

HeatPex Pex/Al/Pex Lagged Piping

Multi-layer composite pipe option	Provides 100% oxygen barrier to prevent corrosion of metallic parts in systems (including manifolds, mixing stations, boilers, pumps, etc.)	Manufactured by continuously overlapped welded aluminium method
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HeatPex Radiant Pex/Al/Pex Lagged Piping



Technical Information

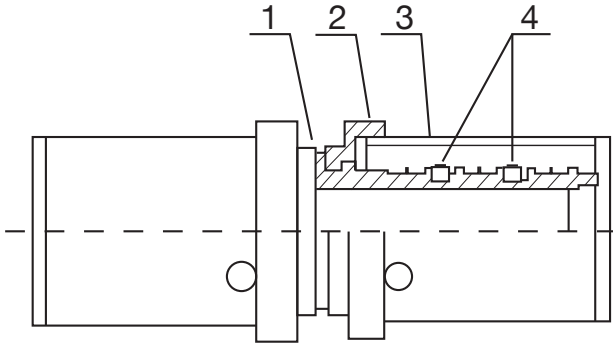
Item	Unit	Pex/Al/Pex
Thermal conductivity	W/m.K	0.40~0.42
Temperature range	oC	-40~95°C
Temperature for long-term use	oC	< 80
Working Pressure	MPa	1
Burst Pressure – 16mm pipe	MPa	6
Burst Pressure – 20mm pipe	MPa	5
Burst Pressure – 25mm pipe	MPa	4
Long Term Hydrostatic Strength	MPa	2.30
R rating (m ² .K/W)		0.22

HeatPex F5 Fittings

Technical Information

(1) Design, materials of construction and operating conditions

Application	Cold water, hot water, gas and compressed air
Working Temperature	-20°C ~ 95°C

Structure Drawing And Main Components	Material
	<p>1. Main body: DZR Brass</p> <p>2. Isolating ring: Polyethylene</p> <p>3. Sleeve: Stainless Steel Sleeve SS304</p> <p>4. O-ring NBR</p>

(2) Pressure loss

F5 U-Profile Press Fittings For Gas Supply														
Nominal size	16		20		25		32		40		50		63	
Zeta values § (-)/ equivalent Pipe length eL [m]	§	eL	§	eL	§	eL	§	eL	§	eL	§	eL	§	eL
Press Elbow 90	1.08	0.90	1.00	1.08	1.06	1.41	0.94	2.00	0.93	2.31	1.08	0.90	1.08	0.90
Equal Straight Union	0.62	0.52	0.54	0.58	0.56	0.73	0.48	1.02	0.46	1.16	0.62	0.52	–	–
Straight at flow speed	0.67	1.58	0.59	1.50	0.65	1.56	0.53	1.44	0.51	1.42	0.67	1.58	0.67	1.58
Branch at flow speed	0.56	1.32	0.63	1.62	0.87	2.08	1.12	3.06	1.28	3.56	0.56	1.32	0.56	1.32
Equal Tee “Y” type	1.20	1.00	–	–	–	–	–	–	–	–	1.20	1.00	1.20	1.00

Zeta Value and equivalent pipe length of F5 u-profile press fittings for gas supply.
A water velocity of 2m/s has been used for the calculation of equivalent pipe lengths

HeatPex F5 Fittings

Technical Information



3) The torque resistance of thread

Thread Size	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"
Torque / N·m	75	100	125	160	200	250	300

4) Fitting stress corrosion resistance

All fittings are tested according to ASTM B858 "Standard Test Method for Ammonia Vapour Test for Determining Susceptibility to Stress Corrosion Cracking in Copper Alloys"

It is required that there shall be no evidence of cracking when viewed with a microscope with a minimum magnification of 10X.

5) Chlorine resistance

The WaterPex/HeatPex/ChillPex piping system has achieved the highest level of Chlorine resistance.
For further information contact The Couta Group





HeatPex Double Leak Detection Fittings

Technical Information

(1) Design, materials of construction and operating conditions

Working Media	Cold water, hot water
Working Temperature	-20°C ~ 80°C
Maximum Working Pressure	10 Bar
Application	Class 1,2/10Bar, Class 4,5/6Bar
Materials of Construction	Body - DZR brass Sleeve - SS304 Isolating Ring - Polyethylene Orings - NBR and EPDM

(2) Pressure loss

Inside Dimension (mm) Outside Dimension (mm)	1216		1620		2025	
Zeta Values (-)/ equivalent Pipe length eL [m]		eL		eL		eL
Press Elbow 90 	1.2	1.44	1.01	1.52	1.01	1.81
Equal Straight Union 	0.81	0.97	0.62	0.94	0.62	1.11
Straight at flow speed 	0.86	1.03	0.67	1.00	0.66	1.19
Branch at flow speed 	1.77	2.12	1.58	2.37	1.57	2.83

3) The torque resistance of thread

Thread Size	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"
Torque / N·m	75	100	125	160	200	250	300

4) Fitting stress corrosion resistance

All fittings are tested according to ASTM B858 "Standard Test Method for Ammonia Vapour Test for Determining Susceptibility to Stress Corrosion Cracking in Copper Alloys"

It is required that there shall be no evidence of cracking when viewed with a microscope with a minimum magnification of 10X.

HeatPex Double Leak Detection Fittings

Design Features

Leak detection U-profile press fitting with double leakage indication



Leakage Indication 1
Haven't been pressed



Leakage Indication 2
After being pressed



Technical Features:

Size: 16mm - 25mm
Temperature range: -40°C - 95°C
Pressure range: 0-10 Bar
Pressing profile: U

Design Criteria:

EN ISO21003, NK 18
DVGW W534, AS4176
AS537 .2

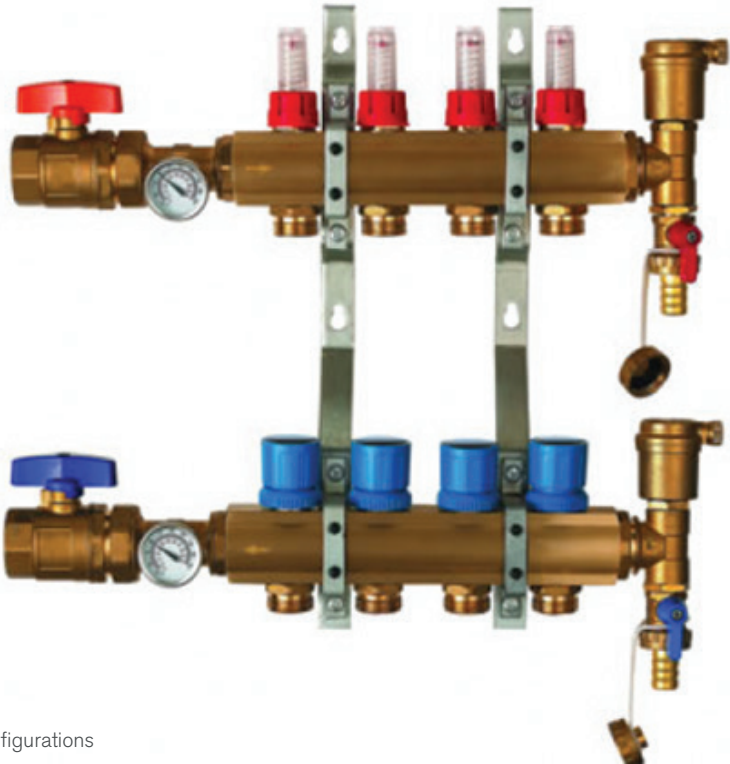


HeatPex Manifolds

Specification Sheet



- > Made of high quality DR Brass
- > Comes with individual flow gauges and isolating return knobs
- > Adjustable flow rate through each circuit for maximum efficiency
- > Connected to manifold using special nut & tail (core connect) compression connection



- > Available in 4, 6, 8, 10 and 12 port configurations
- > Come with 3/4" connections

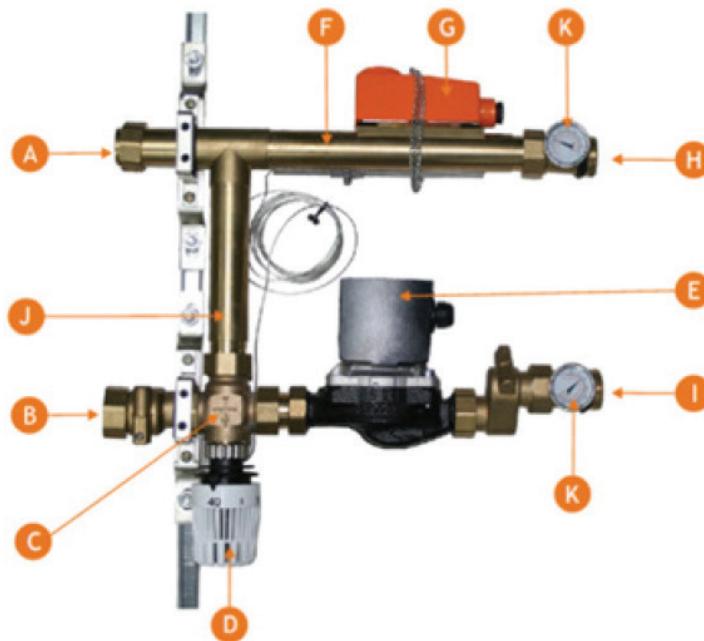
Technical Information

Item	Unit
Body Material	Hb59-1 brass
Body Caliber	1"
Branch Caliber	3/4"
Working Pressure	1 MPa
Working Temperature	0~85oC
Highest Working Temperature	90 oC

HeatPex Mixing Centre

Specification Sheet

The central regulation station controls the volume and temperature of water feed through the manifolds to the under floor heating system. Key features of the unit include the circulation pump, thermostatic controller and three way mixing valve as shown below.



Thermostats and Controls Thermostats and Controls

The temperature in a dwelling, individual room or zone including two or more rooms is controlled by a Room Thermostat. These can be programmed to turn the system on and off at desired temperatures and times and are wired back to the boiler or to a central control board.



Wacker Neuson DF-16 Rebar Tier

Specification Sheet



Advantages of Wacker Neuson DF-16 Rebar Tier

**Binds pipe to mesh faster,
more efficiently and without
Breaking Your Back**

**Allows pipe to be tied to reinforcing
mesh in a slab in a fraction
of the time**

**Ergonomic design with ability to tie
up to 1,000 knots per hour over
longer periods of time**

**Helps increase working speed
compared to conventional methods**

**Allows operator to work in upright
and easy position**

Always ready for action:

The purely mechanical unit has no need for a power supply. Empty batteries and long charging periods do not impair the availability of the unit. The quick tie wire strip replacement also leads to a very high state of readiness.

Versatile:

Ideal for tying concrete reinforcing steel, tying down of HeatPex pipes as well as fastening of electrical ductwork. The unit is suitable for vertical (ceilings, floor slabs) as well as horizontal (walls) applications.

Consistently high workmanship:

Irrespective of the operator's working ability the mechanically executed knot is always tighter than a standard knot performed by hand with a pair of pliers.

One-hand operation:

The unit can be operated in any position with one hand only. The second hand is always available for parallel applications, such as holding reinforcing bars in position.