

THOMAS

PIPE PRODUCTS

**Pipe
Fittings**



EnerSeal Boltless Socketed Fittings

Fabricated Steel Fittings
Socketed for PVC Pipe

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EnerSeal Boltless Socketed Fittings for PVC Pipe

Application

Quick, Simple, Economical Method of Joining PVC Pipe of 630mm Outside Diameter

Application

Large Diameter Boltless Socketed Fittings for 630mm PVC pipe. This is the most economical method of introducing fittings into a large diameter PVC pipeline. Our comprehensive range of fabricated EnerSeal fittings includes, but is not limited to the following:

- Bends
- Equal Tees, Scour Tees, Hydrant Tees
- Socketed Puddle Pipes
- Y Pieces
- Crosses
- Flange Adaptors
- Pressure Testing End Caps
- Straight Repair Connectors
- etc...

We WILL supply weld on sockets to customers and fitting fabricators. Enabling customers to manufacture their own EnerSeal Socketed fittings.

Special Coatings

Corrosion protection coatings of Fusion Bonded Epoxy (FBE), Two Pack Wet Spray Epoxy and Hot Dipped Galvanizing are available.

The Range

630mm OD PVC pipe up to 25 Bar Working Pressure.

Advantages

- Quick & simple Installation
- No bolting required on site
- Lighter than Cast Ductile Iron Fittings
- Economically priced, less costly than Cast Ductile Iron Fittings
- Locally manufactured
- Shorter Lead Times than imported castings
- Supplied with quality self-energizing seals
- Robust
- Various coatings available
- Sockets can be held in stock and fittings manufactured when required
- Any standard or special fitting can be manufactured...

Size Range

- DN630mm

Industries

- Water

Pipe Materials

- PVC



EnerSeal Boltless Socketed Fittings for PVC Pipe

Specifications

Why we developed the EnerSeal Fitting

Currently the only method to introduce fittings into a large diameter (OD>315mm) PVC pipeline are:

1. Using expensive, heavy imported ductile iron fittings. These fittings are not held in stock in Southern Africa and have extremely long lead times. Delivery periods in excess of 3 months are common. There is no technical backup and only a limited range available.
2. The use of standard flanged steel fittings with flange adaptors is another expensive option, however special fittings can be made to order.
3. The use of fabricated steel fittings with Half Coupling Socketed Ends. This is a viable option. The costs are higher than an EnerSeal Fitting yet care must be taken during installation.
4. The EnerSeal is the most cost effective & fastest to produce. It is fast to install and requires the same simple installation skills as for PVC pipe. It creates a complete homogenous PVC pipeline system.

How To Specify an EnerSeal Boltless Socketed Fitting

The EnerSeal Boltless Socketed Fitting shall exhibit construction and design characteristics as follows:

1. Includes Forsheda F576 Anger-lock rubber seal
2. Self-energizing seal includes stiffener
3. No bolts permitted on socketed end
4. Fabricated Mild Steel Fitting
5. Minimum wall thickness 6mm
6. Corrosion coating must not exceed 1000 microns
7. Suitable for 25 Bar working pressure
8. 630mm fitting socket length = 300mm
9. The rubber cavity is formed steel.
10. No circumferential weld beads are permitted at the rubber cavity as this will limit seal performance.

Material Specification

Socket

Mild Steel Grade CQ

Steel Fitting

SANS719

Rubber Seal

Synthetic Rubber to EN 681-1

Suitable for potable water

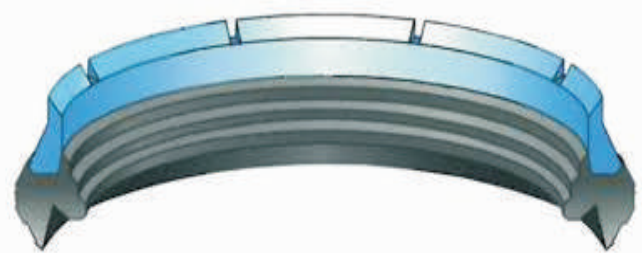
Hardness 60±5 IRHD

Dimensional Detail of Standard Fittings

The tables below list standard dimensional details for fabricated steel fittings. Special fittings of any size and configuration are available on request. The dimensions provided for EnerSeal Boltless Socketed Fittings are equal to those for plain ended and flanged fittings.

Advantages of the F576 Anger-Lock Seal

This seal ring is a combined plastic stiffener and compression seal. The plastic ring is an integral part of the rubber seal which is bonded to the rubber at the time of moulding. The rubber seal is ozone resistant and is suitable for contact with potable water.



The Forsheda F576 Rubber Seal cannot be displaced from the pipe fitting during transportation and installation. The seal exhibits a low jointing force enabling rapid and easy installation of fittings on site.

The rubber seal is the most important component of a Boltless Socketed Fitting. It is imperative to utilize the best possible seal commercially available.

The EnerSeal Range is designed for use with Forsheda F576 Anger-lock Seals. This seal is the most reliable rubber seal for use in conjunction with oPVC pipes.

Corrosion Protection Coating

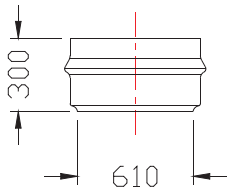
Standard is 250 microns minimum Fusion Bonded Epoxy (FBE) to SANS 1217.

Other coatings are available on request.

EnerSeal Boltless Socketed Fittings for PVC Pipe

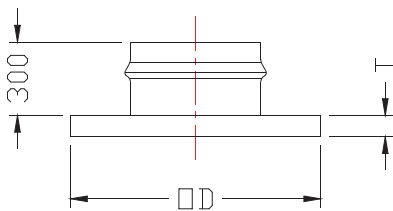
Dimensions

EnerSeal Weld-On Socket



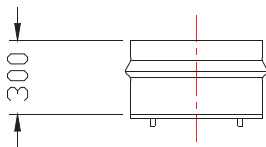
PIPE O.D. (mm)	PN (Bar)	BACK END (mm)
630	Up to 25	610

EnerSeal Flange Adaptor



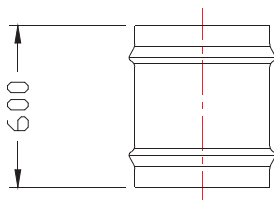
DN (mm)	PIPE O.D. (mm)	PN (Bar)	T (mm)	OD (mm)
600	630	Up to 25	AS PER FLG. SPEC.	

EnerSeal Pressure Testing End Cap



PIPE O.D. (mm)	PN (Bar)	L (mm)	TESTING SOCKETS
630	Up to 25	300	AS PER CUSTOMER

EnerSeal Straight Connector / Repair Coupling

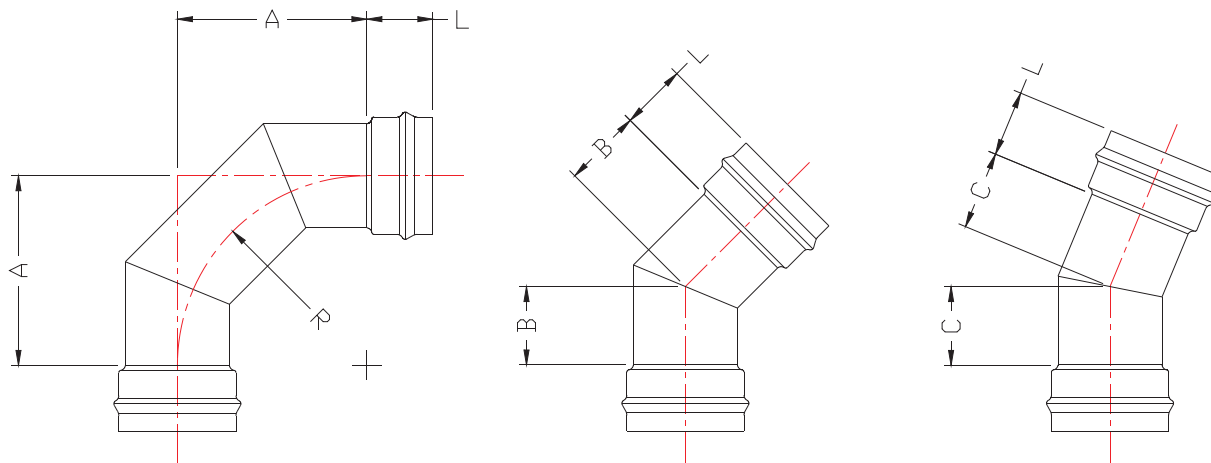


PIPE O.D. (mm)	PN (Bar)	L (mm)
630	Up to 25	600

EnerSeal Boltless Socketed Fittings for PVC Pipe

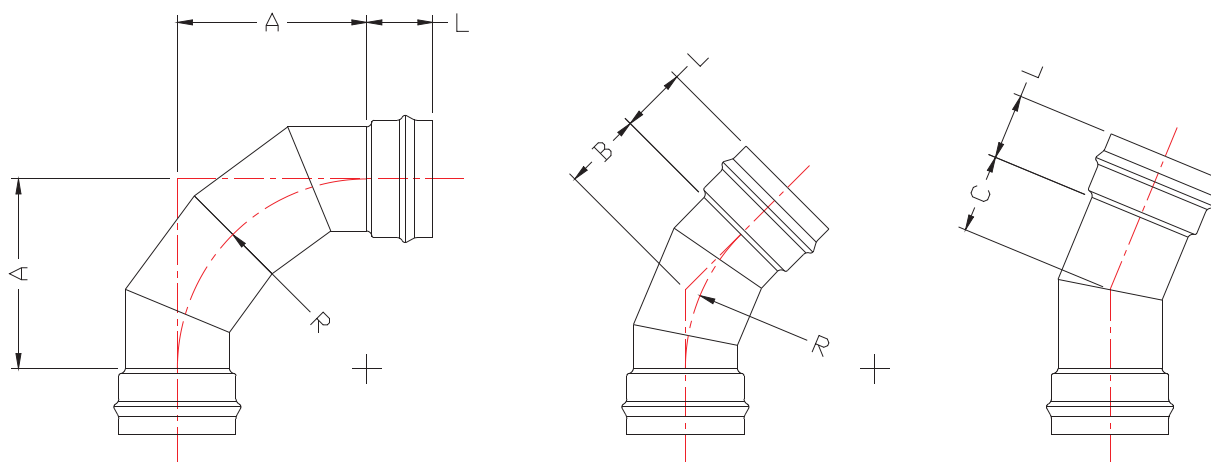
Dimensions

EnerSeal Elbow (SANS 719)



DN (mm)	PVC O.D. (mm)	CENTRE TO FACE			RADIUS R (mm)	L (mm)
		A (mm)	B (mm)	C (mm)		
600	630	610	355	305	610	300

EnerSeal Medium Radius Bend (SANS 719)



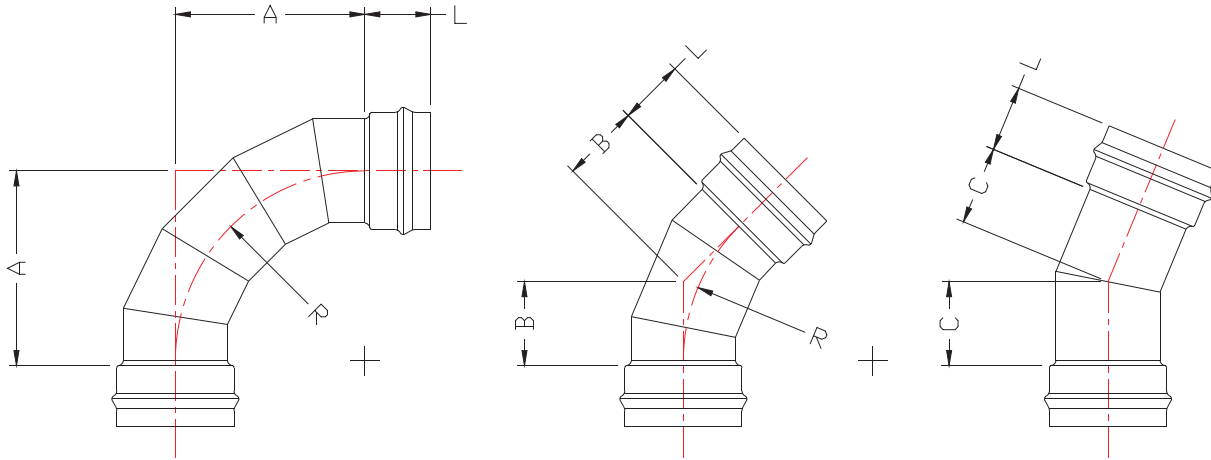
DN (mm)	PVC O.D. (mm)	CENTRE TO FACE			RADIUS R (mm)	L (mm)
		A (mm)	B (mm)	C (mm)		
600	630	1220	610	405	1220	300

The above are standard fittings. Special fittings are available on request.

EnerSeal Boltless Socketed Fittings for PVC Pipe

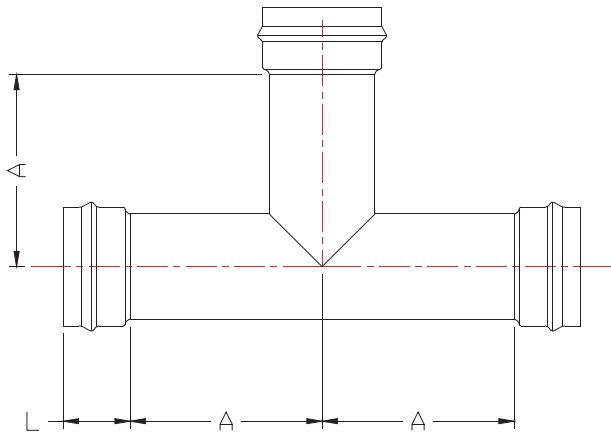
Dimensions

EnerSeal Long Radius Bend (SANS 719)



DN (mm)	PVC O.D. (mm)	CENTRE TO FACE			RADIUS R (mm)	L (mm)
		A (mm)	B (mm)	C (mm)		
600	630	1830	1220	610	1830	300

EnerSeal Equal Tee (SANS 719)



DN (mm)	PVC O.D. (mm)	A (mm)	L (mm)
600	630	610	300