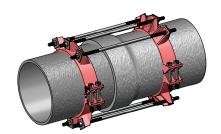




4" - 16" PIPE TO PIPE BELL JOINT RESTRAINT FOR DI PIPE

Submittal Information

| Project Name / Location: | |
|---------------------------|--|
| Engineer: | |
| Referenced Specs: | |
| Distributor / Contractor: | |



Optional Specifications

| Coating: | Standard Alkyd, Direct To Metal (DTM) Enamel (Red) | | | | | | |
|--------------|--|--|--|--|--|--|--|
| | EZ-Shield® Polyester Based Powder Coating (Red) | | | | | | |
| | Other - Specify: | | | | | | |
| Rods, Bolts: | Standard High Strength Low Alloy Steel (HSLA) In Accordance With ANSI/AWWA C111/A21.11 | | | | | | |
| | Fluoropolymer Corrosion Resistant Coating | | | | | | |
| & Nuts | Stainless Steel: Type 304 Type 316 | | | | | | |
| | Other - Specify: | | | | | | |

General Specifications

Material

Harness bodies are Ductile Iron per ASTM A536, Grade 65-45-12
 Clamping bolts and nuts are zinc plated carbon steel, ASTM 307

Pressure

The grip of the 360° circumferential serrations increases as the hydrostatic pressure increases.

Dimensions

: Restraint compatable with Ductile iron pipe manufactured in accordance with ANSI/AWWA C150 & C151 /A21.50 & A21.51.

Harness is compatible with all bell and spigot (push-on) joint socket DI pipe

Installations

Install in accordance with SIP installation procedures and intent of AWWA C600 / M41

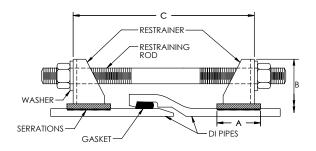
Pipe ends must be free from defects to allow proper gland engagement to the pipe ends

There are no additional tools required for installation other than the tools required to install standard sizes of hex nuts from 5/8"-1 1/4". The hex head bolts and rods shall be designed to tighten clockwise. The hex head bolts

and rods are manufactured to allow for disassembly and re-installation of the restraint.

Deflection

Restraint allows the full joint deflection dictated by pipe manufacturer's recommendation, and maintains the seal while under pressure, and while subjected to ground movements



| RECOMMENDED TORQUE (CLAMPING BOLTS) | | | | | |
|-------------------------------------|--------------------------|--|--|--|--|
| PIPE SIZE (IN) | RANGE OF TORQUE (FT/LBS) | | | | |
| 4-8 | 110-120 | | | | |
| 10-12 | 110-120 | | | | |
| 14-16 | 200-210 | | | | |

Technical Specifications

| Select Size | Size | Size DI Pipe O.D. | Series Number | А | B (Approx.) (I | C (Max.) | X (Min.) | Restraint Bolts/Rods | | Clamping Bolts | | Max Pressure Rating (PSI) | Approx. Weight |
|----------------|------|-------------------|---------------|------|-------------------|-------------|-------------|-------------------------|--------|----------------|----------|---------------------------|-------------------|
| | | | | | | (IVIGA.) | | Qty | Size | Qty | Size | Rating (F31) | (Lbs) |
| | 4 | 4.80 | PTPVCDI04 | 1.12 | 9.15 | 12.00 | 6.29 | 2 | ¾ X 17 | 4 | 5% X 3 ½ | 250 | 16 |
| | 6 | 6.90 | PTPVCDI06 | 1.15 | 11.12 | 13.00 | 8.13 | 2 | ¾ X 17 | 4 | % X 3 ½ | 250 | 20 |
| | 8 | 9.05 | PTPVCDI08 | 1.47 | 14.75 | 15.00 | 10.60 | 2 | ¾ X 17 | 4 | ¾ X 4 | 250 | 32 |
| | 10 | 11.10 | PTPVCDI10 | 1.38 | 16.82 | 16.00 | 12.66 | 4 | ¾ X 24 | 4 | % X 5 | 200 | 52 |
| | 12 | 13.20 | PTPVCDI12 | 1.42 | 19.45 | 18.00 | 14.80 | 4 | ¾ X 24 | 4 | % X 5 | 200 | 56 |
| | 14 | 15.30 | PTPVCDI14 | 4.00 | 22.56 | 24.00 | 18.10 | 6 | ¾ X 30 | 8 | % X 7 | 150 | 150 |
| | 16 | 17.40 | PTPVCDI16 | 4.00 | 24.64 | 28.00 | 20.20 | 6 | ¾ X 30 | 8 | % X 7 | 100 | 154 |

All dimensions are in inches unless noted otherwise. All weights are approximate in pounds unless noted otherwise.

Supporting documentation for the above 'General Specifications' and 'Optional Specifications' are available upon request to review, in addition to Installation Instructions and any requested material samples

Please contact SIP for technical assistance of nonstandard applications and pressures

Please refer to our web page www.sipindustries.com for up to date product data and technical advisories