Technical Data Sheet

Solder Ring

Products

C701SR
Solder Ring Equal Tee

C702SR
Solder Ring Reduced Branch Tee

C703SR
Solder Ring Reduced End Tee

C704SR
Solder Ring Reduced End And Branch Tee

C705SR
Solder Ring Reduced Both Ends Tee

C706SR
Solder Ring Reduced Three Ways Tee

C801SR
Solder Ring Equal Elbow

C803SFSR
Solder Ring Bent Tap Connector

C803SR
Solder Ring Street Elbow

C804SR
Solder Ring 45 Deg Elbow

C805SCSR
Solder Ring Bent Cylinder Union

C901SR
Solder Ring Straight, Reduced & Metric Imperial Coupling

C903SFSR
Solder Ring Straight Tap Connector

C904SR
Solder Ring Fitting Reducer

C905SCSR
Solder Ring Straight Cylinder Union

C923SR
Solder Ring Stop End

P717DRSR
Compression Solder Ring Female Branch Tee

P802TDRSR
Compression Solder Ring Male Elbow

P803DRSR
Compression Solder Ring Female Elbow

P803WPDRSR
Compression Solder Ring Wallplate Elbow

P902TDRSR
SR MALE ADAPTOR

P903DRSR
Compression Solder Ring Female Adaptor

SRMUC
Solder Ring Male Union Adaptor

Technical Information

Technical

Flowflex Solder Ring Fittings Specification

Flowflex Solder Ring Fittings, sizes 8mm to 54mm, manufactured in both copper and bronze, are a fast, reliable and economic method of joining BS EN 1057 copper tube.

Flowflex Solder Ring Fittings connect to copper tube through the process of capillary action with solder forming an easy, effective joint between the fitting and the tube.

They are pre-soldered, allowing for a quicker installation than Flowflex End Feed Fittings. They are lightweight for easy handling and lend themselves well to confined environments due to their compact sizing.

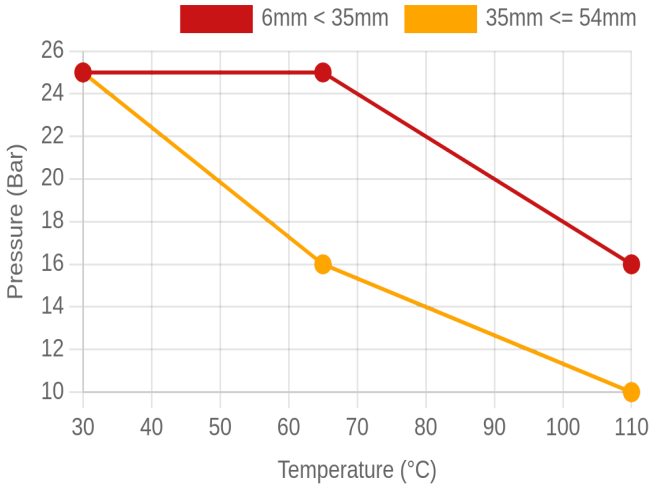
- Copper fittings manufactured to BS EN 1254-1:1998
- Gunmetal (bronze) fittings manufactured to BS EN 1254 4:1998
- KM Lead - Free Solder 99.304% Sn
- Marked with the Flowflex logo

Solder Ring Working Conditions

All working conditions assume that the components have been assembled and connected correctly, and adhere to their respective tube compatibility.

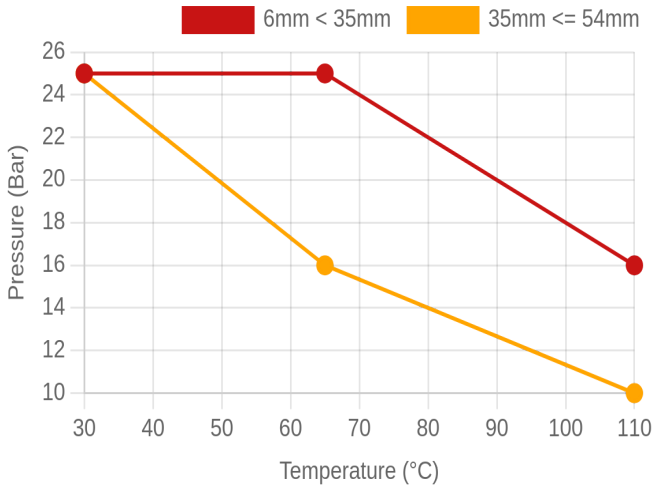
If you are planning to use our products in applications outside the scope of our recommendations, approval must be sought from us beforehand. Please contact us in these cases.

Solder - Tin:Silver - 95:5



Intermediate pressure ratings shall be obtained by interpolation

Solder - Tin:Copper - Remainder:3>0.4



Intermediate pressure ratings shall be obtained by interpolation

Flowflex Solder Ring Electrical Continuity

Equipotential Bonding forms an important part of an installation, which ensures that all metalwork may be earthed or at least has the same potential to reduce the risk of equipment damage and personal injury. Isolated fittings or valves are not required to be bonded.

Flowflex Solder Ring Fittings provide guaranteed electrical continuity when correctly assembled with BS EN 1057 Copper Tube.

After all plumbing work has been completed, always ensure continuity checks are conducted by a qualified electrician in accordance with regulations (BS 7671:2001).

Preparation

Selecting Pipe For Flowflex Soldered And Brazed Connections

Choosing the right pipe is essential for ensuring your installation is successful.

Soldered And Brazed Connections

Flowflex End Feed and Solder Ring fittings are designed to connect BS EN 1057 Copper tube, for water and gas in sanitary and heating applications.

Ensure the tube that you are using conforms to this specification, and that the tube outer diameter matches the size of the fitting. Ensure that both the tube and fitting are clean, in good condition and free from any damage or imperfections.

Assembly

How To Prepare Your Copper Pipe

Equipment

Tools

- Pipe Cutter
- Deburring Tool
- Hand Protection

Supplies

- Copper Pipe

Installation Steps

01

Cut Your Pipe To Size

Cut your pipe cleanly across the tube diameter using a good quality pipe cutter or rotary pipe cutter.

Cut Your Pipe Accurately

It is important to ensure that the pipe ends are clean and cut square. Failure to do so could impact on the quality of your jointing. If your cut is not flat, or your pipe is too short, the pipe may not hit the pipe stop compromising the joint integrity. Too long and you may introduce strain into the whole system.

02

Clean The Socket Of The Pipe

Using your deburring tool, make sure the inside of the pipe is smooth and will not interfere with the flow.

03

Clean The Outside Of The Pipe

Clean the outside of the pipe, making sure that there is no pipe residue, dirt or grit is present near the joint. Failure to remove all oxides and any material where the fittings and tube overlap can interfere with the capillary action and thus will reduce the strength of the soldered joint, resulting in failure.

To the same effect, over zealous cleaning can result in too much material being removed, resulting in a loose fit and failure.

How To Install Flowflex Solder Ring Fittings

Equipment

Tools

- Flame
- Hand & Eye Protection

Supplies

- Flux
- Flowflex Solder Ring Fittings
- Copper Pipe

Installation Steps

01

Apply Flux

As soon as possible after cleaning, flux should be applied sparingly to the inside of the fitting and also the outside of the pipe at the point of overlap. This will help the capillary action and induce a stronger joint.

02

Assemble

Insert the tube into the fitting until the pipe reaches the base of the pipe stop. A small twist can also be applied to ensure even coverage of the flux. At this point, excess flux should be wiped away using a rag.

Before proceeding to the next step, a uniform space around the circumference of the joint should be sought to allow for good capillary action. Excessive space can lead to cracking of the solder.

03

Heating

When heating, the entire circumference of the fitting should be heated evenly. It is recommended that you preheat the pipe and the fitting before applying direct heat.

Do Not Overheat The Joint

Do not overheat the joint or direct the flame into the face of the fitting cup. Overheating could burn the flux, which will compromise its effectiveness and the solder will not enter the joint properly.

04

Cooling And Cleaning

You should allow the joint to cool naturally. Cooling the joint forcefully could stress the joint.

When cool, remove any excess flux and residue with a wet rag.

How To Assemble Threaded Connections

Threaded connections typically feature taper male or parallel female BSP threads. The most common sizes also have parallel male BSP threads. These fittings are used to connect pipework to boilers, pumps, or backplate elbows.

By following these guidelines, you can ensure secure, reliable connections in your plumbing systems, enhancing overall performance and longevity.

Taper Male Threads

For taper male threads, apply a small amount of inert jointing compound or PTFE tape before installation. This ensures a secure and leak-free connection.

Parallel Male Threads

When installing parallel male threads, such as those used for cisterns and cylinders, a high-quality jointing washer should be used to create a reliable seal and prevent leaks.

Tightening Guidance For Threaded Connections

Size	Torque (Nm)
1/2"	75
3/4"	100
1"	125
1 1/4"	160
1 1/2"	200
2"	250
2 1/2"	300
3"	370
4"	465

Commissioning

Testing Your Install

We strongly recommend that all systems are thoroughly tested upon completion. Whenever possible, completed systems should also be flushed to remove any debris, ensuring optimal performance and longevity.

Regular testing and flushing not only ensure the reliability of your installation but also prevent future maintenance issues, promoting a smooth and efficient system operation.

Testing Hydraulic Installations

For hydraulic-based installations, the system should be tested to 1.5 times the working pressure. This helps identify any potential issues and confirms the system's integrity. If higher test pressures are required for your specific application, please contact us for further guidance and support.