SPECIFICATION
PIPE-LOCK™ STEEL RESTRAINT COUPLING
MODEL 471

APPLICATIONS

- **Typical Uses**
  - Joining and restraining plain-end ductile iron pipe ends
  - Joining and restraining plain-end carbon steel pipe ends
  - Replace split or excessively damaged pipe

- **Standard Pipe Size**
  - DI sized 3” - 48” nominal
  - IPS sized 3” - 12” nominal

- **Type of Pipe**
  - Ductile Iron, Carbon Steel

- **Working Pressure** *(see notes)*
  - DI pipe sizes 3” - 16” = 350 psi, 18” - 48” = 250 psi
  - IPS pipe sizes 3” - 12” = 250 psi

MATERIALS

- **Sleeve Weldment**
  - See 477 specification document

- **Restraint**
  - See 111 specification document

- **Gasket**
  - Styrene Butadiene Rubber (SBR) per AWWA C111/A21.11
  - Compounded to resist water, oil, natural gas, acids, alkalies, most (aliphatic) hydrocarbon fluids, and many other chemicals
  - Temperature range: -20°F to +180°F
  - Permanently marked with part number and pipe size range for proper selection

- **Stud**
  - HSLA Carbon Steel per AWWA C111/A21.11 and/or ASTM A193 GRB7
  - **Size:**
    - 3” nominal pipe size = 5/8” – 11 UNC
    - 4” – 24” nominal pipe size = 3/4” – 10 UNC
    - 30” – 36” nominal pipe size = 1-0” – 8 UNC
    - 42” – 48” nominal pipe size = 1-1/4” – 7 UN
  - Rolled threads for improved physical characteristics, greater thread accuracy, and smooth surface finish
SPECIFICATION
PIPE-LOCK™ STEEL RESTRAINT COUPLING
MODEL 471

- Washer
  - Carbon Steel per ASTM A108
  - Electro-galvanized with dichromate seal per ASTM B633 for improved corrosion resistance
  - Size:
    - 3” nominal pipe size = 5/8” Type A Plain
    - 4” – 24” nominal pipe size = 3/4” Type A Plain
    - 30” – 36” nominal pipe size = 1” Type A Plain
    - 42” – 48” nominal pipe size = 1-1/4” Type A Plain
  - Utilized to preserve corrosion resistance of epoxy coated surfaces and increase bearing surface

LISTINGS
- 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
- Multi-Seal Gasket 4” - 12”
- Alternative gasket material (e.g. Buna-N, EPDM, etc.)

NOTES
- If joining DI to Steel size pipe, the working pressure would be the lower rating of the two pipe types.
- These product specifications were correct at the time of publication and are subject to change without notice
- Pipe-Lock™ is a trademark of Smith-Blair Inc.
- 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 notice
DI/STEEL X DI/STEEL

NOTES:
1. SEE SMITH-BLAIR CATALOG FOR ADDITIONAL DETAILS
2. 6" COUPLING SHOWN OTHER SIZES SIMILAR
3. SEE MODEL 477 AND 111 SPECIFICATIONS FOR ADDITIONAL DETAILS