APPLICATIONS

- **Typical Uses**
  - Joining pipe while absorbing thermal expansion and contraction in pipelines due to ambient temperature changes or hot working conditions
  - Joining pipe while absorbing changes in horizontal or vertical pipe length due to differential movement of supporting structures such as buildings, docks, tanks, bridges, etc.

- **Standard Pipe Sizes**
  - 3” to 24” nominal

- **Standard End Configurations**
  - Butt-Weld Ends, Flanged Ends, Grooved Ends, Threaded Ends, Lock Coupling Ends, Mechanical Joint, Plain for Locking or Harnessed Ends

- **Type of Pipe**
  - Carbon Steel, Stainless Steel, Cast Iron

- **Working Pressure**
  - 150 psi (standard design)

MATERIALS

- **Body and Body Flange**
  - Carbon Steel per ASTM A283C, A53, or AISI C1015-20
  - Flexi-Coat® fusion bonded epoxy finish
  - Flange incorporated with integral oval bolt head pocket for one wrench installation
  - Stop plate welded to limit travel from left to right in body

- **Slip Pipe**
  - Carbon Steel per ASTM A283C, A53, or AISI C1015-20
  - Flexi-Coat® fusion bonded epoxy finish applied to non-chrome plated surface
  - Hard chrome plate applied to machined surface to facilitate easy movement, protect against corrosion and pitting, resist scratching and scoring, while reducing friction and wear on packing rings

- **Packing Gland**
  - Carbon Steel per ASTM A283C, A53, or AISI C1015-20
  - Flexi-Coat® fusion bonded epoxy finish applied to non-chrome plated surface
  - Designed to compress packing for positive seal
  - Removable for future maintenance and packing adjustment
Limit Flange
- Carbon Steel per ASTM A283C, A53, or AISI C1015-20
- Flexi-Coat® fusion bonded epoxy finish applied to non-chrome plated surface

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

- Flax Packing
  - Braided Ramie Yarn, Paraffin Impregnated
  - Impregnated with paraffin and mineral oil
  - Rot and mildew resistant
  - Medium-hard square plait construction packing with extremely low frictional characteristics
  - Maximum temperature of 212°F

Bolts
- High Strength Low Alloy (HSLA) Steel per AWWA C111/A21.11
  - 5/8"-11UNC, 10.50" long, Oval Neck Track Head
  - Rolled threads for improved physical characteristics, greater thread accuracy, and smooth surface finish

Limit Rods
- HSLA Steel per AWWA C111/A21.11
  - 5/8"-11UNC, All Thread
  - Rolled threads for improved physical characteristics, greater thread accuracy, and smooth surface finish

Nuts
- HSLA Steel per AWWA C111/A21.11
  - 5/8"-11UNC, Heavy Hex Semi-Finished
  - Double nuts provided on limit rods for locking/jam feature

LISTINGS
- Fusion-Bonded Epoxy Coating meets requirements of AWWA C213 and is certified to NSF/ANSI 61
- Meets applicable AWWA C221 standards

OPTIONS
- Alternative materials of construction (e.g. 304SS, 316SS, Monel, etc.)
- 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/packing material (e.g. Buna-N, EPDM, etc.)
- Anode connector
- Anchor studs
- Higher working pressure design
- Custom joint or expansion length
- Built-in anchor base
- Custom end configurations
- Pipe stops
- Packing lubrication features (e.g. alemite fitting, lantern ring, etc.)
NOTES

- Double end expansion joints **must always be** anchored to prevent the total pipe movement from accumulating in one end
- Slip-type expansion joints must be installed in an accessible location for future maintenance and packing adjustment
- Fitting designed for axial pipe movement only (not for angular deflection)
- Flexi-Coat® is a registered 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 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 pullout. Failure to anchor or improper anchoring can result in dangerous pipe content escape, property damage, serious injury, or death. Read the product installation instructions prior to installing this product.
**WELD ENDS WITHOUT SLIP PIPE - WITHOUT LIMIT RODS**

**NOTES:**
1. SEE SMITH-BLAIR CATALOG FOR ADDITIONAL DETAILS
2. 8" WELD END EXPANSION JOINT SHOWN OTHER SIZES SIMILAR
3. CUSTOMER FURNISHED SLIP PIPE MUST HAVE A PREPARED END AT LEAST 24" IN LENGTH THAT IS ROUND, SURFACE ROUGHNESS OF 32µIN OR BETTER 18" MIN. FROM STAB END, AND NO GREATER THAN +.030" OR -.010" FROM NOMINAL SIZE.
4. ENGINEERED FOR AXIAL PIPE MOVEMENT ONLY

<table>
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<th>NOM. PIPE SIZE</th>
<th>SLIP PIPE O.D. &quot;A&quot;</th>
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WELD ENDS WITH SLIP PIPE - WITHOUT LIMIT RODS

NOTES:
1. SEE SMITH-BLAIR CATALOG FOR ADDITIONAL DETAILS
2. 8" WELD END EXPANSION JOINT SHOWN OTHER SIZES SIMILAR
3. ENGINEERED FOR AXIAL PIPE MOVEMENT ONLY
WELD ENDS WITH SLIP PIPE & LIMIT RODS

NOTES:
1. SEE SMITH-BLAIR CATALOG FOR ADDITIONAL DETAILS
2. 8" WELD END EXPANSION JOINT SHOWN OTHER SIZES SIMILAR
3. ENGINEERED FOR AXIAL PIPE MOVEMENT ONLY

WRENCH SIZE CHART

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FLANGED ENDS WITH SLIP PIPE - WITHOUT LIMIT RODS

NOTES:
1. SEE SMITH-BLAIR CATALOG FOR ADDITIONAL DETAILS
2. 8" FLANGED END EXPANSION JOINT SHOWN OTHER SIZES SIMILAR
3. ENGINEERED FOR AXIAL PIPE MOVEMENT ONLY

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NOTES:
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