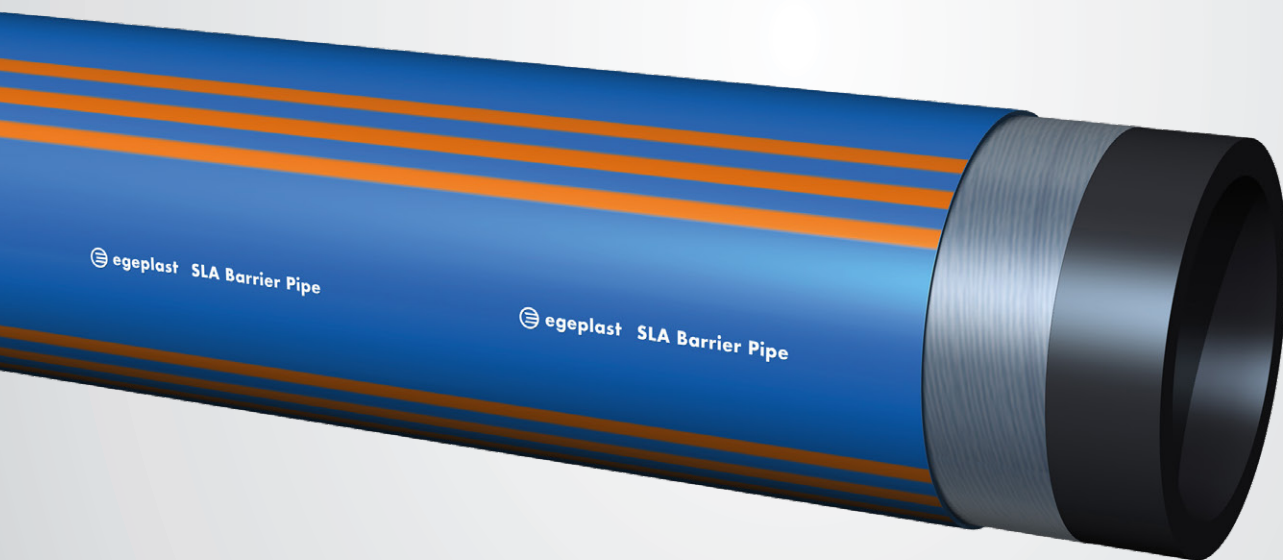


egeplast UK

SLA[®] Barrier Pipe

Pipeline system solutions to protect drinking water



Future-proofed Pipe Systems

Introduction

Innovative pipe solutions for today & tomorrow

egeplast UK manufactures and supplies PE pipe systems, fittings and related fabrications for the UK water, construction and utility sectors. Operating from modern, dedicated manufacturing facilities in Yorkshire, we have a 20-year track record in the manufacture of innovative pipe solutions and a reputation for providing exceptional standards of customer service.

Part of egeplast International GmbH, the company benefits from the financial and technical backing which comes from being part of a leading European manufacturing business. egeplast International was founded in 1908, has a turnover of €200-million per year and operates state of the art manufacturing facilities in the UK, Sweden and Germany. Its operations are accredited to ISO EN 9001 (Quality), ISO EN 14001 (Environment) and ISO EN 50001 (Energy) standards and its products are specified in 30 countries across the world.

Innovation is at the core of our business. With a long-standing commitment to investment in R&D and the development of industry firsts such as egeplast SLA barrier pipe, we are committed to providing future-proofed pipe systems which improve environmental performance, help deliver net zero and ultimately help meet the challenges being faced by society to support a better life for future generations.



The Product

egeplast SLA® Barrier Pipes combine the advantages of materials and open up new possibilities

A significant increase in the use of brown field sites is required to ensure sufficient land is available to meet the needs of housebuilders in the UK. The risk associated with ensuring clean water in these instances cannot be understated and proper specification of appropriate barrier pipe systems is required. Construction sites located on contaminated or brown field sites present a unique set of challenges for water companies and contractors. Both organisations need to ensure the pipe network is effectively sealed and the clean water it carries is protected from potential contamination.

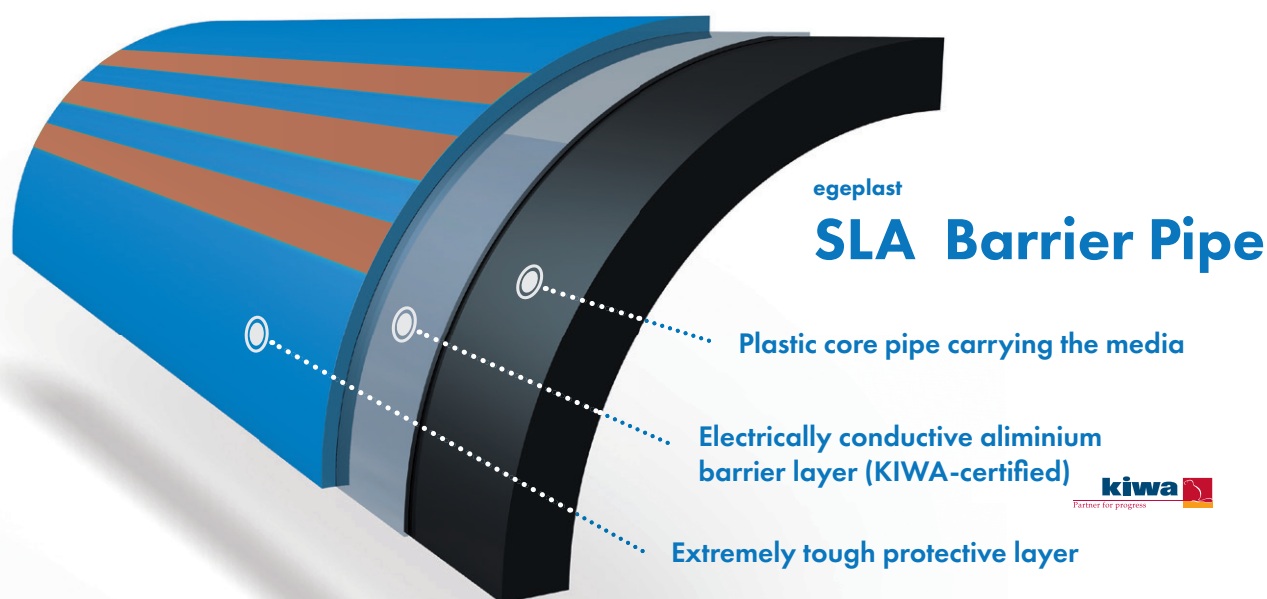
Developed more than 30 years ago the egeplast SLA Barrier Pipe system has been the premier choice of product amongst specifiers across the UK and Europe. Meeting the requirements of DWI and WRAS the pipe and fittings system enables completely secure connections and will reliably eliminate the migration of pollutants into the drinking water supply and is guaranteed for long term performance.

The intelligent combination of flexible thermoplastic materials with the permeation resistance of metal materials enables permanent protection. From the transportation of ultrapure water through to chemically contaminated wastewater and process water, the best possible solution can be found for your application.

The **SLA® Barrier Pipe** System developed by egeplast reliably rules out any migration of pollutants.

The permeation resistance is achieved using a barrier layer, whereby the core pipe conveying the medium is surrounded by an aluminium barrier layer certified by KIWA and an extremely tough protective layer.

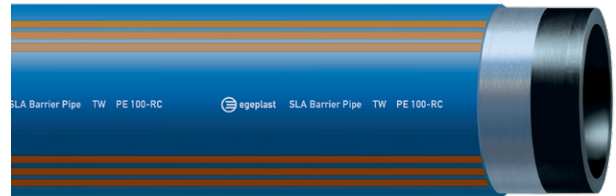
Due to its electrical properties, the embedded metal layer also offers the possibilities both of localising the path of the composite pipes in the ground and of verifying the integrity of the new pipeline using a resistance test after completion of the constructional measure. This increases safety, especially in the case of sensitive media.



Pipe Range

A wide range of available diameters to suit housebuilders and large utility projects.

The egeplast **SLA® Barrier Pipe** consists of a core pipe in accordance with BSEN 12201, upon which a protective coating is additionally extruded in order to increase its scratch and abrasion resistance. A multiple layer aluminium foil is applied as a barrier layer between the core pipe and the coating layer. The three brown stripes serve to identify it as a multiple layer pipe.



SDR11 Coils

Diameter	25m	50m	100m	150m
25mm	●	●	●	●
32mm	●	●	●	●
63mm	●	●	●	●
90mm	●	●	●	●
110mm	●	●	●	●
125mm	●	●	●	●
160mm	●	●	●	●
180mm	●	●	●	●

SDR17 Coils

Diameter	25m	50m	100m	150m
90mm	●	●	●	●
110mm	●	●	●	●
125mm	●	●	●	●
160mm	●	●	●	●
180mm	●	●	●	●

SDR11 Lengths

Diameter	6m	12m
63mm	●	●
90mm	●	●
110mm	●	●
125mm	●	●
160mm	●	●
180mm	●	●
225mm	●	●
250mm	●	●
315mm	●	●
355mm	●	●
400mm	●	●
450mm	●	●
500mm	●	●
630mm	●	●

SDR17 Lengths

Diameter	6m	12m
90mm	●	●
110mm	●	●
125mm	●	●
160mm	●	●
180mm	●	●
225mm	●	●
250mm	●	●
315mm	●	●
355mm	●	●
400mm	●	●
450mm	●	●
500mm	●	●
630mm	●	●

Pipe Sizes, Ratings & Approvals

Required information to ensure product compliance and enable engineering specification to meet UK approval

Actual outside dimensions of egeplast **SLA® Barrier Pipe**

Pipe Reference Size	Actual Outside Diameter
25mm	26.2 - 27.4mm
32mm	33.3 - 34.5mm
40mm	41.3 - 42.5mm
50mm	51.3 - 52.6mm
63mm	65.6 - 65.9mm
75mm	78.8 - 79.0mm
90mm	93.8 - 94.1mm
110mm	113.7 - 114.0mm
125mm	129.6 - 129.9mm
140mm	145.4 - 145.7mm
160mm	165.7 - 166.1mm
180mm	186.6 - 187.3mm

Material requirements for reinstating protective layer over electrofusion couplers with Aluminium Foil & Denso E10 Tape

OD	Metres / Weld Seam Aluminium	Metres / Weld Seam Tape
	Foil	E10
25mm	3.0	1.0
32mm	3.0	1.0
40mm	4.5	1.5
50mm	4.5	1.5
63mm	6.0	2.0
75mm	6.0	2.0
90mm	8.5	2.5
110mm	9.0	3.0
125mm	12.0	4.0
140mm	12.0	4.0
160mm	13.5	4.5
180mm	15.0	5.0
200mm	18.0	6.0
225mm	18.0	6.0
250mm	22.5	7.5
280mm	22.5	7.5
315mm	30.0	10.0
355mm	30.0	10.0
400mm	45.0	15.0
450mm	45.0	15.0
500mm	45.0	15.0
560mm	45.0	15.0
630mm	90.0	30.0

System Approvals

- BS 8588:2017 Polyethylene pressure pipe with an aluminium barrier layer and associated fittings for potable water supply in contaminated land. Size 20 mm to 630 mm
- WRAS Water Regulations Advisory Scheme
- BSEN12201 Inner Core Pipe constructed in accordance with this standard
- DWI Regulation 31 Materials in contact with potable water
- KIWA Chemical and mechanical testing

Pipe Construction

- Inner Core Pipe Black PE100 to BSEN12201
- Metal Layer Double Bonded Aluminium
- External Layer Blue PE100 c/w Brown Stripes

Joining Systems

- 25, 32 & 63mm E/F Fittings and Compression Fittings
- 63 - 180mm Self Tapping Ferrule Straps
- 63 - 180mm E/F Fittings, Butt Fusion Welding
- 90 - 630mm Butt Fusion Welding

All E/F Fittings and Butt Fusion Joints must be externally protected from ground contamination to ensure the integrity of the complete system. Use of Aluminium tape and protective E10 tape is required and can be supplied by egeplast UK.



"Water is critical for sustainable development, including environmental integrity and the alleviation of poverty and hunger, and is indispensable for human health and well-being."

- United Nations

Environmentally Friendly Installation

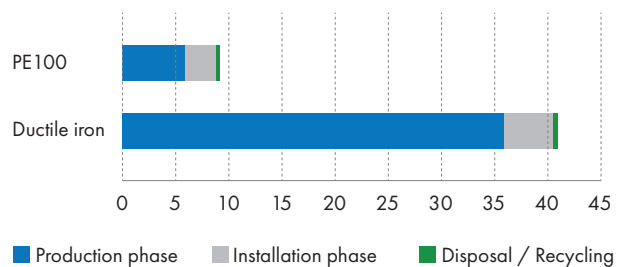
The development of skinned pipe technology has enabled a reduced carbon impact of installation

The influences on the environment can be reduced by low weight and the possibility of trenchless installation using the most modern methods due to the high flexibility of the plastic. The ploughing and milling procedure for example reduce interventions in the environment and increase installation performance. Despite greater burden during installation, the pipe with protective layer guarantees the reliable installation and operation of the pipeline.

As a planner you face the challenge of selecting a safe pipe system for a specific use. The decisive installation criteria for safety pipe systems are usually as follows:

- Protection of humans (the responsibility lies with the system operator)
- High environmental awareness on the part of the operator/client
- Protection from liability risks (liability for negligence from risk of environmental contamination)
- The prevention of operating disruptions (protection of sensitive and expensive production plants)
- The avoidance of bad publicity (prevention of damage)
- Compliance with statutory requirements specific regional and application-related guidelines and regulations for water-polluting substances)
- The safe transportation of water and environmentally hazardous media in buildings, the soil and on pipe bridges
- Moral reservations regarding the occurrence of leaks during the transportation of hazardous chemicals
- Reduction of insurance risks (lower risks lead to reduced premiums)

Impact on the greenhouse effect (in kg CO₂ Equivalent)



Joining Techniques

Butt fusion

Joining methodology for butt fusion welding ensuring the reinstatement and protection of the aluminium barrier layer

Butt Fusion Welding

Step 1

Prepare your pipe ends for Butt Fusion Welding by removing the outside PE skin and aluminium foil utilising the M10 Peeling Tool.



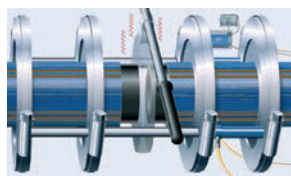
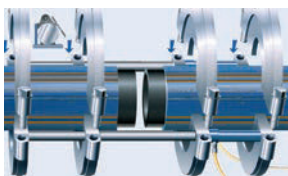
Step 2

Once the outside PE skin and aluminium is removed over a length of 30mm from the pipe end you must scrape the internal pipe, removing any adhesive residue and leaving you a clean swarf free surface for welding.



Step 3

After the above pre welding preparation has taken place you can now Butt Weld. Welding should be carried out in compliance with WIS 4-32-16. Standard welding machines will need to use adapted inserts adjusted to the specific external diameter. (Please check compatibility of inserts and if in doubt seek advice.)



Step 4

For the installation of the egeplast **SLA® Barrier Pipe**, it is mandatory to provide separate protection for both the area of the weld and the aluminium layer. The weld bead is to be removed with an external bead remover, and the aluminium layer must be restored so that it is continuous again. To do this, aluminium foil from egeplast UK, is to be applied in three layers in a left to right motion starting up to 100mm beyond the peeled outer skin, making sure that you cover the weld with a 50% overlap.



Step 5

It is mandatory to provide separate protection to the area by applying 25% overlap of protective E10 Tape over your already applied aluminium foil, (protective E10 Tape available from egeplast UK).



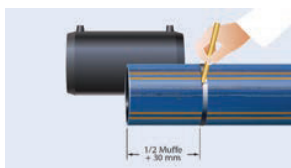
Joining Techniques

Electrofusion

Joining technique for using electrofusion couplings to ensure complete integrity of joint to maintain barrier against ground contaminants

Steps 1 & 2

Prepare your pipe ends ready for electrofusion by measuring the insertion depth for your fitting and then allowing an additional 30mm. Using this measurement from the pipe end and mark the pipe. Using the M10 Peeling Tool remove both the outside PE skin and aluminium layer to your mark as required.



Step 6

Once the electrofusion fitting has successfully welded and cooled down it is mandatory that you reintroduce the egeplast **SLA® Barrier Pipe** aluminium foil and apply three layers in a left to right motion starting up to 100mm away from the fitting, making sure that you cover the fitting with a 50% overlap.



Steps 3 & 4

Once the outside skin and aluminium is removed you must scrape the internal pipe removing any adhesive residue giving you a clean swarf free surface.



Step 7

It is mandatory to provide separate protection to the area by applying 25% overlap of protective E10 Tape over your already applied aluminium foil, (protective E10 Tape available from egeplast UK).



Step 5

Once you have prepared both pipes you can now introduce your electrofusion fitting. You must clamp your fitting in place using restraining clamps then set your electrofusion box to the correct setting and then commence welding



*Also note Electrofusion Tapping Saddles can be applied following the previous steps

Installation Support Products

Heat Shrink Sleeves

Efficient installation solution to maintain the integrity of the barrier pipe system butt fusion joints

egeplast heat shrink sleeves are available for pipes from OD 180 up to 630 mm, in standard lengths of 600mm. Please contact us for bigger diameters or other lengths.



Towing Heads

Provides easy handling particularly for directional drilling, slip lining and direct burial

egeplast towing heads are available for pipes up to 630mm and have been developed to provide a strong fully sealed reusable Towing Head for the larger sizes of PE pipe.

This fully field tested product consists of a PE nose section, manufactured from a solid billet of PE, into which is fitted an eyebolt manufactured from high tensile steel. This eyebolt is in turn housed within a sealed sleeve which is free to rotate within the PE nose. A 500mm length of PE pipe is factory fused onto the PE nose cone thereby allowing the Towing Head to be easily butt fused onto a pipe section or string.

After use it can simply be cut from this pipe string and butt fused onto the next one.



Fabricated Fittings

Meeting the complex installation needs of customers and ensuring the SLA® Barrier pipe system provides a durable high performance barrier against ground contaminants.

egeplast UK manufacture a wide range of fabricated fittings. This includes standard fabrication such as mitred bends, tees and reduced stubs. In addition egeplast are capable of providing engineered solutions for specific projects manufactured to meet the most complex of installations.



Stub Flange



Equal Tee



Mitred Bend

Installation ready SLA Barrier pipe fabricated fittings. Come complete with factory prepared joints that ensure barrier integrity remains intact. Our fabricated SLA fittings ensure that installation is quick, easy and provides a high performance barrier against ground contaminants.

Post Welding Pipe Joint Preparation

It is important that after butt welding that the pipe joints are prepared to ensure that the barrier is repaired to maintain its integrity against ground contaminants using the following simple steps:



A Remove welding bead and clean area to allow joint integrity repair.



B Wrap whole joint with aluminium tape to provide barrier integrity. Foil should be in overlapping strips and care should be taken to cover an area 100mm beyond the edge of the welded joint.



C Cover with protective E10 tape ensuring all foil is covered.

SLA® Barrier Pipe Compression Fittings

A complete range of small bore pipe fittings designed to ensure complete system integrity. Guaranteed for long term performance.

Coupler Barrier



Code	Size (mm)
75020105PL	25 x 25
75030105PL	32 x 32
75060105PL	63 x 63

Coupler Barrier x Copper



Code	Size (mm)
782522C05PL	25 x 22
783228C05PL	32 x 28
786354C05PL	63 x 54

Reducing Coupler Barrier



Code	Size (mm)
78322505PL	32 x 25
78632505PL	63 x 25
78633205PL	63 x 32

Male Adaptor Barrier



PUK Code	Size (mm)
72023105PL	25 x 3/4"
72033105PL	32 x 3/4"
72031105PL	32 x 1"
72061105PL	63 x 1 1/2"
72062105PL	63 x 2"

End Plug Barrier



Code	Size (mm)
07020105PL	25
07030105PL	32
07060105PL	63

90° Elbow Barrier



Code	Size (mm)
77029105PL	25 x 25
77039105PL	32 x 32
77069105PL	63 x 63

Female Adaptor Barrier



Code	Size (mm)
73023105PL	25 x 3/4"
73021105PL	25 x 1"
73033105PL	32 x 3/4"
73031105PL	32 x 1"
73061105PL	63 x 1 1/2"
73062105PL	63 x 2"

90° Tee Barrier



Code	Size (mm)
76029105PL	25 x 25 x 25
76039105PL	32 x 32 x 32
76069105PL	63 x 63 x 63

45° Elbow Barrier



Code	Size (mm)
77064105PL	63 x 63

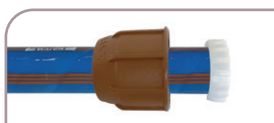
Reducing Tee Barrier



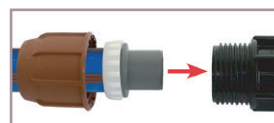
Code	Size (mm)
76032359105PL	32 x 25 x 32
76063329105PL	63 x 32 x 63



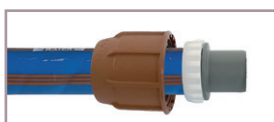
Fitting Instructions



Step 1: Remove nut and grip ring from fitting and mount brown nut onto the pipe and assemble grip ring flush with the pipe end.



Step 3: Push the plain end of the adaptor into the fitting until it meets the stop.



Step 2: Push the barbed end of the adaptor into the pipe until it meets the stop (a mallet may be required).



Step 4: Screw nut tightly towards the body of the fitting using a PLASSON wrench.

MultiFit Ferrule Straps

A smartly designed range of ferrule straps to support the market leading egeplast SLA Barrier Pipe System.

The range enables live service connection with male fitting BSP 3/4" and 1" female iron, and 25mm and 32mm compression fittings for off-takes from SLA Barrier mains pipe from 63mm up to 180mm. Providing integrity for the barrier system, the WRAS / BS 8588 approved products are available for both SDR 11 and 17 networks.

The range is manufactured from high-quality stainless steel and brass components and is designed to be light flexible and compact. The unit comes with a pre-cutter which removes swarf while cutting into the barrier pipe and significantly reduces time and effort during installation.



Key Benefits

The SLA Ferrule straps have been designed with stockists and installers in mind, and to ensure long term performance for the asset owner.



Multi size solution | Units are designed to cover multiple pipe sizes. This reduces the need for multiple products in stock and in vans to enable pipe off takes.



Easy installation | Off takes can be quickly completed in trenches, confined spaces and in the wettest of weather. Minimal tools are required to ensure successful installation.



Fully approved | Products are fully approved for use with potable water system providing long term confidence and performance for the installer and the asset owner.



Barrier integrity | Design prevents any ingress of contaminants into the water system. The self locking sleeve also prevents delamination of the barrier layer of the pipe for long term performance.



System compatible | Product range is suitable for use on SLA Barrier Pipe Systems and covers both SDR 11 and 17.



Live connections | Off takes can be completed on live networks mitigating the need for supply disruptions.

Materials

A performance range of ferrules manufactured from high quality stainless steel and brass components. Designed to be light, flexible, compact and easy to use in all site conditions, the unit comes with a pre-cutter which removes swarf whilst cutting into the barrier pipe and significantly reduces time and effort during installation.

Standards & Approvals

BS EN 8588 | Polyethylene pressure pipe with an aluminium barrier layer and associated fittings for potable water supply in contaminated land.

WRAS approved (2304524) | SLA Barrier Pipe. Extruded, triple layered pipe consisting of a black coloured PE 100 inner layer, aluminium middle layer and blue coloured (with brown coloured longitudinal stripes) PE 100 outer later. For use with water up to 23°C

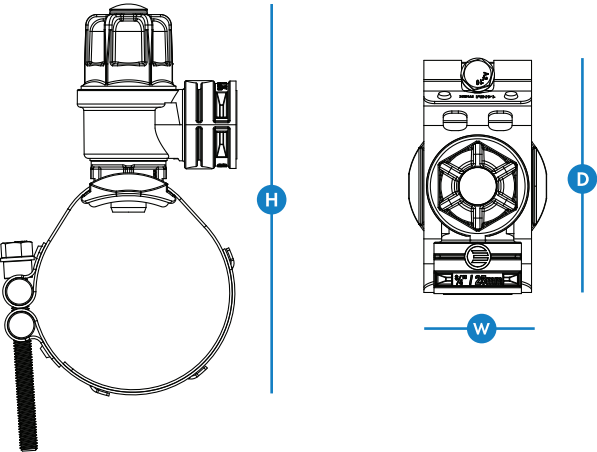


MultiFit Ferrule Straps

MultiFit Connections

Code	Description	Outlet	H (mm)	D (mm)	W (mm)	SDR	Weight (kg)
90063105MTFS	63mm x ¾" SLA Multi-fit Ferrule Strap	¾"	150	124	64	11	0.7
9090123105MTFS	90-125mm x ¾" SLA Multi-fit Ferrule Strap	¾"	178	135	64	11/17	0.8
9016183105MTFS	160-180mm x ¾" SLA Multi-fit Ferrule Strap	¾"	248	179	64	11/17	0.8
90061105MTFS	63mm x 1" SLA Multi-fit Ferrule Strap	1"	179	132	64	11	1.1
9090121105MTFS	90-125mm x 1" SLA Multi-fit Ferrule Strap	1"	206	142	64	11/17	1.1
9016181105MTFS	160-180mm x 1" SLA Multi-fit Ferrule Strap	1"	276	178	64	11/17	1.2

Note: The new MultiFit ferrule straps can replace the traditional Gunmetal Self Tapping Saddles and Ferrules. These products are due to be discontinued. For further information please contact customer service.



One fitting covers multiple sizes

Pipe Size	Ferrule Size
63mm	63mm
90mm	90-125mm
110mm	
125mm	
160mm	180mm
180mm	







Contact us

01427 875770 or sales@egeplast.uk
www.egeplast.uk