

SlideLOK® Ready for Installation Coupling Fig. 74



The SlideLOK coupling is the most rigid ready for installation coupling designed to reduce installation time. The slide action eases assembly and reduces installation time. The patented gasket provides four separate sealing surfaces for added protection.

The SlideLOK coupling is designed to be used with roll groove or cut groove steel pipe, grooved light wall pipe, Gruvlok grooved-end fittings, and valves.

The SlideLOK coupling allows for pressures between full vacuum and 750 psi on roll or cut grooved carbon steel standard wall pipe. The SlideLOK coupling provides a rigid connection allowing pipe hanging practices per ASME B31 Pipe Codes.

\*Patents: 8550502, 8615865, 2732427, D680629, D680630, D696751, 8282136, 9239123, 9297482, 9194516, 9297484, 9039046, 9500307

#### **Material Specifications**

#### **Bolts**

SAE J429, Grade 5, Zinc Electroplated

#### **Heavy Hex Nuts**

ASTM A563, Grade A, Zinc Electroplated

#### **Hardware Kits**

- 304 Stainless Steel (available in sizes up to  $\frac{3}{4}$ ") Kit includes:
- (2) Bolts per ASTM A193, Grade B8 and
- (2) Heavy Hex Nuts per ASTM A194, Grade 8.

EcoGuard® (available in sizes up to ¾") Kit includes:

- Bolts per SAE J429, Grade 5, with EcoGuard corrosion-resistant zinc flake coating and
- (2) Heavy Hex Nuts per ASTM A563, Grade A, EcoGuard corrosion-resistant zinc flake coating.

#### Housing

Ductile Iron conforming to ASTM A 536, Grade 65-45-12

#### Coatings

Rust inhibiting paint
Color: Orange (standard)
Hot Dipped Zing Galyanized (c

Hot Dipped Zinc Galvanized (optional)

#### Gaskets

Properties as designated in accordance with ASTM D2000

**Grade "EP" EPDM** (Green and Red color code) -40°F to 250°F (Service Temperature Range) (-40°C to 121°C)

Recommended for water service, diluted acids, alkalies solutions, oil-free air and many other chemical services.

NOT FOR USE IN PETROLEUM APPLICATIONS.

**Grade "T" Nitrile** (Orange color code) -20°F to 180°F (Service Temperature Range) (-29°C to 82°C)

Recommended for petroleum applications. Air with oil vapors and vegetable and mineral oils.

NOT FOR USE IN HOT WATER OR HOT AIR NOT FOR USE IN DRINKING WATER

#### Gasket Type

SlideLOK (2" - 8")

#### Lubrication

Standard Gruvlok Xtreme

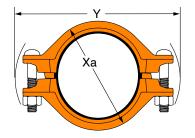




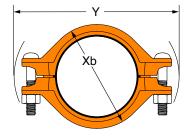
PROJECT INFORMATION	APPROVAL STAMP		
Project:	Approved		
Address:	Approved as noted		
Contractor:	Not approved		
Engineer:	Remarks:		
Submittal Date:			
Notes 1:			
Notes 2:			



# SlideLOK® Ready for Installation Coupling Fig. 74









Uninstalled View

Installed View

Nominal Size	0.0	Max. Working Max. Working		Max. End Load	Allowable Pipe End Separation	Coupling Dimensions				Coupling Bolts		_ Approx.
	0.D.	Pressure on Sched. 40 Sched. 10	Xa			Xb	Υ	Z	Qty.	Size	Wt. Ea.	
In./DN(mm)	In./mm	PSI/bar	PSI/bar	Lbs./kN	In./mm	ln./mm	In./mm	In./mm	In./mm	Qty.	In./mm	Lbs./kg
2	2.375	750	600	3,323	0.13	33/4	33/8	6	2	2	½ x 2 <sup>3</sup> / <sub>4</sub>	2.9
50	60.3	51.7	41.3	14.78	3.18	95	86	152	51		M12 x 70	1.3
21/2	2.875	750	600	4,869	0.13	45/8	41/4	63/8	2	2	½ x 2 <sup>3</sup> / <sub>4</sub>	3.1
65	73.0	51.7	41.3	21.66	3.18	117	108	163	51		M12 x 70	1.4
3	3.500	750	600	7,216	0.13	51/5	411/16	7	2	2	½ x 3½	3.6
80	88.9	51.7	41.3	32.10	3.18	132	119	178	51		M12 x 89	1.6
4	4.500	750	500	11,928	0.20	61/2	6	85/16	2	2	½ x 3½	4.9
100	114.3	51.7	34.5	53.06	5.08	165	152	212	51		M12 x 89	2.2
5	5.563	750	500	18,229	0.20	71/4	63/4	101/2	2	2	5/8 X 3 1/₂	5.5
125	141.3	51.7	34.5	81.09	5.08	184	171	267	51		M16 x 89	2.5
6	6.625	700	500	24,130	0.20	85/16	73/4	11	2	2	5/8 X 3 1/₂	6.3
150	168.3	48.3	34.5	107.34	5.08	211	197	279	51		M16 x 89	2.9
8	8.625	600	300	35,056	0.20	103/4	101/8	14	21/2	2	<sup>3</sup> / <sub>4</sub> x 4 <sup>1</sup> / <sub>2</sub>	14.3
200	219.1	41.4	20.7	155.94	5.08	273	273	356	64	2	M20 x 115	6.5

#### Notes:

Maximum end load is defined as the max allowable force from the combination of internal pressure thrust at the pipe joint and external loads based on the use of standard ASME B36.10 pipe that is grooved in accordance with ASC's groove specification.

Pressure ratings and end loads may differ for other pipe materials and/or wall thicknesses.

See Gruvlok Coupling Working Pressure Ratings document published in the resources section of the website for pressure ratings on alternate pipe materials.



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# **Couplings / Installation**

# Fig. 74 SlideLOK® Ready for Installation Coupling



Read and understand

Ensure system is drained and depressurized before installation or service.

Use appropriate personal protective equipment.







Failure to follow these instructions could result in serious personal injury and/or property damage.

# 1 Pipe Preparation

Pipe ends are to be rolled or cut grooved according to ASC Engineered Solutions™ specifications. Not for use on "EG" rolled or cut grooved pipe ends. The pipe end must be smooth and free from metal burrs, sharp edges or projections.

# 2 Gasket Preparation

Ensure the gasket is suitable for the intended application by referring to the ASC gasket compatibility chart. Apply a light coating of Gruvlok® Lubricant to exposed gasket surfaces.

# 3 Assembly

The SlideLOK Figure 74 may be installed by one of two methods. The preferred method depends on the type of pipe components being joined and their orientation. Please review both methods before installing.



#### Step 3 - Method No. 1

Slide the SlideLOK coupling completely over the grooved pipe end. This will allow a clear and un-obstructed view of the pipe for correct alignment.

- A. Slide the coupling on the pipe past the groove. The bolts and nuts can be hand tightened to position the coupling in place.
- **B.** Align the mating pipe end. Align the two adjoining pipes together.
- C. Slide the coupling back over the grooves so that the coupling keys are located over the respective grooves on both pipe ends.
- **D.** Follow the instructions on fastening the coupling as shown in Step 4.





#### Step 3 - Method No. 2

Slide the SlideLOK coupling half way onto the pipe end or fitting. This will better accommodate fitting, and valve accessories during installation.

- A. Slide the coupling on the fitting so that the groove and keys are aligned.
- **B.** Bring the pipe end or fitting towards the coupling and insert so that the groove and coupling keys are aligned.
- C. Hand tighten the nuts to correctly position the couplings keys over the respective grooved ends.
- **D.** Follow the instructions on fastening the coupling as shown in Step 4.







Do not disassemble the SlideLOK Coupling. The Figure 74 coupling is ready for installation. The bolt and gasket do not need to be removed.

# 4 Tighten Nuts

Securely tighten nuts alternately and equally, keeping the gaps at the bolt pads evenly spaced.

Notice: Uneven tightening may cause the gasket to pinch. Gasket should not be visible between segments after bolts are tightened.

#### **Maximum Bolt Torque**

Bolt Size (In.)	Wrench Size (In.)	Ft-Lbs
1/2	7/8	120
5/8	1 1/16	235
3/4	1 1/2	425

#### **WARNING:**

Proper tightening of coupling bolts is required to obtain specified performance. Over tightening the bolts may result in joint damage. Pipe joint separation may result in significant property damage and serious injury.



# Assembly is Complete

Visually inspect the pipe joint to assure the coupling keys are fully engaged in the pipe grooves. The bolt pads are to have equal gaps on each side of the coupling.

Notice: Visually inspect both sides of the coupling to ensure gaps between bolt pads are evenly spaced and are parallel. Any deviations must be corrected before placing coupling into service.





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# Couplings / Re-installation

# Fig. 74 SlideLOK® Ready for Installation Coupling



Read and understand all instructions before use.

#### WARNING

Ensure system is drained and depressurized before installation or service. Use appropriate personal protective equipment.







Failure to follow these instructions could result in serious personal injury and/or property damage.

# 1 De-Pressurize the System

De-pressurize the system before removing the SlideLOK Coupling. Dis-assemble the couplings by removing the nuts, bolts and gasket from the housing halves. A wrench is required to overcome the epoxy used to secure the nuts on the bolts.

# 2 Pipe Preparation

Pipe ends are to be rolled or cut grooved according to ASC Engineered Solutions™ specifications. Not for use on "EG" rolled or cut grooved pipe ends. The pipe end must be smooth and free from metal burrs, sharp edges or projections.

# 3 Gasket Preparation

Ensure the gasket is suitable for the intended application by referring to the Anvil gasket compatibility chart. A light coating of Gruvlok® lubricant must be applied to the gasket prior to installation.

# 4 Pipe Alignment and Gasket Installation

Slide the gasket onto the pipe then align the two pipe ends together. Pull the gasket into position, centering it between the grooves on each pipe. Gasket should not extend into the groove on either pipe.

# 5 Housing Assembly

Place each housing halves on the pipe making sure the housing key fits into the groove. Be sure that the tongue and recess portions of the housing mate properly. Insert the bolts.

# 6 Tighten Nuts

Securely tighten nuts alternately and equally, keeping the gaps at the bolt pads evenly spaced.

#### **Maximum Bolt Torque**

Bolt Size (In.)	Wrench Size (In.)	Ft-Lbs
1/2	7/8	120
5/8	1 <sup>1</sup> / <sub>16</sub>	235
3/4	1 1/2	425











# REINSTALLATION OF THE FIGURE 74 SLIDELOK COUPLING

The SlideLOK coupling is designed to be installed in the ready for installation assembly position once. After the initial assemble the following steps are to be taken to re-install the Fig. 74 SlideLOK coupling.

**Notice:** Uneven tightening may cause the gasket to pinch. Gasket should not be visible between segments after bolts are tightened.

#### WARNING-

Proper tightening of coupling bolts is required to obtain specified performance. Over tightening the bolts may result in joint damage. Pipe joint separation may result in significant property damage and serious injury.

# 7 Assembly is Complete

Visually inspect the pipe joint to assure the coupling keys are fully engaged in the pipe grooves. The bolt pads are to have equal gaps on each side of the coupling.

**Notice:** Visually inspect both sides of the coupling to ensure gaps between bolt pads are evenly spaced and are parallel. Any deviations must be corrected before placing coupling into service.











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