

## Application:

Drainage and wastewater conduction in residential and industrial systems.

DWV Pipes and Fittings are used in sanitary, ventilation, pressureless sanitary drains, storm drain, and other drainage applications from -40 to 140 °F.

Check state and local codes for applications and restrictions.

## ABS DWV



### 1. Technical Characteristics:

#### 1.1 General Characteristics:

- Line components manufactured in ABS (Acrylonitrile-Butadiene-Styrene).
- Color: Black.
- Maximum work temperature: 140°F.

#### 1.2 Reference Specifications:

- ASTM D-2661 - Standard Specification for Acrylonitrile-Butadiene-Styrene (ABS) Schedule 40 Plastic Drain, Waste, and Vent Pipe and Fittings.
- ASTM D-3965 - Standard Classification System and Basis for Specifications for Rigid Acrylonitrile-Butadiene-Styrene (ABS) Materials for Pipe and Fittings.
- ASTM F-628 - Standard Specification for Acrylonitrile-Butadiene-Styrene (ABS) Schedule 40 Plastic Drain, Waste, and Vent Pipe With a Cellular Core.
- ASTM D-3311 - Standard Specification for Drain, Waste, and Vent (DWV) Plastic Fittings Patterns.
- ASTM F-1498 - Standard Specification for Taper Pipe Threads 60° for Thermoplastic Pipe and Fittings.
- ASTM D2321 - Standard Practice for Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity-Flow Applications.
- ASTM F1668 - Standard Guide for Construction Procedures for Buried Plastic Pipe.
- NSF Standard 14 - Plastics Piping System Components and Related Materials (Third Party Certification products meet applicable ASTM performance requirements).
- Uniform Plumbing Code (UPC) – Establishes minimum standards for the installation and maintenance of plumbing systems.
- CSA B181.1 – A Canadian standard that specifies the requirements for PVC pipe and fittings used in drainage and sewer systems.

#### 1.3 Validity and Warranty Period:

Products warranted to be free from manufacturing defects and to conform to currently applicable ASTM standards for a period of (5) five years from the date of delivery and provided that the manufacturer's installation conditions and local regulations are respected.

#### Properties\* of ABS:

| Property                                        | Measurement Method | Units                  | Values                 |
|-------------------------------------------------|--------------------|------------------------|------------------------|
| Specific Gravity                                | ASTM D792          | g/cc                   | 1,05                   |
| Modulus of Elasticity in Tension (73°F) Minimum | ASTM D638          | Psi                    | 240,000                |
| Specific Heat                                   | D 2766             | BTU/ °F/lb             | 0.35                   |
| Cell Classification - Pipe                      | ASTM D3965         | -                      | 42222                  |
| Cell Classification - Fittings                  | ASTM D3965         | -                      | 32222                  |
| Impact Strength IZOD (notched at 73°F) Minimum  | ASTM D256          | ft lb/ in. of notch    | 6,00                   |
| Tensile Strength (73°F) minimum                 | ASTM D638          | Psi                    | 4,500                  |
| Flexural Strength (73°F)                        | ASTM D790          | Psi                    | 10,585                 |
| Hardness (Shore D)                              | ASTM D2240         | -                      | 70                     |
| Hardness (Rockwell R)                           | ASTM D785          | -                      | 100                    |
| Compressive Strength (73°F)                     | ASTM D695          | Psi                    | 7,000 <sup>5</sup>     |
| Heat Distortion Temperature at 264 psi Minimum  | ASTM D648          | °F                     | 180                    |
| Coefficient of Linear Thermal Expansion         | ASTM D696          | in./ in./ °F           | 5.5 x 10 <sup>-5</sup> |
| Water Absorption (24 hours at 73°F)             | ASTM D570          | % weight gain          | 0,40                   |
| Coefficient of Thermal Conductivity             | ASTM C177          | BTU/ hr/sq ft/ °F/ in. | 1.1                    |

\* Above data is based upon information provided by the raw material manufacturers. It should be used only as a reference and not as a guarantee of performance.

## 2. Benefits:

### 2.1 Easy Installation:

There is no need for special tools. The fittings can be installed using the solvent cement joint technique. The pipes and fittings are light in weight significantly reducing installation costs.

### 2.2 No Conductivity:

It is not an electrical conductor and therefore it is not subject to the action of static energy.

### 2.3 Durability:

The ABS pipes and fittings are highly resilient, tough, and durable with high tensile and impact strength.

Corrosion free.

Cement bonded parts have shown excellent resistance to tree root infiltration that may cause blockages on installations.

## 3. Instructions:

### 3.2 Maintenance – Repair Coupling installation:

- 1) Cut the damaged part.
- 2) Remove burrs from the inside and outside of the pipe.
- 3) Bevel the pipe end.
- 4) Position the repair coupling between the two pipes and mark the outside of the pipe using the repair coupling socket depth as measurement.
- 5) Place the repair coupling on the pipe with the larger inside diameter end facing the gap between the pipe ends.
- 6) Apply cement on both pipes.
- 7) Push the repair coupling toward the gap. Stop when reaches the mark on the second pipe end. A bead of cement will be present around the entire diameter.



## 4. Instructions:

### 4.1 Installation:



**Step 1** - Cut the pipe as straight as possible using a saw. A square cut provides the maximum surface to be used for bonding. Remove all burrs from the inner and outer edges with a knife or sandpaper. If burrs remain present, they will restrain the cement and primer and prevent proper bonding.



**Step 5** - Apply a fine and uniform layer of solvent cement inside the fitting socket and on the tip of the pipe up to the pencil mark previously made. Take care not to leave any excess cement build-up at the bottom of the socket, this can cause leak points between the pipe and the fitting.



**Step 2** - Check proper alignment of the pipe and the fitting. This must be done before bonding.



**Step 6** - Quickly join the pieces together before the cement dries, pushing the end of the pipe to the bottom of the connection socket. Finish the process by giving a quarter turn to spread the cement evenly between the pieces. Hold the pieces in this position for at least thirty seconds without moving them.



**Step 3** - Using a tape measure, measure the entire length of the connection socket. Then mark the same measurement at the pipe end. Do not use any object that scratches or damages the surface of the pipe, this would damage the seal between the pieces.



**Step 7** - Remove excess cement from the pipe and the socket entrance using a clean and dry cloth. Do not move or rotate the pieces for at least five minutes, this movement may loosen the bonding.



**Step 4** - Thoroughly clean the inside of the fitting socket and the end of the pipe with a clean cotton cloth soaked in primer. This will remove dust, dirt, and grease, making the parts' surfaces clean.



**Step 8** - Cure time is the time required for bonded parts to reach the strength required to allow them to be tested by internal pressure or vacuum.

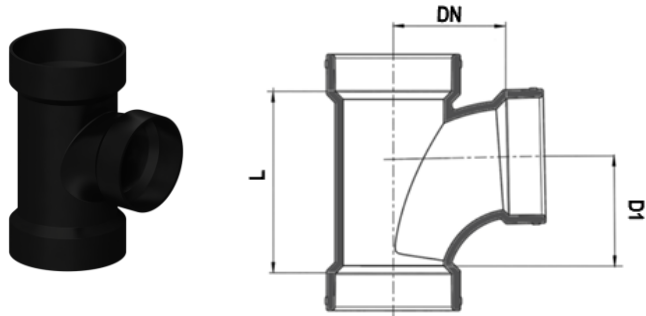
#### Attention:

Check the cement and primer datasheet for more details on the installation process and technical product information.



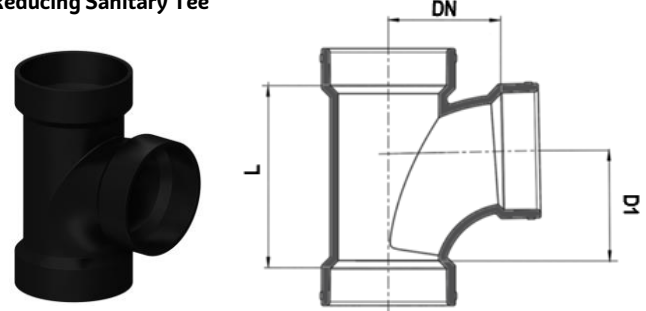
5. Line Items:

Sanitary Tee



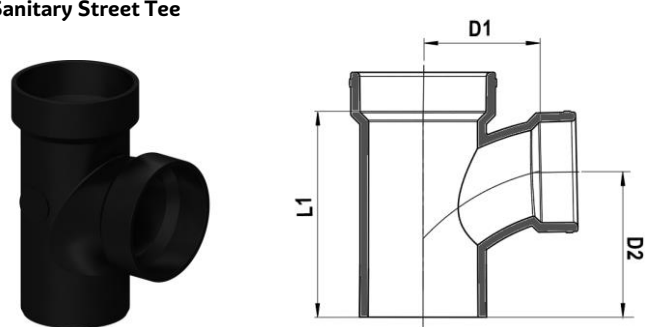
| Dimensions  |           |           |           |           |
|-------------|-----------|-----------|-----------|-----------|
| Size        | 1 1/2"    | 2"        | 3"        | 4"        |
| DN          | 1 11/16"  | 2 5/16"   | 3 1/16"   | 3 7/8"    |
| D1          | 1 11/16"  | 2 5/16"   | 3 1/16"   | 3 7/8"    |
| L           | 2 5/8"    | 3 11/16"  | 4 7/8"    | 6 1/8 "   |
| Part Number | 600-015   | 600-023   | 600-031   | 600-049   |
| Code        | 300005952 | 300005953 | 300005954 | 300005955 |

Reducing Sanitary Tee



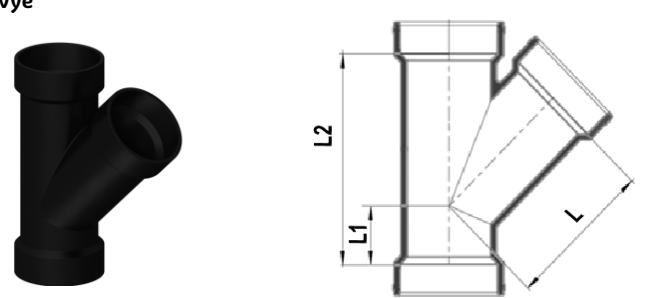
| Dimensions  |                 |              |              |              |            |            |
|-------------|-----------------|--------------|--------------|--------------|------------|------------|
| Size        | 2x1 1/2x 1 1/2" | 2x1 1/2 x 2" | 2x2 x 1 1/2" | 3x3 x 1 1/2" | 3 x 3 x 2" | 4 x 4 x 2" |
| DN          | 2 3/16"         | 2 5/16"      | 2 3/16"      | 1 3/4"       | 2 7/8"     | 3 5/16"    |
| D1          | 2 3/16"         | 2 5/16"      | 2 3/16"      | 1 3/4"       | 2 7/8"     | 3 5/16"    |
| L           | 3 1/8"          | 3 11/16"     | 3 1/8 "      | 2 11/16"     | 3 5/16"    | 3 3/16"    |
| Part Number | 600-080         | 600-098      | 600-114      | 600-130      | 600-148    | 600-155    |
| Code        | 300005956       | 300005957    | 300005958    | 300005959    | 300005960  | 300005961  |

Sanitary Street Tee



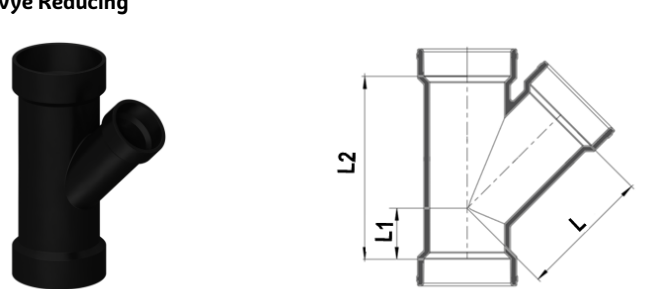
| Dimensions  |           |
|-------------|-----------|
| Size        | 1 1/2"    |
| D1          | 1 3/4"    |
| D2          | 2 1/2"    |
| L1          | 3 1/2"    |
| Part Number | 604-314   |
| Code        | 300006035 |

Wye



| Dimensions  |           |           |           |           |
|-------------|-----------|-----------|-----------|-----------|
| Size        | 1 1/2"    | 2"        | 3"        | 4"        |
| L           | 2 13/16"  | 3 5/8"    | 5"        | 6 3/8"    |
| L1          | 1 1/16"   | 1 3/8"    | 1 5/8"    | 1 7/8"    |
| L2          | 3 7/8"    | 5"        | 6 5/8"    | 8 1/4"    |
| Part Number | 600-395   | 600-403   | 600-411   | 600-429   |
| Code        | 300005963 | 100031286 | 100031287 | 300005964 |

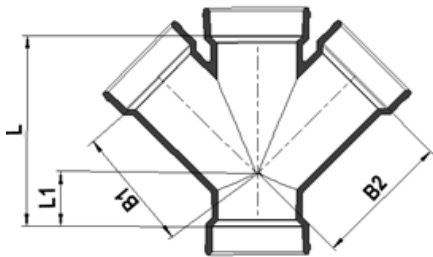
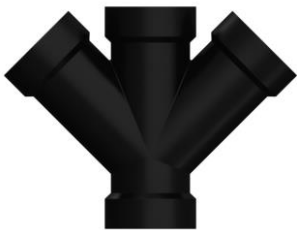
Wye Reducing



| Dimensions  |            |           |           |           |
|-------------|------------|-----------|-----------|-----------|
| Size        | 3x3x1 1/2" | 3x3x2"    | 4x4x2"    | 4x4x3"    |
| L           | 4 9/32     | 4 5/8     | 5 9/16    | 6         |
| L1          | 7/16       | 7/8       | 3/8       | 1 1/16    |
| L2          | 4 5/32     | 5         | 5 1/16    | 6 5/8     |
| Part Number | 600-478    | 600-486   | 605-139   | 605-147   |
| Code        | 300005965  | 300005966 | 300006039 | 100031288 |

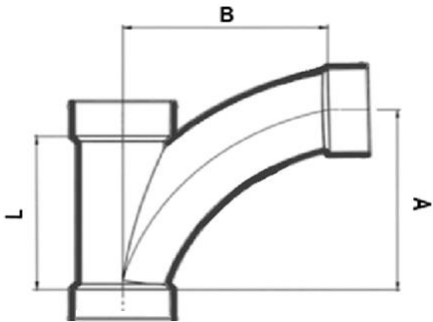


Double Wye



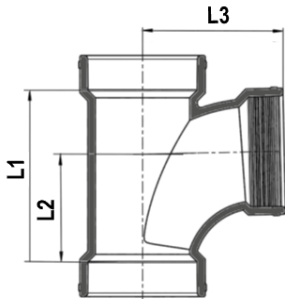
| Dimensions  |           |           |           |
|-------------|-----------|-----------|-----------|
| Size        | 1 1/2"    | 2"        | 3"        |
| B1          | 2 7/8"    | 3 5/8"    | 5"        |
| B2          | 2 7/8"    | 3 5/8"    | 5"        |
| L           | 4"        | 5"        | 6 5/8"    |
| L1          | 1 1/8"    | 1 3/8"    | 1 5/8"    |
| Part Number | 600-528   | 600-536   | 600-544   |
| Code        | 300005967 | 300005968 | 300005969 |

Combination Tee-Wye



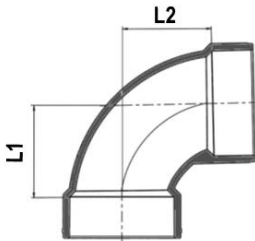
| Dimensions  |           |           |           |           |           |
|-------------|-----------|-----------|-----------|-----------|-----------|
| Size        | 1 1/2"    | 2"        | 3"        | 3x3x2"    | 4"        |
| A           | 3 7/8"    | 5 1/8"    | 7 9/16"   | 5 11/16"  | 10"       |
| B           | 3 15/16"  | 5 1/8"    | 7 9/16"   | 5 1/8"    | 10"       |
| L           | 3 1/2"    | 4 7/16"   | 6 1/2"    | 4 7/16"   | 8 1/2"    |
| Part Number | 604-264   | 604-272   | 604-280   | 604-603   | 604-298   |
| Code        | 300006031 | 300006032 | 300006033 | 100031275 | 300006034 |

Test Tee (w/o plug)



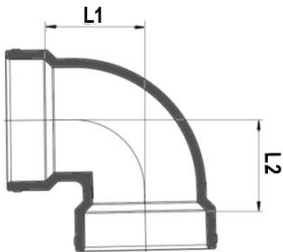
| Dimensions  |           |
|-------------|-----------|
| Size        | 1 1/2"    |
| L1          | 2 3/8"    |
| L2          | 1 3/16"   |
| L3          | 1 13/16"  |
| Part Number | 600-213   |
| Code        | 300005962 |

Sanitary Bend 90°



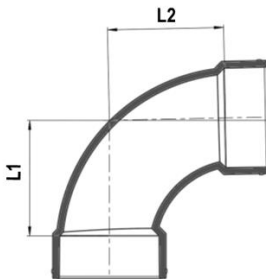
| Dimensions  |          |          |          |          |
|-------------|----------|----------|----------|----------|
| Size        | 1 1/2"   | 2"       | 3"       | 4"       |
| L1          | 1 3/4"   | 2 5/16"  | 3"       | 3 7/8"   |
| L2          | 1 3/4"   | 2 5/16"  | 3"       | 3 7/8"   |
| Part Number | 600-601  | 600-627  | 600-643  | 600-676  |
| Code        | 37059689 | 37059690 | 37059691 | 37059692 |

Vent Bend 90°



| Dimensions  |          |          |          |
|-------------|----------|----------|----------|
| Size        | 1 1/2"   | 2"       | 3"       |
| L1          | 1 3/16"  | 1 1/2"   | 1 7/8"   |
| L2          | 1 3/16"  | 1 1/2"   | 1 7/8"   |
| Part Number | 604-074  | 604-082  | 604-090  |
| Code        | 37059717 | 37059718 | 37059719 |

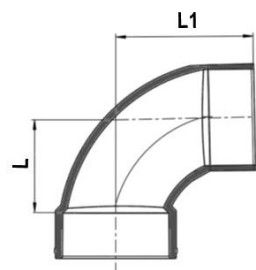
Long Sweep Bend 90°



| Dimensions  |          |          |          |           |
|-------------|----------|----------|----------|-----------|
| Size        | 1 1/2"   | 2"       | 3"       | 4"        |
| L1          | 2 11/16" | 3 7/16"  | 4 1/16"  | 4 15/16 " |
| L2          | 2 11/16" | 3 7/16"  | 4 1/16"  | 4 15/16 " |
| Part Number | 600-700  | 604-116  | 604-124  | 604-132   |
| Code        | 37059695 | 37059696 | 37059697 | 37059698  |

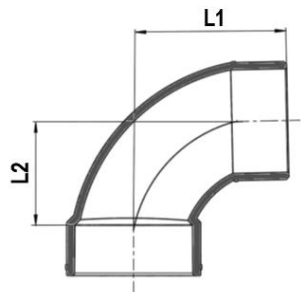


Sanitary Street Bend 90°



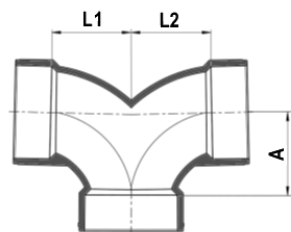
| Dimensions  |          |          |          |
|-------------|----------|----------|----------|
| Size        | 1 1/2"   | 2"       | 3"       |
| L           | 1 3/4    | 2 5/16   | 3 1/16   |
| L1          | 2 1/2    | 3 3/16   | 4 9/16   |
| Part Number | 600-734  | 604-207  | 604-215  |
| Code        | 37059706 | 37059707 | 37059708 |

Long Sweep Street Bend 90°



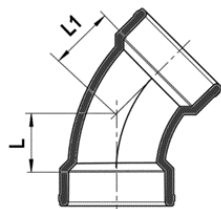
| Dimensions  |          |          |
|-------------|----------|----------|
| Size        | 1 1/2"   | 3"       |
| L1          | 2 3/4"   | 4 1/16"  |
| L2          | 3 1/2"   | 5 9/16"  |
| Part Number | 604-728  | 604-744  |
| Code        | 37059715 | 37059716 |

Double Bend 90°



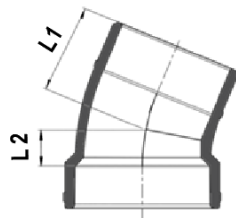
| Dimensions  |          |          |          |
|-------------|----------|----------|----------|
| Size        | 1 1/2"   | 2"       | 3"       |
| L1          | 1 11/16" | 2 5/16"  | 3 1/16"  |
| L2          | 1 11/16" | 2 5/16"  | 3 1/16"  |
| A           | 1 11/16" | 2 5/16"  | 3 1/16"  |
| Part Number | 285-300  | 285-400  | 285-550  |
| Code        | 37059686 | 37059687 | 37059688 |

Bend 60°



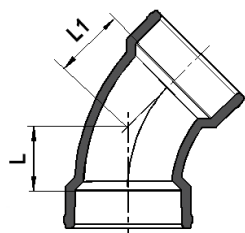
| Dimensions  |          |          |
|-------------|----------|----------|
| Size        | 1 1/2"   | 3"       |
| L           | 1"       | 1 11/16" |
| L1          | 1"       | 1 11/16" |
| Part Number | 600-841  | 600-866  |
| Code        | 37059684 | 37059685 |

Street Bend 60°



| Dimensions  |          |
|-------------|----------|
| Size        | 1 1/2"   |
| L1          | 1 3/4"   |
| L2          | 1"       |
| Part Number | 604-967  |
| Code        | 37059701 |

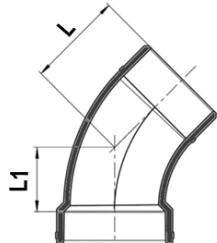
Sanitary Bend 45°



| Dimensions  |          |          |          |          |
|-------------|----------|----------|----------|----------|
| Size        | 1 1/2"   | 2"       | 3"       | 4"       |
| L           | 1 1/8"   | 1 1/2"   | 1 3/4"   | 2 3/16"  |
| L1          | 1 1/8"   | 1 1/2"   | 1 3/4"   | 2 3/16"  |
| Part Number | 600-890  | 600-916  | 600-932  | 600-940  |
| Code        | 37059680 | 37059681 | 37059682 | 37059683 |

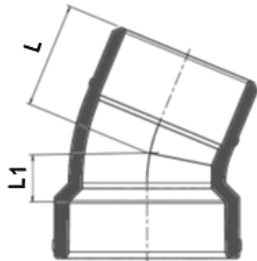


Street Bend 45°



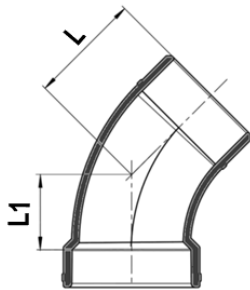
| Dimensions  |          |          |          |          |
|-------------|----------|----------|----------|----------|
| Size        | 1 1/2"   | 2"       | 3"       | 4"       |
| L           | 1 7/8"   | 2 1/4"   | 3 1/4"   | 3 15/16" |
| L1          | 1 1/8"   | 1 7/16"  | 1 3/4"   | 2 3/16"  |
| Part Number | 600-981  | 600-999  | 601-005  | 601-013  |
| Code        | 37059700 | 37059701 | 37059702 | 37059703 |

Bend 22 ½°



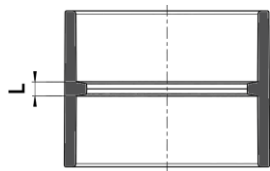
| Dimensions  |          |          |          |          |
|-------------|----------|----------|----------|----------|
| Size        | 1 1/2"   | 2"       | 3"       | 4"       |
| L           | 1 3/16"  | 1 1/2"   | 2 5/16"  | 2 3/4"   |
| L1          | 7/16"    | 5/8"     | 1 3/16"  | 1"       |
| Part Number | 601-047  | 601-054  | 601-062  | 601-070  |
| Code        | 37059709 | 37059710 | 37059711 | 37059712 |

Street Bend 22 ½°



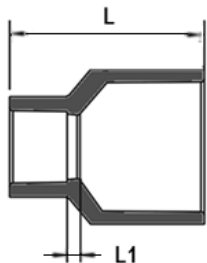
| Dimensions  |          |          |
|-------------|----------|----------|
| Size        | 2"       | 1-1/2"   |
| L           | 1 2/3"   | 1-1/2"   |
| L1          | 2/3"     | 3/4"     |
| Part Number | 605-030  | 601-096  |
| Code        | 37059714 | 37059713 |

Coupling



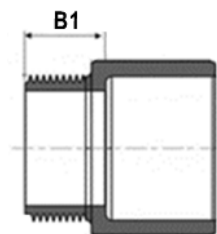
| Dimensions  |          |          |          |          |          |
|-------------|----------|----------|----------|----------|----------|
| Size        | 1 1/4"   | 1 1/2"   | 2"       | 3"       | 4"       |
| L           | 1/8"     | 1/8"     | 1/8"     | 3/16"    | 1/4"     |
| Part Number | 601-112  | 601-120  | 601-138  | 601-146  | 601-153  |
| Code        | 37059728 | 37059729 | 37059730 | 37059731 | 37059732 |

Reducing Coupling



| Dimensions  |            |          |          |
|-------------|------------|----------|----------|
| Size        | 2 x 1 1/2" | 3 x 2"   | 4 x 3"   |
| L           | 2 3/32"    | 3 17/32" | 4 3/16"  |
| L1          | 5/8"       | 1 1/8"   | 15/16"   |
| Part Number | 601-195    | 601-211  | 601-252  |
| Code        | 37059760   | 37059761 | 37059762 |

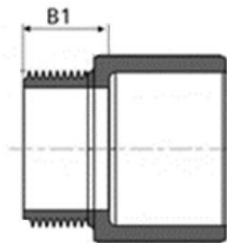
Male Adapter



| Dimensions  |          |          |          |
|-------------|----------|----------|----------|
| Size        | 1 1/2"   | 2"       | 3"       |
| B1          | 15/16"   | 31/32"   | 1 19/32" |
| Part Number | 601-286  | 601-294  | 601-302  |
| Code        | 37059665 | 37059666 | 37059667 |

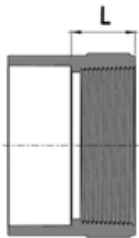


Fitting Adapter



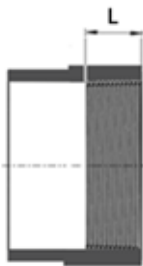
| Dimensions  |          |
|-------------|----------|
| Size        | 1 1/2"   |
| B1          | 15/16"   |
| Part Number | 601-344  |
| Code        | 37059671 |

Female Adapter



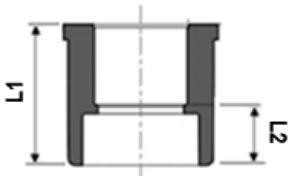
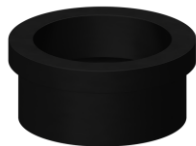
| Dimensions  |          |          |          |          |
|-------------|----------|----------|----------|----------|
| Size        | 1 1/2"   | 2"       | 3"       | 4"       |
| L           | 1"       | 1"       | 1 1/2"   | 1 5/8"   |
| Part Number | 601-385  | 601-393  | 601-401  | 601-419  |
| Code        | 37059656 | 37059657 | 37059658 | 37059659 |

Fitting Cleanout Body



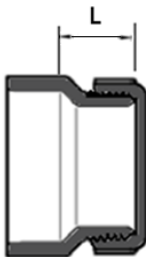
| Dimensions  |          |          |          |          |
|-------------|----------|----------|----------|----------|
| Size        | 1 1/2"   | 2"       | 3"       | 4"       |
| L           | 1"       | 1"       | 1 1/2"   | 1 5/8"   |
| Part Number | 601-450  | 601-468  | 601-476  | 601-484  |
| Code        | 37059672 | 37059673 | 37059674 | 37059675 |

Bushing



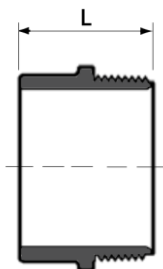
| Dimensions  |          |          |          |
|-------------|----------|----------|----------|
| Size        | 2x1.1/2" | 3x2"     | 4x3"     |
| L1          | 1 1/16"  | 1 3/4"   | 3 1/2"   |
| L2          | 3/8"     | 7/8"     | 2"       |
| Part Number | 601-567  | 601-583  | 601-617  |
| Code        | 37059755 | 37059756 | 37059759 |

Female Trap Adapter



| Dimensions  |              |          |           |
|-------------|--------------|----------|-----------|
| Size        | 1.1/2x1.1/4" | 2"       | 1-1/2"    |
| L           | 1 1/16"      | 31/32"   | 11/16"    |
| Part Number | 601-930      | 18-200   | 601-948   |
| Code        | 37059668     | 37059763 | 300006005 |

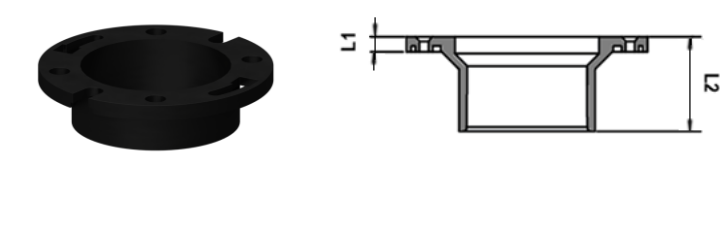
Male Trap Adapter



| Dimensions  |                |          |
|-------------|----------------|----------|
| Size        | 1 1/2 x 1 1/4" | 1-1/2    |
| L           | 1 21/32"       | 1.3/4"   |
| Part Number | 601-989        | 601-997  |
| Code        | 37059670       | 37059699 |

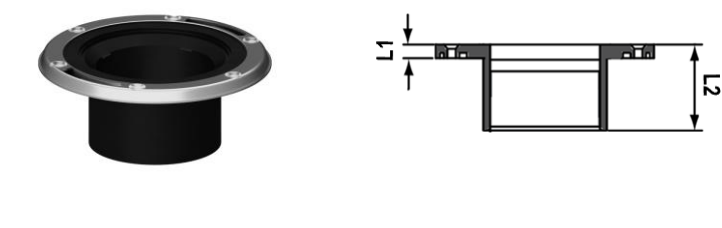


Closet Flange (Hub)



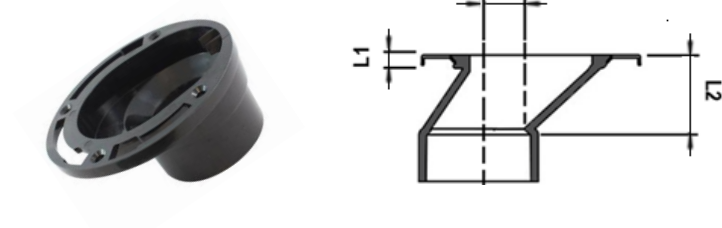
| Dimensions  |          |
|-------------|----------|
| Size        | 4x3"     |
| L1          | 7/16"    |
| L2          | 2"       |
| Part Number | 602-193  |
| Code        | 37059694 |

Closet Flange (Hub W/ Metal Ring)



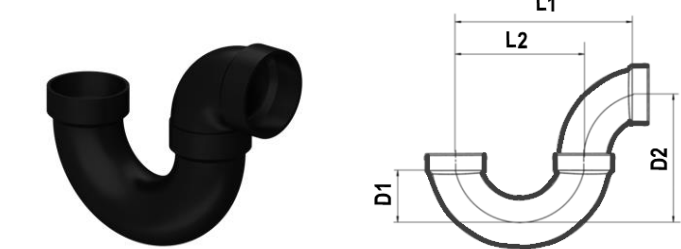
| Dimensions  |          |
|-------------|----------|
| Size        | 4/3"     |
| L1          | 7/16"    |
| L2          | 2"       |
| Part Number | 605-352  |
| Code        | 37059705 |

Closet Flange (Spgt)



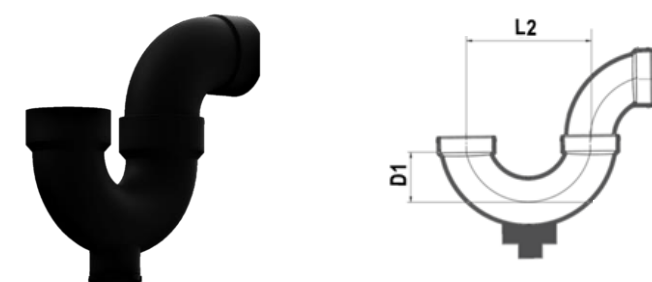
| Dimensions  |          |
|-------------|----------|
| Size        | 4x3"     |
| L1          | 5/16"    |
| L2          | 2 3/4 "  |
| L3          | 1 1/2"   |
| Part Number | 602-227  |
| Code        | 37059693 |

P Trap



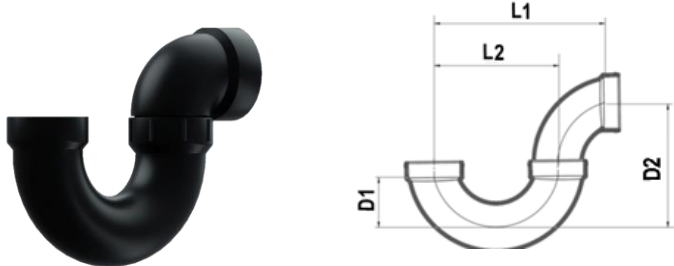
| Dimensions  |          |          |
|-------------|----------|----------|
| Size        | 1 1/2"   | 2"       |
| D1          | 1 3/8"   | 2 1/4"   |
| D2          | 3 5/8"   | 4 1/2"   |
| L1          | 4 13/16" | 7 1/4"   |
| L2          | 3 1/4"   | 5"       |
| Part Number | 602-326  | 602-334  |
| Code        | 37059740 | 37059741 |

P Trap (w/ Cleanout)



| Dimensions  |          |           |
|-------------|----------|-----------|
| Size        | 2"       | 1 1/2"    |
| D1          | 5 1/3    | 1.3/8"    |
| L2          | 2 1/3    | 3"        |
| Part Number | 602-383  | 602-375   |
| Code        | 37059764 | 300006012 |

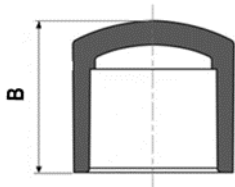
P Trap (With union)



| Dimensions  |          |          |
|-------------|----------|----------|
| Size        | 1 1/2"   | 2"       |
| D1          | 1 3/8"   | 2 1/4"   |
| D2          | 3 5/8"   | 4 5/8"   |
| L1          | 4 7/16"  | 6 1/2"   |
| L2          | 3 1/4"   | 5"       |
| Part Number | 602-409  | 602-417  |
| Code        | 37059742 | 37059743 |

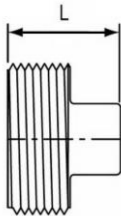
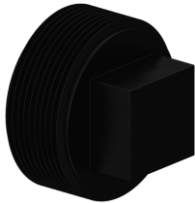


Cap



| Dimensions  |          |          |          |          |
|-------------|----------|----------|----------|----------|
| Size        | 1 1/2"   | 2"       | 3"       | 4"       |
| B           | 7/8"     | 3 1/32"  | 1 23/32" | 2"       |
| Part Number | 602-540  | 602-557  | 602-565  | 602-573  |
| Code        | 37059676 | 37059677 | 37059678 | 37059679 |

Plug



| Dimensions  |          |          |          |          |
|-------------|----------|----------|----------|----------|
| Size        | 1 1/2"   | 2"       | 3"       | 4"       |
| L           | 1 3/8"   | 1 3/8"   | 1 3/4"   | 1 7/8"   |
| Part Number | 602-714  | 602-722  | 602-730  | 602-748  |
| Code        | 37059736 | 37059737 | 37059738 | 37059739 |

