iplex®

Technical Guide

Version 1 / December 2025

DWV Technical Guide

Important disclaimer

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1.0 Introduction

With over 85 years of experience, Iplex is a leading Australian manufacturer and supplier of plastic pipes and fittings. We are recognised for our technical expertise and commitment to quality across the industry.

Strategically located warehouses and distribution centres across Australia allow us to respond quickly to customer orders.

Beyond product supply, Iplex offers technical and sales support to assist with accurate and cost-effective installation—helping customers approach each project with confidence.

Iplex was a pioneer in bringing PVC-U (unplasticised polyvinyl chloride) systems to the Australian market. Over the years, we've consistently advanced our capabilities and demonstrated our commitment to innovation and industry leadership.

Iplex PVC-U Drain Waste and Vent (DWV) system is one of the most comprehensive on the market with a range from 40mm to 375mm in diameter.

PVC-U is the leading material for DWV applications in Australia. Its lightweight nature, resistance to a wide range of chemicals, and non-combustibility make it ideal for multistorey plumbing, especially when used with approved fire stop collars. PVC-U is impervious to bacterial and fungal attack and immune to electrolytic or galvanic corrosion.

Our fittings are designed to withstand the rigors of handling and installation. They are easy to assemble with either solvent cement or rubber seal rings, allowing for flexibility to accommodate thermal or ground movement. These advantages not only ensure reliable performance but also underscore our commitment to delivering high-quality, durable solutions for our customers.

2.0 Sustainability

2.1 Environmental Product Declaration

An Environmental Product Declaration (EPD) is a standardised and verified way of quantifying the environmental impacts of a product based on a consistent set of rules known as PCR (Product Category Rules). The EPD for PVC non-pressure pipes:

- Conforms with International Standards ISO14025 and EN15804.
- Has been verified by an independent third party.
- Has at least a cradle to gate scope.
- Has product specific results.

The PVC non - pressure pipes EPD results can be used in whole of life cycle assessments under Green Star and infrastructure sustainability rating tools. Refer to the tables in the PVC non - pressure pipes EPD to convert the product results from kilogram of installed pipe to length of pipe for individual pipe products.

2.2 Best Environmental Practice - PVC

A Best Environmental Practice PVC (BEP PVC) Certification adheres to the Best Environmental Practice – PVC guidelines as outlined in the Green Building Council of Australia (GBCA) literature review and best practice guidelines for the life cycle of PVC building products. This includes compliance with the relevant specified standards and Section 7 of the GBCA guidelines.

Refer to Iplex's BEP PVC Certification for the specific review of Iplex's technical documentation aligned to a number of standards for:

- Manufacture of PVC resin.
- Manufacture and end of life management of PVC products.
- Use of PVC recyclate in PVC products.

3.0 Product data

3.1 Standards

Iplex PVC-U DWV pipe and fittings systems are intended for use above and below ground and are manufactured to *AS/NZS 1260 PVC Pipes and Fittings for Drain, Waste and Vent Applications*.

They are also certified products holding the StandardsMark and WaterMark indicating that the products have been independently assessed and recognized as quality products fully complying with the product standard.

3.2 Pipe dimensions

Pipes are supplied in effective lengths of 6 metres or 3 metres.

Total pipe length = *Effective Length + Insertion Depth.*

Pipes are supplied with either rubber ring or solvent weld jointing systems, in classes SN6 and SN10 (DN100) and SN4 and SN8 (all other sizes).

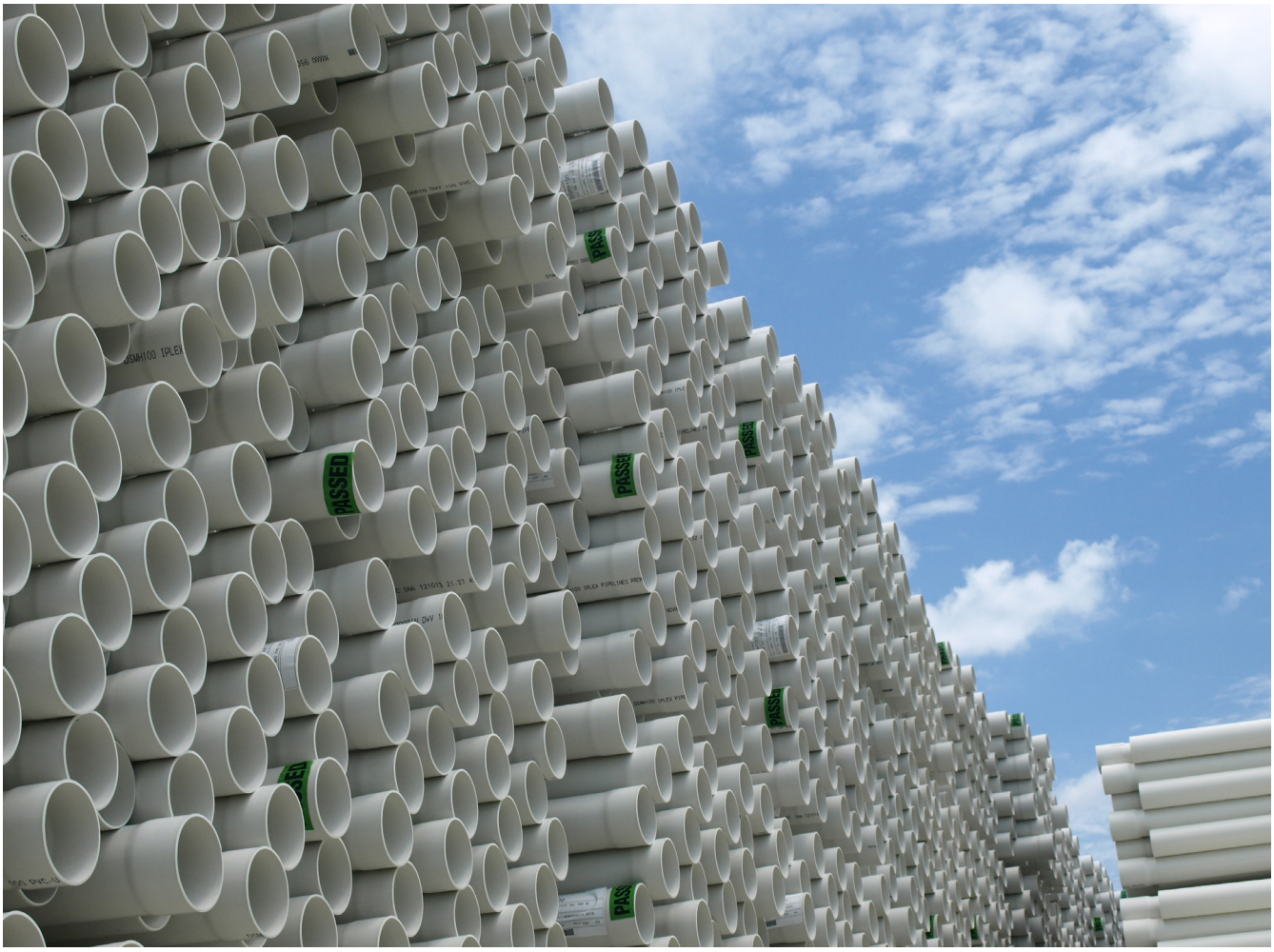
Class SN8 and SN10 pipes are designed for demanding applications such as general municipal drainage and deeper burial.

Diameters less than DN100 are specified by wall thickness.

3.3 Colour and markings

Iplex DWV pipe and fittings are manufactured in a light grey colour in a semi-gloss finish, which is opaque.

All DWV pipes are repeatedly branded along the length in accordance with AS/NZS 1260, which includes the date and place of manufacture, stiffness class and nominal size.



4.0 Material properties

The properties listed in the following table are typical characteristics of PVC-U.

These mechanical properties are for PVC-U at 20°C.

Table 4.1

Physical and mechanical properties	
Specific Gravity	1.45
Yield Strain	5.50%
Compressive Strength	66 MPa
Ultimate tensile strength	52 MPa
Ring Bending modulus (3min)	3200 MPa
Ring Bending Modulus (50 yr)	1400 MPa
Poisson's ratio	0.38
Thermal properties	
Coefficient of linear thermal expansion	7.0×10^{-5} / °C
Thermal conductivity	0.138-0.150 W.m-1.K-1
Maximum practicable working temperature	60°C
Fire resistance	
Flammability	Self extinguishing. Will not support combustion.
Ignitability - AS 1530.3	7*
Smoke development - AS 1530.3	9*
Spread of flame - AS 1530.3	0*
Heat evolved - AS 1530.3	2*
'AWTA Product Testing, test report number 7- 558788-CV	
Electrical properties	
Volume resistivity	10^{15} Ohm.cm
Surface resistivity	$\geq 10^{13}$ Ohm

4.1 Product limitations

Effect of low temperature	The impact resistance of PVC-U pipe and fittings decreases as the temperature drops. Therefore, extra caution is needed when installing these materials near 0°C.
Effect of elevated temperatures	PVC-U DWV pipes have a softening temperature of approximately 80°C. However, the material has a low thermal conductivity. Full bore and extended discharges at higher temperatures must be avoided.
Specialized applications	The systems are more than adequate for normal domestic applications in low and multi-rise dwellings. Where more specialised applications, such as tea-makers, autoclaves, hospitals, commercial dishwashers, commercial laundries, industrial kitchens and laboratories are concerned, where prolonged discharges of liquids at elevated temperatures can occur, contact Iplex for further advice.

Iplex PVC-U drain, waste and vent pipes, should not be used:

i. With aromatic and chlorinated hydrocarbons, ketones, esters and ethers

ii. For any pumped pressure applications

iii. At any continuous service temperatures above 60°C

iv. Without adequate support to the pipe in either above ground or below ground applications

v. In below ground applications (without added protection) where depth of cover is less than:

- 300mm where pipeline is not subject to vehicular loading
- 450mm where pipeline is subject to vehicular loading not in roadways
- 600mm where pipeline is subject to vehicular loading in sealed roadways
- 750mm where pipeline is subject to vehicular loading in unsealed roadways
- 750mm where pipeline is subject to construction equipment loading

vi. When exposed to direct sunlight for service applications, or storage exceeding 24 months from the date of manufacture, without protection.

Protection in storage can include hessian or canvas covers to allow adequate cooling air circulation. Do not use plastic sheet or film covers which will heat and damage the pipes.

Protection once installed can include physical shading such as under or in buildings, bridges or structures, or pale coloured U.V. resistant water based paint systems.

4.2 Product advantages

Features	Benefits
High flow rate	Smooth bores and solvent weld joints allow for a high hydraulic capacity. Consequently, flatter grades are possible using PVC-U systems. The spacing of manholes can be increased due to reduced incidence of blockage and increased flow rates possible with PVC-U sewers.
Flammability	PVC-U does not support combustion.
Non-conductivity	PVC-U is a non-conductor of electricity, and is therefore not subject to galvanic or electrolytic action.
Tree root resistance	Properly made solvent weld joints have been shown to have resistance to tree root intrusions that cause blockages and infiltration in other systems. Iplex DWV elastomeric seal joints have been designed with high interface pressures which, when coupled with smooth, impervious PVC socket and spigot surfaces, provide a high resistance to tree root intrusions (verified by research carried out in conjunction with CSIRO).
Low installation cost	The lightweight nature of Iplex DWV pipes, along with their longer lengths and flexibility, allows for the use of narrower trench widths, significantly reducing installation costs.
Corrosion resistant	The inert nature of PVC-U pipe provides corrosion resistance, and renders wrapping, coating and lining unnecessary.
Leakage elimination	PVC-U sewer pipe and fittings system provide leak free joints, preventing ground water infiltration and sewerage exfiltration.

4.3 Chemical resistance

The chemical resistance of PVC-U to acids, alkalis, oxidizing and reducing agents make it particularly suitable for a wide range of industrial applications. Generally, PVC-U is resistant to most oils, fats, alcohols and aromatic-free petrol.* But is unsuitable for use with aromatic and chlorinated hydrocarbons, ketones and esters which can lead to swelling and softening of the material.

PVC-U DWV pipes are resistant to chemicals expected to be encountered in drain and waste applications.

A full Chemical Resistance Library can be viewed on the Iplex website www.iplex.com.au.

*Solvent Weld Joint (SWJ) only if petrol exposure.

4.4 Product testing

Testing of pipes is in accordance with the requirements of *AS/NZS 1260 PVC-U Pipes and Fittings for Drain, Waste and Vent Applications.*

Pipes and fittings are subjected to the following product tests, performed as detailed in the standard.

4.5 Pipeline design

Design and installation of Iplex PVC-U DWV piping systems is covered by:

- *AS/NZS 3500.2 Plumbing and Drainage, Part 2 Sanitary Plumbing and Drainage Standard*
- *AS/NZS 2032 Installation of PVC-U Pipe Systems*
- *AS/NZS 2566.1 Flexible Buried Pipelines – Structural Design*
- *AS/NZS 2566.2 Flexible Buried Pipelines – Installation*

Check the Iplex Design Tool, PocketEngineer found at www.iplex.com.au. Installers must also ensure that local authority requirements are met.

5.0 Storage and handling

5.1 Handling

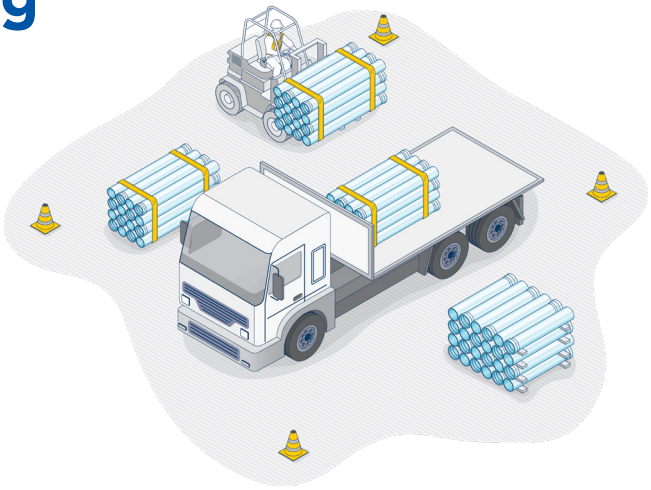
PVC pipes are normally delivered in timber packs designed to hold the pipes in position and protect them from point loading and ovalisation.

Whilst PVC pipes are easy to handle, careless handling can cause unnecessary damage to the pipe. Pipes and fittings must not be dropped or thrown onto hard surfaces or allowed to come into contact with hard sharp objects that could inflict scratches.

Wire slings must not be used to lift pipes.

Particular care must be taken to prevent any damage to the thread on the spigot and socket keeping the thread clean and free from sand, dirt and grit which may affect the axial capacity and/or the jointing process.

Handling of block bundles



5.2 Storage

PVC pipes should be left in their packed units wherever possible until they are required to be installed.

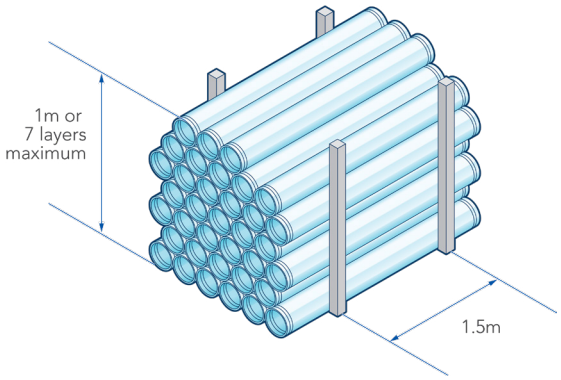
If pipes and fittings are stored outdoors for more than 24 months protection from sunlight is required using a breathable material (i.e. hessian or white shade cloth) to prevent heat build up and allowing ventilation.

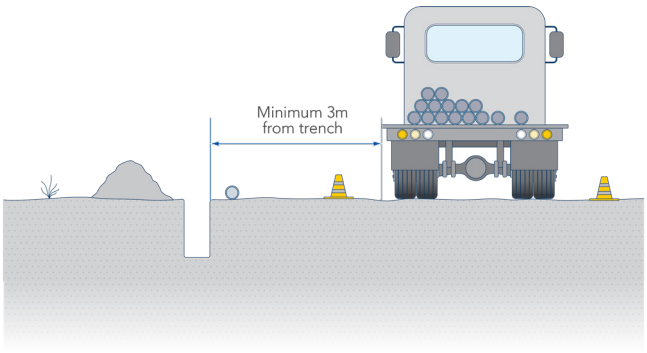
Pipes may be stacked on site provided the ground surface is level and free from loose stones and other sharp objects. Socketed pipes should be stacked with alternate layers of sockets facing in opposite directions to prevent load bearing.

Racks for long term storage are recommended and should preferably provide continuous support, however if this is not possible, supports of at least 75mm bearing width at approximately 1m maximum centres should be placed beneath the pipes. Side restraints should be placed at centres not exceeding 1.5m and stacks should not exceed 1m in height.

When unloading alongside excavated trenches, pipe should be placed on the opposite side of the trench from excavated material if it is safe to do so. Rubber rings and silicone spray should be stored under cover until pipe laying commences.

Loose pipes on bearers





5.2 Cleaning

Water jet cleaning of pipeline internal surfaces is commonly applied in the case of pipeline maintenance, but if not properly managed, water emitted under high pressure has the potential to damage the pipe surface. Water jet cleaning of plastic pipes MUST BE carried out in accordance with the guidance given in PIPA POP205 – Water Jet Cleaning of Plastics Pipes. The use of excessive pressure and inappropriate techniques will damage the pipes. Further details regarding acceptable nozzle types, configurations, nozzle speed, and calculation of pump gauge pressure for varying flowrates is also given in POP205.

6.0 Jointing methods

PVC pipes are easy to assemble using one of two types of jointing methods, Rubber Ring Joints (RRJ) and Solvent Weld Joints (SWJ).

The pipe size and application dictate which jointing method is available.

While Iplex rubber ring jointed pipes can be fully assembled above the trench, care must be taken to ensure joints do not pull apart during lowering into the trench and all joints must subsequently be inspected. Solvent welded pipe may be fully jointed above the trench but not lowered into the trench until the solvent has taken its initial set (see Section 6.1.7.).

6.1 Solvent weld joint

Iplex premium solvent cements and benzene free priming fluids are manufactured to *AS/NZS 3879 Solvent Cements and Priming Fluids for PVC (PVC-U, PVC-M and PVC-O) Pipes and Fittings.*

To achieve strong leak free joints installers should:

1) Select the correct solvent cement for the application

- **Type N** for non-pressure joints with tapered sockets complying to AS/NZS 1254.

Table 6.1 - Solvent cement (Type N)

Product Codes	Color	Container size (mL)	Weight ea (kg)
JNB0250	Blue	250	0.25
JNB0500	Blue	500	0.5
JNB1000	Blue	1000	1
JNB4000	Blue	4000	4
JNC0250	Clear	250	0.25
JNC0500	Clear	500	0.5

2) Select the correct Iplex pipe and fitting.

3) Follow jointing steps 1-8 carefully (Section 6.1.7). Short cuts will result in poor joints that are likely to cause system failure.

6.1.1 How solvent cement works

Iplex PVC solvent cement is a solution of PVC resin in a mixture of solvents, which soften the surfaces when applied to PVC pipe and fittings. It is not a glue.

A thin uniform coat is applied to both the spigot and socket and the joint is assembled while the surfaces are still wet and fluid. The cement layers intermingle and become one. The strength of the joint develops as the solvent permeates the PVC and the volatile constituents evaporate.

6.1.2 The importance of Iplex priming fluids

Before applying the solvent cement, it is essential to use Iplex Priming Fluid for successful jointing as the fluid not only cleans and degreases but removes the glazed surface from PVC which allows the solvent cement to permeate into the wall of the pipe or fitting.

It must be applied with a clean, lint free cotton cloth. Brushing the priming fluid on or simply pouring the fluid over the pipes and fittings does not remove grease and dirt.

Table 6.2 - Priming fluid

Product Codes	Color	Container size (mL)	Weight ea (kg)
JR0250	Red	250	0.25
JR0500	Red	500	0.5
JR1000	Red	1000	0.1
JR4000	Red	4000	4
JC0250	Clear	250	0.25
JC0500	Clear	500	0.5

6.1.3 Tools required

- Appropriate PPE including but not limited to gloves, safety shoes, safety glasses, dust mask
- Saw to cut pipe either hand or electric
- Mitre Box
- De-burring tool or sharp edge or file to remove swarf
- Lint free cloths, non-synthetic
- Solvent Cement and Primer (usage chart can be found in section 6.1.4)
- Tape measure
- Pencil

6.1.4 Solvent cement and primer usage per joint

Table 6.3 - Solvent cement and primer

Average number of joints per litre of Iplex solvent (estimate only)	
Nominal pipe size (mm)	**Approx. joints per litre**
40	100
50	60
65	60
80	60
100	48
150	40
225	16
300	8
375	6

Average number of joints per litre of Iplex primer (estimate only)	
Nominal pipe size (mm)	**Approx. joints per litre**
4	500
50	300
65	250
80	200
150	90
225	30
300	24
375	16

6.1.5 Storage of solvent cement and primer

- Solvent cement and priming fluids are highly flammable. In the event of fire, smother with a fire blanket or earth or use suitable fire extinguisher.
- Store solvent cements and priming fluid in a cool place away from heat, flames and sparks.
- Ensure can lids are tightly closed when not in use.
- Use solvent cements within twelve months of the date stamped on the bottom of the bottle/can. If the solvent cement has become so thick that it does not flow easily, discard.
- Do not add any other ingredients or solvents to these products.

6.1.6 Safety precautions

- Do not use solvent cements or priming fluid in confined spaces without adequate ventilation, or near open flames or sparks.
- Do not smoke while using these products.
- If spilt on skin, immediately wash off with soap and water.
- If poisoning occurs, consult a doctor or Poisons information Centre.
- Keep container sealed when not in use.
- If swallowed:

Solvent cement	• Do not induce vomiting. • Call Poisons Information Centre or a doctor immediately.
Priming fluid	• Do not induce vomiting. • Call Poisons Information Centre or a doctor immediately.

- Avoid contact with eyes. If contact occurs flush with copious amounts of water.

6.1.7 Jointing instructions

Installers must adhere to the PIPA Industry Guideline POP102 – Solvent Cement Jointing of PVC Pipe. A summary is provided below to assist, however the full guideline should be followed.

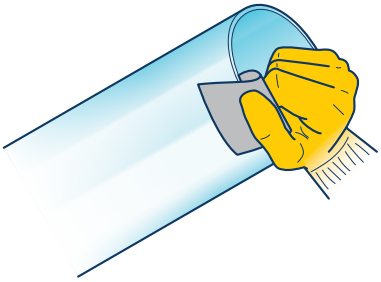
Do not work with hot pipes or on hot windy days without protecting pipes from the wind.

Keep lid on solvent cement to minimise evaporation. Do not use solvent or primer that is over 12 months old from the date stamped on bottom of bottle/can.

Step 1 - Cut spigot square and deburr

Cut the spigot square using a Mitre Box and hacksaw or power saw. Do not use a cutting disk that will melt the pipe as it will release potentially harm gas.

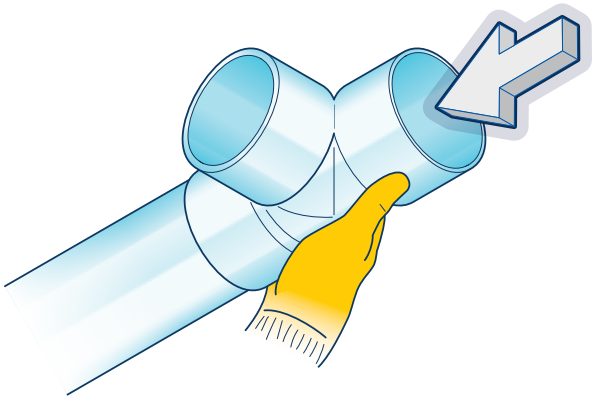
Remove all swarf and burrs from both inside and outside edges with a knife, file, reamer or sandpaper. Swarf and burrs if left, will wipe off the solvent cement and prevent proper jointing. Swarf inside pipes can catch and hold water born materials causing blockages or become dislodged and jam taps and valves. Do not roughen surfaces to be glued.



Step 2 - Check alignment

Check the pipe and spigot or fittings for proper alignment and placement.

The time for any adjustments is now, not later.



Step 3 - Mark clearly

Mark the spigot with a pencil or marker at a distance equal to the internal depth of the socket. Only use pencil or a marker. Do not score or damage the surface of the pipe or fitting.

Step 4 - Clean the surfaces to be glued

Thoroughly clean the inside of the socket and the area between the pencil mark and the spigot end with a clean, lint free cotton cloth dipped in priming fluid (do not use synthetic material). This removes dirt and grease and softens the PVC-U surface. Do not brush or pour the priming fluid on.

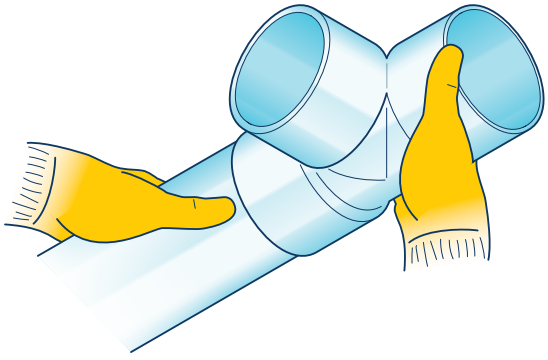
Use gloves. If contact with skin occurs, wash affected area with soap and copious quantities of water immediately.

Step 5 - Coat socket first - then spigot

Apply a thin, uniform coat of Iplex solvent cement to the socket. Take care to ensure that solvent build up does not occur in the root of the socket - a pool of cement there will severely weaken the pipe or fitting. Now apply a uniform coat of solvent cement to the external surface of the spigot up to the pencil mark.

Step 6 - Assemble-hold for 30 seconds

Assemble the joint quickly before the cement dries by pushing the spigot firmly into the socket as far as the pencil mark, apply a quarter turn during insertion to spread the cement evenly. Hold the joint in this position for at least thirty seconds without movement.



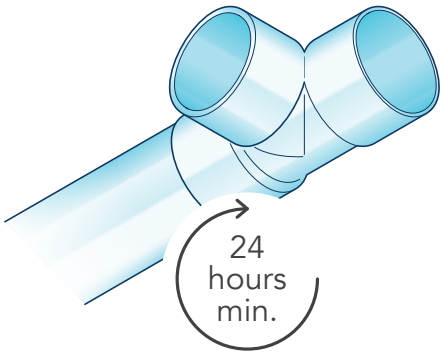
Step 7 - A vital 5 minutes

Gently wipe off the excess solvent cement from the outside of the joint and where possible from the inside of the joint. Do not disturb the joint for at least a further five minutes as movement may break the initial bond.

Step 8 - Curing and testing

The cure time is the time taken for the joint to achieve sufficient strength to allow it to be tested using the non-pressure test procedure specified in *AS/NZS 2032 Installation of PVC Pipe Systems.*

The minimum cure time for solvent weld joints is 24 hours.



6.2 Rubber ring pipe joints

Rubber ring joint pipe is supplied with the Iplex ring, which fits easily into the integral socket, and is available in sizes 100mm to 375mm.

Unless otherwise requested, Styrene Butadiene (SBR) rings are supplied.

Table 6.3

Polymer	Color code
Styrene Butadiene (SBR)	Blue
Ethylene Propylene Diene Monomer	Green

6.2.1 Tools required

- Appropriate PPE including but not limited to gloves, safety shoes, safety glasses, dusk mask.
- Saw to cut pipe either hand or electric.
- Mitre Box.
- De-burring tool or sharp edge or file to remove swarf.
- File to reform chamfer on the newly cut end.
- Cotton cloths, non-synthetic.
- Appropriate Iplex lubricant (mineral based greases must not be used).
- Tape measure.
- Pencil.

6.2.2 Storage of lubricants

- Store lubricant in a cool place away from heat, flames and sparks.
- Ensure can lids are tightly closed when not in use.
- Use lubricant within twelve months of the date stamped on the bottom of the bottle/can.
- Do not add any other ingredients or solvents to these products.

5.2.3 Safety precautions

- Do not smoke while using these products.
- Keep container sealed when not in use.
- If swallowed, do not induce vomiting. Call Poisons Information Centre or a Doctor immediately.
- Avoid contact with eyes. If contact occurs flush with copious amounts of water.

6.3 Cutting pipes if required

To cut pipes on site use a fine-toothed handsaw or electric saw. Do not use a cutting disk that will melt the pipe as it will release potentially harmful gas The cut position should be measured to allow the penetration depth of the spigot into the socket shown in table 6.4 below. A Mitre Box is recommended to ensure the cut is square to the pipe axis and all burrs removed with a file.

A chamfer similar to the factory produced chamfer on the pipes supplied is essential before attempting to join the pipes. The maximum length of chamfers applied on site must be no more than Dimension 'N' shown in the table 6.4 below. The witness mark should then be made, using a marker at the required insertion length.

6.3.1 Chamfer and witness mark details

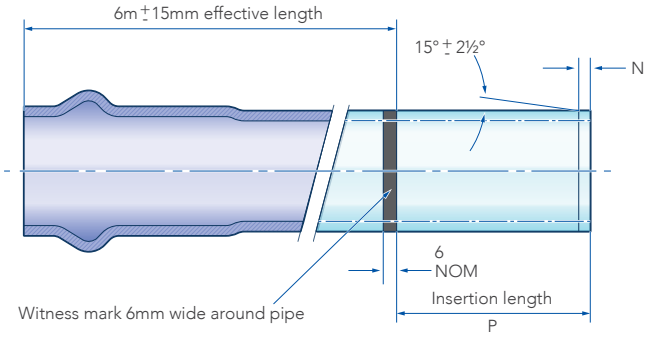


Table 6.4

Nominal pipe size (mm)	Dim. 'P' (mm)	Dim. 'N' (mm)
100	84	11
150	96	13
250	120	20
300	130	20
375	140	25

6.4 Iplex lubricant

The Iplex standard lubricant is suitable for all DWV rubber ring joint applications.

Mineral based greases must not be used.

Table 6.5 - Iplex standard lubricant

Container size (grams)	Product codes
500	JLO10500
1,000	JLO11000
4,000	JLO14000

Table 6.6

Average number of joints per litre of Iplex lubricant (estimate only).

Nominal pipe size (mm)	Approx. joints per litre
100	75
150	50
225	35
300	25
375	20

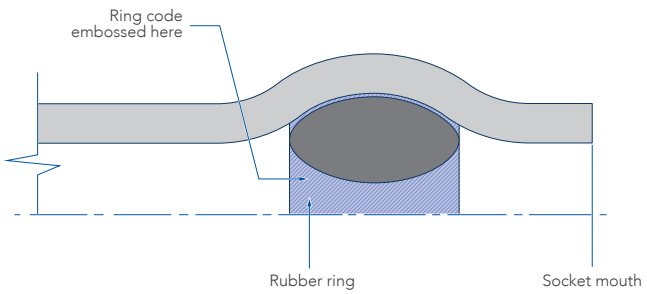
6.5 Ring jointing instructions

Step 1 - Clean

Remove all dust and dirt from the pipe spigot and socket or coupling, paying particular attention to cleaning behind the rubber rings.

Step 2 – Install seal ring (supplied)

Install the rubber ring supplied, ensuring it fits evenly in the socket groove and has the correct orientation.



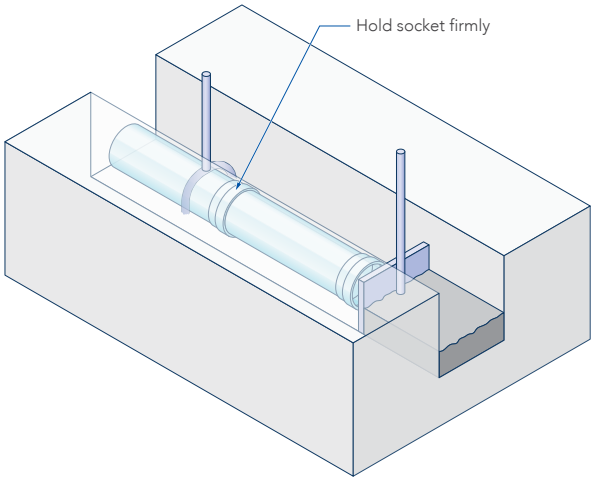
Step 3 - Apply lubricant

Apply lubricant to the spigot, fully covering the circumference up to the witness mark, ensuring that the lubricant also covers the pipe chamfer.

Note: Keep the container of lubricant closed when not in use to avoid spillage or contamination by dust or dirt.

Step 4 - Insert pipe

With pipes in a straight line introduce the spigot into the socket and push home until the witness mark remains just visible. In this position, clearance is automatically provided to allow for expansion and contraction. A crowbar and wooden block can be used to apply extra force to carefully push the joint closed. The socket of the joint being made should be restrained to prevent backward movement which would close up joints already made.



6.6 Placing jointed pipes into trenches

Iplex rubber ring joints can be joined outside the trench if required. However, it is recommended that rubber ring joints be made in the trench, particularly in pipelines of 150mm diameter and over, to avoid the possible necessity of re-positioning disturbed joints.

Particular care should be taken to ensure that no dirt or moisture has collected on the joint surface during handling.

When pipes are jointed outside the trench, particular care must be paid to how they are lifted and that the minimum bend radius of the pipe is not exceeded.

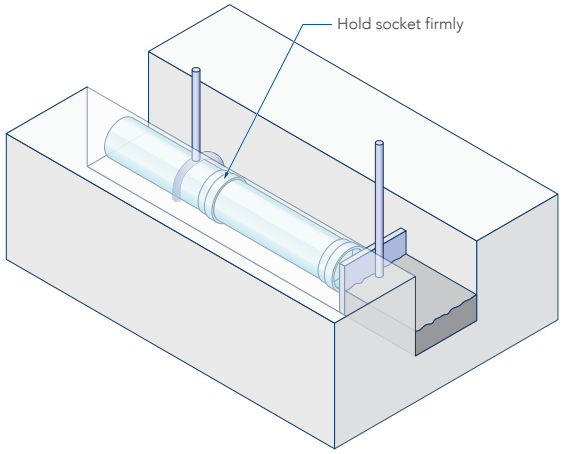
7.0 Installation

Drain, waste and vent pipelines rely on gravity to ensure adequate flow of fluid. Strict adherence to the designed grade along the entire pipeline is essential and the line must be maintained to specification between inspection or manhole position.

Installation of PVC-U DWV pipelines should be installed with Standards *AS/NZS 2566.2 Buried Flexible Pipelines, Part 2: Installation, Standards AS/NZS 2032 - Installation of PVC-U Pipe Systems* and *AS/NZS 3500.2 - Plumbing and Drainage Part 2: Sanitary Plumbing and Drainage*, together with the requirements of local authorities, where applicable.

7.1 Below ground installation

Trenches must be excavated in accordance with plans and specifications and with reference to *AS/NZS 2032 Installation of PVC Pipes Systems*.



Stable condition

Stable conditions are those where, after excavation, the trench walls remain solid and do not show any signs of collapse or cave-in. Under such conditions the recommended trench widths are:

Table 7.1

Pipe diameter (mm)	Normal width (mm)
75-100	400
150-200	600
225-300	750
375	900

Trench depths

The minimum trench depth should be such that pressures created by the weight of fill material plus anticipated traffic or other superimposed loads will not damage the pipes.

As a guide the minimum clear cover is listed below, but refer to AS/NZS 2032 for the latest information.

Table 7.2

Condition	Min. cover depth
Where no subject to vehicular loading:	300mm
Where subject to vehicular loading:	
Under driveways:	450mm
In sealed roadways:	600mm
In unsealed roadways:	750mm
In construction equipment loading:	750mm

Laying and compaction

Preparing the trench

The trench bottom must be as level as possible, so that the barrel of the pipe is fully supported. The trench bottom must have sandy or loamy soil, free from rocks and stones to ensure continuous support for the pipe.

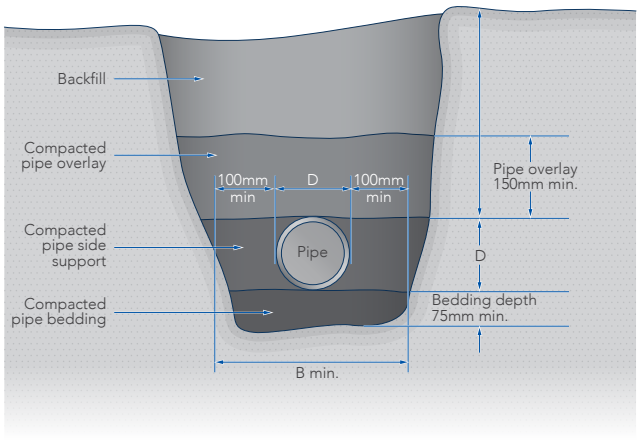
Wet conditions

In wet ground, sloppy working conditions can be alleviated by first placing a layer of hard granular material, or by de-watering the area in and around the trench. If patches of ground are so wet that there is a risk of subsidence and possible damage to sections of the pipeline, these areas must be consolidated by the addition of suitable fill material.

Trench installation

The trench must be excavated deeply enough to allow for the specified grade, the required depth of bedding, and the minimum cover over the pipe.

AS/NZS 2032 Installation of PVC-U Pipe Systems, sets out the following typical installation in a trench.



AS/NZS 2032 states the following materials as suitable for bedding and overlay in the trench:

a. Suitable sand, free from rock or other hard or sharp objects.

b. Crushed rock or gravel of approved grading up to a maximum size of 14mm.

c. Cement mortar, containing one part of cement and four parts of sand by volume, mixed with clean water to a workable consistency (bedding only).

7.2 Backfilling

Use of short lengths of pipe

PVC-U pipe may be cut on site when shorter lengths are required for the installation of fittings.

The cutting of PVC-U pipe is achieved using a fine-toothed handsaw or a PVC-U pipe cutter. The position of the cut must be measured and carefully re-checked before cutting: accuracy must be exercised to ensure that the cut is square to the axis of the pipe and all burrs must be removed from the cut end before making a joint.

Completing sitework

Once the pipe is laid in the trench backfilling can commence. Two distinct phases are involved with pipelines:

a. backfilling prior to testing the pipeline.

b. backfilling after testing the pipeline.

Backfilling usually follows pipe installation as closely as possible in order to protect the pipe from external damage. This eliminates the possibility of the pipe floating due to flooding of open trenches, and avoids shifting the pipe out of line due to cave-ins.

It should be remembered that the purpose of backfilling is not only to protect the pipe by covering it, but to provide firm continuous support under the pipe. Where concrete or mortar bedding has been used, the bedding has to take its initial set before overlay materials is added.

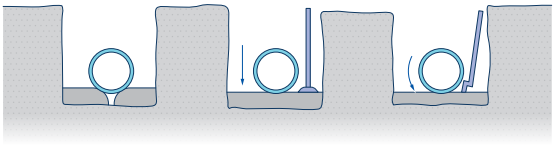
Initial backfilling

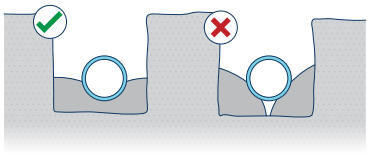
The first step in providing firm continuous support for the pipeline is to tamp soil solidly under the entire barrel of the pipe. Care must be taken not to disturb the grade.

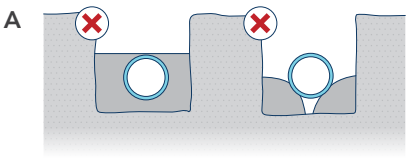
The embedment material must be free from stones, rock or clay. If the native, excavated soil is not suitable, then imported materials must be used for the embedment zone. The initial backfill must be placed by hand-shovel in layers not exceeding 100mm deep. Each layer must be well tamped around and under the pipeline using the long tamper illustrated. In this way air pockets are eliminated from beneath the pipe.

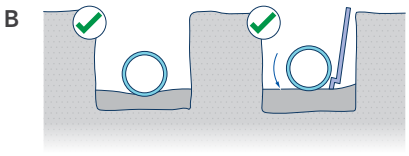
The layers should be shoveled in and tamped with the process being repeated until the pipe is firmly bedded. The flat tamper illustrated is used to consolidate this fill to heights of 300mm above the top of the pipe for diameters up to 300mm.

The illustrations A and B below show the wrong and right ways of tamping the initial backfill.









Case A, too much soil is present, and the tamping bar cannot compact it properly leaving a void underneath the pipe.

Case B, shows the correct fill of a 100mm layer of soil which can be compacted to form a firm bed for the pipe.

Pipe joints must be temporarily left exposed when placing the initial backfill, to enable pressure tests to be carried out. After testing the line, backfilling and final filling must be completed.

7.3 Above ground installation

Above ground installation will require the use of various supports as listed below:

Fixed supports	• The purpose of a fixed support is to restrain all movement and to provide a fixed point in the installation. The clip or support must be securely attached to the fitting, located in the clamping groove where provided.
Sliding supports	• The purpose of a sliding support or clip is to provide a guide without restraint on axial movement of the pipe.
Location of supports	• Refer to maximum spacing of pipe supports table below. • PVC-U must be supported at intervals dependent on the maximum temperature likely to be reached by the material.
PVC-U pipes through walls and floors	• AS/NZS 2032 requires any pipe fitting built into a wall or floor must either be lagged with a suitable flexible material not less than 6mm thick, or pass through a sleeve providing an annular clear space of not less than 6mm, so as to permit the pipe to be sealed in position without restricting axial movement of the pipe.

Table 7.3 - Maximum spacing of pipe supports for non-pressure pipes AS/NZS 2032

Nominal size of pipe (mm)	Graded pipelines (m)	Vertical pipelines (m)
32	0.90	1.80
40/50	1.00	2.00
65-150	1.20	2.50
>150	1.50	3.00

DWV pipes are relatively light materials and available with a large variety of fittings can readily be installed inside buildings, factories, etc.

Thermal movement

PVC-U has a coefficient linear expansion of 7 x 10^{-5}/K. This means that 1 metre length of PVC-U will expand approximately 0.7mm for each 10°C rise or fall in temperature. However, due to the short duration of most effluent flows and the slow temperature response of the material, the greatest thermal movements take place due to variation in environmental temperature rather than the effect of hot effluent discharge. Successful accommodation of thermal movement is dependent on the controlled direction and distribution of this movement.

The following information is intended as a general guide and reference must be made to the relevant code of practice issued by the appropriate statutory authority.

Unless thermal movement can be accommodated by alternative means, expansion joints should be fitted. Maximum spacing intervals for locating expansion joints are 6 metres for cold and 4 metres for hot pipelines. The maximum length of pipeline between fixed points must be 2 metres for cold pipelines and 1 metre for hot pipelines.

Vertical DWV stacks and discharge pipes must have expansion joints located on each floor where fixtures or branch lines are connected, directly above the highest branch connection. They must also be located at the base of a stack or at the end of a drain connection for a discharge pipe, if the length of pipe between fixed points exceeds the distances stated above.

On graded pipelines, expansion joints must be placed immediately upstream to the entry to a vertical stack or other graded line, and immediately upstream of each change of direction in the graded lines.

Expansion joints may be omitted in the following locations:

1. At the top floor of a stack where the stack is free to move through a weatherproof sleeve through the roof.
2. At the base of an external stack connected to a drainage trap where the stack is free to move through a sleeve fitted in the drain connection.
3. At a junction or bend in a graded pipeline where the thermal movement in the pipeline can be accommodated by deflection of the offset leg without affecting the grade of the pipeline, subject to the length of the pipeline and the offset leg. Supporting of the pipe must not impede expansion movement in such cases.

7.4 Expansion

Table 7.4 - Thermal movement

Nominal size of pipe (mm)	Max. pipe length 'L' (m)	Min. offset leg length 'l' (m)
40/50	2	0.5
	3	0.6
	4	0.8
	6	1.0
65/80/100	2	0.75
	3	1.0
	4	1.1
	6	1.2
150	2	1.0
	3	1.1
	4	1.2
	6	1.2

Expansion couplings D63 and D64

A D63 expansion coupling comprises a standard D57 coupling and a seal ring adaptor factory assembled ready for use.

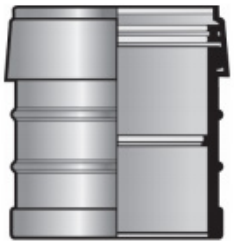
A D64 repair slip coupling comprises a D57 coupling without a center register and with a seal ring adaptor fitted to both sockets factory assembled. It is used to effect repairs to damaged pipe work or to marry in a branch to an existing installation.

To apply this fitting, cut out the necessary portion of the stack or pipe work, chamfer and clean up the exposed end(s), coat the seal rings of the number D64 coupling(s) with Iplex Lubricant and slide coupling(s) onto the existing pipe work.

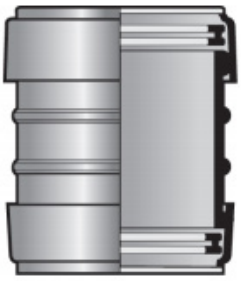
With expansion joint to cast iron brackets, prepare replacement section or assembly, chamfer ends and place into position. Slide down coupling(s) and center over the butt ends of the pipe.

Always secure the slip coupling(s) in position with brackets.

D63 Expansion coupling



D64 Repair slip coupling



Expansion joint to cast iron

A D59 bush supplied complete with seal ring joint is used to connect cast iron. The joint is made using ferropre, a two-part epoxy resin bonding sealer specifically designed for joining cast iron plumbing systems.

Note: Care must be taken to ensure that a 12mm (1/2") gap is left between the end of the pipe and the base of socket.

Brackets

Iplex metal brackets are designed to fit the profile of the fitting sockets.

Brackets are designed to perform two functions:

1. To clamp fittings, creating a fixed point
2. As a guide-bracket allowing thermal movement of the pipework. The pipe should be free to move through the bracket to accommodate expansion and contraction. All expansion joints must be securely anchored with brackets.

Weathering apron

Weatherproof sleeves are fitted in the normal manner and an Iplex D74 weathering apron fitted as follows:

a. Clean pipe and inside of D74 weathering apron with Iplex priming fluid.

b. Solvent weld in position with Iplex solvent weld cement, leaving a 12mm(1/2in) gap between the top of the slate and the shoulder of the weathering apron.

7.5 Testing pipelines

The purpose of testing a non-pressure pipeline is to ensure that the line has been correctly laid to line and grade, will flow satisfactorily and is sealed at each joint and fitting.

All new sewers and sanitary drainage and other non-pressure installations must be tested using either hydrostatic test, low pressure air test or vacuum testing as detailed in AS/NZS 2032. The tests must also be applied to any section of existing pipeline or drain that has been repaired or replaced. All openings in the pipeline below the top of the section under test must be sealed.

Hydrostatic testing

The pipeline must be filled with water to a height of not less than 1m above the natural ground level at the highest point of the section being tested, or to the flood level of the lowest sanitary fixture, but not exceeding 5m at the lowest point of the test section.

The pressure must be maintained without leakage for at least 15 minutes. The source of any leaks must then be ascertained and any defects repaired. The pipeline must then be retested.

Volume of water required to fill line

For a guide as to the amount of water required to fill the test section of sewer line, the following table has been calculated. The amount of water required in practice will vary slightly from the tabulated figures due to variations in pressure and temperature.

Table 7.5

Nominal dia. (mm)	Vol. in m3/km or l/m
100 SN6	8.5
150 SN4	18
225 SN4	43.9
300 SN4	69.6
375 SN4	112.2

Low pressure air testing

All inlets, outlets and access points must be capped and sealed. Air must be introduced slowly, since rapid pressurization can cause significant air temperature changes that may affect testing accuracy.

Apply an initial test pressure of approximately 15kPa. Close the valve on the pressure line and shut off the pump. Allow the air pressure to stabilize for at least three minutes to identify any initial leakage.

When the pressure has stabilized and is at or above the starting test pressure of 10kPa commence the test by allowing the gauge pressure to drop to 10kPa, at which point initiate time recording. Record the drop in pressure over the test period.

The length of drain under test is considered to pass if the pressure drop is ≤3kPa for the relevant time interval specified in Table 7.6.

Vacuum air testing

All inlets, outlets and access points must be capped and sealed.

Apply an initial test vacuum (negative gauge pressure) of approximately 15kPa. Close the valve on the vacuum line and shut off the vacuum pump. Allow the air pressure to stabilize for at least three minutes to identify any initial leakage.

When the vacuum has stabilized and is above the starting test vacuum of 10kPa, commence the test by allowing the vacuum to drop to 10kPa, at which point initiate time recording.

Record the drop in vacuum over the test period.

The length of drain under test is considered to pass if the test vacuum loss is ≤3kPa for the relevant time interval specified in Table 7.6.

Table 7.6 - Pressure and vacuum air testing acceptance times for 3kPa pressure change:

Pipe size DN (mm)	Test length, metres					
	50	100	150	200	250	300
	Minimum test duration, minutes					
<100	2	2	2	2	3	3
100	2	2	2	2	3	3
150	3	3	3	5	6	6
225	4	5	8	10	13	15
300	6	9	14	18	23	29
375	7	14	22	29	36	43

Notes:

1. **Timing of the test duration must commence after the three minutes initial period.**
2. **Test duration times for other combinations of pipe size and test length may be interpolated.**

Closed circuit television (CCTV) inspection

CCTV acceptance inspection of sanitary drains must be conducted in accordance with the requirements of WSA 05. In addition, the operator must investigate, describe, identify and report on the defects or features in accordance with the criteria in this clause.

Inspection must be conducted under no-flow conditions, that is the sanitary plumbing system is not being used so that the flow (water) level can be measured and reported.

Note: It is recommended that the sanitary drain be cleaned prior to inspection.

AS/NZS 2032 and AS/NZS 3500 must also be referred to for information on testing DWV installations.

Completing final backfill

After testing of the pipeline, selected material must be hand shovelled over each exposed joint and tamped to give 300mm minimum cover. Final backfilling to ground level can be completed by hand or machine, using the soil originally excavated from the trench. Care must be taken to exclude large rocks and stones from the final backfill.

Testing waste pipes

The tests which must be applied, are similar to those specified above. The only difference is in the preparation of the pipeline for test.

Preparing the pipeline for test

Before the procedures outlined previously are observed the pipeline must first be checked for the following:

- All joints must be inspected to ensure the correct location of the witness mark or groove to the coupling socket.
- Check that seven days minimum has elapsed since the last concrete thrust block or support was cast.
- Check the tightness of all ties and clamps and the correct positioning of PVC-U or felt pads preventing PVC-U pipe from chafing.

8.0 Frequently asked questions

Can DWV pipe be installed in sunlight?

Yes, refer to AS/NZS 2032. Iplex PVC-U DWV pipes and fittings should be protected from exposure to direct sunlight for service applications. Protection in service can include physical shading such as under or inside buildings, bridges or structures, or pale coloured U.V. resistant, water based paint systems.

How deep or shallow can I bury DWV pipe?

Refer to AS/NZS 2566 and AS/NZS 2032.

What is the flow capacity of the DWV pipe?

Refer Tools - Hydraulic flow calculator at Iplex PocketEngineer.

Can I encase DWV pipes in concrete?

Refer to AS/NZS 2032. CL5.3.5

Can I run petrol through the pipe?

Generally not, but refer to the Iplex website Chemical Resistance Guide or in PocketEngineer.

What dimensions does DWV pipe and fittings come in?

Refer to product information detailed in section 9.0 Product Range.

What pressure do I test to?

Iplex DWV pipe systems are not pressure rated and must be tested using the procedure for non-pressure pipes in AS/NZS 2032 section 7.

What is a safe span if installed above the ground?

Refer to AS/NZS 2032.

Does DWV contain lead?

The manufacture of DWV pipe and fittings use non toxic heavy metal stabilisers.

Can I earn Green Star credit points with Iplex DWV pipe and fittings?

Yes, Iplex DWV pipe and fittings meet the Best Environmental Performance Standards of the Green Building Council of Australia.

9.0 Product range

9.1 DWV system – pipes

Drain, waste and vent pipe - solvent weld

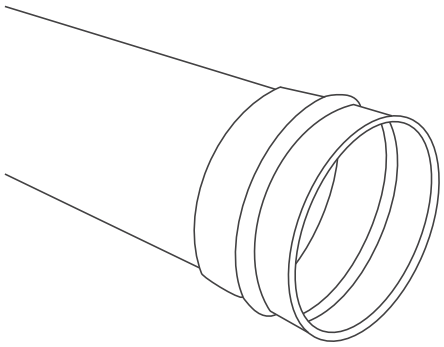
Product code	Typical dimensions				
	Nominal size (mm) DN	Stiffness rating	Length (m) L	Minimum mean outside dia. (mm) L1	Wall thickness min. (mm) L2
DPSH40	40	SH	6	43	2.0
DPSH50	50	SH	6	56	2.2
DPSH65	65	SH	6	69	2.7
DPSH80	80	SH	6	82	2.9
DSMH100	100	SN6	6	110	3.0
DSMH150	150	SN4	6	160	4.2
DSMH225	225	SN4	6	250	6.6
DSMH300	300	SN4	6	315	8.4
DSME100C	100	SN10	3	110	3.9
DSME100	100	SN10	6	110	3.9
DSME150C	150	SN8	3	160	5.2
DSME150	150	SN8	6	160	5.2
DSME225C	225	SN8	3	250	8.2
DSME225	225	SN8	6	250	8.2
DSEH300C	300	SN8	3	315	10.4
DSEH300	300	SN8	6	315	10.4

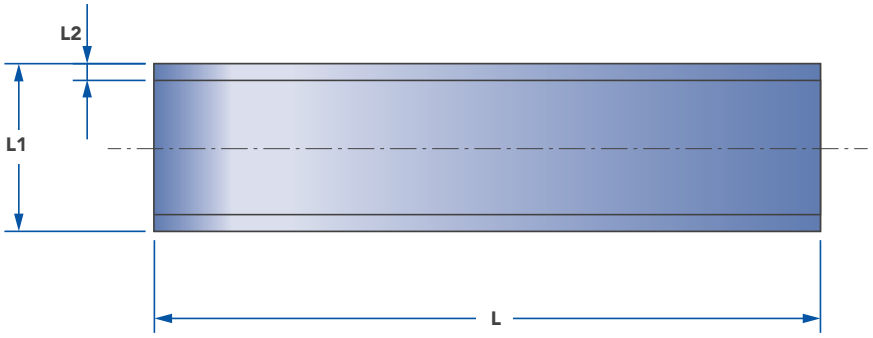
Note: Rating SH = Standard.

Note: All dimensions, mass and volume are approximate only. If critical contact Iplex.

Drain, waste and vent pipe - rubber ring

Product code	Typical dimensions				
	Nominal size (mm) DN	Stiffness rating	Length (m) L	Minimum mean outside dia. (mm) L1	Wall thickness min. (mm) L2
DRMH150C	150	SN4	3	160	4.2
DRMH225C	225	SN4	3	250	6.6
DRSH300C	300	SN4	3	315	8.4
DRSH375C	375	SN4	3	400	10.6
DRME150C	150	SN8	3	160	5.2
DRME225C	225	SN8	3	250	8.2
DRME300C	300	SN8	3	315	10.4
DREH375C	375	SN8	3	400	13.2



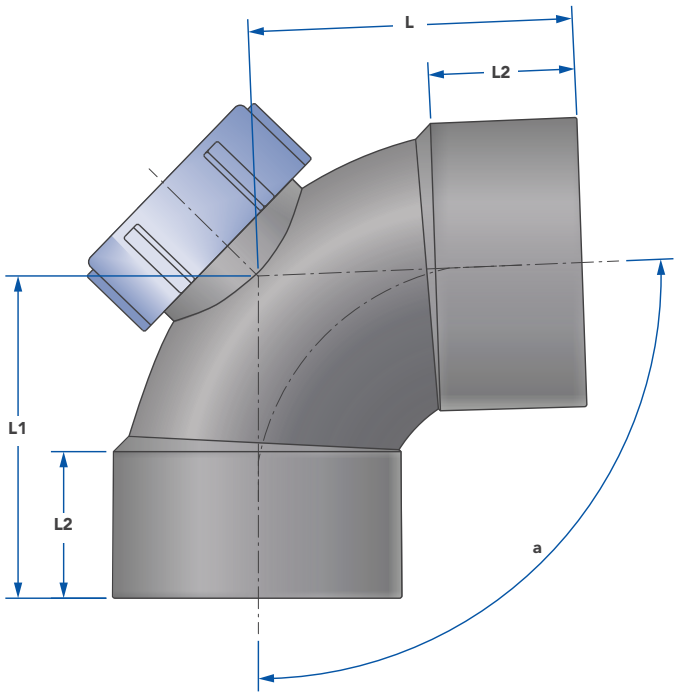


Note: All dimensions, mass and volume are approximate only. If critical contact Iplex.

9.2 DWV System – fittings solvent weld

Inspection opening bend female and female (F&F)

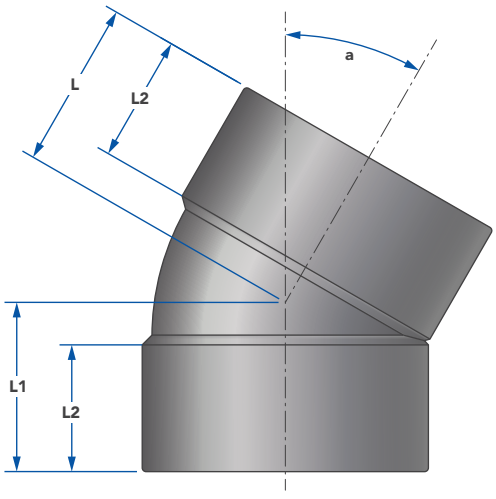
		Typical dimensions			
Product code	Nominal size (mm)	Angle (deg) a	Dim (mm) L	Dim. (mm) L1	Dim. (mm) L2
D0014045	40	45	43	43	29
D0014088	40	88	58	58	26
D0015045	50	45	49	49	32
D0015088	50	88	69	69	30
D0016545	65	45	69	69	44
D0016588	65	88	98	98	40
D0018088	80	88	118	118	47
D00110045	100	45	81	81	51
D00110088	100	88	155	152	53
D00115088	150	88	222	257	79



Note: All dimensions, mass and volume are approximate only. If critical contact Iplex.

Plain bend F&F

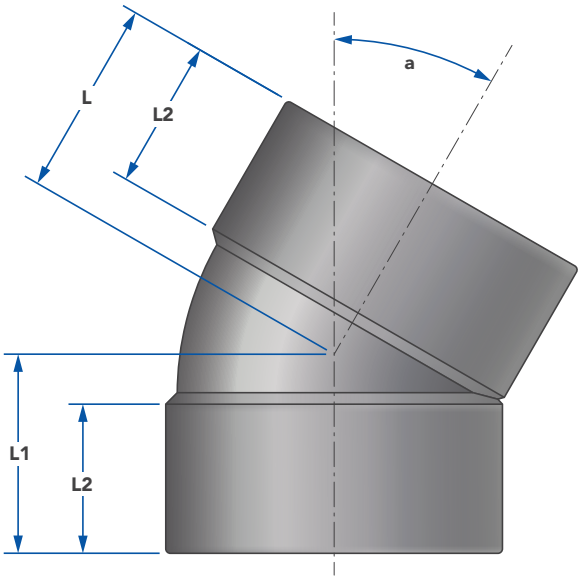
Product code	Typical dimensions				
	Nominal size (mm)	Angle (deg) a	Dim (mm) L	Dim. (mm) L1	Dim. (mm) L2
D0023245	32	45	35	35	26
D0023288	32	88	49	49	25
D0024015	40	15	48	48	27
D0024045	40	45	37	37	29
D0024088	40	88	58	58	27
D0025015	50	15	35	35	30
D0025045	50	45	43	43	30
D0025088	50	88	72	72	32
D0026515	65	15	44	44	39
D0026545	65	45	54	54	39
D0026588	65	88	98	98	40
D0028015	80	15	78	78	51
D0028045	80	45	63	63	45
D0028088	80	88	118	118	47
D0021005	100	5	59	59	51
D00210015	100	15	62	62	51
D00210030	100	30	69	69	51
D00210045	100	45	76	76	51
D00210060	100	60	87	107	53
D00210088	100	88	131	131	51
D00215015	150	15	96	111	77
D00215045	150	45	116	137	77
D00215088	150	88	222	257	78



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

Fabricated bends F&F

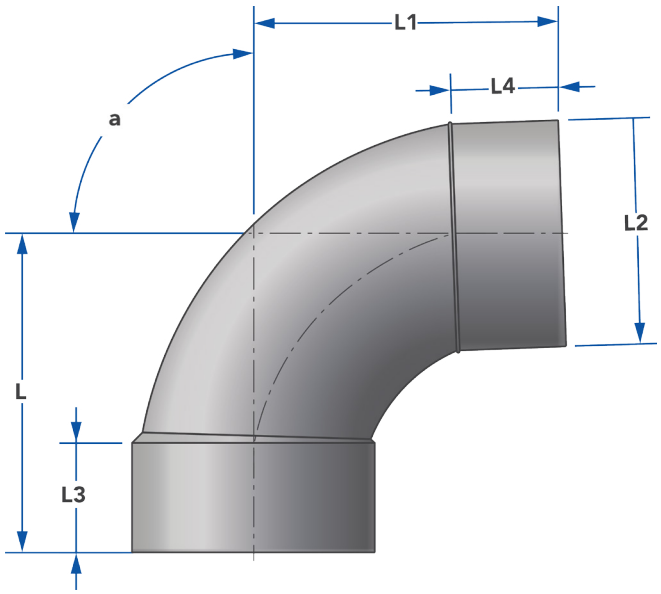
Product code	Typical dimensions				
	Nominal size (mm)	Angle (deg) a	Dim (mm) L	Dim. (mm) L1	Dim. (mm) L2
D0021505	150	5	107	111	80
D00215030	150	30	165	180	77
D0022255	225	55	219	250	125
D00222515	225	15	250	250	110
D00222530	225	30	250	250	110
D00222545	225	45	200	200	110
D00222588	225	88	365	365	175
D00230015	300	15	321	321	175
D00230022	300	22	331	331	175
D00230030	300	30	342	342	175
D00230045	300	45	340	340	175
D00230088	300	88	367	567	175
D00237545	375	45	456	456	200
D00237588	375	88	653	653	200



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

Plain bend male and female (M&F)

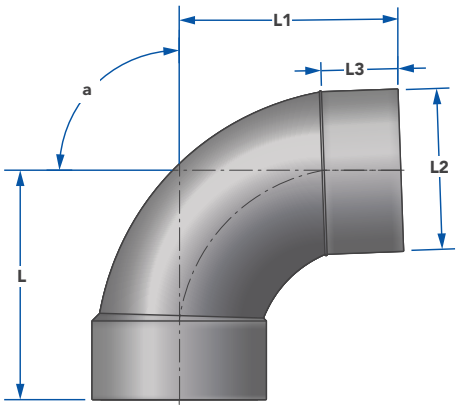
	Typical dimensions						
Product code	Nominal size (mm)	Angle (deg) a	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3	Dim. (mm) L4
D0034042	40	42	38	39	43	27	27
D0035042	50	42	48	48	56	32	32
D0035088	50	88	74	74	56	34	34
D0036542	65	42	67	69	69	44	44
D0038042	80	42	78	79	82	51	51
D0031005	100	5	59	70	110	51	70
D00310011	100	11	75	60	110	75	51
D00310015	100	15	62	77	110	51	53
D00310022	100	22	88	65	110	70	47
D00310030	100	30	87	71	110	53	51
D00310042	100	42	75	92	110	51	53
D00310060	100	60	107	87	110	53	52
D00310088	100	88	151	151	110	52	80
D00315015	150	15	111	98	160	111	77
D00315042	150	42	116	137	160	77	78
D00315088	150	88	261	222	160	77	78



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

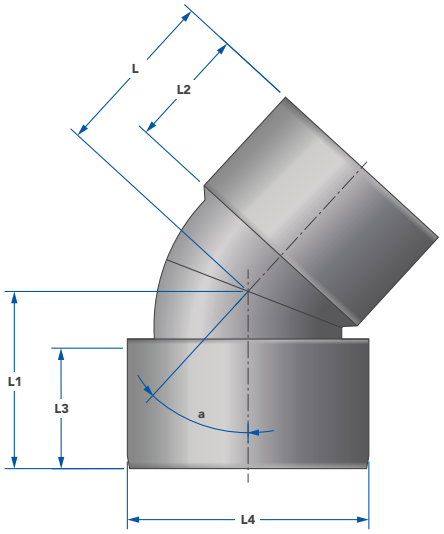
Fabricated bends M&F

Product code	Typical dimensions					
	Nominal size (mm)	Angle (deg) a	Dim. (mm) L	Dim. (mm) L1	Dim. (mm) L2	Dim. (mm) L3
D0031505	150	5	120	90	160	80
D0032255	225	5	160	217	250	125
D00322545	225	45	265	256	250	110
D00322560	225	60	291	260	250	110
D00322588	225	88	384	365	250	110



Reducing bend M&F

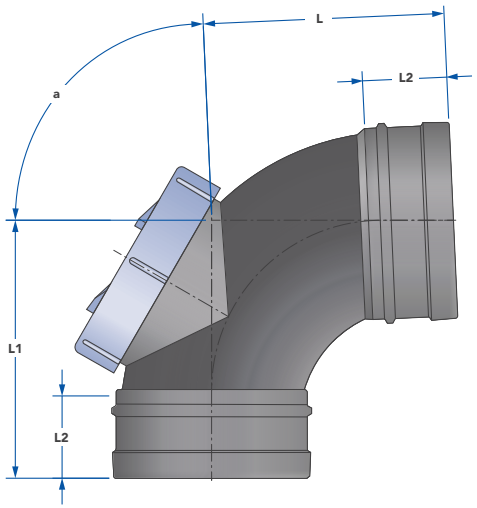
Product code	Typical dimensions						
	Nominal size (mm)	Angle (deg) a	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3	Dim. (mm) L4
D004504042	50x40	42	39	41	27	27	56



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

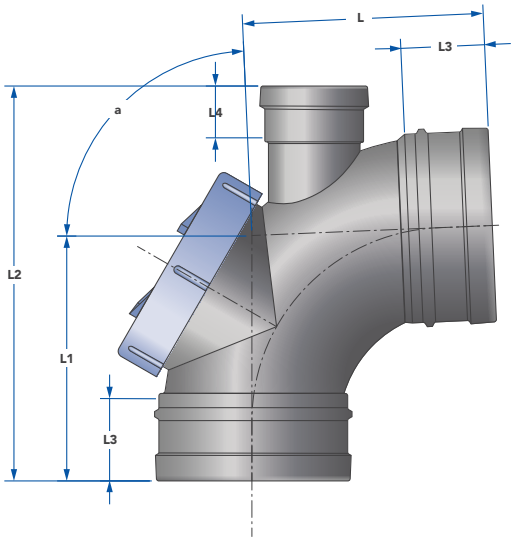
Rear access bend F&F

Product code	Typical dimensions				
	Nominal size (mm)	Angle (deg) a	Dim (mm) L	Dim. (mm) L1	Dim. (mm) L2
D00510088	100	88	149	153	151



Vented access bend F&F

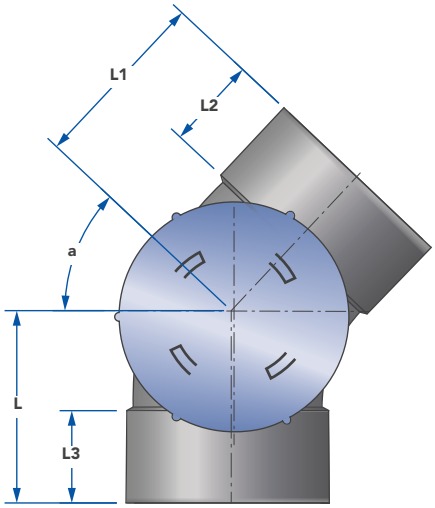
Product code	Typical dimensions						
	Nominal size (mm)	Angle (deg) a	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3	Dim. (mm) L4
D008105088	100x50	88	149	153	246	51	32



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

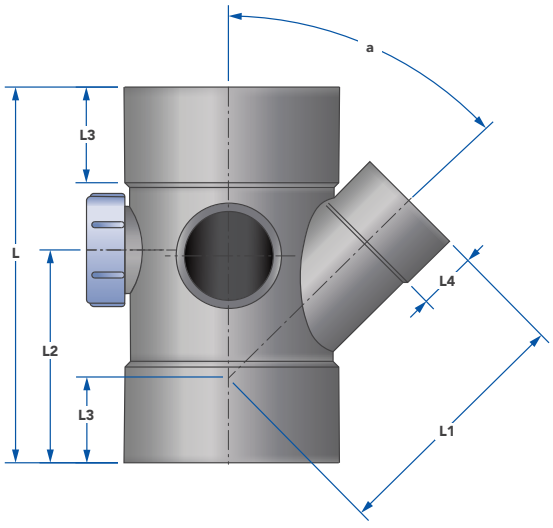
Side access bend F&F

Product code	Typical dimensions					
	Nominal size (mm)	Angle (deg) a	Dim (mm) L	Dim. (mm) L1	Dim. (mm) L2	Dim. (mm) L3
D01010045	100	45	108	108	51	51
D01010088	100	88	151	156	53	53



Inspection opening junction F&F reducing

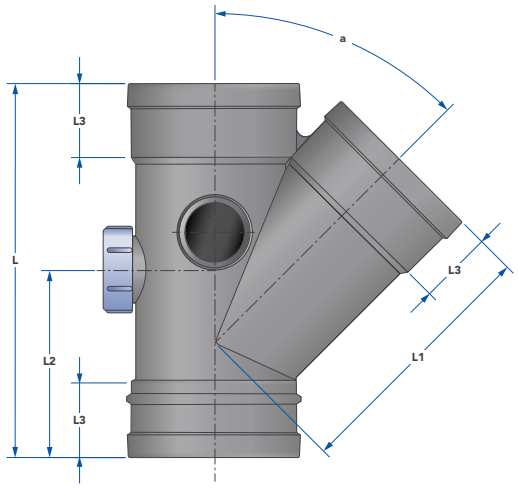
Product code	Typical dimensions						
	Nominal size (mm)	Angle (deg) a	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3	Dim. (mm) L4
D017105045	100x50	45	203	136	51	45	31
D017106545	100x65	45	203	154	51	45	39



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

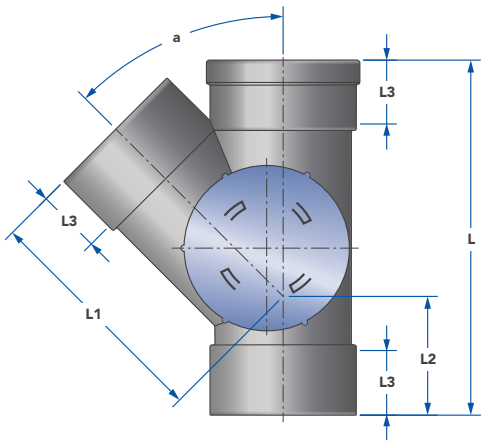
Inspection opening junction F&F

Product code	Typical dimensions					
	Nominal size (mm)	Angle (deg) a	Dim. (mm) L	Dim. (mm) L1	Dim. (mm) L2	Dim. (mm) L3
D0184088	40	88	119	63	64	28
D0185045	50	45	143	101	72	31
D0185088	50	88	133	70	72	32
D0186545	65	45	204	143	96	41
D0186588	65	88	172	100	100	40
D0188088	80	88	202	118	118	47
D01810045	100	45	264	187	133	51
D01810088	100	88	250	146	146	53



Side access junction F&F left hand

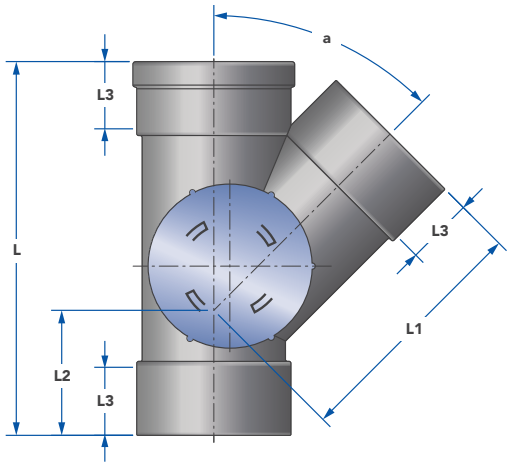
Product code	Typical dimensions					
	Nominal size (mm)	Angle (deg) a	Dim. (mm) L	Dim. (mm) L1	Dim. (mm) L2	Dim. (mm) L3
D01910045	100	45	288	192	95	53



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

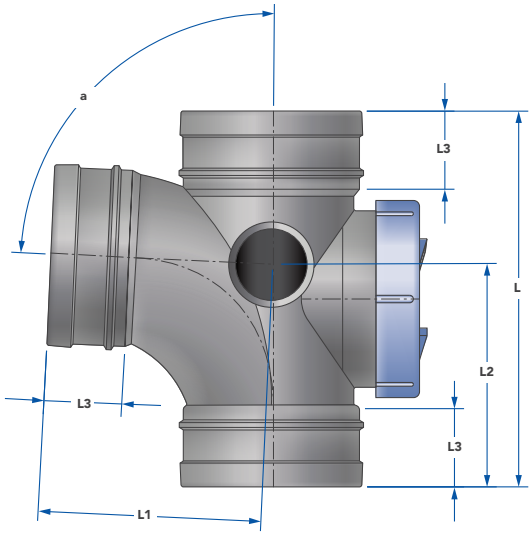
Side access junction F&F right hand

Product code	Typical dimensions					
	Nominal size (mm)	Angle (deg) a	Dim. (mm) L	Dim. (mm) L1	Dim. (mm) L2	Dim. (mm) L3
D02010045	100	45	288	192	95	53



Rear access junction F&F

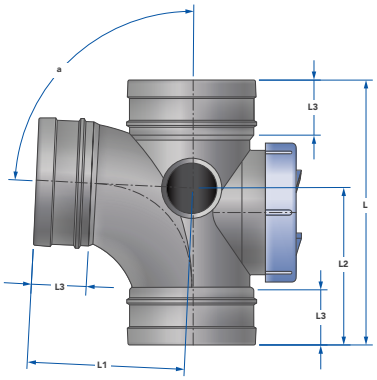
Product code	Typical dimensions					
	Nominal size (mm)	Angle (deg) a	Dim. (mm) L	Dim. (mm) L1	Dim. (mm) L2	Dim. (mm) L3
D0238088	80	88	202	118	118	51
D02310088	100	88	251	147	148	51
D02315088	150	88	405	222	257	78



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

Fabricated access junctions

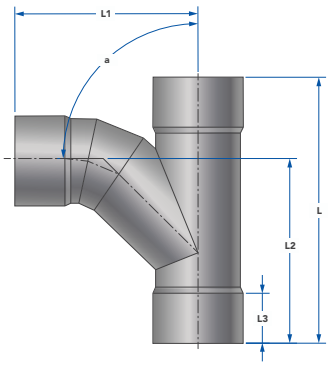
Product code	Typical dimensions					
	Nominal size (mm)	Angle (deg) a	Dim. (mm) L	Dim. (mm) L1	Dim. (mm) L2	Dim. (mm) L3
D02322588	225	88	820	600	510	125

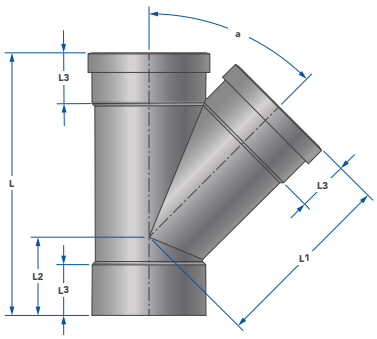


Plain junction F&F

Product code	Typical dimensions					
	Nominal size (mm)	Angle (deg) a	Dim. (mm) L	Dim. (mm) L1	Dim. (mm) L2	Dim. (mm) L3
D0243288*	32	88	97	56	58	25
D0244045**	40	45	132	83	49	29
D0244088*	40	88	105	57	62	27
D0245045**	50	45	143	101	42	31
D0245088*	50	88	133	70	72	32
D0246545**	65	45	204	143	64	41
D0246588*	65	88	172	100	46	40
D0248045**	80	45	218	152	66	47
D0248088*	80	88	202	118	118	47
D02410045**	100	45	266	188	80	51
D02410088*	100	88	242	146	138	53
D02415045***	150	45	413	276	137	77
D02415088	150	88	405	222	256	79

*Thread on 1 end only. **Thread on 1 end and branch. ***Thread on branch only.

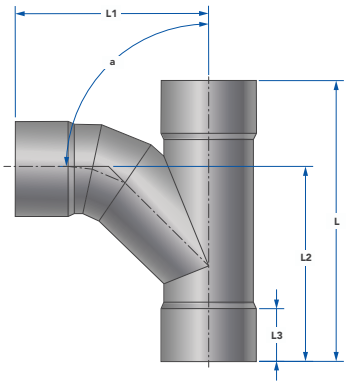


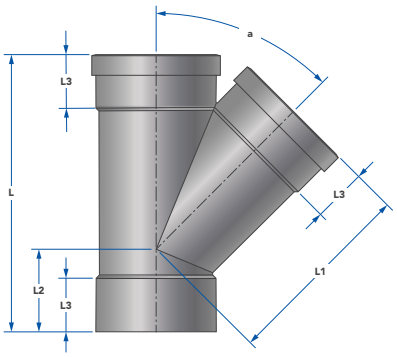


Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

Fabricated junction F&F

Product code	Typical dimensions					
	Nominal size (mm)	Angle (deg) a	Dim. (mm) L	Dim. (mm) L1	Dim. (mm) L2	Dim. (mm) L3
D02422545	225	45	834	542	292	125
D02422588	225	88	820	614	571	125
D02430045	300	45	980	656	329	175
D02430088	300	88	977	721	678	175
D02437545	375	45	1246	823	423	200
D02437588	375	88	1246	858	854	200

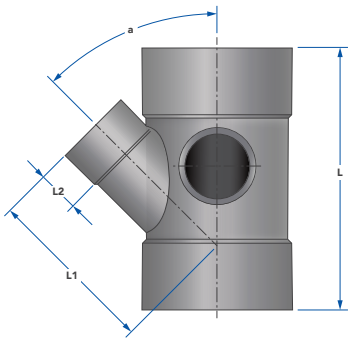


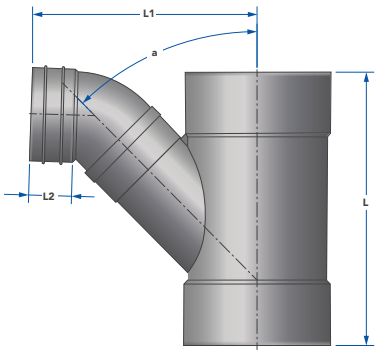


Plain junction F&F reducing

Product code	Typical dimensions						
	Nominal size (mm)	Angle (deg) a	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3	Dim. (mm) L4
D025805045*	80x50	45	194	143	55	45	34
D025105045*	100x50	45	203	136	51	45	31
D025106545*	100x65	45	203	154	51	45	39
D025108045	100x80	45	233	176	63	51	45
D025151045*	150x100	45	373	226	97	77	51
D025151088	150x100	88	320	169	175	79	53

* Thread on branch only.



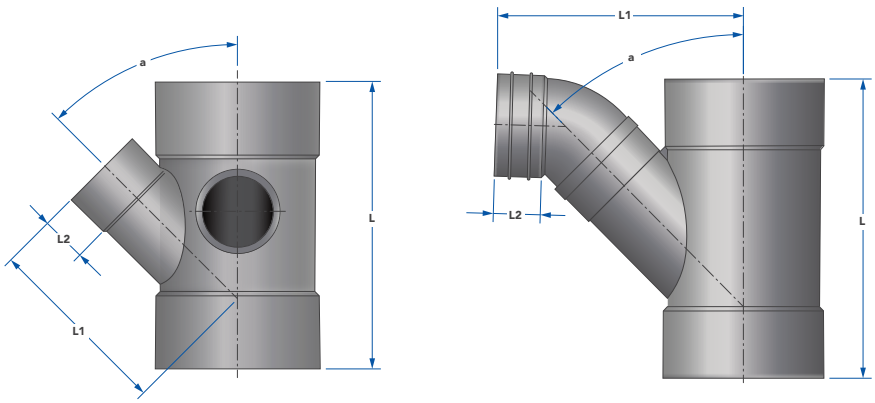


Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

Fabricated Junctions F&F Reducing

		Typical dimensions			
Product code	Nominal size (mm)	Angle (deg) a	Dim (mm) L	Dim. (mm) L1	Dim. (mm) L2
D025221045*	220x100	45	500	311	55
D025221545*	220x150	45	500	361	80
D025221588	220x150	88	500	410	80
D025301045*	300x100	45	716	423	55
D025301088	300x100	88	716	399	55
D025301545*	300x150	45	780	474	80
D025301588	300x150	88	763	472	80
D025302245*	300x225	45	955	588	125
D025302288	300x225	88	908	591	125
D025371088	370x100	88	836	449	55
D025371545*	370x150	45	907	553	80
D025371588	370x150	88	907	551	80
D025372245*	370x225	45	1034	658	125
D025372288	370x225	88	1034	683	125
D025373045*	370x300	45	1126	731	175
D025373088	370x300	88	1126	759	175

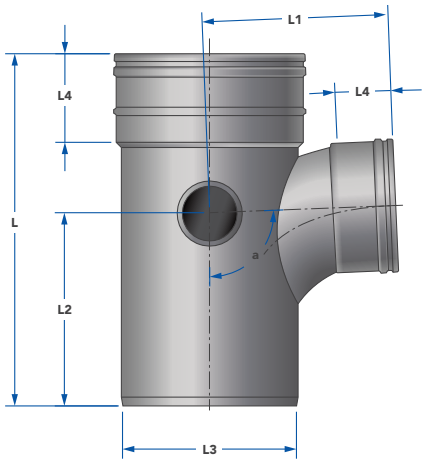
*Thread on branch only.



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

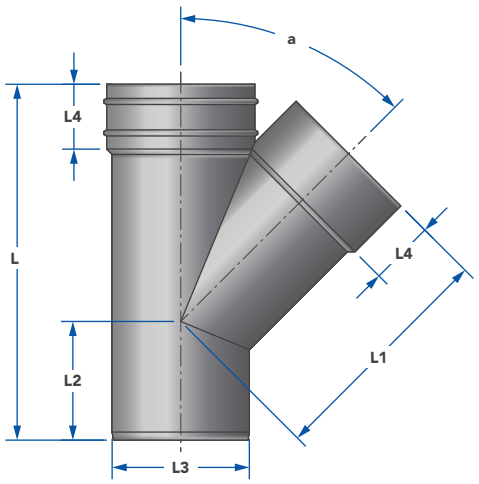
Plain junction M&F

Product code	Typical dimensions						
	Nominal size (mm)	Angle (deg) a	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3	Dim. (mm) L4
D02610088	100	88	250	146	146	110	53
D02610045	100	45	286	191	95	110	51
D02615045	150	45	413	276	141	160	77
D02615088	150	88	407	222	258	160	79



Plain junction M&F reducing

Product code	Typical dimensions						
	Nominal size (mm)	Angle (deg) a	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3	Dim. (mm) L4
D027151045	150x100	45	373	226	97	160	77
D027151088	150x100	88	320	169	175	160	79

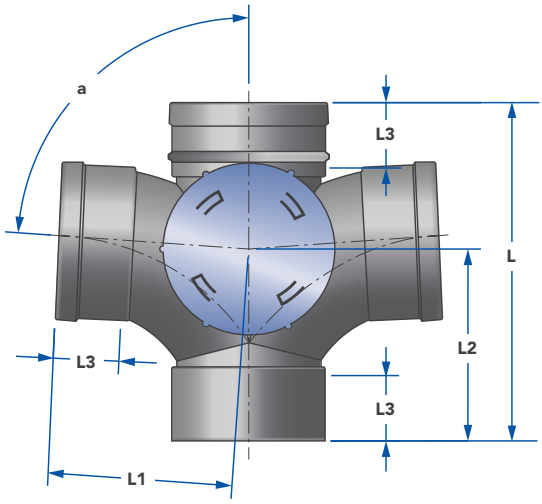


Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

Access double junction F&F

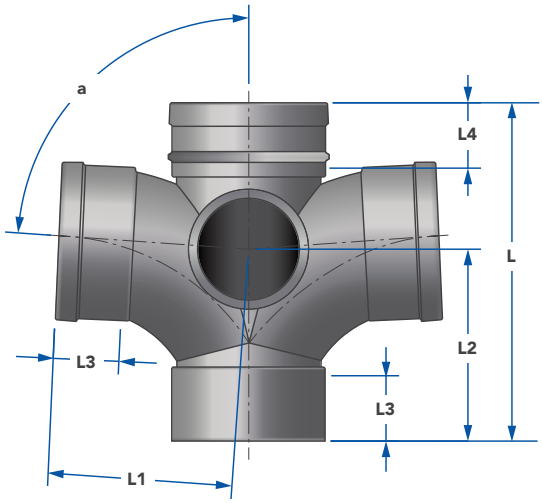
Product code	Typical dimensions					
	Nominal size (mm)	Angle (deg) a	Dim. (mm) L	Dim. (mm) L1	Dim. (mm) L2	Dim. (mm) L3
D03310088	100	88	259	146	147	53

Note: All dimensions, mass and volume are approximate only. If critical contact Iplex.



Plain double junction F&F

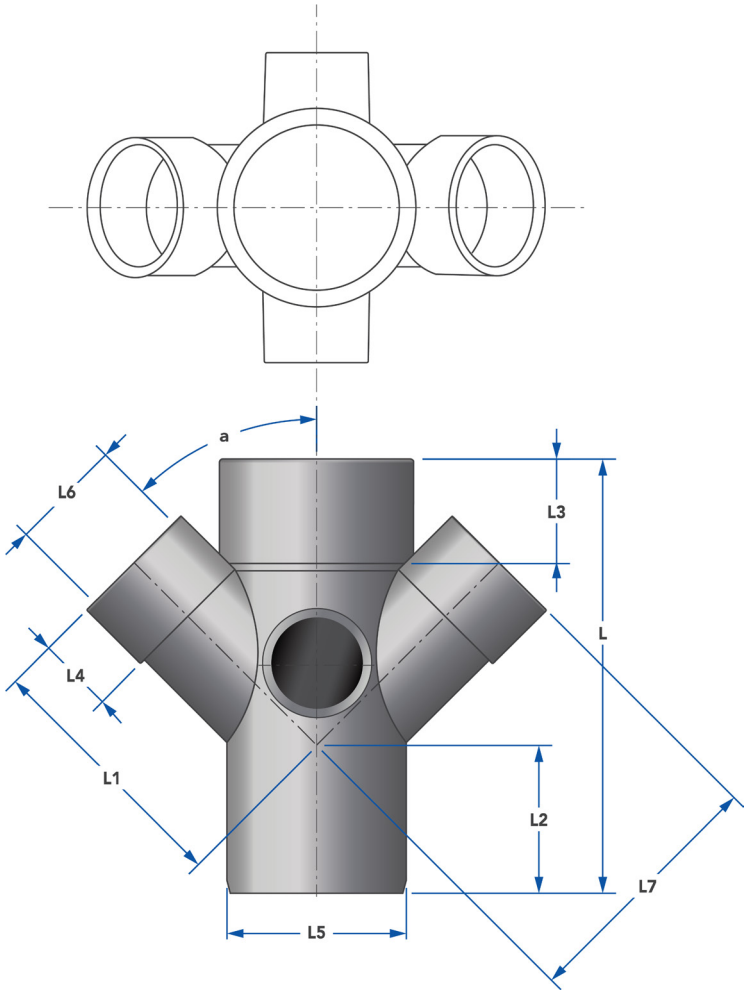
Product code	Typical dimensions						
	Nominal size (mm)	Angle (deg) a	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3	Dim. (mm) L4
D03610088	100	88	259	146	147	53	53



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

Double riser junction 45 M&F

Product code	Typical dimensions									
	Nominal size (mm)	Angle (deg) a	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3	Dim. (mm) L4	Dim (mm) L5	Dim. (mm) L6	Dim. (mm) L7
D04485544	80	45	200	119	68	47	32	82	56	119
	Branch details: 2 of 50 x 45°, 2 of 40 x 88°									
D04485444	80	45	200	119	68	47	32	82	56	107
	Branch details: 1 of 50 x 45°, 1 of 40 x 45°, 2 of 40 x 88°									

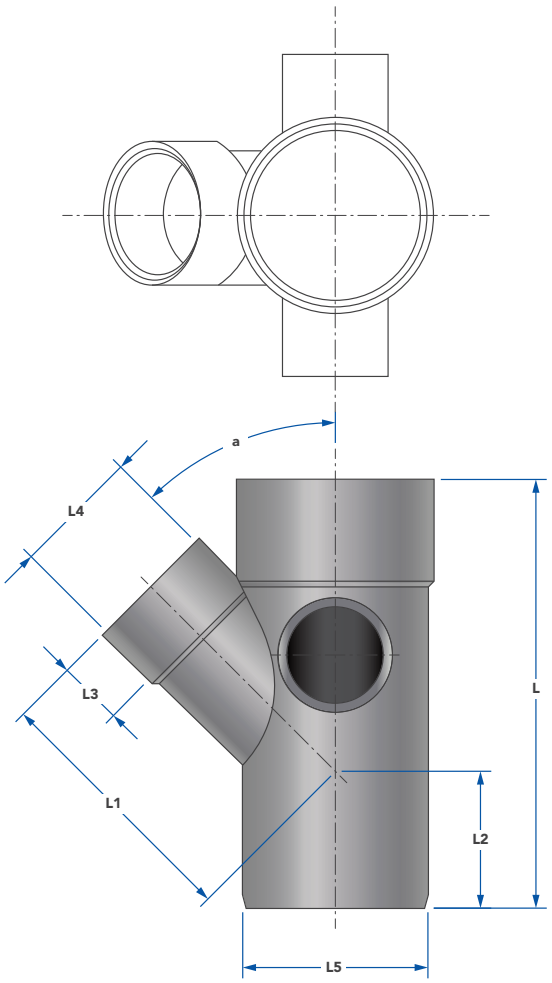


Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

Riser junction 45 M&F

Product code	Typical dimensions							
	Nominal size (mm)	Angle (deg) a	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3	Dim. (mm) L4	Dim. (mm) L5
D0468544	80	45	191	116	61	30	56	82
	Branch details: 1 of 50 x 45°, 2 of 40 x 88°							
D04684444	80	45	191	107	61	27	43	82
	Branch details: 1 of 40 x 45°, 3 of 40 x 88°							
D04685544	80	45	191	116	61	30	56	82
	Branch details: 1 of 50 x 45°, 1 of 50 x 88°, 2 of 40 x 88°							

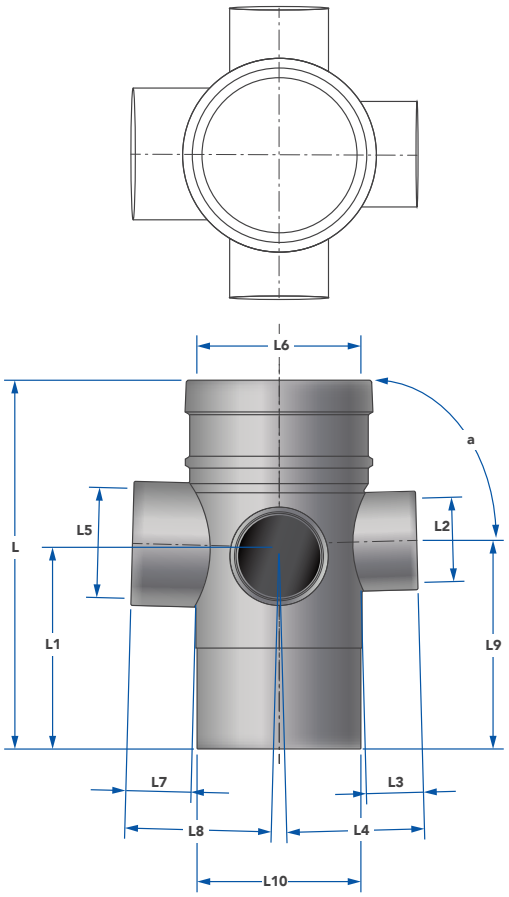
.



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

Four way riser 88 M&F

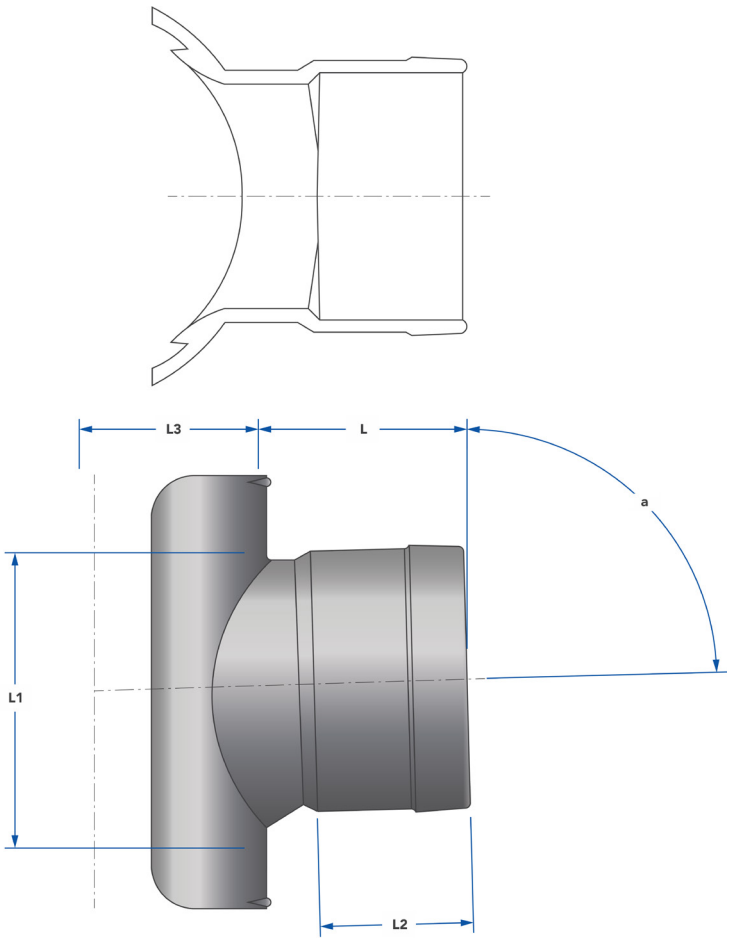
Product code	Typical dimensions												
	Nominal size (mm)	Angle (deg) a	Dim. (mm) L	Dim. (mm) L1	Dim. (mm) L2	Dim. (mm) L3	Dim. (mm) L4	Dim. (mm) L5	Dim. (mm) L6	Dim. (mm) L7	Dim. (mm) L8	Dim. (mm) L9	Dim. (mm) L10
D04885444	80	88	186	102	43	27	69	56	82	30	74	95	82
	Branch details: 1 of 50 x 88°, 3 of 40 x 88°												
D048105554	100	88	176	92	43	27	83	56	110	31	86	92	110
	Branch details: 1 of 40 x 88°, 3 of 50 x 88°												
D048105544	100	88	176	92	43	31	83	56	110	31	83	92	110
	Branch details: 2 of 40 x 88°, 2 of 50 x 88°												
D048185544	100	88	176	92	43	28	83	56	110	31	86	92	82
	Branch details: 2 of 40 x 88°, 2 of 50 x 88°												



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

Clamp on boss

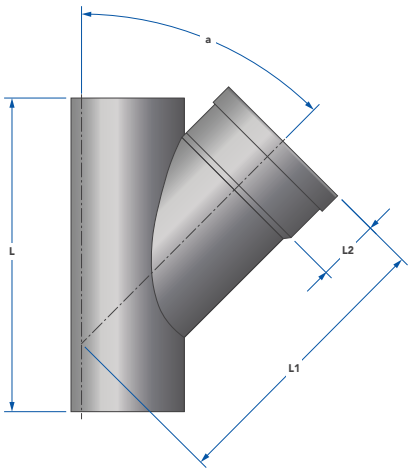
Product code	Typical dimensions					
	Nominal size (mm)	Angle (deg) a	Dim. (mm) L	Dim. (mm) L1	Dim. (mm) L2	Dim. (mm) L3
D0501032	100x32	88	21	50	-	110
D050104088	100x40	88	46	56	27	110
D050105088	100x50	88	56	70	38	110
D050106588	100x65	88	61	83	43	110



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

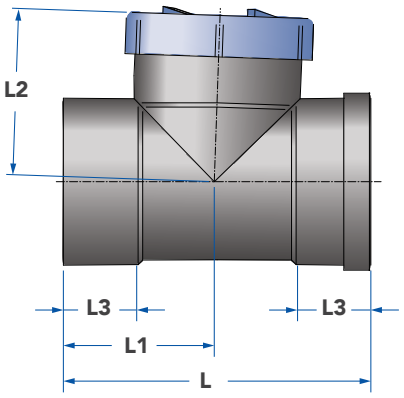
Fabricated clamp on boss

	Typical dimensions				
Product code	Nominal size (mm)	Angle (deg) a	Dim (mm) L	Dim. (mm) L1	Dim. (mm) L2
D050151045	150x100	45	250	226	55
D050221045	225x100	45	305	250	55
D050301045	300x100	45	305	250	55
D050301545	300x150	45	305	330	80



Inspection test opening F&F

	Typical dimensions				
Product code	Nominal size (mm)	Dim (mm) L	Dim. (mm) L1	Dim. (mm) L2	Dim. (mm) L3
D05465	65	165	86	84	41
D05480	80	216	106	93	51
D054100	100	216	106	117	52
D054150	150	359	187	165	77



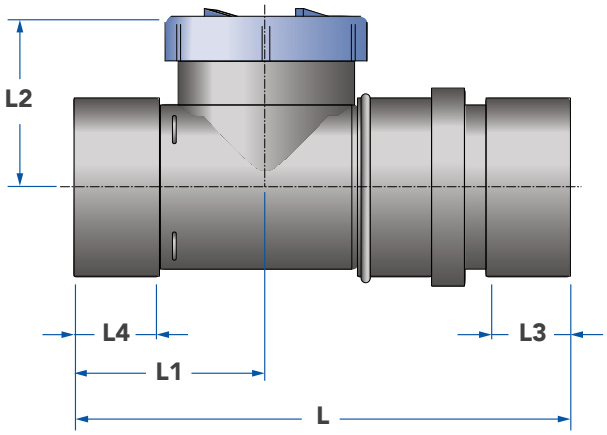
Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

Inspection opening and expansion adaptor

Product code	Typical dimensions						
	Nominal size (mm)	Max dim. (mm) L	Min dim. (mm) L	Dim. (mm) L1	Dim. (mm) L2	Dim. (mm) L3	Dim. (mm) L4
D05480EC	80*	325	290	106	93	51	51
D054100EC	100*	367	315	127	-	53	54

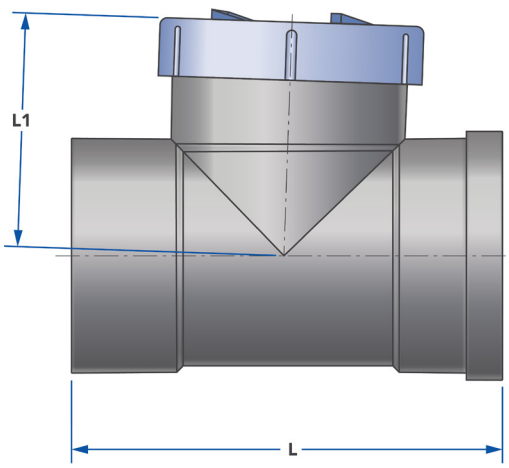
*80mm allows for 35mm expansion.

*100mm allows for 50mm expansion.



Fabricated inspection opening F&F

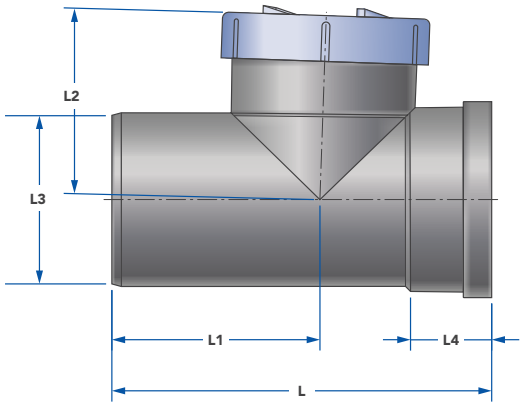
Product code	Typical dimensions		
	Nominal size (mm)	dim. (mm) L	dim.(mm) L1
D054225150	225x150	500	240
D054225225	225x225	500	303
D054300150	300x150	740	270
D054375150	375x150	680	310



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

Inspection opening M&F

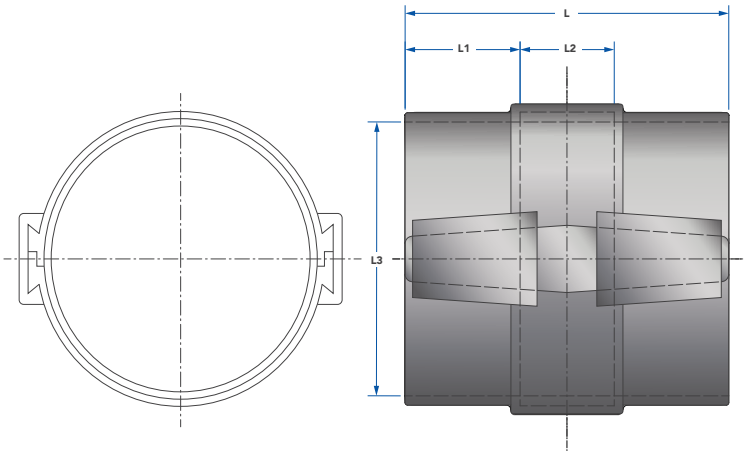
Product code	Typical dimensions					
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3	Dim. (mm) L4
D055100	100	242	132	117	110	52
D055150	150	359	187	165	160	77



Repair coupling F&F

Product code	Typical dimensions				
	Nominal size (mm)	Dim (mm) L	Dim. (mm) L1	Dim. (mm) L2	Dim. (mm) L3
D056100	100	130	46	38	110
D056150	150	176	60	55	160

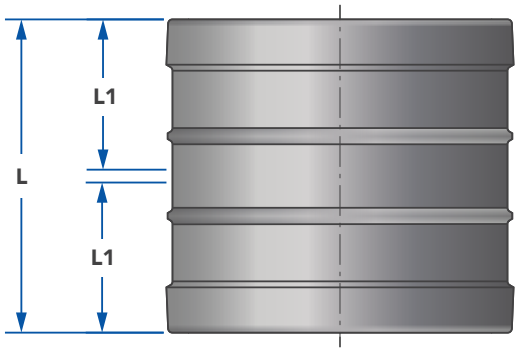
Note: All dimensions, mass and volume are approximate only. If critical contact Iplex.



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

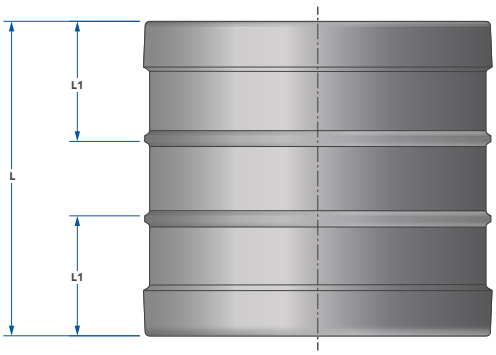
Plain coupling

Product code	Typical dimensions		
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1
D05732	32	54	26
D05740	40	57	29
D05750	50	63	31
D05765	65	84	40
D05780	80	90	44
D057100	100	110	53
D057150	150	159	77
D057225	225	226	110
D057300	300	358	176



Fabricated coupling

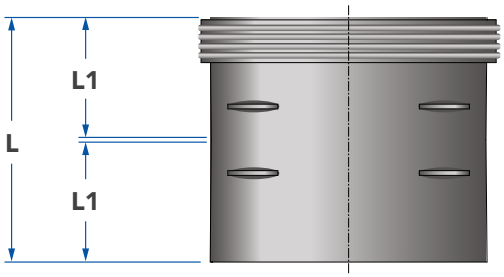
Product code	Typical dimensions		
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1
D057300	300	500	175
D057375	375	700	200



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

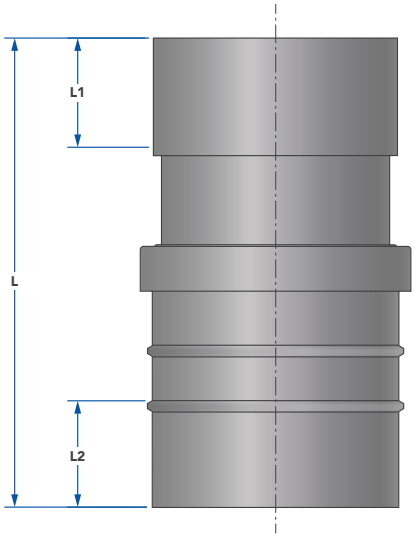
Access coupling

Product code	Typical dimensions		
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1
D05880	80	90	44
D058100	100	103	51
D058150	150	159	77



Expansion coupling assembly F&F

Product code	Typical dimensions			
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim. (mm) L2
D06150	50	146	32	32
D06165	65	190	40	40
D06180	80	230	51	51
D061100	100	236	53	51
D061150	150	311	77	77

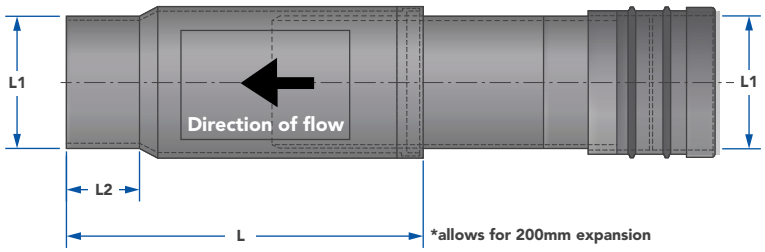


Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

Double expansion coupling assembly F&F

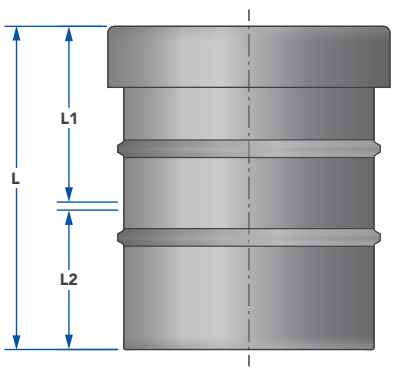
	Typical dimensions			
Product code	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim. (mm) L2
D061100D	100	294	110	60

Note: All dimensions, mass and volume are approximate only. If critical contact Iplex.



Expansion coupling F&F

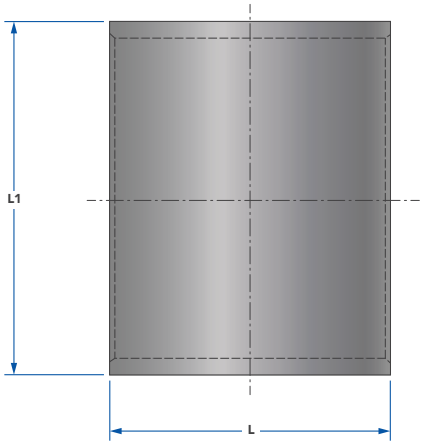
	Typical dimensions			
Product code	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim. (mm) L2
D06340	40	81	47	29
D06350	50	84	47	32
D06365	65	98	53	40
D06380	80	122	65	51
D063100	100	127	69	51
D063150	150	182	100	77



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

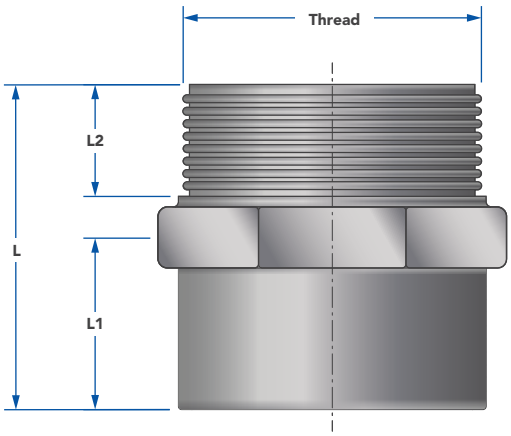
Slip rehab coupling

Product code	Typical dimensions		
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1
D064100	100	110	115



Male iron coupling

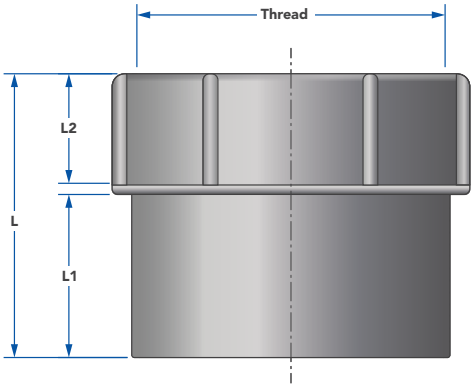
Product code	Typical dimensions				
	Nominal size (mm)	Thread BSP (inches)	Dim. (mm) L	Dim. (mm) L1	Dim. (mm) L2
D0663232	32	1-1/4″	48	24	19
D0664040	40	1-1/2″	51	27	18
D0665050	50	2″	52	31	20
D066100100	100	4″	111	55	56



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

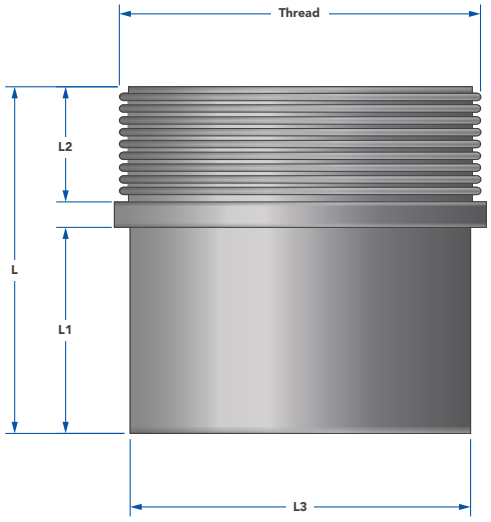
Female iron coupling

Product code	Typical dimensions				
	Nominal size (mm)	Thread BSP (inches)	Dim. (mm) L	Dim. (mm) L1	Dim. (mm) L2
D0673232	32	1-1/4″	49	25	21
D0674040	40	1-1/2″	53	29	22
D0675050	50	2″	56	32	21
D0676565	65	2-1/2″	105	69	32



Male iron adaptor

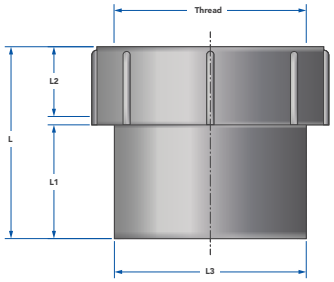
Product code	Typical dimensions					
	Nominal size (mm)	Thread BSP (inches)	Dim. (mm) L	Dim. (mm) L1	Dim. (mm) L2	Dim. (mm) L3
D0684040	40	1-1/2″	47	27	16	43
D0685050	50	2″	57	34	19	56



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

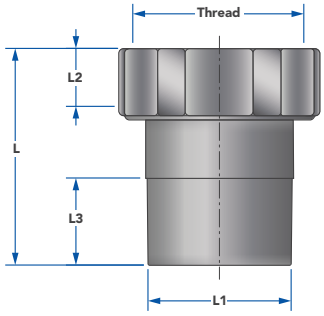
Female iron adaptor

Product code	Typical dimensions					
	Nominal size (mm)	Thread BSP (inches)	Dim. (mm) L	Dim. (mm) L1	Dim. (mm) L2	Dim. (mm) L3
D0694040	40	1-1/2″	44	31	20	43
D0695050	50	2″	56	33	20	56



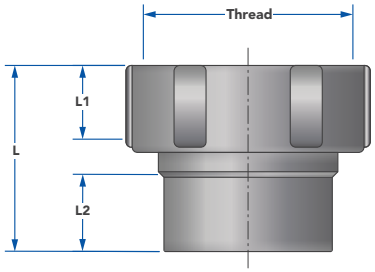
Cap and lining male spigot

Product code	Typical dimensions					
	Nominal size (mm)	Thread BSP (inches)	Dim. (mm) L	Dim. (mm) L1	Dim. (mm) L2	Dim. (mm) L3
D0704040	40	1-1/2″	72	37.5	18	28
D0705050	50	2″	76	50.5	20	31
D0704040B(Brass)	40	1-1/2″	71	37.8	17	28



Cap and lining female socket

Product code	Typical dimensions				
	Nominal size (mm)	Thread BSP (inches)	Dim. (mm) L	Dim. (mm) L1	Dim. (mm) L2
D0715040	40	2″	54	20	21

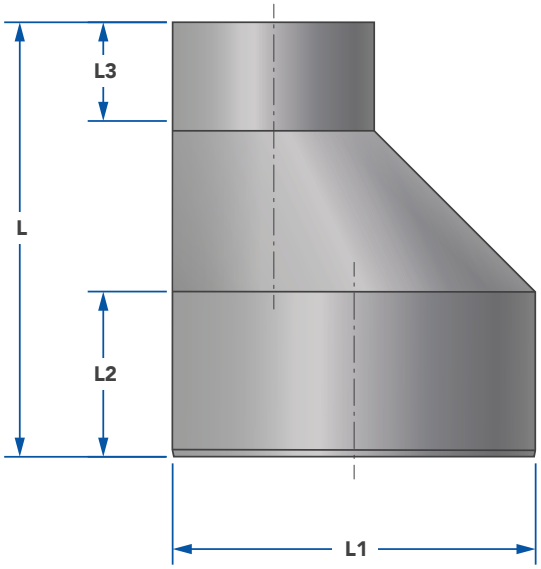


Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

Level invert taper

		Typical dimensions			
Product code	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim. (mm) L2	Dim. (mm) L3
D0724032	40x32	73	43	25	25
D0725032	50x32	98	56	32	25
D0725040	50x40	68	56	29	28
D0726540	65x40	97	69	39	29
D0726550	65x50	79	69	38	31
D0728040	80x40	121	82	50	27
D0728050	80x50	138	82	50	38
D0728065	80x65	125	82	50	44
D07210050	100x50	132	110	49	31
D07210065	100x65	127	110	49	39
D07210080	100x80	166	110	49	51
D07225100	225x100	209	160	97	51
D072225100	225x100	600	250	125	51
D072225150	225x150	401	250	125	80
D072300150	300x150	768	315	180	80
D072300225	300x225	552	315	175	125
D072375300*	375x300	740	400	200	175

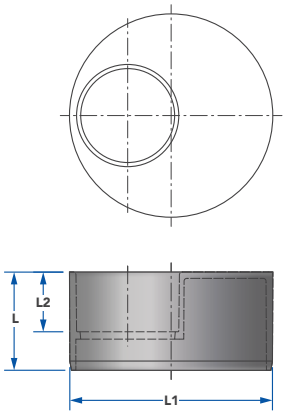
Note: *Fabricated item.



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

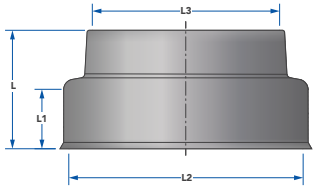
Socket reducer

Product code	Typical dimensions			
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim. (mm) L2
D0734032	40x32	29	43	27
D0735032	50x32	32	56	25
D0735040	50x40	30	56	28
D0736540	65x40	40	69	31
D0736550	65x50	40	69	32
D0738050	80x50	45	82	30
D0738065	80x65	45	82	39
D07310040	100x40	53	110	29
D07310050	100x50	53	110	32
D07310065	100x65	51	110	39
D07310080	100x80	53	110	47
D073150100	150x100	79	160	53



Weathering apron

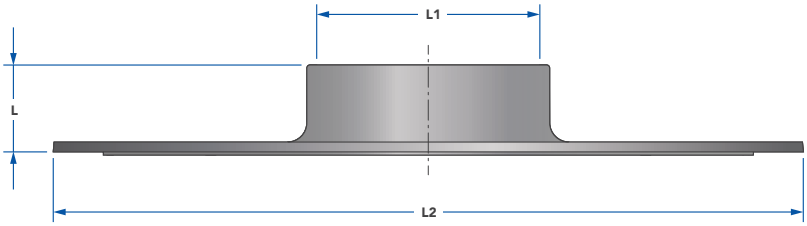
Product code	Typical dimensions				
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim. (mm) L2	Dim. (mm) L3
D07440	40	70	38	56	43
D07450	50	70	38	69	56
D07480	80	70	38	102	83
D074100	100	68	38	133	110



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

Safe waste tray

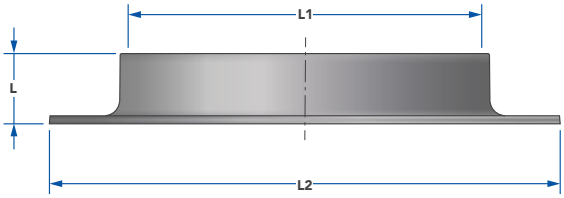
Product code	Typical dimensions			
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim. (mm) L2
D07740	40	22	43	190
D07750	50	22	56	190
D07780	80	22	82	190
D07780G*	80	22	90	190
D077100	100	22	110	190



Floor flange

Product code	Typical dimensions			
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim. (mm) L2
D07840	40	22	43	75
D07850	50	22	56	110
D07865	65	22	69	115
D07880	80	22	82	134
D078100	100	22	110	159

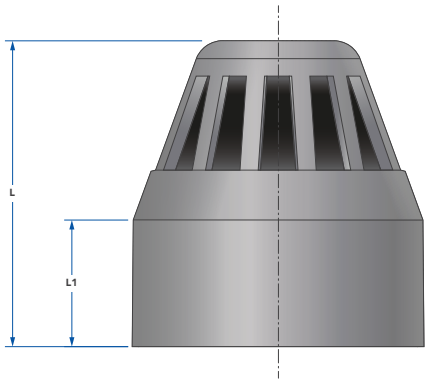
Note: All dimensions, mass and volume are approximate only. If critical contact Iplex.



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

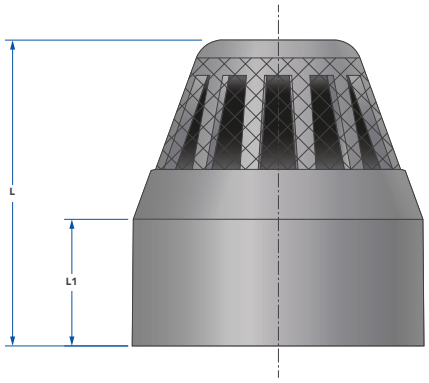
Vent cowl

Product code	Typical dimensions		
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1
D07940	40	50	22
D07950	50	65	25
D07965	65	88	45
D07980	80	72	25
D079100	100	85	25
D079150	150	100	25



Vent cowl (insect proof)

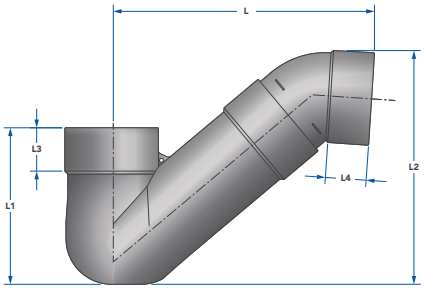
Product code	Typical dimensions		
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1
D08050	50	65	25
D08080	80	72	25
D080100	100	85	25



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

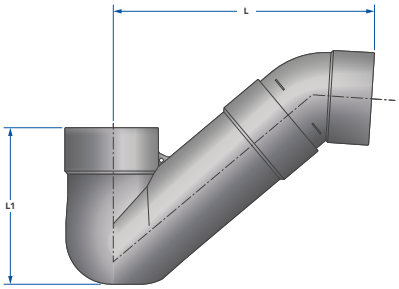
Disconnector trap fixed

Product code	Typical dimensions					
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3	Dim. (mm) L4
D081100	110	332	198	295	53	51



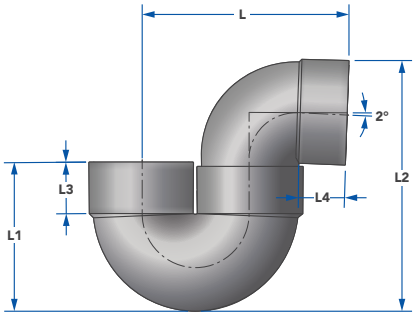
Fabricated disconnector trap fixed

Product code	Typical dimensions		
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1
D081150	150	460	41



Adjustable disconnector trap F&F

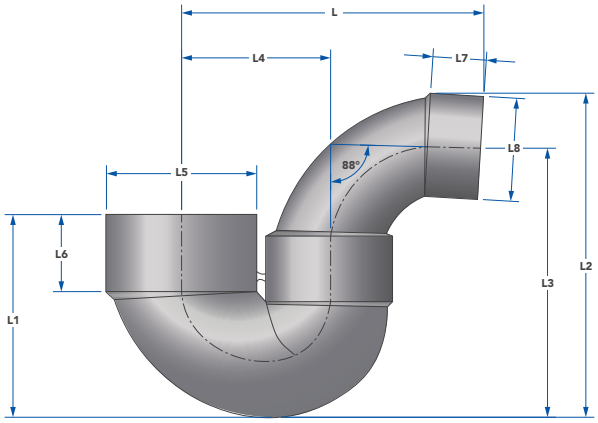
Product code	Typical dimensions					
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3	Dim. (mm) L4
D083100	100	232	166	281	56	51



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

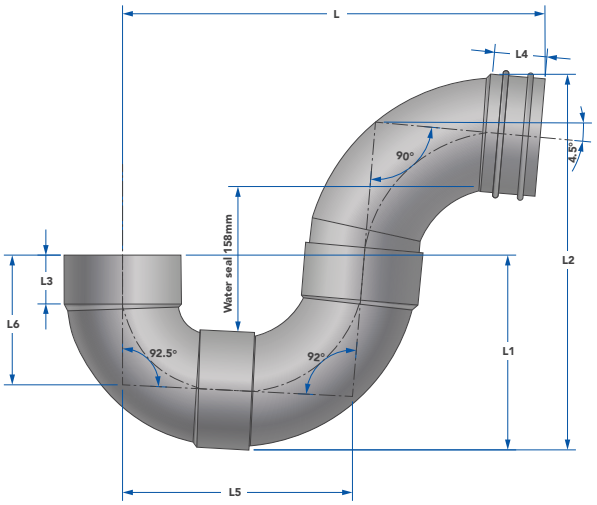
Adjustable F/W gully P trap

Product code	Typical dimensions									
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3	Dim. (mm) L4	Dim. (mm) L5	Dim. (mm) L6	Dim. (mm) L7	Dim. (mm) L8
D0868050	80x50	178	121	193	161	88	82	45	31	56
D0868065	80x65	185	121	206	167	88	82	45	39	69
D0868080	80x80	267	156	237	190	88	82	47	51	82



Boundary trap

Product code	Typical dimensions							
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3	Dim. (mm) L4	Dim. (mm) L5	Dim. (mm) L6
D092100	100	421	195	379	51	52	230	131

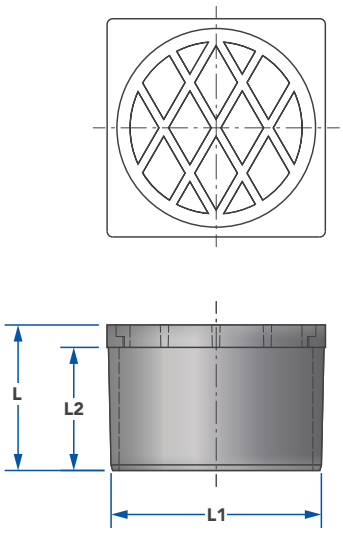


Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

Diamond grate

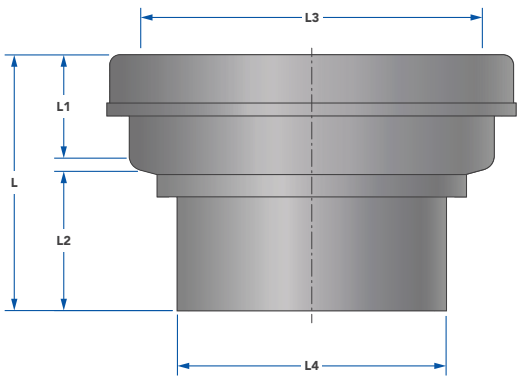
Product code	Typical dimensions			
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim. (mm) L2
D09580	80	52	76	44
D09580CA*	80	52	76	44

*Chrome Plate A.B.S.



Male pan collar

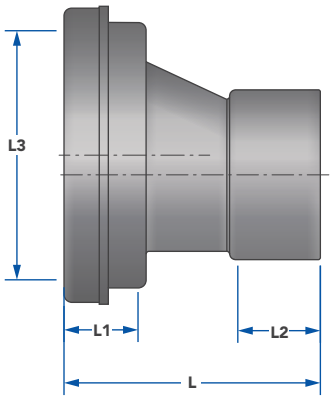
Product code	Typical dimensions					
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3	Dim. (mm) L4
127100	100	97	41	52	127	103
128100	100	108	44	50	127	103
D099100R	100	Rubber for pan collar				



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

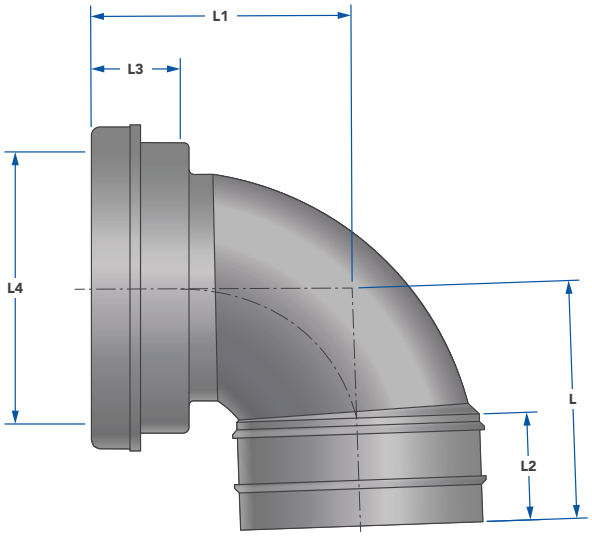
Female pan collar

Product code	Typical dimensions				
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim. (mm) L2	Dim. (mm) L3
D100100	100	100	41	52	127
D10010080	100x80	136	41	45	127



Pan connector bend

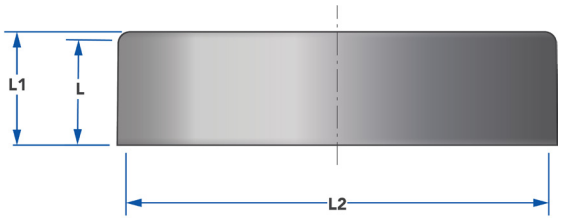
Product code	Typical dimensions					
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3	Dim. (mm) L4
D102100125	100x125	128	116	44	51	127



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

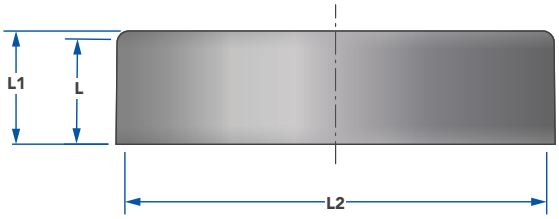
Push on cap

Product code	Typical dimensions			
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim. (mm) L2
D10540	40	25	28	43
D10550	50	25	27	56
D10565	65	25	28	69
D10580	80	25	28	82
D105100	100	27	30	110
D105150	150	33	38	160
D105225	225	47	54	250
D105300	300	47	54	315



Fabricated push on cap

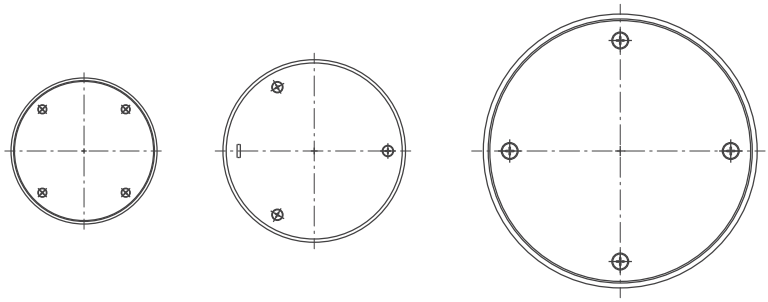
Product code	Typical dimensions			
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim. (mm) L2
D105375	375	280	320	400

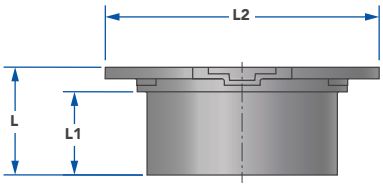


Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

Bolted trap screw

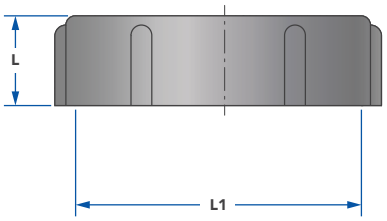
Product code	Typical dimensions				
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	No. of screws
D10680	80	58	45	126	4
D106100	100	66	51	168	3
D106100B(Brass)	100	66	51	168	3
D106100C(Chrome)	100	66	51	168	3
D106150	150	98	77	221	4
D106150B (Brass)	150	98	77	221	4





Threaded access cap

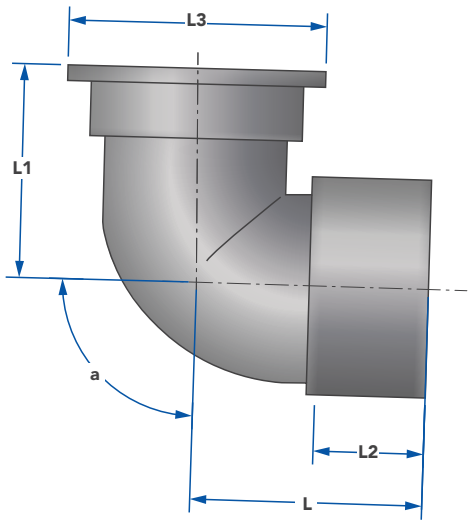
Product code	Typical dimensions		
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1
D10950	50	20	66
D10980	80	24	96
D109100	100	29	125
D109150	150	30	175



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

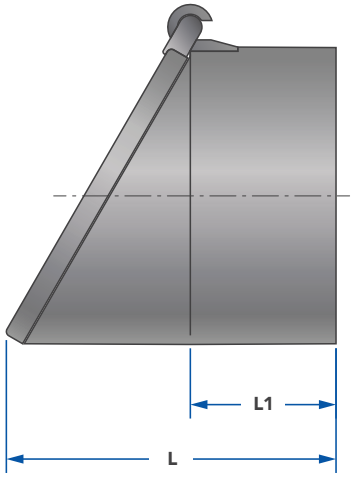
Bend with grate 88 degree

Product code	Typical dimensions					
	Nominal size (mm)	Angle (deg) a	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3
D11150	50	88	67	57	33	76



Flap valve

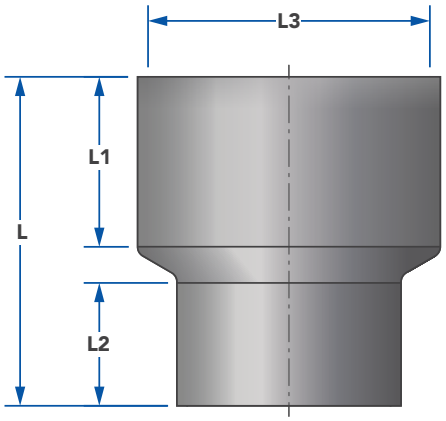
Product code	Typical dimensions		
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1
D11350	50	68	30
D113100	100	190	55
D113150	150	154	76
D113225	225	230	110
D113300	300	326	175



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

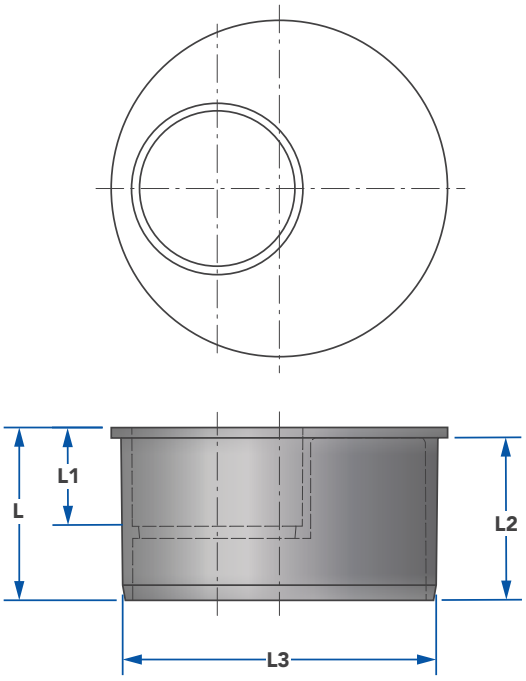
Shower riser

Product code	Typical dimensions				
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3
D1188050	80x80	90	46	32	76



Pipe reducer

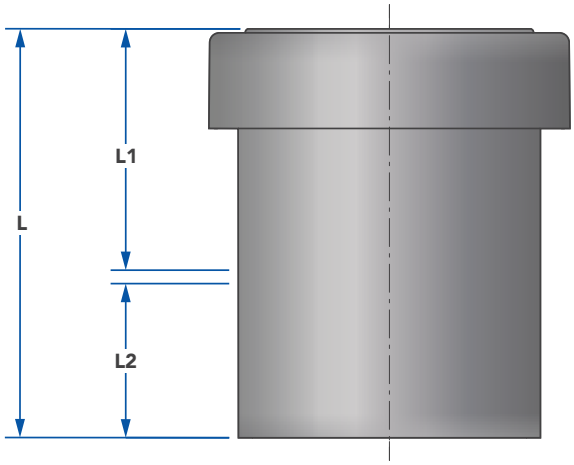
Product code	Typical dimensions				
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3
D12210050	100x50	57	32	53	103



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

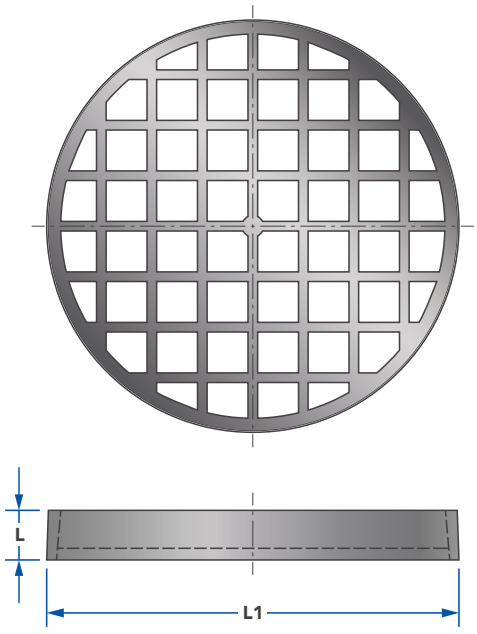
Copper to PVC adaptor (rubber ring joint)

Product code	Typical dimensions			
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim. (mm) L2
D1244040	40x40	81	47	29
D1245050	50x50	84	47	32
D1246565	65x65	98	53	40



Short DT grate

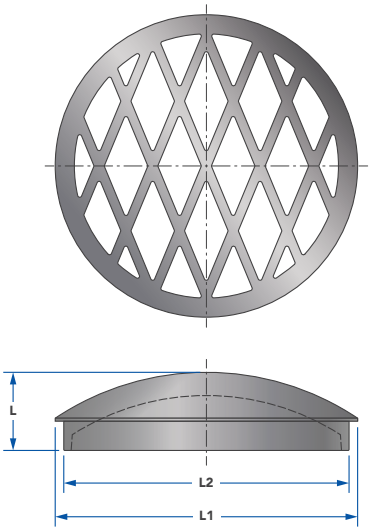
Product code	Typical dimensions		
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1
D125125S	125	17	141



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

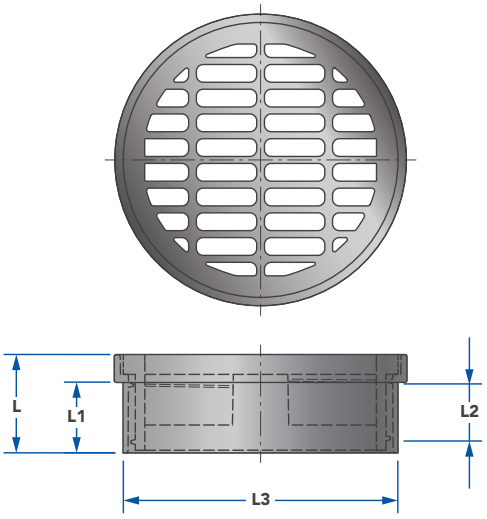
Dome grate

Product code	Typical dimensions			
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim. (mm) L2
D126125	125	39	150	142



Pop-up grate

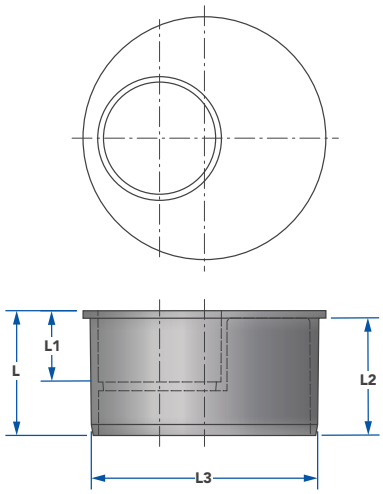
Product code	Typical dimensions					
	Nominal size (mm)	Min. dim. (mm) L	Max. dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3
D128100S	100	51	79	37	28	142



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

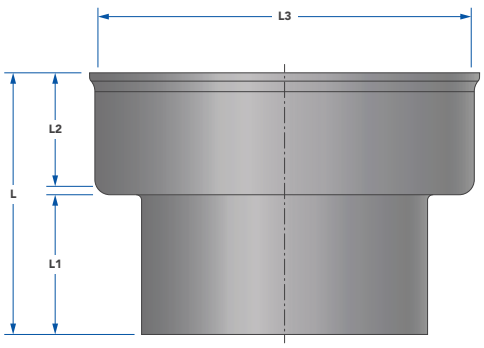
Pipe reducer

Product code	Typical dimensions				
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3
D131100	100	82	53	19	143
D131100S (Spigot Long)	100	150	108	36	143
D131100L (Long)	100	93	51	36	143



Earthenware spigot adaptor

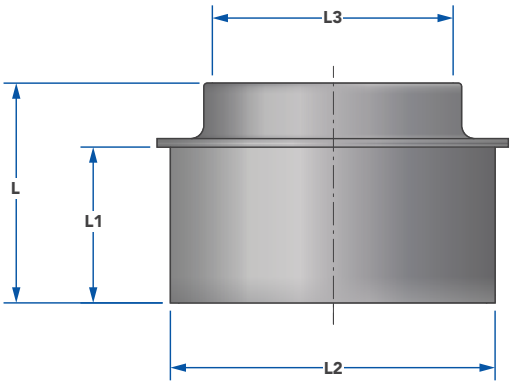
Product code	Typical dimensions				
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3
D132100	100	111	51	57	160
D132150	150	156	77	68	218
D132225	225	340	125	65	305



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

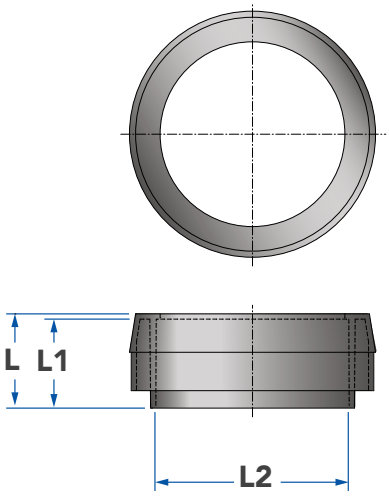
Wall sleeve

Product code	Typical dimensions				
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3
D13340	40	52	37	63	43
D13350	50	52	37	76	56
D13365	65	52	37	88	69
D133100	100	52	37	133	110



DWV adaptor earthenware socket

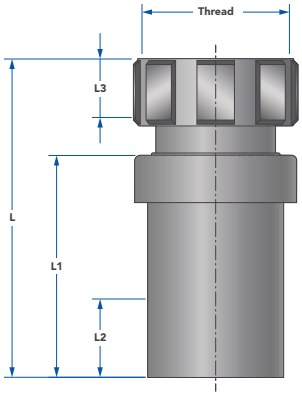
Product code	Typical dimensions			
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim. (mm) L2
D135100	100	54	51	110
D135150	150	82	77	160
D135225	225	160	125	277



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

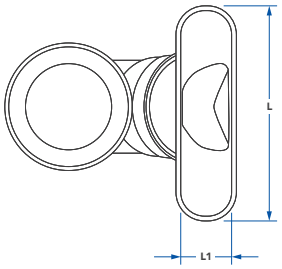
Adjustable bath connector

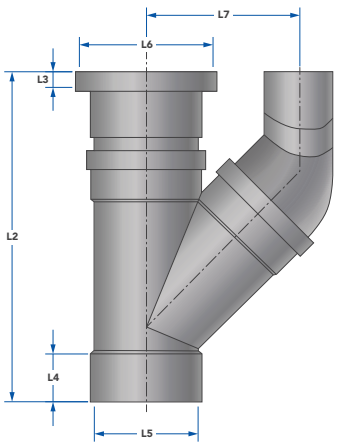
Product code	Typical dimensions						
	Nominal size (mm)	Thread BSP (Inches)	Min. dim. (mm) L	Max. dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3
D13740	40	1-1/2″	105	130	81	29	20



Squash top assembly (fabricated)

Product code	Typical dimensions								
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3	Dim. (mm) L4	Dim. (mm) L5	Dim. (mm) L6	Dim. (mm) L7
D148100A	100	248	63	352	17	51	110	143	161

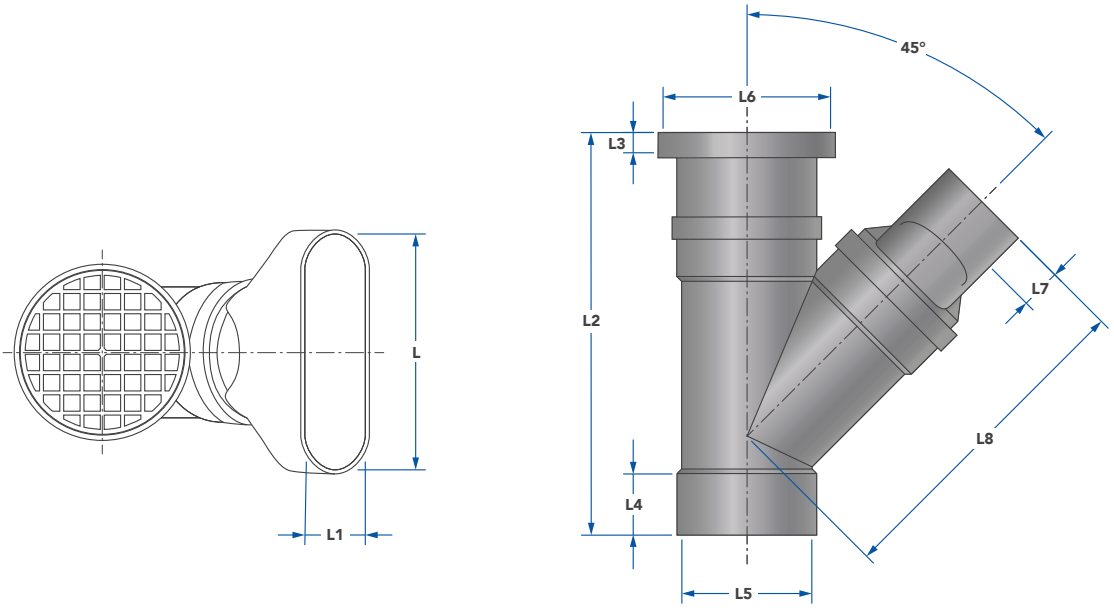




Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

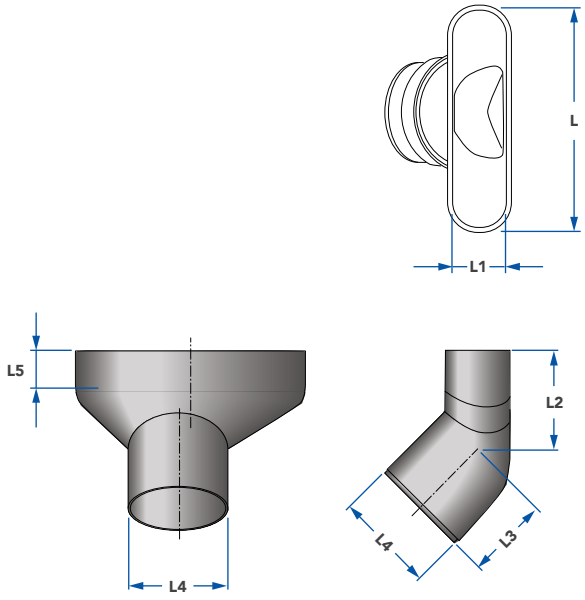
Squash top kit (fabricated)

Product code	Typical dimensions								
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3	Dim. (mm) L4	Dim. (mm) L5	Dim. (mm) L6	Dim. (mm) L7
D148100K	100	200	76	338	17	51	110	143	38



Squash slope top (fabricated)

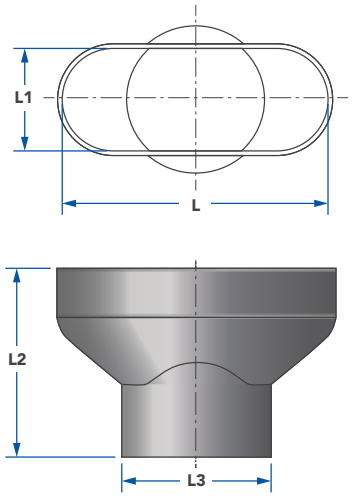
Product code	Typical dimensions						
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3	Dim. (mm) L4	Dim. (mm) L5
D14910045	100	248	63	110	91	110	40



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

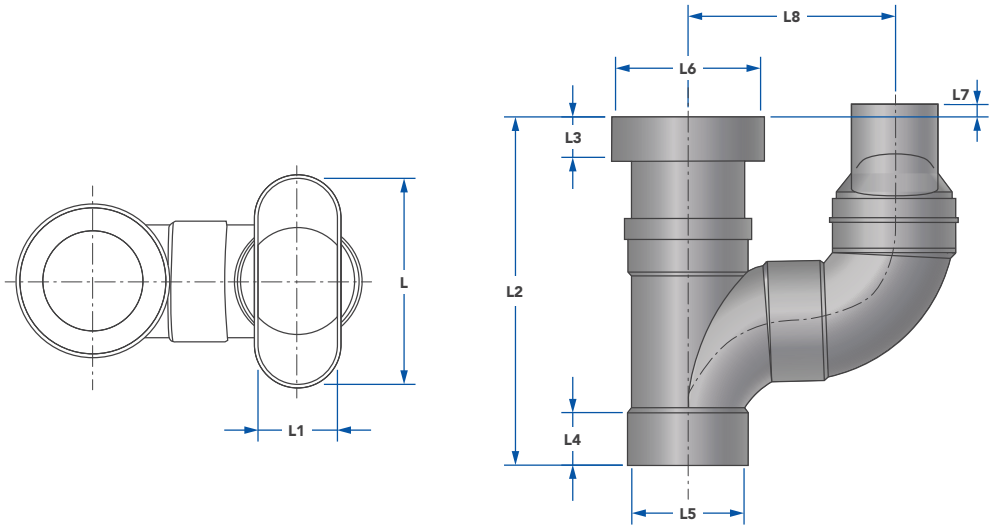
Inlet level (fabricated)

Product code	Typical dimensions				
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3
D150100	100	200	76	143	110



Single inlet level kit (fabricated)

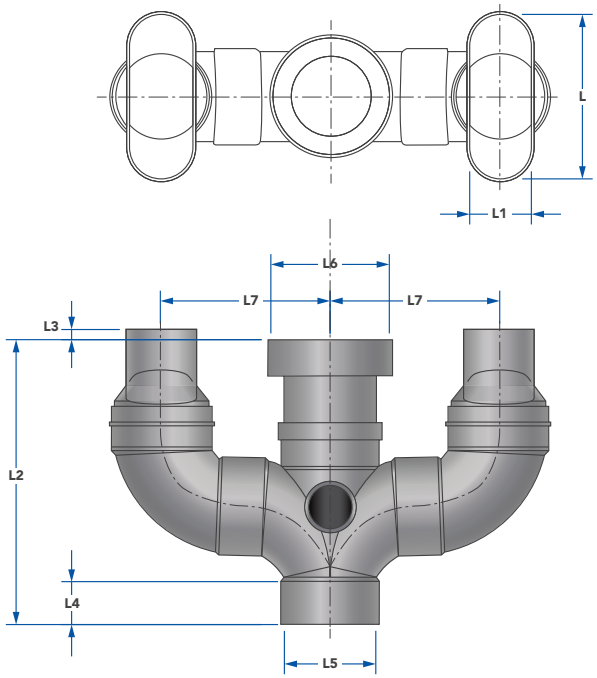
Product code	Typical dimensions									
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3	Dim. (mm) L4	Dim. (mm) L5	Dim. (mm) L6	Dim. (mm) L7	Dim. (mm) L8
D153100K	100	200	76	339	37	51	110	143	12	198



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

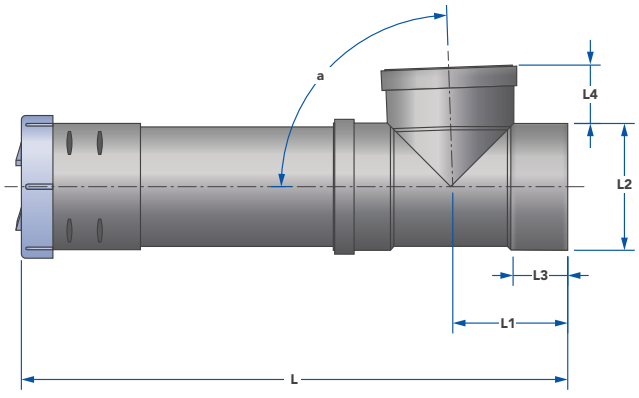
Double inlet level kit (fabricated)

Product code	Typical dimensions								
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3	Dim. (mm) L4	Dim. (mm) L5	Dim. (mm) L6	Dim. (mm) L7
D154100K	100	200	76	356	37	53	110	143	210



IP boundary (fabricated)

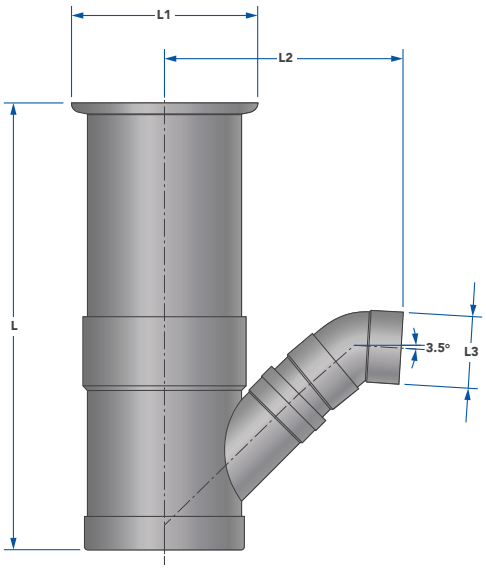
Product code	Typical dimensions						
	Nominal size (mm)	Angle (dea) a	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3	Dim. (mm) L4
D700100	100	88	804	106	110	52	54
D700150	150	88	804	106	160	-	-



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

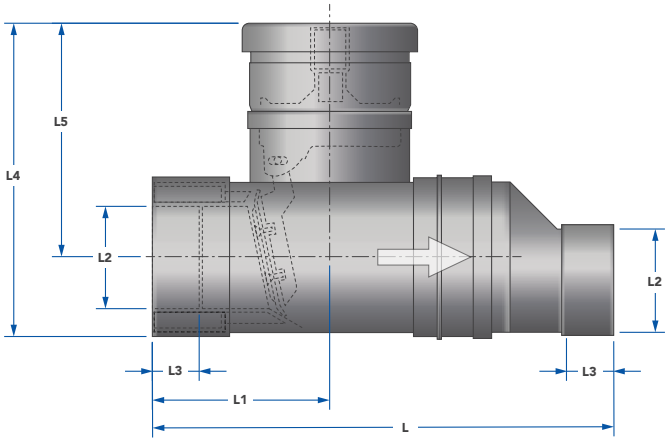
Silt trap (fabricated)

Product code	Typical dimensions				
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3
D715225100	225x100	730	390	304	110
Bucket only					
D712225	10mm holes				
D712225C	3mm holes				
D712225E	5mm holes				



Reflux valve (fabricated)

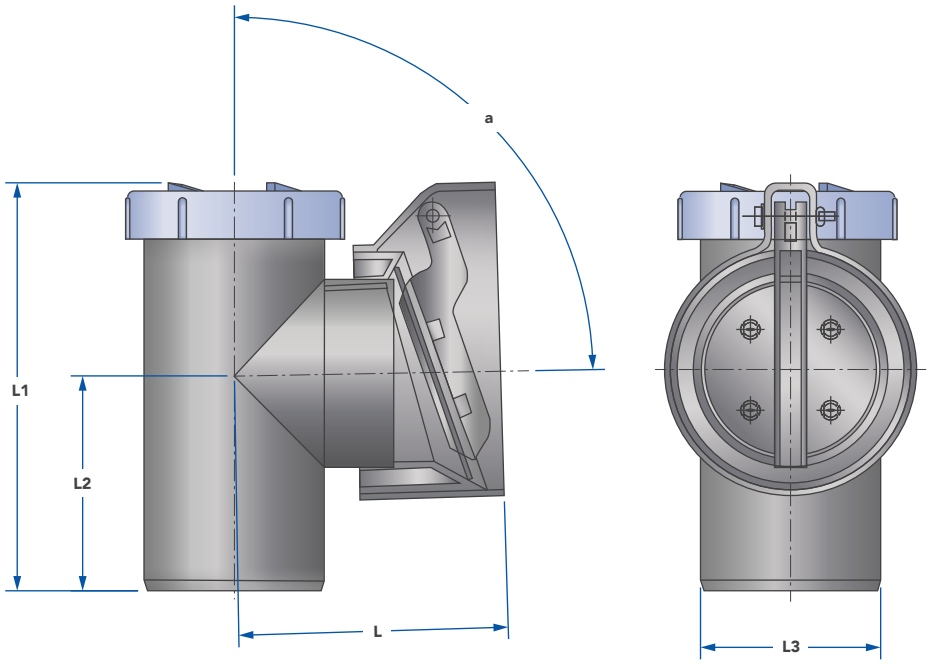
Product code	Typical dimensions						
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3	Dim. (mm) L4	Dim. (mm) L5
D730100	100	490	190	110	50	340	250



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

BCC overflow relief (fabricated)

	Typical dimensions					
Product code	Nominal size (mm)	Angle (dea) a	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3
D735100	100	88	167	254	132	110

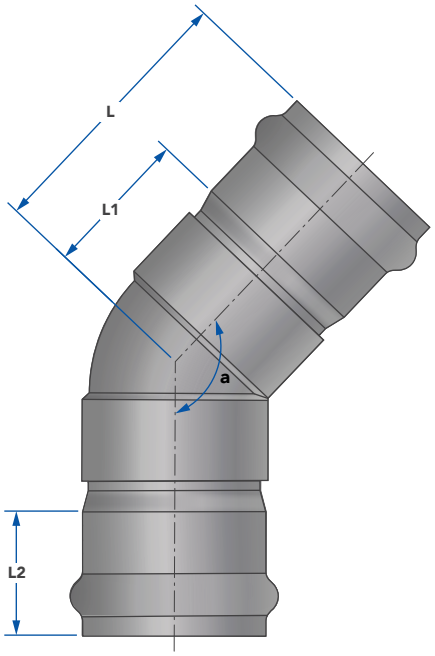


Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

9.3 DWV system – fittings rubber ring fabricated

Bend F&F - 2RRJ

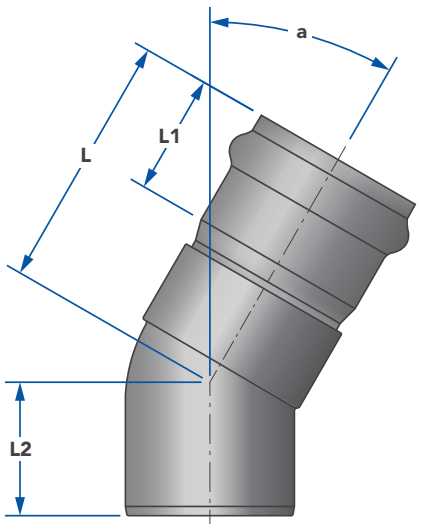
Product code	Typical dimensions				
	Nominal size (mm)	Angle (dea) a	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2
DR0210045	100	45	175	77	78
DR0210088	100	88	230	120	78
DR0215045	150	45	235	125	78
DR0215088	150	88	385	275	94
DR0222545	225	45	280	140	122
DR0222588	225	88	400	260	122
DR0230045	300	45	400	260	147
DR0230088	300	88	540	400	147
DR0237545	375	45	440	280	250
DR0237588	375	88	630	470	250



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

Bend M&F - 1RRJ

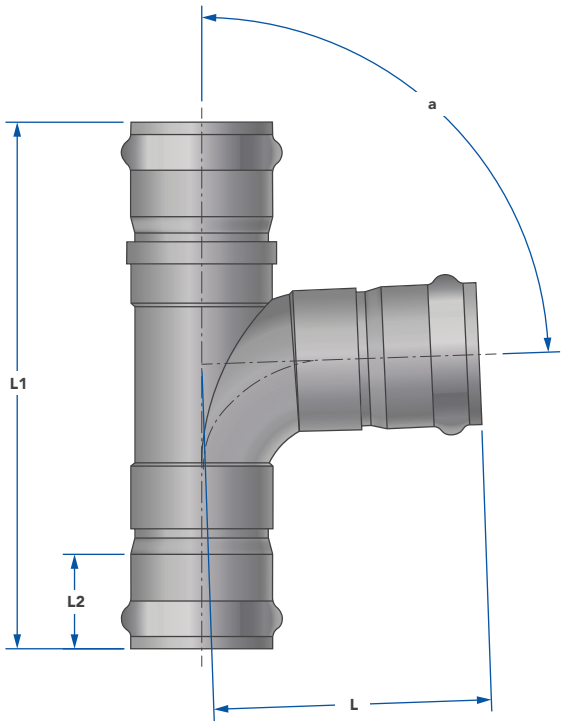
Product code	Typical dimensions				
	Nominal size (mm)	Angle (dea) a	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2
DR0310015	100	15	161	83	41
DR0310030	100	30	165	87	43
DR0310045	100	45	175	97	78
DR0310060	100	60	225	98	79
DR0310088	100	88	259	99	80
DR0315015	150	15	235	125	25
DR0315030	150	30	200	90	115
DR0315042	150	45	235	125	70
DR0315088	150	88	385	275	185
DR0322515	225	15	260	120	135
DR0322545	225	45	280	140	195
DR0322588	225	88	400	260	315
DR0330015	300	15	300	145	190
DR0330030	300	30	310	155	200
DR0330045	300	45	400	260	300
DR0330088	300	88	540	400	440
DR0337545	375	45	440	280	330
DR0337588	375	88	630	470	510



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

Junction F&F - 3RRJ

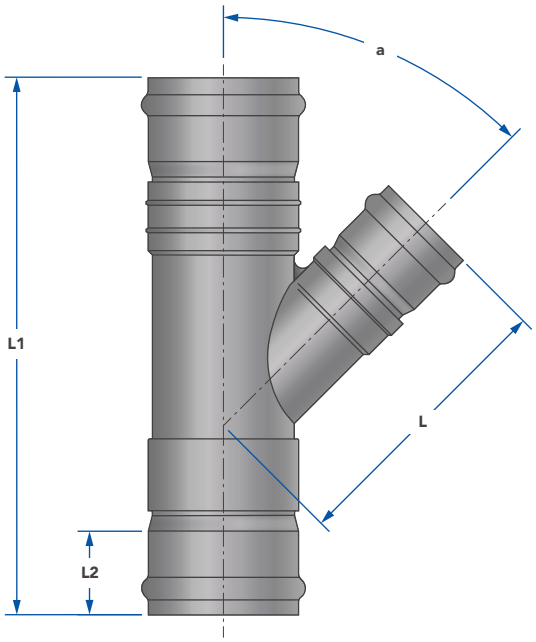
Product code	Typical dimensions				
	Nominal size (mm)	Angle (dea) a	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2
DR2410045	100	45	290	465	78
DR2410088	100	88	230	440	78
DR2415045	150	45	410	545	94
DR2415088	150	88	360	540	94
DR2422545	225	45	520	840	122
DR2422588	225	88	610	840	122
DR2430045	300	45	660	1000	147
DR2430088	300	88	710	1000	147
DR2437545	375	45	790	1220	250
DR2437588	375	88	840	1200	250



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

Reducing junction F&F - 3RRJ

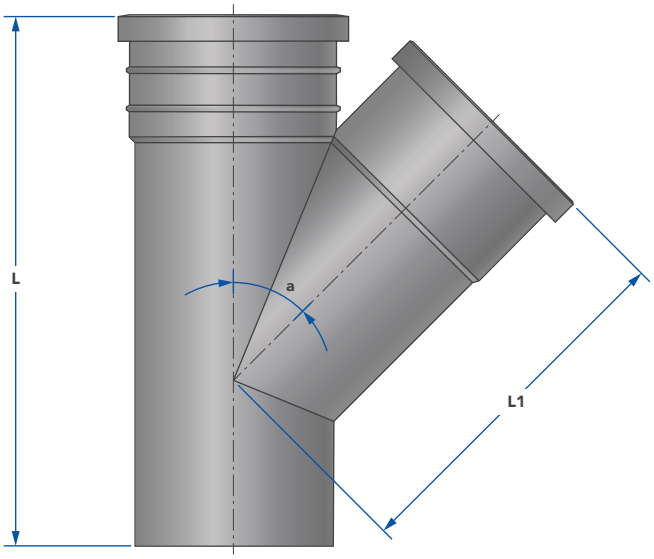
Product code	Typical dimensions				
	Nominal size (mm)	Angle (dea) a	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2
DR25151045	150x100	45	335	500	94
DR25151088	150x100	88	280	455	94
DR25221045	225x100	45	400	630	122
DR25221545	255x150	45	460	710	122
DR25221588	225x150	88	490	710	122
DR25301045	300x100	45	465	710	147
DR25301545	300x150	45	510	780	147
DR25301588	300x150	88	510	780	147
DR25371045	375x100	45	530	1000	250
DR25371545	375x150	45	590	1000	250
DR25371588	375x150	88	590	1000	250



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

Junction M&F - 2RRJ

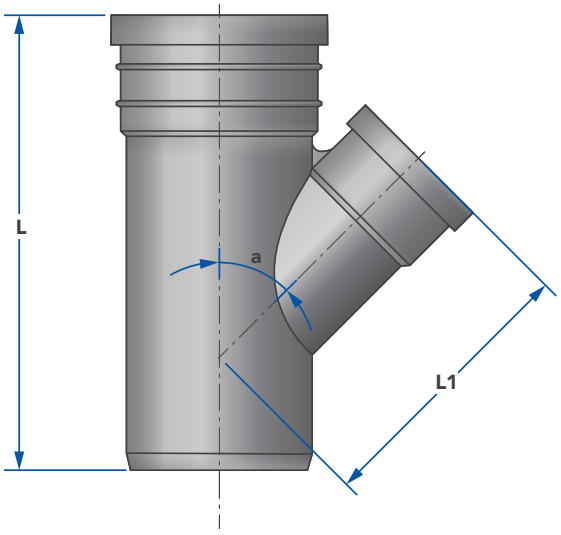
Product code	Typical dimensions			
	Nominal size (mm)	Angle (dea) a	Dim. (mm) L	Dim. (mm) L1
DR2615045	150	45	545	410
DR2615088	150	88	540	360
DR2622545	225	45	840	520
DR2630045	300	45	1000	660



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

Reducing junction M&F - 2RRJ

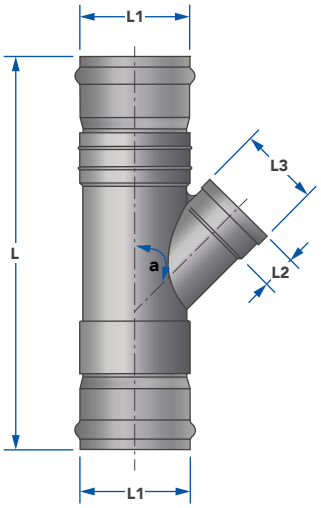
Product code	Typical dimensions			
	Nominal size (mm)	Angle (dea) a	Dim. (mm) L	Dim. (mm) L1
DR27151045	150x100	45	335	500
DR27151088	150x100	88	280	455
DR27221045	225x100	45	400	630
DR27221088	225x100	88	420	630
DR27221545	225x150	45	460	710
DR27221588	225x150	88	490	710
DR27301045	300x100	45	465	710
DR27301088	300x100	88	460	710
DR27301545	300x150	45	510	780
DR27301588	300x150	88	510	780
DR27302245	300x225	45	610	980
DR27302288	300x225	88	700	980
DR27371045	375x100	45	530	800
DR27371088	375x100	88	510	800
DR27371545	375x150	45	590	980
DR27371588	375x150	88	590	980
DR27372245	375x225	45	660	1000
DR27372288	375x225	88	710	1000
DR27373045	375x300	45	720	1100
DR27373088	375x300	88	750	1100



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

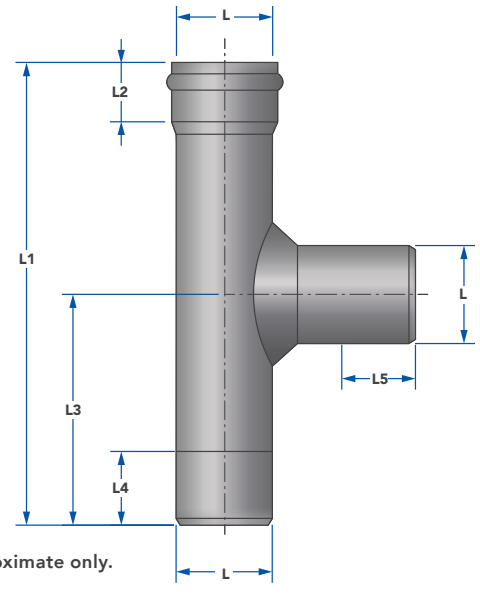
Red. Slope junction F&F - 2RRJ

Product code	Typical dimensions					
	Nominal size (mm)	Angle (dea) a	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3
DR2915104B	150x100	45	610	160	51	110
DR2930104B	300x100	45	1000	315	75	110
DR2937104B	375x100	45	1000	400	75	110



Water board drop junction M&F - 1RRJ

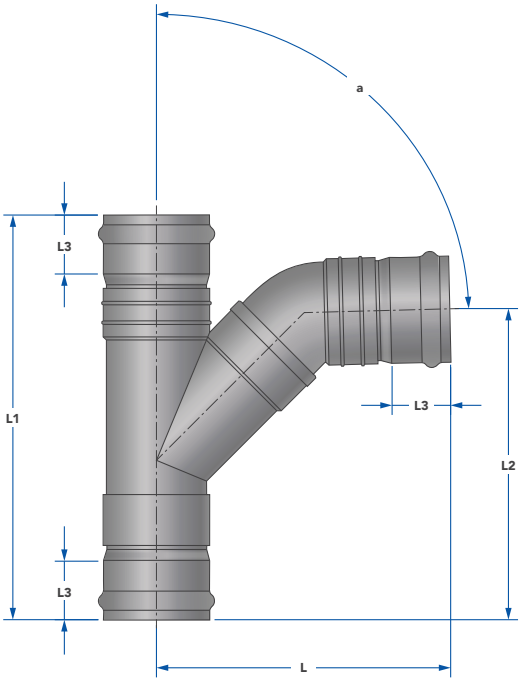
Product code	Typical dimensions						
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3	Dim. (mm) L4	Dim. (mm) L5
DR37150WB	150	160	750	94	375	120	310
DR37225WB	225	250	920	120	470	160	450
DR37300WB	300	315	1020	147	510	170	530



Note:All dimensions, mass and volume are approximate only.
If critical contact Iplex.

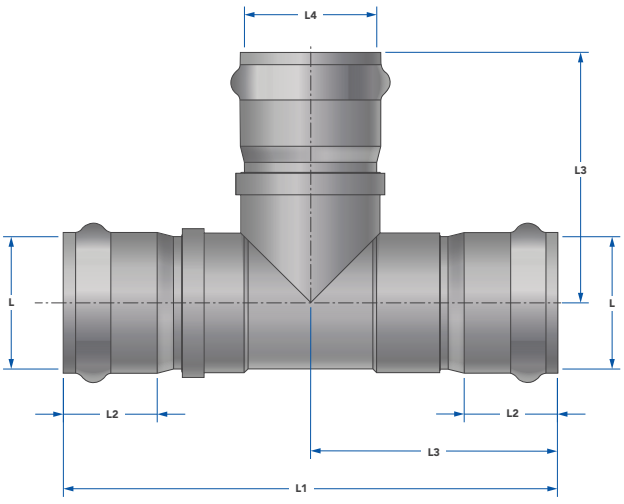
Slope riley junction M&F - 2RRJ

Product code	Typical dimensions					
	Nominal size (mm)	Angle (dea) a	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3
DR4015088	100	88	470	650	490	94



Square junction F&F - 3RRJ

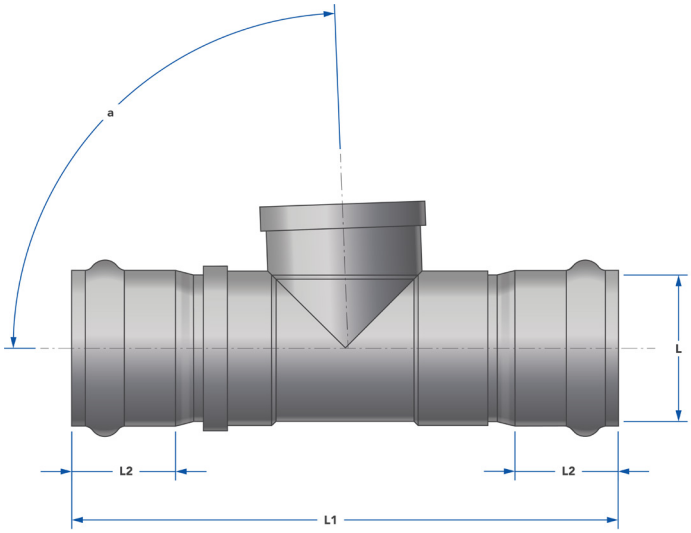
Product code	Typical dimensions					
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3	Dim. (mm) L4
DR52150150	150	160	595	94	275	150
DR52225150	225x150	250	680	122	250	150
DR52300150	300x150	315	1040	147	345	150



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

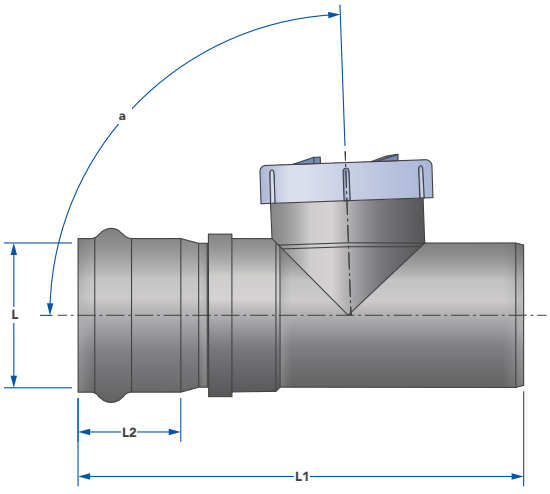
Inspection opening F&F - 2RRJ

Product code	Typical dimensions				
	Nominal size (mm)	Angle (dea) a	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2
DR54100	100	88	110	415	78
DR54150	150	88	160	-	94



Inspection opening M&F - 1RRJ

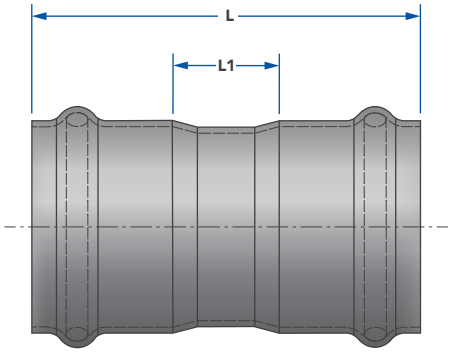
Product code	Typical dimensions				
	Nominal size (mm)	Angle (dea) a	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2
DR55100	100	88	110	341	78
DR55150	150	88	160	504	94



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

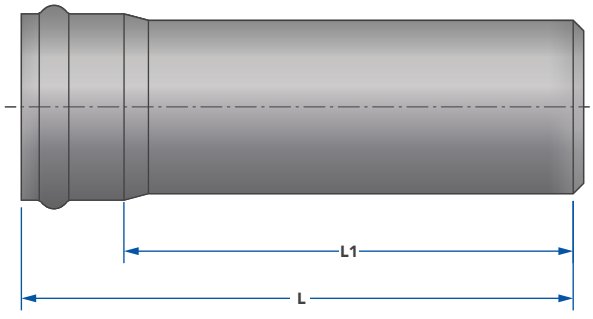
Coupling F&F - 2RRJ

Product code	Typical dimensions		
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1
DR57100	100	215	59
DR57150	150	260	40
DR57225	225	420	140
DR57300	300	1000	700
DR57375	375	1000	680



DWV short pipes M&F - 1RRJ

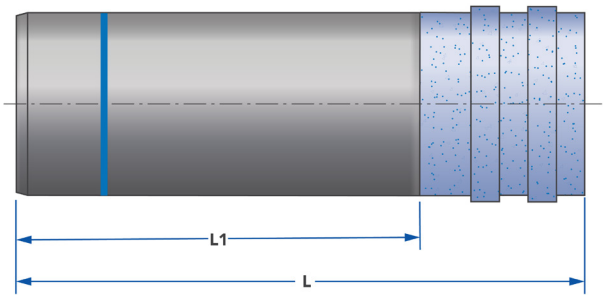
Product code	Typical dimensions		
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1
DR60EH100E	100	500	405
DR60EH150E	150	500	390
DR60EH225E	225	500	360
DR60EH300E	300	500	345
DR60EH375E	375	500	340



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

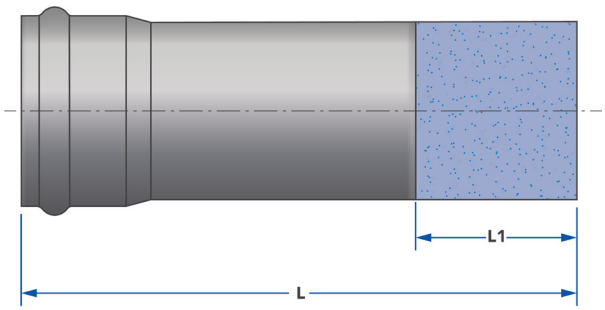
Manhole spigot connector M&M (sanded) C/W weep rings

Product code	Typical dimensions		
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1
DM61EHW100	100	500	405
DM61EHW150	150	500	390
DM61EHW225	225	500	360
DM61EHW300	300	500	345
DM61EHW375	375	500	340



Manhole socket connector M&F - 1RRJ (sanded)

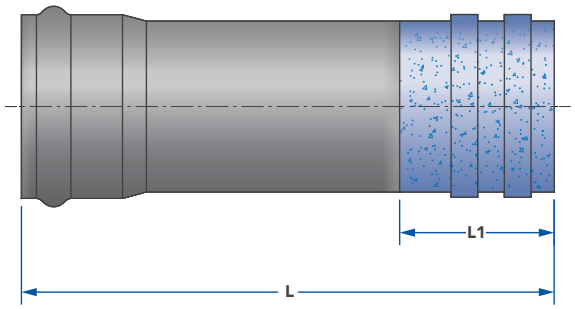
Product code	Typical dimensions		
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1
DR61100	100	500	140
DR61150	150	500	145
DR61225	225	500	200
DR61300	300	500	200
DR61375	375	500	200



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

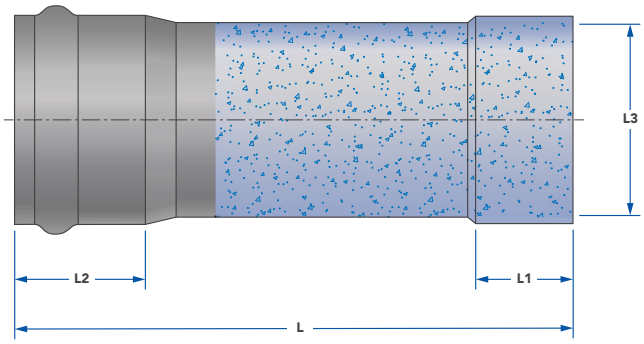
Manhole socket connector M&F - 1RRJ (sanded) C/W weep rings

Product code	Typical dimensions		
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1
DR61EHW100	100	500	140
DR61EHW150	150	500	145
DR61EHW225	225	500	200
DR61EHW300	300	500	200
DR61EHW375	375	500	200



Manhole socket coupling F&F - 1RRJ (sanded)

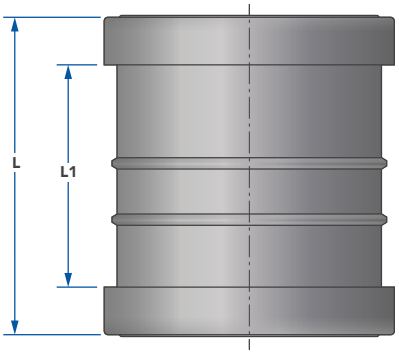
Product code	Typical dimensions				
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim (mm) L3
DR62100	100	320	55	78	110
DR62150	150	320	80	94	160
DR62225	225	500	125	122	250
DR62300	300	500	-	-	315
DR62375	375	600	-	-	400



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

Slip repair coupling F&F - 2RRJ

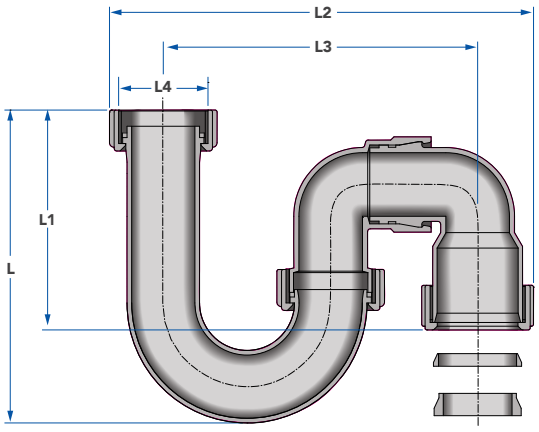
Product code	Typical dimensions		
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1
DR64100	100	140	105
DR64150	150	210	160
DR64225	225	325	245
DR64300	300	460	360
DR64375	375	500	400



9.4 DWV system – polypropylene traps

S&P trap

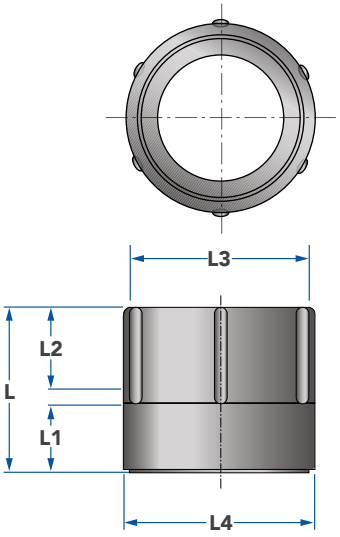
Product code	Typical dimensions					
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3	Dim. (BSP) L4
T0014032	40x32	197	147	228	169	1-1/4″
T00140	40	168	118	228	169	1-1/2″
T00150	50	215	164	268	194	2″



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

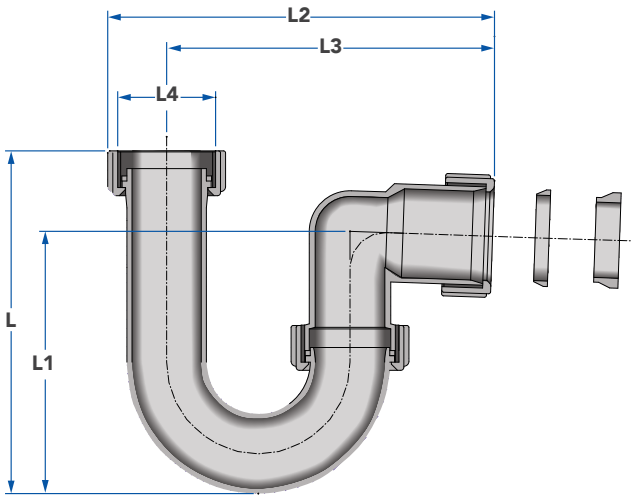
Threaded trap adaptor

Product code	Typical dimensions					
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (BSP) L3	Dim. (BSP) L4
T0024032	40x32	41	17	20	1-1/4″	1-1/2″



P trap

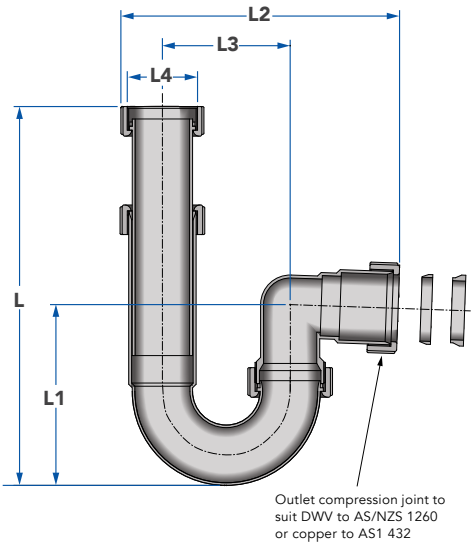
Product code	Typical dimensions					
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3	Dim. (BSP) L4
T00340	40	168	129	190	90	1-1/2″
T00350	50	215	153	236	108	2″



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

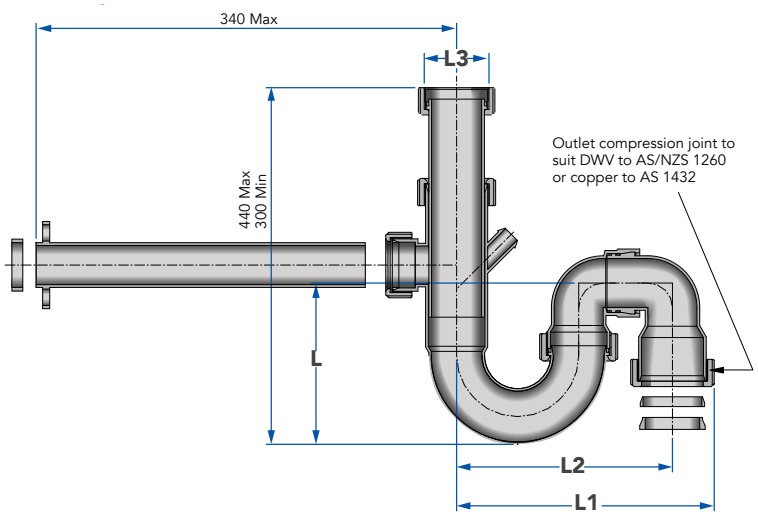
Telescopic P trap

Product code	Typical dimensions					
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3	Dim. (BSP) L4
T00440	40	290	131	191	90	1-1/2″
T00450	50	297	153	236	108	2″



Telescopic waste disposal S&P trap

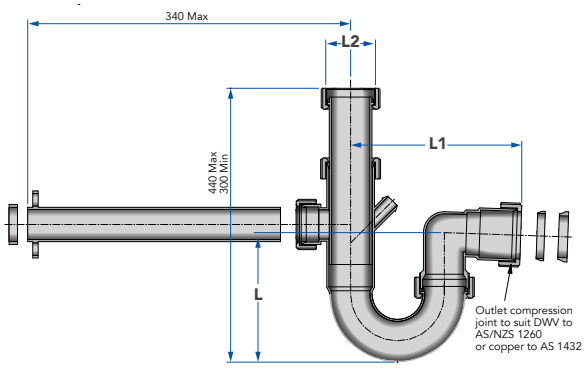
Product code	Typical dimensions				
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (BSP) L3
T00550	50	148	236	198	2″



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

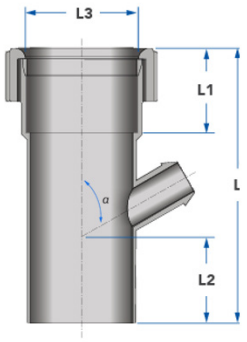
Telescopic waste disposal P trap

Product code	Typical dimensions			
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim. (BSP) L2
T00650	50	155	205	2″



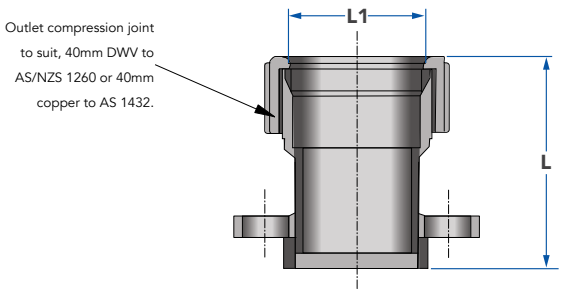
Dishwasher connector (50mm)

Product code	Typical dimensions					
	Nominal size (mm)	Angle (deg) a	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3
T00735JP	50	60	128	40	40	52



Waste disposal connector (40mm)

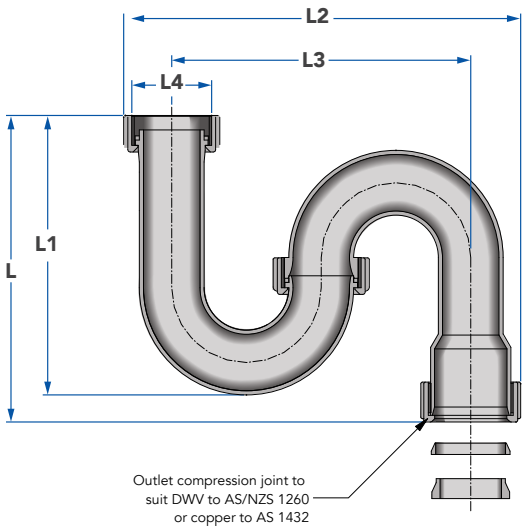
Product code	Typical dimensions		
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1
T00740	40	67	43



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

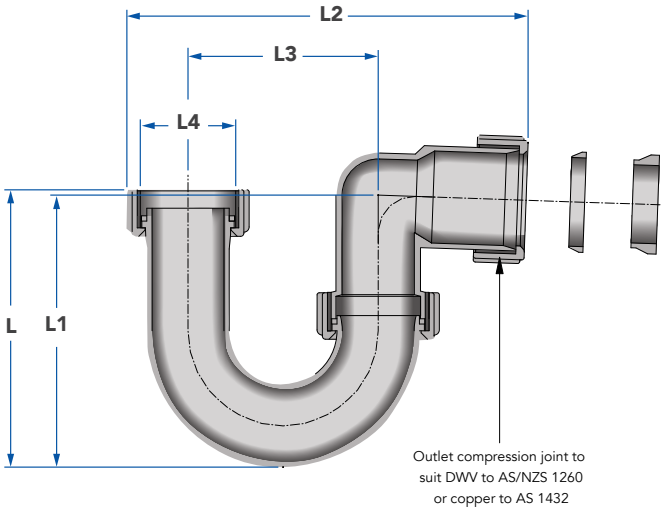
S trap

Product code	Typical dimensions					
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3	Dim. (BSP) L4
T00940	40	185	168	239	180	1-1/2″
T00950	50	215	191	289	216	2″



Low level P trap

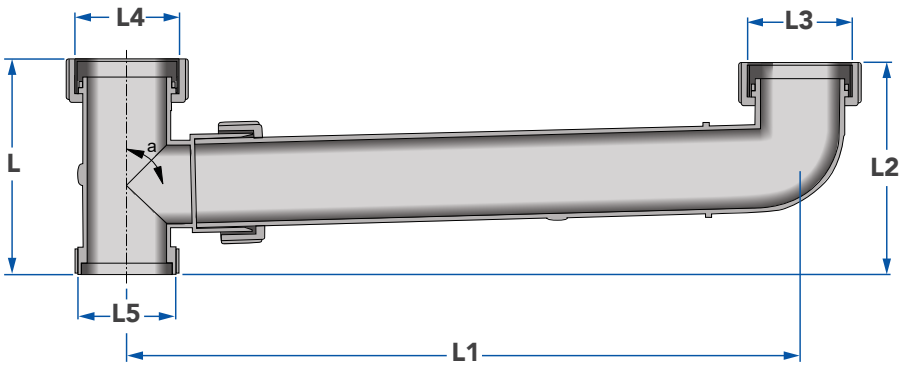
Product code	Typical dimensions					
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3	Dim. (BSP) L4
T01240	40	131	129	190	90	1-1/2″
T01250	50	153	148	190	90	2″



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

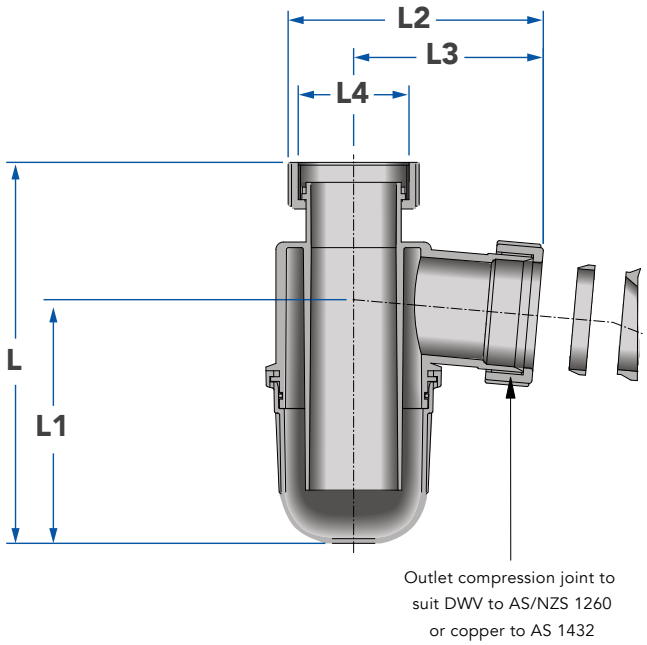
Double bowl sink connector

Product code	Typical dimensions							
	Nominal size (mm)	Angle (deg) a	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (BSP) L3	Dim. (BSP) L4	Dim. (BSP) L5
T01450300	50x300	88	124	385	122	2″	2″	2″
T01450600	50x400	-	124	598	131	2″	2″	2″



Bottle trap

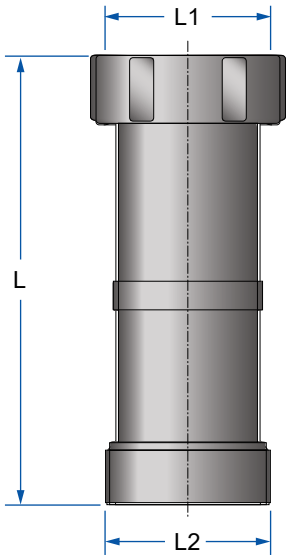
Product code	Typical dimensions					
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3	Dim. (BSP) L4
T01750	50	220	131	137	102	2″



Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

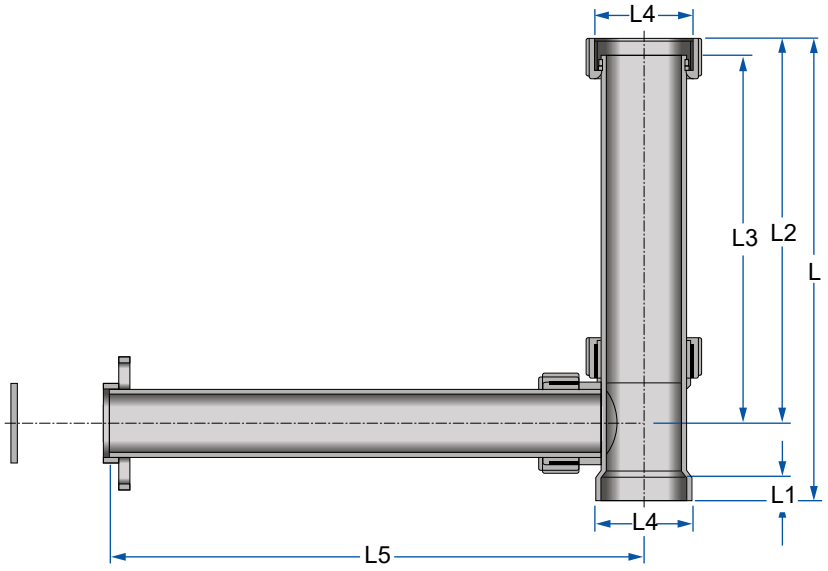
Bath connector trap

Product code	Typical dimensions			
	Nominal size (mm)	Dim. (mm) L	Dim. (BSP) L1	Dim. (BSP) L2
T01950150	50x150	164	2″	2″



Adjustable garbage disposal connector

Product code	Typical dimensions						
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1	Dim (mm) L2	Dim. (mm) L3	Dim. (BSP) L4	Dim. (mm) L5
T03750	50	283	15	235	225	2″	328

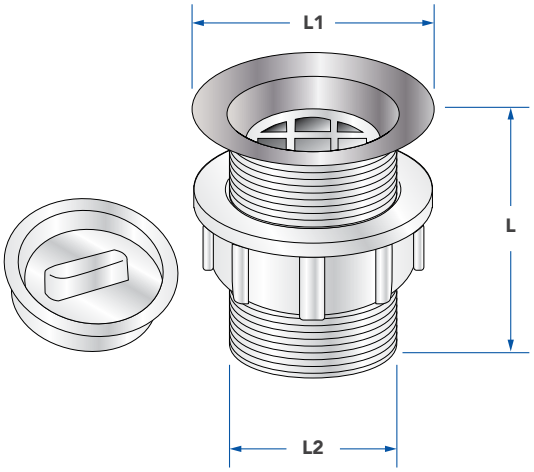


Note:All dimensions, mass and volume are approximate only. If critical contact Iplex.

9.5 DWV system - floor grates

Waste outlet and plug

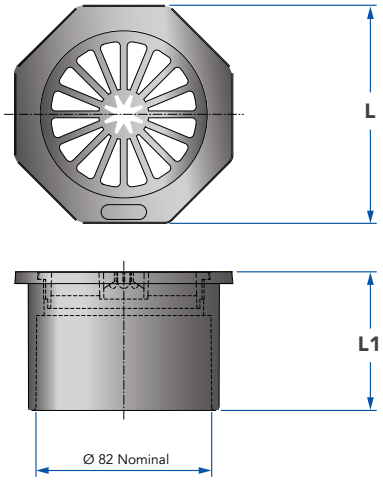
Product code	Typical dimensions			
	Nominal size (mm)	Dim. (mm) L	Dim. (BSP) L1	Dim. (BSP) L2
L00140	40	73.5	55.5	1-1/2″
L00150	50	55	85	2″



Floor grate socket

Product code	Typical dimensions		
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1
G00480	80	103	65
G00480FC*	80	103	65

* Full chrome



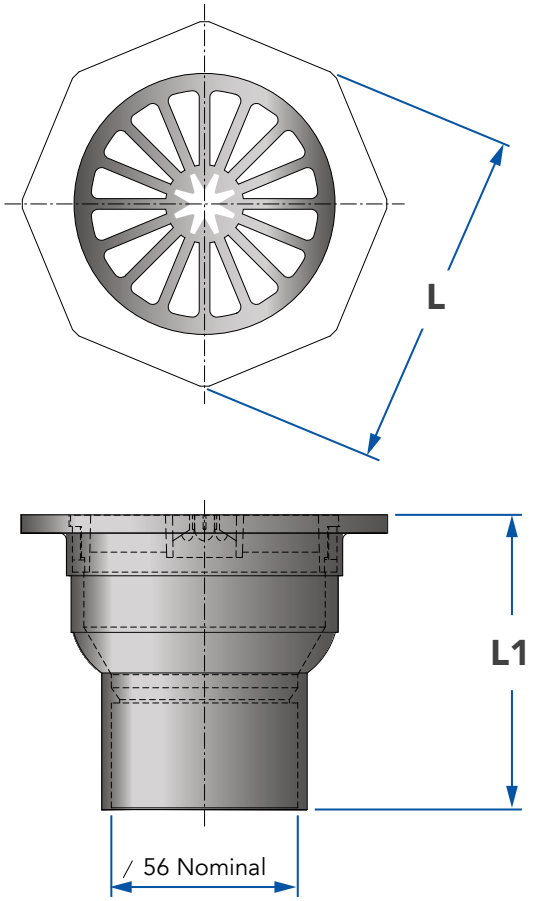
Note: All dimensions, mass and volume are approximate only. If critical contact Iplex.

Floor grate

Product code	Typical dimensions		
	Nominal size (mm)	Dim. (mm) L	Dim. (mm) L1
G168100	100	120	70
G0028050	80x50	102	59
G0028050C*	80x50	102	59
G0028050FC**	80x50	102	59

* Chrome centre

** Full chrome



Note: All dimensions, mass and volume are approximate only. If critical contact Iplex.

9.6 DWV system – jointing materials

Solvent cement non-pressure (blue)

Product code	Size
JNB0125	125ml
JNB0250	250ml
JNB0500	500ml
JNB1000	1 litre
JNB4000	4 litre

Solvent cement non-pressure (clear)

Product code	Size
JNC0250	250ml
JNC0500	500ml

Lubricant - standard

Product code	Size
JLO10500	500ml
JLO11000	1 litre
JLO14000	4 litre

Lubricant - bactericidal

Product code	Size
JLB10500	500ml
JLB11000	1 litre
JLB14000	4 litre

Priming fluid (red)

Product code	Size
JR0250	250ml
JR0500	500ml
JR1000	1 litre
JR4000	4 litre

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