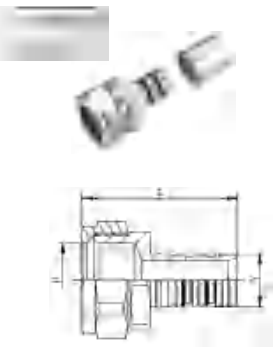
F5 Stop Ends
U Profile Press Fitting



SAP Code	Specification	Carton Qty	A	B	L
1100041900	16mm	600	11.8	15	28
1100041901	20mm	480	15.8	18	28
1100044529	25mm	192	19.8	22	34.6
1100049890	32mm	128	25.8	34.6	28

Maiximun working pressure 10 bar
Maiximun working temperature 95°C

F5 MLCP with Compression Union to Copper Adaptors
U Profile Press Fitting



SAP Code	Specification	Carton Qty	A	B	L
1100042663	16x15mm Cu	288	11.8	15.1	42.5
1100044537	20x22mm Cu	144	16.8	22.1	43
1100042664	25x22mm Cu	120	19.8	22.1	50
1100044538	32x28mm Cu	96	25.8	28.1	51.1

Maiximun working pressure 10 bar
Maiximun working temperature 95°C

F5 MLCP with Brass Tail to Copper Adaptors
U Profile Press Fitting



SAP Code	Specification	Carton Qty	A	B	L
1100042659	16x15mm Cu	360	11.8	15	62
1100044535	20x15mm Cu	280	15.8	15	62
1100042660	20x22mm Cu	144	15.8	22	71
1100042661	25x22mm Cu	96	19.8	22	77.6
1100044536	25x28mm Cu	96	19.8	28	82.6
1100042662	32x28mm Cu	96	25.8	28	82.6

Maiximun working pressure 10 bar
Maiximun working temperature 95°C

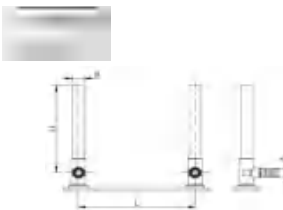
F5 Chromed Radiator Tail Elbows
U Profile Press Fitting



SAP Code	Specification	Carton Qty	A	B	L
1100042666	16x15Cu x310mm	50	11.8	15	310

Maiximun working pressure 10 bar
Maiximun working temperature 95°C

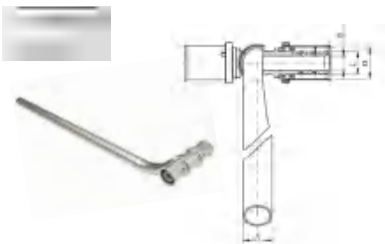
F5 Chromed Radiator Tail Elbows - Two ways out
U Profile Press Fitting



SAP Code	Specification	Carton Qty	A	B	H	L
1100042667	16x16x15Cu x150mm	15	11.8	15	119	150

Maiximun working pressure 10 bar
Maiximun working temperature 95°C

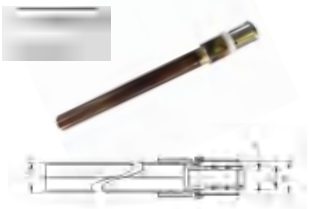
F5 Chromed Radiator Tail Tees
U Profile Press Fitting



SAP Code	Specification	Carton Qty	A	B	H	L
1100050465	16x 15Sx16mm	30	15	7.5	11.8	16.4

Maiximun working pressure 10 bar
Maiximun working temperature 95°C

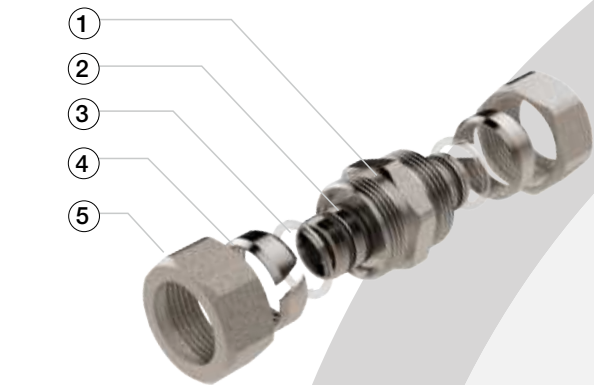
F5 MLCP to 150mm Copper Tails
U Profile Press Fitting



SAP Code	Specification	Carton Qty
1100052346	16x15Cux150mm	160
1100052347	20x22Cux150mm	98

Maiximun working pressure 10 bar
Maiximun working temperature 95°C

RIIFO F1 Compression Fitting System



- 1

Body
Material:Brass
- 2

O ring
Material: EPDM
- 3

Washer
Material: PE
- 4

Olive
Material:Brass
- 5

Nut
Material:Brass

Advantages

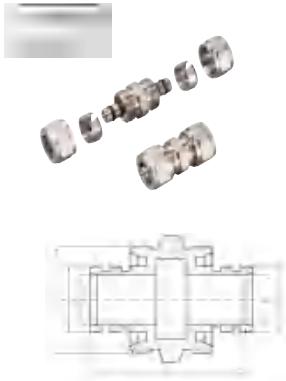
- Reusable
- Ease and security of installation
- Excellent sealing performance with double O-ring
- The stress and risk of cracking is eliminated by the annealing process
- Machined by special horizontal machining centre, with surface finish degree of no more than Ra3.2µm

Torque Resistance of Thread

Thread size	1/4"	3/8"	1/2"	3/4"	1"
Torque/N·m	20	35	75	100	125

F1 Couplers

Compression Fitting



SAP Code	Specification	Carton Qty	A	B	L
1100044379	12mm	336	8.4	4.5	47
1100044380	16mm	192	11.8	8.5	47.5
1100044381	20mm	160	15.8	12	48.5
1100044382	25mm	112	19.8	15	49
1100044383	32mm	96	25.8	21	51

Maiximun working pressure 10 bar
Maiximun working temperature 95°C

F1 Reducing Couplers

Compression Fitting

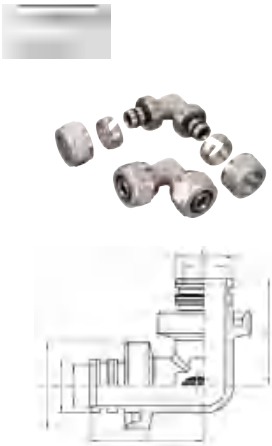


SAP Code	Specification	Carton Qty	A	B	C	D	L
1100044384	20x16mm	192	15.8	12	8.5	11.8	48.5
1100044385	25x16mm	120	19.8	15	8.5	11.8	48.5
1100044386	25x20mm	120	19.8	15	12	15.8	48.5
1100044387	32x16mm	96	25.8	21	8.5	11.8	49.5
1100044388	32x20mm	96	25.8	21	12	15.8	49.5
1100044389	32x25mm	96	25.8	21	15	19.8	50

Maiximun working pressure 10 bar
Maiximun working temperature 95°C

F1 90° Elbows

Compression Fitting

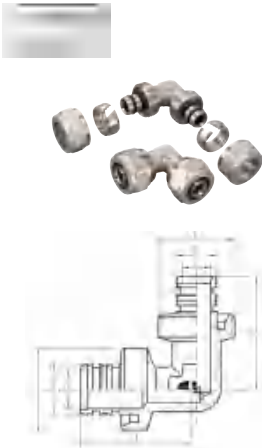


SAP Code	Specification	Carton Qty	A	B	L
1100044390	16mm	120	11.8	8.5	34
1100044391	20mm	120	15.8	12	36
1100044392	25mm	80	19.8	15	39.5
1100044393	32mm	48	25.8	21	44

Maiximun working pressure 10 bar
Maiximun working temperature 95°C

F1 Reducing 90° Elbows

Compression Fitting



SAP Code	Specification	Carton Qty	A	B	C	D	L1	L2
1100044394	20x16mm	120	15.8	12	11.8	8.5	33.5	35
1100044395	25x20mm	80	19.8	15	12	15.8	37.5	39
1100044396	32x20mm	72	25.8	21	12	15.8	38	45

Maiximun working pressure 10 bar
Maiximun working temperature 95°C

F1 Tees

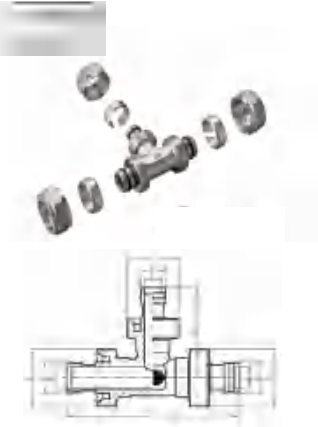
Compression Fitting



SAP Code	Specification	Carton Qty	A	B	L1	L2
1100044397	12mm	160	8.4	4.5	62	31
1100044398	16mm	96	11.8	8.5	68	34
1100044399	20mm	96	15.8	12	72	36
1100044400	25mm	48	19.8	15	79	39.5
1100044401	32mm	36	25.8	21	88	44

Maiximun working pressure 10 bar
Maiximun working temperature 95°C

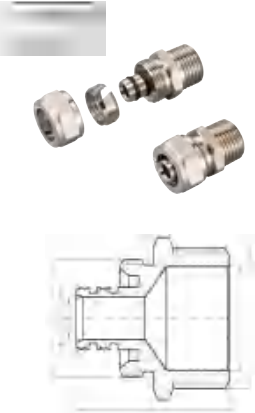
F1 Reducing Tees
Compression Fitting



SAP Code	Specification	Carton Qty	A	B	C	D	E	F	L1	L2
1100044402	16x12x12mm	96	11.8	8.5	4.5	8.4	4.5	8.4		
1100044403	20x16x20mm	80	15.8	12	12	15.8	8.5	11.8	69	36
1100044404	20x25x20mm	56	15.8	12	12	15.8	15	19.8	76	37
1100044405	25x20x25mm	56	19.8	15	15	19.8	12	15.8	74	37
1100044406	32x25x32mm	44	25.8	21	21	25.8	15	19.8	80	45

Maiximun working pressure 10 bar
Maiximun working temperature 95°C

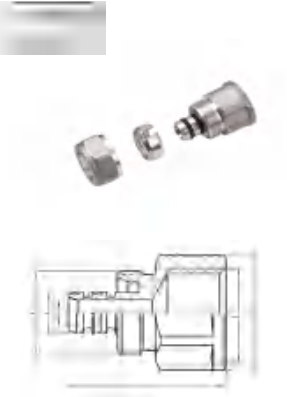
F1 Male Couplers
Compression Fitting



SAP Code	Specification	Carton Qty	A	B	C	D	L
1100044407	12mm x 1/2"	336	8.4	4.5	15	R1/2	40
1100044408	16mm x 1/2"	288	11.8	8	15	R1/2	40
1100044409	16mm x 3/4"	200	11.8	8	20	R3/4	41
1100044410	20mm x 1/2"	192	15.8	11.9	15	R1/2	40
1100044411	20mm x 3/4"	192	15.8	11.9	20	R3/4	41
1100044412	25mm x 1/2"	128	19.8	14.8	14.8	R1/2	41.5
1100044413	25mm x 3/4"	128	19.8	14.8	20	R3/4	42.5
1100044414	25mm x 1"	128	19.8	14.8	26	R1	43.8
1100044415	32mm x 1"	108	25.8	20.5	26	R1	45.5

Maiximun working pressure 10 bar
Maiximun working temperature 95°C

F1 Female Couplers
Compression Fitting



SAP Code	Specification	Carton Qty	A	B	C	D	L
1100044416	16mm x 1/2"	240	11.8	8	G1/2	27	37.5
1100044417	16mm x 3/4"	240	11.8	8	G3/4	33	38.5
1100044418	20mm x 1/2"	240	15.8	11.9	G1/2	30	36.5
1100044419	20mm x 3/4"	200	15.8	11.9	G3/4	33	38.5
1100044420	25mm x 1/2"	160	19.8	14.8	G1/2	37	33.8
1100044421	25mm x 3/4"	160	19.8	14.8	G3/4	37	36.3
1100044422	25mm x 1"	128	19.8	14.8	G1	41	39.8
1100044423	32mm x 1"	108	25.8	20.5	G1	42	39.3

Maiximun working pressure 10 bar
Maiximun working temperature 95°C

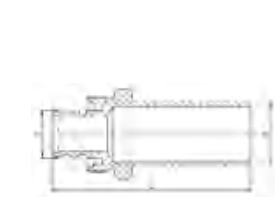
F1 Stop Ends
Compression Fitting



SAP Code	Specification	Carton Qty	A	B	L
1100044424	16mm	384	8.5	11.8	27
1100044425	20mm	288	12	15.8	27
1100044426	25mm	192	15	19.8	27
1100044427	32mm	96	21	25.8	28

Maiximun working pressure 10 bar
Maiximun working temperature 95°C

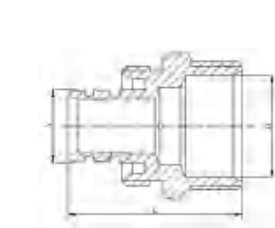
F1 MLCP with Brass Tail to Copper Adaptors
Compression Fitting



SAP Code	Specification	Carton Qty	A	B	L
1100044428	16x15mm Cu	224	11.8	15	58
1100044429	20x15mm Cu	168	15.8	15	58
1100044430	20x22mm Cu	160	15.8	22	67
1100044431	25x22mm Cu	120	19.8	22	67.5
1100044432	25x28mm Cu	96	19.8	28	72.5
1100044433	32x28mm Cu	64	25.8	28	73.5

Maiximun working pressure 10 bar
Maiximun working temperature 95°C

F1 MLCP with Compression Union to Copper Adaptors
Compression Fitting



SAP Code	Specification	Carton Qty	A	B	L
1100044434	16x15mm Cu	288	11.8	15.1	36.5
1100044435	20x15mm Cu	160	15.8	15.1	36.5
1100044436	25x28mm Cu	64	19.8	28.1	41.5
1100044437	32x28mm Cu	64	25.8	28.1	42.5

Maiximun working pressure 10 bar
Maiximun working temperature 95°C



FS5 Plumbing Manifolds with 1" Inlet

Nickled Brass



Part/Article Number	Specification	Carton Qty	H	L
1100044367	2 Port 1"x3/4" Blue	42	56.5	43
1100044368	2 Port 1"x3/4" Red	42	56.5	43
1100044369	3 Port 1"x3/4" Blue	24	56.5	43
1100044370	3 Port 1"x3/4" Red	24	56.5	43
1100044371	4 Port 1"x3/4" Blue	18	56.5	43
1100044372	4 Port 1"x3/4" Red	18	56.5	43

Nickel plated brass water supply manifold with 1" connection at the inlet end and 3/4" outlet connection.

Maiximun working pressure 10 bar
Maiximun working temperature 95°C

FS5 Plumbing Manifolds with 3/4" Inlet

Nickled Brass



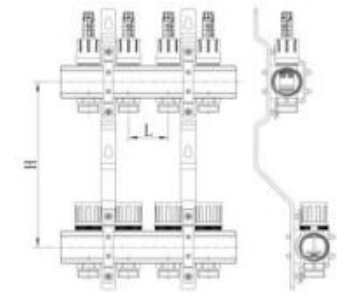
Part/Article Number	Specification	Carton Qty	H	L
1100044373	2 Port 3/4"x1/2" Blue	60	49	36
1100044374	2 Port 3/4"x1/2" Red	60	49	36
1100044375	3 Port 3/4"x1/2" Blue	48	49	36
1100044376	3 Port 3/4"x1/2" Red	48	49	36
1100044377	4 Port 3/4"x1/2" Blue	30	49	36
1100044378	4 Port 3/4"x1/2" Red	30	49	36

Nickel plated brass water supply manifold with 3/4" connection at the inlet end and 1/2" outlet connection.

Maiximun working pressure 10 bar
Maiximun working temperature 95°C

FN9 Brass UFH Manifolds

Nickled Brass



Part/Article Number	Specification	Carton Qty	H	L
1100042280	2 Port - Inlet 1"x3/4" Outlet	4	210	50
1100042281	3 Port - Inlet 1"x3/4" Outlet	4	210	50
1100042282	4 Port - Inlet 1"x3/4" Outlet	4	210	50
1100042283	5 Port - Inlet 1"x3/4" Outlet	4	210	50
1100042284	6 Port - Inlet 1"x3/4" Outlet	4	210	50
1100042285	7 Port - Inlet 1"x3/4" Outlet	4	210	50
1100042286	8 Port - Inlet 1"x3/4" Outlet	2	210	50
1100042287	9 Port - Inlet 1"x3/4" Outlet	2	210	50
1100042288	10 Port - Inlet 1"x3/4" Outlet	2	210	50
1100042289	11 Port - Inlet 1"x3/4" Outlet	2	210	50
1100042290	12 Port - Inlet 1"x3/4" Outlet	2	210	50

Manifold body made of brass, the supply rail has a flow meter with a double adjustable red sleeve for 0.5-5 l/min allowing for flow regulation and isolation of individual circuits with visual flow indication. The return rail has temperature controlled valves to accommodate one electric actuator per circuit. The pre-assembled manifold consists of 2 return/fill valves, 2 automatic venting valves. Accessory parts such as connectors and ball valves can also be ordered separately.

FN9 Manifolds Assembly & Technical Data

- ① Ball valve

③ Flow meter

⑤ Manual actuator
- ② Manifold

④ Brackets

⑥ Automatic vent & drain valve

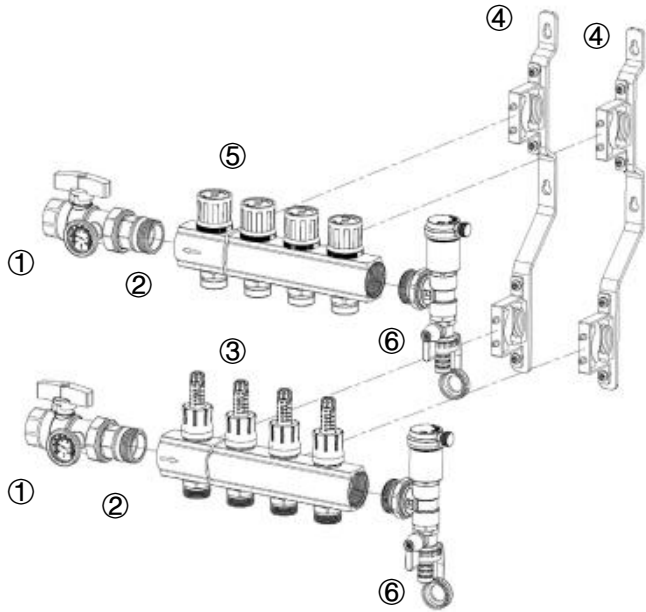
Technical Data

Working Performance:
Max. Working Pressure: 10bar(145 psi)
Cont. Working Temperature: 32°F (0°C) ~ 158°F (70°C)
Max. Instantaneous Working Temperature (Max. 10 min/day): 212°F (100°C)
Max Differential Pressure: 1 bar (14.5 psi)

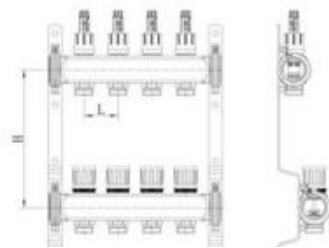
Working Media:
1: Water
2: 50% water and 50% ethylene glycol
3: 50% water and 50% propylene glycol

Material:
Manifolds Body: Brass
Port Connection: Nickel coated brass
Sealing Ring: EPDM

Flow:
Indication Scale - 0.5 ~ 5 L/min, Tolerance ±10%
Kvs - 1.10



FN16S Stainless Steel UFH Manifolds



Part/Article Number	Specification	Carton Qty	H	L
1100042446	2 Port - Inlet 1"x3/4" Outlet	4	210	50
1100042447	3 Port - Inlet 1"x3/4" Outlet	4	210	50
1100042448	4 Port - Inlet 1"x3/4" Outlet	4	210	50
1100042449	5 Port - Inlet 1"x3/4" Outlet	4	210	50
1100042450	6 Port - Inlet 1"x3/4" Outlet	4	210	50
1100042451	7 Port - Inlet 1"x3/4" Outlet	4	210	50
1100042452	8 Port - Inlet 1"x3/4" Outlet	2	210	50
1100042453	9 Port - Inlet 1"x3/4" Outlet	2	210	50
1100042454	10 Port - Inlet 1"x3/4" Outlet	2	210	50
1100042455	11 Port - Inlet 1"x3/4" Outlet	2	210	50
1100042456	12 Port - Inlet 1"x3/4" Outlet	2	210	50

Manifold body made of Stainless Steel , the supply rail has a flow meter with a double adjustable red sleeve for 0.5-5 l/min allowing for flow regulation and isolation of individual circuits with visual flow indication. The return rail has temperature controlled valves to accommodate one electric actuator per circuit. The pre-assembled manifold consists of 2 return/fill valves, 2 automatic venting valves. Accessory parts such as connectors and ball valves can also be ordered separately.

FN16S Manifolds Assembly & Technical Data

- ① Ball valve

③ Flow meter

⑤ Manual actuator
- ② Manifold

④ Brackets

⑥ Automatic vent & drain valve

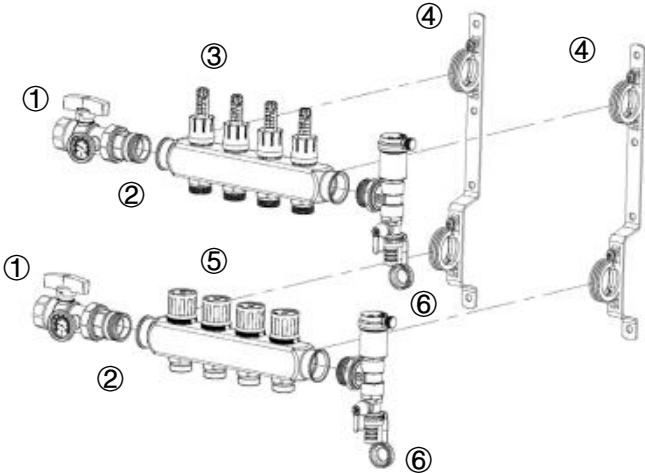
Technical Data

Working Performance:
Max. Working Pressure: 10bar(145 psi)
Cont. Working Temperature: 32°F (0°C) ~ 158°F (70°C)
Max. Instantaneous Working Temperature (Max. 10 min/day): 212°F (100°C)
Max Differential Pressure: 1 bar (14.5 psi)

Working Media:
1: Water
2: 50% water and 50% ethylene glycol
3: 50% water and 50% propylene glycol

Material:
Manifolds Body: 304 Stainless Steel
Port Connection: Nickel coated brass
Sealing Ring: EPDM

Flow:
Indication Scale - 0.5 ~ 5 L/min, Tolerance ±10%
Kvs - 1.10



F5 Manifolds Outlet Adaptors
U Profile Press Fitting



Part/Article Number	Specification	Carton Qty
1100044530	16mm x 1/2"	336
1100044531	20mm x 1/2"	336
1100044532	16mm x 3/4"	224
1100044533	20mm x 3/4"	192
1100044534	25mm x 3/4"	120

Maiximun working pressure 10 bar
Maiximun working temperature 95°C

F1 Manifolds Outlet Adaptors
Compression Fitting



Part/Article Number	Specification	Carton Qty
1100041679	16mm x 1/2"	576
1100044438	20mm x 1/2"	320
1100042859	12mm x 3/4"	336
1100042668	16mm x 3/4"	384
1100044439	20mm x 3/4"	384
1100044440	25mm x 3/4"	160
1100044441	20mmxW11/8(14)A	320

Maiximun working pressure 10 bar
Maiximun working temperature 95°C

Tools

Pipe Cutting Tools



Used to cut plastic pipe and multilayer composite pipes(pipe size less than DN32)

Part/Article Number	Specification	Carton Qty
1100015650	Pipe Cutting Tool III	50
1100018777	Pipe Cutting Tool IV	40

Internal Bending Springs



The bending radius of the direct bend, centered on the pipe axis, should not be less than 5 times the size of the pipe.

Part/Article Number	Specification	Carton Qty
1100033464	16mm	150
1100033487	20mm	90
1100033489	25mm	54
1100033490	32mm	24

External Bending Springs



The bending radius of the direct bend, centered on the pipe axis, should not be less than 5 times the size of the pipe.

Part/Article Number	Specification	Carton Qty
1100033492	16mm	36
1100033494	20mm	24
1100033495	25mm	12
1100033497	32mm	6

Integral Manual Pressing Tools



Part/Article Number	Specification	Carton Qty
1100018780	16mm	5
1100018779	20mm	5

U profile - Non-replaceable inserts.

Lengthened Manual Pressing Tools & Inserts
for Manual Pressing Tools



Part/Article Number	Specification	Carton Qty
1100015725	Lengthened Manual Pressing Tool 14-32	5
1100015629	insert 12mm	100
1100015743	insert 16mm	96
1100015745	insert 20mm	96
1100015746	insert 25mm	96
1100015748	insert 32mm	96

Separate orders are required for pressing tool and inserts.

Bevelling Tools



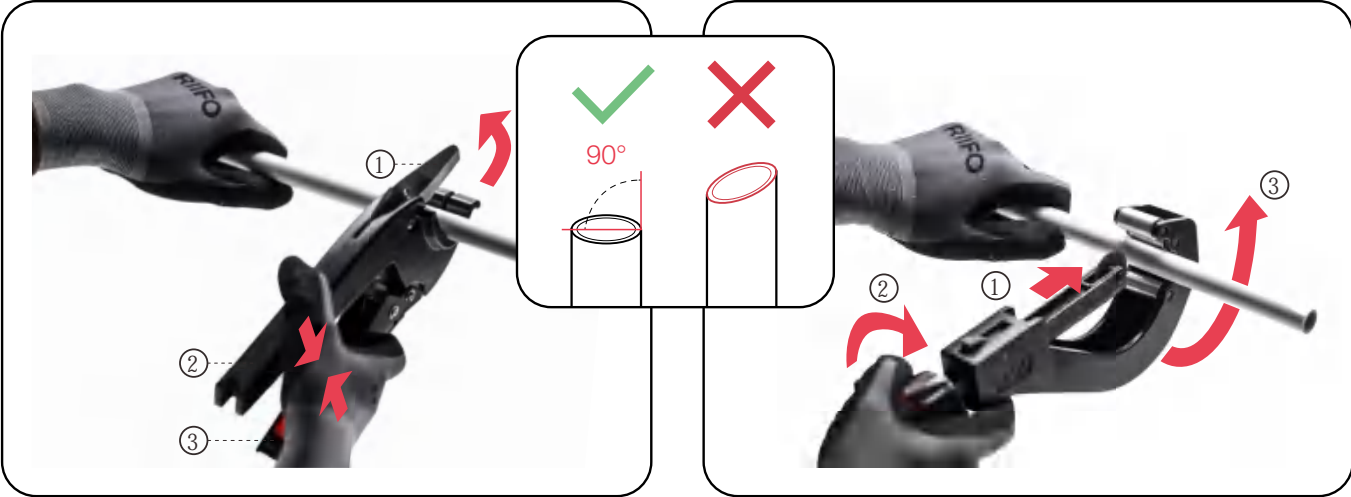
Part/Article Number	Specification	Carton Qty
1100015706	12/16/20mm	200
1100018270	16/20/25mm	180
1100018272	20/25/32mm	100

Used to ensure that the tube is round and free of burrs before inserting into the fitting and will not damage the O-ring of the fitting.

INSTALLATION

Pipe Cutting

NOTICE!



WARNING!

Risk of injury might occur in the end stop area of the shears if operated incorrectly.
Only use the tool as described in the operating instructions.

NOTE!

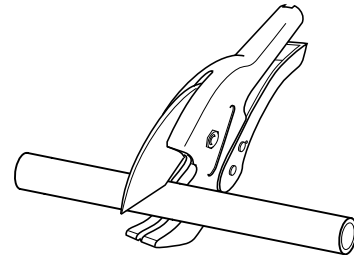
- Incorrect cutting causes leakage in connection
- The end of the pipe shall be cut vertically.
 - The end of the pipe shall not be damaged or distorted.

INSTALLATION

Press Fitting

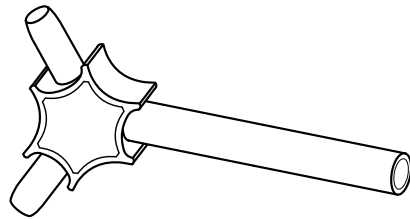
Step1:

Cut the pipe vertically by RIIFO pipe cutter. Make sure to cut it quickly and precisely.



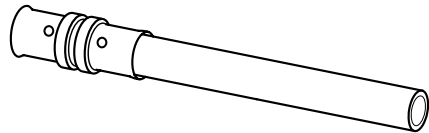
Step2:

Use a plastic reamer to round and bevel the end holes of the pipe.



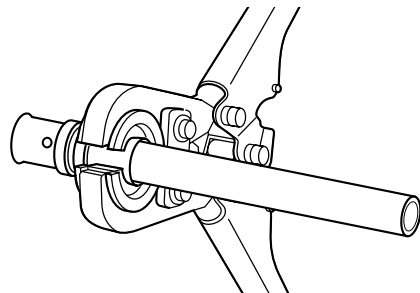
Step3:

Choose the right size sleeved-fitting for the pipe and aim the pipe end at the ring-shape hole of the fitting integrated with stainless steel sleeve. Push the pipe into the fitting up to the shoulder. Check the inserting depth by looking through the inspection holes on the sleeve shoulder, to ensure that the pipe is completely inserted.



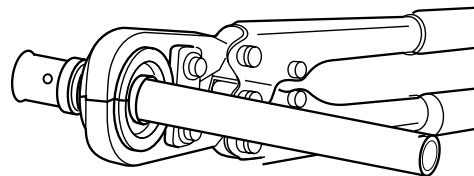
Step4:

Open the pressing tool and position the tool directly onto the stainless steel sleeve.



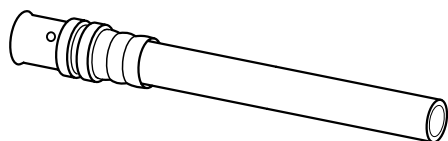
Step5:

The margin of the block must be placed against the press section.



Step6:

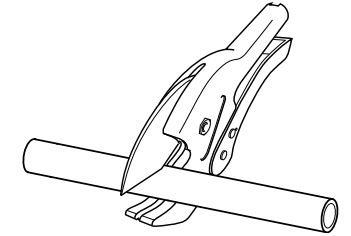
While the jaw is completely closed, the handles will be locked. Open the handles and remove the pressing tool from the fitting and the installation is complete. Check the inspection holes again to make sure the fitting is fully inserted just in case.



Compression Fitting

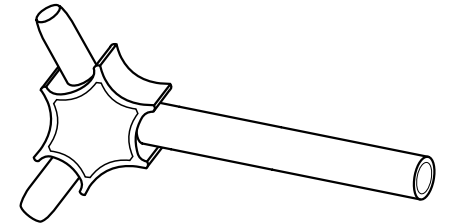
Step1:

Cut the pipe vertically by RIIFO pipe cutter. Make sure to cut it quickly and precisely.



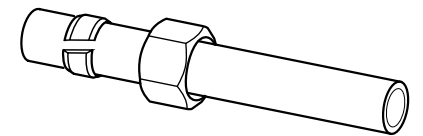
Step2:

Use a plastic reamer to round and bevel the end holes of the pipe.



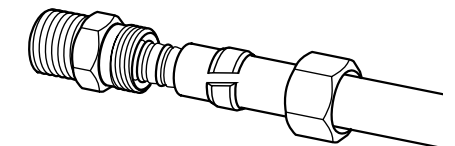
Step3:

Insert the nut and the compression ring into the pipe in turn, and note that the end of the threaded opening faces the end face of the pipe.



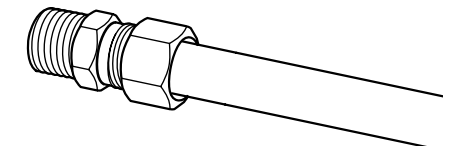
Step4:

Insert the fitting core into the tube bore along the tube axis to ensure complete insertion. During the insertion process, care must be taken not to damage the O-ring on the core.



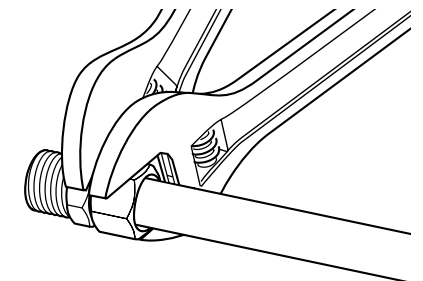
Step5:

Tighten the nut with your finger.



Step6:

Tighten the nut with a spanner.



WARRANTY

To fulfill the manufacturer duty on supplying high quality and reliable solutions, RIIFO multilayer pipes and fittings are warranted against defects from manufacturing side for a period starting at the manufacturing date printed on product. For detailed documentations of product warranty, kindly contact our company.

PROFESSIONAL INSTALLATION LIMITED WARRANTY

Subject to the conditions and limitations of this Limited Warranty, RIIFO UK Ltd (“RIIFO”), warrants to the property owner (“Owner”) that the components in its RIIFO Piping Systems as described below (the “Products”), when properly installed by licensed plumbers in potable water and radiant heating systems and subject to normal conditions of use, shall be free from failure caused by manufacturing defects for the respective periods set forth below, each of which periods shall commence on the date of original purchase of the Product (whether or not by Owner).

In the event that a RIIFO Product fails during the applicable warranty period due to a manufacturing defect as determined by RIIFO and all conditions for coverage under his Limited Warranty are met, the Owner shall be entitled to the following as his or her exclusive remedy: (i) at RIIFO’s sole election, either (a) the replacement of the same type, size and like quantity of non-defective Product at the original point of delivery, at no cost to Owner or (b) credits, offsets, refunds or a combination thereof, for the purchase price of the defective Product; and (ii) if the Product in question is covered by either the 10-year or 25-year limited warranty and the failure occurred during the first ten (10) years of such warranty period and was the direct cause of a leak at the Owner’s property, RIIFO will reimburse the Owner for all reasonable and necessary costs of repair or replacement for physical damage to the property, including drywall, flooring and painting costs, as well as damages to personal property, resulting from the failure or leak.

Installation: This Limited Warranty applies only if the applicable Product is configured and installed by a licensed professional plumbing contractor in accordance with RIIFO’s instructions, good plumbing practices, and applicable code requirements and industry standards.

FAILURE TO INSTALL THE PRODUCTS IN COMPLIANCE WITH THESE REQUIREMENTS WILL VOID THIS WARRANTY AND MAY RESULT IN SEVERE WATER DAMAGE. RIIFO DOES NOT GUARANTEE OR IN ANY WAY WARRANT THE INSTALLATION OF ITS PRODUCTS.

Exclusions From Coverage: This Limited Warranty excludes defects or failures caused after shipment of the Product by:

- (i) components not manufactured or sold by RIIFO;
- (ii) improper installation (as set forth above);
- (iii) use in improper applications or conditions or in conjunction with improper materials (including, without limitation, improper lubricants, pastes, solvents or sealants);
- (iv) exposure to damaging physical or chemical conditions, including, but not limited to, chemically corrosive or aggressive water conditions, abnormal operating conditions, accident, abuse, and misuse;
- (v) freezing or overheating of liquids within the Product, or unusual pressure surges or pulsation; (vi) vibration;
- (vii) exposure to temperatures and/or pressures exceeding the ranges for the Product as specified in RIIFO’s design manuals and installation guides;
- (viii) exposure to ultraviolet lights or other high-energy radiation;
- (ix) failure to adhere to RIIFO instructions and/or specifications concerning the proper handling, installation, testing and use of the Product;
- (x) failure to adhere to applicable standards set forth by local laws, codes, or regulations and the applicable industry standards;
- (xi) abuse, misuse, alteration, accidental damage, Acts of God (such as flood, hurricanes, tornadoes or fire) or any other improper activities(including but not limited to repairing or attempt by anyone other than RIIFO authorized service agent) not listed above or damage caused by the fault or negligence of anyone other than RIIFO.

DISCLAIMER OF OTHER WARRANTIES: THIS LIMITED WARRANTY IS THE ONLY WARRANTY APPLICABLE TO THE PRODUCTS, WHICH ARE OTHERWISE SOLD “AS IS.” THERE ARE NO OTHER WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, STATUTORY OR OTHERWISE, INCLUDING, WITHOUT LIMITATION, ANY

IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. ALL SUCH WARRANTIES ARE SPECIFICALLY DISCLAIMED. NO STATEMENT, CONDUCT OR DESCRIPTION BY RIIFO OR ITS REPRESENTATIVES, IN ADDITION TO OR BEYOND THIS LIMITED WARRANTY, SHALL CONSTITUTE A WARRANTY.

SOLE REMEDY/LIMITATION OF LIABILITY: THE SOLE AND EXCLUSIVE REMEDY FOR BREACH OF THIS LIMITED WARRANTY AND THE SOLE AND EXCLUSIVE OBLIGATION OF RIIFO WITH RESPECT TO ANY CLAIMS FOR BREACH OF THIS LIMITED WARRANTY, SHALL BE AS SET FORTH ABOVE. IN NO EVENT SHALL RIIFO BE LIABLE FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, PUNITIVE, OR INDIRECT DAMAGES, LOST PROFITS, LOSS OF GOODWILL, LOSS OF BUSINESS OPPORTUNITIES, OR DAMAGE TO REPUTATION.

Warranty Claim Process: Any warranty claim by Owner regarding an alleged defective Product shall be made in writing to RIIFO, postmarked within the applicable warranty period and no later than ten (10) days after the date the defect is discovered, or in the exercise of ordinary care should have been discovered. Such notification should be sent to the RIIFO address indicated in www.riifo.co.uk , and must include a description of the Product (with model number, if available), date of purchase and/or date of installation (with proof of purchase, if available), and a description of alleged defect. If the Owner cannot determine the date of purchase, RIIFO will deem the production date to be the date of purchase for purposes of this Limited Warranty. Owner shall keep all Products alleged to be defective and, at RIIFO’s request and expense, ship the Product(s) to RIIFO for inspection. In the event Owner is seeking the reimbursement of property damages as set forth above, Owner must detailed documentation of the claimed damages, including photographs, estimates, and invoices. RIIFO shall also have the right, but not the obligation, to inspect the site of installation/damage. Upon receipt of a complete warranty claim, RIIFO will diligently perform an investigation to determine if a manufacturing defect is present.

If RIIFO determines warranty coverage applies, it will promptly notify Owner and provide the remedy set forth in this Limited Warranty. No action by RIIFO under this warranty shall be construed as an admission of liability. Transferability: This Limited Warranty shall apply for the full applicable warranty period with respect to the original Owner of the real property at which the Product is installed and to any subsequent owner(s) of such property, provided such ownership transfer(s) occur within 10 years of the Product purchase date. Any change in ownership of the property after such 10-year period will void any remaining warranty coverage.

Transferability: This Limited Warranty shall apply for the full applicable warranty period with respect to the original Owner of the real property at which the Product is installed and to any subsequent owner(s) of such property, provided such ownership transfer(s) occur within 10 years of the Product purchase date. Any change in ownership of the property after such 10-year period will void any remaining warranty coverage.

Product Warranty Periods

PRODCUT NAME/TYPE	WARRANTY PERIOD (FROM DATE OF PURCHASE)	CONDITIONS
PEXa/PEX-b pipe	25 years (if connected and used with RIIFO pipe/fittings) or 10 years if otherwise (subject to written technical approval by RIIFO UK Ltd)	Must comply with ISO 15875
PEX-AL-PEX pipe	25 years (if connected and used with RIIFO pipe/fittings) or 10 years if otherwise (subject to written technical approval by RIIFO UK Ltd)	Must comply with ISO 21003
PE-AL-PE pipe	25 years (if connected and used with RIIFO pipe/fittings) or 10 years if otherwise (subject to written technical approval by RIIFO UK Ltd)	Must comply with ISO 21003
PERT-AL-PERT pipe	25 years (if connected and used with RIIFO pipe/fittings) or 10 years if otherwise (subject to written technical approval by RIIFO UK Ltd)	Must comply with ISO 21003
PPR pipe	25 years (if connected and used with RIIFO pipe/fittings) or 10 years if otherwise (subject to written technical approval by RIIFO UK Ltd)	Must comply with ISO 15874
PF5/PF15 fitting	10 years (if connected and used with RIIFO pipe/fittings) or 5 years if otherwise (subject to written technical approval by RIIFO UK Ltd)	Must comply with ISO 15875
F5 / F8/ F9 /F18 /F6 fitting	10 years (if connected and used with RIIFO pipe/fittings) or 5 years if otherwise (subject to written technical approval by RIIFO UK Ltd)	Must comply with ISO 21003
F1 fitting	2 years	Must comply with ISO 21003
PPR fitting	5 years (if used together with RIIFO pipe)	Must comply with ISO 15874
VALVE	3 years	Must be installed per installation instructions
Water Manifold	3 years	Must be installed per installation instructions
Heating Manifold	3 years	Must be installed per installation instructions