

ATPLAS Boundary Boxes

Boundary boxes and associated equipment For In-Line water meters.

Benefits

- Large surface box opening provides excellent access and visibility into the chamber making meter reading, installation and maintenance simple.
- Quick release meter mountings and removable stopvalve and check valve assemblies means that installation and maintenance is quick and simple
- A telescopic chamber design offers installation depths from 500mm to 1200mm in just three alternatives making installation straightforward
- The range provides integral Pushfit connections for 25 and 32mm PE pipe as well as 25mm PE tails
- The quarter turn stopvalve offers the advantage of low head loss and is easy to operate, even after extended periods without operation



Technical help

For further technical data, product specifications and general information please contact our Customer Service Department at the telephone number shown below.

Atplas has many years of experience in the design and manufacture of boundary boxes for the UK and international water industry. This experience has enabled Atplas to develop an advanced range of products designed around the needs of specifiers, installers and meter readers.

A new addition to the range is the Atplas In-Line water meter box. This combines established design concepts with revolutionary new technology. This combination of experience and innovation has enabled Atplas to create a range of boundary boxes that exactly suits the developing needs of the worlds water industry.



Technical data

General Sizes:

Height:

Short Box: From 500 to 700mm

Standard Box: From 700 to 950mm

Tall Box: From 900 to 1200mm

Internal aperture: 190 x 265mm

Inlet/Outlet:

PE connections

(Options for 25 or 32mm Talbot Pushfit outlets)

PE Tails

(25mm with a standard options of 200mm lengths)

For specific sizes relating to individual box types please refer to the the table on page 3

Material:

Surface Box: DMC

Detection plate: Galvanised steel

Seals: Nitrile Rubber

Chamber: Upper - DMC, Lower - uPVC

Manifold: Acetal

Base Footing: Polypropylene

Insulation disc:

Stopvalve Type: Quarter Turn

Meter Types:

Industry standard In-Line water meters to a length of 110mm

Standards:

The Atplas In-Line boundary box is designed to comply with Water Industry Specification No: 4-37-01 and EAN124, withstanding a 10 tonne loading

All Atplas boundary boxes are designed for an asset life in excess of 50 years subject to normal operating and maintenance conditions.

General application

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 headloss 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



The Mini Box

For use in situations where shallow services force the use of a reduced height box

Internal Access

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



Meter Replacement Tube

The Atlas In-Line 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



The Standard Box

For use in most normal situations, the telescopic chamber ensures suitability for service depths of between 700 and 950mm

25mm Tailed Outlets

The Atlas In-Line 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



The Tall Box

For use in situations where extreme cold conditions exist or in areas where there are deep services. The telescopic chamber ensures compatibility with service pipes of 700 to 1200mm deep.

Talbot Pushfit Connections

For ease of pipe connection the Atlas In-Line Meter Box can be supplied with integral 25mm or 32mm Talbot Pushfit connections for PE pipe. This simple to use fitting has no nuts to leave undone or loose components.



Spares

The Atplas In-Line boundary box is designed to provide the longest possible installed life. This length of life is achieved by ensuring that the parts most likely to wear are capable of being replaced while the unit is installed. As with all boundary boxes the two main parts prone to wear after extended use are the stop valve assembly and the check valve assembly. These two units can be quickly and easily replaced and are readily available as spare parts. This ease of maintenance and speed of replacement ensures that the products total life cost is maximised and that any costly and inconvenient customer supply interruptions are kept to a minimum.



In addition to these internal components the Sliding Head Assembly is also available as a spare should the surface box or upper chamber housing become damaged once installed.

Tools and Accessories

The Atplas in line boundary box needs no special tools to install, operate or maintain. However a range of tools and accessories are offered to enhance the use of the In-Line boundary box.

Tools

Plastic valve operating keys (long and short)

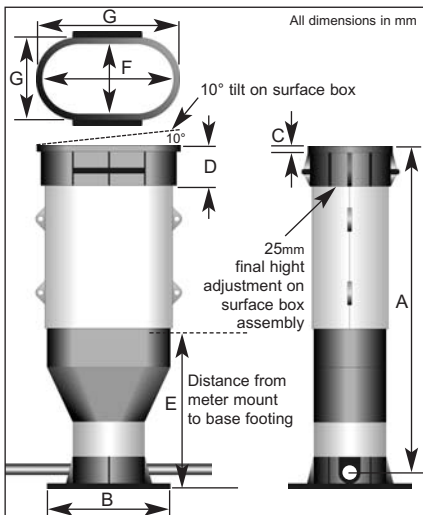
Metal extended valve operating keys



Accessories

Full flow meter replacement tube

Dimensions and Details



Description	Outlet Types	A(min)	A(max)	B ¹ (ø)	B ¹ (square)	C	D	E	F	G
Short Box	25mm PE	500	700	255	-	20	90		190 x 265	260 x 340
Short Box	32mm PE	500	700	255	-	20	90		190 x 265	260 x 340
Short Box	25mm Tails	500	700	-	242 x 242	20	90		190 x 265	260 x 340
Standard Box	25mm PE	700	950	255	-	20	90	440	190 x 265	260 x 340
Standard Box	32mm PE	700	950	255	-	20	90	440	190 x 265	260 x 340
Standard Box	25mm Tails	700	950	-	242 x 242	20	90	440	190 x 265	260 x 340
Tall Box	25mm PE	900	1,200	-	242 x 242	20	90		190 x 265	260 x 340
Tall Box	32mm PE	900	1,200	-	242 x 242	20	90		190 x 265	260 x 340
Tall Box	25mm Tails	900	1,200	-	242 x 242	20	90		190 x 265	260 x 340

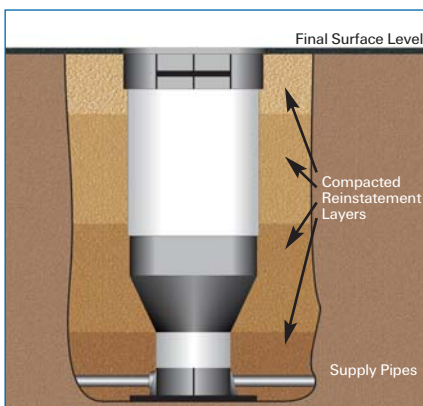
Material Specification

Description	Material
Surface Box Assembly	DMC
Upper Chamber	DMC
Lower Chamber	uPVC
Seals	EPDM or Nitrile
Detector Plate	Galvanised Steel
Pressurised Parts	Acetal

Thermal Insulation

Each Atplas In-Line Boundary Box can be supplied as standard with an insulation pad in the upper chamber. This pad is designed to help provide effective protection against freezing to a temperature at ground level of -15°C

Installation Instructions



As with all boundary boxes, in order to gain the optimum performance from the Atplas In-Line boundary box it is important to ensure that the correct procedure is followed when installing the product, especially when reinstating or backfilling the site. The diagram to the left provides a general overview of the optimum arrangement of backfill material and compaction. Supplies should also be flushed before connecting in order to avoid any contamination.

More detailed instructions are supplied with each product and are also available on request from our Customer Service Department at the telephone number shown on the back of this data sheet.

As with all industrial products it is also important to take adequate safety precautions during use, maintenance and installation. We recommend the use of adequate protective clothing such as gloves, overalls, eye protection and safety footwear.

Boundary Box Systems

In-Line Boundary Boxes for Water Meters

Associated Products

The Tyco range of boundary boxes and associated equipment combine to provide the connection point between the mains water supply and the consumer property. This point may be used for several associated functions such as metering, filtration, pressure regulation or leak detection. Tyco supply an extensive range of boundary box designs as well as a variety of associated items, all of which conform to the relevant water industry standards. These products are high quality and are designed to provide many years of trouble free use and operation.



The Atplax Mini box is ideally suited to situations where ground conditions or existing services dictate that shallow installations have to be made. The Mini Box is telescopic giving 135mm of initial height adjustment with the surface box providing a further 28mm of height adjustment and up to 6° of tilt for pavement gradients making installation easy. As with all Atplax boundary boxes the Mini Box is available with quarter turn or screwdown stop valves



The Atplax standard boundary box is a single manifold unit with 25 or 32mm outlets for PE pipe or 3/4" female threaded connections suited to a wide variety of connection types including fittings suitable for contaminated ground areas. This unit, as with all Atplax boxes, has a telescopic chamber and the standard box offers height adjustment between 500 and 800mm. The surface box provides up to 6° of tilt and is available with either a square or round flange to suit a variety of surface materials



The Atplax Double box effectively splits a single service supply into two outlets, each with its own stopvalve and the option to install concentric meters on either or both services. The unit is compact and completely self contained and is ideal for use in congested trench and pavement situations. Only one excavation is needed to connect two dwellings. The unit uses a telescopic chamber and a tilting surface box, this combined with up to 40° of directional adjustment on the 25mm outlets and 32mm inlet makes installation a simple procedure.



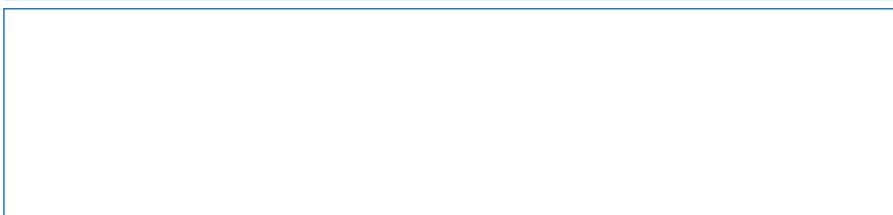
The range of Atplax Multi-Manifolds provide a complete integrated manifold chamber system. The unit is supplied with in either 6 or 4 outlet options with directionally adjustable 25mm Pushfit outlets and a 2" BSP female threaded inlet. Each connection has its own stopvalve and concentric meter mount. The unit is supplied complete with its own chamber housing with telescopic height adjustment and a tilting surface box to accurately match foot path gradients. These compact, cost effective units are quick to install and are ideal for use in cramped or congested trench conditions or with multi dwelling developments.

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The Atplax range of boundary boxes is designed for the conveyance of cold potable water. Save with the express written approval of Atplax, no warranty is given that the fittings are suitable for any other purpose.

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

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