

# HOUSE CONNECTION

---

INTRODUCTION	236
PRODUCT SELECTION	238

## **METER BOXES**

TALBOT MATRIX SINGLE	240
ATPLAS SINGLE	242
EBCO SINGLE	244
INLINE SINGLE	246
DOUBLE METER BOXES	248
MULTIMANIFOLD	249

## **TAPPING SYSTEMS**

FLAT BOSS SADDLES	250
SWIVEL FERRULES	251
COMBINED SADDLE FERRULES	252
SELF TAPPING FERRULE STRAPS	253
ABSP	254
SERIES C/SC/PVCFIX	256
SERIES Z	258
ROC GT2	260
SERIES 700	262

SERIES 800	263
SERIES 1300 & 2300	264
SERIES 1400	266

## **SERVICE FITTINGS**

TALBOT PUSHFIT	268
GRIPPA	270
EBCO COMPRESSION FITTINGS	272
EBCO THREADED FITTINGS	274

## **SERVICE VALVES**

MANIFOLDS	276
EBCO METAL STOPCOCKS	278
TALBOT PLASTIC STOPCOCKS	278
BAYARD SERVICE VALVES	278
SCHMIEDING SERVICE VALVES	278
BELGICAST SERVICE VALVES	278

<b>SURFACE BOXES</b>	279
TALBOT STOPVALVE CHAMBERS	280

# HOUSE CONNECTION

---

HOUSE CONNECTION PRODUCTS COMPRISE EVERYTHING BETWEEN THE WATER SUPPLY MAIN AND THE CUSTOMER'S HOUSE.

THE TALIS RANGE INCLUDES TAPPING SYSTEMS, WATER METER BOXES, SURFACE BOXES AND SERVICE FITTINGS AND VALVES, TO SUIT ALMOST ALL INSTALLATION SITUATIONS AND CONNECT TO A WIDE RANGE OF DIFFERENT PIPES. THEY MEET THE MOST STRINGENT DRINKING WATER REQUIREMENTS AND COMPLY WITH ALL INTERNATIONALLY APPLICABLE STANDARDS, APPROVALS AND TESTING REQUIREMENTS.

UP TO  
**1300**  
CM  
MAINS PIPE TAPPING

**16-63**  
MM  
SERVICE PIPE  
FITTINGS

**EXTENSIVE  
RANGE**  
WITH ALL RELEVANT  
APPROVALS

**RELIABLE**  
AND LEAK FREE

**3000**  
ARTICLES  
IN THE RANGE

**QUICK &  
SIMPLE**  
TO INSTALL

**ROBUST**  
AND LONG LASTING

# TALIS' ANSWERS



TALIS offers house connection products for connection of drinking water and irrigation water. The use of innovative materials and connections mean robust and long lasting connections can be made. TALIS house connection products are chosen and installed by water companies and contractors across the world, where their ease of installation and reliability of operation are well known. They are available from stock from many established distributors and agents worldwide.

TALIS sales representatives are available to help you select the right product for the job and to make sure that you have trouble free installation.

Innovation has been the foundation of our success and our products have evolved to meet both the technical and cost criteria encountered.

Meter boxes are available in different heights, for underground fitting of concentric or in-line water meters, and for the installation of between one and six meters. For apartment blocks, larger meter manifolds are available. Meter boxes prevent freezing of the water supply, whilst providing an easy way for the water meter to be read.



Self tapping ferrule straps can be used to make a tapping without the need for a drilling machine. The ferrules are supplied with an integrated cutter for the mains pipe, which can be simply operated by hand using a ferrule key.

Where additional shutoff is required, the ERHARD ABSP can be installed, which has an integrated stainless steel rotary disc. With this, the water supply can be isolated in order to change the main isolating valve even under pressure.

The Talbot Pushfit connection is a tried and tested method of connecting low, medium and high density metric polyethylene water pipes from 16mm to 63mm. It is quick and easy to use – simply push the pipe into the fitting. The fitting's grip and seal onto the pipe increases with water pressure and tensile load, meaning that the pipe will burst or neck before the fitting connection fails.



## STANDARDS

Products meet all applicable local standards and have all necessary certifications.

## PROVEN RECORD

TALIS house connection products have been sold in the marketplace for many years, giving peace of mind that they are fit for purpose and long lasting.

## CORROSION RESISTANCE

With products made from either epoxy-coated ductile iron, gunmetal or robust plastics, TALIS house connection products are corrosion resistant to ground conditions.

## EASY TO FIT

Products are easy to fit, even when working in trench conditions.

## TAPPING SYSTEMS

### GUNMETAL



Gunmetal ferrules, straps and self tapping saddles take a service line off an existing mains pipe. Ferrules are generally used for PE or cast iron pipes, for others a strap is also required. Self tapping ferrule straps contain an integrated cutter for making the tapping into the mains pipe. Ferrules contain an integrated isolating valve.

#### APPROVALS

WRAS

#### DIMENSIONS

**Mains Pipe:** 55-330mm  
**Outlet:** 15-63mm

### ROC GT2



Takes a service line off an existing mains pipe, with a metric boss in either M40 or M55 for connection to an isolating valve. Tapping is made with a suitable tapping machine.

#### APPROVALS

ACS

#### DIMENSIONS

**Mains Pipe:** 40-700mm  
**Outlet:** M40 / M50

### ABSP



Takes a service line off an existing mains pipe, with a boss for connection to an isolating valve. Ductile iron tapping saddle with integrated rotary disc closure to isolate the water supply and allow the replacement of the main valve even under pressure.

#### APPROVALS

DVGW

#### DIMENSIONS

**Mains Pipe:** 80-300mm  
**Outlet:** 1 1/2"

### Z SERIES



The Z series of ductile iron tapping saddles take a service line off an existing mains pipe and has an additional tongue made of Hostaform which shuts off the water to allow replacement of the main isolating valve even under pressure.

#### APPROVALS

DVGW

#### DIMENSIONS

**Mains Pipe:** 65-400mm  
**Outlet:** 32-63mm

### C/SC/PVCFIX SERIES



The C/SC and PVCFIX series of tapping saddles take a service line off an existing mains pipe. Some models have an integrated isolating valve, and the PVCFIX has an integrated cutter for making the tapping into mains PVC pipe.

#### APPROVALS

DVGW

#### DIMENSIONS

**Mains Pipe:** 65-300mm  
**Outlet:** 1 1/2" - 2"

### SERIES 700



Made from ductile iron with an anticorrosive coating, the Series 700 range takes a service line off an existing mains pipe. It is ideally suited to irrigation pipelines, as well as for drinking water.

#### APPROVALS

-

#### DIMENSIONS

**Mains Pipe:** 30-300mm  
**Outlet:** 3/4" - 3"

### SERIES 800



The Series 800 is a multidiameter saddle which takes a service line off an existing mains pipe. It can also be used as a pipe repair clamp or a GIBAULT joint, and is suitable for all pipe types.

#### APPROVALS

-

#### DIMENSIONS

**Mains Pipe:** 58-225mm  
**Outlet:** 1" - 2"

### SERIES 1300/2300



Made from ductile cast iron, the Series 1300 takes a service line off existing PE and PVC mains pipes. The 1300 series has a threaded outlet for pipe connection, the 2300 series is for flange connection.

#### APPROVALS

-

#### DIMENSIONS

**Mains Pipe:** 25-400mm  
**Outlet:** 1/2"-2"/40-150mm flange

### SERIES 1400



Made from ductile cast iron, the Series 1400 takes a service line off an existing mains pipe. The 1410 series has a spatula for isolating the water supply between drilling and fitting a service connection or isolating valve. The series 1425 is for flange connection. Both series are fastened to the pipe with a stainless steel strap (Series 1450).

#### APPROVALS

-

#### DIMENSIONS

**Mains Pipe:** 50-1300mm  
**Outlet:** 1/2" - 3"

## METER BOXES

### METER BOXES



Meter boxes are buried, usually in pavements and house a stop valve and a water meter in an easily accessible and safe environment.

#### APPROVALS

WRAS

#### DIMENSIONS

Inlet / Outlet: 20-32mm

## SERVICE FITTINGS

### TALBOT PUSH FIT FITTINGS



Push fit fittings from 16-63mm for easy and fast connection PE or PVC pipes.

#### APPROVALS

WRAS, ACS

#### DIMENSIONS

Inlet / Outlet: 16-63mm

### METAL FITTINGS



Threaded gunmetal pipe fittings from 1/4" to 4" for connection of pipes and fittings. Compression fittings for PE pipes 20-63mm and copper pipes 15-54mm.

#### APPROVALS

-

#### DIMENSIONS

Inlet / Outlet: 20-63mm

## SERVICE VALVES

### SERVICE VALVES & MANIFOLDS



A service valve, or stop or isolation valve, is used to cut off the water supply. Manifold systems divide a water service supply pipe into virtually any number of outlets, each outlet having its own shut-off device and the option for individual metering facilities. It can be used above ground in meter rooms and in crowded areas for multi-dwelling developments.

#### APPROVALS

WRAS, DVGW, ACS

#### DIMENSIONS

Inlet / Outlet: 20-63mm

## SURFACE BOXES

### ALL IN ONE SURFACE BOXES



All in one surface boxes are used to house a stop cock or similar shut off device in a secure and convenient environment. The base comes with an integrated stopcock and water inlet and outlet connections.

#### APPROVALS

WRAS

#### DIMENSIONS

Inlet / Outlet: 20-32mm

### SURFACE BOXES



Surface boxes comprise a tube and a top with removable lid. They sit above an isolating valve connected to the mains pipe via a tapping saddle, and allow the isolating valve to be operated via a long key.

#### APPROVALS

-

#### DIMENSIONS

-

## METER BOXES

## ATPLAS RANGE

### TALBOT MATRIX SINGLE

The TALBOT MATRIX meter box is a telescopic, self-contained chamber system that is used to provide a safe and clean underground environment for concentric water meters. Its small, stable footprint makes it easy to install with minimal excavation. The fully sealed box is height adjustable and comes with a rotatable tilt lid to align with paving materials and gradients. It comes with integrated pipe connections, isolating valve and meter carrier.



#### MARKETS



House  
connection

#### TECHNICAL DATA

##### Nominal Pressure (PN):

Working: 16 bar

#### APPROVALS

WRAS approved  
Compliant with WIS 4-37-01

#### ADVANTAGES

##### ACCESS

Easy access through the removable lid for the consumer or meter reader to read the water meter.

##### FROST-FREE

Manifold and water meter remain frost free under prolonged surface frost to at least -15°C.

##### EASY

Stable injection moulded height adjustable polypropylene box with small footprint so requiring minimal excavation, making installation fast and easy.

#### CHARACTERISTICS

└ **Telescopic chamber** – One single moulding reduces the risk of ground water getting into the system. The telescopic chamber combined with a final height adjustment of up to 50mm in the surface box gives excellent overall height adjustment.

└ **Ease of installation** – Small, stable footprint makes it easy to install in congested trenches and requires minimal excavation. The round surface box has a removable square flange that makes correct back filling easy. The surface box flange can also be rotated through 360° and the surface box has up to 8° of tilt making alignment with paving materials and gradients simple.

└ **Ease of operation** – The surface box lid provides excellent visibility and access to the meter and shut off device. The standard shut off device is a 1/4 turn ball valve that greatly reduces head loss and has a built in stop.

└ **16 bar pressure rating** – The 16 bar pressure rating not only exceeds the 8-10 bar normal working pressure, it also exceeds the typical 12 bar pressure rating of the pipe.

└ **Flexible connection system** – TALBOT Pushfit inlets and outlets are available in 20mm, 25mm and 32mm as well as Irish heavy gauge.

CONNECTIONS	SHUT OFF	HEIGHT
20mm push fit	360 degree	470-850mm
25mm push fit	1/4 turn	470-850mm
25mm push fit	360 degree	470-850mm
32mm push fit	1/4 turn	470-850mm
32mm push fit	360 degree	470-850mm
25mm push fit	1/4 turn	281-495mm

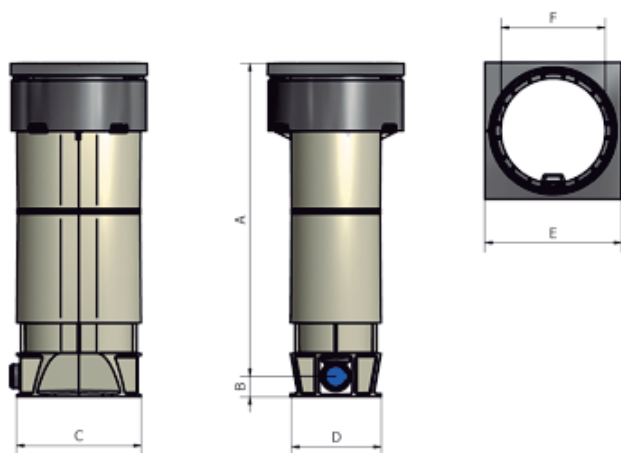
## FEATURES

└ **Chamber** – The Matrix chamber consists of two sections, an upper and a lower chamber unit. These units are moulded in one piece so reducing the number of potential leak paths and helping to ensure that ground water is kept out of the chamber. The chamber units are white and give good visibility of the meter. They combine telescopically giving a height adjustment in the standard Matrix Boundary box of between 470mm and 850mm without the need to cut the chamber to length.

└ **Surface box** – The large lid can be opened clear of the chamber opening providing excellent visibility and access into the chamber for easy meter reading. The square flange on the surface box can be removed to aid back filling during installation. The square flange can be rotated through 360° aiding alignment with surface materials. The surface box is designed in such a way as to allow extensive final adjustment. The surface box provides a combination of up to 8° tilt in any plane and a height adjustment of up to 50mm, making final alignment with surface materials and gradients an easy procedure. It is fitted with a galvanised steel detector plate.

└ **Inlets/Outlets** – The Matrix box is available with several different types and sizes of connection, including TALBOT push fit, to suit a variety of pipe sizes and materials including metric, imperial and Irish heavy gauge PE pipes.

└ **Meter housing** – Matrix uses a combined meter housing and shut off device that is moulded as a single unit with an integral, removable single check valve. This single moulding eliminates many potential leak paths. The shut off device is an all plastic quarter turn ball valve with an integral stop. There are also two lengths of key available to suit customer needs, which have a built in torque overload feature that reduces the risk of damaging the unit through over tightening. The valve is also designed to provide low head loss. The meter housing accepts industry standard end fitting G 1½" threaded (concentric) meters up to Qn 2.5m³/hour.



A (MIN/MAX)	B	C	D	E	F
281/850mm	35mm	208mm	151mm	227mm	173mm



## METER BOXES

## ATPLAS RANGE

### ATPLAS SINGLE

The ATPLAS range of below ground meter boxes are products that are buried, usually in pavements and walk ways. The chamber houses the meter in an easily accessible and safe environment that house holders or meter readers can have easy and quick access to for meter reading or service shut off. ATPLAS boxes are telescopic, height adjustable boxes manufactured from robust DMC. They are designed for use with concentric water meters.



#### MARKETS



House  
connection

#### TECHNICAL DATA

##### Nominal Pressure (PN):

Working: 16 bar

#### APPROVALS

WRAS approved  
Compliant with WIS 4-37-01

#### ADVANTAGES

##### ACCESS

Easy access through the removable lid for the consumer or meter reader to read the water meter.

##### FROST-FREE

Manifold and water meter remain frost free under prolonged surface frost to at least -15°C.

##### RANGE

Available in two different heights, sealed or unsealed boxes, with ¼ turn or screwdown valves and a range of inlet and outlet dimensions.

#### CHARACTERISTICS

└ **Range** – The flexibility of the ATPLAS range of boundary boxes provides a variety of options, from sealed or un-sealed to screwdown or ¼ turn control valves. Available as a short version for use in shallow service situations.

└ **Connections** – Standard push fit connections suit PE pipe and 3/4" female threaded connections for use with male threaded fittings means that almost any type of service pipe can be catered for.

└ **Surface box** – The robust plastic surface box has a load bearing performance of over 30kN. The removable square surface box flange aids back filling and can be rotated through 360° to make final alignment with paving materials easy. If needed a round surface box profile can be supplied to suit other surface

materials. Up to 8° tilt and 30mm of final height adjustment on the surface box allows for easy and accurate alignment with surface levels and gradients. Excellent visibility and access to both the meter and control valve is provided by the surface box lid.

└ **16 bar pressure rating** – The 16 bar pressure rating not only exceeds the 8-10 bar normal working pressure, it also exceeds the typical 12 bar pressure rating of the pipe.

SEALED/UNSEALED	CONNECTIONS	SHUT OFF	HEIGHT	LID
Sealed	25mm Pushfit	Rising spindle	500-865mm	Tilt pluck swivel square
Sealed	32mm Pushfit	Rising spindle	500-865mm	Tilt pluck swivel square
Sealed	3/4" Female	Rising spindle	500-865mm	Tilt pluck swivel square
Sealed	25mm Pushfit	Rising spindle	500-865mm	Tilt pluck swivel round
Sealed	32mm Pushfit	Rising spindle	500-865mm	Tilt pluck swivel round
Sealed	3/4" Female	Rising spindle	500-865mm	Tilt pluck swivel round
Sealed	3/4" Female	Rising spindle	270-385mm	Tilt pluck swivel square
Unsealed	25mm Pushfit	Rising spindle	500-865mm	Tilt pluck swivel square
Unsealed	32mm Pushfit	Rising spindle	500-865mm	Tilt pluck swivel square
Unsealed	3/4" Female	Rising spindle	500-865mm	Tilt pluck swivel square
Unsealed	3/4" Female	Rising spindle	270-385mm	Tilt pluck swivel square
Unsealed	25mm Pushfit	1/4 Turn	500-865mm	Tilt pluck swivel square
Unsealed	32mm Pushfit	1/4 Turn	500-865mm	Tilt pluck swivel square
Unsealed	3/4" Female	1/4 Turn	500-865mm	Tilt pluck swivel square
Unsealed	3/4" Female	1/4 Turn	270-385mm	Tilt pluck swivel square
Unsealed	25mm Pushfit	Rising spindle	500-865mm	Tilt pluck swivel round
Unsealed	32mm Pushfit	Rising spindle	500-865mm	Tilt pluck swivel round
Unsealed	3/4" Female	Rising spindle	500-865mm	Tilt pluck swivel round
Unsealed	3/4" Female	Rising spindle	270-385mm	Tilt pluck swivel round

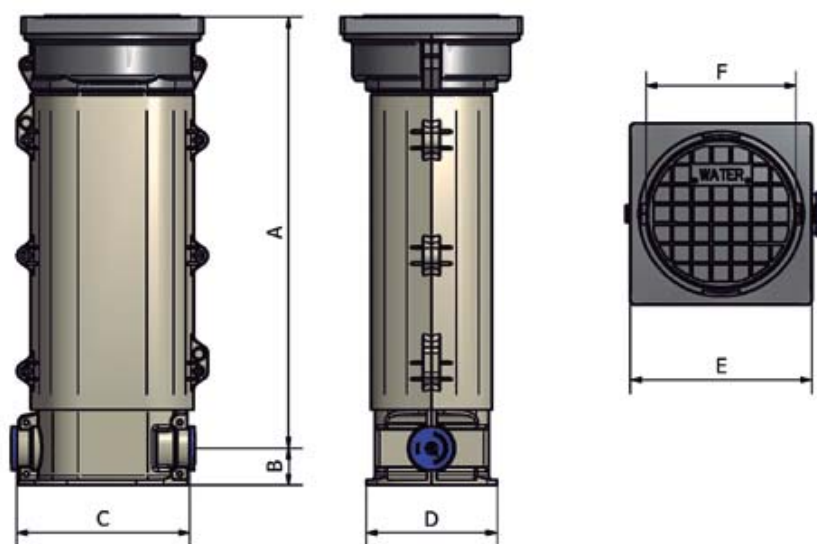
## FEATURES

└ **Chamber** – A stadium shaped chamber helps prevent rotation and is intended to transfer any torque resulting from meter installation/removal to the ground around it, through the 'flat sides' avoiding impact on service connections.

└ **Surface box** – The robust plastic surface box has a load bearing performance of over 30kN. The removable 210mm square surface box flange aids back filling and can be rotated through 360° to make final alignment with paving materials easy. If needed a round surface box profile can be supplied to suit other surface material. Up to 6° tilt and 30mm of final height adjustment on the surface box allows for easy and accurate alignment with surface levels and gradients.

└ **Meter housing** – The rising-spindle stop valve design helps minimise damage through possible over-tightening, using a piston and bore arrangement with positive stop points and torque failsafe in the key and valve cap. Valves can be replaced in-situ using appropriate tools and with regard for local regulations and working practices. Water flow is assisted by the 1" nominal bore through the manifold with its 1" Non-return valve adapted to suit the Concentric G1.5 meter interface.

└ **Inlets/Outlets** – The ATPLAS range is available with several different types and sizes of connection to suit a variety of pipe sizes and materials including metric, imperial and Irish heavy gauge PE pipes.



ATPLAS METERBOXES

A (MIN/MAX)	B	C	D	E	F
270/865mm	45mm	215mm	155mm	210mm	122mm

## METER BOXES

## ATPLAS RANGE

### EBCO SINGLE

The EBCO meter box range is designed for underground installation, giving access for the meter reader and the consumer in order to take meter readings. The range consists of sealed telescopic and unsealed telescopic or rigid boxes. They have either raised plastic manifolds or base gunmetal or plastic manifolds. The boxes come with integrated pipe connections, isolating valve and meter carrier for concentric water meters. A range of lids is also available.



#### MARKETS



House  
connection

#### TECHNICAL DATA

##### Working pressures:

Plastic Manifold: 12 bar  
Gunmetal Manifold: 16 bar

#### APPROVALS

WRAS approved.  
Compliant with WIS 4-37-01

#### ADVANTAGES

##### ACCESS

Easy access through the removable lid for the consumer or meter reader to read the water meter.

##### FROST-FREE

Manifold and water meter remain frost free under prolonged surface frost to at least -15°C.

##### RANGE

Boxes available to suit different installation situations, for example rigid or telescopic chambers, and gunmetal manifold for contaminated ground.

#### CHARACTERISTICS

└ **Circular chamber** – A light one piece unit with a slope/tilt plastic lid secured to the upper PVC guard tube. Both the inner (188mm diameter) and outer (200mm diameter) guard tube can be removed from the base during installation and cut to site requirement if needed. Available with a single rigid tube only. Robust flat base to sustain heavy surface loads. EbcO boxes may be sealed or unsealed to external ground water.

└ **Manifold** – Available with either base manifold, or raised manifold for easier meter reading. Manifolds are either plastic acetal or gunmetal for use in contaminated ground. A ¼ turn shutoff valve is included.

└ **Lids** – EBCO telescopic boxes are fitted with either a tilt pluck swivel square or snap shut sealed hinged lid, fitted with metal detector plate. EBCO rigid boxes are supplied without lids.

SEALED/UNSEALED	TELESCOPIC/RIGID	CONNECTIONS	SHUT OFF	MANIFOLD	HEIGHT	LID
Sealed	Telescopic	25mm Pushfit	¼ turn	Plastic raised	568-878mm	Tilt pluck swivel square
Sealed	Telescopic	¾" Female	¼ turn	Gunmetal base	470-730mm	Snap shut sealed hinged
Unsealed	Telescopic	25mm Pushfit	¼ turn	Plastic base	560-820mm	Tilt pluck swivel square
Unsealed	Telescopic	25mm Pushfit	¼ turn	Plastic raised	610-880mm	Tilt pluck swivel square
Unsealed	Telescopic	25mm Pushfit	¼ turn	Plastic raised	565-860mm	Snap shut unsealed hinged
Unsealed	Rigid	25mm PE pipe tail	¼ turn	Plastic raised	811mm	Supplied without lid
Unsealed	Rigid	25mm Pushfit	¼ turn	Plastic raised	695mm	Supplied without lid
Unsealed	Rigid	25mm Pushfit	¼ turn	Plastic base	674mm	Supplied without lid
Unsealed	Rigid	¾" Female	¼ turn	Plastic base	567mm	Supplied without lid
Unsealed	Rigid	¾" Female	¼ turn	Gunmetal base	677mm	Supplied without lid
Unsealed	Rigid	25mm PE pipe tail	¼ turn	Gunmetal pentagon raised	698mm	Supplied without lid
Unsealed	Ratchet	25mm Pushfit	¼ turn	Plastic raised	550-750mm	Fixed pluck swivel square
Unsealed	Ratchet	25mm PE pipe tail	¼ turn	Plastic raised	550-750mm	Fixed pluck swivel square
Unsealed	Ratchet	25mm Pushfit	¼ turn	Plastic base	550-750mm	Fixed pluck swivel square
Unsealed	Ratchet	25mm PE pipe tail	¼ turn	Plastic base	290-490mm	Fixed pluck swivel square

## FEATURES

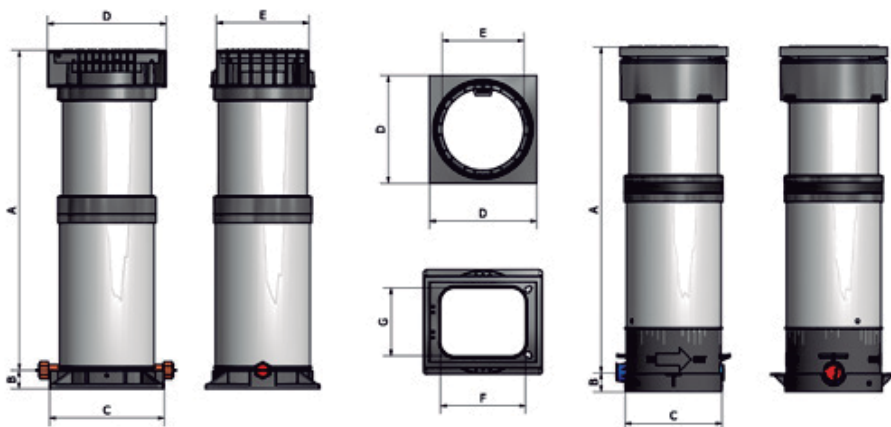
The EBCO range of boxes is available in different configurations:

└ **Telescopic box** – Height adjustable and available in sealed or unsealed variants with plastic base, plastic raised or gunmetal manifolds. Available lids are swivel square trim on top with a round tethered pluck lid or a swivel square trim with a hinged rectangular sealed lid.

└ **Rigid box** – Supplied as an unsealed box without a lid, available with plastic raised, plastic base, gunmetal base or gunmetal pentagon raised manifolds. 710mm high but can be cut down on site.

└ **Ratchet box** – As a lower cost alternative using fewer components, the ratchet box has a PVC guard tube with a PP telescopic head, adjustable in 5mm intervals from either 550-750mm or 330-530mm. It has a swivel square trim on top with a round tethered pluck lid. It is available with a base or raised plastic manifold.

└ **Pentagon manifold** – The pentagon manifold consists of a raised valve with test port downstream allowing tests to be done with the meter in situ. Where appropriate a pressure reducing valve can be fitted to the test port.



EBCO TELESCOPIC METERBOXES

A (MIN/MAX)	B	C	D	E	F	G
480/880mm	40mm	242mm max	225/251mm	173 /195mm	178mm	145mm

## METER BOXES

## ATPLAS RANGE

### INLINE SINGLE

The ATPLAS INLINE range of below ground meter boxes are products that are buried, usually in pavements and walk ways. The Inline range is for use with industry standard inline water meters to a length of 110mm and incorporates quick release meter mountings and a removable stop valve. A large surface box opening provides excellent access and visibility into the chamber making meter reading, installation and maintenance simple. ATPLAS boxes are telescopic, height adjustable boxes manufactured from robust DMC and PVC.



#### MARKETS



House  
connection

#### TECHNICAL DATA

##### Nominal Pressure (PN):

Working: 16 bar

#### APPROVALS

ACS approved

#### ADVANTAGES

##### TOOL-FREE

Removal and replacement of the water meter, isolating valve and check valve without tools.

##### FROST-FREE

Manifold and water meter remain frost free under prolonged surface frost to at least -15°C.

##### RANGE

Available in three different heights and a range of inlet and outlet dimensions.

#### CHARACTERISTICS

└ **Robust and long lasting** – Internal parts made of anticorrosive acetal resin, high pressure resistance up to 16 bar, high temperature resistance to -40°C.

└ **Lid** – Pluck out type with integral galvanised steel detector plate and securing strap

└ **Surface box assembly** - Provides up to 28mm of final height adjustment and up to 6° of horizontal tilt.

└ **Upper Chamber** – Stadium shape provides easy access to the meter and valve assemblies.

└ **Lower Chamber and Base** – Houses the service pipe Pushfit connections or tails as well as the meter manifold, check valve holder and stop valve assembly. A plastic grid just below the meter mounting stops items such as tools or spare

parts being dropped into the base footing whilst allowing any water or silt that may gain entry to the unit to drain away. This grid also allows warm air from the base of the unit to circulate within the chamber so aiding the thermal properties of the unit.

└ **Stopvalve assembly** – The quarter turn valve with an integral stop offers exceptionally low head loss and is moulded as a single unit. The valve operating key has a built in torque overload facility that reduces the risk of damaging the unit through overtightening.

└ **Check valve assembly** – Houses the check valve and drain/flushing ports.

DESCRIPTION	OUTLET	BOX HEIGHT
Short Box	25mm PE	500-700mm
Short Box	32mm PE	500-700mm
Short Box	25mm PE tails	500-700mm
Standard Box	25mm PE	700-950mm
Standard Box	32mm PE	700-950mm
Standard Box	25mm PE tails	700-950mm
Tall Box	25mm PE	900-1200mm
Tall Box	32mm PE	900-1200mm
Tall Box	25mm PE tails	900-1200mm



INLINE BOUNDARY BOX

## FEATURES

**Heights** – Available in three different heights, the standard box for most situations (700-950mm), Tall Box for use in situations where extreme cold conditions exist or in areas where there are deep services (700-1200) and the Mini Box (500-700mm) for use in situations where shallow services force the use of a reduced height box.

**Connections** – The ATPLAS INLINE Meter Box can be supplied with 25mm PE tails. These are supplied as standard in lengths of 200mm but can also be supplied in lengths of 2 meters. Talbot Pushfit connections can also be supplied with integral 25mm or 32mm Pushfit connections for PE pipe. This simple to use fitting has no nuts or loose components.

**Meter Replacement Tube** – The ATPLAS INLINE Meter Box is supplied with a full flow meter replacement tube located between the manifold unit and the check valve holder. This unit allows for testing of the unit to be carried out prior to meter fitment. The meter replacement tube is quickly and easily removed and replaced with an appropriate meter when required.

**Internal Access** – The large surface box opening provides excellent access and visibility into the chamber making meter reading, installation and maintenance simple.



## METER BOXES

## ATPLAS RANGE

### DOUBLE METER BOXES

Double meter boxes are available as either ATPLAS sealed or unsealed telescopic DMC moulded boxes or EBCO unsealed rigid boxes with PVC guard tube. They are available with one inlet and two outlets, allowing for the connection of two properties to one incoming connection pipe with two water meters contained inside the box. It is more convenient and lower cost than installing two separate meter boxes.



#### MARKETS



House  
connection

#### TECHNICAL DATA

**Nominal Pressure (PN):**  
Working: 16 bar

#### APPROVALS

WRAS approved  
Compliant with WIS 4-37-01

#### ADVANTAGES

##### EASE

Two properties can be served by one meter box.

##### FROST-FREE

Frost free under prolonged surface frost to -15°C.

##### RANGE

One/two inlets, two outlets, different dimensions.

#### CHARACTERISTICS

Boxes with plastic manifolds have 25mm or 32mm push fit inlets for PE pipe, twin push fit outlets 25mm. Gunmetal manifold boxes have either two 1/2" male inlets or one 1" female inlets, with two 3/4" female outlets. The single inlet version is ideal for new lay applications, whilst the twin inlet suits rehabilitation of existing infrastructure. ATPLAS box is telescopic 515-870mm high, EBCO box is either telescopic or a rigid box that can be cut on site.

TYPE	SEALED/ UNSEALED	INLET CONNECTIONS	OUTLET CONNECTIONS	SHUT OFF	HEIGHT	LID
ATPLAS	Sealed	32mm Pushfit	2x25mm Pushfit	Rising spindle	520-865mm	Tilt pluck oval
ATPLAS	Unsealed	32mm Pushfit	2x25mm Pushfit	Rising spindle	520-865mm	Tilt pluck oval
ATPLAS	Unsealed	32mm Pushfit	2x25mm Pushfit	1/4 turn	520-865mm	Tilt pluck oval
EBCO	Unsealed	2x25mm Pushfit	2x25mm Pushfit	1/4 turn	737mm	None
EBCO	Unsealed	32mm Pushfit	2x25mm Pushfit	1/4 turn	722-897mm	Snap shut unsealed hinged
EBCO	Unsealed	2x1" Male	2x3/4" Female	1/4 turn	600mm	None
EBCO	Unsealed	1" Female	2x3/4" Female	1/4 turn	600mm	None

## METER BOXES

## ATPLAS RANGE

### MULTIMANIFOLD

ATPLAS multimanifold meter boxes are available with either 4 ports or 6 ports. It has a 2" female inlet, and the outlets are 25mm push fit for PE pipe, with an 'eye ball' angular adjustment to help installation in congested trench conditions. The box allows for several water meters to be sited in one box, thus making installation faster and easier.



#### MARKETS



House  
connection

#### TECHNICAL DATA

**Nominal Pressure (PN):**  
Working: 16 bar

#### APPROVALS

WRAS approved  
Compliant with WIS 4-37-01

#### ADVANTAGES

##### EASE

Several properties can be served by one meter box.

##### FROST-FREE

Manifold and water meter remain frost free.

##### RANGE

One inlet, four or six outlets.

#### CHARACTERISTICS

ATPLAS multimanifold meter boxes are buried, usually in pavements and walkways. The box offers great flexibility and versatility. It is telescopic allowing for easy and precise adjustment. The small, stable footprint of the boundary box makes it easy to install in congested trenches and requires minimal excavation. The outlets on the box have an 'eye ball' angular adjustment to help installation in congested trench conditions.

SEALED/UNSEALED	CONNECTIONS	SHUT OFF
Sealed	2" Female x 4 x 25mm Pushfit	Rising spindle
Sealed	2" Female x 4 x 25mm Pushfit	¼ Turn
Sealed	2" Female x 6 x 25mm Pushfit	Rising spindle
Sealed	2" Female x 6 x 25mm Pushfit	¼ Turn
Unsealed	2" Female x 4 x 25mm Pushfit	Rising spindle
Unsealed	2" Female x 4 x 25mm Pushfit	¼ Turn
Unsealed	2" Female x 6 x 25mm Pushfit	Rising spindle
Unsealed	2" Female x 6 x 25mm Pushfit	¼ Turn



## TAPPING SYSTEMS

## ATPLAS RANGE

## FLAT BOSS SADDLES

EBCO and Talbot Flat Boss Saddles are designed for making service connections into PE, PVC, asbestos cement, cast iron, ductile iron and steel mains. A ferrule can then be inserted into the main via the strap boss using drilling and tapping equipment whilst the main is pressurised or dry. The range provides maximum thread engagement into the boss of the saddle and tapplings from ½" to 2" can be made into most flat boss straps. Solid flat boss straps can also be used as blanking straps for sealing existing holes in mains after removal of a ferrule. These straps are made from corrosion resistant materials to give years of trouble free service.



## MARKETS



House  
connection

## TECHNICAL DATA

**Nominal Pressure (PN):**

Working: 16 bar

Test: 24 bar

The pressures stated above apply  
with water temperatures up to 20°C

**Medium Temperature:** up to 40°C

## APPROVALS

Made from WRAS approved materials

## ADVANTAGES

**STRONG**

Robust materials for high  
strength installation.

**QUICK**

Efficient installation onto all  
common pipe types.

**LASTING**

Long life due to corrosion  
resistant materials.

## CHARACTERISTICS

└ **Gunmetal material** – Selected for its  
strength for reliable installation as well  
as being light weight for easy handling.  
Gunmetal is to BS EN 1982:2008 CC491K.

└ **Standards conformity** – Meets WRAS and  
WIS requirements for installation in the UK.

└ **Range** – For all mains pipe types 40-  
600mm, available with no tapping or ½" –  
2" tapping (see below table for details).

NOMINAL PIPE BORE	TYPE OF PIPE			SIZE OF TAPPING						
	Asbestos/ Cement/Cast Iron	Ductile Iron	PE/ PVC	No tapping	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
1 ½" (40mm)	X	-	X	X	X	X	-	-	-	-
2" (50mm)	X	-	X	X	X	X	X	-	-	-
3" (80mm)	X	X	X	X	X	X	X	X	X	-
4" (100mm)	X	X	X	X	X	X	X	X	X	X
5" (125mm)	X	X	X	X	X	X	X			
6" (150mm)	X	X	X	X	X	X	X	X	X	X
160mm	-	-	X	X	X	X	X	X	X	X
7" (175mm)	X	-	-	X	-	-	X	-	-	-
180mm	-	-	X	X	-	X	X	-	X	X
8" (200mm)	X	X	X	X	X	X	X	X	X	X
200mm	-	-	X	X					X	X
9" (225mm)	X	-	X	X	X	X	X	X	X	X
10" (250mm)	X	X	X	X	X	X	X	X	X	X
12" (300mm)	X	X	X	X	X	X	X	X	X	X
315mm	-		X	X		X	X		X	-
14" (350mm)	-	X	X	X	-	-		-	-	-
16" (400mm)	-	X	-	X	-	-	X	-	-	-
20" (500mm)	-	X	-	X	-	-		-	-	-
24" (600mm)	-	X	-	X	-	-	-	-	-	-

# TAPPING SYSTEMS

## ATPLAS RANGE

### SWIVEL FERRULES

EBCO and Talbot Swivel Ferrules provide a quick, permanent, leak free service connection, consisting of a stem with an inner plug for valve isolation and a 360° swivel outlet at 90° to the stem. The swivel outlet provides a direct connection to the service line via an integral joint in the ferrule banjo so no adaptor is needed. These ferrules will provide service connections, dry or under pressure, directly into cast iron, ductile iron or steel mains. Asbestos cement, PE and PVC mains can also be tapped via a Flat Boss Strap.



#### MARKETS



House connection

#### TECHNICAL DATA

##### Nominal Pressure (PN):

Working: 16 bar

Test: 24 bar

The pressures stated above apply with water temperatures up to 20°C

**Medium Temperature:** up to 40°C

#### APPROVALS

Made from WRAS approved materials

#### ADVANTAGES

##### QUICK

Fast installation onto all common pipe types.

##### LEAK FREE

Connection to the service pipe via integral joint.

##### EASY

Quick connection with swivel outlet at 90 degrees.

#### CHARACTERISTICS

└ **Range** – For direct connection to metal pipes, and plastic and cement pipes with flat boss saddles. Inlets from 1/2" to 2".

└ **Robust and long lasting** – Ferrules can provide years of service in even the most aggressive soil conditions.

└ **Standards conformity** – Meets WRAS and WIS requirements for installation in the UK.

└ **Reliable and leak free** – Specifically designed to operate at pressures up to 16 bar (240 psi) subject to the ratings of pipe and strap if used.

INLET SIZE		OUTLET SIZE			
BSPT Male	BSP Female Thread	Type B Copper	EBCO Push Fit for PE	EBCO-B for PE MDPE	Talbot push fit for PE
1/2"	1/2"	15mm	20mm	20mm/1/2"	20mm/1/2"
1/2"	3/4"	22mm	25mm	25mm/3/4"	25mm/3/4"
3/4"	1/2"	15mm	20mm	20mm/1/2"	1/2"
3/4"	3/4"	22mm	25mm	25mm/3/4"	25mm/3/4"
1"	1"	28mm	32mm	32mm/1"	32mm/1"
1 1/4"	1 1/4"	35mm	-	-	40mm
1 1/2"	1 1/2"	42mm	50mm	50mm/1 1/2"	50mm
1 1/2"	-	-	-	63mm/2"	63mm
2"	2"	54mm	63mm	63mm/2"	63mm/2"

## TAPPING SYSTEMS

## ATPLAS RANGE

## COMBINED SADDLE FERRULES

EBCO and TALBOT combined saddle ferrules are designed for making service connections into PE, PVC, asbestos cement, cast iron and ductile iron mains. They come fitted with the selected ferrule, which can be removed in order to make the drilling and tapping using suitable equipment. The ferrule strap range provides maximum thread engagement into the boss of the strap and tappings from 1/2" to 2" can be made into most pipes.



## MARKETS



House connection

## TECHNICAL DATA

**Nominal Pressure (PN):**

Working: 16 bar

Test: 24 bar

The pressures stated above apply with water temperatures up to 20°C

**Medium Temperature:** up to 40°C

## APPROVALS

Made from WRAS approved materials

## ADVANTAGES

**STRONG**

Robust materials for high strength installation.

**QUICK**

Fast installation in virtually any trench condition.

**LASTING**

High quality corrosion resistant materials.

## CHARACTERISTICS

└ **Design** and selection of materials gives high strength for reliable installation and is light weight for easy handling.

└ **Gunmetal material** – Selected for its strength for reliable installation as well as being light weight for easy handling. Gunmetal is to BS EN 1982:2008 CC491K.

└ **Standards conformity** – Meets WRAS and WIS requirements for installation in the UK.

└ **Ferrule fitted** – Comes complete with swivel ferrule.

NOMINAL PIPE BORE	TYPE OF PIPE			OUTLET							
	Asbestos/Cement/Cast Iron	Ductile Iron	PE/PVC	MDPE					COPPER		
	20mm (1/2")	25mm (3/4")	32mm (1")	50mm (1 1/2")	63mm (2")	15mm	22mm	28mm			
1 1/2" (40mm)	X	-	-	-	X	-	-	-	-	-	-
2" (50mm)	X	-	X	X	X	X	-	-	-	-	-
63mm	-	-	X	X	-	-	-	-	-	-	-
3" (80mm)	X	X	-	X	X	X	X	X	X	X	X
90mm	-	-	X	X	-	-	-	-	-	-	-
4" (100mm)	X	X	X	X	X	X	X	-	-	-	-
110mm	-	-	X	-	-	-	-	X	-	-	-
5" (125mm)	X	-	-	X	X	X	-	-	-	-	-
6" (150mm)	X	X	X	X	X	X	X	X	-	-	-
160mm	-	-	X	-	X	-	-	-	-	-	-
7" (175mm)	X	-	-	-	X	-	-	-	-	-	-
8" (200mm)	X	X	X	X	X	X	X	X	-	-	-
9" (225mm)	X	-	X	X	X	X	X	X	-	-	-
10" (250mm)	X	X	-	-	X	X	X	X	X	X	X
12" (300mm)	X	X	-	-	X	X	X	X	-	-	-
315mm	-	-	X	-	X	X	-	-	-	-	-
400mm	-	-	X	-	X	X	-	-	-	-	-
450mm	-	-	X	-	X	-	-	-	-	-	-
560mm	-	-	X	-	-	X	-	-	-	-	-

## TAPPING SYSTEMS

## ATPLAS RANGE

### SELF TAPPING FERRULE STRAPS

Self Tapping Ferrule Straps for PE, PVC and asbestos cement mains pipes incorporate an integral ferrule with a self-contained cutter, eliminating the need for drilling machines. Straps are made from gunmetal or a combination of gunmetal and plastic making the product durable and corrosion resistant. The strap also uses a specially designed cutter, which tests show greatly reduces the risk of bursting a PVC main or creating a swarf blockage whilst cutting.



#### MARKETS



House connection

#### TECHNICAL DATA

##### Nominal Pressure (PN):

Working: 16 bar

Test: 24 bar

The pressures stated above apply with water temperatures up to 20°C

**Medium Temperature:** up to 40°C

#### APPROVALS

Made from WRAS approved materials

#### ADVANTAGES

##### QUICK

No drilling machine required.

##### VERSATILE

Can be used in wet or dry conditions.

##### RANGE

Banjo outlets for copper and PE pipe.

#### CHARACTERISTICS

▮ **The fitting** has an integral cutter and requires only a spanner and standard ferrule key to install and carry out the drilling, dry or under pressure, making it a viable alternative to electrofusion.

- Integral cutter greatly reduces the risk of fracturing PE/PVC pipe during the drilling.
- Cutter design reduces the chance of swarf blockage by retaining the PE/PVC slug.
- Can be supplied with banjo outlet types to suit copper, male threaded and PE pipe.

NOMINAL PIPE BORE	TYPE OF PIPE		OUTLET					
			MDPE			COPPER		
	Asbestos / Cement	PE / PVC	20mm (3/4")	25mm (1")	32mm (1 1/4")	15mm	22mm	2-8mm
32mm	-	X	X	X	-	-	-	-
1 1/2" (40mm)	-	X	-	X	-	-	-	-
2" (50mm)	X	X	X	X	-	-	-	-
63mm	-	X	X	X	X	-	-	-
3" (80mm)	X	-	X	X	X	X	X	-
90mm	-	X	X	X	X	-	-	-
4" (100mm)	X	X	X	X	X	X	X	X
110mm	-	X	X	X	X	-	-	-
5" (125mm)	X	X	X	X	X	-	-	-
6" (150mm)	X	X	X	X	X	X	X	X
160mm	-	X	X	X	X	-	-	-
7" (175mm)	X	-	-	X	-	-	-	-
180mm	-	X	X	X	X	-	-	-
8" (200mm)	X	X	X	X	X	X	X	X
9" (225mm)	X	X	-	X	-	-	-	-
10" (250mm)	-	X	X	X	X	-	-	-
12" (300mm)	-	X	X	-	X	-	-	-
315mm	-	X	X	X	X	-	-	-

Check with TALIS before tapping AC pipes with wall thickness greater than 18mm at the tapping point, or plastic pipes with wall thickness over 19mm. Straps are supplied with banjo outlets of: TALBOT push fit plastic or metal for PE, EBCO push fit for PE, EBCO B compression for PE, EBCO S compression for copper or female threaded outlets.

## TAPPING SYSTEMS

### ERHARD RANGE

#### ABSP

The ERHARD ABSP tapping saddle allows a secure and reliable connection between the water mains and the house. In addition to the functionality of a regular tapping saddle, it offers an integrated isolation valve. It is suitable for pipes of all sizes and materials, as well as for many connection possibilities. ERHARD ABSP tapping saddles are suitable for nominal sizes DN80 to DN300 and for pressure PN16. A wide range of connection options facilitates the application.



#### MARKETS



House  
connection

#### TECHNICAL DATA

##### Nominal Pressure (PN):

Working: 16 bar

Medium Temperature: +10° -  
+60°C

#### APPROVALS

DVGW, GSK (coating)

#### ADVANTAGES

##### VERSATILE

High tolerance for  
different pipe types.

##### RELIABLE

Double acting  
compression seal.

##### ANTI-CORROSION

Epoxy powder coating  
and A2 bolts.

#### CHARACTERISTICS

└ **Reliable corrosion protection** – Optimized down to the last detail, epoxy coating in accordance with GSK, also available with ERHARD Pro-Enamel, a special fibre enamel for increased impact strength.

└ **Robust and durable construction** – 4mm strong, self-cleaning rotary-disc seal with just two moving parts, reliable end stops, 1¾ rotations between the “open” and “closed” settings to allow opening and closing without the emergence of water-hammer.

└ **High performance Drilling diameter** – Up to 38mm, streamlined flow, sealed at both ends, over 16m³/h with a pressure difference of 0.2 bar.

└ **Long-lasting seal** – Multiple o-ring seal on the pinion shaft, duo-sealing system as a saddle seal.

└ **Numerous connection possibilities** – Vertical and horizontal outlets for Rp 1½ as well as for the Plasjon system.

└ **Economical and flexible deployment** – Just one model for all pipe diameters and materials such as cast iron, steel or fibre cement and adjustment via a corresponding retaining strap.

└ **Intelligent accessories** – Bore hole sleeve, stem extensions with bayonet lock and interface according to DVGW GW 336.

DN	COATING	OUTLET	CAST IRON AND STEEL PIPE	ASBESTOS CEMENT PIPE	PE/PVC PIPE
80-300	Epoxy or enamel	vert. Rp 1½" or horiz. Rp 1½"	With 48mm strap	With 90mm strap	
80			-	-	x
100			-	-	x
125			-	-	x
150			-	-	x
200			-	-	x
250			-	-	x
300			-	-	x



ABSP – METAL AND CEMENT PIPE



ABSP – PVC PIPE



ABSP – PE PIPE

## FEATURES

With the new **ERHARD ABS Premium** service valve it has been possible to reduce the number of required models dramatically. There is a separate casing type for each different combination of pressure stages and outlets. Models are available for pipes made of cast iron and steel, of coated cast iron and steel and of fibre cement.

**Adjustments** to the various pipe diameters are then simply made using an adjustable retaining strap, which is combined with the appropriate casing according to requirements. Together with the optimized weight of the cases, this reduces both storage and transportation costs and facilitates their daily use.

**All ERHARD premium** service valves are coated as standard with ERHARD EKB fusion bonded epoxy, which complies with the requirements of the quality mark RAL-GZ 662 of the "Quality Association for the Heavy Duty Corrosion Protection of Powder Coated Valves and Fittings" (GSK). The coating thickness is at least 250µm.

**A reduction** to just two moving parts ensures that the valve of the ERHARD ABS Premium service valve will continue to function reliably and can be moved dependably for years to come:

- The pinion shaft made of stainless steel is securely aligned over the middle of the pipe and mounted in a corrosion protected shaft bushing. It has a standardised square connection.
- The rotary movement is then transferred to the rotary disc via an interlocking system. The 4mm thickness of the material guarantees a high level of dependability even under a high operating pressure. The smooth surface of the disc prevents the build up of deposits and damage to the sealing rings. The shearing principle between the rotary disc and the steel-sheathed sealing rings also ensures that the parts are self-cleaning.

**Opening and closing** takes place with a 1¼ rotation. This ensures that there is no water hammer with high flow rates. The pipe saddle also has robust and reliable end stops which easily surpass the values required by the relevant standard.



## TAPPING SYSTEMS

## SCHMIEDING RANGE

## SERIES C/SC/PVCFIX

The SCHMIEDING C (Combi) range, reduces the number of required parts for the tapping of various pipe materials and dimensions, because there are only four different upper parts, to cover the whole spectrum. As a further development of the SCHMIEDING C system, the SC (Super Combi) range has only one upper part for all dimensions from DN80-300. Fitting to the different pipe types and dimensions is then made by combining with the relevant stainless steel strap. This reduces stockholding requirements and increases the efficiency. The PVCFIX model (pictured) comes optionally with an integrated cutter for PVC pipe.



## MARKETS



House  
connection

## TECHNICAL DATA

**Nominal Pressure (PN):**

Working: 16 bar

**Medium Temperature:** +10° -

+60°C

## APPROVALS

DVGW, GSK (coating)

## ADVANTAGES

## RANGE

Models available for all pipe materials.

## ANTI-CORROSIVE EFFICIENCY

250µ epoxy coating in line with GSK regulations.

Reduced stockholding of upper parts through combination with straps to match pipe dimensions.

## CHARACTERISTICS

└ **The C/SC/PVCFIX series** – Made from ductile iron EN-JS1050, epoxy coated to 250µ in line with the GSK (Association for High Quality Corrosion Protection of Valves and Fittings with Powder Coating) or enamelled. Seals are made from EPDM, and the fittings are pressure rated to PN16.

└ **Tapping saddle** – Available for cast iron, steel and cement pipes DN65-600, and for PVC pipes DN80-300. Variants are available fitted with an isolating valve that can be operated from above with a key. The tapping saddles are suitable for use with drilling machines, or in the case of PVCFIX, an integrated cutter is fitted. Outlets are either blind or up to 2" threaded female connections.

└ **Stainless steel straps** – Available in different dimensions depending on the pipe type, and are fitted with M16 nuts up to DN125 and M20 nuts from DN150.



MODEL	PIPE DIMENSIONS	PIPE MATERIAL				OUTLET	MAIN ISOLATION VALVE INTEGRATED
		PVC	Cast Iron	Steel	Asbestos Cement	Female thread	
VAS30	65-200	-	X	X	X	2"	Yes
AS20	80-300	X	-	-	-	0-2"	No
VAS30SC	80-300	-	X	X	X	2"	Yes
VK-SC	80-300	-	X	X	X	1½" - 2"	Yes
PVCFIX/VAS32	80-300	X	-	-	-	2"	Yes*

\* Also with optional integrated cutter.



VAS 30



VK-SC



PVCFIX

## FEATURES

└ **VAS 30** – For cast iron, steel or fibre cement pipe, with a threaded female outlet of 2" and a brass main shutoff valve, to be combined with the applicable SCHMIEDING stainless steel strap. DN80-300 with epoxy coating inside and outside, and DN65-200 with outside epoxy coating, inside enamelled.

└ **AS 20** – For PVC pipe, boss outlet blind, 1", 1¼", 1½" or 2". Saddle and strap from cast iron with rubber seal to protect PVC pipe.

└ **VAS 30 SC** – For cast iron, steel or fibre cement pipe, with a threaded female outlet of 1½" or 2" and a brass main shutoff valve, to be combined with the applicable SCHMIEDING stainless steel strap. DN80-300 with outside epoxy coating, inside enamelled.

└ **Stainless steel straps** – For combining with VAS30 and AS11. Up to DN125 with M16 bolts, from DN150 with M20 bolts. 45x5mm, 60x1.5mm or 80x1.5mm depending on pipe type.

└ **PVCFIX/VAS32** – For the tapping of PVC pipelines to DIN 8062 under pressure. It has a wide bearing surface completely coated with rubber to protect the pipe, a side threaded 2" outlet and an integrated cutter. Before mounting the tapping saddle on the PVC pipe the cutter is screwed up inside the spindle, and the saddle and strap are secured onto the pipe with two stainless steel bolts. Subsequently the tapping is carried out directly by the spindle. The drilling slug is captured in the interior of the cutter, and therefore is not flushed out. The cutter is made from brass, or above DN200 from stainless steel.



## TAPPING SYSTEMS

## SCHMIEDING RANGE

## SERIES Z

The Series Z tapping system is a complete range of compact saddles for quick and easy tapping of pipes of all materials. It contains an innovative detail, the auxiliary shut off in the form of a tongue made from Hostaform. With this, a change of the main isolating valve is possible under pressure. The Series Z can be used for water up to 16 bar and for gas up to 5 bar. Saddles are ductile iron EN-JS1050 with either epoxy coating or enamelled.



## MARKETS



House  
connection

## TECHNICAL DATA

**Nominal Pressure (PN):**

Working: 16 bar

**Medium Temperature:** +10° -

+60°C

## APPROVALS

DVGW for water and gas,  
GSK (coating)

## ADVANTAGES

## EASY

Installation made easy even under pressure with auxiliary shut off valve.

## PE CONNECTION

Models available with PE tails to make house connection with PE easy.

## ANTI-CORROSION

Epoxy coating or full enamelling inside and out.

## CHARACTERISTICS

└ **The auxiliary valve** – Makes the installation considerably easier. First the tapping saddle is mounted on the pipe. Subsequently the main valve is removed and the drilling machine attached. After the drilling, the drilling machine is pulled up and rinsed, then the tapping can be closed with the tongue. After screwing the main valve back in, the tongue is opened and the valve will be open. The tongue is operated by a square key from the outside.

└ **The Series Z tapping system** – Can be used for drinking water and raw water to 16 bar, and a temperature of 60°C. It can also be used for gas to 5 bar (MOP 5, all gases to DVGW G 260). It is available with in and out epoxy coating or fully enamelled inside and out, whereby the saddle is extremely corrosion resistant. All enamelled models have a main valve

made of lead free brass to fulfil the drinking water regulation limits on lead in drinking water.

└ **Rotatable PE outlet spigot** – Available on most models, making them perfect for meeting the challenges of a modern piping system. The rotatable upper part is 360° infinitely variable, its fixing is made by a chrome steel fixing. Radial and axial seals ensure the tightest seal between the upper and lower parts.

MODEL	PIPE DIMENSIONS	PIPE MATERIAL					OUTLET		
		PVC	PE	Cast Iron	Steel	Asbestos Cement	Female thread	PE	Weld end
ZK	65-300	X	-	-	-	-	1"-2"	-	-
ZK-P	80-200	X	-	-	-	-	-	32-63	-
ZG	80-300	-	-	X	X	X	1"-2"	-	-
ZG-P	80-300	-	-	X	X	X	-	32-63	-
ZE-Fri-P	63-225	-	X	-	-	-	-	32-63	-
Z-Flex	80-400	-	-	X	X	X	1"-2"	-	-
Z-Flex-P	80-400	-	-	X	X	X	-	32-63	-
ZSS	*	-	-	-	X	-	-	-	25-50
ZS-P	*	-	-	-	X	-	-	32-63	-
ZEG	**	-	-	-	-	-	1"-2"	-	-
ZEG-P	**	-	-	-	-	-	-	32-63	-
Z Anbohrsperr	On application	X	-	X	X	X	1½"	-	-

\* Direct welding with inlet 40mm or 50mm.

\*\* Valve only, for screwing into saddle 1½" or 2".



## FEATURES

└ The **ZK model** is for PVC pipes, and has a main valve integrated. The saddle and strap have a width of 120mm, and are lined with rubber to protect the pipe.

└ The **ZG model** is for cast iron, steel and asbestos cement pipes, and has a main valve integrated. The saddle and straps have a width of 80, 90 or 100mm depending on the pipe diameter. This model is also available without main valve, but with auxiliary valve as a "Z-Anbohrsperr", for PVC, cast iron, steel and asbestos cement pipes.

└ The **Z-Flex models** are for cast iron and asbestos cement pipes with a main valve. They are available with a rotatable head for PE connection. Connection to the pipe is by means of a stainless steel strap (1.4301) with soft PVC coating. There are two head units, type A (DN80-200) and type B (DN250-400).

└ The **ZS** is for direct welding to steel pipes, with an integrated main valve. Weld spigots are of steel 1.4058.

└ The **ZE model** has a threaded male inlet for connection to existing tapping saddles, with integrated main valve.

└ The **ZE-Fri-P** is for electrowelding to PE pipe, with an integrated main valve.



THE POLYAMIDE VALVE CONE GIVES A SECURE SEAT TO THE MAIN VALVE



THE HOSTAFORM TONGUE AUXILIARY VALVE MAKES INSTALLATION EASIER



THE AUXILIARY VALVE IS OPERATED BY A SQUARE SPANNER

## TAPPING SYSTEMS

## BAYARD RANGE

## ROC GT2

The ROC GT2 ductile iron tapping saddle enables connection to mains pipes of all materials. Due to its innovative design, a wide variety of pipe sizes can be covered by 15 sizes of saddle. Fitted one way around the metal lugs prevents compression of plastic pipes, but if one half of the saddle is rotated by 180 degrees, the metal lugs do not line up, permitting the correct fit for asbestos cement, steel and cast iron pipes.



## MARKETS



House  
connection

## TECHNICAL DATA

**Nominal Pressure (PN):**

Working: 16 bar

**Medium Temperature:** +10° -  
+60°C

## APPROVALS

ACS (French declaration of sanitary  
compliance)

## ADVANTAGES

## VERSATILE

High tolerance for  
different pipe types.

## RELIABLE

Double acting  
compression seal.

## ANTI-CORROSION

Epoxy powder coating  
and geomet bolts.

## CHARACTERISTICS

└ **Reliability** – Double-acting  
compression seal as valve is  
tightened, and complete seal without  
oakum, independent of collar  
tightening.

└ **Boss sizes** – M40 (petit bossage)  
or M55 (grand bossage) with integral  
valve top screw.

└ **Single spanner** tightening for  
whole range.

└ **Specifically designed** for the  
external diameters of PVC-B0,  
PVC-U and PE pipes using spacer  
lugs.

└ **High tolerance** positioning for  
iron, steel, asbestos-cement pipes  
with interlocking spacer lugs.

└ **Threaded** lower half-flange for  
bolt threads.

└ **Anti-corrosion protection** – Epoxy  
powder coating.

└ **Steel bolts coated** with grade B  
Geomet® or stainless steel bolts on  
request.

DN (Iron/Steel)	IRON	STEEL	ASBESTOS CEMENT	PVC/PE	OD (PVC/PE)
40	ROC GT2 63	ROC GT2 50	Check with TALIS	ROC PVC	40
50	ROC GT2 75	ROC GT2 63		ROC GT2 50	50
65	ROC GT2 90	ROC GT2 75-90		ROC GT2 63	63
80	ROC GT2 110	ROC GT2 90-110		ROC GT2 75	75
100	ROC GT2 125	ROC GT2 110-140		ROC GT2 90	90
125	ROC GT2 160	ROC GT2 140-160		ROC GT2 110	110
150	ROC GT2 180	ROC GT2 160-180		ROC GT2 125	125
175	ROC GT2 200	ROC GT2 200		ROC GT2 140	140
200	ROC GT2 225	ROC GT2 225-250		ROC GT2 160	160
250	ROC GT2 280	ROC GT2 280-315		ROC GT2 180	180
300	ROC GT2 355	ROC GT2 355		ROC GT2 200	200
				ROC GT2 225	225
				ROC GT2 250	250
				ROC GT2 280	280
				ROC GT2 315	315
				ROC GT2 355	355

Note: For 350-700 use ROC Fonte or ROC AC (check with TALIS for details).

## FEATURES

✎ **Cuts down on the range required** to cover the different types of materials as the ROC GT2 tapping saddle allows the tapping of mains pipes of all material types. By design, the ROC GT2 saddle is set to the external diameters of plastic pipes, and metal lugs prevent over-tightening. If one of the half-flanges is rotated (180°), the metal lugs no longer act, allowing fitting to asbestos-cement, steel and cast iron pipes.

✎ **It has anti-corrosion** protection of powder coated expoxy over the ductile iron (EN-GJS-450-10) parts with Geomet® bolts or stainless steel bolts on request.

✎ **The connection** to the boss is M40 (petit bossage) or M55 (grand bossage) in order to fit to isolation valves such as the ISEO valve from TALIS.

## SETTING UP ON PVC AND PE PIPES



By design, the ROC GT2 saddle is set to the external diameters of plastic pipes, and metal lugs prevent over-tightening.

## SETTING UP ON ASBESTOS-CEMENT, STEEL AND CAST IRON PIPES



If one of the half-flanges is rotated (180°), the metal lugs non longer act, allowing fitting to asbestos-cement, steel and cast iron pipes.

## TAPPING SYSTEMS

## BELGICAST RANGE

## SERIES 700

The Series 700 range of tapping saddles comprises of grey cast iron saddles for PVC pipes and for asbestos cement pipes and ductile iron saddles for ductile iron pipes. Both have anticorrosive coatings.

With dimensions from 32-315mm, these low cost saddles are ideally suited for irrigation or drinking water applications.



## MARKETS



House  
connection

## TECHNICAL DATA

**Nominal Pressure (PN):**

Working: 16 bar

**Medium Temperature:** +10° -  
+60°C

## APPROVALS

Made from WRAS approved materials

## ADVANTAGES

## LOW COST

Simple saddles for  
connection of water.

## RELIABLE

EPDM seal to EN 681-1.

## ANTI-CORROSION

Anti-corrosive coating,  
bichromated bolts on series 790.

## CHARACTERISTICS

└ **Series 700 and Series 750 saddles –**

Made from grey cast iron GG-25 quality with anticorrosive coating and zinc plated nuts and bolts.

└ **Series 790 saddles –** Made from GGG 40 ductile iron coating with anticorrosive coating with bichromated nuts and bolts for maximum corrosion resistance.

## SERIES 700 for PVC

Pipe OD	Outlets
32	1/2" & 3/4"
40	3/4" & 1"
50	3/4" & 1"
63	3/4" & 1"
75	3/4" - 1 1/2"
90	3/4" - 1 1/2"
110	3/4" - 3"
125	3/4" - 3"
140	3/4" - 3"
160	1" - 3"
180	1" - 3"
200	3/4" - 3"
250	1" - 3"
315	2" - 3"

## SERIES 750 for Fibre Cement

Pipe OD	Outlets
50	1/2" & 1"
60	3/4" - 1 1/4"
70	1"
80	1" - 1 1/4"
100	3/4" - 1 1/4"
125	1" - 1 1/4"
150	1" - 1 1/4"
175	2"
200	1" - 2 1/2"
250	2" & 3"

## SERIES 790 for Ductile Iron

Pipe DN	Outlets
60	3/4" - 1 1/4"
80	3/4" - 1 1/4"
100	1" - 2"
125	1" - 2"
150	1" - 2"
175	1 1/2"
200	1" - 2"
250	1" - 3"
300	1" - 3"

## TAPPING SYSTEMS

## BELGICAST RANGE

### SERIES 800

The Series 800 multidiameter saddle operates by means of a lateral wedge fixing system and half moon gasket, which means that a wide range of diameters can be covered by one saddle.

Five models cover the range from DN80-DN200. Due to its design, the Series 800 saddle can also be used as either a pipe repair clamp or a Gibault joint.



#### MARKETS



House  
connection

#### TECHNICAL DATA

##### Nominal Pressure (PN):

Working: 16 bar

Medium Temperature: +10° -  
+60°C

#### ADVANTAGES

##### FLEXIBLE

Tapping saddle, repair clamp or Gibault joint.

##### RELIABLE

Working pressure of 16 bar.

##### ADAPTABLE

Five sizes cover DN80-DN200.

#### CHARACTERISTICS

└ **The set of diameters** included in a simple unit is very large, due to the lateral wedges fixing system and to the "half-moon" designed gasket. The multidiameter saddle is closed with the same uniform pressure along the whole length by simply tightening the lateral screws.

└ **It can be used** as a pipe repair clamp or Gibault joint.

└ **The Series 800 saddle** is made from epoxy coated ductile iron GGG-40 and comes with either 4 or 6 bichromated M14 or M16 bolts. Outlets are either 1", 1 1/2" or 2".

#### SERIES 800

Pipe DN	RANGE		Length	SCREWS	
	Min.	Max.		Quantity	Size
80 - 3"	58	100	150	4	M14 x 110
100 - 4"	78	120	160	4	M14 x 110
125 - 5"	104	145	180	4	M14 x 110
150 - 6"	130	172	210	4	M16 x 110
200 - 8"	180	225	270	6	M16 x 110

## TAPPING SYSTEMS

### BELGICAST RANGE

## SERIES 1300 & 2300

The Series 1300/2300 tapping saddles guarantee complete watertightness as they allow the saddle and strap to be fully screwed tight together. They are for the tapping of PVC and PE mains pipes, with connection to the house via a female threaded boss or PN10/16 flange. The saddle and strap are made from GGG 40 or GGG-50 ductile cast iron and cover pipe sizes from DN32 to DN400.



#### MARKETS



House  
connection

#### TECHNICAL DATA

##### Nominal Pressure (PN):

Working: 16 bar

##### Medium Temperature: +10° -

+60°C

#### ADVANTAGES

##### RANGE

For PE and PVC pipes DN32-DN400, threaded boss or flange connection.

##### RELIABLE

Saddle and strap fully screwed tight together.

##### ANTI-CORROSION

Epoxy coating of 120-180 microns.

#### CHARACTERISTICS

└ **The series 1300/2300 saddle** – Allows full screwing, therefore guaranteeing complete watertightness. It is made of GGG 40 (Series 1300) or GGG 50 (Series 2300) ductile cast iron, approx. 120-180 micron resin coated and has an EPDM gasket.

└ **Saddles** – Available for mains pipes from DN32 to DN400, with female threaded boss outlets from 1/2" to 2" or flange outlets from DN40 to DN150.

└ **Stainless** steel bolts and washers M8, M10 or M12, A2 or AISI304.

## SERIES 1300/2300

Pipe DN	OUTLET FEMALE THREAD (SERIES 1300)						OUTLET PN10/16 FLANGE DN (SERIES 2300)					
	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	40	50	60/65	80	100	150
32	X	X	-	-	-	-	-	-	-	-	-	-
40	X	X	X	-	-	-	-	-	-	-	-	-
50	-	X	X	X	-	-	-	-	-	-	-	-
63	-	X	X	X	X	X	X	X	-	-	-	-
75	-	-	X	X	X	X	X	X	-	-	-	-
90	-	-	X	X	X	X	X	X	X	-	-	-
110	-	-	X	X	X	X	X	X	X	X	-	-
125	-	-	X	X	X	X	X	X	X	X	-	-
140	-	-	X	X	X	X	X	X	X	X	X	-
160	-	-	X	X	X	X	X	X	X	X	X	-
180	-	-	X	X	X	X	X	X	X	X	X	-
200	-	-	X	X	X	X	X	X	X	X	X	-
225	-	-	-	-	-	X	X	X	X	X	X	-
250	-	-	-	X	-	X	-	X	-	X	X	X
280	-	-	-	-	-	X	-	X	-	X	X	X
315	-	-	-	-	-	X	-	X	-	X	X	X
400	-	-	-	-	-	-	-	X	-	X	X	X



## FEATURES

└ The **Series 1300 saddle** is made up of two ductile iron shells (GGG 40), epoxy coated, which are fitted together with four stainless steel bolts. In order to ensure a watertight fitting to the pipe, an EPDM gasket is fitted around the inside of the saddle and strap. The Series 2300 is available to fit PVC and PE pipes with diameter 32-315mm. The outlets are female threaded bosses which are available between 1/2" and 2" depending on the pipe diameter. A full range of outlets can be provided using reducing bushes.

└ The **Series 2300 saddle** is made up of a two parts of epoxy coated GGG-50 ductile iron. The upper part contains a flanged outlet connection. The connection between the two parts is by AISI-304 stainless steel nuts and bolts. The range is suitable for PVC and PE pipes from 63-400mm diameter, and the outlet connections are for diameter 40-150mm flanges PN10/16 depending on the mains pipe diameter. An EPDM gasket provides a watertight seal to the pipe.



## TAPPING SYSTEMS

## BELGICAST RANGE

### SERIES 1400

The Series 1400 tapping saddle range comprises saddles with stainless steel straps. Bodies are manufactured from GGG0-40 ductile iron with either epoxy or cataphoresis coating. Bodies are available in small or medium size, which fit with one strap, or large size which fit with 2-4 straps. The small and medium sized heads are available with integrated shutoff by means of a removable stainless steel spatula. The saddles are available with outlets from ½" to 3", and the large heads are also available with PN10/16 flanged outlets.



#### MARKETS



House  
connection

#### TECHNICAL DATA

##### Nominal Pressure (PN):

Working: 16 bar

Medium Temperature: +10° -  
+60°C

#### ADVANTAGES

##### RANGE

Both the body and the gasket fit nine nominal diameters for different pipes.

##### RELIABLE

EPDM gasket to EN681-1, mechanically inserted on Series 1425.

##### SHUTOFF

Series 1410 has integrated shutoff with stainless steel spatula.

#### CHARACTERISTICS

└ **The Series 1400 saddles** – Made from GG40 ductile iron and are fixed to the mains pipe by means of stainless steel straps Series 1450. The straps are made from AISI-304 stainless steel, covered in EPDM-65 rubber to protect the pipe. They are fixed to the saddles with M14 stainless steel screws, nuts and washers (AISI-304). In this way, a small number of heads can be used to cover all pipe dimensions from DN50 to DN1000.

└ **Saddle gaskets** are EPDM to EN681-1, and for the Series 1425 they are mechanically inserted to guarantee watertightness.

└ **The saddles** – Can be used for all pipe types.

## SERIES 1400/1410/1425

Pipe DN		No of straps	OUTLET FEMALE THREAD (SERIES 1400/1410)								OUTLET PN10/16 FLANGE DN (SERIES 1425)							
min.	max.		½"	¾"	1"	1 ¼"	1 ½"	2"	2 ½"	3"	40	50	60/65	80	100	125	150	200
50	1000	1	X	X*	X*	-	-	-	-	-	-	-	-	-	-	-	-	-
80	1000	1	-	-	X*	X*	X*	-	-	-	-	-	-	-	-	-	-	-
80	700	1	-	-	-	-	-	X*	-	-	-	-	-	-	-	-	-	-
125	700	2	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
125	700	2	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-
80	1000	2	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-
80	700	2	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
100	700	2	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-
125	600	2	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-
600	750	2	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-
150	500	2	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
500	800	2	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-
200	600	2	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-
500	900	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-
300	500	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-
450	1300	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X

\* also available with shutoff (Series 1410).



SERIES 1400



SERIES 1410



SERIES 1425

## FEATURES

└ The **Series 1400** is an epoxy coated universal saddle body with EPDM gasket, covering the pipe diameters DN50-DN1000, with female threaded boss outlets from 1/2" to 3". Both the body and the gasket fit nine nominal diameters for different pipes.

└ The **Series 1410** work-pipe universal saddle is cathaphoresis coated. The water can be shut off by inserting a stainless steel AISI-304 spatula into the head. In this way tapping into live mains can be easily achieved by pushing the spatula into the fitting before fully removing the drill. The spatula then remains in place until a suitable isolating valve is fitted to the house connection.

└ The **Series 1425** is a saddle for pipes of diameter DN80 to DN1000 with flange connections ranging from DN40 to DN200 of PN10/16. Major water tightness is guaranteed by the mechanical insertion of the EPDM gasket. Depending on the size, between two and four stainless steel straps (Series 1450) are used to fasten the saddle on to the mains pipe.

└ An **automatic drill** is available in a short or long version for the Series 1400. The short (Series 1480) drill is used for threaded saddles and the long (Series 1490) drill is used for flanged saddles (or threaded saddles using short drilling rings). This drill cuts through cast iron pipes in less than one minute. Rotation and feed motions are fully automatic, and it works with or without water pressure. It is compatible with the whole range of Series 1400 saddles.



## SERVICE FITTINGS

## ATPLAS RANGE

## TALBOT PUSHFIT

The Talbot Pushfit connection is a tried and tested method of connecting PE and PVC water pipes from 16mm to 63mm. Talbot Pushfit fittings are quick and easy to use, with no nuts to lose or leave undone. Simply push the pipe into the fitting. The grip and seal on the pipe increases with pressure and tensile load so that the pipe will burst or neck before the fitting will fail. Pushfit fittings are manufactured from high performance materials for resistance to distortion and corrosion and for strong threaded connections.



## MARKETS



House  
connection

## TECHNICAL DATA

**Nominal Pressure (PN):**

Working: 16 bar

Test: 24 bar

The pressures stated  
above apply with water temperatures  
up to 20°C

**Medium Temperature:** up to 40°C

## APPROVALS

WRAS, ACS, WATERMARK

## ADVANTAGES

## QUICK

Pushfit fittings are quick and easy to use, with no nuts to lose or leave undone.

## ROBUST

The connections grip and seal on the pipe increases with water pressure and tensile load so that the pipe will burst or neck before the connection will fail.

## VANDALPROOF

Pipe cannot be removed from the fitting without the necessary Talbot extractors.

## CHARACTERISTICS

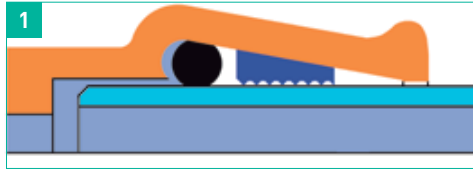
└ **Range** – A range of push fit couplings, elbows, tees and threaded adaptors is available in dimensions 16-63mm for PE pipes and for PVC pipes 25-50mm. Fittings are also available for imperial and Irish heavy gauge PE pipes.

└ **Materials** – Pushfit fittings are manufactured from acetal or polypropylene, with acetal grip rings and EPDM O-rings.

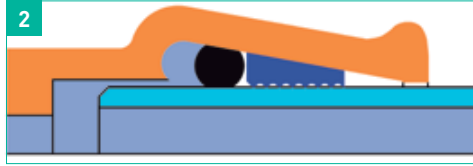
└ **Standards compliance** – Talbot Pushfit fittings can be supplied to meet the applicable performance requirements of:

- ISO 3458, 3459, 3501, 3503
- WIS 4-23-04, WIS 4-32-11
- Australian/New Zealand Standard AS/NZS 4129

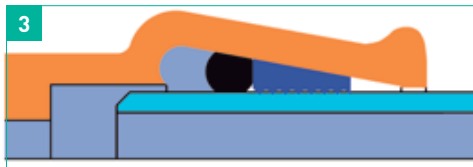
## HOW PUSHFIT WORKS



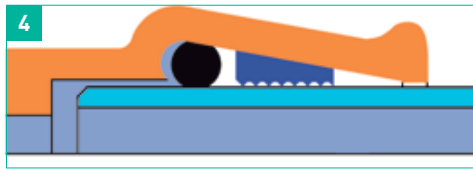
After insertion of the pipe, with the components at rest, the O-ring provides the water seal and the grip ring is ready to resist any pull out.



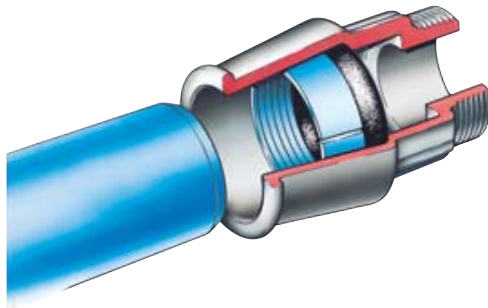
Water pressure forces the O-ring against the grip ring, pushing both components down the taper of the fitting creating an excellent pressure seal on the pipe.



As the water pressure rises the O-ring is forced further down the tapered body towards the grip ring, increasing the sealing pressure against the pipe and body.



In negative pressure conditions the O-ring remains in its original seating position and provides an effective vacuum seal.



PDM O-RINGS PROVIDE A WATERTIGHT SEAL



GRIP RINGS ENSURE RESISTANCE AGAINST PULL OUT

## SERVICE FITTINGS

## ATPLAS RANGE

### GRIPPA

The Talbot Grippa is a universal fitting that adapts PE pipe to a wide variety of existing lead, galvanised iron and copper pipes with no change of components. The range consists of just three fittings which suit all metal pipes with outside diameters of 15mm (3/8") to 34mm (3/8"). The 'Universal' connection of the Grippa fitting utilises a patented adjusting grip ring and seal. These two components allow a watertight, end load resistant connection to be made without special preparation of the pipe or the fitting, over a wide range of pipe diameters.



#### MARKETS



House  
connection

#### TECHNICAL DATA

##### Nominal Pressure (PN):

Working: 16 bar

Test: 24 bar

The pressures stated above apply  
with water temperatures up to 20°C

**Medium Temperature:** up to 40°C

#### APPROVALS

WRAS, ACS, WATERMARK

#### ADVANTAGES

##### STOCK

Reduced stockholding  
as three fittings connect  
on to the majority  
of lead, copper and  
galvanised iron pipe  
sizes.

##### SIMPLE

Simple to install, with  
no loose assembly of  
components or special  
preparation of the pipe.

##### ROBUST

Pipe cannot be removed  
from the fitting without  
the necessary Talbot  
extractors.

#### CHARACTERISTICS

└ **Grippa Body** – Acetal body houses  
all parts.

└ **Grip Ring** – Moulded in engineering  
plastic with stainless steel studs  
for additional grip, the grip ring's  
patented design allows it to adjust  
automatically and grip firmly onto  
a wide range of pipe sizes and  
materials.

└ **Nut** – The Grippa nut provides the  
load which compresses both the seal  
and the grip ring.

└ **Sealing Ring** – Moulded in  
WRAS approved EPDM Rubber and  
incorporates two stand off moulded  
washers to ensure correct pipe  
insertion during installation. The  
sealing ring's patented design enables  
its internal diameter to constrict when  
compressed, so forming an effective  
watertight seal around a variety of  
pipe diameters.

└ **PE End** – The 25mm (3/4") or 20mm  
(1/2") Pushfit end houses the PE grip  
and O-ring and provides the tried and  
tested performance synonymous with  
Talbot Pushfit.

UNIVERSAL END				PE END
	3/8" Grippa	1/2" Grippa	3/4" Grippa	
Pipe OD range	15-21mm	21-27mm	27-34mm	
Type of pipe	-	-	-	Suits metric BS 6572 and 6730 pipe with a liner and DIN and ISO pipes (blue grip ring, black o ring marked M) or Imperial BS pipe (black grip ring, black o ring). 20mm (1 1/2") or 25mm (3/4")
Lead	3/8" 4lb-6lb	1/2" 5lb-9lb	3/4" 7lb-11lb	
Galvanised Iron	3/8"	1/2"	3/4"	
Copper	15mm, 1/2"	22mm, 3/4"	28mm, 1"	

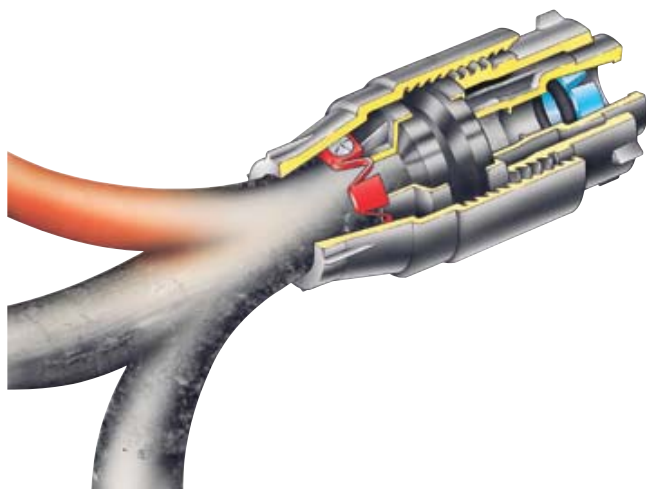
## FEATURES

└ The **"Universal" connection** of the Grippa fitting utilises a patented adjusting grip ring and seal. These two components allow a watertight, end load resistant connection to be made without special preparation of the pipe or the fitting, over a wide range of pipe diameters.

└ The **grip ring's flexibility** allows it to be compressed inwards when pushed down the tapered mouth of the fitting. This enables Grippa to join a wide range of pipe types and sizes. The patented grip ring has two sets of gripping teeth. Firstly, six sets of moulded plastic teeth to provide a uniform, secure grip onto the softer lead pipes. For harder copper and galvanised iron there is a secondary set of three stainless steel studs which grip securely into the surface of the pipe.

└ The **unique Grippa sealing ring** is designed to reduce in diameter when compressed as the Grippa fitting is tightened. The seal also incorporates two 'stand offs' which ensure the correct insertion depth of the pipe. The first 'stand off' is easily pushed past and holds the pipe in the correct position whilst the fitting is tightened. The second 'stand off' provides a firmer resistance and signifies that the pipe is inserted to the correct depth.

└ **Simple Talbot Grippa design** minimises the risk of error during assembly. Talbot fittings have excellent mechanical strength and can tolerate normal pipe imperfections as well as unsquare cut ends of pipe.



## SERVICE FITTINGS

## ATPLAS RANGE

## EBCO COMPRESSION FITTINGS

EBCO compression fittings are available either as EBCO-B fittings for PE pipe 20-63mm and their imperial equivalents or EBCO-S fittings for copper pipe 15-54mm. The EBCO-B fitting is made from virtually corrosion immune gunmetal so will give many years of trouble free service. This security combined with the products robust gunmetal construction offers the knowledge that connections made are secure, robust and reliable. The robust and easy to use EBCO-S range of Type B copper adaptors are manufactured in gunmetal and conform to EN 1254. These fittings are suitable for use with half hard copper tube to EN 1057:2006.



## MARKETS



House  
connection

## TECHNICAL DATA

**Nominal Pressure (PN):**

Working: 16 bar

Test: 24 bar

The pressures stated above apply  
with water temperatures up to 20°C

**Medium Temperature:** up to 40°C

## APPROVALS

WRAS approved components

## ADVANTAGES

## CORROSION FREE

Made from corrosion immune gunmetal, EBCO compression fittings provide years of trouble free service in even the most arduous of ground conditions.

## RELIABLE

Robust gunmetal construction with a secure seal provides a lasting leak free connection.

## RANGE

The extensive range of EBCO-B compression fittings covers most requirements. Stopcocks and ferrules are also available with EBCO compression outlets.

## CHARACTERISTICS

└ **EBCO-B fittings** – Made up of gunmetal bodies and thrust nuts, copper pipe inserts, nitrile compression glands and polypropylene friction washers. EBCO-S fittings are made from gunmetal.

└ **EBCO-B fittings** – Available for metric or imperial (BS1972 type C and BS3284 type D) PE pipes from 20-63mm (1½" – 2"). The range includes connectors, reducers, adaptors, elbows, tees and stopends. Stopcocks and ferrules are also available with EBCO-B compression outlets.

└ **EBCO-S fittings** – Available for use with half hard copper tube to EN 1057:2006. The range consists of connectors, adaptors, elbows and tees from 15-54mm.



## ASSEMBLY INSTRUCTIONS

### EBCO-B Assembly Instructions

Ensure the pipe is cut square then disassemble the end of the fitting to be connected, slide the thrust nut, then the friction washer, then the compression gland over the end of the pipe to be connected.

Insert the serrated insert into the pipe and securely hammer it fully home with a soft faced mallet.

Place the end of the pipe into the fitting's body and screw the thrust nut fully into the body, securely locating the friction washer and sealing rubber inside the body of the fitting.

Once the thrust nut has been hand tightened use a spanner and tighten a further 1½ to 2 turns to form a fully sealed connection. The connection is now made.

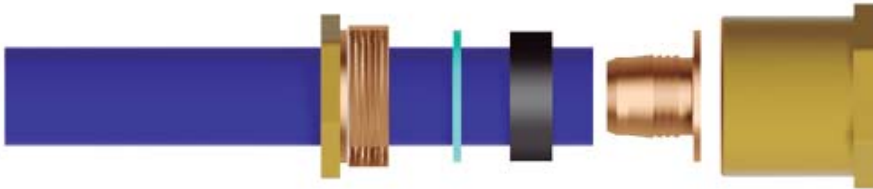
### EBCO-S Assembly Instructions

Disassemble the end of the fitting to be connected, slide the integral compression nut and ring assembly over the pipe end. Using an appropriately sized flaring tool bell out the end of the copper pipe. RE-assemble the fitting, ensuring that the pipe sits snugly against the cone on the fitting body. Tighten the compression nut fully to create an end load resistant and watertight connection. The connection is now made.

### Other products

There is also a range of brass compression fittings in the BAYARD range, from 20-50mm for PVC and PE.

## EBCO-B FITTINGS



## EBCO-S FITTINGS



EBCO-S CONNECTORS



EBCO-S FEMALE ADAPTOR



EBCO-S MALE ADAPTOR



## SERVICE FITTINGS

## ATPLAS RANGE

## EBCO THREADED FITTINGS

The EBCO range of traditional gunmetal pipe fittings for threaded pipes is robust and contains a wide variety of product types and sizes. The BSP fitting threads are to EN 10226-1 (BS21) and products are available in sizes 1/4" to 2 1/2". Also in the range are hexagon hose connectors, lugged blanking caps and strainer bodies and caps.



## MARKETS



House  
connection

## TECHNICAL DATA

**Nominal Pressure (PN):**

Working: 16 bar

**Medium Temperature:** up to 40°C

## ADVANTAGES

## CORROSION FREE

Made from corrosion immune gunmetal, EBCO threaded fittings will provide years of trouble free service in even the most arduous of ground conditions.

## RELIABLE

Robust gunmetal construction provides a lasting leak free connection.

## RANGE

The extensive range of EBCO threaded pipe fittings will cover the majority of operational needs.

## CHARACTERISTICS

└ **BSP threaded fittings** – British Standard Pipe thread (BSP) is a family of standard screw thread types that has been adopted internationally for interconnecting and sealing pipe ends by mating an external (male) with an internal (female) thread. Jointing threads use a taper external (male) thread, and a parallel internal (female) thread. EBCO threads are to EN 10226-1 (former BS21). The material is gunmetal to EN1982 (CC491K).

└ **Hexagon hose connectors** – Available in either straight or bent (90° elbow) configurations, gunmetal hose connectors are supplied with either a male BSP thread with hexagon shoulder or a female BSP thread with hexagon nut and loose serrated tail. Sizes range from 1/2" to 4".

└ **Lugged blanking caps** – Cast gunmetal cap with lugs, brass chain and nitrile washer. Sizes range from 1/2" to 4".

└ **Strainer Bodies and Caps** – Gunmetal water intake strainer and cap for use with nylon filter inserts. Sizes range from 1/2" to 1 1/2". Supplied without nylon filter insert.



EQUAL CROSS - FEMALE  
ALL ENDS



REDUCING HEXAGON NIPPLE



REDUCING TEE - FEMALE  
ALL ENDS

## FEATURES

For **BSP threads** two types of thread are distinguished by international standard:

- Parallel threads, which have a constant diameter.
- Taper threads, whose diameter increases or decreases along the length of the thread.

**Jointing threads** – These are pipe threads for joints made pressure-tight by the mating of the threads. They use a taper external (male) thread, and a parallel internal (female) thread. Best practice is to always use a jointing compound on the threads.

The range of **EBCO** threaded fittings encompasses BSP connectors: couplings, reducers, elbows, pipe crosses, tees, straight unions, locknuts, hexagon bushes, hexagon nipples, plugs and caps, also hexagon hose connectors, lugged blanking caps with chains, and strainer bodies.

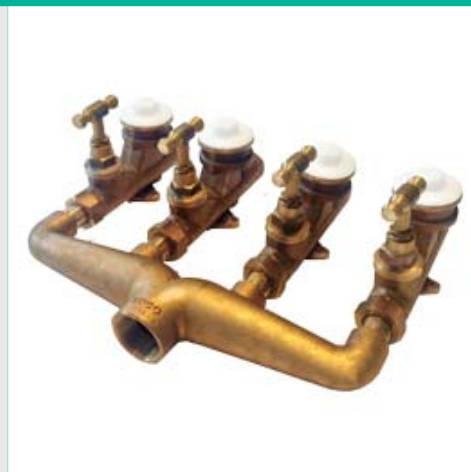


## SERVICE VALVES

## ATPLAS RANGE

### MANIFOLDS

Manifold systems divide a water service pipe into several outlets each of which has a separate shut off device and the possibility of fitting a water meter. They can be used in crowded areas for multi-dwelling developments, and are commonly fitted either in underground chambers, basements or service rooms of apartment blocks. TALIS sells manifolds in gunmetal (4 or 6 port) or plastic (2 to 12 ports).



#### MARKETS



House connection

#### TECHNICAL DATA

**Nominal Pressure (PN):**

Working: 16 bar

**Medium Temperature:** up to 40°C

#### APPROVALS

WRAS

#### ADVANTAGES

##### COMPACT

6 port manifold fits a standard 18"x24" meter chamber.

##### ANTI-CORROSIVE

Gunmetal or plastic is robust and corrosion resistant even in the most aggressive ground conditions.

##### FLEXIBILITY

The plastic manifold system can be supplied in almost any configuration to give a product suited to customers' needs.

#### CHARACTERISTICS

##### The EBCO Stopvalve Manifold System –

Used to divide a water service pipe into either 6 or 4 outlets, each outlet having its own shut-off device in either screwdown or ¼ turn operation and the option for individual metering facilities. The system can be used in crowded areas for multidwelling developments. It is a simple and robust unit and both its 4 and 6 port configurations are compact enough to be installed in a standard 24"x18" chamber.

##### The cost effective Talbot Stopvalve Manifold System –

Used to divide a water service pipe into virtually any number of outlets, each outlet having its own shut-off device and the option for individual metering facilities. The system can be used in crowded areas for multi-dwelling developments and its modular construction provides a wide range of installation options. The Talbot Stopvalve Manifold System is a purpose designed unit which gives maximum benefit to both the installer and operator.



## FEATURES

└ **The EBCO manifold system** comes as either a 4 or 6 port manifold. 1 1/2" female inlet and 3/4" female outlets allow most types of connections to be fitted. Supplied with stopvalves, each outlet has its own shut-off device which is available with a screw down valve based on BS 5433 or 1/4 turn ball valve.

└ **Staggered meter** mounts on the 6 port unit means that the unit is compact enough to fit an 18"x24" meter chamber. Each unit is supplied individually boxed for quick and easy on site assembly.

└ **The Talbot Modular Manifold system** divides a single inlet of either 50 or 63mm Talbot Pushfit for PE or female thread connection into virtually any number of outlets required depending on site conditions and water pressure.

└ **The shut off device** is a multi-turn stopvalve and has a removable key with torque overload protection. The outlets are of either 20 or 25mm Talbot Pushfit or 3/4" female threaded connections. The Talbot Pushfit connection uses a common body and only two sets of interchangeable components to connect to metric PE pipes and their imperial equivalents.

└ **Design and selection** of materials gives light weight for easy handling, high strength for installation and operation as well as corrosion resistance for long life. The manifold is made of acetal plastic with a polypropylene stopvalve rotor and key. Seals are made from EPDM, nitrile rubber or thermoplastic elastomers.



## SERVICE VALVES

### EBCO METAL STOPCOCKS

EBCO stopcocks, bibcocks, stopvalves and spherical ball valves are available to meet the standards of BS5433 and BS1010. Gunmetal stopcocks are available in ½" to 2" size with male/female BSP threaded connections, EBCO push fit and Talbot push fit connections from 20mm to 63mm (½" to 2") for PE pipe and copper Type B connections from 15mm to 54mm. BS5433 stopcocks come with either crutch heads or square heads. Gunmetal bibcocks and stopvalves are available with threaded connections ½" to 2". EBCO spherical ball valves are gunmetal and have either ¼ turn or 360 degree on/off control.



### TALBOT PLASTIC STOPCOCKS

The Talbot plastic stopcock is available in sizes 20mm, 25mm and 32mm and can be used in all situations normally suited to a BS5433 stopcock. The design and selection of materials gives high strength for installation and operation and corrosion resistance for long life.



### BAYARD SERVICE VALVES

In the BAYARD range, valves are available in dezincification resistant brass and cast iron. They either have metric 40 or 50 (petit bossage and grand bossage) connections, threaded connections or flange connections. Valves are designed for operation from above with square keys and are either ¼ turn or 360 degree turn. They are available with reverse tapered plug, spherical ball valves (ISEO), gate valve with flange (OCA) or with vertical outlet, as well as for isolation of the water meter.



### SCHMIEDING SERVICE VALVES

The SCHMIEDING range has a range of brass valves for house connection. The KFR brass valve incorporates a non-return valve and optional drain plug. Handwheels are made of glass reinforced polyamide.



### BELGICAST SERVICE VALVES

BELGICAST gate valves BV-05-47 are available for use as house connection service valves. They come with spigot ends in DN 50-300, threaded ends in DN20-50 or pushfit ends for polyethylene pipe DN20-50 (d20-63mm). The bodies are made from cast iron GGG-50, with wedges in brass or GGG-50 with EPDM coating.



## SURFACE BOXES

**FRISCHHUT** RANGE

**BAYARD** RANGE

### SURFACE BOXES

A large range of surface boxes and accessories for underground gate valves protection and operation. Standard and adjustable surface boxes of cast iron construction for pavements and roads are available, as well as protection tubes of cast iron or reinforced PVC, which connect to cast iron bell bases, tabernacles or square plates.



#### MARKETS



House connection



Fire protection network



Sewage network and treatment

#### ADVANTAGES

##### ROBUST

Made from cast iron with locked or tethered lids for long service.

##### RANGE

Visible tops to suit different pavement and roadway designs.

##### VERSATILE

Available with different guard tubes and bases.

#### CHARACTERISTICS

##### Standard and adjustable surface boxes –

Cast iron construction, EAUX inscription on lid, for pavement or roadway models with circular, square, hexagonal and octagonal shape, with corrosion protection.

Guard tubes – Reinforced PVC or cast iron, heights from 150-900mm. Socket end in cast iron and socket end with collar in PVC and cast iron.

Bell base, tabernacle and square plate series – Cast iron construction for installation of guard tubes.



The FRISCHHUT cast iron screwable surface box allows an easy adjustment to street level or runways as it is height-adjustable: due to a coarse male thread on the one hand the surface box is held in position, on the other hand it can be raised or lowered as required.

## SURFACE BOXES

## ATPLAS RANGE

### TALBOT STOPVALVE CHAMBERS

The Talbot range of Stopvalve Chambers and Surface Boxes provides a robust housing for an underground stopcock or similar shut off device, keeping it upright and easily accessible. It is made up of a base, guard tube and surface box. The system is made from carefully selected plastics which are lightweight for easy handling and installation and high strength for secure operation and durability. The combination of two sizes of chamber base and guard tube gives the complete system the flexibility to meet customers' exact needs.



#### MARKETS



House connection

#### TECHNICAL DATA

**Nominal Pressure (PN):**  
Working: 16 bar

#### APPROVALS

Meets UK WIS 4-37-01

#### ADVANTAGES

##### TOUGH

The tough materials used in the manufacture of the Talbot Chamber System offer long product life and secure operation.

##### EASY

The system is quick and easy to use and install especially when used in conjunction with Talbot stopcocks and plugcocks.

##### VERSATILE

Just two sizes of chamber base will suit all stopvalves from 20mm (1/2") to 63mm (2").

#### CHARACTERISTICS

└ **The Talbot stopvalve chamber system** – Designed to house a below ground stopcock or similar shut off device, firmly holding it in a clean and easily accessible environment for secure and simple operation and maintenance.

└ **The surface box** – Made from polypropylene with polyamide hinges and fitted with a steel detector plate. This is fitted onto a guard tube made from PVC which in turn sits on a polypropylene chamber base. Surface boxes are available in black for water or yellow for gas.

└ **Systems** – Delivered pre-assembled.

└ **Talbot chamber systems** – Designed for an asset life in excess of 50 years subject to normal operating and maintenance conditions.



BASE	TUBE HEIGHT	FOR STOPVALVES
6"	700mm	20-32mm
6"	700mm	40-63mm
6"	625mm	20-32mm
6"	625mm	40-63mm
4"	625mm	20-32mm



LIDS

## FEATURES

└ **The Talbot polypropylene surface box** is very robust with good strength and durability characteristics. It is made from a grade of polypropylene chosen to give maximum toughness and rigidity at temperatures ranging from -15°C to +40°C. In the unlikely event of the lid becoming damaged it can be replaced whilst the surface box is in situ. The boxes are usually supplied in either black polypropylene for water (marked 'W') or yellow polypropylene for gas (marked 'G').

└ **The 'universal' design** of the surface box adaptor ensures it fits any surface box to BS 5834: Part 2: 1983, of cast iron, aluminium or plastic. The surface box may have either a circular flange (max. diameter of 224mm) or a square flange (max. size 195x195mm). The adaptor will also suit the top section of concrete chambers (maximum concrete down spigot, 195 x195mm).

└ **The guard tube** is either of 6" or 4" diameter depending on customer needs. The 6" tube comes in 700mm or 625mm lengths and gives good access and visibility to the stopvalve.

The 4" guard tube is supplied in lengths of 625mm and is ideally suited to congested trench conditions. Both types of tube can be cut to the customer's exact needs on site. When using the 4" guard tube a special top adaptor is needed, this enables the universal surface box adaptor to fit the 4" system.

└ **The one piece universal base** holds all stopcocks (screwdown and plug type). The stopvalve is simply pushed between two sets of flexible support arms which hold it firmly upright. The base also has a hole in the stopvalve platform which accepts the base nut of plug type stopvalves, enabling them to sit firmly in the base. The base has six full length external flutes which stop the assembly twisting in the ground and adds rigidity to the unit. The base also has a significant socket depth that prevents inadvertent separation from the guard tube. There are three sizes of base, two for use with the 6" diameter guard tube and one for the 4" tube.

