SPECIFICATION
OMNI™ CAST FLANGED COUPLING ADAPTER
MODEL 912-90

APPLICATIONS

- Typical Uses
  - Joining plain-end pipe to flanged fittings, meters, valves, or other miscellaneous flanged service equipment
  - Replace cracked pipe or spooled flanges

- Standard Pipe Sizes
  - 3” to 12” nominal

- Type of Pipe
  - Carbon Steel, Stainless Steel, Ductile Iron, Asbestos Cement, PVC, Cast Iron
  (see notes for thin wall PVC applications)

- Working Pressure
  - Up to 250 psi

MATERIALS

- Follower
  - Cast using Ductile Iron 65-45-12 per ASTM A536
  - Flexi-Coat® fusion bonded epoxy finish which meets application methods AWWA C213
  - Flanges color coded for rapid and correct installation: Red for iron pipe size, Blue for ductile, and Gray for asbestos cement
  - Permanently marked with part number and pipe size range for proper selection

- Body
  - Cast using Ductile Iron 65-45-12 per ASTM A536
  - Flexi-Coat® fusion bonded epoxy finish which meets application methods AWWA C213
  - Single body design for each nominal pipe size reducing inventory
  - Flange connection compatible with ANSI 125# and 150# bolt hole patterns

- Gasket and O-ring
  - Nitrile (Buna-N) per ASTM D2000
  - NSF/ANSI 61 and 372 certified
  - Compounded to resist water, oil, natural gas, acids, alkalies, most (aliphatic) hydrocarbon fluids, and many other chemicals
  - Temperature range: -20°F to +180°F
  - For ductile iron and asbestos cement pipe, the gaskets sealing surface has molded in ribs for maximum sealing on textured pipe
  - Gasket permanently marked with part number and pipe size range for proper selection
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- **Flange Bolt**
  - Carbon Steel per ASTM A307
  - Fe/Zn coated per ASTM F1941-10
  - Size:
    - 3”-4” nominal pipe size = 5/8”-11UNC Hex Head
    - 6”-8” nominal pipe size = 3/4”-10UNC Hex Head
    - 10”-12” nominal pipe size = 7/8”-09UNC Hex Head
  - Rolled threads for improved physical characteristics, greater thread accuracy and smooth surface finish

- **Nut**
  - Carbon Steel per ASTM A307
  - Fe/Zn coated per ASTM F1941-10
  - Size:
    - 3”-4” nominal pipe size = 5/8” Heavy Hex Semi-Finished
    - 6”-8” nominal pipe size = 3/4” Heavy Hex Semi-Finished
    - 10”-12” nominal pipe size = 7/8” Heavy Hex Semi-Finished

- **Stud Bolt**
  - Carbon Steel per ASTM A193 grade B7
  - Fe/Zn coated per ASTM F1941-10
  - Size:
    - 3”-4” nominal pipe size = 5/8”-11UNC x 7” long, All Thread
    - 6”-8” nominal pipe size = 3/4”-10UNC x 8” long, All Thread
    - 10”-12” nominal pipe size = 7/8”-09UNC x 9” long, All Thread
  - Rolled threads for improved physical characteristics, greater thread accuracy and smooth surface finish

**LISTINGS**
- UL certified to NSF/ANSI 61 and 372
- Meets applicable AWWA C219 standards

**OPTIONS**
- Type 304 Stainless Steel hardware with fluoropolymer coated nuts to prevent galling
- Type 316 Stainless Steel hardware with fluoropolymer coated nuts to prevent galling
- Alternative gasket material (e.g. Buna-N, EPDM, etc.)
- Anode connector
- Anchor Studs (Pipe Restraint)
- Transition gasket for undersized pipe
NOTES

- This product does not restrain the pipe from pulling out of the fitting unless optional anchor studs are specified
- Pipe stiffeners are required when this product is used on thin wall PVC pipe
- OMNI™ is a trademark of Smith-Blair Inc.
- These product specifications were correct at the time of publication and are subject to change without notice
- See the Smith-Blair® web site for part numbers and ordering information
- See the Smith-Blair® web site for warranty information
- See the Smith-Blair® web site for corrosion warnings

Minimum 3” pipe insertion required

Total Maximum Allowable Axial Pipe Movement per Coupling

<table>
<thead>
<tr>
<th>Coupling Size</th>
<th>Allowable Movement</th>
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<tbody>
<tr>
<td>3/4” to 2”</td>
<td>1/16”</td>
</tr>
<tr>
<td>2-1/2” to 10”</td>
<td>1/8”</td>
</tr>
<tr>
<td>10-3/4” and Larger</td>
<td>3/16”</td>
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Pipe End Tolerances

<table>
<thead>
<tr>
<th>Pipe OD</th>
<th>Minus Tolerance</th>
<th>Plus Tolerance</th>
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<tbody>
<tr>
<td>1/2” up to 16”</td>
<td>-0.06</td>
<td>+0.06</td>
</tr>
<tr>
<td>&gt;16” up to 24”</td>
<td>-0.08</td>
<td>+0.08</td>
</tr>
<tr>
<td>&gt;24” up to 42”</td>
<td>-0.10</td>
<td>+0.10</td>
</tr>
<tr>
<td>&gt;42”</td>
<td>-0.06</td>
<td>+0.12</td>
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Maximum Angular Deflection per Coupling

<table>
<thead>
<tr>
<th>Nominal Pipe Size</th>
<th>Center Sleeve Length</th>
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<tbody>
<tr>
<td></td>
<td>5”</td>
</tr>
<tr>
<td>1/2” up to 2”</td>
<td>3-1/2°</td>
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<tr>
<td>&gt;2” up to 12”</td>
<td>2°</td>
</tr>
<tr>
<td>&gt;12” up to 24”</td>
<td>3/4°</td>
</tr>
<tr>
<td>&gt;24” up to 36”</td>
<td>-</td>
</tr>
<tr>
<td>&gt;36” up to 42”</td>
<td>-</td>
</tr>
<tr>
<td>&gt;42” up to 60”</td>
<td>-</td>
</tr>
<tr>
<td>&gt;60” up to 80”</td>
<td>-</td>
</tr>
<tr>
<td>&gt;80” up to 100”</td>
<td>-</td>
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<tr>
<td>&gt;100”</td>
<td>-</td>
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NOTES:
1. SEE SMITH-BLAIR CATALOG FOR ADDITIONAL DETAILS
2. 12" COUPLING SHOWN OTHER SIZES SIMILAR
3. MATING FLANGE NOT SHOWN

<table>
<thead>
<tr>
<th>NOMINAL SIZE</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>STUD BOLT</th>
<th>FLANGE BOLT</th>
<th>APPROX. WT. (LB)</th>
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<tbody>
<tr>
<td>3</td>
<td>7</td>
<td>3.00</td>
<td>7.75</td>
<td>3.88</td>
<td>4</td>
<td>5/8&quot; X 7&quot;</td>
<td>17</td>
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<tr>
<td>4</td>
<td>9.03</td>
<td>5.24</td>
<td>10.88</td>
<td>7.25</td>
<td>4</td>
<td>5/8&quot;</td>
<td>22</td>
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<td>6</td>
<td>13.36</td>
<td>9.41</td>
<td>15.88</td>
<td>11.63</td>
<td>4</td>
<td>3/4&quot; X 8&quot;</td>
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<tr>
<td>8</td>
<td>18.75</td>
<td>14.00</td>
<td>7.8&quot;</td>
<td>9.00</td>
<td>6</td>
<td>7/8&quot;</td>
<td>40</td>
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SPECIFICATION
SMITH-BLAIR, Inc.
TEXARKANA, ARKANSAS

CERTIFIED TO NSF/ANSI 61-G & 372