

## SlideFLEX™ Ready for Installation Flexible Coupling Fig. 70



The SlideFLEX Fig 70 coupling is a flexible ready for installation coupling designed to ease assembly and reduce installation time. The patented gasket provides four separate sealing surfaces for added protection.

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

The SlideFLEX coupling allows for pressures between full vacuum and up to 1,000 psi on roll or cut grooved carbon steel standard wall pipe. The SlideFLEX coupling provides a flexible connection, allowing linear and angular deflection and standard pipe hanging practices per B31 Pipe Codes.

For Listings/Approval Details and Limitations, visit our website at [www.asc-es.com](http://www.asc-es.com) or contact an ASC Engineered Solutions™ Sales Representative.

### Material Specifications

#### Bolts

SAE J429, Grade 5, Ecoguard® Corrosion-Resistant Zinc-Flake Coating

#### Heavy Hex Nuts

ASTM A563, Grade A, Ecoguard® Corrosion-Resistant Zinc-Flake Coating

#### Housing

Ductile Iron conforming to ASTM A536, Grade 65-45-12

#### Coatings

Rust inhibiting paint Color: Orange (standard)  
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

#### Working Pressure, End Load, Pipe End Separation & Deflection From Center Line

Based on standard wall steel pipe with cut or roll grooves in accordance with Gruvlok specifications. See technical data section for design factors.

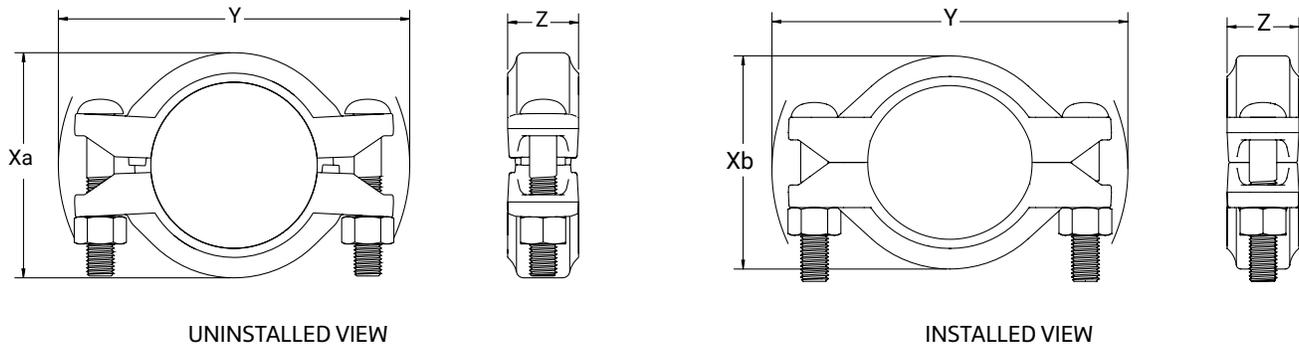


SlideLOK Pressure Responsive Gasket



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

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Nominal Size	O.D.	Max. Working Pressure on Sched. 40	Max. Working Pressure on Sched. 10	Max. End Load	Nominal Range of Pipe End Separation	Deflection from $\phi$		Coupling Dimensions				Bolt Dimensions		Approx. Wt. Ea.
						Angular	Linear	Xa	Xb	Y	Z	Qty.	Size	
In./DN(mm)	In./mm	PSI/bar	PSI/bar	Lbs./kN	In./mm	Degrees	In./ft-mm/m	In./mm	In./mm	In./mm	In./mm		In./mm	Lbs./kg
2 50	2.375 60.3	1000 68.9	750 51.7	4,430 19.71	0 - 0.13 0 - 3.18	1.50	0.31 26.2	3.97 100.8	3.70 94	6.71 170.4	1.78 45.2	2	5/8 x 3 1/4 N/A	3.77 1.71
2½ 65	2.875 73.0	1000 68.9	750 51.7	6,492 28.88	0 - 0.13 0 - 3.18	1.23	0.26 21.8	4.54 115.3	4.31 109.5	7.15 181.6	1.78 45.2	2	5/8 x 3 1/4 N/A	4.15 1.88
3 80	3.5 88.9	1000 68.9	750 51.7	9,621 42.8	0 - 0.13 0 - 3.18	1.03	0.21 17.8	5.18 131.6	4.72 119.9	8.05 204.5	1.81 46.0	2	5/8 x 4 N/A	5.28 2.39
4 100	4.5 114.3	1000 68.9	750 51.7	15,904 70.75	0 - 0.25 0 - 6.35	1.60	0.33 27.7	6.25 158.8	6.00 152.4	9.21 233.9	1.96 49.8	2	¾ x 4 ½ N/A	6.85 3.11
6 150	6.625 168.3	1000 68.9	500 34.5	34,472 153.34	0 - 0.25 0 - 6.35	1.09	0.23 18.8	8.62 218.95	8.18 207.77	12.72 323.09	2.11 53.59	2	7/8 x 5 N/A	12.66 5.74
8 200	8.625 219.1	800 55.2	500 27.6	46,741 207.91	0 - 0.25 0 - 6.35	0.82	0.17 14.5	11.02 279.91	10.5 266.70	15.51 393.95	2.5 63.50	2	1 x 5 ½ N/A	21.48 9.74

**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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## SlideFLEX™ Ready for Installation Flexible Coupling Fig. 70



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 Pipe Preparation

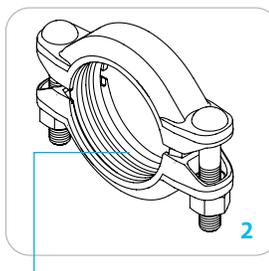
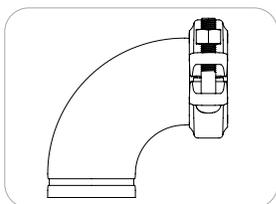
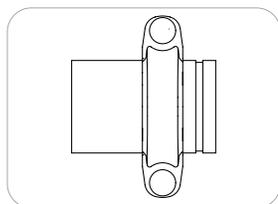
Pipe ends are to be rolled or cut grooved according to ASC Engineered Solutions™ specifications. Not for use on “EG” rolled or cut grooved pipe ends. The pipe end must be smooth and free from metal burrs, sharp edges or projections.

### 2 Gasket Preparation

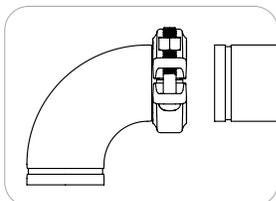
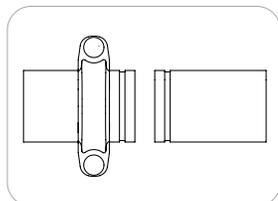
Ensure the gasket is suitable for the intended application by referring to the ASC gasket compatibility chart. Apply a light coating of Gruvlok® Lubricant to exposed gasket surfaces.

### 3 Assembly

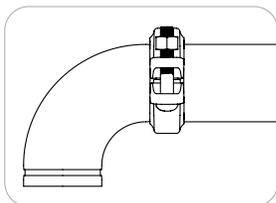
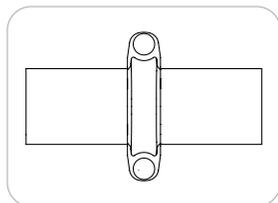
Slide the coupling on pipe or fitting. The bolts and nuts can be hand tightened to limit coupling movement during the next steps.



Apply thin coat of lubricant. Keep foreign particles from adhering.



Bring ends of adjoining pipes or fittings together.



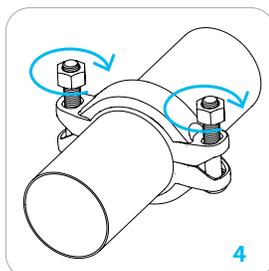
Adjust coupling to ensure all grooves and couplings keys are aligned.

### 4 Tighten Nuts

Securely tighten nuts alternately and equally until the bolt pads make metal-to-metal contact.

#### Maximum Bolt Torque

Bolt Size (In.)	Wrench Size (In.)	Ft-Lbs
5/8	1 1/16	235
3/4	1 1/2	425
7/8	1 7/16	675
1	1 5/8	900



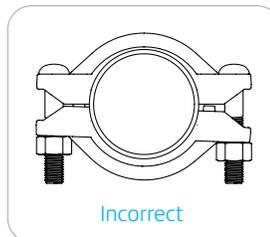
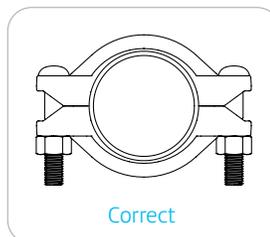
**NOTICE:** Uneven tightening may cause gasket to pinch. Gasket should not be visible between segments after bolts are tightened.

**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.

### 5 Assembly is Complete

Visually inspect the pipe joint to ensure the coupling keys are fully engaged in the pipe grooves. The bolt pads are to have metal-to-metal contact on each side of the coupling.

**NOTICE:** Visually inspect both sides of the coupling to ensure there are no gaps between bolt pads. Any deviations must be corrected before placing coupling into service.



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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.

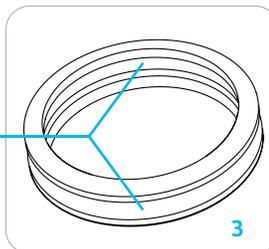
### 2 Pipe Preparation

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### 3 Gasket Preparation

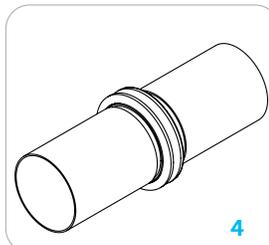
Ensure the gasket is suitable for the intended application by referring to the Anvil gasket compatibility chart. A light coating of Gruvlok® lubricant must be applied to the gasket prior to installation.

Apply thin coat of lubricant. Keep foreign particles from adhering.



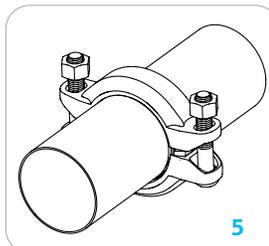
### 4 Pipe Alignment & Gasket Installation

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.



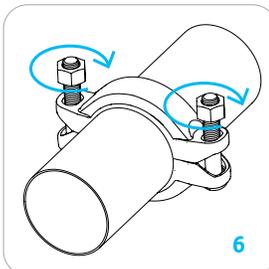
### 5 Housing Assembly

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 until the bolt pads make metal-to-metal contact.



#### Maximum Bolt Torque

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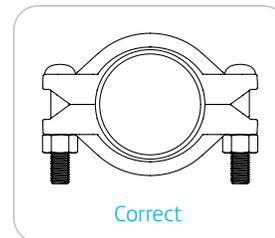
### REINSTALLATION OF THE FIGURE 70 SLIDEFLEX COUPLING

The SlideFLEX 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. 70 SlideFLEX coupling.

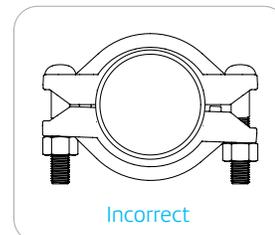
### 7 Assembly is Complete

Visually inspect the pipe joint to ensure the coupling keys are fully engaged in the pipe grooves. The bolt pads are to have metal-to-metal contact on each side of the coupling.

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Correct



Incorrect



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