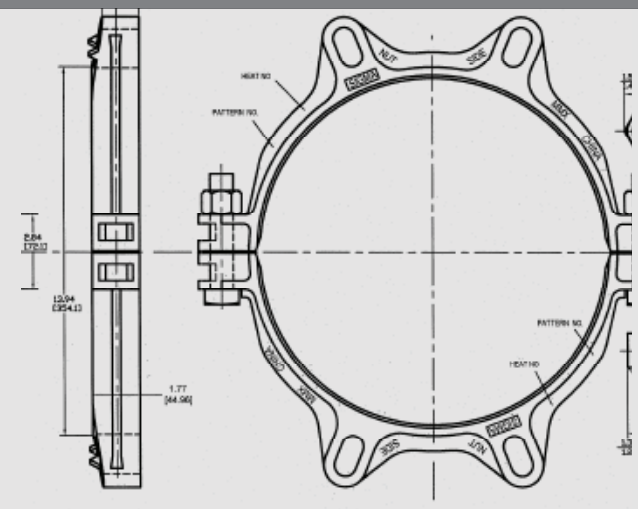
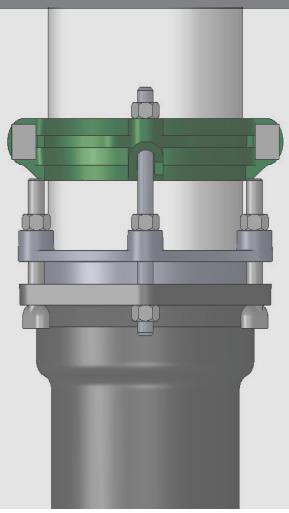
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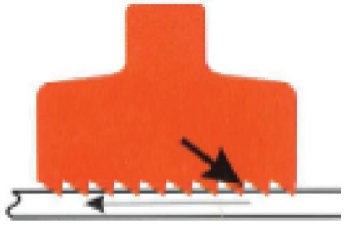
Quality – Service – Commitment – Delivered.

PV-LOK™ Series PVM for DI Fitting Restraint (IPS)









Cross Section of PV-LOK illustrates directional grip of serrations to maximize restraint of PVC pipe.

Features & Advantages:

The PV-LOK™ Series PVM restrainer incorporates a series of machined, serrations that effectively engage PVC pipe walls, to provide positive joint security and full support of the pipe. The PV-LOK Series PVM is designed for use with ductile iron fittings meeting AWWA/ANSI C153/A21.53 and C110/A21.10 having either a mechanical joint or a push-on joint with ear lugs. The Series PVM incorporates a PV-LOK clamping ring, and elongated T-bolts or restraining rods depending on nominal size.

Sample Specification:

Restraint devices for joining plain end PVC pipe to either mechanical joint or push-on joint with ear lug watermain 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 watermain 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/push-on joint watermain fittings shall be SIGMA PV-LOK™ Series PVM or approved equal.

Uni-Bell UNI-B-13-94

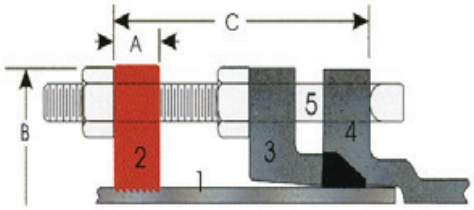
FM APPROVED

Material:

- Clamping ring is manufactured of high strength ductile iron in accordance with ASTM A536, grade 65-45-12.
- Side clamping bolt and hex nuts are high strength steel in accordance with ASTM A449 and zinc plated to B633, Type III Sc.1 for corrosion resistance.
- Extra long T-head bolts and nuts are high strength, low alloy steel in accordance with AWWA/ANSI C111/A21.11. Restraining rods and heavy hex nuts are of high strength, low alloy steel in accordance with AWWA/ANSI C111/A21.11. T-head bolts and restraining rods provide minimum 45,000 psi yield and 60,000 psi tensile strength.

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PV-LOK™ Series PVM for DI Fitting Restraint (IPS)



1. Plain end Pipe.
2. Restrainer Clamp
3. MJ Gland
4. MJ Bell
5. Long T-Bolt

Dimensions in Inches, Weights in Pounds:

Size	For PVC Pipe with IPS Pipe O.D.	Steel Pipe OD	A	B*	C (max)	Restraining Rods		Clamping Bolts			Weight
	Item No.					No.	Size	No.	Size	Min. Torque	
2	PVM-S2	2.38	1.25	6.25	4.0	2	5/8x5	2	5/8x4	85	5
3	PVM-S3	3.50	1.25	7.69	4.0	2	5/8x5	2	5/8x4	85	6
4	PVM-S4	4.50	1.25	9.13	6.0	2	3/4x7	2	5/8x4	100	8
6	PVM-S6	6.63	1.25	12.12	6.0	2	3/4x7	2	5/8x4	100	10
8	PVM-S8	8.63	1.50	14.13	6.0	2	3/4x7	2	3/4x4-1/2	100	15
10	PVM-S10	10.75	1.75	16.88	8.0	4	3/4x9	2	7/8x5	125	24
12	PVM-S12	12.75	1.75	19.25	8.0	4	3/4x9	2	7/8x5	125	27

Pressure Rating:

Nominal Pipe Size	Item #	Pressure Rating ASTM D2241		
		SDR17	SDR21	SDR26
2	PVM-S2	250	200	160
3	PVM-S3	250	200	160
4	PVM-S4	250	200	160
6	PVM-S6	250	200	160
8	PVM-S8	250	200	160
10	PVM-S10	250	200	160
12	PVM-S12	250	200	160

PV-LOK Products are rated with a working pressure equal to that of the PVC pipe to which they are applied.
**When calculating clearance for pipe in a casing, add a minimum of 1-1/2" to the "B" dimension above.*

Installation Instructions (4-12"):

1. Install plain-end PVC pipe into the mechanical joint bell. Insert one of the extra-long T-bolts provided with Series PVM 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 PVM clamping ring on the pipe at the reference line. Tighten the side clamping bolts to recommended torque (pad to pad). The protrusions on the restrainer ears must face the fitting to insure proper direction of the angled serrations. 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 gasket assembly.

4. Snug the retaining nuts behind the restrainer ears (against the flat surface). Do not over-tighten retaining nuts, approximately one turn with a wrench.