

# CTS S SlideLOK<sup>®</sup> Ready for Installation Coupling **Fig. 64**



The CTS SlideLOK coupling is a ready for installation coupling designed to reduce installation time. The slide action allows for a smooth trouble free installation. The patented gasket provides four separate sealing surfaces for added protection. The engineered predictive gap is a quick and easy indication of proper assembly.

The CTS SlideLOK is designed to be used with copper tube sizes 2" – 8" and produces a secure, rigid joint connection.

The CTS SlideLOK coupling allows for a maximum working pressure of 300 psi for Type K or L. Contact an ASC Engineered Solutions<sup>™</sup> Representative for other copper tube pressure ratings.

\*Patent: D680629, D680630, D696751

For Listings/Approval Details and Limitations, visit our website at www.asc-es.com or contact an ASC Engineered Solutions Sales Representative

## **Material Specifications**

#### Bolts

SAE J429, Grade 5, Zinc Electroplated

#### Heavy Hex Nuts

ASTM A563, Grade A, Zinc Electroplated

### Housing

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

#### Coatings

Rust inhibiting paint Color: Copper (standard)

#### Gaskets

Properties as designated in accordance with ASTM D2000

Grade "EP" EPDM (Copper 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.

#### Gasket Type SlideLOK (2" - 8")

SlideLOR (2 - 0

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:	



# CTS S SlideLOK<sup>®</sup> Ready for Installation Coupling **Fig. 64**







Uninstalled View

Installed View

Nominal	Nominal O Max. Working Max.			Range of Pipe End	Range of Coupling Dimensions				Coupling Bolts		Approx.
Size 0.D.		Pressure	End Load	Separation	Ха	Xb	Y	Z	Qty.	Size	Wt. Ea.
In./DN(mm)	In./mm	PSI/bar	Lbs./kN	In./mm	In./mm	In./mm	In./mm	In./mm		In./mm	Lbs./kg
2	2.125	300	1,064	0-0.08	31/2	31/4	51/2	1 15/16	2	<sup>1</sup> / <sub>2</sub> x 2 <sup>3</sup> / <sub>4</sub>	2.4
50	54.0	20.7	4.73	0-2.0	89	83	140	49	2	M12 x 70	1.1
21/2	2.625	300	1,624	0-0.08	4	3¾	6	1 15/16	0	<sup>1</sup> / <sub>2</sub> x 2 <sup>3</sup> / <sub>4</sub>	2.6
65	66.7	20.7	7.22	0-2.0	102	95	152	49	Z	M12 x 70	1.2
3	3.125	300	2,301	0-0.08	45/8	41⁄4	63⁄4	1 15/16	0	½ x 3½	3.5
80	79.4	20.7	10.24	0-2.0	117	108	171	49	Z	M12 x 89	1.6
4	4.125	300	4,009	0-0.13	51/2	51/8	8	2	0	1/2 x 31/2	4.0
100	104.8	20.7	17.83	0-3.3	140	130	203	51	Z	M12 x 89	1.8
5	5.125	300	6,189	0-0.13	6 5/8	61⁄4	91/4	2	0	5∕8 x 31⁄2	5.0
125	130.2	20.7	27.53	0-3.3	168	159	235	51	Z	M16 x 89	2.3
6	6.125	300	8,839	0-0.13	73⁄4	7 1/4	101⁄4	2	0	5∕8 x 31⁄2	5.8
150	155.6	20.7	39.32	0-3.3	197	184	260	51	Z	M16 x 89	2.6
8	8.125	300	15,555	0.07-0.13	93⁄4	91⁄4	12¼	2	0	5∕8 x 4¹⁄₄	8.0
200	206.4	20.7	69.19	0-3.3	248	235	311	51	Z	M16 x 110	3.6

#### Notes:

For additional details see "Coupling Data Chart Notes" in the Introduction Section of the Gruvlok Catalog.

See Installation & Assembly directions on next page.



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# Fig. 64 CTS S SlideLOK® Rigid Coupling



WARNING Ensure system is drained and depressurized before

installation or service.





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

#### 1 Copper Tube Preparation

Copper tube ends are to be roll grooved copper tube according to ASC specifications. The tube end must be smooth and free from metal burrs or projections.

## 2 Gasket Preparation

all instructions

before use

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 CTS SlideLOK Figure 64 may be installed by one of two methods. The preferred method depends on the type of components being joined and their orientation. Please review both methods before installing.

#### Step 3 – Method No. 1

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

A. Slide the coupling on the copper tube past the groove. The bolts and nuts can be hand tightened to position the coupling in place.

#### Step 3 – Method No. 2

Slide the CTS SlideLOK coupling half way onto the copper tube 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 copper tube



- **B.** Align the mating copper tube end. Align the two adjoining tubes together.
- C. Slide the coupling back over the grooves so that the coupling keys are located over the respective grooves on both copper tube ends.
- **D.** Follow the instructions on fastening the coupling as shown in Step 4.
  - 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.





#### **READY FOR INSTALLATION -RIGHT OUT OF THE BOX**

Do not disassemble the CTS SlideLOK™ Coupling. The Figure 64 coupling is ready for installation. The bolt and gasket do not need to be removed.

## 4 Final Assembly

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.

ANSI Specified Bolt Torque				
Torque				
FtLbs				
45-60				
80-100				
100-130				



## 5 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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WARNING Ensure system is drained and depressurized before

installation or service.



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

## 1 De-pressurize the System

before use.

De-pressurize the system before removing the CTS SlideLOK Coupling. Disassemble 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 Copper Tube Preparation

Copper tube ends are to be roll grooved copper tube according to Anvil specifications. The tube end must be smooth and free from metal burrs 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 Copper Tube Alignment and Gasket Installation

Slide the gasket onto the copper tube then align the two tube ends together. Center the gasket between the grooves on each copper tube. Gasket should not extend into the groove on either copper tube.

#### 5 Housing Assembly

Place each of the housing halves on the copper tube making sure the housing key fits into the groove. Be sure that the tongue and recessed portions of the housings mate properly. Insert the bolts and loosely install the nuts.

#### Tighten Nuts 6

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.

Size	Torque
ln.	FtLbs
2	45-60
21/2-4	80-100
5-8	100-130

**ANSI Specified Bolt Torque** 

# 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.



#### **REINSTALLATION OF THE FIG. 64 CTS SLIDELOK™ COUPLING**

The CTS 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. 64 CTS SlideLOK coupling.















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