



FOR: Restraint of AWWA C900/905 PVC pipe in sizes 4" – 36" to Mechanical joint AWWAC153/C110 ductile iron fittings
 Restraint of *IPS diameter ASTM D2241 PVC pipe in sizes 4" – 12" to Mechanical joint AWWAC153/C110 ductile iron fittings
***NOTE:** Transition gasket required for IPS diameter ASTM D2241 PVC pipe
 NOTE: 4" – 16" restraints and accessories provided in boxed kits. Sizes larger than 16" will be provided with accessories kitted separate from the restraint and gland.

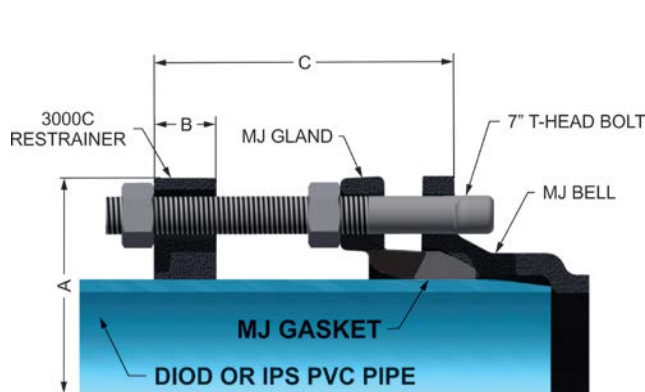
FEATURES and ADVANTAGES:

- Available for PVC sizes 4" through 36" for both ductile iron outside diameter (DIOD) pipe or iron pipe size (IPS) outside diameter pipe
- Restraints and fasteners rated at the listed pressure on the PVC pipe and restraint shall have a 2:1 safety factor
- Full 360° contact, no pipe distortion or point loading
- Connecting T-head bolts or threaded rods, clamp assembly bolts, and hex nuts consist of low alloy high strength steel and comply with applicable requirements of ANSI/AWWA C111/A21.11.
- System pressure rating *DR14 -305psi, *DR18 – 235psi, *DR25 – 165psi.
- For easy identification, IPS pipe diameter clamps are GREY and DI pipe diameter clamps are BLACK

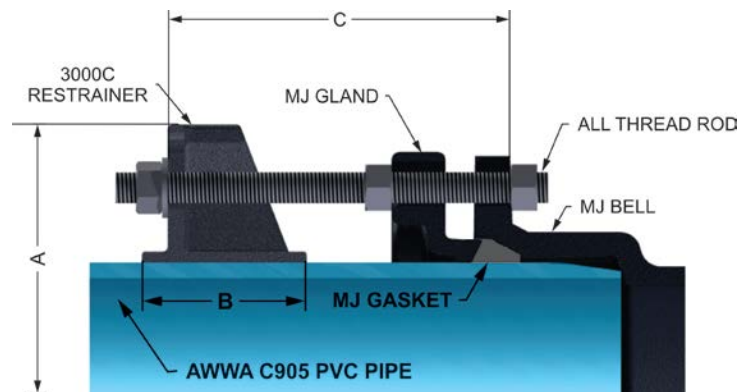
SAMPLE SPECIFICATIONS:

All clamps are made of high strength grade 65-45-12 ductile iron in accordance with the requirements and specifications of ASTM A536. Clamps coated with alkyl resin based baking enamel. Clamps provide 360 degree contact with the PVC pipe and internal serrations are machined to exact tolerances. Restrainers approved per applicable requirements of ASTM F1674, current revisions apply. Kits include, 1 each 3000C restrainer, hex head clamping bolts and nuts for restrainer assembly, NSF approved MJ or transition gasket, mechanical joint gland and restraint to fitting T-head bolts or connecting threaded rods with hex nuts. For use on water or wastewater pipelines subject to hydrostatic pressure and tested in accordance with ASTM D2774 or AWWA C600 as applicable.

4" to 12" Assembly



14" to 36" Assembly



Nominal Size	Series 3000MJ For PVC Pipe With Ductile Pipe O.D.		Series 3000MJ For PVC Pipe With IPS Pipe O.D.		*A	*B	*C Max.	Restraint Rods Connecting		Quantity, Sizing and Torque For Clamp Assembly Bolts			*Kit (lbs.)
	Pipe O.D.	DIOD Part No.	Pipe O.D.	IPS Part No.				Qty.	Size	Qty	Size	Torque	
4	4.80	462576	4.50	512899	9.12	1.12	6.00	2	3/4 X 7	2	5/8 X 3.5	100 ft.lbs.	14.4
6	6.90	462583	6.63	512905	11.12	1.12	6.00	2	3/4 X 7	2	5/8 X 3.5	100 ft.lbs.	19.2
8	9.05	462590	8.63	512912	14.74	1.25	6.00	2	3/4 X 7	2	3/4 X 5	150 ft.lbs.	25.7
10	11.10	462606	10.75	512875	16.81	1.38	6.00	4	3/4 X 7	2	7/8 X 5	150 ft.lbs.	39.3
12	13.20	462613	12.75	512882	19.45	1.38	6.00	4	3/4 X 7	2	7/8 X 5	150 ft.lbs.	41.8
14	15.30	CALL	N/A	N/A	22.54	4.00	15.00	6	3/4 X 17	4	7/8 X 6.5	150 ft.lbs.	91.8
16	17.40	CALL	N/A	N/A	24.66	4.00	15.00	6	3/4 X 17	4	7/8 X 6.5	150 ft.lbs.	96.9
18	19.50	CALL	N/A	N/A	26.64	5.06	15.00	8	3/4 X 17	4	1 X 8	175 ft.lbs.	143.3
20	21.60	CALL	N/A	N/A	28.76	5.06	22.00	8	3/4 X 24	4	1-1/8 X 8.5	200 ft.lbs.	169.1
24	25.80	CALL	N/A	N/A	33.98	5.20	22.00	12	3/4 X 24	4	1-1/8 X 8.5	225 ft.lbs.	224.1
30	32.00	CALL	N/A	N/A	40.90	10.00	22.00	12	1 X 24	8	1-1/8 X 8.5	250 ft.lbs.	408.4
36	38.30	CALL	N/A	N/A	48.00	10.00	22.00	12	1 X 24	8	1-1/8 X 8.5	250 ft.lbs.	500

*Note: Approximate dimensions and weights

Tyler Union Waterworks Contact Information

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Installation Instructions for Sizes 4" – 12" Series 3000MJ:

Figure 1



Figure 2



Figure 3



Figure 4



Figure 5



Step (1): Assemble the mechanical joint, installing gasket, gland, and T-head bolts per AWWA C600 standard, leave out the T-head bolt corresponding to the restrainer ears per Figure 1.

Step (2): Per Figure 2, use a 7" T-head bolt (included) as a guide and mark the location on the pipe where the restrainer will be assembled.

Step (3): Assemble restrainer per Figure 3, leaving sufficient threads on the end of the T-head bolt to fully engage nut.

Step (4): Tighten the restrainer clamp assembly bolts on each side evenly to the recommended torque maintaining even gaps between the clamp pads. (4" - 6" – 100 ft lbs., 8" – 12" 150 ft. lbs.)

Step (5): Connect restrainer to fitting per Figure 5. Insert the 7" T-head bolt (bolt and 2 hex nuts provided) through the bolt flange installing a hex nut between the gland and restrainer. Tighten the hex nut up to gland per AWWA C600 standard. Tighten the second hex nut up to the restrainer as show in Figure 5. Use additional hex nuts (not included) on the inside of the restrainer ear if joint is expected to contract.

Installation Instructions for Sizes 14" – 36" Series 3000MJ:

Figure 1



Figure 2



Figure 3



Figure 4



Step (1): Assemble the mechanical joint, installing gasket, gland, and T-head bolts per AWWA C600 standard, leave out the T-head bolt corresponding to the restrainer ears per Figure 1.

Step (2): Per Figure 2, use a connecting rod (included) as a guide and mark the location on the pipe where the restrainer will be assembled.

Step (3): Assemble restrainer per Figure 3, leaving sufficient threads on the end of the connecting rod to fully install washer and fully engage hex nut. Tighten the restrainer clamp assembly bolts on each side evenly to the recommended torque maintaining even gaps between the clamp pads. (14" – 16" 150 – 200 ft lbs., 18" - 175 - 225 ft. lbs., 20" - 200 - 250 ft. lbs., 24" - 225 - 275 ft. lbs., 30" – 250 - 300 ft. lbs., and 36" - 250 - 300 ft. lbs.)

Step (4): Connect restrainer to fitting per Figure 4. Inserting the rods through the restrainer ears(rod and 3 hex nuts provided for each ear), gland, and fitting bolt hole. Install one hex nut behind fitting bell, one hex nut against the gland and one hex nut behind the restrainer ear against the washer. Tighten hex nut up to gland per AWWA C600 standard. Use additional hex nuts (not included) on the inside of the restrainer ear if joint is expected to contract.

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