

## Push-fit solutions



## Pegler Yorkshire Unrivalled quality, innovation, customer service and long-term value for money

As part of the global Aalberts Industries NV Group, Pegler Yorkshire is one of Britain's largest and most respected manufacturers of innovative products for the demanding and diverse plumbing and heating industries.

#### Pegler Yorkshire - a unique story

It was in the late 19th century when two separate and altruistic companies set out on the long road to satisfying the needs of prospective customers and, of course, to profit in the process. Coincidentally located just 30 miles apart, each was driven by the same vision and ideals of a no-compromise culture. Cutting corners was never an option and only the best could ever be good enough.

These two companies were Pegler and Yorkshire Fittings. Although in meeting all the challenges of the 20th and 21st centuries each has changed a great deal, the business ethos common to both never has. And now these two like minds have come together as Pegler Yorkshire - a single source of proven, flow control solutions for installers. specifiers and engineers in the domestic, public and commercial markets.

#### Reputable and established brands

Just as Pegler and Yorkshire have endured over such a long period, many of the brand names they have created over time are similarly very well established, in many cases as market leaders in their respective categories. The very extensive Pegler Yorkshire product range now comprises more than 15,000 lines - without rival for the choice and coverage it offers and for the number and scope of applications it satisfies.

#### A mind for innovation

Brands which endure and are not easily displaced must by definition be the product of innovative thinking and technology that continually stand the test of time. Pegler Yorkshire's no-compromise philosophy will always put new product development high on the agenda, based on not only meeting the needs of today's markets, but also anticipating and meeting customers' future needs.

#### The true value of knowledge

As well as the benefit of unparalleled experience of the flow control market and its growth over many decades, Pegler Yorkshire has strong associations with major industry bodies such as those responsible for determining product and performance standards.

The result is a comprehensive store of knowledge and reference which is invaluable in the key areas of research, development and dealing efficiently and accurately with customer enquiries - particularly with regard to product application and suitability.

#### A charter for the best in customer service

With so diverse a product range and customer base, Pegler Yorkshire's no-compromise standards of quality, reliability and value for money naturally go hand in hand with the principle of delivering the best in customer service.

#### Green awareness and responsibilities

Developing products which reduce the carbon footprint by saving water and energy is only one side of the green issues coin. Pegler Yorkshire is also increasingly committed to recycling key production materials (such as brass), eliminating the need for excessive packaging wherever possible, and looking for new ways in which the company's day-to-day operations can be improved to reduce waste and minimise the impact on the environment.

Likewise, social responsibilities such as supporting employee and local community welfare are aspects of the very fabric and philosophy upon which both Pegler and Yorkshire were founded.

#### **Standards**

Pegler Yorkshire are dedicated to designing, developing and manufacturing products of the highest quality. We are members of numerous standards committees and take an active part in their development. Our products, where applicable, comply with the relevant British, European and International standards. Whatever the latest developments, we quarantee that our products will always meet the latest and highest standards.





#### Trade bodies

Pegler Yorkshire is pleased to be associated with several influential industry organisations:







Construction The Bathroom Association lanufacturers Association



The Brass Page for specifiers, designers, engineers and manufacturers





construction products association





The UK Copper Board









Thermostatic



Scottish and

## **Tectite**) Push-fit solutions

This data book has been produced in clearly defined sections to help the user to find relevant information quickly and easily. At the foot of each page there is a reminder of the brochure sections with the relevant page numbers.

## **Section 1**

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## **Section 2**

#### **Product range details**

Sizes, dimensional details 10-49 and product codes



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# **Tectite**) Push-fit solutions The complete range

Tectite fittings from Pegler Yorkshire makes jointing easier, faster and more cost effective than other jointing methods – a fittings system which simply pushes together in seconds to create a perfect joint, every time.

## Tectite push-fit benefits

A completely heat-free system offering the following benefits:

- Improved installation time over traditional methods
- No naked flames (improved safety)
- Perfectly clean internal bore (less finishing/cleaning required)
- No localised annealing from high temperature working.
- No carbon deposits (less risk of corrosion)
- System does not need to be "dry" for effective jointing



### Versatility and choice



A wide range of fittings for use with many different types of materials, including copper tube, PEX and PB

pipe, and a variety of steel including stainless and carbon.

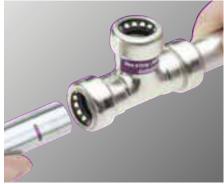
Choice of demountable or non-demountable fittings.



## Time-saving and cost-saving installation

Time-saving and cost-saving installation of many types of plumbing and heating services – for commercial, domestic and public utility applications – including:

- All above-ground hot and cold domestic and commercial water services
- Heating and chilled water services (potable and non-potable)
- Low-temperature hot water and heating
- Smallbore or minibore central heating systems
- Pressurised, vented and unvented heating systems



## The perfect solution all round

A heat-free, time saving jointing method which guarantees uncontaminated installation. Ideal for applications as diverse as domestic maintenance and refurbishment, new build and large-scale public sector projects.

### Renowned Pegler Yorkshire quality and reliability

Renowned Pegler Yorkshire quality and reliability – with some Tectite products offering the bonus of an enhanced 30-year warranty. Pegler Yorkshire also operates a Quality Management System for the development, manufacture and supply of fittings, tube, valves and accessories which complies with the requirements of BS EN ISO 9001:2000.

### Key to symbols

Products in this brochure are accompanied by symbols intended to aid the reader by stating their ideal environments. These symbols are:

- **◆▶** Demountable
- Non-demountable
- ☐ Potable water applications
- ▼ Not suitable for potable water applications
- Gas installation applications
- Not suitable for gas installation applications
- Chilled water services
- Closed circuit heating
- Electrical continuity
- ♣

  Hot water services
- Reduced requirement for flushing
- **≜** Galvanised or nickel plated
- 🔏 No tools required
- Saves installation time
- Easy to insulate
- Easy to install in confined areas
- ( Can be rotated



# **Tectite**Push-fit solutions Product overview



Tectite Sprint non-demountable fittings are ideal for fast and efficient heat free jointing, offering a visually appealing, low profile design which can be easily installed in confined spaces. They are also easy to insulate.

#### **Features**

- Available in sizes 10mm to 28mm
- Manufactured from copper or machined DZR brass
- Can be used with copper tube, PB and PEX pipe (with liners) or chrome plated copper tube
- Suitable for use on hot and cold water services, heating and chilled water applications and low temperature hot water services
- Provides electrical continuity
- WRAS approved\*







The original Tectite fitting and proven in the field for over 15 years, Tectite Classic can be used for similar applications to Tectite Sprint but where a demountable fitting is required.

#### **Features**

- Demountable
- Available in sizes 10mm to 28mm
- Manufactured from gunmetal, A-metal or DZR brass
- Can be used with copper tube, PB and PEX pipe (with liners) or chrome plated copper tube
- Suitable for use on hot and cold water services, heating applications and low temperature hot water services
- WRAS approved\*





\*On certain sizes





Tectite Pro demountable fittings have been specially developed to meet the rigorous demands of the mechanical services sector. Tectite Pro offers enhanced performance over an extended size range and is WRAS approved. 15mm to 54mm fittings feature a stainless steel grab ring.

#### **Features**

- Demountable
- Available in sizes 15mm to 54mm
- Manufactured from gunmetal, A-metal or DZR brass
- Provides electrical continuity
- Can be used with copper tube, PB and PEX pipe, chrome plated copper tube or carbon steel tube
- Designed for use in the mechanical services sector on hot and cold services, heating and chilled water applications and low temperature hot water services
- Provides enhanced performance
- WRAS approved





Tectite 316 is a stainless steel option which has been developed for use with 316 System tube for potable water applications where water quality and hygiene are key considerations. The Tectite 316 range incorporates a stainless steel grab ring which has been specifically developed to grip stainless steel tube without the need to for it to be scribed.

#### **Features**

- Demountable
- Available in sizes 15mm to 54mm
- Manufactured from 316 stainless steel
- Provides electrical continuity
- Can be used with 316 System tube
- Designed for use for potable water services in the food processing and pharmaceutical industries
- WRAS approved



## **Tectite**) Push-fit solutions Product overview



Designed for use in conjunction with XPress carbon steel System tube, the nondemountable Tectite Advance System is five times quicker to install than a traditional screwed steel installation\*. With installed cost savings of up to 70%, borne out in an independent industry report, Tectite Advance can help to deliver projects on time and within budget.

\*Research carried out in conjunction with Leeds College of Building, February 2007.

#### **Features**

- Available in sizes from 15mm to 54mm
- Manufactured from galvanised carbon steel
- Provides electrical continuity
- Can be used with XPress carbon steel System tube and plastic coated XPress tube
- Light weight and easy to fit
- Designed for use with unvented closed circuit heating and chilled water services (closed loop)





#### Tectite Pro quarter turn ball valves

Tectite Pro quarter turn ball valves are a safe, reliable and cost effective way to control the flow of water.

#### **Features**

- Available in sizes from 15mm to 22mm
- Manufactured from brass with nickel plated finish
- Designed for use with hot and cold water services and heating systems

#### **Tectite Classic and Tectite Pro** servicing valves

Tectite Pro servicing valves allow sections of pipework to be isolated for repair or maintenance without the need to drain down the system. They incorporate a simple open/shut mechanism which can be operated with a screwdriver or coin.

#### **Features**

- Available in 15mm sizes
- Manufactured from brass with a chrome plated finish
- Provides electrical continuity

- Designed for use in hot and cold water services
- Ideal for use with terminal taps and float valves

#### **Tectite flexible hose connectors**

Tectite flexible hose connectors are suitable for use in areas where space is limited and the fitting of rigid tube is difficult.

#### **Features**

- Available in 15mm sizes
- Manufactured with high quality stainless steel braided EPDM hose
- Designed for use in hot and cold water services and on fan coils
- WRAS approved

#### **Tectite accessories**

The Tectite range is complemented by a variety of accessories. These include deburring/scribe tools, disconnecting tools and clips, pipe clips, demounting end caps, grab rings and lubricant.





It's Pegler Yorkshire's policy to provide a range of products and services which meet, or exceed, the requirements of our customers in respect of quality, cost and delivery.

### Standards and approvals

WRAS All Tectite Sprint, Tectite Classic, Tectite Pro and Tectite 316 fittings are listed and comply with the requirements of the United Kingdom Water Regulations/Byelaws (Scotland).

**DVGW** Tectite Classic and Tectite 316 fittings have been approved by the German approval authority. They comply with DVGW Arbeitsblatt W534, which covers fittings and joints for tubes in potable water installations.

Tectite Classic fittings are also approved by KIWA (Dutch certification), SITAC (Norway, Sweden and Finland certification) and CSTB (French certification). Tectite 316 fittings are also approved by **SVGW** (Swiss certification).



Tectite-PEX barrier pipe is kitemark approved





Applicable Tectite products are DVGW approved for the European market.



ISO is achieved through the continuous improvement of our Quality Management System

in line with the requirements of BS EN IS09001: 2000.



			PRO.	DUCT AF	PROVA	LS				
Product	WRAS	CSTB	KIWA	DVGW	ETA	ACS	Sintef	Sitac	SVGW	OVGW
Tectite Sprint	V	-	-	-	_	-	V	V	-	-
Tectite Classic		V	<b>V</b>	<b>V</b>	<b>V</b>	V	-	-	-	-
Tectite Pro		-	-	-	-	-	-	-	-	-
Tectite 316	~	-	-	<b>V</b>	-	-	-	-	~	<b>V</b>
Tectite Advance	-	-	-	-	-	-	-	-	-	-

#### **Guarantees**

#### **25 YEAR GUARANTEE**

Where Tectite Sprint, Tectite Classic, Tectite Pro and Tectite 316 fittings, Tectite-PEX barrier pipe and 316 System tube are installed in pipelines with other products, all are guaranteed against all manufacturing defects for 25 years.

#### **30 YEAR GUARANTEE**



Where pipelines are constructed exclusively using Tectite fittings and recommended tubes, the resulting

installations will be deemed Tectite Systems and as such qualify for a 30 year guarantee against all manufacturing defects.

Tectite fittings,	tube and accessories	Guarante	e perio	od (ye	ars)
		5	10	25	30
<b>-</b> \	Fittings	-	-	~	-
<b>Jectite</b> SPRINT	Fittings with Yorkex* copper tube and/or Tectite-PEX pipe	-	-	-	<b>~</b>
	Fittings	-	-	~	_
Tectite	Fittings with Yorkex* copper tube and/or Tectite-PEX pipe	-	-	-	<b>~</b>
	Fittings	-	-	~	_
<b>Tectite</b>	Fittings with Yorkex* copper tube and/or Tectite-PEX pipe	-	-	-	<b>~</b>
	Fittings with XPress carbon steel System tube	-	~	-	_
	Fittings	-	-	~	_
<b>Tectite</b>	Fittings and stainless steel 316 System tube	-	-	-	~
	Fittings with XPress carbon steel System tube	-	~	-	_
Toctito	Fittings	V	-	-	_
ADVANCE	Fittings with XPress carbon steel System tube	-	~	-	_
<b>Tectite</b>	Tectite Pro quarter turn ball valves	-	-	~	_
<b>Tectite</b> )	Tectite Classic and Tectite Pro servicing valves	-	-	~	-
<b>Tectite</b> )	Tectite flexible hose connectors	_	~	-	-
To qualify for guar	antees, all products must be installed in accordance with our instruc	tions in spec	ified ap	plicatio	ons.

\*Yorkex is a brand name of Yorkshire Copper Tube.



## Push-fit for copper and plastic

Manufactured from copper and DZR brass, Tectite Sprint is ideal for use on hot and cold-water services, in low-temperature hot water and heating.





TP520 Barr	ier pipe. Straig	ght lengths
Size	Finish	Order code
15mm x 3m	White plastic	60029
15mm x 6m	White plastic	60030
22mm x 3m	White plastic	60037
22mm x 6m	White plastic	60038
28mm x 3m	White plastic	60041
28mm x 6m	White plastic	60042

Suitable for: ► N T X \* III Ø III Ø III (1)



TP525 Barri	er pipe. Coil	
Size	Finish	Order code
12mm x 50m	White plastic	60020
12mm x 100m	White plastic	60021
15mm x 25m	White plastic	60024
15mm x 50m	White plastic	60025
15mm x 100m	White plastic	60026
22mm x 25m	White plastic	60033
22mm x 50m	White plastic	60034

### Push-fit fittings





TT1 Strai	ight cou	ıpling	J
Size	а	Za	Order code
10mm	34	2	75500
12mm	36	2	75660
14mm	37	2	75661
15mm	36	2	75501
16mm	36	2	75662
18mm	37	2	75663
22mm	38	2	75502
28mm	40	2	75503

Suitable for: ☎~日☆※ □ Ø ♣ □ Ø ♣ □ O

- For jointing plain and chrome plated copper tube to BS EN 1057,
- PEX including Tectite PEX and PB plastic pipes to BS 7291
- Guaranteed for 30 years against manufacturing defects when installed exclusively with Tectite PEX or Yorkex Copper Tube from Yorkshire Copper Tube Ltd, or for 25 years when used with other products

TT1R Redu	ucing (	coupli	ing
Size	а	Za	Order code
15 x 10mm	41	8	75504
14 x 12mm	38	5.5	75664
15 x 12mm	39	7	75665
16 x 12mm	40	7.5	75666
16 x 14mm	37.5	5.5	75667
18 x 15mm	37.5	5.5	75668
18 x 16mm	37	5.5	75669
22 x 15mm	42	8	75505
22 x 16mm	42	9.5	75670
22 x 18mm	41.5	7.5	75671





TT2 Strai	ght female	connector
-----------	------------	-----------

Size	а	Za	S	Order code
10mm x <sup>1</sup> /2"	35.5	6.5	25	75672
12mm x <sup>1</sup> /2"	35.5	6.5	25	75673
14mm x <sup>3</sup> /8"	33	5.5	20	75674
14mm x <sup>1</sup> /2"	35.5	6.5	25	75675
15mm x <sup>1</sup> /2"	34	17	24.5	75510
16mm x 1/2"	35	6.5	25	75676
18mm x <sup>1</sup> /2"	35.5	6	25	75677
22mm x <sup>3</sup> /4"	37	19	30	75511
28mm x 1"	41	3	38	75678





### TT3 Straight male connector

Size	а	Za	S	Order code	
10mm x <sup>3</sup> /8"	32	17	22	75679	
10mm x <sup>1</sup> /2"	34.5	19.5	22	75680	
12mm x <sup>3</sup> /8"	32	16.5	22	75681	
12mm x <sup>1</sup> /2"	34.5	19	22	75682	
14mm x <sup>3</sup> /8"	32.5	17	22	75683	
14mm x <sup>1</sup> /2"	34	18.5	22	75684	
15mm x <sup>1</sup> /2"	37	20	21	75515	
16mm x <sup>1</sup> /2"	34	19	22	75685	
18mm x <sup>3</sup> /4"	38.5	22	27	75687	
22mm x <sup>3</sup> /4"	39.5	21.5	26	75516	
28mm x 1"	43.5	24.5	32	75518	



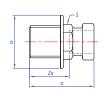


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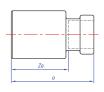
## Push-fit for copper and plastic





TT5 Tank o	IT5 Tank connector				
Size	а	Za	S	b	Order code
15mm x <sup>1</sup> /2"	42	25	22	34.8	75520
22mm x <sup>3</sup> /4"	46	28	28	42	75521

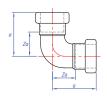




TT6 Reduc	er		
Size	а	Za	Order code
15 x 10mm	37	21	75523
15 x 12mm	37	21.5	75524
18 x 15mm	39	23.5	75520
22 x 14mm	46	30.5	75688
22 x 15mm	39	22	75525
28 x 15mm	43	26	75526
28 x 22mm	44	26	75527

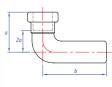
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TT12 Elb	ow		
Size	а	Za	Order code
10mm	28	12	75530
12mm	32	15.5	75689
14mm	34.5	18.5	75690
15mm	35	18	75531
16mm	37	21.5	75691
18mm	37.5	22	75692
22mm	44.5	26.5	75532
28mm	52.5	33.5	75533





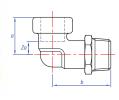
TT129	Str	eet el	bow		
Size		а	b	Za	Order code
10 x 10	)mm	28	44	12	75535
10 x 15	mm	28	45	12	75536
12 x 12	2mm	32.5	33.5	16.5	75693
14 x 14	ímm	35	35	19	75694
15 x 15	mm	35	35	18	75537
16 x 16	5mm	37	37	21.5	75695
18 x 18	3mm	37.5	42.5	22	75696
22 x 22	2mm	52.5	50	33.5	75538

Suitable for: ► N T X \* M O W S C D D M (\*)

TT13	Male elbow	

Size	а	Ь	Za	Order code
15mm x <sup>1</sup> /2"	25.5	29	8.5	75540

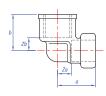




TT14 Fema	le el	bow				
Size	а	b	Za	Zb	Order code	
14mm x <sup>1</sup> /2"	26	26.5	9.5	14	75697	
15mm x <sup>1</sup> /2"	27	25	10	10	75545	
16mm x <sup>1</sup> /2"	25	26.5	9.5	14	75698	

Suitable for: ► 🕶 🗖 💥 🕮 🖔 🕦 📵 🖤



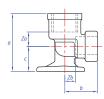


### TT15 Backplate elbow

Size	а	b	С	Za	Zb	Order code	
12mm x <sup>1</sup> /2"	43.5	26	17	9.5	14	75548	
14mm x <sup>1</sup> /2"	43.5	26	17	9.5	14	75699	
15mm x <sup>1</sup> /2"	41.5	27	17.5	10	10	75550	

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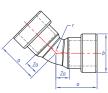


#### TT21 Obtuse elbow

Size	а	Za	Order code	
12mm	26.5	10	75701	
14mm	27.5	11	75702	
15mm	27.5	12	75551	
16mm	28	12.5	75703	
18mm	33	14	75704	
22mm	34	17	75552	
28mm	40	21.5	75553	

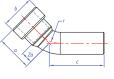
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#### TT21S Obtuse street elbow

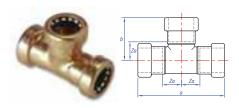
Size	а	Za	Order code	
12mm	27.5	10	75705	
14mm	28	11.5	75706	
15mm	28	12	75585	
16mm	28.5	12.5	75707	
18mm	30.5	14	75708	
22mm	34	17	75586	
28mm	40	21.5	75587	



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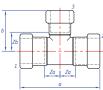
## Push-fit for copper and plastic



TT24 Equ	ıal tee			
Size	а	b	Za	Order code
10mm	46.5	23	7	75555
12mm	52	25.5	9	75709
14mm	52.5	26	10	75710
15mm	52.5	26	9	75556
16mm	59.5	29.7	14	75711
18mm	57.5	28.5	13	75712
22mm	62.5	31	13	75557
28mm	72.5	36	17	75558

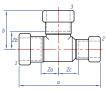
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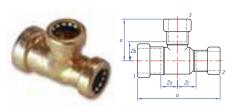
TT25 Tee, red	uced	branc	h		
Size (1 x 2 x 3)	а	b	Za	Zb	Order code
14 x 14 x 12mm	50	26.5	8.5	10	75713
15 x 15 x 10mm	48	25	7	9	75565
15 x 15 x 12mm	49	27.5	8.5	11	75714
16 x 16 x 12mm	49	27.5	8.5	11	75715
16 x 16 x 14mm	50	26.5	9.5	10	75716
18 x 18 x 12mm	50	29.5	8	13	75717
18 x 18 x 14mm	51	28.5	9	12	75718
18 x 18 x 15mm	54	27.5	10	12	75719
22 x 22 x 10mm	50	29.5	7	13.5	75566
22 x 22 x 14mm	57	30.5	11	14	75720
22 x 22 x 15mm	54	30.5	9	13.5	75567
22 x 22 x 16mm	60	31.5	12.5	16	75721
22 x 22 x 18mm	60	31.5	12.5	15	75722
28 x 28 x 15mm	56	34.5	9	17.5	75568
28 x 28 x 18mm	63	34.5	12.5	18	75723
28 x 28 x 22mm	65	35.5	13.5	17.5	75569





TT26 Tee, one end reduced									
Size (1 x 2 x 3)	а	b	Za	Zb	Zc	Order code			
15 x 12 x 15mm	60	28	12.5	15.5	12.5	75724			
18 x 12 x 18mm	65	31.5	13	19	15	75725			
18 x 15 x 18mm	64	30.5	13	18	14	75726			
22 x 15 x 22mm	68.5	31.5	13.5	13.5	20	75573			
22 x 18 x 22mm	68.5	32.5	14	15	20	75727			
28 x 15 x 28mm	77.5	36.5	17.5	17.5	24	75574			
28 x 22 x 28mm	78.5	36.5	17.5	17.5	24	75575			

TT27 Tee, one end and branch reduced									
Size (1 x 2 x 3)	а	b	Za	Zb	Zc	Order code			
16 x 14 x 14mm	54	26.5	12.5	10	10	75728			
22 x 15 x 15mm	63.5	30	12	13	13.5	75582			
22 x 18 x 18mm	65	33	13.5	16.5	17.5	75729			
28 x 18 x 18mm	73	36.5	13.5	20	24	75730			
28 x 22 x 22mm	70	34	17.5	15	15.5	75584			



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TT61 Sto	TT61 Stop end						
Size	а	Order code					
10mm	16	75590					
12mm	18	75731					
14mm	18	75732					
15mm	17	75591					
16mm	17	75733					
18mm	19	75734					





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75592

75593

18

19

22mm

28mm

TT62 Tap	conne	ctor	
Size	а	Za	Order code
10mm x <sup>1</sup> /2"	33	17	75600
12mm x <sup>3</sup> /8"	34.5	18	75736
12mm x <sup>1</sup> /2"	36.5	20	75735
14mm x <sup>3</sup> /8"	37	21	75738
14mm x <sup>1</sup> /2"	34	18	75737
15mm x <sup>1</sup> /2"	34	17	75601
16mm x <sup>1</sup> /2"	36	20.5	75739
16mm x <sup>3</sup> /4"	35.5	20	75740
18mm x <sup>1</sup> /2"	36	20	75741
18mm x <sup>3</sup> /4"	36	20	75742
22mm x <sup>3</sup> /4"	38.5	20.5	75603

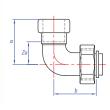




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TT63 Bent				
Size	а	b	Za	Order code
10mm x <sup>1</sup> /2"	36	24	20	75604
12mm x <sup>1</sup> /2"	32.5	24	16	75743
15mm x <sup>1</sup> /2"	37	24	20	75605
18mm x <sup>1</sup> /2"	40.5	32	24	75744







### System PEX pipe



TP520 Barrier pipe. Straight lengths							
Size	Finish	Order code					
15mm x 3m	White plastic	60029					
15mm x 6m	White plastic	60030					
22mm x 3m	White plastic	60037					
22mm x 6m	White plastic	60038					
28mm x 3m	White plastic	60041					
28mm x 6m	White plastic	60042					

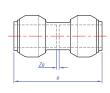


TP525 Barrier pipe. Coil								
Size	Finish	Order code						
12mm x 50m	White plastic	60020						
12mm x 100m	White plastic	60021						
15mm x 25m	White plastic	60024						
15mm x 50m	White plastic	60025						
15mm x 100m	White plastic	60026						
22mm x 25m	White plastic	60033						
22mm x 50m	White plastic	60034						

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### Demountable push-fit fittings



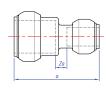


T1 Straight coupling							
Size	а	Za	Order code				
10mm	49	1	45108				
12mm	49	1	45110				
14mm	49	1	45112				
15mm	49	1	45114				
16mm	49	1	45116				
18mm	49	1	45118				
20mm	59	1	45120				
22mm	59	1	45121				
28mm	65	1	45123				

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T1R Reducir							
Size	а	Za	Order code				
12 x 10mm	49	1	45155				
14 x 12mm	49	1	45157				
15 x 10mm	49	1	45159				
15 x 12mm	49	1	45161				
16 x 12mm	49	1	45163				
16 x 14mm	49	1	45165				
18 x 15mm	49	1	45167				
20 x 18mm	54	1	45168				
22 x 10mm	54	1	45170				
22 x 15mm	54	1	45172				
22 x 18mm	54	1	45174				
28 x 22mm	62	1	45178				
6 11 11 6 1-1							

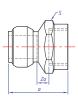




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T2 Straight	female	conn			
Size	а	Za	S	Order code	
10mm x <sup>3</sup> /8"	39	2	22	45190	
10mm x <sup>1</sup> /2"	40	2	26	45192	
12mm x <sup>3</sup> /8"	39	2	25	45194	
12mm x <sup>1</sup> /2"	40	2	25	45196	
14mm x <sup>3</sup> /8"	39	2	22	45200	
14mm x <sup>1</sup> /2"	40	2	25	45202	
15mm x <sup>3</sup> /8"	39	2	22	45204	
15mm x <sup>1</sup> /2"	40	3	25	45206	
15mm x <sup>3</sup> /4"	40	1	25	45208	
18mm x <sup>1</sup> /2"	40	3	25	45210	
18mm x <sup>3</sup> /4"	43	3	32	45212	
22mm x <sup>1</sup> /2"	45	2	32	45220	
22mm x 3/4"	47	3	32	45222	
22mm x 1"	49	2	38	45223	
28mm x <sup>3</sup> /4"	51	3	32	45224	
28mm x 1"	53	1	37	45225	





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T3 Tapered male connector							
Size	а	Za	S	Order code			
10mm x <sup>3</sup> /8"	39	15	22	45250			
10mm x 1/2"	42	18	23	45252			
12mm x <sup>3</sup> /8"	39	15	20	45254			
12mm x 1/2"	40	16	25	45256			
15mm x 3/8"	39	16	20	45265			
15mm x <sup>1</sup> /2"	40	16	22	45267			
18mm x 1/2"	43	19	24	45286			
18mm x <sup>3</sup> /4"	43	19	28	45288			
22mm x 1/2"	44	16	28	45290			
22mm x 3/4"	46	18	28	45292			
22mm x 1"	49	20	34	45294			
28mm x 1"	53	21	37	45296			

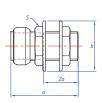




T3P Straight male connector						
Size	а	Za	b	S	Order code	
12mm x <sup>3</sup> /8"	37	13	30	22	45350	
14mm x <sup>3</sup> /8"	37	13	30	22	45354	
14mm x <sup>1</sup> /2"	37	14	32	24	45356	
15mm x <sup>1</sup> /2"	40	17	27	21	45358	
15mm x <sup>3</sup> /4"	47	23	50	42	45360	
16mm x <sup>1</sup> /2"	38	14	32	24	45362	
22mm x 1/2"	42	14	32	26	45364	
22mm x 3/4"	44	15	35	28	45366	
22mm x 1"	45	16	42	28	45368	
28mm x 1"	48	16	42	32	45370	

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ector				
а	Za	b	S	Order code
49	25	35	22	45390
53	24	42	28	45394
56	24	48	32	45396
	<i>a</i> 49 53	<i>a</i> Za 49 25 53 24	a     Za     b       49     25     35       53     24     42	a         Za         b         S           49         25         35         22           53         24         42         28

T6 Reducer			
Size	а	Za	Order code
12 x 10mm	45	21	45410
14 x 12mm	46	22	45414
15 x 10mm	48	24	45416
15 x 12mm	46	22	45418
16 x 12mm	46	22	45420
16 x 14mm	46	22	45421
18 x 12mm	46	22	45423
18 x 15mm	46	22	45424
22 x 12mm	52	28	45425
22 x 15mm	52	28	45426
22 x 18mm	52	28	45430
28 x 15mm	55	31	45435
28 x 18mm	55	31	45437
28 x 22mm	56	27	45438





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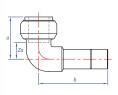
T12 Elbow			
Size	а	Za	Order code
10mm	30	6	45510
12mm	31	7	45512
14mm	33	9	45514
15mm	33	9	45516
16mm	33	9	45518
18mm	34	10	45520
20mm	40	12	45522
22mm	40	12	45524
28mm	49	17	45526





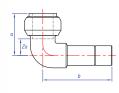
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T12S Street elbow								
Size	а	b	Za	Order code				
10mm	30	42	6	45490				
12mm	31	42	7	45492				
10 x 15mm	33	42	9	45494				
15mm	33	44	9	45496				
18mm	34	48	10	45498				
22mm	41	48	12	45500				
28mm	49	57	17	45502				





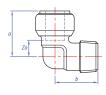




T12SNP Street elbow (nickel plated)								
Size	а	b	Za	Order code				
10mm	30	42	6	45491				
10 x 15mm	33	42	9	45495				
15mm	33	44	9	45497				

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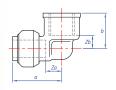




T13 Male e	T13 Male elbow							
Size	а	b	Za	Order code				
10mm x <sup>3</sup> /8"	30	24	6	45550				
10mm x <sup>1</sup> /2"	30	29	6	45552				
12mm x <sup>3</sup> /8"	32	24	7	45554				
12mm x <sup>1</sup> /2"	33	29	7	45556				
14mm x <sup>1</sup> /2"	33	29	9	45560				
15mm x <sup>1</sup> /2"	33	29	9	45561				
16mm x <sup>1</sup> /2"	34	29	10	45563				
16mm x <sup>3</sup> /4"	36	36	13	45564				
18mm x <sup>1</sup> /2"	34	29	10	45569				
18mm x <sup>3</sup> /4"	34	36	10	45570				
22mm x <sup>3</sup> /4"	41	34	12	45576				
28mm x 1"	49	42	17	45578				

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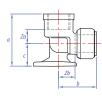




T14 Female	elbow					
Size	а	b	Za	Zb	Order code	
10mm x <sup>3</sup> /8"	34	23	10	13	45590	
10mm x <sup>1</sup> /2"	34	23	10	11	45592	
12mm x <sup>3</sup> /8"	34	24	10	13	45594	
12mm x 1/2"	34	25	10	11	45596	
14mm x <sup>1</sup> /2"	34	25	10	11	45600	
15mm x <sup>1</sup> /2"	34	25	10	11	45606	
16mm x 1/2"	34	25	9	12	45608	
16mm x 3/4"	39	32	16	14	45609	
18mm x <sup>1</sup> /2"	36	25	12	11	45614	
18mm x <sup>3</sup> /4"	40	33	16	18	45615	
22mm x 3/4"	42	33	13	18	45620	
28mm x 1"	49	37	17	21	45622	

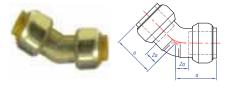
T15 Backplate elbow								
Size	а	b	с	Za	Zb	Order code		
10mm x <sup>1</sup> /2"	44	34	20	11	11	45630		
12mm x <sup>1</sup> /2"	45	34	20	11	11	45638		
14mm x <sup>1</sup> /2"	45	35	20	12	11	45640		
15mm x <sup>1</sup> /2"	45	35	20	11	11	45646		
16mm x <sup>1</sup> /2"	45	35	20	10	12	45648		
18mm x 1/2"	45	34	20	13	11	45650		
18mm x 3/4"	51	40	20	9	11	45652		
22mm x <sup>3</sup> /4"	54	40	21	18	12	45654		





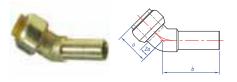
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T21 Obtuse elbow							
Size	а	Za	Order code				
12mm	33	5	45531				
14mm	33	5	45533				
15mm	33	5	45535				
16mm	33	5	45536				
18mm	34	5	45537				
22mm	41	6	45538				
28mm	49	7	45539				



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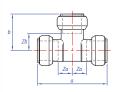
T21S Obtus	721S Obtuse street elbow									
Size	а	b	Za	Order code						
12mm	33	36	5	45528						
14mm	33	37	5	45529						
15mm	33	37	5	45542						
16mm	33	37	5	45543						
18mm	34	38	5	45544						
22mm	41	42	6	45545						
28mm	49	48	7	45546						



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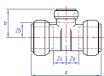




T24 Equal tee								
Size	а	b	Za	Zb	Order code			
10mm	59	30	6	6	45660			
12mm	62	31	7	7	45662			
14mm	65	33	8	9	45664			
15mm	65	34	9	10	45666			
16mm	68	34	10	10	45668			
18mm	68	34	10	10	45670			
20mm	80	41	14	12	45674			
22mm	81	41	12	12	45676			
28mm	97	49	16	15	45678			

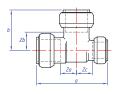
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T25 Tee, redu	ced b	ranch				
Size	а	b	Za	Zb	Order code	
12 x 12 x 10mm	60	32	7	7	45700	
14 x 14 x 12mm	62	33	8	9	45710	
15 x 15 x 10mm	59	32	6	8	45715	
15 x 15 x 12mm	63	33	8	9	45717	
16 x 16 x 12mm	66	33	8	9	45719	
16 x 16 x 14mm	67	34	10	10	45722	
18 x 18 x 14mm	67	35	10	11	45724	
20 x 20 x 16mm	75	36	9	12	45726	
22 x 22 x 10mm	70	38	6	14	45730	
22 x 22 x 14mm	75	38	9	14	45736	
22 x 22 x 15mm	75	38	9	14	45737	
22 x 22 x 16mm	75	38	9	14	45739	
22 x 22 x 18mm	78	36	10	12	45742	
28 x 28 x 15mm	84	40	10	16	45744	
28 x 28 x 18mm	87	39	10	15	45745	
28 x 28 x 22mm	91	44	12	15	45746	

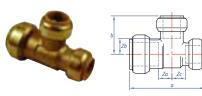




T26 Tee, one end reduced									
Size	а	b	Za	Zb	Zc	Order code			
15 x 10 x 15mm	65	34	9	10	9	45780			
22 x 15 x 22mm	78	41	9	13	17	45786			
22 x 18 x 22mm	78	41	9	13	17	45788			
28 x 15 x 28mm	88	48	12	16	25	45790			
28 x 18 x 28mm	88	48	11	16	24	45792			
28 x 22 x 28mm	92	48	11	15	20	45793			

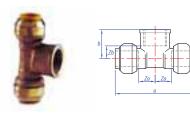
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T27 Tee, one end and branch reduced										
Size	а	b	Za	Zb	Zc (	Order code				
15 x 10 x 10mm	63	32	8	9	8	45810				
15 x 12 x 12mm	62	33	9	9	7	45812				
16 x 14 x 14mm	66	33	10	9	9	45815				
22 x 18 x 18mm	71	36	9	12	11	45819				
22 x 15 x 15mm	73	36	9	13	10	45820				
28 x 18 x 18mm	80	41	10	17	10	45821				
28 x 22 x 22mm	89	44	15	16	15	45822				



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T30 Female branch tee						
Size	а	b	Za	Zb	Order code	
12 x 12mm x <sup>1</sup> /2"	69	24	11	8	45823	
15 x 15mm x <sup>1</sup> /2"	69	25	11	12	45840	
16 x 16mm x <sup>1</sup> /2"	71	25	12	13	45825	
22 x 22mm x <sup>1</sup> /2"	78	27	10	14	45845	
22 x 22mm x <sup>3</sup> /4"	78	30	13	12	45846	



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T61 Stop e	end	
Size	а	Order code
10mm	24	45860
12mm	24	45862
14mm	24	45864
15mm	24	45866
16mm	24	45868
18mm	24	45870
20mm	29	45872
22mm	29	45874
28mm	32	45876





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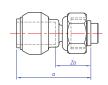




T61RV Air	release s	top end
Size	а	Order code
10mm	24	45890
12mm	24	45891
15mm	24	45892
18mm	24	45893
22mm	29	45894
28mm	32	45895

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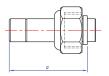




T62 Tap con	nector		
Size	а	Za	Order code
10mm x <sup>1</sup> /2"	40	16	45900
15mm x <sup>1</sup> /2"	43	19	45902
15mm x <sup>3</sup> /4"	42	18	45171
22mm x 3/4"	52	24	45903

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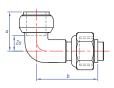




T62S Tap co	onnector	
Size	а	Order code
15mm x <sup>1</sup> /2"	39	45910
15mm x <sup>3</sup> /4"	45	45912
22mm x <sup>3</sup> /4"	49	45914

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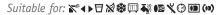


T63 Bent ta	p conn	ector		
Size	а	b	Za	Order code
10mm x <sup>1</sup> /2"	34	42	11	45920
15mm x <sup>1</sup> /2"	33	45	9	45922
22mm x <sup>3</sup> /4"	40	47	12	45924

Suitable for: **▼** ◆ ▶ च 🛭 🛠 🕮 🔻 🏵 🔟 🐚

#### T68FF Flat faced union adaptor

Size	а	Za	Order code	
15mm x <sup>3</sup> /4"	34	11	40759	





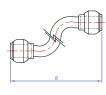


### Classic Flexifit

#### **TF90 Flexible connector**

Suitable for: ★★→日※参Ⅲ→※●■ (\*)

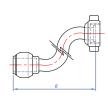




#### TF92 Flexible tap connector

Size	а	Order code
15mm x <sup>1</sup> /2"	300	45985
22mm x <sup>3</sup> /4"	400	45986



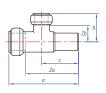


## Classic push-fit manifolds

TM80 Manifold							
Size	а	b	С	Za	Zb	Order code	
22 x 22 x 10mm	75	37	38	47	12	45940	

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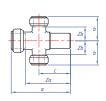




#### TM81 Manifold

Size	а	b	С	Za	Zb	Order code	
22 x 22 x 10 x 10mm	75	37	38	47	12	45942	

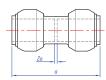






## Enhanced performance demountable push-fit fittings

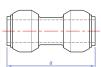




TX1 Straig	ht coupli				
Size	а	Za	Order code		
15mm	49	1	65114		
22mm	59	1	65121		
28mm	65	1	65123		
35mm	115	1	45126		
42mm	125	1	45128		
54mm	139	1	45130		

Suitable for: **\\*** ◀ ▶ च 💥 ♦ 🖾 🗸 ② 🔟 🐚

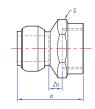




TX1 Slip straight coupling, slip pattern							
Size	а	Order code					
15mm	49	65141					
22mm	59	65143					
28mm	65	65144					
35mm	115	45145					
42mm	125	45146					
54mm	139	45147					

Suitable for: **\\*** ← ► □ **\\* \\*** □ **\** □ **\\*** □ **\** □ **\\*** □ **\\*** □ **\\*** □ **\\*** □ **\\*** □ **\\*** □ **\\*** □ **\\*** □ **\** □ **\\*** □ **\** 

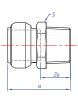




TX2 Straight	TX2 Straight female connector									
Size	а	Za	S	Order code						
15mm x <sup>1</sup> /2"	40	3	25	65206						
22mm x 3/4"	47	3	32	65222						
22mm x 1"	49	2	38	65223						
28mm x 1"	53	1	37	65225						
35mm x 1 <sup>1</sup> / <sub>4</sub> "	84	5	48	45230						
42mm x 1 <sup>1</sup> /2"	89	4	54	45232						
54mm x 2"	101	4	66	45234						

TX3 Tapered	TX3 Tapered male connector								
Size	а	Za	S	Order code					
15mm x <sup>1</sup> /2"	40	16	22	65267					
22mm x <sup>3</sup> /4"	46	18	28	65292					
22mm x 1"	49	20	34	65294					
28mm x 1"	53	21	37	65296					
35mm x 1 <sup>1</sup> /4"	83	26	43	45310					
42mm x 1 <sup>1</sup> /2"	88	26	50	45312					
54mm x 2"	100	31	61	45314					





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TX3P Straigh	TX3P Straight male connector									
Size	а	b	Za	S	Order code					
15mm x <sup>1</sup> /2"	40	27	17	21	65358					
22mm x 3/4"	44	35	15	28	65366					
22mm x 1"	45	42	16	28	65368					
28mm x 1"	48	42	16	32	65370					





Suitable for: ► 4 > □ 💥 🕮 🗸 🕲 🔟 🐚

TX6 Reduce	r		
Size	а	Za	Order code
22 x 15mm	52	28	65426
28 x 15mm	55	31	65435
28 x 22mm	56	27	65438
35 x 15mm	81	57	45450
35 x 22mm	83	54	45452
35 x 28mm	87	58	45454
42 x 15mm	86	62	45456
42 x 22mm	88	59	45458
42 x 28mm	92	60	45460
42 x 35mm	116	59	45462
54 x 15mm	94	70	45464
54 x 22mm	95	66	45466
54 x 28mm	100	68	45468
54 x 35mm	124	67	45470
54 x 42mm	129	67	45472



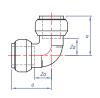


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## Enhanced performance demountable push-fit fittings

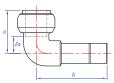




TX12 Elbow			
Size	а	Za	Order code
15mm	33	9	65516
22mm	40	12	65524
28mm	49	17	65526
35mm	76	19	45530
42mm	85	23	45532
54mm	98	29	45534

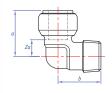
Suitable for: **\\*** ◀ ▶ च 💥 ♦ 🖾 🗸 ② 🔟 🐚





TX12S Street elbow							
Size	а	b	Za	Order code			
15mm	33	44	9	65496			
22mm	41	48	12	65500			
28mm	49	57	17	65502			

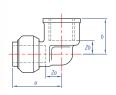




TX13 Male elbow							
Size	а	b	Za	Order code			
15mm x <sup>1</sup> /2"	29	33	9	65561			
22mm x <sup>3</sup> /4"	34	41	12	65576			
28mm x 1"	42	49	17	65578			

Suitable for: **\\*** ◀ ▶ च 💥 ♦ 🖽 🗸 🗇 📵 🐚





TX14 Female elbow									
Size	а	b	Za	Zb	Order code				
15mm x <sup>1</sup> /2"	34	26	10	11	65606				
22mm x 3/4"	42	25	13	18	65620				
28mm x 1"	49	37	17	21	65622				

Suitable for: **\\*** ◀ ▶ च 💥 ♦ 🖽 🗸 🕒 📵 🐚

TX15 Backplate elbow								
Size	а	b	с	Za	Zb	Order code		
15mm x <sup>1</sup> /2"	45	35	20	11	11	65646		

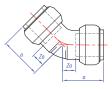








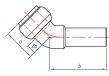




TX21S Obti				
Size	а	b	Za	Order code
15mm	33	37	9	65542
22mm	41	42	12	65545
28mm	49	48	17	65546
35mm	56	94	10	45547
42mm	75	106	13	45548
54mm	83	114	14	45549

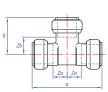
Suitable for: **▼** ◆ ▶ 🗖 💥 ※ 🕮 🗸 ③ 🔟 😘





TX24 Equa	ıl tee				
Size	а	b	Za	Zb	Order code
15mm	65	34	9	10	65666
22mm	81	41	12	12	65676
28mm	97	49	16	15	65678
35mm	152	76	20	20	45680
42mm	170	85	23	23	45682
54mm	196	98	29	29	45684

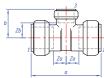






## Enhanced performance demountable push-fit fittings

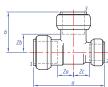




TX25 Tee, red	uced	branc	h			
Size (1 x 2 x 3)	а	b	Za	Zb	Order code	
22 x 22 x 15mm	75	38	9	14	65737	
28 x 28 x 15mm	84	40	10	16	65744	
28 x 28 x 22mm	91	44	12	15	65746	
35 x 35 x 15mm	135	67	11	44	45750	
35 x 35 x 22mm	148	74	17	45	45752	
35 x 35 x 28mm	148	78	17	46	45753	
42 x 42 x 15mm	159	82	18	58	45754	
42 x 42 x 22mm	159	76	18	47	45756	
42 x 42 x 28mm	159	81	18	49	45758	
54 x 54 x 15mm	175	89	19	65	45760	
54 x 54 x 22mm	175	84	19	55	45762	
54 x 54 x 28mm	175	87	19	55	45764	
54 x 54 x 35mm	177	86	21	29	45765	

Suitable for: ► 4 > □ × □ Ø ♣ □ Ø ♦ □ (•)

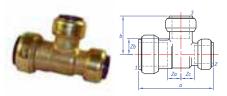




TX26 Tee, one end reduced						
Size (1 x 2 x 3)	а	b	Za	Zb	Zc	Order code
22 x 15 x 22mm	78	41	9	13	17	65786
28 x 15 x 28mm	88	48	12	16	25	65790
28 x 22 x 28mm	92	48	11	15	20	65793

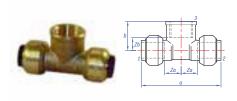
Suitable for: **\\*** ← ► □ **\\* \\*** □ **\** □ **\\*** □

TX27 Tee, one	end	and b	ranch	redu	ced		
Size (1 x 2 x 3)	а	b	Za	Zb	Zc	Order code	
22 x 15 x 15mm 28 x 22 x 22mm	73 89		_	13 16		65820 65822	



Suitable for: **▼** ◆ ▶ 🗖 💥 🏶 🖫 🗸 🏵 🔟 🐿

TX30 Female branch tee							
Size	а	b	Za	Zb	Order code		
15 x 15mm x <sup>1</sup> /2"	69	25	11	12	65840		
22 x 22mm x <sup>1</sup> /2"	78	27	10	14	65845		
35 x 35mm x <sup>1</sup> /2"	135	38	11	21	65848		
42 x 42mm x <sup>1</sup> /2"	147	41	12	25	65850		



Suitable for: ► TX ♣ □ Ø ♣ □ Ø • O • O

TX61 Stop	end	
Size	а	Order code
15mm	24	65866
22mm	29	65874
28mm	32	65876
35mm	57	45878
42mm	62	45880
54mm	69	45882





Suitable for: **▼** ◆ ▶ 🗖 💥 🏶 🖫 🗸 ❷ 🔟 🐿



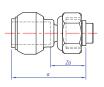
## Enhanced performance demountable push-fit fittings





TX61RV Ai	r release	stop end
Size	а	Order code
15mm	24	65892
22mm	29	65894
28mm	32	65895

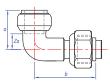




#### **TX62 Tap connector** Size Za Order code 15mm x 1/2" 43 19 65902 15mm x $^{3}/_{4}$ " 42 18 65171 22mm x <sup>3</sup>/4" 52 24 65903

Suitable for: ☎◀▶日 ※※Ⅲ & ¾● (\*)

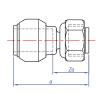




TX63 Bent tap connector							
Size	а	b	Za	Order code			
15mm x <sup>1</sup> /2"	33	45	9	65922			
22mm x <sup>3</sup> /4"	40	47	12	65924			

Suitable for: **▼** ◆ ▶ 🗖 💥 🏶 🗒 🍎 🐼 🕩 😭 🕩





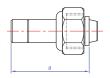
TX68FF Flat	faced	union	adaptor	
Size	а	Za	Order code	
15mm x <sup>3</sup> /4"	34	11	65759	

### TX68S Cylinder union

Size	а	Order code	
22mm x 1"	48	65930	



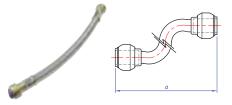




## Pro Flexifit

TXF90 Flexible connector								
Size	а	Order code						
15mm	300	65983						
22mm	400	65984						

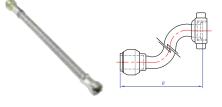
Suitable for: ► 4 > 日 ※ ※ □ ② ❖ □ (•)



### TXF92 Flexible tap connector

	<u> </u>		
Size	а	Order code	
15mm x <sup>1</sup> /2"	300	65985	
22mm x <sup>3</sup> /4"	400	65986	

Suitable for: ► 4 > □ × ⊕ □ (\*)





## Stainless steel push-fit fittings for stainless steel tube

### 316 System Tube

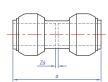


SS610 316 System tube							
Size	Finish	Order code					
15mm x 6m	Stainless steel	25010					
18mm x 6m	Stainless steel	25012					
22mm x 6m	Stainless steel	25014					
28mm x 6m	Stainless steel	25016					
35mm x 6m	Stainless steel	25018					
42mm x 6m	Stainless steel	25020					
54mm x 6m	Stainless steel	25022					

Suitable for: 🌠 ◆ 🗖 💥 🕮 🔾 ② 🔟 🐚

### 316 push-fit fittings

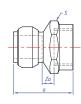




TS1 Straight coupling								
Size	а	Za	Order code					
15mm	49	1	25114					
18mm	49	1	25118					
22mm	59	1	25121					
28mm	69	1	25123					
35mm	115	1	25126					
42mm	125	1	25128					
54mm	139	1	25130					

Suitable for: X°4 ▶ ☐ X □ ↓ U ● X ⊕ □ (•)





TS2 Straight female connector									
Size	а	Za	S	Order code					
15mm x <sup>1</sup> /2"	40	4	25	25206					
18mm x 1/2"	40	4	25	25210					
18mm x <sup>3</sup> /4"	44	5	32	25212					
22mm x 1/2"	45	4	32	25220					
22mm x 3/4"	47	4	32	25222					
28mm x 1"	54	5	37	25225					
35mm x 1 <sup>1</sup> / <sub>4</sub> "	84	6	48	25230					
42mm x 1 <sup>1</sup> /2"	89	6	54	25232					
54mm x 2"	100	6	66	25234					

Suitable for: **\\*** ◀▶ च ⋈ ♣ ♠ ♠ ♥ ❷ **•••** ♦

TS3 Tapered male connector									
а	Za	S	Order code						
43	19	24	25267						
43	19	24	25286						
44	20	28	25288						
46	17	28	25292						
54	20	36	25296						
83	26	43	25310						
88	26	50	25312						
100	31	61	25314						
	a 43 43 44 46 54 83 88	a     Za       43     19       43     19       44     20       46     17       54     20       83     26       88     26	a     Za     S       43     19     24       43     19     24       44     20     28       46     17     28       54     20     36       83     26     43       88     26     50	a         Za         S         Order code           43         19         24         25267           43         19         24         25286           44         20         28         25288           46         17         28         25292           54         20         36         25296           83         26         43         25310           88         26         50         25312					





TS6 Reducei	r		
Size	а	Za	Order code
18 x 15mm	46	22	25424
22 x 15mm	52	30	25426
22 x 18mm	52	28	25430
28 x 15mm	55	31	25435
28 x 18mm	55	31	25437
28 x 22mm	56	27	25438
35 x 22mm	83	54	25452
35 x 28mm	87	53	25454
42 x 22mm	87	58	25458
42 x 28mm	92	58	25460
42 x 35mm	116	59	25462
54 x 35mm	124	67	25470
54 x 42mm	129	67	25472





Suitable for: ▼ < ▶ 🖯 📈 🕮 🔻 🍪 🔟 (\*\*)

TS12 Elbow			
Size	а	Za	Order code
15mm	33	9	25516
18mm	35	11	25520
22mm	41	12	25524
28mm	49	15	25528
35mm	76	19	25530
42mm	85	23	25532
54mm	98	29	25534

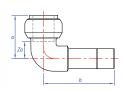






## Stainless steel push-fit fittings for stainless steel tube

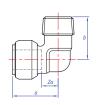




TS12S Street elbow								
Size	а	b	Za	Order code				
15mm	32	44	8	25496				
18mm	35	48	11	25498				
22mm	41	50	12	25500				
28mm	49	57	15	25502				

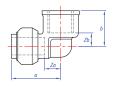
Suitable for: 🌠 ◆ 🗖 💥 🕮 🔾 ② 🔟 🐚





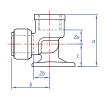
TS13 Male elbow								
Size	а	b	Za	Order code				
15mm x <sup>1</sup> /2"	33	29	9	25561				
18mm x <sup>1</sup> /2"	35	33	11	25569				
22mm x <sup>3</sup> /4"	41	34	12	25576				
28mm x1"	49	41	15	25578				





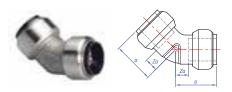
TS14 Female elbow									
Size	а	b	Za	Zb	Order code				
15mm x <sup>1</sup> /2"	34	25	10	12	25606				
18mm x <sup>1</sup> /2"	36	25	12	12	25614				
18mm x <sup>3</sup> /4"	40	25	16	11	25615				
22mm x 3/4"	42	33	13	18	25620				
28mm x 1"	49	37	15	21	25622				





TS15 Backplate elbow									
Size	а	b	С	Za	Zb	Order code			
15mm x <sup>1</sup> /2"	44	35	19	11	13	25646			
18mm x <sup>1</sup> /2"	44	35	19	11	13	25650			
22mm x <sup>3</sup> /4"	53	43	21	14	17	25654			

TS21 Obtus	se elbow	,	
Size	а	Za	Order code
15mm	33	9	26043
18mm	33	9	26045
22mm	39	10	26047
28mm	49	15	26048
35mm	77	20	26049
42mm	85	23	26050
54mm	98	29	26051



TS21S Obtuse street elbow				
Size	а	b	Za	Order code
15mm	33	36	9	26063
18mm	33	37	9	26065
22mm	39	42	10	26067
28mm	46	48	12	26068
35mm	66	93	9	26069
42mm	75	106	13	26070
54mm	83	114	14	26071



TS24 Equal	tee					
Size	а	b	Za	Zb	Order code	
15mm	66	33	9	9	25666	
18mm	66	33	9	9	25670	
22mm	78	39	10	10	25676	
28mm	92	46	12	12	25678	
35mm	154	77	20	20	25680	
42mm	170	85	23	23	25682	
54mm	196	98	29	29	25684	

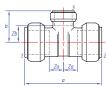


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# Stainless steel push-fit fittings for stainless steel tube

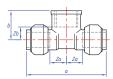




TS25 Tee, red	uced	branc	h			
Size	а	b	Za	Zb	Order code	
18 x 18 x 15mm	60	31	6	7	25725	
22 x 22 x 15mm	71	35	6	11	25737	
22 x 22 x 18mm	75	35	8	11	25742	
28 x 28 x 15mm	79	39	6	15	25744	
28 x 28 x 18mm	82	41	7	17	25745	
28 x 28 x 22mm	86	43	9	14	25746	
35 x 35 x 15mm	137	63	11	39	25750	
35 x 35 x 22mm	148	73	17	49	25752	
35 x 35 x 28mm	148	76	17	42	25753	
42 x 42 x 22mm	159	76	17	47	25756	
42 x 42 x 28mm	159	79	17	45	25758	
54 x 54 x 22mm	176	77	19	48	25762	
54 x 54 x 28mm	176	85	19	51	25764	
54 x 54 x 35mm	178	86	20	29	25765	
54 x 54 x 42mm	184	91	23	29	25766	

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TS30 Female I	branc	h tee				
Size	а	b	Za	Zb	Order code	
15 x 15mm x <sup>1</sup> /2"	68	25	10	12	25840	
18 x 18mm x <sup>1</sup> /2"	74	28	13	15	25843	
22 x 22mm x <sup>1</sup> /2"	78	27	10	14	25845	
22 x 22mm x <sup>3</sup> / <sub>4</sub> "	80	30	11	15	25846	
28 x 28mm x <sup>1</sup> /2"	86	32	9	19	25847	
35 x 35mm x <sup>1</sup> /2"	136	49	11	36	25848	
42 x 42mm x <sup>1</sup> /2"	147	52	12	27	25850	

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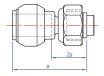
TS61 Stop end			
Size	а	Order code	
15mm	24	25866	
18mm	24	25870	
22mm	29	25874	
28mm	34	25876	
35mm	57	25878	
42mm	62	25880	
54mm	69	25882	





TS62 Tap con	nnecto	•	
Size	а	Za	Order code
15mm x <sup>1</sup> /2"	43	19	25902
22mm x <sup>3</sup> /4"	52	24	25903







# Carbon steel push-fit fittings





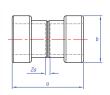
SC640 Carbon	steel system tu	be			
Size	Finish	Length	Order code	Length	Order code
15mm x 1.2mm*	Galvanised steel	6m	45080	3m	25080
18mm x 1.2mm*	Galvanised steel	6m	45081	3m	25081
22mm x 1.5mm*	Galvanised steel	6m	45082	3m	25082
28mm x 1.5mm*	Galvanised steel	6m	45083	3m	25083
35mm x 1.5mm*	Galvanised steel	6m	45084	3m	25084
42mm x 1.5mm*	Galvanised steel	6m	45085	3m	25085
54mm x 1.5mm*	Galvanised steel	6m	45086	3m	25086



SC660 Plastic coate	ed carbon steel	system tube	
Size	Finish	Order code	
15mm x 2.2mm* x 6m	Galvanised steel	25060	
18mm x 2.2mm* x 6m	Galvanised steel	25061	
22mm x 2.5mm* x 6m	Galvanised steel	25062	
28mm x 2.5mm* x 6m	Galvanised steel	25063	
35mm x 2.5mm* x 6m	Galvanised steel	25064	
42mm x 2.5mm* x 6m	Galvanised steel	25065	
54mm x 2.5mm* x 6m	Galvanised steel	25066	

# Advance push-fit fittings





TA1 Straig				
Size	а	b	Za	Order code
15mm	40	23	3	76000
18mm	42	26	4	76001
22mm	42	31	4	76002
28mm	46	38	6	76003
35mm	67	46	7	76004
42mm	74	55	7	76005
54mm	78	67	7	76006

\*Supplied and priced from the XPress Stainless range.

TA2 Straigh	r			
Size	а	b	Za	Order code
15mm x <sup>1</sup> /2"	39	27	3	76007
18mm x <sup>1</sup> /2"	38	30	2	76008
22mm x <sup>3</sup> /4"	42	36	5	76010
28mm x 1"	47	41	4	76011





TA3 Tapered	ctor			
Size	а	b	Za	Order code
15mm x <sup>1</sup> /2"	39	27	21	76013
18mm x <sup>1</sup> /2"	40	30	22	76014
22mm x 3/4"	42	36	24	76016
28mm x 1"	48	46	26	76017
35mm x 1 <sup>1</sup> / <sub>4</sub> "	60	52	29	76018
42mm x 1 <sup>1</sup> /2"	62	63	30	76019
54mm x 2"	69	78	34	76020

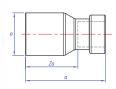




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TA6 Reducer					
Size	а	b	Za	Order code	
18 x 15mm	42	18	25	76021	
22 x 15mm	45	22	27	76022	
22 x 18mm	48	22	30	76023	
28 x 15mm	51	28	34	76024	
28 x 18mm	51	28	32	76025	
28 x 22mm	52	28	32	76026	
35 x 15mm	67	35	48	76110	
35 x 18mm	65	35	47	76111	
35 x 22mm	62	35	43	76027	
35 x 28mm	64	35	43	76028	
42 x 22mm	71	42	53	76112	
42 x 28mm	68	42	48	76113	
42 x 35mm	77	42	46	76029	
54 x 22mm	84	54	65	76030	
54 x 28mm	81	54	61	76031	
54 x 35mm	84	54	54	76114	
54 x 42mm	86	54	54	76032	

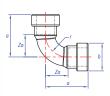






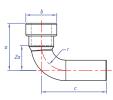
# Carbon steel push-fit fittings





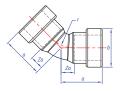
TA12 Elbow					
Size	а	b	Za	r	Order code
15mm	35	23	17	18	76033
18mm	40	26	21	22	76034
22mm	46	31	26	27	76035
28mm	55	38	35	34	76036
35mm	73	46	42	42	76037
42mm	83	55	51	50	76038
54mm	101	68	64	65	76039





TA12S Street elbow										
Size	а	Ь	С	Za	r	Order code				
15mm	35	23	52	17	18	76040				
18mm	40	26	52	21	22	76041				
22mm	46	31	58	26	27	76042				
28mm	55	38	68	35	34	76043				
35mm	73	46	93	42	42	76044				
42mm	83	55	105	51	50	76045				
54mm	101	68	117	65	65	76046				



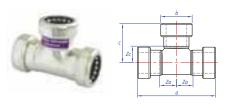


TA21 Obtu	se elbow	,			
Size	а	b	Za	r	Order code
15mm	25	23	7	18	76047
18mm	27	26	9	22	76048
22mm	30	31	11	27	76049
28mm	35	38	15	34	76050
35mm	48	46	17	42	76051
42mm	54	55	21	50	76052
54mm	63	68	26	65	76053

TA21S Obtuse street elbow											
Size	а	b	С	Za	r	Order code					
15mm	25	23	37	7	18	76054					
18mm	27	26	39	9	22	76055					
22mm	30	31	42	11	27	76056					
28mm	35	38	48	15	34	76057					
35mm	48	46	68	17	42	76058					
42mm	54	55	76	21	50	76059					
54mm	63	68	86	26	65	76060					



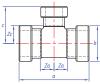
TA24 Equal tee										
Size	а	b	С	Za	Zc	Order code				
15mm	59	23	30	12	12	76061				
18mm	63	26	31	14	13	76062				
22mm	67	31	34	16	16	76063				
28mm	78	38	38	21	20	76064				
35mm	109	47	55	24	24	76065				
42mm	120	55	61	27	28	76066				
54mm	141	68	71	40	35	76067				



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TA25 Tee, reduced branch										
Size	а	b	С	Za	Zc	Order code				
18 x 18 x 15mm	60	26	30	12	13	76068				
22 x 22 x 15mm	62	31	32	13	14	76069				
22 x 22 x 18mm	63	31	34	13	16	76070				
28 x 28 x 15mm	66	38	37	13	19	76071				
28 x 28 x 18mm	68	38	37	14	19	76072				
28 x 28 x 22mm	71	38	37	16	17	76073				
35 x 35 x 15mm	83	47	41	11	24	76074				
35 x 35 x 18mm	86	47	42	12	24	76075				
35 x 35 x 22mm	90	47	42	14	22	76076				
35 x 35 x 28mm	96	47	45	17	25	76077				
42 x 42 x 22mm	99	55	45	18	25	76078				
42 x 42 x 28mm	105	55	47	21	27	76079				
42 x 42 x 35mm	120	55	60	28	29	76080				
54 x 54 x 22mm	106	68	51	16	31	76081				
54 x 54 x 28mm	112	68	53	19	33	76082				
54 x 54 x 35mm	125	68	66	31	35	76083				
54 x 54 x 42mm	136	68	70	31	38	76084				



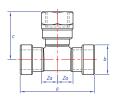


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# Carbon steel push-fit fittings





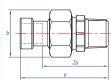
TA30 Female branch tee										
Size	а	b	С	Za	Order code					
15 x 15mm x <sup>1</sup> /2"	59	23	47	12	76085					
18 x 18mm x <sup>1</sup> /2"	63	26	45	14	76086					
22 x 22mm x <sup>1</sup> /2"	67	31	55	16	76087					
28 x 28mm x <sup>1</sup> /2"	71	38	56	16	76088					
35 x 35mm x <sup>1</sup> /2"	90	47	70	14	76089					
42 x 42mm x <sup>1</sup> /2"	99	55	64	18	76090					
54 x 54mm x <sup>1</sup> /2"	106	68	70	16	76091					





TS61 Stop	TS61 Stop end					
Size	а	Order code				
15mm*	24	25866				
18mm*	24	25870				
22mm*	29	25874				
28mm*	34	25876				
35mm*	57	25878				
42mm*	62	25880				
54mm*	69	25882				





TA69 Straight male union connector										
Size	а	b	Za	Order code						
15mm x <sup>1</sup> /2"	72	32	53	76092						
18mm x <sup>1</sup> /2"	72	32	53	76094						
22mm x <sup>3</sup> /4"	78	38	59	76097						
28mm x 1"	86	48	65	76099						
35mm x 1 <sup>1</sup> / <sub>4</sub> "	97	53	66	76100						
42mm x 1 <sup>1</sup> /2"	104	67	71	76101						
54mm x 2"	124	67	88	76102						

\*Supplied and priced from the Tectite 316 range.

m Bel

## Tectite accessories

45978

28mm

#### **DT Disconnecting tool** Size Order code 10mm 45970 12mm 45971 14mm 45972 15mm 45973 45974 16mm 18mm 45975 22mm 45977



#### DC Disconnecting clip Size Order code 10mm 46100 12mm 46101 14mm 46102 46103 15mm 16mm 46104 18mm 46105 22mm 46107 28mm 46108



## **DTX Disconnecting tool**

Size	Order code	
35-54mm	46145	



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Size	Order code
10mm	60100
15mm	60103
22mm	60105
28mm	60106



## T67 Copper liner





# Accessories







#### T115 Tectite Sprint deburring/scribe tool

Size	Order code	
10-28mm	75640	



#### T120 Pipe clips - nail in

Size	Order code
10mm	60110
10111111	00110
15mm	60111
22mm	60112
00	
28mm	60113



#### T125 Bend former



#### T140 Pipe cutter-ratchet

ze	Order code
28mm	60120



#### TCX End cap

Size	Order code
35mm	46180
42mm	46181
54mm	46182

## TDX Demounting end cap

Size	Order code
35mm	46146
42mm	46151
54mm	46156



## TX100 Replacement '0' ring

Size	Order code
35mm	46147
42mm	46148
54mm	46149



# TX105 Replacement grab ring

	<u>'</u>
Size	Order code
35mm	46135
42mm	46136
54mm	46137



## TX106 Replacement grab ring for Tectite 316

Size	Order code
35mm	46183
42mm	46184
54mm	46185



## S122 Tube preparation kit

Size	Order code
5-54mm	39233
-54IIIM	39233



## S130 Silicone lubricant grease

Size	Order code
100g tub	39219





# Quarter-turn ball valves and servicing valves



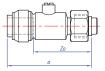


#### TX480 Servicing valve

Size	а	Za	Order code
15mm	69	21	65950

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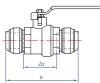


#### TX481 Servicing valve

Size	а	Za	Order code	
10mm x <sup>1</sup> /2"	74	50	45952	
15mm x <sup>1</sup> /2"	70	46	65954	

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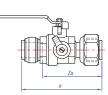




#### TX490L Quarter-turn ball valve

Size	а	Za	Order code	
15mm	83	35	65962	
22mm	94	36	65964	





#### TX495 Quarter-turn ball valve

Size	а	Za	Order code
15mm x <sup>3</sup> /4"	76	52	65960

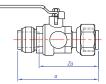
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## TX496 Quarter-turn ball valve

Size	а	Za	Order code
15mm x <sup>3</sup> /4"	76	52	65959

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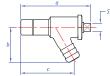


## TX526S DZR draining tap

Size	а	b	С	S	Order code
15mm	74	35	56	8	65936

Suitable for: **★** ◆ ◆ □ **★** ★ □ **②** ★ □ **②** ● **□ ②** ● **□** 







# **Tube compatibility**

FITTING AND TUBE COMPATIBILITY							
Tube/pipe type	Standard	Tectite Sprint	Tectite Classic	Tectite Pro	Tectite 316	Tectite Advance	
Copper tube	BS EN 1057	V	V	V	V	-	
PB pipe (with liner)	BS 7291: Part 2	V	<b>V</b>	<b>V</b>	-	_	
PEX pipe (with liner)	BS 7291: Part 3	V	<b>V</b>	<b>V</b>	-	_	
Stainless steel tube	EN 10312	_	_	_	<b>V</b>	_	
Carbon steel tube	EN 10305-2	-	-	<b>V</b>	<b>V</b>	V	
Plastic coated carbon steel tube	EN 10305-2	_	_	_	_	V	

# **Typical applications**



- Hot and cold water services
- Heating and chilled water applications
- Low temperature hot water heating
- Pressurised, vented and unvented heating systems
- Non demountable



- Hot and cold water services
- Heating applications
- Low temperature hot water heating
- Pressurised, vented and unvented heating systems
- Demountable

# **Tectite**

- Hot and cold water services
- Heating and chilled water applications
- Low temperature hot water heating
- Pressurised, vented and unvented heating systems
- Potable water applications
- Demountable

# **Tectite**

- Where water quality and hygiene are issues
- Hot and cold water services
- Heating and chilled water applications
- Low temperature hot water heating
- Pressurised, vented and unvented heating systems
- Demountable

# Tectite)

- Unvented closed circuit heating and chilled water applications (closed loop)
- Threaded steel system replacement
- Non demountable

RECOMMENDED APPLICATIONS					
Application	Tectite Sprint	Tectite Classic	Tectite Pro	Tectite 316	Tectite Advance
Commercial mechanical services					
Chilled	V	×	<b>V</b>	X	V
Potable	<b>V</b>	X	<b>V</b>	<b>V</b>	X
Heating	<b>V</b>	X	<b>V</b>	X	<b>V</b>
Hot water services	<b>V</b>	×	<b>V</b>	<b>V</b>	×
Food	X	×	X	<b>V</b>	×
Brewery	X	×	X	<b>V</b>	×
Gas	X	×	×	X	×
Domestic					
Potable	<b>V</b>	V	×	<b>V</b>	×
Heating	<b>✓</b>	<b>V</b>	X	<b>V</b>	V
Gas	X	X	X	X	X
Hot water services	V	V	X	X	X
Cold water services	<b>V</b>	V	X	X	X
Grey/rain water	V	<b>V</b>	X	×	×



# Push-fit solutions Materials specification and manufacturing standards

Component	<b>Tectite</b>	<b>Tectite</b>	<b>Tectite</b>	<b>Tectite</b>	<b>Tectite</b>
Body	Copper or DZR brass	DZR brass or gunmetal	Stainless steel (316)	DZR brass or gunmetal	Carbon steel (zinc plated)
'0' ring	EPDM*	EPDM*	EPDM*	EPDM*	EPDM*
Alignment ring	Glass filled nylon 6	Glass filled Nylon 6	Glass filled Nylon 6	Glass filled Nylon 6	Glass filled Nylon 6
Cartridge/ Demounting ring	N/A	Acetal copolymer	Up to 28mm cartridge ring brass tin plated	Up to 28mm cartridge ring brass	N/A
Grab ring	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
35-54mm End Cap	-	-	High performance nylon	High performance nylon	-
Shim	-	-	-	-	Mild steel (Zinc plated)

\*Ethylene Propylene Diene Monomer

# Manufacturing standards

Component	Standard	Summary	<b>Tectite</b>	<b>Tectite</b>	<b>Tectite</b> )	<b>Tectite</b>	<b>Tectite</b>
Taper end thread	ISO 7/EN10226-1 (formerly BS 21/ISO 7)	Pipe-threads, where pressure- tight joints are made on the threads (metric dimensions)	<b>V</b>	V	V	V	V
Parallel end thread	BS EN ISO 228:2003 (formerly BS 2779/ ISO R228/1)	Pipe-threads, where pressure- tight joints are not made on the threads (metric dimensions)	V	V	V	~	V

## **Connectors**

#### Male connectors



Tectite male connectors have either taper male BSP threads to ISO 7 (formerly BS 21) or parallel BSP threads to BS EN ISO 228:2003. Inert jointing compounds or PTFE tape should be applied to taper

threads and good quality jointing washers should be used with parallel threaded fittings.



#### Female connectors

Tectite female threaded connectors have internal parallel threads to BS EN ISO 228:2003.



## Working temperatures and pressure tables

The maximum temperature and pressure range in any system is dictated by the component with the lowest performance rating. Remember to pressure test all systems thoroughly after completion. Tectite installations may be tested to 1.5 times their normal working pressure at ambient temperature.

#### Achieving low temperatures

For products used in water systems, working temperatures of less then 4°C can only be achieved if antifreeze is added to the system.

#### **Pressure Equipment Directive**

Since 30th May 2002 most pressure equipment and assemblies on the market in the

United Kingdom have had to comply with the Pressure Equipment Directive (P.E.D.) 1999. Fittings are exempt from the P.E.D. unless they are incorporated into pressure equipment, meaning that all Tectite fittings are exempt. Tectite valves are also exempt. For a detailed explanation please visit: www.pegleryorkshire.co.uk/technical.cfm

Tectite fitting	Tube/pipe used with	Min. temperature	Max. temperature
Classic	Copper	-24°C*	95°C 6 bar
Classic	PB or PEX	-20°C* 20°C 12 bar 65°C 6 bar	92°C 3 bar
Sprint	Copper	-24°C* 20 bar 30°C 20 bar 65°C 16 bar	114°C 10 bar
Sprint	PB or PEX	-20°C* 20°C 12 bar 65°C 6 bar	92°C 3 bar
Pro up to 28mm	Copper	-24°C* 20 bar 30°C 20 bar 65°C 16 bar	114°C 10 bar
Pro over 35mm	Copper	-24°C* 16 bar 16 bar 65°C 10 bar	90°C 6 bar
316 up to 28mm	Stainless steel	-24°C 20 bar 30°C 20 bar 65°C 16 bar	114°C 10 bar
316 over 35mm	Stainless steel	-24°C 16 bar 30°C 16 bar 65°C 10 bar	90°C 6 bar
Advance	Carbon steel	-24°C 20 bar 30°C 20 bar 65°C 16 bar	114°C 10 bar
Advance	Plastic coated carbon steel	-24°C 20 bar 30°C 20 bar 65°C 16 bar	114°C 10 bar

<sup>\*</sup>Female T, TX and TT fittings to be DENSO® wrapped to avoid failure.

All performance figures based on correct assembly of fittings and tube/pipe as detailed in installation instructions.

TECTITE CLASSIC & TECTITE PRO FLEXIBLE HOSE/TAP CONNECTORS:  Performance when correctly assembled with copper tube to BS EN 1057									
Sizes		Min. temperature					Max. ter	mperature	
15mm		-20°C 16 bar	30°C	16 bar	65°C	10 bar	90°C	6 bar	
22mm		-20°C 10 bar	30°C	10 bar	65°C	10 bar	90°C	6 bar	
	<b>TECTI</b> Performance when correctly assembled w	<b>TE PRO SERVICING V</b> ith copper tube to B		7 and carb	on steel S	System tub	e		
Outside diameter		Min. temperature					Max. ter	mperature	
15-54mm		-15°C 16 bar	30°C	16 bar	65°C	10 bar	90°C	6 bar	

# **Equipotential bonding**

All metallic pipework systems should comply with the equipotential bonding requirements of the current edition of the IEE electrical wiring regulations (BS 7671: 2001). After all plumbing work has been completed, always ensure guaranteed continuity checks are conducted by a qualified electrician in accordance with regulations.



	Electrical continu	uity
-	Tectite Sprint Tectite Classic Tectite Pro Tectite 316 Tectite Advance	ン×ソソン



# **Tectite**) Push-fit solutions Tubes, pipe and

# their compatibilities

# Copper tube



Compatible copper tube must meet the requirements

of BS EN 1057 for copper and copper alloy - seamless round copper tubes for water (and gas) in sanitary and heating applications.

BS EN 1057 includes specified temper conditions (material strength) expressed as an 'R' number. Quite simply, the higher the number, the harder the material. As a result, tube

diameter, wall thickness, length and the material temper must all be specified for full product designation.

All Tectite 316 fittings can be used with copper tube, although in humid conditions some staining of the tube may be witnessed (see page 57 Phenolic foam section for details on moistureproof insulation).

Yorkex\* copper System tube is manufactured to the same standards as above and offers the same features and benefits.

#### COPPER TUBE BS EN 1057 COMPATIBILITY: Tectite Sprint, Tectite Classic and Tectite Pro fittings All tube tempers (R220, R250 and R290) are available in all the designated wall thicknesses

Outside			Wa	ll thickn	ess			
diameter	0.6mm	0.7mm	0.8mm	0.9mm	1.0mm	1.2mm	1.5mm	2.0mm
10mm	V	<b>V</b>	<b>V</b>	-	<b>V</b>	-	-	-
12mm	<b>V</b>	-		-		-	-	-
15mm	-		-	-		-	-	-
22mm	-	-	-				-	-
28mm	-	-	-				<b>V</b>	-
35mm	-	-	-	-	-		<b>V</b>	-
42mm	-	-	-	-	-			-
54mm	-	-	-	-	-		-	<b>V</b>



When Yorkex\* copper tube is used with Tectite fittings as part of a complete system an enhanced guarantee of 30 years will apply.

Tectite fittings can also be used with copper tube to the above standards, in which case a 25 year guarantee will apply.

# **Tectite-PEX** barrier pipe



Tectite-PEX is a highintegrity cross-linked polyethylene barrier

pipe. Available in sizes from 10mm to 28mm in 3m and 6m straight lengths or 25m, 50m and 100m coils, it is suitable for use with Tectite Sprint and Tectite Classic fittings (use with T66 liners). You can use Tectite Sprint and Tectite Classic fittings on all PEX plastic pipes which meet BS 7291: Part 3 (use with appropriate manufacturers' **Flexibility** liners). Tectite 316 fittings cannot be used with plastic pipes.

For the ultimate in convenience, our Tectite Sprint and Tectite Classic ranges of fittings can also be used with PB pipe that conforms to BS 7921: Part 2 (use with appropriate manufacturers' liners).

At the heart of Tectite-PEX is an EVOH (ethylene vinyl alcohol) resin oxygen barrier found centrally within the pipe wall. This barrier inhibits the ingress of oxygen - vital in central heating applications where permeation of oxygen into the system can cause radiator corrosion.

TECT	TITE-PEX BENDS
Size	Maximum Radii
10mm	45mm using T120 clips
15mm	100mm using T120 clips, 90mm using T125 bend former brackets
22mm	175mm using T120 clips
28mm	300mm using T120 clips

Tectite-PEX is flexible enough to be cabled around obstructions and through joists with ease, saving on time and materials. The product's flexibility also allows it to absorb energy and so reduce noise from water hammer and thermal movement.

The pipe's low thermal conductivity means exposed pipework in central heating systems is cooler to the touch than other materials. It is resistant to limescale and allbut eliminates the threat of burst pipes in cold conditions.

Lightweight and convenient to handle and store, Tectite-PEX

can be painted with either emulsion or oil-based gloss paints (NOT cellulose paint). Care must be taken to ensure that no paint comes into contact with Tectite fittings.

#### Installation

When installing Tectite-PEX, always remember to observe minimum bend radii to avoid kinking of the pipe. The Tectite accessories range includes a bend former for tight bends.

#### Standards and approvals

Tectite PEX adheres to all major trade specifications as follows:

BS 7291 Specification for thermoplastic pipes and associated

fittings for hot and cold water for domestic purposes and heating installations in buildings.

BS 7291: Part 1 General requirements.

BS 7291: Part 3 Specification for cross-linked polyethylene (PEX) pipes and associated fittings.



Kitemark approved All Tectite PEX barrier pipe Licence No. KM 70057 is Kitemark approved.

WRAS Tectite PEX complies with The Water Supply (Water Fittings) Regulations 1999.

**DIN** Tectite PEX barrier pipe fully meets the requirements of DIN 16892.

TECT	TTE-PEX BA	RRIER PIPE 1	<b>TOLERANCES</b>	
		Wall th	nickness	
Dimensions	1.6mm	1.6mm	2.1mm	2.7mm
12mm ± 0.1mm	-0.1mm	-	-	-
15mm ± 0.1mm	-	-0.1+0.2mm	-	-
22mm ± 0.1mm	-	-	-0.1+0.2mm	-
28mm ± 0.1mm	-	-		-0.1+0.2mm



When Tectite-PEX barrier pipe is used with Tectite fittings as part of a complete system an enhanced 30 year guarantee will apply.

Tectite fittings can also be used with PEX barrier pipe to the above standards, in which case a 25 year quarantee will apply.

<sup>\*</sup>Yorkex is a brand name of Yorkshire Copper Tube.



# Stainless steel 316 System tube



Specially designed to be used with Tectite 316 stainless steel

fittings, 316 System tube is available in 6m straight lengths in sizes from 15mm to 54mm. The tube is manufactured from

BS 316 S31/DIN 1.4401 stainless steel strip conforming to BS10088 Part 2 and thanks to its thinwalled geometry, is stiff, lightweight and easy to handle.

Tectite 316 fittings are also compatible with stainless steel tubes to BS EN 10312 (encompassing the former BS 4127) and DVGW GW541.

STA	AINLESS STEEL	316 SYSTEM TUBE: S	pecification
		Wall thickness	
		EN 10312 Table 1	
Outside	316 System	GW541 Table 2	EN 10312 Table 2
diameter	tube	(formerly BS 4127)	GW541 Table 3
15mm	0.6mm	0.6mm	1.0mm
18mm	0.7mm	0.7mm	1.0mm
22mm	0.7mm	0.7mm	1.2mm
28mm	0.8mm	0.8mm	1.2mm
35mm	1.0mm	1.0mm	1.5mm
42mm	1.0mm	1.1mm	1.5mm
54mm	1.0mm	1.2mm	1.5mm



When Tectite stainless steel System tube is used with Tectite fittings as part of a complete system an enhanced guarantee of 30 years will apply.

Tectite fittings can also be used with stainless steel tube to the above standards, in which case a 25 year guarantee will apply.

# XPress galvanised carbon steel System tube and plastic coated carbon steel System tube



Carbon steel System tube from our XPress range is available

in 3m and 6m straight lengths in sizes from 15mm to 108mm (54mm if plastic coated). Galvanised carbon steel System tube is manufactured in accordance with EN 10305-3 from material with a very low carbon content and has a thin walled profile resulting in a lightweight easier to handle product.

The galvanised coating (external only) has a minimum thickness of 7 microns and is thermally applied which provides a superior bond to the tube.

Tectite Advance can be used with our SC640 galvanised carbon steel System tube or our SC660 plastic coated carbon steel System tube.



When XPress galvanised carbon steel System tube or plastic carbon steel System tube is used with Tectite fittings as part of a complete system an enhanced 10 year guarantee will apply.

Tectite fittings can also be used with carbon steel tube and plastic coated carbon steel tube to the above standards, in which case a 5 year guarantee will apply.

XPRESS	GALVANISED CARBOI	N STEEL TUBE: Sp	pecification							
	Wall thickness									
		EN 10312	? Table 1							
	Outside diameter		Including							
<i>Outside</i>	including plastic	Galvanised	plastic							
diameter	coating	tube	coating							
15mm	17mm	1.2mm	2.2mm							
18mm	19mm	1.2mm	2.2mm							
22mm	24mm	1.5mm	2.5mm							
28mm	30mm	1.5mm	2.5mm							
35mm	37mm	1.5mm	2.5mm							
42mm	44mm	1.5mm	2.5mm							
54mm	56mm	1.5mm	2.5mm							
67mm	-	1.5mm	-							
76mm	<del>-</del>	2.0mm	-							
89mm	-	2.0mm	-							
108mm	-	2.0mm	-							

	STEEL SYSTEM E: Bends							
Size Minimum Radii								
15mm	30mm							
18mm	36mm							
22mm	44mm							
28mm	56mm							
	Rmm Carbon steel suitable for bending bend formers.							

muBels



# Push-fit solutions System design considerations and tube expansion

The following are some of the specific design considerations it is important to take account of when designing and installing pipework systems containing Tectite fittings.

#### Thermal movement

Thermal movement is a major consideration when designing plumbing and heating systems. Pipework systems expand and contract with changes in temperature. If they are fixed too rigidly and their movement restricted, the systems will be

subject to stress which must be avoided. So it's important to take the effect of thermal movement into account when designing or installing a system.

It's especially important to avoid stress concentrations between fixed points typically found at radiators, valves and other fittings. However, the ability of Tectite joints to rotate will accommodate movement within the system associated with expansion and contraction in certain design configurations.

The following tables show thermal expansion details for a range of tube/pipe lengths and temperature changes. For further calculations please refer to the Pegler Yorkshire System Design Document or visit the website.

	TECTITE SPRINT, TECTITE CLASSIC AND TECTITE PRO: Copper tube expansion									
Temperature	Tube length									25
change	3m	4m	5m	6m	7m	8m	9m	10m	12m	25m
10°C	0.5mm	0.7mm	0.9mm	1.0mm	1.2mm	1.4mm	1.5mm	1.7mm	2.0mm	4.3mm
20°C	1.0mm	1.4mm	1.7mm	2.0mm	2.4mm	2.7mm	3.0mm	3.4mm	4.0mm	8.5mm
30°C	1.5mm	2.0mm	2.6mm	3.1mm	3.6mm	4.1mm	4.6mm	5.1mm	6.1mm	13mm
40°C	2.0mm	2.7mm	3.4mm	4.1mm	4.8mm	5.4mm	6.1mm	6.8mm	8.2mm	17mm
50°C	2.6mm	3.4mm	4.3mm	5.1mm	6.0mm	6.8mm	7.7mm	8.5mm	10.2mm	21mm
60°C	3.1mm	4.1mm	5.1mm	6.1mm	7.1mm	8.2mm	9.2mm	10.2mm	12.2mm	26mm
70°C	3.6mm	4.8mm	6.0mm	7.1mm	8.3mm	9.5mm	10.7mm	11.9mm	14.3mm	30mm
80°C	4.1mm	5.4mm	6.8mm	8.2mm	9.5mm	10.9mm	12.2mm	13.6mm	16.3mm	34mm
90°C	4.6mm	6.1mm	7.7mm	9.2mm	10.7mm	12.2mm	13.8mm	15.3mm	18.4mm	38mm
100°C	5.1mm	6.8mm	8.5mm	10.2mm	11.9mm	13.6mm	15.3mm	17.0mm	20.4mm	43mm

	TECTITE SPRINT, TECTITE CLASSIC AND TECTITE PRO: PEX barrier pipe expansion															
Upper working	Lower working temperature															
temperature	0°c	10°c	20°c	30°c	40°c	50°c	60°c	70°c	80°c	90°c						
90°C	17.6mm	16.4mm	15.1mm	13.5mm	11.6mm	9.4mm	7.4mm	5.0mm	2.6mm	0.0mm						
80°C	15.0mm	13.8mm	12.5mm	10.9mm	9.0mm	6.8mm	4.8mm	2.4mm	0.0mm							
70°C	12.6mm	11.4mm	10.1mm	8.5mm	6.6mm	4.0mm	2.4mm	0.0mm								
60°C	10.2mm	9.0mm	7.7mm	6.1mm	4.2mm	2.0mm	0.0mm									
50°C	8.2mm	7.0mm	5.7mm	4.1mm	2.2mm	0.0mm										
40°C	6.0mm	4.8mm	3.5mm	1.9mm	0.0mm											
30°C	4.1mm	2.9mm	1.6mm	0.0mm												
20°C	2.5mm	1.3mm	0.0mm													
10°C	1.2mm	0.0mm														
0°C	0.0mm															

	TECTITE 316: Stainless steel System tube expansion									
Temperature	Tube length									
change	3m	4m	5m	6m	7m	8m	9m	10m	12m	25m
10°C	0.5mm	0.6mm	0.8mm	1.0mm	1.1mm	1.3mm	1.4mm	1.6mm	1.9mm	4.0mm
20°C	1.0mm	1.3mm	1.6mm	1.9mm	2.2mm	2.6mm	2.9mm	3.2mm	3.8mm	8.0mm
30°C	1.4mm	1.9mm	2.4mm	2.9mm	3.4mm	3.8mm	4.3mm	4.8mm	5.8mm	12.0mm
40°C	1.9mm	2.6mm	3.2mm	3.8mm	4.5mm	5.1mm	5.8mm	6.4mm	7.7mm	16.0mm
50°C	2.4mm	3.2mm	4.0mm	4.8mm	5.6mm	6.4mm	7.2mm	8.0mm	9.6mm	20.0mm
60°C	2.9mm	3.8mm	4.8mm	5.8mm	6.7mm	7.7mm	8.6mm	9.6mm	11.5mm	24.0mm
70°C	3.4mm	4.5mm	5.6mm	6.7mm	7 <b>.</b> 8mm	9.0mm	10.1mm	11.2mm	13.4mm	28.0mm
80°C	3.8mm	5.1mm	6.4mm	7.7mm	9.0mm	10.2mm	11.5mm	12.8mm	15.4mm	32.0mm
90°C	4.3mm	5.8mm	7.2mm	8.6mm	10.1mm	11.5mm	13.0mm	14.4mm	17.3mm	36.0mm
100°C	4.8mm	6.4mm	8.0mm	9.6mm	11.2mm	12.8mm	14.4mm	16.0mm	19.2mm	40.0mm

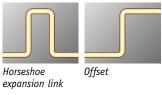


TECTITE PRO*, TECTITE 316* AND TECTITE ADVANCE*: Galvanised carbon steel System tube and plastic coated carbon steel System tube expansion										
Temperature change	3m	4m	5m	6m	Tube 7m	length 8m	9m	10m	12m	25m
10°C	0.4mm	0.5mm	0.6mm	0.7mm	0.8mm	1.0mm	1.1mm	1.2mm	1.4mm	3.0mm
20°C	0.7mm	1.0mm	1.2mm	1.4mm	1.7mm	1.9mm	2.2mm	2.4mm	2.9mm	6.0mm
30°C	1.1mm	1.4mm	1.8mm	2.2mm	2.5mm	2.9mm	3.2mm	3.6mm	4.3mm	9.0mm
40°C	1.4mm	1.9mm	2.4mm	2.9mm	3.4mm	3.8mm	4.3mm	4.8mm	5.8mm	12.0mm
50°C	1.8mm	2.4mm	3.0mm	3.6mm	4.2mm	4.8mm	5.4mm	6.0mm	7.2mm	15.0mm
60°C	2.2mm	2.9mm	3.6mm	4.3mm	5.0mm	5.8mm	6.5mm	7.2mm	8.6mm	18.0mm
70°C	2.5mm	3.4mm	4.2mm	5.0mm	5.9mm	6.7mm	7.6mm	8.4mm	10.1mm	21.0mm
80°C	2.9mm	3.8mm	4.8mm	5.8mm	6.7mm	7.7mm	8.6mm	9.6mm	11.5mm	24.0mm
90°C	3.2mm	4.3mm	5.4mm	6.5mm	7.6mm	8.6mm	9.7mm	10.8mm	13.0mm	27.0mm
100°C	3.6mm	4.8mm	6.0mm	7.2mm	8.4mm	9.6mm	10.8mm	12.0mm	14.4mm	30.0mm

#### Correct anchoring

Always ensure the spur used to anchor the branch of a tee or connecting a radiator is long enough to allow normal thermal movement. Failure to observe this simple rule can lead to a failure. Incorporating expansion loops or bellows devices into the system can help guard against such problems, whilst a horseshoe link or offset (see diagrams) is an ideal way to counteract continual thermal cycling.

# Techniques for expansion stress relief









Suitable for 10mm tube only

#### Thermal expansion

Never use so-called 'cold draw techniques' when designing expansion joints into a system containing any Tectite push-fit fittings. These techniques may compromise the integrity of the surrounding joints.

#### **Design considerations**

Some contracts may still require that proprietary chemicals are used to cleanse and flush pipework before full commissioning. Tectite is compatible with a wide selection of products, to find out more contact us.

#### Pipe restraint

In any installation, the system should be supported to ensure the minimum stress is imposed on the tube/pipe and joints. For the maximum spacing of supporting brackets for internal installations, please see the tables (right).

#### Insulation

For all Tectite Systems, we recommend you adhere to the insulation requirements as specified in BS 5970. These requirements are equally applicable to plastic pipe and stainless steel tube.

Maximum spaci	ng of suppor	rt brackets for in	ternal fixing (	of copper tube
Copper tube to		al run spacing		run spacing
BS EN 1057	R220	R250/R290	R220	R250/R290
10mm	1200mm	800mm	1600mm	1200mm
12mm	1500mm	1000mm	2000mm	1500mm
15mm	1800mm	1200mm	2400mm	1800mm
22mm	2400mm	1800mm	3000mm	2400mm
28mm	2400mm	1800mm	3000mm	2400mm
35mm	2700mm	2400mm	3000mm	3000mm
42mm	3000mm	2400mm	3600mm	3000mm
54mm	3000mm	2700mm	3600mm	3000mm

Maximum spacing of support brackets for internal fixing of Tectite-PEX Barrier Pipe						
	Horiza	ntal run :	spacing	Vertic	al run spa	cing
	Avera	ige service	e temp.	Averag	e service t	emp.
Size	20°C	60°C	80°C	20°C	60°C	80°C
10mm	500mm	400mm	300mm	800mm	600mm	500mm
15mm	500mm	400mm	300mm	800mm	600mm	500mm
22mm	800mm	600mm	500mm	1200mm	1000mm	800mm
28mm	800mm	600mm	500mm	1200mm	1000mm	800mm

Maximum spacing of support brackets for internal fixing of 316 System tube, BS EN 10312 and GW541 stainless steel tube and carbon steel System tube

Size	Horizontal run spacing	Vertical run spacing
15mm	1200mm	1800mm
18mm	1500mm	2100mm
22mm	1800mm	2400mm
28mm	1800mm	2400mm
35mm	2400mm	3000mm
42mm	2400mm	3000mm
54mm	2700mm	3000mm

#### Phenolic foam

When using rigid phenolic foam (or other thermal insulation) to lag pipework, always remember to refer to the lagging manufacturer's fixing instructions. To avoid the risk of external corrosion of copper pipework lagged with this foam, it is recommended that such insulation products be installed with a moisture barrier. Materials like Densopaste or a plastics covering applied by the tube manufacturer both provide an appropriate barrier between the outer surface of the tube or fitting and the foam.

Some manufacturers of this type of lagging supply their products with an internal, factoryapplied sodium silicate or polyethylene barrier to prevent external corrosion problems. However, if you do need to add a barrier product, we recommend that all Tectite fittings are fully installed and pressure tested before these are applied and that they are completely coated.

#### Covered pipework

Making provision for thermal movement is vital where pipework of any material is installed under screed, plaster or passes through brick or blockwork. The preferred practice is to: pass tubes and pipes through sleeves or conduits or to lay them in ducts surrounded by loose, non-rigid material such as vermiculite or glass wool. For further information, consult the publication BS 6700:1997 Water Services in Buildings.

#### **Local Water Authority**

It's wise to consult the local water authority when it comes to pipework accessibility.

#### Tube bending

Portable bending machines are ideal for copper tubes up to 28mm. Most machines bend the tube between matched formers and back guides that support the outside diameter (OD) of the tube. This eliminates the risk of the tube wall collapsing.

The point at which the bending pressure is exerted must be maintained at the correct distance in front of the former's point of support. It's also important to keep formers and guides well lubricated. Bending tubes correctly will avoid any wrinkling and flattening that can affect flow conditions.

Using adjustable bending machines (which allow the pressure on the back quide to be adjusted) will ensure perfect bends every time so long as the root (inside) bending radius is at least 3 times the outside diameter of the tube.

#### Pipework clearance

When designing a Tectite System, please take care to ensure all joints can be made and demounted easily. Observe minimum gaps and insertion distances to ensure sufficient access for a demounting clip/tool, where applicable (see fitting spacing tables).

Fitting spacing for
Tectite Sprint and Advance
(not demountable)

10mm         5mm         20mm           15mm         5mm         21mm           22mm         5mm         23mm           28mm         5mm         25mm	Sizes	min. gap between fittings	tube projection
	15mm	5mm	21mm
	22mm	5mm	23mm

Classic, Pro and 316				
	Min. gap	Min.		
	between	tube		
Sizes	fittings	projection		
10mm	10mm	40mm		
12mm	10mm	40mm		
15mm	10mm	40mm		

10mm

10mm

50mm

50mm

50mm

40mm

50mm

100mm

100mm

100mm

Fitting spacing for Tectite

#### Spacing

22mm

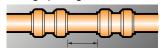
28<sub>mm</sub>

35mm

42mm

54mm

Fitting spacing



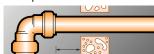
Sufficient space must be left between fittings to allow room for dis-assembly tools to operate. See adjacent table for fitting spacing.

Minimum projection



Similar consideration should be given to the distance pipe stubs project through walls or bulkheads. Refer to table.

Good practice



Projection distances shown in the table also ensure that the subsequent installation will be a convenient distance from the wall

# **Tectite**Push-fit solutions Installation instructions 10mm to 28mm sizes

The Tectite jointing system has been designed with easy, efficient installation in mind.

# **Guide to installation**

The jointing procedures are almost identical for every type of Tectite fitting and compatible tube material. Where there are variations (such as inserting a liner into a PEX pipe) these are shown on the following pages and in the fitting instructions. To ensure the fittings stay clean and the 'O' ring is protected from damage, never remove the fitting from its packaging until immediately prior to installation.

The tube/pipe can be fully inserted by hand. A damaged tube/pipe end will require excessive force to be used. If this is the case you should check the tube/pipe is round and deburred before continuing. Tectite fittings with plain male ends must not be used directly with capillary fittings, since heating will damage the nonmetallic parts. Neither should plain ends on capillary fittings be used with Tectite.

Heat should not be applied to Tectite fittings, directly or indirectly. They should be disconnected (where applicable) to avoid any possible damage to non-metallic parts if they are to be used on a system in conjunction with capillary fittings. Similarly, reconnection must not be considered until the heated tubes have been allowed to cool and have been flushed to remove any flux residues. Use pipe clips to secure finished installations and prevent vibration or movement.

# **Painting**

Fittings can be painted with water-based paints. Oil-based or aggressive solvent paint should be avoided.

# Socket depths

Socket depths					
	Size	Socket depth			
<b>Tectite</b>	10mm 15mm 22mm 28mm	15mm 16mm 18mm 20mm			
<b>Tectite</b>	10-18mm 22mm 28mm	23mm 27mm 31mm			
Tectite) Tectite	10-18mm 22mm 28mm 35mm 42mm 54mm	23mm 27mm 31mm 57mm 62mm 68mm			
<b>Tectite</b>	15mm 18mm 22mm 28mm 35mm 42mm 54mm	18mm 18mm 18mm 20mm 31mm 32mm 37mm			

# Boiler connection

Tectite-PEX barrier pipe should not be joined directly to a boiler or other similar heat source. Connection should be via a piece of copper tube a minimum of 1m long.

# **Preparation**

New tube ends should have any tape, labels or residual adhesive removed, taking care not to damage the tube in the process. Check the tube is round, clean and free from burrs and scores. If necessary, trim and prepare as below.

We recommend the use of a good quality tube cutter with a sharp



wheel for metal and plastic coated metal tube.

Tube cutters

For cutting PEX pipe we recommend the use of good quality pipe shears with a sharp blade. Clean, square cut pipe ends should have the pipe manufacturer's liners fitted.

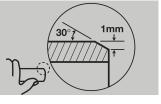
Ensure the tube is cut square and all burrs and sharp edges are



removed and is chamfered as shown in the illustration.

Remove burrs

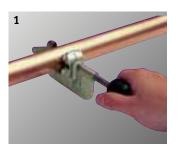
Having deburred as above you will be left with a 1mm chamfer on the outside of the tube as indicated in the diagram. Wipe clean the tube end to remove all swarf and debris.





If a deburrer is not available, a fine file should be used to prepare the tube end.

# Copper, chrome plated copper, stainless steel System and carbon steel System tubes



1. Select the correct size of tube and fitting for the job. Ensure both are clean, in good condition and free from damage, scores and imperfections. Do not use any additional lubricant or sealing compounds. Cut the tube square using a rotary tube cutter wherever possible. Take care to ensure that the tube end is deburred and chamfered. If the tube is oval or damaged, use a re-rounding tool.



2. Remove any burrs or sharp edges from the external tube end using either the T110 (Tectite Classic and Tectite Pro) or the T115 (Tectite Sprint and Tectite Advance) 3-in-1 Tectite deburring, scribe tool and socket depth marker or the S120 deburring tool from the

XPress accessories range. Also, ensure the internal bore is deburred. For deburring stainless steel tube ends a fine toothed file should be used.



Then wipe clean the tube end to remove all swarf and debris this helps to avoid damage to the '0' ring when inserting the tube.



An alternative method of preparing copper tube ends 35-54mm before inserting into the fitting, is to use the appropriately-sized S122 percussion deburrer (not for carbon steel tube) featured in the XPress accessories range. Place the cup of the deburrer onto the end of the tube and strike it with a sharp blow from a copper-faced hammer. As well as removing burrs and sharp edges, this tool also creates a slight taper that aids insertion into the fitting. If 10mm R220 annealed copper tube is being used, ensure a T67 support liner is fully inserted into the tube.





3. To make a perfect joint, the tube must be fully inserted in the fitting until it meets the tube stop. To confirm that this is the case, mark the socket depth on the tube or pipe using the T110/T115 socket depth marker (Tectite Classic, Tectite Pro & Tectite 316) or a tape measure and a marker/pencil. For the socket depth of each size of fitting, see tables.



4. When jointing chrome-plated copper tube with Tectite Classic, Tectite Pro and Sprint fittings, scribe the tube using the T110/T115 (Sprint) scribing tool to ensure positive grab ring location. This helps to accommodate any variance in chrome plate thickness. Note: The scribing function is not suitable for stainless steel tube.



Proceed to jointing (see next page).

# PB and PEX pipe Plastic coated



- 1. Select the correct size of pipe and fitting for the job. Ensure both are clean, in good condition and free from damage, scores and imperfections. Do not use any additional lubricant or sealing compounds. Cut the pipe square using good quality plastic pipe shears with a sharp blade.
- 2. Where Tectite-PEX barrier pipe is used, remove the label from the pipe end. If the pipe has been used on a previous installation cut the tube back to behind the teeth marks, ensuring there are no score marks on the pipe. Also ensure the correct pipe support liner from the pipe manufacturer is fully inserted into the pipe (T66 for Tectite flex).



Proceed to jointing (see next page).

# carbon steel System tube

1. Select the correct size of tube and fitting for the job. Ensure both are clean, in good condition and free from damage, scores and imperfections. Do not use any additional lubricant or sealing compounds. Cut the tube square using a rotary tube cutter wherever possible.



- 2. The plastic coating must be removed to the socket depth of the fitting using the S115 stripping tool from the XPress accessories range. Select the correct sized tool, fully insert the tube and twist the tool until the excess of plastic is completely detached.
- 3. Remove any burrs or sharp edges from the external tube end using an S120 deburring tool from the XPress accessories range. Also deburr the internal bore. If using plastic coated tube, the use of the S115 tool (as point 2), will deburr the inside of 15mm to 28mm tube. The same tool will also deburr the outside of plastic coated tube - insert the tube into the opposite end of the tool and twist.

# **Tectite**Push-fit solutions Installation instructions 10mm to 28mm sizes

# **Jointing**

1. To make a perfect joint, the tube or pipe must be fully inserted in the fitting until it meets the tube stop. To confirm that this is the case, mark the socket depth on the tube or pipe using the appropriate socket depth marker or a tape measure and a marker/pencil. For the socket depth of each size of fitting, see tables on page 58.



2. Inspect the fitting ensuring that the grab rings/'0'-rings have not been contaminated with grit or debits. Insert the tube/pipe into the mouth of the fitting to rest against the grab ring.



- **3.** Push the tube firmly with a slight twisting action until it reaches the tube stop with a positive "click".
- **4.** Ensure the depth insertion mark corresponds with the mouth of the fitting and then pull firmly on the tube to ensure the fitting is secure

NOTE: We recommend all systems are thoroughly pressure tested to 1.5 times working pressure before the hand-over to the customer.



NOTE: Tectite Sprint and Tectite Advance fittings must not be used with the male ended fittings from other Tectite ranges (except T526S). Other third party male ended products should not be used with any Tectite fittings.

Do not use Tectite fittings on gas services.

Tectite Classic fittings do not provide electrical continuity, other Tectite fittings only provide electrical continuity when installed with metal tube.



Although manufactured to a different design, jointing tubes in sizes from 35mm to 54mm with Tectite Pro and Tectite 316 fittings is basically the same as it is at smaller sizes.

## **Preparation**

The first thing to consider when it comes to installation of 35mm to 54mm fittings is whether you plan to demount any fittings in the system on a regular basis. If you do, then we recommend you replace the standard end cap with the appropriately sized TDX demounting end cap.

To ensure the fittings stay clean and the '0' ring is protected from damage, never remove the fitting from its packaging until immediately prior to installation.

When it comes to tube end preparation and socket depth marking for jointing with 35mm to 54mm fittings, follow the same routine as outlined in the preliminaries, tube preparation and installation tips sections for 10mm to 28mm fittings on the previous pages.

- 1. Insert the tube through the end cap to rest against the grab ring.
- 2. Now push the tube firmly with a slight twisting action until it reaches the tube stop with a positive 'click'.
- 3. Ensure the depth insertion mark corresponds with the mouth of the fitting, then pull firmly on the tube to ensure that the fitting is secure.

NOTE: We recommend all systems are thoroughly pressure tested to 1.5 times working pressure before the hand-over to the customer.







# **Tectite**)

# Push-fit solutions Installation instructions Demounting

How to demount Tectite Classic, Tectite Pro and Tectite 316 fittings from pipework.

# **Demounting**

Tectite Classic, Tectite Pro and Tectite 316 fittings in sizes 10mm to 28mm can all be disconnected as described below. Tectite Sprint and Tectite Advance fittings are not suitable for disconnection. Ensure the system is de-pressurised and drained.



- 1. Place the forks of the disconnecting tool around the fitting assembly. The fork side carrying the Tectite brand logo should be positioned around the tube/pipe, with the opposite side around the neck of the fitting.
- 2. Squeeze the disconnecting tool with one hand until the release collar in the fitting is depressed. With the other hand, twist out the tube/pipe using the thumb as a lever against the tool to assist disconnection.
- **3.** Check the fitting and tube/pipe for damage before remaking the joint.



**4.** The plastic disconnecting clip may be used where only where an occasional disconnecting facility is required.

(You cannot demount Sprint or Advance fittings)

# Demounting with TDX demounting end caps

Tectite Pro and Tectite 316 fittings in 35mm to 54mm sizes are supplied with conventional black end caps. If you intend to demount the fitting on a regular basis, a TDX demounting end cap should be purchased separately and substituted for the standard end cap. A DTX Tectite end cap tool will also be required.

Due to the potentially high frequency with which TX61/TS61 stop ends may be demounted, they are supplied with the TDX end caps fitted as standard.

Demounting the fitting from the tube is a simple process when TDX demounting end caps have been installed in the fittings. Ensure the system is de-pressurised and drained.

- 1. To remove the tube from the fitting, insert the prongs of the Tectite DTX end cap tool in the recesses in the status indicator (2) and turn anti-clockwise fully. The status indicator will withdraw into the fitting, indicating that the fitting is in the de-mountable position. Using a 'clockwise' twisting and pulling action the tube can now be removed.
- **2.** Before reusing the fitting, the status indicator must be returned to the mounted position (protruding).

Important: If the status indicator is not in the protruding position, the assembly will not withstand full system pressure.









# Demounting end cap

If regular demounting of a particular fitting is envisaged TDX demounting end caps should be purchased separately and installed in the fitting body.



# **Standard** black end caps

Fittings with standard black end caps can be demounted from the tube by unscrewing the end cap with the Tectite DTX end cap tool and snipping off the grab ring with side cutters, discarding both grab ring and '0' ring. A new grab ring and '0' ring must be used when reassembling the fitting (see the disassembly section).

# Disassembly

Replacing the 'O' ring on 35mm to 54mm Tectite Pro and Tectite 316 fittings is easily achieved by disassembling the fitting.



- 1. Have replacement parts for the discarded items ready for insertion. Using a spanner on the fitting flats to prevent the fitting from rotating, insert the Tectite DTX end cap tool into the slots in the end cap. Turn the tool anti-clockwise to unscrew the end cap and slide it along the tube away from the fitting body.
- 2. Pull the tube out of the fitting body.
- 3. Remove and discard the '0' ring.
- 4. Remove and retain the alignment ring.



5. Snip off the grab ring with side cutters and discard.

# Reassembly

Tectite Pro grab rings (TX105) and Tectite 316 grab rings (TS106) are not interchangeable. Care must be taken when replacing grab rings to ensure that only the correct grab ring is used.

1. Before re-assembly have replacement parts for the discarded items ready for insertion, ensuring all the components are clean and the 'O' ring is lubricated using S130 Silicone lubricant from the XPress accessories range. Replace the components in the correct order, as shown, and check they are fully seated in the fitting body.

Note: The grab ring operates with an interference fit in the body to provide electrical

continuity. Therefore, the end cap must be tightened down flush with the fitting body.

- 2. Screw the end cap back into the fitting until hand tight. If resistance is felt and the end cap is not flush with the fitting body, remove the end cap and ensure the grab ring is fully located i.e. fully in contact with the alignment ring. Again screw the end cap into the fitting until hand tight. Temporarily insert a 300mm length of deburred tube into the fitting BUT NOT THROUGH the grab ring to help locate the demount tool. Tighten the end cap a further 8mm to 10mm. Remove the tube.
- 3. Before reinstalling the fitting back into the system, check the end of the tube for damage. If the tube is scored or damaged, remove the affected section with a tube cutter and prepare the tube end as described in preliminaries and tube preparation (page 58).
- 4. Reinsert the tube into the fitting up to the tube stop, ensuring the socket depth mark corresponds with the mouth of the fitting and that the finished joint is secure.

# Replacement '0' rings



TX100 replacement '0' rings and TX105/TS106 grab rings are available (sizes 35mm to 54mm) in the event that any are lost or damaged on-site. We recommend the use of S130 Silicone lubricant grease available from the XPress range to aid insertion of the replacement '0' ring into the fitting as these '0' rings are supplied unlubricated.

Once the end cap has been unscrewed the other components can be removed and replaced if necessary.



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