APPLICATIONS

- **Typical Uses**
  - Joining plain-end pipe of same outside diameters
  - Joining plain-end pipe of different outside diameters with same nominal size
  - Replace split or excessively damaged pipe

- **Standard Pipe Sizes**
  - 2” to 16” nominal

- **Type of Pipe**
  - Carbon Steel, Stainless Steel, Ductile Iron, Asbestos Cement, PVC, HDPE (with stiffeners)

- **Working Pressure**
  - 250 psi

MATERIALS

- **Follower**
  - Cast using Ductile Iron 65-45-12 per ASTM A536
  - Flexi-Coat® fusion bonded epoxy finish

- **Sleeve**
  - Cast using Ductile Iron 65-45-12 per ASTM A536
  - Flexi-Coat® fusion bonded epoxy finish
  - Designed to provide up to 2.40” of range with a single assembly

- **Gasket**
  - Nitrile (Buna-N) per ASTM D2000
  - Compounded to resist water, oil, natural gas, acids, alkalis, most (aliphatic) hydrocarbon fluids, and many other chemicals
  - Temperature range: -20°F to +180°F

- **Bolts**
  - High Strength Low Alloy (HSLA) Steel per AWWA C111/A21.11
  - 5/8”-11UNC, Track Head Oval Neck with Rolled Threads

- **Nut**
  - HSLA Steel per AWWA C111/A21.11
  - 5/8”-11UNC, Heavy Hex Semi-Finished

LISTINGS

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SPECIFICATION
OMNI™ CAST COUPLING – STD SLEEVE
MODEL 441

- Certified to NSF/ANSI 61 and NSF/ANSI 372
- Meets applicable portions of AWWA C219
- Flexi-Coat® Fusion-Bonded Epoxy Coating meets requirements of AWWA C213

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. Viton, EPDM, etc.)
- Insulating boot

NOTES
- Pipe stiffeners are required when this product is used on HDPE
- Xylem, Smith-Blair, SB stylized, and Flexi-Coat are registered trademarks and Omni is a trademark of Xylem, Inc., or one of its subsidiaries.
- These product specifications were correct at the time of publication and are subject to change without notice
- See the Smith-Blair website for part numbers and ordering information
- See the Smith-Blair website for warranty information
- See the Smith-Blair website for corrosion notice

WARNING
THIS PRODUCT DOES NOT RESTRAIN PIPE MOVEMENT.
Proper anchoring is required to prevent pipe pull out. Failure to anchor or improper anchoring can result in dangerous pipe content escape, property damage, serious injury, or death. Refer to smith-blair.com for products designed to restrain axial pipe movement. Read the product installation instructions prior to installing this product.
Recommended Pipe to Pipe Centerline Gaps

<table>
<thead>
<tr>
<th>Sleeve Length</th>
<th>Optimum Gaps</th>
<th>Maximum Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Straight Run</td>
<td>Deflected Joints</td>
</tr>
<tr>
<td>5”</td>
<td>1/2”</td>
<td>1”</td>
</tr>
<tr>
<td>7”</td>
<td>1/2”</td>
<td>1-1/2”</td>
</tr>
<tr>
<td>10”</td>
<td>1”</td>
<td>2-1/4”</td>
</tr>
<tr>
<td>Longer Than 10”</td>
<td>1”</td>
<td>2-3/4”</td>
</tr>
</tbody>
</table>

Pipe gap to be centered in coupling sleeve.

Total Maximum Allowable Axial Pipe Movement per Coupling

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

Pipe End Tolerances

<table>
<thead>
<tr>
<th>Nominal Pipe Size</th>
<th>Minus Tolerance</th>
<th>Plus Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2” up to 16”</td>
<td>-0.06</td>
<td>+0.06</td>
</tr>
</tbody>
</table>

Maximum Angular Deflection per Coupling 4° (Pipe-to-Pipe) 2° (Pipe-to-Sleeve)
NOTES:
1. SEE SMITH-BLAIR CATALOG FOR PIPE RANGE AVAILABILITY
2. 6" COUPLING SHOWN OTHER SIZES SIMILAR

NOM. PIPE SIZE | PIPE O.D. RANGE | A | B | HARDWARE | APPROX WEIGHT (LBS)
--- | --- | --- | --- | --- | ---
2 | 2.34 TO 2.63 | 6.01 | 4.00 | 2 | 5/8" X 8.00" | 9
2.50 | 2.65 TO 2.88 | 6.52 | 4.00 | 2 | 5/8" X 8.00" | 9
3 | 2.85 TO 4.14 | 7.78 | 4.00 | 4 | 5/8" X 8.00" | 14
4 | 4.00 TO 5.45 | 9.01 | 5.00 | 5 | 5/8" X 8.00" | 15
6 | 6.00 TO 7.65 | 11.28 | 5.00 | 5 | 5/8" X 8.00" | 25
8 | 8.00 TO 9.85 | 13.48 | 5.00 | 5 | 5/8" X 9.00" | 31
10 | 10.00 TO 12.20 | 15.83 | 6.00 | 6 | 5/8" X 10.50" | 47
12 | 12.00 TO 14.40 | 18.30 | 6.00 | 8 | 5/8" X 10.50" | 52
14 | 15.30 TO 16.90 | 20.55 | 6.00 | 8 | 5/8" X 9.00" | 59
16 | 17.40 TO 19.20 | 22.93 | 6.00 | 10 | 5/8" X 10.50" | 71