

### FITTINGS

# **NEW!**

## **FITTING TO VALVE TO PIPE RESTRAINT**

**NEW SIMPLER DESIGN  
'07 RELEASE**



**DUCTILE  
IRON**

**Restrains  
Valve  
Directly to  
Fitting and  
Pipe**

### **Engineered for Durability**

#### **Eliminate Concrete Thrust Blocks**

With the HARCO Fitting to Valve to Pipe Restraint you can eliminate concrete thrust blocking of valves and support the use of fitting joint restraint. This dramatically speeds the installation and allows for later access to the valve. In combination with fitting restraints and pipe bell restraints using the principles of mechanical joint restraint, concrete thrust blocking of the Tee and valve can be eliminated. Consult HARCO for a simple restrained pipe length calculation utility.

#### **One Size Fits All**

The Harco Valve to Pipe restraint fits push-on valves for IPS-PVC pipe made by American Flow Control/Waterous, AVK, Clow, Kennedy, Matco-Norca, M&H and Nibco.

#### **New Design with fewer Parts**

HARCO's Valve to Pipe Restraint now has fewer parts and allows for easier installation of the grip rings and ductile iron restraint rods from the side.

#### **Proper Thrust Force Transfer**

HARCO's design transfers valve thrust forces directly to the grip rings unlike other valve restraints that apply forces to the ends of the pipe risking a failure. Harco grip rings have machined serration which have the exact form required to grip the pipe perfectly, ensuring long-term performance. As cast serrations provide inconsistent gripping of the pipe and questionable long-term performance.

#### **The HARCO Difference**

Standards and testing are a major advantage to HARCO. The grip ring design used by HARCO has been tested to comply with the industry standard for PVC pipe joint restraint, Uni-B-13-94, passing all three tests: the quick burst test, the 1,000-hour test and the one million cycle test.

**Machined  
Grip Rings  
Perform  
Long Term**

**Fits  
Push-On  
Valves for  
IPS-PVC  
Pipe**



HARRINGTON CORPORATION • P.O. BOX 10335 • LYNCHBURG, VIRGINIA 24506

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PF133-110306

# FITTING TO VALVE TO PIPE RESTRAINT

## Product Sheet

### Fitting to Valve to Pipe Assembly Instructions (Style B)

#### Items to be assembled:

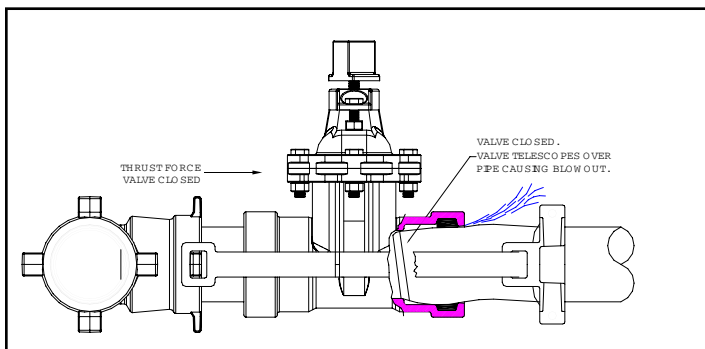
- A - (1) Grip Rings w/ Clamp Bolts & Nuts.
- B - 2" - 8" include (2) Restraint Rod & Nut  
10" & 12" includes (2) Restraint Rod & Nut, (2) T-bolts & Nut
- C - (1) Push-On Joint Valve.
- D - (1) Short PVC Pipe

#### Notes:

**Step 1:** Cut and bevel short piece of pipe 1/2" shorter than combined length of fitting and valve bells. Install pipe in fitting then install valve onto pipe pushing valve bell flush onto fitting bell.

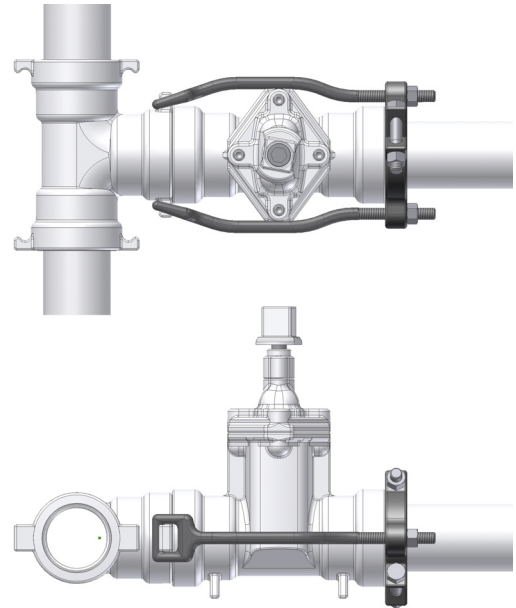
**Step 2:** Assemble HARCO grip ring on pipe with the rings flush against valve bells. (as shown in diagram) After being sure of the alignment of the restraint bolt holes, tighten grip ring clamp bolts to 100 ft-lbs. of torque. For sizes up to 8" "start" the restraint rods in the grip ring before the grip ring is put in place and tightened.

**Step 3:** Slide restraint rods over lugs and tighten restraint rod nuts evenly to 5 ft-lbs. of torque.

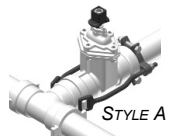


#### Warning:

If grip rings are not installed flush against valve bells, the thrust force from valve closure may cause the valve to force itself over end of PVC pipe resulting in failure of gasket seal, causing a leak.



SIZE	PART NUMBER	WT.	STYLE
2"	820121	7	A
2½"	820221	8	A
3"	820322	8	A
4"	820422	11	A
6"	820622	15	A
8"	820822	23	A
10"	821021	48	C
12"	821221	63	C



### Suggested Specifications

Fitting to Valve to Pipe restraint shall consist of ductile iron (ASTM A536) grip rings with machined serrations and ductile iron restraint rods. The ring that grips the pipe shall meet the requirements of Uni-B-13-94. The restraint rods / nuts shall be made from low alloy steel to AWWA/ANSI C111/A21.1 or ductile iron to ASTM A536. All valve restraint is to be supplied by the Harrington Corporation of Lynchburg, Virginia.



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