

# CPVC PIPE AND FITTING(ASTM D2846)

## PRODUCT INTRODUCTION

Chlorinated polyvinyl chloride (CPVC) is a unique polymer after polyvinyl chloride chlorination. Ordinary PVC molecular chlorine content is 45%, the chlorinated polyvinyl chloride (CPVC) molecules chlorine content is about 64% to 68%, up to more than 70%. CPVC tensile capacity is higher than the UPVC, PP, PP－B, PP－R H, PB, HDPE, PE, PE－X RT, etc.; its thermal expansion coefficientis
lower than the PP, PE, PB; thermal conductivity is lower than that of PP, PE, PB and metal pipe; the temperature resistance and resitance to deformation ability is better than that of PP, UPVC, ABS and HDPE.
CPVC pipes are designed in copper tube size from 1/2" to 2”, with two kinds of standards dimensional ratios－SDR-11 and SDR-13.5. The fittings are designed with standard SDR-11. SDR13.5 pipe match the standard ASTM F442. The specification of those products,which covers requirements, test methods, and methods of marking for components made in one standard dimension ratio and intended for water service, can match the standard ASTM D2846.

## FEATURES OF PRODUCT

- **Safety and Health:**
  The extremely low rate of harmful bacteria breeding is superior to drinking water hygiene standard designed by both the World Health Organization and the People's Republic of China Ministry of health. Thereby it was recommended for medical system.
- **Flame Retardant:**
  Limited oxygen index of CPVC material is 60%. The minimum ignition temperature is 482℃. No dropping fire, very low smoke rate and no poisonous gas.
- **Corrosion Resistant:**
  CPVC material has strong resistance to acid and alkali, which can be used for delivering liquid of HCL and NaOH.
- **Low Thermal Expansion Coefficient:**
  CPVC material has low coefficient of thermal expansion. Expansion loop length is 16 feet, under the condition of 100F temperature change and 20' holding
- **Anti Ultraviolet:**
  The ultraviolet rays will not cause breakage of polymer chains structure.
- **Long Service Life:**
  CPVC material has strong antioxidant and aging resistance performance than other material in utilization.

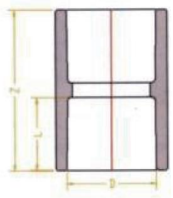
## FIELDS OF APPLICATION

Hot and cold water applications in homes, apartments, hotels, resorts, hospitals, high and low rising buildings, corporate and commercial houses, academic institutes etc

Piping networks for pure water and medicament in pharmaceutical factory

Piping networks for beverage, dairy and drinking water supply

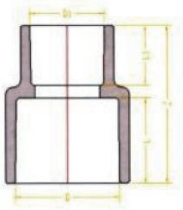




## A030101 Coupling

| Size | D | L | Z |
|---|---|---|---|
| 1/2" | 15. 9 | 12. 8 | 28. 6 |
| 3/4" | 22. 2 | 17.9 | 39 |
| 1" | 28. 6 | 23 | 49 |
| 1-1/4" | 34.9 | 28.1 | 59.2 |
| 1-1/2" | 41.3 | 33.2 | 69.4 |
| 2" | 54 | 43.3 | 90 |

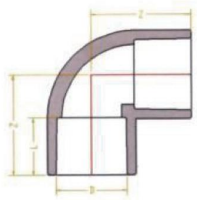




## A030102 Reducing Couping

| Size | D | D1 | L | L1 | Z |
|---|---|---|---|---|---|
| 3/4x1/2" | 22.2 | 15.9 | 17.9 | 12.8 | 33.8 |
| 1"x3/4" | 28.6 | 22.2 | 23 | 17.9 | 44 |
| 1"x1/2" | 28.6 | 15.9 | 23 | 12.8 | 36 |
| 1-1/4"x1" | 34.9 | 28.6 | 28.1 | 23 | 54.2 |
| 1-1/4"x3/4" | 34.9 | 22.2 | 28.1 | 17.9 | 49 |
| 1-1/2"x1-1/4" | 41.3 | 34.9 | 33.2 | 28.1 | 64. 5 |
| 1-1/2"x1" | 41.3 | 28. 6 | 33.2 | 23 | 59.5 |
| 2"x1-1/2" | 54 | 41.3 | 43.3 | 33.2 | 79.5 |
| 2"x1-1/4" | 54 | 34.9 | 43.3 | 28.1 | 74.5 |

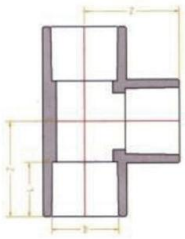




## A030103 90° Elbow

| Size (mm) | D (mm) | L (mm) | Z (mm) |
|---|---|---|---|
| 1/2" | 15.9 | 12.8 | 22.8 |
| 3/4" | 22.2 | 17.9 | 31.1 |
| 1" | 28.6 | 23 | 39.3 |
| 1-1/4" | 34. 9 | 28. 1 | 47.5 |
| 1-1/2" | 41.3 | 33.2 | 55. 7 |
| 2" | 54 | 43.3 | 72. 4 |
| 3/4x1/2" | 22.2 | 17.9 | 27 |

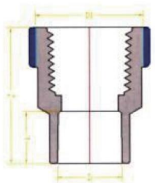




## A030104 Tee

| Size | D | L | Z |
|---|---|---|---|
| 1/2" | 15.9 | 12.8 | 22.8 |
| 3/4" | 22.2 | 17.9 | 31.1 |
| 1" | 28.6 | 23 | 39.3 |
| 1-1/4" | 34.9 | 28.1 | 47.5 |
| 1-1/2" | 41.3 | 33.2 | 55.7 |
| 2" | 54 | 43.3 | 72.4 |

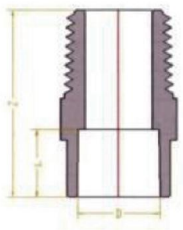




## A030105 Female Adapter

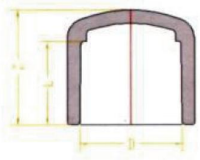
| Size | D | D1 | L | Z |
|---|---|---|---|---|
| 1/2" | 15.9 | 27 | 12.8 | 34 |
| 3/4" | 22.2 | 32.5 | 17.9 | 40 |
| 1" | 28. 6 | 39.1 | 23 | 49 |
| 1-1/4" | 34.9 | 49 | 28.1 | 54 |
| 1-1/2" | 41.3 | 55 | 33.2 | 61 |
| 2" | 54 | 70 | 43.3 | 73.5 |





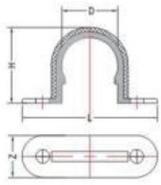
## A030106 Male Adapter

| Size | D | L | Z |
|---|---|---|---|
| 1/2" | 15.9 | 12.8 | 36 |
| 3/4" | 22.2 | 17.9 | 41. 5 |
| 1" | 28.6 | 23 | 50.2 |
| 1-1/4" | 34.9 | 28.1 | 56 |
| 1-1/2" | 41.3 | 33.2 | 61 |
| 2" | 54 | 43.3 | 73.5 |
| 3/4x1/2 | 22.2 | 17.9 | 41.5 |

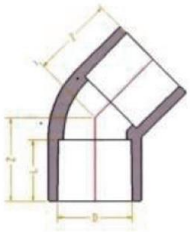
## A030107 End Cap

| Size | D | L | Z |
|---|---|---|---|
| 1/2" | 15.9 | 12. 8 | 18 |
| 3/4" | 22.2 | 17.9 | 24 |
| 1" | 28. 6 | 23 | 29 |
| 1-1/4" | 34.9 | 28.1 | 35 |
| 1-1/2" | 41.3 | 33.2 | 40 |
| 2" | 54 | 43.3 | 53 |

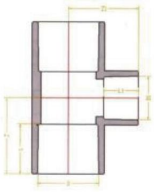
## A030108 Clip

| Size | D | L | Z | H |
|---|---|---|---|---|
| 1/2" | 15.9 | 37.9 | 11.9 | 21. 5 |
| 3/4" | 22.2 | 45. 7 | 11.9 | 28. 5 |
| 1" | 28. 6 | 54.2 | 12.1 | 35.2 |
| 1-1/4" | 34. 9 | 70.2 | 14.3 | 42.2 |
| 1-1/2" | 41.3 | 84 | 15.5 | 50.3 |
| 2" | 54 | 94 | 15.7 | 64. 7 |

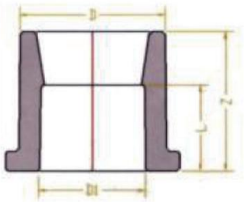
## A030109 45° Elbow

| Size | D | L | Z |
|---|---|---|---|
| 1/2" | 15.9 | 12.8 | 17.8 |
| 3/4" | 22.2 | 17.9 | 24.2 |
| 1" | 28.6 | 23 | 30.5 |
| 1-1/4" | 34.9 | 28.1 | 37 |
| 1-1/2" | 41.3 | 33.2 | 43.2 |
| 2" | 54 | 43.3 | 56.3 |

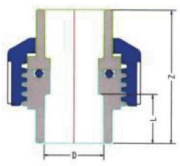
## A030110 Reducing Tee

| Size | D | D1 | L | L1 | Z | Z1 |
|---|---|---|---|---|---|---|
| 3/4"x1/2" | 22.2 | 15.9 | 17.9 | 12.8 | 28 | 26 |
| 1"x3/4" | 28.6 | 22.2 | 23 | 17.9 | 36.2 | 34.5 |
| 1"x1/2" | 28.6 | 15.9 | 23 | 12.8 | 33 | 39.2 |
| 1-1/4"x1" | 34.9 | 28.6 | 28.1 | 23 | 44.5 | 42.5 |
| 1-1/4"x3/4" | 34.9 | 22.2 | 28.1 | 17.9 | 40.7 | 37.9 |
| 1-1/2*x1- | 41.3 | 34.9 | 33.2 | 28.1 | 52.6 | 50.5 |
| 1-1/2"x1" | 41.3 | 28.6 | 33.2 | 23 | 49.5 | 45.5 |
| 2"x1-1/2" | 54 | 41.3 | 43.3 | 33.2 | 66.3 | 61.8 |
| 2"x1-1/4" | 54 | 34.9 | 43.3 | 28.1 | 63.2 | 56.7 |

## A030111 Reducing Bushing

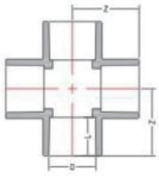
| Size (mm) | D | D1 | L | Z |
|---|---|---|---|---|
| 3/4"X1/2" | 22.2 | 15.9 | 17.9 | 21 |
| 1"x1/2" | 28.6 | 15. 9 | 23 | 26.2 |
| 1"X3/4" | 28. 6 | 22.2 | 23 | 26.2 |
| 1-1/4"X1/2" | 34.9 | 15. 9 | 17.9 | 32.2 |
| 1-1/4"X3/4" | 34. 9 | 22.2 | 23 | 32.2 |
| 1-1/4"X1" | 34.9 | 28. 6 | 28.1 | 32.2 |
| 1-12X1/2" | 41.3 | 15. 9 | 17.9 | 37.7 |
| 1-1/2X3/4" | 41.3 | 22.2 | 23 | 37.7 |
| 1-1/2X1" | 41.3 | 28.6 | 28.1 | 37.7 |
| 1-1/2x1-1/4" | 41.3 | 34.9 | 33.2 | 37.7 |
| 2"x1/2" | 54 | 15. 9 | 17.9 | 48 |
| 2"X3/4" | 54 | 22.2 | 23 | 48 |
| 2"x1" | 54 | 28.6 | 28.1 | 48 |
| 2x1-1/4" | 54 | 34.9 | 33.2 | 48 |
| 2X1-1/2" | 54 | 41.3 | 43.3 | 48 |

## A030112 Union

| Size | D | L | Z |
|---|---|---|---|
| 1/2" | 15. 9 | 12.8 | 35.5 |
| 3/4" | 22.2 | 17.9 | 46.5 |
| 1" | 28. 6 | 23 | 59 |
| 1-1/4" | 34.9 | 28.1 | 72 |
| 1-1/2" | 41.3 | 33.2 | 80 |
| 2" | 54 | 43.3 | 102 |

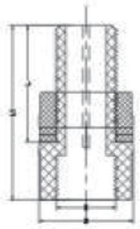




## A030113 Cross Tee

| Size | D | L | Z |
|---|---|---|---|
| 1/2" | 15.9 | 12.8 | 22.8 |
| 3/4" | 22.2 | 17.9 | 31.1 |
| 1" | 28. 6 | 23 | 39.3 |
| 1-1/4" | 34.9 | 28.1 | 42.2 |
| 1-1/2" | 41.3 | 33.2 | 50.2 |
| 2" | 54 | 43.3 | 72.4 |

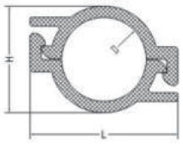




## A030114 Tank Coulpling

| Size | M | D | L | L1 |
|---|---|---|---|---|
| 1/2" | 1/2" | 35.5 | 50 | 73.8 |
| 3/4" | 3/4" | 40 | 50 | 74.8 |
| 1" | 1" | 40 | 50 | 78 |
| 1-1/4" | 1-1/4" | 52 | 63.2 | 91.2 |
| 1-1/2" | 1-1/2" | 60 | 63.2 | 92.2 |
| 2" | 2" | 72 | 63.2 | 93.2 |

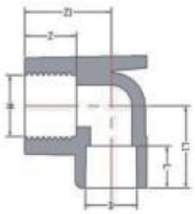




## A030115 Repairing coupling

| Size | D (mm) | L (mm) | H (mm) |
|---|---|---|---|
| 1/2" | 15. 9 | 29 | 21.2 |
| 3/4" | 22.2 | 39 | 28 |
| 1" | 28. 6 | 46.5 | 34.7 |

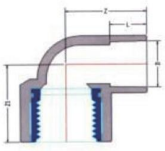




## A030116 90° Ear Elbow

| Size | D | L | L1 | Z | Z1 | M |
|---|---|---|---|---|---|---|
| 1/2" | 15.9 | 12.8 | 25.5 | 16 | 27 | 1/2" |

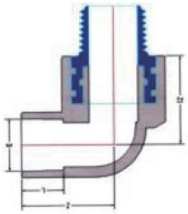




## A030117 90° Female Elbow

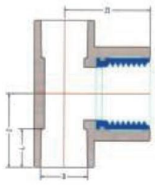
| Size | D | L | Z | Z1 |
|---|---|---|---|---|
| 1/2"x1/2" | 15.9 | 12.8 | 25 | 29.5 |
| 3/4"x3/4" | 22.2 | 17.9 | 34 | 32.7 |
| 3/4"x1/2" | 22.2 | 17.9 | 34 | 32.7 |
| 1"x1/2" | 28.6 | 23 | 36 | 36.5 |
| 1"x1" | 28.6 | 23 | 43.5 | 41 |





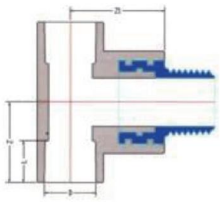
## A030118 Male elbow

| Size | D | L | Z | Z1 |
|---|---|---|---|---|
| 1/2"x1/2" | 15. 9 | 12.8 | 25 | 29.5 |
| 3/4"x3/4" | 22.2 | 17.9 | 34 | 32.7 |
| 3/4"x1/2" | 22.2 | 17.9 | 34 | 32.7 |
| 1"x1/2" | 28. 6 | 23 | 36 | 36.5 |
| 1"x1" | | | | |

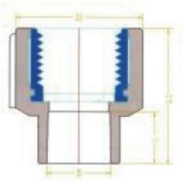
## A030119 Female Tee

| Size | D | L | Z | Z1 |
|---|---|---|---|---|
| 1/2"x1/2" | 15.9 | 12.8 | 25 | 29.5 |
| 3/4"x1/2" | 22.2 | 17.9 | 34 | 32.7 |
| 1"x1/2" | 28.6 | 23 | 36 | 36.5 |

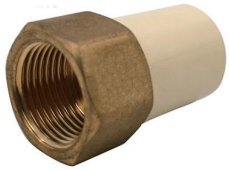
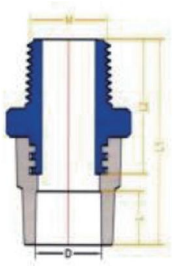
## A030120 Male Tee

| Size (mm) | D (mm) | U (mm) | Z (mm) | Z1 (mm) |
|---|---|---|---|---|
| 1/2"x1/2" | 15.9 | 12. 8 | 25 | 29.5 |
| 3/4"x1/2" | 22.2 | 17.9 | 34 | 32. 7 |
| 1"x1/2" | 28. 6 | 23 | 36 | 36.5 |

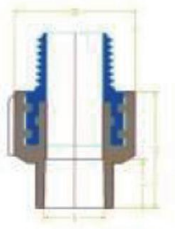
## A030121 Female Adapter

| Size | D | D1 | L | L1 |
|---|---|---|---|---|
| 1/2" | 15.9 | 15.9 | 17.9 | 31 |
| 3/4" | 22.2 | 22.2 | 23 | 38.5 |
| 1" | 28.6 | 15.9 | 23 | 46.5 |
| 3/4"x1/2" | 22.2 | 15.9 | 23 | 36.5 |
| 1"x1/2" | 28. 6 | 15.9 | 23 | 41.5 |

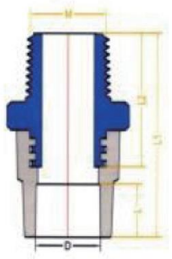
## A030122 Female Coupling

| Size | D | L | L1 | L2 | M |
|---|---|---|---|---|---|
| 1/2” | 15.9 | 12.8 | 50.5 | 33 | 1/2" |
| 3/4" | 12.8 | 17.9 | 55 | 33 | 3/4" |
| 1” | 28.6 | 23 | 68 | 38 | 1" |
| 1-1/4" | 34.9 | 28.1 | 79 | 43.8 | 1-1/4" |
| 1-1/2” | 34.9 | 33.2 | 85 | 46.8 | 1-1/2" |
| 2” | 54 | 43.3 | 100 | 54 | 2" |
| 3/4"x1/2" | 22.2 | 17.9 | 53 | 33 | 1/2" |
| 1"X3/4" | 28.6 | 23 | 59 | 33 | 3/4" |
| 1-1/4"x1" | 34.9 | 28. 1 | 72 | 38 | 1" |

## A030123 Male Coupling

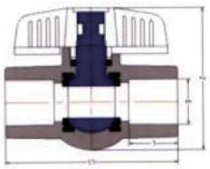
| Size (mm) | D (mm) | D1 (mm) | L (mm) | L1 (mm) |
|---|---|---|---|---|
| 1/2" | 15.9 | 15.9 | 17.9 | 31 |
| 3/4" | 22.2 | 22.2 | 23 | 38.5 |
| 1" | 28.6 | 15.9 | 23 | 46.5 |
| 3/4"x1/2" | 22.2 | 15.9 | 23 | 36.5 |

## A030124 Male Coupling

| Size | D | L | L1 | L2 | M |
|---|---|---|---|---|---|
| 1/2” | 15.9 | 12.8 | 50.5 | 33 | 1/2” |
| 3/4" | 12. 8 | 17.9 | 55 | 33 | 3/4" |
| 1" | 28.6 | 23 | 68 | 38 | 1" |
| 36895 | 34.9 | 28.1 | 79 | 43.8 | 1-1/4" |
| 1-1/2" | 34.9 | 33.2 | 85 | 46.8 | 1-1/2" |
| 2" | 54 | 43.3 | 1 00 | 54 | 2" |
| 3/4"x1/2 | 22.2 | 17.9 | 53 | 33 | 1/2" |
| 1"x3/4" | 28. 6 | 23 | 59 | 33 | 3/4" |
| 1-1/4"x1" | 34.9 | 28.1 | 72 | 38 | 1" |

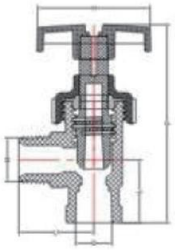




## A0301V01 UPVC D 2846 Compact Ball Valves

| Size | D | L | L1 | Z |
|---|---|---|---|---|
| 1/2" | 15. 9 | 13 | 68 | 55 |
| 3/4" | 22.2 | 18 | 80 | 66. 5 |
| 1" | 28. 6 | 23 | 93.5 | 81 |
| 1-1/4" | 34.9 | 28.5 | 104 | 89 |
| 1-1/2" | 41.3 | 33.5 | 115 | 97.5 |
| 2" | 54 | 43.5 | 126 | 120 |

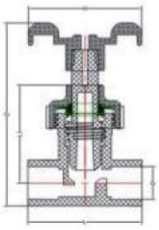




## A0301V02 PVC Angle Valve

| Size | D | L | L1 | Z | H | M |
|---|---|---|---|---|---|---|
| 1/2" | 15.9 | 27.7 | 33.3 | 87 | 50.3 | 1/2" |

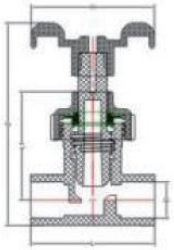




## A0301V03 Angle Valve

| Size | D | L | L1 | Z | H |
|---|---|---|---|---|---|
| 1/2” | 15.9 | 54.6 | 47.5 | 88.5 | 54.0 |





## A0301V04 UPVC Angle Valve

| Size | M | L | D | L1 | L2 |
|---|---|---|---|---|---|
| 1/2" | 1/2" | 16. 5 | 15. 72 | 13.3 | 57.9 |