



*Weifang Yuanyao Casting Co.,Ltd*



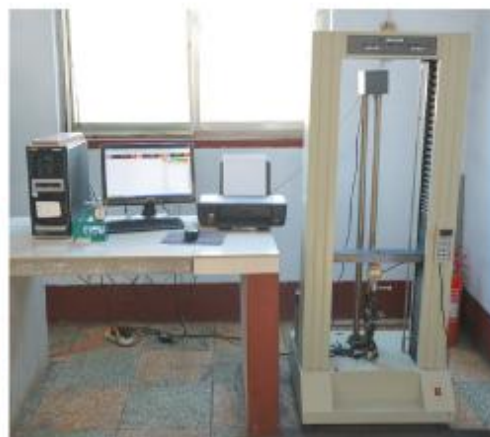


## » Company Introduction

Weifang Yuanyao Casting Co., Ltd, a wholly-owned subsidiaries of Weifang Xinchun Casting Co., Ltd. , specilizing in ductile iron grooved systems, was founded in Weifang City in 2005. There are about 400 full-time staff including more than 360 skillful workers from five workshops: casting、cleaning、machine、painting and one modern warehouse in our company. Our annual output is about 15,000 tons , there are and two automatic casting disa lines in our factory. One new DISAMATIC automatic line from Denmark is under construction. Our "LUYUAN" grooved couplings and fittings have been approved by UL\ULC\FM\ CE, CNBOP\VDS\LPCB are going to be done in near future. "LUYUAN" grooved couplings and fittings are more and more well known by the customers from America, Europe, Middle East , Africa, Australia and so on. Advanced equipment makes our quality better. Efficient management makes our prices and quality much more competitive.

High quality 、 more competitive price and perfect service are our target!

Dear customers, let's work together now, Yuanyao casting will be your best partner in ductile grooved systems!





Rigid Coupling



Flexible Coupling



Reducing Flexible Coupling



90° Elbow



45° Elbow



Equal Tee



Reducer Tee  
(Thread Outlet)



Reducer Tee  
(Grooved Outlet)



22.5° Elbow



11.25° Elbow



Equal Cross



Thread Reducer Cross



Grooved Reducer Cross



Grooved Flange



Adaptor Flange



U-Bolt Mechanical Tee



Mechanical Tee  
(Thread Outlet)



Mechanical Tee  
(Grooved Outlet)



Mechanical Cross  
(Grooved Outlet)



Mechanical Cross  
(Thread Outlet)



eccentric Reducer



Grooved Concentric Reducer



Thread Concentric Reducer



Cap



Blue



## Rigid Coupling



| Nominal Size<br>mm/in | Pipe O. D<br>mm/in | Working Pressure<br>PSI/MPa | Bolt/Nut | Dimensions mm/in |                 |               |
|-----------------------|--------------------|-----------------------------|----------|------------------|-----------------|---------------|
|                       |                    |                             |          | A                | B               | C             |
| 32<br>1 1/4           | 42.4<br>1.669      | 300<br>2.07                 | M10*55   | 64<br>2.52       | 106.2<br>4.18   | 45<br>1.772   |
| 40<br>1 1/2           | 48.3<br>1.9        | 300<br>2.07                 | M10*55   | 70<br>2.756      | 113.4<br>4.465  | 45<br>1.772   |
| 50<br>2               | 60.3<br>2.375      | 300<br>2.07                 | M10*55   | 82.8<br>3.26     | 125.8<br>4.953  | 46.4<br>1.827 |
| 65<br>2 1/2           | 73<br>2.875        | 300<br>2.07                 | M10*55   | 95.8<br>3.772    | 139.2<br>5.48   | 46.6<br>1.835 |
| 65<br>2 1/2           | 76.1<br>3          | 300<br>2.07                 | M10*55   | 98.8<br>3.89     | 142.2<br>5.598  | 46.8<br>1.843 |
| 80<br>3               | 88.9<br>3.5        | 300<br>2.07                 | M10*55   | 112.42<br>4.426  | 156.6<br>6.165  | 47.4<br>1.866 |
| 100<br>4              | 114.3<br>4.5       | 300<br>2.07                 | M12*65   | 139.8<br>5.504   | 191.8<br>7.551  | 50<br>1.969   |
| 125<br>5              | 139.7<br>5.5       | 300<br>2.07                 | M12*70   | 167.8<br>6.606   | 220.2<br>8.669  | 50<br>1.969   |
| 125<br>5              | 141.3<br>5.563     | 300<br>2.07                 | M12*70   | 169.4<br>6.669   | 222.2<br>8.748  | 50<br>1.969   |
| 150<br>6              | 165.1<br>6.5       | 300<br>2.07                 | M12*70   | 194.8<br>7.67    | 248.6<br>9.787  | 50<br>1.969   |
| 150<br>6              | 168.3<br>6.625     | 300<br>2.07                 | M12*70   | 198.6<br>7.819   | 252.6<br>9.945  | 50<br>1.969   |
| 200<br>8              | 219.1<br>8.625     | 300<br>2.07                 | M16*85   | 254.4<br>10.016  | 322.2<br>12.685 | 61.4<br>2.417 |
| 250<br>10             | 273<br>10.75       | 300<br>2.07                 | M20*100  | 312.8<br>12.315  | 391.8<br>15.425 | 62.8<br>2.472 |
| 300<br>12             | 323.9<br>12.75     | 300<br>2.07                 | M20*100  | 365.6<br>14.394  | 445.8<br>17.551 | 63.7<br>2.508 |

## Flexible Coupling



| Nominal Size<br>mm/in | Pipe O. D<br>mm/in | Working Pressure<br>PSI/MPa | Bolt/Nut | Dimensions mm/in |                 |               |
|-----------------------|--------------------|-----------------------------|----------|------------------|-----------------|---------------|
|                       |                    |                             |          | A                | B               | C             |
| 40<br>1 1/2           | 48.3<br>1.9        | 300<br>2.07                 | M10*55   | 70<br>2.756      | 113.4<br>4.465  | 45<br>1.772   |
| 50<br>2               | 60.3<br>2.375      | 300<br>2.07                 | M10*55   | 82.8<br>3.26     | 125.8<br>4.953  | 46.4<br>1.827 |
| 65<br>2 1/2           | 73<br>2.875        | 300<br>2.07                 | M10*55   | 95.8<br>3.772    | 139.2<br>5.48   | 46.6<br>1.838 |
| 65<br>2 1/2           | 76.1<br>3          | 300<br>2.07                 | M10*55   | 98.8<br>3.89     | 142.2<br>5.598  | 46.8<br>1.843 |
| 80<br>3               | 88.9<br>3.5        | 300<br>2.07                 | M10*55   | 112.42<br>4.426  | 156.6<br>6.165  | 47.4<br>1.866 |
| 100<br>4              | 114.3<br>4.5       | 300<br>2.07                 | M12*65   | 139.8<br>5.504   | 191.8<br>7.551  | 50<br>1.969   |
| 125<br>5              | 139.7<br>5.5       | 300<br>2.07                 | M12*70   | 167.8<br>6.606   | 220.2<br>8.669  | 50<br>1.969   |
| 150<br>6              | 165.1<br>6.5       | 300<br>2.07                 | M12*70   | 194.8<br>7.67    | 248.6<br>9.787  | 50<br>1.969   |
| 150<br>6              | 168.3<br>6.625     | 300<br>2.07                 | M12*70   | 198.6<br>7.819   | 252.6<br>9.945  | 50<br>1.969   |
| 200<br>8              | 219.1<br>8.625     | 300<br>2.07                 | M16*85   | 254.4<br>10.016  | 322.2<br>12.685 | 61.4<br>2.417 |
| 250<br>10             | 273<br>10.75       | 300<br>2.07                 | M20*100  | 312.8<br>12.315  | 391.8<br>15.425 | 62.8<br>2.472 |
| 300<br>12             | 323.9<br>12.75     | 300<br>2.07                 | M20*100  | 365.6<br>14.394  | 445.8<br>17.551 | 63.7<br>2.508 |



## Reducing Flexible Coupling



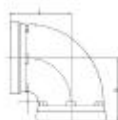
| Nominal Size<br>mm/in | Pipe O.D<br>mm/in              | Working Pressure<br>PSI/MPa | Bolt/Nut | Dimensions mm/in |              |              |
|-----------------------|--------------------------------|-----------------------------|----------|------------------|--------------|--------------|
|                       |                                |                             |          | A                | B            | C            |
| 50 × 40<br>2 × 1 1/2  | 60.3 × 78.3<br>2.375 × 1.900   | 300<br>2.07                 | M10×55   | 86<br>3.39       | 125<br>4.93  | 44<br>1.74   |
| 65 × 25<br>2 1/2 × 1  | 73.0 × 33.7<br>2.875 × 1.327   | 300<br>2.07                 | M10×55   | 100<br>3.94      | 138<br>5.44  | 45<br>1.78   |
| 65 × 50<br>2 1/2 × 2  | 73.0 × 60.3<br>2.875 × 2.375   | 300<br>2.07                 | M10×55   | 100<br>3.94      | 138<br>5.43  | 47<br>1.85   |
| 65 × 25<br>2 1/2 × 1  | 76.1 × 33.7<br>3.000 × 1.327   | 300<br>2.07                 | M10×55   | 102<br>4.02      | 140<br>5.51  | 45<br>1.78   |
| 65 × 40<br>2 1/2 × 2  | 76.1 × 33.7<br>3.000 × 1.327   | 300<br>2.07                 | M10×55   | 102<br>4.02      | 140<br>5.51  | 45<br>1.78   |
| 65 × 50<br>2 1/2 × 2  | 76.1 × 48.3<br>3.000 × 1.900   | 300<br>2.07                 | M10×55   | 102<br>4.02      | 142<br>5.6   | 44.5<br>1.75 |
| 80 × 25<br>3 × 1      | 88.9 × 60.3<br>3.500 × 1.327   | 300<br>2.07                 | M10×55   | 115<br>4.53      | 168<br>6.61  | 46<br>1.81   |
| 80 × 50<br>3 × 2      | 88.9 × 60.3<br>3.500 × 2.375   | 300<br>2.07                 | M10×55   | 115<br>4.53      | 168<br>6.61  | 47<br>1.85   |
| 80 × 65<br>3 × 2 1/2  | 88.9 × 73.0<br>3.500 × 2.375   | 300<br>2.07                 | M10×55   | 115<br>4.53      | 168<br>6.61  | 46<br>1.81   |
| 80 × 65<br>3 × 2 1/2  | 88.9 × 76.1<br>3.500 × 3.000   | 300<br>2.07                 | M10×55   | 115<br>4.53      | 168<br>6.61  | 46<br>1.81   |
| 100 × 25<br>4 × 1 1/2 | 114.3 × 33.7<br>4.500 × 2.875  | 300<br>2.07                 | M12×65   | 144<br>5.67      | 198<br>7.8   | 50<br>1.97   |
| 100 × 65<br>4 × 2 1/2 | 114.3 × 73.0<br>4.500 × 1.327  | 300<br>2.07                 | M12×65   | 144<br>5.67      | 198<br>7.8   | 50.5<br>1.99 |
| 100 × 65<br>4 × 2 1/2 | 114.3 × 76.1<br>4.500 × 3.000  | 300<br>2.07                 | M12×65   | 144<br>5.67      | 198<br>7.8   | 50.5<br>1.99 |
| 100 × 80<br>4 × 3     | 114.3 × 88.9<br>4.500 × 3.500  | 300<br>2.07                 | M12×65   | 148<br>5.83      | 198<br>7.8   | 50<br>1.97   |
| 150 × 100<br>6 × 4    | 165.1 × 114.3<br>6.500 × 4.500 | 300<br>2.07                 | M12×70   | 197<br>7.75      | 260<br>10.24 | 51<br>2.01   |
| 150 × 100<br>6 × 4    | 168.3 × 114.3<br>6.625 × 4.500 | 300<br>2.07                 | M12×70   | 200<br>7.87      | 268<br>10.55 | 51.5<br>2.03 |
| 200 × 150<br>8 × 6    | 219.1 × 165.1<br>8.625 × 6.500 | 300<br>2.07                 | M16×85   | 257<br>10.12     | 335<br>13.19 | 60<br>2.36   |
| 200 × 150<br>8 × 6    | 219.1 × 168.3<br>8.625 × 6.625 | 300<br>2.07                 | M16×85   | 257<br>10.12     | 335<br>13.19 | 60<br>2.36   |

## Grooved Flange

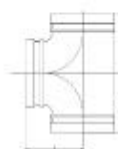


| Nominal Size<br>mm/in | Pipe O.D<br>mm/in | Working Pressure<br>PSI/MPa | Bolt Size | Dimensions mm/in |              |                |                |               |
|-----------------------|-------------------|-----------------------------|-----------|------------------|--------------|----------------|----------------|---------------|
|                       |                   |                             |           | A                | B            | C              | D              | E             |
| 50<br>2               | 60.3<br>2.375     | 300<br>2.07                 | M10×50    | 206<br>8.11      | 22<br>0.86   | 152<br>5.98    | 121<br>4.76    | 57.5<br>2.26  |
| 65<br>2 1/2           | 73<br>2.875       | 300<br>2.07                 | M10×50    | 230<br>9.05      | 22<br>0.86   | 178<br>7       | 140<br>5.51    | 69.8<br>2.74  |
| 80<br>3               | 88.9<br>3.5       | 300<br>2.07                 | M10×50    | 242<br>9.53      | 24<br>0.95   | 191<br>7.52    | 152<br>5.98    | 85.5<br>3.37  |
| 100<br>4              | 114.3<br>4.5      | 300<br>2.07                 | M12×55    | 280<br>11.02     | 24<br>0.95   | 229<br>9       | 191<br>7.52    | 110.5<br>4.35 |
| 125<br>5              | 141.3<br>5.563    | 300<br>2.07                 | M12×65    | 325<br>12.79     | 24.5<br>0.96 | 254<br>10      | 216<br>8.5     | 137.4<br>5.41 |
| 200<br>8              | 219.1<br>8.625    | 300<br>2.07                 | N20×100   | 414.3<br>16.31   | 30<br>1.18   | 341.4<br>13.44 | 298.5<br>11.75 | 214.9<br>8.46 |

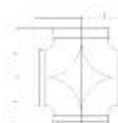
## 90° Elbow



## Equal Tee



## Equal Cross



| Nominal Size<br>mm/in | Pipe O.D.<br>mm/in | Working Pressure<br>PSI/MPa | Dimension L mm/in |       |           |       |             |
|-----------------------|--------------------|-----------------------------|-------------------|-------|-----------|-------|-------------|
|                       |                    |                             | 90° Elbow         |       | Equal Tee |       | Equal Cross |
|                       |                    |                             | Standard          | Short | Standard  | Short |             |
| 25                    | 33.7               | 300                         | 57                | 57    | 57        | 57    | 57          |
| 1                     | 1.315              | 2.07                        | 2.24              | 2.24  | 2.24      | 2.24  | 2.24        |
| 32                    | 42.4               | 300                         | 70                | 60    | 70        | 60    | 60          |
| 1 1/4                 | 1.66               | 2.07                        | 2.75              | 2.4   | 2.75      | 2.4   | 2.4         |
| 40                    | 48.3               | 300                         | 70                | 60    | 70        | 60    | 60          |
| 1 1/2                 | 1.9                | 2.07                        | 2.75              | 2.4   | 2.75      | 2.4   | 2.4         |
| 50                    | 60.3               | 300                         | 82.5              | 70    | 82.5      | 70    | 70          |
| 2                     | 2.375              | 2.07                        | 3.25              | 2.76  | 3.25      | 2.76  | 2.76        |
| 65                    | 73                 | 300                         | 95                | 76    | 95        | 76    | 76          |
| 2 1/2                 | 2.875              | 2.07                        | 3.74              | 3     | 3.74      | 3     | 3           |
| 65                    | 76.1               | 300                         | 95                | 76    | 95        | 76    | 76          |
| 2 1/2                 | 3                  | 2.07                        | 3.74              | 3     | 3.74      | 3     | 3           |
| 80                    | 88.9               | 300                         | 108               | 86    | 108       | 86    | 86          |
| 3                     | 3.5                | 2.07                        | 4.25              | 3.4   | 4.25      | 3.4   | 3.4         |
| 100                   | 114.3              | 300                         | 127               | 101.6 | 127       | 101.6 | 101.6       |
| 4                     | 4.5                | 2.07                        | 5                 | 4     | 5         | 4     | 4           |
| 125                   | 133                | 300                         | 122               | 122   | 122       | 122   | 122         |
| 5                     | 5.25               | 2.07                        | 4.8               | 4.8   | 4.8       | 4.8   | 4.8         |
| 125                   | 139.7              | 300                         | 140               | 122   | 140       | 122   | 122         |
| 5                     | 5.5                | 2.07                        | 5.5               | 4.8   | 5.5       | 4.8   | 4.8         |
| 125                   | 141.3              | 300                         | 140               | 122   | 140       | 122   | 122         |
| 5                     | 5.563              | 2.07                        | 5.5               | 4.8   | 5.5       | 4.8   | 4.8         |
| 150                   | 165.1              | 300                         | 165               | 140   | 165       | 140   | 140         |
| 6                     | 6.5                | 2.07                        | 6.5               | 5.5   | 6.5       | 5.5   | 5.5         |
| 150                   | 168.3              | 300                         | 165               | 140   | 165       | 140   | 140         |
| 6                     | 6.625              | 2.07                        | 6.5               | 5.5   | 6.5       | 5.5   | 5.5         |
| 200                   | 219.1              | 300                         | 197               | 175   | 197       | 175   | 175         |
| 8                     | 8.625              | 2.07                        | 7.75              | 6.89  | 7.75      | 6.89  | 6.89        |
| 250                   | 273                | 300                         | 229               | 215   | 229       | 215   | 215         |
| 10                    | 10.75              | 2.07                        | 9.00              | 8.5   | 9.00      | 8.5   | 8.5         |
| 300                   | 323.9              | 300                         | 254               | 245   | 254       | 245   | 245         |
| 12                    | 12.75              | 2.07                        | 10.00             | 9.65  | 10.00     | 9.65  | 9.65        |

## 45° Elbow



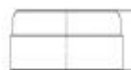
## 22.5° Elbow



## 11.25° Elbow



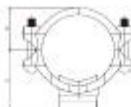
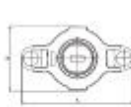
## Cap



| Nominal Size<br>mm/in | Pipe O.D.<br>mm/in | Working Pressure<br>PSI/MPa | Dimension L mm/in |             |              |      |
|-----------------------|--------------------|-----------------------------|-------------------|-------------|--------------|------|
|                       |                    |                             | 45° Elbow         | 22.5° Elbow | 11.25° Elbow | Cap  |
| 25                    | 33.7               | 300                         | 44                | 44          | 35           | 22.1 |
| 1                     | 1.315              | 2.07                        | 1.73              | 1.73        | 1.38         | 0.87 |
| 32                    | 42.4               | 300                         | 45                | 45          | 35           | 23.5 |
| 1 1/4                 | 1.66               | 2.07                        | 1.77              | 1.77        | 1.38         | 0.93 |
| 40                    | 48.3               | 300                         | 45                | 45          | 35           | 23.5 |
| 1 1/2                 | 1.9                | 2.07                        | 1.77              | 1.77        | 1.38         | 0.93 |
| 50                    | 60.3               | 300                         | 51                | 51          | 35           | 23.5 |
| 2                     | 2.375              | 2.07                        | 2                 | 2           | 1.38         | 0.93 |
| 65                    | 73                 | 300                         | 57                | 51          | 38           | 23.5 |
| 2 1/2                 | 2.875              | 2.07                        | 2.24              | 2           | 1.5          | 0.93 |
| 65                    | 76.1               | 300                         | 57                | 51          | 38           | 25.5 |
| 2 1/2                 | 3                  | 2.07                        | 2.24              | 2           | 1.5          | 1    |
| 80                    | 88.9               | 300                         | 64                | 57          | 38           | 25.5 |
| 3                     | 3.5                | 2.07                        | 2.51              | 2.24        | 1.5          | 1    |
| 100                   | 108                | 300                         | 76                | 73          | 45           | 27   |
| 4                     | 4.25               | 2.07                        | 3                 | 2.87        | 1.77         | 1.06 |
| 100                   | 114.3              | 300                         | 76                | 73          | 45           | 27   |
| 4                     | 4.5                | 2.07                        | 3                 | 2.87        | 1.77         | 1.06 |
| 125                   | 133                | 300                         | 83                | 73          | 51           | 27   |
| 5                     | 5.25               | 2.07                        | 3.27              | 2.87        | 2            | 1.06 |
| 125                   | 139.7              | 300                         | 83                | 73          | 51           | 27   |
| 5                     | 5.5                | 2.07                        | 3.27              | 2.87        | 2            | 1.06 |
| 125                   | 141.3              | 300                         | 83                | 73          | 51           | 27   |
| 5                     | 5.563              | 2.07                        | 3.27              | 2.87        | 2            | 1.06 |
| 150                   | 165.1              | 300                         | 89                | 79          | 51           | 27   |
| 6                     | 6.5                | 2.07                        | 3.5               | 3.11        | 2            | 1.06 |
| 150                   | 168.3              | 300                         | 89                | 79          | 51           | 27   |
| 6                     | 6.625              | 2.07                        | 3.5               | 3.11        | 2            | 1.06 |
| 200                   | 219.1              | 300                         | 108               | 98          | 51           | 30.2 |
| 8                     | 8.625              | 2.07                        | 4.25              | 3.86        | 2            | 1.19 |
| 250                   | 273                | 300                         | 121               | 111         | 54           | 32   |
| 10                    | 10.75              | 2.07                        | 4.76              | 4.37        | 2.13         | 1.26 |
| 300                   | 323.9              | 300                         | 133               | 124         | 57           | 32   |
| 12                    | 12.75              | 2.07                        | 5.24              | 4.88        | 2.24         | 1.26 |

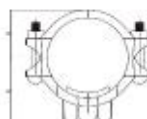


## Mechanical Tee (Grooved Outlet)



| Nominal Size<br>mm/in | Pipe O.D.<br>mm/in        | Working Pressure<br>PSI/MPa | Bolt Size | Dimensions mm/in |               |               |              | Hole Dia<br>mm/in<br>+1.8, 0/-0.063, 0 |
|-----------------------|---------------------------|-----------------------------|-----------|------------------|---------------|---------------|--------------|----------------------------------------|
|                       |                           |                             |           | A                | B             | C             | D            |                                        |
| 50×25<br>2×1          | 60.3×33.7<br>2.375×1.315  | 300<br>2.07                 | M10×60    | 114<br>4.5       | 69<br>2.72    | 67.1<br>2.64  | 38.6<br>1.52 | 38<br>1.5                              |
| 50×32<br>2×1½         | 60.3×42.4<br>2.375×1.660  | 300<br>2.07                 | M10×60    | 114<br>4.5       | 76.5<br>3.01  | 66.6<br>2.62  | 38.6<br>1.52 | 46<br>1.8                              |
| 50×40<br>2×1½         | 60.3×48.3<br>2.375×1.900  | 300<br>2.07                 | M10×60    | 114<br>4.5       | 76.5<br>3.01  | 66.6<br>2.62  | 38.6<br>1.52 | 46<br>1.8                              |
| 65×25<br>2½×1         | 73.0×33.7<br>2.875×1.315  | 300<br>2.07                 | M10×70    | 126.4<br>4.98    | 69.4<br>2.73  | 74.1<br>2.92  | 45.6<br>1.8  | 38<br>1.5                              |
| 65×32<br>2½×1½        | 73.0×42.4<br>2.875×1.660  | 300<br>2.07                 | M10×70    | 126.4<br>4.98    | 76.8<br>3.02  | 74.1<br>2.92  | 45.6<br>1.8  | 46<br>1.8                              |
| 65×40<br>2½×1½        | 73.0×48.3<br>2.875×1.900  | 300<br>2.07                 | M10×70    | 126.4<br>4.98    | 76.8<br>3.02  | 74.1<br>2.92  | 45.6<br>1.8  | 46<br>1.8                              |
| 65×25<br>2½×1         | 76.1×33.7<br>3.000×1.315  | 300<br>2.07                 | M10×70    | 129.4<br>5.09    | 69.4<br>2.73  | 74.1<br>2.92  | 47.2<br>1.86 | 38<br>1.5                              |
| 65×32<br>2½×1½        | 76.1×42.4<br>3.000×1.660  | 300<br>2.07                 | M10×70    | 129.4<br>5.09    | 76.8<br>3.02  | 74.1<br>2.92  | 47.2<br>1.86 | 46<br>1.8                              |
| 65×40<br>2½×1½        | 76.1×48.3<br>3.000×1.900  | 300<br>2.07                 | M10×70    | 129.4<br>5.09    | 76.8<br>3.02  | 74.1<br>2.92  | 47.2<br>1.86 | 46<br>1.8                              |
| 80×25<br>3×1          | 88.9×33.7<br>3.500×1.315  | 300<br>2.07                 | M12×75    | 147.4<br>5.8     | 72<br>2.83    | 82.3<br>3.24  | 53.8<br>2.12 | 38<br>1.5                              |
| 80×32<br>3×1½         | 88.9×42.4<br>3.500×1.660  | 300<br>2.07                 | M12×75    | 147.4<br>5.8     | 86<br>3.39    | 82.3<br>3.24  | 53.8<br>2.12 | 51<br>2                                |
| 80×40<br>3×1½         | 88.9×48.3<br>3.500×1.900  | 300<br>2.07                 | M12×75    | 147.4<br>5.8     | 86<br>3.39    | 82.3<br>3.24  | 53.8<br>2.12 | 51<br>2                                |
| 80×50<br>3×2          | 88.9×60.3<br>3.500×2.375  | 300<br>2.07                 | M12×75    | 147.4<br>5.8     | 99.4<br>3.91  | 83.3<br>3.28  | 53.8<br>2.12 | 63<br>2.5                              |
| 100×25<br>4×1         | 114.3×33.7<br>4.500×1.315 | 300<br>2.07                 | M12×75    | 176.2<br>6.94    | 72.4<br>2.85  | 96<br>3.78    | 66.5<br>2.62 | 38<br>1.5                              |
| 100×32<br>4×1½        | 114.3×42.4<br>4.500×1.660 | 300<br>2.07                 | M12×75    | 176.2<br>6.94    | 86.4<br>3.4   | 96<br>3.78    | 66.5<br>2.62 | 51<br>2                                |
| 100×40<br>4×1½        | 114.3×48.3<br>4.500×1.900 | 300<br>2.07                 | M12×75    | 176.2<br>6.94    | 86.4<br>3.4   | 96<br>3.78    | 66.5<br>2.62 | 51<br>2                                |
| 100×50<br>4×2         | 114.3×60.3<br>4.500×2.375 | 300<br>2.07                 | M12×75    | 176.2<br>6.94    | 100.9<br>3.97 | 96<br>3.78    | 66.5<br>2.62 | 63<br>2.5                              |
| 100×65<br>4×2½        | 114.3×73.0<br>4.500×2.875 | 300<br>2.07                 | M12×75    | 176.2<br>6.94    | 109.5<br>4.31 | 96.2<br>3.79  | 66.5<br>2.62 | 70<br>2.75                             |
| 100×65<br>4×2½        | 114.3×76.1<br>4.500×3.000 | 300<br>2.07                 | M12×75    | 176.2<br>6.94    | 109.5<br>4.31 | 96.2<br>3.79  | 66.5<br>2.62 | 70<br>2.75                             |
| 125×50<br>5×2         | 139.7×60.3<br>5.500×2.375 | 300<br>2.07                 | M16×85    | 209.8<br>8.26    | 102.8<br>4.05 | 108.4<br>4.27 | 78.9<br>3.1  | 63<br>2.5                              |
| 125×65<br>5×2½        | 139.7×76.1<br>5.500×3.000 | 300<br>2.07                 | M16×85    | 209.8<br>8.26    | 110.1<br>4.33 | 108.4<br>4.27 | 78.9<br>3.1  | 70<br>2.75                             |
| 125×80<br>5×3         | 139.7×88.9<br>5.500×3.500 | 300<br>2.07                 | M16×85    | 209.8<br>8.26    | 130.7<br>5.15 | 108.4<br>4.27 | 78.9<br>3.1  | 86<br>3.4                              |
| 150×32<br>6×1½        | 165.1×42.4<br>6.500×1.660 | 300<br>2.07                 | M16×100   | 234.8<br>9.24    | 88.8<br>3.5   | 121<br>4.76   | 91.5<br>3.6  | 51<br>2                                |
| 150×40<br>6×1½        | 165.1×48.3<br>6.500×1.900 | 300<br>2.07                 | M16×100   | 234.8<br>9.24    | 88.8<br>3.5   | 121<br>4.76   | 91.5<br>3.6  | 51<br>2                                |
| 150×50<br>6×2         | 165.1×60.3<br>6.500×2.375 | 300<br>2.07                 | M16×100   | 234.8<br>9.24    | 103.2<br>4.06 | 121<br>4.76   | 91.5<br>3.6  | 63<br>2.5                              |
| 150×65<br>6×2½        | 165.1×73.0<br>6.500×2.875 | 300<br>2.07                 | M16×100   | 234.8<br>9.24    | 110.8<br>4.36 | 121<br>4.76   | 91.5<br>3.6  | 70<br>2.75                             |
| 150×65<br>6×2½        | 165.1×76.1<br>6.500×3.000 | 300<br>2.07                 | M16×100   | 234.8<br>9.24    | 110.8<br>4.36 | 121<br>4.76   | 91.5<br>3.6  | 70<br>2.75                             |
| 150×80<br>6×3         | 165.1×88.9<br>6.500×3.500 | 300<br>2.07                 | M16×100   | 234.8<br>9.24    | 131.1<br>5.16 | 121<br>4.76   | 91.5<br>3.6  | 86<br>3.4                              |
| 150×32<br>6×1½        | 168.3×42.4<br>6.625×1.660 | 300<br>2.07                 | M16×100   | 238.2<br>9.38    | 88.8<br>3.5   | 122.5<br>4.82 | 93<br>3.66   | 51<br>2                                |
| 150×40<br>6×1½        | 168.3×48.3<br>6.625×1.900 | 300<br>2.07                 | M16×100   | 238.2<br>9.38    | 88.8<br>3.5   | 122.5<br>4.82 | 93<br>3.66   | 51<br>2                                |
| 150×50<br>6×2         | 168.3×60.3<br>6.625×2.375 | 300<br>2.07                 | M16×100   | 238.2<br>9.38    | 103.2<br>4.06 | 122.5<br>4.82 | 93<br>3.66   | 63<br>2.5                              |
| 150×65<br>6×2½        | 168.3×73.0<br>6.625×2.875 | 300<br>2.07                 | M16×100   | 238.2<br>9.38    | 110.8<br>4.36 | 122.5<br>4.82 | 93<br>3.66   | 70<br>2.75                             |
| 150×65<br>6×2½        | 168.3×76.1<br>6.625×3.000 | 300<br>2.07                 | M16×100   | 238.2<br>9.38    | 110.8<br>4.36 | 122.5<br>4.82 | 93<br>3.66   | 70<br>2.75                             |
| 150×80<br>6×3         | 168.3×88.9<br>6.625×3.500 | 300<br>2.07                 | M16×100   | 238.2<br>9.38    | 131.1<br>5.16 | 122.5<br>4.82 | 93<br>3.66   | 86<br>3.4                              |

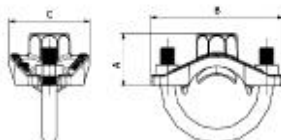
# Mechanical Tee (Thread Outlet)



| Nominal Size<br>mm/in | Pipe O.D.<br>mm/in | Working Pressure<br>PSI/MPa | Bolt Size | Dimensions mm/in |       |       |      | Hole Dia<br>mm/in<br>+1.6/0<br>+0.053/0 |
|-----------------------|--------------------|-----------------------------|-----------|------------------|-------|-------|------|-----------------------------------------|
|                       |                    |                             |           | A                | B     | C     | D    |                                         |
| 50×25                 | 60.3×33.7          | 300                         | M10×60    | 114              | 69    | 58.1  | 38.6 | 38                                      |
| 2×1                   | 2.375×1.315        | 2.07                        |           | 4.5              | 2.72  | 2.29  | 1.52 | 1.5                                     |
| 50×32                 | 60.3×42.4          | 300                         | M10×60    | 114              | 76.5  | 59.1  | 38.6 | 46                                      |
| 2×1½                  | 2.375×1.660        | 2.07                        |           | 4.5              | 3.01  | 2.33  | 1.52 | 1.8                                     |
| 50×40                 | 60.3×48.3          | 300                         | M10×60    | 114              | 76.5  | 59.1  | 38.6 | 46                                      |
| 2×1½                  | 2.375×1.900        | 2.07                        |           | 4.5              | 3.01  | 2.33  | 1.52 | 1.8                                     |
| 65×40                 | 73.0×48.3          | 300                         | M10×70    | 126.4            | 76.8  | 66.1  | 45.6 | 46                                      |
| 2½×48.3               | 2.375×1.900        | 2.07                        |           | 4.98             | 3.02  | 2.6   | 1.8  | 1.8                                     |
| 65×25                 | 76.1×33.7          | 300                         | M10×70    | 129.4            | 69.4  | 65.1  | 47.2 | 38                                      |
| 76.1×1                | 3.000×1.315        | 2.07                        |           | 5.09             | 2.73  | 2.56  | 1.86 | 1.5                                     |
| 65×32                 | 76.1×42.4          | 300                         | M10×70    | 129.4            | 76.8  | 66.1  | 47.2 | 46                                      |
| 76.1×1½               | 3.000×1.660        | 2.07                        |           | 5.09             | 3.02  | 2.6   | 1.86 | 1.8                                     |
| 65×40                 | 76.1×48.3          | 300                         | M10×70    | 129.4            | 76.8  | 66.1  | 47.2 | 46                                      |
| 76.1×1½               | 3.000×1.900        | 2.07                        |           | 5.09             | 3.02  | 2.6   | 1.86 | 1.8                                     |
| 80×25                 | 88.9×33.7          | 300                         | M12×75    | 147.4            | 72    | 74.3  | 53.8 | 38                                      |
| 3×1                   | 3.500×1.315        | 2.07                        |           | 5.8              | 2.83  | 2.93  | 2.12 | 1.5                                     |
| 80×32                 | 88.9×42.4          | 300                         | M12×75    | 147.4            | 86    | 74.3  | 53.8 | 51                                      |
| 3×1½                  | 3.500×1.660        | 2.07                        |           | 5.8              | 3.39  | 2.93  | 2.12 | 2                                       |
| 80×40                 | 88.9×48.3          | 300                         | M12×75    | 147.4            | 86    | 74.3  | 53.8 | 51                                      |
| 3×1½                  | 3.500×1.900        | 2.07                        |           | 5.8              | 3.39  | 2.93  | 2.12 | 2                                       |
| 80×50                 | 88.9×60.3          | 300                         | M12×75    | 147.4            | 99.4  | 79.3  | 53.8 | 63                                      |
| 3×2                   | 3.500×2.375        | 2.07                        |           | 5.8              | 3.91  | 3.12  | 2.12 | 2.5                                     |
| 100×25                | 114.3×33.7         | 300                         | M12×75    | 176.2            | 72.4  | 87    | 66.5 | 38                                      |
| 4×1                   | 4.500×1.315        | 2.07                        |           | 6.94             | 2.85  | 3.43  | 2.62 | 1.5                                     |
| 100×32                | 114.3×42.4         | 300                         | M12×75    | 176.2            | 86.4  | 87    | 66.5 | 51                                      |
| 4×1½                  | 4.500×1.660        | 2.07                        |           | 6.94             | 3.4   | 3.43  | 2.62 | 2                                       |
| 100×40                | 114.3×48.3         | 300                         | M12×75    | 176.2            | 86.4  | 87    | 66.5 | 51                                      |
| 4×1½                  | 4.500×1.900        | 2.07                        |           | 6.94             | 3.4   | 3.43  | 2.62 | 2                                       |
| 100×50                | 114.3×60.3         | 300                         | M12×75    | 176.2            | 100.9 | 92    | 66.5 | 63                                      |
| 4×2                   | 4.500×2.375        | 2.07                        |           | 6.94             | 3.97  | 3.62  | 2.62 | 2.5                                     |
| 100×65                | 114.3×73.0         | 300                         | M12×75    | 176.2            | 109.5 | 97.2  | 66.5 | 70                                      |
| 4×2½                  | 4.500×2.875        | 2.07                        |           | 6.94             | 4.31  | 3.83  | 2.62 | 2.75                                    |
| 100×65                | 114.3×76.1         | 300                         | M12×75    | 176.2            | 109.5 | 97.2  | 66.5 | 70                                      |
| 4×76.1                | 4.500×3.000        | 2.07                        |           | 6.94             | 4.31  | 3.83  | 2.62 | 2.75                                    |
| 125×25                | 139.7×33.7         | 300                         | M16×85    | 209.8            | 74.4  | 99.4  | 78.9 | 38                                      |
| 139.7×1               | 5.500×1.315        | 2.07                        |           | 8.26             | 2.93  | 3.91  | 3.1  | 1.5                                     |
| 125×32                | 139.7×42.4         | 300                         | M16×85    | 209.8            | 88.2  | 99.4  | 78.9 | 51                                      |
| 139.7×1½              | 5.500×1.660        | 2.07                        |           | 8.26             | 3.47  | 3.91  | 3.1  | 2                                       |
| 125×40                | 139.7×48.3         | 300                         | M16×85    | 209.8            | 88.2  | 99.4  | 78.9 | 51                                      |
| 139.7×1½              | 5.500×1.900        | 2.07                        |           | 8.26             | 3.47  | 3.91  | 3.1  | 2                                       |
| 125×50                | 139.7×60.3         | 300                         | M16×85    | 209.8            | 102.8 | 104.4 | 78.9 | 63                                      |
| 139.7×2               | 5.500×2.375        | 2.07                        |           | 8.26             | 4.05  | 4.11  | 3.1  | 2.5                                     |
| 125×65                | 139.7×76.1         | 300                         | M16×85    | 209.8            | 110.1 | 110.6 | 78.9 | 70                                      |
| 139.7×76.1            | 5.500×3.000        | 2.07                        |           | 8.26             | 4.33  | 4.35  | 3.1  | 2.75                                    |
| 125×80                | 139.7×88.9         | 300                         | M16×85    | 209.8            | 130.7 | 110.6 | 78.9 | 86                                      |
| 139.7×3               | 5.500×3.500        | 2.07                        |           | 8.26             | 5.15  | 4.35  | 3.1  | 3.4                                     |
| 150×25                | 165.1×33.7         | 300                         | M16×100   | 234.8            | 74.9  | 112   | 91.5 | 38                                      |
| 165.1×1               | 6.500×1.315        | 2.07                        |           | 9.24             | 2.95  | 4.41  | 3.6  | 1.5                                     |
| 150×50                | 165.1×60.3         | 300                         | M16×100   | 234.8            | 103.2 | 117   | 91.5 | 63                                      |
| 165.1×2               | 6.500×2.375        | 2.07                        |           | 9.24             | 4.06  | 4.61  | 3.6  | 2.5                                     |
| 150×65                | 165.1×76.1         | 300                         | M16×100   | 234.8            | 110.8 | 123   | 91.5 | 70                                      |
| 165.1×76.1            | 6.500×3.000        | 2.07                        |           | 9.24             | 4.36  | 4.84  | 3.6  | 2.75                                    |
| 150×80                | 165.1×88.9         | 300                         | M16×100   | 234.8            | 131.1 | 123   | 91.5 | 86                                      |
| 165.1×3               | 6.500×3.500        | 2.07                        |           | 9.24             | 5.16  | 4.84  | 3.6  | 3.4                                     |
| 150×25                | 168.3×33.7         | 300                         | M16×100   | 238.2            | 74.9  | 113.5 | 93   | 38                                      |
| 6×1                   | 6.625×1.315        | 2.07                        |           | 9.38             | 2.95  | 4.47  | 3.66 | 1.5                                     |
| 150×32                | 168.3×42.4         | 300                         | M16×100   | 238.2            | 88.8  | 113.5 | 93   | 51                                      |
| 6×1½                  | 6.625×1.660        | 2.07                        |           | 9.38             | 3.5   | 4.47  | 3.66 | 2                                       |
| 150×40                | 168.3×48.3         | 300                         | M16×100   | 238.2            | 88.8  | 113.5 | 93   | 51                                      |
| 6×1½                  | 6.625×1.900        | 2.07                        |           | 9.38             | 3.5   | 4.47  | 3.66 | 2                                       |
| 150×50                | 168.3×60.3         | 300                         | M16×100   | 238.2            | 103.2 | 118.5 | 93   | 63                                      |
| 6×2                   | 6.625×2.375        | 2.07                        |           | 9.38             | 4.06  | 4.67  | 3.66 | 2.5                                     |
| 150×65                | 168.3×73.0         | 300                         | M16×100   | 238.2            | 110.8 | 124.5 | 93   | 70                                      |
| 6×2½                  | 6.625×2.875        | 2.07                        |           | 9.38             | 4.36  | 4.9   | 3.66 | 2.75                                    |
| 150×65                | 168.3×76.1         | 300                         | M16×100   | 238.2            | 110.8 | 124.5 | 93   | 70                                      |
| 6×76.1                | 6.625×3.000        | 2.07                        |           | 9.38             | 4.36  | 4.9   | 3.66 | 2.75                                    |
| 150×80                | 168.3×88.9         | 300                         | M16×100   | 238.2            | 131.1 | 124.5 | 93   | 86                                      |
| 6×3                   | 6.625×3.500        | 2.07                        |           | 9.38             | 5.16  | 4.9   | 3.66 | 3.4                                     |

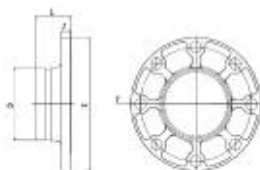


## U-Bolt Mechanical Tee



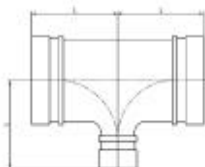
| Nominal Size<br>mm/in | Pipe O.D.<br>Mm/in | Working Pressure<br>PSI/MPa | Bolt Size | Dimensions mm/in |      |       | Hole Dia<br>mm/in<br>+1.6, 0/-0.083, 0 |
|-----------------------|--------------------|-----------------------------|-----------|------------------|------|-------|----------------------------------------|
|                       |                    |                             |           | A                | B    | C     |                                        |
| 32×15                 | 42.4×21.3          | 300                         | M10×73    | 36               | 93   | 56.58 | 29                                     |
| 1½×1/2                | 1.66×0.83          | 2.07                        |           | 1.42             | 3.66 | 2.23  | 1.14                                   |
| 32×20                 | 42.4×26.9          | 300                         | M10×73    | 39               | 93   | 56.58 | 29                                     |
| 1½×3/4                | 1.66×1.05          | 2.07                        |           | 1.54             | 3.66 | 2.23  | 1.14                                   |
| 32×25                 | 42.4×33.7          | 300                         | M10×73    | 43               | 93   | 56.58 | 29                                     |
| 1½×1                  | 1.66×1.32          | 2.07                        |           | 1.69             | 3.66 | 2.23  | 1.14                                   |
| 40×15                 | 48.3×21.3          | 300                         | M10×73    | 36               | 93   | 56.58 | 29                                     |
| 1½×1/2                | 1.90×0.83          | 2.07                        |           | 1.42             | 3.66 | 2.23  | 1.14                                   |
| 40×20                 | 48.3×26.9          | 300                         | M10×73    | 39               | 93   | 56.58 | 29                                     |
| 1½×3/4                | 1.90×1.05          | 2.07                        |           | 1.54             | 3.66 | 2.23  | 1.14                                   |
| 40×25                 | 48.3×33.7          | 300                         | M10×73    | 43               | 93   | 56.58 | 29                                     |
| 1½×1                  | 1.90×1.32          | 2.07                        |           | 1.69             | 3.66 | 2.23  | 1.14                                   |
| 50×15                 | 60.3×21.3          | 300                         | M10×90    | 36               | 98   | 57.04 | 29                                     |
| 2×1/2                 | 2.38×0.83          | 2.07                        |           | 1.42             | 3.86 | 2.25  | 1.14                                   |
| 50×20                 | 60.3×26.9          | 300                         | M10×90    | 39               | 98   | 57.04 | 29                                     |
| 2×3/4                 | 2.38×1.05          | 2.07                        |           | 1.54             | 3.86 | 2.25  | 1.14                                   |
| 50×25                 | 60.3×33.7          | 300                         | M10×90    | 43               | 98   | 57.04 | 29                                     |
| 2×1                   | 2.38×1.32          | 2.07                        |           | 1.69             | 3.86 | 2.25  | 1.14                                   |
| 65×15                 | 73.0×21.3          | 300                         | M10×105   | 36               | 113  | 57.69 | 29                                     |
| 2½×1/2                | 2.88×0.83          | 2.07                        |           | 1.42             | 4.45 | 2.27  | 1.14                                   |
| 65×20                 | 73.0×26.9          | 300                         | M10×105   | 39               | 113  | 57.69 | 29                                     |
| 2½×3/4                | 2.88×1.05          | 2.07                        |           | 1.54             | 4.45 | 2.27  | 1.14                                   |
| 65×25                 | 73.0×33.7          | 300                         | M10×105   | 43               | 113  | 57.69 | 29                                     |
| 2½×1                  | 2.88×1.32          | 2.07                        |           | 1.69             | 4.45 | 2.27  | 1.14                                   |
| 65×15                 | 76.1×21.3          | 300                         | M10×105   | 36               | 113  | 57.69 | 29                                     |
| 2½×1/2                | 3.0×0.83           | 2.07                        |           | 1.42             | 4.45 | 2.27  | 1.14                                   |
| 65×20                 | 76.1×26.9          | 300                         | M10×105   | 39               | 113  | 57.69 | 29                                     |
| 2½×3/4                | 3.0×1.05           | 2.07                        |           | 1.54             | 4.45 | 2.27  | 1.14                                   |
| 65×25                 | 76.1×33.7          | 300                         | M10×105   | 43               | 113  | 57.69 | 29                                     |
| 2½×1                  | 3.0×1.32           | 2.07                        |           | 1.69             | 4.45 | 2.27  | 1.14                                   |

## Adpator Flange

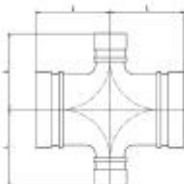


| Nominal Size<br>mm/in | Pipe O.D.<br>Mm/in | Working Pressure<br>PSI/MPa | Bolt Size<br>NO.—Size mm | Dimensions mm/in |       |       |      |
|-----------------------|--------------------|-----------------------------|--------------------------|------------------|-------|-------|------|
|                       |                    |                             |                          | L                | X     | Y     | Z    |
| 50                    | 60.3               | 225                         | 4-M16                    | 65               | 165   | 125   | 16   |
| 2                     | 2.2375             | 1.6                         |                          | 2.56             | 6.5   | 4.92  | 0.63 |
| 65                    | 73                 | 225                         | 4-M16                    | 65               | 185   | 145   | 16   |
| 2½                    | 2.875              | 1.6                         |                          | 2.56             | 7.28  | 5.7   | 0.63 |
| 65                    | 76.1               | 225                         | 4-M16                    | 65               | 185   | 145   | 16   |
| 2½                    | 3                  | 1.6                         |                          | 2.56             | 7.28  | 5.7   | 0.63 |
| 80                    | 88.9               | 225                         | 8-M16                    | 65               | 200   | 160   | 16   |
| 3                     | 3.5                | 1.6                         |                          | 2.56             | 7.87  | 6.3   | 0.63 |
| 100                   | 108                | 225                         | 8-M16                    | 70               | 220   | 180   | 16   |
| 4                     | 4.25               | 1.6                         |                          | 2.76             | 8.66  | 7.09  | 0.63 |
| 100                   | 114.3              | 225                         | 8-M16                    | 70               | 220   | 180   | 16   |
| 4                     | 4.5                | 1.6                         |                          | 2.76             | 8.66  | 7.09  | 0.63 |
| 125                   | 133                | 225                         | 8-M16                    | 70               | 250   | 210   | 18   |
| 5                     | 5.25               | 1.6                         |                          | 2.76             | 9.84  | 8.27  | 0.71 |
| 125                   | 139.7              | 225                         | 8-M16                    | 70               | 250   | 210   | 18   |
| 5                     | 5.5                | 1.6                         |                          | 2.76             | 9.87  | 8.27  | 0.71 |
| 150                   | 159                | 225                         | 8-M20                    | 70               | 285   | 240   | 18   |
| 6                     | 6.25               | 1.6                         |                          | 2.76             | 11.22 | 9.45  | 0.71 |
| 150                   | 165.1              | 225                         | 8-M20                    | 70               | 285   | 240   | 18   |
| 6                     | 6.5                | 1.6                         |                          | 2.76             | 11.22 | 9.45  | 0.71 |
| 150                   | 168.3              | 225                         | 8-M20                    | 70               | 285   | 240   | 18   |
| 6                     | 6.625              | 1.6                         |                          | 2.76             | 11.22 | 9.45  | 0.71 |
| 200                   | 219.1              | 225                         | 12-M20                   | 80               | 340   | 295   | 19   |
| 8                     | 8.625              | 1.6                         |                          | 3.15             | 13.39 | 11.61 | 0.75 |
| 250                   | 273                | 225                         | 12-M24                   | 85               | 405   | 355   | 21   |
| 10                    | 10.75              | 1.6                         |                          | 3.35             | 15.94 | 13.98 | 0.83 |
| 300                   | 323.9              | 225                         | 12-M24                   | 90               | 460   | 410   | 24   |
| 12                    | 12.75              | 1.6                         |                          | 3.54             | 18.11 | 16.14 | 0.94 |

### Grooved Reducer Tee



### Grooved Reducer Cross



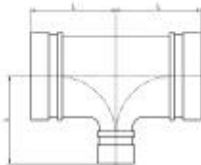
### Grooved Concentric Reducer



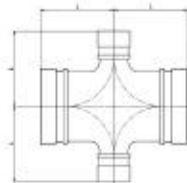
| Nominal Size<br>mm/in    | Pipe O.D.<br>mm/in            | Working Pressure<br>PSI/MPa | Dimension L mm/in  |                        |
|--------------------------|-------------------------------|-----------------------------|--------------------|------------------------|
|                          |                               |                             | Reducing Tee/Cross | Grooved/Thread Reducer |
| 50 × 25<br>2 × 1         | 60.3 × 33.7<br>2.375 × 1.315  | 300<br>2.07                 |                    |                        |
| 50 × 32<br>2 × 1 1/4     | 60.3 × 42.4<br>2.375 × 1.660  | 300<br>2.07                 | 70<br>2.76         |                        |
| 50 × 40<br>2 × 1 1/2     | 60.3 × 48.3<br>2.375 × 1.900  | 300<br>2.07                 |                    |                        |
| 65 × 25<br>2 1/2 × 1     | 73.0 × 33.7<br>2.875 × 1.315  | 300<br>2.07                 |                    |                        |
| 65 × 32<br>2 1/2 × 1 1/4 | 73.0 × 42.4<br>2.875 × 1.660  | 300<br>2.07                 |                    |                        |
| 65 × 40<br>2 1/2 × 1 1/2 | 73.0 × 48.3<br>2.875 × 1.900  | 300<br>2.07                 |                    |                        |
| 65 × 50<br>2 1/2 × 2     | 73.0 × 60.3<br>2.875 × 2.375  | 300<br>2.07                 | 76<br>3            |                        |
| 65 × 25<br>2 1/2 × 1     | 76.1 × 33.7<br>3.000 × 1.315  | 300<br>2.07                 |                    | 64<br>2.5              |
| 65 × 32<br>2 1/2 × 1 1/4 | 76.1 × 42.4<br>3.000 × 1.660  | 300<br>2.07                 |                    |                        |
| 65 × 40<br>2 1/2 × 1 1/2 | 76.1 × 48.3<br>3.000 × 1.900  | 300<br>2.07                 |                    |                        |
| 65 × 50<br>2 1/2 × 2     | 76.1 × 60.3<br>3.000 × 2.375  | 300<br>2.07                 |                    |                        |
| 80 × 25<br>3 × 1         | 88.9 × 33.7<br>3.500 × 1.315  | 300<br>2.07                 |                    |                        |
| 80 × 32<br>3 × 1 1/4     | 88.9 × 42.4<br>3.500 × 1.660  | 300<br>2.07                 |                    |                        |
| 80 × 40<br>3 × 1 1/2     | 88.9 × 48.3<br>3.500 × 1.900  | 300<br>2.07                 | 86<br>3.5          |                        |
| 80 × 50<br>3 × 2         | 88.9 × 60.3<br>3.500 × 2.375  | 300<br>2.07                 |                    |                        |
| 80 × 65<br>3 × 2 1/2     | 88.9 × 73.0<br>3.500 × 2.875  | 300<br>2.07                 |                    |                        |
| 80 × 65<br>3 × 2 1/2     | 88.9 × 76.1<br>3.500 × 3.000  | 300<br>2.07                 |                    |                        |
| 100 × 25<br>4 × 1        | 108.0 × 33.7<br>4.250 × 1.315 | 300<br>2.07                 |                    |                        |
| 100 × 32<br>4 × 1 1/4    | 108.0 × 42.4<br>4.250 × 1.660 | 300<br>2.07                 |                    |                        |
| 100 × 40<br>4 × 1 1/2    | 108.0 × 48.3<br>4.250 × 1.900 | 300<br>2.07                 |                    |                        |
| 100 × 50<br>4 × 2        | 108.0 × 60.3<br>4.250 × 2.375 | 300<br>2.07                 |                    |                        |
| 100 × 65<br>4 × 2 1/2    | 108.0 × 73.0<br>4.250 × 2.875 | 300<br>2.07                 |                    |                        |
| 100 × 65<br>4 × 2 1/2    | 108.0 × 76.1<br>4.250 × 3.000 | 300<br>2.07                 | 101.6<br>4         | 76<br>3                |
| 100 × 80<br>4 × 3        | 108.0 × 88.9<br>4.250 × 3.500 | 300<br>2.07                 |                    |                        |
| 100 × 25<br>4 × 1        | 114.3 × 33.7<br>4.500 × 1.315 | 300<br>2.07                 |                    |                        |
| 100 × 32<br>4 × 1 1/4    | 114.3 × 42.4<br>4.500 × 1.660 | 300<br>2.07                 |                    |                        |
| 100 × 40<br>4 × 1 1/2    | 114.3 × 48.3<br>4.500 × 1.900 | 300<br>2.07                 |                    |                        |
| 100 × 50<br>4 × 2        | 114.3 × 60.3<br>4.500 × 2.375 | 300<br>2.07                 |                    |                        |
| 100 × 65<br>4 × 2 1/2    | 114.3 × 73.0<br>4.500 × 2.875 | 300<br>2.07                 |                    |                        |



### Grooved Reducer Tee



### Grooved Reducer Cross

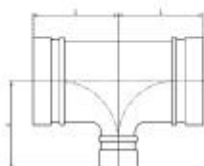


### Grooved Concentric Reducer

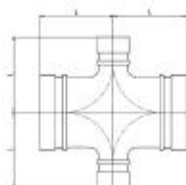


| Nominal Size<br>mm/in | Pipe O. D<br>mm/in             | Working Pressure<br>PSI/MPa | Dimension L mm/in  |                        |
|-----------------------|--------------------------------|-----------------------------|--------------------|------------------------|
|                       |                                |                             | Reducing Tee/Cross | Grooved/Thread Reducer |
| 100 × 65<br>4 × 76.1  | 114.3 × 76.1<br>4.500 × 3.000  | 300<br>2.07                 | 101.6<br>4         | 76<br>3                |
| 100 × 80<br>4 × 3     | 114.3 × 88.9<br>4.500 × 3.500  | 300<br>2.07                 |                    |                        |
| 125 × 25<br>5 × 1     | 133.0 × 33.7<br>5.250 × 1.315  | 300<br>2.07                 |                    |                        |
| 125 × 32<br>5 × 1 1/4 | 133.0 × 42.4<br>5.250 × 1.660  | 300<br>2.07                 |                    |                        |
| 125 × 40<br>5 × 1 1/2 | 133.0 × 48.3<br>5.250 × 1.900  | 300<br>2.07                 |                    |                        |
| 125 × 50<br>5 × 2     | 133.0 × 60.3<br>5.250 × 2.375  | 300<br>2.07                 |                    |                        |
| 125 × 65<br>5 × 2 1/2 | 133.0 × 73.0<br>5.250 × 2.875  | 300<br>2.07                 |                    |                        |
| 125 × 65<br>5 × 76.1  | 133.0 × 76.1<br>5.250 × 3.000  | 300<br>2.07                 |                    |                        |
| 125 × 80<br>5 × 3     | 133.0 × 88.9<br>5.250 × 3.500  | 300<br>2.07                 |                    |                        |
| 125 × 25<br>5 × 1     | 139.7 × 33.7<br>5.500 × 1.315  | 300<br>2.07                 |                    |                        |
| 125 × 32<br>5 × 1 1/4 | 139.7 × 42.4<br>5.500 × 1.660  | 300<br>2.07                 |                    |                        |
| 125 × 40<br>5 × 1 1/2 | 139.7 × 48.3<br>5.500 × 1.900  | 300<br>2.07                 |                    |                        |
| 125 × 50<br>5 × 2     | 139.7 × 60.3<br>5.500 × 2.375  | 300<br>2.07                 | 122<br>4.8         | 89<br>3.5              |
| 125 × 65<br>5 × 2 1/2 | 139.7 × 73.0<br>5.500 × 2.875  | 300<br>2.07                 |                    |                        |
| 125 × 65<br>5 × 76.1  | 139.7 × 76.1<br>5.500 × 3.000  | 300<br>2.07                 |                    |                        |
| 125 × 80<br>5 × 3     | 139.7 × 88.9<br>5.500 × 3.500  | 300<br>2.07                 |                    |                        |
| 125 × 100<br>5 × 4    | 139.7 × 114.3<br>5.500 × 4.500 | 300<br>2.07                 |                    |                        |
| 125 × 25<br>5 × 1     | 141.3 × 33.7<br>5.563 × 1.315  | 300<br>2.07                 |                    |                        |
| 125 × 32<br>5 × 1 1/4 | 141.3 × 42.4<br>5.563 × 1.660  | 300<br>2.07                 |                    |                        |
| 125 × 40<br>5 × 1 1/2 | 141.3 × 48.3<br>5.563 × 1.900  | 300<br>2.07                 |                    |                        |
| 125 × 50<br>5 × 2     | 141.3 × 60.3<br>5.563 × 2.375  | 300<br>2.07                 |                    |                        |
| 125 × 65<br>5 × 2 1/2 | 141.3 × 73.0<br>5.563 × 2.875  | 300<br>2.07                 |                    |                        |
| 125 × 65<br>5 × 76.1  | 141.3 × 76.1<br>5.563 × 3.000  | 300<br>2.07                 |                    |                        |
| 125 × 80<br>5 × 3     | 141.3 × 88.9<br>5.563 × 3.500  | 300<br>2.07                 |                    |                        |
| 125 × 100<br>5 × 4    | 141.3 × 114.3<br>5.563 × 4.500 | 300<br>2.07                 |                    |                        |
| 150 × 25<br>6 × 1     | 159.0 × 33.7<br>6.250 × 1.315  | 300<br>2.07                 |                    |                        |
| 150 × 32<br>6 × 1 1/4 | 159.0 × 42.4<br>6.250 × 1.660  | 300<br>2.07                 | 140                | 102                    |
| 150 × 40<br>6 × 1 1/2 | 159.0 × 48.3<br>6.250 × 1.900  | 300<br>2.07                 | 5.5                | 4                      |
| 150 × 50<br>6 × 2     | 159.0 × 60.3<br>6.250 × 2.375  | 300<br>2.07                 |                    |                        |

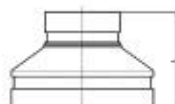
### Grooved Reducer Tee



### Grooved Reducer Cross



### Grooved Concentric Reducer



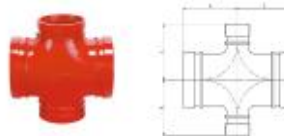
| Nominal Size<br>mm/in | Pipe O. D<br>Mm/in             | Working Pressure<br>PSI/MPa | Dimension L mm/in  |                        |
|-----------------------|--------------------------------|-----------------------------|--------------------|------------------------|
|                       |                                |                             | Reducing Tee/Cross | Grooved/Thread Reducer |
| 150 × 65<br>6 × 2 1/2 | 159.0 × 73.0<br>6.250 × 2.875  | 300<br>2.07                 |                    |                        |
| 150 × 65<br>6 × 76.1  | 159.0 × 76.1<br>6.250 × 3.000  | 300<br>2.07                 |                    |                        |
| 150 × 80<br>6 × 3     | 159.0 × 88.9<br>6.250 × 3.500  | 300<br>2.07                 |                    |                        |
| 150 × 100<br>6 × 4    | 159.0 × 114.3<br>6.250 × 4.500 | 300<br>2.07                 |                    |                        |
| 150 × 25<br>6 × 1     | 165.1 × 33.7<br>6.500 × 1.315  | 300<br>2.07                 |                    |                        |
| 150 × 32<br>6 × 1 1/4 | 165.1 × 42.4<br>6.500 × 1.660  | 300<br>2.07                 |                    |                        |
| 150 × 40<br>6 × 1 1/2 | 165.1 × 48.3<br>6.500 × 1.900  | 300<br>2.07                 |                    |                        |
| 150 × 50<br>6 × 2     | 165.1 × 60.3<br>6.500 × 2.375  | 300<br>2.07                 |                    |                        |
| 150 × 65<br>6 × 2 1/2 | 165.1 × 73.0<br>6.500 × 2.875  | 300<br>2.07                 | 140<br>5.5         | 102<br>4               |
| 150 × 65<br>6 × 76.1  | 165.1 × 76.1<br>6.500 × 3.000  | 300<br>2.07                 |                    |                        |
| 150 × 80<br>6 × 3     | 165.1 × 88.9<br>6.500 × 3.500  | 300<br>2.07                 |                    |                        |
| 150 × 100<br>6 × 4    | 165.1 × 114.3<br>6.500 × 4.500 | 300<br>2.07                 |                    |                        |
| 150 × 25<br>6 × 1     | 168.3 × 33.7<br>6.625 × 1.315  | 300<br>2.07                 |                    |                        |
| 150 × 32<br>6 × 1 1/4 | 168.3 × 42.4<br>6.625 × 1.660  | 300<br>2.07                 |                    |                        |
| 150 × 40<br>6 × 1 1/2 | 168.3 × 48.3<br>6.625 × 1.900  | 300<br>2.07                 |                    |                        |
| 150 × 50<br>6 × 2     | 168.3 × 60.3<br>6.625 × 2.375  | 300<br>2.07                 |                    |                        |
| 150 × 65<br>6 × 2 1/2 | 168.3 × 73.0<br>6.625 × 2.875  | 300<br>2.07                 |                    |                        |
| 150 × 65<br>6 × 76.1  | 168.3 × 76.1<br>6.625 × 3.000  | 300<br>2.07                 |                    |                        |
| 150 × 80<br>6 × 3     | 168.3 × 88.9<br>6.625 × 3.500  | 300<br>2.07                 |                    |                        |
| 150 × 100<br>6 × 4    | 168.3 × 114.3<br>6.625 × 4.500 | 300<br>2.07                 |                    |                        |
| 200 × 25<br>8 × 1     | 219.1 × 33.7<br>8.625 × 1.315  | 300<br>2.07                 |                    |                        |
| 200 × 32<br>8 × 1 1/4 | 219.1 × 42.4<br>8.625 × 1.660  | 300<br>2.07                 |                    |                        |
| 200 × 40<br>8 × 1 1/2 | 219.1 × 48.3<br>8.625 × 1.900  | 300<br>2.07                 |                    |                        |
| 200 × 50<br>8 × 2     | 219.1 × 60.3<br>8.625 × 2.375  | 300<br>2.07                 |                    |                        |
| 200 × 65<br>8 × 2 1/2 | 219.1 × 73.0<br>8.625 × 2.875  | 300<br>2.07                 | 175<br>6.89        | 127<br>5               |
| 200 × 65<br>8 × 76.1  | 219.1 × 76.1<br>8.625 × 3.000  | 300<br>2.07                 |                    |                        |
| 200 × 80<br>8 × 3     | 219.1 × 88.9<br>8.625 × 3.500  | 300<br>2.07                 |                    |                        |
| 200 × 100<br>8 × 4    | 219.1 × 114.3<br>8.625 × 4.500 | 300<br>2.07                 |                    |                        |
| 250 × 25<br>10 × 1    | 273.0 × 33.7<br>10.750 × 1.315 | 300<br>2.07                 | 215<br>8.5         |                        |



### Grooved Reducer Tee



### Grooved Reducer Cross



### Grooved Concentric Reducer



| Nominal Size<br>mm/in  | Pipe O.D<br>mm/in               | Working Pressure<br>PSI/MPa | Dimension L mm/in  |                        |
|------------------------|---------------------------------|-----------------------------|--------------------|------------------------|
|                        |                                 |                             | Reducing Tee/Cross | Grooved/Thread Reducer |
| 250 × 32<br>10 × 1 1/4 | 273.0 × 42.4<br>10.750 × 1.660  | 300<br>2.07                 |                    |                        |
| 250 × 40<br>10 × 1 1/2 | 273.0 × 48.3<br>10.750 × 1.900  | 300<br>2.07                 |                    |                        |
| 250 × 50<br>10 × 2     | 273.0 × 60.3<br>10.750 × 2.375  | 300<br>2.07                 |                    |                        |
| 250 × 65<br>10 × 2 1/2 | 273.0 × 73.0<br>10.750 × 2.875  | 300<br>2.07                 | 215<br>8.5         |                        |
| 250 × 65<br>10 × 76.1  | 273.0 × 76.1<br>10.750 × 3.000  | 300<br>2.07                 |                    |                        |
| 250 × 80<br>10 × 3     | 273.0 × 88.9<br>10.750 × 3.500  | 300<br>2.07                 |                    |                        |
| 250 × 100<br>10 × 4    | 273.0 × 114.3<br>10.750 × 4.500 | 300<br>2.07                 |                    | /                      |
| 300 × 25<br>12 × 1     | 323.9 × 33.7<br>12.750 × 1.315  | 300<br>2.07                 |                    |                        |
| 300 × 32<br>12 × 1 1/4 | 323.9 × 42.4<br>12.750 × 1.660  | 300<br>2.07                 |                    |                        |
| 300 × 40<br>12 × 1 1/2 | 323.9 × 48.3<br>12.750 × 1.900  | 300<br>2.07                 |                    |                        |
| 300 × 50<br>12 × 2     | 323.9 × 60.3<br>12.750 × 2.375  | 300<br>2.07                 |                    |                        |
| 300 × 65<br>12 × 2 1/2 | 323.9 × 73.0<br>12.750 × 2.875  | 300<br>2.07                 | 245<br>9.65        |                        |
| 300 × 65<br>12 × 76.1  | 323.9 × 76.1<br>12.750 × 3.000  | 300<br>2.07                 |                    |                        |
| 300 × 80<br>12 × 3     | 323.9 × 88.9<br>12.750 × 3.500  | 300<br>2.07                 |                    |                        |
| 300 × 100<br>12 × 4    | 323.9 × 114.3<br>12.750 × 4.500 | 300<br>2.07                 |                    |                        |

### Gaske Ring



| Gasket Mark | Name           | Temperature Range               | General Service Recommendations                                                                                                                                                                                                                                                                         | Color Mark |
|-------------|----------------|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| E           | EPDM           | -34℃ ~ +110℃<br>(-30 ~ +230° F) | Recommended for hot water service within the specified temperature range plus a variety of dilute acids,oil-free air and many chemical services,UL classified in accordance with ANSI/ NSF61 or cold + 86° F( + 30° )and hot+180° F(+82° C)potable water service,Not recommended for petroleum service. | Black      |
| N           | NBR            | -29℃ ~ +82℃<br>(-20 ~ +180F)    | (Recommended for petroleum products,air with oil vapors,vegetable and mineral oils within the specified temperature range,Not recommended for hot water services.)                                                                                                                                      | Black      |
| S           | Silicon Rubber | -40 ~ +177℃<br>(-40 ~ +350° F)  | (Recommended for high temperature dry air and some high temperature chemical products.)                                                                                                                                                                                                                 | White      |

## Installation Instruction For Rigid & Flexible Coupling



### Pipe preparation

Check pipe end for proper groove dimensions and to assure that pipe end is free of indentations and projections that would prevent proper sealing.



### Lubricate gasket

Check gasket to be sure it's compatible for the intended service. Apply thin lubricant to the outside and sealing lips of the gasket.



### Gasket installation

Slip the gasket over one pipe, making sure the gasket lip does not over-hang the pipe end.



### Alignment

After aligning two pipe ends together, pull the pull the gasket into position, centering between the grooves on each pipe. The gasket should not extend into the groove on either pipe.



### Housing installation

Remove one bolt & nut and loosen the other nut. Place one housing over the pipe grooves. Swing the other housing over the gasket and into the grooves on both pipes. Re-insert the bolt and connect two housings.



### Tighten nuts

Firstly hand tighten nuts and make sure oval neck bolt completely fits into bolt hole. Then securely tighten nuts alternatively and equally to the specified bolt torque by using spanner.



### Assembly completed - Rigid coupling

For Rigid Coupling, keep the gaps at bolt pads evenly spaced. Gasket can't be seen visually.



### Assembly completed - Flexible coupling

For Flexible Coupling, two housings should be iron to iron connected. Gaskets can't be seen visually.

### Caution

Proper torquing of bolts is required to obtain specified performance.

-Over torquing the bolts may result in damage to the bolt and /or casting which could result in pipe joint separation.

-Under torquing the bolts may result in lower pressure retention capabilities, lower bend load capabilities, joint leakage and pipe joint separation. Pipe joint separation may result in significant property damage and serious injury.

### Specified Bolt Torque

| ANSI BOLTS |                       |         |
|------------|-----------------------|---------|
| Bolt Size  | Specified Bolt Torque |         |
| Inch       | Lbs-Ft.               | N.m     |
| 3/8        | 30-45                 | 40-60   |
| 1/2        | 80-100                | 110-135 |
| 5/8        | 100-130               | 135-175 |
| 3/4        | 130-180               | 175-245 |
| 7/8        | 180-240               | 245-325 |



## Installation Instruction For Threaded & Grooved Mechanical Tee



### Pipe preparation

Clean the gasket sealing surface within 16mm of the hole and visually inspect the sealing surface for defects that may prevent proper sealing of the gasket. Don't drill the hole on weld line.



### Remove burrs

If any burrs or slug exists at the pipe hole, please remove them before assembly, to protect the gasket and avoid leakage.



### Gasket installation

Insert the gasket into outlet housing making sure the tab in the gasket line up with the tab recesses in the housing. Align outlet housing over the pipe hole making sure that the locating collar is in the pipe hole.



### Alignment

Align the strap around the pipe. Insert the bolts and tighten the nuts finger tight.



### Tighten nuts

Alternatively and evenly tighten the nuts to the specified bolt torque.



### Assembly completed

There should be even gaps on two sides between upper and lower housings.

### Caution

Proper torquing of bolts is required to obtain specified performance.  
 -Over torquing the bolts may result in damage to the bolt and/or casting which could result in pipe joint separation.  
 -Under torquing the bolts may result in lower pressure retention capabilities, lower bend load capabilities, joint leakage and pipe joint separation. Pipe joint separation may result in significant property damage and serious injury.

### Specified Bolt Torque

| ANSI BOLTS |                       |           |
|------------|-----------------------|-----------|
| Bolt Size  | Specified Bolt Torque |           |
| Inch       | Lbs-Ft.               | 牛·米 (N.m) |
| 3/8        | 30-45                 | 40-60     |
| 1/2        | 60-100                | 110-135   |
| 5/8        | 100-130               | 135-175   |
| 3/4        | -                     | -         |
| 7/8        | -                     | -         |

*LUYUAN PIPE FITTING*

*CONNECT THE WORLD*

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