

PIPE TO PIPE RESTRAINT STYLE B

**IPS PVC
PRESSURE**

***Eliminates
Concrete Thrust
Blocks***

Engineered for Durability

Eliminate Concrete Thrust Blocks

With HARCO Pipe to Pipe Restraints as well as Pipe to Pipe Restraints and Valve Restraints, underground gasketed piping can be installed without the use of concrete thrust blocks. Joint Restraint is especially useful for bridge crossings, stream crossings, unstable soils, fill areas, and places where concrete thrust blocks are awkward. Consult HARCO for a simple restrained pipe length calculation utility.

How Joint Restraints Work

Joint restraint systems tie lengths of pipe to a fitting, relying on the friction of the soil on the pipe to resist fitting thrust forces. There are times when additional lengths of pipe are required to hold the fitting. The Pipe to Pipe restraint is for this purpose. A simple restrained length

calculation program allows a user to input the variables from his application and identify the joint restraint design required for his job.

The HARCO Difference

HARCO pipe grip rings are machined to ensure sharp, consistent serrations, and roundness. This allows perfect gripping of the pipe every time. Long term performance is guaranteed. The use of threaded restraint rods allowing adjustment for dimensional variations ensures that forces are distributed for even pull on the pipe and fitting. There is no danger of “cocking” that can reduce the life of the pipe.

***Machined Grip
Rings Perform
Long Term***

***Threaded
Restraint Rods
for “Even Pull”***



PIPE TO PIPE RESTRAINT STYLE B

ITEMS TO BE ASSEMBLED:

- A - (1) Plain end PVC pipe.
- B - (1) Bell End PVC Pipe
- C - (1) HARCO Grip Rings (FIGURE 1)
- D - (1) HARCO Pipe Bell Backing Ring.(FIGURE 2)
- E - (2) Corten Threaded Restraining Rods with (4) Nuts (FIGURE 3)

STEP 1: Mark and assemble plain-end PVC pipe into bell according to pipe manufacture's recommendations.

STEP 2: Assemble the HARCO grip rings on the spigot pipe, approx. 2" inches behind the insertion mark on the pipe. Tighten the side clamping bolts to recommended torque 100 ft. lbs (pad to pad).

STEP 3: Assemble HARCO Pipe bell backing ring around pipe bell socket immediately behind the gasket.

STEP 4: Insert the threaded rods (E) provided and snug the retaining nuts against the restrainer ears (against the flat surface). Do not over-tighten retaining nuts, approximately one turn with a wrench.

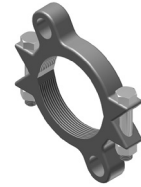


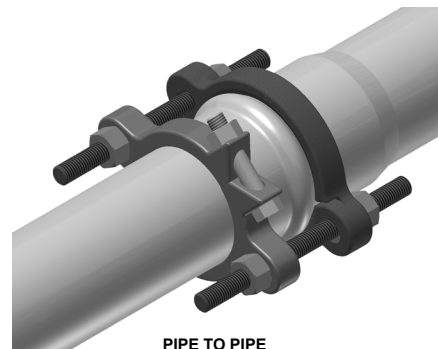
FIGURE 1
(1) GRIP RING WITH BOLTS & NUTS



FIGURE 2
BELL BACKING RING



FIGURE 3
(2) ROD & NUT



PIPE TO PIPE RESTRAINT ASSEMBLY

Ordering Information

SIZE	PART NUMBER	STYLE	WEIGHT
3"	820316	B	8
4"	820416	B	12
6"	820616	B	16
8"	820816	B	34

Suggested Specifications

Pipe to Pipe Restraints shall meet the requirements of UNI-B-13-94. Grip ring serrations shall be machined, as cast serrations are not permitted. Restraint rods, bolts and nuts shall be of low alloy steel to AWWA/ANSI C111/A21.11. Pipe to Pipe Restraints shall be supplied by The Harrington Corporation of Lynchburg, VA.

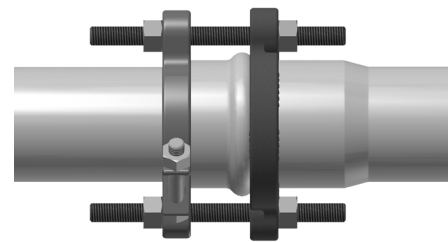


FIGURE 4
RESTRAINT ASSEMBLY

