

## ATPLAS

### Below Ground Boundary Boxes

#### Benefits

- *The flexibility of the Atlas range of boundary boxes provides a variety of options, from sealed or un-sealed to screwdown or 1/4 turn control valves*
- *Available as a short version for use in shallow service situations*
- *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*
- *The robust plastic surface box has a load bearing capacity of over 30 kN*
- *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*
- *Fully designed and tested to WIS specifications*



The Atlas 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. Alternatively Atlas Boundary Boxes can be used as a shut off device with the option to fit a meter at a later date.



#### Technical data

##### Sizes:

##### Connections

25mm & 32mm metric options for PE pipe  
3/4" female threaded option

##### Height adjustment

Standard Box: 505mm to 830mm  
Double Box: 550mm to 870mm  
Short Box: 270mm to 385mm

*The above dimensions include 30mm of final height adjustment in the surface box*

*Dimensions are taken from the centre of the inlet pipe to the top of the surface box flange*

##### Multi Manifold (4 and 6 port units):

Telescopic sliding head with 70mm of height adjustment and 6° of long and 3° of short tilt.

Additional chamber sections can be supplied to increase the height of the unit:

Short unit: 90mm Long unit: 180mm

*The minimum height of the manifold system is 700mm*

##### Standards

Loading: BS5834 Part 2 Grade C

Watertight: 4-37-01 class 1 (where applicable)

Valve Type 1/4 turn or Screw Down

NRV Single (dual check valve also available)

Material: Acetal, Polypropylene, DMC or SMC

##### Additional Components:

##### Meter Blanking Plugs:

Full Flow (white), Trickle Flow (yellow) and No Flow (red).

Tools: A range of tools are available to aid meter fitment and unit maintenance.

Spares: A full range of spares are available.

#### General application

The Atlas range of below ground boundary boxes has been designed and manufactured to comply with Water Industry Specification No. 4-37-01 and BS5834 Part 2.

The materials used in the Atlas product that come into contact with water have WRAS approval and the range has been submitted for 3rd party approval by the WRAS.

The range is designed for an asset life in excess of 50 years subject to normal operating and maintenance conditions and as with all Tyco Waterworks products it is manufactured in an ISO 9001 quality assured environment.

#### Safety

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

#### Technical help

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

## Atlas Below Ground Boundary Box Systems

- **Telescopic chamber.**

The moulded two piece telescopic chamber greatly reduces the risk of ground water getting into the system through any seals or joints. This means that the meter reader is less likely to encounter a chamber that is full of water. The telescopic chamber combined with a final height adjustment of up to 30mm in the surface box gives excellent overall height adjustment.

- **Ease of installation.**

The small, stable footprint of the Atlas Boundary Box 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 control valve. The shut off device can be supplied as either a traditional screwdown type or as a 1/4 turn valve that greatly reduces head loss. The valve has a built in stop, making it simple to turn the supply on and off. The system can also be converted to meet the requirements for automatic meter reading installation.

- **12 bar pressure rating.**

The 12 bar pressure rating of the Atlas Boundary box not only exceeds the 8 - 10 bar normal working pressure, it also matches the typical 12 bar pressure rating of the pipe. The box is designed to cope with almost any eventuality regarding water pressure fluctuations, reducing the risk of failure in the field. All the materials used in the Atlas Boundary box that come into contact with water are WRAS listed.

- **Flexible connection system.**

The outlets on the double box and multimanifold systems have an 'eye ball' angular adjustment to help installation in congested trench conditions. These outlets are available in 25mm push fit options.

- **Extensive Range.**

The Atlas range of Boundary Boxes can be supplied in a variety of formats to satisfy most customer needs.

- **Range.**

- 25mm inlet x 25mm outlet with a screwdown manifold
- 25mm inlet x 25mm outlet with a 1/4 turn ball valve manifold
- 32mm inlet x 32mm outlet with a screwdown manifold
- 32mm inlet x 32mm outlet with a 1/4 turn ball valve manifold
- 3/4" female inlet x 3/4" female outlet with a screwdown manifold
- 3/4" female inlet x 3/4" female outlet with a 1/4 turn ball valve manifold
- 32mm inlet x 2, 25mm outlets with screwdown manifolds
- 32mm inlet x 2, 25mm outlets with 1/4 turn ball valve manifolds
- 2" inlet x 4, 25mm outlets with screwdown manifolds
- 2" inlet x 4, 25mm outlets with 1/4 turn ball valve manifolds
- 2" inlet x 6, 25mm outlets with screwdown manifolds
- 2" inlet x 6, 25mm outlets with 1/4 turn ball valve manifolds

### Additional Components

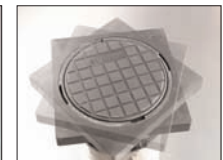
- Alternative meter plugs: Plastic full flow meter plugs are supplied as standard, no flow and restricted flow options are also available as well as gunmetal alternatives.
- Tools: Tools are available to fit the meter plugs, meters and check valve.

### Compatible Meters

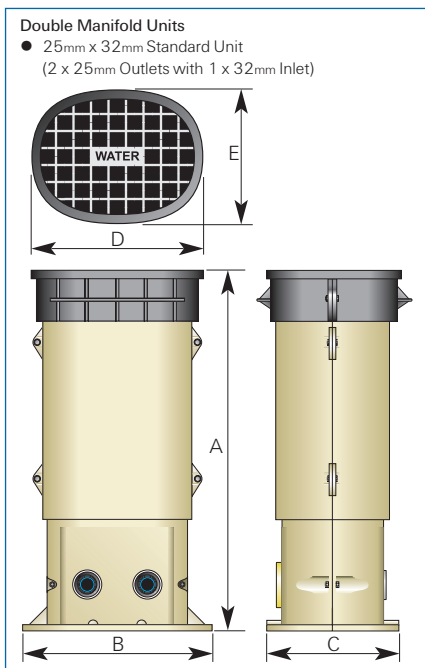
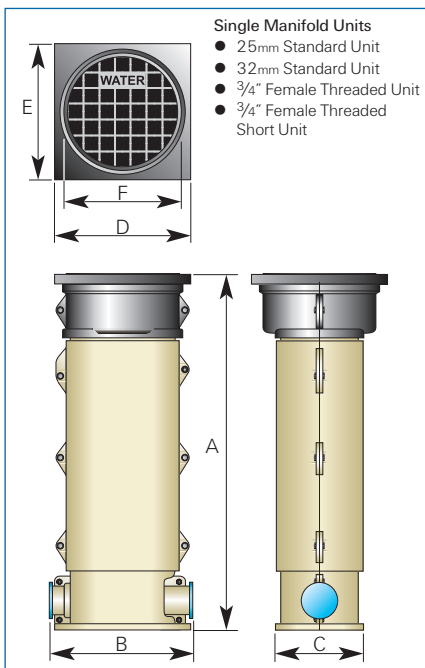
The meter housing accepts industry standard end fitting G 1 1/2" threaded (concentric) meters up to Qn 2.5m<sup>3</sup> per hour.

### Notes

Meters are not supplied as standard with any of the Atlas Boundary Box Systems.



## Atlas Below Ground Boundary Box Solutions

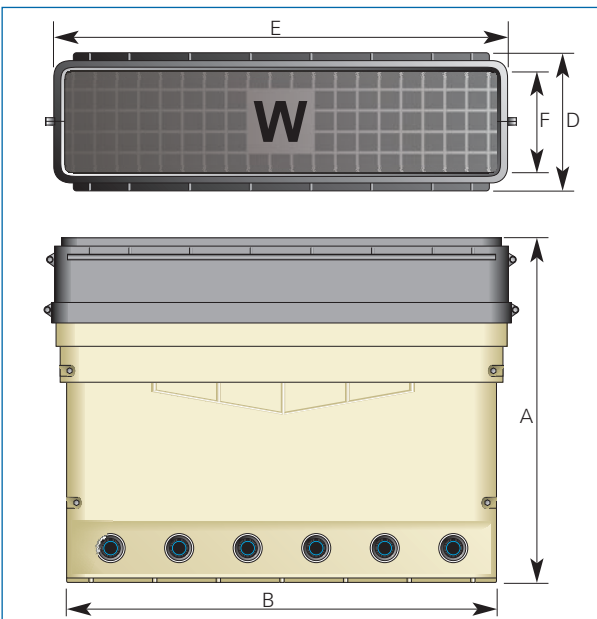


### Dimensions and Details

Box Type	A (min)	A (max)	B	C	D	E	F	Weight
Single Manifold Boundary Box (Standard) 25mm, 32mm and 3/4" female connections	495mm	820mm	200mm	115mm	210mm	210mm	122mm	7kg
Single Manifold Boundary Box (Short) 3/4" female connections	250mm	320mm	220mm	115mm	210mm	210mm	122mm	4.7kg
Double Manifold Boundary Box 1 x 32mm inlet with 2 x 25mm outlets	550mm	870mm	350mm	270mm	370mm	220mm	-	13kg
Multi-Manifold Boundary Box 1 x 2" inlet with 4 or 6 x 25mm outlets	410mm	780mm+	720mm	190mm	200mm	750mm	720mm x 180mm	43kg

### Material Specification

Description	Material
Surface Box Assembly	DMC
Chamber Assembly	DMC
Seals	
In contact with water	EPDM or Nitrile
Other	EPDM or Nitrile
Pressurised Parts	Acetal



- Multi Manifold Units**
- 4 x 25mm outlets with 1 x 2" female threaded inlet
  - 6 x 25mm outlets with 1 x 2" female threaded inlet

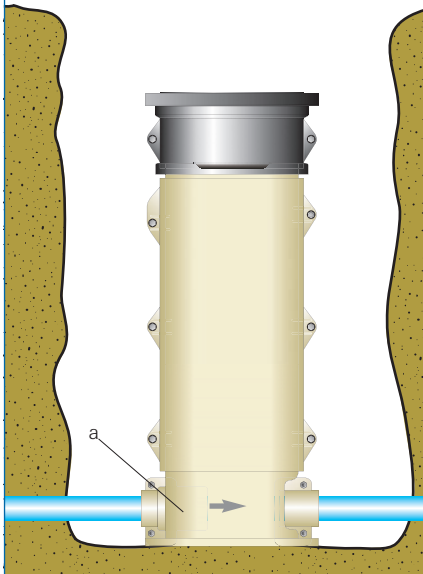


## Atlas Single and Double Boundary Box Installation Instructions

1. Place the complete Boundary Box in position on firm ground and connect the inlet and outlet pipework.

The direction of flow is indicated by an arrow (a) on the base.

Tyco Waterworks advise that the system is flushed fully to avoid any debris entering the check valve assembly before connecting the service pipes.



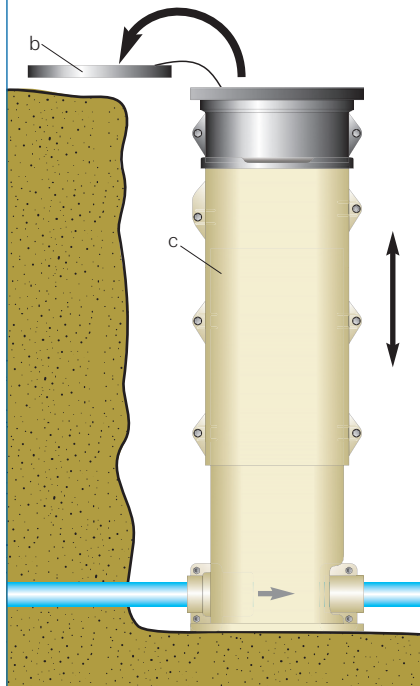
### Note:

These instructions must be followed carefully, failure to do so may cause damage to property. Tyco Waterworks accept no liability for any loss, damages or claims arising from failure to adhere to these instructions and/or negligent installation.

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

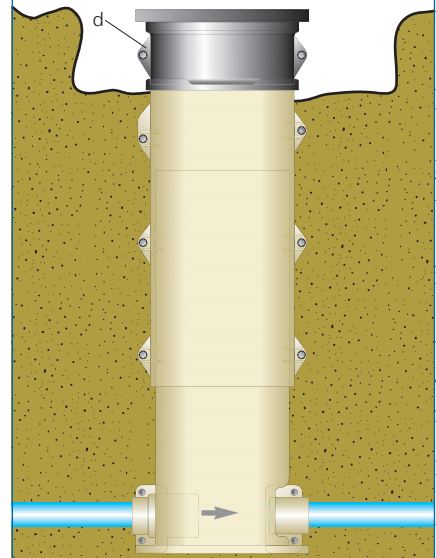
These products are designed for the conveyance of cold potable water. Save with the express written approval of Tyco Waterworks, no warranty is given that the fittings are suitable for any other purpose.

2. Open the surface box lid (b) to allow the telescopic chamber (c) to extend and adjust the box height to the approximate height of final reinstatement level.

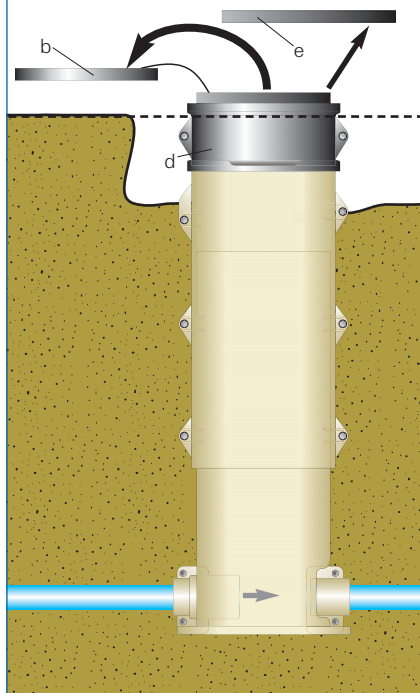


3. Close the lid and backfill with suitable granular material in well compacted 150mm to 200mm layers to the level of the surface box frame (d).

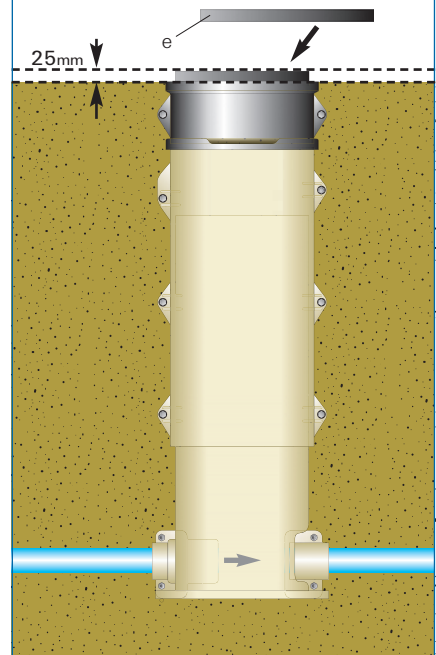
Notes: Reference should be made to HAUC regulations governing reinstatement as well as adhering to good general working practices. For further information please refer to the HAUC website, <http://www.haucuk.org>



4. Remove the square surface box flange (e) (if fitted) by rotating it. Open the lid (b) and, using the final adjustment available in the surface box frame (d), adjust the height and tilt to the general requirement.



5. Close the lid and continue to backfill and compact to a level that allows for the final reinstatement material. Replace the surface box flange (e) and reinstate to the final surface level. The surface box frame may be raised approximately 20mm above the final surface level then compacted down with the surrounding material, helping to improve re-instatement quality.



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