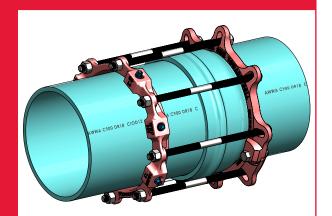




WEDGE ACTION, SPLIT HARNESS, BELL JOINT RESTRAINT FOR NEW INSTALLATIONS OF AWWA C900 & C909 PVC PIPE

# The EZ GRIP® ULTRA

Pipe-To-Pipe Joint Restraint is a proven design, offering an efficient, reliable, and inexpensive method to restrain PVC Bell and Spigot (Push-On) Joints by utilizing a Wedge Action Harness Gland, a Split Harness Retaining Gland and joining Rods that grab, hold, and secure the **PVC Bell and Spigot ends together** 



## ADVANTAGES, BENEFITS, FEATURES

- The EZ Grip® ULTRA PTP is designed for installation on new piping installs
- The EZ Grip® ULTRA PTP performs optimally with AWWA C900 & C909 PVC pipe
- The EZ Grip® ULTRA PTP design requires less wedges, resulting in less labor and time to install
- Wedges match the curve of the pipe diameter, eliminating point loading
- The split ring can be conveniently installed inside or outside of trench
- Machined to exact tolerances with a minimum safety factor of 2:1
- The EZ Grip® ULTRA PTP allows full joint deflection as recomended by pipe manufacturer
- The EZ Grip® ULTRA PTP is designed so that it can be disassembled and reinstalled, if necessary
- Restraint Gland and Split Harness Ring are composed of high strength Ductile Iron in compliance with the ASTM A536 Standard, Grade 65-45-12
- Rods are manufactured from high-strength low-alloy (HSLA) steel as per ANSI/AWWA C111/A21.11. Hardware also available in 304 & 316 Stainless steel, or with a Fluoropolymer Coating
- The EZ Grip® ULTRA PTP Joint Restraint for PVC Pipe is provided with a coating that is compatible with most field applied coatings. It is also available with EZ Shield®, a polyester based powder coating. The standard color of the PTP Joint Restraint is red
- Offered in sizes from 4" up to 12"

### **IMPORTANT NOTE:**

Not for use with AWWA C906 (HDPE) Not for use with ASTM D2241 IPS PVC Pipe

Available: (2) Import

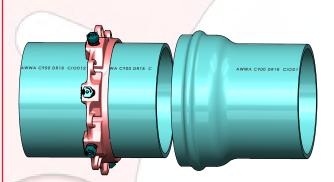
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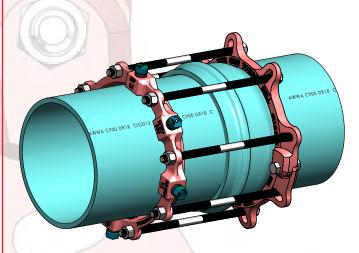
# SIP Industries EZ GRIP® PTP SERIES

WEDGE ACTION, SPLIT HARNESS, BELL JOINT RESTRAINT FOR NEW INSTALLATIONS OF AWWA C900 & C909 PVC PIPE

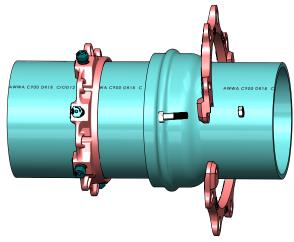
## **Installation Procedure: 4"-12"**



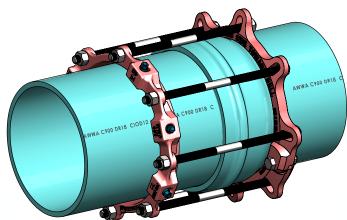
1 Clean and prepare the pipe for installations using normal procedures per pipe manufactures recommendations.



3 Position the EZ Grip wedge gland on spigot end of pipe by inserting the restraint rods into the restrainer ears of the split ring follower so that the threaded rod ends extend past the ear. Thread a nut on the rod so that ½" of threads are seen on both ends of the rods. Only hand tighten all hex nuts at this time. Tighten down the break-off torque nuts until all the wedges are in firm contact with the pipe surface. Once this step is completed continue tightening in an alternate manner (star pattern) until all the break-off torque nuts have sheared off and a 5/8" hex-head will remain.



**2** While pipe ends are still apart slide the EZ Grip wedge gland over the plain end of the pipe with the gasket lip facing the spigot end of the pipe. Assemble the split ring follower on the back side of the pipe bell with flat side of bolt ears facing away from the bell. Tighten the split ring follower bolts on each side until bolt and nut are securely fastened. Complete the pipe joint assembly per the pipe manufactures recommendations.



**4** Hand adjust the nuts on the rods to ensure at least  $\frac{1}{2}$ " of threads are exposed but that the rods are evenly against both the EZ Grip wedge gland and the split ring follower.

Note: Do not over-tighten the restrainer rod nuts. Only hand tighten the nuts plus about one turn with a wrench.

| BREAK-AWAY HEX NUT TORQUE RANGES |                             |  |  |  |  |
|----------------------------------|-----------------------------|--|--|--|--|
| SIZE<br>(IN)                     | RANGE OF TORQUE<br>(FT-LBS) |  |  |  |  |
| 4-12                             | 65-75                       |  |  |  |  |

| RECOMMENDED TORQUE (CLAMPING BOLTS) |                             |  |  |  |  |
|-------------------------------------|-----------------------------|--|--|--|--|
| PIPE SIZE<br>(IN)                   | RANGE OF TORQUE<br>(FT-LBS) |  |  |  |  |
| 4-12                                | 90-110                      |  |  |  |  |

If it is necessary to disassemble, a 5/8" hex head is provided on the wedge screws.

For re-installation, first confirm that all wedges are in their sockets, and then follow the installation instructions, using a torque indicating wrench to tighten the 5/8" hex head to 70 ft-lbs for sizes 4"-12".

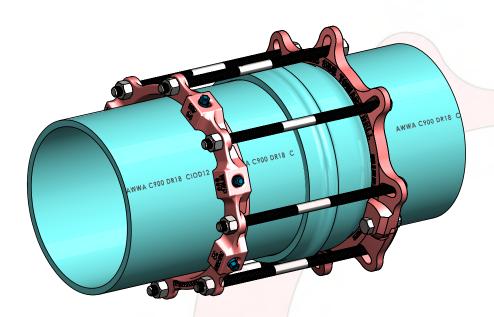
If pipe is out-of-round, please contact SIP for modified installation procedure.



# **SIP Industries EZ GRIP**® PTP SERIES

WEDGE ACTION, SPLIT HARNESS, BELL JOINT RESTRAINT FOR NEW INSTALLATIONS OF AWWA C900 & C909 PVC PIPE

# **Technical Data**



#### EZPVCUPTP - EZ GRIP® ULTRA JOINT RESTRAINTS FOR PUSH-ON JOINTS OF C900 & C909 PVC PIPE BELLS

| Size | O.D.  | C900/C909 PVC Pipe<br>Restraint |     | Harness<br>Restraint Glands |     | Max. Bell O.D. | Restraint Rods |        | Clamping Bolts |             | Approx.<br>Weight |
|------|-------|---------------------------------|-----|-----------------------------|-----|----------------|----------------|--------|----------------|-------------|-------------------|
|      |       | Item Code                       | Qty | Item Code                   | Qty |                | Qty            | Size   | Qty            | Size        | (Lbs)             |
| 4    | 4.80  | EZPVCU04                        | 1   | EZDPTPSG04                  | 2   | 6.75           | 4              | ¾ X 17 | 2              | 5/8 X 3 1/2 | 20                |
| 6    | 6.90  | EZPVCU06                        | 1   | EZDPTPSG06                  | 2   | 9.23           | 6              | ¾ X 17 | 2              | % X 3 ½     | 30                |
| 8    | 9.05  | EZPVCU08                        | 1   | EZDPTPSG08                  | 2   | 11.50          | 6              | ¾ X 17 | 2              | ¾ X 4       | 40                |
| 10   | 11.10 | EZPVCU10                        | 1   | EZDPTPSG12                  | 2   | 14.15          | 8              | ¾ X 24 | 2              | % X 5       | 55                |
| 12   | 13.20 | EZPVCU12                        | 1   | EZDPTPSG12                  | 2   | 16.53          | 8              | ¾ X 24 | 2              | % X 5       | 65                |

All the dimensions are in inches unless stated otherwise.

Please contact SIP for technical assistance of nonstandard applications, pressures and bell dimensions that exceed the listed Max. Bell O.D. dimensions Please refer to our web page <a href="www.sipindustries.com">www.sipindustries.com</a> for up to date product data and technical advisories

| MAXIMUM WATER WORKING PRESSURE RATING WITH OCCASSIONAL SURGES |                              |      |      |      |        |       |
|---|------------------------------|------|------|------|--------|-------|
| NOMINAL<br>PIPE SIZE  | COOFF OF THE CLASSIFICATIONS |      |      |      |        |       |
| (IN)  | DR14                         | DR17 | DR18 | DR25 | DR27.5 | PC235 |
| 4   | 305                          | 250  | 235  | 200  | -      | 235   |
| 6   | 305                          | 250  | 235  | 200  | -      | 235   |
| 8   | 305                          | 250  | 235  | 200  | -      | 235   |
| 10  | 305                          | 250  | 235  | 200  | -      | 235   |
| 12  | 305                          | 250  | 235  | 200  | -      | 235   |





WEDGE ACTION, SPLIT HARNESS, BELL JOINT RESTRAINT FOR NEW INSTALLATIONS OF AWWA C900 & C909 PVC PIPE

#### SAMPLE SPECIFICATIONS

The bell and spigot (push-on) joint restraining mechanism shall be designed and manufactured as one solid, non-serrated split harness backing ring and one wedge-action restraint gland connected to each other with rods to provide the joint restraint. The bell and spigot (push-on) joint restraint shall be compatible with AWWA C900 PVC Pipe. The bell and spigot (push-on) joint restraint shall have the same pressure rating as the pipe with a 2:1 safety factor. The grip of the wedges shall increase as the hydrostatic pressure increases.

There shall be no additional tools required for installation other than the tools required to install standard sizes of hex nuts from 1" - 1 1/4". The hex heads, bolts and rods shall be designed to tighten clockwise. The hex heads, bolts and rods shall be manufactured to allow for disassembly and re-installation of the restraint.

The restraint gland and harness shall be manufactured of high strength ductile iron in accordance with the ASTM A536 Standard, Grade 65-45-12.

Rods and hex nuts are manufactured from high-strength low-alloy (HSLA) steel as per ANSI/AWWA C111/A21.11.

The restraining gland shall comply with all applicable dimensions of ANSI/AWWA C111/A21.11 and shall be compatible with all bell and spigot (push-on) joint sockets of the standard.

The restraint device for PVC Pipe shall be SIP Industries. EZ GRIP® PTP Joint Restraint or equal.

Available: Import 🔯



## PRODUCT LINE

#### **AWWA DI Fittings & Accessories**

- C153 Compact MJ Fittings and Acc. 2" 64"
- C110 Full Body MJ Fittings 2" 64"
- C153 Trim Tyton® Push-On Fittings 4" 24"
- C110 Flange Fittings 2" 64'
- MJ x MJ Adapter for Connecting MJ Bells 3" 24"
- Stainless Steel & Blue T-Bolts
- Made in India, China & Mexico
- Bare, Cement, Zinc, FBE & Other Linings

#### Joint Restraint System

- EZD Joint Restraint for DI Pipe 3" 48"
- EZDTP Joint Restraint Tandem for DI Pipe 3" 48"
- EZDPTP Joint Restraint for Push-On Joints DI Pipe 3" 48"
- Ductile Iron Retainer Glands 3" 30"
- FAR / FAH Flange Adapter for DI Pipe 3" 48"
- EZFA Restrained Flange Adapter for DI and PVC Pipe 3" 36"
- EZPVC Joint Restraint for PVC Pipe 3" 36"
- ULTRA Joint Restraint for PVC Pipe 4" 12"
- EZPVCPTP Joint Restraint for Push-On Joints PVC Pipe 14" 36"
- PTPVC Pipe to Pipe Restraint 4" 48"
- PTPDF Pipe to MJ Fittings Restraint 4" 48"
- PTPFC Pipe to PVC Fittings Restraint 4" 12"
- Made in China & USA
- EZ Shield or Shop Coating

#### **Municipal Construction Castings**

- Manhole Rings and Cover
- Frames and Grates
- Valve Boxes and Service Boxes
- Water Meter Covers and Boxes
- Cleanout and Monument Boxes
- **Detectable Warning Plates**
- Extension Rings
- Trench Grates and Tree Grates
- Made in India & USA

### **Fabrication Products for DI Pipe**

- High Hub Flanges Class 150 and 250. 3" 64" Threaded Bell Flanges 3" 48"
- Anchor Flanges 3" 60"
- Filler Flanges 4" 30"

#### Other Products and Services

- All Thread Rod
- Pipe Lube and Hydraulic Cement
- Socket Clamps and Lugs
- Flange Packs
- **OEM Castings**



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