



Solutions to
Shape the World

Reliance
Worldwide
Corporation



Plumbing & Heating

2022 Catalogue





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Reliance Worldwide Corporation Europe

RWC and its brand families develop safe, sustainable and efficient solutions through a range of innovative products.









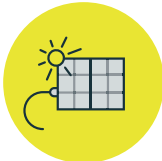





For a diverse range of sectors such as:

- Plumbing and Heating
- Water Treatment (Filtration, Softening, Osmosis and Dosing)
- Beverage Distribution
- Compressed Air and Pneumatics
- Telecommunications
- Industrial
- Automotive



Which applications are supported by each RWC product?

For each product or system, you can quickly identify compatibility by the following icons.

 <p>Drinking Water Water that we can consume or drink without danger to our health.</p>	 <p>SHW Sanitary Hot Water intended for human consumption (potable) that has been heated.</p>	 <p>Heating Radiators Radiator heating is the use of radiators to transfer heat to the room.</p>	 <p>Rainwater Rainwater that is not absorbed by the ground and is collected and channelled away.</p>	 <p>Industrial Water Water originating from any industrial activity such as process or waste water.</p>	 <p>Lubricated Compressed Air Compressed air with a lubricator to inject a specific quantity of oil into the air stream to lubricate pneumatic equipment.</p>
 <p>Underfloor heating Heating or cooling by the use of water through pipe circuits located in the floor to transfer heat or cold to the floor.</p>	 <p>Iced Water Water at a temperature between 0 °C and 15 °C.</p>	 <p>Solar Installations These are systems or components for use in solar thermal installations.</p>	 <p>Dry Compressed Air Compressed air that does not use oil lubricators.</p>	 <p>Food Sector This is the sector that is responsible for all processes related to the food chain, including the processing of food products.</p>	 <p>Chemical Industry The industry that extracts and processes natural or synthetic raw materials in order to create a commercial product.</p>
		 <p>Pharmaceutical Industry The industry involved in the manufacture and preparation of medicinal chemicals.</p>	 <p>Petrochemical Industry It is the industry that deals with the treatment and transformation of petroleum, petroleum products and natural gas.</p>		

Plumbing and Heating

1. Pipes
2. Systems



1. Pipes

RWC is a leading manufacturer of plastic pipes for various applications. Under the SharkBite brand, we offer the widest range on the market in millimetres, inches, single or multi-layer.

- Multilayer Piping with Aluminium - PERT / AL / PERT
- Peroxide System Cross-linked Polyethylene Piping - PEXa, PEXa UV Black



SharkBite Multilayer - PERT / AL / PERT

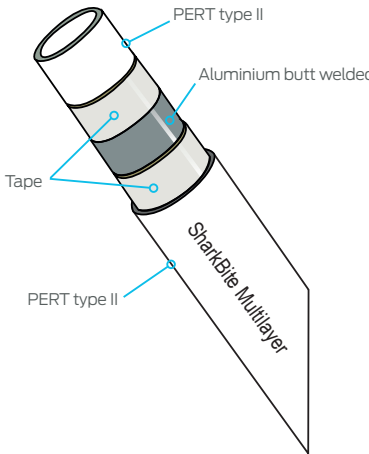


APPLICATIONS

- Composed of temperature resistant polyethylene (PERT Type II).
- With aluminium butt welded "head to head".
- Maximum temperature 95° C.
- Maximum pressure 10 bar.

Code	Colour	Dimension	Length
S8L16100	White	ø 16 x 2.0	100
S8L16200	White	ø 16 x 2.0	200
S8L16500	White	ø 16 x 2.0	500
S8L20100	White	ø 20 x 2.0	100
S8L2550	White	ø 25 x 2.5	50
S8L3250	White	ø 32 x 3.0	50
S8L164	White	ø 16 x 2.0	4 (160)
S8L204	White	ø 20 x 2.0	4 (120)
S8L254	White	ø 25 x 2.5	4 (80)
S8L324	White	ø 32 x 3.0	4 (48)
S8L405	White	ø 40 x 3.5	5
S8L505	White	ø 50 x 4.0	5
S8L635	White	ø 63 x 4.5	5

Manufactured according to ISO 21003



1. Flexibility

PERT type II is a material used for the manufacture of multi-layer pipes in plumbing and heating applications due to its flexibility. It can be bent and is easier to change direction in tight spaces compared to PVC, CPVC, PP, copper or steel pipes without the need for elbows, reducing costs, potential leak points and pressure losses generated by connections.

2. Easy to install

SharkBite Multilayer pipe installation is more economical than any other type of metal pipe such as copper or steel. Compared to copper, for example, no soldering is required, and compared to other plastic materials, it does not even require glue.

3. Safety

Compared to metallic materials, SharkBite Multilayer does not corrode and does not develop any electrochemical processes that lead to degradation. Compared to copper pipe and fitting systems, its installation does not require the use of a flame that can cause fires, making it one of the safest systems available today.

4. Compatibility

SharkBite Multilayer is perfectly compatible (using adapters), with installations in other materials such as copper and PVC.

5. Durability

SharkBite Multilayer is a material with high thermo-mechanical properties and is characterised by a service life of at least 50 years. International Standards require producers of Multilayer pipe systems to perform tests that can verify and guarantee the durability of the product. ISO 21003

6. Resistance

SharkBite Multilayer has a pressure and temperature resistance of 95° C at 10 bar.

7. Combination PERT type II and aluminium

It allows to obtain "MULTILAYER" pipes, which provide exceptional mechanical properties, offering a single product with the advantages of both materials.

8. They are 100% impermeable to oxygen

Thanks to the butt-welded aluminium layer.

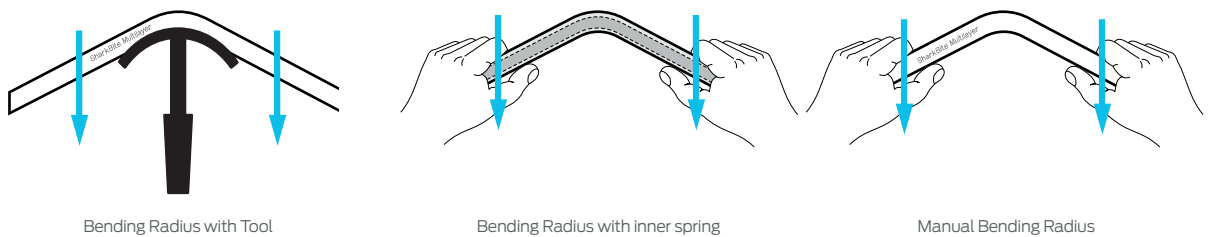
The performance of multilayer tubes depends on many factors:

Type of aluminium alloy, thickness of the aluminium, the position of the aluminium layer, the technology used in forming and welding the aluminium, the adhesion of the PERT to the aluminium.

Characteristics of the aluminium alloy used in the production of SharkBite Multilayer are:

- Excellent forming and welding properties.
- High mechanical strength at high temperatures.
- High elastic strength.
- Excellent adhesion due to special degreasing treatments applied on the surface.

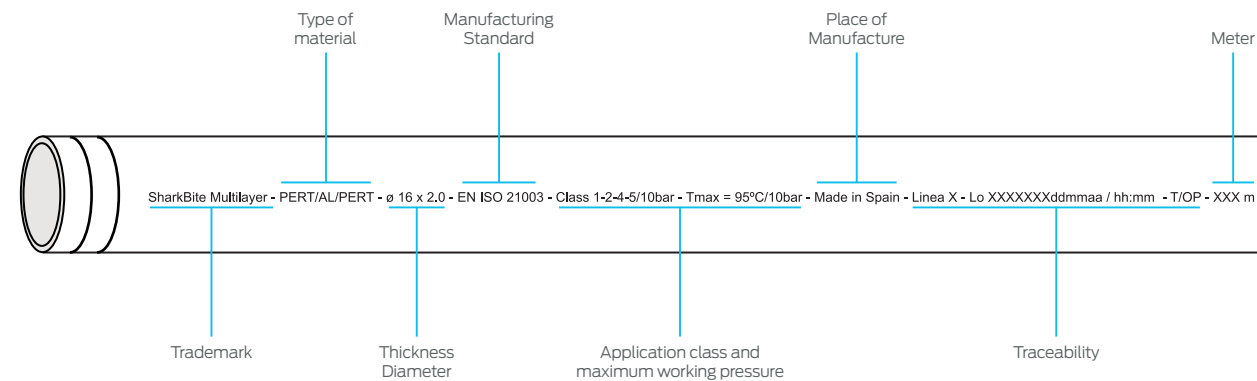
Bending Radius :



Diameter	Dimension	R=4xØ	R=5xØ	Diameter	Dimension
Ø 16x2.0	49mm	64mm	80mm	Ø 40X3.5	150mm
Ø 20x2.0	80mm	80mm	10mm	Ø 50X4.0	190mm
Ø 25x2.5	90mm	90mm	120mm	Ø 63X4.5	240mm
Ø 32x3.0	120mm	120mm	160mm		

SharkBite Multilayer Compatibility with Accessories				
Dimension	NEXUS	PRESS	SPEEDFIT	
Ø 16 X 2.0	✓	✓	✓	
Ø 20 X 2.0	✓	✓	✓	
Ø 25 X 2.5	✓	✓	✗	
Ø 32 X 3.0	✓	✓	✗	
Ø 40 X 3.5	✗	✓	✗	
Ø 50 X 4.0	✗	✓	✗	
Ø 63 X 4.5	✗	✓	✗	

SharkBite Multilayer Pipe Marking



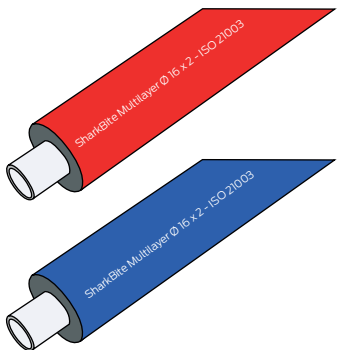
SharkBite Multi-layer Isolation

- PERT / AL / PERT Multi-layer pipe with insulation
- Maximum temperature: 95°C
- Maximum pressure: 10 bar

The insulation of SharkBite Multi-layer pipes not only reduces energy exchanges between the pipes and their surroundings, but also insulates them from noise, and at the same time provides protection.

Code	Colour	Dimension	Length
S8LI16R100	Red	ø 16 x 2.0 (6mm)	100
S8LI16B100	Blue	ø 16 x 2.0 (6mm)	100
S8LI20R100	Red	ø 20 x 2.0 (6mm)	100
S8LI20B100	Blue	ø 20 x 2.0 (6mm)	100
S8LI25R50	Red	ø 25 x 2.5 (10mm)	50
S8LI25B50	Blue	ø 25 x 2.5 (10mm)	50
S8LI32R25	Red	ø 32 x 3.0 (10mm)	25
S8LI32B25	Blue	ø 32 x 3.0 (10mm)	25

Manufactured according to ISO 21003



In pipes used for the conveyance of cold water, insulation is used for:

- Prevent the formation of condensation
- Avoid or reduce the heating of water
- Prevent or reduce noise transmission
- Protect the pipe

In pipes used for the conveyance of hot water, insulation is used for:

- Reduce energy loss and consequent water cooling
- Avoid or reduce noise transmission
- Protect the pipe
- Absorb heat expansion / contraction

RWC EUROPE supplies SharkBite Multi-layer pipes with pre-assembled, fire-retardant, closed-cell polyethylene foam insulation, which speeds up and simplifies the installation of systems .

SharkBite Multi-layer with insulation can be used for air conditioning systems as long as the temperature and pressure limits defined by the standard are observed. Typical liquids used are:





















- Water
- Water with glycol (ethylene or propylene)
- Other Liquids, that are not compatible / non-aggressive with PERT type II (consult compatibility - therefore, cryogenic liquids such as Freon or ammonia should not be used)

The choice of insulation thickness depends on the application and conditions of use, and always in compliance with local regulations or standards.

Diameter	Thickness Insulation	Outside Diameter	Weight	Thermal Conductivity
Ø 16 X 2.0	6mm	28 Ømm	123 g/m	0.058 W/mK
Ø 20 X 2.0	6mm	32 Ømm	153 g/m	0.056 W/mK
Ø 25 X 2.5	10mm	45 Ømm	238 g/m	0.059 W/mK

SharkBite PEXa



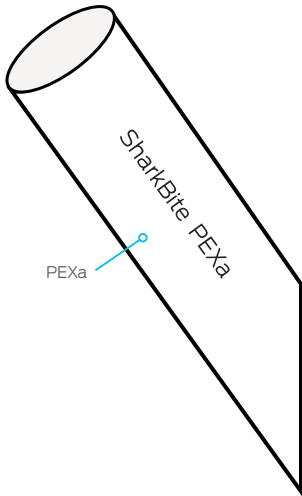


APPLICATIONS

- PEXa cross-linked polyethylene pipe by peroxide Xa system
- Corrosion resistant, excellent thermal memory, lightweight and flexible
- Maximum temperature 95 °C / Minimum temperature -40 °C

Code	Colour	Dimension	Length
S816S4T100	Natural	ø 16 x 1.8	100
S816S4T200	Natural	ø 16 x 1.8	200
S820S5T100	Natural	ø 20 x 1.9	100
S820S5T200	Natural	ø 20 x 1.9	200
S825S5T100	Natural	ø 25 x 2.3	100
S832S5T50	Natural	ø 32 x 2.9	50
S816S4T4	Natural	ø 16 x 1.8	4 (160)
S820S5T4	Natural	ø 20 x 1.9	4 (120)
S825S5T4	Natural	ø 25 x 2.3	4 (80)
S832S5T4	Natural	ø 32 x 2.9	4 (48)

Manufactured according to ISO 21003



Cross-linked Polyethylene PEXa - SharkBite PEXa

Cross-linked polyethylene (commonly abbreviated as PEX), is used for the manufacture of pipes for hot and cold water supply, for the transport of natural gas and for the transport of industrial chemicals, manufactured according to ISO15875 (EUROPE) AS2492 (AUSTRALIA) and ASTM F876 (USA).

The raw material of PEX is HDPE (high density polyethylene) and contains bonds in the polymer structure which completely modify its characteristics, thus making it a very versatile material. The raw material of PEX is HDPE (high density polyethylene) and contains bonds in the polymer structure that completely change its characteristics, changing the thermoplastic to a thermoset.

The cross-linking process can be carried out using different technologies which are recognised by international standards and identified as international standards and identified as:

PEXa - PEXb - PEXc

The cross-linking process is carried out during extrusion (PEXa) or after extrusion (PEXb and PEXc). The ISO 15875 standard indicates the degree of cross-linking that each type of cross-linking process must have.

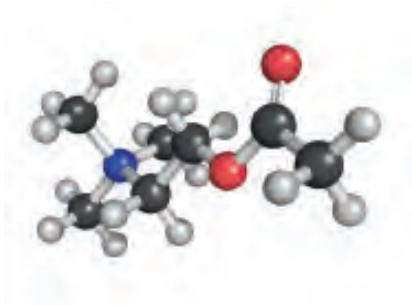
PEXa ≥ 70% [SharkBite PEXa](#)

PEXb ≥ 65%

PEXc ≥ 60%

Cross-linking improves the properties of the pipe, obtaining:

1. High temperature resistance 95 °C
2. Low temperature resistance - 40 °C - PEXa
3. Chemical resistance
4. Impact resistance
5. Tensile strength
6. Excellent thermal memory



PEXa is produced by the peroxide method (Engel or Infrared System I.R. are the most common). Cross -linking is carried out at a temperature higher than the melting point of HDPE polyethylene. The material is extruded and immediately thereafter held at high temperatures and/or pressures. During this process, the peroxide decomposes into free radicals and reacts with the polymer, creating chains that are connected to each other in a three-dimensional network by chemical bonds.

SharkBite PEXa tubing, due to its excellent thermal memory, can be repaired in the event of accidental bursting during installation. Repairs can be made using the following recommendations :

- Make sure that the installation is not pressurised
- Straighten the pipe by hand
- Heat the pinched area with a heat gun (never with a flame) until the tubing becomes transparent and returns to its original size and position
- Allow the SharkBite PEXa tubing to cool at room temperature or with the aid of a wet rag until the tubing has returned to its original opaque appearance

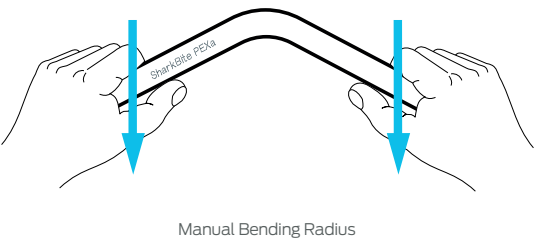


SharkBite PEXa tubing due to its excellent thermal memory absorbs the increase in size due to freezing. Cross-linking by the PEXa system (peroxide method), allows it to expand (due to the increase in volume due to freezing) and absorb much of the expansion energy of the freezing process. No pipe is completely immune to freezing, but RWC's SharkBite PEXa pipe is extremely resistant to freezing damage.

In the event of freezing, the following recommendations may be made:

- The installer or user should correct the lack of insulation to prevent recurrence
- Pour hot water over the affected portion of the SharkBite PEXa tubing
- Wrap warm rags or towels around the affected portion of the frozen pipe
- Heat the area with air (never with a flame) or an air heater until completely thawed

Manufactured according to ISO 21003



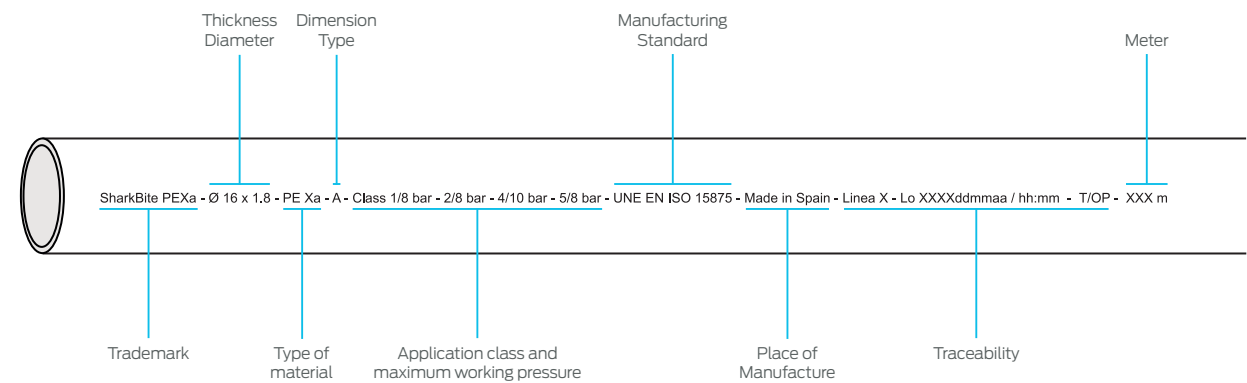
Code	Hot Bending	Cold Bending
Ø 16x1.5	48mm	64mm
Ø 16x1.8	48mm	64mm
Ø 16x2.2	48mm	64mm
Ø 20x1.9	60mm	80mm
Ø 20x2.8	60mm	80mm
Ø 25x2.3	100mm	125mm
Ø 25x1.5	100mm	125mm
Ø 32x2.9	128mm	192mm



SharkBite PEXa Compatibility with Accessories

Dimension	NEXUS	PRESS	SPEEDFIT
Ø 16 x 1.8	✓	✓	✓
Ø 20 x 1.9	✓	✓	✓
Ø 25 x 2.3	✓	✓	✗
Ø 32 x 2.9	✓	✓	✗

SharkBite Multilayer Pipe Marking



1. Systems

SYSTEM are all those components necessary for a complete and correct installation. The components must come from the same manufacturer and form an integrated system.

The advantages of using a system from the same manufacturer are:

- 100 % compatibility between all components
- Integration under the same manufacturer's installation standard (Technical manual)
- 100 % guarantee of all components and the installation as different manufacturers do not conflict with each other, which may not be compatible with each other within the tolerance of the ISO standard

- SharkBite NEXUS
- SharkBite FLOOR





- Available in \varnothing 16, \varnothing 20, \varnothing 25 and \varnothing 32mm
- Compatible with PEX, PERT and MULTILAYER pipes with aluminium
- SharkBite NEXUS is a Push Fit quick connect system
- PPSU range (Polyphenylsulphone)
- BRASS Range



Body	PPSU (Polyphenylsulphone) or Brass CW617N
Bushing Holder	PPSU (Polyphenylsulphone)
Bushing	AISI 304 Tempered
Sealing gasket	EPDM Peroxide 70
Range	\varnothing 16 / \varnothing 20 / \varnothing 25 / \varnothing 32mm

YouTube



https://www.youtube.com/channel/UCxgatoILVygrisaye83KX8A/playlists?view=50&sort=dd&shelf_id=4

Time saving

With SharkBite NEXUS you can save up to 70% of installation time

Stock saving

It allows us to save up to 50% of fittings, as it is compatible with PEX, PERT and MULTILAYER, depending on the application

Minimum volume

It is designed with the minimum volume with respect to the pipe, which allows us to embed the installation in both classic partition walls (bricks) and modern ones (plasterboard or synthetic materials)

Pressure and temperature resistance

The working temperature can be raised to 95 °C, with a pressure of 10 bar

Corrosion resistance

The smooth surface of the pipe prevents sedimentation from adhering to the walls during the life of the system

Low weight

It is light in weight, which speeds up installation and saves time and money in transportation

Long life

If the system is used according to technical specifications in pressures and temperatures, the whole system is built to last for a long life. system is built to last at least 50 years

No noise

The PPSU material avoids the noises produced by the water circulation, due to its low roughness coefficient, damping between 2 and 3 times the water hammer, compared to the traditional brass or copper systems

Healthy

Manufactured with materials approved for the transport of drinking water, providing no odour, taste or toxicity





SharkBite NEXUS Pipe Compatibility

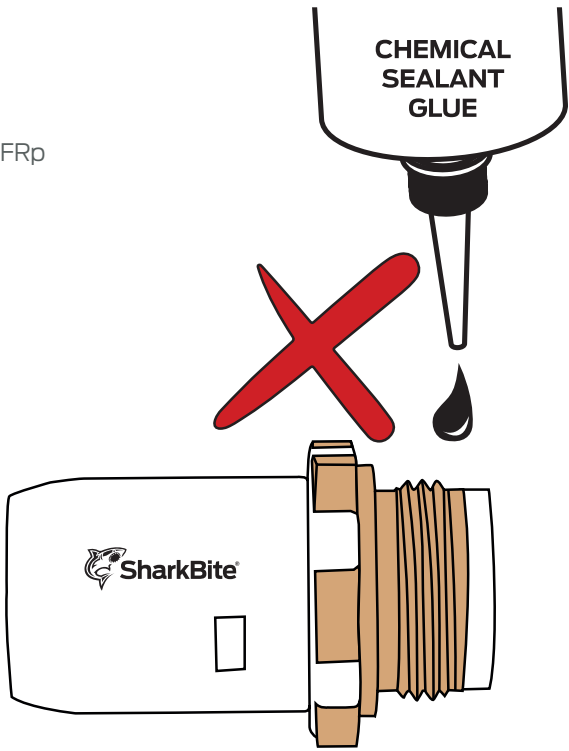
System	SharkBite NEXUS	Diameter	SharkBite NEXUS
SharkBite Multilayer	✓	Ø16 x 1.5	✗
SharkBite PEXa	✓	Ø16 x 1.8	✓
SharkBite PERT	✓	Ø16 x 2.0	✓
SharkBite PEXa UV Black	✓	Ø20 x 1.9	✓
SharkBite PEXa EVOH	✗	Ø20 x 2.0	✓
SharkBite PEXa EVOH Plus	✓	Ø25 x 2.3	✓
SharkBite PERT EVOH	✗	Ø25 x 2.5	✓
		Ø32 x 2.9	✓
		Ø32 x 3.0	✓

Caution with the use of chemical thread sealants, thread strippers and/or PVC glues.

Anaerobic sealants used for metal threads cause stress cracks and breaks in contact with thermoplastic materials. Regardless of whether the threads of the fittings are metallic, indirect or accidental contact with PPSU plastic parts can cause breakage or cracking. SharkBite NEXUS fittings (PPSU and PPSU with metal insert) should be fitted with thread, PTFE tape, Silicone Tape or hemp / tow. See compatibility table in the technical manual.

PTFE tape thicknesses shall meet the following requirements:

- 0.075mm to 0.100mm for threads of 1/2"
- 0.100mm to 0.200mm for threads of 3/4" and 1"
- The PTFE tape shall be 100 % PTFE according to EN 571 - 3 FRp
- Leave the first thread free to facilitate joining

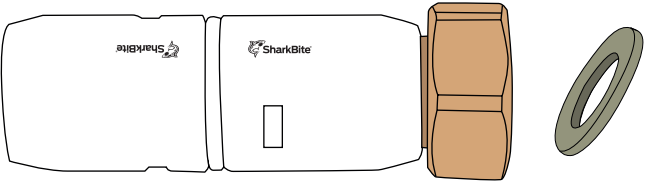


The tightening torque, or maximum torque for thread tightening, is as follows:

- For 1/2" threads it is 40Nm (Newton metre)
- For 3/4" threads it is 60Nm (Newton metre)
- For 1" threads it is 70Nm (Newton metre)

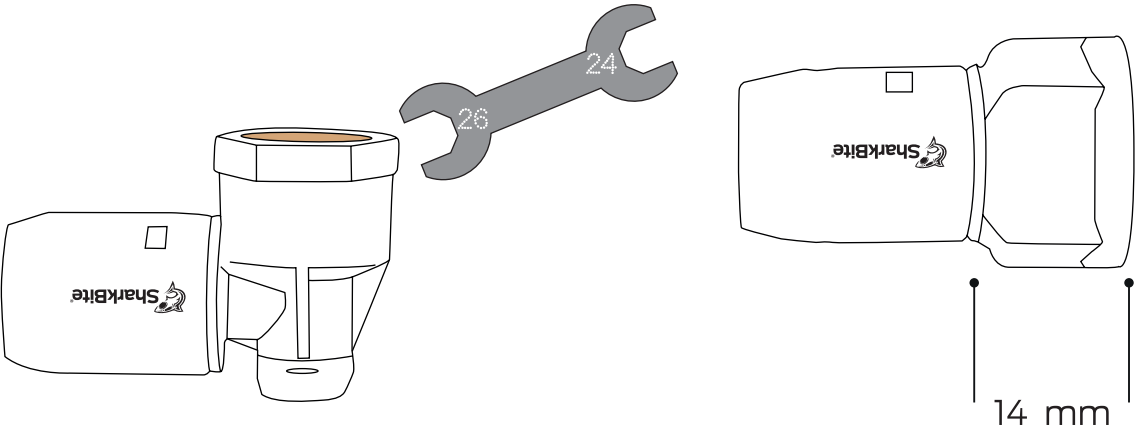
SharkBite NEXUS (PPSU) fittings with a moveable thread (fitting, elbow or moveable tee), it must be ensured that the flat gasket is fitted in the socket without the use of any other sealant:

- Tighten by hand and finish tightening with the appropriate spanner to a maximum of 1/4 turn



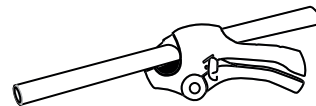
The use of SharkBite NEXUS (PPSU) female threaded fittings should adhere to the following recommendations:

- Do not use male threads deeper than 14mm
- Use the open-end spanner according to the thread size to fix the female thread and another spanner to insert the male thread

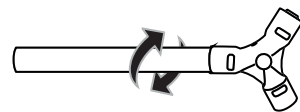


Assembly Instructions

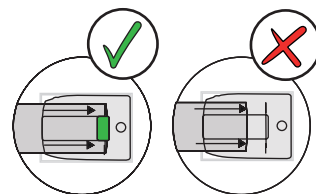
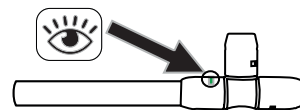
1. Cut the tube perpendicularly at 90°



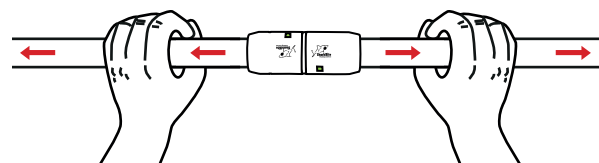
2. Calibrate and chamfer the end of the tube



3. Insert the end of the bevelled tube into the Nexus fitting. The **GREEN** visual safety indicator will indicate that the joint is correct and secure

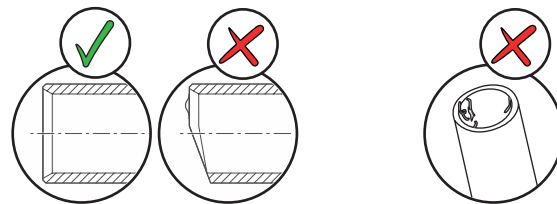


4. Check that the tube is attached to the SharkBite Nexus fitting by pulling in the opposite direction to the fitting to ensure that the clamp is anchored on the tube

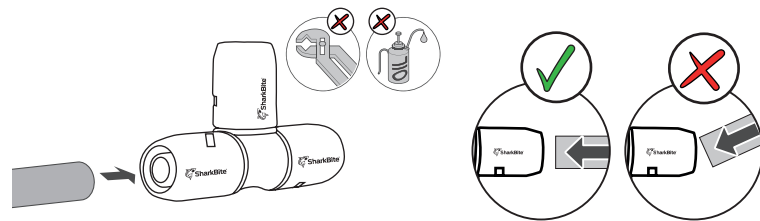


For correct use of SharkBite NEXUS accessories the instructions and recommendations below should be followed:

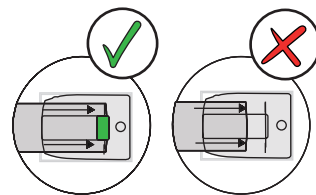
- Ensure that the tube is cut to 90° and that no material remains in the tube



Do not use any tools or lubricants to insert the tube into the SharkBite Nexus fitting. Insert the tube straight into the fitting.



Do not use any tools or lubricants to insert the tube into the SharkBite Nexus fitting. Insert the tube straight into the fitting.



Connecting Sleeve PPSU



Code	Dimension	Box A
SN001616	16-16	30
SN002020	20-20	20
SN002525	25-25	12
SN003232	32-32	6

Fixed Female Fitting PPSU



Code	Dimension	Box A
SN011612FB	16 X 1/2"	20
SN012012FB	20 X 1/2"	15
SN012034FB	20 X 3/4"	15
SN012534FB	25 X 3/4"	10

Male Elbow PPSU



Code	Dimension	Box A
SN021612MB	16 X 1/2"	20
SN022012MB	20 X 1/2"	20
SN022534MB	25 X 3/4"	10

Mobile Elbow PPSU



Code	Dimension	Box A
SN021612FBSW	16 X 1/2"	15
SN022034FBSW	20 X 3/4"	12
SN022501FBSW	25 X 1"	7

Reduced Sleeve PPSU



Code	Dimension	Box A
SN001620	20-16	20
SN001625	25-16	15
SN002025	25-20	15
SN001632BB	32-16	-
SN002032BB	32-20	-
SN002532	32-25	8

Fixed Female Fitting BRASS



Code	Dimension	Box A
SN011612FBB	16 X 1/2"	20
SN011638FBB	16 X 3/8"	20
SN012012FBB	20 X 1/2"	15

Fixed Male Fitting BRASS



Code	Dimension	Box A
SN011612MBB	16 X 1/2"	30
SN011638MBB	16 X 3/8"	30
SN012012MBB	20 X 1/2"	25

Elbow Base Fixing PPSU



Code	Dimension	Box A
SN021612FBWP	16 X 1/2"	15
SN022012FBWP	20 X 1/2"	12
SN022534FBWP	25 X 3/4"	10

Elbow Equal PPSU



Code	Dimension	Box A
SN021616	16-16	25
SN022020	20-20	18
SN022525	25-25	8
SN023232	32-32	5

Double U Female Elbow BRASS



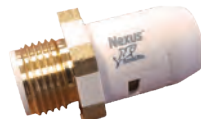
Code	Dimension	Box A
SN021616DB	16-1/2"-16	3
SN022020DB	20-1/2"-20	3

Mobile Fitting PPSU



Code	Dimension	Box A
SN011612FBSW	16 X 1/2"	20
SN012012FBSW	20 X 1/2"	20
SN012034FBSW	20 X 3/4"	15
SN012534FBSW	25 X 3/4"	12
SN012501FBSW	25 X 1"	8
SN013201FBSW	32 X 1"	6

Fixed Male Fitting PPSU



Code	Dimension	Box A
SN011612MB	16 X 1/2"	30
SN012012MB	20 X 1/2"	25
SN012034MB	20 X 3/4"	20
SN012534MB	25 X 3/4"	15
SN013201MB	32 X 1"	8

Female Elbow PPSU



Code	Dimension	Box A
SN021612FB	16 X 1/2"	20
SN022012FB	20 X 1/2"	20
SN022034FB	20 X 3/4"	10
SN022534FB	25 X 3/4"	8
SN023201FB	32 X 1"	-

Elbow AdapterBRASS



Code	Dimension	Box A
SN021616AD	16-16	25
SN022020AD	20-20	18
SN022525AD	25-25	8
SN023232AD	32-32	5

Reducer AdapterBRASS



Code	Dimension	Box A
SN011625AD	25 - 16	8
SN012025AD	25 - 20	8
SN012032AD	32 - 20	6

Tube-Tube AdapterBRASS



Code	Dimension	Box A
-	16 - 16	30
-	20 - 20	20
-	25 - 25	12
-	32 - 32	6

Equal TeePPSU



Code	Dimension	Box A
SN03161616	16-16-16	12
SN03202020	20-20-20	8
SN03252525	25-25-25	5
SN03323232	32-32-32	3

Reduced TeePPSU



Code	Dimension	Box A
SN03162016	16-20-16	12
SN03201616	20-16-16	12
SN03201620	20-16-20	10
SN03202016	20-20-16	10
SN03251625	25-16-25	8
SN03252020	25-20-20	6
SN03252025	25-20-25	6
SN03252520	25-25-20	6
SN03322525	32-25-25	4

Female TeePPSU



Code	Dimension	Box A
SN03161216FB	16-1/2"-16	15
SN03201220FB	20-1/2"-20	10

Mobile TeePPSU



Code	Dimension	Box A
SN03161216FBSW	16-1/2-16	10
SN03163416FBSW	16-3/4-16	10
SN03201220FBSW	20-1/2-20	7
SN03203420FBSW	20-3/4-20	7
SN03251225FBSW	25-1/2-25	5
SN03253425FBSW	25-3/4-25	5
SN03250125FBSW	25-1-25	4

Reduced TeeBRASS



Code	Dimension	Box A
SN03202516BB	20-25-16	6
SN03202520BB	20-25-20	6
SN03251616BB	25-16-16	6
SN03251620BB	25-16-20	6
SN03252016BB	25-20-16	6
SN03252516BB	25-25-16	6
SNP03321632BB	32-16-32	-
SNP03322025BB	32-20-25	-
SNP03322032BB	32-20-32	-
SNP03322520BB	32-25-32	-

Orientable Manifold. Wall or CeilingPPSU



Old Code	New Code	Dimension	Box A
SN7C251616	SN7C003	25/16-16	1
SN7C25161616	SN7C004	25/16-16-16	1
SN7C25201616	SN7C008	25/20-16-16	1
SN7C2516161616	SN7C005	25/16-16-16-16	1
SN7C2520161616	SN7C009	25/20-16-16-16	1
SN7C252016161616	SN7C010	25/20-16-16-16-16	1
SN7C2520202020	SN7C014	25/20-20-20-20	1
SN7C25202020	SN7C013	25/20-20-20	1
SN7C252020	SN7C011	25/20-20	1
SN7C201616	SN7C038	20/16-16	1
SN7C20161616	SN7C021	20/16-16-16	1
SN7C20201616	SN7C034	20/20-16-16	1
SN7C2016161616	SN7C022	20/16-16-16-16	1
SN7C2020161616	SN7C033	20/20-16-16-16	1
SN7C202016161616	SN7C035	20/20-16-16-16-16	1

NEXUS Manifolds and distributors are modular. They are available in any possible combination you need. With pipe inlet, male / female / mobile thread. Ask for your combination.

Orientable Manifold. Wall or Ceiling

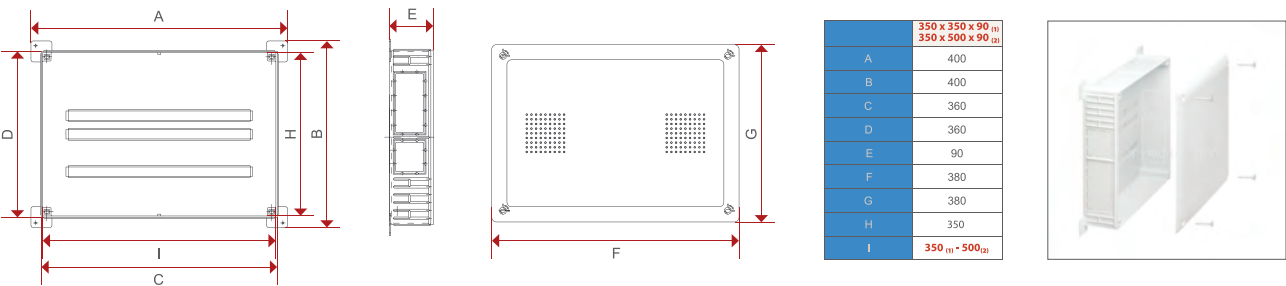
PPSU



New Code	Dimension	Box A
SN7D010	0/16-16/20	1
SN7D021	20/20-16/20	1
SN7D011	20/16-16-16/20	1
SN7D012	20/20-16-16/20	1
SN7D001	20/16-16-16-16/20	1
SN7D013	20/20-16-16-16/20	1
SN7D022	20/16-16-16-16-16/20	1
SN7D014	20/20-16-16-16-16/20	1
SN7D015	25/16-16/20	1
SN7D023	25/20-16/20	1
SN7D016	25/16-16-16/20	1
SN7D017	25/20-16-16/20	1
SN7D018	25/16-16-16-16/20	1
SN7D019	25/20-16-16-16/20	1
SN7D024	25/16-16-16-16-16/20	1
SN7D020	25/20-16-16-16-16/20	1
-	26/16-16/20	1
-	26/20-16/20	1
-	26/16-16-16/20	1
-	26/20-16-16/20	1
-	26/16-16-16-16/20	1
-	26/20-16-16-16/20	1
-	26/16-16-16-16-16/20	1
-	26/20-16-16-16-16/20	1

NEXUS Manifolds and distributors are modular. They are supplied in any possible combination you need. With pipe inlet, male/female/mobile thread. Ask for your combination.

Plastic Manifold Box



Code	Dimension	Box A
SN7PCB1	350X350	1
SN7PCB2	350X500	1

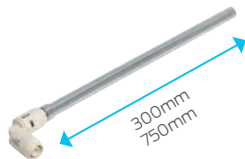
KiT Manifold Support (Nexus-Press)



Code	Dimension	Box A
SN7SCS	SIMPLE	1
SN7SCD	DOBLE	1

The **DOUBLE** manifold support kit includes a metal plate and support kit for two manifolds at two heights.
The **SIMPLE** manifold support kit includes metal plate and support kit for one manifold.

Radiator Connection Elbow



Code	Dimension	Box A
SN021615300CU	16 CU15 - 300	1
SN021615750CU	16 CU15 - 750	1

Radiator Connection Elbow



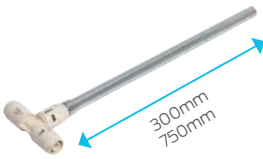
Code	Dimension	Box A
SN07MP	KNOB / CHROMED KNOB	5
SN07MO	HIDDEN / CHROMED HIDDEN	10
SN07MM	HANDLE / CHROMED LEVER	10
SN07ALAR	EXTENDER	10

Recessed Ball Valve



Code	Dimension	Box A
SN0716VE	16	6
SN0720VE	20	5
SN0725VE	25	4
SN0732VE	32	3

Radiator Connection Elbow



Code	Dimension	Box A
SN03161516300CU	16 CU15 16 - 300	1
SN03201520300CU	20 CU15 20 - 300	1
SN03201516300CU	20 CU15 16 - 300	1
SN03251525300CU	25 CU15 25 - 300	1
SN03161516750CU	16 CU15 16 - 750	1
SN03201520750CU	20 CU15 20 - 750	1
SN03201516750CU	20 CU15 16 - 750	1
SN03251525750CU	25 CU15 25 - 750	1

Ball Valve Surface



Code	Dimension	Box A
SN0716VS	16	6
SN0720VS	20	5
SN0725VS	25	4
SN0732VS	32	3

Mobile Adapter



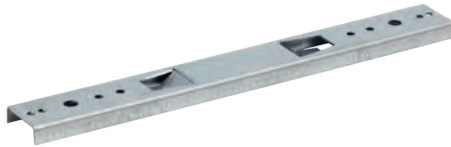
Code	Dimension	Box A
SN071612SW	16 - 1/2"	30
SN072034SW	20 - 3/4"	30
SN072501SW	25 - 1"	20

Mobile Adapter



Code	Dimension	Box A
SN0716202532	16-20-25-26-32	1

Fixing Plate



Code
SN07PF

Male Thread Adaptor



Code	Dimension	Box A
SN071612M	16 - 1/2"	30
SN071634M	16 - 3/4"	30
SN072012M	20 - 1/2"	30
SN072034M	20 - 3/4"	30
SN072534M	25 - 3/4"	30
SN072501M	25 - 1"	20
SN073201M	32 - 1"	20

Solder Copper Adapter



Code	Dimension	Box A
SN0716C15	16 - CU15	30
SN0716C18	16 - CU18	30
SN0720C22	20 - CU22	30

U-Fixing Plate



Code
SN07PF2

Case Plate



Female Elbow
not included

Code	Dimension	Box A
SN07CP	16-1/2" & 20-1/2"	8

Adapter Female Thread



Code	Dimension	Box A
SN071612F	16 - 1/2"	30
SN071634F	16 - 3/4"	30
SN072012F	20 - 1/2"	30
SN072034F	20 - 3/4"	30
SN072534F	25 - 3/4"	25
SN072501F	25 - 1"	20
SN073201F	32 - 1"	15

Manometer-Thermometer Adapter



Code	Dimension	Box A
SN071614MT	16 X 1/4"	30

Brass End Cap



Code	Dimension	Box A
F514	16	50
F518	20	40
F520	25	30

Plastic End Cap

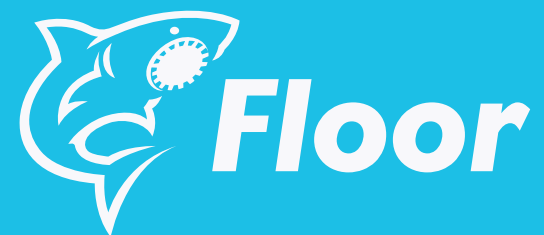


Code	Dimension	Box A
F514	16	50
F518	20	40
F520	25	30

Bevellers



Code	Dimension	Box A
SN07162025	16-20-25	1
SN0732	32	1



THE SMARTEST HEATING

The SharkBite Floor underfloor heating and cooling system adapts to the needs of your project, both in new buildings as well as in refurbishments and extensions.

Its range of components and control system makes it the ideal solution for a simple, energy-efficient and aesthetic execution.

Our experts are at your disposal to provide you with all the support you need, before, during and after installation.



REASONS TO INSTALL SharkBite Floor

- 1. Improved technical comfort.** Like the sun, SharkBite Floor uses radiant heat to warm the floor of the room, creating a cosy and comfortable atmosphere.
- 2. Greater heating control.** Create the perfect comfort zone with individual or multiple room temperature control. Simple, standard and intelligent solutions.
- 3. Increased usable space.** As there are no visible emitting elements, the usable space is increased compared to other air-conditioning systems by between 3% and 5%.
- 4. A more hygienic and healthier environment.** The temperature differences between the air and the floor surfaces will be reduced, and the effect of the air convection will not be perceived, and there will be no discomfort for the user and no movement of dust.
- 5. Reducción del consumo.** Diseñado para trabajar a baja temperatura, el sistema de climatización SharkBite Floor reduce el consumo energético hasta un 20 % respecto a otros sistemas de climatización.
- 6. Renewable heat source.** Compatible with conventional and renewable heat sources that reduce environmental impact, including heat pumps and solar panel systems.
- 7. Reduced noise.** Creates a relaxed and quiet environment, without noise from pipes or air flow. The insulating board and cement mortar together behave like a floating floor, and can help to comply with the requirements of the DB-HR of the CTE.
- 8. Universal control.** Enable multi-zone heating throughout the home by combining SharkBite Floor with AIRZONE.



Safety

RWC started in the Plumbing and Heating market in 1949. With the security and solvency of our multinational parent company Reliance Worldwide Corporation (Aus) Pty Ltd, world leaders in the plumbing and heating industry, RWC has been in business since 1949.

Reliability

RWC stands for constant reliability. When you buy RWC products you become a customer for life. We offer a proven guarantee on the quality, performance and reliability of our products.

Innovation

RWC has been and will always remain at the forefront of innovation in plumbing and heating systems. With an impressive track record. We owe this to our customers. RWC listens to its customers, identifies their needs, and then develops products that meet those needs.

Simplicity

RWC uses state-of-the-art technology to design and create products. Our goal is to aim for ease of installation and to minimise maintenance. A high quality product that is easy to install, to satisfy customers and reduce installation times. We manufacture with the aim of making the installer's job easier and faster, with a positive effect on cost reduction.

Quality

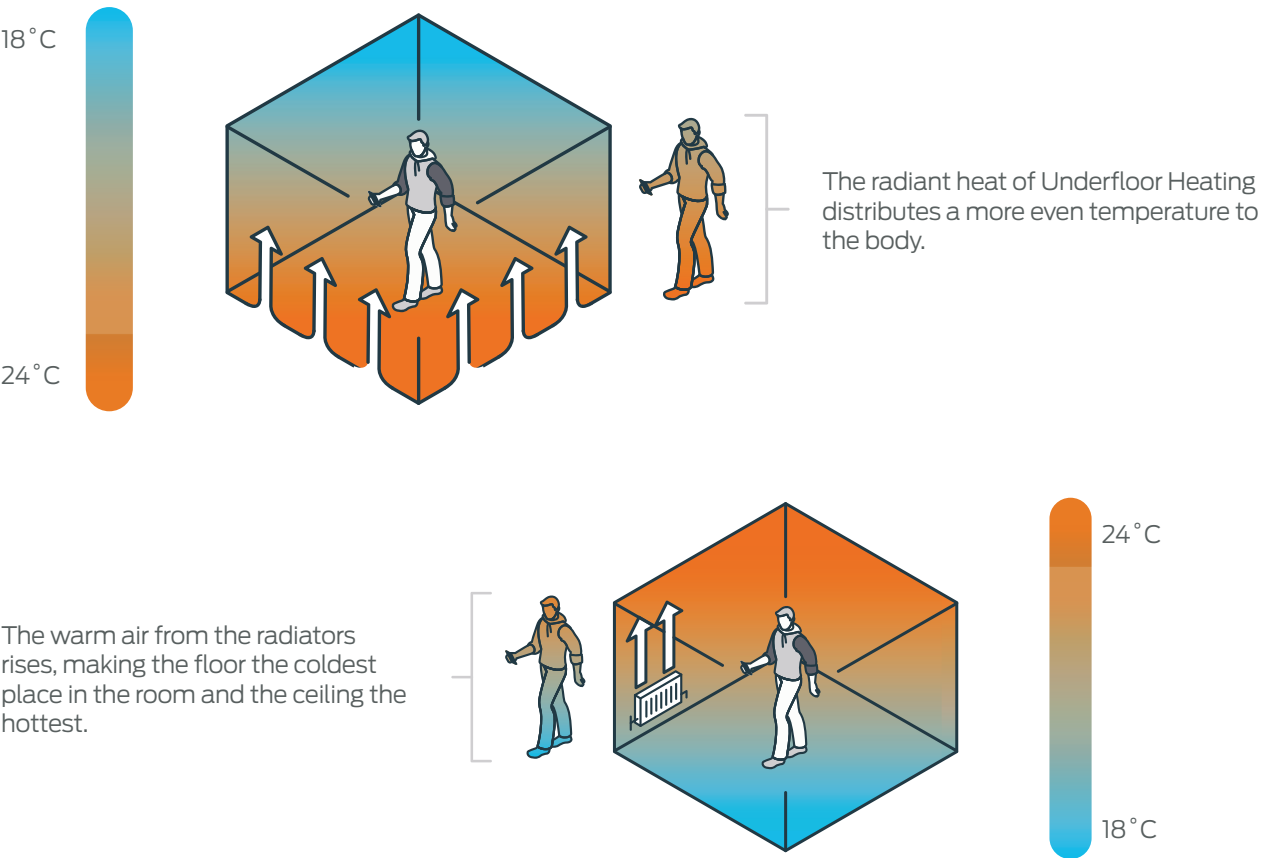
Every RWC product is manufactured to the highest quality standards, using pioneering techniques and only the highest quality materials. Our reputation is built on quality and high performance. Knowing this, our customers appreciate the convenience of being able to turn to a single supplier for a truly comprehensive range of ultra-reliable plumbing and heating products. RWC is an accredited manufacturer to the following international standards.



SharkBite Floor

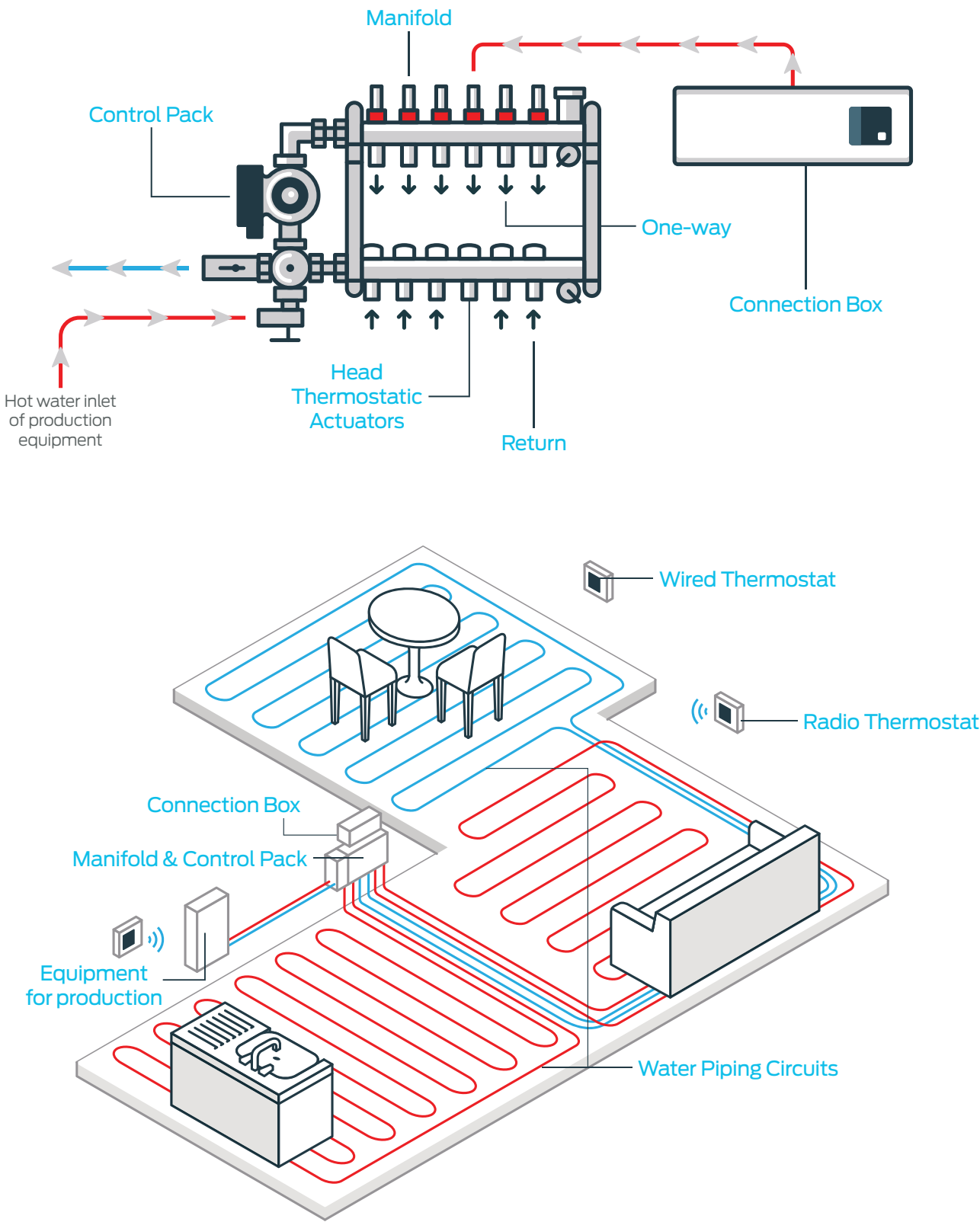
50% of the energy exchange between humans and the environment is produced by radiation. In order to achieve a greater influence of the air conditioning system on comfort conditions, radiant air conditioning must be used. In order to achieve a uniform energy exchange between the system and the users, it is necessary to have a large radiant surface available, this being the floor of the building, rather than very localised points of energy emission. This is the case with radiators and air conditioners, which transfer energy by convention, generating an inhomogeneous distribution of energy.

Air conditioning systems by convention, by influencing the air temperature instead of the radiant surface to reach the comfort temperature, require a greater energy input, as the air has a lower density and greater volume. The energy exchange by radiation depends on the fourth power of the absolute temperatures of the bodies. Increasing or decreasing the temperature of the radiant surface by one degree means a multiplying factor that is not reached if we vary the air temperature by one degree.



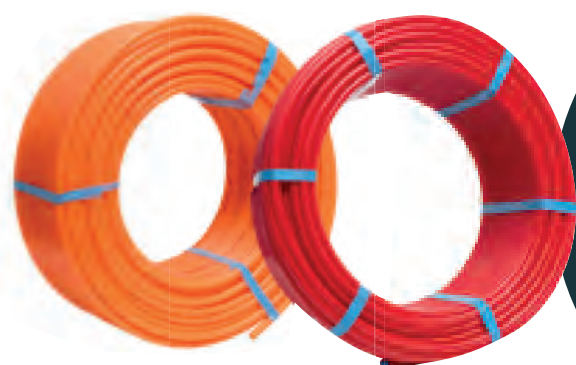
SharkBite Floor controls the temperature in each room using intelligent thermostats via cable or radio connection.

The control unit controls the manifold, opening or closing the actuators and circulating the water at the temperature required for each circuit. The collector control pack, consisting of a thermostatic mixing valve and pump, fulfils a dual function: regulation of the inlet temperature and movement of the flow rate required by the system, making it compatible with any source of energy from the combustion of oil derivatives or natural gas or renewable energy, such as biomass, solar, aerothermal, etc.




Key Components

All SharkBite Floor systems are supplied to the highest standards of quality and reliability.



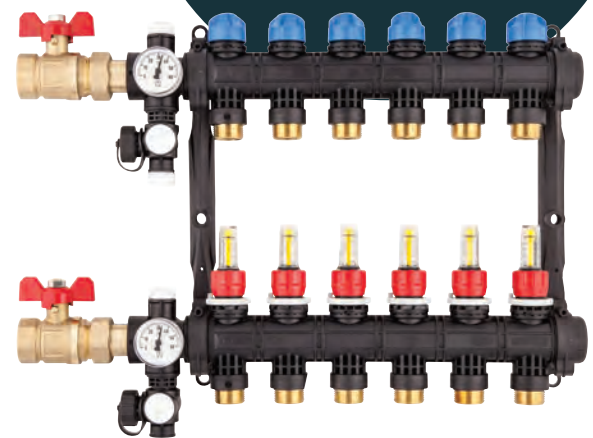
SharkBite PEXa EVOH pipes and SharkBite PERT EVOH with 3 or 5 layers

The widest range of tubing made of PEXa EVOH or PERT EVOH with 3 or 5-layer oxygen barrier protection. The flexibility of SharkBite tubing will allow you to make tight angle bends easily and feasibly, even when working at low temperatures.



Control/Regulation


The exclusive and elegant Airzone thermostats allow the components of the radiant air-conditioning system to be controlled via cable or radio connection, with touch sensitive and anti-regulation screens.



Manifold

Manufactured to the highest quality standards, our 1" stainless steel and polyamide manifolds are available in a range from 2 to 12 outlets.

They are supplied preassembled with 3/4" Euroconus outlet, shut-off valves, bleeders, fill/drain cock, thermometers and Clamping kit.



Control Pack

With the function of mixing and controlling the water temperature, it is suitable for heating systems up to 14kW and connects directly to the manifold without the need for additional brackets. The nickelplated control package consists of a mixing valve, a Grundfos UPM3 Auto pump.

Choosing the Right System

Depending on the type of work and application, there are many types and diversity of components in underfloor heating, but we can group the systems into three main groups:

- 1. Traditional system (new construction and residential sector)**
Without height limitation, plasticised base plate can be installed without low profile and PEXa EVOH or PERT EVOH pipes of Ø16, Ø18 and Ø20mm.
- 2. Industrial and specific systems**
Installation of plates with compressive strength and installation of pipes providing higher flow and lower pressure drop, with Ø20mm.
- 3. Renovation and refurbishment systems**
In these cases, due to height limitations, it is necessary to install low-profile plasticised plates, using Ø16mm pipes in PEXa EVOH.

The floor finishes have different thermal resistances, being recommended for radiant air-conditioning systems those of lower resistance.

- 1. Ceramics and granites**
Most ceramic and granite floor finishes have a low thermal resistance. The surface transmits temperature quickly and efficiently, making it the perfect finish for underfloor heating and cooling systems.
- 2. Vinyl and linoleum**
This material offers low heat resistance due to its thin layer. Vinyl and linoleum types are suitable for use with underfloor heating but the temperature must not exceed 29 °C.
- 3. Timber**
Wood finishes perform well on underfloor heating, but are not suitable for installation on underfloor heating/cooling. The surface temperature should not exceed 29 °C and the manufacturer's instructions should be followed.

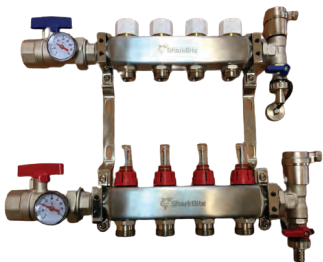
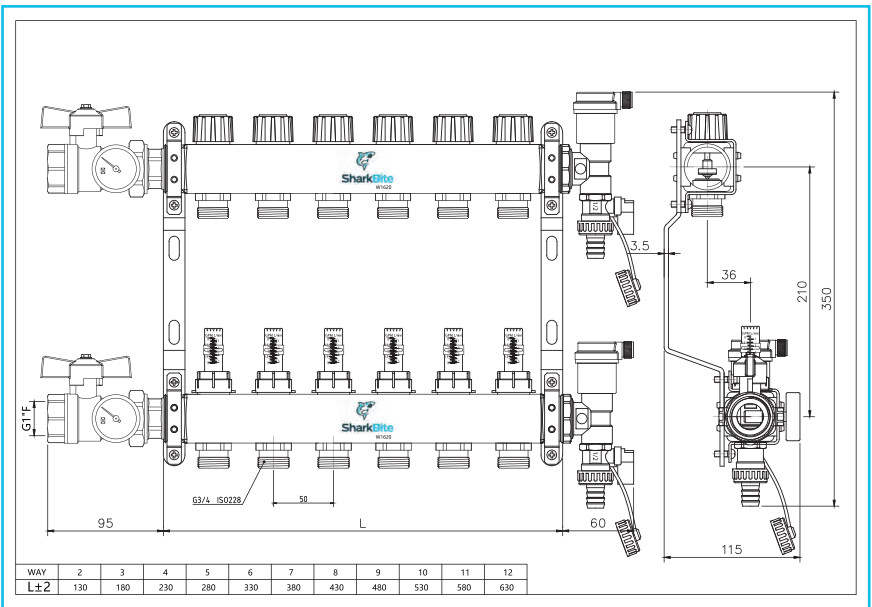


Stainless Steel Manifolds for Underfloor Radiant Heating

They consist of two multiple bars, one for the flow and one for the return, with ball shut-off valves and thermometer, drain/fill tap and automatic air vent on the flow and return. On the flow bar, each circuit has an easy-to-read adjustable flow meter. Each circuit on the return is fitted with a protection cap and integral control valve which allows the user to adjust the water volume, or can be removed for the fitting of an electric head/actuator.

Characteristics

- 1" stainless steel manifold
- Supplied pre-mounted on mounting plates
- Supply and return valves with thermometers
- Thermostatically controlled - Flow meters
- Automatic drain valves with fill and drain valve
- 3/4" Euroconus type threaded outlets (connectors not included)



Material

Body	304 Stainless Steel
Joints	Fibre
Fixing Bracket	Zinc Plated
Valves 1"	Nickel-Plated Brass
Purge/Tap Kit	Nickel-Plated Brass

Specifications

Maximum Service Pressure	10 bar
Maximum Temperature	90°C
Connections Manifold	1"
Connections Fittings	Euk 3/4"

Code	Description	A	B	C	D	E
MANA02	2 OUTPUTS	320mm	210mm	50mm	276mm	90mm
MANA03	3 OUTPUTS	320mm	210mm	50mm	326mm	90mm
MANA04	4 OUTPUTS	320mm	210mm	50mm	376mm	90mm
MANA05	5 OUTPUTS	320mm	210mm	50mm	426mm	90mm
MANA06	6 OUTPUTS	320mm	210mm	50mm	476mm	90mm
MANA07	7 OUTPUTS	320mm	210mm	50mm	526mm	90mm
MANA08	8 OUTPUTS	320mm	210mm	50mm	576mm	90mm
MANA09	9 OUTPUTS	320mm	210mm	50mm	626mm	90mm
MANA10	10 OUTPUTS	320mm	210mm	50mm	676mm	90mm
MANA11	11 OUTPUTS	320mm	210mm	50mm	726mm	90mm
MANA12	12 OUTPUTS	320mm	210mm	50mm	776mm	90mm

Ball Shut-off Wrenches



*Unit

Code	Description	Dimension
SKIT450001	RED	1"
SKIT450002	BLUE	1"

Ball Shut-off Wrenches with Thermometers



*Set

Code	Dimension
SKIT450013	1"

Euroconus Connection Fittings



Compatible with PEX and Multilayer

Code	Dimension
MFIT100003	EUK 3/4"-16
MFIT100006	EUK 3/4"-20

Pack Control



Code	Packaging
UFHC970360	1

Ball Shut-off Wrenches



Code	Description	Dimension
SN7MC1	2 TO 5 OUTPUTS	600 x 500
SN7MC2	6 TO 10 OUTPUTS	600 x 700
SN7MC3	11 TO 13 OUTPUTS	600 x 900

Curve-Guidance Tubes



Code	Dimension
F840	ø 16
F842	ø 20
F844	ø 25

Orientable Guidance-Curve



Code	Dimension
SN7CTFX16	ø 16
SN7CTFX20	ø 20

Manifold Extension Kit



*Price of the set

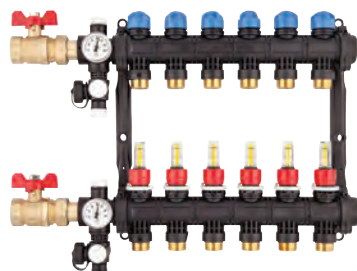
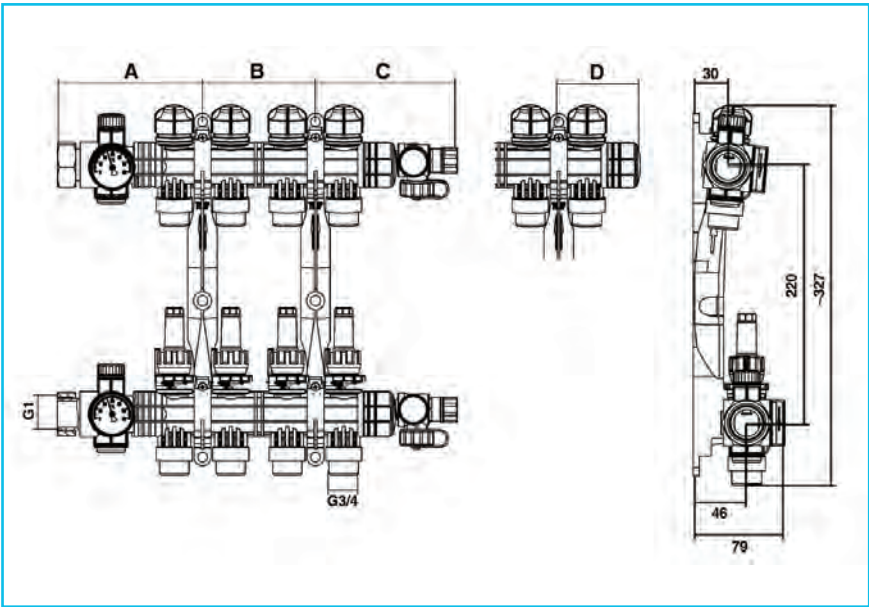
Code	Packaging
MEKIT01/2	1

Stainless Steel Manifolds for Underfloor Radiant Heating

These consist of two multiple bars, one for the supply and one for the return, with ball shut-off valves and thermometer, drain/fill tap and manual bleeder on the supply and return. On the flow bar, each circuit has an easy-to-read adjustable flow meter. Each circuit on the return is fitted with a protection cap and integral control valve that allows the user to adjust the water volume, or can be removed for the fitting of an electric head/actuator.

Characteristics

- 1" polyamide manifold
- Supply and return valves
- Thermostatically controlled - Flow meters
- Filling-emptying kit, manual drain and thermometer
- 3/4" euroconus type threaded outlets (connectors not included)



Material

Body	Polyamide
Joints	Fibre
Fixing Bracket	Polyamide
Valves 1"	Brass
Purge/Tap Kit	Polyamide

Specifications

Maximum Service Pressure	6 bar
Maximum Temperature	90°C
Connections Manifold	1"
Connections Fittings	Euk 3/4

Code	Description	A	B	C	D
80822RWC	2 OUTPUTS	72	100mm	76mm	23mm
80823RWC	3 OUTPUTS	129mm	100mm	76mm	23mm
80824RWC	4 OUTPUTS	129mm	100mm	126mm	73mm
80825RWC	5 OUTPUTS	129mm	150mm	126mm	73mm
80826RWC	6 OUTPUTS	129mm	200mm	126mm	73mm
80827RWC	7 OUTPUTS	179mm	200mm	126mm	73mm
80828RWC	8 OUTPUTS	179mm	200mm	176mm	123mm
80829RWC	9 OUTPUTS	179mm	250mm	176mm	123mm
80830RWC	10 OUTPUTS	229mm	250mm	176mm	123mm
80831RWC	11 OUTPUTS	229mm	300mm	176mm	123mm
80832RWC	12 OUTPUTS	229mm	300mm	226mm	173mm

Ball Shut-off Wrenches



*Set

Code	Description	Dimension
80835RWC	RED/BLUE	1"

Ball Shut-off Wrenches



Code	Description	Dimension
SN7MC1	2 TO 5 OUTPUTS	600 x 500
SN7MC2	6 TO 10 OUTPUTS	600 x 700
SN7MC3	11 TO 13 OUTPUTS	600 x 900

Purge



*Set

Code	Description	Dimension
80835RWC	POLYIMIDE	1/2"

Curve-Guidance Tubes



Code	Dimension
F840	ø 16
F842	ø 20
F844	ø 25

Purge



*Set

Code	Description	Dimension
80839RWC	POLYIMIDE	1"

Orientable Guidance-Curve



Code	Dimension
SN7CTFX16	ø 16
SN7CTFX20	ø 20

Pack Control



*Set

Code	Description	Dimension
80871RWC	POLYIMIDE	1"

Euroconus Connection Fittings



Compatible with PEX and Multilayer

Code	Dimension
MFIT100003	EUK 3/4"-16
MFIT100006	EUK 3/4"-20

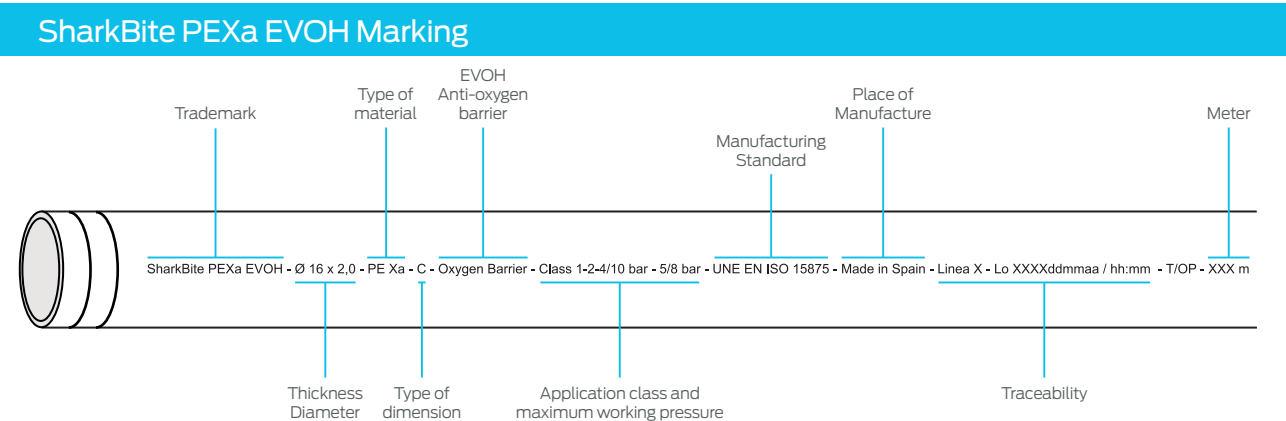
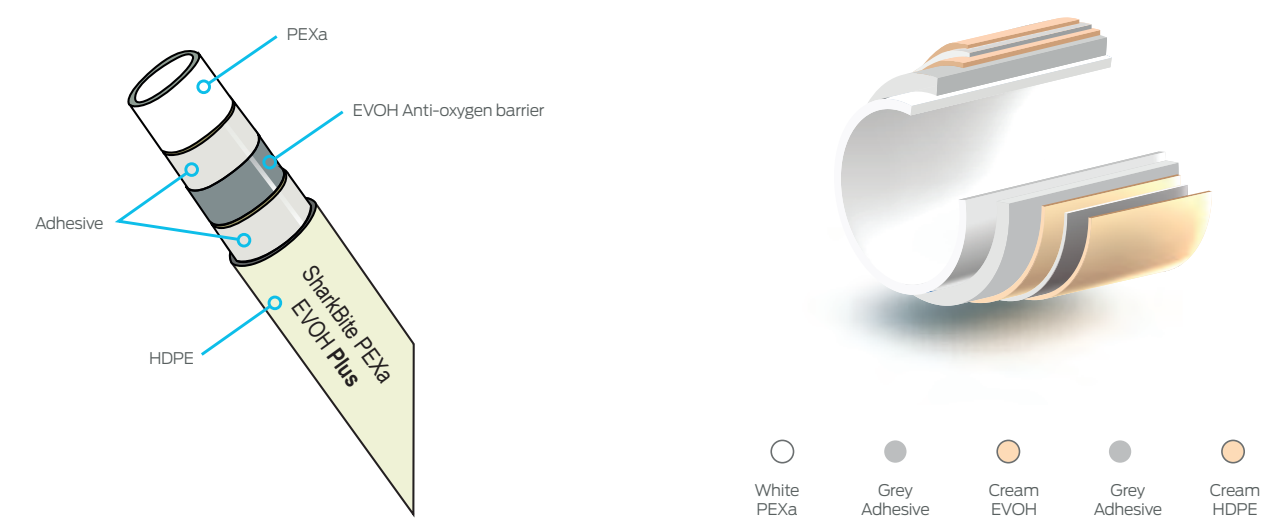
SharkBite PEXa EVOH Plus
5 Layers

APPLICATIONS

- PEXa cross-linked polyethylene piping by Peroxide System. 5-layer oxygen diffusion barrier
- Prevents oxidation of metal elements, such as the boiler and metal components. The outer layer is designed to protect the EVOH against mechanical damage
- Made of EVOH (ethylene-vinyl alcohol) coating for oxygen diffusion resistance according to DIN 4726
- Corrosion resistant - Excellent thermal memory - Lightweight and flexible
- Maximum temperature 95 °C / Minimum temperature -40 °C

Code	Colour	Dimension	Length
S816S4EVC100	Cream	ø 16 x 2.0	100
S816S4EVC120	Cream	ø 16 x 2.0	120
S816S4EVC200	Cream	ø 16 x 2.0	200
S816S4EVC240	Cream	ø 16 x 2.0	240
S816S4EVC500	Cream	ø 16 x 2.0	500
S816S32EVC100	Cream	ø 16 x 2.2	100
S816S32EVC120	Cream	ø 16 x 2.2	120
S816S32EVC200	Cream	ø 16 x 2.2	200
S816S32EVC240	Cream	ø 16 x 2.2	240
S816S32EVC500	Cream	ø 16 x 2.2	500
S817S5EVC200	Cream	ø 17 x 2.0	200
S817S5EVC500	Cream	ø 17 x 2.0	500
S820S5EVC120	Cream	ø 20 x 2.0	120
S820S5EVC240	Cream	ø 20 x 2.0	240
S820S32EVC100	Cream	ø 20 x 2.8	100
S820S32EVC120	Cream	ø 20 x 2.8	120
S820S32EVC200	Cream	ø 20 x 2.8	200
S825S5EVC100	Cream	ø 25 x 2.3	100
S825S32EVC100	Cream	ø 25 x 3.5	100
S832S5EVC50	Cream	ø 32 x 2.9	50
S832S32EVC50	Cream	ø 32 x 4.4	50
S816S4EVC4	Cream	ø 16 x 2.0	4 (160)
S816S32EVC4	Cream	ø 16 x 2.2	4 (160)
S820S5EVC4	Cream	ø 20 x 2.0	4 (120)
S820S32EVC4	Cream	ø 20 x 2.8	4 (120)
S825S5EVC4	Cream	ø 25 x 2.3	4 (80)
S825S32EVC4	Cream	ø 25 x 3.5	4 (80)
S832S5EVC4	Cream	ø 32 x 2.9	4 (48)
S832S32EVC4	Cream	ø 32 x 4.4	4 (48)

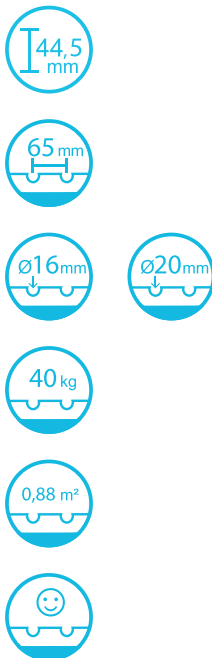
Manufactured according to ISO 15875



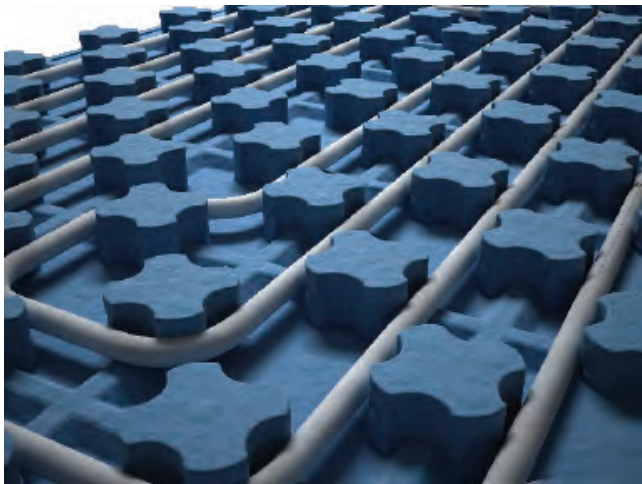
Low Profile Plasticised Base Plate



- Height:
- Pipe Passage:
- Pipe Diameter:
- Density:
- m2/plate:
- UNE-EN 1264:



Code	Dimension	Dens.	Packaging
SN7FP340	1310x670x44,5mm	40 kg	12 x caja

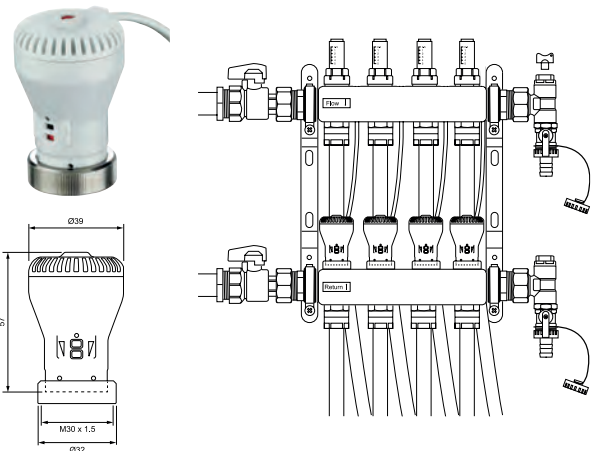


Control Regulation

Head - Multiple thermostatic actuator with a thermostatic wax element to transform electrical energy into movement. The compact design allows easy and quick installation in any position with two indicator windows (green and red).

- Clear indicator to show when open or closed
- Available for 24V or 230V

Code	Description	Dimension
SKIT450014	230V	M30
SKIT450015	24V	M30



Material

Function Mode	2- Posición, retorno de resorte sin tensión
Supply Voltage	24V DC/AC - 230V AC
Electrical Input Current	0.2A / 0.3A
Permanent Power Absorption	2.5 - 3W
Full Stroke Time	ca. 3 - 4 mins
Nominal Stroke	3mm
Nominal Spring Return Load	90N
Environment Temperature	0 °C to 50 °C
Storage Temperature	-20 °C to +70 °C
Cable Length	0.8M / 2 X 0.5mm²
Degree of Protection	IP42
Protection Class	Double insulation

Perimeter Band



Code	Dimension
SN7BPRS	80m

Pipe Clamp



Code	Dimension	Box A
JGUFHSTAPLE	60mm (ø 16)	300
JGUFHSTAPLE40	40mm (ø 16)	300

Fluidising additive (for mortar)



Code	Dimension
SN7ADIT	25 kg

Pipe Fixing Clip



Code	Dimension	Box A
JGUFHCLIP	16	100

Key Information

Terms and Conditions of Sale

All purchases are subject to our standard terms and conditions of sale, which can be found at <https://www.SharkBite.es/condiciones-generales/> (Reliance Valves and SharkBite).

Technical Information

RWC and its family of products are specifically designed and manufactured to the technical specifications set out in our Technical Specification Guides on our websites. All products must be selected, used and maintained in accordance with these technical specifications and checklists. It is the responsibility of end users to ensure that products are suitable for their application, are correctly installed and maintained, and are used in accordance with our technical guidelines. RWC operates a product development programme, and therefore reserves the right to modify or change the specification of our products without prior notice. All information in this publication is given in good faith, and is believed to be correct at the time of going to press.

Technical Support

At RWC, we offer installers all the support they need - before, during and after installation.



Technical Helpline

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With one of the largest technical sales teams in Spain, we offer free technical support and advice.



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The RWC logo, consisting of the letters "RWC" in a bold, blue, sans-serif font, positioned in the bottom right corner of the page. The background of the bottom right corner features abstract geometric shapes in blue and yellow.