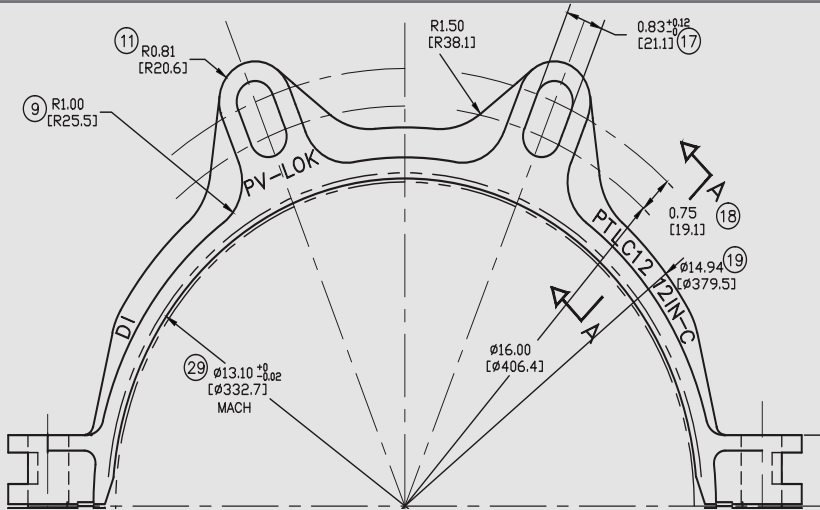


PV-LOK™ Series PTM for DI Fitting Restraint



Features & Advantages:

The PV-LOK™ Series PTM restraining device incorporates a series of machined and bi-directional serrations that effectively engage PVC pipe walls to provide positive joint security and full support of the pipe wall. The PV-LOK Series PTM is designed for use with ductile iron fittings manufactured in accordance to AWWA/ANSI C153/A21.53 and C110/A21.10 having a mechanical joint or push-on with ear lug fittings.

Sample Specification:

Restraint devices for joining plain-end PVC pipe to mechanical joint or push-on with ear lug water-main fittings shall consist of a split retainer ring that incorporates a series of machined serrations (not "as cast") that provide positive restraint, exact fit and full support of the pipe wall. The restraint device shall provide the necessary bolts and nuts to complete the water-main fitting assembly. Devices shall carry a minimum 2:1 safety factor and meet or exceed the recognized testing for restrained joints on PVC pressure pipe and offer factory certification and independent test results. Restraint devices for securing PVC pipe to mechanical joint or push-on with ear lug water-main fittings shall be SIGMA PV-LOK™ Series PTM or approved equal.

Material:

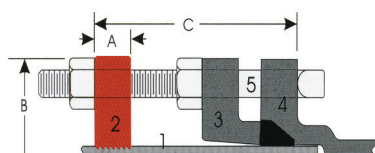
- Serrated Clamping Ring and Mechanical Joint Gland: Ductile Iron ASTM A536 65-45-12.
- Side Clamping Bolts and Hex Nuts: ASTM A449 high strength steel, zinc-plated or Stainless Steel at customer request.
- Restraining Rods and Hex Nuts: High strength low alloy steel (AWWA/ANSI C111/A21.11) 45,000 psi yield / 60,000 psi tensile. Stainless Restraining Rods and Hex Nuts also available at customer request.
- Coating is standard shop coat. CORRSafe (A cationic epoxy base coating applied to the restrained joint product using a time tested electrodeposition process) available at customer request.



•Available with either standard shop coating or epoxy base coating.

•Available with either standard steel or stainless steel hardware.

PV-LOK™ Series PTM for DI Fitting Restraint



1. Plain-end pipe
2. Restrainer clamp
3. MJ gland
4. MJ bell
5. Extra-long T-bolt

Dimensions in Inches, Weights in Pounds:

Size	For PVC Pipe with DI Pipe OD	DI Pipe OD	A	B*	C (max)	Restraining Rods		Clamping Bolts			Weight
	Item No.					No.	Size	No.	Size	Min. Torque	
4	PTM-C4	4.80	1.25	9.13	6.0	2	3/4x7	2	5/8x4	100	8
6	PTM-C6	6.90	1.25	12.12	6.0	2	3/4x7	2	5/8x4	100	10
8	PTM-C8	9.05	1.50	14.13	6.0	2	3/4x7	2	3/4x4-1/2	100	15
10	PTM-C10	11.10	1.75	16.88	6.0	4	3/4x9	2	7/8x5	125	24
12	PTM-C12	13.20	1.75	19.25	6.0	4	3/4x9	2	7/8x5	125	27

PV-LOK restrainers are rated with a working pressure equal to the PVC pipe upon which they are installed.

*When calculating clearance for pipe in a casing, add a minimum of 1-1/2" to the "B" dimension above.

For use on ductile iron pipe, please contact SIGMA for recommendations.

Installation Instructions:

1. Install the plain-end pvc pipe into the mechanical joint bell. Insert one of the extra-long T-bolts provided with Series PTM through one of the bolt holes, marking a reference line on the pipe approximately 1 to 2 inches from the end of the bolt.
2. Assemble the MJ gland, gasket and bolts to AWWA standards. Assemble PTM clamping ring on the pipe at the reference line. Tighten the side clamping bolts to recommended torque (pad to pad). Line up the ears with the corresponding MJ bolt holes.
3. Insert the extra-long T-bolts and install one nut each between the gland and the clamping ring. Tighten the nuts against the MJ gland to AWWA standards to complete the gasketed assembly.
4. Snug the retaining nuts behind the restrainer ears and tighten approximately one turn with a wrench. Do not over-tighten retaining nuts.