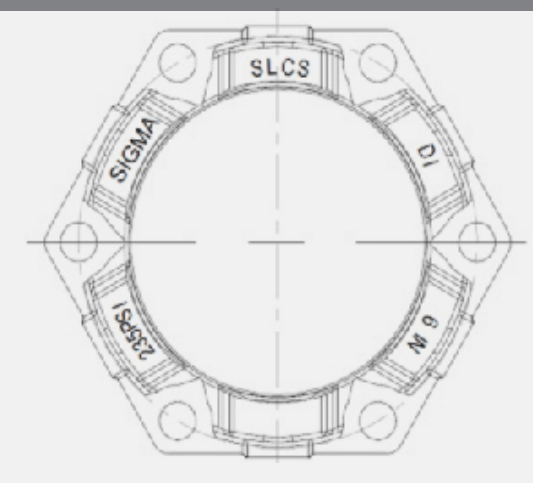
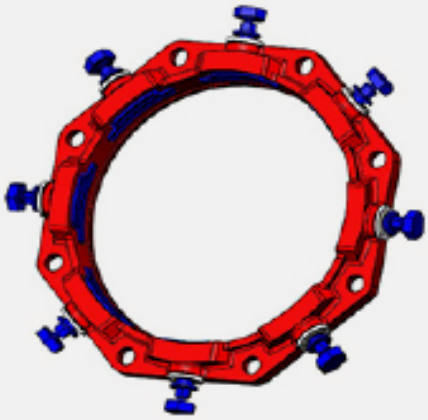
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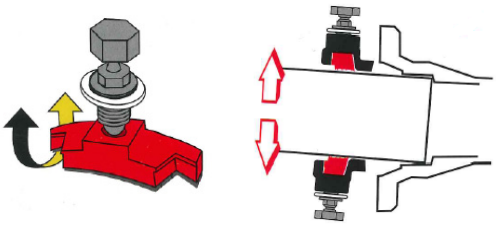
Quality – Service – Commitment – Delivered.

ONE-LOK™ Series SLCS for PVC Pipe









ONE-LOK's unique **CAM ACTION** allows the restraining lugs to "rock" and grip the PVC pipe wall more securely as thrust force increases, and allows for subsidence, seismic or other forces after installation, up to the maximum allowed deflection.



Features & Advantages:

1) The SIGMA ONE-LOK Series SLCS is a mechanical joint restraining gland that implements a series of individually activated wedges into the mechanical joint follower gland. When the wedge segment is engaged by the actuating bolt, the primary contact edges of each wedge segment lock onto the pipe wall. This action causes the primary contact edges to grip the pipe and effectively restrain all classifications of AWWA C900, C909, and ASTM D2241 IPS size PVC pipe.

2) ONE-LOK SLCS's precision contoured wedges provide proper contact and support of the PVC pipe wall. Each wedge is manufactured with an elongated contour that evenly matches the outside circumference of each nominal diameter of PVC pipe.

3) ONE-LOK SLCS's wedge actuating bolt provides the installer with two visual torque indicators. The breakaway top and secondary shoulder stop ensure proper engagement of the wedge segment at the time of installation. Unlike other actuating bolts, the ONE-LOK SLCS is manufactured with a proprietary quality control system that ensures the breakaway tops will activate at the correct torque. The breakaway top is sized to match the same dimensions of the bolts and nuts used to assemble the mechanical joint fitting and follower gland, eliminating the need for special installation tools. Once engaged, the actuating bolt leaves a residual hex-head shank, allowing post-installation disassembly of the restrained joint, if necessary.

4) ONE-LOK SLCS also features a non-corrosive, two-piece ABS plastic spacer that is removed when using the product to restrain IPS sized pipes meeting ASTM D2241. The two-piece design of this spacer allows it to be removed without requiring disassembly of the product. When the ONE-LOK SLCS is used to restrain pipes meeting AWWA C900, the spacer is left intact on the actuating bolt.

5) ONE-LOK SLCS's unique wedge segment and actuating bolt design allows the two components to interface using a cam action principle, allowing the wedge segments to rock and increase their grip on the pipe wall as thrust on the assembled joint increases. This also allows improved resistance to subsidence, seismic forces, and other movement within the maximum deflection limitations of the mechanical joint under applicable AWWA standards.

SIGMA ONE-LOK SLCS's can be used on all pressure classes and thicknesses of PVC pipe.

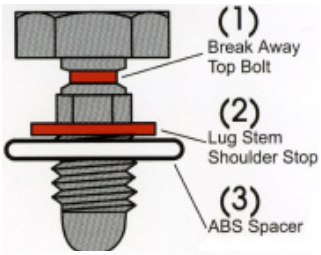
SIGMA Corporation

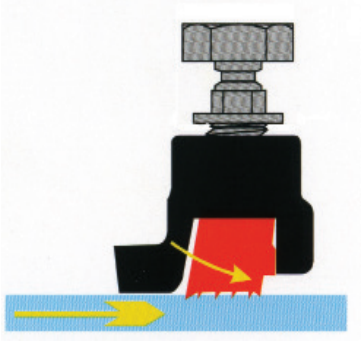
700 Goldman Drive
Cream Ridge, NJ 08514

800 999 2550 p
609 758 1163 f
crm-sales@sigmaco.com

www.sigmaco.com

ONE-LOK™ Series SLCS for PVC Pipe



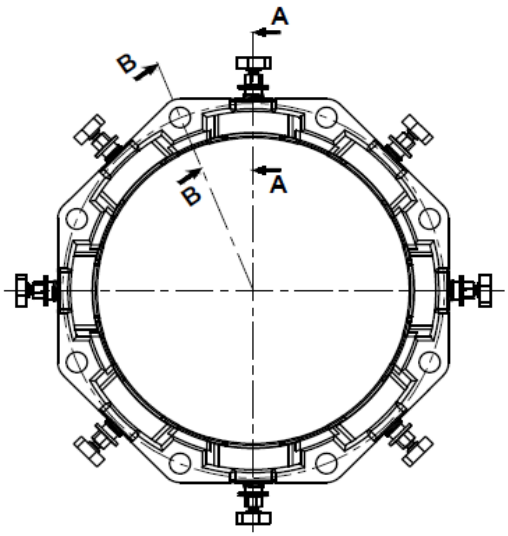


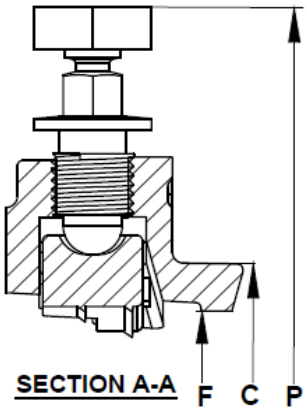
Sample Specification:

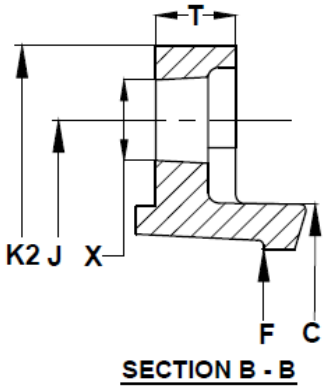
Restraint for standard mechanical joint fittings shall be incorporated in the design of the follower gland and shall utilize multiple wedge segments that act against the pipe, increasing their resistance as the line pressure increases. The assembled joint shall maintain the maximum flexibility and deflection of all nominal pipe sizes after burial. Restraining gland, wedge segments, and actuating bolts shall be manufactured of high strength ductile iron conforming to the requirements of ASTM A536, Grade 65-45-12. Dimensions shall be compatible with standardized mechanical joints conforming to the requirements AWWA C111/ANSI A21.11 and AWWA C153/ANSI 21.53 through 24" (latest revision). Breakaway tops shall be incorporated in the design of the actuating bolts to visually ensure proper torque. The manufacturing of the actuating bolt must incorporate a quality control procedure that is deemed acceptable by the specifier and positively assures precise and consistent operating torque of the breakaway top. The mechanical joint restraining devices shall have a working pressure rating of 235 psi and provide no less than a safety factor of 2:1. Restraint shall be UL Listed & FM approved in applicable sizes. Restraining device shall be SIGMA ONE-LOK™ SLCS or approved equal.

Material:

- Gland body, brackets, wedge segments & actuating bolts ASTM A536 65-45-12 ductile iron.
- Restraining Rods & Nuts: High strength, low alloy steel meeting AWWA/ANSI C111/A21.11 with minimum 65,000 psi tensile strength and 45,000 psi yield strength.







Dimensions in Inches, Weights in Pounds

Size	Item #	Weight	PVC Pipe OD		Dimensions								Bolts and Inserts			Pressure Rating	T-bolts			Gasket	
			DI	IPS	C	F	K2	T	P	P*	X	J	No	Size	Torque		No	Size	Torque	No	Item #
3	SLCS3	8.0	---	3.50	4.76	3.60	7.69	0.60	9.42	8.50	0.750	6.19	4	7/8	45-55	235	4	5/8 x 3.0	45-60	1	TG3
4	SLCS4	9.0	4.80	4.50	5.92	4.90	9.12	0.60	10.22	9.30	0.875	7.50	4	7/8	45-55	235	4	¾ x 3.5	75 - 90	1	MG4
6	SLCS6	13.0	6.90	6.63	8.01	7.00	11.12	0.60	12.87	11.95	0.875	9.50	6	7/8	50-60	235	6	¾ x 3.5	75 - 90	1	MG6
8	SLCS8	17.0	9.05	8.63	10.17	9.15	13.37	0.75	14.37	13.45	0.875	11.75	6	7/8	50-60	235	6	¾ x 4.0	75 - 90	1	MG8
10	SLCS10	24.0	11.10	10.75	12.22	11.20	15.62	0.85	16.68	15.76	0.875	14.00	8	7/8	50-60	235	8	¾ x 4.0	75 - 90	1	MG10
12	SLCS12	28.0	13.20	12.75	14.32	13.30	17.88	0.85	18.58	17.66	0.875	16.25	8	7/8	50-60	235	8	¾ x 4.0	75 - 90	1	MG12

Note: P* With break off bolts broken head

Weight does not include any accessories like T-bolt + Gasket. There could be +/- 5% variation in the weight.

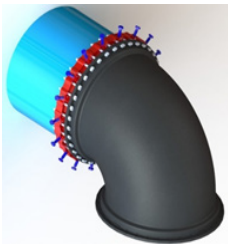
Sizes 4" - 12" are UL listed and have been tested in accordance with ASTM F1674.
Sizes 4" - 12" are FM approved on AWWA C900 pipe, DR14, DR18, and DR25.

Pressure Rating Chart

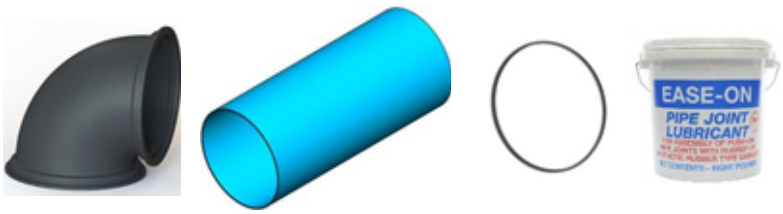
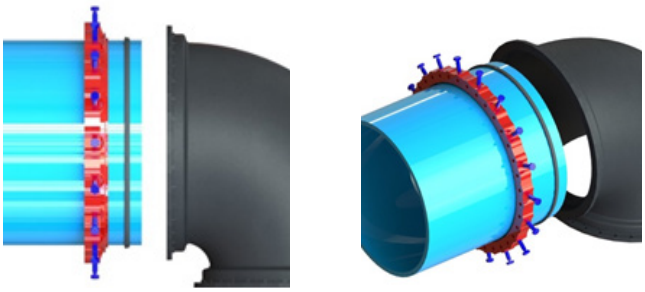
Nominal Pipe Size	Item #	Pressure Rating													
		C900									ASTM D2241				
		DR14	DR17	DR18	DR21	DR25	DR27.5	DR32.5	DR41	DR51	SDR17	SDR21	SDR26	SDR32.5	SDR41
3	SLCS3	-	-	-	-	-	-	-	-	-	250	200	160	125	100
4	SLCS4	305	250	235	200	165	150	-	-	-	250	200	160	125	100
6	SLCS6	305	250	235	200	165	150	-	-	-	250	200	160	125	100
8	SLCS8	305	250	235	200	165	150	-	-	-	250	200	160	125	100
10	SLCS10	305	250	235	200	165	150	-	-	-	250	200	160	125	100
12	SLCS12	305	250	235	200	165	150	-	-	-	250	200	160	125	100

NOTES:
- All packs come with ONE-LOK SLCS Gland, MJ Gaskets & required # of T-Bolts
- Approved with Ipex C909 PVC pipe

Installation Instructions for Wedge Action Restraint with PVC Pipe & Mechanical Joint Fitting

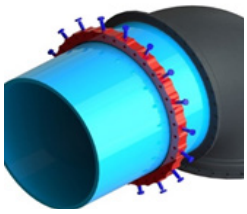
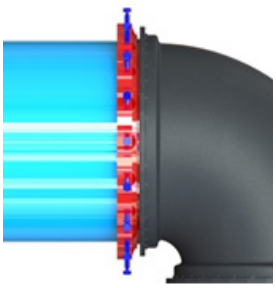
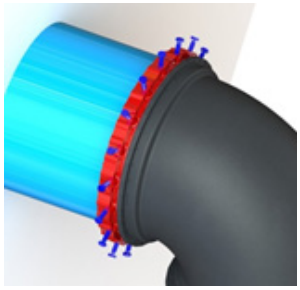
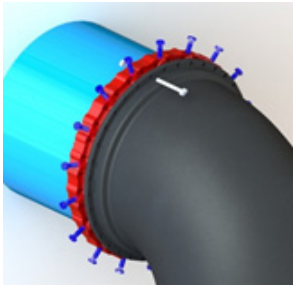
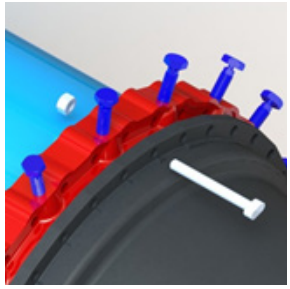
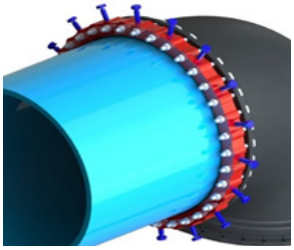
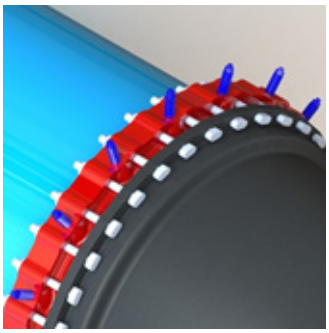
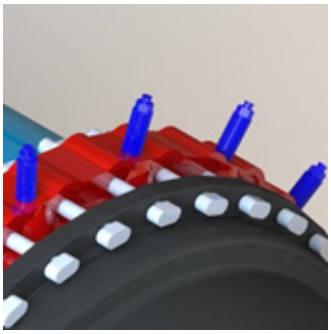


One Lok SLCS Wedge Action Restraint

1. Clean the fitting socket & pipe end. Lubricate mechanical joint gasket & pipe end with soapy water or approved lubricant meeting AWWA C111/A21.11. (A transition gasket is required if using on "IPS" PVC pipe)	
2. Install the One Lok SLCS Wedge Restraint on the pipe with the lip extension facing the pipe end followed by the gasket, tapered side toward end of the pipe.	

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Installation Instructions for Wedge Action Restraint with PVC Pipe & Mechanical Joint Fitting (Continued)

3. Insert the gasket along with the pipe into the fitting socket and seat the gasket firmly and evenly into the gasket cavity, keeping the joint straight.	
4. Push the One-Lok gland toward the fitting and center it around the pipe with the lip evenly against the gasket.	 
5. Insert the T-bolts with the T-head on the fitting side and nut on the restraint side and hand-tighten the nuts. Make the required joint deflection as required keeping the wedge restraint centered on the pipe but before torquing the T-bolts.	 
6. Tighten the nuts in an alternate method (STAR PATTERN) to the recommended torque of 45-60 ft-lbs for 3” and 75-90 ft-lbs for sizes 4”-12”, use of a torque indicating wrench is recommended to confirm the applied torque.	 
7. Hand tighten each actuating bolt in a clockwise direction until contact is made between each wedge insert and the pipe OD. Continue tightening the actuating bolts in an alternate method (STAR PATTERN) until all the break-off tops have been removed. Never tighten actuating bolt more than 180 degrees before moving to the next bolt. Recommended Torque for actuating bolt – 45-55 ft-lbs for 3” and 50-60 ft-lbs for 4”-12.”	 

For installation on “IPS” OD PVC pipe, twist, break and remove the ABS spacers from the actuating bolts. DO NOT REMOVE SPACERS when installing product on C900 PVC pipe.