





## Anaconda®

Connecting existing service pipes to newly installed or rehabilitated buried gas mains, whilst negotiating existing utility services with a minimum number of joints can be challenging.

## 'Smart thinking' by Radius Systems

The next generation tapping tee from Radius Systems, Anaconda® is a cutting-edge innovation which is the solution to service pipe connection challenges faced by gas pipeline installers.

Combining a Unifit® tapping tee with a factory connected flexible polyethylene (PE) service pipe outlet, this ground-breaking solution minimises the number of electrofusion fittings and associated joints required to connect a service pipe to a buried gas main, bringing substantial installation cost and time savings to installers.

## Features & benefits

- PE100 Unifit® tapping tee base with a 25 mm
   PE80 structural and flexible pipe outlet
- Factory welded tapping tee connection to the flexible pipe
- Ability to negotiate changes in service pipe alignment
- Suitable for buried gas applications up to 2 bar
- Reduction in the number of fittings and associated joints in the system
- Reduced pipe preparation for electrofusion jointing
- Increased overall efficiency for service connection operations
- Double length connection spigot to facilitate a second joint if required
- Significant installation time savings, leading to reduced network downtime
- Reduced disruption to customers
- No additional tooling required

# bsi

## **Approvals**

Anaconda® approved to GIS/PL2-6:2014

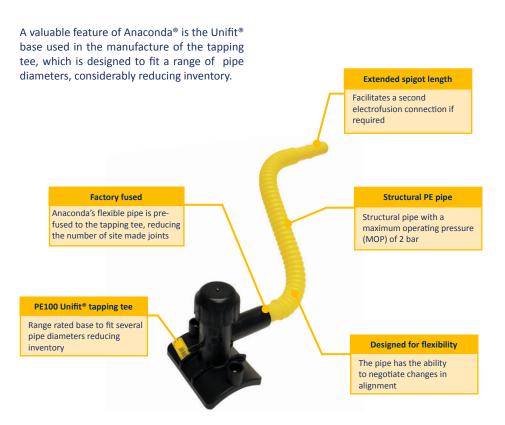


## Innovative design for optimum service pipe connections

Anaconda's innovative design has been specifically developed to offer flexibility with the ability to accommodate different trench configurations, as well as changes in direction between the main and the service pipe.

A unique feature and an intrinsic part of Anaconda®, the 25 mm flexible corrugated PE pipe can be shaped to bypass existing services, such as utility pipelines or structures found in trenches.

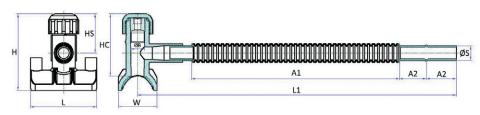
The robust, structural PE pipe is fused to Anaconda's tapping tee outlet in a factory environment, giving our customers confidence of a high integrity joint and removing the need for an additional site connection. In addition, the pipe has been manufactured with a double-length outlet, providing the flexibility for a second electrofusion joint.



## Product range

25 mm outlet - MOP 2 bar





Tapping tee base	Dime	Dimensions										Fuse	Cool	Product
Nominal diameter	ØB	Н	HC	HS	L	L1	A1	A2	ØS	W		time	time	code - 40V
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg	sec	min	4.0 mm pin
40 ¹	20	151	120	71	115	546	366	46	25	62	0.43	40	4	GB8083
55	20	136	110	71	115	546	366	46	25	67	0.43	55	4	GB8085
63 & 2"	20	141	110	71	115	548	366	46	25	77	0.43	55	4	GB8086
75	20	129	110	71	115	547	366	46	25	75	0.43	55	4	GB8087
90 & 3"	20	130	111	71	115	555	366	46	25	90	0.43	55	4	GB8088
110 - 140 & 4"	20	128	115	71	115	552	366	46	25	83	0.43	55	4	GB8091
140 - 180 & 6"	20	125	115	71	115	554	366	46	25	88	0.43	55	4	GB8097
200 - 250 & 8"2	20	122	115	71	115	555	366	46	25	90	0.43	55	4	GB8103
268 - 355 <sup>2</sup>	20	120	115	71	115	555	366	46	25	90	0.43	55	4	GB8109

Fitted with an under-part

ØB Cut hole diameter

Fitted with a thread follower which must be removed after tapping the main

## How to make an Anaconda® connection

## Considerations when installing Anaconda®



- The position of Anaconda® on the main in relation to the service pipe
- Obstructions that may affect the pipe route
- The distance between the main and the service pipe





- Flexible pipe minimum inner bend diameter = 90 mm
- The bend should be situated in the centre of the flexible section
- Do not over-bend the pipe



## Jointing overview

Only use calibrated equipment and industry approved tooling when installing Anaconda®

Minimum personal protection equipment









Using a marker pen, mark the position of Anaconda's tapping tee on the main and prepare the pipe surface area with a pipe scraping tool



Clamp the tapping tee onto the prepared main using the correct clamping force. Fuse the tapping tee using the fitting's welding parameters



Prepare the service pipe spigot using a pipe scraping tool. Mark the fitting's insertion depth on the service pipe



Place the fitting on the service pipe and push fully up to the insertion depth. Keep the packaging on the fitting to protect from contamination



When the tapping tee is fully cooled, prepare Anaconda's pipe spigot. Mark the fitting's insertion depth



Fully insert Anaconda's prepared pipe spigot into the fitting up to the insertion depth



Fit an appropriately sized alignment clamp to secure and align the pipe spigots



Weld the socket fitting using its welding parameters. Once the fitting is fully cooled, remove the clamps



The connection is now complete. The installation should be pressure tested before commissioning.





## What if Anaconda's flexible pipe gets damaged

- In the event that the flexible pipe section is accidentally damaged, the connection can be repaired by cutting the flexible pipe from the tapping tee.
- Make a new connection onto the tapping tee's 32 mm spigot outlet using a solid wall PE80 pipe with the appropriate electrofusion fittings.

## <u>OR</u>

 Anaconda's tapping tee outlet can be capped-off after cutting Anaconda's flexible pipe flush with the tapping tee outlet. The gas supply to the tapping tee must be isolated and the area made safe before undertaking the repair or capping-off operation

Cut Anaconda's flexible pipe flush with the tapping tee outlet



Cut the pipe at the service outlet end



Reconnect the tapping tee outlet to the service pipe





What is Anaconda's intended application?

The intended application for Anaconda is to make a gas service connection to a buried PE main.

What is the maximum operating pressure for Anaconda®?
Anaconda® has a maximum operating pressure of 2 bar.

What are the benefits of using Anaconda®?

Anaconda's key feature is its flexibility and ability to negotiate changes in direction from the main to the service pipe. Anaconda® reduces the number of joints required in the system and increases site efficiencies.

Is Anaconda's pipe a single or dual wall construction?

Anaconda's corrugated section is manufactured as a single wall pipe.

What are the dimensions of Anaconda's 25 mm pipe spigot? The 25 mm spigot has an SDR of 11. Its dimensions are those of a standard 25 mm SDR11 solid wall PE pipe as per the requirements of GIS:PL2:2 and EN1555-2.

Thow is Anaconda® supplied?

Anaconda® is supplied individually packaged in a sealed clear polyethylene bag.

Are there any special installation procedures or requirements that I should be aware of?

No. Anaconda® should be installed in accordance with gas industry best practice, using industry approved tooling and suitably calibrated equipment. Radius Systems can provide additional installation guidance where required.

Can I make a connection onto the flexible part of Anaconda®?

No. It is only possible to make a

No. It is only possible to make a connection onto Anaconda's plain spigot end.

Is it possible to squeeze off Anaconda's flexible pipe to control the flow of gas? No. It is not possible to squeeze off Anaconda® to control the flow of gas. What if the electrofusion joint which connects Anaconda® to the service pipe fails?

Anaconda® has an extended spigot, which if required, allows for the first joint to be removed and a second connection to be made.

What is the minimum inner bend radius for Anaconda's pipe?

The minimum inner bend radius for the flexible pipe is 45 mm. This is equal to bending Anaconda's pipe around a 90 mm nominal OD pipe. The bend should be applied at the centre of the flexible pipe section.

How do I identify the manufacturing batch details for Anaconda®?

Anaconda's manufacturing batch details are embossed on the body of the tapping tee and can also be found on the packaging label.

## **Radius Systems**

Radius Systems are a market leader in the innovation and manufacture of plastic pipe systems for the utilities and construction industries. With extensive research and development at the heart of our products and systems, we take care of the entire pipe life cycle - from design and manufacture through to installation, repair and rehabilitation. We strive to improve industry practices, with good health and safety policies at the forefront of our philosophy of 'getting it right first time'. Our continuous customer inspired research and development, combined with successful customer partnerships represent our total dedication to the plastic piping industry.

#### Manufacturing facilities

With 2 production sites in the UK, we have complete control over quality and the ability to meet our customers' expectations

#### Innovative approach

We are leaders in our field with a history of research and new product development. Practicality, durability and adaptability are all high on our agenda to meet our clients' needs

#### Flexible product and service provision

Our comprehensive range of services is designed to fit the variable demands of <u>our clients' developments</u> in pipes, fittings, training and support services

#### Reliability and safety

With over 50 years experience in pipe design and manufacture, our clients know that they can count on us to meet not just their product and service needs, but also their delivery and safety requirements

#### Outstanding customer service

We have a dedicated Customer Services team to answer queries from our customers in the UK and overseas. Our service is not just about the delivery of products - contact our team if you have a product or installation enquiry or a post-delivery query



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