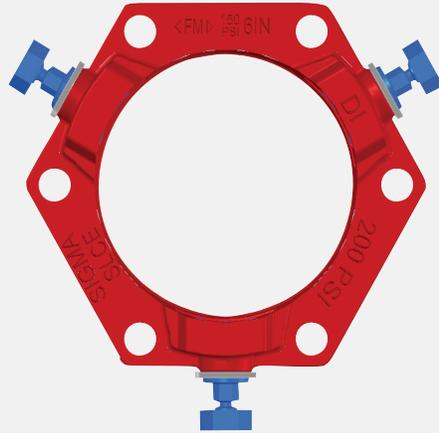
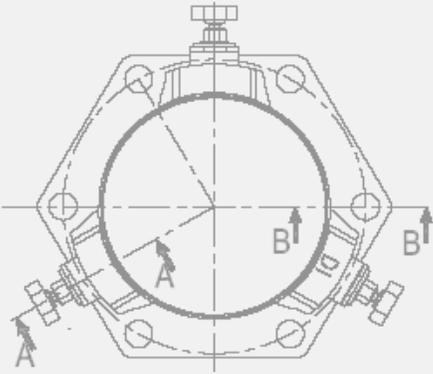


# ONE-LOK™ Series SLCE for PVC Pipe



## Features & Advantages:

1) The SIGMA ONE-LOK Series SLCE 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 both AWWA C900/C905 and ASTM D2241 IPS size PVC pipe.

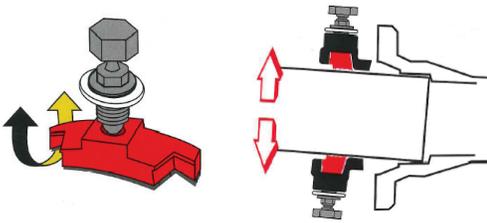
2) ONE-LOK SLCE's precision contoured wedges provide proper contact and support of the PVC pipe wall. Each wedge is manufactured with an elongated contour that evenly matches the outside circumference of each nominal diameter of PVC pipe.

3) ONE-LOK SLCE'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 SLCE 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 SLCE 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 SLCE is used to restrain pipes meeting AWWA C900, the spacer is left intact on the actuating bolt.

5) ONE-LOK SLCE'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.

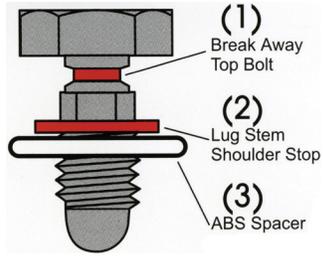
SIGMA ONE-LOK SLCE's can be used on all pressure classes and thicknesses of PVC pipe.



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.



# ONE-LOK™ Series SLCE for PVC Pipe

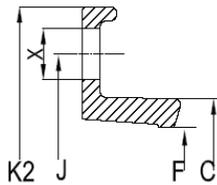
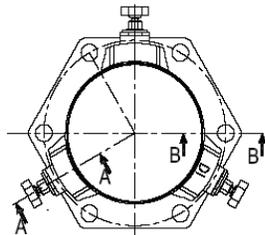
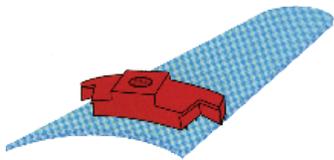
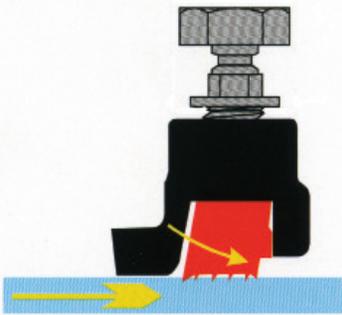


## Sample Specification:

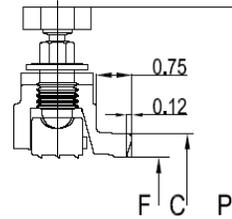
Restraint for standard mechanical joint fittings shall be incorporated in the design of the follower gland and shall utilize multiple wedge segments that act against the pipe, increasing their resistance as the line pressure increases. The assembled joint shall maintain the maximum flexibility and deflection 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 200psi (235psi for sizes 14-36") minimum and provide no less than a safety factor of 2:1. Restraint shall be FM approved in applicable sizes. Restraining device shall be SIGMA ONE-LOK™ 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.
- Side Clamping Bolts & Hex Nuts: ASTM A449 high strength steel.



SECTION B - B



SECTION A - A

## Dimensions in Inches, Weights in Pounds

Size	Item #	Weight	PVC Pipe DI OD	IPS Pipe OD	Dimensions								Bolts and Inserts		
					C	F	K2	T	P	P*	X	J	No	Size	Torque
3	SLCE3	6.21		3.50	4.76	3.60	7.18	0.60	9.42	8.50	0.750	6.14	2	7/8	45-55
4	SLCE4	6.78	4.80	4.50	5.92	4.90	7.92	0.60	10.22	9.30	0.875	7.50	2	7/8	50-60
6	SLCE6	10.28	6.90	6.63	8.01	7.00	10.00	0.60	12.87	11.95	0.875	9.50	3	7/8	50-60
8	SLCE8	14.48	9.05	8.63	10.17	9.15	12.18	0.75	14.37	13.45	0.875	11.75	4	7/8	50-60
10	SLCE10	21.40	11.10	10.75	12.22	11.20	14.60	0.85	16.68	15.76	0.875	14.00	6	7/8	50-60
12	SLCE12	26.96	13.20	12.75	14.32	13.30	16.64	0.85	18.58	17.66	0.875	16.25	8	7/8	50-60
14	SLCE14	33.67	15.30		16.40	15.44	20.25	1.20	21.68	19.98	0.875	18.75	10	7/8	55-65
16	SLCE16	41.67	17.40		18.50	17.54	22.45	1.21	23.65	21.95	0.875	21.00	12	7/8	55-65
18	SLCE18	49.50	19.50		20.60	19.64	24.75	1.25	25.79	24.09	0.875	23.25	12	7/8	55-65
20	SLCE20	61.17	21.60		22.70	21.74	27.00	1.34	28.16	26.46	0.875	25.50	14	7/8	55-65
24	SLCE24	79.33	25.80		26.90	25.94	31.50	1.46	32.70	31.00	0.875	30.00	16	7/8	55-65
30	SLCE30	198.00	32.00		33.29	32.17	38.42	2.00	41.92	39.92	1.125	36.88	20	1.00	65-75
36	SLCE36	248.00	38.30		39.59	38.47	46.00	2.00	48.78	46.78	1.125	43.75	24	1.00	65-75

ONE-LOK SLCE was previously referred to as model SLC

P\* Dim shows OD after head is broken/removed.



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.



Quality – Service – Commitment – Delivered.

Nominal Pipe Size	Item #	Pressure Rating											
		C900			ASTM D2241			C905					
		DR14	DR18	DR25	SDR17	SDR21	SDR26	DR18	DR21	DR25	DR32.5	DR41	DR51
3	SLCE3	-	-	-	250	200	160	-	-	-	-	-	-
4	SLCE4	305	235	165	250	200	160	-	-	-	-	-	-
6	SLCE6	305	235	165	250	200	160	-	-	-	-	-	-
8	SLCE8	305	235	165	250	200	160	-	-	-	-	-	-
10	SLCE10	305	235	165	250	200	160	-	-	-	-	-	-
12	SLCE12	305	235	165	250	200	160	-	-	-	-	-	-
14	SLCE14	-	-	-	-	-	-	235	200	165	125	100	-
16	SLCE16	-	-	-	-	-	-	235	200	165	125	100	-
18	SLCE18	-	-	-	-	-	-	235	200	165	125	100	80
20	SLCE20	-	-	-	-	-	-	235	200	165	125	100	80
24	SLCE24	-	-	-	-	-	-	235	200	165	125	100	80
30	SLCE30	-	-	-	-	-	-	-	-	165	125	100	80
36	SLCE36	-	-	-	-	-	-	-	-	165	125	100	80

NOTE: All packs come with ONE-LOK SLCE Gland, MJ or SIGMA Seal Gaskets & required # of T-Bolts

### **Installation Instructions:**

*Note: This product is not designed to be used on plain end fittings.*

1. Clean fitting socket and pipe end. Lubricate gasket and pipe end with soapy water (or approved pipe lubricant meeting AWWA C111). Install ONE-LOK™ restrainer on the pipe with the lip extension facing the pipe end, followed by the gasket, tapered side toward end of pipe. Insert pipe into fitting outlet and seat the gasket firmly and evenly into the gasket cavity. Maintain a straight joint during assembly.

NOTE: SIGMASEAL Gasket is recommended for ONE-LOK 30-36". When installing SIGMASEAL gasket, the tapered edges of the gasket must face away from the pipe wall.

2. Push the ONE-LOK gland toward the fitting and center it around the pipe with the lip evenly against the gasket. Insert the T-bolts and hand-tighten the nuts. If deflection is required, make up after joint assembly but before tightening T-bolts.

3. Tighten T-bolts in an alternating manner maintaining an even gap between the gland and the fitting face at all points around the socket. Repeat alternate tightening cycle of the t-bolts until one full complete cycle is completed where each individual t-bolt maintains the recommended torque.

4. For installation on IPS O.D. PVC Pipe, twist, break, and remove the ABS spacers from the actuating bolts. DO NOT REMOVE SPACERS when installing product on C900 PVC. Hand tighten all actuating bolt until complete contact of all wedge segments is made with the pipe.

5. Tighten each actuating in a clockwise direction, alternating between the bolts in a star pattern until the break-off tops have been removed. Never tighten an actuating bolt more than 180 degrees before moving to the next bolt.

## 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

970 DE LA Bastican  
Victoriaville, Quebec G6T 1Y2  
Phone (888) 744-6262  
Fax (819) 758-1153  
jboucher@repcoc.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

[www.sigmaco.com](http://www.sigmaco.com)

Terms and Conditions of Sales available at our website.

## AWWA Ductile Iron Fittings



- 2-64" C153 Ductile Iron Mechanical Joint Class 350
- 2-48" C110 Full Body Mechanical Joint
- 2-64" C110 Cast Iron/Ductile Iron Flanged Fittings
- 3-24" C153 TRIM TYTON® Compact Push On Fittings
- 4-24" C110 Full Body Push On Fittings
- C116 Fusion Bonded Epoxy lining available
- PROTECTO 401® ceramic epoxy lining available

## Mechanical Joint Accessories



- Prepackaged and loose mechanical joint accessories
- SIGMASEAL™ improved mechanical joint gasket
- Snap-on multi-purpose gasket for ductile iron or PVC pressure pipes
- Ductile iron set screw retainer glands
- OMNI-SLEEVE™ improved wall penetration sleeve
- Specialty bolts and nuts for mechanical joint assemblies

## ONE-LOK™ Wedge Action Restraints



- 3-48" ONE-LOK SLDE restraint for ductile iron pipe (import or domestic)
- 54"-60"-64" ONE-LOK SLDE restraint for ductile iron pipe (import)
- 3-36" ONE-LOK SLCE restraint for PVC pipe (import or domestic)
- 3-36" ONE-LOK SLDEH bell joint harness for ductile iron pipe
- 4-12" / 20" ONE-LOK SLDM restraint for oversized cast iron pipe
- 4-36" ONE-LOK SSLD split restraint for existing ductile iron pipe
- 4-36" ONE-LOK SSLDH split restraint harness for existing ductile iron pipe
- 3-12" ONE-LOK SLCEH bell joint harness for PVC pipe

## PV-LOK™ Serration Lock Restraints



- 4-48" PV-LOK PWM Restraint for MJ Fitting to PVC pipe
- 4-48" PV-LOK PWP Restraint for PVC bell joint restraint
- 4-12" PV-LOK PWP Restraint for PVC bell joint restraint (domestic)
- 4-48" PV-LOK PVPF Restraint for PVC fitting to PVC pipe
- 4-12" PV-LOK PWH PVC bell joint harness
- 2-12" PV-LOK PVM Restraint for MJ Fitting to IPS PVC pipe
- 2-12" PV-LOK PVP Restraint for IPS PVC pipe bell joint
- 4-8" PV-LOK PVPF Restraints for IPS PVC pressure fitting

## Flange Adapters



- 3-36" SIGMAFLANGE SFA flange adapter sleeve for PVC and DIP
- 2-48" ZIP FLANGE set screw style flange adapter

## Municipal Construction Castings



- Manhole Rings and Covers
- Curb and Meter Boxes
- Frames and Grates
- Storm Inlets
- Valve Boxes, Risers, and Extensions

## Products for the Ductile Iron Fabricator



- 3-64" High Hub Threaded Flanges
- 3-48" Tapped High Hub Threaded Flanges
- 3-36" Extra Heavy 250lb Drilled Threaded Flanges
- 3-48" Threaded MJ Bell Adapters
- 3-48" MJ x PE Bell adapter (2ft)
- 3-48" Anchor Flanges
- 3-16" Filler Flanges

## Extended Range Products



- FLANGE-PAK™ prepackaged flange accessory sets
- Polyethylene encasement for ductile iron pipe
- Copper tubing products
- Tracer wire & detectable/non-detectable marking tape
- Pipe joint lubricant & hydraulic cement
- Socket clamps and tie rod accessories
- BOXLOK Valve Box Alignment Device
- Cast Iron Companion Flanges