

## PVC PIPE



## ● Unplasticized Polyvinyl Chloride Pipes

VP JIS K6741

VU JIS K6741

## ●VP (JIS K6741) Pipe

Unit:mm

| Nominal Size (mm) | Identification | Outer diameter       |                     |                   | Thickness      |           | Approximate Inner diameter | Length | Calculated Weight (kg/m) | HI-VP PIPE |
|-------------------|----------------|----------------------|---------------------|-------------------|----------------|-----------|----------------------------|--------|--------------------------|------------|
|                   |                | Basic Dimension (mm) | Max. Min. Tolerance | Average Tolerance | Min. Dimension | Tolerance |                            |        |                          |            |
| 13                | VP 13          | 18                   | ±0.2                | ±0.2              | 2.2            | ±0.6      | 13                         | 4,000  | 0.174                    | ●          |
| 16                | VP 16          | 22                   | ±0.2                | ±0.2              | 2.7            | ±0.6      | 16                         | 4,000  | 0.256                    | ●          |
| 20                | VP 20          | 26                   | ±0.2                | ±0.2              | 2.7            | ±0.6      | 20                         | 4,000  | 0.310                    | ●          |
| 25                | VP 25          | 32                   | ±0.2                | ±0.2              | 3.1            | ±0.8      | 25                         | 4,000  | 0.448                    | ●          |
| 30                | VP 30          | 38                   | ±0.3                | ±0.2              | 3.1            | ±0.8      | 31                         | 4,000  | 0.542                    | ●          |
| 40                | VP 40          | 48                   | ±0.3                | ±0.2              | 3.6            | ±0.8      | 40                         | 4,000  | 0.791                    | ●          |
| 50                | VP 50          | 60                   | ±0.4                | ±0.2              | 4.1            | ±0.8      | 51                         | 4,000  | 1.122                    | ●          |
| 65                | VP 65          | 76                   | ±0.5                | ±0.3              | 4.1            | ±0.8      | 67                         | 4,000  | 1.445                    | ●          |
| 75                | VP 75          | 89                   | ±0.5                | ±0.3              | 5.5            | ±0.8      | 77                         | 4,000  | 2.202                    | ●          |
| 100               | VP100          | 114                  | ±0.6                | ±0.4              | 6.6            | ±1.0      | 100                        | 4,000  | 3.409                    | ●          |
| 125               | VP125          | 140                  | ±0.8                | ±0.5              | 7.0            | ±1.0      | 125                        | 4,000  | 4.464                    | ●          |
| 150               | VP150          | 165                  | ±1.0                | ±0.5              | 8.9            | ±1.4      | 146                        | 4,000  | 6.701                    | ●          |
| 200               | VP200          | 216                  | ±1.3                | ±0.7              | 10.3           | ±1.4      | 194                        | 4,000  | 10.129                   | ●          |
| 250               | VP250          | 267                  | ±1.6                | ±0.9              | 12.7           | ±1.8      | 240                        | 4,000  | 15.481                   | ●          |
| 300               | VP300          | 318                  | ±1.9                | ±1.0              | 15.1           | ±2.2      | 286                        | 4,000  | 21.962                   | ●          |
| 350               | VM350          | 370                  |                     | ±1.2              | 14.3           | ±2.0      | 339                        | 4,000  | 24.378                   | —          |
| 400               | VM400          | 420                  |                     | ±1.3              | 16.2           | ±2.2      | 385                        | 4,000  | 31.294                   | —          |



VP-Straight Pipe



HI-VP-Straight Pipe

## ●VU (JIS K6741) Pipe

Unit:mm

| Nominal Size (mm) | Identification | Outer diameter       |                   | Thickness      |           | Approximate Inner diameter | Length | Calculated Weight (kg/m) |
|-------------------|----------------|----------------------|-------------------|----------------|-----------|----------------------------|--------|--------------------------|
|                   |                | Basic Dimension (mm) | Average Tolerance | Min. Dimension | Tolerance |                            |        |                          |
| 40                | VU 40          | 48                   | ±0.2              | 1.8            | ±0.4      | 44                         | 4,000  | 0.413                    |
| 50                | VU 50          | 60                   | ±0.2              | 1.8            | ±0.4      | 56                         | 4,000  | 0.521                    |
| 65                | VU 65          | 76                   | ±0.3              | 2.2            | ±0.6      | 71                         | 4,000  | 0.825                    |
| 75                | VU 75          | 89                   | ±0.3              | 2.7            | ±0.6      | 83                         | 4,000  | 1.159                    |
| 100               | VU100          | 114                  | ±0.4              | 3.1            | ±0.8      | 107                        | 4,000  | 1.737                    |
| 125               | VU125          | 140                  | ±0.5              | 4.1            | ±0.8      | 131                        | 4,000  | 2.739                    |
| 150               | VU150          | 165                  | ±0.5              | 5.1            | ±0.8      | 154                        | 4,000  | 3.941                    |
| 200               | VU200          | 216                  | ±0.7              | 6.5            | ±1.0      | 202                        | 4,000  | 6.572                    |
| 250               | VU250          | 267                  | ±0.9              | 7.8            | ±1.2      | 250                        | 4,000  | 9.758                    |
| 300               | VU300          | 318                  | ±1.0              | 9.2            | ±1.4      | 298                        | 4,000  | 13.701                   |
| 350               | VU350          | 370                  | ±1.2              | 10.5           | ±1.4      | 348                        | 4,000  | 18.051                   |
| 400               | VU400          | 420                  | ±1.3              | 11.8           | ±1.6      | 395                        | 4,000  | 23.059                   |
| 450               | VU450          | 470                  | ±1.5              | 13.2           | ±1.8      | 442                        | 4,000  | 28.875                   |
| 500               | VU500          | 520                  | ±1.6              | 14.6           | ±2.0      | 489                        | 4,000  | 35.346                   |

## Notes:

- 1.The maximum outer diameter (minimum outer diameter) is the largest(smallest) of outer diameter measurement at a location.
- 2.The average outer diameter is the average for outer diameter measurements made in a direction other than two parallel directions or a circumference measurement divided by 3.142.
- 3.The mass per unit length (m) in the table, which was calculated using a specific gravity of 1.43, is only for information, not part of the standards.
- 4.The length tolerance is  $\pm 10$ mm.
- 5.Pipe VM350 400mm long conforms to the AS24 standard.
- 6.Pipe HI-VP conform to the JIS K6742 standard.

※ Water Pipes (JIS K6742) are available.



Single-adhesion receptacle straight Pipe



Single-rubber ring receptacle straight Pipe

# TS FITTINGS

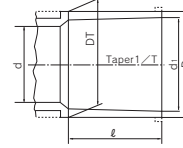
## ● TS FITTING(JIS K6743) (PVC: 13 to 150mm, HI-PVC: 13 to 150mm)



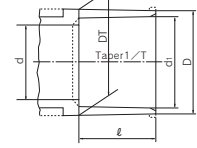
### SPECIFICATIONS

|                                       |      |                |
|---------------------------------------|------|----------------|
| Elbow                                 | (L)  | 13 - 150mm     |
| Tee                                   | (T)  | 13 - 150×125mm |
| Water Feeding Elbow                   | (FL) | 13 - 25mm      |
| Metal-containing Water Feeding Elbow  |      | 13 - 25mm      |
| Water Feeding Socket                  | (FS) | 13 - 25mm      |
| Metal-containing Water Feeding Socket |      | 13 - 25mm      |
| Water Feeding Tee                     | (FT) | 13 - 25×20mm   |
| Metal-containing Water Feeding Tee    |      | 13 - 25×20mm   |
| Valve Socket                          | (VS) | 13 - 150mm     |
| Union Socket                          | (US) | 13 - 50mm      |
| Socket                                | (S)  | 13 - 150×125mm |
| Cap                                   | (C)  | 13 - 150mm     |

Normal Size 13mm~50mm



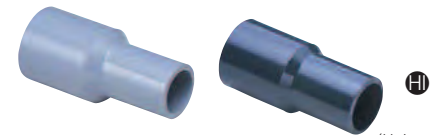
Normal Size 65mm~150mm



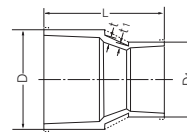
| (Unit:mm)    |        |               |                          |      |       |       |                 |        |        |
|--------------|--------|---------------|--------------------------|------|-------|-------|-----------------|--------|--------|
| Nominal Size | d1     | d1(Tolerance) | $\epsilon^{+0.5}_{-0.5}$ | 1/T  | D     | DT    | D,DT(Tolerance) | d(Min) | P,PeOD |
| ※10          | 15.40  | ±0.20         | 22.0                     | 1/25 | 21.0  | 21.0  | -0.5            | 10     | 15     |
| 13           | 18.40  | ±0.20         | 26.0                     | 1/30 | 24.0  | 24.0  | -0.6            | 13     | 18     |
| 16           | 22.40  | ±0.20         | 30.0                     | 1/34 | 29.0  | 29.0  | -0.7            | 16     | 22     |
| 20           | 26.45  | ±0.20         | 35.0                     | 1/34 | 33.0  | 33.0  | -0.8            | 20     | 26     |
| 25           | 32.55  | ±0.25         | 40.0                     | 1/34 | 40.0  | 40.0  | -1.0            | 25     | 32     |
| 30           | 38.60  | ±0.25         | 44.0                     | 1/34 | 46.0  | 46.0  | -1.0            | 31     | 38     |
| 40           | 48.70  | ±0.30         | 55.0                     | 1/37 | 57.0  | 57.0  | -1.2            | 40     | 48     |
| 50           | 60.80  | ±0.30         | 63.0                     | 1/37 | 70.0  | 70.0  | -1.5            | 51     | 60     |
| ※65          | 76.60  | ±0.30         | 61.0                     | 1/48 | 87.0  | 88.5  | -1.5            | 67     | 76     |
| 75           | 89.60  | ±0.30         | 64.0                     | 1/49 | 102.0 | 104.5 | -1.5            | 77     | 89     |
| 100          | 114.70 | ±0.30         | 84.0                     | 1/56 | 130.0 | 133.5 | -1.8            | 100    | 114    |
| ※125         | 140.80 | ±0.30         | 104.0                    | 1/58 | 157.0 | 161.0 | -1.8            | 125    | 140    |
| 150          | 166.00 | ±0.40         | 132.0                    | 1/63 | 186.0 | 190.0 | -2.0            | 146    | 165    |

※AS-Standard

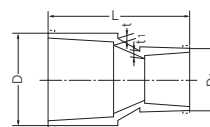
## ● Reducing Socket



Normal Size 13mm~50mm



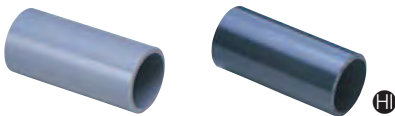
Normal Size 65mm~150mm



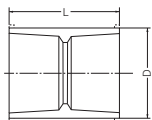
| Nominal Size | D     | t    | D <sub>1</sub> | t <sub>1</sub> | L ±4.0 | HI |
|--------------|-------|------|----------------|----------------|--------|----|
| 16×13        | 29.0  | 3.5  | 24.0           | 3.0            | 61     | ●  |
| 20×13        | 33.0  | 3.5  | 24.0           | 3.0            | 68     | ●  |
| 20×16        | 33.0  | 3.5  | 29.0           | 3.5            | 71     | ●  |
| 25×13        | 40.0  | 4.0  | 24.0           | 3.0            | 86     | ●  |
| 25×16        | 40.0  | 4.0  | 29.0           | 3.5            | 85     | ●  |
| 25×20        | 40.0  | 4.0  | 33.0           | 3.5            | 84     | ●  |
| 30×20        | 46.0  | 4.0  | 33.0           | 3.5            | 93     | ●  |
| 30×25        | 46.0  | 4.0  | 40.0           | 4.0            | 93     | ●  |
| ※40×20       | 57.0  | 4.5  | 33.0           | 3.5            | 113    | ●  |
| 40×25        | 57.0  | 4.5  | 40.0           | 4.0            | 114    | ●  |
| 40×30        | 57.0  | 4.5  | 46.0           | 4.0            | 114    | ●  |
| ※50×20       | 70.0  | 5.0  | 33.0           | 3.5            | 116    | ●  |
| ※50×25       | 70.0  | 5.0  | 40.0           | 4.0            | 140    | ●  |
| 50×30        | 70.0  | 5.0  | 46.0           | 4.0            | 136    | ●  |
| 50×40        | 70.0  | 5.0  | 57.0           | 4.5            | 136    | ●  |
| ※65×40       | 87.0  | 6.6  | 57.0           | 4.5            | 145    | ●  |
| ※65×50       | 87.0  | 6.6  | 70.0           | 5.0            | 149    | ●  |
| ※75×40       | 102.0 | 8.0  | 57.0           | 5.0            | 153    | ●  |
| 75×50        | 102.0 | 8.0  | 70.0           | 5.0            | 165    | ●  |
| ※75×65       | 102.0 | 8.0  | 87.0           | 6.6            | 159    | ●  |
| 100×75       | 130.0 | 10.0 | 102.0          | 8.0            | 190    | ●  |
| ※125×100     | 157.0 | 11.0 | 130.0          | 10.0           | 229    | ●  |
| 150×100      | 186.0 | 13.0 | 130.0          | 10.0           | 295    | ●  |
| ※150×125     | 186.0 | 13.0 | 157.0          | 11.0           | 272    | ●  |

※AS-Standard

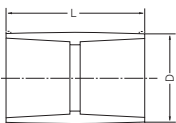
## ● Socket



Normal Size 13mm~50mm



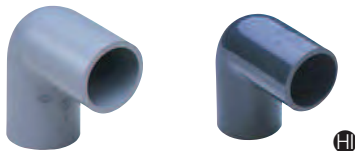
Normal Size 65mm~150mm



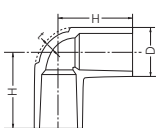
| Nominal Size | D     | L ±4.0 | HI |
|--------------|-------|--------|----|
| 13           | 24.0  | 57     | ●  |
| 16           | 29.0  | 67     | ●  |
| 20           | 33.0  | 77     | ●  |
| 25           | 40.0  | 87     | ●  |
| 30           | 46.0  | 95     | ●  |
| 40           | 57.0  | 117    | ●  |
| 50           | 70.0  | 133    | ●  |
| ※65          | 87.0  | 145    | ●  |
| 75           | 102.0 | 155    | ●  |
| 100          | 130.0 | 200    | ●  |
| ※125         | 157.0 | 240    | ●  |
| 150          | 186.0 | 300    | ●  |

※AS-Standard

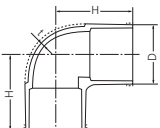
## ● Elbow



Normal Size 13mm~50mm

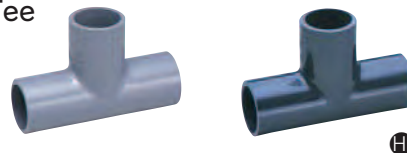


Normal Size 65mm~150mm

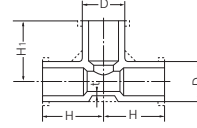


| Nominal Size | D     | t    | H <sup>+5.0</sup> <sub>-1.0</sub> | HI |
|--------------|-------|------|-----------------------------------|----|
| 13           | 24.0  | 3.0  | 36                                | ●  |
| 16           | 29.0  | 3.5  | 43                                | ●  |
| 20           | 33.0  | 3.5  | 50                                | ●  |
| 25           | 40.0  | 4.0  | 58                                | ●  |
| 30           | 46.0  | 4.0  | 65                                | ●  |
| 40           | 57.0  | 4.5  | 82                                | ●  |
| 50           | 70.0  | 5.0  | 96                                | ●  |
| ※65          | 87.0  | 6.6  | 110                               | ●  |
| ※75          | 102.0 | 8.0  | 120                               | ●  |
| ※100         | 130.0 | 10.0 | 153                               | ●  |
| ※125         | 157.0 | 11.0 | 188                               | ●  |
| ※150         | 186.0 | 13.0 | 230                               | ●  |

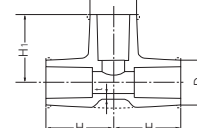
## ● Tee



Normal Size 13mm~50mm

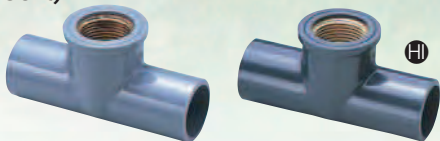


Normal Size 65mm~150mm



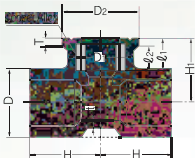
| Nominal Size | D     | t    | H <sup>+5.0</sup> <sub>-1.0</sub> | H <sub>1</sub> | HI |
|--------------|-------|------|-----------------------------------|----------------|----|
| 13           | 24.0  | 3.0  | 36                                | 36             | ●  |
| 16           | 29.0  | 3.5  | 43                                | 43             | ●  |
| 20           | 33.0  | 3.5  | 50                                | 50             | ●  |
| 25           | 40.0  | 4.0  | 58                                | 58             | ●  |
| 30           | 46.0  | 4.0  | 65                                | 65             | ●  |
| 40           | 57.0  | 4.5  | 82                                | 82             | ●  |
| 50           | 70.0  | 5.0  | 96                                | 96             | ●  |
| ※65          | 87.0  | 6.6  | 110                               | 110            | ●  |
| 75           | 102.0 | 8.0  | 120                               | 120            | ●  |
| 100          | 130.0 | 10.0 | 152                               | 152            | ●  |
| ※125         | 157.0 | 11.0 | 187                               | 187            | ●  |
| 150          | 186.0 | 13.0 | 230                               | 230            | ●  |

## TS FITTINGS

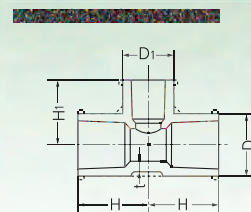
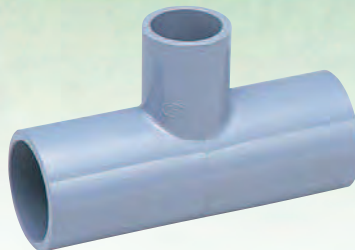
● Faucet Tee  
(with Metal Insert)

(Unit:mm)

| Nominal Size | D    | t   | D <sub>1</sub> | D <sub>2</sub> | ℓ <sub>1</sub> <sup>+5.0</sup> <sub>-1.0</sub> | ℓ <sub>2</sub> <sup>+5.0</sup> <sub>-1.0</sub> | T | H <sub>1</sub> <sup>+5.0</sup> <sub>-1.0</sub> | H <sub>1</sub> <sup>-5.0</sup> <sub>-1.0</sub> | Female THD Size | HI |
|--------------|------|-----|----------------|----------------|--|--|---|--|--|-----------------|----|
| 13           | 24.0 | 3.0 | 30             | 34             | 17   | 14   | 4 | 38   | 29   | Rp1/2           | ●  |
| 20           | 33.0 | 3.5 | 37             | 42             | 19   | 16   | 4 | 51   | 36   | Rp3/4           | ●  |
| 25           | 40.0 | 4.0 | 46             | 52             | 21   | 18   | 5 | 59   | 42   | Rp1             | ●  |
| 16×13        | 29.0 | 3.5 | 30             | 34             | 17   | 14   | 4 | 43   | 32   | Rp1/2           | ●  |
| 20×13        | 33.0 | 3.5 | 30             | 34             | 17   | 14   | 4 | 47   | 34   | Rp1/2           | ●  |
| 25×13        | 40.0 | 4.0 | 30             | 34             | 17   | 14   | 4 | 52   | 38   | Rp1/2           | ●  |
| 25×20        | 40.0 | 4.0 | 37             | 42             | 19   | 16   | 4 | 56   | 40   | Rp3/4           | ●  |



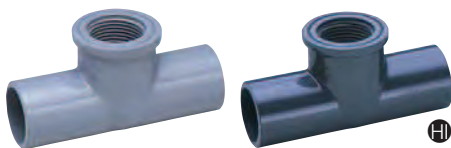
## ● Reducing Tee



(Unit:mm)

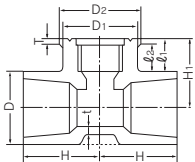
| Nominal Size | D    | t   | H  | D <sub>1</sub> | H <sub>1</sub> | HI |
|--------------|------|-----|----|----------------|----------------|----|
| 16×13        | 29.0 | 3.5 | 41 | 24.0           | 38             | ●  |
| 20×13        | 33.0 | 3.5 | 46 | 24.0           | 40             | ●  |
| 20×16        | 33.0 | 3.5 | 48 | 29.0           | 45             | ●  |
| 25×13        | 40.0 | 4.0 | 51 | 24.0           | 43             | ●  |
| 25×16        | 40.0 | 4.0 | 53 | 29.0           | 48             | ●  |
| 25×20        | 40.0 | 4.0 | 55 | 33.0           | 53             | ●  |
| 30×13        | 46.0 | 4.0 | 55 | 24.0           | 46             | ●  |
| 30×16        | 46.0 | 4.0 | 57 | 29.0           | 51             | ●  |
| 30×20        | 46.0 | 4.0 | 59 | 33.0           | 56             | ●  |
| 30×25        | 46.0 | 4.0 | 62 | 40.0           | 61             | ●  |
| 40×13        | 57.0 | 4.5 | 66 | 24.0           | 52             | ●  |
| 40×16        | 57.0 | 4.5 | 68 | 29.0           | 57             | ●  |
| 40×20        | 57.0 | 4.5 | 70 | 33.0           | 62             | ●  |
| 40×25        | 57.0 | 4.5 | 73 | 40.0           | 67             | ●  |
| 40×30        | 57.0 | 4.5 | 76 | 46.0           | 71             | ●  |
| 50×13        | 70.0 | 5.0 | 74 | 24.0           | 58             | ●  |
| 50×16        | 70.0 | 5.0 | 76 | 29.0           | 63             | ●  |
| 50×20        | 70.0 | 5.0 | 78 | 33.0           | 68             | ●  |
| 50×25        | 70.0 | 5.0 | 81 | 40.0           | 73             | ●  |
| 50×30        | 70.0 | 5.0 | 84 | 46.0           | 77             | ●  |
| 50×40        | 70.0 | 5.0 | 90 | 57.0           | 88             | ●  |

## ● Faucet Tee



(Unit:mm)

| Nominal Size | D    | t   | D <sub>1</sub> | D <sub>2</sub> | ℓ <sub>1</sub> <sup>+5.0</sup> <sub>-1.0</sub> | ℓ <sub>2</sub> <sup>+5.0</sup> <sub>-1.0</sub> | T | H <sub>1</sub> <sup>+5.0</sup> <sub>-1.0</sub> | H <sub>1</sub> <sup>-5.0</sup> <sub>-1.0</sub> | Female THD Size | HI |
|--------------|------|-----|----------------|----------------|--|--|---|--|--|-----------------|----|
| □13          | 24.0 | 3.0 | 30             | 34             | 17   | 14   | 4 | 38   | 29   | Rp1/2           | ●  |
| □20          | 33.0 | 3.5 | 37             | 42             | 19   | 16   | 4 | 51   | 36   | Rp3/4           | ●  |
| □25          | 40.0 | 4.0 | 46             | 52             | 21   | 18   | 5 | 59   | 42   | Rp1             | ●  |
| □16×13       | 29.0 | 3.5 | 30             | 34             | 17   | 14   | 4 | 43   | 32   | Rp1/2           | ●  |
| □20×13       | 33.0 | 3.5 | 30             | 34             | 17   | 14   | 4 | 47   | 34   | Rp1/2           | ●  |
| □25×13       | 40.0 | 4.0 | 30             | 34             | 17   | 14   | 4 | 52   | 38   | Rp1/2           | ●  |
| □25×20       | 40.0 | 4.0 | 37             | 42             | 19   | 16   | 4 | 56   | 40   | Rp3/4           | ●  |

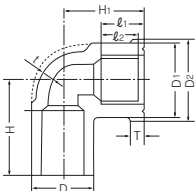


## ● Faucet Elbow



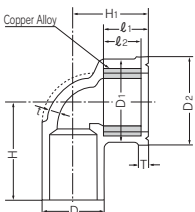
(Unit:mm)

| Nominal Size | D    | t   | D <sub>1</sub> | D <sub>2</sub> | ℓ <sub>1</sub> <sup>+5.0</sup> <sub>-1.0</sub> | ℓ <sub>2</sub> <sup>+5.0</sup> <sub>-1.0</sub> | T | H <sub>1</sub> <sup>+5.0</sup> <sub>-1.0</sub> | H <sub>1</sub> <sup>-5.0</sup> <sub>-1.0</sub> | Female THD Size | HI |
|--------------|------|-----|----------------|----------------|--|--|---|--|--|-----------------|----|
| □13          | 24.0 | 3.0 | 30             | 34             | 17   | 14   | 4 | 38   | 29   | Rp1/2           | ●  |
| □16          | 29.0 | 3.5 | 30             | 34             | 17   | 14   | 4 | 43   | 32   | Rp1/2           | ●  |
| □20          | 33.0 | 3.5 | 37             | 42             | 19   | 16   | 4 | 51   | 36   | Rp3/4           | ●  |
| □25          | 40.0 | 4.0 | 46             | 52             | 21   | 18   | 5 | 59   | 40   | Rp1             | ●  |

● Faucet Elbow  
(with Metal Insert)

(Unit:mm)

| Nominal Size | D    | t   | D <sub>1</sub> | D <sub>2</sub> | ℓ <sub>1</sub> <sup>+5.0</sup> <sub>-1.0</sub> | ℓ <sub>2</sub> <sup>+5.0</sup> <sub>-1.0</sub> | T | H <sub>1</sub> <sup>+5.0</sup> <sub>-1.0</sub> | H <sub>1</sub> <sup>-5.0</sup> <sub>-1.0</sub> | Female THD Size | HI |
|--------------|------|-----|----------------|----------------|--|--|---|--|--|-----------------|----|
| 13           | 24.0 | 3.0 | 30             | 34             | 17   | 14   | 4 | 38   | 29   | Rp1/2           | ●  |
| 16×13        | 29.0 | 3.0 | 30             | 34             | 17   | 14   | 4 | 43   | 32   | Rp1/2           | ●  |
| 20           | 33.0 | 3.5 | 37             | 42             | 19   | 16   | 4 | 51   | 36   | Rp3/4           | ●  |
| 25           | 40.0 | 4.0 | 46             | 52             | 21   | 18   | 5 | 59   | 40   | Rp1             | ●  |
| 20×13        | 33.0 | 3.5 | 30             | 34             | 17   | 14   | 4 | 47   | 33   | Rp1/2           | ●  |

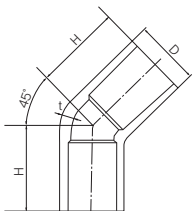


## ● 45 Elbow

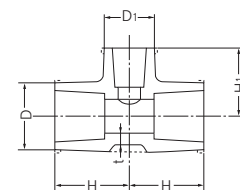


(Unit:mm)

| Nominal Size | D    | t   | H <sub>1</sub> <sup>+5.0</sup> <sub>-1.0</sub> | HI |
|--------------|------|-----|--|----|
| 20           | 33.0 | 3.5 | 44   | ●  |
| 25           | 40.0 | 4.0 | 51   | ●  |



Nomal Size 65mm~150mm



(Unit:mm)

| Nominal Size | D     | t    | H <sub>1</sub> <sup>+5.0</sup> <sub>-1.0</sub> | D <sub>1</sub> | H <sub>1</sub> <sup>+5.0</sup> <sub>-1.0</sub> | HI |
|--------------|-------|------|--|----------------|--|----|
| ※65×40       | 87.0  | 6.6  | 100  | 57.0           | 95   | ●  |
| ※65×50       | 87.0  | 6.6  | 101  | 70.0           | 104  | ●  |
| 75×25        | 102.0 | 8.0  | 93   | 40.0           | 88   | ●  |
| 75×40        | 102.0 | 8.0  | 100  | 57.0           | 102  | ●  |
| 75×50        | 102.0 | 8.0  | 105  | 70.0           | 110  | ●  |
| ※75×65       | 102.0 | 8.0  | 113  | 87.0           | 117  | ●  |
| 100×50       | 130.0 | 10.0 | 125  | 75.0           | 122  | ●  |
| 100×75       | 130.0 | 10.0 | 140  | 102.0          | 132  | ●  |
| ※125×75      | 157.0 | 11.0 | 160  | 102.0          | 147  | ●  |
| ※125×100     | 157.0 | 11.0 | 173  | 130.0          | 167  | ●  |
| 150×75       | 186.0 | 13.0 | 195  | 102.0          | 158  | ●  |
| 150×100      | 186.0 | 13.0 | 208  | 130.0          | 182  | ●  |
| ※150×125     | 186.0 | 13.0 | 217  | 157.0          | 201  | ●  |

※AS-Standard



● Faucet Socket



(Unit: mm)

| Nominal Size | D    | D <sub>1</sub> | D <sub>2</sub> | l <sub>1</sub> | l <sub>2</sub> <sup>±1.0</sup> | T | L <sup>+5.0<br/>-1.0</sup> | Female THD Size | HI |
|--------------|------|----------------|----------------|----------------|--------------------------------|---|----------------------------|-----------------|----|
| □13          | 24.0 | 30             | 34             | 17             | 14                             | 4 | 47                         | Rp1/2           | ●  |
| □16          | 29.0 | 30             | 34             | 17             | 14                             | 4 | 52                         | Rp1/2           | ●  |
| □20          | 33.0 | 37             | 42             | 19             | 16                             | 4 | 59                         | Rp3/4           | ●  |
| □25          | 40.0 | 46             | 52             | 21             | 18                             | 5 | 68                         | Rp1             | ●  |

□ASAHI AV Standard

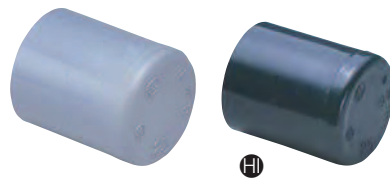
● Faucet Socket (with Metal Insert)



(Unit: mm)

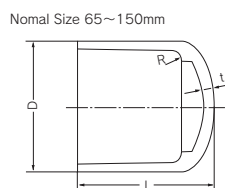
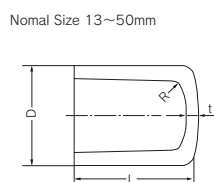
| Nominal Size | D    | D <sub>1</sub> | D <sub>2</sub> | l <sub>1</sub> | l <sub>2</sub> <sup>±1.0</sup> | T | L <sup>+5.0<br/>-1.0</sup> | Female THD Size | HI |
|--------------|------|----------------|----------------|----------------|--------------------------------|---|----------------------------|-----------------|----|
| 13           | 24.0 | 30             | 34             | 17             | 14                             | 4 | 47                         | Rp1/2           | ●  |
| 16×13        | 29.0 | 30             | 34             | 17             | 14                             | 4 | 52                         | Rp1/2           | ●  |
| 20           | 33.0 | 37             | 42             | 19             | 16                             | 4 | 59                         | RD3/4           | ●  |
| 25           | 40.0 | 46             | 52             | 21             | 18                             | 5 | 68                         | Rp1             | ●  |
| 20×13        | 33.0 | 30             | 36             | 17             | 14                             | 4 | 57                         | Rp1/2           | ●  |

● Cap



(Unit: mm)

| Nominal Size | D     | t    | L <sup>+5.0<br/>-1.0</sup> | HI |
|--------------|-------|------|----------------------------|----|
| 13           | 24.0  | 3.0  | 29.0                       | ●  |
| 16           | 29.0  | 3.5  | 33.5                       | ●  |
| 20           | 33.0  | 3.5  | 38.5                       | ●  |
| 25           | 40.0  | 4.0  | 44.0                       | ●  |
| 30           | 46.0  | 4.0  | 48.0                       | ●  |
| 40           | 57.0  | 4.5  | 59.5                       | ●  |
| 50           | 70.0  | 5.0  | 68.0                       | ●  |
| ※65          | 87.0  | 6.6  | 96.0                       | ●  |
| 75           | 102.0 | 8.0  | 105.0                      | ●  |
| 100          | 130.0 | 10.0 | 138.0                      | ●  |
| 150          | 186.0 | 13.0 | 205.0                      | ●  |



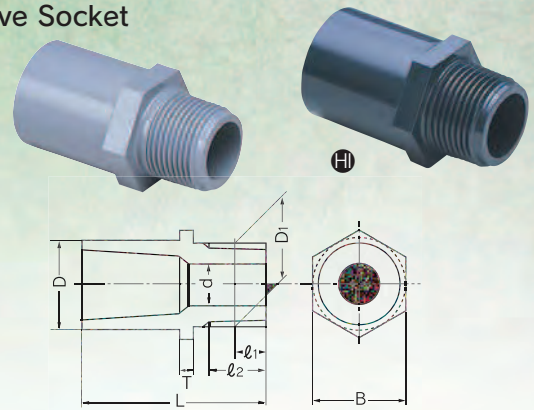
● 90° AV Bend



(単位: mm)

| Nominal Size | d <sub>1</sub> | d <sub>2</sub> | l   | D <sub>1</sub> | D <sub>2</sub> | d   | t   | L   | R   | HI |
|--------------|----------------|----------------|-----|----------------|----------------|-----|-----|-----|-----|----|
| 75           | 89.80          | 88.13          | 72  | 101            | 104            | 78  | 6   | 137 | 65  | —  |
| 100          | 115.00         | 112.89         | 92  | 129            | 132            | 100 | 7.3 | 172 | 80  | —  |
| 125          | 141.20         | 138.72         | 112 | 156            | 160            | 125 | 7.7 | 237 | 125 | —  |
| 150          | 166.50         | 163.39         | 140 | 185            | 189            | 148 | 9.8 | 260 | 120 | —  |

● Valve Socket

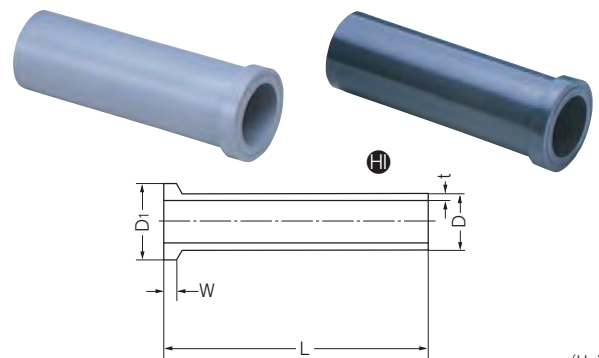


(Unit: mm)

| Nominal Size | D     | d   | Male THD Size | Gauge Dimension D <sub>1</sub> | Number of threads (Per 25.4mm) | Position of gauge diameter l <sub>1</sub> | l <sub>2</sub> (Min) | T  | L <sup>+5.0<br/>-1.0</sup> | B   | HI |
|--------------|-------|-----|---------------|--------------------------------|--------------------------------|---|----------------------|----|----------------------------|-----|----|
| ※ 10         | 21.0  | 10  | 3/8           | 16.662                         | 19                             | 6.35                                      | 12                   | 6  | 43                         | 21  | —  |
| 13           | 24.0  | 13  | 1/2           | 20.955                         | 14                             | 8.16                                      | 13.16                | 6  | 50                         | 24  | ●  |
| 16           | 29.0  | 13  | 1/2           | 20.955                         | 14                             | 8.20                                      | 15                   | 6  | 54                         | 29  | ●  |
| 20           | 33.0  | 18  | 3/4           | 26.441                         | 14                             | 9.53                                      | 14.53                | 8  | 64                         | 33  | ●  |
| 25           | 40.0  | 23  | 1             | 33.249                         | 11                             | 10.39                                     | 16.79                | 8  | 71                         | 40  | ●  |
| 30           | 46.0  | 31  | 1 1/4         | 41.910                         | 11                             | 12.70                                     | 19.10                | 10 | 80                         | 46  | ●  |
| 40           | 57.0  | 37  | 1 1/2         | 47.803                         | 11                             | 12.70                                     | 19.10                | 10 | 92                         | 57  | ●  |
| 50           | 70.0  | 48  | 2             | 59.614                         | 11                             | 15.88                                     | 23.38                | 12 | 106                        | 70  | ●  |
| □ 65         | 87.0  | 62  | 2 1/2         | 75.184                         | 11                             | 17.46                                     | 30                   | 15 | 118                        | 87  | ●  |
| □ 75         | 102.0 | 72  | 3             | 87.884                         | 11                             | 20.64                                     | 34                   | 16 | 127                        | 102 | ●  |
| □ 100        | 130.0 | 96  | 4             | 113.030                        | 11                             | 25.40                                     | 40                   | 18 | 157                        | 130 | ●  |
| □ 125        | 157.0 | 119 | 5             | 138.430                        | 11                             | 28.58                                     | 44                   | 20 | 186                        | 157 | —  |
| □ 150        | 186.0 | 140 | 6             | 163.830                        | 11                             | 28.58                                     | 44                   | 25 | 220                        | 186 | —  |

□ASAHI AV Standard

● Union Socket



(Unit: mm)

| Nominal Size | D    | t   | D <sub>1</sub> | W | L <sup>+5.0<br/>-1.0</sup> | HI |
|--------------|------|-----|----------------|---|----------------------------|----|
| 13           | 18.0 | 2.5 | 23.0           | 5 | 80                         | ●  |
| 16           | 22.0 | 3.0 | 27.5           | 5 | 85                         | ●  |
| 20           | 26.0 | 3.0 | 29.5           | 6 | 90                         | ●  |
| 25           | 32.0 | 3.5 | 36.5           | 7 | 100                        | ●  |
| 30           | 38.0 | 3.5 | 42.0           | 8 | 110                        | ●  |
| 40           | 48.0 | 4.0 | 53.0           | 8 | 120                        | ●  |
| 50           | 60.0 | 4.5 | 71.0           | 9 | 130                        | ●  |

● 45° AV Bend



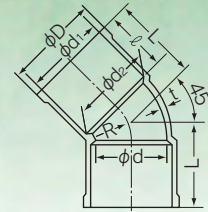
(単位: mm)

| Nominal Size | d <sub>1</sub> | d <sub>2</sub> | l   | D   | D <sub>1</sub> | d   | t   | Z  | L   | R    | HI |
|--------------|----------------|----------------|-----|-----|----------------|-----|-----|----|-----|------|----|
| 40           | 48.70          | 47.21          | 55  | 57  | 60             | 40  | 4.5 | 14 | 69  | 20   | ●  |
| 50           | 60.80          | 59.10          | 63  | 70  | 73             | 51  | 5   | 17 | 80  | 25.5 | ●  |
| 65           | 76.60          | 75.33          | 61  | 87  | 90             | 67  | 6.6 | 20 | 81  | 34   | ●  |
| 75           | 89.80          | 88.13          | 72  | 101 | 104            | 78  | 6   | 25 | 97  | 39   | ●  |
| 100          | 115.00         | 112.89         | 92  | 129 | 132            | 100 | 7.3 | 30 | 122 | 50   | ●  |
| 125          | 141.20         | 138.71         | 112 | 156 | 160            | 125 | 7.7 | 37 | 149 | 62.5 | ●  |
| 150          | 166.50         | 163.39         | 140 | 185 | 189            | 148 | 10  | 44 | 184 | 74   | ●  |

# PVC LARGE-SIZE FITTINGS



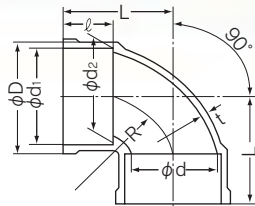
## 45° AV Bend



Unit:mm

| Nominal Size(mm) | d <sub>1</sub> | d <sub>2</sub> | ℓ   | D   | d   | t  | L   | R     | PVC | HI-PVC |
|------------------|----------------|----------------|-----|-----|-----|----|-----|-------|-----|--------|
| 200              | 217.00         | 214.10         | 145 | 240 | 196 | 15 | 193 | 98    | ●   | ●      |
| 250              | 268.20         | 265.00         | 155 | 293 | 247 | 16 | 213 | 123.5 | ●   | ●      |
| 300              | 318.70         | 315.88         | 155 | 337 | 298 | 10 | 225 | 149   | ●   | ●      |

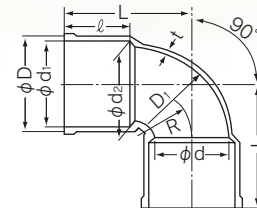
## AV Short Elbow



Unit:mm

| Nominal Size(mm) | d <sub>1</sub> | d <sub>2</sub> | ℓ   | D   | d   | t  | L   | R   | PVC | HI-PVC |
|------------------|----------------|----------------|-----|-----|-----|----|-----|-----|-----|--------|
| 200              | 217.0          | 214.1          | 145 | 240 | 196 | 15 | 265 | 190 | ●   | ●      |
| 250              | 268.2          | 265.0          | 155 | 295 | 247 | 16 | 310 | 235 | ●   | ●      |
| 300              | 319.6          | 315.5          | 175 | 347 | 298 | 18 | 350 | 170 | ●   | ●      |

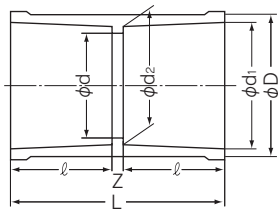
## 90° AV Bend



Unit:mm

| Nominal Size(mm) | d <sub>1</sub> | d <sub>2</sub> | ℓ   | D   | D <sub>1</sub> | d   | t  | L   | R   | PVC | HI-PVC |
|------------------|----------------|----------------|-----|-----|----------------|-----|----|-----|-----|-----|--------|
| 200              | 217.00         | 214.10         | 145 | 240 | 216            | 196 | 15 | 341 | 196 | ●   | ●      |
| 250              | 268.20         | 265.00         | 155 | 293 | 267            | 247 | 16 | 402 | 247 | ●   | ●      |
| 300              | 318.70         | 315.88         | 155 | 337 | 318            | 298 | 10 | 395 | 240 | ●   | ●      |

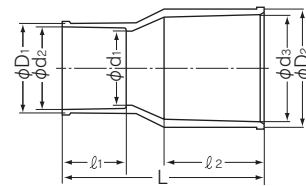
## AV Socket



Unit:mm

| Nominal Size(mm) | d <sub>1</sub> | d <sub>2</sub> | ℓ   | D   | d   | Z  | L   | PVC | HI-PVC |
|------------------|----------------|----------------|-----|-----|-----|----|-----|-----|--------|
| 200              | 217.0          | 214.10         | 145 | 238 | 202 | 10 | 300 | ●   | ●      |
| 250              | 268.2          | 265.00         | 155 | 295 | 247 | 43 | 353 | ●   | ●      |
| 300              | 319.6          | 315.52         | 175 | 336 | 298 | 10 | 360 | ●   | ●      |

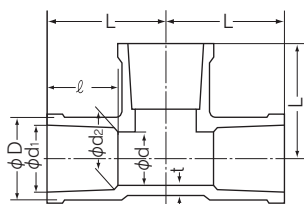
## AV Reduced Socket



Unit:mm

| Nominal Size(mm) | d <sub>1</sub> | d <sub>2</sub> | ℓ <sub>1</sub> | D <sub>1</sub> | d <sub>3</sub> | ℓ <sub>2</sub> | D <sub>2</sub> | L   | PVC | HI-PVC |
|------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----|-----|--------|
| 200×150          | 146            | 166.0          | 132            | 188            | 217.0          | 145            | 240            | 356 | ●   | ●      |
| 250×200          | 194            | 217.0          | 145            | 240            | 268.2          | 155            | 293            | 380 | ●   | ●      |
| 300×250          | 247            | 268.2          | 155            | 295            | 319.6          | 175            | 347            | 405 | ●   | ●      |

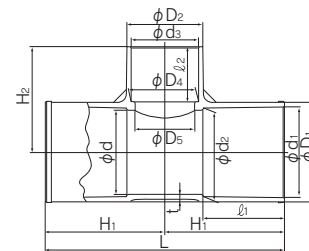
## AV Tee



Unit:mm

| Nominal Size(mm) | d <sub>1</sub> | d <sub>2</sub> | ℓ   | D   | d   | t  | L   | PVC | HI-PVC |
|------------------|----------------|----------------|-----|-----|-----|----|-----|-----|--------|
| 200              | 217.0          | 214.10         | 145 | 240 | 196 | 15 | 266 | ●   | ●      |
| 250              | 268.2          | 265.00         | 155 | 295 | 247 | 16 | 331 | ●   | ●      |
| 300              | 319.6          | 315.52         | 175 | 337 | 298 | 10 | 340 | ●   | ●      |

## AV Reduced Tee



Unit:mm

| Nominal Size(mm) | d <sub>1</sub> | d <sub>2</sub> | ℓ <sub>1</sub> | d <sub>3</sub> | d <sub>4</sub> | ℓ <sub>2</sub> | D <sub>1</sub> | D <sub>2</sub> | d   | d <sub>5</sub> | t  | L   | H <sub>1</sub> | H <sub>2</sub> | PVC | HI-PVC |
|------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----|----------------|----|-----|----------------|----------------|-----|--------|
| 200×75           | 217.0          | 214.1          | 145            | 89.60          | 88.29          | 64             | 240            | 102            | 194 | 77             | 15 | 402 | 201            | 180            | ●   | ●      |
| 200×100          | 217.0          | 214.1          | 145            | 114.70         | 113.20         | 84             | 240            | 130            | 194 | 100            | 15 | 430 | 215            | 200            | ●   | ●      |
| 200×150          | 217.0          | 214.1          | 145            | 166.00         | 163.91         | 132            | 240            | 188            | 194 | 146            | 15 | 476 | 238            | 253            | ●   | ●      |
| 250×75           | 268.20         | 265.00         | 155            | 89.60          | 88.29          | 64             | 295            | 108            | 247 | 77             | 16 | 452 | 226            | 210            | ●   | ●      |
| 250×100          | 268.20         | 265.00         | 155            | 114.70         | 113.20         | 84             | 295            | 136            | 247 | 100            | 16 | 492 | 246            | 225            | ●   | ●      |
| 250×200          | 268.20         | 265.00         | 155            | 217.00         | 214.10         | 200            | 295            | 245            | 247 | 194            | 16 | 608 | 304            | 310            | ●   | ●      |
| 300×75           | 320.70         | 314.70         | 300            | 89.60          | 88.29          | 64             | 343            | 102            | 298 | 77             | 17 | 722 | 361            | 236            | ●   | ●      |

We also produce LARGE-SIZE VU FITTINGS.

Unit:MPa{Kgf/cm<sup>2</sup>}

## Max. Working Pressure

| Items        | AV90° Bends | AV45° Bends | AV Short Elbows | AV Sockets | AV Reduced Sockets | AV Tees   | AV Reduced Tees |
|--------------|-------------|-------------|-----------------|------------|--------------------|-----------|-----------------|
| Nominal Size |             |             |                 |            |                    |           |                 |
| 200mm        | 0.75{7.7}   | 0.75{7.7}   | 0.75{7.7}       | 0.75{7.7}  | 0.75{7.7}          | 0.75{7.7} | 0.75{7.7}       |
| 250mm        | 0.5{5.1}    | 0.5{5.1}    | 0.5{5.1}        | 0.5{5.1}   | 0.5{5.1}           | 0.5{5.1}  | 0.5{5.1}        |
| 300mm        | 0.4{4.1}    | 0.4{4.1}    | 0.6{6.1}        | 0.6{6.1}   | 0.6{6.1}           | 0.4{4.1}  | 0.4{4.1}        |

·The pressure limit includes water hammer pressure. Do not exceed the limit.