

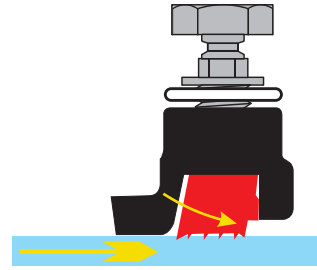
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One
LokTM

Contoured Wedge Action Retainer Gland



*Manufactured with Break-Off Lug Bolts Suitable for
Restraining C-900/905 or IPS PVC Pipes*



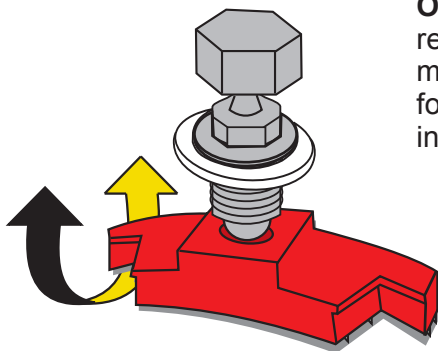
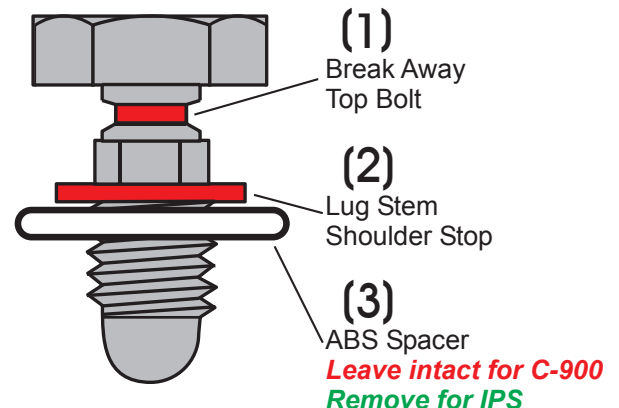
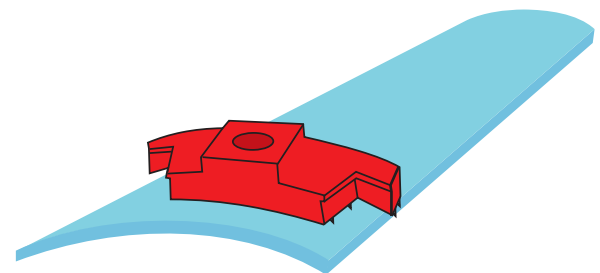
Contoured-Lug Restraint for PVC Pipe

SIGMA One-Lok is a mechanical joint restraining gland that implements a series of individually activated lugs that locate around the circumference of PVC pressure pipe. When the lug-stem assembly is tightened down onto the pipe, the teeth (edges) on the bottom of each wedge lock onto the pipe wall. Pressure thrusts cause the primary contact edges to “grip” the pipe surface and properly restrain all classifications of AWWA C-900/C-905 or IPS pipe.

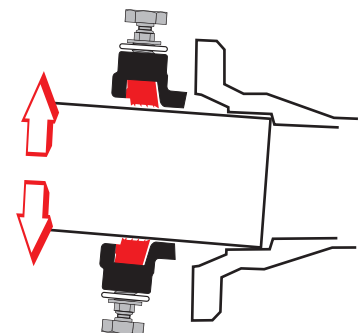
CONTOURED LUGS provide proper contact and full support of the PVC pipe wall. Each lug is manufactured with a wide arc or contour that evenly matches the curvature for each nominal classification of AWWA C-900/905 or IPS Pipe. In addition to providing a more secure grip, One-Lok’s elongated wedges eliminate concerns of pipe wall damage.

A **BREAK-OFF LUG STEM** assembly that provides the installer TWO “visual torque indicators”. A break-away top bolt (1) and lug stem shoulder stop (2) eliminate any guesswork at the installation site, unlike ordinary bolted assemblies. The One-Lok twist-off top is sized exactly to the standard T-bolt and nut dimension in the mechanical joint, so there are no additional tools required for installing One-Lok. After twist-off, the bolt stem provides a residual hex shank for easy removal in service and maintenance areas.

A **REMOVABLE ABS SPACER** (3) that allows the One-Lok to be used effectively on AWWA C-900 or IPS PVC pipes.

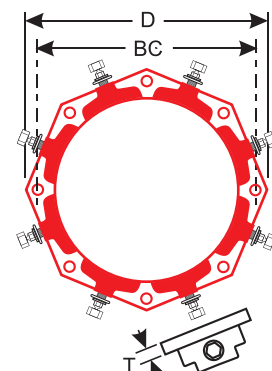


One-Lok’s unique CAM ACTION allows the restraining lugs to “rock” and grip the PVC pipe wall more securely as thrust force increases, and allows for subsidence, seismic or other forces after installation, up to the maximum allowed deflection.





Size	Item No.	Wt.	Dimensions					Wedge Bolts				Packaged with T-Bolts, Nuts and MJ Gasket			
			C-900/ C-905 Pipe O.D.	IPS Pipe O.D.	B.C.	D	T	No.	Size	Length	Torque	Item No.	Wt.	T-Bolts	
														Qty.	Size
4	SLC4	7	4.80	4.500	7.50	9.12	0.75	4	7/8	2.86	45-55	SLCP4	14	4	3/4 x 3 1/2
6	SLC6	12	6.90	6.625	9.50	11.12	0.88	3	7/8	2.86	45-55	SLCP6	18	6	3/4 x 3 1/2
8	SLC8	18	9.05	8.625	11.75	13.37	1.00	6	7/8	2.86	45-55	SLCP8	27	6	3/4 x 4
10	SLC10	26	11.10	10.75	14.00	15.62	1.00	8	7/8	2.86	45-55	SLCP10	34	8	3/4 x 4
12	SLC12	34	13.20	12.75	16.25	17.88	1.00	8	7/8	2.86	45-55	SLCP12	38	8	3/4 x 4
14	SLC14	50	15.30	-	18.75	20.25	1.25	10	7/8	3.14	55-65	SLCP14	53	10	3/4 x 4 1/2
16	SLC16	56	17.40	-	21.00	22.50	1.31	12	7/8	3.14	55-65	SLCP16	65	12	3/4 x 4 1/2
18	SLC18	60	19.50	-	23.25	24.75	1.38	12	7/8	3.34	55-65				
20	SLC20	75	21.60	-	25.50	27.00	1.44	14	7/8	3.45	55-65				
24	SLC24	140	25.80	-	30.00	31.50	1.56	16	7/8	3.70	55-65				



Pressure Rating:
4" through 24" 235 psi

◀ **FM** ▶ Sizes 4" - 12" are FM Approved 150 psi ; 4:1 safety factor on AWWA C-900 PVC pipe and have been tested in accordance with ASTM F1674.

Sample Specification:

Restraint for joining standardized mechanical joint fittings shall be incorporated in the design of the follower gland and shall utilize multiple lugs to provide full circle support of the pipe wall. Restraint of the pipe shall be accomplished by a series of wedges that grip the pipe wall in an even manner using twist-off top actuating bolts to insure proper visual torque assembly. The assembled joint shall maintain maximum flexibility of all nominal pipe sizes after burial. Restraining gland, wedge segments and break-off bolt assemblies shall be manufactured of high strength ductile iron conforming to the requirements of ASTM A536, Grade 65-45-12 and dimensions shall be consistent with the standardized mechanical joint bell and T-head bolts conforming to AWWA C111/ANSI A21.11 and AWWA C153/ANSI A21.53 (latest revision). The mechanical joint restraining device shall provide a water working pressure rating and minimum safety factor that exceed the full rated pressure of the PVC pipe on which it is installed. Device shall be recognized under independent certification and shall be SIGMA One-Lok or approved equal.

One-Lok Installation Instructions



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 pipe end. Insert pipe into the fitting outlet and seat the gasket firmly and evenly into the gasket cavity. Maintain a straight joint during assembly.



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 them in an alternating manner maintaining an even gap between the gland and the fitting face at all points around the socket. Repeat until all the T-bolts have been tightened to the requirements of AWWA C-600 (latest revision). Use of a torque wrench is recommended.



3. For installation on C-900 PVC pipe **Do Not Remove** ABS spacers from wedge bolts.

For installation on IPS PVC pipe, **Twist, break and remove** the ABS spacers from the wedge bolts to assure proper pipe contact.

Hand tighten all One-Lok wedge bolts until complete contact of the gripping segments is made with the pipe.



4. Tighten each wedge bolt clockwise, **alternating between bolts** (star pattern), until all the break-off tops have been removed. Never tighten a wedge bolt more than 180 degrees before moving to the next bolt.