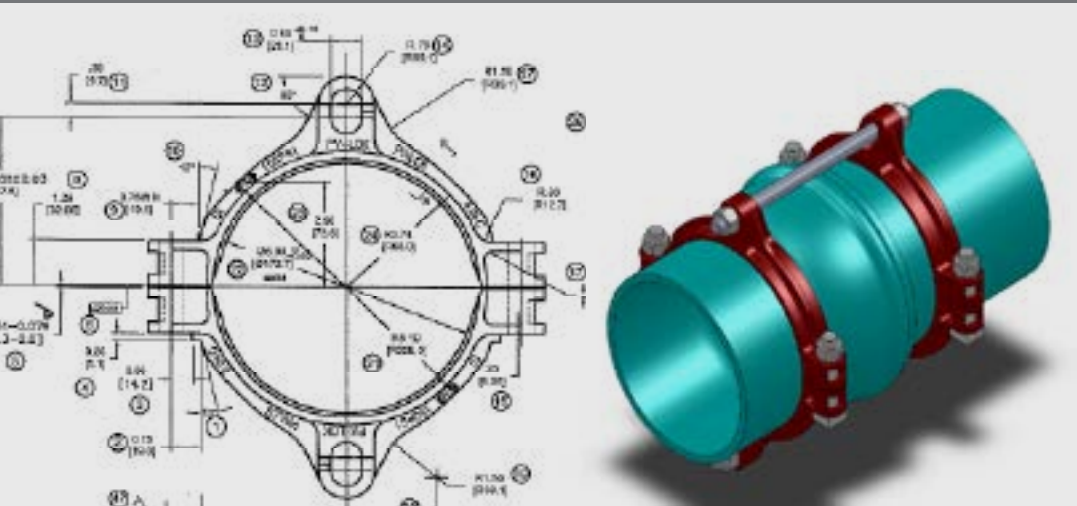


PV-LOK™ Series PWP for Bell Joint Restraint (CIOD)



Features & Advantages:

The PV-LOK™ Series PWP 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 directional gripping action maximizes restraint during increased line pressures such as those resulting from surges and water hammers. The Series PWP incorporates two PV-LOK clamping rings and a series of restraining rods & nuts that tie the two rings together and secure the PVC bell and spigot pipe joint.



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

Sample Specification:

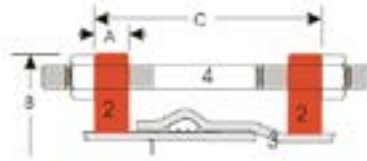
Restraint devices for bell and spigot joints of PVC pipe shall consist of two split retainer rings incorporated a series of machined (not “as cast”) serrations. One clamping ring shall be installed on the spigot pipe, and with the necessary restraining rods and nuts, connected to a second clamping ring located on the pipe barrel immediately behind the gasket bell. Restraint devices shall incorporate a series of machined serrations 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 PVC pipe bell 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 bell assemblies shall be SIGMA PV-LOK™ Series PWP or approved equal.

Material:

- Serrated Clamping Ring - ASTM A536 65-45-12 Ductile Iron with standard coating or epoxy based e-coat.
- Side Clamping Bolts and Hex Nuts: ASTM A449 with high strength steel standard zinc-plated or Stainless Steel or Cor-Blue
- Restraining Rods and Hex Nuts: High strength low alloy steel (AWWA/ANSI C111/ A21.11) or Stainless Steel or Cor-Blue
- Epoxy based e-coat is called CORRSafe (A cationic epoxy base coating applied using a time tested electrodeposition process)
- Cor-Blue is Fluoropolymer fastener coating process



PV-LOK™ Series PWP for Bell Joint Restraint (CIOD)



1. Plain End Pipe
2. Restrainer Clamp
3. Bell End Pipe
4. Restraining Rod

Dimensions in Inches, Weights in Pounds:

Pipe Size	Item #	PVC pipe w DI Pipe OD	A	B	C (max)	BCD		Restraining Rods		Nuts for Res Rods		Clamping Bolts			Weight
						Max	Min	No.	Size	No.	Size	No.	Size	Min Torque	
4	PWP-C4	4.80	1.20	9.00	13.00	7.5"	7.12"	2	3/4x15	4	3/4	4	5/8x3 3/8	85	14.36
6	PWP-C6	6.90	1.20	11.52	13.00	10.02"	9.26"	2	3/4x18	4	3/4	4	5/8x3 3/8	85	16.44
8	PWP-C8	9.05	1.75	12.81	13.00	12.5"	11.5"	2	3/4x18	4	3/4	4	3/4x3 7/8	100	27.00
10	PWP-C10	11.10	1.75	16.88	16.00	15.26"	13.76"	4	3/4x24	8	3/4	4	7/8x4 3/8	125	44.40
12	PWP-C12	13.20	1.75	19.12	22.00	17.5"	16.00"	4	3/4x24	8	3/4	4	7/8x4 3/8	125	50.64
14	PWP-C14	15.30	3.50	21.10	22.00	19.6"	17.6"	6	3/4x30	12	3/4	8	7/8x6 1/4	130	101.61
16	PWP-C16	17.40	3.50	23.58	22.00	22.0"	20.0"	6	3/4x30	12	3/4	8	7/8x6 1/4	130	114.15
18	PWP-C18	19.50	4.25	25.80	22.00	24.04"	22.2"	8	3/4x30	16	3/4	8	1.00x6 1/4	130	164.97
20	PWP-C20	21.60	5.00	29.06	22.00	26.74"	24.70"	8	3/4x36	16	3/4	8	1-1/4x6-1/2	130	234.50
24	PWP-C24	25.80	5.00	34.64	22.00	32.36"	29.72"	10	3/4x36	20	3/4	8	1-1/4x6-1/2	130	288.50
30	PWP-C30	32.00	5.50	41.80	38.00	39.76"	36.76"	10	1x40	20	1	8	1-1/4x8-1/2	130	463.75
36	PWP-C36	38.30	5.50	49.04	38.00	46.88"	43.52"	12	1x40	24	1	8	1-1/4x8-1/2	130	520.40
42	PWP-C42	44.50	6.26	57.18	46.00	54.62"	50.62"	16	1 1/4x48	32	1 1/4	8	1 1/2x9	175	983.76
48	PWP-C48	50.80	6.26	63.48	46.00	60.92"	56.92"	16	1 1/4x48	32	1 1/4	24	1 1/2x9	175	1058.50

PV-LOK Products are rated with a working pressure equal to that of the PVC pipe to which they are applied.

Also suitable for use on ductile iron pipe in sizes 4-12" (250 psi on 4"-8" and 200 psi on 10"-12")

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

Pressure Rating:

Nominal Pipe Size	Item #	Pressure Rating													
		C900									ASTM D2241				
		DR14	DR17	DR18	DR21	DR25	DR27.5	DR32.5	DR41	DR51	SDR17	SDR21	SDR26	SDR32.5	SDR41
4	PWP-C4	305	250	235	200	165	150	-	-	-	250	200	160	125	100
6	PWP-C6	305	250	235	200	165	150	-	-	-	250	200	160	125	100
8	PWP-C8	305	250	235	200	165	150	-	-	-	250	200	160	125	100
10	PWP-C10	305	250	235	200	165	150	-	-	-	250	200	160	125	100
12	PWP-C12	305	250	235	200	165	150	-	-	-	250	200	160	125	100
14	PWP-C14	305	250	235	200	165	150	125	100	-	-	-	-	-	-
16	PWP-C16	305	250	235	200	165	150	125	100	-	-	-	-	-	-
18	PWP-C18	305	250	235	200	165	150	125	100	80	-	-	-	-	-
20	PWP-C20	305	250	235	200	165	150	125	100	80	-	-	-	-	-
24	PWP-C24	305	250	235	200	165	150	125	100	80	-	-	-	-	-
30	PWP-C30	-	250	235	200	165	150	125	100	80	-	-	-	-	-
36	PWP-C36	-	-	235	200	165	150	125	100	80	-	-	-	-	-
42	PWP-C42	-	-	-	200	165	150	125	100	80	-	-	-	-	-
48	PWP-C48	-	-	-	-	165	150	125	100	80	-	-	-	-	-



Installation Instructions (4-12”):

1. Assemble plain-end PVC pipe into bell according to pipe manufacturer’s recommendations.
2. Assemble the Series PWP clamping rings on the spigot pipe (approx. 2 inches behind the insertion mark on the pipe) and immediately behind the pipe bell end, making sure the protrusions on the restrainer ears face toward each other to insure proper direction of the angled serrations. Tighten the side clamping bolts to recommended torque.
3. Insert the restrainer rods 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.

Installation Instructions (14-48”):

1. Assemble pipe bell joint to pipe manufacturer’s recommendations.
2. Assemble the Series PWP clamping rings on the spigot pipe approximately two inches behind the insertion mark on the pipe and immediately behind the pipe bell end. Tighten the side clamping bolts evenly to recommended torque – you should expect ¼” to ½” gap on each side of the restrainer. The flat side of the restrainer ear should face away from the fitting to insure proper direction of the angled serrations.
3. Connect the two Series PWP restrainers using the restrainer rods that are provided. Place a washer behind each restrainer ear and snug all of the retainer nuts. Do not over-tighten retainer nuts, approximately one turn with a wrench.

LOCATIONS

Northeast Region

Cream Ridge, New Jersey (HQ)

700 Goldman Drive
Cream Ridge, NJ 08514
Phone (800) 999-2550
Fax (609) 758-1158
crmcsr@sigmaco.com

REPCO

395 Boul. Labbé Nord
Victoriaville, Qc G6P 1B1
Phone (888) 744-6262
Fax (819) 758-1153
jboucher@repco.ca

Concord Supply

2353 Bowman Street
Innisfil, Ontario L9S 3V6
Phone (877) 436-3800
Fax (705) 436-6338
tanya@concordsupply.ca

Midwest Region

Sauk Village, Illinois

21699 Torrence Avenue
Sauk Village, IL 60411
Phone (888) 999-0420
Fax (708) 758-6790
chicsr@sigmaco.com

Southeast Region

Alexander City, Alabama

1500 Highway 22 W
Alexander City, AL 35010
Phone (800) 824-4513
Fax (256) 234-4956
alxcsr@sigmaco.com

Southwest Region

Houston, Texas

5000 Askins Lane
Houston, TX 77093
Phone (800) 999-0109
Fax (281) 987-0200
htncsr@sigmaco.com

Western Region

Ontario, California

4652 E. Guasti Road
Ontario, CA 91761
Phone (800) 688-6230
Fax (909) 391-2033
ontcsr@sigmaco.com

Auburn, Washington (Branch)

902 W Main Street
Auburn, WA 98001
Phone (800) 688-6230
Fax (909) 391-2033
ontcsr@sigmaco.com

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- 2-48" C110 Ductile Iron Mechanical Joint Fittings
- 2-64" C110 Ductile Iron Flanged Fittings
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- 4-48" ONE-LOK D-SLDE Domestic Wedge Restraint for Ductile Iron Pipe
- 3-64" ONE-LOK SLDE Wedge Restraint for Ductile Iron Pipe (Import)
- 4-48" ONE-LOK T-SLDE Tandem Wedge Restraint for High Pressure Ductile Iron Pipe
- 3-36" ONE-LOK D-SLCE Domestic Wedge Restraint for PVC Pipe
- 3-12" ONE-LOK SLC Wedge Restraint for PVC Pipe (Import)
- 3-60" ONE-LOK SLCE Wedge Restraint for PVC Pipe (Import)
- 3-42" ONE-LOK SLDEH Wedge Harness Restraint for Ductile Iron Pipe
- 4-12" /16" /20" ONE-LOK SLDM Wedge Restraint for Oversized Cast Iron Pipe
- 4-36" ONE-LOK SSLD Split Wedge Restraint for Installed Ductile Iron Pipe & Fitting
- 4-36" ONE-LOK SSLDH Split Wedge Harness Restraint for Installed Ductile Iron Pipe
- 4-12" ONE-LOK SLCEH Wedge Harness Restraint for AWWA C900 PVC Pipe

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PV-LOK™ Serration Lock Restraints



- 4-48" PV-LOK PWM Serrated Restraint for Ductile Iron Fitting & AWWA C900/905 PVC Pipe
- 4-48" PV-LOK PWP Serrated Bell Joint Restraint for AWWA C900/905 PVC Pipe
- 4-12" PV-LOK D-PWP Domestic Serrated Bell Joint Restraint for AWWA C900 PVC Pipe
- 4-12" PV-LOK PVPF Restraint for AWWA C900/905 PVC Pipe & PVC Fitting
- 4-12" PV-LOK PWH Serrated Harness Restraint for AWWA C900 PVC Pipe
- 2-12" PV-LOK PVM Serrated Restraint for Ductile Iron & IPS OD PVC pipe
- 2-12" PV-LOK PVP Serrated Bell Joint Restraint for IPS OD PVC Pipe
- 4-8" PV-LOK PVPF Serrated Restraint for IPS OD PVC Pipe & PVC Fitting
- 4-12" PV-LOK PWP Serrated Bell Joint Restraint for Ductile Iron Pipe

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- Socket Clamps and Tie Rod Accessories
- Boxlok Valve Box Alignment Device
- Cast Iron Companion Flanges

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