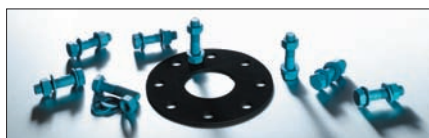


**tyco** / Flow Control / **Tyco Waterworks**

**Mains Fittings and Valves**  
40mm to over 2,200mm



Tyco Waterworks has brought together some of the best known and respected brands in the water, gas and municipal industries to provide a single source of supply for almost every product involved in the distribution infrastructure.

Tyco Waterworks can also supply a vast range of additional products from our sister companies throughout the world. Products such as valves and large diameter fittings from names such as Laya, Sapag, Bayard and Belgicast.

**tyco** / Flow Control / **Tyco Waterworks**

## Mains Fittings



### Mains Flange Adaptors, Couplings and End Caps

The Tyco Waterworks range of mains couplings, flange adaptors and end caps suits almost every type and size of mains pipe available. Fittings are supplied fully assembled and ready for installation and are coated in to WIS 4-52-01 to give excellent installed life spans.

Fittings are offered to suit both rigid pipes and PE pipes and are available with either extensive fitting tolerances or can be made to customers exact specification in order to suit most installation configurations.

### Valves and Shut off Devices

Tyco Waterworks can supply, directly from their extensive valve stocks at their UK distribution centre in the Midlands, a wide range of valve types and valve sizes from some of the best known manufacturers in the world today. Valves such as gate valves, air valves, float valves, and butterfly valves from names including Belgicast, Bayard, Iprosa and Sapag can be supplied ex stock and at competitive prices. A full range of ancillary products including extension spindles, flange adaptors, couplings, fasteners and flange gaskets are also available. This availability combined with in-house valve actuation facilities, makes Tyco Waterworks a key valve supplier into the Water and Municipal markets.

### Mains Repair Fittings

The repair and maintenance of supply distribution infrastructures is vital in order to reduce operating costs and conserve the water or gas supply.

The range of Tyco Waterworks repair solutions for mains pipe will cope with most of the causes of leakage, from a leaking ferrule through to a fractured water main or damaged socket and spigot connection. Products can be supplied on short lead times and can often be fitted whilst the main is still pressurised so reducing the time taken and costs incurred to make the repair.

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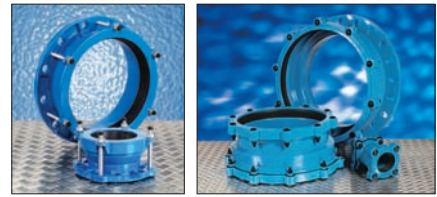
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[www.tycowaterworks.com](http://www.tycowaterworks.com)

## UPE Wide Tolerance Couplings, Flange Adaptors and End Caps for Rigid Pipes - 32mm to 800mm

The UPE range of wide tolerance fittings for rigid pipes can be used with almost any plain-ended rigid pipe material from 32mm to over 800mm pipe nominals. This flexibility makes it a versatile and economical range to use. All fittings are coated to WIS 4-52-01 and can be used with both water and gas applications.

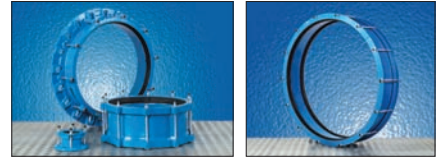
- UPE Universal Fittings - 40mm - 300mm
- UPE MultiDiameter Fittings - 32mm - 800mm



## UPE Engineered Couplings and Flange Adaptors and End Caps for Rigid Pipes - 80mm to 2,200mm

Engineered fittings offer an effective method of connecting any rigid pipe material from 80mm to 2,200mm.

- Connects pipe material of the same or different outside diameter in any combination.
- Engineered Flange Adaptors connect pipe to a wide range of flange specifications.
- Made to the customers exact requirements with a fitting tolerance of up to 11mm.



## Tyco Waterworks Fittings for PE Pipe - 63mm to 180mm

UPE SuperLok SL fittings are an efficient means of making fully end-load resistant connections to medium density polyethylene pipe (MDPE/PE 80) or high performance polyethylene pipe (HPPE/PE 100) from 63mm to 180mm.

- Type 1 end-load resistance as specified in WIS 4-24-01.
- Slip fitting for ease of installation.
- fully protected against corrosion to WIS 4-52-01.
- Can be used on gas or water distribution systems with a simple change of gasket.

The Talbot Pushfit mains range for PE pipe is available in a range of fittings from 63mm to 180mm in SDR11, SDR17 or SDR17.6.

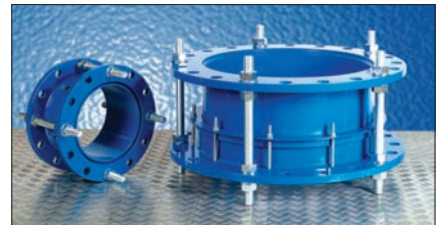
- Fittings are end load resistant needing no end restraint.
- Can quickly and easily be removed from the pipe if needed.
- Light weight and robust with no nuts or fasteners to leave undone.
- Coated to WIS 4-52-01 providing years of trouble free use and service.



## Associated Products

### UPE Dismantling Joints

- Offers benefits for the planning, installation and maintenance of all flanged fittings and flanged pipework with a nominal bore of up to 2,200mm.
- Significant longitudinal adjustment by way of the flanged spigot fitted within a flange adaptor body.
- The UPE Dismantling Joint offers a fully end load resistant connection.
- Coated in accordance with WIS 4-52-01.



### UnderPressure Tees

- A robust and flexible means of taking flanged connections of between 80mm and 1200mm diameter off water and gas mains.
- The universal tolerance and elastomeric seals ensure a leak free connection on all rigid pipe materials within the stated tolerance, including Ductile Iron, Cast Iron, Steel and uPVC.
- The operation of the UnderPressure Tee can be enhanced through the use of the UPE Converter Slide Valve, an economical and compact alternative to traditional gate valves.



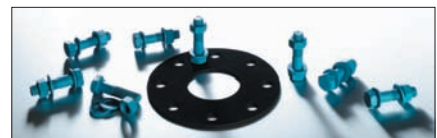
### UPE Converter Slide Valves

- An effective full bore construction valve that will allow underpressure drilling operations to be performed on water main pressures of up to 10bar as well as on low or medium pressure gas systems.
- Valve flanges are to BS4504, NP16 and each one is supplied complete with studs, nuts and washers.
- When fitted with a bypass valve to equalise the pressures over the valve plate, the slide valve can be used in conjunction with the range of UPE UnderPressure Tees providing an ideal base for branch drilling and flow stopping operations.



### Fasteners and flange bolt sets

- An extensive range that can be tailored to suit all customer needs.
- Flange gasket sets consist of a gasket and the appropriate number and type of fasteners for the size of flange in a clearly labelled bag.



## Mains Repair Fittings

The UPE range of repair fittings is a varied and extensive one with fittings available to solve virtually any repair situation encountered, from temporary emergency repairs through to permanent solutions or damaged socket and spigot connections.

### UPE UniSoc and UniSoc+ fittings

- For the fast, efficient repair of spigot and socket connections of water and gas pipes
- Repairs leaking ferrules or straps.
- Suitable for use on all spigot and socketed Cast Iron and Ductile Iron pipes.
- Supplied pre-assembled with two identical halves and two sets of gland rings.

### UPE MiniSoc Repair Collar

- For the fast and efficient repair of spigot and socket joints on metric PVC pipes.
- This small, compact unit gives significant savings in time, labour and material costs.

### UPE range of Stainless Steel Repair Clamps

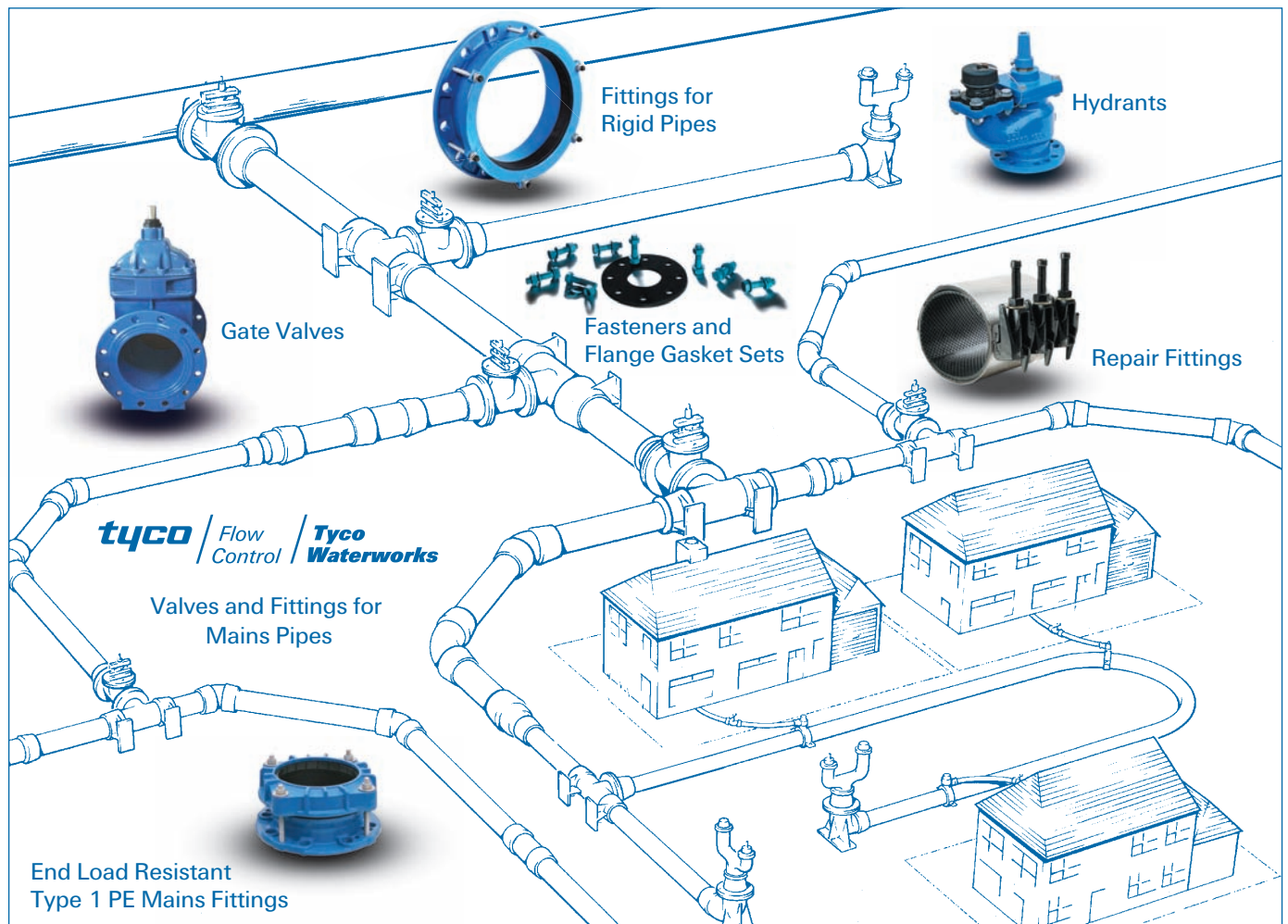
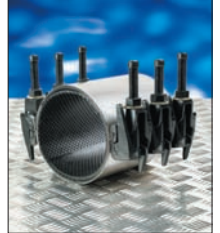
- Provides a quick, efficient and versatile method of repairing broken or damaged rigid pipe material from 15mm to 450mm (0.6" to 18") in diameter.
  - Mini Clamps - 15mm to 80mm (0.6" to 2.1")
  - Single Band Repair Clamps - 50mm to 450mm (2" to 18")
  - Double Band Repair Clamps - 50mm to 450mm (2" to 18")

### UPE SuperCollar

- A wide tolerance fitting for the repair of damaged rigid water or gas mains.
- Designed to stand lateral, axial and radial pipe movement.
- The large seal not only helps to give the fitting its considerable tolerance but also enables rough or corroded pipes to be sealed without extensive pipe preparation.

### UPE Leadless Split Collars and Ductile Split Collars

- For the repair of leaking water and gas mains.
- Can be used to take off services from existing pipelines through a ferrule or similar device inserted into the boss of the fitting.



## Valves and Shut off Devices



### Gate Valves - Soft Sealing and Metal Seated

- High performance valves manufactured in ductile iron to BS 5163 and EN 1074.
- Lightest valve available on the market providing easy handling and installation.
- Fully coated on both internal and external surfaces with epoxy.
- Fully encapsulated ductile iron wedge with EPDM rubber.
- Low friction wedge guides.
- All valves can be offered with a full range of electric actuators.
- Valves are available in size range 50mm to 1800mm.
- Low Headloss.
- Fully WRAS listed.

### Balanced Float Valve

- Diaphragm actuated for the control of water levels in reservoirs and storage tanks.
- Can be used with drinking water and fire protection networks, irrigation systems and high rise buildings providing low headloss.
- Can be flanged to either PN10 or PN16 in sizes DN 40 to 250 and are fully coated with a WRAS listed epoxy coating.

### Air Valves

- Designed for the automatic removal of air pockets from potable water and sewage pipelines.
- Available in sizes from DN 1" to 200mm and can be flanged or BSP mounted.
- Fully epoxy coated.

### Non-Return Valves and Check Valves

- Reduces damage to distribution networks through the elimination of water hammer.
- Available for use with clean to dirty water.
- A full range of Swing Check Valves, Reflux Check Valves, Tilting Disc & Wafer Check Valves are also available in sizes 50mm to 2000mm.

### Butterfly Valves

- Wafer, Lugged and Flanged Butterfly Valves for flow shut off and regulation.
- Available in sizes from DN 32 to DN 2400 with models suitable for PN16 & PN25.
- Ideal for use with supply and irrigation networks as well as with water treatment plants.
- Suitable for use with both clean or dirty water installations as well as with gas distribution networks
- Can be offered with a full range of pneumatic & electric actuators

### Type 2 Fire Hydrants

- Type 2 hydrants manufactured to BS 750.
- Supplied with fixed or loose stoppers and have low operating torques.
- Bubble tight shut off and an outlet to BS 750 part 5.2 figure 3.

### Pillar Type Fire Hydrants

- Non-freezing pillar type fire hydrants for connection above ground to mobile equipment for fire protection services

### Specialist Range of Water Fountains

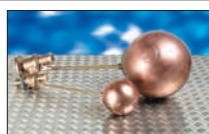
- Button operated water fountains for use in recreational areas and cemeteries for drinking & flower vase filling.

### Pressure Control Valves – Pilot Operated

- The Hydrostab range of pilot operated Control Valves can be supplied in various options including:
  - Pressure reducing valve
  - Pressure sustaining valve
  - Flow rate control valve.

### Pressure Reducing Valves – Direct Operated

- The Monostab range of pressure reducing valves are available in 50mm to 200mm sizes and with two output spring ranges 1.5 to 6 bar and 5 to 12 bar.



Standard Outside Pipe Diameter Guide Chart

Nominal Bore	Imperial Cast Iron and A C (turned end) BS 1211 (up to and including 27" NB) BS78, BS486			Steel						UPVC		ABS	Ductile Iron	GRP	Metric AC (turned end) BS486		
	Class AB Only	Class CD Only	Non Standard	ISO/4200			BS1387	BS3600 & BS3601 (pipe ends to BS534)	API 5L & BS1600 (up to and including 36"NB)	BS3505	BS3506	BS5391	BS4772 DIN28601 DIN28602 DIN28603	BS5480	Class 15	Class 20	Class 25
				Ser 1	Ser 2	Series 3											
15mm 0.5"				21.3				21.3	21.4	21.4	21.4	21.4					
20mm 0.75"				26.9	25.0	25.4		26.9	26.8	26.7	26.8	26.8					
25mm 1"				33.7	32.0	30.0	35.0	33.7	33.6	33.4	33.6	33.6					
32mm 1.25"				42.4	40.0	44.5		42.4	42.3	42.2	42.3	42.3					
40mm 1.5"	55.9	55.9 2.20	57.0 2.20	48.3 2.25	57.0	54.0		48.3	48.3	48.3	48.3	48.3	56.0 DIN	28601			
50mm 2"	69.1 2.72	69.1 2.72		60.3	63.5			60.3	60.3	60.3	60.3	60.3	66.0 DIN 28605				69.0
65mm 2.5"	82.3 3.24	82.3 3.24	82.5 3.25	76.1	70.0	73.0		76.1	76.1	76.1	75.2	75.2	82.0 DIN 28605				
80mm 3"	95.5 3.76	95.5 3.76		88.9		82.5		88.9	88.9	88.9	88.9	88.9	98.0				96.0
90mm 3.5"				101.6	101.6			101.6	101.6								
100mm 4"	121.9 4.80	121.9 4.80		114.3	127.0	108.0		114.3	114.3	114.3	114.3	114.3	118.0				122.0
125mm 5"	149.4 5.90	149.9 5.90		139.7	133.0	141.3	152.4	139.7	139.7	141.3	140.2	140.2	144.0 DIN 28601/3				
150mm 6"	177.3 6.98	177.3 6.98		168.3		159.0	177.8	165.1	168.3	168.3	168.3	168.3	170.0		177.0		177.0
175mm 7"	204.7 8.06	204.7 8.06				193.7			193.7			193.7					
200mm 8"	232.2 9.14	232.2 9.14		219.1				219.1	219.1	219.1	219.1	219.1	222.0	222.0	232.0	232.0	240.0
225mm 9"	259.1 10.20	259.1 10.20				244.5			244.5			244.5			259.0	259.0	268.0
250mm 10"	286.0 11.26	286.0 11.26		273.0				273.0	273.1	273.0	273.0		274.0	272.0	286.0	286.0	295.0
300mm 12"	333.8 13.14	333.8 13.6		323.9				323.9	323.9	323.9	323.9		326.0	324.0	334.0	345.0	356.0
350mm 14"	386.6 15.22	399.3 15.72		355.6				355.6	355.6	355.6	355.6		378.0	376.0	392.0	405.0	419.0
375mm 15"	413.0 16.26	426.2 16.78															
400mm 16"	439.0 17.30	453.1 17.84		406.4				406.4	406.4	406.4	406.4		429.0	427.0	448.0	463.0	478.0
450mm 18"	492.3 19.38	506.9 19.96		457.0				457.0	457.0	457.0	457.0		480.0 (BS only)	478.0	498.0	515.0	532.0
500mm 20"	545.1 21.46	560.3 22.06		508.0				508.0	508.0	508.0	508.0		532.0	530.0	568.0	586.0	605.0
525mm 21"	571.5 22.50	587.2 23.12															
550mm 22"	597.9 23.54	613.7 24.16				559.0		559.0	559.0		559.0						
600mm 24"	650.2 25.60	667.0 26.26		610.0				610.0	610.0	610.0	610.0		635.0	633.0	654.0	672.0	691.0
650mm 26"	702.6 27.66	720.3 28.36				660.0		660.0	660.0								
675mm 27"	728.9 28.70	746.8 29.40															
700mm 28"	754.9 29.72	773.2 30.44		711.0				711.0	711.1				738.0	718.0	761.0	780.0	801.0
750mm 30"	807.2 31.78	826.0 32.52			762.0			762.0	762.0						808.0	830.0	852.0
800mm 32"	859.5 33.84	879.3 34.62		813.0				813.0	813.0				842.0	820.0	869.0	891.0	915.0
825mm 33"	886.0 34.88	905.8 35.6															
850mm 34"	912.4 35.92					864.0		864.0	864.0						927.0	952.0	977.0
900mm 36"	964.2 37.96	984.5 38.76		914.0				914.0	914.4				945.0	924.0	970.0	996.0	1024.0
1000mm 40"	1068.3 42.06	1090.2 42.92		1016.0				1016.0	1016.0				1048.0	1027.0			
1050mm 42"	1120.6 44.12	1143.0 45.00		1067.0				1067.0	1097.0								
1100mm 44"	1172.5 46.16			1118.0					1118.0				1152.0 (BS only)	1144.0			
1200mm 48"	1276.6 50.26	1300.5 51.20		1219.0				1219.0	1220.0				1152.0 (BS only)	1228.0			
1300mm 52"					1321.0				1320.8					1350.0			
1400mm 56"				1422.0				1422.0	1422.4				1462.0 (BS only)	1449.0			
1600mm 64"				1626.0				1626.0	1626.0				1668.0 (BS only)	1640.0			

The above table represents a general guideline relating to some of the pipe types and sizes available. A wall chart is available showing the above information including sizes up to 2 meters. For a copy and for more detailed information please contact the UPE Customer Service Department on the number shown on the back of this data sheet.

## Service Fittings From Tyco Waterworks

The Tyco Waterworks range of service fittings is extensive and combines with the mains range shown in this data sheet to provide a range that has been progressively extended to create a single source of supply for all of your pipe fitting needs.

### Service Couplings and Adaptors

- Fittings available for most pipe materials and in sizes from 16mm through to 63mm as well as the imperial equivalents.
- The range consists of the quick and easy to use plastic Talbot Pushfit connection through to traditional gunmetal compression fittings.
- All fittings are robust and easy to use, needing no special tools or equipment in order to create a secure and leak free connection.



### Service Repair Fittings

- Designed to cope with a range of repair situations for service pipe.
- Copes with most of the causes of leakage, from a permanent repair to a temporary or emergency repair.
- Fittings can often be fitted whilst the main is still pressurised so reducing the time taken and damage and costs incurred to make the repair.



### Boundary Boxes, Manifolds and Chamber Systems

- Boundary Boxes - Below Ground
- Boundary Boxes - Above Ground
- Manifold Systems
- Chamber Systems
- Systems can be:
  - Sealed or un sealed.
  - Telescopic or utilising a fixed height guard tube that can be easily cut to length on site.
- Systems are available for use in areas of contaminated land.
- Manifold systems can be supplied either with or without an integrated chamber system.



### Stop Cocks and Shut Off Devices

Extensive range of fittings available for most pipe materials.

- Available in a variety of configurations.
- BS5252 Gunmetal Plug Cocks.
- BS5463 Gunmetal Stopcocks.
- WIS 4-23-04 Plastic Stopvalves.
- Bib Taps and Sampling Taps.
- Talflo water saving valves for use with community stand posts.



### Straps and Ferrules for Service Take Offs

- Self Tapping Ferrule Straps
- Swivel Ferrules
- Flat Boss Straps
  - Can be used to connect PE, copper and threaded pipes to almost any type and size of mains pipe material from 32mm in diameter.
  - Straps are available up to 15mm in diameter as standard with larger sizes available on request.
  - Ferrules can be inserted directly into suitable mains pipe of any size as long as both wall section and wall strength allow.

## Tyco Waterworks

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### Further Information and Technical Help

For further product specifications and technical data, on these products as well as other products in the Tyco Waterworks range please contact our Customer Service Department at the telephone number shown to the left.

We reserve the right to change the design and specification without notice.

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