



Allpex

**Integral Solder Ring Fittings
to BS 864.2 and BS EN 1254.1**



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Allpex Integral Solder Ring Fittings, Technical Specifications.

Integral Solder Ring Fittings:

This catalogue contains the standard range of "ALLPEX" Solder Ring (integral solder ring) type fittings using lead free Capillary solder suitable for use with copper tube sizes from 8 to 67 mm O.D.



This range of integral solder ring capillary fittings manufactured from copper or copper alloys is used for jointing copper tube in hot and cold water services, heating systems, for domestic & commercial applications and industrial applications such as gas, air distribution systems. Each fitting contains a precise amount of lead free solder for forming a perfect joint.

An Allpex integral solder ring fitting is precision-made and uses the principle of capillary attraction to allow molten solder to fill the gap between the fitting socket and the tube forming a sealed joint when cooled.

A ring of high quality, lead-free solder is positioned in each capillary socket. The solder is released when heat is applied to the fitting over the contact-surface between socket & tube due to capillary action forming a reliable joint, without the need for additional solder. Allpex integral solder ring fittings are light and neat, easy to handle and install. In addition, the fitting's smooth lines minimises flow restrictions and are unobtrusive on exposed pipelines or to insulation sleeves or pipe fittings.

Product Marking:

All "ALLPEX" fittings are identified with one of the following marks: *

"AL" "ALLPEX", , , "A" depending on the manufacturing plant.

Specifications and Standards:

All "ALLPEX" Solder Ring type fittings are made to following specifications.

BS 864: Part 2 Specification for capillary and compression fittings of copper and copper alloy for copper tubes.

BS EN 1254 Part 1 Specification for copper and copper alloy fittings with capillary ends for soldering and brazing for use with copper tubes.

BS EN 29453 Specification for soft solders. (previously BS 219)

BS 1010 Part 2 Draw off taps, above ground stopvalves and union ends.

BS 4504: section 2 & 3.3 Specification for copper alloy and composite flanges.

BS 21 and ISO 7 Specification for threads.

Other specifications that are also complied with are DIN 2865, ISO 21016, NF E29-591, KIWA No.: 50 and GIVEG.

Raw Materials: Allpex integral solder ring fittings are manufactured from copper, gunmetal or DZR copper alloy.

Copper Fittings: Allpex Solder Ring fittings from 8mm to 67mm are made of Copper grade SF-Cu material No.: 2.0090 according to DIN 1787, equivalent to Cu-DHP / C106 according to BS 6017 and ISO 1337. Material is oxygen-free 99.9% DHP copper, which can be readily soldered or brazed.

Bronze Gunmetal Fittings:

Bronze / Gunmetal fittings are available from 8mm to 67mm. They are made of G-Cu Sn 5 Zn 5 Pb 5 (=Rg5) material No.: 21096.01 according to DIN 1705, equivalent to Cu Pb 5 and Sn 5, Zn 5 according to BS 1400 LG and ISO 1338. These fittings contain 85% Copper and 5% each of Sn, Zn and Pb and are immune from de-zincification, and can be soldered or brazed.

Corrosion-Resistant inner surfaces:

Capillary solder fittings made to BS 864 / EN 1254 must fulfill the following requirements with regard to residual grease or carbon on inner surface: -

When applying the HNO₃ test, no black residues may remain on the surface. Single black particles are permitted provided they do not form a film. The amount of residual grease (measured as carbon) must not exceed 1.0mg/dm².

Copper Capillary Solder Fittings in sizes upto 54mm are subjected to even more stringent quality and test requirement in that we will accept not more than 0.68mg/dm² of grease on the inner surface of the fittings.

Dimensions:

Capillary solder fittings have diameters with very strictly controlled tolerances as specified in BS 864.2 & BS EN 1254.1 enabling fittings to be connected to each other or to pipe to BS 2871.1 / BS EN 1057 and comply with the dimensions and tolerances as set out in these standards.

Technical Service & Advice:

Our team of specialist engineers will be pleased to offer any help or advice for installations and applications. **

Installation Guidelines:

The relevant industry guidelines must be followed when these solder or threaded fittings are being used for gas or water applications as published by the relevant authorities.

It is a recommended good practice to check all fittings for defects or damage before the installation.

Installation details for jointing Allpex integral solder ring fittings are as follows: -
Select the correct size of tube and fittings for the job. Ensure the ends of the tube are cut square and remove any burr from inside or outside. Re-round the ends with a re-rounding tool if using fully annealed tube i.e. EN 1057 – R220

-The reliability of soldered joints is greatly influenced by the type of flux that is used. The tube and fitting should always be cleaned before fluxing.

-If one or more ends of an Allpex fitting are to remain unmade a short length of correctly sized, uncleaned tube should be inserted into the ends to be left unjointed. Keep this section cool by wrapping a wet rag around it while heating the remaining ends.

-**Remaking joints:** Joints made with Allpex fittings are difficult to disconnect due to the intermetallic bonding between the solder and the copper of the fitting and However, in some situations, joints can be remade by fluxing the tinned portion of the tube and reinserting this into the fitting. Then heat the joint and hand-feed lead-free solder. If a new tube is to be used, clean and flux the tube before assembly.

-When installing fittings with parallel threads, a good quality jointing tape or washer should be used as appropriate.







Assembly Steps:






- 1) Clean the inside of the fitting socket and the outside of the tube with fine sandpaper, or steel wool or Allpex cleaning pad
- 2) Using a suitable brush, apply adequate but not excessive Allpex soldering flux to both the outside surface of the tube and the inside surface of the fitting socket.
- 3) Insert the tube into the fitting until it reaches the tube stop, then wipe off any excess flux. Heat the assembled joint until a complete ring of solder appears at the mouth of the fitting.
- 4) Allow the joint to cool without disturbance. Clean the joint generally.


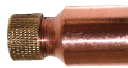




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Declaration of non-obligation: We must declare that all illustrations, drawings, measurements and recommendations contained in this catalogue are without obligation and that we reserve the right to effect changes and modifications at any time and without prior notice. Errors and Omissions excused.












CODE	SIZE	BAG	BOX
SC10, Straight Coupler, CxC			
			
SC10-8	8	10	1000
SC10-10	10	10	1000
SC10-12	12	10	1000
SC10-15	15	25	700
SC10-22	22	25	250
SC10-28	28	10	150
SC10-35	35	5	90
SC10-42	42	5	50
SC10-54	54	1	30
SC10-67	67	1	30
SC10S- Slip Coupling, CxC (without stop)			
			
SC10S-15	15	10	700
SC10S-22	22	10	250
SC10S-28	28	5	200
SC10X- Full Crossover, CxC			
			
SC10X-15	15	10	120
SC10X-22	22	10	60
SC10XF- Part Crossover, FtgxC			
			
SC10XF-15	15	10	120
SC10XF-22	22	10	60
SC11MI, Metric x IMP Coupler, CxC			
			
SC11MI-15D	15x1/2	10	500
SC11MI-22E	22x3/4	10	200
SC11MI-28F	28x1	10	150
SC11MI-35G	35x1 1/4	5	90
SC11, Reducing Coupler, CxC			
			
SC11-158	15x8	10	1000
SC11-1510	15x10	10	1000
SC11-1512	15x12	10	750
SC11-2215	22x15	25	300
SC11-2815	28x15	10	200
SC11-2822	28x22	10	150
SC11-3515	35x15	5	120
SC11-3522	35x22	5	120
SC11-3528	35x28	5	100
SC11-4222	42x22	5	100
SC11-4228	42x28	5	80
continued.....			







CODE	SIZE	BAG	BOX
SC11, Reducing Coupler, CxC			
continued from previous column.....			
SC11-4235	42x35	5	80
SC11-5435	54x35	1	30
SC11-5442	54x42	1	30
SC11F, Fitting Reducer, FtgxC			
			
SC11F-108	10x8	10	1000
SC11F-158	15x8	10	1000
SC11F-1510	15x10	25	1000
SC11F-1512	15x12	10	750
SC11F-2215	22x15	25	400
SC11F-2815	28x15	10	200
SC11F-2822	28x22	10	200
SC11F-3515	35x15	5	120
SC11F-3522	35x22	5	120
SC11F-3528	35x28	5	100
SC11F-4215	42x15	5	100
SC11F-4222	42x22	5	100
SC11F-4228	42x28	5	80
SC11F-4235	42x35	5	80
SC11F-5415	54x15	1	50
SC11F-5422	54x22	1	50
SC11F-5428	54x28	1	40
SC11F-5435	54x35	1	30
SC11F-5442	54x42	1	30
SC11F-6742	67x42	1	20
SC11F-6754	67x54	1	20
SC11FL, Long Fitting Reducer, FtgxC			
			
SC11FL-158	15x8	10	750
SC11FL-1510	15x10	10	750
SC16, ST Swivel Connector, CxFi			
			
SC16-15D	15x1/2	25	400
SC16-15E	15x3/4	10	250
SC16-22E	22x3/4	10	200
SC16C, ST Cylinder Connector, CxFi			
			
SC16C-22F	22x1	10	150
SC16C-28F	28x1	10	150
SC17, End Cap			
			
SC17-8	8	10	1000
SC17-10	10	10	1000
SC17-15	15	25	1000
SC17-22	22	10	500
SC17-28	28	5	200
continued.....			

CODE	SIZE	BAG	BOX
SC17, End Cap			
continued from previous column.....			
SC17-35	35	5	150
SC17-42	42	5	100
SC17-54	54	5	60
SC17-67	67	1	50
SC17A, Air Release Vent Cap, CxVent			
			
SC17A-15	15	25	1000
SC17A-22	22	10	400
SC17P, Air Release Vent Plug, FtgxVent			
			
SC17P-15	15	10	1000
SC20, Elbow, 90 Deg, CxC			
			
SC20-8	8	10	750
SC20-10	10	10	700
SC20-12	12	10	600
SC20-15	15	25	500
SC20-22	22	25	150
SC20-28	28	10	90
SC20-35	35	5	50
SC20-42	42	5	30
SC20-54	54	5	15
SC20-67	67	1	10
SC20F, Street Elbow, FtgxC			
			
SC20F-15	15	10	400
SC20F-22	22	10	200
SC20F-28	28	10	100
SC20F-35	35	5	50
SC20F-42	42	5	15
SC20F-54	54	1	10
SC21, Reducing Elbow, CxC			
			
SC21-2215	22x15	25	200
SC21-2822	28x22	25	150
SC25, Obtuse Elbow, 135/45, CxC			
			
SC25-15	15	10	450
SC25-22	22	10	150
SC25-28	28	10	100
SC25-35	35	5	50
SC25-42	42	5	30
SC25-54	54	1	15
SC25-67	67	1	10



CODE	SIZE	BAG	BOX
SC25F, Fitting Obtuse Elbow, CxFtg			
			
SC25F-15	15	10	450
SC25F-22	22	10	150
SC25F-28	28	10	100
SC26, Bent Swivel Connector, CxFi			
			
SC26-15D	15x1/2	10	400
SC26-22E	22x3/4	5	100
SC26C, Bent Cylindrical Connector, CxFi (CONE SPIGOT)			
			
SC26C-22E	22x3/4	10	90
SC26C-22F	22x1	10	90
SC30, Equal Tee, CxCxC			
			
SC30-8	8	10	500
SC30-10	10	10	500
SC30-12	12	10	400
SC30-15	15	25	300
SC30-22	22	25	100
SC30-28	28	10	50
SC30-35	35	5	30
SC30-42	42	5	20
SC30-54	54	1	10
SC30-67	67	1	5
SC31, Reducing Tee, CxCxC			
			
SC31-151510	15x15x10	10	300
SC31-151522	15x15x22	10	150
SC31-221515	22x15x15	10	150
SC31-221522	22x15x22	10	100
SC31-222215	22x22x15	25	150
SC31-222228	22x22x28	5	50
SC31-281515	28x15x15	5	50
SC31-281528	28x15x28	5	50
SC31-282215	28x22x15	5	50
SC31-282222	28x22x22	5	50
SC31-282228	28x22x28	5	50
SC31-282815	28x28x15	5	50
SC31-282822	28x28x22	5	50
SC31-353515	35x35x15	1	40
SC31-353522	35x35x22	1	40
SC31-353528	35x35x28	1	40
SC31-424215	42x42x15	1	30
SC31-424222	42x42x22	1	30
SC31-424228	42x42x28	1	30
continued.....			

CODE	SIZE	BAG	BOX
SC31, Reducing Tee, CxCxC			
continued from previous column.....			
SC31-424235	42x42x35	1	25
SC31-545415	54x54x15	1	20
SC31-545422	54x54x22	1	20
SC31-545428	54x54x28	1	20
SC31-545435	54x54x35	1	15
SC31-545442	54x54x42	1	10
SG12, Male Coupler, CxMi (BSPT taper)			
			
SG12-8B	8x1/4	10	300
SG12-10B	10x1/4	10	300
SG12-10C	10x3/8	10	300
SG12-15B	15x1/4	10	250
SG12-15C	15x3/8	25	250
SG12-15D	15x1/2	25	250
SG12-22E	22x3/4	10	150
SG12-28F	28x1	5	140
SG12-35G	35x1/4	1	50
SG12-42H	42x1 1/2	1	30
SG12-54I	54x2	1	20
SG12U, St Male Union Connector, CxMi (BSPT taper) (Copper tail)			
			
SG12U-22E	22x3/4	10	150
SG12U-22F	22x1	5	100
SG12U-28F	28x1	5	80
SG12F, Male Fitting Adaptor, FtgxMi			
(Used to convert copper sockets to male thread)			
			
SG12F-8B	8x1/4	10	300
SG12F-10B	10x1/4	10	300
SG12F-10C	10x3/8	10	300
SG12F-12C	12x3/8	10	250
SG12F-15B	15x1/4	10	250
SG12F-15D	15x1/2	10	250
SG12F-22E	22x3/4	10	150
SG12F-28F	28x1	5	80
SG12F-35G	35x1/4	1	50
SG12F-42H	42x1 1/2	1	30
SG12F-54I	54x2	1	20
SG14, Female Coupler, CxFi			
			
SG14-8B	8x1/4	10	300
SG14-10B	10x1/4	10	300
SG14-10C	10x3/8	10	300
SG14-15C	15x3/8	10	250
SG14-15B	15x1/4	10	250
SG14-15D	15x1/2	25	300
SG14-22E	22x3/4	10	200
SG14-28F	28x1	5	80
continued.....			

CODE	SIZE	BAG	BOX
SG14, Female Coupler, CxFi			
continued from previous column.....			
SG14-35G	35x1/4	1	50
SG14-42H	42x1 1/2	1	30
SG14-54I	54x2	1	20
SG14F, Female Fitting Adaptor, FtgxFi			
(Used to convert copper sockets to female thread)			
			
SG14F-8B	8x1/4	10	300
SG14F-10B	10x1/4	10	300
SG14F-10C	10x3/8	10	300
SG14F-12D	12x1/2	10	300
SG14F-15B	15x1/4	10	250
SG14F-15D	15x1/2	10	300
SG14F-22E	22x3/4	10	200
SG14F-28F	28x1	5	80
SG14F-35G	35x1/4	1	50
SG14F-42H	42x1 1/2	1	50
SG14F-54I	54x2	1	25
SG22, Male Elbow, CxMi (BSPT taper)			
			
SG22-15D	15x1/2	10	300
SG22-22E	22x3/4	10	150
SG22-28F	28x1	5	80
SG22U, Bent Male Union, CxMi (BSPT taper)			
			
SG22U-22E	22x3/4	5	100
SG24, Female Elbow, CxFi			
			
SG24-15D	15x1/2	10	250
SG24-22E	22x3/4	10	100
SG24-28F	28x1	5	80
SG29, Wall Plate Elbow, CxFi			
			
SG29-15D	15x1/2	10	200
SG29-22E	22x3/4	5	80
SG34, Female Tee, CxCxFi			
			
SG34-1515D	15x15x1/2	10	150
SG34-15D15	15x1/2x15	10	150
SG34-2222D	22x22x1/2	10	100
SG34-22D22	22x1/2x22	10	100
SG34-2222E	22x22x3/4	10	100