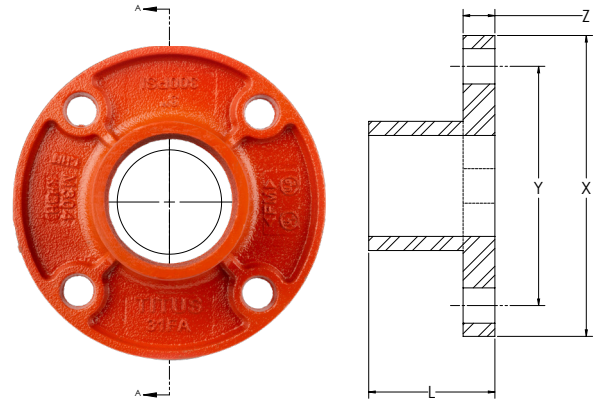


## 31FA GROOVED X FLANGE ADAPTER

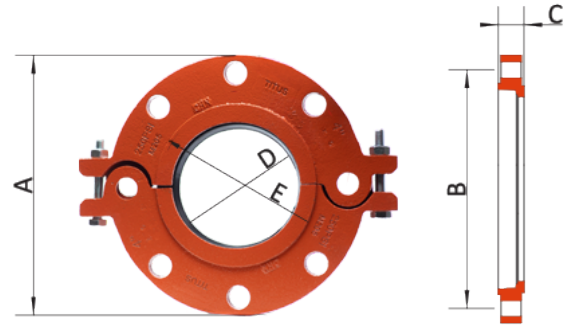
- Ductile Iron ASTM A-536 Grade 65-45-12.
- Finish available in standard orange paint or hot dipped galvanized (ASTM A-153)
- For current listing/approval details contact a Titus representative



| Nominal Size<br>in/mm | Pipe O.D.<br>in/mm | Max.Working<br>Pressure<br>PSI/Bar | X<br>in/mm   | Y<br>in/mm   | Z<br>in/mm  | L<br>in/mm  | Bolts Size<br>in/mm | Bolts No. |
|-----------------------|--------------------|------------------------------------|--------------|--------------|-------------|-------------|---------------------|-----------|
| <b>2</b>              | <b>2.375</b>       | <b>300</b>                         | <b>6.10</b>  | <b>4.74</b>  | <b>0.63</b> | <b>2.56</b> | <b>5/8</b>          | 4         |
| 50                    | 60.3               | 20                                 | 155          | 120.5        | 16          | 65          | M16                 | 4         |
| <b>2-1/2</b>          | <b>2.875</b>       | <b>300</b>                         | <b>7.09</b>  | <b>5.51</b>  | <b>0.63</b> | <b>2.56</b> | <b>5/8</b>          | 4         |
| 65                    | 73.00              | 20                                 | 180          | 140          | 16          | 65          | M16                 | 4         |
| <b>3</b>              | <b>3.50</b>        | <b>300</b>                         | <b>7.48</b>  | <b>6.02</b>  | <b>0.71</b> | <b>2.56</b> | <b>5/8</b>          | 4         |
| 80                    | 88.90              | 20                                 | 190          | 153          | 18          | 65          | M16                 | 4         |
| <b>4</b>              | <b>4.50</b>        | <b>300</b>                         | <b>9.06</b>  | <b>7.52</b>  | <b>0.87</b> | <b>2.76</b> | <b>5/8</b>          | 8         |
| 100                   | 114.30             | 20                                 | 230          | 191          | 22          | 70          | M16                 | 8         |
| <b>5</b>              | <b>5.563</b>       | <b>300</b>                         | <b>10.04</b> | <b>8.50</b>  | <b>0.87</b> | <b>2.76</b> | <b>3/4</b>          | 8         |
| 125                   | 141.3              | 20                                 | 255          | 216          | 22          | 70          | M20                 | 8         |
| <b>6</b>              | <b>6.625</b>       | <b>300</b>                         | <b>11.02</b> | <b>9.49</b>  | <b>0.87</b> | <b>2.76</b> | <b>3/4</b>          | 8         |
| 150                   | 168.30             | 20                                 | 280          | 241          | 22          | 70          | M20                 | 8         |
| <b>8</b>              | <b>8.625</b>       | <b>300</b>                         | <b>13.58</b> | <b>11.77</b> | <b>0.98</b> | <b>3.15</b> | <b>3/4</b>          | 8         |
| 200                   | 219.1              | 20                                 | 345          | 299          | 25          | 80          | M20                 | 8         |
| <b>10</b>             | <b>10.75</b>       | <b>300</b>                         | <b>15.94</b> | <b>14.25</b> | <b>1.02</b> | <b>3.35</b> | <b>7/8</b>          | 12        |
| 250                   | 273                | 20                                 | 405          | 362          | 26          | 85          | M22                 | 12        |
| <b>12</b>             | <b>12.75</b>       | <b>300</b>                         | <b>19.09</b> | <b>17.01</b> | <b>1.10</b> | <b>3.54</b> | <b>7/8</b>          | 12        |
| 300                   | 323.9              | 20                                 | 485          | 432          | 28          | 90          | M22                 | 12        |

## 31FH GROOVED HINGED FLANGE ADAPTER

- Maximum working pressure 250 psi (17 bar) depending on flange size and schedule of pipe
- Matches flange dimensions of Class 125/150, latch bolts included
- Branded with TITUS or T
- Gasket: Grade E – EPDM with operating temperature of -30F to 230F (-34C to 110C) and is marked by a green stripe
- Bolts are SAE J429 Grade 5
- All Groove dimensions conform to AWWA-C606
- All Ductile Iron housing materials conform to ASTM A-536 Grade 65-45-12
- Finish available in standard orange paint or hot dipped galvanized (ASTM A-153)
- Steel adapter insert required when used against wafer/lug valves, with rubber or irregular surfaces
- For current listing/approval details contact a Titus representative



| Nominal Size<br>in/mm | Pipe O.D.<br>in/mm | Max. Working Pressure<br>PSI/Bar | Max. End Load<br>Lbs/KN | Dimensions   |              |             |              |              | Bolt |               |
|-----------------------|--------------------|----------------------------------|-------------------------|--------------|--------------|-------------|--------------|--------------|------|---------------|
|                       |                    |                                  |                         | A<br>in/mm   | B<br>in/mm   | C<br>in/mm  | D<br>in/mm   | E<br>in/mm   | No.  | Size<br>in/mm |
| <b>2</b>              | <b>2.375</b>       | <b>300</b>                       | <b>1330</b>             | <b>6.10</b>  | <b>4.74</b>  | <b>0.98</b> | <b>2.36</b>  | <b>3.07</b>  | 4    | <b>5/8</b>    |
| 50                    | 60.3               | 20                               | 5.71                    | 155          | 120.5        | 25          | 60           | 78           |      | M16           |
| <b>2.5</b>            | <b>2.875</b>       | <b>300</b>                       | <b>1950</b>             | <b>7.09</b>  | <b>5.51</b>  | <b>0.98</b> | <b>2.87</b>  | <b>3.66</b>  | 4    | <b>5/8</b>    |
| 65                    | 73.0               | 20                               | 8.37                    | 180          | 140          | 25          | 73           | 93           |      | M16           |
| <b>3</b>              | <b>3.500</b>       | <b>300</b>                       | <b>2880</b>             | <b>7.48</b>  | <b>6.02</b>  | <b>0.98</b> | <b>3.50</b>  | <b>4.21</b>  | 4    | <b>5/8</b>    |
| 80                    | 88.9               | 20                               | 12.41                   | 190          | 153          | 25          | 89           | 107          |      | M16           |
| <b>4</b>              | <b>4.500</b>       | <b>300</b>                       | <b>4770</b>             | <b>9.06</b>  | <b>7.52</b>  | <b>0.98</b> | <b>4.49</b>  | <b>5.16</b>  | 8    | <b>5/8</b>    |
| 100                   | 114.3              | 20                               | 20.51                   | 230          | 191          | 25          | 114          | 131          |      | M16           |
| <b>5</b>              | <b>5.563</b>       | <b>300</b>                       | <b>7290</b>             | <b>10.04</b> | <b>8.50</b>  | <b>0.98</b> | <b>5.55</b>  | <b>6.18</b>  | 8    | <b>3/4</b>    |
| 125                   | 141.3              | 20                               | 31.35                   | 255          | 216          | 25          | 141          | 157          |      | M20           |
| <b>6</b>              | <b>6.625</b>       | <b>300</b>                       | <b>10340</b>            | <b>11.02</b> | <b>9.49</b>  | <b>0.98</b> | <b>6.61</b>  | <b>7.28</b>  | 8    | <b>3/4</b>    |
| 150                   | 168.3              | 20                               | 44.47                   | 280          | 241          | 25          | 168          | 185          |      | M20           |
| <b>8</b>              | <b>8.625</b>       | <b>300</b>                       | <b>17520</b>            | <b>13.58</b> | <b>11.77</b> | <b>1.06</b> | <b>8.62</b>  | <b>9.21</b>  | 8    | <b>3/4</b>    |
| 200                   | 219.1              | 20                               | 75.37                   | 345          | 299          | 27          | 219          | 234          |      | M20           |
| <b>10</b>             | <b>10.750</b>      | <b>300</b>                       | <b>27210</b>            | <b>15.94</b> | <b>14.25</b> | <b>1.18</b> | <b>10.75</b> | <b>11.57</b> | 12   | <b>1</b>      |
| 250                   | 273.0              | 20                               | 164.71                  | 405          | 362          | 30          | 273          | 294          |      | M24           |
| <b>12</b>             | <b>12.75</b>       | <b>300</b>                       | <b>38280</b>            | <b>19.09</b> | <b>17.01</b> | <b>1.26</b> | <b>12.76</b> | <b>13.43</b> | 12   | <b>1</b>      |
| 300                   | 323.9              | 20                               | 164.71                  | 485          | 432          | 32          | 324          | 341          |      | M24           |

- Working pressure and/or end load are based on schedule 7/10/40 steel pipe, cut or roll grooved.
- For a one time field test, working pressure may be increased 1.5 times the figures listed above.
- For bolt torque recommendation, see installation instructions or technical data sheets.