

• Compression • Solder Ring • End Feed



About us

Flowflex Handbook

Contents

2014 sees Flowflex Components celebrate its 60th year in business. Established in 1954 the Flowflex name has been synonymous with the manufacture and supply of high quality non-ferrous plumbing fittings for use with all applications in the plumbing and heating trade.

Since 1977 the company has operated from a single 6 acre site with easy access to international road, rail, sea and air links. Based in Derbyshire, in the heart of the United Kingdom, Flowflex provides its customers with a comprehensive product portfolio; supplying a wide range of compression; copper and copper alloy plumbing fittings and valves in a variety of configurations and sizes.

The manufacturing facilities cover hot press forging and an array of machining centres in the manufacture of the brass components. Recent investment in new plant and new developments in the internal sales office, IT, order processing and distribution have all been undertaken to ensure the quality of service and support to customers is continually improved.

For 60 years the well established Flowflex brand names have enjoyed an enviable reputation for product quality, reliability and service. Today products are not only sold throughout Europe but also to other major markets in the Middle East and Far East. Flowflex continues to demonstrate its ability to supply consistently high quality components by its ISO 9001:2008 accreditation.

Customers can be reassured as products are independently tested and certified to ensure they comply with British and International Standards; and where appropriate, Flowflex holds a number of specific product approvals for the fittings and valves supplied.

1954 - 2014

Celebrating Sixty Years In Business







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Introduction

Manufactured in the UK to the most exacting standards Flowflex demonstrates its ability to supply consistently high quality fittings. Flowflex is a British Standards Institution registered company (ISO9001:2008) and operates a quality management system for the manufacture and supply of components and fittings for use in all applications in the plumbing and heating industry.

All Flowflex Compression Fittings are guaranteed against manufacturing defects for 25 years, when installed in accordance with our instructions on specified tube materials and applications.

Flowflex Compression fittings are designed to join copper tubes that are manufactured to BS EN 1057. Flowflex Compression fittings create a mechanical joint when tightening the nut, compressing the ring onto the tube.

Flowflex Compression fittings are suitable for use on hot and cold water services, heating installations, fuel services and industrial engineering applications. Fittings are suitable in low pressure gas pipework in domestic premises using copper tube manufactured to EN 1057.

Compression fittings are available in four finishes to connect to copper, stainless steel and polyethylene tube with appropriate liner:

- Standard brass fittings.
- Dezincification resistant (DZR) fittings.
- Chrome plate finish, for use with chrome plated copper tubes.
- Nickel plate finish, for use with stainless steel tubes.

Guidelines for ordering purposes:

To order a 15mm straight coupling in Standard Brass, DZR Brass, Natural or Chrome Plate finish, see example below:

Code	Finish
P901.05	Standard Brass
P901DR.05	DZR Brass
P901CP.05	Standard Brass Chrome Plate
P901DRCP.05	DZR Brass Chrome Plate

Compression Fittings Range Made in the U.K.

Manufactured from brass bar which conforms to British (CZ) and European (CW) material designs:

Code	Finish
CW614N (CZ121)	Standard Brass Fittings
CW617N (CZ122)	Standard Brass Fittings
CW602N (CZ132)	DZR Fittings

- Compression Ends manufactured to EN1254-2.
- Male and Female Threaded Ends manufactured to EN 1254-4.
- WRAS approved (8mm 54mm).
- A Kitemark Licence is held for an extensive range of Compression Fittings.
- Marked Flowflex UK EN 1254-2 on Cap Nut.
- DR fittings marked Lamontite on Cap Nut.





Flowflex Components Ltd supply UK made Compression fittings throughout Europe; Fittings comply with the following European Approvals:

GASTEC	Approval for Compression Range
KIWA	Approval for Compression Range
ETA	Denmark Approval
SITAC	Sweden Approval
STF	Finland Approval







Compression Fittings Range

Working Temperature and Pressures

When correctly assembled with copper tubes manufactured to BS EN 1057 Compression fittings can operate at the temperatures and pressures below:

Maximum Temperatures	Max pressures for nominal diameters from 6mm up to and including 54mm
°C	BAR
30	16
65	10
110	6
120	5

Note 1: Intermediate pressure rating shall be determined by interpolation.

Note 2: Certain designs of compression fittings are suitable for use at temperatures / pressure ratings outside those given in this table. For such application the advice of the manufacturer should be sought.

Tightening Compression Fittings Guidance:			
12mm	1 1/4 Turns		
15mm	1 1/4 Turns		
18mm	1 1/4 Turns		
22mm	1 1/4 Turns		
28mm	1 1/4 Turns		
35mm	3/4 Turns		
42mm	3/4 Turns		
54mm	3/4 Turns		

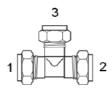
Dimensions and Codes:

Equal fittings with uniform connections are shown with one size. E.G. 15mm

Reduced fittings with two connections are shown with the largest size first. E.G. 22 x 15mm

Tees and other reduced fittings of unequal sizes are shown with the largest end first, then the opposite run, followed by the branch.

E.G. 22 x 22 x 15mm



Jointing Techniques for Compression fittings with Copper Tube to BS EN1057

- 1. Ensure the tube conforms to BS EN 1057.
- 2. Select the correct fitting for the size of the tube to be connected.



3. Ends of the tube for jointing must be cut cleanly across the tube diameter and be free from contamination, surface damage or defects.



4. Enter the tube through the thrust nut and compression ring full into the fitting until positive contact is made with the tube stop.



5. Make sure the sealing faces of the joint and threads are clean and free from swarf and any contamination. A little light oil applied to the threads of the fittings is useful in reducina friction during tightening. With correctly made joints, jointing compounds should not be required, although in certain circumstances these may offer practical advantages.



6. Care should be taken that the compression olive is not placed over any identification mark or other indention on the tube.



- 7. Hand tighten the thrust nuts until ALL slack in joint is taken up.
- 8. Complete tightening should be made using a suitable spanner. Ensure the axial alignment of the tube and fittings during tightening operation and thereafter. Overtightening should be avoided as this may destroy the watertight seal. (For guidance see table on previous page)

Male and Female Joints

- Taper threads should be assembled using a WRAS Approved sealant or tape. E.G. PTFE.
- Parallel threads should be assembled using washers WRAS Approved.

Notes: Some authorities and System Specifications preclude the use of jointing compounds or require that only certain proprietary material may be used. Before utilising jointing compound it is the responsibility of the installer to ensure compliance.

Compression Fittings Range

Compression Fittings Range

Straight Coupling

Code	Size	Weight (g)	Bag Qty	Box Qty
P901.01	6mm	34	20	300
P901.02	8mm	30	10	300
P901.03	10mm	58	10	200
P901.04	12mm	51	20	200
P901.05	15mm	69	20	200
P901.08	22mm	118	10	100
P901.09	28mm	171	5	50
P901.10	35mm	283	5	50
P901.11	42mm	397	2	30
P901.12	54mm	675	2	20

Reducing Coupling

Code	Size	Weight (g)	Bag Qty	Box Qty
P901.13	8 x 6mm	42	20	300
P901.139	10 x 6mm	64	20	300
P901.14	10 x 8mm	46	20	300
P901.15	12 x 8mm	43	20	200
P901.16	12 x 10mm	55	20	200
P901.17	15 x 8mm	60	20	200
P901.18	15 x 10mm	70	20	200
P901.19	15 x 12mm	65	20	200
P901.20	22 x 15mm	109	10	100
P901.21	28 x 15mm	157	5	100
P901.22	28 x 22mm	180	5	50
P901.225	35 x 22mm	272	5	50
P901.23	35 x 28mm	269	5	30
P901.2361	42 x 35mm	355	2	20
P901.24	54 x 42mm	644	1	20

Made in the U.K. Compression fittings are available in Standard Brass, DZR Brass, Natural, Nickel or Chrome Plate Finish.





Code	Size	Weight (g)	Bag Qty	Box Qty
P901DO.1	15mm	164	20	100
P901DO.2	22mm	233	10	100
P901DO.3	28mm	127	5	50



Code	Size	Weight (g)	Bag Qty	Box Qty
P901RP.1	15 x 75mm	138	20	100
P901RP.2	15 x 100mm	150	20	100
P901RP.3	15 x 125mm	226	10	100
P901RP.5	22 x 100mm	256	10	50

Straight Male Iron Coupling - Parallel



			- a	5 0
Code	Size	Weight (g)	Bag Qty	Box Qty
P902.01	6mm x 1/8"	21	20	300
P902.02	6mm x 1/4"	31	20	300
P902.03	8mm x 1/8"	24	20	300
P902.04	8mm x 1/4"	27	20	300
P902.05	8mm x 3/8"	36	20	300
P902.06	8mm x 1/2"	49	20	300
P902.07	10mm x 1/4"	39	20	200
P902.09	10mm x 1/2"	63	20	200
P902.08	10mm x 3/8"	46	20	200
P902.10	12mm x 1/4"	36	20	200
P902.11	12mm x 3/8"	55	20	200
P902.12	12mm x 1/2"	56	20	200
P902.13	15mm x 1/4"	51	20	200
P902.14	15mm x 3/8"	53	10	200
P902.15	15mm x 1/2"	65	20	200
P902.17	15mm x 3/4"	87	20	200
P902.20	22mm x 1/2"	101	10	100
P902.21	22mm x 3/4"	112	10	100
P902.22	22mm x 1"	131	10	100
P902.221	28mm x 3/4"	146	5	50
P902.23	28mm x 1"	151	5	50
P902.234	28mm x 1 1/4"	234	5	50
P902.235	35mm x 1"	239	5	40
P902.24	35mm x 1 1/4"	260	5	50
P902.25	42mm x 1 1/2"	301	2	20
P902.26	54mm x 2"	542	2	20

Made in the U.K. Compression fittings are available in Standard Brass, DZR Brass, Natural, Nickel or Chrome Plate Finish.

Straight Male Iron Coupling - Taper



Code	Size	Weight (g)	Bag Qty	Box Qty
P902T.02	6mm x 1/4"	27	20	300
P902T.04	8mm x 1/4"	27	20	300
P902T.05	8mm x 3/8"	35	20	300
P902T.06	10mm x 1/4"	41	20	300
P902T.07	10mm x 3/8"	47	20	200
P902T.08	10mm x 1/2"	59	20	200
P902T.09	12mm x 1/4"	36	20	200
P902T.10	12mm x 3/8"	36	20	200
P902T.11	12mm x 1/2"	56	20	200
P902T.12	15mm x 1/4"	54	20	200
P902T.13	15mm x 3/8"	61	20	200
P902T.14	15mm x 1/2"	51	20	200
P902T.18	22mm x 3/4"	106	10	100
P902T.182	22mm x 1"	141	10	100
P902T.19	28mm x 1"	148	5	50

Straight Adaptor Extended Thread c/w Back Nut



Code	Size	Weight (g)	Bag Qty	Box Qty
P902B.1	15mm x 1/2"	105	20	100
P902B.2	22mm x 3/4"	216	10	50
P902B.3	28mm x 1"	257	5	50
P902B.4	35mm x 1 1/4"	359	5	30
P902B.5	42mm x 1 1/2"	466	2	20
P902B.6	54mm x 2"	930	2	10

Straight Female Iron Coupling



Code	Size	Weight (g)	Bag Qty	Box Qty
P903.002	6mm x 1/4"	36	20	300
P903.01	8mm x 1/4"	33	10	300
P903.02	8mm x 3/8"	42	20	300
P903.03	8mm x 1/2"	43	20	300
P903.04	10mm x 1/4"	45	20	200
P903.05	10mm x 3/8"	47	20	200
P903.06	10mm x 1/2"	55	20	200
P903.07	12mm x 1/4"	41	20	200
P903.08	12mm x 3/8"	41	20	200
P903.09	12mm x 1/2"	52	20	200
P903.10	15mm x 1/4"	65	20	200
P903.11	15mm x 3/8"	57	20	200
P903.12	15mm x 1/2"	60	20	200
P903.14	15mm x 3/4"	84	20	200
P903.141	15mm x 1"	132	10	100
P903.17	22mm x 1/2"	100	10	100
P903.18	22mm x 3/4"	114	10	100
P903.19	22mm x 1"	150	10	100
P903.195	28mm x 3/4"	212	5	50
P903.20	28mm x 1"	161	5	50
P903.201	28mm x 1 1/4"	228	5	50
P903.202	35mm x 1"	363	5	30
P903.21	35mm x 1 1/4"	235	5	50
P903.22	42mm x 1 1/2"	333	2	30
P903.23	54mm x 2"	567	2	20

Made in the U.K. Compression fittings are available in Standard Brass, DZR Brass, Natural, Nickel or Chrome Plate Finish.

Straight Tap Connector (Swivel Coupling)



Code	Size	Weight (g)	Bag Qty	Box Qty
P903SF.1	15mm x 1/2"	49	25	200
P903SF.2	15mm x 3/4"	111	25	100
P903SF.3	22mm x 3/4"	163	25	100

Flanged Tank Connector



Code	Size	Weight (g)	Bag Qty	Box Qty
P921.1	15mm	115	20	160
P921.2	22mm	176	10	80
P921.3	28mm	227	5	50

Straight Adaptor Short Thread



Code	Size	Weight (g)	Bag Qty	Box Qty
P903ST.1	15mm x 1/2"	51	20	200
P903ST.2	15mm x 3/4"	65	20	100
P903ST.3	22mm x 3/4"	76	10	100

Made in the U.K. Compression fittings are available in Standard Brass, DZR Brass, Natural, Nickel or Chrome Plate Finish.

Compression Fittings Range

One Piece Reducer



Code	Size	Weight (g)	Bag Qty	Box Qty
J17DR.14	8 x 6mm	3	20	500
J17DR.15	10 x 8mm	3	20	500
J17DR.16	12 x 10mm	4	20	500
J17DR.165	15 x 8mm	18	20	500
J17DR.17	15 x 10mm	14	20	500
J17DR.18	15 x 12mm	10	20	500
J17DR.20	18 x 15mm	12	20	500
J17DR.21	22 x 15mm	25	20	500
J17DR.22	22 x 18mm	20	20	500
J17DR.27	28 x 12mm	78	10	300
J17DR.28	28 x 15mm	68	10	300
J17DR.29	28 x 22mm	38	10	200
J17DR.31	35 x 15mm	140	10	150
J17DR.32	35 x 22mm	104	10	150
J17DR.33	35 x 28mm	62	10	150
J17DR.42	42 x 22mm	200	10	100
J17DR.43	42 x 28mm	150	10	100
J17DR.44	42 x 35mm	84	10	100
J17DR.53	54 x 28mm	400	10	50
J17DR.54	54 x 35mm	270	10	50
J17DR.55	54 x 42mm	210	10	50

Made in the U.K. Compression fittings are available in Standard Brass, DZR Brass, Natural, Nickel or Chrome Plate Finish.

Stop End



Code	Size	Weight (g)	Bag Qty	Box Qty	
P923.1	8mm	22	10	300	
P923.2	10mm	34	10	300	
P923.3	12mm	31	20	300	
P923.4	15mm	45	20	300	
P923.5	22mm	60	10	200	
P923.6	28mm	119	5	100	
P923.7	35mm	176	5	50	
P923.8	42mm	249	2	50	
P923.9	54mm	498	2	30	

90 Deg Equal Elbow



Code	Size	Weight (g)	Bag Qty	Box Qty
P801.01	6mm	39	20	300
P801.02	8mm	33	10	300
P801.03	10mm	64	10	200
P801.04	12mm	55	20	200
P801.05	15mm	75	20	200
P801.08	22mm	134	10	100
P801.09	28mm	216	5	50
P801.10	35mm	438	5	30
P801.11	42mm	594	2	20
P801.12	54mm	892	1	10

Compression Fittings Range

90 Deg Reducing Elbow Code Size Weight (s) Pos Ob Pos Ob

Code	Size	Weight (g)	Bag Qty	Box Qty
P801.035	12 x 10mm	55	20	200
P801.036	15 x 10mm	78	20	200
P801.085	22 x 15mm	105	10	100
P801.092	28 x 15mm	217	5	50
P801.098	28 x 22mm	202	5	50

90 Deg Male Iron Elbow - Parallel



Code	Size	Weight (g)	Bag Qty	Box Qty	
P802.002	6mm x 1/4"	59	20	300	
P802.01	8mm x 1/4"	35	20	300	
P802.02	10mm x 1/4"	57	20	200	
P802.03	10mm x 3/8"	60	20	200	
P802.031	10mm x 1/2"	74	20	200	
P802.04	12mm x 1/4"	50	20	200	
P802.05	12mm x 3/8"	58	20	200	
P802.051	12mm x 1/2"	77	20	200	
P802.07	15mm x 3/8"	66	20	200	
P802.08	15mm x 1/2"	75	20	200	
P802.09	15mm x 3/4"	107	20	100	
P802.11	22mm x 1/2"	117	10	100	
P802.12	22mm x 3/4"	121	10	100	
P802.13	22mm x 1"	161	10	100	
P802.14	28mm x 1"	198	5	50	
P802.141	28mm x 3/4"	254	5	50	
P802.15	35mm x 1 1/4"	319	5	20	
P802.16	42mm x 1 1/2"	646	2	20	
P802.17	54mm x 2"	921	1	10	

Made in the U.K. Compression fittings are available in Standard Brass, DZR Brass, Natural, Nickel or Chrome Plate Finish.

90 Deg Male Iron Elbow - Taper



Code	Size	Weight (g)	Bag Qty	Box Qty
P802T.02	6mm x 1/4"	36	20	300
P802T.04	8mm x 1/4"	32	20	300
P802T.045	8mm x 3/8"	49	20	200
P802T.05	10mm x 1/4"	52	20	200
P802T.06	10mm x 3/8"	41	20	200
P802T.07	10mm x 1/2"	77	20	200
P802T.09	12mm x 3/8"	53	20	200
P802T.10	12mm x 1/2"	66	20	200
P802T.11	15mm x 1/4"	71	20	200
P802T.12	15mm x 3/8"	66	20	200
P802T.13	15mm x 1/2"	66	20	200
P802T.14	22mm x 3/4"	143	10	100
P802T.15	22mm x 1"	181	10	100
P802T.16	28mm x 1"	219	5	50

90 Deg Female Iron Elbow - Parallel



Code	Size	Weight (g)	Bag Qty	Box Qty
P803.01	8mm x 1/4"	52	20	300
P803.012	8mm x 1/2"	80	20	300
P803.02	10mm x 1/4"	71	20	200
P803.03	10mm x 3/8"	67	20	200
P803.031	10mm x 1/2"	88	20	200
P803.04	12mm x 1/4"	68	20	200
P803.05	12mm x 3/8"	50	20	200
P803.051	12mm x 1/2"	77	20	200
P803.06	15mm x 1/2"	80	20	200

90 Deg Femaile Iron Elbow - Parallel Cont.

Code	Size	Weight (g)	Bag Qty	Box Qty
P803.055	15mm x 3/8"	99	20	200
P803.063	15mm x 3/4"	81	20	100
P803.068	22mm x 1/2"	133	10	100
P803.07	22mm x 3/4"	148	10	100
P803.08	22mm x 1"	178	10	100
P803.085	28mm x 3/4"	271	5	50
P803.09	28mm x 1"	233	5	50
P803.10	35mm x 1 1/4"	359	5	25
P803.11	42mm x 1 1/2"	652	2	20
P803.12	54mm x 2"	1256	1	10



Code	Size	Weight (g)	Bag Qty	Box Qty
P803WP.05	12mm x 1/2"	138	20	100
P803WP.2	15mm x 1/2"	135	20	100
P803WP.231	15mm x 3/4"	212	20	100
P803WP.4	22mm x 1/2"	153	10	50
P803WP.5	22mm x 3/4"	211	10	50

Made in the U.K. Compression fittings are available in Standard Brass, DZR Brass, Natural, Nickel or Chrome Plate Finish.







Code	Size	Weight (g)	Bag Qty	Box Qty
P701.01	6mm	56	20	200
P701.02	8mm	46	10	200
P701.03	10mm	90	20	200
P701.04	12mm	79	20	200
P701.05	15mm	108	20	100
P701.08	22mm	195	10	50
P701.09	28mm	302	5	40
P701.10	35mm	480	5	20
P701.11	42mm	689	2	10
P701.12	54mm	1118	1	10

Tee - Reduced Centre Branch

Code	Size	Weight (g)	Bag Qty	Box Qty
P702.116	15 x 15 x 10mm	109	20	100
P702.125	15 x 15 x 12mm	104	20	100
P702.16	22 x 22 x 15mm	165	10	50
P702.161	22 x 22 x 12mm	181	10	50
P702.19	28 x 28 x 15mm	262	10	40
P702.20	28 x 28 x 22mm	275	5	40
P702.21	35 x 35 x 22mm	361	5	30
P702.22	35 x 35 x 15mm	450	5	30

Compression Tee

1st and 2nd Size on the run 3rd Size on the branch



Made in the U.K. Compression fittings are available in Standard Brass, DZR Brass, Natural, Nickel or Chrome Plate Finish.

Tee - Reduced Centre Branch Cont.



Code	Size	Weight (g)	Bag Qty	Box Qty
P702.23	35 x 35 x 28mm	470	5	30
P702.24	42 x 42 x 15mm	726	2	20
P702.25	42 x 42 x 22mm	522	2	20
P702.26	42 x 42 x 28mm	737	2	20
P702.27	42 x 42 x 35mm	711	2	16
P702.33	54 x 54 x 15mm	1017	1	10
P702.335	54 x 54 x 22mm	986	1	10
P702.34	54 x 54 x 28mm	999	1	10
P702.36	54 x 54 x 35mm	1022	1	10
P702.37	54 x 54 x 42mm	1024	1	10

Tee - Reduced End Branch



Code	Size	Weight (g)	Bag Qty	Box Qty
P703.15	22 x 15 x 22mm	93	10	50
P703.17	28 x 15 x 28mm	307	5	50
P703.18	28 x 22 x 28mm	292	5	40

Compression Tee

1st and 2nd Size on the run 3rd Size on the branch



Made in the U.K. Compression fittings are available in Standard Brass, DZR Brass, Natural, Nickel or Chrome Plate Finish.

Compression Fittings Range

Tee - Reduced End and Centre Branch

Code	Size	Weight (g)	Bag Qty	Box Qty
P704.14	22 x 15 x 15mm	160	10	100
P704.171	28 x 22 x 22mm	268	5	50
P704.168	28 x 15 x 15mm	190	5	50
P704.224	35 x 28 x 28mm	494	5	30

Tee - Reduced Both Ends Code Weight (g) Bag Qty Box Qty P705.123 12 x 12 x 15mm 109 20 100 P705.13 15 x 15 x 22mm 153 10 100 P705.165 22 x 22 x 28mm 314 5 40



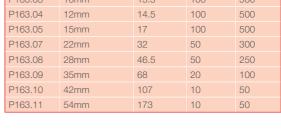
Made in the U.K. Compression fittings are available in Standard Brass, DZR Brass, Natural, Nickel or Chrome Plate Finish.



Code	Size	Weight (g)	Bag Qty	Box Qty
P737.1	15 x 1/2" x 15mm	127	20	100
P737.2	22 x 1/2" x 22mm	180	10	50
P737.3	22 x 3/4" x 22mm	216	10	50
P737.4	28 x 1/2" x 28mm	288	5	50

Cap Nut







Blank Nut With Washer

Code	Size	Weight (g)	Bag Qty	Box Qty
P163B.01	6mm	10	100	1000
P163B.2	8mm	10	100	1000
P163B.03	10mm	17	100	500
P163B.035	12mm	17	100	500
P163B.4	15mm 1/2" B.S.P.	26	100	500
P163B.6	22mm	47	50	300
P163B.5	3/4" B.S.P.	49	50	300
P163B.8	28mm	55	20	250
P163B.7	1" B.S.P.	79	20	250
P163B.71	35mm	100	20	100
P163B.07	42mm	179	10	50
P163B.08	54mm	312	10	50



Made in the U.K. Compression fittings are available in Standard Brass, DZR Brass, Natural, Nickel or Chrome Plate Finish.

Brass Olives Code Size Weight (g) Bag Qty Box Qty

Code	Size	Weight (g)	Bag Qty	Box Qty
P165DR.01	6mm	0.65	100	2000
P165DR.02	8mm	1	100	2000
P165DR.03	10mm	1.35	100	2000
P165DR.04	12mm	1.75	100	2000
P165DR.05	15mm	2	100	2000
P165DR.07	22mm	3.55	100	1500
P165DR.08	28mm	7.25	50	500
P165DR.09	3/4"	4	50	1000
P165DR.10	35mm	8.6	50	300
P165DR.11	42mm	10.3	10	500
P165DR.12	54mm	19.6	10	400





Code	Size	Weight (g)	Bag Qty	Box Qty
P172.01	1/4" x 1/8"	4	50	500
P172.02	3/8" x 1/8"	12	50	500
P172.03	3/8" x 1/4"	15	50	500
P172.04	1/2" x 1/8"	26	20	200
P172.05	1/2" x 1/4"	20	20	300
P172.06	1/2" x 3/8"	12	50	400
P172.07	3/4" x 1/2"	30	10	300
P172.08	1" x 1/2"	80	10	200
P172.09	1" x 3/4"	58	10	440
P172.10	1 1/4" x 1/2"	88	1	100
P172.11	1 1/4" x 3/4"	136	10	100
P172.12	1 1/4" x 1"	102	10	100
P172.14	1 1/2" x 3/4"	124	1	100
P172.15	1 1/2" x 1"	117	1	100
P172.16	1 1/2" x 1 1/4"	114	1	100
P172.19	2" x 1"	328	5	50
P172.20	2" x 1 1/4"	200	5	50
P172.21	2" x 1 1/2"	165	1	50





			l	
Code	Size	Weight (g)	Bag Qty	Box Qty
P168DR.002	10 x 6mm	7	20	500
P168DR.005	10 x 8mm	4	20	500
P168DR.003	12 x 8mm	4	20	500
P168DR.006	12 x 10mm	5	20	500
P168DR.01	15 x 8mm	20	10	500
P168DR.02	15 x 10mm	17	10	500
P168DR.03	15 x 12mm	12	20	500
P168DR.04	22 x 15mm	26	10	400
P168DR.004	22 x 12mm	35	20	200
P168DR.05	28 x 15mm	58	20	300
P168DR.06	28 x 22mm	41	10	300
P168DR.064	35 x 15mm	140	10	100
P168DR.065	35 x 22mm	92	10	100
P168DR.07	35 x 28mm	59	10	100
P168DR.075	42 x 15mm	184	10	100
P168DR.076	42 x 22mm	158	10	100
P168DR.08	42 x 28mm	125	10	100
P168DR.09	42 x 35mm	72	10	100
P168DR.010	54 x 15mm	446	10	50
P168DR.110	54 x 22mm	409	10	50
P168DR.1101	54 x 28mm	359	10	50
P168DR.10	54 x 35mm	281	10	50
P168DR.11	54 x 42mm	208	10	50

Introduction

Installations Instructions

67mm, 76mm & 108mm
- Large Size Compression Fittings.

Preliminaries

-arge Size Compression Fittings

Select the correct size of tube and fitting for the job. Ensure that both are clean, in good condition and free from damage and imperfections.

Copper Tube should conform to BS EN 1057 and be of hard (R290) or half - hard (R250) tempers.

Preparation

- 1 Cut the tube square using a rotary tube cutter wherever possible. If hacksaw is used to cut the tube, a fine toothed blade should be used.
- 2 Remove any burr from the inside and outside of the tube ends using a fine toothed file.

Jointing Techniques

- 1 Place the flange and compression ring on to the tube.
- 2 Insert the tube firmly into the fittings body, ensuring that the compression ring seats centrally and that the tube makes firm contact with the tube in the body.
- 3 Bring up the compression flange, and tighten the nuts by hand. Using a spanner continue to tighten the nuts diagonally in increments on ½ turn, to a minimum of 2 turns and maximum of 2 ½ turns.

DO NOT OVER TIGHTEN THE NUTS

- 4 The compression flange should be parallel to the face of the body to indicate that a sound joint has been made.
- 5 If after assembling the joint in accordance with the instructions above a slight weep is experienced - as occasionally may happen - it will readily be corrected by the application of a smear of an approved sealing compound to the sealing faces.

Materials Used

Bronze parts to BS1400 LG2 and German alloy RG7 Brass Pins & Nuts CZ121

Working Temperatures and Pressures

Service Temperature °C	Bar pressure		PSI
30	16	x14	224
65	10	x14	140
110	6	x14	84
120	3	x14	42













Large Size Compression Fittings 67 - 108mm



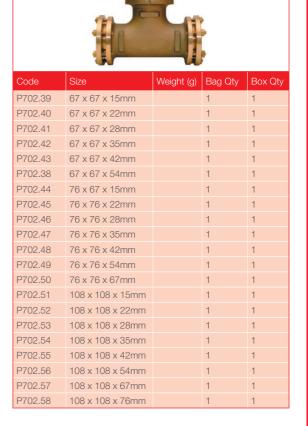
8630

Bent Male Connector				
Code	Size	Weight (g)	Bag Qty	Box Qty
P802.18	67mm	3500	1	1
P802.19	76mm	4430	1	1





Tee - Reduced Branch

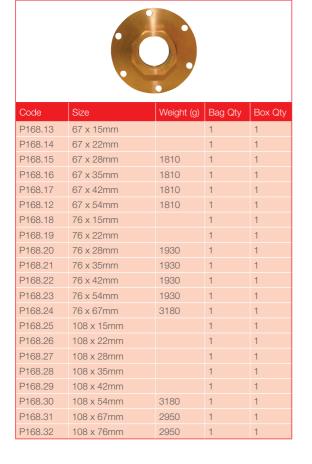


arge Size Compression Fittings 67 - 108mm

P801.15

108mm











Large Size Compression Fittings 67 - 108mm

Reducers for Fittings

Introduction

Flowflex Solder Ring Fittings are manufactured in Copper and Brass, complying with international recognised standards.

Flowflex Solder Ring fittings are a fast, reliable and economic solution to the assembly of copper tube which are manufactured to BS EN 1057. A ring of high quality lead – free solder is located in each fitting. Secure jointing is achieved through capillary action as the pre soldered fitting is heated to make both an easy and effective connection, without the need to use additional solder.

Flowflex is a British Standards Institution registered company (ISO9001:2008) and operates a quality management system for the manufacture and supply of components and fittings for use in all applications in the plumbing and heating industry.

All Flowflex Solder Ring Fittings are guaranteed against manufacturing defects for 25 years, when installed in accordance with our instructions on specified tube materials and applications.

- Available in sizes from 8mm to 54mm
- Copper fittings manufactured to EN1254-1: 1998
- Gunmetal (Bronze) fittings manufactured to EN1254-4
- WRAS approved
- Marked with the Flowflex Logo
- Marked with the Kitemark Symbol
- KM Lead Free Solder 99.304% Sn

Suitable for use on hot and cold water services, heating installations, fuel services and industrial engineering applications. Fittings are suitable in low pressure gas pipework in domestic premises using copper tube manufactured to EN 1057.



Working Temperature and Pressures

Flowflex Solder Ring fittings are designed to join copper tubes to BS EN 1057. The Flowflex range of Solder Ring fittings are designed for operation at the temperatures and pressures in the table below:

Typical examples of soldering alloys		Maximum temperature (1) °C	Maximum for nomina (1) BA	l diameters (2)
				Over 34mm up to 54mm
II	Tin/silver 95/5%	30	25	25
III	III Tin/copper Cu 3% Max 0.4% min.	65	25	16
	Remainder Sn	110	16	10

- (1) For use in applications outside the scope of this table, the approval of the manufacturer should be obtained.
- (2) Intermediate pressure ratings shall be obtained by interpolation.

Sopper Capillary Lead Free Solder Ring Fittings

Jointing Techniques for Solder Ring fittings with Copper Tube BS EN1057

- 1 Equipment used when jointing Solder Ring Fittings
 - Blow Lamp
 - Wire Brush
 - Steel Wool
 - Flux

Sopper Capillary Lead Free Solder Ring Fittings



- 2 Ensure the tube conforms to BS EN1057.
- 3 Select the correct fitting for the size of the tube to be connected.



4 Ends of the tube for jointing must be cut cleanly across the tube diameter and be free from contamination, surface damage or defects.



- 5 Clean the socket of the fitting with a wire brush.
- 6 Clean the outside diameter of the with fine steel wool.
- 7 Apply flux to the socket and the outside diameter of the tube.



- 8 Push fittings onto copper tube to the full depth of socket and make joint by applying heat evenly until solder appears between copper tube and fitting.
- 9 Remove excess solder if necessary..

Dimensions & Codes:

Equal fittings with uniform connections are shown with one size.

e.g. 15mm

Reduced fittings with two connections are shown with the largest size first.

e.g. 22 x 15mm

Tees and other reduced fittings of unequal sizes are shown with the largest end first, then the opposite run, followed by the branch.



e.g. 22 x 22 x 15mm

				∇
KM15C	15mm	165	25	1000
KM22C	22mm	311	25	400
KM28C	28mm	538	10	200
Fitting Reduc	er			\$
KM2215FR	22 x 15mm	250	25	750
KM2815FR	28 x 15mm	389	10	500
KM2822FR	28 x 22mm	421	10	350
				₩
KM15E90	15mm	206	25	1000
KM22E90	22mm	414	25	400
KM28E90	28mm	747	10	200
90 Deg Street				\heartsuit
KM15EST	15mm	186	25	1000
KM22EST	22mm	429	25	400
45 Deg Obtus	se Equal Elbow			\Diamond
KM15E45	15mm	196	25	1000
KM22E45	22mm	389	25	400
KM28E45	28mm	657	10	200
Equal Tee				₩
KM15T	15mm	308	25	500
KM22T	22mm	638	25	250
KM28T	28mm	1139	10	120
Tee - Reduce	d Branch			∇
KM222215T	22 x 22 x 15mm	518	25	300
KM282815T	28 x 28 x 15mm	887	10	180
KM282822T	28 x 28 x 22mm	997	10	150
Tee - Reduce	d End Branch			\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
KM221522T	22 x 15 x 22mm	623	25	250
Tee - Reduce	d Centre and End			₩
KM221515T	22 x 15 x 15mm	518	25	300
Stop End				₩
KM15SE	15mm	94	25	2000
KM22SE	22mm	189	25	800

Copper Capillary Lead Free Solder Ring Fittings

Straight Coupling



Code		Weight (g)	Bag Qty	Box Qty
C901SR.02	8mm	48	25	5000
C901SR.03	10mm	66	25	3000
C901SR.04	12mm	85	25	2000
C901SR.05	15mm	165	25	1000
C901SR.08	22mm	311	25	400
C901SR.09	28mm	538	10	200
C901SR.10	35mm	1040	5	180
C901SR.11	42mm	1572	5	100
C901SR.12	54mm	2286	2	60

Metric / Imperial Coupling



		Weight (g)	Bag Qty	Box Qty
C901SR.27	15mm x ½"	100	25	1000
C901SR.25	22mm x ¾"	260	25	400
C901SR.26	28mm x 1"	450	10	300
C901SR.28	35mm x 1 1/4"	900	10	200

Reducing Coupling



Code		Weight (g)	Bag Qty	Box Qty
C901SR.17	15 x 8mm	141	25	1500
C901SR.18	15 x 10mm	144	25	1000
C901SR.19	15 x 12mm	149	10	1500
C901SR.20	22 x 15mm	270	25	750
C901SR.21	28 x 15mm	671	10	350
C901SR.22	28 x 22mm	505	25	350
C901SR.231	35 x 22mm	960	5	300
C901SR.23	35 x 28mm	966	5	200
C901SR.236	42 x 28mm	1480	5	40
C901SR.2361	42 x 35mm	1480	5	40
C901SR.239	54 x 35mm	1480	5	40
C901SR.24	54 x 42mm	1480	5	40

Female Iron Straight Coupling



Code		Weight (g)	Bag Qty	Box Qty
P903SR.11	15mm x 3/8"	33	25	200
P903SR.12	15mm x 1/2"	44	25	200
P903SR.18	22mm x 3/4"	74	25	100
P903SR.20	28mm x 1"	112.6	10	100
P903SR.21	35mm x 1 1/4"	1680	5	100
P903SR.22	42mm x 1 1/2"	1680	5	40
P903SR.23	54mm x 2"	4670	2	40

Male Iron Straight Coupling - Taper



Code		Weight (g)	Bag Qty	Box Qty
P902TSR.12	15mm x 1/4"	33.8	25	200
P902TSR.14	15mm x 1/2"	36.4	25	200
P902TSR.18	22mm x 3/4"	61.2	25	200
P902TSR.19	28mm x 1"	91.4	5	50
P902TSR.20	35mm x 1 1/4"	91.4	5	40
P902TSR.21	42mm x 1 1/2"	226.4	5	30
P902TSR.22	54mm x 2"	397.2	2	30

Fitting Reducer

Copper Capillary Lead Free Solder Ring Fittings



Code	Size	Weight (g)	Bag Qty	Box Qty
C904SR.16	10 x 8mm	117	25	2000
C904SR.17	15 x 8mm	117	25	2000
C904SR.18	15 x 10mm	124	25	1000
C904SR.19	15 x 12mm	136	10	1000
C904SR.20	22 x 15mm	250	25	750
C904SR.21	28 x 15mm	389	10	500
C904SR.22	28 x 22mm	421	10	3500
C904SR.232	35 x 15mm	580	5	300
C904SR.231	35 x 22mm	760	5	250
C904SR.23	35 x 28mm	830	5	200
C904SR.233	42 x 15mm	954	5	150
C904SR.234	42 x 22mm	1026	5	200
C904SR.236	42 x 28mm	1005	5	150
C904SR.2361	42 x 35mm	1390	5	200

Fitting Reducer Cont



Code	Size	Weight (g)	Bag Qty	Box Qty
C904SR.237	54 x 15mm	1650	2	100
C904SR.2375	54 x 22mm	1650	2	100
C904SR.238	54 x 28mm	1894	2	90
C904SR.239	54 x 35mm	1874	2	90
C904SR.24	54 x 42mm	2185	2	90

Female Adaptor



		Weight (g)		
FA.1512	15mm x 1/2"	50	10	200
FA.2234	22mm x 3/4"	80	5	100
FA.281	28mm x 1"	120	5	50
FA.35114	35mm x 1 1/4"	1700	1	50
FA.42112	42mm x 1 1/2"	1700	1	20
FA.542	54mm x 2"	5000	1	20

Straight Male Union

Code		Weight (g)	Bag Qty	Box Qty
SRMUC.1512	15mm x 1/2"	136	10	200
SRMUC.2234	22mm x 3/4"	192	5	100
SRMUC.281	28mm x 1"	310	5	50
SRMUC.35114	35mm x 1 1/4"	481	1	50
SRMUC.42112	42mm x 1 1/2"	687	1	20
SRMUC.542	54mm x 2"	951	1	20

Straight Female Union Code Size Weight (a) Bag Qty Box Qty

Code		Weight (g)	Bag Qty	Box Qty
SRFUC.1512	15mm x 1/2"	142	10	200
SRFUC.2234	22mm x 3/4"	206	5	100
SRFUC.281	28mm x 1"	327	5	50
SRFUC.35114	35mm x 1 1/4"	498	1	50
SRFUC.42112	42mm x 1 1/2"	707	1	20
SRFUC.542	54mm x 2"	987	1	20



2267

3472

5

2

60

30



C801SR.11

C801SR.12

42mm

54mm



Copper Capillary Lead Free Solder Ring Fittings



Code		Weight (g)	Bag Qty	Box Qty
P803SR.06	15mm x 1/2"	61	25	200
P803SR.068	22mm x 1/2"	74.6	25	100
P803SR.07	22mm x 3/4"	105.8	25	100







5350

2

20

C701SR.12

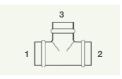
54mm

Tee - Reduced Centre Branch

Solder Ring Tee

1st and 2nd size on the run 3rd size on the branch





Sopper Capillary Lead Free Solder Ring Fittings

Copper Capillary Lead Free Solder Ring Fittings

Code		Weight (g)	Bag Qty	Box Qty
C702SR.27	42 x 42 x 35mm	2990	5	40
C702SR.33	54 x 54 x 15mm	3393	2	20
C702SR.34	54 x 54 x 22mm	3393	2	20
C702SR.35	54 x 54 x 28mm	3735	2	20
C702SR.36	54 x 54 x 35mm	3862	2	20
C702SR.37	54 x 54 x 42mm	4600	1	20



Code		Weight (g)	Bag Qty	Box Qty
C703SR.15	22 x 15 x 22mm	623	25	250
C703SR.17	28 x 15 x 28mm	1064	25	250
C703SR.18	28 x 22 x 28mm	1130	10	100
C703SR.19	35 x 15 x 35mm	170	5	90
C703SR.20	35 x 22 x 35mm	1000	5	90
C703SR.21	35 x 28 x 35mm	1730	5	90
C703SR.22	42 x 28 x 42mm	281	5	40
C703SR.23	42 x 35 x 42mm	295	5	40
C703SR.24	54 x 42 x 54mm	552	1	20





850

10

150



28 x 22 x 15mm













Introduction

Flowflex End Feed Fittings, which are manufactured in both Copper and Bronze, are a fast, reliable and economic method of joining copper tubes that are manufactured to BS EN 1057. The End Feed joint is created through the process of capillary action as solder is applied to the End Feed fitting to make an easy, effective connection.

Flowflex is a British Standards Institution registered company (ISO9001:2008) and operates a quality management system for the manufacture and supply of components and fittings for use in all applications in the plumbing and heating industry.

All Flowflex End Feed Fittings are guaranteed against manufacturing defects for 25 years, when installed in accordance with our instructions on specified tube materials and applications.

The quality of materials used and the adoption of rigorous quality control has allowed Flowflex End Feed fittings to obtain the conformity to the following standards.

- Available in sizes 6mm to 54mm.
- Copper 5000 series fittings manufactured to FN 1254-1: 1998
- Bronze 4000 series manufactured to EN1254-4
- Marked with the Flowflex Logo
- WRAS Approved

Suitable for use on hot and cold water services, heating installations, fuel services and industrial engineering applications. Fittings are suitable in low pressure gas pipework in domestic premises using copper tube manufactured to EN 1057.







Working Temperature and Pressures

Flowflex End Feed fittings can be assembled using a variety of soft or hard solders (brazing alloy). Their working temperatures and pressures vary according to which solder has been used. When correctly assembled with copper tube to BS EN 1057, the applicable temperatures and pressures are indicated in the table below.

ex	Typical amples of soldering alloys	Maximum temperature (1)	nominal (1)	oressures for diameters (2) AR	
			From 6mm up to 34mm	Over 34mm up to 54mm	
		30	16	16	
1	Lead/tin 50/50% or 60/40%	65	10	10	
		110	6	6	
	Tin/silver 95/5%	30	25	25	
I	Tin/copper Cu 3% Max 0.4% min.	65	25	16	
	Remainder Sn	110	16	10	

- (1) For use in applications outside the scope of this table, the approval of the manufacturer should be obtained.
- (2) Intermediate pressure ratings shall be obtained by interpolation.

NOTE Soldering alloys with lead and brazing alloys with cadmium are not permitted in installations for water for human consumption

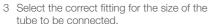
Jointing Techniques for 8mm to 54mm (soft solder)

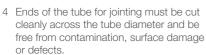
The reliability of soft soldered joints is influenced by the type of flux used. Special care should be taken when choosing the correct flux.

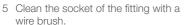
- 1 Select Equipment
 - Blow Lamp
 - Wire Brush
 - Steel Wool
 - Solder
 - Flux

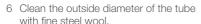
Sopper Capillary End Feed Fittings

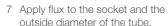
2 Ensure the tube conforms to the specification. Flowflex End Feed Fittings are to be installed with copper tubes that conform to BS EN 1057.











8 Push fittings onto copper tube to full depth of socket and make Joint by applying heat evenly until solder appears between copper tube and fitting.

9 Remove excess solder if necessary.











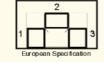
Dimensions & Size Description

Equal fittings with uniform connections are shown with one size. **E.G. 15mm**

Reduced fittings with two connections are shown with the largest size first. **E.G. 22 x 15mm**

Code (European)

Tees and other reduced fittings of unequal sizes are shown with the largest end first, then the branch, followed by the remaining end on the run.



E.G. 5130R.221522

Size Description (U.K.)

Tees and other reduced fittings of unequal sizes are shown with the largest end first, then the opposite run followed by the branch **F.C.** 22 x 23 x

1 UK Specification

followed by the branch. *E.G.* 22 x 22 x 15mm

Straight Coupling



Code	Size	Weight (g)	Bag Qty	Box Qty
5270.08	8mm	3.5	10	5000
5270.10	10mm	3	10	3000
5270.12	12mm	4	10	2000
5270.15	15mm	8	25	1000
5270.22	22mm	19	25	500
5270.28	28mm	28	10	300
5270.35	35mm	48	5	200
5270.42	42mm	71	5	100
5270.54	54mm	135	2	50

Metric / Imperial Coupling



Code	Size	Weight (g)	Bag Qty	Box Qty
C901EF.245	15mm x 1/2"	7	25	1000
C901EF.25	22mm x 3/4"	21.5	25	550
C901EF.26	28mm x 1"	29	10	300
C901EF.27	35mm x 1 1/4"	51	10	150

Slip Coupling Code Size Weight (g) Res Oty Rev Oty

Code	Size	Weight (g)	Bag Qty	Box Qty
C906EF.05	15mm	7	25	1000
C906EF.08	22mm	18.5	25	500
C906EF.09	28mm	28	25	500



Code	Size	Weight (g)	Bag Qty	Box Qty
5240.1008	10 x 8mm	4	25	2000
5240.1508	15 x 8mm	8	25	1500
5240.1510	15 x 10mm	9	25	1000
5240.2215	22 x 15mm	20.5	25	750
5240.2815	28 x 15mm	32	10	350
5240.2822	28 x 22mm	32	10	350
5240.3522	35 x 22mm	48	5	300
5240.3528	35 x 28mm	48	5	200
5240.4222	42 x 22mm	76	5	150
5240.4228	42 x 28mm	75	5	150
5240.4235	42 x 35mm	75	5	150
5240.5422	54 x 22mm	145	1	100
5240.5428	54 x 28mm	145	1	60
5240.5435	54 x 35mm	145	1	60
5240.5442	54 x 42mm	146	1	60



Code	Size	Weight (g)	Bag Qty	Box Qty
5243.0806	8 x 6mm	3	10	3000
5243.1006	10 x 6mm	3	10	2000
5243.1008	10 x 8mm	2.5	10	3000
5243.1508	15 x 8mm	5.5	25	2000
5243.1510	15 x 10mm	8	25	2000
5243.1512	15 x 12mm	8.5	10	1000
5243.2215	22 x 15mm	20	25	750
5243.2815	28 x 15mm	31	10	500
5243.2822	28 x 22mm	31	10	450
5243.3515	35 x 15mm	51	5	300
5243.3522	35 x 22mm	47	5	200
5243.3528	35 x 28mm	45	5	200
5243.4215	42 x 15mm	75	5	150
5243.4222	42 x 22mm	73	5	200
5243.4228	42 x 28mm	71	5	200
5243.4235	42 x 35mm	70	5	200
5243.5415	54 x 15mm	138	2	100
5243.5422	54 x 22mm	135	2	100
5243.5428	54 x 28mm	135	2	90
5243.5435	54 x 35mm	132	2	90
5243.5442	54 x 42mm	132	2	90



Straight Male Union

Code	Size	Weight (g)	Bag Qty	Box Qty
EFMUC.1512	15mm x 1/2"	130	10	200
EFMUC.2234	22mm x 3/4"	186	5	100
EFMUC.281	28mm x 1"	295	5	50
EFMUC.35114	35mm x 1 1/4"	467	1	50
EFMUC.42112	42mm x 1 1/2"	663	1	20
EFMUC.542	54mm x 2"	928	1	20

Male Iron Coupling - Taper



Code	Size	Weight (g)	Bag Qty	Box Qty
4243G.08X1/4	8mm x 1/4"	18	25	300
4243G.12X1/4	12mm x 1/4"	17.8	25	300
4243G.15X1/4	15mm x 1/4"	31.2	10	300
4243G.15X3/8	15mm x 3/8"	23	10	300
4243G.15X1/2	15mm x 1/2"	34	10	550
4243G.15X3/4	15mm x 3/4"	46	10	350
4243G.22X3/4	22mm x 3/4"	41	10	350
4243G.28X1	28mm x 1"	87	10	250
4243G.35X1.1/4	35mm x 1 1/4"	99	5	120
4243G.42X1.1/2	42mm x 1 1/2"	212	1	60
4243G.54X2	54mm x 2"	290	1	40

Female Iron Coupling



Code	Size	Weight (g)	Bag Qty	Box Qty
4270G.15X1/4	15mm x 1/4"	48	25	200
4270G.15X1/2	15mm x 1/2"	43	10	450
4270G.22X3/4	22mm x 3/4"	62	10	250
4270G.28X1	28mm x 1"	108	10	150
4270G.35X1.1/4	35mm x 1 1/4"	208	5	100
4270G.42X1.1/2	42mm x 1 1/2"	252	1	60
4270G.54X2	54mm x 2"	392	1	40

Straight Tap Connector



Code	Size	Weight (g)	Bag Qty	Box Qty
C903SFEF.1	15mm x 1/2"	33	25	500
C903SFEF.2	15mm x 3/4"	59	10	350
C903SFEF.3	22mm x 3/4"	63	10	350

Bent Tap Connector



C	Code	Size	Weight (g)	Bag Qty	Box Qty
С	803SFEF.1	15mm x 1/2"	34	25	500
С	803SFEF.2	22mm x 3/4"	76	25	250

Stop Ends



Code	Size	Weight (g)	Bag Qty	Box Qty
5301.08	8mm	2	25	2000
5301.10	10mm	3	25	2000
5301.15	15mm	5	25	2000
5301.22	22mm	14	25	800
5301.28	28mm	24	10	700
5301.35	35mm	45	5	200
5301.42	42mm	60	5	100
5301.54	54mm	95	1	80

90 Deg Equal Elbow



Code	Size	Weight (g)	Bag Qty	Box Qty
5090.08	8mm	4	25	2000
5090.10	10mm	4.5	25	2000
5090.12	12mm	9	10	1500
5090.15	15mm	11.5	25	1000
5090.22	22mm	29	25	400
5090.28	28mm	48	10	200
5090.35	35mm	90	5	100
5090.42	42mm	137	5	60
5090 54	54mm	260	2	30

90 Deg Street Elbow MxF



Code	Size	Weight (g)	Bag Qty	Box Qty
5092.10	10mm	7	25	2000
5092.15	15mm	11.5	25	1000
5092.22	22mm	30	25	400
5092.28	28mm	49	10	200
5092.35	35mm	92	5	100
5092.42	42mm	142	5	50
5092.54	54mm	240	2	30

45 Deg Obtuse Street Elbow MxF



Code	Size	Weight (g)	Bag Qty	Box Qty
5040.15	15mm	11.5	25	1250
5040.22	22mm	28	10	400
5040.28	28mm	46	10	200
5040.35	35mm	82	5	100
5040.42	42mm	120	5	60
5040.54	54mm	220	2	40

45 Deg Obtuse Elbow Code Size Weight (g) Bag Qty Box Qty

Code	Size	Weight (g)	Bag Qty	Box Qty
5041.10	10mm	6	10	2000
5041.15	15mm	11.5	25	1000
5041.22	22mm	27	10	400
5041.28	28mm	45	10	200
5041.35	35mm	80	5	100
5041.42	42mm	130	5	60
5041.54	54mm	219	2	30





















Tee - Reduced Centre Branch



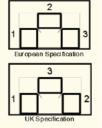
Code	Size	Weight (g)	Bag Qty	Box Qty
5130R.151015	15 x 15 x 10mm	18	10	800
5130R.221022	22 x 22 x 10mm	41	10	250
5130R.221522	22 x 22 x 15mm	43	25	300
5130R.281528	28 x 28 x 15mm	63	10	170
5130R.282215	28 x 15 x 22mm	82	10	150
5130R.281522	28 x 22 x 15mm	75	10	150
5130R.282228	28 x 28 x 22mm	77	10	150
5130R.351535	35 x 35 x 15mm	101	5	100
5130R.352235	35 x 35 x 22mm	118	5	70
5130R.352835	35 x 35 x 28mm	130	5	60
5130R.421542	42 x 42 x 15mm	160	5	60
5130R.422242	42 x 42 x 22mm	186	5	50
5130R.422842	42 x 42 x 28mm	210	5	40
5130R.423542	42 x 42 x 35mm	233	5	40
5130R.541554	54 x 54 x 15mm	280	2	20
5130R.542254	54 x 54 x 22mm	295	2	20
5130R.542854	54 x 54 x 28mm	315	2	20
5130R.543554	54 x 54 x 35mm	317	2	20
5130R.544254	54 x 54 x 42mm	320	1	25

End Feed Tees

Code (European Specification) -

1st size on the run, 2nd size on the branch, 3rd size on the remaining run.

Size (UK Specification) - 1st size and 2nd sizes on the run. 3rd size on the branch.



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Tee - Reduced End Branch



Code	Size	Weight (g)	Bag Qty	Box Qty
5130R.151510	15 x 10 x 15mm	23	25	800
5130R.222215	22 x 15 x 22mm	56	25	250
5130R.282815	28 x 15 x 28mm	88	10	140
5130R.282822	28 x 22 x 28mm	90	10	100
5130R.353522	35 x 22 x 35mm	156	5	60
5130R.353528	35 x 28 x 35mm	160	5	60
5130R.424235	42 x 35 x 42mm	270	5	40
5130R.545442	54 x 42 x 54mm	400	1	25

Tee - Reduced Centre and End



Code	Size	Weight (g)	Bag Qty	Box Qty
5130R.221515	22 x 15 x 15mm	46	25	350
5130R.281515	28 x 15 x 15mm	70	10	200
5130R.282222	28 x 22 x 22mm	83	10	100
5130R.352222	35 x 22 x 22mm	109	5	90
5130R.352828	35 x 28 x 28mm	135	5	80
5130R.423535	42 x 35 x 35mm	240	5	40

Tee - Reduced Both Ends



Code	Size	Weight (g)	Bag Qty	Box Qty
5130R.152215	15 x 15 x 22mm	45	25	250
5130R.222822	22 x 22 x 28mm	88	10	170
5130R.352228	35 x 28 x 22mm	120	5	90

Female Iron Tee - Female Iron Branch



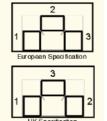
Code	Size	Weight (g)	Bag Qty	Box Qty
Code	SIZE	vveignt (g)	Day Qty	DOX Qty
4130G.15X1/2X15	15 x 15 x 1/2"	74	10	100
4130G.22X1/2X22	22 x 22 x 1/2"	100	10	50
4130G.22X3/4X22	22 x 22 x 3/4"	147	10	50
4130G.28X1/2X28	28 x 28 x 1/2"	163	5	25
4130G.35X3/4X35	35 x 35 x 3/4"	278.5	5	25

End Feed Tees

Code (European Specification) -

1st size on the run, 2nd size on the branch, 3rd size on the remaining run.

Size (UK Specification) - 1st size and 2nd sizes on the run, 3rd size on the branch.



Introduction

Flowflex large size copper end feed brazing Fittings, which are manufactured in both copper and bronze, are a fast, reliable and economic method of joining copper tubes that are manufactured to BS FN 1057. The End Feed joint is created through the process of capillary action as solder is applied to the End Feed fitting to make an easy, effective connection.

Flowflex is a British Standards Institution registered company (ISO9001:2008) and operates a quality management system for the manufacture and supply of components and fittings for use in all applications in the plumbing and heating industry.

All Flowflex End Feed Fittings are guaranteed against manufacturing defects for 25 years, when installed in accordance with our instructions on specified tube materials and applications.

The quality of materials used and the adoption of rigorous quality control has allowed Flowflex End Feed fittings to obtain the conformity to the following standards.

- Available in sizes 67mm to 159mm.
- Copper 5000 series fittings manufactured to EN 1254-1 and EN 1254-5
- Bronze 4000 series fittings manufactured to EN 1254-4: 1998
- Marked with the Flowflex Logo

Flowflex Compression fittings are suitable for use on hot and cold water services, heating installations, fuel services and industrial engineering applications. Fittings are suitable in low pressure gas pipework in domestic premises using copper tube manufactured to EN 1057.





Flowflex large size copper end feed brazing fittings can be assembled using hard solders (brazing alloy). Their working temperatures and pressures vary according to which solder has been used. When correctly assembled with copper tube to BS EN 1057, the applicable temperatures and pressures are indicated in the table below.

Typical examples of soldering alloys		amples of soldering temperature		Maximum pressures for nominal diameters (1) (2) BAR	
			From 54mm up to 108mm	Over 108mm up to 159mm	
IV	Silver/copper Cadmium-free 55% to 40% Ag	30	16	5	
V	Silver with cadmium 30% or 40% Ag	65	16	3	
VI	Copper/phosphorus 94/6% or Copper/phosphorus with 2% Silver 92/6/2%	110	10	2	

- (1) For use in applications outside the scope of this table, the approval of the manufacturer should be obtained.
- (2) Intermediate pressure ratings shall be obtained by interpolation.

NOTE Soldering alloys with lead and brazing alloys with cadmium are not permitted in installations for water for human consumption



-arge Size Copper End Feed Brazing Fittings

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Jointing Techniques

- 1 Ensure the tube conforms to BS EN 1057.
- 2 Select the correct fitting for the size of the tube to be Connected.
- 3 Ends of the tube for jointing must be cut cleanly across the tube diameter and be free from contamination, surface damage or defects.
- 4 Clean the outside diameter of the tube and the inside diameter of the socket with wire wool.
- 5 Flux should be applied to the mating surfaces.
- 6 Insert the pipe into the socket and Braze in accordance with the brazing rod manufacturer's instructions.
- 7 After brazing, fittings must be allowed to cool naturally.
- 8 Remove all flux residues with hot water.

NOTE: 67mm – 159mm copper fittings must be hard soldered using 'silver brazing alloy' rods. Soft soldering is not permitted.







Dimensions & Size Description

Equal fittings with uniform connections are shown with one size. E.G. 15mm

Reduced fittings with two connections are shown with the largest size first. E.G. 22 x 15mm

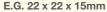
Code (European)

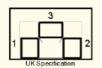
Tees and other reduced fittings of unequal sizes are shown with the largest end first, then the branch, followed by the remaining end on the run. E.G. 5130R.221522



Size Description (U.K.)

Tees and other reduced fittings of unequal sizes are shown with the largest end first, then the opposite run followed by the branch.





Straight Coupling



Code	Size	Weight (g)	Bag Qty	Box Qty
5270.67	67mm	197	1	30
5270.76	76mm	270	1	36
5270.108	108mm	503	1	12
5270.133	133mm	1598	1	4
5270.159	159mm	1598	1	4

Reducing Coupling



Code	Size	Weight (g)	Bag Qty	Box Qty
5240.6742	67 x 42mm	253	1	40
5240.6754	67 x 54mm	223	1	40
5240.7654	76 x 54mm	312	1	25
5240.7667	76 x 67mm	303	1	25
5240.8976	89 x 76mm	443	1	25

Fitting Reducer



Code	Size	Weight (g)	Bag Qty	Box Qty
5243.6722	67 x 22mm	249	1	25
5243.6728	67 x 28mm	245	1	25
5243.6735	67 x 35mm	211	1	25
5243.6742	67 x 42mm	243	1	25
5243.6754	67 x 54mm	354	1	20

Jointing Techniques 67mm to 159mm (Brazing Alloys)

Large Size Copper End Feed Brazing Fittings 67-159mm

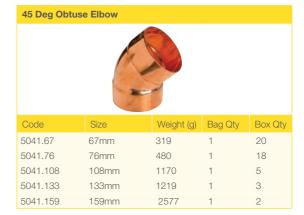
Fitting Reducer cont

Code	Size	Weight (g)	Bag Qty	Box Qty
5243.7635	76 x 35mm	292	1	15
5243.7642	76 x 42mm	241	1	36
5243.7654	76 x 54mm	304	1	30
5243.7667	76 x 67mm	325	1	15
5243.8976	89 x 76mm	441	1	12
5243.10842	108 x 42mm	833	1	12
5243.10854	108 x 54mm	570	1	10
5243.10867	108 x 67mm	740	1	10
5243.10876	108 x 76mm	753	1	12
5243.13367	133 x 67mm	1162	1	10
5243.13376	133 x 76mm	1149	1	10
5243.133108	133 x 108mm	1002	1	5
5243.15976	159 x 76mm	1480	1	5
5243.159133	159 x 108mm	1625	1	5
5243.159108	159 x 133mm	1490	1	5









Equal Tee Code Size Weight (g) Bag Qty Box Qty

Code	Size	Weight (g)	Bag Qty	Box Qty
5130.67	67mm	697	1	10
5130.76	76mm	890	1	6
5130.108	108mm	2170	1	3
5130.133	133mm	3544	1	1
5130.159	159mm	4452	1	1

Tee - Reduced Centre Branch



Code	Size	Weight (g)	Bag Qty	Box Qty
5130R.672867	67 x 67 x 28mm	415	1	20
5130R.673567	67 x 67 x 35mm	482	1	20
5130R.674267	67 x 67 x 42mm	522	1	20
5130R.675467	67 x 67 x 54mm	570	1	12
5130R.762876	76 x 28 x 76mm	685	1	10
5130R.763576	76 x 76 x 35mm	685	1	10
5130R.764276	76 x 76 x 42mm	690	1	10
5130R.765476	76 x 76 x 54mm	640	1	10
5130R.766776	76 x 76 x 67mm	775	1	10
5130R.10835108	108 x 108 x 35mm	1267	1	5
5130R.10842108	108 x 108 x 42mm	1310	1	5
5130R.10854108	108 x 108 x 54mm	1419	1	5
5130R.10867108	108 x 108 x 67mm	1404	1	4
5130R.10876108	108 x 108 x 76mm	1643	1	4
5130R.15954159	159 x 159 x 54mm	3150	1	1
5130R.15976159	159 x 159 x 76mm	3374	1	1
5130R.159108159	159 x 159 x 108mm	3855	1	1
5130R.159133159	159 x 159 x 133mm	4862	1	1

Notes:

The Quickest, Neatest, Simplest and Lowest Cost installation solution for pressure relief termination.

The Pipe Cowl



Pipe Cowl Available in 15mm & 22mm

The Extended Pipe Cowl



Extended Pipe Cowl Available in 15mm for easy high level installation!

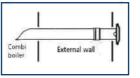
Code	Size	Weight (g)	Bag Qty	Box Qty
B270.26	15mm	31	20	500
B270.22	22mm	54	10	200
B270.38	15mm (Extended)	31	1	50

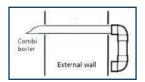
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Compare the difference









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Complies with all current legislation and NHBC approved.

Guarantees a neat finish every time!

Patents		
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UK	GB 2 396 204	

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All flow control products are tested to the rigorous quality standards Flowflex employ throughout their manufacturing process.

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Flowflex Components are committed to the development of new products.

From our production facility located in the heart of the United Kingdom, we are able to bring together the required components for the manufacture and assembly of new products.

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Innovation



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