

Ajusta™ Boundary Boxes

Boundary Box Systems

Elster SmartMeter offer a comprehensive range of boundary box products, which cater for every installation eventuality, whether it be new-build or retrofit application. Our range of options and accessories offer a solution with unrivalled flexibility and reliability whilst significantly reducing overall operational and logistical costs.



Boundary Box Systems

Rigidity with Flexibility

The guard tubes are manufactured from UPVC, giving rigidity and stability. The Ajusta™ has unbeatable adaptability in the field – screw down height adjustment of 210mm allows the Ajusta to fit varying service pipe depths without sacrificing rigidity or the need to cut the guard tube on site. Our complete Ajusta construction including slope adjuster option and lid/surface box has been built and tested to withstand five tonne load bearing without sinking or damage. This cost-effective solution gives unparalleled flexibility during re-instatement and long life expectancy in use.

Right First Time Every Time

Our boundary boxes have reliability engineered-in. We test 100 percent of our boxes in-house via a strict eight-stage verification cycle to ensure the highest possible reliability. We have an unrivalled reputation for quality, which means unscheduled dig-outs and re-instatements due to leaks are virtually eliminated. We have the lowest product failure rate of any boundary box manufacturer. We have options for straight-guard tube or Ajusta lid; MDPE pipe fitting or push-fit depending on requirement.

Lids

The boundary box range will accept the majority of existing lids/surface boxes, giving the customer total flexibility. Both plastic and metal lids are compatible. Our flexible approach means that we can exceed customer expectation, whether the quantity required is 10 or 10,000.

STMS Boundary Box Advantages

- Complete range of boundary boxes includes basic guard tube, fully adjustable and versions for use on contaminated land
- Modular and scaleable design offers multiple options for lid and surface box arrangements
- Bayonet option simplifies box fitting in confined dig-outs and assists with concentric meter installation
- Fully adjustable Ajusta box height from 590mm to 800mm with five tonne weight bearing capability. Mini-box version available for shallower digs
- Available with pre-installed SmartMeter intelligent water meter for ease of installation
- Push-fit boundary box utilises renowned John Guest fittings for ultimate leak-free reliability whilst simplifying installation
- Option of round or square lid design depending on reinstatement requirements (e.g. tarmac, block paving, etc.)
- Lid detection facility for easy location of boundary boxes. Patented lid lifting tool makes opening boxes easier



Contaminated Land Boxes

Two options for contaminated land installation:

Non-sealed box with brass manifold and brass fittings. Brass material will not allow leaching of groundwater.

Sealed box with plastic manifold. Sealed box is 100 percent leak tested so that groundwater cannot ingress into the boundary box chamber. Using plastic manifold reduces risk of theft compared with brass alternatives.



Push-fit and MDPE Tailed Boundary Boxes

MDPE tailed options allow for either compression fitting or reliable electrofusion jointing of either new or existing pipework. Negates requirement for "make-up" sections, which reduces potential leak paths.

Push-fit solutions utilise highest reliability John Guest Speedfit™ fittings in 20mm or 25mm options, ideal for new installations or to reduce installation costs via fewer fittings without compromising risk of leakage.



Ajusta Design Benefits

The Ajusta design allows modular and scaleable boundary box implementation with minimum stock holding:

- Height, angle and slope are fully adjustable and can be installed in any surface
- Bayonet feature significantly increases ease of installation where clearance is an issue as it maximises accessibility for the fitter. This reduces issues with pipe joint/connection quality and reduces risk of cross-threading when installing concentric water meters. Re-instatement is also made easier as the guard tube can be fitted once the base installation is satisfactory before backfilling
- Each assembled box undertakes a rigorous eight-stage test cycle, which includes verification of the following:
 - Multi-point pressure test to 19 bar
 - NRV function test to ensure no reverse flow
 - Ensuring stop-tap operates and fully closes under maximum pressure
 - Ensure leak-free operation at every stage.
- Five tonne load bearing capability irrespective of options employed, with no loss of rigidity or risk of sinking post re-instatement
- This is the most reliable box on the market – offers massive operational savings by having the least number of dig-outs and re-instatements and associated issues with the new Traffic Management Act

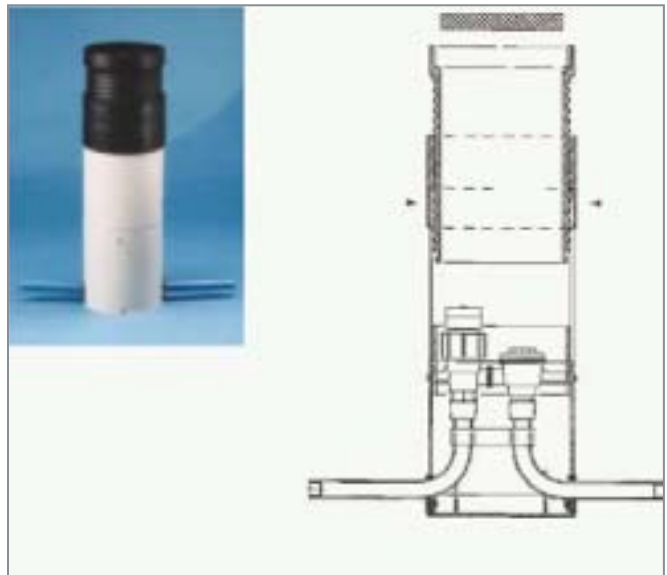
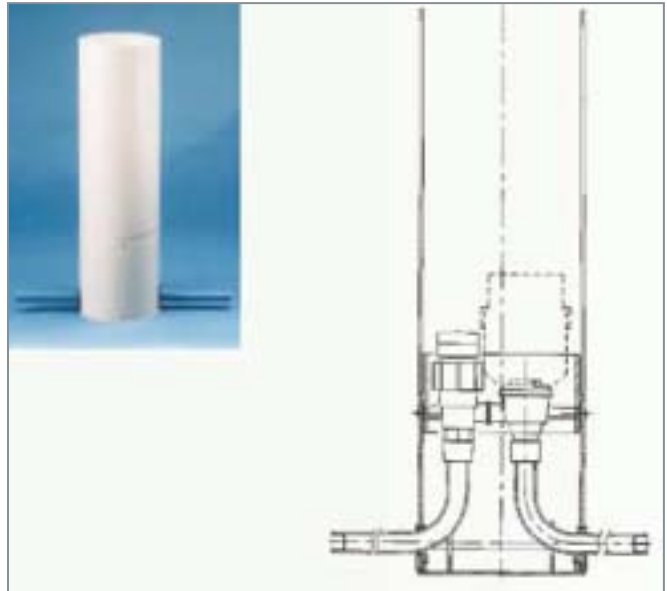


Ajusta Range

The Ajusta is available with height adjustment assembly and can be installed into a highway utilising the disc lid. The bayonet design enables the box to be separated prior to meter installation allowing ease of connection and meter insertion.

This boundary box comprises a 200mm diameter guard tube with bayonet fitting, which can be cut to appropriate size to meet the varying depth of service pipes. The standard product is 750mm; however other requirements can easily be accommodated.

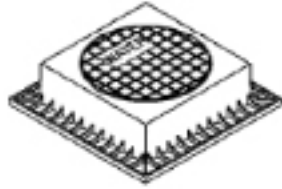
Straight guard tube solutions without the bayonet feature are also available. Standard height is 750mm, but any height requirement can be supplied.



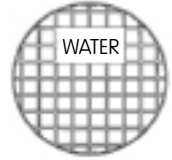
Boundary Box Accessories

Boundary boxes are available with a number of accessories to assist with installation; a small stockholding will allow the fitting team to cope with any installation.

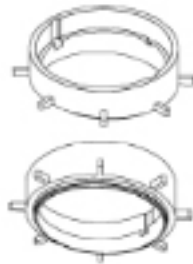
Surface Box
(including disc lid)



Disc Lid
(wording can be tailored to suit individual specification)



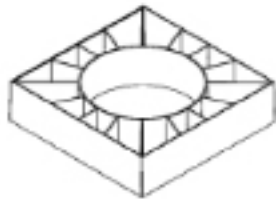
Slope Adjuster



Lid Release Tool



Plinth
(for fixed height range)



SmartMeter™ – Packaged Solutions

The SmartMeter intelligent concentric meter enables leakage detection, quantification and the implementation of complex tariffs to curb demand. Available as a pre-installed meter and boundary box solution, the system helps reduce installation time and prevents grit and other particulates from entering the pipework.

- Ease of installation
- Reduces risk of grit and particulates
- Reduces installation time
- Drastically reduces storage and shipping costs when compared to separate box and meter supplies



Technical Data

Type	Class 2RD (non-watertight, rigid tube)
Approval	Complies with WIS 4-37-01
Pattern	Raised manifold (standard 120mm clearance. Other clearances available on request)
Manifold	Screw down stop valve with "anti shear" torque limit mechanism, meter housing, non-return valve
Meter Housing	Accepts G 1 ½ inch concentric water meter
Loading	5 tonnes (complete assembly)
Height Adjustment	Adjustable screw height on Ajusta range (210mm max, 150mm nominal vertical range), variable on guard tube type
DWI Regulation 25	Complies
Hydrostatic Pressure Rating	Each manifold tested to 16 Bar
Friction Loss	Less than 3-metre head @ 25 litres per min with class D N1 meter fitted
Surface box	Accepts wide range of lids and surface boxes including other manufacturers' in both plastic and metal
Connections	25mm MDPE service pipes; 150mm in length 20mm or 25mm push fit ¾ inch male iron connection on contaminated land box
Diameter	200mm external tube diameter
Frost Protection	Expanded polyethylene foam pad optional
Packaging	Boundary box packaged 50 units per pallet

Approvals

Potable Water Contact Materials WRAS listed
Manufactured to ISO 9001 – Quality accreditation
Manufactured to ISO 14001 – Environmental accreditation

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