



**Installer
guide**

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Vulcathene jointing options

Mechanical and enfusion fittings are available in the Vulcathene range. Whichever is specified, these solutions offer significant benefits to chemical drainage installation

- **Chemically resistant, fully matched pipework**
- **Full BBA approval for peace of mind**
- **Flexibility of design**
- **Easy to install**
- **High impact resistance**
- **UV protection**

Mechanical fittings

With a unique nut and tongued olive method, mechanical fittings are simple and easy to install, allowing connections to be rejoined where necessary and without affecting the joint's efficiency. This provides significant installation flexibility and cost benefits.

Alongside a broad range of pipe and fittings, laboratory bench items such as sinks, drip cups, wastes and anti-siphon traps complete the portfolio, catering for a broad range of chemical drainage installation needs.

Enfusion fittings

Where a fusion welded joint is preferred, Vulcathene enfusion fittings are available in sizes from 38mm to 152mm. These are ideal where pipework is to be buried, run overhead in ceiling voids, or in less accessible locations such as drainage stacks.

Vulcathene enfusion fittings incorporate moulded socket ends with an integral resistance wire in place. Jointing is completed by energizing the resistance wire via a dedicated enfusion control unit.

The Vulcathene enfusion and mechanical systems are interchangeable, offering great versatility to the installer of chemical waste drainage systems.



Making the mechanical joint

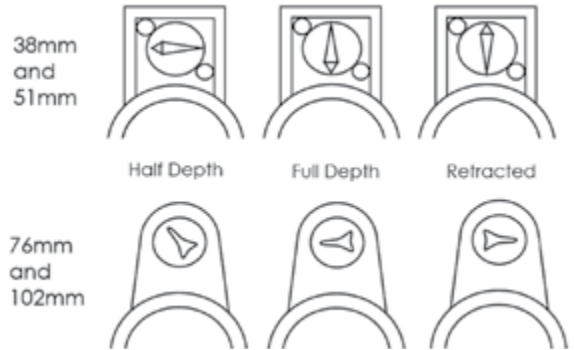
Step 1 - Cut pipe to length using a rotary plastic pipe cutter as shown. Where possible clamp the pipe in a vice avoiding excessive distortion.



This method is favored over the use of a hacksaw as the finish is clean (no loose swarf or burr on the pipe). The pipe must be square. If a saw is used, it is essential that all burrs and loose material are removed.

To achieve full joint integrity, it is essential that a groove is cut around the pipe with the appropriate grooving tool, into which the tongued olive will be located.

Step 2 - Fully insert the pipe into the grooving tool. Adjust the depth of the cutting blade to approximately half its depth. Rotate the cutting tool in an anti-clockwise direction around the pipe. Then adjust cutting blade to full depth, further rotating the cutter anti-clockwise. When completed, retract the blade and remove the tool making sure that any swarf created by the grooving action is removed. Do not attempt to cut the groove with the blade at full depth first time.



Step 3 - To begin assembling the joint, first slide the nut onto the pipe. The threaded connection should be facing the groove that has been made, once this has been done you are ready to slide the olive into place (widest end first) seating the tongue of the olive into the groove in the pipe. To aid installation, Vulcathene lubricant should be used, especially when fitting 76mm & 102mm olives.

When the olive is correctly seated you are ready to make your joint, before progressing ensure that the thread of your fitting is clean, proceed by applying Vulcathene lubricant to the threads of the fitting.



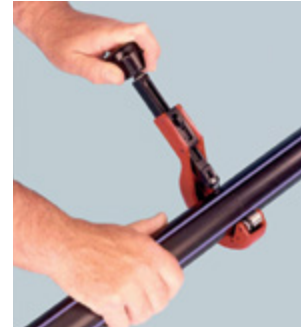
Loosely assemble the joint and proceed to hand tighten each nut. Using two Vulcathene spanners. The joint should then be tightened further to its full thread capacity.



NOTE: Always tighten the nuts as work progresses. They should not be left until the job is completed. When installing a Vulcathene chemical drainage system it is imperative that Vulcathene grooving tools and spanners must be used to ensure joint integrity.

Making the enfusion joint

Step 1 - Cut pipe to length using a rotary plastic pipe cutter as shown. Where possible clamp the pipe in a vice avoiding excessive distortion.

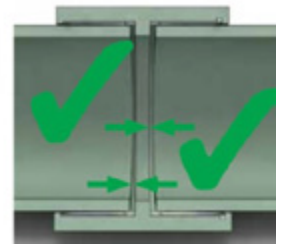
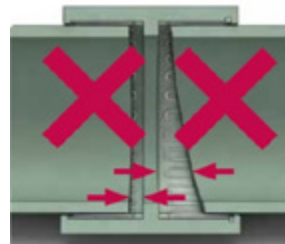


This method is favored over the use of a hacksaw as the finish is clean (no loose swarf or burr on the pipe). The pipe must be square. If a saw is used, it is essential that all burrs and loose material are removed.

Step 2 - Using a pipe scraper, scrape the end of the pipe equivalent to the depth of the socket, plus at least 10% for safety margin. Removal of the smooth, oxidized layer on the surface of the pipe is imperative to obtain a good fusion joint. Once prepared it is very important not to handle this area or allow it to get dirty.

Important notes

Ensure pipes are cut square and inserted all the way to the stop at the bottom of the socket.



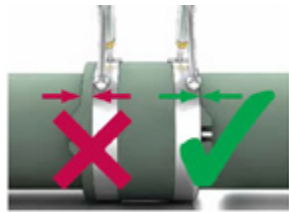
Before moving forward to create the enfusion joint it is important to check that the power source to the enfusion control unit is providing 104 to 126 volts at 45 to 65 cycles with 16amp capacity. The enfusion controller provides for reasonable and normal power variation – generators should be checked to ensure that the correct, rated output is being provided.

If multiple joints are to be simultaneously, refer to the table below which indicates the maximum number of joints relative to the pipe size. This information is also detailed on the enfusion machine.

Pipe Size	Maximum no. of joints
38mm	8
51mm	6
76mm	4
102mm	3
152mm	2

If jointing fittings of different sizes, the sum of joint sizes during a single weld cycle must not exceed 306mm.

Step 3 - Loosely fit the correct sized clamp over the hub of the socket to be jointed and align edge of the clamp with front face of the socket.



Before fully tightening it is imperative to ensure correct positioning of clamp.

Step 4 - Tighten the clamp around the hub of the socket. It is important that the clamp is tightened sufficiently to stop pipe rotation in the socket. Do not overtighten.

Important notes

The following instructions refer to the current L2601 hand-held / peli case enfusion welding machine, these machines incorporate the latest software updates. Please contact our technical support team for advice on the latest software.

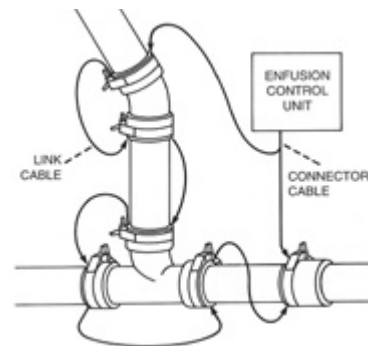
For calibration advice, please contact the enfusion control unit manufacturer.

ALL cables MUST be removed from the peli case before using the hand-held enfusion control unit.

Terminal pin extension adaptors are available where access to the fitting terminal pin is restricted. For example, where enfusion fittings are positioned close or hard against a wall.

Step 5 - Turn the enfusion control unit on and it will perform a self-test. Ensure the unit boots correctly and is not due for re-calibration.

Step 6 - Follow the instruction on the display to connect the output lead. If making a single joint, connect the output leads from welding machine directly onto terminal pins of the fitting. If making multiple joints, utilise the link leads as demonstrated below.



Step 7 – Press the start button to begin the welding process. The enfusion control unit will display the temperature and the welding time.

When the fusion cycle has been completed, the enfusion control unit will emit an audible beep, the enfusion control unit will then start an initial cooling time of 30 seconds.

Step 8 – Following the initial 30 seconds cooling time, carefully disconnect leads from the fitting. The enfusion control unit will now reset, ready for the next operation. Leave the joint undisturbed for at least 5 minutes before removing clamps.

Enfusion troubleshooting

If the enfusion control unit stops before joint completion, the unit will send an audible alarm and the machine will display an error message such as *interrupted weld, output fault or connection fault*.

In the event of an error occurring, the joint will need to be allowed to cool. Check that all connections are secure. Once the fault has been corrected, the full cycle can be run again. (Allow 38mm to 76mm fittings to cool for 5 minutes and 102mm to 152mm fittings to cool for 7 minutes.)

The enfusion control unit should be re-set by shutting it off, switching it back on and pressing the START button when prompted.

NOTE: When working in very cold conditions try to screen the joint from direct contact with the wind. Protecting the joint with a suitable blanket will also help prevent excessive loss of heat due to wind chill.

Enfusion control units contain sophisticated electronic components and should therefore be handled with care. Should the machine for any reason experience a malfunction, please do not tamper with it and instead call your local Vulcathene distributor or representative for advice.

UniCollar® fire protection

1. Removing the casing and accessories from the box

The box contains the fixings and accessories required to install the collar. Open the box at the position clearly marked with an arrow. Remove the box of accessories.



The end of the collar can now be pulled and the strip will uncoil. Ensure the soft Graftex faces up. The collar strip has snapping perforations at 15mm centres.

Only pull out enough strip for the collar length required.

2. Cutting and snapping the strip

Identify the outside diameter of the pipe that is to have the collar applied to. On the box is a table, which gives the number of segments for each size pipe and the length of strip required. Either count the number of (15mm) segments required or measure the strip.



Cut through the Graftex at the appropriate position eg. for a 114mm OD pipe, cut at segment marked 30.

Hold the strip with a finger and thumb on each side of the cut and as close to the cut as possible, and fold in a downward direction as far as possible. Repeat this folding until the steel snaps.



3. Fixing the collar

The ends of the Graftex, once cut, will be square. To make it easy to fix, cut these square ends away at a slight angle. Shape the strip to the approximate diameter of the pipe.



If the pipe is small (eg. under 75mm) pay extra attention to the ends of the strip to ensure they have been shaped correctly. Push one of the prongs of a bracket through the notch at one end of the strip. Fold the strip around the pipe and push the other prong through the notch on the other end of the strip. (The bracket can be gently hammered in to position if pushing is difficult). Attach the bracket to the wall or floor as described over and shown on the box drawings. Fix the other bracket(s) as required.



Ensure the correct number of brackets are always used and the 2 ends of the strip always have a connecting bracket.

4. Floors

The UniCollar® achieves Fire Resistance Level (FRL) up to 4 hours with Vulcathene pipes up to 114mm diameter, bolted to soffit of floor slab (with a similar fire rating or the same or greater thickness) using the 20mm x 5mm steel anchors provided, through the holes in the brackets provided.



The concrete must be in a condition that will ensure the anchors hold securely. Larger steel fixings may be used if deemed appropriate. Back fill any gap between the pipe and concrete greater than 8mm with mortar or commercial grade mortar mix. Acrylic, intumescent or silicone sealant may be applied around the pipe on the topside of the floor slab if a water seal is required. If there is a possibility of pipe movement occurring that will cause cracks in the seal between the pipe and mortar mix (if used), it may be advisable to seal the pipe with acrylic, intumescent or silicone sealant to prevent cold smoke egress. This however is not required for the fire rating to be achieved. If the gap between the pipe and slab is less than 8mm, apply a bead of acrylic, intumescent or silicone sealant approx. 8mm deep in to the gap at the soffit.

Fire resistance: (BS 476: Part 20)

**Pipe size integrity: 38mm-102mm 4 hours
(*152mm 2 hours)**

*Note: 2 UniCollars® are required on 152mm size pipe.

5. Walls

For framed walls, use the 40mm x 10 laminating screws provided. For masonry walls, use the 20mm x 5mm steel anchors provided. The wall or floor must be in a condition that will ensure the anchors hold securely. Larger steel fixings may be used if deemed appropriate. Ensure the annular gap between the wall and pipe is minimal and seal this gap with a bead of acrylic, intumescent or silicone sealant.

Attach a collar to both faces of the wall. Fire tests were conducted with 2 brackets on pipes 69mm and under. For framed walls, 3 brackets are recommended if framing studs are not available to screw in to.

Fire resistance: (BS 476: Part 20)

Pipe size integrity: 38mm-152mm 2 hours

For details of suitability and approvals for use of UniCollar® for other pipe materials and sizes contact our Technical Support Team on: +44 (0) 1543 471680 (Option 2).

Pipe Diameter (mm)	No. of Collars per Carton
38	8
51	7
76	6
102	5
152	3

Additional advice

Waste pipe falls

Horizontal waste runs should be installed to provide a natural fall to the Vulcathene stack. It is recommended that falls are maintained between 2° to 3° to ensure optimum waste flow. The fall should never be less than 1°.

Typical pipework falls for Vulcathene pipes

Pipe length	Fall in pipework at 1°	Fall in pipework at 2°	Fall in pipework at 2.5°	Fall in pipework at 3°
	Metres	Millimetres		
1	17.46	34.93	43.67	52.24
1.5	26.19	52.39	65.5	78.36
2	34.91	69.85	87.33	104.48
2.5	43.64	87.31	109.17	130.6
3	52.37	104.78	131	156.72
3.5	61.1	122.24	152.83	182.85
4	69.83	139.7	174.67	208.97
4.5	78.56	157.16	196.5	235.09
5	87.29	174.63	218.34	261.21
5.5	96.01	192.09	240.17	287.33
6	104.74	209.55	262	313.45
6.5	113.47	227.01	283.84	339.57
7	122.2	244.48	305.67	365.69
7.5	130.93	261.94	327.5	391.81
8	139.66	279.4	349.34	417.93
8.5	148.38	296.86	371.17	444.05
9	157.11	314.33	393	470.17
9.5	165.84	331.79	414.84	496.29
10	174.57	349.25	436.67	522.42
10.5	183.3	366.71	458.5	548.54
11	192.03	384.18	480.34	574.66
11.5	200.76	401.64	502.17	600.78
12	209.48	419.1	524	626.9

Supporting Vulcathene pipes

Horizontal runs at room temperature do not typically require continuous support. Instead, Vulcathene pipe clips must be fixed at the following recommended centres:

Nominal I.D.	38mm	51mm	76mm	102mm	152mm
Horizontal Fixing Centres	1.22m	1.37m	1.52m	1.83m	1.83m
Vertical Fixing Centres	1.5m	1.5m	1.5m	1.5m	1.5m

Vulcathene pipe clips are snap fit, retaining the pipe securely whilst still allowing linear movement of the pipe caused by temperature variations.

When longer than typical vertical runs are installed in 76mm and 102mm, strain may be caused by thermal movement. Where this is the case metal straps can be used to retain the pipe.

Metal hangers are also recommended for applications where Vulcathene pipework needs to be suspended.

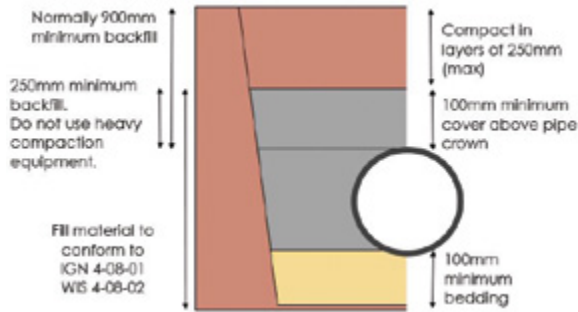
Galvanized support channels should be used for horizontal runs where consistent temperatures in excess of 40°C (104°F) are expected.

Buried pipes

Generally, when burying pipe, trenches should not be less than one metre deep. The trench should be as narrow as possible to allow proper consolidation. The trench bottom should be level and free from rock, debris and sharp objects.

A 100mm bed of suitable pipe bedding should be laid in the bottom of the trench. Backfilling with similar material, this should continue until a 100mm layer over the pipe is achieved.

Pipes may be jointed in the trench, but if jointed above ground should be allowed to cool sufficiently.



Thermal movement

To overcome the issue of expansion and contraction, Vulcathene stress relief units (SRU's) are purpose designed to cater for the stresses caused by thermal movement.

When installing an SRU, care should be taken to ensure an accurate linear 'thrust and pull' movement. Pipe clips should not grip the pipe tightly but allow it to slide freely avoiding buckling. The body of the SRU should always be firmly anchored.

Vulcathene SRU's are designed to move easily at around 5psi, the total movement for all sizes being approximately +/- 25mm. The co-efficient of expansion for Vulcathene plumbing is 1.4mm per metre, per 10°C.

An SRU should be installed on the stack at every floor level where there is a stack input connection. If there is no stack connection, one SRU should be installed every two floors.

SRU's should be installed on horizontal pipes where there are insufficient changes in direction to accommodate thermal movement, such as long runs or where fluids at elevated temperatures are expected.

Installing Vulcathene thermal stress relief units

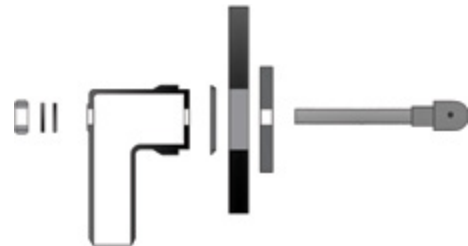
All Vulcathene SRUs should be installed in line with the intended flow of the effluents. 38mm and 51mm SRU tail end pipes should be pushed fully home and its position marked. It should then be withdrawn by up to 38mm.

The 76mm, 102mm & 152mm SRU's are spigot ended on one side for either mechanical or enfusion jointing. The other side of the units are socket ended, complete with an integral 'O' ring seal and fitted with a dust cap.

The dust cap should be removed and slid up the pipe. The pipe should then be chamfered, lubricated and then slid into the chamber of the SRU until it hits the stop. The pipe should then be marked to show the limit of travel, then withdrawn approximately 25mm to 38mm. The dust cap should then be firmly replaced.

Installing drip cups and wastes

When 504 wastes are used with a plastic or thin walled vessel, a butyl rubber gasket should be fitted between the back nut and underside of the sink. All sinks, drip cups and slotted waste assemblies should be bedded with a suitable chemical resistant sealant.



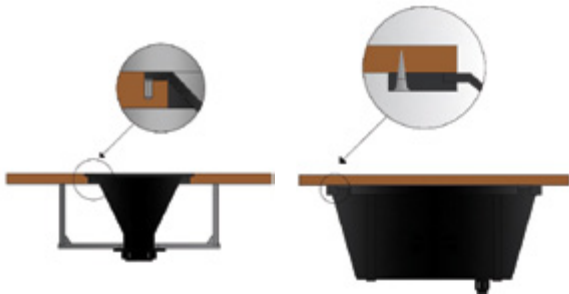
The below illustration shows a 509 overflow assembly with flexible hose to connect to the waste. The overflow bend and face-plate should be set with a suitable sealant.



The illustration below shows the slotted version of the 504 waste assembly used in conjunction with the 509 overflow assembly. The waste, overflow collar and gaskets should all be set with a suitable sealant.

Sink fitting

The illustrations below show the recommended method of supporting Vulcathene sinks using wooden battens screwed to the underside of the work top. Larger capacity sinks may need additional supporting metal straps in the manner shown



Installing clamp saddles

Vulcathene clamp saddles enable fast and easy connection of new branch pipes to existing Vulcathene stacks, without the need for special tools or equipment.

Clamp bolts should be tightened with care. Avoid over-tightening. Note: 76mm saddles are supplied with 4 bolts, 102mm saddles are supplied with 6.



1. Position lower half of saddle around pipe.



2. Taking care to seat gasket in the branch outlet, bolt both halves together.



3. Use a spanner to tighten bolt heads making sure not to over-torque.



4. Drill pipe wall.

Storage

The high impact strength of Vulcathene provides a degree of protection against damage on site. However certain precautions should be taken:

- **Pipe should be stored on a level flat surface free from sharp or abrasive objects**
- **Small pipes may be 'nested' inside larger pipe if required**
- **The stack of stored pipes should be supported or braced to prevent collapse**
- **38mm to 76mm pipes should not be stacked higher than 20 units & 102mm pipes, no higher than 12 units**
- **When stored at higher temperatures for prolonged periods, the pipes should be covered**

Connecting to other systems

The Vulcathene system offers a wide range of fittings to facilitate connection to other pipe systems. We recommend that this is only used where retrofitting is required.

It is important to ensure that the system being connected to Vulcathene is also suitable for chemical drainage.

These fittings include:

- **BSP threaded and flange adaptors**
- **Flex-Seal adaptors**
- **Vulcathene 'polyfusion' adaptors**
- **Adaptors for borosilicate glass systems**

If connections to other pipe systems are required, we are available to provide advice and guidance to suggest the most efficient options for your installation. Please feel free to contact our technical support team for more details.

Technical Support Team contact details

Tel: +44 (0) 1543 471680 (select option '2')

Email: vulcathene@alixaxis.com

System testing

The system should be inspected for any possible leaks in accordance with BS EN 12056. Air should be pumped into the system through a branch of a tee piece until a pressure equal to 38mm water gauge is achieved. The inlet valve should then be closed, and the system should maintain the pressure for a minimum of three minutes.

System maintenance

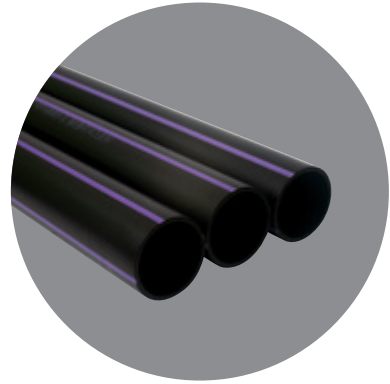
The anti-siphon bottle traps and dilution recovery traps have sumps that can be removed for cleaning.

The W612 dilution recovery trap is cleaned by removing the dip tubes and carefully flushing the interior of the dilution chamber.

The 910G dilution recovery trap is complete with a removable lid & gasket seal, both held in place by a stainless-steel clamp which can be easily removed for access & maintenance.

Access pipes should be fitted to provide access for testing and maintenance.

 **Vulcathene**



Pipe, bench products and ancillaries

PIPE

Pipe Diameter (mm)	Standard Length (m)	Catalogue number	Product Code
38	4	W001	V41 0310
51	4	W001	V41 0320
76	4	W001	V41 0330
102	4	W001	V41 0340
152	4	W001	V41 0360



WASTES

Size (inch x mm x mm)	Pack qty	Catalogue number	Product Code
UNSLOTTED			
1 1/4 x 60 dia. x 89	10	504	V5 504 011
1 1/4 x 73 dia. x 102	10	504	V5 504 031
1 1/4 x 85 dia. x 102	10	504	V5 504 051
1 1/2 x 60 dia. x 89	10	504	V5 504 071
1 1/2 x 73 dia. x 102	10	504	V5 504 091
1 1/2 x 85 dia. x 102	10	504	V5 504 111
2 x 85 dia. x 102	10	504	V5 504 131
SLOTTED			
1 1/4 x 60 dia. x 89	10	504	V5 504 021
1 1/4 x 73 dia. x 102	10	504	V5 504 041
1 1/4 x 85 dia. x 102	10	504	V5 504 061
1 1/2 x 60 dia. x 89	10	504	V5 504 081
1 1/2 x 73 dia. x 102	10	504	V5 504 101
1 1/2 x 85 dia. x 102	10	504	V5 504 121
2 x 85 dia. x 102	10	504	V5 504 141



Pipe, bench products and ancillaries

STANDING WASTE TUBES

Size (mm)	Pack qty	Catalogue number	Product Code
32 x 140*	25	507	V5 507 011
32 x 178*	25	507	V5 507 031
38 x 140	25	507	V5 507 051
38 x 178	25	507	V5 507 071
51 x 225*	10	507	V5 507 091
FITTED WITH HANGING LOOP			
32 x 140*	25	507	V5 507 021
32 x 178*	25	507	V5 507 041
38 x 140	25	507	V5 507 061
38 x 178	25	507	V5 507 081
51 x 225*	10	507	V5 507 101



* Made to Order (Please refer to our Terms & Conditions).

WASTE GASKETS – For use with 601, 602 and 604 Series sinks and 605 Series troughs

Size (inch)	Pack qty	Product Code
1 1/2	1	V4 000 01
2	1	V4 000 02

PLUG AND CHAIN ASSEMBLY

Size (mm)	Pack qty	Catalogue number	Product Code
32	1	508	V5 508 501
38	1	508	V5 508 101
51	1	508	V5 508 201



Pipe, bench products and ancillaries

OVERFLOW ASSEMBLY

Size (inch)	Pack qty	Catalogue number	Product Code
9-22	1	509	V5 509 001

Note: The 504 waste is not included in the assembly and should be ordered separately. Size refers to length of tube.



SMALL CIRCULAR DRIP CUP

Size (mm)	Pack qty	Catalogue number	Product Code
102 dia.	1	501	V5 501 001



LARGE CIRCULAR DRIP CUP

Size (mm)	Pack qty	Catalogue number	Product Code
168 dia.	1	500	V5 500 001



SMALL OVAL DRIP CUP

Size (mm)	Pack qty	Catalogue number	Product Code
175 x 102	1	497	V5 497 001



LARGE OVAL DRIP CUP

Size (mm)	Pack qty	Catalogue number	Product Code
264 x 111	1	499B	V5 499 001



Pipe, bench products and ancillaries

LARGE OVAL DRIP CUP

Size (mm)	Pack qty	Catalogue number	Product Code
305 x 152	1	499T	V5 490 001



SINKS

Size (mm)	Pack qty	Catalogue number	Product Code
492 x 241 x 171	1	601	V4 601 00



SINKS

Size (mm)	Pack qty	Catalogue number	Product Code
552 x 400 x 231	1	602	V4 602 00



RUNNING TROUGH – Fabricated (polypropylene)

Size (mm)	Pack qty	Catalogue number	Product Code
*	n/a	603	-



* Made to Order (Please refer to our Terms & Conditions).

ADJUSTABLE DILUTION RECOVERY TRAP – Anti-siphon, 2.3 litres capacity

Size (mm)	Pack qty	Catalogue number	Product Code
38	1	W681	V1 068 101



Pipe, bench products and ancillaries

ADJUSTABLE DILUTION RECOVERY TRAP – Anti-siphon, with visual glass base, 2.3 litres capacity

Size (mm)	Pack qty	Catalogue number	Product Code
38	1	W691	V10 691 01



DILUTION RECOVERY TRAP – 4.5 litres capacity

Pack qty	Catalogue number	Product Code
1	W612	V10 612 01



DILUTION RECOVERY TRAP/DEMOUNTABLE LID* – With visual glass base, 4.5 litres capacity

Pack qty	Catalogue number	Product Code
1	W910G	V10 910 001



*Inlets, glass dip tubes, blanking off plugs to be ordered separately.
Note: The Vulcathene 910G Dilution Recovery Trap has been re-designed and now incorporates a removable lid for easier access and maintenance.

ADJUSTABLE ANTI-SIPHON BOTTLE TRAP

Size (mm)	Pack qty	Catalogue number	Product Code
38	1	W561	V10 561 01



Pipe, bench products and ancillaries

ADJUSTABLE ANTI-SIPHON BOTTLE TRAP – with visual glass base

Size (mm)	Pack qty	Catalogue number	Product Code
38	1	W571	V10 571 01



ANTI-SIPHON UNIT

Size (mm)	Pack qty	Catalogue number	Product Code
51	1	W50	V467020



CLAY TRAP

Pack quantity	Catalogue number	Product Code
1	W915	V10 915 01



FLOOR GULLY* – 4.5 litre trapped floor gully, 76mm plain ended outlet, 76mm trap seal

Size (litre)	Pack qty	Product Code
4.5**	1	V18 101 00



*Floor gullies are fabricated to order; gullies with additional inlets can also be supplied.

** Made to Order (Please refer to our Terms & Conditions).

Pipe, bench products and ancillaries

PIPE CLIPS

Size (mm)	Pack qty	Catalogue number	Product Code
38	10	PC91	V5 091 101
51	10	PC91	V5 091 201
76	10	PC91	V5 091 301
102	2	PC91	V5 091 401



CLAMP SADDLES

Size (mm x BSP)	Pack qty	Catalogue number	Product Code
102 x 2"	1	W465	V465050
102 x 1½"	1	W465	V465060
76 x 2"	1	W465	V465070
76 x 1½"	1	W465	V465080



AIR ADMITTANCE VALVE

Size (mm)	Pack quantity	Catalogue number	Product Code
102	1	W450	V466040



UNICOLLAR FIRE PROTECTION

Size (mm)	Pack qty	Product Code
2250 strip length	1	V468100



GLASS DIP TUBES – for 910G

Pack qty	Product Code
1	V5 913 001



Pipe, bench products and ancillaries

FLEXIBLE CONNECTORS – 38mm

Size (m)	Pack qty	Catalogue number	Product Code
1	1	W916	V5 916 001
1.5	1	W916	V5 916 015
2	1	W916	V5 916 002
3	1	W916	V5 916 003



GALVANISED SUPPORT CHANNELS – Supplied in standard lengths of 2.5m

Size (mm)	Pack qty	Product Code
38	1	V4 650 10
51	1	V4 650 20
76	1	V4 650 30
102	1	V4 650 40



VERTICAL INLETS – for 910G

Size (mm)	Pack qty	Catalogue number	Product Code
38	1	W651	V10 651 01
51	1	W652	V10 652 01



HORIZONTAL INLETS – for 910G

Size (mm)	Pack qty	Catalogue number	Product Code
38	1	W641	V10 641 01
51	1	W642	V10 642 01



Pipe, bench products and ancillaries

BLANKING OFF PLUGS – for 910G

Pack qty	Product Code
1	V5 912 001



VULCATHENE LUBRICANT

Size (g)	Pack qty	Product Code
200	12	V5 900 002



ADDITIONAL DIP TUBE – for W612

Pack qty	Product Code
1*	V10 912 01



* Made to Order (Please refer to our Terms & Conditions).

FLEXIBLE DRAIN COUPLINGS

Size (mm)	Pack qty	Cat. number	Product Code
DC95 80-95	1	DC95	V10 0DC95
DC115 100-115	1	DC115	V10 DC115



FLEXIBLE ADAPTOR COUPLINGS

Size (mm)	Pack qty	Cat. no.	Product Code
AC1221 110-122/80-95	1	AC1221	V1 AC1221
AC1361 121-136/80-95	1	AC1361	V1 AC1361
AC5144 110-125/100-115	1	AC5144	V1 AC5144
AC1362 121-136/100-115	1	AC1362	V1 AC1362



Mechanical fittings

92½° SWEEP BENDS

Size (mm)	Pack qty	Catalogue number	Product Code
38	10	W181	V10 181 01
51	5	W182	V10 182 01
76	1	W183	V10 183 01
102	1	W184	V10 184 01



92½° LOOSE NUT SWEEP BENDS

Size (mm)	Pack qty	Catalogue number	Product Code
38	10	W291	V10 291 01
51	10	W292	V10 292 01
76	1	W293	V10 293 01
102	1	W294	V10 294 01



135° SLOW BENDS

Size (mm)	Pack qty	Catalogue number	Product Code
38	10	W191	V10 191 01
51	5	W192	V10 192 01
76	1	W193	V10 193 01
102	1	W194	V10 194 01



135° LOOSE NUT SLOW BENDS

Size (mm)	Pack qty	Catalogue number	Product Code
38	10	W211	V10 211 01
51	5	W212	V10 212 01
76	1	W213	V10 213 01
102	1	W214	V10 214 01



Mechanical fittings

92½° EQUAL SWEEP TEES*

Size (mm)	Pack qty	Catalogue number	Product Code
38	5	W201	V10 201 01
51	5	W202	V10 202 01
76	1	W203	V10 203 01
102	1	W204	V10 204 01



*Note: Apart from the 51mm x 38mm fitting which is produced as a one piece moulding, all other reducing sweep tees are made up with a W20 'Series' equal sweep tee with the addition of a W39 'Series' reducing coupler which should be ordered as a separate item.

92½° REDUCING SWEEP TEE

Size (mm)	Pack qty	Catalogue number	Product Code
51 x 38	5	W2021	V10 202 11



45° SINGLE WYES

Size (mm)	Pack qty	Catalogue number	Product Code
38	10	W371	V10 371 01
51	5	W372	V10 372 01
76	1	W373	V10 373 01
102	1	W374	V10 374 01



45° DOUBLE WYES

Size (mm)	Pack qty	Catalogue number	Product Code
38	5	W381	V10 381 01
51	1	W382	V10 382 01
76	1	W383	V10 383 01
102	1	W384	V10 384 01



Mechanical fittings

90° CORNER BRANCH*

Size (mm)	Pack qty	Catalogue number	Product Code
102 x 51	1	W942	V10 942 01



*Fabricated.

TUBULAR TRAP – U-BENDS

Size (mm)	Pack qty	Catalogue number	Product Code
38	5	W701	V10 701 01
51	1	W702	V10 702 01



Tubular traps should be assembled from stock components using a W70 'Series' 'U' bend and additional items as indicated in technical catalogue such as P traps, S traps and running traps

LINE COUPLERS

Size (mm)	Pack qty	Catalogue number	Product Code
38	10	W161	V10 161 01
51	10	W162	V10 162 01
76	1	W163	V10 163 01
102	1	W164	V10 164 01



REDUCING COUPLERS

Size (mm)	Pack qty	Catalogue number	Product Code
51 x 38	10	W3921	V10 39 211
76 x 38	10	W3931	V10 39 311
76 x 51	10	W3932	V10 39 321
102 x 38	1	W3941	V10 39 411
102 x 51	1	W3942	V10 39 421
102 x 76	1	W3943	V10 39 431



Mechanical fittings

M.I. TO PIPE COUPLERS

Size (mm)	Pack qty	Catalogue number	Product Code
38	10	W141	V10 141 01
51	10	W142	V10 142 01



F.I. TO PIPE COUPLERS

Size (mm)	Pack qty	Catalogue number	Product Code
38	10	W151	V10 151 01
51	10	W152	V10 152 01



1¼" F.I. X 1½" M.I. REDUCER

Size (mm)	Pack qty	Catalogue number	Product Code
1¼" x 1½"	25	W121	V10 121 01



1 ¾" X 38mm F.I TO PIPE COUPLER

Size (mm)	Pack qty	Catalogue number	Product Code
1 ¾"	10	W2710	V10 271 01



GLASS ADAPTORS

Size (mm)	Pack qty	Catalogue number	Product Code
38	1	W451	V10 451 04
51	1	W452	V10 452 04
76	1	W453	V10 453 04
102	1	W454	V10 454 04



Mechanical fittings

ACCESS PIPES

Size (mm)	Pack qty	Catalogue number	Product Code
51	1	W902	V10 902 01
76	1	W903	V10 903 01
102	1	W904	V10 904 01



HORIZONTAL/VERTICAL THERMAL STRESS RELIEF UNITS

Size (mm)	Pack qty	Catalogue number	Product Code
38	1	W801	V10 111 01



HORIZONTAL/VERTICAL THERMAL STRESS RELIEF UNITS

Size (mm)	Pack qty	Catalogue number	Product Code
51	1	W802	V54 522 01



HORIZONTAL/VERTICAL THERMAL STRESS RELIEF UNITS

Size (mm)	Pack qty	Catalogue number	Product Code
76	1	W803	V10 803 01
102	1	W804	V10 804 01



Mechanical fittings

FLANGES – BS Table 'D' supplied undrilled

Size (mm)	Pack qty	Catalogue number	Product Code
38*	1	W101T.D	V10 101 01
51*	1	W102T.D	V10 102 01
76*	1	W103T.D	V10 103 01
102*	1	W104T.D	V10 104 01



* Made to Order (Please refer to our Terms & Conditions).

GASKETS – BS Table 'D'

Size (mm)	Pack qty	Product Code
38	1	V4 501 10
51	1	V4 501 20
76	1	V4 501 30
102	1	V4 501 40



NUTS

Size (mm)	Pack qty	Catalogue number	Product Code
38	50	W231	V10 231 01
51	50	W232	V10 232 01
76	25	W233	V10 233 01
102	25	W234	V10 234 01



NO HEAT OLIVES

Size (mm)	Pack qty	Catalogue number	Product Code
38*	1	W221	V10 221 11
51*	1	W222	V10 222 11
76	25	W223	V10 223 11
102	25	W224	V10 224 11



Mechanical fittings

BLANKING OFF PLUGS

Size (mm)	Pack qty	Catalogue number	Product Code
38	10	W241	V10 241 01
51	10	W242	V10 242 01
76	1	W243	V10 243 01
102	1	W244	V10 244 01



SPANNERS

Size (mm)	Pack qty	Catalogue number	Product Code
38	10	W361	V10 361 01
51	5	W362	V10 362 01
76	5	W363	V10 363 01
102	5	W364	V10 364 01



CUTTING TOOLS

Size (mm)	Pack qty	Catalogue number	Product Code
38	1	W261	V10 261 01
51	1	W262	V10 262 01



CUTTING TOOLS

Size (mm)	Pack qty	Catalogue number	Product Code
76	1	W263	V10 263 01
102	1	W264	V10 264 01



Mechanical fittings

PIPE CUTTERS

Description	Pack qty	Product Code
16-50mm pipe cutter	1	FT 80 00 01
50-125mm pipe cutter	1	FT 80 00 03
110-160mm pipe cutter	1	FT 80 00 09
16-63mm spare cutter wheel	1	FT 80 00 02
50-125mm spare cutter wheel	1	FT 80 00 04



HALF COUPLERS (POLYFUSION)

Size (mm)	Pack qty	Catalogue number	Product Code
38	10	C130	V5 130 101



BSP COUPLERS (POLYFUSION)

Size (mm)	Pack qty	Catalogue number	Product Code
38	10	P758	V5 758 101



POLYFUSION WELDING TOOLS

Size (mm)	Pack qty	Product Code
38	1	V4 400 10



Enfusion fittings

SINGLE SOCKETS - Long sweep bend

Size (mm)	Pack qty	Catalogue number	Product Code
38	10	L281	V60 281 01
51	10	L282	V60 282 01
76	1	L283	V60 283 01
102	1	L284	V60 284 01
152	1	L286	V60 286 01



SINGLE SOCKETS - Short sweep bend

Size (mm)	Pack qty	Catalogue number	Product Code
38	10	L291	V60 291 01
51	10	L292	V60 292 01



LOOSE NUT/SOCKETS - Short sweep bend

Size (mm)	Pack qty	Catalogue number	Product Code
38	10	L291A	V60 291 11



DOUBLE SOCKETS - Long sweep bend

Size (mm)	Pack qty	Catalogue number	Product Code
38	10	L171	V60 171 01
51	10	L172	V60 172 01
76	1	L173	V60 173 01
102	1	L174	V60 174 01
152	1	L176	V60 176 01



Enfusion fittings

DOUBLE SOCKETS - Short sweep bend

Size (mm)	Pack qty	Catalogue number	Product Code
38	10	L181	V60 181 01
51	10	L182	V60 182 01



DOUBLE SOCKETS - 45° slow bend

Size (mm)	Pack qty	Catalogue number	Product Code
38	10	L191	V60 191 01
51	10	L192	V60 192 01
76	1	L193	V60 193 01
102	1	L194	V60 194 01
152	1	L196	V60 196 01



SINGLE SOCKETS - 45° slow bend

L211/L212/L213/L214/L216

Size (mm)	Pack qty	Catalogue number	Product Code
38	10	L211	V60 211 01
51	10	L212	V60 212 01
76	1	L213	V60 213 01
102	1	L214	V60 214 01
152	1	L216	V60 216 01



92½° EQUAL SWEEP TEES

Size (mm)	Pack qty	Catalogue number	Product Code
38	5	L201	V60 201 01
51	5	L202	V60 202 01
76	1	L203	V60 203 01
102	1	L204	V60 204 01



Enfusion fittings

92½° REDUCING SWEEP TEES*

Size (mm)	Pack qty	Catalogue number	Product Code
51 x 38	5	L2021	V60 202 11
76 x 38	1	L2031	V60 203 11
76 x 51	1	L2032	V60 203 21
102 x 51	1	L2042	V60 204 21



*To make 102x76mm reducing tee use L204 equal tee with L3934 reducer.

45° SINGLE WYES

Size (mm)	Pack qty	Catalogue number	Product Code
38	10	L371	V60 371 01
51	1	L372	V60 372 01
76	1	L373	V60 373 01
102	1	L374	V60 374 01
152	1	L376	V60 376 01



45° REDUCING WYES

Size (mm)	Pack qty	Catalogue number	Product Code
51 x 38	1	L3721	V60 372 11
76 x 38	1	L3731	V60 373 11
76 x 51	1	L3732	V60 373 21
102 x 51	1	L3742	V60 374 21
102 x 76	1	L3743	V60 374 31
152 x 51	1	L3762	V60 376 21
152 x 76	1	L3763	V60 376 31
152 x 102	1	L3764	V60 376 41



Enfusion fittings

92½° DOUBLE BRANCHES

Size (mm)	Pack qty	Catalogue number	Product Code
51	1	L352	V60 352 01
76	1	L353	V60 353 01
102	1	L354	V60 354 01



U-BENDS

Size (mm)	Pack qty	Catalogue number	Product Code
38*	1	L1011	V60 101 11
51*	1	L1012	V60 101 21



*P traps in 38mm & 51mm sizes can be made by adding 1 x L28 series single socket bend to the U bend; P traps in 76mm, 102mm & 152mm sizes can be made using 2 x L28 series single socket bends plus 1 x L17 series double socket.

SLIP COUPLERS

Size (mm)	Pack qty	Catalogue number	Product Code
102	1	L164(S)	V67 164 01
152	1	L166(S)	V64 166 01



LINE COUPLERS

Size (mm)	Pack qty	Catalogue number	Product Code
38	10	L161	V60 161 01
51	10	L162	V60 162 01
76	1	L163	V60 163 01
102	1	L164	V60 164 01
152	1	L166	V60 166 01



Enfusion fittings

GLASS ADAPTORS

Size (mm)	Pack qty	Catalogue number	Product Code
38*	1	L451	V60 451 04
51*	1	L452	V60 452 04
76*	1	L453	V60 453 04
102*	1	L454	V60 454 04



* Made to Order (Please refer to our Terms & Conditions).

M.I. TO PIPE COUPLERS

Size (mm)	Pack qty	Catalogue number	Product Code
38	10	L141	V60 141 01
51	10	L142	V60 142 01



REDUCING COUPLERS*

Size (mm)	Pack qty	Catalogue number	Product Code
51 x 38	25	L3912	V60 391 21
76 x 51	10	L3923	V60 392 31
102 x 51	5	L3924	V60 392 41
102 x 76	1	L3934	V60 393 41
152 x 102	1	L3946	V60 394 61



* 76mm x 38mm reducer: Use L3923 reducer + L3912 reducer

102mm x 38mm reducer: Use L3924 reducer + L3912 reducer

152mm x 38mm reducer: Use L3946 reducer + L3924 reducer + L3912 reducer

152mm x 51mm reducer: Use L3946 reducer + L3924 reducer

152mm x 76mm reducer: Use L3946 reducer + L3934 reducer

Enfusion fittings

F.I. TO PIPE COUPLERS

Size (mm)	Pack qty	Catalogue number	Product Code
38	10	L151	V60 151 01
51	10	L152	V60 152 01



HORIZONTAL/VERTICAL THERMAL STRESS RELIEF UNITS

Size (mm)	Pack qty	Catalogue number	Product Code
38	1	L801	V60 801 01



HORIZONTAL/VERTICAL THERMAL STRESS RELIEF UNITS

Size (mm)	Pack qty	Catalogue number	Product Code
51	1	L802	V60 802 01



HORIZONTAL/VERTICAL THERMAL STRESS RELIEF UNITS

Size (mm)	Pack qty	Catalogue number	Product Code
76	1	L803	V10 803 01
102	1	L804	V10 804 01
152	1	L806	V60 806 01



*Now supplied spigot ended.

Enfusion fittings

FLANGES

Size (mm)	Pack qty	Catalogue number	Product Code
UNDRILLED			
38	1	L361	V60 401 01
51	1	L362	V60 402 01
76	1	L363	V60 403 01
102	1	L364	V60 404 01
152	1	L366	V60 406 01



CLEANOUT PLUGS*

Size (mm)	Pack qty	Catalogue number	Product Code
38	5	L241	V60 241 01
51	5	L242	V60 242 01
76	1	L243	V60 243 01
102	1	L244	V60 244 01



*Note: for 152mm cleanout use L3946 reducer with L244 cleanout plug.

ENFUSION 'HAND HELD' ELECTROFUSION UNIT

Pack quantity	Catalogue number	Product Code
1	L2601	V6ECU001



LINK CABLE

Pack quantity	Catalogue number	Product Code
1	L2610	C53EN003





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