

# Product Specification and Technical Guide



## About Us

For more than 60 years Flowflex has been at the forefront of designing and engineering solutions for the heating and plumbing sector, delivering innovation and technical know-how to support contractors, consultants, installers and our distribution partners.

As a family business we pride ourselves in the integrity, quality and reliability we deliver through our products and people. With a strong heritage in British engineering and manufacturing we champion innovation and help to bring new and exciting solutions to the market.

Our vision is to be a world leader in engineering and manufacturing solutions for the heating and plumbing sector and beyond, including working in partnership with manufacturers across a variety of industries through our OEM solutions.



1954

Flowflex was founded

1970

Brass Compression Fitting manufacturing began

1977

Moved to Buxton site

1980

Acquired: James H Lamont, Soho Stampings, Kings Langley

1995

Copper Fitting manufacturing began

2007

End Feed, Solder Ring Valves and PEX Systems manufacturing began

2017

Press Fittings launched

## British Manufacturing and Engineering

Maintaining the highest quality in design, engineering and manufacture is a vital factor in the delivery of our fittings, valves and components. Operating on a six-acre site in the North of England, we ensure that we manufacture to the highest standards to produce outstanding products that are fit for purpose.

Over 60 years we have built the knowledge and expertise to develop superior engineering solutions for our customers and manufacture some of the most highly regarded non-ferrous plumbing fittings available on the market. Our dedication and commitment to excellence in everything we do is evident in the loyalty of our customers and the reputation of our products.



## International Distribution

Flowflex fittings, valves and components are now distributed around the world by our partners. We have developed a network of distributors with local expertise, promoting and supporting our products in their individual markets.

In certain markets our products are promoted under the Lamontite brand and over the years we have developed specific solutions for local requirements. The expertise and flexibility in our business allows us to work with our customers to find the right solution for their project, whether that be adapting existing products or designing new ones.

As our business grows we are always looking for new international opportunities and partners to work with to bring the Flowflex name to markets around the world. Our global network is expanding and we are particularly strong in the Middle East.



## Flowflex Fittings Range:



### Compression Fittings

Manufactured to the highest standards in the UK, our complete range of brass compression fittings, including chrome-plated and PEX fittings, provides the reliability and quality demanded by today's professional installers and consultants.

With sizes from 8mm to 108mm, our fittings are guaranteed against manufacturing defects for 25 years and are continually tested under our quality management systems to ensure the highest quality every time.



### Capillary Fittings

Our range of capillary fittings include end feed and solder ring options and are available in both copper and brass, offering a lightweight, fast and simple joint for copper pipe, ideal for domestic and commercial heating and plumbing applications.

Available in sizes from 6mm to 159mm, all fittings are guaranteed against manufacturing defects for 25 years and are manufactured to BS EN 1057 and WRAS approved.



### Press Fittings

With a comprehensive range of fittings in sizes from 12mm to 108mm our press fittings range is ideal for commercial applications and includes copper and steel options.

Each fitting is manufactured to the highest standards and tested extensively to ensure a secure and robust joint every time.



### Valves

Our range provides specifiers with valves to meet most uses and applications, ensuring consistent high quality across a project.

Including brass and chrome-plated options, the Flowflex valve range offers choice, reliability and quality for projects large and small, with sizes ranging from 8mm to 1200mm.

## Contents

Compression	6-37
Compression	12-32
PEX	33-34
Capillary	38-63
End Feed	44-53
Solder Ring	54-58
Press	64-85
Copper Press	69-73
Stainless Steel	74-79
Multilayer	80-83
Valves	86-136
Gate & Ball Valves	94-101
Angle Seat, Swing & Check Valves	102-104
Foot & Float Valves & Strainers	105-107
Pressure Reducing Valves & Bib Tap	108
Commercial Valves	109-116
Manifold & Angle Valves	117-125
Mini Ball & General Valves	126-136

# Compression Fittings

Manufactured to the highest standards in the UK, our complete range of brass compression fittings provides the reliability and quality demanded by today's professional installers and consultants.

For more than 60 years we have been designing and manufacturing compression fittings to answer the needs of the market, continually improving and innovating.

Our range of compression fittings, from 8mm to 108mm, are guaranteed against manufacturing defects for 25 years and are continually tested under our quality management systems to ensure the highest quality every time.

Fittings are designed to join copper pipe and create a mechanical joint upon tightening the nut. They are suitable for hot and cold water services, heating installations, fuel services and industrial engineering applications, as well as low pressure gas pipework in domestic premises using copper tube manufactured to EN 1057.

Flowflex compression fittings are available in four finishes; standard brass fittings, dezincification resistant (DZR) fittings, chrome-plated fittings and nickel-plated fittings.



## Dimensions

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



# Compression Fittings Index

Warranty only valid when compression fittings are used with Flowflex olives supplied with the fitting.

## Compression Fittings to EN 1254-2



Code: **P701**  
Page 12, 30



Code: **P702**  
Page 12, 30



Code: **P703**  
Page 12



Code: **P704**  
Page 12



Code: **P705**  
Page 13



Code: **P707**  
Page 13



Code: **P717**  
Page 13



Code: **P717WP**  
Page 13



Code: **P727**  
Page 13



Code: **P737**  
Page 13



Code: **P801**  
Page 14, 30



Code: **P801DO**  
Page 14



Code: **P802**  
Page 14, 30



Code: **P802DO**  
Page 15



Code: **P802T**  
Page 15



Code: **P803**  
Page 15, 30



Code: **P803SF**  
Page 15



Code: **P803WP**  
Page 16



Code: **P901**  
Page 16, 30, 31



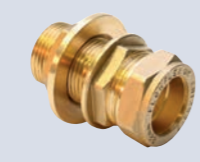
Code: **P901DO**  
Page 16



Code: **P901RP**  
Page 17



Code: **P902**  
Page 17, 31



Code: **P902B**  
Page 17



Code: **P902T**  
Page 18

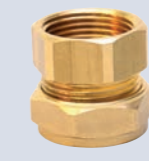
## Compression Fittings to EN 1254-2



Code: **P903**  
Page 18, 31



Code: **P903SF**  
Page 19



Code: **P903ST**  
Page 19



Code: **P906**  
Page 19



Code: **P921**  
Page 19, 31



Code: **P923**  
Page 19, 32



Code: **P701CP**  
Page 20



Code: **P702CP**  
Page 20



Code: **P703CP**  
Page 20



Code: **P704CP**  
Page 20



Code: **P705CP**  
Page 20



Code: **P801CP**  
Page 21



Code: **P802CP**  
Page 21



Code: **P802MICP**  
Page 21



Code: **P802TCP**  
Page 22



Code: **P803CP**  
Page 22



Code: **P803WPCP**  
Page 23



Code: **P901CP**  
Page 23



Code: **P902CP**  
Page 24



Code: **P903CP**  
Page 24



Code: **P903SF**  
Page 25



Code: **P906CP**  
Page 25



Code: **P923CP**  
Page 25



Code: **J17DR**  
Page 26

# Compression Fittings Index

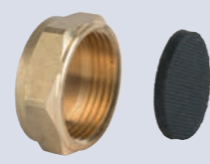
## Compression Fittings to EN 1254-2



Code: **P03**  
Page 26



Code: **P163**  
Page 26



Code: **P163B**  
Page 26



Code: **P165**  
Page 27, 31



Code: **P165C**  
Page 27



Code: **P165CN**  
Page 27



Code: **P165DR**  
Page 27



Code: **P168DR**  
Page 27



Code: **P169DR**  
Page 28



Code: **P172**  
Page 28



Code: **P177**  
Page 28



Code: **P179**  
Page 28



Code: **P182**  
Page 28



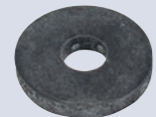
Code: **P197**  
Page 29, 32



Code: **P198**  
Page 29



Code: **P199**  
Page 29



Code: **P200**  
Page 32

## PEX Fittings to EN 1254-3



Code: **PX105**  
Page 33



Code: **PX165**  
Page 33



Code: **PX602**  
Page 33



Code: **PX603**  
Page 33



Code: **PX604**  
Page 33



Code: **PX605**  
Page 33



Code: **PX701**  
Page 33



Code: **PX716**  
Page 33



Code: **PX801**  
Page 34



Code: **PX802**  
Page 34



Code: **PX803**  
Page 34



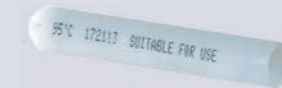
Code: **PX901**  
Page 34



Code: **PX902**  
Page 34

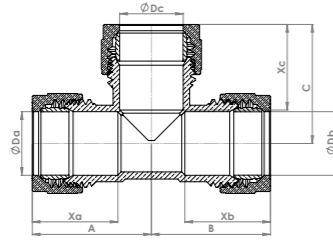


Code: **PX903**  
Page 34



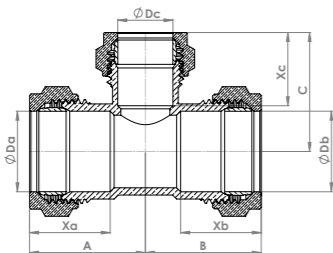
Code: **PXPP100W**  
Page 34

**P701 Tee**



Code	Size	A	B	C	Xa	Xb	Xc
P701.01	6 x 6 x 6mm	18	18	20	7	7	7
P701.02	8 x 8 x 8mm	18	18	18	4	4	6
P701.03	10 x 10 x 10mm	18	18	20	9	9	9
P701.04	12 x 12 x 12mm	18	18	19	9	9	9
P701.041	14 x 14 x 14mm	20	20	20	12	12	12
P701.043	16 x 16 x 16mm	21	21	20	13	13	12
P701.05	15 x 15 x 15mm	20	20	20	12	12	12
P701.07	18 x 18 x 18mm	23	23	23	13	13	13
P701.08	22 x 22 x 22mm	25	25	25	13	13	12
P701.09	28 x 28 x 28mm	29	29	28	14	14	14
P701.10	35 x 35 x 35mm	35	35	35	16	16	16
P701.11	42 x 42 x 42mm	44	44	45	17	17	18
P701.12	54 x 54 x 54mm	49	49	50	19	19	18

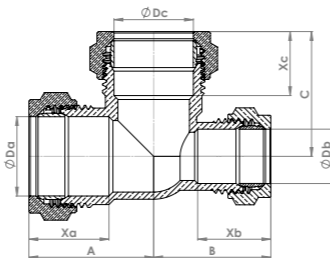
**P702 Tee Reducing Branch**



Code	Size	A	B	C	Xa	Xb	Xc
P702.0121	12 x 12 x 10mm	19	19	19	10	10	9
P702.077	18 x 18 x 12mm	23	23	24	13	13	10
P702.078	18 x 18 x 15mm	22	22	23	13	13	13
P702.116	15 x 15 x 10mm	21	21	21	13	13	9
P702.125	15 x 15 x 12mm	20	20	22	12	12	9
P702.16	22 x 22 x 15mm	23	23	26	13	13	13
P702.161	22 x 22 x 12mm	23	23	24	13	13	10
P702.166	22 x 22 x 18mm	25	25	25	13	13	13
P702.19	28 x 28 x 22mm	27	27	31	14	14	14
P702.20	28 x 28 x 22mm	27	27	31	14	14	16
P702.21	35 x 35 x 22mm	28	28	32	16	16	14
P702.22	35 x 35 x 15mm	28	28	34	16	16	13
P702.23	35 x 35 x 28mm	35	35	34	16	16	15
P702.24	42 x 42 x 15mm	31	31	31	17	17	13
P702.25	42 x 42 x 22mm	31	31	37	19	19	13
P702.26	42 x 42 x 28mm	44	44	45	17	17	14
P702.27	42 x 42 x 35mm	44	44	47	23	23	16

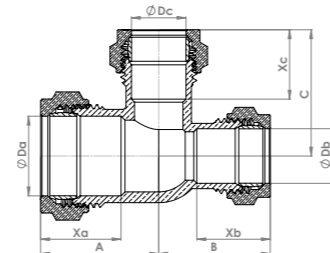
Code	Size	A	B	C	Xa	Xb	Xc
P702.33	54 x 54 x 15mm	32	32	44	19	19	14
P702.335	54 x 54 x 22mm	32	32	47	19	19	14
P702.34	54 x 54 x 28mm	37	37	46	19	19	13
P702.36	54 x 54 x 35mm	37	37	49	19	19	15
P702.37	54 x 54 x 42mm	37	37	49	19	19	15

**P703 Tee Reducing End**



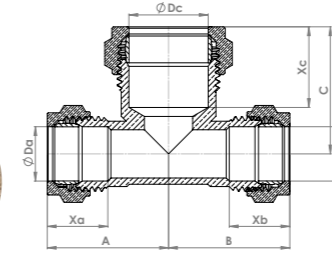
Code	Size	A	B	C	Xa	Xb	Xc
P703.124	15 x 12 x 15mm	20	22	20	12	9	12
P703.135	18 x 15 x 18mm	23	23	24	13	13	13
P703.15	22 x 15 x 22mm	27	24	26	13	12	13
P703.163	22 x 18 x 22mm	25	25	25	13	13	13
P703.17	28 x 15 x 28mm	32	31	16	14	13	13
P703.18	28 x 22 x 28mm	33	31	14	15	13	15

**P704 Tee Reducing End & Branch**



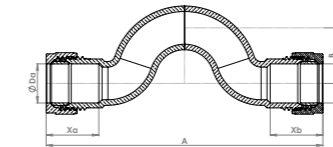
Code	Size	A	B	C	Xa	Xb	Xc
P704.076	18 x 15 x 15mm	23	23	23	13	12	13
P704.121	15 x 12 x 12mm	21	21	22	12	9	9
P704.14	22 x 15 x 15mm	24	23	25	13	12	13
P704.168	28 x 15 x 15mm	27	23	25	16	12	13
P704.171	28 x 22 x 22mm	27	27	29	16	13	13

**P705 Tee Reducing Both Ends**



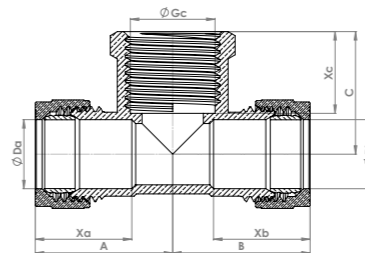
Code	Size	A	B	C	Xa	Xb	Xc
P705.123	12 x 12 x 15mm	20	20	22	9	9	12
P705.126	15 x 15 x 18mm	16	16	15	6	5	6
P705.13	15 x 15 x 22mm	26	26	26	12	13	12
P705.165	22 x 22 x 28mm	32	32	32	13	13	15

**P707 Crossover**



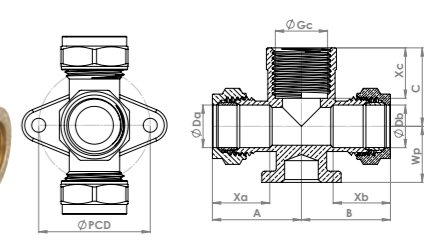
Code	Size	A	B	C	Xa	Xb	Xc
P707.1	15 x 15mm	93	19		20	20	
P707.2	22 x 22mm	107	24		20	20	
P707.3	28 x 28mm	144	34		21	21	

**P717 Adaptor Tee - Female Branch**



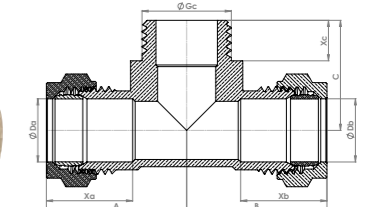
Code	Size	A	B	C	Xa	Xb	Xc
P717.03	12 x 12mm x 3/8"	22	22	27	10	10	18
P717.04	10 x 10mm x 1/2"	22	22	27	10	10	18
P717.06	12 x 12mm x 1/2"	22	22	27	10	10	18
P717.08	14 x 14mm x 1/2"	22	22	26	13	13	18
P717.1	15 x 15mm x 1/2"	22	22	26	13	13	18
P717.14	15 x 15mm x 3/4"	29	29	32	13	13	19
P717.15	16 x 16mm x 1/2"	22	22	26	13	13	18
P717.16	18 x 18mm x 3/4"	29	29	32	13	13	19
P717.17	18 x 18mm x 1/2"	24	24	27	13	13	18
P717.2	22 x 22mm x 1/2"	24	24	28	12	12	18
P717.3	22 x 22mm x 3/4"	29	29	31	14	14	18
P717.35	22 x 22mm x 1"	29	29	37	14	14	22
P717.4	28 x 28mm x 1"	31	31	37	15	15	22
P717.5	28 x 28mm x 1/2"	29	29	29	14	14	15
P717.6	28 x 28mm x 3/4"	31	31	37	14	14	19

**P717WP Adaptor Wallplate Tee - Female Branch**



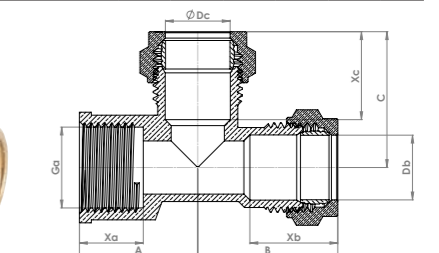
Code	Size	A	B	C	Xa	Xb	Xc
P717WP.1	15 x 15mm x 1/2"	24	24	29	13	13	18
P717WP.15	22 x 22mm x 1/2"	29	29	34	14	14	18

**P727 Adaptor Tee - Male Branch**



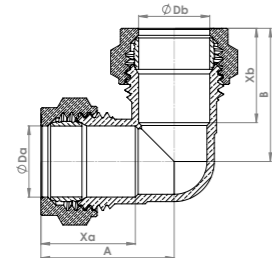
Code	Size	A	B	C	Xa	Xb	Xc
P727.30	15 x 15mm x 1/2"	26	26	27	13	13	15
P727.33	22 x 22mm x 1/2"	31	31	32	14	14	15

**P737 Adaptor Tee Female End**



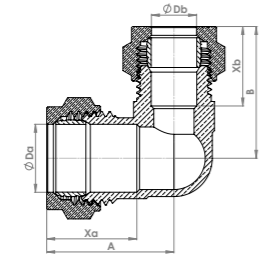
Code	Size	A	B	C	Xa	Xb	Xc
P737.1	15 x 1/2" x 15mm	25	26	25	13	13	15
P737.2	22 x 1/2" x 22mm	26	26	26	14	15	14
P737.3	22 x 3/4" x 22mm	26	31	26	14	18	14
P737.4	28 x 1/2" x 28mm	31	26	31	14	18	14

**P801 Elbow**



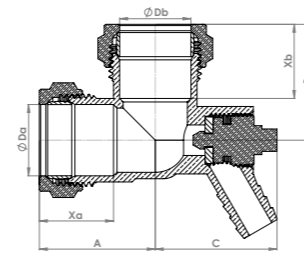
Code	Size	A	B	C	Xa	Xb	Xc
P801.01	6 x 6mm	18	18	7	7		
P801.02	8 x 8mm	19	19	6	6		
P801.03	10 x 10mm	18	18	9	9		
P801.04	12 x 12mm	27	27	8	8		
P801.042	14 x 14mm	21	21	13	13		
P801.05	15 x 15mm	20	20	12	12		
P801.061	16 x 16mm	23	23	13	13		
P801.07	18 x 18mm	23	23	13	13		
P801.08	22 x 22mm	24	24	12	12		
P801.09	28 x 28mm	29	29	15	15		
P801.10	35 x 35mm	35	35	16	16		
P801.11	42 x 42mm	44	44	20	20		
P801.12	54 x 54mm	50	50	22	22		

**P801 Reducing Elbow**



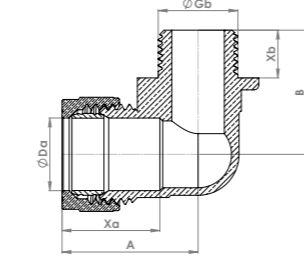
Code	Size	A	B	C	Xa	Xb	Xc
P801.035	12 x 10mm	19	17	9	9		
P801.036	15 x 10mm	22	22	12	10		
P801.055	15 x 12mm	22	22	12	10		
P801.075	18 x 15mm	22	21	13	14		
P801.085	22 x 15mm	25	22	14	13		
P801.089	22 x 18mm	26	26	13	13		
P801.092	28 x 15mm	29	29	16	13		
P801.098	28 x 22mm	29	26	15	14		

**P801DO Elbow with M.T. Cock**



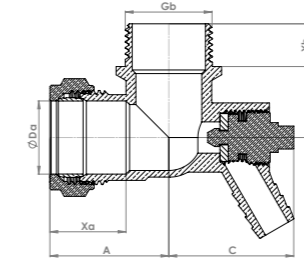
Code	Size	A	B	C	Xa	Xb	Xc
P801DO.2	22mm	28	28	32	14	14	
P801DO.3	28mm	41	41	41	26	26	

**P802 Adaptor Male Elbow**



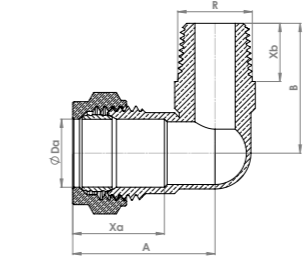
Code	Size	A	B	C	Xa	Xb	Xc
P802.002	6mm x 1/4"	23	19	7	8		
P802.01	8mm x 1/4"	23	21	8	7		
P802.02	10mm x 1/4"	20	17	10	8		
P802.03	10mm x 3/8"	19	19	9	7		
P802.031	10mm x 1/2"	26	21	9	9		
P802.04	12mm x 1/4"	21	17	9	9		
P802.05	12mm x 3/8"	21	19	9	8		
P802.051	12mm x 1/2"	26	23	9	9		
P802.055	14mm x 1/2"	27	23	13	9		
P802.07	15mm x 3/8"	26	25	13	10		
P802.08	15mm x 1/2"	25	24	14	9		
P802.09	15mm x 3/4"	27	29	13	11		
P802.095	16mm x 1/2"	24	26	13	10		
P802.10	18mm x 1/2"	30	27	13	15		
P802.105	18mm x 3/4"	32	24	18	20		
P802.11	22mm x 1/2"	31	30	14	10		
P802.12	22mm x 3/4"	32	26	14	11		
P802.13	22mm x 1"	36	30	13	14		
P802.14	28mm x 1"	38	35	19	13		
P802.141	28mm x 3/4"	34	40	15	11		
P802.15	35mm x 1 1/4"	43	40	15	14		
P802.16	42mm x 1 1/2"	60	50	18	15		
P802.17	54mm x 2"	61	71	25	17		

**P802DO Male Iron Elbow with M.T. Cock**



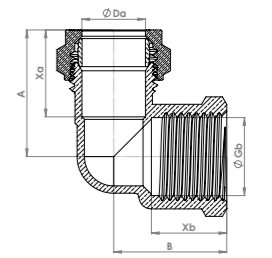
Code	Size	A	B	C	Xa	Xb	Xc
P802DO.1	22mm x 3/4"	28	28	32	14	14	
P802DO.3	28mm x 1"	41	41	41	26	26	

**P802T Adaptor Male Elbow - Taper**



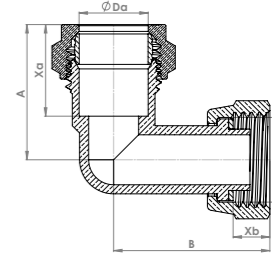
Code	Size	A	B	C	Xa	Xb	Xc
P802T.02	6mm x 1/4"	24	19	7	14		
P802T.04	8mm x 1/4"	24	19	7	14		
P802T.045	8mm x 3/8"	28	21	9	15		
P802T.05	10mm x 1/4"	25	19	9	13		
P802T.06	10mm x 3/8"	28	21	9	15		
P802T.07	10mm x 1/2"	30	22	11	13		
P802T.08	12mm x 1/4"	28	20	10	15		
P802T.09	12mm x 3/8"	28	20	10	15		
P802T.10	12mm x 1/2"	30	22	10	14		
P802T.11	15mm x 1/4"	33	25	13	15		
P802T.12	15mm x 3/8"	29	22	13	13		
P802T.13	15mm x 1/2"	33	25	13	15		
P802T.131	15mm x 3/4"	33	25	13	16		
P802T.135	18mm x 1/2"	33	26	13	16		
P802T.136	18mm x 3/4"	34	26	13	15		
P802T.139	22mm x 1/2"	40	29	14	19		
P802T.14	22mm x 3/4"	40	28	14	16		
P802T.15	22mm x 1"	39	28	16	16		
P802T.159	28mm x 3/4"	45	37	19	16		
P802T.16	28mm x 1"	46	35	15	18		

**P803 Adaptor Female Elbow**



Code	Size	A	B	C	Xa	Xb	Xc
P803.002	6mm x 1/4"	28	18	7	12		
P803.009	28mm x 1/2"	37	27	16	19		
P803.01	8mm x 1/4"	28	18	7	12		
P803.012	8mm x 1/2"	27	20	7	16		
P803.02	10mm x 1/4"	21	16	9	12		
P803.03	10mm x 3/8"	22	19	9	14		
P803.031	10mm x 1/2"	27	19	9	15		
P803.04	12mm x 1/4"	22	20	9	13		
P803.05	12mm x 3/8"	22	20	9	13		
P803.051	12mm x 1/2"	28	20	9	15		
P803.054	14mm x 1/2"	27	20	12	18		
P803.055	15mm x 3/8"	27	22	13	15		
P803.06	15mm x 1/2"	27	21	14	18		
P803.063	15mm x 3/4"	29	33	13	19		
P803.064	16mm x 1/2"	26	21	13	18		
P803.065	18mm x 1/2"	27	27	13	18		
P803.066	18mm x 3/4"	28	31	13	18		
P803.068	22mm x 1/2"	27	27	14	14		
P803.07	22mm x 3/4"	29	27	14	18		
P803.08	22mm x 1"	33	28	14	20		
P803.085	28mm x 3/4"	35	36	16	19		
P803.09	28mm x 1"	37	31	15	21		
P803.10	35mm x 1 1/4"	42	38	19	23		
P803.11	42mm x 1 1/2"	55	49	18	24		
P803.12	54mm x 2"	66	57	26	36		

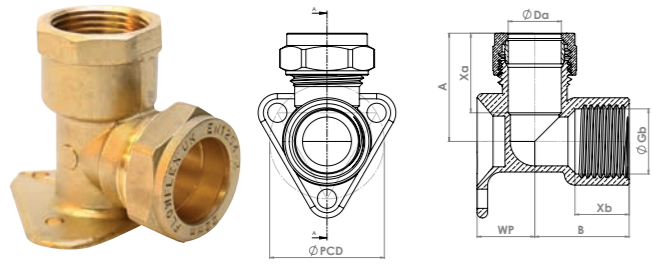
**P803SF Bent Tap Connector (Bent Swivel)**



Code	Size	A	B	C	Xa	Xb	Xc
P803SF.1	15mm x 1/2"	21	32	13	8		
P803SF.2	22mm x 3/4"	45	27	14	9		

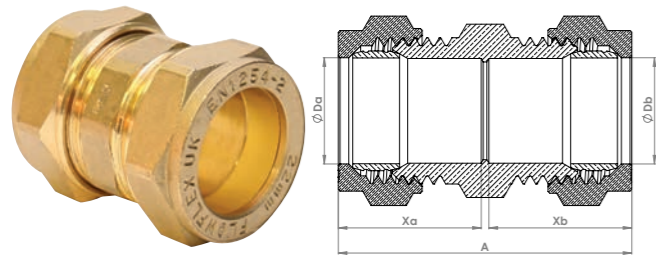


**P803WP Adaptor Wallplate Elbow**



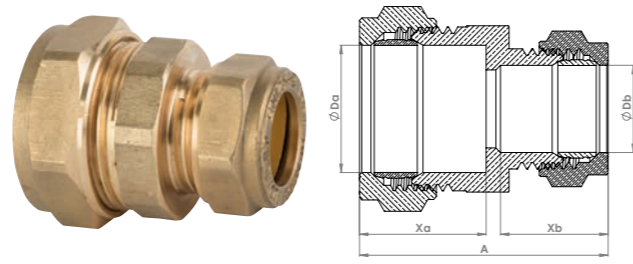
Code	Size	A	B	C	Xa	Xb	Xc
P803WP.05	12mm x 1/2"	25	24	12	16	10	16
P803WP.08	14mm x 1/2"	26	23	14	16	16	15
P803WP.2	15mm x 1/2"	26	23	15	16	16	15
P803WP.231	15mm x 3/4"	35	28	15	19	15	20
P803WP.25	16mm x 1/2"	30	25	16	17	13	16
P803WP.3	18mm x 1/2"	28	26	18	18	13	19
P803WP.4	22mm x 1/2"	29	26	22	18	13	19
P803WP.5	22mm x 3/4"	36	28	22	19	13	18

**P901 Coupler**



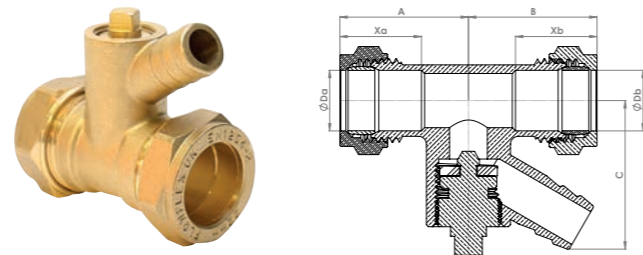
Code	Size	A	B	C	Xa	Xb	Xc
P901.01	6 x 6mm	20			8	8	
P901.02	8 x 8mm	20			8	8	
P901.03	10 x 10mm	23			8	8	
P901.04	12 x 12mm	23			8	8	
P901.042	14 x 14mm	25			9	9	
P901.05	15 x 15mm	24			9	9	
P901.062	16 x 16mm	27			10	10	
P901.07	18 x 18mm	28			11	11	
P901.075	20 x 20mm	26			9	9	
P901.08	22 x 22mm	26			9	9	
P901.09	28 x 28mm	27			10	10	
P901.10	35 x 35mm	34			34	34	
P901.11	42 x 42mm	38			15	15	
P901.12	54 x 54mm	38			13	13	

**P901 Reducing Coupler**



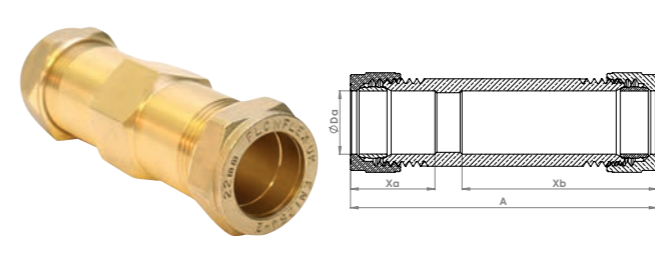
Code	Size	A	B	C	Xa	Xb	Xc
P901.13	8 x 6mm	22			7	9	
P901.14	10 x 8mm	22			7	9	
P901.15	12 x 8mm	22			9	7	
P901.16	12 x 10mm	23			9	10	
P901.164	14 x 10mm	25			12	8	
P901.166	14 x 12mm	25			11	8	
P901.17	15 x 8mm	23			14	7	
P901.18	15 x 10mm	25			13	9	
P901.19	15 x 12mm	25			13	8	
P901.190	15 x 14mm	25			11	12	
P901.1905	16 x 10mm	25			13	9	
P901.191	16 x 14mm	26			11	12	
P901.192	16 x 15mm	25			11	11	
P901.1921	18 x 12mm	27			10	10	
P901.1922	18 x 10mm	27			10	10	
P901.193	18 x 15mm	27			13	12	
P901.20	22 x 15mm	26			12	10	
P901.203	22 x 18mm	27			12	11	
P901.21	28 x 15mm	28			13	12	
P901.22	28 x 22mm	28			14	12	
P901.225	35 x 22mm	33			16	12	
P901.23	35 x 28mm	34			14	15	
P901.236	42 x 28mm	39			18	16	
P901.2361	42 x 35mm	39			18	16	
P901.238	54 x 28mm	42			22	15	
P901.24	54 x 42mm	42			19	17	

**P901DO Coupler with M.T. Cock**



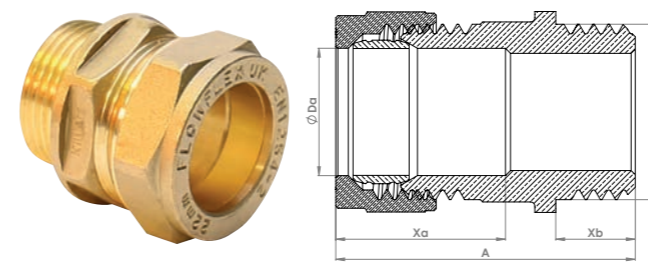
Code	Size	A	B	C	Xa	Xb	Xc
P901DO.1	15mm	25	25	38	13	13	
P901DO.2	22mm	23	23	41	14	14	
P901DO.3	28mm	24	24	44	15	15	

**P901RP Coupler Repair**



Code	Size	A	B	C	Xa	Xb	Xc
P901RP.1	15 x 15 x 75mm	58			38	12	
P901RP.2	15 x 15 x 100mm	82			12	64	
P901RP.5	22 x 22 x 100mm	99			21	79	

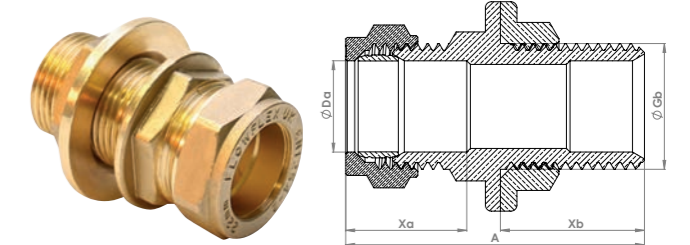
**P902 Adaptor Male Straight**



Code	Size	A	B	C	Xa	Xb	Xc
P902.01	6mm x 1/8"	23			7	10	
P902.02	6mm x 1/4"	23			7	10	
P902.021	6mm x 3/8"	23			7	10	
P902.03	8mm x 1/8"	20			7	7	
P902.04	8mm x 1/4"	21			7	8	
P902.05	8mm x 3/8"	23			8	10	
P902.06	8mm x 1/2"	27			8	9	
P902.07	10mm x 1/4"	22			9	9	
P902.08	10mm x 3/8"	23			10	10	
P902.09	10mm x 1/2"	28			9	9	
P902.10	12mm x 1/4"	22			9	8	
P902.11	12mm x 3/8"	23			8	10	
P902.12	12mm x 1/2"	28			9	9	
P902.124	14mm x 3/4"	29			11	11	
P902.126	14mm x 1/2"	28			11	9	
P902.13	15mm x 1/4"	23			13	9	
P902.14	15mm x 3/8"	25			13	9	
P902.15	15mm x 1/2"	27			13	9	
P902.17	15mm x 3/4"	29			11	11	
P902.173	15mm x 1"	32			11	13	
P902.176	16mm x 1/2"	28			11	9	
P902.18	18mm x 1/2"	28			15	9	
P902.19	18mm x 3/4"	29			11	11	
P902.195	18mm x 1"	33			16	13	
P902.20	22mm x 1/2"	28			13	9	
P902.21	22mm x 3/4"	29			16	11	
P902.22	22mm x 1"	32			12	12	

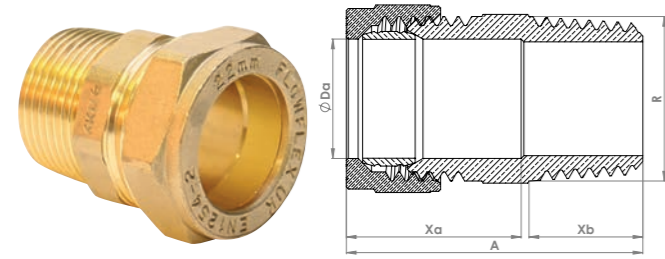
Code	Size	A	B	C	Xa	Xb	Xc
P902.221	28mm x 3/4"	30			14	11	
P902.224	28mm x 1/2"	28			13	9	
P902.23	28mm x 1"	32			19	12	
P902.234	28mm x 1 1/4"	37			13	14	
P902.235	35mm x 1"	35			16	13	
P902.24	35mm x 1 1/4"	36			16	14	
P902.25	42mm x 1 1/2"	40			18	15	
P902.26	54mm x 2"	44			26	17	

**P902B Adaptor Male Straight Extended Thread**



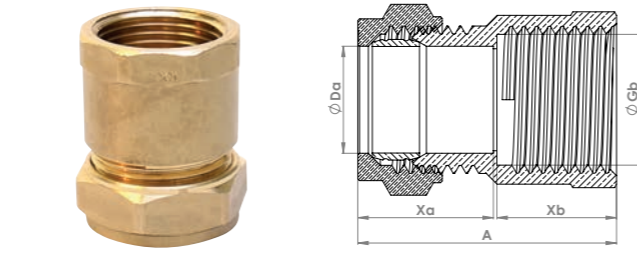
Code	Size	A	B	C	Xa	Xb	Xc
P902B.1	15mm x 1/2"	49			17	24	
P902B.2	22mm x 3/4"	57			25	35	
P902B.3	28mm x 1"	49			16	30	
P902B.4	35mm x 1 1/4"	50			15	28	
P902B.5	42mm x 1 1/2"	57			18	31	
P902B.6	54mm x 2"	65			24	38	

**P902T Adaptor Male Straight - Taper**



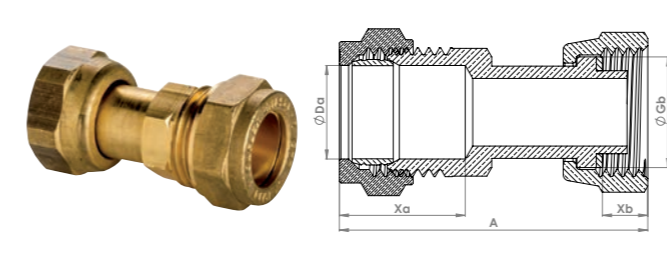
Code	Size	A	B	C	Xa	Xb	Xc
P902T.01	6mm x 1/8"	22			10	7	
P902T.02	6mm x 1/4"	26			7	13	
P902T.03	8mm x 1/8"	22			7	10	
P902T.04	8mm x 1/4"	26			7	13	
P902T.05	8mm x 3/8"	27			7	13	
P902T.06	10mm x 1/4"	27			9	13	
P902T.07	10mm x 3/8"	27			9	13	
P902T.08	10mm x 1/2"	29			9	14	
P902T.09	12mm x 1/4"	27			8	13	
P902T.10	12mm x 3/8"	27			9	13	
P902T.11	12mm x 1/2"	29			9	14	
P902T.113	12mm x 3/4"	31			10	16	
P902T.12	15mm x 1/4"	28			12	13	
P902T.13	15mm x 3/8"	29			13	13	
P902T.14	15mm x 1/2"	29			13	14	
P902T.155	15mm x 3/4"	32			13	16	
P902T.16	18mm x 1/2"	33			13	15	
P902T.17	18mm x 3/4"	32			13	16	
P902T.178	22mm x 1/2"	32			14	15	
P902T.18	22mm x 3/4"	32			17	16	
P902T.182	22mm x 1"	35			12	18	
P902T.185	28mm x 3/4"	34			13	16	
P902T.19	28mm x 1"	36			18	18	
P902T.20	35mm x 1 1/4"	40			20	18	

**P903 Adaptor Female Straight**



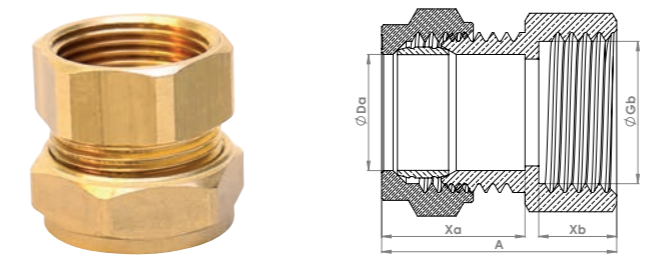
Code	Size	A	B	C	Xa	Xb	Xc
P903.001	6mm x 1/8"	21			7	11	
P903.002	6mm x 1/4"	25			7	12	
P903.003	8mm x 1/8"	21			7	11	
P903.01	8mm x 1/4"	25			7	13	
P903.02	8mm x 3/8"	25			7	14	
P903.03	8mm x 1/2"	27			8	17	
P903.04	10mm x 1/4"	9			9	13	
P903.05	10mm x 3/8"	26			8	14	
P903.06	10mm x 1/2"	27			9	16	
P903.07	12mm x 1/4"	26			8	13	
P903.08	12mm x 3/8"	26			9	14	
P903.09	12mm x 1/2"	28			9	16	
P903.096	14mm x 1/2"	29			11	17	
P903.10	15mm x 1/4"	25			11	13	
P903.11	15mm x 3/8"	25			10	13	
P903.12	15mm x 1/2"	28			11	17	
P903.14	15mm x 3/4"	32			11	19	
P903.141	15mm x 1"	32			12	21	
P903.145	16mm x 1/2"	29			11	16	
P903.146	16mm x 3/4"	32			11	19	
P903.15	18mm x 1/2"	31			13	16	
P903.16	18mm x 3/4"	32			10	19	
P903.17	22mm x 3/4"	31			11	16	
P903.18	22mm x 3/4"	33			13	19	
P903.19	22mm x 1"	36			12	21	
P903.195	28mm x 3/4"	37			12	18	
P903.196	28mm x 1/2"	37			12	18	
P903.20	28mm x 1"	37			13	23	
P903.201	28mm x 1 1/4"	39			14	23	
P903.202	35mm x 1"	44			18	20	
P903.21	35mm x 1 1/4"	42			16	24	
P903.22	42mm x 1 1/2"	46			18	24	
P903.23	54mm x 2"	48			19	27	

**P903SF Straight Tap Connector (Swivel Coupling)**



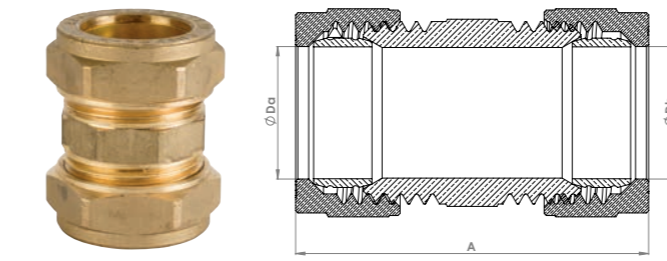
Code	Size	A	B	C	Xa	Xb	Xc
P903SF.1	15mm x 1/2"	42			13	6	
P903SF.2	15mm x 3/4"	39			12	9	
P903SF.3	22mm x 3/4"	50			27	10	

**P903ST Adaptor Female Straight - Short Thread**



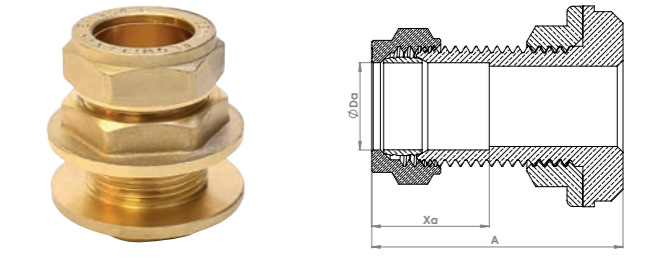
Code	Size	A	B	C	Xa	Xb	Xc
P903ST.1	15mm x 1/2"	23			11	10	
P903ST.2	15mm x 3/4"	22			11	9	
P903ST.3	22mm x 3/4"	23			12	10	

**P906 Coupler Slip**



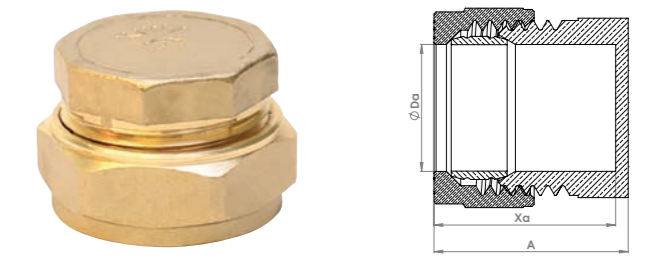
Code	Size	A	B	C	Xa	Xb	Xc
P906.05	15 x 15mm	24					
P906.08	22 x 22mm	26					
P906.09	28 x 28mm	27					

**P921 Tank Connector**



Code	Size	A	B	C	Xa	Xb	Xc
P921.1	15mm	35			12		
P921.2	22mm	37			14		
P921.3	28mm	41			14		

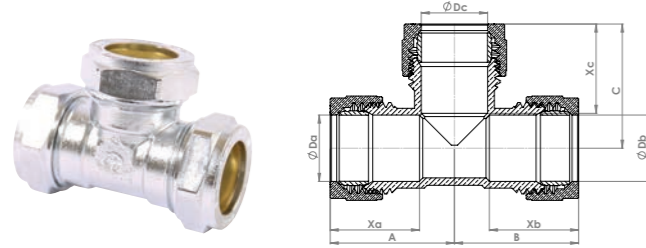
**P923 Stop End**



Code	Size	A	B	C	Xa	Xb	Xc
P923.1	8mm	14			9		
P923.2	10mm	14			11		
P923.3	12mm	14			10		
P923.4	15mm	15			13		
P923.45	18mm	16			13		
P923.5	22mm	16			14		
P923.6	28mm	20			15		
P923.7	35mm	17			14		
P923.8	42mm	22			16		
P923.9	54mm	25			19		

# Chrome Plate Compression Fittings

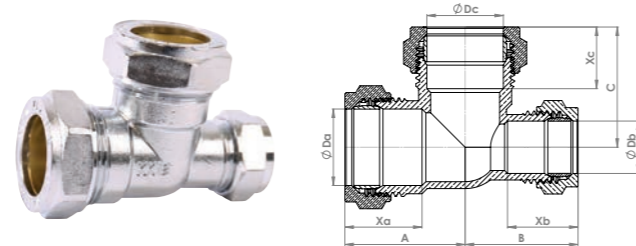
## P701CP Tee



Code	Size	A	B	C	Xa	Xb	Xc
P701CP.01	6 x 6 x 6mm	18	18	20	7	7	7
P701CP.02	8 x 8 x 8mm	18	18	18	4	4	6
P701CP.03	10 x 10 x 10mm	18	18	20	9	9	9
P701CP.04	12 x 12 x 12mm	18	18	19	9	9	9
P701CP.041	14 x 14 x 14mm	20	20	20	12	12	12
P701CP.043	16 x 16 x 16mm	21	21	20	13	13	12
P701CP.05	15 x 15 x 15mm	20	20	20	12	12	12
P701CP.07	18 x 18 x 18mm	23	23	23	13	13	13
P701CP.08	22 x 22 x 22mm	25	25	25	13	13	12
P701CP.09	28 x 28 x 28mm	29	29	28	14	14	14
P701CP.10	35 x 35 x 35mm	35	35	35	16	16	16
P701CP.11	42 x 42 x 42mm	44	44	45	17	17	18
P701CP.12	54 x 54 x 54mm	49	49	50	19	19	18

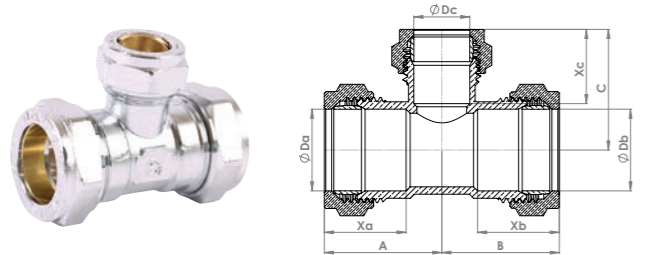
Code	Size	A	B	C	Xa	Xb	Xc
P702CP.33	54 x 54 x 15mm	32	32	44	19	19	14
P702CP.335	54 x 54 x 22mm	32	32	47	19	19	14
P702CP.34	54 x 54 x 28mm	37	37	46	19	19	13
P702CP.36	54 x 54 x 35mm	37	37	49	19	19	15
P702CP.37	54 x 54 x 42mm	37	37	49	19	19	15

## P703CP Tee Reducing End



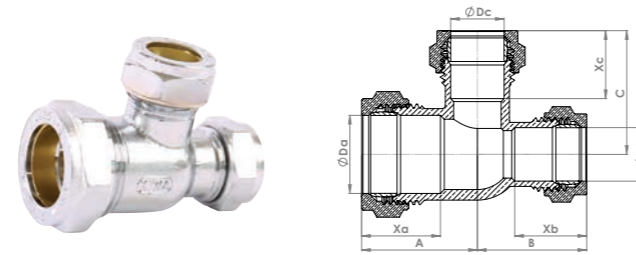
Code	Size	A	B	C	Xa	Xb	Xc
P703CP.124	15 x 12 x 15mm	20	22	20	12	9	12
P703CP.135	18 x 15 x 18mm	23	23	24	13	13	13
P703CP.15	22 x 15 x 22mm	27	24	26	13	12	13
P703CP.163	22 x 18 x 22mm	25	25	25	13	13	13
P703CP.17	28 x 15 x 28mm	32	31	16	14	13	13
P703CP.18	28 x 22 x 28mm	33	31	14	15	13	15

## P702CP Tee Reducing Branch



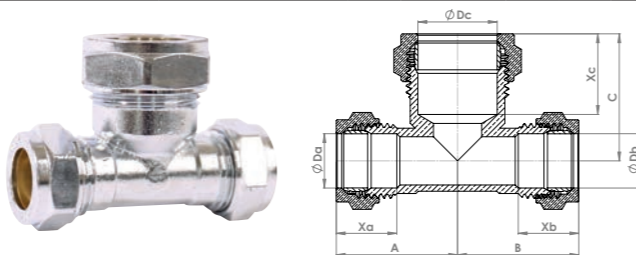
Code	Size	A	B	C	Xa	Xb	Xc
P702CP.0121	12 x 12 x 10mm	19	19	19	10	10	9
P702CP.077	18 x 18 x 12mm	23	23	24	13	13	10
P702CP.078	18 x 18 x 15mm	22	22	23	13	13	13
P702CP.116	15 x 15 x 10mm	21	21	21	13	13	9
P702CP.125	15 x 15 x 12mm	20	20	22	12	12	9
P702CP.16	22 x 22 x 15mm	23	23	26	13	13	13
P702CP.161	22 x 22 x 12mm	23	23	24	13	13	10
P702CP.166	22 x 22 x 18mm	25	25	25	13	13	13
P702CP.19	28 x 28 x 22mm	27	27	31	14	14	14
P702CP.20	28 x 28 x 22mm	27	27	31	14	14	16
P702CP.21	35 x 35 x 22mm	28	28	32	16	16	14
P702CP.22	35 x 35 x 15mm	28	28	34	16	16	13
P702CP.23	35 x 35 x 28mm	35	35	34	16	16	15
P702CP.24	42 x 42 x 15mm	31	31	31	17	17	13
P702CP.25	42 x 42 x 22mm	31	31	37	19	19	13
P702CP.26	42 x 42 x 28mm	44	44	45	17	17	14
P702CP.27	42 x 42 x 35mm	44	44	47	23	23	16

## P704CP Tee Reducing End & Branch



Code	Size	A	B	C	Xa	Xb	Xc
P704CP.076	18 x 15 x 15mm	23	23	23	13	12	13
P704CP.121	15 x 12 x 12mm	21	21	22	12	9	9
P704CP.14	22 x 15 x 15mm	24	23	25	13	12	13
P704CP.168	28 x 15 x 15mm	27	23	25	16	12	13
P704CP.171	28 x 22 x 22mm	27	27	29	16	13	13

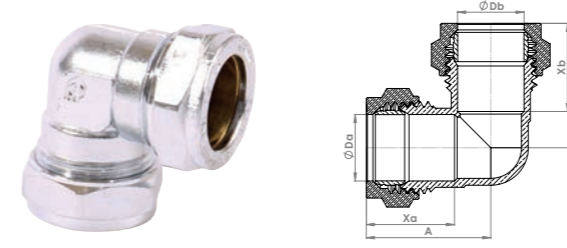
## P705CP Tee Reducing Both End



Code	Size	A	B	C	Xa	Xb	Xc
P705CP.123	12 x 12 x 15mm	20	20	22	9	9	12
P705CP.126	15 x 15 x 18mm	16	16	15	6	5	6
P705CP.13	15 x 15 x 22mm	26	26	26	12	13	12
P705CP.165	22 x 22 x 28mm	32	32	32	13	13	15

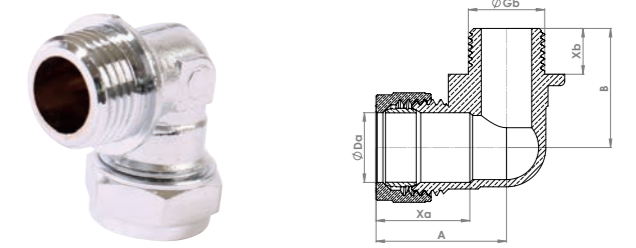
# Chrome Plate Compression Fittings

## P801CP Elbow



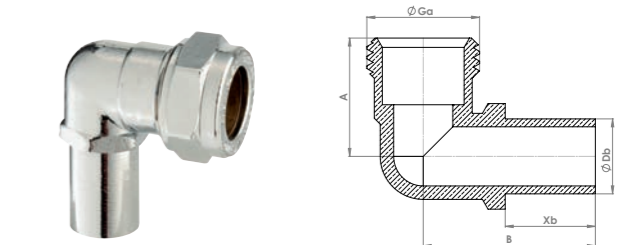
Code	Size	A	B	C	Xa	Xb	Xc
P801CP.01	6 x 6mm	18	18	7	7	7	7
P801CP.02	8 x 8mm	19	19	6	6	6	6
P801CP.03	10 x 10mm	18	18	9	9	9	9
P801CP.035	12 x 10mm	19	17	9	9	9	9
P801CP.036	15 x 10mm	22	22	12	10	10	10
P801CP.04	12 x 12mm	27	27	8	8	8	8
P801CP.042	14 x 14mm	21	21	13	13	13	13
P801CP.05	15 x 15mm	20	20	12	12	12	12
P801CP.055	15 x 12mm	22	22	12	10	10	10
P801CP.061	16 x 16mm	23	23	13	13	13	13
P801CP.07	18 x 18mm	23	23	13	13	13	13
P801CP.075	18 x 15mm	22	21	13	14	14	14
P801CP.08	22 x 22mm	24	24	12	12	12	12
P801CP.085	22 x 15mm	25	22	14	13	13	13
P801CP.089	22 x 18mm	26	26	13	13	13	13
P801CP.09	28 x 28mm	29	29	15	15	15	15
P801CP.092	28 x 15mm	29	29	16	13	13	13
P801CP.098	28 x 22mm	29	26	15	14	14	14
P801CP.10	35 x 35mm	35	35	16	16	16	16
P801CP.11	42 x 42mm	44	44	20	20	20	20
P801CP.12	54 x 54mm	50	50	22	22	22	22

## P802CP Adaptor Male Elbow



Code	Size	A	B	C	Xa	Xb	Xc
P802CP.002	6mm x 1/4"	23	19	7	7	8	8
P802CP.01	8mm x 1/4"	23	21	8	7	7	7
P802CP.02	10mm x 1/4"	20	17	10	8	8	8
P802CP.03	10mm x 3/8"	19	19	9	7	7	7
P802CP.031	10mm x 1/2"	26	21	9	9	9	9
P802CP.04	12mm x 1/4"	21	17	9	9	9	9
P802CP.05	12mm x 3/8"	21	19	9	8	8	8
P802CP.051	12mm x 1/2"	26	23	9	9	9	9
P802CP.055	14mm x 1/2"	27	23	13	9	9	9
P802CP.07	15mm x 3/8"	26	25	13	10	10	10
P802CP.08	15mm x 1/2"	25	24	14	9	9	9
P802CP.09	15mm x 3/4"	27	29	13	11	11	11
P802CP.095	16mm x 1/2"	24	26	13	10	10	10
P802CP.10	18mm x 1/2"	30	27	13	15	15	15
P802CP.105	18mm x 3/4"	32	24	18	20	20	20
P802CP.11	22mm x 1/2"	31	30	14	10	10	10
P802CP.12	22mm x 3/4"	32	26	14	11	11	11
P802CP.13	22mm x 1"	36	30	13	14	14	14
P802CP.14	28mm x 1"	38	35	19	13	13	13
P802CP.141	28mm x 3/4"	34	40	15	11	11	11
P802CP.15	35mm x 1 1/4"	43	40	15	14	14	14
P802CP.16	42mm x 1 1/2"	60	50	18	15	15	15
P802CP.17	54mm x 2"	61	71	25	17	17	17

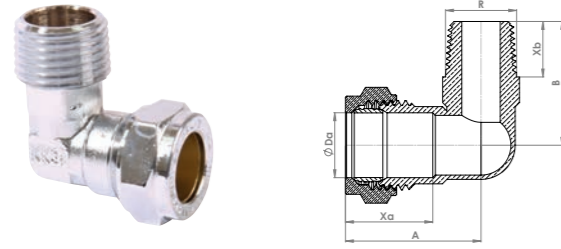
## P802MICP Swivel Elbow



Code	Size	A	B	C	Xa	Xb	Xc
P802MICP.08	15mm x 1/2"	23	31	13	16	16	16

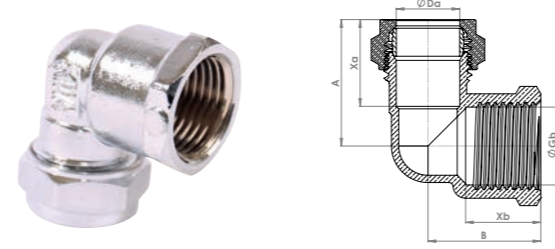
## Chrome Plate Compression Fittings

### P802TCP Adaptor Male Elbow - Taper



Code	Size	A	B	C	Xa	Xb	Xc
P802TCP.02	6mm x 1/4"	24	19	7	14		
P802TCP.04	8mm x 1/4"	24	19	7	14		
P802TCP.045	8mm x 3/8"	28	21	9	15		
P802TCP.05	10mm x 1/4"	25	19	9	13		
P802TCP.06	10mm x 3/8"	28	21	9	15		
P802TCP.07	10mm x 1/2"	30	22	11	13		
P802TCP.08	12mm x 1/4"	28	20	10	15		
P802TCP.09	12mm x 3/8"	28	20	10	15		
P802TCP.10	12mm x 1/2"	30	22	10	14		
P802TCP.11	15mm x 1/4"	33	25	13	15		
P802TCP.12	15mm x 3/8"	29	22	13	13		
P802TCP.13	15mm x 1/2"	33	25	13	15		
P802TCP.131	15mm x 3/4"	33	25	13	16		
P802TCP.135	18mm x 1/2"	33	26	13	16		
P802TCP.136	18mm x 3/4"	34	26	13	15		
P802TCP.139	22mm x 1/2"	40	29	14	19		
P802TCP.14	22mm x 3/4"	40	28	14	16		
P802TCP.15	22mm x 1"	39	28	16	16		
P802TCP.159	28mm x 3/4"	45	37	19	16		
P802TCP.16	28mm x 1"	46	35	15	18		

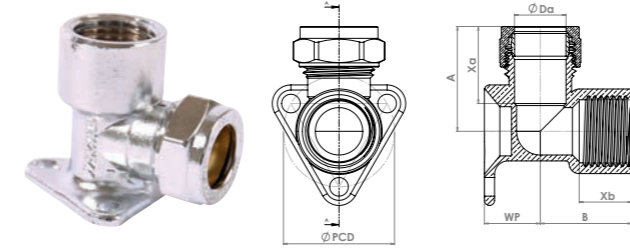
### P803CP Adaptor Female Elbow



Code	Size	A	B	C	Xa	Xb	Xc
P803CP.002	6mm x 1/4"	28	18	7	12		
P803CP.009	28mm x 1/2"	37	27	16	19		
P803CP.01	8mm x 1/4"	28	18	7	12		
P803CP.012	8mm x 1/2"	27	20	7	16		
P803CP.02	10mm x 1/4"	21	16	9	12		
P803CP.03	10mm x 3/8"	22	19	9	14		
P803CP.031	10mm x 1/2"	27	19	9	15		
P803CP.04	12mm x 1/4"	22	20	9	13		
P803CP.05	12mm x 3/8"	22	20	9	13		
P803CP.051	12mm x 1/2"	28	20	9	15		
P803CP.054	14mm x 1/2"	27	20	12	18		
P803CP.055	15mm x 3/8"	27	22	13	15		
P803CP.06	15mm x 1/2"	27	21	14	18		
P803CP.063	15mm x 3/4"	29	33	13	19		
P803CP.064	16mm x 1/2"	26	21	13	18		
P803CP.065	18mm x 1/2"	27	27	13	18		
P803CP.066	18mm x 3/4"	28	31	13	18		
P803CP.068	22mm x 1/2"	27	27	14	14		
P803CP.07	22mm x 3/4"	29	27	14	18		
P803CP.08	22mm x 1"	33	28	14	20		
P803CP.085	28mm x 3/4"	35	36	16	19		
P803CP.09	28mm x 1"	37	31	15	21		
P803CP.10	35mm x 1 1/4"	42	38	19	23		
P803CP.11	42mm x 1 1/2"	55	49	18	24		
P803CP.12	54mm x 2"	66	57	26	36		

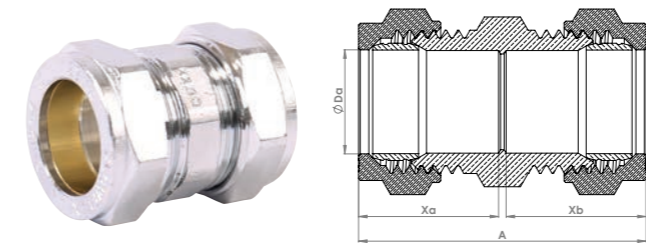
## Chrome Plate Compression Fittings

### P803WPCP Adaptor Wallplate Elbow



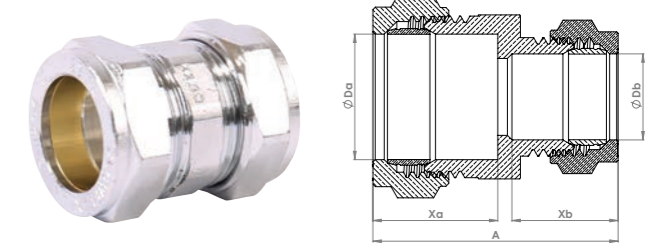
Code	Size	A	B	C	Xa	Xb	Xc
P803WPCP.05	12mm x 1/2"	25	24	12	16	10	16
P803WPCP.08	14mm x 1/2"	26	23	14	16	16	15
P803WPCP.2	15mm x 1/2"	26	23	15	16	16	15
P803WPCP.231	15mm x 3/4"	35	28	15	19	15	20
P803WPCP.25	16mm x 1/2"	30	25	16	17	13	16
P803WPCP.3	18mm x 1/2"	28	26	18	18	13	19
P803WPCP.4	22mm x 1/2"	29	26	22	18	13	19
P803WPCP.5	22mm x 3/4"	36	28	22	19	13	18

### P901CP Coupler



Code	Size	A	B	C	Xa	Xb	Xc
P901CP.01	6 x 6mm	20			8	8	
P901CP.02	8 x 8mm	20			8	8	
P901CP.03	10 x 10mm	23			8	8	
P901CP.04	12 x 12mm	23			8	8	
P901CP.042	14 x 14mm	25			9	9	
P901CP.05	15 x 15mm	24			9	9	
P901CP.062	16 x 16mm	27			10	10	
P901CP.07	18 x 18mm	28			11	11	
P901CP.075	20 x 20mm	26			9	9	
P901CP.08	22 x 22mm	26			9	9	
P901CP.09	28 x 28mm	27			10	10	
P901CP.10	35 x 35mm	34			34	34	
P901CP.11	42 x 42mm	38			15	15	
P901CP.12	54 x 54mm	38			13	13	

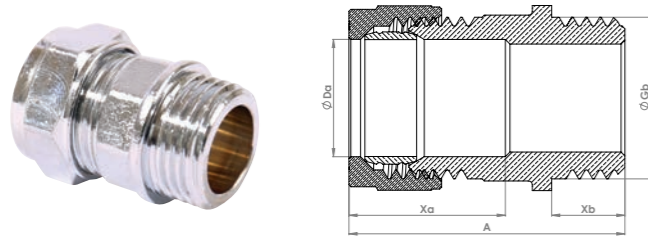
### P901CP Reducing Coupler



Code	Size	A	B	C	Xa	Xb	Xc
P901CP.13	8 x 6mm	22			7	9	
P901CP.14	10 x 8mm	22			7	9	
P901CP.15	12 x 8mm	22			9	7	
P901CP.16	12 x 10mm	23			9	10	
P901CP.164	14 x 10mm	25			12	8	
P901CP.166	14 x 12mm	25			11	8	
P901CP.17	15 x 8mm	23			14	7	
P901CP.18	15 x 10mm	25			13	9	
P901CP.19	15 x 12mm	25			13	8	
P901CP.190	15 x 14mm	25			11	12	
P901CP.1905	16 x 10mm	25			13	9	
P901CP.191	16 x 14mm	26			11	12	
P901CP.192	16 x 15mm	25			11	11	
P901CP.1921	18 x 12mm	27			10	10	
P901CP.1922	18 x 10mm	27			10	10	
P901CP.193	18 x 15mm	27			13	12	
P901CP.20	22 x 15mm	26			12	10	
P901CP.203	22 x 18mm	27			12	11	
P901CP.21	28 x 15mm	28			13	12	
P901CP.22	28 x 22mm	28			14	12	
P901CP.225	35 x 22mm	33			16	12	
P901CP.23	35 x 28mm	34			14	15	
P901CP.236	42 x 28mm	39			18	16	
P901CP.2361	42 x 35mm	39			18	16	
P901CP.238	54 x 28mm	42			22	15	
P901CP.24	54 x 42mm	42			19	17	

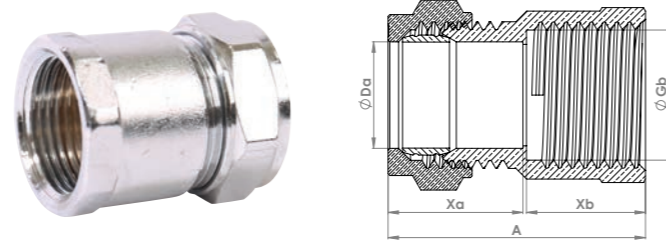
## Chrome Plate Compression Fittings

### P902CP Adaptor Male Straight



Code	Size	A	B	C	Xa	Xb	Xc
P902CP.01	6mm x 1/8"	23			7	10	
P902CP.02	6mm x 1/4"	23			7	10	
P902CP.021	6mm x 3/8"	23			7	10	
P902CP.03	8mm x 1/8"	20			7	7	
P902CP.04	8mm x 1/4"	21			7	8	
P902CP.05	8mm x 3/8"	23			8	10	
P902CP.06	8mm x 1/2"	27			8	9	
P902CP.07	10mm x 1/4"	22			9	9	
P902CP.08	10mm x 3/8"	23			10	10	
P902CP.09	10mm x 1/2"	28			9	9	
P902CP.10	12mm x 1/4"	22			9	8	
P902CP.11	12mm x 3/8"	23			8	10	
P902CP.12	12mm x 1/2"	28			9	9	
P902CP.124	14mm x 3/4"	29			11	11	
P902CP.126	14mm x 1/2"	28			11	9	
P902CP.13	15mm x 1/4"	23			13	9	
P902CP.14	15mm x 3/8"	25			13	9	
P902CP.15	15mm x 1/2"	27			13	9	
P902CP.17	15mm x 3/4"	29			11	11	
P902CP.173	15mm x 1"	32			11	13	
P902CP.176	16mm x 1/2"	28			11	9	
P902CP.18	18mm x 1/2"	28			15	9	
P902CP.19	18mm x 3/4"	29			11	11	
P902CP.195	18mm x 1"	33			16	13	
P902CP.20	22mm x 1/2"	28			13	9	
P902CP.21	22mm x 3/4"	29			16	11	
P902CP.22	22mm x 1"	32			12	12	
P902CP.221	28mm x 3/4"	30			14	11	
P902CP.224	28mm x 1/2"	28			13	9	
P902CP.23	28mm x 1"	32			19	12	
P902CP.234	28mm x 1 1/4"	37			13	14	
P902CP.235	35mm x 1"	35			16	13	
P902CP.24	35mm x 1 1/4"	36			16	14	
P902CP.25	42mm x 1 1/2"	40			18	15	
P902CP.26	54mm x 2"	44			26	17	

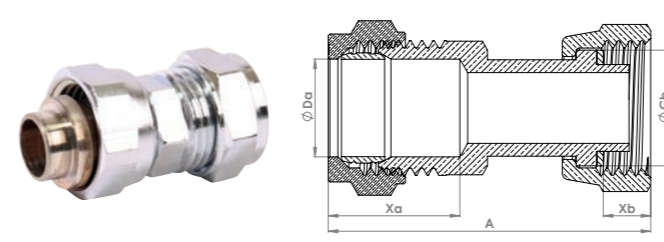
### P903CP Adaptor Female Straight



Code	Size	A	B	C	Xa	Xb	Xc
P903CP.001	6mm x 1/8"	21			7	11	
P903CP.002	6mm x 1/4"	25			7	12	
P903CP.003	8mm x 1/8"	21			7	11	
P903CP.01	8mm x 1/4"	25			7	13	
P903CP.02	8mm x 3/8"	25			7	14	
P903CP.03	8mm x 1/2"	27			8	17	
P903CP.04	10mm x 1/4"	9			9	13	
P903CP.05	10mm x 3/8"	26			8	14	
P903CP.06	10mm x 1/2"	27			9	16	
P903CP.07	12mm x 1/4"	26			8	13	
P903CP.08	12mm x 3/8"	26			9	14	
P903CP.09	12mm x 1/2"	28			9	16	
P903CP.096	14mm x 1/2"	29			11	17	
P903CP.10	15mm x 1/4"	25			11	13	
P903CP.11	15mm x 3/8"	25			10	13	
P903CP.12	15mm x 1/2"	28			11	17	
P903CP.14	15mm x 3/4"	32			11	19	
P903CP.141	15mm x 1"	32			12	21	
P903CP.145	16mm x 1/2"	29			11	16	
P903CP.146	16mm x 3/4"	32			11	19	
P903CP.15	18mm x 1/2"	31			13	16	
P903CP.16	18mm x 3/4"	32			10	19	
P903CP.17	22mm x 3/4"	31			11	16	
P903CP.18	22mm x 3/4"	33			13	19	
P903CP.19	22mm x 1"	36			12	21	
P903CP.195	28mm x 3/4"	37			12	18	
P903CP.196	28mm x 1/2"	37			12	18	
P903CP.20	28mm x 1"	37			13	23	
P903CP.201	28mm x 1 1/4"	39			14	23	
P903CP.202	35mm x 1"	44			18	20	
P903CP.21	35mm x 1 1/4"	42			16	24	
P903CP.22	42mm x 1 1/2"	46			18	24	
P903CP.23	54mm x 2"	48			19	27	

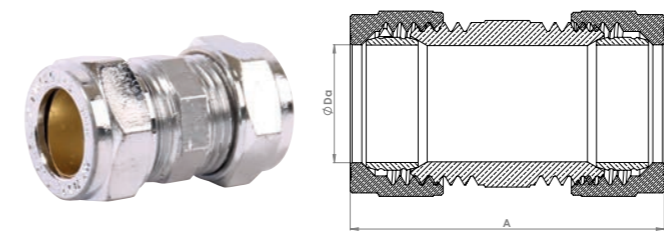
## Chrome Plate Compression Fittings

### P903SFCP Straight Tap Connector (Swivel Coupling)



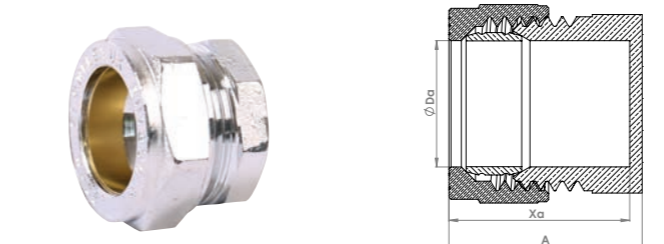
Code	Size	A	B	C	Xa	Xb	Xc
P903SFCP.1	15mm x 1/2"	42			13	6	
P903SFCP.2	15mm x 3/4"	39			12	9	
P903SFCP.3	22mm x 3/4"	50			27	10	

### P906CP Coupler Slip



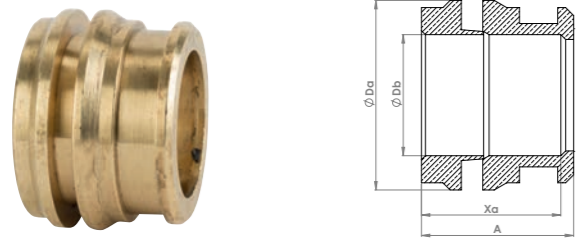
Code	Size	A	B	C	Xa	Xb	Xc
P906CP.05	15 x 15mm	24					
P906CP.08	22 x 22mm	26					
P906CP.09	28 x 28mm	27					

### P923CP Stop End



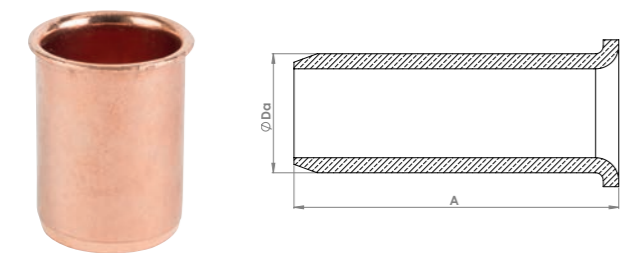
Code	Size	A	B	C	Xa	Xb	Xc
P923CP.1	8mm	14			9		
P923CP.2	10mm	14			11		
P923CP.3	12mm	14			10		
P923CP.4	15mm	15			13		
P923CP.45	18mm	16			13		
P923CP.5	22mm	16			14		
P923CP.6	28mm	17			14		
P923CP.7	35mm	20			15		
P923CP.8	42mm	22			16		
P923CP.9	54mm	25			19		

**J17DR Reducing Set One Piece**



Code	Size	A	B	C	Xa	Xb	Xc
J17DR.14	8 x 6mm	13			11		
J17DR.15	10 x 8mm	15			14		
J17DR.16	12 x 10mm	15			15		
J17DR.165	15 x 8mm	19			18		
J17DR.17	15 x 10mm	19			18		
J17DR.18	15 x 12mm	19			18		
J17DR.19	18 x 12mm	20			17		
J17DR.20	18 x 15mm	20			17		
J17DR.21	22 x 15mm	19			18		
J17DR.22	22 x 18mm	20			17		
J17DR.27	28 x 12mm	22			20		
J17DR.28	28 x 15mm	22			20		
J17DR.29	28 x 22mm	22			21		
J17DR.31	35 x 15mm	25			20		
J17DR.32	35 x 22mm	25			21		
J17DR.35	35 x 28mm	25			23		
J17DR.42	42 x 22mm	35			21		
J17DR.43	42 x 28mm	35			23		
J17DR.44	42 x 35mm	35			25		
J17DR.53	54 x 28mm	36			23		
J17DR.54	54 x 35mm	36			25		
J17DR.55	54 x 42mm	36			35		

**P03 Insert Copper**



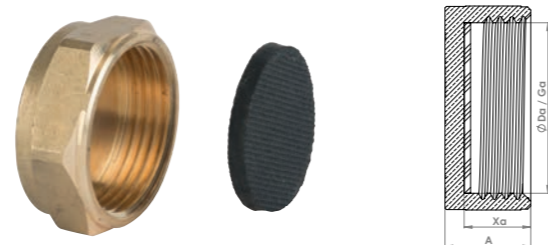
Code	Size	A	B	C	Xa	Xb	Xc
P03.10	10mm	21			19		
P03.12	12mm	21			19		
P03.15	15mm	23			22		
P03.22	22mm	27			26		

**P163 Cap Nut**



Code	Size	A	B	C	Xa	Xb	Xc
P163.004	14mm	12			8		
P163.01	6mm	13			9		
P163.02	8mm	13			10		
P163.03	10mm	12			9		
P163.04	12mm	12			9		
P163.05	15mm	12			8		
P163.055	16mm	13			10		
P163.06	18mm	14			10		
P163.065	20mm	16			11		
P163.07	22mm	13			9		
P163.08	28mm	15			11		
P163.09	35mm	18			12		
P163.10	42mm	20			15		
P163.11	54mm	21			15		

**P163B Blank Nut with Washer**



Code	Size	A	B	C	Xa	Xb	Xc
P163B.03	10mm	13			10		
P163B.035	12mm	13			10		
P163B.07	42mm	20			15		
P163B.08	54mm	21			15		
P163B.4	15mm	13			10		
P163B.5	3/4"	13			10		
P163B.6	22mm	13			12		
P163B.7	1"	16			13		
P163B.71	35mm	18			14		
P163B.8	28mm	15			12		

**P165 Olive Brass**



Code	Size	A	B	C	Xa	Xb	Xc
P165.01	6mm	6					
P165.02	8mm	6					
P165.03	10mm	6					
P165.04	12mm	6					
P165.045	14mm	6					
P165.05	15mm	6					
P165.054	16mm	6					
P165.06	18mm	7					
P165.07	22mm	7					
P165.08	28mm	7					
P165.09	3/4"	7					
P165.10	35mm	9					
P165.11	42mm	9					
P165.12	54mm	10					

**P165C Olive Copper**



Code	Size	A	B	C	Xa	Xb	Xc
P165C.06	18mm	7					
P165C.08	28mm	7					
P165C.20	15mm	6					
P165C.25	22mm	7					

**P165CN Olive Conversion**



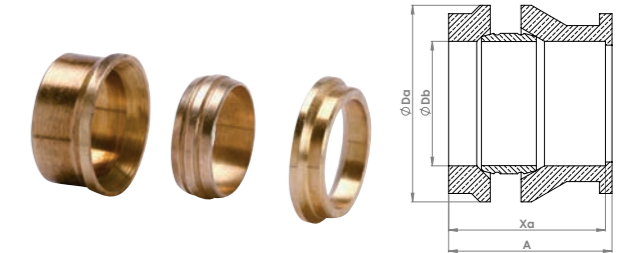
Code	Size	A	B	C	Xa	Xb	Xc
P165CN.11	1 1/2"	10					

**P165DR Olive Brass**



Code	Size	A	B	C	Xa	Xb	Xc
P165DR.03	10mm	6					
P165DR.05	15mm	6					
P165DR.07	22mm	7					
P165DR.08	28mm	7					
P165DR.10	35mm	9					
P165DR.11	42mm	9					
P165DR.12	54mm	10					

**P168DR 3 Piece Reducing Set DZR**



Code	Size	A	B	C	Xa	Xb	Xc
P168DR.001	8 x 6mm	17			15		
P168DR.003	12 x 8mm	16			15		
P168DR.004	22 x 12mm	19			18		
P168DR.005	10 x 8mm	17			15		
P168DR.006	12 x 10mm	18			17		
P168DR.01	15 x 8mm	19			18		
P168DR.010	54 x 15mm	29			24		
P168DR.02	15 x 10mm	20			19		
P168DR.03	15 x 12mm	20			18		
P168DR.034	18 x 12mm	20			18		
P168DR.035	18 x 15mm	20			19		
P168DR.04	22 x 15mm	19			18		
P168DR.045	22 x 18mm	20			19		
P168DR.05	28 x 15mm	21			19		
P168DR.06	28 x 22mm	21			19		
P168DR.064	35 x 15mm	21			19		
P168DR.065	35 x 22mm	21			19		
P168DR.07	35 x 28mm	23			22		
P168DR.075	42 x 15mm	21			19		
P168DR.076	42 x 22mm	22			20		
P168DR.08	42 x 28mm	23			22		
P168DR.09	42 x 35mm	24			23		
P168DR.10	54 x 35mm	31			27		
P168DR.11	54 x 42mm	31			28		
P168DR.110	54 x 22mm	31			26		
P168DR.1101	54 x 28mm	30			28		

**P169DR** Blanking Disc DZR



Code	Size	A	B	C	Xa	Xb	Xc
P169DR.03	8mm	8					
P169DR.04	10mm	9					
P169DR.05	12mm	9					
P169DR.1	15mm	9					
P169DR.15	18mm	5					
P169DR.2	22mm	10					
P169DR.3	28mm	6					

**P172** Reducing Bush



Code	Size	A	B	C	Xa	Xb	Xc
P172.01	1/4" x 1/8"	9			6		
P172.02	3/8" x 1/8"	10			8		
P172.03	3/8" x 1/4"	11			8		
P172.04	1/2" x 1/8"	12			9		
P172.05	1/2" x 1/4"	12			9		
P172.06	1/2" x 3/8"	12			9		
P172.07	3/4" x 1/2"	15			9		
P172.08	1" x 1/2"	17			14		
P172.09	1" x 3/4"	17			12		
P172.10	1 1/4" x 1/2"	20			15		
P172.11	1 1/4" x 3/4"	20			15		
P172.12	1 1/4" x 1"	20			15		
P172.14	1 1/2" x 3/4"	17			12		
P172.15	1 1/2" x 1"	17			12		
P172.16	1 1/2" x 1 1/4"	17			13		
P172.19	2" x 1"	25			18		
P172.20	2" x 1 1/4"	17			10		
P172.21	1 1/2" x 1 1/2"	25			18		

**P177** Flanged Back Nut



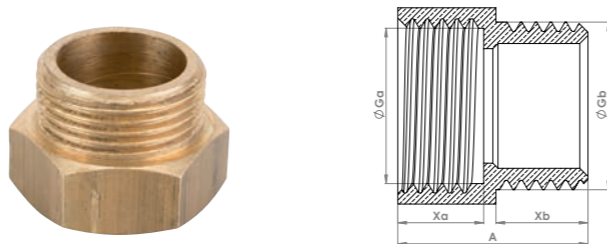
Code	Size	A	B	C	Xa	Xb	Xc
P177.007	2"	16					
P177.08	28mm	7					
P177.1	1/2"	9					
P177.2B	3/4"	10					
P177.3	1"	7					
P177.4	1 1/4"	10					
P177.5	1 1/2"	10					
P921.2A	22mm	10					

**P179** Flanged Plug



Code	Size	A	B	C	Xa	Xb	Xc
P179.1	1/2"	18			10		
P179.2	3/4"	17			10		
P179.3	1"	21			11		

**P182** Tap Extension Piece



Code	Size	A	B	C	Xa	Xb	Xc
P182.1	1/2" x 1/2"	23			11	10	
P182.2	1/2" x 3/4"	22			10	9	
P182.3	3/4" x 3/4"	22			10	10	

**P197** Nut Fibre Washer



Code	Size	A	B	C	Xa	Xb	Xc
P197.15	1/2"	1					
P197.25	3/4"	1					

**P198** Rubber Washer (Back Nut)



Code	Size	A	B	C	Xa	Xb	Xc
P198.1	15mm	3					
P198.2	22mm	3					
P198.3	28mm	3					
P198.4	3/4"	3					

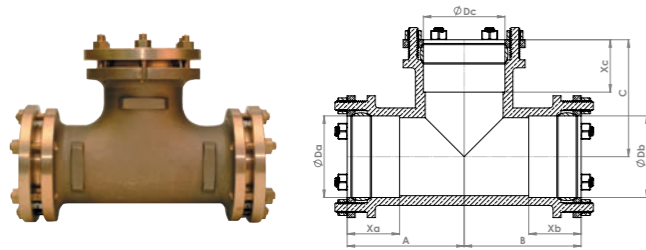
**P199** Tank Connector Rubber Washer



Code	Size	A	B	C	Xa	Xb	Xc
P199.3	22mm	3					

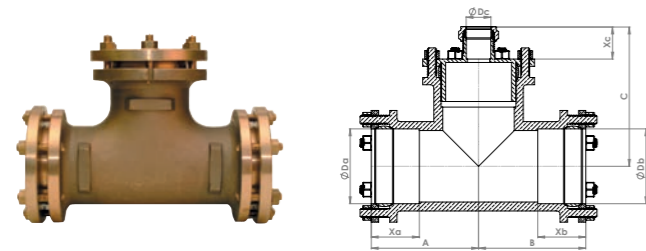
## Large Size Compression Fittings

### P701 Tee



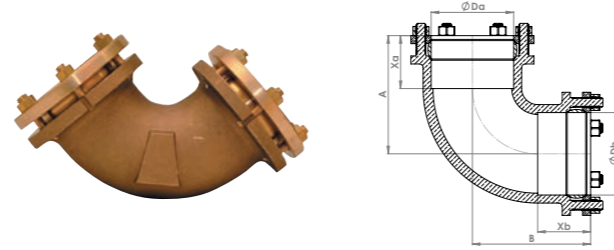
Code	Size	A	B	C	Xa	Xb	Xc
P701.13	67mm	97	97	94	44	44	44
P701.14	76mm	122	122	123	44	44	44
P701.15	108mm	147	147	145	45	45	45

### P702 Tee Reducing Branch



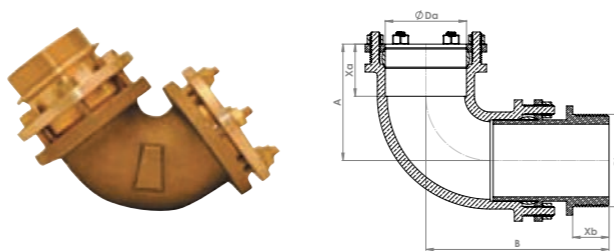
Code	Size	A	B	C	Xa	Xb	Xc
P702.38	67 x 67 x 54mm	97	97	94	44	44	15
P702.39	67 x 67 x 15mm	97	97	94	44	44	15
P702.40	67 x 67 x 22mm	97	97	94	44	44	15
P702.41	67 x 67 x 28mm	97	97	94	44	44	15
P702.42	67 x 67 x 35mm	97	97	94	44	44	15
P702.43	67 x 67 x 42mm	97	97	94	44	44	15
P702.44	76 x 76 x 15mm	122	122	123	44	44	15
P702.45	76 x 76 x 22mm	122	122	123	44	44	15
P702.46	76 x 76 x 28mm	122	122	123	44	44	15
P702.47	76 x 76 x 35mm	122	122	123	44	44	15
P702.48	76 x 76 x 42mm	122	122	123	44	44	15
P702.49	76 x 76 x 54mm	122	122	123	44	44	15
P702.50	76 x 76 x 67mm	122	122	123	44	44	23
P702.51	108 x 108 x 15mm	147	147	145	45	45	15
P702.52	108 x 108 x 22mm	147	147	145	45	45	15
P702.53	108 x 108 x 28mm	147	147	145	45	45	15
P702.54	108 x 108 x 35mm	147	147	145	45	45	15
P702.55	108 x 108 x 42mm	147	147	145	45	45	15
P702.56	108 x 108 x 54mm	147	147	145	45	45	15
P702.57	108 x 108 x 67mm	147	147	145	45	45	15
P702.58	108 x 108 x 76mm	147	147	145	45	45	20

### P801 Elbow



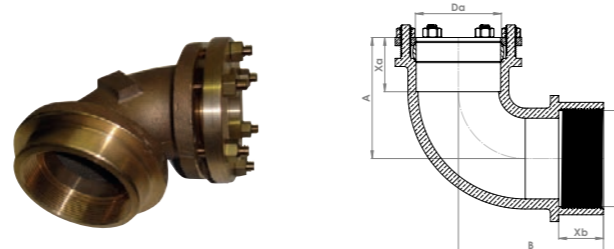
Code	Size	A	B	C	Xa	Xb	Xc
P801.13	67mm	95	95	40	40		
P801.14	76mm	130	130	40	40		
P801.15	108mm	140	140	40	40		

### P802 Adaptor Male Elbow



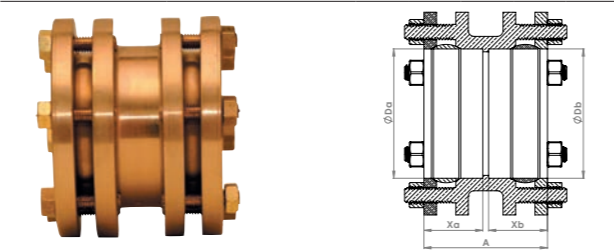
Code	Size	A	B	C	Xa	Xb	Xc
P802.18	67mm	93	100	40	20		
P802.19	76mm	120	140	40	23		

### P803 Adaptor Female Elbow



Code	Size	A	B	C	Xa	Xb	Xc
P803.13	67 x 67mm	95	95	40	27		
P803.14	76 x 76mm	125	130	40	27		

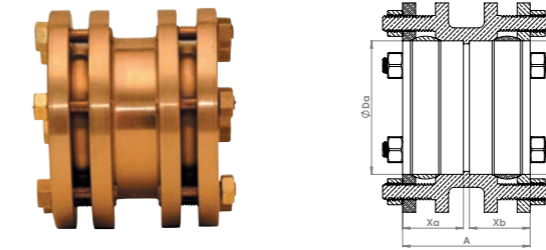
### P901 Coupler



Code	Size	A	B	C	Xa	Xb	Xc
P901.25	67mm	80		37	37		
P901.26	76mm	84		39	39		
P901.27	108mm	99		47	47		

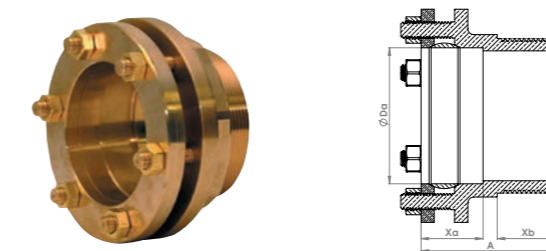
## Large Size Compression Fittings

### P901 Metric x Imperial Coupling



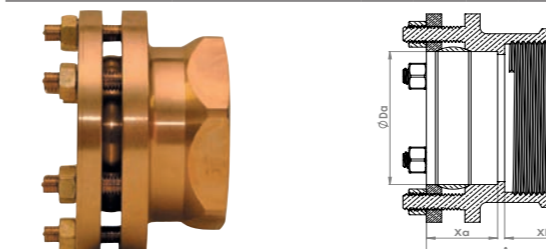
Code	Size	A	B	C	Xa	Xb	Xc
P901.28	108mm x 4"	97		47	47		
P901.31	76mm x 3"	81		40	40		

### P902 Adaptor Male Straight



Code	Size	A	B	C	Xa	Xb	Xc
P902.27	67mm	68		43	18		
P902.28	76mm	69		43	18		
P902.29	108mm	123		50	33		

### P903 Adaptor Female Straight



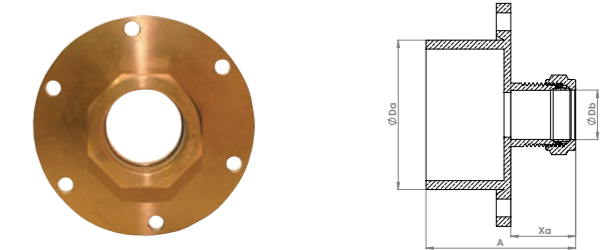
Code	Size	A	B	C	Xa	Xb	Xc
P903.24	67mm	68		45	25		
P903.25	76mm	69		45	25		
P903.26	108mm	91		52	49		

### P165 Olive Brass



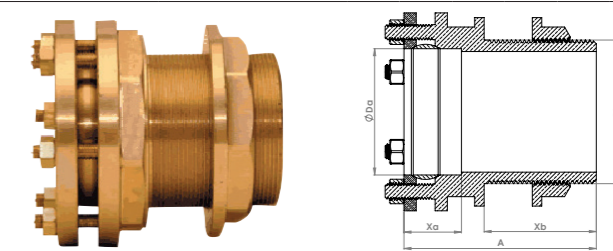
Code	Size	A	B	C	Xa	Xb	Xc
P165.13	67mm	11					
P165.14	76mm	12					
P165.15	108mm	13					

### P904 Reducer for Large Compression



Code	Size	A	B	C	Xa	Xb	Xc
P904.12	67 x 54mm	60			15		
P904.13	67 x 15mm	47			15		
P904.14	67 x 22mm	48			15		
P904.15	67 x 28mm	51			15		
P904.16	67 x 35mm	52			15		
P904.17	67 x 42mm	54			15		
P904.18	76 x 15mm	47			15		
P904.19	76 x 22mm	48			15		
P904.20	76 x 28mm	50			15		
P904.21	76 x 35mm	50			15		
P904.22	76 x 42mm	55			15		
P904.23	76 x 54mm	60			15		
P904.24	76 x 67mm	60			23		
P904.26	108 x 22mm	48			15		
P904.27	108 x 28mm	50			15		
P904.28	108 x 35mm	50			15		
P904.29	108 x 42mm	55			15		
P904.30	108 x 54mm	60			15		
P904.31	108 x 67mm	60			15		
P904.32	108 x 76mm	60			20		

### P921 Tank Connectors

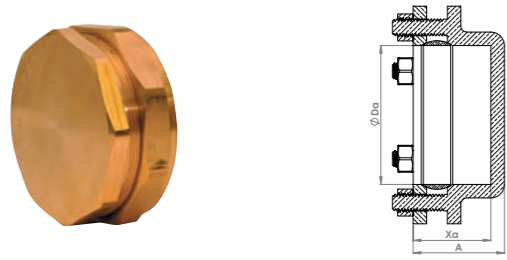


Code	Size	A	B	C	Xa	Xb	Xc
P921.7	67mm	102			43	29	
P921.8	76mm	122			59	41	
P921.9	108mm	142			50	70	



## Large Size Compression Fittings

### P923 Blank Caps



Code	Size	A	B	C	Xa	Xb	Xc
P923.10	67mm	44			41		
P923.11	76mm	45			42		
P923.12	108mm	48			45		

### P197 Nut Fibre Washer



Code	Size	A	B	C	Xa	Xb	Xc
P197.5	2 1/4"	1					

### P200 Rubber Washer

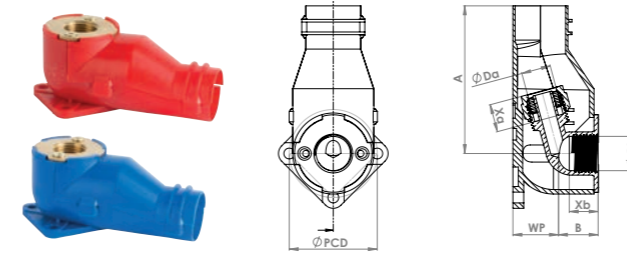


Code	Size	A	B	C	Xa	Xb	Xc
P200.1	4mm	2					

## PEX Fittings

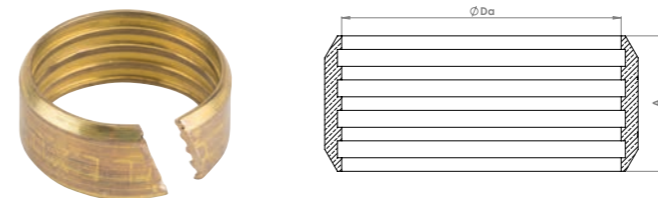
**i** For Manifold Ball Valve see PX811

### PX105 Elbow 105°



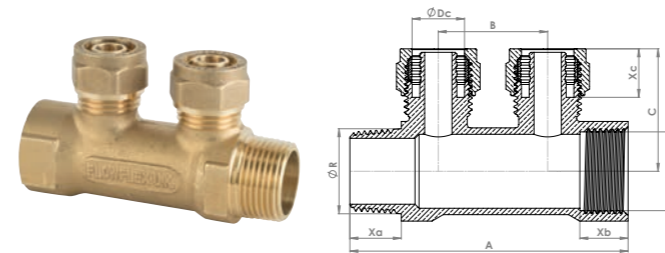
Code	Size	A	B	C	Xa	Xb	Xc
PX105.06	1/2" x 16mm (red)	82	24		14	15	
PX105.07	1/2" x 16mm (blue)	82	24		14	15	

### PX165 Split Brass Olive



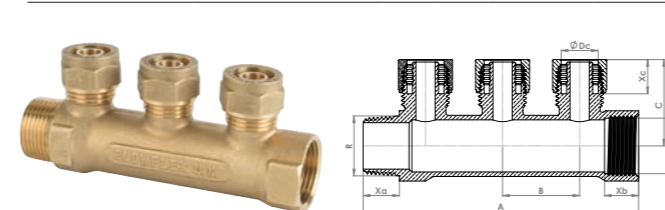
Code	Size	A	B	C	Xa	Xb	Xc
PX165.03	16mm	8					

### PX602 Manifold



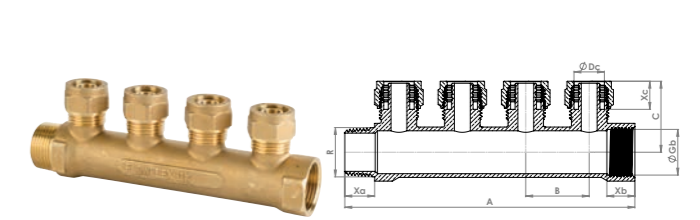
Code	Size	A	B	C	Xa	Xb	Xc
PX602.15	3/4" x 3/4" x 16mm	87	34	38	16	16	14

### PX603 Manifold



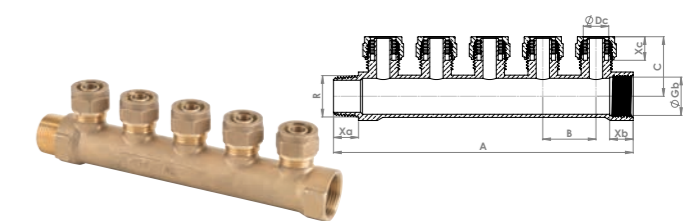
Code	Size	A	B	C	Xa	Xb	Xc
PX603.15	3/4" x 3/4" x 16mm	120	34	37	16	15	14

### PX604 Manifold



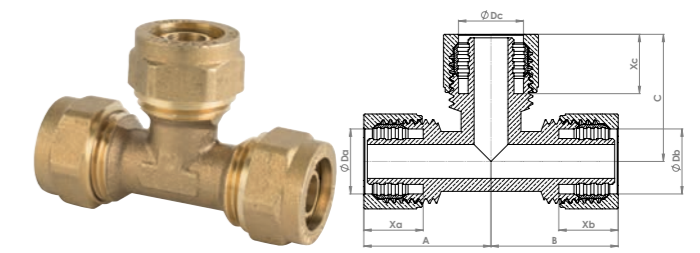
Code	Size	A	B	C	Xa	Xb	Xc
PX604.15	3/4" x 3/4" x 16mm	157	34	38	16	16	14

### PX605 Manifold



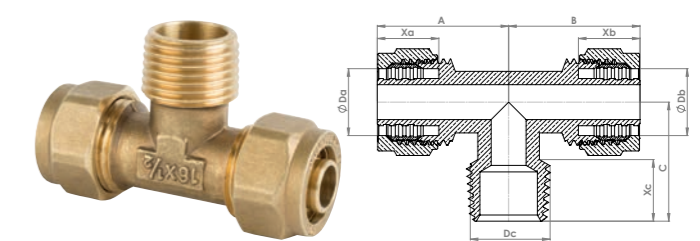
Code	Size	A	B	C	Xa	Xb	Xc
PX605.15	3/4" x 3/4" x 16mm	193	34	38	16	16	14

### PX701 Tee



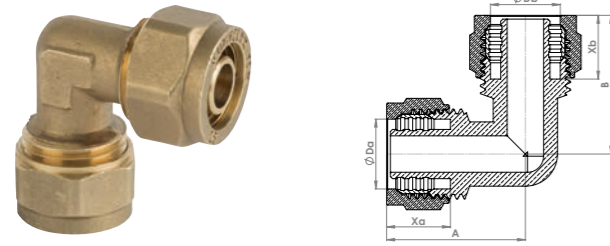
Code	Size	A	B	C	Xa	Xb	Xc
PX701.04	16 x 16 x 16mm	31	31	31	14	14	14

### PX716 Adaptor Male Tee



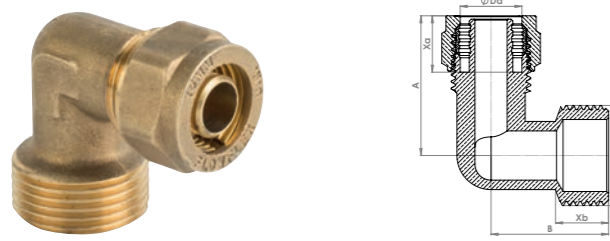
Code	Size	A	B	C	Xa	Xb	Xc
PX716.06	16 x 16mm	32	32	28	15	15	14

**PX801 Elbow**



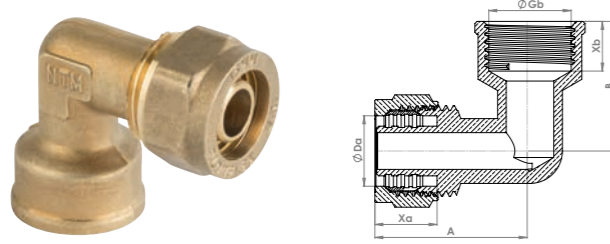
Code	Size	A	B	C	Xa	Xb	Xc
PX801.03	16mm	32	32	14	14		

**PX802 Adaptor Male Elbow**



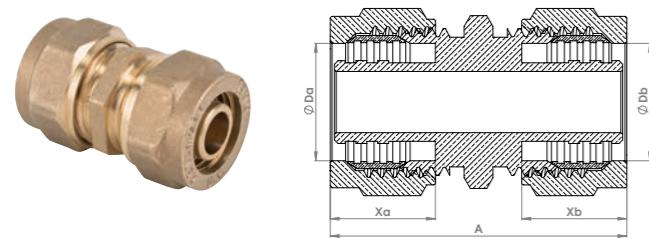
Code	Size	A	B	C	Xa	Xb	Xc
PX802.06	16mm x 1/2"	33	26	14	12		
PX802.07	16mm x 3/4"	35	30	14	13		

**PX803 Adaptor Female Elbow**



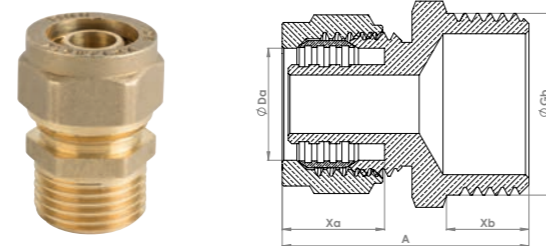
Code	Size	A	B	C	Xa	Xb	Xc
PX803.06	16mm x 1/2"	35	30	14	12		

**PX901 Coupler**



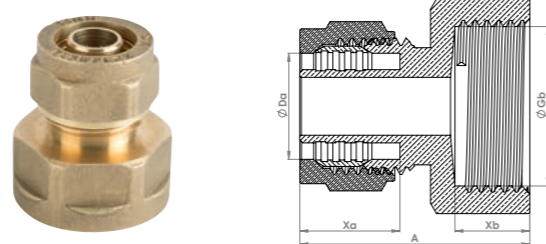
Code	Size	A	B	C	Xa	Xb	Xc
PX901.04	16mm	40		14	14		

**PX902 Adaptor Male Straight**



Code	Size	A	B	C	Xa	Xb	Xc
PX902.06	16mm x 1/2"	35		14	13		
PX902.15	16mm x 3/4"	35		14	13		

**PX903 Adaptor Female Straight**



Code	Size	A	B	C	Xa	Xb	Xc
PX903.06	16mm x 1/2"	29		14	10		
PX903.15	16mm x 3/4"	29		14	10		

**PXPP100W PEX Pipe**



Code	Size	A	B	C	Xa	Xb	Xc
PXPP100W.04	16 x 2.2 x 100m						

**General Specification**

Compression fittings are designed to mechanically form a joint between the fitting and the pipe. When tightening the nut, you are compressing the olive onto the tube, creating a permanent seal.

Flowflex compression fittings are manufactured in the UK to the BS EN 1254-2:1998 Standard. Made from brass bar which conforms to British and European (CW) material designs, they are available in four finishes:

- 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

**Material Specifications**

Standard	Materials
CW614N (CZ121)	Standard brass fittings
CW617N (CZ122)	Standard brass fittings
CW602N (CZ132)	DZR fittings

- Compression ends manufactured to EN1254-2
- Male & Female threaded ends manufactured to EN1254-4
- WRAS Approved
- A Kitemark licence is held for an extensive range of compression fittings
- Marked Flowflex UK EN1254-2 on cap nut

**Approvals**



Flowflex operates a quality management system audited by the British Standards Institute as per for the manufacture and supply of fittings and components for use in all applications of the HVAC industry. It is through these internal systems that we have the confidence to guarantee our compression fittings against manufacturing defects for 25 years, when installed in accordance with our instructions on specified tube materials and applications.

**Tube Compatibility**

All installers should ensure that the size of the fitting matches the size of the tube, whilst also ensuring both are in good condition and free from damage and imperfections.

Warranty only valid when compression fittings are used with Flowflex olives supplied with the fitting.

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

Stress Corrosion Cracking (SCC) is a phenomenon that occurs occasionally with brass compression fittings. The development of SCC depends on the following specific conditions:

- A susceptible material, in this case brass
- A degree of internal stress either from the manufacturing process or during installation
- An environment containing moisture, ammonia or ammoniacal compounds

For more information on SCC contact Flowflex for a data sheet.

## Working Temperature & Pressures

Maximum Temperature	Maximum 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.

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

## Connecting

### 1. Tube Specification

Ensure the tube conforms to the 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.

### 2. Cut Your Pipe to Size

You must cut your pipe accurately. Failure to do so could impact on the quality of your jointing. If your pipe is too short, it might not hit the pipe stop. Too long and strain could be introduced into the system. When cutting, ends of the tube must be cut cleanly across the tube diameter to allow for a secure connection to the fitting.

#### Carbon, Stainless Steel and Chrome Plated

Ensure no flats or score marks are visible on the outside surface of the tube. The weld bead should not be visible.

### 3. Clean The Socket of the Pipe

Before creating the joint, it is important that the inside of the pipe is smooth and doesn't interfere with the flow. In the case that flow local to the joint is affected, erosion and corrosion may occur and also vibrations. Use of a stiff wire brush is recommended to reach the desired outcome. Care must be taken with soft tube to ensure the tube is not deformed by applying too much pressure.

### 4. Clean The Outside of the Pipe

Cleaning the outside diameter of the tube and the inside of the fittings is imperative to ensure that a secure and reliable joint is formed. Failure to remove all oxides and any material where the fittings and tube overlaps can interfere with 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.

Use of fine steel wool is recommended here to reach the desired outcome.

#### MDPE

At this point you should be careful to ensure no pipe residue, dirt or grit is present near the joint.

#### PEX

At this point you should be careful to ensure no pipe residue, dirt or grit is present near the joint.

### 5. Assemble the Fitting Around the Tube

Remove the compression nut and compression olive, then put the nut on the tube, followed by the olive. Insert the tube end up to the fitting's tube stop. Slide the olive and the nut down to the fitting body. Tighten the nut using your fingers to secure the fitting in place.

#### MDPE

MDPE pipe requires a pipe support liner, which should be pushed fully into the bore of the pipe.

In the case that the pipe support liner is difficult to insert, you can make a small chamfer with a sharp knife.

#### PEX

PEX pipe requires a pipe support liner, which should be pushed fully into the bore of the pipe.

In the case that the pipe support liner is difficult to insert, you can make a small chamfer with a sharp knife.

### 6. Tighten the Nut

Tighten the nut further using open ended or adjustable spanners, using the spanner flats incorporated into the fitting body and nut. The second spanner must be used to prevent the fitting rotating as the nut is tightened.

**Do not overtighten the nuts.** Over-tightening can be detrimental to both the nut and the olive, weakening the joint and causing issues later when servicing. You can use our table for guidance.

A few drops of light oil can be used on the threads to assist the turning. This can be especially helpful on sizes 35mm and above. When jointing stainless steel or annealed (R220) copper tube some variation may be needed – the nut may be tightened further if necessary.

### 7. Testing and Commissioning

Systems should always be tested for joint integrity. Whenever possible, completed systems should be flushed to remove debris.

## Notes

### Tightening Compression Fittings Guidance

< 28	1 1/4 Turns
> 28	3/4 Turns

This table is to be used for guidance purposes only

### Threaded Connections

Threaded connectors have taper male or parallel female BSP threads, and the most popular sizes have parallel male BSP threads.

These are for jointing pipework to boilers, pumps or backplate elbows. For taper male threads, a small amount of inert jointing compound or PTFE tape should be applied before installation.

When installing parallel male threads, for example to cisterns and cylinders, a good quality jointing washer should be used.

### PTFE Tape

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, make sure yours is compliant.

### Carbon, Stainless Steel and Chrome Plated

A suitable jointing compound should be applied to the sealing faces prior to tightening of the compression nuts. Sealants with PTFE fillers are preferred, with PTFE tape as an alternative.

### General Specification

Flowflex PEX fittings is our solution for connecting brass fittings to PEX pipe. Manufactured to BS EN 1254-3:1998, our fittings come manufactured with an insert and are supplied with a split olive to allow for a firm joint.

The wider PEX system supplied by Flowflex includes manifolds and valves to support underfloor heating installations and the isolation of terminal appliances.

- Standard brass fittings
- Manufactured to BS EN 1254-3:1998
- Full systems

Flowflex operates a quality management system audited by the British Standards Institute as per for the manufacture and supply of fittings and components for use in all applications of the HVAC industry. It is through these internal systems that we have the confidence to guarantee our PEX fittings against manufacturing defects for 25 years, when installed in accordance with our instructions on specified tube materials and applications.

## Large Compression

### Materials Used

Bronze parts to BS1400 LG2 and German alloy RG7 brass pins & nuts CZ121

### Working Temperatures and Pressures

Service Temperature	Bar Pressure	PSI
30	16	224
65	10	140
110	6	84
120	3	42

### Preliminaries

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 a 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.

### Connecting

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

- a. The compression flange should be parallel to the face of the body to indicate that a sound joint has been made.
4. 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.

**Note:** Before fitting any reducer, remove the flange and compression ring from the end to which the reducer is being fitted. The instructions at point 3 for tightening the nuts should also be followed for fitting a reducer.

# Capillary Fittings

Our range of capillary fittings include end feed and solder ring options and are available in both copper and brass, offering a lightweight, fast and simple joint for copper pipe, ideal for domestic and commercial heating and plumbing applications.

Available in sizes from 6mm to 159mm, we have a fitting to suit most applications and projects. All fittings are guaranteed against manufacturing defects for 25 years and are manufactured to BS EN 1254 and WRAS approved.

## End Feed Fittings

Offering a complete range of sizes, from 6mm to 159mm our end feed fittings provide a traditional connection for commercial and residential installations. And our range of larger fittings is ideal for more complex and demanding commercial projects, providing reliability and security of connection.

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.

## Solder Ring Fittings

With a comprehensive selection of fittings, Flowflex solder ring fittings are available in copper and brass and are manufactured to the highest standards. Sizes range from 8mm to 54mm.

All fittings comply with British and International standards, manufactured to BS EN 1254 under quality management standard ISO9001:2008. A ring of high quality lead-free solder is located in each fitting with the joint secured 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.

## Dimensions

### End Feed

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)

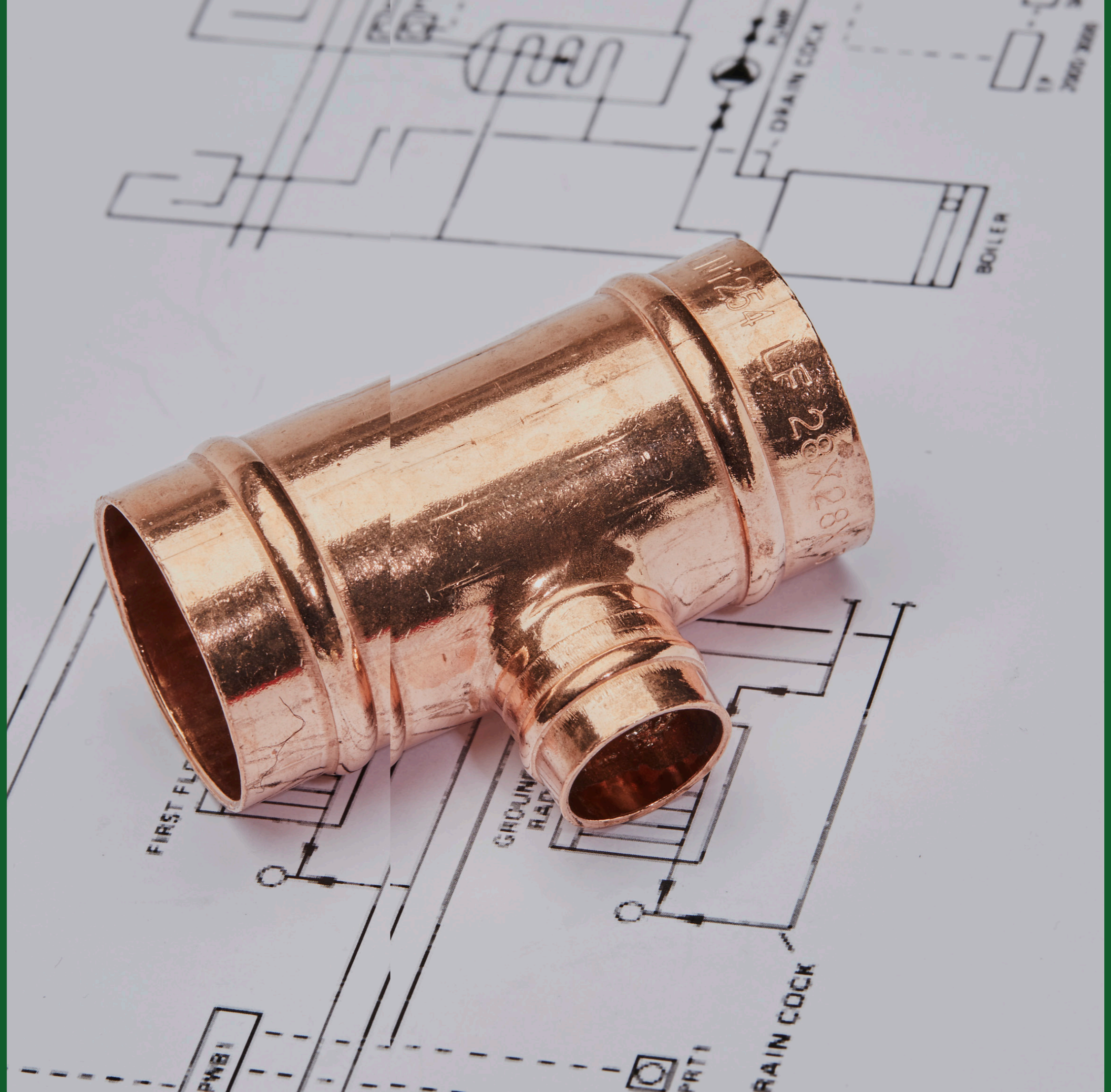
Tees and other reduced fittings of unequal sizes are shown with the largest end first, then the branch, followed by the remaining end on the run. e.g. 5130R.221522

### Solder Ring

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



## Capillary Fittings Index

End Feed Fittings to EN 1254-1 and EN 1254-4



Code: **5001A**  
Page 44



Code: **5002A**  
Page 44, 51



Code: **5040**  
Page 44



Code: **5041**  
Page 44, 51



Code: **5085**  
Page 44



Code: **5086**  
Page 44



Code: **5090**  
Page 45, 51



Code: **5092**  
Page 45, 51



Code: **5130**  
Page 45, 51



Code: **5130R**  
Page 45, 46



Code: **5240**  
Page 46, 52



Code: **5243**  
Page 46, 52



Code: **5270**  
Page 47, 52



Code: **5301**  
Page 47, 53



Code: **C803SFEF**  
Page 47



Code: **C805SCEF**  
Page 47



Code: **C901EF**  
Page 47



Code: **C903SFEF**  
Page 47



Code: **C904LEF**  
Page 48



Code: **C905SCEF**  
Page 48

## Capillary Fittings Index

End Feed Fittings to EN 1254-1 and EN 1254-4



Code: **C906EF**  
Page 48



Code: **4090G**  
Page 48



Code: **4092G**  
Page 48



Code: **4130G**  
Page 48



Code: **4243G**  
Page 49, 53



Code: **4270G**  
Page 49, 53



Code: **4341G**  
Page 49



Code: **B020**  
Page 49



Code: **EFMUC**  
Page 49



Code: **FA**  
Page 50



Code: **371**  
Page 50



Code: **P440EF**  
Page 50



Code: **P737EF**  
Page 50



Code: **P803WPEF**  
Page 50

## Capillary Fittings Index

Solder Ring Fittings to EN 1254-1 and EN 1254-4



Code: **C701SR**  
Page 54



Code: **C702SR**  
Page 54



Code: **C703SR**  
Page 54



Code: **C704SR**  
Page 54



Code: **C705SR**  
Page 54



Code: **C706SR**  
Page 55



Code: **C801SR**  
Page 55



Code: **C803SFSR**  
Page 55



Code: **C803SR**  
Page 55



Code: **C804SR**  
Page 55



Code: **C805CSR**  
Page 55



Code: **C901SR**  
Page 56



Code: **C901SR**  
Page 56



Code: **C901SR**  
Page 56

## Capillary Fittings Index

Solder Ring Fittings to EN 1254-1 and EN 1254-4



Code: **C903SFSR**  
Page 56



Code: **C904SR**  
Page 57



Code: **C905CSR**  
Page 57



Code: **C923SR**  
Page 57



Code: **P717SR**  
Page 57



Code: **P802TSR**  
Page 57



Code: **P803SR**  
Page 58



Code: **P803WPSR**  
Page 58



Code: **P902TSR**  
Page 58



Code: **P903SR**  
Page 58

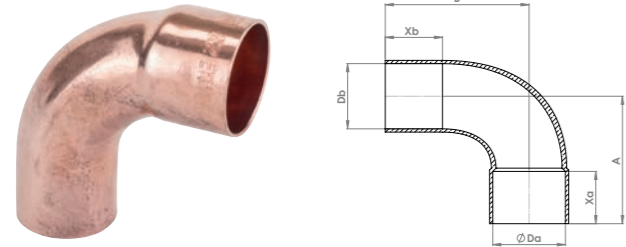


Code: **SRFUC**  
Page 58



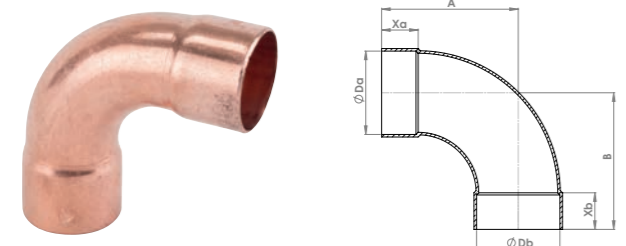
Code: **SRMUC**  
Page 58

**5001A Long Radius Street Elbow**



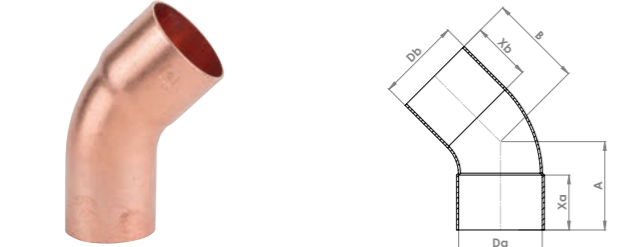
Code	Size	A	B	C	Xa	Xb	Xc
5001A.12	12 x 12mm	23	25	8			
5001A.15	15 x 15mm	29	31	11			
5001A.22	22 x 22mm	42	44	15			
5001A.28	28 x 28mm	52	54	18			
5001A.35	35 x 35mm	65	67	23			
5001A.42	42 x 42mm	77	79	27			
5001A.54	54 x 54mm	97	99	32			

**5002A Long Radius Elbow**



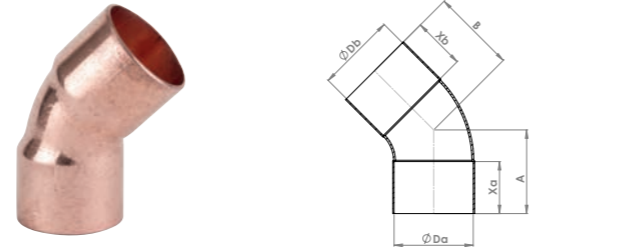
Code	Size	A	B	C	Xa	Xb	Xc
5002A.12	12 x 12mm	23	23	8	8		
5002A.15	15 x 15mm	29	29	11	11		
5002A.22	22 x 22mm	42	42	15	15		
5002A.28	28 x 28mm	52	52	18	18		
5002A.35	35 x 35mm	65	65	23	23		
5002A.42	42 x 42mm	77	77	27	27		
5002A.54	54 x 54mm	97	97	32	32		

**5040 Elbow 45° Street**



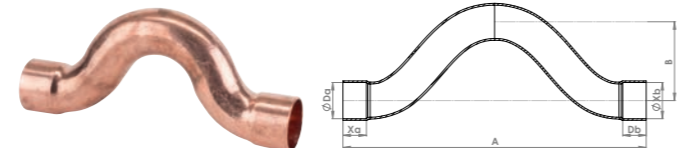
Code	Size	A	B	C	Xa	Xb	Xc
5040.12	12 x 12mm	13	15	8			
5040.15	15 x 15mm	16	18	10			
5040.22	22 x 22mm	23	25	15			
5040.28	28 x 28mm	28	30	18			
5040.35	35 x 35mm	37	39	23			
5040.42	42 x 42mm	42	44	27			
5040.54	54 x 54mm	52	54	32			

**5041 Elbow 45°**



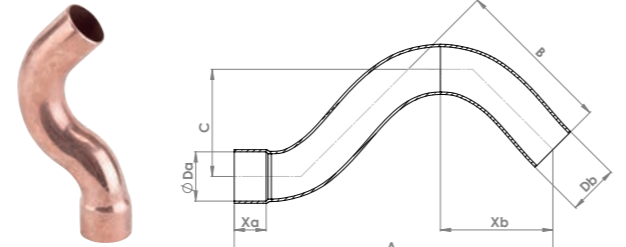
Code	Size	A	B	C	Xa	Xb	Xc
5041.10	10 x 10mm	13	13	7	7		
5041.15	15 x 15mm	17	17	11	11		
5041.22	22 x 22mm	23	23	15	15		
5041.28	28 x 28mm	28	28	17	17		
5041.35	35 x 35mm	37	37	23	23		
5041.42	42 x 42mm	42	42	27	27		
5041.54	54 x 54mm	52	52	32	32		

**5085 Crossover Full**



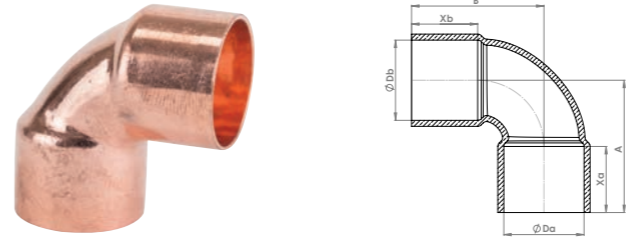
Code	Size	A	B	C	Xa	Xb	Xc
5085.15	15 x 15mm	112	112	11	11		
5085.22	22 x 22mm	145	35	16	16		

**5086 Crossover Part**



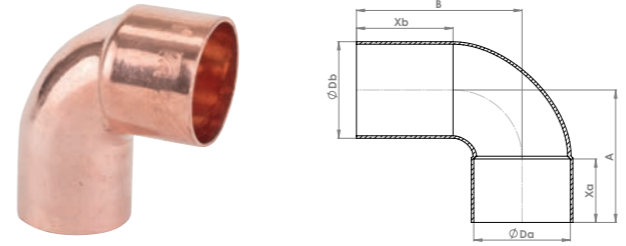
Code	Size	A	B	C	Xa	Xb	Xc
5086.15	15 x 15mm	93	35	27	13	43	
5086.22	22 x 22mm	120	45	35	14	54	

**5090 Elbow**



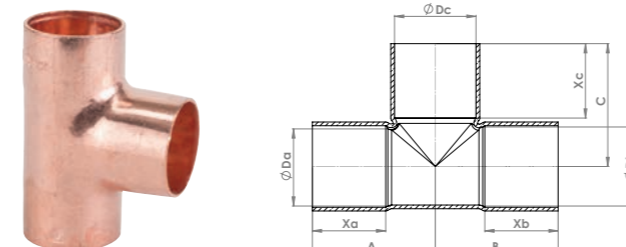
Code	Size	A	B	C	Xa	Xb	Xc
5090.08	8 x 8mm	13	13	6	6		
5090.10	10 x 10mm	15	15	7	7		
5090.12	12 x 12mm	16	16	8	8		
5090.15	15 x 15mm	19	19	10	10		
5090.22	22 x 22mm	28	28	15	15		
5090.28	28 x 28mm	35	35	18	18		
5090.35	35 x 35mm	46	46	23	23		
5090.42	42 x 42mm	55	55	27	27		
5090.54	54 x 54mm	70	70	32	32		

**5092 Elbow Street**



Code	Size	A	B	C	Xa	Xb	Xc
5092.10	10 x 10mm	15	17	7			
5092.15	15 x 15mm	19	21	8			
5092.22	22 x 22mm	28	30	12			
5092.28	28 x 28mm	35	37	16			
5092.35	35 x 35mm	46	54	24			
5092.42	42 x 42mm	56	66	29			
5092.54	54 x 54mm	71	82	39			

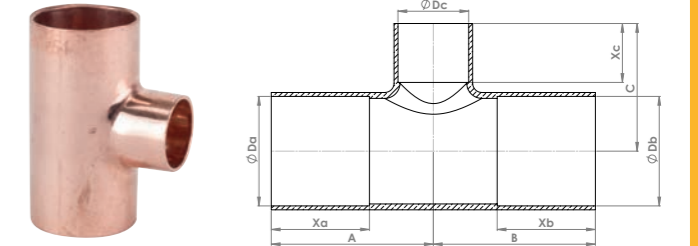
**5130 Tee**



Code	Size	A	B	C	Xa	Xb	Xc
5130.06	6 x 6 x 6mm	11	11	11	6	6	6
5130.08	8 x 8 x 8mm	12	12	12	6	6	6
5130.10	10 x 10 x 10mm	14	14	14	8	8	8
5130.12	12 x 12 x 12mm	18	18	18	9	9	9
5130.15	15 x 15 x 15mm	20	20	20	11	11	11
5130.22	22 x 22 x 22mm	28	28	28	16	16	16

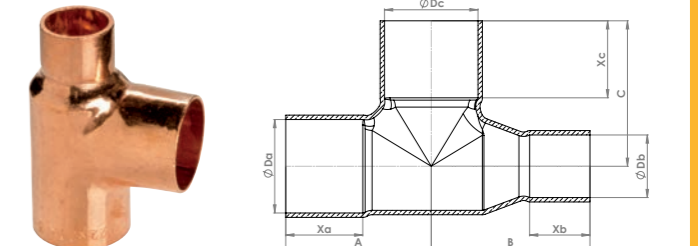
Code	Size	A	B	C	Xa	Xb	Xc
5130.28	28 x 28 x 28mm	34	34	34	19	19	19
5130.35	35 x 35 x 35mm	42	42	42	22	22	22
5130.42	42 x 42 x 42mm	50	50	50	27	27	27
5130.54	54 x 54 x 54mm	61	61	61	32	32	32

**5130R Tee Reducing Branch**



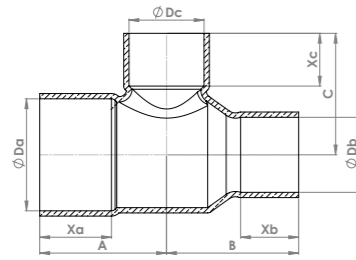
Code	Size	A	B	C	Xa	Xb	Xc
5130R.151015	15 x 15 x 10mm	17	17	17	6	9	6
5130R.221022	22 x 22 x 10mm	25	25	17	9	12	6
5130R.221522	22 x 22 x 15mm	25	25	23	9	12	9
5130R.281528	28 x 28 x 15mm	28	28	26	9	15	9
5130R.282215	28 x 15 x 22mm	31	30	31	12	15	19
5130R.281522	28 x 22 x 15mm	28	28	26	9	15	12
5130R.282228	28 x 28 x 22mm	31	31	31	12	15	12
5130R.351535	35 x 35 x 15mm	32	32	30	9	19	0
5130R.352235	35 x 35 x 22mm	36	36	35	13	19	13
5130R.352835	35 x 35 x 28mm	38	38	38	15	19	15
5130R.421542	42 x 42 x 15mm	36	36	34	9	23	9
5130R.422242	42 x 42 x 22mm	40	40	39	13	23	13
5130R.422842	42 x 42 x 28mm	43	43	42	16	23	16
5130R.423542	42 x 42 x 35mm	46	46	46	19	23	19
5130R.541554	54 x 54 x 15mm	41	41	40	9	29	9
5130R.542254	54 x 54 x 22mm	45	45	45	13	29	13
5130R.542854	54 x 54 x 28mm	48	48	48	16	29	16
5130R.543554	54 x 54 x 35mm	51	51	52	19	29	19
5130R.544254	54 x 54 x 42mm	55	55	56	23	29	23

**5130R Tee Reducing End**



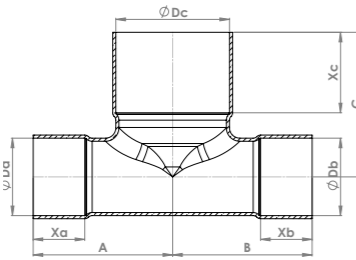
Code	Size	A	B	C	Xa	Xb	Xc
5130R.151510	15 x 10 x 15mm	19	19	19	8	8	11
5130R.222215	22 x 15 x 22mm	28	27	28	12	12	16
5130R.282815	28 x 15 x 28mm	34	33	34	15	15	22
5130R.282822	28 x 22 x 28mm	34	35	34	15	15	19
5130R.353522	35 x 22 x 35mm	42	42	42	19	19	26
5130R.353528	35 x 28 x 35mm	42	42	42	19	19	23
5130R.424235	42 x 35 x 42mm	50	50	50	23	23	27
5130R.545442	54 x 42 x 54mm	61	62	61	29	29	35

**5130R Tee Reducing Branch & End**



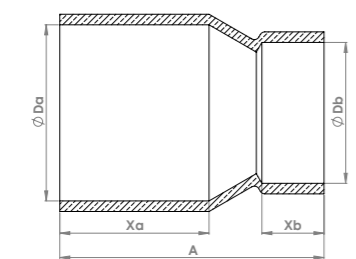
Code	Size	A	B	C	Xa	Xb	Xc
5130R.221515	22 x 15 x 15mm	25	24	23	9	12	13
5130R.281515	28 x 15 x 15mm	28	27	26	9	15	16
5130R.282222	28 x 22 x 22mm	31	32	31	12	15	16
5130R.352222	35 x 22 x 22mm	36	37	35	13	19	21
5130R.352828	35 x 28 x 28mm	38	40	38	15	19	21
5130R.423535	42 x 35 x 35mm	46	46	46	19	23	23

**5130R Tee Reducing Both Ends**



Code	Size	A	B	C	Xa	Xb	Xc
5130R.152215	15 x 15 x 22mm	27	27	28	16	12	16
5130R.222822	22 x 22 x 28mm	35	35	34	19	15	19
5130R.352228	35 x 28 x 22mm	36	37	35	13	19	18

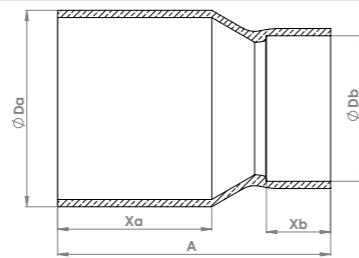
**5240 Coupler Reducing**



Code	Size	A	B	C	Xa	Xb	Xc
5240.1008	10 x 8mm	17					
5240.1208	12 x 8mm	19					
5240.1508	15 x 8mm	24					
5240.1510	15 x 10mm	24					
5240.1512	15 x 12mm	24					
5240.2212	22 x 12mm	32					
5240.2215	22 x 15mm	32					
5240.2815	28 x 15mm	38					
5240.2822	28 x 22mm	40					
5240.3522	35 x 22mm	48					

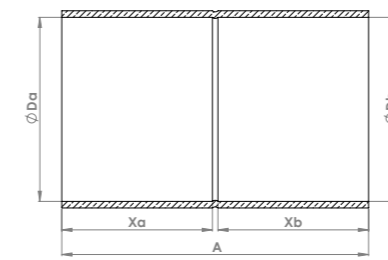
Code	Size	A	B	C	Xa	Xb	Xc
5240.3522	35 x 22mm	48					
5240.3528	35 x 28mm	48					
5240.4228	42 x 28mm	56					
5240.4235	42 x 35mm	60					
5240.5422	54 x 22mm	70					
5240.5428	54 x 28mm	70					
5240.5435	54 x 35mm	70					

**5243 Fitting Reducer**



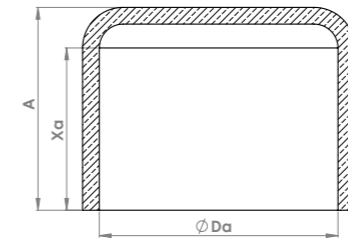
Code	Size	A	B	C	Xa	Xb	Xc
5243.0806	8 x 6mm	16			6		
5243.1006	10 x 6mm	20			6		
5243.1008	10 x 8mm	20			8		
5243.1210	12 x 10mm	22			8		
5243.1508	15 x 8mm	26			7		
5243.1510	15 x 10mm	24			8		
5243.1512	15 x 12mm	26			8		
5243.2212	22 x 12mm	33			8		
5243.2215	22 x 15mm	35			13		
5243.2812	28 x 12mm	41			9		
5243.2815	28 x 15mm	43			11		
5243.2822	28 x 22mm	44			16		
5243.3515	35 x 15mm	50			11		
5243.3522	35 x 22mm	50			15		
5243.3528	35 x 28mm	50			18		
5243.3215	42 x 15mm	65			11		
5243.4222	42 x 22mm	58			16		
5243.4228	42 x 28mm	58			18		
5243.4235	42 x 35mm	60			25		
5243.5415	54 x 15mm	70			10		
5243.5422	54 x 22mm	70			18		
5243.5428	54 x 28mm	70			25		
5243.5435	54 x 35mm	70			25		
5243.5442	54 x 42mm	70			25		

**5270 Coupler**



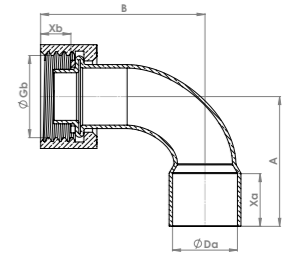
Code	Size	A	B	C	Xa	Xb	Xc
5270.08	8 x 8mm	15			6	6	
5270.10	10 x 10mm	17			7	7	
5270.12	12 x 12mm	19			8	8	
5270.15	15 x 15mm	24			11	11	
5270.22	22 x 22mm	33			15	15	
5270.28	28 x 28mm	40			18	18	
5270.35	35 x 35mm	49			23	23	
5270.42	42 x 42mm	58			27	27	
5270.54	54 x 54mm	69			32	32	

**5301 Stop End**



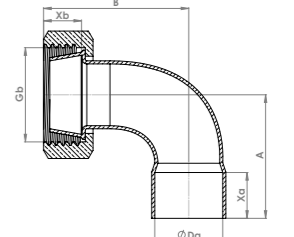
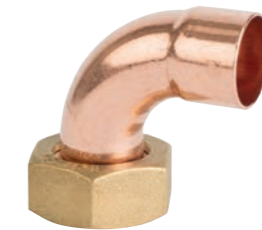
Code	Size	A	B	C	Xa	Xb	Xc
5301.08	8mm	9			6		
5301.10	10mm	9			7		
5301.12	12mm	10			8		
5301.15	15mm	12			10		
5301.22	22mm	17			15		
5301.28	28mm	20			18		
5301.35	35mm	25			23		
5301.42	42mm	29			27		
5301.54	54mm	34			32		

**C803SFEF Tap Connector Bent**



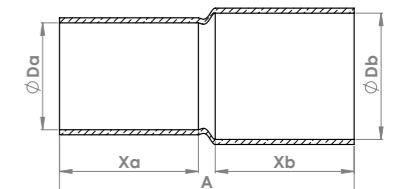
Code	Size	A	B	C	Xa	Xb	Xc
C803SFEF.1	15mm x 1/2"	35	35		10	7	
C803SFEF.2	22mm x 3/4"	44	45		15	8	

**C805SCEF Cylinder Union Bent**



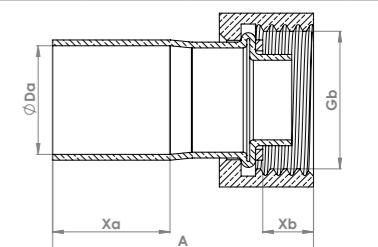
Code	Size	A	B	C	Xa	Xb	Xc
C805SCEF.4	22mm x 1"	41	45		16	9	

**C901EF Metric x Imperial Coupler**



Code	Size	A	B	C	Xa	Xb	Xc
C901EF.245	15mm x 1/2"	23			11	11	
C901EF.25	22mm x 3/4"	36			16	15	
C901EF.26	28mm x 1"	40			20	19	
C901EF.27	35mm x 1 1/4"	53			23	23	

**C903SFEF Straight Tap Connector**



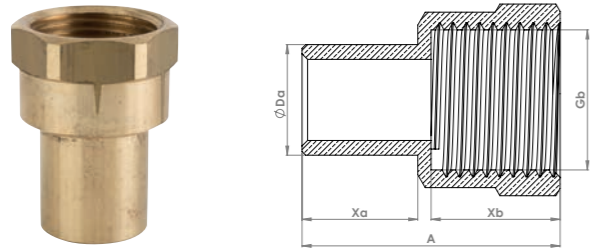
Code	Size	A	B	C	Xa	Xb	Xc
C903SFEF.1	15mm x 1/2"	33			12	8	
C903SFEF.2	15mm x 3/4"	38			12	8	
C903SFEF.3	22mm x 3/4"	45			17	8	





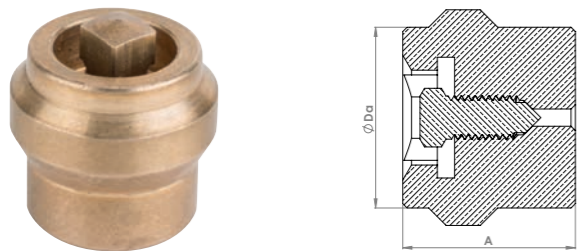
## End Feed Fittings

### FA Adaptor Female Straight



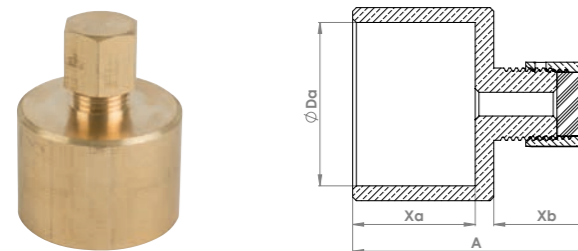
Code	Size	A	B	C	Xa	Xb	Xc
FA.1512	15mm x 1/2"	35			15	17	
FA.2234	22mm x 3/4"	43			23	18	
FA.281	28mm x 1"	50			26	21	

### 371.1 Air Vent



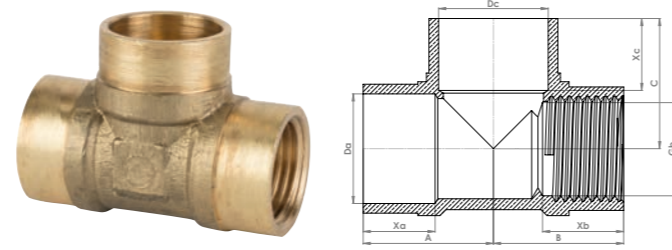
Code	Size	A	B	C	Xa	Xb	Xc
371.1	1/2"	16					

### P440EF Air Vent



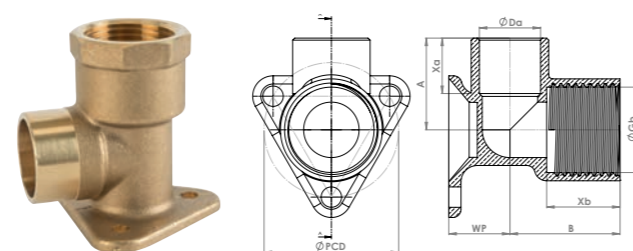
Code	Size	A	B	C	Xa	Xb	Xc
P440EF.1	15mm	26			11	13	
P440EF.2	22mm	32			16	13	

### P737EF Adaptor Tee - Female End



Code	Size	A	B	C	Xa	Xb	Xc
P737EF.1	15 x 1/2" x 15mm	22	22	21	10	10	13
P737EF.2	22 x 1/2" x 22mm	26	26	26	15	16	15

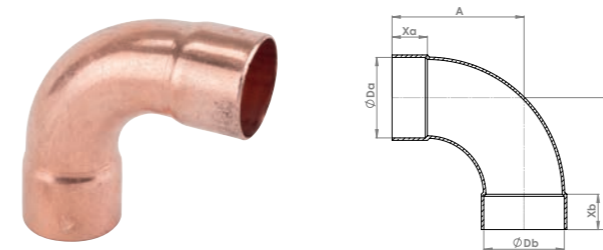
### P803WPEF Adaptor Wallplate Elbow



Code	Size	A	B	C	Xa	Xb	Xc
P803WPEF.2	15mm x 1/2"	25	23	15	15	15	17
P803WPEF.5	22mm x 3/4"	34	30	22	17	16	20

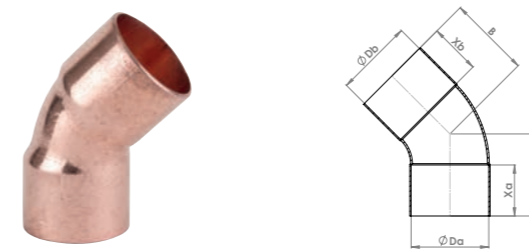
## Large Size End Feed Fittings

### 5002A Long Radius Elbow



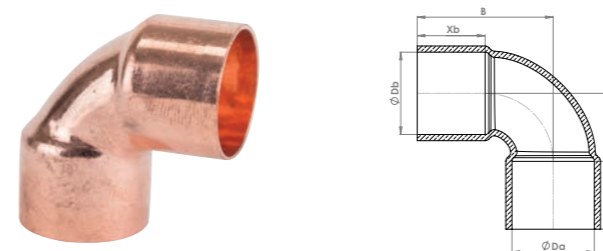
Code	Size	A	B	C	Xa	Xb	Xc
5002A.76	76 x 76mm	125	125		33	33	
5002A.108	108 x 108mm	177	177		47	47	

### 5041 Elbow 45°



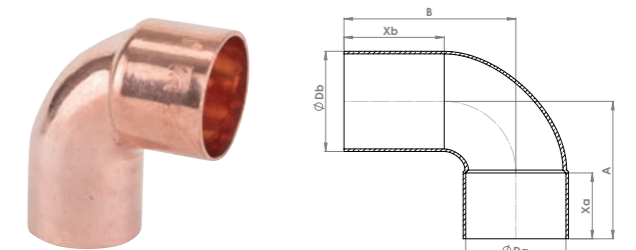
Code	Size	A	B	C	Xa	Xb	Xc
5041.67	67 x 67mm	65	65		36	36	
5041.76	76 x 76mm	68	68		36	36	
5041.108	108 x 108mm	110	110		50	50	
5041.133	133 x 133mm	280	280		45	45	
5041.159	159 x 159mm	335	335		45	45	

### 5090 Elbow



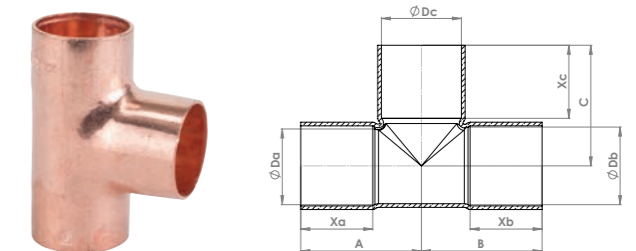
Code	Size	A	B	C	Xa	Xb	Xc
5090.67	67 x 67mm	83	83		33	33	
5090.76	76 x 76mm	91	91		33	33	
5090.108	108 x 108mm	127	127		47	47	
5090.133	133 x 133mm	127	127		47	47	
5090.159	159 x 159mm	160	160		60	60	

### 5092 Elbow Street



Code	Size	A	B	C	Xa	Xb	Xc
5092.76	76 x 76mm	91	105		58		

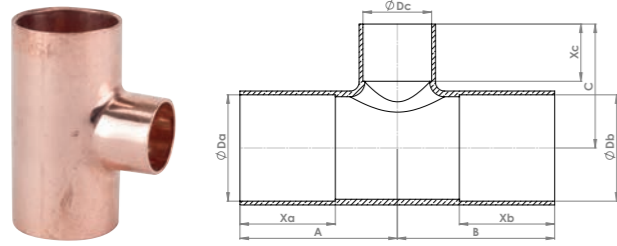
### 5130 Tee



Code	Size	A	B	C	Xa	Xb	Xc
5130.67	67 x 67 x 67mm	78	78	78	36	36	36
5130.76	76 x 76 x 76mm	80	80	80	34	34	34
5130.108	108 x 108 x 108mm	112	112	112	48	48	48
5130.133	133 x 133 x 133mm	135	135	135	50	50	50
5130.159	159 x 159 x 159mm	160	160	160	60	60	60

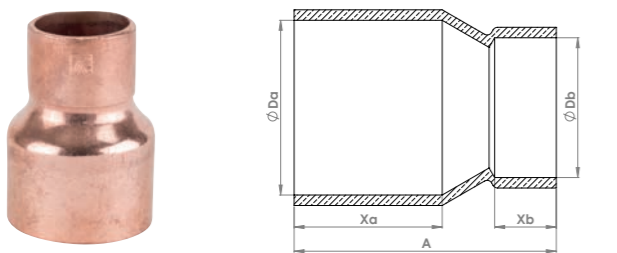
## Large Size End Feed Fittings

### 5130R Tee Reducing



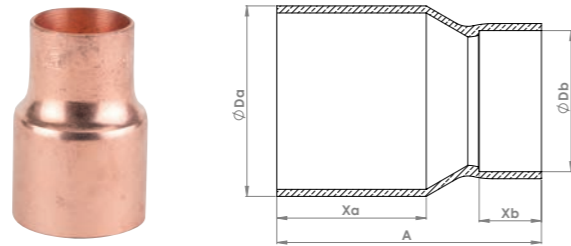
Code	Size (mm)	A	B	C	Xa	Xb	Xc
5130R.672867	67 x 67 x 28	54	54	61	21	42	35
5130R.673567	67 x 67 x 35	58	58	64	25	41	21
5130R.674267	67 x 67 x 42	61	61	67	27	41	27
5130R.675467	67 x 67 x 54	67	67	74	33	42	33
5130R.762876	76 x 76 x 28	59	59	70	25	46	25
5130R.763576	76 x 76 x 35	59	59	70	25	46	25
5130R.764276	76 x 76 x 42	63	63	74	29	46	29
5130R.765476	76 x 76 x 54	69	69	79	35	46	35
5130R.766776	76 x 76 x 67	78	78	81	44	48	44
5130R.10822108	108 x 108 x 22	72	72	88	24	72	24
5130R.10835108	108 x 108 x 35	77	77	92	29	65	29
5130R.10842108	108 x 108 x 42	80	80	97	32	70	32
5130R.10854108	108 x 108 x 54	86	86	97	38	65	38
5130R.10867108	108 x 108 x 67	91	91	97	43	64	43
5130R.10876108	108 x 108 x 76	95	95	97	47	64	47
5130R.133108133	133 x 133 x 108	139	139	142	89	94	89
5130R.15954159	159 x 159 x 54	90	90	118	42	86	42
5130R.15967159	159 x 159 x 67	101	101	120	53	86	53
5130R.15976159	159 x 159 x 76	101	101	120	53	86	53
5130R.159108159	159 x 159 x 108	117	117	142	69	94	69
5130R.159133159	159 x 159 x 133	130	130	120	92	86	82
5130R.219159219	219 x 219 x 159	185	185	175	115	110	107

### 5240 Coupler Reducing



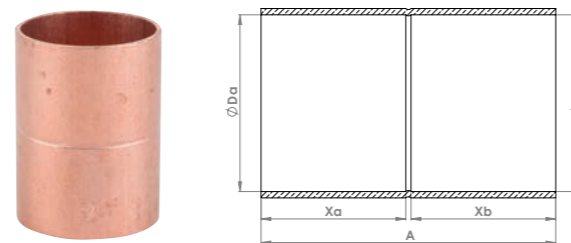
Code	Size	A	B	C	Xa	Xb	Xc
5240.6742	64 x 54mm	78					
5240.6754	67 x 54mm	85					
5240.7654	76 x 54mm	84					
5240.7667	76 x 67mm	85					

### 5243 Coupler Fitting Reducer



Code	Size	A	B	C	Xa	Xb	Xc
5243.6722	67 x 22mm	80				20	
5243.6728	67 x 28mm	80				20	
5243.6735	67 x 35mm	80				20	
5243.6742	67 x 42mm	88				30	
5243.6754	67 x 54mm	80				32	
5243.7635	76 x 35mm	90				30	
5243.7642	76 x 42mm	90				30	
5243.7654	76 x 54mm	85				35	
5243.7667	76 x 67mm	81				32	
5243.10835	108 x 35mm	116				32	
5243.10842	108 x 42mm	116				42	
5243.10854	108 x 54mm	116				32	
5243.10867	108 x 67mm	112				32	
5243.10876	108 x 76mm	108				36	
5243.133108	133 x 108mm	106				36	
5243.13367	133 x 67mm	119				32	
5243.13376	133 x 76mm	119				36	
5243.159108	159 x 108mm	150				40	
5243.159133	159 x 133mm	160				40	
5243.15976	159 x 76mm	120				30	
5243.219159	219 x 159mm	169				45	

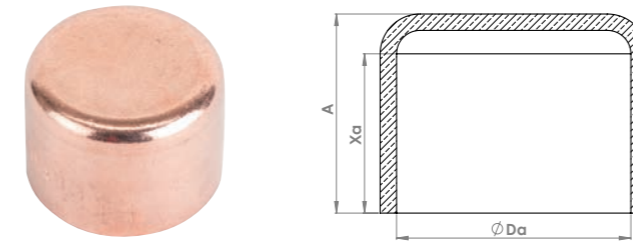
### 5270 Coupler



Code	Size	A	B	C	Xa	Xb	Xc
5270.67	67 x 67mm	72				33	33
5270.76	76 x 76mm	72				33	33
5270.108	108 x 108mm	100				47	47
5270.133	133 x 133mm	100				47	47
5270.159	159 x 159mm	100				47	47
5270.219	219 x 219mm	125				75	75

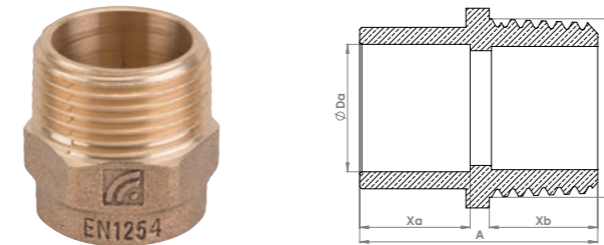
## Large Size End Feed Fittings

### 5301 Stop End



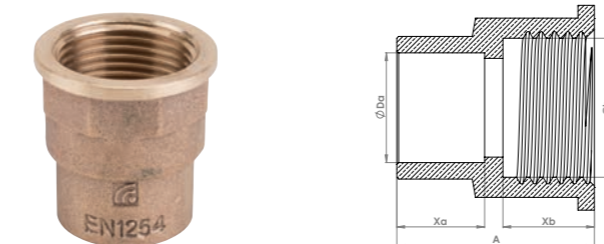
Code	Size	A	B	C	Xa	Xb	Xc
5301.67	67mm	35				33	
5301.76	76mm	35				33	
5301.108	108mm	49				47	
5301.159	159mm	64				62	

### 4243G Adaptor Male Straight



Code	Size	A	B	C	Xa	Xb	Xc
4243G.67X2.1/2	67mm x 2 1/2"	72				32	31
4243G.76X3	76mm x 3"	76				34	31
4243G.108X4	108mm x 4"	98				47	37

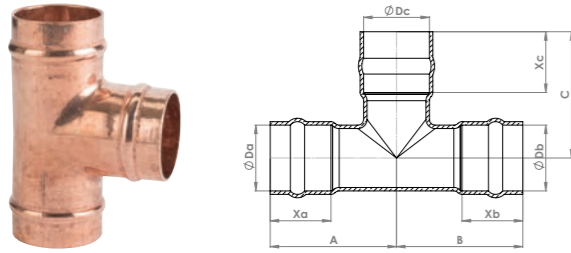
### 4270G Adaptor Female Straight



Code	Size	A	B	C	Xa	Xb	Xc
4270G.67X2.1/2	67mm x 2 1/2"	64				32	28
4270G.76X3	76mm x 3"	65				33	28
4270G.108X4	108mm x 4"	83				48	31

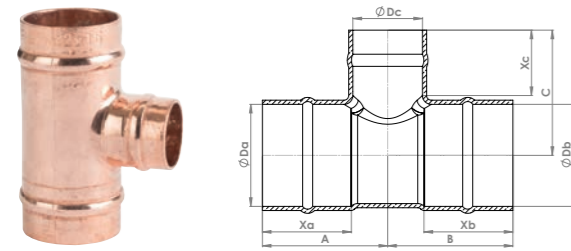
## Solder Ring Fittings

### C701SR Tee



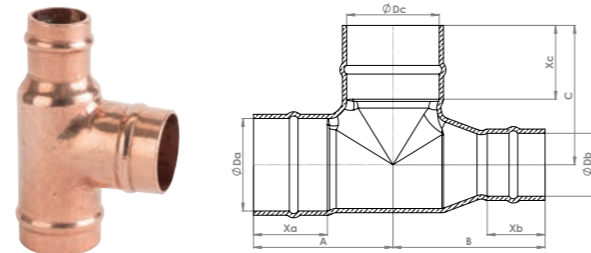
Code	Size	A	B	C	Xa	Xb	Xc
C701SR.02	8 x 8 x 8mm	16	16	16	10	10	10
C701SR.03	10 x 10" x 10mm	20	20	20	12	12	12
C701SR.04	12 x 12 x 12mm	19	19	19	13	13	13
C701SR.05	15 x 15 x 15mm	22	22	22	15	15	15
C701SR.08	22 x 22 x 22mm	30	30	30	20	20	20
C701SR.09	28 x 28 x 28mm	37	37	37	22	22	22
C701SR.10	35 x 35 x 35mm	46	46	46	26	26	26
C701SR.11	42 x 42 x 42mm	53	53	53	31	31	31
C701SR.12	54 x 54 x 54mm	65	65	65	38	38	38

### C702SR Tee Reducing Branch



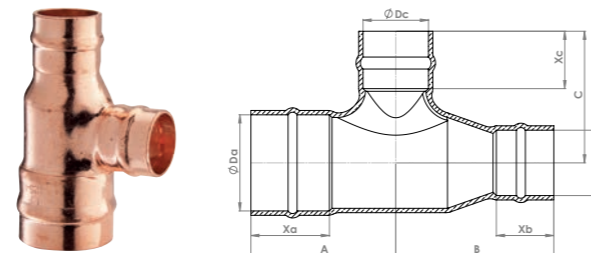
Code	Size	A	B	C	Xa	Xb	Xc
C702SR.133	15 x 15 x 10mm	23	23	26	14	15	11
C702SR.16	22 x 22 x 15mm	36	36	27	20	20	14
C702SR.19	28 x 28 x 15mm	30	30	29	22	22	14
C702SR.20	35 x 35 x 28mm	33	33	31	22	22	19
C702SR.21	35 x 35 x 22mm	38	38	39	30	30	20
C702SR.22	35 x 35 x 15mm	37	37	34	29	29	14
C702SR.23	35 x 35 x 28mm	42	42	43	27	27	23
C702SR.24	42 x 42 x 15mm	40	40	59	32	32	14
C702SR.25	42 x 42 x 22mm	43	43	42	33	33	20
C702SR.26	42 x 42 x 28mm	47	47	46	31	31	26
C702SR.27	42 x 42 x 35mm	49	49	50	32	32	27
C702SR.33	54 x 54 x 15mm	47	47	45	38	38	15
C702SR.34	54 x 54 x 22mm	49	49	49	37	37	19
C702SR.35	54 x 54 x 28mm	51	51	51	38	38	27
C702SR.36	54 x 54 x 35mm	55	55	57	38	38	27
C702SR.37	54 x 54 x 42mm	58	58	62	37	37	32

### C703SR Tee Reducing End



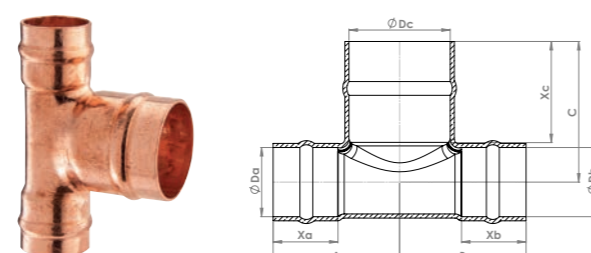
Code	Size	A	B	C	Xa	Xb	Xc
C703SR.15	22 x 15 x 22mm	30	31	32	19	14	19
C703SR.17	28 x 15 x 28mm	39	41	39	23	14	22
C703SR.18	28 x 22 x 28mm	40	41	38	22	18	21
C703SR.20	35 x 22 x 35mm	49	46	46	28	20	28
C703SR.21	35 x 28 x 35mm	49	48	47	29	24	28

### C704SR Tee Reducing Branch & End



Code	Size	A	B	C	Xa	Xb	Xc
C704SR.14	22 x 15 x 15mm	28	29	27	19	14	14
C704SR.171	28 x 22 x 22mm	35	38	34	23	19	18

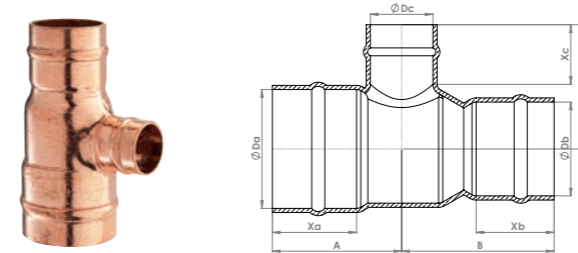
### C705SR Tee Reducing Both Ends



Code	Size	A	B	C	Xa	Xb	Xc
C705SR.13	15 x 15 x 22mm	35	35	32	16	16	20
C705SR.165	22 x 22 x 28mm	34	34	37	20	20	22

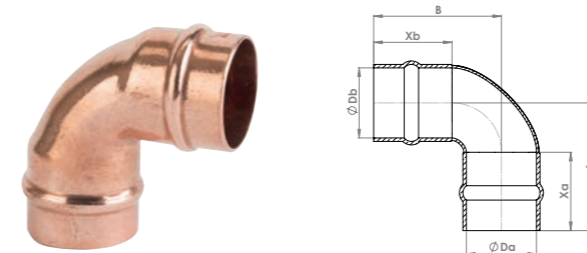
## Solder Ring Fittings

### C706SR Tee Reducing 3 Ways



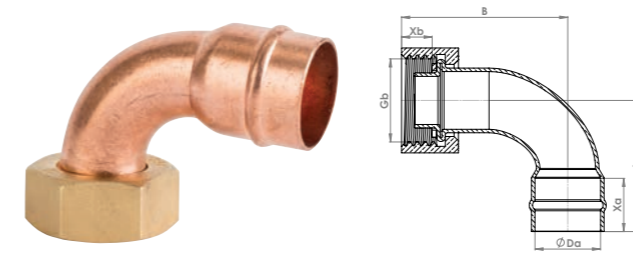
Code	Size	A	B	C	Xa	Xb	Xc
C706SR.176	28 x 22 x 15mm	32	35	31	22	19	13

### C801SR Elbow



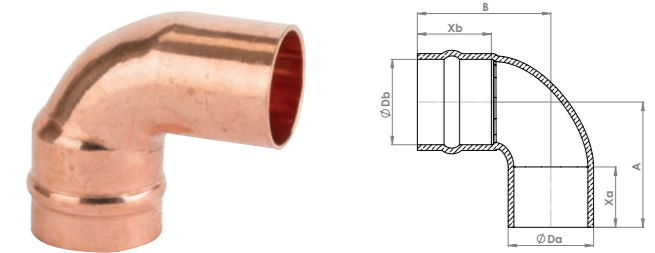
Code	Size	A	B	C	Xa	Xb	Xc
C801SR.02	8 x 8mm	18	18		9	9	
C801SR.03	10 x 10mm	19	19		12	12	
C801SR.04	12 x 12mm	22	22		12	12	
C801SR.05	15 x 15mm	24	24		14	14	
C801SR.08	22 x 22mm	35	35		20	20	
C801SR.09	28 x 28mm	37	37		22	22	
C801SR.10	35 x 35mm	46	46		27	27	
C801SR.11	42 x 42mm	57	57		25	25	
C801SR.12	54 x 54mm	67	67		38	38	

### C803SFSR Tap Connector Bent



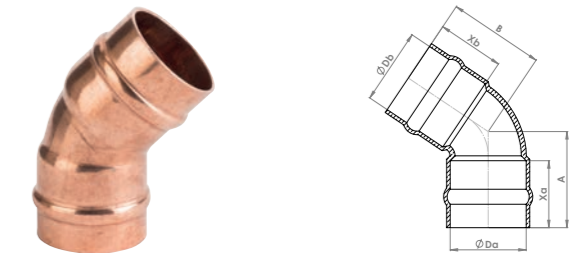
Code	Size	A	B	C	Xa	Xb	Xc
C803SFSR.1	15mm x 1/2"	32	36		14	9	
C803SFSR.2	22mm x 3/4"	47	38		21	9	

### C803SR Elbow Street



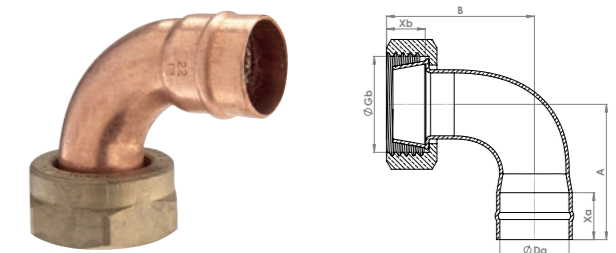
Code	Size	A	B	C	Xa	Xb	Xc
C803SR.05	15 x 15mm	24	25		14	14	
C803SR.08	22 x 22mm	32	36		20	21	
C803SR.09	28 x 28mm	39	42		20	24	
C803SR.11	42 x 42mm	50	61		33	32	

### C804SR Elbow 45°



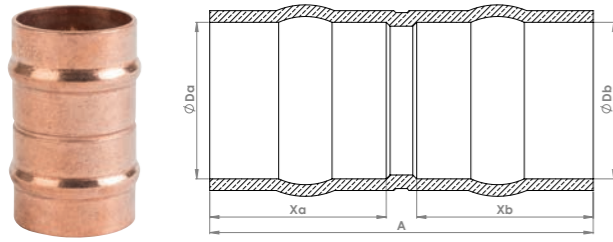
Code	Size	A	B	C	Xa	Xb	Xc
C804SR.05	15 x 15mm	17	17		14	14	
C804SR.08	22 x 22mm	24	24		19	19	
C804SR.09	28 x 28mm	31	31		25	25	
C804SR.10	35 x 35mm	36	36		29	29	
C804SR.11	42 x 42mm	41	41		32	32	
C804SR.12	54 x 54mm	49	49		39	39	

### C805SCSR Cylinder Union Bent



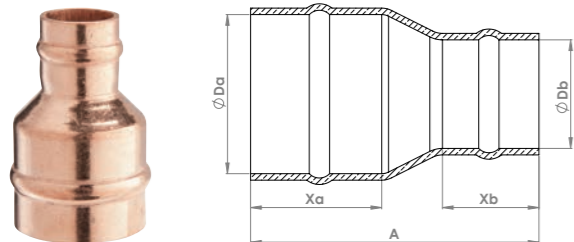
Code	Size	A	B	C	Xa	Xb	Xc
C805SCSR.4	22mm x 1"	49	45		20	16	

**C901SR Coupler**



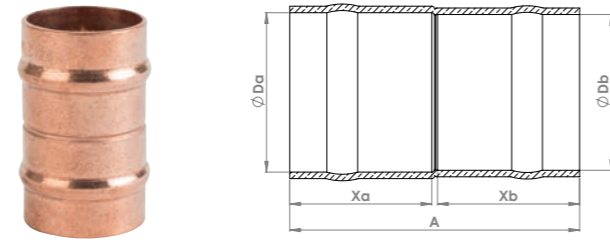
Code	Size	A	B	C	Xa	Xb	Xc
C901SR.02	8 x 8mm	20			10	10	
C901SR.03	10 x 10mm	23			11	11	
C901SR.04	12 x 12mm	26			13	13	
C901SR.05	15 x 15mm	29			14	14	
C901SR.08	22 x 22mm	41			20	20	
C901SR.09	28 x 28mm	46			23	23	
C901SR.10	35 x 35mm	56			28	28	
C901SR.11	42 x 42mm	66			32	32	
C901SR.12	54 x 54mm	79			39	39	

**C901SR Reducing Coupler**



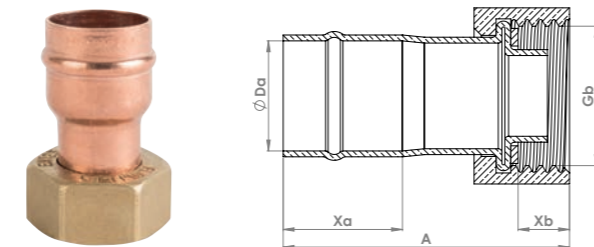
Code	Size	A	B	C	Xa	Xb	Xc
C901SR.17	15 x 8mm	30			11	14	
C901SR.18	15 x 10mm	31			12	14	
C901SR.19	15 x 12mm	31			12	15	
C901SR.20	22 x 15mm	40			14	20	
C901SR.21	28 x 15mm	47			14	24	
C901SR.22	28 x 22mm	50			20	23	
C901SR.23	35 x 28mm	58			25	29	
C901SR.231	35 x 22mm	58			20	29	
C901SR.236	42 x 28mm	66			23	33	
C901SR.2361	42 x 35mm	72			26	36	
C901SR.24	54 x 42mm	79			39	33	
C901SR.239	54 x 35mm	75			29	36	

**C901SR Metric/Imperial**



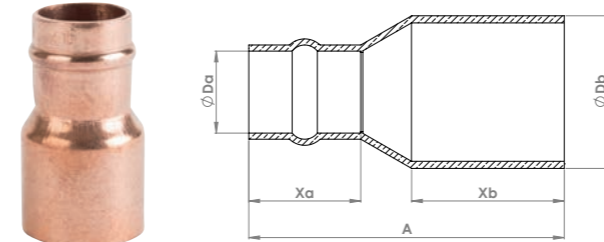
Code	Size	A	B	C	Xa	Xb	Xc
C901SR.25	15mm x 3/4"	41			19	19	
C901SR.26	28mm x 1"	26			13	22	
C901SR.27	15mm x 1/2"	28			14	14	
C901SR.28	35mm x 1/4"	62			29	30	

**C903SFSR Straight Tap Connector**



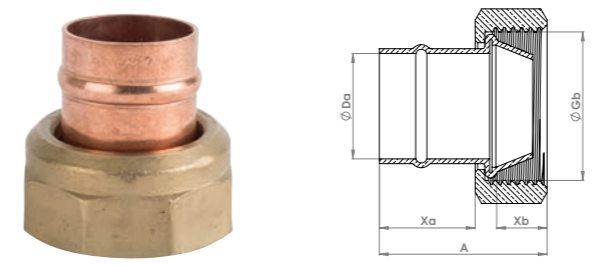
Code	Size	A	B	C	Xa	Xb	Xc
C903SFSR.1	15mm x 1/2"	39			16	9	
C903SFSR.2	15mm x 3/4"	48			14	11	
C903SFSR.3	22mm x 3/4"	49			19	9	

**C904SR Coupler Street Reducer**



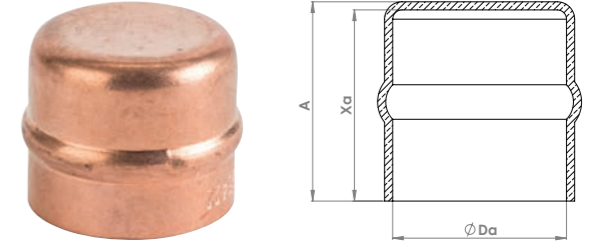
Code	Size	A	B	C	Xa	Xb	Xc
C904SR.16	10 x 8mm	24			11	10	
C904SR.17	15 x 8mm	32			14	15	
C904SR.18	15 x 10mm	31			13	14	
C904SR.19	15 x 12mm	33			14	17	
C904SR.20	22 x 15mm	39			14	18	
C904SR.21	28 x 15mm	43			14	21	
C904SR.22	28 x 22mm	48			20	23	
C904SR.23	42 x 28mm	58			22	31	
C904SR.231	35 x 22mm	57			19	29	
C904SR.232	35 x 15mm	55			15	29	
C904SR.233	42 x 15mm	62			14	33	
C904SR.234	42 x 22mm	64			21	33	
C904SR.236	42 x 28mm	66			24	35	
C904SR.2361	42 x 35mm	68			27	34	
C904SR.237	54 x 15mm	75			14	41	
C904SR.2375	54 x 22mm	75			20	38	
C904SR.238	54 x 28mm	73			23	39	
C904SR.239	54 x 35mm	80			29	41	
C904SR.24	54 x 42mm	80			33	41	

**C905SCSR Straight Cylinder Union**



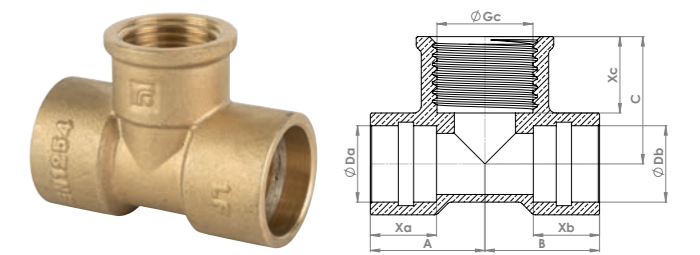
Code	Size	A	B	C	Xa	Xb	Xc
C905SCSR.4	22mm x 1"	36			21	12	

**C923SR Stop End**



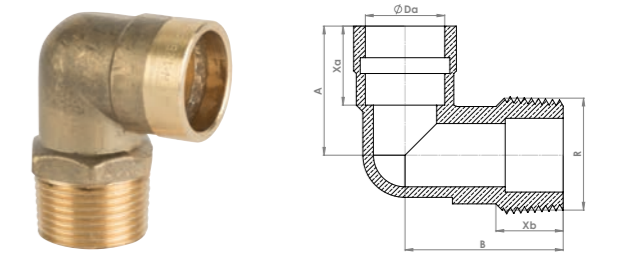
Code	Size	A	B	C	Xa	Xb	Xc
C923SR.1	8mm	11			9		
C923SR.2	10mm	12			10		
C923SR.4	15mm	15			13		
C923SR.5	22mm	20			18		
C923SR.6	28mm	24			22		
C923SR.7	35mm	29			27		
C923SR.8	42mm	31			29		
C923SR.9	54mm	37			35		

**P717SR Adaptor Tee - Female Branch**



Code	Size	A	B	C	Xa	Xb	Xc
P717SR.1	15 x 15mm x 1/2"	22	22	25	12	12	14
P717SR.2	22 x 22mm x 1/2"	26	26	27	15	15	14

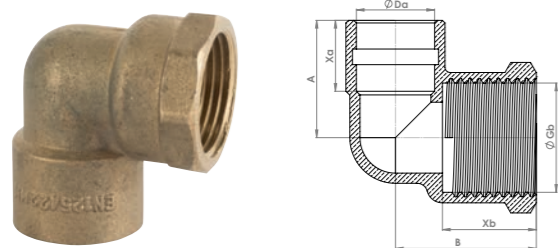
**P802TSR Adaptor Male Elbow**



Code	Size	A	B	C	Xa	Xb	Xc
P802TSR.13	15mm x 1/2"	25	31		15	14	
P802TSR.14	22mm x 3/4"	30	40		17	16	

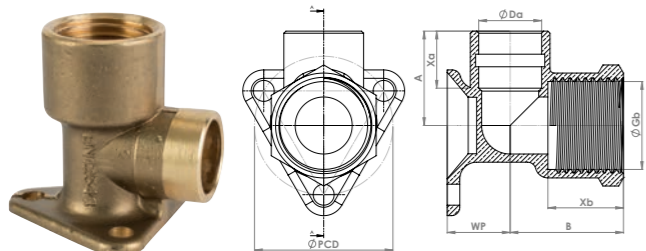
## Solder Ring Fittings

### P803SR Adaptor Female Elbow



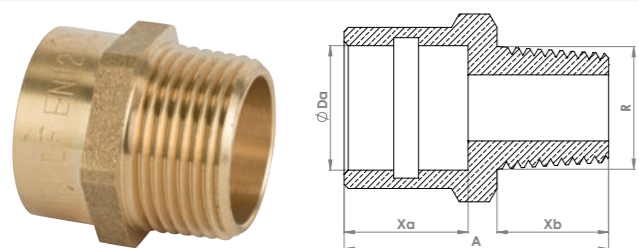
Code	Size	A	B	C	Xa	Xb	Xc
P803SR.06	15mm x 1/2"	22	25	12	15		
P803SR.07	22mm x 3/4"	32	30	20	16		

### P803WPSR Adaptor Wallplate Elbow



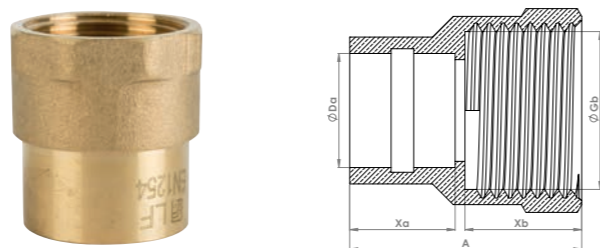
Code	Size	A	B	C	Xa	Xb	Xc
P803WPSR.2	15mm x 1/2"	25	23	15	16	15	16

### P902TSR Adaptor Male Straight - Taper



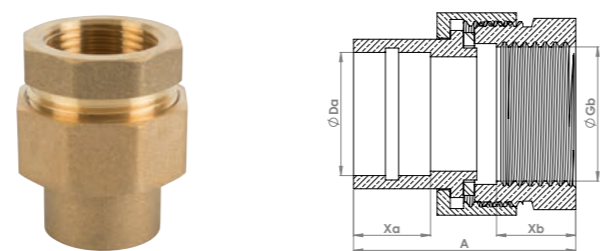
Code	Size	A	B	C	Xa	Xb	Xc
P902TSR.12	15mm x 1/4"	32			15	13	
P902TSR.14	15mm x 1/2"	28			13	13	
P902TSR.18	22mm x 3/4"	30			15	14	
P902TSR.19	28mm x 1"	36			18	16	
P902TSR.20	35mm x 1 1/4"	38			23	19	
P902TSR.21	42mm x 1 1/2"	47			27	19	
P902TSR.22	54mm x 2"	56			32	24	

### P903SR Adaptor Female Straight



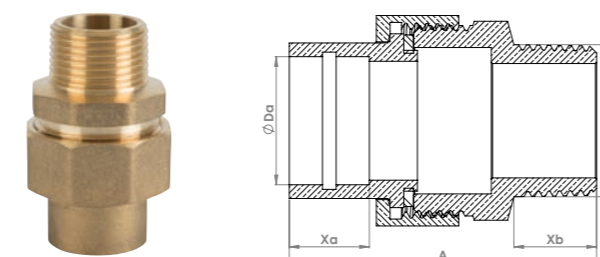
Code	Size	A	B	C	Xa	Xb	Xc
P903SR.11	15mm x 3/8"	28			15	13	
P903SR.18	22mm x 3/4"	33			15	16	
P903SR.20	28mm x 1"	40			19	19	
P903SR.21	35mm x 1 1/4"	46			23	21	
P903SR.22	42mm x 1 1/2"	50			27	21	
P903SR.23	54mm x 2"	59			32	26	

### SRFUC Adaptor Female Straight Union



Code	Size	A	B	C	Xa	Xb	Xc
SRFUC.1512	15mm x 1/2"	42			14	15	
SRFUC.2234	22mm x 3/4"	46			15	17	
SRFUC.281	28mm x 1"	50			17	18	
SRFUC.35114	35mm x 1 1/4"	53			21	18	
SRFUC.42114	42mm x 1 1/2"	57			21	18	
SRFUC.542	54mm x 2"	64			23	23	

### SRMUC Adaptor Male Straight Union



Code	Size	A	B	C	Xa	Xb	Xc
SRMUC.1512	15mm x 1/2"	53			11	15	
SRMUC.2234	22mm x 3/4"	60			15	16	
SRMUC.281	28mm x 1"	67			13	17	
SRMUC.35114	35mm x 1 1/4"	73			13	20	
SRMUC.42112	42mm x 1 1/2"	73			14	21	
SRMUC.1512	54mm x 2"	80			16	22	

## Capillary Fittings Technical Information

### End Feed

#### General Specification

Flowflex end feed fittings, manufactured in both copper and bronze, are a fast, reliable and economic method of joining BS EN 1057 copper tube.

End feed 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 lightweight for easy handling and lend themselves well to confined environments due to their compact sizing.

Flowflex operates a quality management system audited by the British Standards Institute as per for the manufacture and supply of fittings and components for use in all applications of the HVAC industry. It is through these internal systems that we have the confidence to guarantee our end feed fittings 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
- Available degreased and individually bagged for use in medical applications
- Copper fittings manufactured to EN1254-1:1998
- Gunmetal (bronze) fittings manufactured to EN1254-4:1998
- Designed to connected to BS EN 1057 tube
- Marked with the Flowflex logo
- WRAS Approved

#### Approvals



#### Tube Compatibility

All installers should ensure that the size of the fitting matches the size of the pipe, whilst also ensuring both are in good condition and free from damage and imperfections.

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

After all plumbing work has been completed, always ensure continuity checks are conducted by a qualified electrician in accordance with regulations (BS 7671: 20001).

#### Working Temperatures and Pressures

Typical examples of soldering alloys	Max Temp. (1) °C	Max pressures for nominal diameters (1) (2) BAR	
		From 6mm up to 34mm	Over 34mm up to 54mm
Lead/tin 50/50% or 60/40%	30	16	16
	65	10	10
	110	6	6
Tin/silver 95/5% Tin/copper Cu 3% Max 0.4% min. Remainder Sn	30	25	25
	65	25	16
	110	16	10

1. For use in applications outside 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.

#### Connecting

##### 1. Tube Specification

Ensure the tube conforms to the 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.

Flowflex end feed fittings are to be installed with copper tubes that conform to BS EN 1057.

##### 2. Cut Your Pipe To Size

You must cut your pipe accurately. Failure to do so could impact on the quality of your jointing. If your pipe is too short, it might not hit the pipe stop. Too long and strain could be introduced into the system.

When cutting, ends of the tube must be cut cleanly across the tube diameter to allow for a secure connection to the fitting.

##### 3. Clean The Socket of the Pipe

Before creating the joint, it is important that the inside of the pipe is smooth and doesn't interfere with the flow. In the case that flow local to the joint is affected, erosion and corrosion may occur and also vibrations.

Use of a stiff wire brush is recommended to reach the desired outcome. Care must be taken with soft tube to ensure the tube is not deformed by applying too much pressure.

##### 4. Clean The Outside of the Pipe

Cleaning the outside diameter of the tube and the inside of the fittings is imperative to ensure that a secure and reliable joint is formed. Failure to remove all oxides and any material where the fittings and tube overlaps can interfere with 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.

Use of fine steel wool is recommended here to reach the desired outcome.

## Capillary Fittings Technical Information

### 1. 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.

### 2. Assembly

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

### 3. 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 directly heating 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 destroy its effectiveness and the solder will not enter the joint properly.

### 4. Apply Solder

Touch the joint with the solder. If the solder does not melt, remove it and continue heating. If the solder begins to melt, push the solder into the joint whilst continuing to heat the base of the joint.

Solder joints depend on capillary action drawing free-flowing molten solder into the narrow clearance between the fitting and the tube. Molten solder metal is drawn into the joint by capillary action regardless of whether the solder flow is upward, downward or horizontal.

### 5. 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.

### 6. Testing and Commissioning

Systems should always be tested for joint integrity. Whenever possible, completed systems should be flushed to remove debris.

### Tube Compatibility

All installers should ensure that the size of the fitting matches the size of the pipe, whilst also ensuring both are in good condition and free from damage and imperfections.

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

After all plumbing work has been completed, always ensure continuity checks are conducted by a qualified electrician in accordance with regulations (BS 7671: 20001).

## Capillary Fittings Technical Information

### Large End Feed

#### General Specification

Flowflex large end feed fittings, manufactured in both copper and bronze, are a fast, reliable and economic method of joining BS EN 1057 copper tube.

End feed 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 lightweight for easy handling and lend themselves well to confined environments due to their compact sizing.

Flowflex operates a quality management system audited by the British Standards Institute as per for the manufacture and supply of fittings and components for use in all applications of the HVAC industry. It is through these internal systems that we have the confidence to guarantee our large end feed fittings against manufacturing defects for 25 years, when installed in accordance with our instructions on specified tube materials and applications.

- Available in sizes from 67mm to 159mm
- Copper fittings manufactured to EN1254-1 & EN1254-5
- Gunmetal (bronze) fittings manufactured to EN1254-4:1998
- Designed to connected to BS EN 1057 tube
- Marked with the Flowflex logo

#### Tube Compatibility

All installers should ensure that the size of the fitting matches the size of the pipe, whilst also ensuring both are in good condition and free from damage and imperfections.

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

After all plumbing work has been completed, always ensure continuity checks are conducted by a qualified electrician in accordance with regulations (BS 7671: 20001).

#### Working Temperatures and Pressures

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

1. For use in applications outside 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.

#### Connecting

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.**

## Capillary Fittings Technical Information

### Solder Ring

#### General Specification

Flowflex solder ring fittings, manufactured in both copper and bronze, are a fast, reliable and economic method of joining BS EN 1057 copper tube.

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 lightweight for easy handling and lend themselves well to confined environments due to their compact sizing.

Flowflex operates a quality management system audited by the British Standards Institute as per for the manufacture and supply of fittings and components for use in all applications of the HVAC industry. It is through these internal systems that we have the confidence to guarantee our solder ring fittings 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
- Available degreased and individually bagged for use in medical applications
- Copper fittings manufactured to EN1254-1:1998
- Gunmetal (bronze) fittings manufactured to EN1254-4:1998
- Designed to connected to BS EN 1057 tube
- Marked with the Flowflex logo
- Marked with the Kitemark Symbol
- KM Lead - Free Solder 99.304% Sn
- WRAS Approved

#### Approvals



#### Tube Compatibility

All installers should ensure that the size of the fitting matches the size of the pipe, whilst also ensuring both are in good condition and free from damage and imperfections.

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

After all plumbing work has been completed, always ensure continuity checks are conducted by a qualified electrician in accordance with regulations (BS 7671: 20001).

#### Working Temperatures and Pressures

Typical examples of soldering alloys	Max Temp. (1) °C	Max pressures for nominal diameters (1) (2) BAR	
		From 6mm up to 34mm	Over 34mm up to 54mm
Tin/silver 95/5%	30	25	25
Tin/copper Cu 3%	65	25	16
Max 0.4% min. Remainder Sn	110	1	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.

#### Connecting

##### 1. Tube Specification

Ensure the tube conforms to the 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.

Flowflex solder ring fittings are to be installed with copper tubes that conform to BS EN 1057.

##### 2. Cut Your Pipe To Size

You must cut your pipe accurately. Failure to do so could impact on the quality of your jointing. If your pipe is too short, it might not hit the pipe stop. Too long and strain could be introduced into the system.

When cutting, ends of the tube must be cut cleanly across the tube diameter to allow for a secure connection to the fitting.

##### 3. Clean The Socket of the Pipe

Before creating the joint, it is important that the inside of the pipe is smooth and doesn't interfere with the flow. In the case that flow local to the joint is affected, erosion and corrosion may occur and also vibrations.

Use of a stiff wire brush is recommended to reach the desired outcome. Care must be taken with soft tube to ensure the tube is not deformed by applying too much pressure.

## Capillary Fittings Technical Information

#### 4. Clean The Outside of the Pipe

Cleaning the outside diameter of the tube and the inside of the fittings is imperative to ensure that a secure and reliable joint is formed. Failure to remove all oxides and any material where the fittings and tube overlaps can interfere with 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.

Use of fine steel wool is recommended here to reach the desired outcome.

#### 5. 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.

#### 6. Assembly

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

#### 7. 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 directly heating 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 destroy its effectiveness and the solder will not enter the joint properly.**

#### 8. 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.

#### 9. Testing and Commissioning

Systems should always be tested for joint integrity. Whenever possible, completed systems should be flushed to remove debris.



# Press Fittings

Press fittings are ideal for commercial applications, providing secure and reliable connections to pipe within heating and plumbing systems. Connections are made quickly and efficiently, with high mechanical resistance and without the need for a heat source, creating a clean and secure joint.

With a comprehensive range of fittings, in sizes from 12mm to 108mm and available in copper and steel, we have the complete solution for any project.

Each fitting is manufactured to the highest standards and tested extensively to ensure a secure and robust joint every time.

Our technical support team are on hand to support your installation and advise on the right press fittings to suit your project.

## Dimensions

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

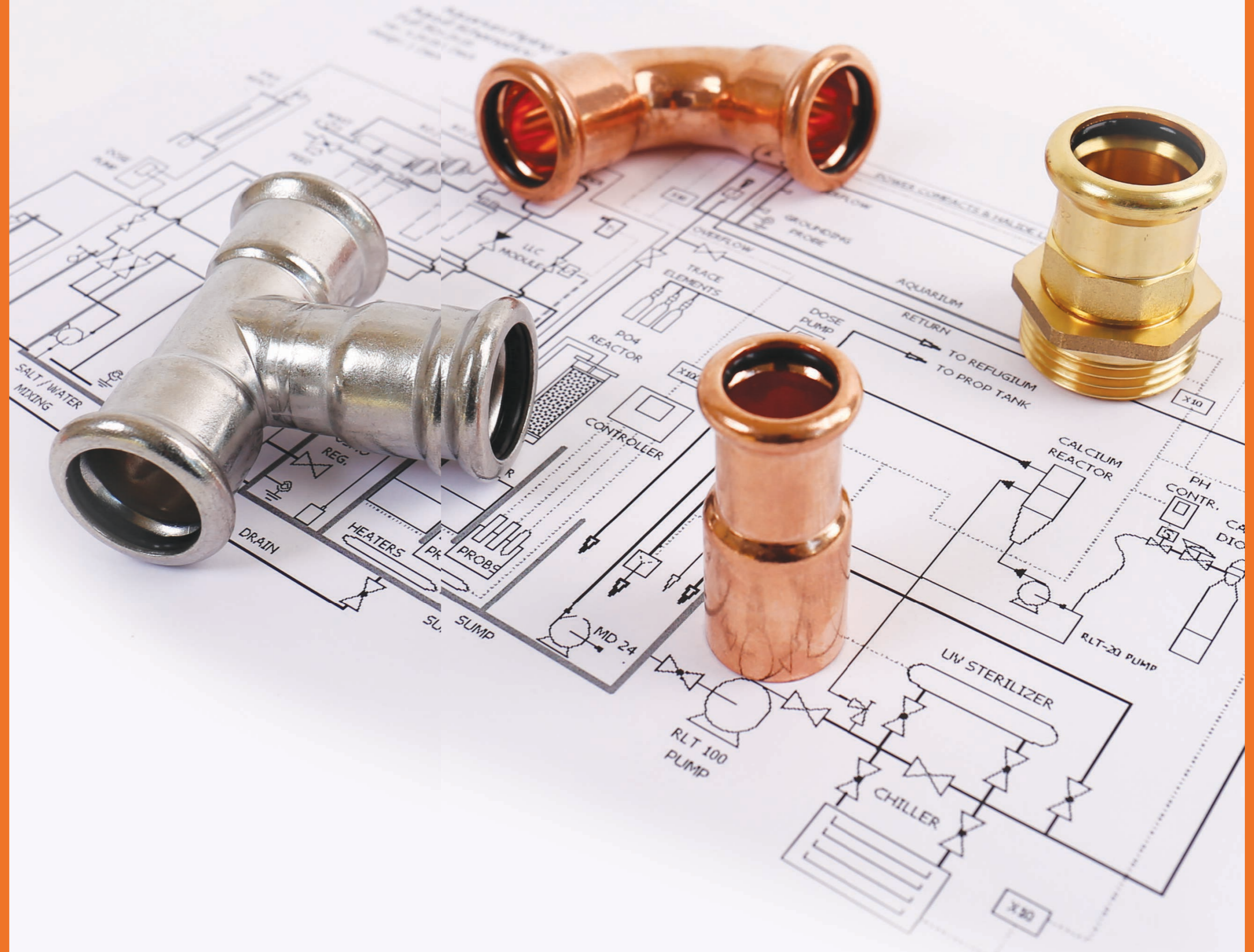
Tees and other reduced settings of unequal sizes are shown with the largest end first, then the branch, followed by the remaining end on the run. e.g. 22 x 15 x 22mm

## Codes

Code	FPM1006B.15				
Description	Flowflex Press M Profile 15mm Equal Brass Coupling – Black Gasket for water				
Code Breakdown	FPM	100	6	B	15
Code Description	Family	Family & Part	Material	Gasket Colour	Size
Example	M Profile	Equal Coupling	Brass	Black – Water	15mm

## Key

O-Ring	Material	Application
Black ●	EPDM	Water
Yellow ●	HNBR	Gas, NG, LPG
Green ●	FPM, FKM	Solar, Oil, Air



# Press Fittings Index

## Copper Press Fittings - M Profile

			
Code: <b>FPM2124B</b> Page 69 ●●	Code: <b>FPM2154B</b> Page 69	Code: <b>FPM1124B</b> Page 69 ●●	Code: <b>FPM1184B</b> Page 69
			
Code: <b>FPM3104B</b> Page 69 ●●	Code: <b>FPM2104B</b> Page 69 ●●	Code: <b>FPM1104B</b> Page 70 ●●	Code: <b>FPM1003B</b> Page 70 ●●
			
Code: <b>FPM1053B</b> Page 70 ●	Code: <b>FPM1513B</b> Page 70 ●	Code: <b>FPM1253B</b> Page 71 ●●	Code: <b>FPM2003B</b> Page 71 ●●
			
Code: <b>FPM2013B</b> Page 71	Code: <b>FPM2043B</b> Page 71	Code: <b>FPM2033B</b> Page 72	Code: <b>FPM1354B</b> Page 72
			
Code: <b>FPM4023B</b> Page 72 ●●	Code: <b>FPM3003B</b> Page 72 ●●	Code: <b>FPM3053B</b> Page 72	Code: <b>FPM3053B</b> Page 73 ●●
			
Code: <b>FPM3053B</b> Page 73 ●●	Code: <b>FPM1304B</b> Page 73 ●		

# Press Fittings Index

## Stainless Steel Press Fittings - M Profile

			
Code: <b>FPM2126B</b> Page 74 ●	Code: <b>FPM2156B</b> Page 74 ●	Code: <b>FPM1126B</b> Page 74 ●●	Code: <b>FPM1186B</b> Page 74
			
Code: <b>FPM3106B</b> Page 74 ●●	Code: <b>FPM2106B</b> Page 75 ●	Code: <b>FPM1106B</b> Page 75 ●●	Code: <b>FPM1196B</b> Page 75
			
Code: <b>FPM2416B</b> Page 75	Code: <b>FPM2426B</b> Page 75	Code: <b>FPM1456B</b> Page 76	Code: <b>FPM1006B</b> Page 76 ●●
			
Code: <b>FPM1516B</b> Page 76 ●	Code: <b>FPM1256B</b> Page 76 ●●	Code: <b>FPM2006B</b> Page 77 ●●	Code: <b>FPM2016B</b> Page 77 ●●
			
Code: <b>FPM2046B</b> Page 77 ●●	Code: <b>FPM2036B</b> Page 77 ●●	Code: <b>FPM1526B</b> Page 78 ●●	Code: <b>FPM1356B</b> Page 78
			
Code: <b>FPM4026B</b> Page 78 ●●	Code: <b>FPM3006B</b> Page 78 ●●	Code: <b>FPM3056B</b> Page 79 ●●	Code: <b>FPM1316B</b> Page 79

**Stainless Steel Press Fittings - M Profile**



Code: **FPM1306B**  
Page 79

**Multilayer Fittings**



Code: **FML2101**  
Page 80



Code: **FML1101**  
Page 80

**Multilayer Fittings**



Code: **FML1001**  
Page 80



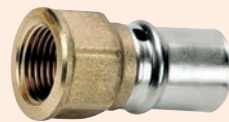
Code: **FML1051**  
Page 80



Code: **FML2121**  
Page 81



Code: **FML2151**  
Page 81



Code: **FML1121**  
Page 81



Code: **FML3121**  
Page 81



Code: **FML3031**  
Page 82



Code: **FML3161**  
Page 82



Code: **FML2011**  
Page 82



Code: **FML2351**  
Page 82



Code: **FML1351**  
Page 82



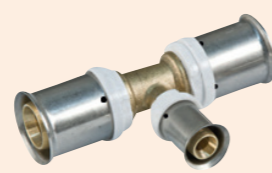
Code: **FML2001**  
Page 83



Code: **FML4021**  
Page 83



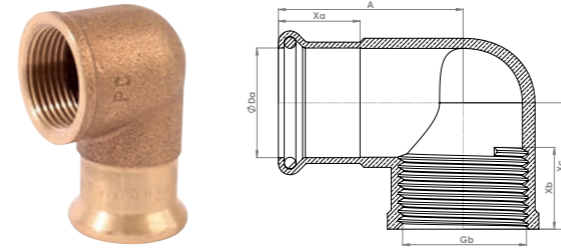
Code: **FML3001**  
Page 83



Code: **FML3051**  
Page 83

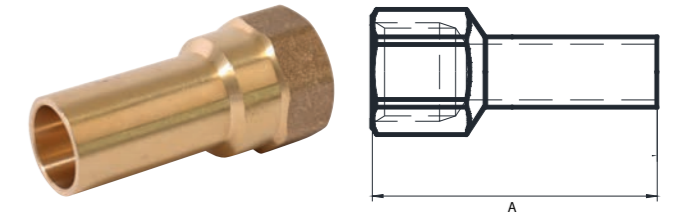
**Copper Press Fittings - M Profile**

**FPM2124B Adaptor Female Elbow 90°**



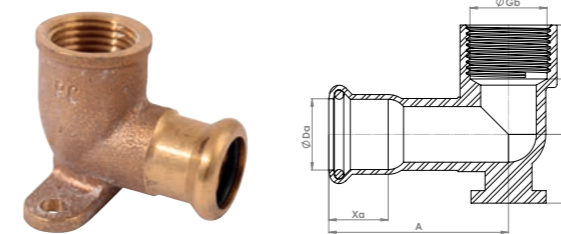
Code	Size	A	B	C	Xa	Xb	Xc
FPM2124B.1512	15mm x 1/2"	38	27		20	14	
FPM2124B.2234	22mm x 3/4"	43	25		21	12	
FPM2124B.281	28mm x 1"	50	30		23	15	

**FPM1184B Adaptor Female Straight Street**



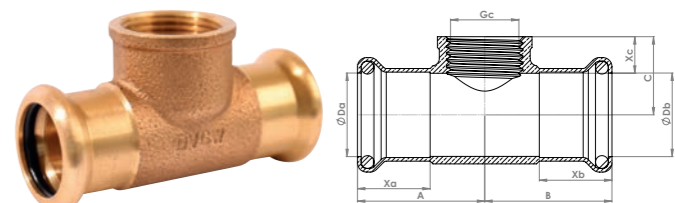
Code	Size	A	B	C	Xa	Xb	Xc
FPM1184B.1512	15mm x 1/2"	45					
FPM1184B.2234	22mm x 3/4"	52					

**FPM2154B Adaptor Female Elbow Wallplate**



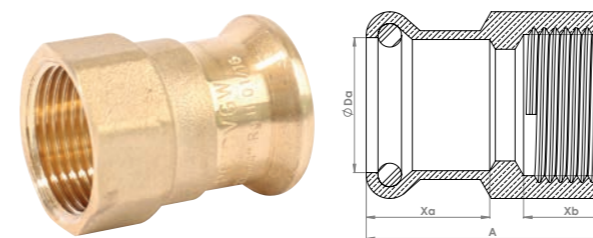
Code	Size	A	B	C	Xa	Xb	Xc
FPM2154B.1512	15mm x 1/2"	35	25		21	13	

**FPM3104B Adaptor Female Tee**



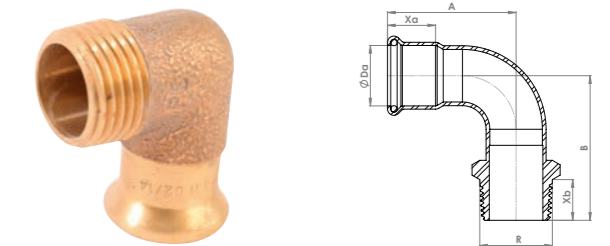
Code	Size	A	B	C	Xa	Xb	Xc
FPM3104B.151512	15 x 15 x 1/2"	32	32	19	20	20	12
FPM3104B.181812	18 x 18 x 1/2"	34	34	20	21	21	11
FPM3104B.222212	22 x 22 x 1/2"	35	35	22	22	22	11
FPM3104B.222234	22 x 22 x 3/4"	39	39	28	22	22	15
FPM3104B.282812	28 x 28 x 1/2"	38	38	28	23	23	13
FPM3104B.282834	28 x 28 x 3/4"	41	41	26	23	23	12
FPM3104B.353512	35 x 35 x 1/2"	50	50	34	26	26	14
FPM3104B.424212	42 x 42 x 1/2"	55	55	38	30	30	14
FPM3104B.545412	54 x 54 x 1/2"	56	56	41	35	35	13

**FPM1124B Adaptor Female Straight**



Code	Size	A	B	C	Xa	Xb	Xc
FPM1124B.1212	12mm x 1/2"	30			16	10	
FPM1124B.1512	15mm x 1/2"	34			20	13	
FPM1124B.1534	15mm x 3/4"	40			21	15	
FPM1124B.1812	18mm x 1/2"	40			17	16	
FPM1124B.1834	18mm x 3/4"	40			18	16	
FPM1124B.221	22mm x 1"	43			19	17	
FPM1124B.2212	22mm x 1/2"	35			21	11	
FPM1124B.2234	22mm x 3/4"	42			21	15	
FPM1124B.281	28mm x 1"	46			24	19	
FPM1124B.2834	28mm x 3/4"	41			23	15	
FPM1124B.351	35mm x 1"	50			25	16	
FPM1124B.35114	35mm x 1 1/4"	49			26	18	
FPM1124B.42112	42mm x 1 1/2"	54			30	19	
FPM1124B.542	54mm x 2"	65			35	26	

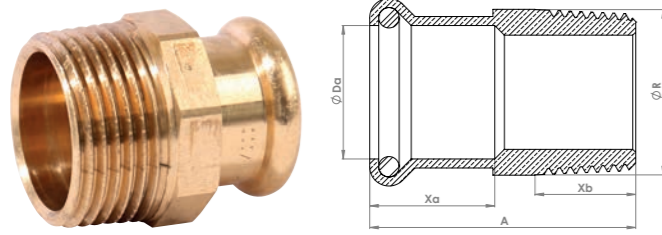
**FPM2104B Adaptor Male Elbow 90°**



Code	Size	A	B	C	Xa	Xb	Xc
FPM2104B.1512	15mm x 1/2"	30	25		20	12	
FPM2104B.2234	22mm x 3/4"	47	34		21	13	
FPM2104B.281	28mm x 1"	58	53		22	14	

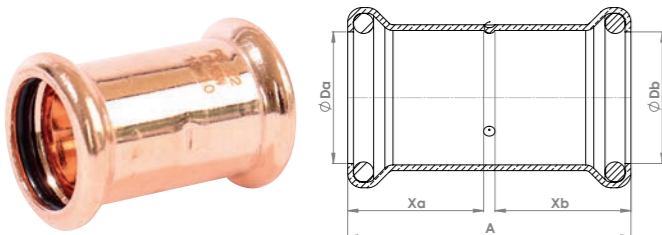
## Copper Press Fittings - M Profile

### FPM1104B Adaptor Male Straight



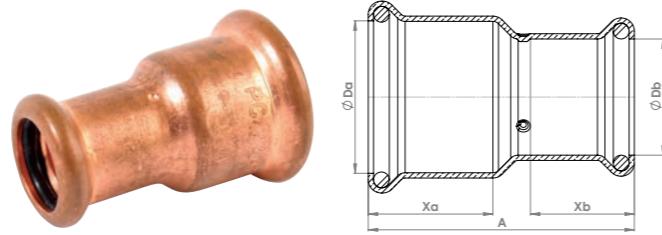
Code	Size	A	B	C	Xa	Xb	Xc
FPM1104B.1212	12mm x 1/2"	29			20	11	
FPM1104B.1512	15mm x 1/2"	35			20	11	
FPM1104B.1534	15mm x 3/4"	41			20	15	
FPM1104B.1812	18mm x 1/2"	29			21	16	
FPM1104B.1834	18mm x 3/4"	30			21	16	
FPM1104B.221	22mm x 1"	43			21	18	
FPM1104B.2212	22mm x 1/2"	38			21	14	
FPM1104B.2234	22mm x 3/4"	42			21	15	
FPM1104B.281	28mm x 1"	48			23	16	
FPM1104B.2834	28mm x 3/4"	49			23	15	
FPM1104B.351	35mm x 1"	55			24	16	
FPM1104B.35114	35mm x 1 1/4"	50			24	18	
FPM1104B.42112	42mm x 1 1/2"	54			30	20	
FPM1104B.542	54mm x 2"	63			35	24	
FPM1104B.67212	67mm x 2 1/2"	79			50	25	
FPM1104B.763	76mm x 3"	83			55	30	

### FPM1003B Coupler Equal



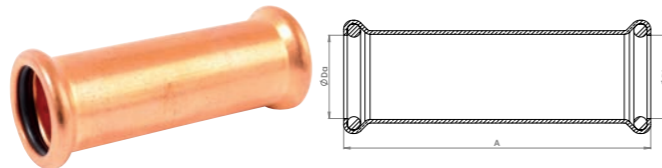
Code	Size	A	B	C	Xa	Xb	Xc
FPM1003B.12	12mm	38			17	17	
FPM1003B.15	15mm	38			18	18	
FPM1003B.18	18mm	44			20	20	
FPM1003B.22	22mm	45			21	21	
FPM1003B.28	28mm	50			24	24	
FPM1003B.35	35mm	56			27	27	
FPM1003B.42	42mm	64			31	31	
FPM1003B.54	54mm	74			36	36	
FPM1003B.67	67mm	110			50	50	
FPM1003B.76	76mm	110			51	51	

### FPM1053B Coupler Reducing



Code	Size	A	B	C	Xa	Xb	Xc
FPM1053B.2215	22 x 15mm	47			21	20	
FPM1053B.2822	28 x 22mm	50			21	24	

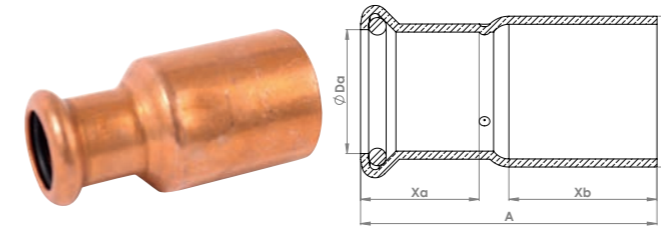
### FPM1513B Coupler Slip



Code	Size	A	B	C	Xa	Xb	Xc
FPM1513B.15	15mm	80					
FPM1513B.18	18mm	80					
FPM1513B.22	22mm	80					
FPM1513B.28	28mm	91					
FPM1513B.35	35mm	103					
FPM1513B.42	42mm	120					
FPM1513B.54	54mm	140					

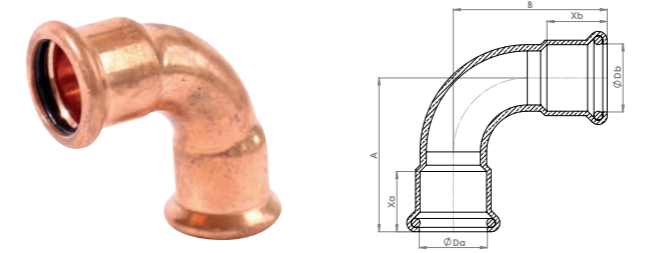
## Copper Press Fittings - M Profile

### FPM1253B Coupler Street Reducing



Code	Size	A	B	C	Xa	Xb	Xc
FPM1253B.1512	15 x 12mm	44			17	20	
FPM1253B.1815	18 x 15mm	47			20	20	
FPM1253B.2215	22 x 15mm	50			22	23	
FPM1253B.2218	22 x 18mm	50			20	21	
FPM1253B.2815	28 x 15mm	57			18	31	
FPM1253B.2818	28 x 18mm	61			22	23	
FPM1253B.2822	28 x 22mm	54			20	28	
FPM1253B.3522	35 x 22mm	60			18	30	
FPM1253B.3528	35 x 28mm	60			24	30	
FPM1253B.4222	42 x 22mm	68			21	33	
FPM1253B.4228	42 x 28mm	68			22	33	
FPM1253B.4235	42 x 35mm	73			27	30	
FPM1253B.5435	54 x 35mm	78			26	38	
FPM1253B.5442	54 x 42mm	78			29	38	
FPM1253B.6728	67 x 28mm	109			23	50	
FPM1253B.6735	67 x 35mm	109			26	50	
FPM1253B.6742	67 x 42mm	110			30	50	
FPM1253B.6754	67 x 54mm	100			38	50	
FPM1253B.7635	76 x 35mm	113			26	50	
FPM1253B.7642	76 x 42mm	113			30	50	
FPM1253B.7654	76 x 54mm	107			35	53	
FPM1253B.7667	76 x 67mm	58			50	50	

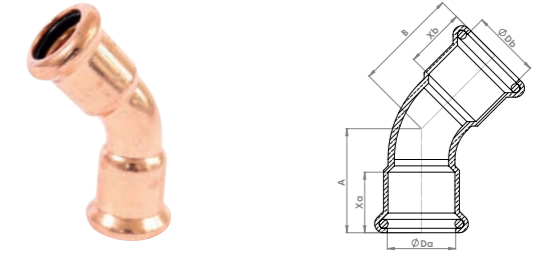
### FPM2003B Elbow Equal



Code	Size	A	B	C	Xa	Xb	Xc
FPM2003B.12	12mm	31	31		17	17	
FPM2003B.15	15mm	38	38		21	21	
FPM2003B.18	18mm	42	42		21	21	
FPM2003B.22	22mm	47	47		21	21	
FPM2003B.28	28mm	55	55		23	23	
FPM2003B.35	35mm	68	68		27	27	
FPM2003B.42	42mm	83	83		32	32	

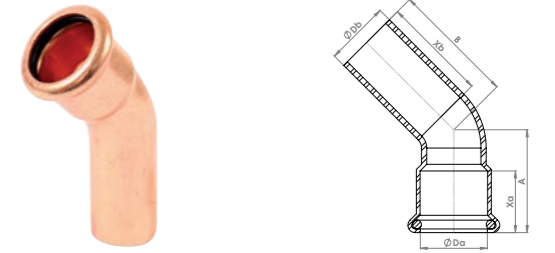
Code	Size	A	B	C	Xa	Xb	Xc
FPM2003B.54	54mm	93	93		35	35	
FPM2003B.67	67mm	125	125		50	50	
FPM2003B.76	76mm	135	135		52	52	

### FPM2013B Elbow 45°



Code	Size	A	B	C	Xa	Xb	Xc
FPM2013B.15	15mm	32	32		20	20	
FPM2013B.18	18mm	30	30		21	21	
FPM2013B.22	22mm	33	33		21	21	
FPM2013B.28	28mm	38	38		23	23	
FPM2013B.35	35mm	44	44		27	27	
FPM2013B.42	42mm	53	53		30	30	
FPM2013B.54	54mm	62	62		36	36	
FPM2013B.67	67mm	85	85		50	50	
FPM2013B.76	76mm	90	90		53	53	

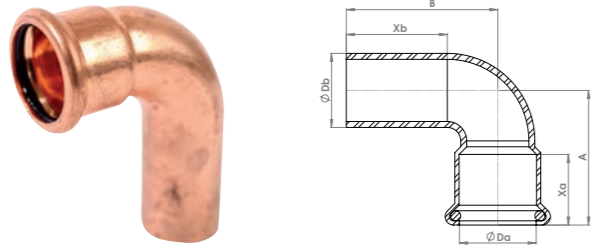
### FPM2043B Elbow 45° Street



Code	Size	A	B	C	Xa	Xb	Xc
FPM2043B.15	15mm	30	35		20	25	
FPM2043B.18	18mm	30	39		21	25	
FPM2043B.22	22mm	35	42		20	30	
FPM2043B.28	28mm	38	46		24	36	
FPM2043B.35	35mm	45	60		27	40	
FPM2043B.42	42mm	55	68		32	50	
FPM2043B.54	54mm	63	88		34	55	
FPM2043B.67	67mm	88	95		50	53	
FPM2043B.76	76mm	90	97		50	55	

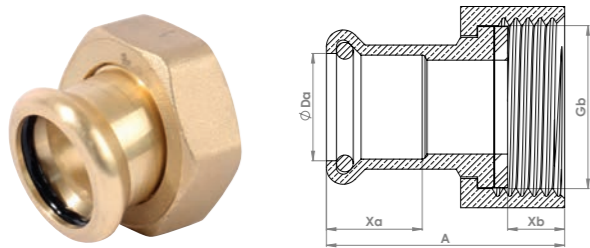
## Copper Press Fittings - M Profile

### FPM2033B Elbow 90° Street



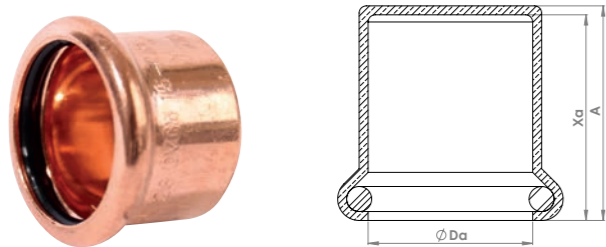
Code	Size	A	B	C	Xa	Xb	Xc
FPM2033B.12	12mm	31	45	17	17		
FPM2033B.15	15mm	36	50	20	20		
FPM2033B.18	18mm	42	53	20	20		
FPM2033B.22	22mm	47	58	20	20		
FPM2033B.28	28mm	55	70	23	38		
FPM2033B.35	35mm	70	83	28	40		
FPM2033B.42	42mm	80	103	31	46		
FPM2033B.54	54mm	100	125	35	58		
FPM2033B.67	67mm	130	133	85	88		
FPM2033B.76	76mm	150	155	53	53		

### FPM1354B Joint Connector



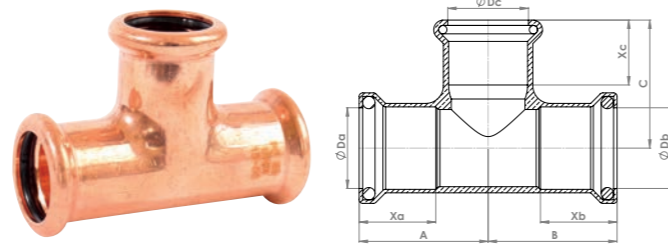
Code	Size	A	B	C	Xa	Xb	Xc
FPM1354B.1534	15mm x 3/4"	41			20	8	
FPM1354B.221	22mm x 1"	49			21	10	
FPM1354B.28114	28mm x 1 1/4"	50			23	10	

### FPM4023B Stop End



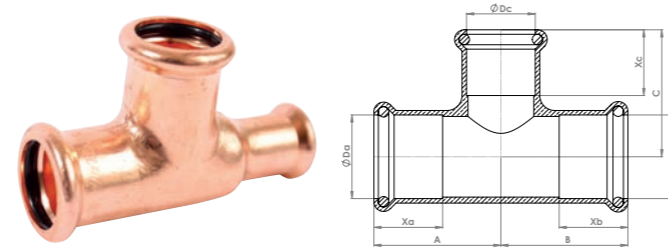
Code	Size	A	B	C	Xa	Xb	Xc
FPM4023B.15	15mm	20			18		
FPM4023B.18	18mm	20			18		
FPM4023B.22	22mm	21			19		
FPM4023B.28	28mm	26			24		

### FPM3003B Tee Equal



Code	Size	A	B	C	Xa	Xb	Xc
FPM3003B.12	12mm	28	28	28	17	17	17
FPM3003B.15	15mm	32	32	32	20	20	20
FPM3003B.18	18mm	34	34	34	20	20	20
FPM3003B.22	22mm	37	37	37	21	21	21
FPM3003B.28	28mm	42	42	42	24	24	24
FPM3003B.35	35mm	50	50	50	26	26	26
FPM3003B.42	42mm	58	58	58	30	30	31
FPM3003B.54	54mm	70	70	70	36	36	36
FPM3003B.67	67mm	95	95	86	52	52	52
FPM3003B.76	76mm	111	111	90	52	52	52

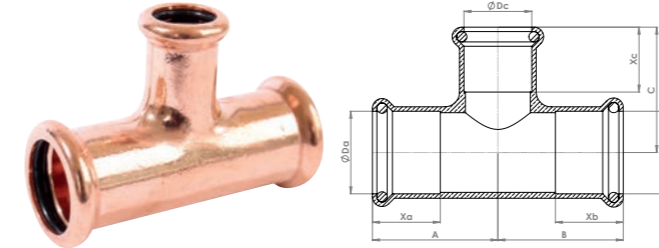
### FPM3053B Tee Reducing End



Code	Size	A	B	C	Xa	Xb	Xc
FPM3053B.221522	22 x 15 x 22	37	37	37	22	22	21
FPM3053B.282228	28 x 22 x 28	42	45	42	24	22	24

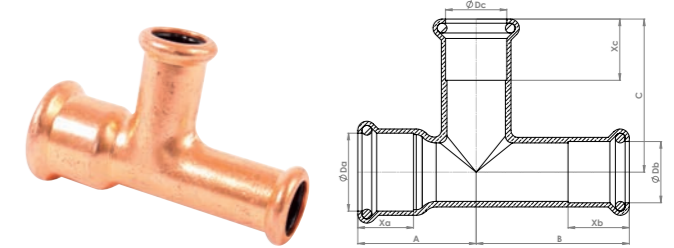
## Copper Press Fittings - M Profile

### FPM3053B Tee Reducing Branch



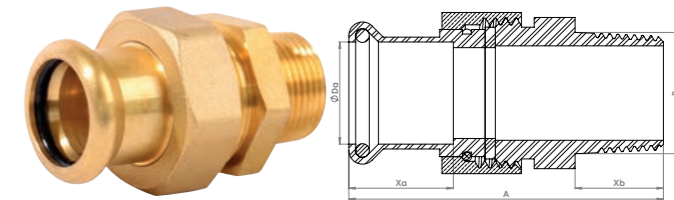
Code	Size	A	B	C	Xa	Xb	Xc
FPM3053B.151512	15 x 15 x 12	32	32	32	20	17	20
FPM3053B.181812	18 x 18 x 12	34	34	35	20	19	21
FPM3053B.181815	18 x 18 x 15	34	34	35	20	19	20
FPM3053B.222215	22 x 22 x 15	37	48	39	22	20	22
FPM3053B.222218	22 x 22 x 18	37	37	38	21	14	22
FPM3053B.282815	28 x 28 x 15	42	42	41	23	21	22
FPM3053B.282822	28 x 28 x 22	42	42	42	24	24	22
FPM3053B.353515	35 x 35 x 15	45	45	45	27	27	21
FPM3053B.353522	35 x 35 x 22	45	45	45	26	26	22
FPM3053B.353528	35 x 35 x 28	50	50	45	26	26	25
FPM3053B.424215	42 x 42 x 15	50	50	50	31	31	22
FPM3053B.424222	42 x 42 x 22	50	50	50	31	31	22
FPM3053B.424228	42 x 42 x 28	56	56	50	31	31	25
FPM3053B.424235	42 x 42 x 35	56	56	53	30	30	27
FPM3053B.545422	54 x 54 x 22	60	60	58	37	37	22
FPM3053B.545428	54 x 54 x 28	60	60	60	36	36	25
FPM3053B.545435	54 x 54 x 35	61	61	57	37	37	28
FPM3053B.545442	54 x 54 x 42	69	69	65	37	37	32
FPM3053B.676728	67 x 67 x 28	76	76	67	50	33	41
FPM3053B.676735	67 x 67 x 35	80	80	70	51	27	41
FPM3053B.676742	67 x 67 x 42	82	82	76	50	35	44
FPM3053B.676754	67 x 67 x 54	88	88	78	41	35	41
FPM3053B.767622	76 x 76 x 22	73	73	73	51	23	51
FPM3053B.767628	76 x 76 x 28	77	77	78	51	23	50
FPM3053B.767635	76 x 76 x 35	80	80	80	50	25	50
FPM3053B.767642	76 x 76 x 42	90	90	85	52	52	30
FPM3053B.767654	76 x 76 x 54	93	93	85	52	34	33
FPM3053B.767667	76 x 76 x 67	95	95	90	57	39	38

### FPM3053B Tee Reducing Branch & End



Code	Size	A	B	C	Xa	Xb	Xc
FPM3053B.221515	22 x 15 x 15mm	38	44	38	21	21	21
FPM3053B.282222	28 x 22 x 22mm	42	42	42	23	23	23

### FPM1304B Union Male



Code	Size	A	B	C	Xa	Xb	Xc
FPM1304B.1512	15mm x 1/2"	58			22	15	
FPM1304B.2234	22mm x 3/4"	71			26	19	
FPM1304B.281	28mm x 1"	76			26	20	













## Press Fittings

### General Specification

The press fitting technology have been tried and tested for decades and is applicable as an extremely flexible and innovative connection technology. Press fittings offer a cost effective jointing solution for many applications. Compared to traditional jointing methods press fittings can create a perfect joint in a matter of seconds. A completely heat-free jointing system means no naked flames, solders or adhesives are needed.

### Material Specifications

Press fittings have a pre-installed gasket which, when compressed, creates the joint. The colour of the gasket denotes the application:

Gasket	Diameter	Temperature	Application
Black - EPDM	12 – 108mm	-10°C to 110°C	Water
Yellow - HNBR	15 – 35mm	-20°C to 70°C	Gas installation with natural gas (NG) and liquefied petroleum gas (LPG)
Green - FPM (DIN ISO 1629) / FKM (ASTM D1418)	15 – 108mm	-30°C to 180°C	Solar & Compressed Air Systems

### Press Fittings

	Copper Press Fittings	Stainless Steel Press Fittings
Pressing Contour	M	M
Size Range	12mm to 76mm (Gas 15mm to 28mm)	15mm to 108mm (Gas 15mm to 28mm)
Material	Copper, bronze & brass	Stainless steel 316L
Approval	DVGW	DVGW

### Installation

1. Tube can be cut to length using commercial cutting tools suitable for metallic materials. Ensure the ends of the tube is cut completely square and clean.
2. After cutting the tube, use a deburring tool to ensure the ends are clean. This will ensure that the gasket is not damaged when inserting the tube into the press fitting.
3. Mark the tube to ensure the fitting reaches the tube stop. Insert the tube into fitting up to the tube stop. See table below for specific insertion depths.

Fitting Size (mm)	Insertion Depth (mm)	Fitting Size (mm)	Insertion Depth (mm)
15	20	42	30
18	20.5	54	35
22	21.5	76	53
28	23	89	60
35	25	108	75

4. Ensure the correct size jaw is inserted into the compression tool. For copper and stainless steel press fittings the M profile jaw is required.
5. The jaw must be placed square on the fitting and the joint is complete when the mouth of the fitting is fully enclosed by the jaws.

## Multilayer Fittings

	Multilayer for Water	Multilayer for Gas
Pressing Contour	Tong TH Model	Tong TH Model
Size Range	16mm to 63mm (Above 40mm has a plastic ring)	16mm to 26mm
Material	AISI 304 Stainless Steel	AISI 304 Stainless Steel 'Gas Marked' manufactured to UNI/TS11344
Application	Heating, Air Conditioning & Drinking Water	Natural Gas (2nd Family) G PL (3rd Family) at low pressure
Approval	KIWA (16 to 26mm)	—
Thread	UNI EN 10226-1	UNI EN 10226-1
Temperatures	0 to 95°C	-20°C to 70°C
Max Pressure	10 Bar	0.5 Bar

### Installation

1. Cut the pipe to length, perpendicularly with a pipe cutter or cutting shears.
2. Gauge the end of the pipe using a deburring / calibrating tool.
3. Insert the pipe into the fitting with a slight twisting motion. Check that the pipe is in the right position by looking at the holes on the press sleeve. You will be able to see the pipe through the holes in the press sleeve.
4. Attach the press jaws with the correct profile – Flowflex multilayer fittings require TH tongs. Run the press cycle and ensure the jaws are closed completely.

# Valves

Our complete range of valves offers installers and specifiers the choice they are looking for to suit most applications, commercial or domestic.

Available in brass, brass chrome, nickel plate and bronze, depending upon product type, our range is manufactured under ISO9001 quality management to the highest British standards and tested to ensure reliability and performance.

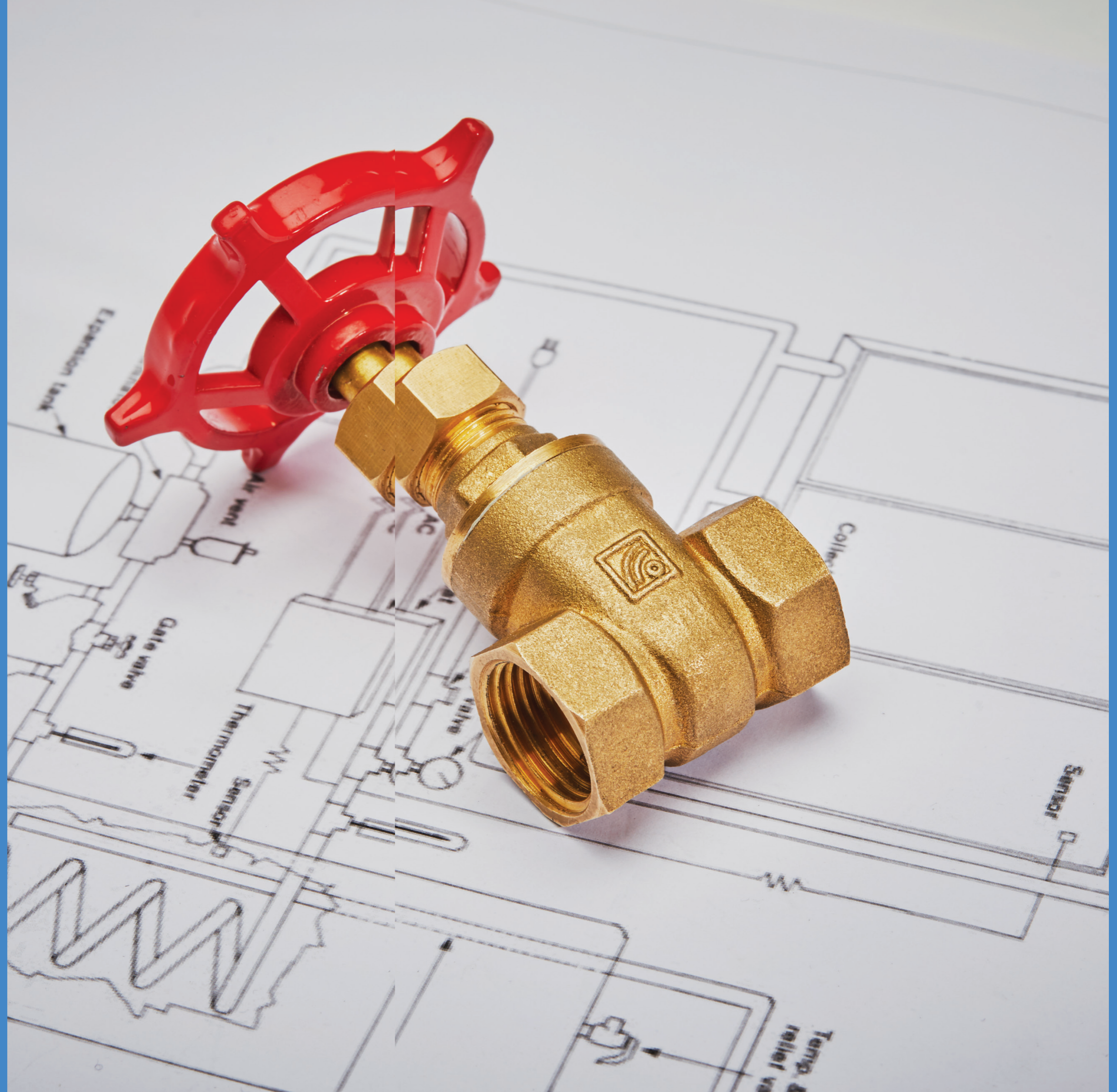
The Valve series includes isolating valves, service valves, gate valves, check valves, ball valves, manifold, angle valves and others in sizes that range from 8mm to 1200mm.

Gate valve ranges are WRAS approved and are manufactured to meet UK and international standards, BS 5154. Compression ends on the valves supplied are manufactured and tested to meet UK and international standards, BS EN 1254-2.

To ensure quality and performance materials used to manufacture the valves range meet the following, appropriate standards:

Forged Brass: BS EN 12165: CW617N

Brass Bar: BS EN 12163, BS EN 12164, BS EN 12167: CW614N



## Valve Fittings Index

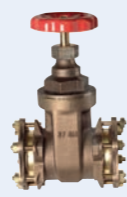
### Gate Valves



Code: **L196**  
Page 94



Code: **L197**  
Page 94



Code: **L197 - Large**  
Page 95



Code: **L198**  
Page 95



Code: **P474**  
Page 96



Code: **L198LS**  
Page 96



Code: **P474LS**  
Page 97

### Ball Valves



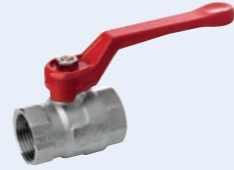
Code: **711**  
Page 98



Code: **611**  
Page 98



Code: **811**  
Page 99



Code: **FTH4021NP**  
Page 99



Code: **FTH4451NP**  
Page 100



Code: **FTH4461NP**  
Page 100



Code: **FCP4461NP**  
Page 101



Code: **PX811**  
Page 101

### Angle Seat Valve



Code: **FTH4811**  
Page 102

## Valve Fittings Index

### Swing & Check Valves



Code: **FTH4781**  
Page 102



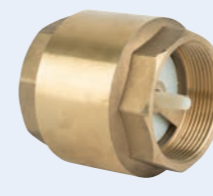
Code: **FTH4784**  
Page 103



Code: **P470**  
Page 103

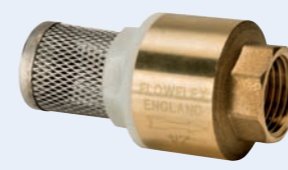


Code: **P470DR**  
Page 104



Code: **SPV**  
Page 104

### Foot Valves & Strainers



Code: **SPF**  
Page 105



Code: **FTH4881**  
Page 105



Code: **FTH5181**  
Page 106

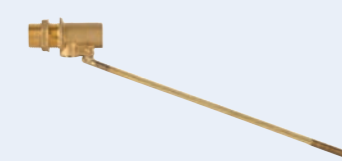
### Float Valves



Code: **BV.04**  
Page 106



Code: **BV.05**  
Page 107



Code: **BVV**  
Page 107

### Pressure Reducer



Code: **FTH4891NP**  
Page 108

### Bib Tap



Code: **L480**  
Page 108

Commercial Valves



Code: **FFL4807**  
Page 109



Code: **FFL4187**  
Page 109



Code: **FFL4827**  
Page 110



Code: **FFL4837**  
Page 110



Code: **FFL4517**  
Page 111



Code: **FFL4767**  
Page 111



Code: **FFL5187**  
Page 112



Code: **FFL4507**  
Page 113



Code: **FFL4537**  
Page 114



Code: **FFL4527**  
Page 115

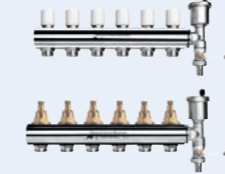


Code: **FFL4547**  
Page 116

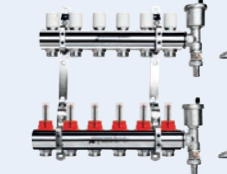
Manifolds



Code: **FTH4271NP**  
Page 117



Code: **FTH4281NP**  
Page 117



Code: **FTH4251NP**  
Page 118



Code: **FTH4261NP**  
Page 118



Code: **FTH4261NP**  
Page 119



Code: **FTH4261NP**  
Page 119



Code: **FTH4261NP**  
Page 120



Code: **FTH4291**  
Page 121



Code: **FTH4301**  
Page 121

Angle Valves



Code: **AV100.1**  
Page 122



Code: **AV102.1**  
Page 122



Code: **AV103.1**  
Page 123



Code: **AV103.1HC**  
Page 123



Code: **AV104.1**  
Page 124



Code: **AV105.1**  
Page 124



Code: **AV106.1**  
Page 125

Mini Ball Valves



Code: **FTH4371CP**  
Page 126



Code: **FTH4351CP**  
Page 126



Code: **FTH4391CP**  
Page 127



Code: **FTH4361CP**  
Page 127



Code: **FTH4392CP**  
Page 128



Code: **FTH4402CP**  
Page 128



Code: **FTH4412CP**  
Page 129



Code: **FCP4422CP**  
Page 129



Code: **FCP4372CP**  
Page 130

General Valves



Code: **P460**  
Page 130



Code: **P460 - Large**  
Page 131



Code: **HUBT**  
Page 131



Code: **P462WMT**  
Page 132



Code: **P467**  
Page 132



Code: **P467**  
Page 132



Code: **P472CPBH**  
Page 133



Code: **P472**  
Page 133



Code: **P472CP**  
Page 133



Code: **P481CP**  
Page 134



Code: **P183**  
Page 134



Code: **P477**  
Page 135

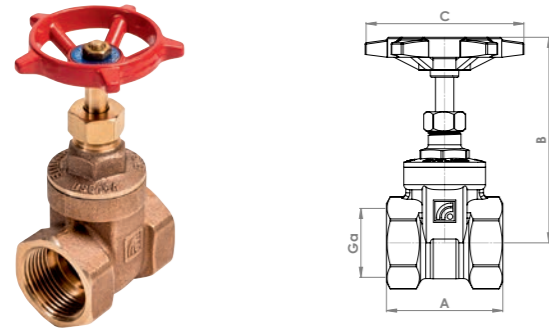


Code: **P478**  
Page 135



Code: **MPF.PV**  
Page 136

**L196 Bronze Gate Valve FxF**



**General Specification**

- Working Medium: Water, Oil, Steam
- Pressure Rating: PN30
- Max Working Temperature: <=120°C
- Pressure / Temperature Rating:  
Hot Water - 9 Bar @ 120°C  
Cold Water - 20 Bar @ 100°C
- Approval: WRAS

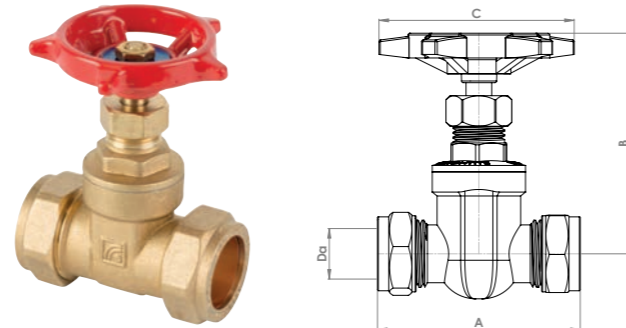
**Material Specification**

Part	Material
Nut	Brass CW617N
Name Plate	Aluminium
Handwheel	Aluminium
Press Nut	Bronze CC491K
Brass Ring	Bronze CC491K
Plastic Ring	PTFE
Bonnet	Bronze CC491K
Lock Nut	Bronze CC491K
Sealing	PTFE
Stem	Brass CW614N
Board	Bronze CC491K
Body	Bronze CC491K

**Product Codes & Dimensions**

Code	Size (Ga)	A	B	C
L196.1	1/2"	49	75	55
L196.2	3/4"	50	87	55
L196.3	1"	57	101	63
L196.4	1 1/4"	60	108	70
L196.5	1 1/2"	63	125	70
L196.6	2"	66	154	80
L196.7	2 1/2"	88	192	90
L196.8	3"	96	201	140
L196.9	4"	106	243	140

**L197 Brass Gate Valve CxC**



**General Specification**

- Working Medium: Water
- Pressure Rating: PN16
- Approval: WRAS

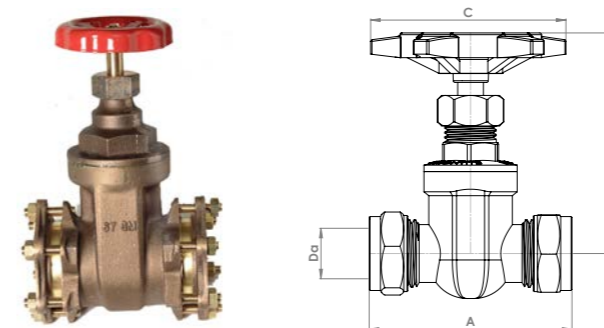
**Material Specification**

Part	Material
Body	Brass CW617N
Bonnet	Brass CW617N
Stem	Brass CW614N
Wedge	Brass CW617N
Gland	Brass CW614N
Compression Nut	Brass CW617N
Compression Cone	DZR Brass CW602N
Handwheel	Aluminium
Handwheel Nut	Brass CW6174N
Rating Disc	Aluminium

**Product Codes & Dimensions**

Code	Size (Ga)	A	B	C
L197.1	15mm	106	80	60
L197.2	22mm	127	85	65
L197.3	28mm	49	93	65
L197.4	35mm	50	121	80
L197.5	42mm	57	141	100
L197.6	54mm	60	164	110

**L197 Large Brass Gate Valve CxC**



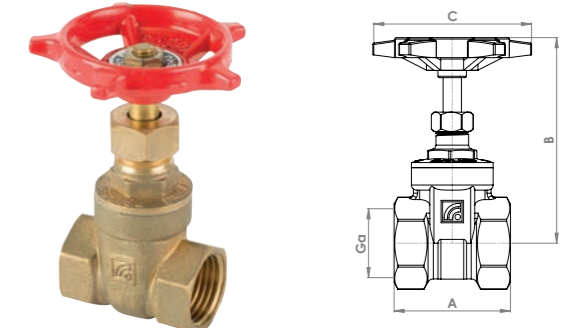
**General Specification**

- Temperature Pressure: 10 Bar @ 30°C  
3 Bar @ 120°C

**Product Codes & Dimensions**

Code	Size (Da)	A	B	C
L197.7	67mm	131	208	100
L197.8	76mm	149	238	120
L197.9	108mm	194	309	200

**L198 Gate Valve FxF**



**General Specification**

- Working Medium: Water
- Pressure Rating: PN20
- Approval: WRAS

**Material Specification**

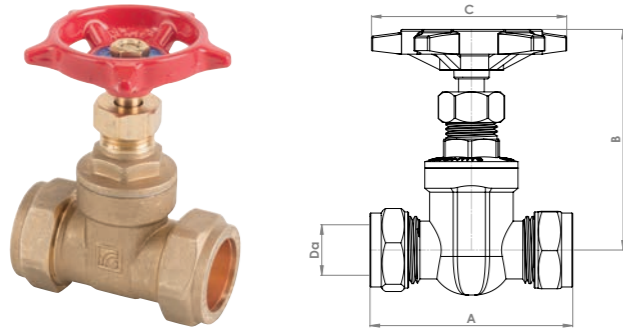
Part	Material
Body	Brass CW617N
Bonnet	Brass CW617N
Stem	Brass CW614N
Wedge	Brass CW617N
Gland	Brass CW614N
Handwheel	Aluminium
Handwheel Nut	Brass CW614N
Rating Disc	Aluminium

**Product Codes & Dimensions**

Code	Size (Ga)	A	B	C
L198.1	1/2"	40	70	58
L198.2	3/4"	70	79	660
L198.3	1"	84	91	65
L198.4	1 1/4"	87	106	80
L198.5	1 1/2"	112	127	95
L198.6	2"	63	144	105
L198.7	2 1/2"	69	196	115
L198.8	3"	80	213	145
L198.9	4"	102	240	145



**P474** Gate Valve CxC



**General Specification**

- Working Medium: Water
- Pressure Rating: PN16
- Approval: WRAS

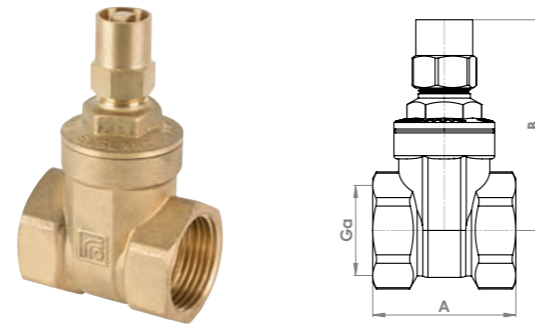
**Material Specification**

Part	Material
Body	Brass CW617N
Bonnet	Brass CW617N
Stem	Brass CW614N
Wedge	Brass CW617N
Gland	Brass CW614N
Handwheel	Aluminium
Handwheel Nut	Brass CW614N
Rating Disc	Aluminium

**Product Codes & Dimensions**

Code	Size (Da)	A	B	C
P474.1	15mm	34	70	58
P474.2	22mm	47	70	58
P474.3	28mm	54	85	63
P474.4	35mm	69	110	80
P474.5	42mm	76	130	92
P474.6	54mm	102	165	105

**L198LS** Lockshield Gate Valve FxF



**General Specification**

- Pressure Rating: PN20
- Manufactured to: BS5154

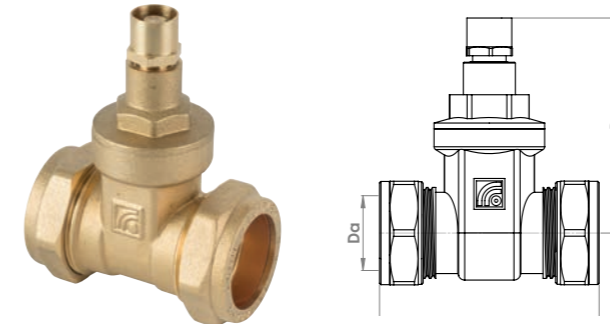
**Material Specification**

Part	Material
Housing	Brass CW617N
Gate	Brass CW617N
Housing Seal	PTFE
Column Lock	Brass CW617N
Column Washer	Brass CW617N
Drive Column	Brass CW617N
Housing Cap	Brass CW617N
Washer	PTFE
Lockshield	Brass CW617N

**Product Codes & Dimensions**

Code	Size (Ga)	A	B
L198LS.2	3/4"	70	70
L198LS.3	1"	84	70

**P474LS** Lockshield Gate Valve CxC



**General Specification**

- Manufactured to: BS5154
- Compression Ends: BS EN 1254-2

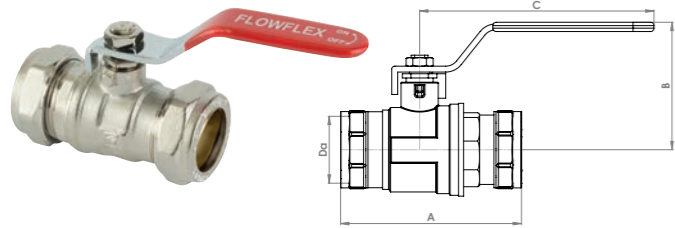
**Material Specification**

Part	Material
Housing	Brass CW617N
Gate	Brass CW617N
Housing Steel	PTFE
Column Lock	Brass CW617N
Column Washer	Brass CW617N
Drive Column	Brass CW614N
Housing Cap	Brass CW617N
Washer	PTFE
Lockshield	Brass CW614N
Olive	Copper
Nut	Brass CW617N

**Product Codes & Dimensions**

Code	Size (Da)	A	B
P474LS.1	15mm	31	60
P474LS.2	22mm	33	67
P474LS.3	28mm	33	67

**711** Compression Lever Arm Ball Valve  
Red Handle CxC



**General Specification**

- Pressure Rating: PN20
- Compression Ends: BS EN 1254-2

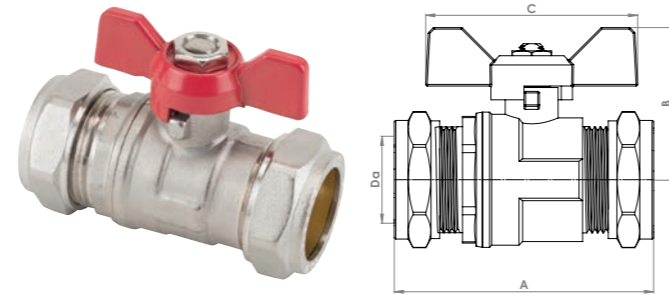
**Material Specification**

Part	Material
Body	Brass CW617N nickel-plated
Ball	Brass CW614N chrome-plated
Stem	Brass CW614N nickel-plated
Seat	PTFE
Friction Washer	PTFE
O-Ring	Nitrile butadiene rubber (NBR)
Lever	Steel chrome-plated
Handle Nut	Steel chrome-plated

**Product Codes & Dimensions**

Code	Size (Da)	A	B	C
7111	15mm	62	45	85
7112	22mm	69	49	85
7113	28mm	85	63	127
7114	35mm	109	76	139
7115	42mm	125	94	139
7116	54mm	141	99	160
7117	18mm	74	50	83

**611** Compression Butterfly Handle Ball Valve



**General Specification**

- Pressure Rating: PN20
- Compression Ends: BS EN 1254-2

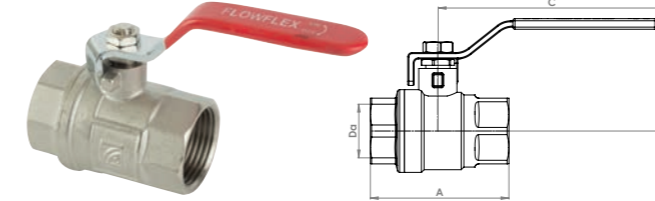
**Material Specification**

Part	Material
Body	Brass CW617N nickel-plated
Ball	Brass CW614N chrome-plated
Stem	Brass CW614N nickel-plated
Seat	PTFE
Friction Washer	PTFE
O-Ring	Nitrile butadiene rubber (NBR)
Lever	Lacquered aluminium
Handle Nut	Steel chrome-plated

**Product Codes & Dimensions**

Code	Size (Da)	A	B	C
6111	15mm	62	45	50
6112	22mm	71	36	52
6113	28mm	83	46	68
6117	18mm	70	45	50

**811** Compression Lever Arm Ball Valve  
Red Handle FxF



**General Specification**

- Pressure Rating: PN30

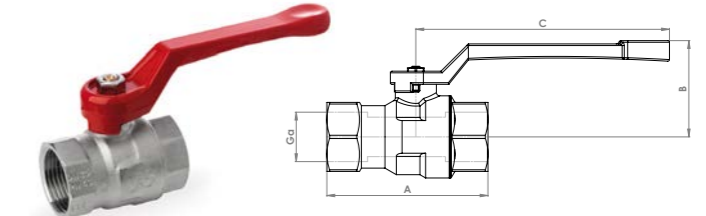
**Material Specification**

Part	Material
Body	Brass CW617N nickel-plated
Ball	Brass CW614N chrome-plated
Stem	Brass CW614N nickel-plated
Seat	PTFE
Friction Washer	PTFE
O-Ring	Nitrile butadiene rubber (NBR)
Lever	Steel chrome-plated
Handle Nut	Steel chrome-plated

**Product Codes & Dimensions**

Code	Size (Da)	A	B	C
8111	1/2"	84	40	85
8112	3/4"	94	47	85
8113	1"	119	62	99
8114	1 1/4"	142	75	117
8115	1 1/2"	169	82	117
8116	2"	40	87	132
8117	2 1/2"	44	119	235
8118	3"	55	127	235
8119	4"	57	142	235

**FTH4021NP** Lever Arm Water Ball Valve



**General Specification**

This valve is used for distributing and shutting off generally non-corrosive fluids that are compatible with the valve material.

Other applications are in plant engineering for plumbing and heating, industry and agriculture.

- Working Temperature: -10°C to 95°C
- Female Thread to: ISO 228

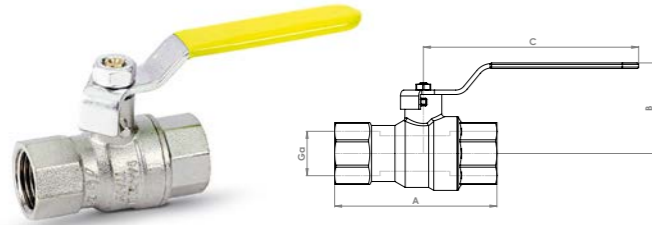
**Material Specification**

Part	Material
Body	Brass CW617N UNI-EN 12165 nickel-plated
Seal	PTFE
Ball	Brass CW617N UNI-EN 12165 chrome-plated
End Connection	Brass CW617N UNI-EN 12165 nickel-plated
Stem	Brass CW617N UNI-EN 12164
O-Ring	Nitrile butadiene rubber (NBR)
Nut	Galvanised iron
Lever	Lacquered aluminium

**Product Codes & Dimensions**

Code	Size (Ga)	A	B	C
FTH4021NP.14	1/4"	39	39	95
FTH4021NP.38	3/8"	39	39	95
FTH4021NP.12	1/2"	49	45	95
FTH4021NP.34	3/4"	55	49	95
FTH4021NP.1	1"	65	56	123
FTH4021NP.114	1 1/4"	77	69	123
FTH4021NP.112	1 1/2"	90	80	150
FTH4021NP.2	2"	104	87	150

**FTH4451NP** Lever Arm Gas Ball Valve  
Yellow Handle FxF



**General Specification**

This valve is used to distribute and shut off low pressure gas.  
Other applications are in plant engineering for plumbing and heating, and industry.

- Pressure Class: MOP5
- Working Temperature: -20°C to 60°C
- Female Threads to: EN10226-1

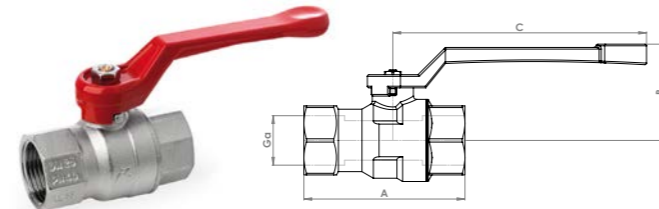
**Material Specification**

Part	Material
Body	Brass CW617N UNI-EN 12165 nickel-plated
Seal	PTFE
Ball	Brass CW617N UNI-EN 12165 chrome-plated
End Connection	Brass CW617N UNI-EN 12165 nickel-plated
Stem	Brass CW617N UNI-EN 12164
O-Ring	VITON
Washer	PTFE
Nut	Galvanised iron
Lever	Galvanised iron and PVC coated

**Product Codes & Dimensions**

Code	DN	A	B	C	Ga
FTH4451NP.12	15	59	41	95	1/2"
FTH4451NP.34	20	68	46	95	3/4"
FTH4451NP.1	25	80	56	120	1"
FTH4451NP.114	32	96	63	120	1 1/4"
FTH4451NP.112	40	106	80	150	1 1/2"
FTH4451NP.2	50	130	88	150	2"

**FTH4461NP** Lever Arm Water Ball Valve  
Red Handle FxF



**General Specification**

This valve is used to distribute and shut off generally non-corrosive fluids that are compatible with the valve material.

Other applications are in plant engineering for plumbing and heating, industry and agriculture.

- Working Temperature: -10°C to 95°C
- Female Threads to: EN10226-1

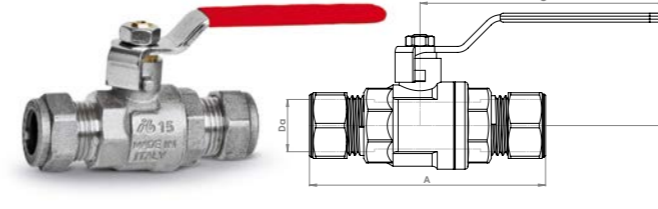
**Material Specification**

Part	Material
Body	Brass CW617N UNI-EN 12165 nickel-plated
Seal	PTFE
Ball	Brass CW617N UNI-EN 12165 chrome-plated
End Connection	Brass CW617N UNI-EN 12165 nickel-plated
Stem	Brass CW617N UNI-EN 12164
O-Ring	Nitrile butadiene rubber (NBR)
Washer	PTFE
Nut	Galvanised iron
Lever	Lacquered aluminium

**Product Codes & Dimensions**

Code	DN	A	B	C	Ga	PN
FTH4461NP.12	15	59	43	92	1/2"	40
FTH4461NP.34	20	68	52	115	3/4"	40
FTH4461NP.1	25	80	59	115	1"	40
FTH4461NP.114	32	96	69	125	1 1/4"	40
FTH4461NP.112	40	106	81	150	1 1/2"	40
FTH4461NP.2	50	130	89	150	2"	40

**FCP4461NP** Water Ball Valve Red Handle CxC



**General Specification**

This valve is used to distribute and shut off generally non-corrosive fluids that are compatible with the valve material.

Other applications are in plant engineering for plumbing and heating, industry and agriculture.

- Working Temperature: -10°C to 95°C

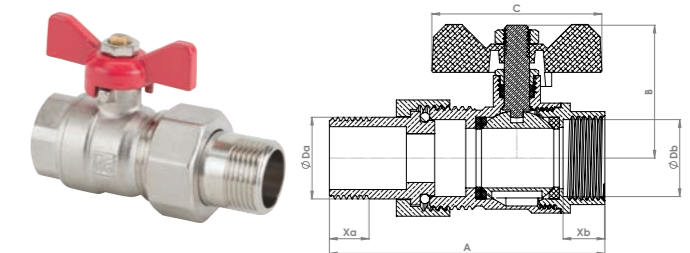
**Material Specification**

Part	Material
Body	Brass CW617N UNI-EN 12165 nickel-plated
Nut	DZR Brass CW511L UNI-EN 12164 nickel-plated
Olive	Brass CW508L UNI-EN 12449
Seal	PTFE
Ball	Brass CW617N UNI-EN 12165 chrome-plated
End Connection	Brass CW617N UNI-EN 12165 nickel-plated
Stem	Brass CW617N UNI-EN 12164
O-Ring	Nitrile butadiene rubber (NBR)
Nut	Galvanised iron
Lever	Lacquered aluminium

**Product Codes & Dimensions**

Code	DN	A	B	C	Da	PN
FCP4461NP.15	15	79	42	95	15	40
FCP4461NP.22	20	85	46	95	22	40
FCP4461NP.28	25	102	58	120	28	40

**PX811** Mi x Fi Union Ball Valve



**General Specification**

This valve is used with our PEX system.

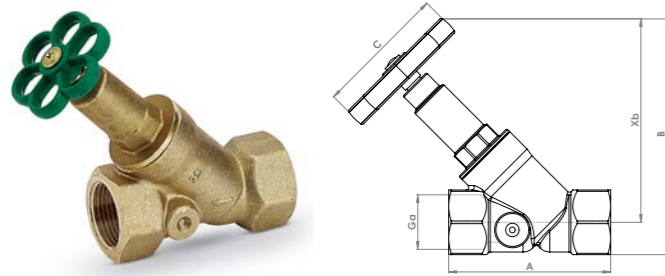
Valve can be supplied with either Red or Blue Handle

**Product Codes & Dimensions**

Code	Handle	Size	A	B	C	Xa	Xb
PX8112	Red Butterfly	3/4"	86	44	57	13	12
PX8113	Blue Butterfly	3/4"	86	44	57	13	12

## Angle Seat, Swing & Check Valves

### FTH4811 Angle Seat Valve



#### General Specification

This valve is used for distributing, regulating and shutting off generally non-corrosive fluids that are compatible with valve materials.

Other applications are in plant engineering for plumbing and heating, and industry.

- Working Temperature: 0°C to 60°C
- Female Thread to: EN10226-1

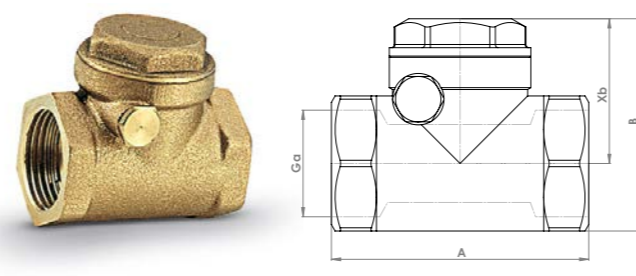
#### Material Specification

Part	Material
Body	Brass CW617N UNI-EN 12165
Upper part body	Brass CW617N UNI-EN 12164 Brass CW617N UNI-EN 12165
O-Ring	KTW approved EPDM perox
Upper part stem	Brass CW617N UNI-EN 12164
Snap ring	Bronze CC491K
O-Ring	KTW approved EPDM perox
Valve	Brass CW617N UNI-EN 12164
O-Ring	KTW approved EPDM perox
Hose-end disc	Brass CW617N UNI-EN 12164
Gasket	KTW approved EPDM perox
Washer	Brass CW508L UNI-EN 1652
Self-locking nut	Brass CW617N
Handwheel	Plastic
Screw	Brass CW508L UNI-EN 12166

#### Product Codes & Dimensions

Code	DN	A	B	C	Xb	Ga	PN
FTH4811.12	15	65	93	50	79	1/2"	16
FTH4811.34	20	75	106	55	90	3/4"	16
FTH4811.1	25	90	123	55	103	1"	16
FTH4811.114	32	110	150	70	125	1 1/4"	16
FTH4811.112	40	120	163	70	136	1 1/2"	16
FTH4811.2	50	150	188	70	153	2"	16

### FTH4781 Brass Swing Check Valve Metal Seat



#### General Specification

This valve is for use in non-return systems with generally non-corrosive fluids that are compatible with the valve materials.

Other applications are in plant engineering for plumbing and heating, industry, agriculture and pneumatics.

This valve can be installed either horizontally or vertically, the direction of flow is indicated by an arrow on the valve body.

- Working Temperature: 0°C to 80°C
- Female Threads to: ISO 228

#### Material Specification

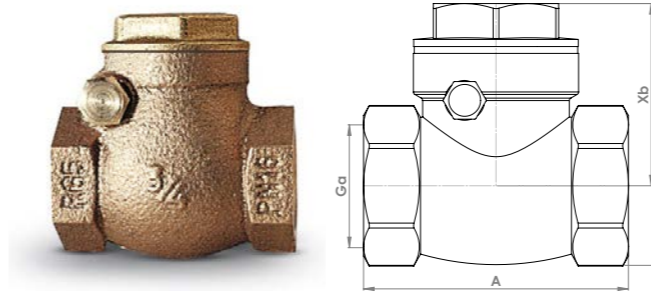
Part	Material
Body	Brass CW617N UNI-EN 12165
Cap	Brass CW617N (for 1/2") UNI-EN 12164 - Brass CW617N (from 3/4" to 2") UNI-EN 12165
O-Ring	Nitrile butadiene rubber (NBR)
Pin	Brass CW617N UNI-EN 12164
Clapet	Brass CW617N UNI-EN 12165
M8 Cap	Brass CW617N UNI-EN 12164
O-Ring	Nitrile butadiene rubber (NBR)

#### Product Codes & Dimensions

Code	DN	A	B	Xb	Min. bore	Ga	PN
FTH4781.38	10	43	46	25	13	3/8"	10
FTH4781.12	15	44	46	32	13	1.2"	10
FTH4781.34	20	52	55	37	17	3/4"	10
FTH4781.1	25	62	63	41	25	1"	10
FTH4781.114	32	72	76	49	30	1 1/4"	8
FTH4781.112	40	80	85	54	35	1 1/2"	8
FTH4781.2	50	93	100	60	45	2"	8
FTH4781.212	65	118	107	65	55	2 1/2"	6
FTH4781.3	80	135	130	85	70	3"	6
FTH4781.4	100	164	159	109	90	4"	6

## Angle Seat, Swing & Check Valves

### FTH4784 Bronze Metal Seat Swing Check Valve



#### General Specification

This valve is generally used for the non-return of fluids that can cause dezincification problems. It is also suitable for use in marine and other aggressive environments.

Other applications are in plant engineering for plumbing and heating, industry, agriculture and pneumatics.

This valve can be installed either horizontally or vertically, the direction of flow is indicated by an arrow on the valve body.

- Working Temperature: 0°C to 95°C
- Female Thread to: ISO 228

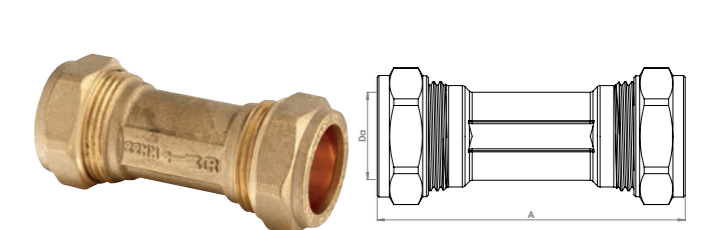
#### Material Specification

Part	Material
Body	Brass CW617N UNI-EN 12165
Cap	Brass CW617N (for 1/2") UNI-EN 12164 - Brass CW617N (from 3/4" to 2") UNI-EN 12165
O-Ring	Nitrile butadiene rubber (NBR)
Pin	Brass CW617N UNI-EN 12164
Clapet	Brass CW617N UNI-EN 12165
M8 Cap	Brass CW617N UNI-EN 12164
O-Ring	Nitrile butadiene rubber (NBR)

#### Product Codes & Dimensions

Code	DN	A	B	Xb	Ga	PN
FTH4784.12	15	55	53	36	1/2"	16
FTH4784.34	20	62	64	43	3/4"	16
FTH4784.1	25	72	73	49	1"	16
FTH4784.114	32	82	85	57	1 1/4"	16
FTH4784.112	40	90	95	63	1 1/2"	16
FTH4784.2	50	105	107	69	2"	16
FTH4784.212	65	125	128	82	2 1/2"	16
FTH4784.3	80	144	145	91	3"	16
FTH4784.4	100	176	192	123	4"	16

### P470 Single Check Valve



#### General Specification

This valve is generally used for the non return of fluids, eliminating the risk of contamination from the backflow.

#### Material Specification

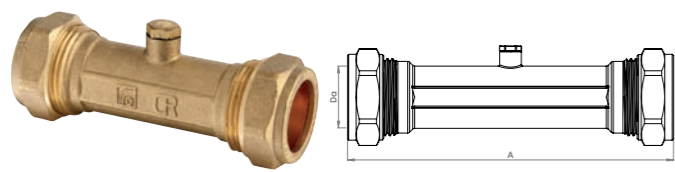
Part	Material
Body	Brass CW617N
Olive	Copper
Nut	Brass CW617N
Insert	Plastic
Insert Seal	Nitrile butadiene rubber (NBR)
Insert Retainer	AISI 304 stainless steel

#### Product Codes & Dimensions

Code	Size (Da)	A
P470.11	15mm	58
P470.22	22mm	62
P470.33	28mm	89

## Angle Seat, Swing & Check Valves

### P470DR Double Check Valve



#### General Specification

This valve is used for the non return of fluids. Therefore eliminating the risk of contamination from the backflow by only allowing water to flow in one direction.

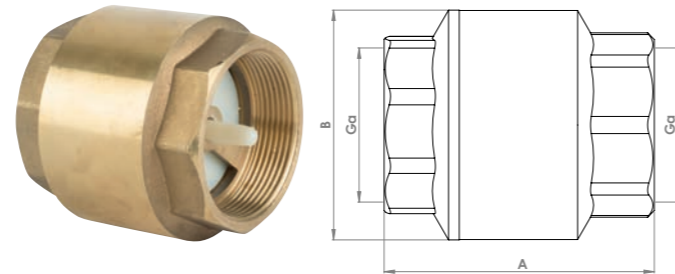
#### Material Specification

Part	Material
Body	Brass CW617N
Olive	Copper
Nut	Brass CW617N
Insert	Plastic
Insert Seal	Nitrile butadiene rubber (NBR)
Insert Retainer	AISI 304 stainless steel

#### Product Codes & Dimensions

Code	Size	A
P470DR.1	15mm	79
P470DR.2	22mm	95

### SPV Spring Check Valve



#### General Specification

- Max Pressure: 10 bar
- Working Temperatures: -20°C to 100°C

#### Material Specification

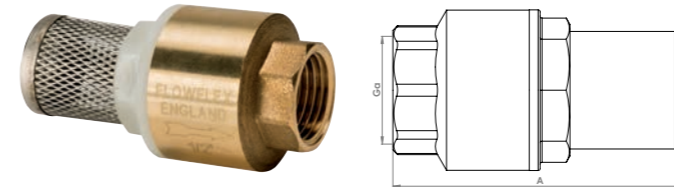
Part	Material
Body	Brass CW617N
Spring	AISI 304 stainless steel
Plunger	Nylon
Washer	Nitrile butadiene rubber (NBR)

#### Product Codes & Dimensions

Code	Size (Ga)	Max Pressure	A	B
SPV.1	1/2"	10	75	35
SPV.2	3/4"	10	80	41
SPV.3	1"	10	92	45
SPV.4	1 1/4"	8	101	56
SPV.5	1 1/2"	8	121	65
SPV.6	2"	8	46	80
SPV.7	2 1/2"	6	53	95
SPV.8	3"	6	61	109
SPV.9	4"	6	72	110

## Foot & Float Valves & Strainers

### SPF Foot Valve



#### General Specification

- Max Pressure: 10 bar
- Working Temperatures: -20°C to 100°C

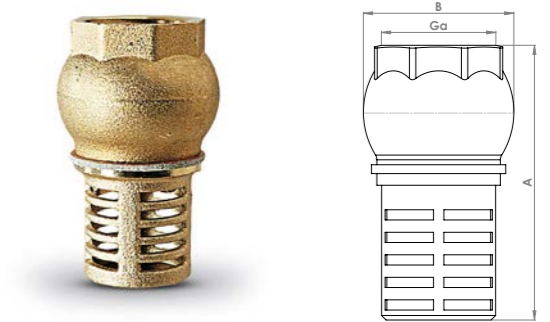
#### Material Specification

Part	Material
Body	Brass CW617N
Spring	AISI 304 stainless steel
Plunger	Nylon
Nut	Nylon
Mesh	AISI 304 stainless steel
Washer	Nitrile butadiene rubber (NBR)

#### Product Codes & Dimensions

Code	Size (Ga)	Max Pressure	A
SPF.1	1/2"	10	116
SPF.2	3/4"	10	140
SPF.3	1"	10	148
SPF.4	1 1/4"	8	177
SPF.5	1 1/2"	8	195
SPF.6	2"	8	45
SPF.7	2 1/2"	6	48
SPF.8	3"	6	53
SPF.9	4"	6	67

### FTH4881 Foot Valve



#### General Specification

The valve is used in suction lift pumps for the non-return of generally non-corrosive fluids that are compatible with the valve material.

Other applications are in plant engineering for plumbing and heating, industry and agriculture.

This valve can only be installed vertically with the filter at the bottom.

- Working Temperature: 0°C to 60°C
- Female Thread to: ISO 228

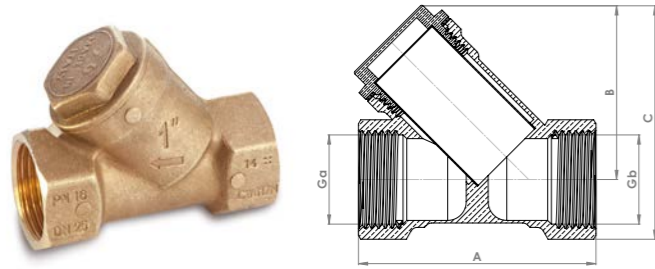
#### Material Specification

Part	Material
Body	Brass CW617N UNI-EN 12165
Filter	Brass UNI-EN 1982-CB753S
Filter Gasket	Fabric
Shutter	Brass CW617N UNI-EN 12165
Seal Gasket	Nitrile butadiene rubber (NBR)

#### Product Codes & Dimensions

Code	DN	A	B	Ga	PN
FTH4881.12	15	61	39	1/2"	10
FTH4881.34	20	70	45	3/4"	10
FTH4881.1	25	82	51	1"	10
FTH4881.114	32	95	61	1 1/4"	8
FTH4881.112	40	103	69	1 1/2"	8
FTH4881.2	50	121	80	2"	8
FTH4881.212	65	140	100	2 1/2"	6
FTH4881.3	80	175	121	3"	6
FTH4881.4	100	195	141	4"	6

**FTH5181 Brass Y Strainer**



**General Specification**

The strainer is used for filtering generally non-corrosive fluids which are compatible with the valve materials.

Other applications are in plant engineering for plumbing and heating, industry, agriculture and pneumatics.

The strainer can be installed either horizontally or vertically, the direction of flow is indicated by an arrow on the valve body.

- Strainer: 350 micron hole - 50 mesh
- Female Thread: ISO228
- Working Temperature: 0°C to 95°C

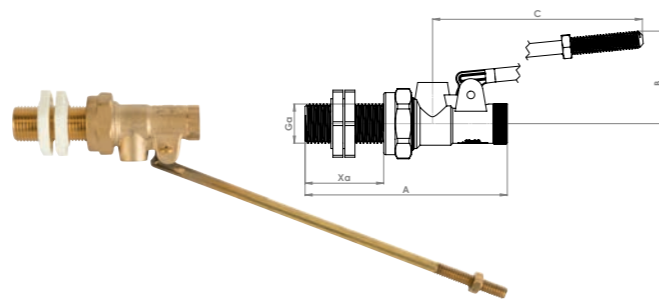
**Material Specification**

Part	Material
Body	Brass CW617N UNI-EN 12165
Cap	Brass CW617N UNI-EN 12164 (for 3/8" and 1/2") - Brass CW617 UNI-EN 12165 (for 3/4" to 2")
Cap Gasket	Nitrile butadiene rubber (NBR)
Strainer	AISI 304 stainless steel

**Product Codes & Dimensions**

Code	Size (Ga, Gb)	A	B	C	DN	PN
FTH5181.38	3/8"	57	34	48	10	16
FTH5181.12	1/2"	57	34	48	15	16
FTH5181.34	3/4"	66	41	58	20	16
FTH5181.1	1"	80	51	73	25	16
FTH5181.114	1 1/4"	92	62	88	32	16
FTH5181.112	1 1/2"	101	69	98	40	16
FTH5181.2	2"	121	86	121	50	16

**BV.04 Part 1 High Pressure Ball Valves**



**General Specification**

- Max Pressure: 14 Bar
- Working Temperature: 0°C to 85°C

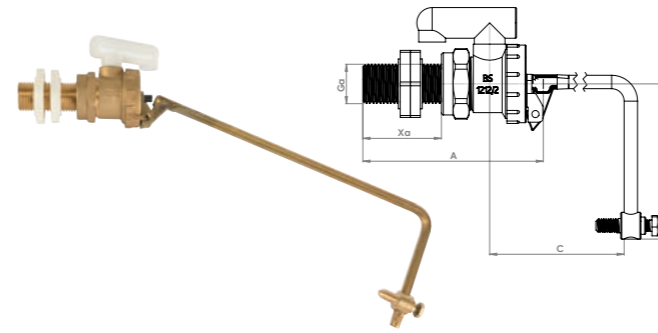
**Material Specification**

Part	Material
Body	Brass CW617N
Washer	Fibre compound
Float Arm	Brass CW617N
MI Body	Brass CW617N
MI Body Nut	Brass CW614N
Nozzle	Plastic
Nut	Brass CW617N
Flange Nut	Plastic
Sealing Disc	Nitrile butadiene rubber (NBR)
Valve Cap	Plastic
Shuttle	Brass CW614N

**Product Codes & Dimensions**

Code	Size (Ga)	A	B	C	Xa
BV.04	1/2"	106	41	224	41

**BV.05 Part 2 High Pressure Ball Valves**



**General Specification**

- Complies with: BS1212-2

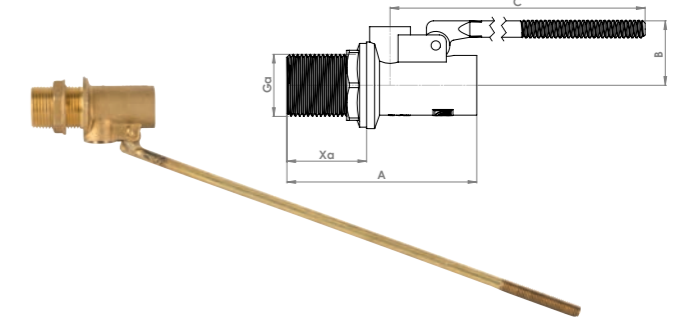
**Material Specification**

Part	Material
Body	Brass CW617N
Washer	Fibre compound
Float Arm	Brass CW617N
MI Body	Brass CW617N
MI Body Nut	Brass CW617N
Nozzle	Plastic
Nut	Brass CW614N
Flange Nut	Plastic
Sealing Disc	Nitrile butadiene rubber (NBR)
Valve Cap	Plastic
Valve Cap Nut	Brass CW617N
Shuttle	Brass CW614N
Exit Pipe	Plastic

**Product Codes & Dimensions**

Code	Size (Ga)	A	B	C	Xa
BV.05	1/2"	92	81	228	29

**BVV MOH Brass Float Valve**



**General Specification**

- Max Pressure: 14 Bar
- Working Temperature: 0°C to 85°C

**Material Specification**

Part	Material
Body	Brass CW617N
Washer	Nitrile butadiene rubber (NBR)
Float Arm	Brass CW617N
Flange Nut	Brass CW614N
Nut	Brass CW614N
Shuttle	Brass CW614N

**Product Codes & Dimensions**

Code	Size (Ga)	Seat Bore	Tail Length	Lever Size	Float size
BVV.11	1/2"	1/8"	1 1/4"	10 x 5/16"	4 1/2" x 5/16"W
BVV.12	3/4"	1/4"	1 1/2"	13 x 5/16"	5" x 5/16"W
BVV.13	1"	3/8"	1 1/2"	14 x 3/8"	6" x 3/8"W
BVV.14	1 1/4"	1/2"	2"	17 x 3/8"	8" x 3/8"W
BVV.15	1 1/2"	5/8"	2"	21 x 1/2"	10" x 1/2"W
BVV.16	2"	5/8"	2"	21 x 1/2"	10" x 1/2"W

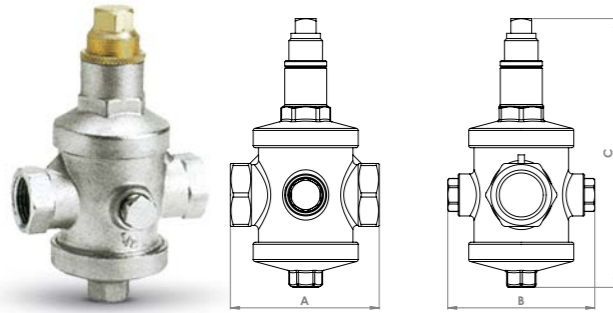
Code	A	B	C	Xa
BVV.11	76	31	268	31
BVV.12	81	35	366	33
BVV.13	92	49	42	38
BVV.14	105	49	466	48
BVV.15	111	58	480	49
BVV.16	123	69	514	50

**Flow Rate & Size Selection Chart (GPM)**

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
0.25	0.82	1.85	2.50	5.90	11.70
0.35	1.16	2.60	3.50	8.30	16.50
0.50	1.65	3.70	4.90	11.80	23.50
0.70	2.33	5.20	6.90	16.60	33.70
0.93	3.10	6.90	9.20	21.90	43.10
1.10	3.70	8.20	11.00	26.30	52.50
1.40	4.50	10.10	13.50	32.30	64.40
1.60	5.20	11.70	15.60	37.30	74.40
1.76	5.80	13.00	17.40	41.60	83.10
1.93	6.40	14.30	19.10	45.60	91.00
2.10	6.90	15.40	20.60	49.20	98.30
2.20	7.40	16.50	22.00	52.60	105.00

## Pressure Reducing Valves & Bib Tap

### FTH4891NP Pressure Reducer



#### General Specification

The pressure reducer is used for regulating the downstream pressure of fluids when medium-low flow rates are required.

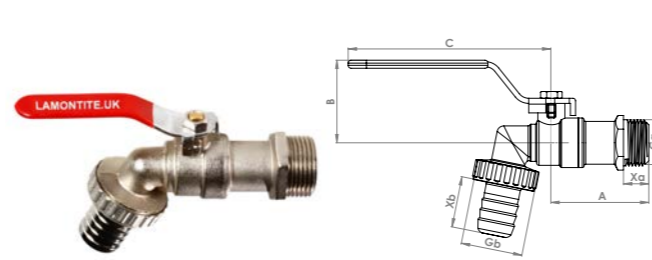
Other applications are in plant engineering for plumbing and heating, industry and agriculture.

- Maximum Operating Pressure: 25 bar
- Outlet Regulation: 1/2" to 1" = 0.5 - 5 Bar  
1 1/4" to 2" = 1 - 5.5 Bar
- Factory set pressure: 3 bar
- Working Temperature: 0°C to 80°C

#### Product Codes & Dimensions

Code	Size	A	B	C
FTH4891NP.12	1/2"	70	68	128
FTH4891NP.34	3/4"	74	68	128
FTH4891NP.1	1"	90	80	160
FTH4891NP.114	1 1/4"	126	92	230
FTH4891NP.112	1 1/2"	126	92	230
FTH4891NP.2	2"	154	110	260

### L480 Bib Tap



#### General Specification

- Pressure Rating: 10 Bar
- Working Temperature: -20°C to 100°C

#### Material Specification

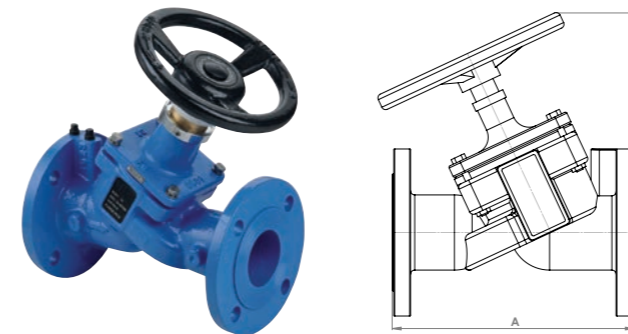
Part	Material
Body	Brass CW617N nickel-plated
Male Threaded Body	Brass CW617N nickel-plated
Ball	Brass CW614N chrome-plated
Sealing Rings	PTFE
Drive Column	Brass CW617N
Lever	Steel
Lever Nut	Brass CW614N chrome-plated
Washer	Nitrile butadiene rubber (NBR)
Male Tap Piece	AISI 304 stainless steel
Sealing Nut	AISI 304 stainless steel

#### Product Codes & Dimensions

Code	Size (Ga)	A	B	C	Xa	Xb
L480.2	1/2"	85	40	79	12	21
L480.3	3/4"	104	43	79	13	24
L480.4	1"	116	52	102	14	31

## Commercial Valves

### FFL4807 Fixed Orifice Double Regulating Valve (FODRV)



#### General Specification

- Pressure Rating: PN16
- Working Temperature: -10°C to 120°C
- Flange to: BS EN 1092-2
- Complies with: BS7350

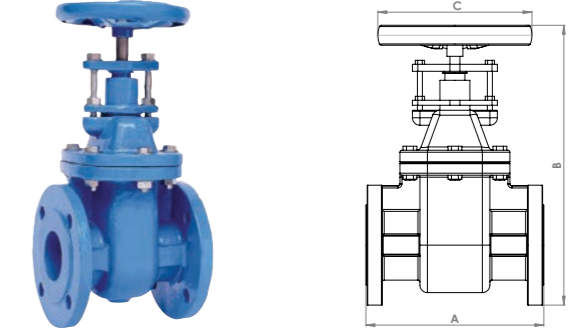
#### Material Specification

Part	Material	Specification
Body	Ductile iron	EN-JL 1050
Bonnet	Ductile iron	EN-JL 1050
Stem	Stainless steel	BS970 410S21
Disc	EPDM coated ductile iron	EN-JL 1050
Gland	Brass	EN 12165 Brass CW617N
Gland	Ductile iron	EN-JL 1050
Stem Nut	Brass	EN 12165 Brass CW617N
Handwheel	Ductile iron	EN-JL 1050
Test Points	Brass	EN 12165 Brass CW602N
Orifice Plate	Brass	EN 12165 Brass CW617N
Packing	Graphite	Non-asbestos

#### Product Codes & Dimensions

Code	Size	A	B
FFL4807.212	65	290	265
FFL4807.3	80	310	270
FFL4807.4	100	350	310
FFL4807.5	125	400	340
FFL4807.6	150	480	340
FFL4807.8	200	600	537
FFL4807.10	250	730	570
FFL4807.12	300	850	690

### FFL4187 Gate Valve Non Rising Stem



#### General Specification

- Pressure Rating: PN16
- Working Temperature: -10°C to 120°C
- Manufacture Conforms to: BS5150
- Flange Conforms to: EN 1092-2
- Face to Face Conforms to: BS5150 & BS5463 PN16
- Testing Conforms to: BS6755

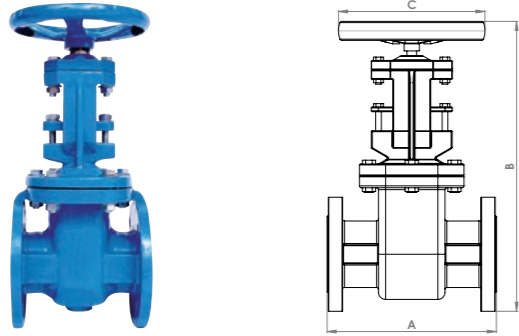
#### Material Specification

Part	Material	Specification
Body	Cast iron	EN-JL 1040
	Ductile iron	EN-JL 1050
Bonnet	Cast iron	EN-JL 1040
	Ductile iron	EN-JL 1050
Disc	Cast iron	EN-JL 1040
	Ductile iron	EN-JL 1050
Seat Ring	Bronze	EN1982 CC491K
	Brass	EN12165 CW603N
Stem	Stainless steel	BS970 420S37
Packing	Graphite	Asbestos-free
Handwheel	Cast iron	EN-JL 1040

#### Product Codes & Dimensions

Code	Size	A	B	C
FFL4187.50	50	178	278	180
FFL4187.65	65	190	312	180
FFL4187.80	80	203	327	200
FFL4187.100	100	229	400	250
FFL4187.125	125	254	489	300
FFL4187.150	150	267	544	300
FFL4187.200	200	292	632	350
FFL4187.250	250	330	772	400
FFL4187.300	300	356	863	450

**FFL4827 OS & Y Metal Seated Gate Valve**



**General Specification**

- Pressure Rating: PN16
- Working Temperature: -10°C to 120°C
- Manufacture Conforms to: BS5150
- Flange Conforms to: EN 1092-2
- Face to Face Conforms to: BS5150 & BS5463 PN16
- Testing Conforms to: BS6755

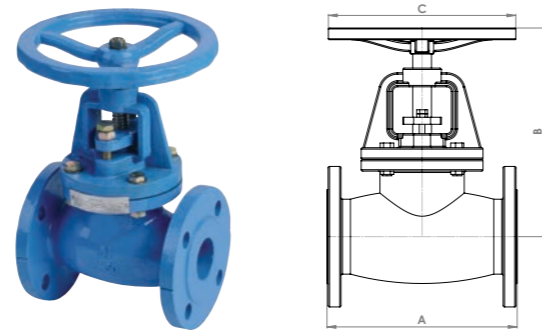
**Material Specification**

Part	Material	Specification
Body	Cast iron	EN-JL 1040
	Ductile iron	EN-JL 1050
Bonnet	Cast iron	EN-JL 1040
	Ductile iron	EN-JL 1050
Disc	Cast iron	EN-JL 1040
	Ductile iron	EN-JL 1050
Seat Ring	Bronze	EN1982 CC491K
	Brass	EN12165 CW603N
Stem	Stainless steel 420	BS970 420S37
Packing	Graphite	Asbestos-free
Handwheel	Cast iron	EN-JL 1040

**Product Codes & Dimensions**

Code	Size	A	B	C
FFL4827.50	50	178	375	200
FFL4827.65	65	190	408	200
FFL4827.80	80	203	441	200
FFL4827.100	100	229	544	250
FFL4827.125	125	254	643	250
FFL4827.150	150	267	770	300
FFL4827.200	200	292	958	350
FFL4827.250	250	330	1255	450
FFL4827.300	300	356	1442	450

**FFL4837 Globe Valve**



**General Specification**

- Pressure Rating: PN16
- Working Temperature: -10°C to 120°C
- Manufacture Conforms to: BS5163
- Flange Conforms to: EN 1092-2
- Testing Conforms to: BS6755

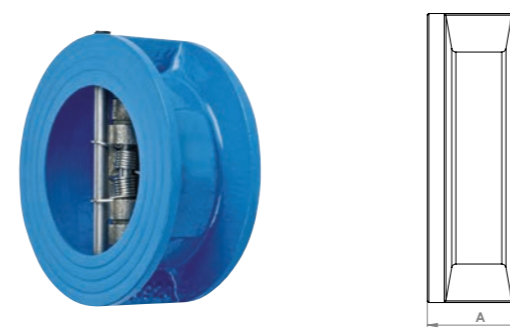
**Material Specification**

Part	Material	Specification
Body	Cast iron	EN-JL 1040
Bonnet	Cast iron	EN-JL 1040
Disc	Stainless steel 420 (15-20)	
	Cast iron (65-300mm)	EN-JL 1040
Seat Ring	Stainless steel 420	BS970 420S37
Stem	Stainless steel 420	BS970 420S37
Packing	Graphite	Asbestos-free
Handwheel	Cast iron	EN-JL 1040

**Product Codes & Dimensions**

Code	Size	A	B	C
FFL4837.50	50	203	282	200
FFL4837.65	65	216	292	200
FFL4837.80	80	241	337	255
FFL4837.100	100	292	394	255
FFL4837.125	125	330	445	306
FFL4837.150	150	356	495	360
FFL4837.200	200	495	635	360
FFL4837.250	250	622	775	406
FFL4837.300	300	698	858	406

**FFL4517 Wafer Type Double Door Check Valve**



**General Specification**

- Pressure Rating: PN16/CLASS 125
- Working Temperature: -20°C to 110°C (EPDM)  
-10°C to 80°C (Rubber)
- Testing Conforms to: DIN3202/API594

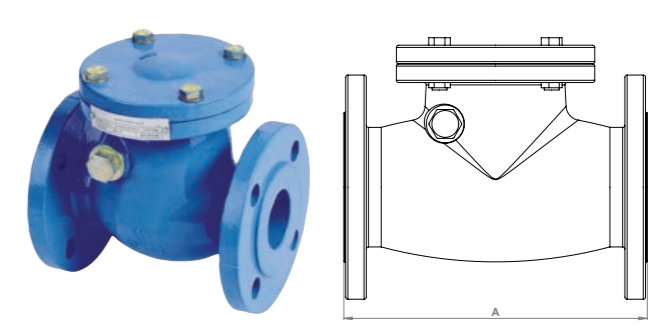
**Material Specification**

Part	Material	Specification
Body	Cast iron	A126 Class B
	Ductile iron	AS36 65-45-12
	Stainless steel 316	A351 CF8M
	Carbon steel	A216WCB
Disc	Ductile iron	AS36 65-45-12
	Aluminium bronze	BS84 C95400
Stem	Stainless steel 304	A351 CF8
	Stainless steel 316	A351 CF8M
Seat Ring	EPDM/rubber	Commercial
Spring	Stainless steel 316	S31600
	Stainless steel 304	S30400

**Product Codes & Dimensions**

Code	Size	A
FFL4517.50	50	43
FFL4517.65	65	46
FFL4517.80	80	64
FFL4517.100	100	64
FFL4517.125	125	70
FFL4517.150	150	76
FFL4517.200	200	89
FFL4517.250	250	114
FFL4517.300	300	114
FFL4517.350	350	127
FFL4517.400	400	140
FFL4517.450	450	152
FFL4517.500	500	152
FFL4517.600	600	178
FFL4517.700	700	229
FFL4517.800	800	241

**FFL4767 Swing Type Check Valve**



**General Specification**

- Pressure Rating: PN16
- Working Temperature: -10°C to 120°C
- Conforms to: EN12334 (BS5153)

**Material Specification**

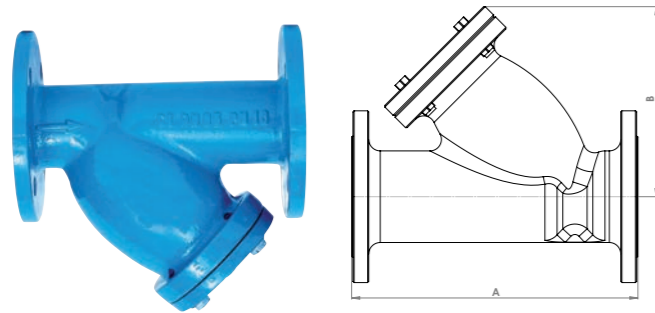
Part	Material	Specification
Body	Cast iron	EN-JL 1040
Cover	Cast iron	EN-JL 1040
Disc	Cast iron	EN-JL 1040
Body Seat Ring	Bronze	CC 491K
Disc Ring	Bronze	CC 491K
Cap Bolts	Steel	BS 3692 Gr.8.8
Cap Bolt Nut	Steel	BS 3692 Gr.8.8
Gasket	Asbestos-free	
Body Plate	Aluminium	

**Product Codes & Dimensions**

Code	Size	A
FFL4767.50	50	203
FFL4767.65	65	216
FFL4767.80	80	241
FFL4767.100	100	292
FFL4767.125	125	330
FFL4767.150	150	356
FFL4767.200	200	495
FFL4767.250	250	622
FFL4767.300	300	698



**FFL5187 Y Type Strainer**



**General Specification**

- Pressure Rating: PN16
- Flange Conforms to: EN1092-2
- Testing Conforms to: BS6755

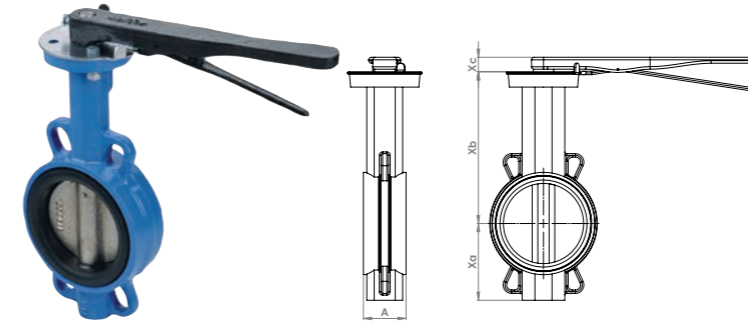
**Material Specification**

Part	Material	Specification
Body	Cast iron	EN-JL 1040
	Ductile iron	EN-JL 1050
Cap	Cast iron	EN-JL 1040
	Ductile iron	EN-JL 1050
Screen	Stainless steel 304	BS907 304S15
Blowoff Plug	Carbon steel	

**Product Codes & Dimensions**

Code	Size	A	B
FFL5187.50	50	223	150
FFL5187.65	65	273	189
FFL5187.80	80	292	213
FFL5187.100	100	352	226
FFL5187.125	125	416	273
FFL5187.150	150	470	301
FFL5187.200	200	543	370
FFL5187.250	250	660	457
FFL5187.300	300	762	540
FFL5187.350	350	980	740
FFL5187.400	400	1100	850
FFL5187.450	450	1200	800

**FFL4507 Wafer Type Butterfly Valve**



**General Specification**

- Pressure Rating: PN16
- Working Medium: Water, Oil, Gas
- Working Temperature: -20°C to 110°C (EPDM Seat)  
-10°C to 80°C (Rubber Seat)
- Complies with: ISO5752 / BS5155 / BS EN593 /  
MSS SP-67 / API 609

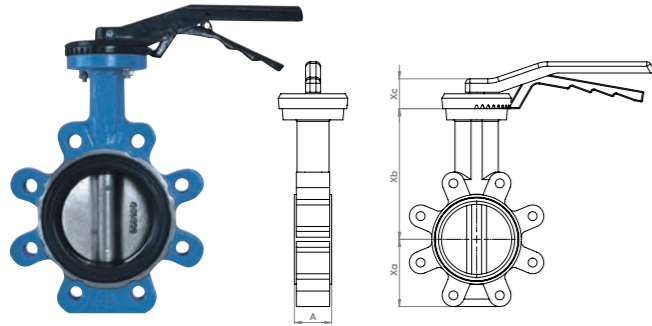
**Material Specification**

Part	Material	Specification
Body	Cast iron	A126 Class B
	Ductile iron	A536 Gr. 65-45-12
	Ductile iron	A536 Gr. 65-45-12
	Bronze CC491K	B148 C95400
Disc	AISI 304 stainless steel 304	A351 CF-8
	AISI 304 stainless steel 316	A351 CF-8M
Shaft	AISI 304 stainless steel 410	A276 S 410 00
	AISI 304 stainless steel 431	A276 S 431 00
Seat	EPDM/Nitrile butadiene rubber (NBR)	
O-Ring	EPDM/Nitrile butadiene rubber (NBR)	
	PTFE	
Bushing	PTFE	
	Bronze CC491K	B62 C83600

**Product Codes & Dimensions**

Code	Size	A	X	Xb	Xc
FFL4507.40	40	33	68	110	24
FFL4507.50	50	42	80	161	30
FFL4507.65	65	45	89	175	30
FFL4507.80	80	45	95	181	30
FFL4507.100	100	51	114	200	30
FFL4507.125	125	55	127	213	30
FFL4507.150	150	55	139	226	30
FFL4507.200	200	60	175	260	34
FFL4507.250	250	67	203	292	34
FFL4507.300	300	76	242	337	34
FFL4507.350	350	76	267	368	40
FFL4507.400	400	102	316	400	52
FFL4507.450	450	114	334	422	52
FFL4507.500	500	127	370	480	64
FFL4507.550	550	151	433	533	70
FFL4507.600	600	151	468	562	70
FFL4507.650	650	172	484	540	95
FFL4507.700	700	165	530	626	95
FFL4507.750	750	167	554	660	95
FFL4507.800	800	188	605	666	130
FFL4507.900	900	203	668	720	130
FFL4507.1000	1000	216	728	806	130
FFL4507.1200	1200	276	855	938	150

**FFL4537 Wafer Type Butterfly Valve**



**General Specification**

- Pressure Rating: PN16
- Working Medium: Water, Oil, Gas
- Working Temperature: 20°C to 110°C (EPDM Seat)  
-10°C to 80°C (Rubber Seat)
- Complies with: ISO5752 / BS5155 / BS EN593 / MSS SP-67 / API 609

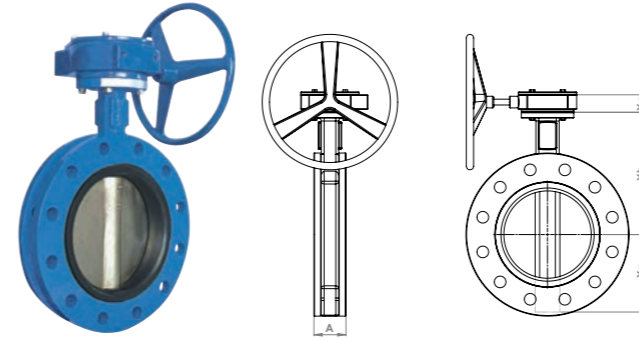
**Material Specification**

Part	Material	Specification
Body	Cast Iron	A126 Class B
	Ductile Iron	A536 Gr. 65-45-12
Disc	Ductile Iron	A536 Gr. 65-45-12
	Bronze CC491K	B148 C95400
	AISI 304 Stainless steel 304	A351 CF-8
Shaft	AISI 304 Stainless steel 316	A351 CF-8M
	AISI 304 Stainless steel 410	A276 S 410 00
	AISI 304 Stainless steel 431	A276 S 431 00
Seat	EPDM / Nitrile butadiene rubber (NBR)	
O-Ring	EPDM / Nitrile butadiene rubber (NBR)	
Bushing	Bronze CC491K	B62 C83600

**Product Codes & Dimensions**

Code	Size	A	Xa	Xb	Xc
FFL4537.40	40	33	68	110	24
FFL4537.50	50	42	80	161	30
FFL4537.65	65	45	89	175	30
FFL4537.80	80	45	95	181	30
FFL4537.100	100	51	114	200	30
FFL4537.125	125	55	127	213	30
FFL4537.150	150	55	139	226	30
FFL4537.200	200	60	175	260	34
FFL4537.250	250	67	203	292	34
FFL4537.300	300	76	242	337	34
FFL4537.350	350	76	267	368	40
FFL4537.400	400	102	316	400	52
FFL4537.450	450	114	334	422	52
FFL4537.500	500	127	370	480	64
FFL4537.550	550	151	433	533	70
FFL4537.600	600	151	468	562	70
FFL4537.650	650	172	484	540	70
FFL4537.700	700	165	530	626	95

**FFL4527 U Type Butterfly Valve**



**General Specification**

- Pressure Rating: PN16
- Working Medium: Water, Oil, Gas
- Working Temperature: -20°C to 110°C (EPDM Seat)  
-10°C to 80°C (Rubber Seat)
- Complies with: ISO5752 / BS5155 / BS EN593 / MSS SP-67 / API 609

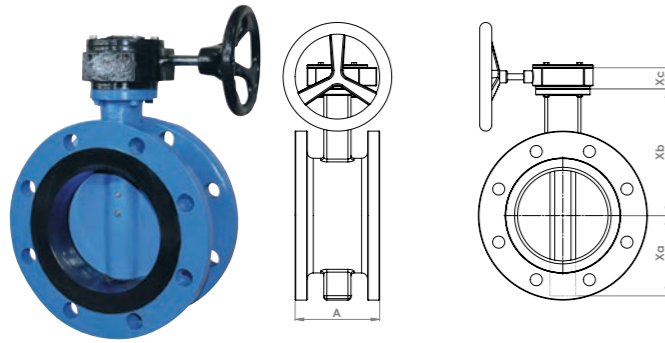
**Material Specification**

Part	Material	Specification
Body	Cast Iron	EN-JS 1050
	Ductile Iron	EN-JS 1050
Disc	Bronze	EN 1982 CC491K
	Stainless steel 304	BS970 304
	Stainless steel 316	BS970 316
Shaft	Stainless steel 410	BS970 410
	Stainless steel 431	BS970 431
Seat Ring	EPDM / Nitrile butadiene rubber (NBR)	
O-Ring	EPDM / Nitrile butadiene rubber (NBR)	
Bushing	Bronze	EN 1982 CC491K

**Product Codes & Dimensions**

Code	Size	A	Xa	Xb	Xc
FFL4527.150	150	55	133	226	30
FFL4527.200	200	60	175	260	34
FFL4527.225	225	67	190	275	34
FFL4527.250	250	67	201	292	34
FFL4527.300	300	76	242	337	34
FFL4527.350	350	76	267	368	40
FFL4527.375	375	102	320	375	52
FFL4527.400	400	102	316	400	52
FFL4527.450	450	114	344	422	52
FFL4527.500	500	127	380	480	64
FFL4527.550	550	151	432	533	70
FFL4527.600	600	151	468	562	70
FFL4527.650	650	172	484	540	70
FFL4527.700	700	165	530	626	95
FFL4527.750	750	167	564	660	95
FFL4527.800	800	188	602	666	95
FFL4527.900	900	203	661	722	130
FFL4527.1000	1000	216	724	806	130
FFL4527.1050	1050	251	784	865	150
FFL4527.1100	1100	253	804	820	150
FFL4527.1200	1200	276	869	938	150

**FFL4547 Double flange Butterfly Valve**



**General Specification**

- Working Pressure: 150PSI
- Working Medium: Water, Oil, Gas
- Working Temperature: -4°F to 230°F (EPDM Seat)  
14°F to 176°F (Rubber Seat)
- Complies with: AWWA C504

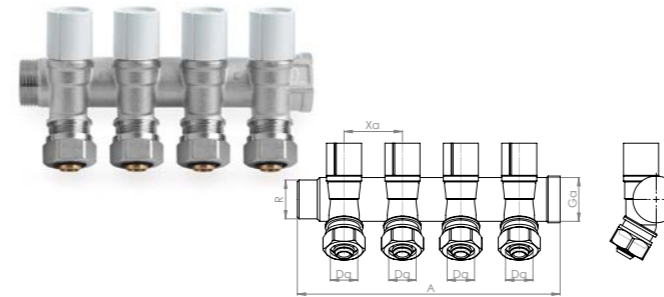
**Material Specification**

Part	Material	Specification
Body	Ductile iron	A536 Gr. 65-45-12
Disc	Ductile iron	A536 Gr. 65-45-12
	Bronze CC491K	B148 C95400
Shaft	Stainless steel 304	A351 CF-8
	Stainless steel 316	A351 CF-8M
	Stainless steel 410	A276 S 410
	Stainless steel 431	A276 S 431
Seat	EPDM / Nitrile butadiene rubber (NBR)	
O-Ring	EPDM / Nitrile butadiene R=rubber (NBR)	
Bushing	Bronze	B62 C83600

**Product Codes & Dimensions**

Code	Size	A	Xa	Xb	Xc
FFL4547.50	50	108	70	130	32
FFL4547.65	65	112	75	140	32
FFL4547.80	80	114	85	150	32
FFL4547.100	100	127	104	160	32
FFL4547.125	125	140	112	180	32
FFL4547.150	150	140	130	200	32
FFL4547.200	200	152	160	230	38
FFL4547.250	250	165	194	260	38
FFL4547.300	300	178	220	300	38
FFL4547.350	350	190	270	360	45
FFL4547.400	400	216	305	390	51
FL4547.450	450	222	332	420	51
FL4547.500	500	229	362	470	64
FL4547.600	600	267	415	540	70
FL4547.700	700	292	515	565	72
FL4547.750	750	318	545	612	72
FL4547.900	900	330	605	680	77
FL4547.1000	1000	410	685	760	85
FL4547.1050	1050	410	730	820	85
FL4547.1100	1100	450	730	820	85
FL4547.1200	1200	470	790	820	150

**FTH4271NP Manifold with Valves and D.16 Adaptors**



**General Specification**

This manifold is used to distribute and shut off fluids for sanitary and heating systems.

Other applications are in plant engineering for plumbing and heating and industry.

- Finish: Nickel-plated
- Working Temperature: 0°C to 95°C
- Threads to: ISO 228 Side connections M22x15

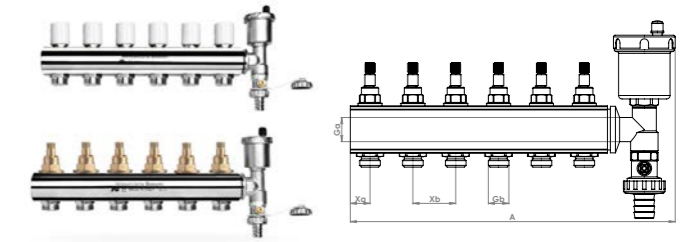
**Material Specification**

Part	Material
Body	Brass CW617N UNI-EN 1265 nickel-plated
Seal	EPDM perox
O-Ring	EPDM perox
Upper Part	Brass CW617N UNI-EN 1264
Snap Ring	Bronze CC491K UNI-EN 1982:200
Stem	Brass CW617N UNI-EN 1264
O-Ring	EPDM perox
Hose-end Pipe	Brass CW617N UNI-EN 1264
Seal	PTFE
O-Ring	EPDM perox
Olive	Brass CW617N UNI-EN 1264
Nut	Brass CW617N UNI-EN 1265 nickel-plated
Screw	AISI 304 Stainless steel
Handle	Plastic

**Product Codes & Dimensions**

Code	A	Xa	Da	R	Ga	Ways
FTH4271NP.234	83	35	16	3/4"	3/4"	2
FTH4271NP.334	118	35	16	3/4"	3/4"	3
FTH4271NP.444	153	35	16	3/4"	3/4"	4

**FTH4281NP Manifold from Bar with Regulating Upper Parts**



**General Specification**

This manifold is used to distribute, intercept & regulate heat transfer fluids.

- Finish: Nickel-plated
- Working Temperature: 0°C to 95°C
- Threads to: ISO 228

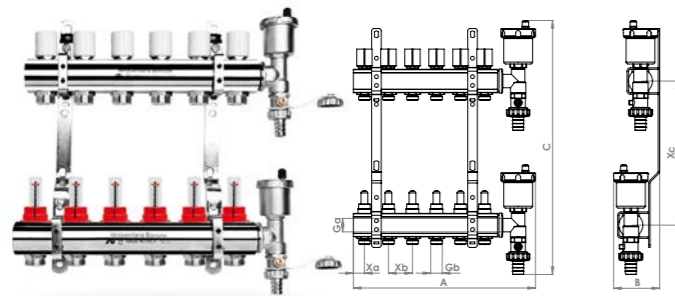
**Material Specification**

Part	Material
Manifold	Brass CW617N UNI-EN 1268 nickel-plated
Upper Part	Brass CW617N UNI-EN 1264 nickel-plated
Connector	Brass CW617N UNI-EN 1268 nickel-plated
Handle	Plastic (ABS)
Bracket	Galvanised iron

**Product Codes & Dimensions**

Code	A	Xa	Xb	Ga	Gb	PN	Ways
FTH4281NP.3	200	26	50	1"	3/4"	10	3
FTH4281NP.4	250	26	50	1"	3/4"	10	4
FTH4281NP.5	300	26	50	1"	3/4"	10	5
FTH4281NP.6	350	26	50	1"	3/4"	10	6
FTH4281NP.7	400	26	50	1"	3/4"	10	7
FTH4281NP.8	450	26	50	1"	3/4"	10	8
FTH4281NP.9	500	26	50	1"	3/4"	10	9
FTH4281NP.10	550	26	50	1"	3/4"	10	10
FTH4281NP.11	600	26	50	1"	3/4"	10	11
FTH4281NP.12	650	26	50	1"	3/4"	10	12
FTH4281NP.13	700	26	50	1"	3/4"	10	13

**FTH4251NP Pre-Assembled Manifold**



**General Specification**

The manifold is used to distribute, intercept & regulate heat transfer fluids.

- Finish: Nickel-plated
- Working Temperature: 0°C to 95°C
- Threads to: ISO 228

**Material Specification**

Part	Material
Manifold	Brass CW617N UNI-EN 1268 nickel-plated
Upper Part	Brass CW617N UNI-EN 1264 nickel-plated
Connector	Brass CW617N UNI-EN 1268 nickel-plated
Handle	Plastic (ABS)
Bracket	Galvanised iron

**Product Codes & Dimensions**

Code	A	B	C	Xa	Xb	Xc	Ga	Gb	PN	Ways
FTH4251NP.3	200	70	370	26	50	200	1"	3/4"	10	3
FTH4251NP.4	250	70	370	26	50	200	1"	3/4"	10	4
FTH4251NP.5	300	70	370	26	50	200	1"	3/4"	10	5
FTH4251NP.6	350	70	370	26	50	200	1"	3/4"	10	6
FTH4251NP.7	400	70	370	26	50	200	1"	3/4"	10	7
FTH4251NP.8	450	70	370	26	50	200	1"	3/4"	10	8
FTH4251NP.9	500	70	370	26	50	200	1"	3/4"	10	9
FTH4251NP.10	550	70	370	26	50	200	1"	3/4"	10	10
FTH4251NP.11	600	70	370	26	50	200	1"	3/4"	10	11
FTH4251NP.12	650	70	370	26	50	200	1"	3/4"	10	12
FTH4251NP.13	700	70	370	6	50	200	1"	3/4"	10	13

**FTH4261NP Manifold with Valve**



**General Specification**

This manifold is used to distribute and shut off fluids for sanitary and heating systems.

Other applications are in plant engineering for plumbing and heating and industry.

- Finish: Nickel-plated
- Working Temperature: 0°C to 95°C
- Threads to: ISO 228

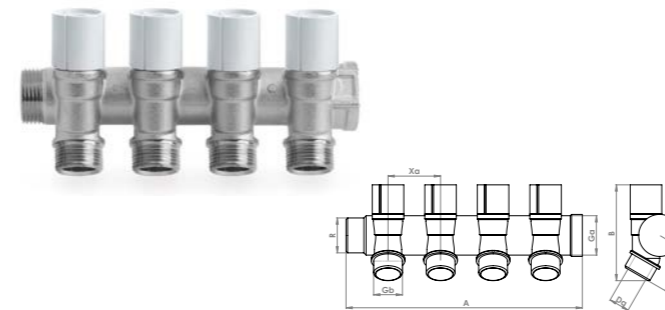
**Material Specification**

Part	Material
Body	Brass CW617N UNI-EN 1265 nickel-plated
Gasket	EPDM perox
Upper Part O-Ring	EPDM perox
Snap Ring	Bronze CC491K
Stem	Brass CW617N UNI-EN 1264
Stem O-Ring	EPDM perox
Valve	Brass CW617N UNI EN 12164
Screw	AISI 304 Stainless steel
Handle	Plastic (ABS)

**Product Codes & Dimensions**

Code	A	B	Xa	Xb	R	Ga	Gb	PN	Ways
FTH4261NP.23412	83	73	35	35.5	3/4"	3/4"	1/2"	10	2
FTH4261NP.2112	90	77	35	36.5	1"	1"	1/2"	10	2
FTH4261NP.33412	118	73	35	35.5	3/4"	3/4"	1/2"	10	3
FTH4261NP.3112	125	77	35	36.5	1"	1"	1/2"	10	3
FTH4261NP.43412	153	73	35	35.5	3/4"	3/4"	1/2"	10	4
FTH4261NP.4112	158	77	35	36.5	1"	1"	1/2"	10	4
FTH4261NP.53412	188	73	35	35.5	3/4"	3/4"	1/2"	10	5
FTH4261NP.5112	195	77	35	36.5	1"	1"	1/2"	10	5

**FTH4261NP Manifold with Valve**



**General Specification**

This manifold is used to distribute and shut off fluids for sanitary and heating systems.

Other applications are in plant engineering for plumbing and heating and industry.

- Finish: Nickel-plated
- Working Temperature: 0°C to 95°C
- Threads to: ISO 228 and METRIC

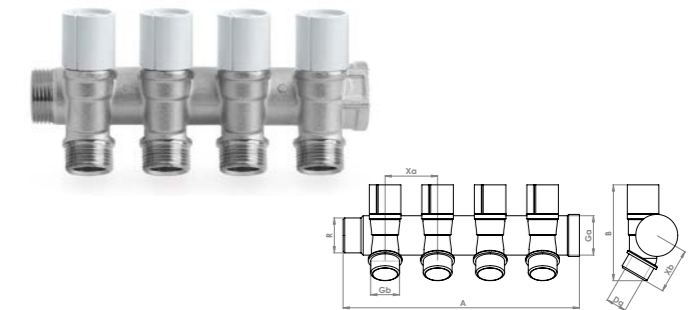
**Material Specification**

Part	Material
Body	Brass CW617N UNI-EN 1265 nickel-plated
Gasket	EPDM perox
Upper Part O-Ring	EPDM perox
Upper Part	Brass CW617N UNI-EN 1264
Snap Ring	Bronze CC491K
Stem	Brass CW617N UNI-EN 1264
Stem O-Ring	EPDM perox
Valve	Brass CW617N UNI EN 12164
Screw	AISI 304 Stainless steel
Handle	Plastic (ABS)

**Product Codes & Dimensions**

Code	A	B	Xa	Xb	R	Ga	Gb	PN	Ways
FTH4261NP.2342215	83	73	35	35.5	3/4"	3/4"	M22 x1.5	10	2
FTH4261NP.212215	90	77	35	36.5	1"	1"	M22 x1.5	10	2
FTH4261NP.3342215	118	73	35	35.5	3/4"	3/4"	M22 x1.5	10	3
FTH4261NP.312215	125	77	35	36.5	1"	1"	M22 x1.5	10	3
FTH4261NP.4342215	153	73	35	35.5	3/4"	3/4"	M22 x1.5	10	4
FTH4261NP.412215	158	77	35	36.5	1"	1"	M22 x1.5	10	4
FTH4261NP.5342215	188	73	35	35.5	3/4"	3/4"	M22 x1.5	10	5
FTH4261NP.512215	195	77	35	36.5	1"	1"	M22 x1.5	10	5

**FTH4261NP Manifold with Valve**



**General Specification**

This manifold is used to distribute and shut off fluids for sanitary and heating systems.

Other applications are in plant engineering for plumbing and heating and industry.

- Finish: Nickel-plated
- Working Temperature: 0°C to 95°C
- Threads to: ISO 228 and 24x19
- Side Connections: 24x19

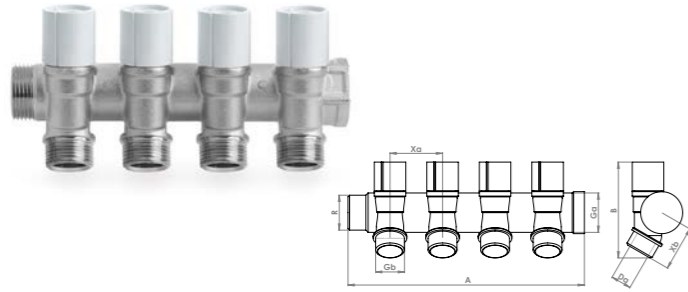
**Material Specification**

Part	Material
Body	Brass CW617N UNI-EN 1265 nickel-plated
Gasket	EPDM perox
Upper Part O-Ring	EPDM perox
Upper Part	Brass CW617N UNI-EN 1264
Snap Ring	Bronze CC491K
Stem	Brass CW617N UNI-EN 1264
Stem O-Ring	EPDM perox
Valve	Brass CW617N UNI EN 12164
Screw	AISI 304 Stainless steel
Handle	Plastic (ABS)

**Product Codes & Dimensions**

Code	A	B	Da	Xa	Xb	R	Gb	PN	Ways
FTH4261NP.212419	97	77	18.1	35	37	1"	24 x19	10	2
FTH4261NP.312419	132	77	18.1	35	37	1"	24 x19	10	3
FTH4261NP.412419	167	77	18.1	35	37	1"	24 x19	10	4
FTH4261NP.512419	202	77	18.1	35	37	1"	24 x19	10	5

**FTH4261NP** Manifold with Valve



**General Specification**

This manifold is used to distribute and shut off fluids for sanitary and heating systems.

Other applications are in plant engineering for plumbing and heating and industry.

- Finish: Nickel-plated
- Working Temperature: 0°C to 95°C
- Threads to: ISO 228

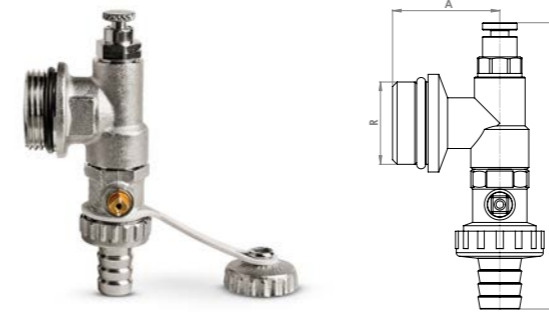
**Material Specification**

Part	Material
Body	Brass CW617N UNI-EN 1264 nickel-plated
Gasket	EPDM perox
Upper Part O-Ring	EPDM perox
Upper Part	Brass CW617N UNI-EN 1264
Snap Ring	Bronze CC491K
Stem	Brass CW617N UNI-EN 1264
O-Ring	EPDM perox
Valve	Brass CW617N UNI EN 12164
O-Ring	EPDM perox
Hose-end Pipe	Brass CW617N UNI EN 12164
Seal	PTFE
O-Ring	EPDM perox
Olive	Brass CW617N UNI EN 12164
Nut	Brass CW617N UNI EN 12164 nickel-plated
Screw	AISI 304 Stainless steel
Handle	Plastic

**Product Codes & Dimensions**

Code	A	Xa	R	Ga	Gb	PN	Ways
FTH4261NP.234162	83	35	3/4"	3/4"	16x2	10	2
FTH4261NP.21162	90	35	1"	1"	16x2	10	2
FTH4261NP.334162	118	35	3/4"	3/4"	16x2	10	3
FTH4261NP.31162	125	35	1"	1"	16x2	10	3
FTH4261NP.434162	153	35	3/4"	3/4"	16x2	10	4
FTH4261NP.41162	158	35	1"	1"	16x2	10	4
FTH4261NP.534162	188	35	3/4"	3/4"	16x2	10	5
FTH4261NP.51162	195	35	1"	1"	16x2	10	5

**FTH4291** Manifold Terminal with Relief Valve



**General Specification**

- Finishes available: Nickel-plated & Sandblasted brass

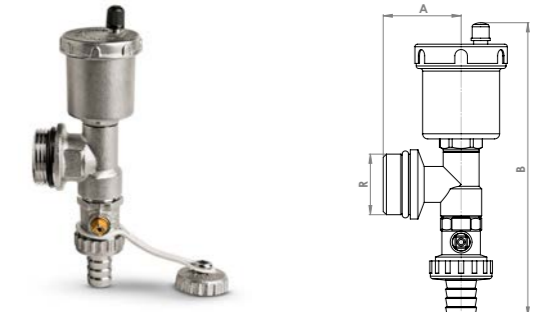
**Material Specification**

Part	Component
1	1/2" Boiler ball drain valve with lever
2	F/M/F Tee with O-Ring
3	Drain cock with O-Ring

**Product Codes & Dimensions**

Code	Finish:	A	B	R	PN
FTH4921.34	Sandblasted	37	120	3/4"	10
FTH4921.1	Sandblasted	37	120	1"	10
FTH4921NP.34	Nickel-plated	37	120	3/4"	10
FTH4921NP.1	Nickel-plated	37	120	1"	10

**FTH4301** Manifold Terminal with Automatic Relief Valve



**General Specification**

- Finishes available: Nickel-plated & Sandblasted brass

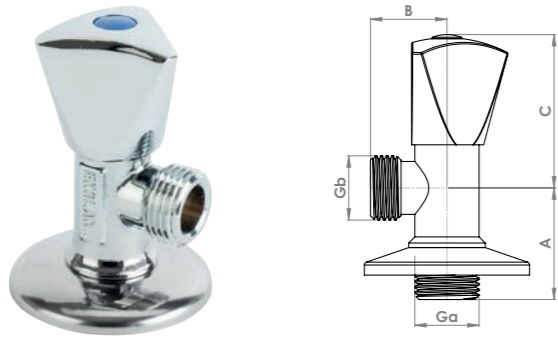
**Material Specification**

Part	Component
1	1/2" Boiler ball drain valve with lever
2	F/M/F Tee with O-Ring
3	3/8" Automatic relief valve

**Product Codes & Dimensions**

Code	Finish:	A	B	R	PN
FTH4301.34	Sandblasted	37	165	3/4"	10
FTH4301.1	Sandblasted	37	165	1"	10
FTH4301NP.34	Nickel-plated	37	165	3/4"	10
FTH4301NP.1	Nickel-plated	37	165	1"	10

**AV100.1 Angle Valves**



**General Specification**

1/2" x 1/2"  
Angle Valve with Tricon Handle with Hot/Cold Indicator

- Max. Working Pressure: 10 Bar
- Working Temperature: -20°C to 100°C
- Approval: WRAS Approved

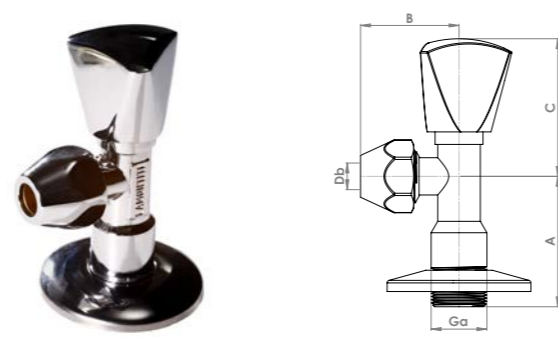
**Material Specification**

Part	Component
Body	Brass CW617N Chrome-plated
Bushing	Brass CW614N
Press Cap	Brass CW617N
Handle	Brass CW617N Chrome-plated
Rosette	Steel Chrome-plated
Spindle Screw	Brass CW614N
Red/Blue Cap	ABS Plastic
Clip	Steel

**Product Codes & Dimensions**

Code	Size (Ga, Gb)	A	B	C
AV100.1	1/2" x 1/2"	38	25	46

**AV102.1 Angle Valves**



**General Specification**

1/2" x 1/2" (10mm)  
Angle Valve with 10mm Compression Nut

- Max. Working Pressure: 10 Bar
- Working Temperature: -20°C to 100°C
- Approval: WRAS Approved

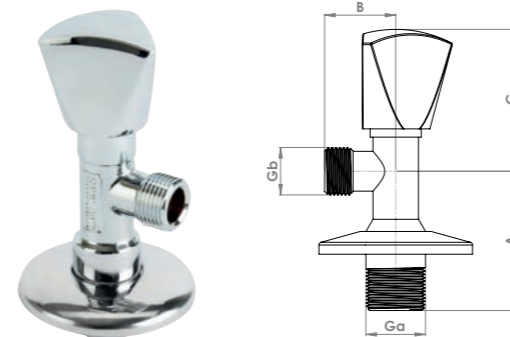
**Material Specification**

Part	Component
Body	Brass CW617N Chrome-plated
Bushing	Brass CW614N
Press Cap	Brass CW617N
Handle	Brass CW617N Chrome-plated
Rosette	Steel Chrome-plated
Spindle Screw	Brass CW614N
Red/Blue Cap	ABS Plastic
Clip	Steel

**Product Codes & Dimensions**

Code	Size (Ga, Db)	A	B	C
AV102.1	1/2" x 10mm	45	34	54

**AV103.1 Angle Valves**



**General Specification**

1/2" x 3/8"  
Angle Valve with 3/8" Outlet

- Max. Working Pressure: 10 Bar
- Working Temperature: -20°C to 100°C
- Approval: WRAS Approved

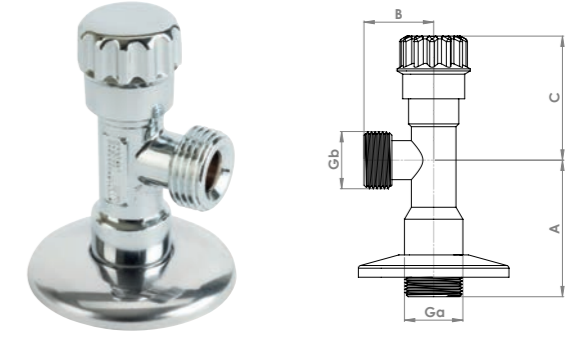
**Material Specification**

Part	Component
Body	Brass CW617N Chrome-plated
Spindle	Brass CW614N Chrome-plated
Handle	Brass CW617N Chrome-plated
Indice	Brass CW617N Chrome-plated
Thrust Washer	AISI 304 Stainless steel
O-Ring	Nitrile butadiene rubber (NBR)
Head O-Ring	ABS Plastic
Rosette	Steel Chrome-plated

**Product Codes & Dimensions**

Code	Size (Ga, Gb)	A	B	C
AV103.1	1/2" x 3/8"	48	25	53

**AV103.1HC Angle Valves**



**General Specification**

1/2" x 3/8"  
Angle Valve with Hot / Cold Indice

- Max. Working Pressure: 10 Bar
- Working Temperature: -20°C to 100°C
- Approval: WRAS Approved

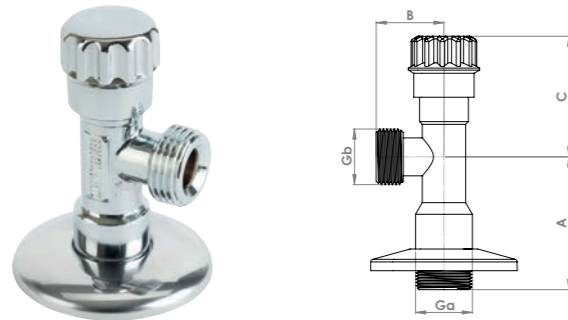
**Material Specification**

Part	Component
Body	Brass CW617N Chrome-plated
Spindle	Brass CW614N Chrome-plated
Handle	Brass CW617N Chrome-plated
Thrust Washer	AISI 304 Stainless steel
O-Ring	Nitrile butadiene rubber (NBR)
Head O-Ring	ABS Plastic
Rosette	Steel Chrome-plated
Screw	AISI 304 Stainless Steel
Cap	Brass CW617N Chrome-plated

**Product Codes & Dimensions**

Code	Size (Ga, Gb)	A	B	C
AV103.1HC	1/2" x 3/8"	47	25	43

**AV104.1** Angle Valves



**General Specification**

1/2" x 1/2"  
Angle Valve with Multi Rib Handle

- Max. Working Pressure: 10 Bar
- Working Temperature: -20°C to 100°C
- Approval: WRAS Approved

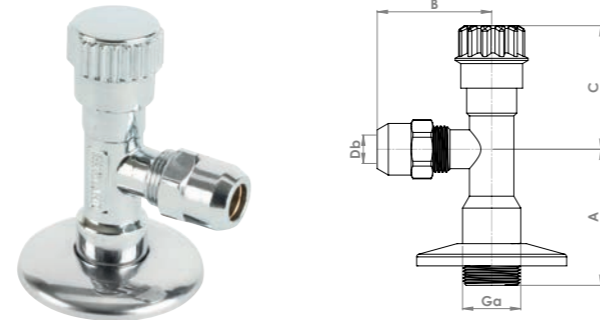
**Material Specification**

Part	Component
Body	Brass CW617N Chrome-plated
Valve	Brass CW617N Chrome-plated
Rosette	Steel Chrome-plated
Spindle	Brass CW614N Chrome-plated
11x4x4 O-Ring	Nitrile butadiene rubber (NBR)
12x2 O-Ring	Nitrile butadiene rubber (NBR)
Thrust Washer	AISI 304 Stainless steel
Handle	Chrome-plated plastic

**Product Codes & Dimensions**

Code	Size (Ga, Gb)	A	B	C
AV104.1	1/2" x 1/2"	48	25	37

**AV105.1** Angle Valves



**General Specification**

1/2" x 3/8"  
Angle Valve with 10mm Nut

- Max. Working Pressure: 10 Bar
- Working Temperature: -20°C to 100°C

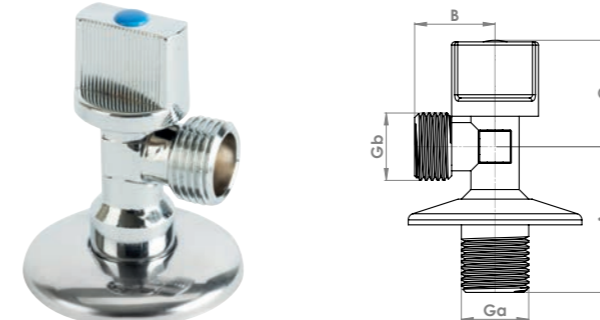
**Material Specification**

Part	Component
Body	Brass CW617N Chrome-plated
Valve	Brass CW617N Chrome-plated
Rosette	Steel Chrome-plated
O-Ring	PTFE
Thrust Washer	AISI 304 Stainless steel
Handle	Chrome-plated plastic
Compression Nut	Brass CW617N Chrome-plated
Gasket	Nitrile butadiene rubber (NBR)
Split Olive	Brass CW614N

**Product Codes & Dimensions**

Code	Size (Ga, Db)	A	B	C
AV105.1	1/2" x 3/8"	48	40	38

**AV106.1** Angle Valves



**General Specification**

1/2"  
Angle Valve with 1/4 Turn Handle CP with Hot/Cold Indice

- Max. Working Pressure: 10 Bar
- Working Temperature: -20°C to 100°C
- Approval: WRAS Approved

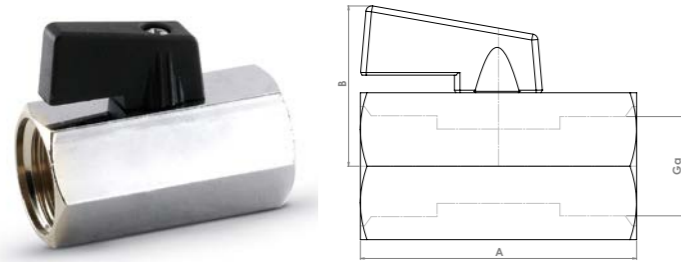
**Material Specification**

Part	Component
Body	Brass CW617N Chrome-plated
Valve	Brass CW617N Chrome-plated
Head O-Ring	Nitrile butadiene rubber (NBR)
Setscrew	Brass CW614N
Handle	Chrome-plated plastic
M4 Screw	AISI 304 Stainless steel
Cap	Plastic
Rosette	Steel Chrome-plated
O-Ring	Nitrile butadiene rubber (NBR)

**Product Codes & Dimensions**

Code	Size (Ga, Gb)	A	B	C
AV100.6	1/2" x 1/2"	45	24	34

**FTH4371CP** Water Ball Valve Black Handle FxF



**General Specification**

This valve is used for distributing and shutting off generally non-corrosive fluids that are compatible with the valve material.

Other applications are in plant engineering for plumbing and heating, pneumatic and industry, when it is necessary to have a shut-off element with reduced dimensions.

- Maximum Pressure: 10 Bar
- Working Temperature: -10°C to 90°C
- Female Thread to: ISO 228

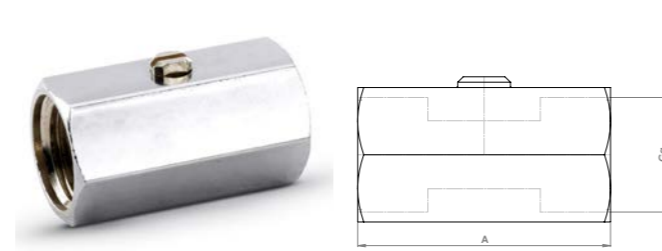
**Material Specification**

Part	Component
Body	Brass CW617N UNI-EN 12164 Chrome-plated
Seal	PTFE
Ball	Brass CW617N UNI-EN 12164 Nickel-plated
Ring	Brass CW617N UNI-EN 12164
Stem	Brass CW617N UNI-EN 12164 Nickel-plated
O-Ring	Nitrile butadiene rubber (NBR)
Screw	CIR UNI 947-72
Black Plastic Lever	Glass-filled NYLON 66

**Product Codes & Dimensions**

Code	DN	A	B	Min. bore.	Ga	PN
FTH4371CP.14	8	39	27	8	1/4"	10
FTH4371CP.38	10	42	27	8	3/8"	10
FTH4371CP.12	15	47	29	10	1/2"	10
FTH4371CP.34	20	54	32	12	3/4"	10

**FTH4351CP** Water Ball Valve FxF



**General Specification**

- Working Temperature: -10°C to 90°C
- Female Thread to: ISO 228

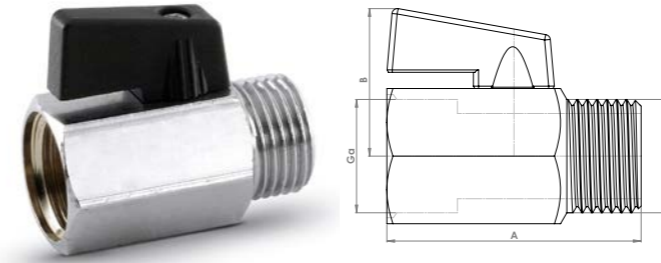
**Material Specification**

Part	Component
Body	DZR Brass CW511L UNI-EN 12164 Chrome-plated
Seal	PTFE
Ball	DZR Brass CW511L UNI-EN 12164 Nickel-plated
Ring	DZR Brass CW511N UNI-EN 12164
Stem	DZR Brass CW511L UNI-EN 12164 Nickel-plated
O-Ring	EPDM perox

**Product Codes & Dimensions**

Code	DN	A	Min. bore.	Ga	PN
FTH4351CP.14	8	39	8	1/4"	10
FTH4351CP.38	10	42	8	3/8"	10
FTH4351CP.12	15	47	10	1/2"	10
FTH4351CP.34	20	54	12	3/4"	10

**FTH4391CP** Water Ball Valve Black Handle MxF



**General Specification**

- Working Temperature: -10°C to 90°C
- Female Thread to: ISO 228

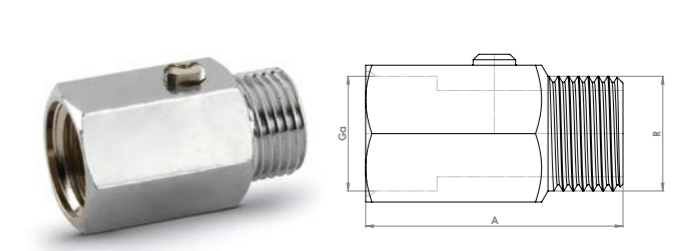
**Material Specification**

Part	Component
Body	Brass CW617N UNI-EN 12164 Chrome-plated
Seal	PTFE
Ball	Brass CW617N UNI-EN 12164 Nickel-plated
Ring	Brass CW617N UNI-EN 12164
Stem	Brass CW617N UNI-EN 12164 Nickel-plated
O-Ring	Nitrile butadiene rubber (MBR)
Screw	CIR UNI 947-72
Black Plastic Lever	Glass-filled NYLON 66

**Product Codes & Dimensions**

Code	DN	A	B	Min. bore.	R	Ga	PN
FTH4391CP.14	8	39	27	8	1/4"	1/4"	10
FTH4391CP.38	10	40	27	9	3/8"	3/8"	10
FTH4391CP.12	15	45	29	10	1/2"	1/2"	10
FTH4391CP.34	20	51	32	12	3/4"	3/4"	10

**FTH4361CP** Water Ball Valve MxF



**General Specification**

- Working Temperature: -10°C to 90°C
- Female Thread to: ISO 228

**Material Specification**

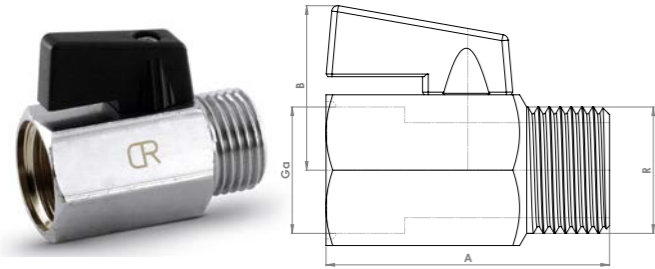
Part	Component
Body	DZR Brass CW511LN UNI-EN 12164 Chrome-plated
Seal	PTFE
Ball	DZR Brass CW511L UNI-EN 12164 Nickel-plated
Ring	DZR Brass CW511L UNI-EN 12164
Stem	DZR Brass CW511L UNI-EN 12164 Nickel-plated
O-Ring	EPDM perox

**Product Codes & Dimensions**

Code	DN	A	Min. bore.	R	Ga	PN
FTH4361CP.14	8	39	8	1/4"	1/4"	10
FTH4361CP.38	10	40	8	3/8"	3/8"	10
FTH4361CP.12	15	45	10	1/2"	1/2"	10
FTH4361CP.34	20	51	12	3/4"	3/4"	10



**FTH4392CP** Water Ball Valve Black Handle DZR MxM



**General Specification**

This valve is used for distributing and shutting off fluids that can cause dezincification problems.

Other applications are in plant engineering for plumbing and heating, pneumatic and industry, when it is necessary to have a shut-off element with reduced dimensions.

- Maximum Pressure: 10 Bar
- Working Temperature: -10°C to 90°C
- Female Thread to: ISO 228

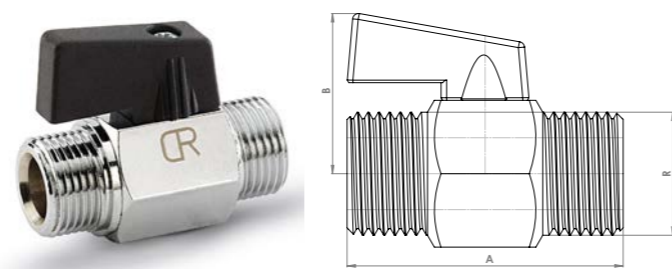
**Material Specification**

Part	Component
Body	DZR Brass CW511LN UNI-EN 12164 Chrome-plated
Seal	PTFE
Ball	DZR Brass CW511L UNI-EN 12164 Nickel-plated
Ring	DZR Brass CW511L UNI-EN 12164
Stem	DZR Brass CW511L UNI-EN 12164 Nickel-plated
O-Ring	EPDM perox
Screw	C4C UNI-EN 10263-03
Black Plastic Lever	Glass-filled NYLON 66

**Product Codes & Dimensions**

Code	DN	A	B	Min. bore.	R	Ga	PN
FTH4392CP.38	10	40	27	8	3/8"	3/8"	10
FTH4392CP.12	15	405	29	10	1/2"	1/2"	10

**FTH4402CP** Water Ball Valve Black Handle DZR MxM



**General Specification**

- Working Temperature: -10°C to 90°C
- Female Thread to: ISO 228

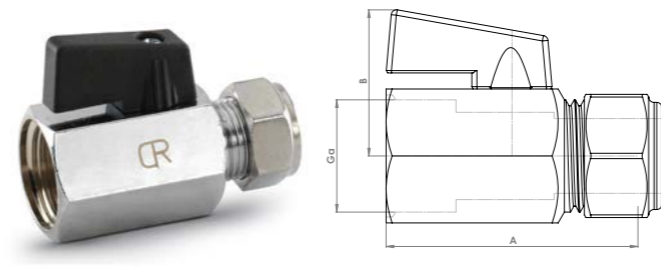
**Material Specification**

Part	Component
Body	DZR Brass CW511LN UNI-EN 12164 Chrome-plated
Seal	PTFE
Ball	DZR Brass CW511L UNI-EN 12164 Nickel-plated
Ring	DZR Brass CW511L UNI-EN 12164
Stem	DZR Brass CW511L UNI-EN 12164 Nickel-plated
O-Ring	EPDM perox
Screw	C4C UNI-EN 10263-03
Black Plastic Lever	Glass-filled NYLON 66

**Product Codes & Dimensions**

Code	DN	A	B	Xb	R	PN
FTH43402CP.12	16	44	28	10	1/2"	10

**FCP4412CP** Water Ball Valve Black Handle DZR CxM



**General Specification**

- Working Temperature: -10°C to 90°C
- Female Thread to: ISO 228

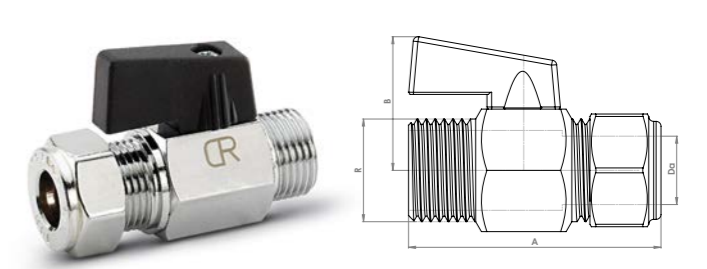
**Material Specification**

Part	Component
Body	DZR Brass CW511LN UNI-EN 12164 Chrome-plated
Nut	DZR Brass CW511LN UNI-EN 12164 Chrome-plated
Olive	Brass CW508L UNI-EN 12449
Seal	PTFE
Ball	DZR Brass CW511L UNI-EN 12164 Nickel-plated
Ring	DZR Brass CW511L UNI-EN 12164
Stem	DZR Brass CW511L UNI-EN 12164 Nickel-plated
O-Ring	EPDM perox
Screw	C4C UNI-EN 10263-03
Black Plastic Lever	Glass-filled NYLON 66

**Product Codes & Dimensions**

Code	DN	A	B	Xb	R	PN
FCP4412CP.1212	15	53	29	10	1/2"	10
FCP4412CP.1512	15	53	29	10	1/2"	10

**FCP4422CP** Water Ball Valve Black Handle DZR CxM



**General Specification**

- Working Temperature: -10°C to 90°C
- Female Thread to: ISO 228

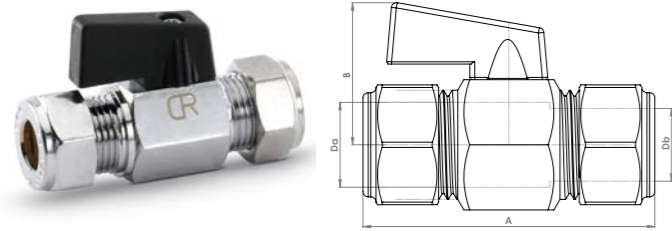
**Material Specification**

Part	Component
Body	DZR Brass CW511LN UNI-EN 12164 Chrome-plated
Nut	DZR Brass CW511LN UNI-EN 12164 Chrome-plated
Olive	Brass CW508L UNI-EN 12449
Seal	PTFE
Ball	DZR Brass CW511L UNI-EN 12164 Nickel-plated
Ring	DZR Brass CW511L UNI-EN 12164
Stem	DZR Brass CW511L UNI-EN 12164 Nickel-plated
O-Ring	EPDM perox
Screw	C4C UNI-EN 10263-03
Black Plastic Lever	Glass-filled NYLON 66

**Product Codes & Dimensions**

Code	DN	A	B	Xb	R	PN
FCP4422CP.1512	16	51	28	10	1/2"	10

**FCP4372CP Water Ball Valve Black Handle DZR CxC**



**General Specification**

- Working Temperature: -10°C to 90°C
- Female Thread to: ISO 228

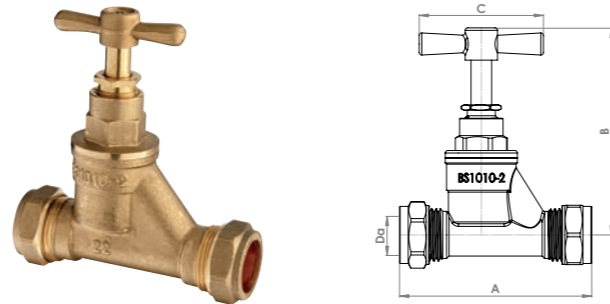
**Material Specification**

Part	Component
Body	DZR Brass CW511LN UNI-EN 12164 Chrome-plated
Nut	DZR Brass CW511LN UNI-EN 12164 Chrome-plated
Olive	Brass CW508L UNI-EN 12449
Seal	PTFE
Ball	DZR Brass CW511L UNI-EN 12164 Nickel-plated
Ring	DZR Brass CW511L UNI-EN 12164
Stem	DZR Brass CW511L UNI-EN 12164 Nickel-plated
O-Ring	EPDM perox
Screw	C4C UNI-EN 10263-03
Black Plastic Lever	Glass-filled NYLON 66

**Product Codes & Dimensions**

Code	A	B	Da	Db	PN
FCP4372CP.1010	59	28	10	10	10
FCP4372CP.1210	58	28	12	10	10
FCP4372CP.1212	58	28	12	12	10
FCP4372CP.1510	58	28	15	10	10
FCP4372CP.1512	61	28	15	12	10
FCP4372CP.1515	61	28	15	15	10

**P460 Stop Cock**



**General Specification**

- Manufactured to: BS1010-2
- Compression Ends: BS EN 1254-2

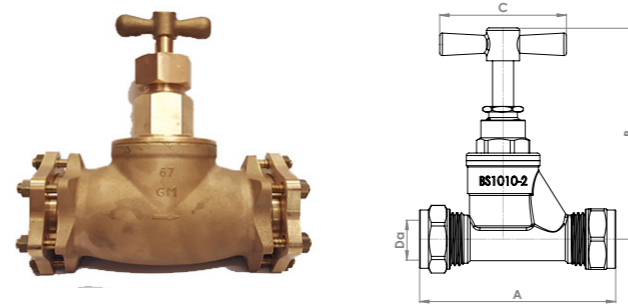
**Material Specification**

Part	Component
Body	Brass CW617N
Drive Column	Brass CW617N
Washer	Nitrile butadiene rubber (NBR)
Bonnet	Brass CW617N
Sealing Ring	PTFE
Locking Ring	Brass CW617N
Handle	Brass CW617N
Screw	Brass CW617N
Olive	Copper
Nut	Brass CW617N

**Product Codes & Dimensions**

Code	Size (Da)	A	B	C
P460.1	15mm	74	80	51
P460.2	22mm	93	87	54
P460.3	28mm	107	96	62

**P460 Large Stop Cock**



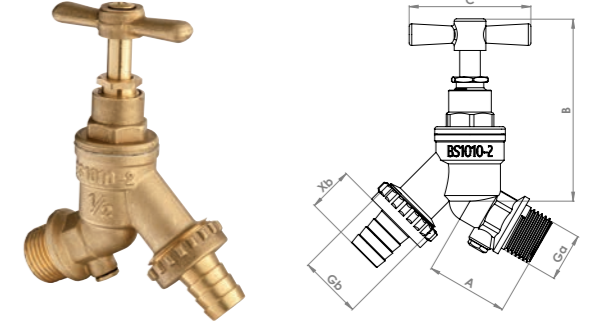
**General Specification**

- Temperature Pressure: 10 Bar @ 30°C
- 3 Bar @ 120°C

**Product Codes & Dimensions**

Code	Size (Da)	A	B
P460.7	67mm	206	194
P460.8	76mm	239	221

**HUBT Hose Union Bib Tap**



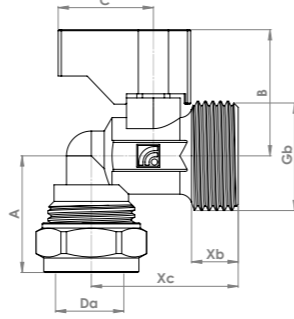
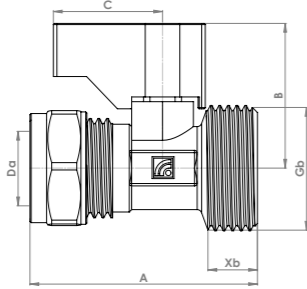
**General Specification**

- Max Pressure: 10 bar
- Working Temperature: -20°C to 120°C
- Manufactured to: BS1010-2

**Product Codes & Dimensions**

Code	Size (Ga)	A	B	C	Xb
HUBT.01	1/2"	35	70	19	19
HUBT.02	3/4"	55	90	23	23
HUBTDC.01	1/2"	35	70		19

**P462WMT & P467 Washing Machine Valves**



**General Specification**

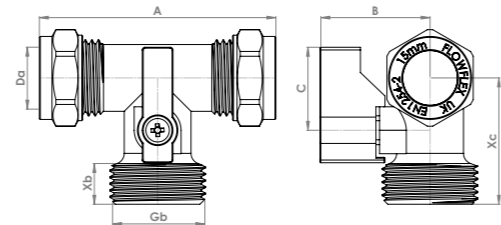
- Compression Ends: BS EN 1254-2
- Supplied with Red & Blue Handles

**Material Specification**

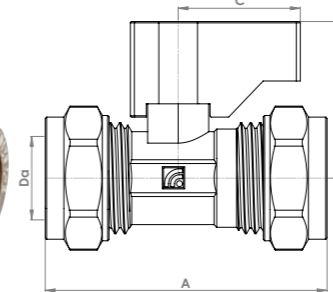
Part	Component
Body	Brass CW617N Chrome-plated
Ball	Brass CW617N Chrome-plated
Sealing Rings	Nitrile butadiene rubber (NBR)
Drive Column	Brass CW617N Chrome-plated
Column Sealing rings	Nitrile butadiene rubber (NBR)
Ball Retainer	AISI 304 Stainless steel
Olive	Copper
Nut	Brass CW617N Chrome-plated
Handle	Plastic
Screw	Steel

**Product Codes & Dimensions**

Code	Size (Da, Gb)	A	B	C	Xb
P462WMT.1 Straight	15mm x 3/4"	39	30	23	9
P467.1 Elbow	15mm x 3/4"	28	28	23	9
P467.2 Tee	15mm x 3/4"	56	39	23	9



**P472CPBH Isolation Valve with Black Handle**



**General Specification**

- Max Pressure: 10 bar
- Working Temperatures: -20°C to 100°C
- Lamontite Compression Ends: BS EN 1254-2

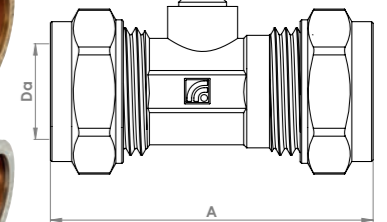
**Material Specification**

Part	Component
Body	Brass CW617N Chrome-plated
Ball	Brass CW617N Chrome-plated
Sealing Rings	Nitrile butadiene rubber (NBR)
Drive Column	Brass CW617N Chrome-plated
Column Sealing rings	Nitrile butadiene rubber (NBR)
Ball Retainer	AISI 304 Stainless steel
Olive	Copper
Nut	Brass CW617N Chrome-plated
Handle	Plastic
Screw	Steel

**Product Codes & Dimensions**

Code	Size (Da)	A	B	C
P472CPBH.1	15mm	60	30	22
P472CPBH.2	22mm	70	32	22

**P472 & P472CP Isolation Valve**



**General Specification**

This valve is generally used to isolate fluids from a section of pipework. This enables repairs to be carried out without having to turn off the mains.

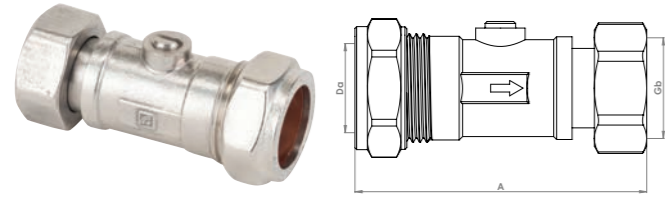
**Material Specification**

Part	Component
Body	Brass CW617N Chrome-plated
Ball	Brass CW617N Chrome-plated
Sealing Rings	Nitrile butadiene rubber (NBR)
Drive Column	Brass CW617N Chrome-plated
Column Sealing rings	Nitrile butadiene rubber (NBR)
Ball Retainer	AISI 304 Stainless steel
Olive	Copper
Nut	Brass CW617N Chrome-plated

**Product Codes & Dimensions**

Code	Size (Da)	Finish:	A
P472.1	15mm	Brass CW617N	37
P472.2	22mm	Brass CW617N	49
P472CP.1	15mm	Chrome Plate	37
P472CP.2	22mm	Chrome Plate	49

**P481CP** Straight Service Valve CP



**General Specification**

- Manufactured to: BS5154
- Compression Ends: BS EN 1254-2

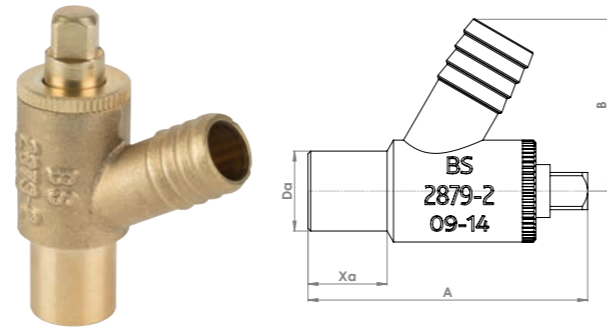
**Material Specification**

Part	Component
Body	Brass CW617N Chrome-plated
Swivel Body	Brass CW617N Chrome-plated
Swivel Nut	Brass CW617N Chrome-plated
Washer	Nitrile butadiene rubber (NBR)
Ball	Brass CW614N Chrome-plated
Sealing Rings	Nitrile butadiene rubber (NBR)
Drive Column	Brass CW614N Chrome-plated
Column Sealing Rings	Nitrile butadiene rubber (NBR)
Ball Retainer	AISI 304 Stainless steel
Olive	Copper
Nut	Brass CW617N Chrome-plated

**Product Codes & Dimensions**

Code	Size (Da, Gb)	A
P481CP.1	15mm x 1/2"	60
P481CP.2	22mm x 3/4"	74

**P183** Drain Off Cock Type A



**General Specification**

- Manufactured to: BS2879-2

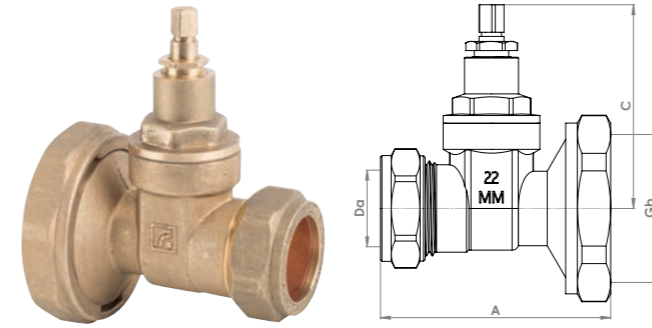
**Material Specification**

Part	Component
Body	Brass CW617N
Insert	Brass CW617N
Washer	Nitrile butadiene rubber (NBR)
Insert Cap	Brass CW617N

**Product Codes & Dimensions**

Code	Size (Da)	A	B	Xa
P183.3	15mm	51	33	15

**P477** Gate Type Pump Valve



**General Specification**

This valve is used to isolate central heating pumps

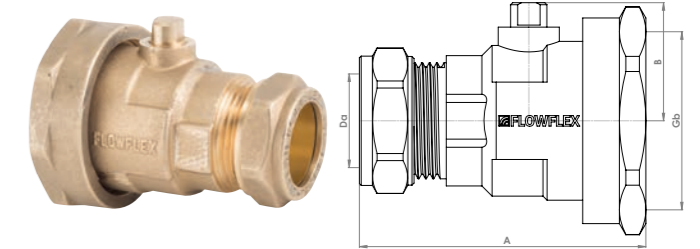
**Material Specification**

Part	Component
Housing	Brass CW617N
Gate	Brass CW617N
Housing Seal	PTFE
Column Lock	Brass CW617N
Column Washer	Brass CW617N
Drive Column	Brass CW614N
Swivel Nut	Brass CW614N
Swivel Washer	Nitrile butadiene rubber (NBR)
Housing Cap	Brass CW617N
Washer	PTFE
Olive	Copper
Nut	Brass CW614N

**Product Codes & Dimensions**

Code	Size (Da, Gb)	A	B
P477.2	22mm x 1 1/2"	64	26
P477.3	28mm x 1 1/2"	64	26

**P478** Ball Type Pump Valve



**General Specification**

- Pressure Rating: PN16
- Compression Ends: BS EN 1254-2

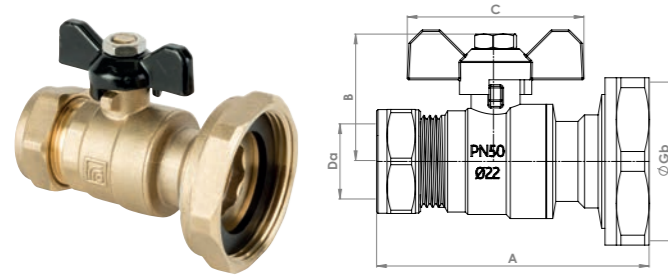
**Material Specification**

Part	Component
Nut	Brass CW617N
Olive	Brass CW617N
Body	Brass CW617N
Sealing Ring	PTFE
Ball	Brass CW617N Chrome-plated
Swivel Nut	Brass CW617N
Swivel Body	Brass CW617N
Washer	Nitrile butadiene rubber (NBR)
Drive Column	Brass CW614N
Washer	PTFE
O-Ring	Nitrile butadiene rubber (NBR)

**Product Codes & Dimensions**

Code	Size (Da, Gb)	A	B
P478.2	22mm x 1 1/2"	64	26
P478.3	28mm x 1 1/2"	64	26

**MPF.PV Pump Valve Black Handle**



**General Specification**

- Pressure Rating: PN50

**Material Specification**

Part	Component
Nut	Brass CW617N
Olive	Brass CW617N
Body	Brass CW617N
Sealing Ring	PTFE
Ball	Brass CW614N Chrome-plated
Swivel Nut	Brass CW617N
Swivel Body	Brass CW617N
Washer	Nitrile butadiene rubber (NBR)
Drive Column	Brass CW617N
O-Ring	Nitrile butadiene rubber (NBR)
Handle	Aluminium
Handle Nut	Steel Chrome-plated

**Product Codes & Dimensions**

Code	Size (Da, Gb)	A	B	C
MPF.PV	22mm x 1 1/2"	83	42	51



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