FIG. 6402

CTS SlideLOK® Ready for Installation Coupling

NSF/ANSI 61

Patent D680629, D680630, D696751

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The CTS SlideLOK coupling is a ready for installation coupling designed to reduce installation time. The slide action allows for greater flexibility during installation. The patented gasket provides four separate sealing surfaces for added protection. The engineered metal-to-metal installation requirement 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 Anvil representative for other copper tube pressure ratings.

SlideLOK Pressure Responsive Gasket

MATERIAL SPECIFICATIONS

BOLTS:
SAE J429, Grade 5, Zinc Electroplated

HEAVY HEX NUTS:
ASTM A563, Grade A, Zinc Electroplated

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

COATINGS:
Rust inhibiting paint Color: COPPER (standard)
Hot Dipped Zinc Galvanized (optional)

GASKETS: Materials
Properties as designated in accordance with ASTM D 2000

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")

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:	

FIG. 6402

CTS SlideLOK® Ready for Installation Coupling

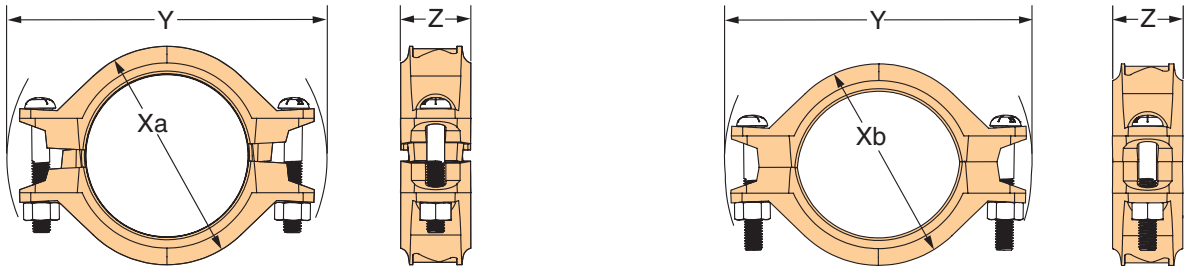


FIGURE 6402 CTS SLIDELOK COUPLING

Nominal Size	O.D.	Max. Working Pressure	Max. End Load	Range of Pipe End Separation	Coupling Dimensions				Coupling Bolts		Specified Torque §		Approx. Wt. Ea.
					Xa	Xb	Y	Z	Qty.	Size	Min.	Max.	
In./DN(mm)	*In./mm*	*PSI/bar*	*Lbs./kN*	*In./mm*	*In./mm*	*In./mm*	*In./mm*	*In./mm*		*In./mm*	*Ft.-Lbs/N-M*		*Lbs./kg*
2 *50*	2.125 *54.0*	300 *20.7*	1,064 *4.73*	0-0.08 *0-2.0*	3½ *89*	3¼ *83*	5½ *140*	1 15/16 *49*	2	½ x 3½ *M12 X 89*	80 *110*	100 *150*	2.4 *1.1*
2½ *65*	2.625 *66.7*	300 *20.7*	1,624 *7.22*	0-0.08 *0-2.0*	4 *102*	3¾ *95*	6 *152*	1 15/16 *49*	2	½ x 3½ *M12 X 89*	80 *110*	100 *150*	2.6 *1.2*
3 *80*	3.125 *79.4*	300 *20.7*	2,301 *10.24*	0-0.08 *0-2.0*	4⅝ *117*	4¼ *108*	6¾ *171*	1 15/16 *49*	2	½ x 3½ *M12 X 89*	80 *110*	100 *150*	3.5 *1.6*
4 *100*	4.125 *104.8*	300 *20.7*	4,009 *17.83*	0-0.13 *0-3.3*	5½ *140*	5⅛ *130*	8 *203*	2 *51*	2	½ x 3½ *M12 X 89*	80 *110*	100 *150*	4.0 *1.8*
5 *125*	5.125 *130.2*	300 *20.7*	6,189 *27.53*	0-0.13 *0-3.3*	6⅝ *168*	6¼ *159*	9¼ *235*	2 *51*	2	⅝ x 3½ *M16 X 89*	100 *135*	130 *175*	5.0 *2.3*
6 *150*	6.125 *155.6*	300 *20.7*	8,839 *39.32*	0-0.13 *0-3.3*	7¾ *197*	7¼ *184*	10¼ *260*	2 *51*	2	⅝ x 3½ *M16 X 89*	100 *135*	130 *175*	5.8 *2.6*
8 *200*	8.125 *206.4*	300 *20.7*	15,555 *69.19*	0.07-0.13 *0-3.3*	9¾ *248*	9¼ *235*	12¼ *311*	2 *51*	2	⅝ x 4¼ *M16 X 110*	100 *135*	130 *175*	8.0 *3.6*

For additional details see "Coupling Data Chart Notes" in the Introduction Section of the Gruvlok Catalog.
§ – For additional Bolt Torque information, see the Technical Data Section of the Gruvlok Catalog.
See Installation & Assembly directions on next page.

FIG. 6402

CTS SlideLOK™ Rigid Coupling

INSTALLATION

READY FOR INSTALLATION - RIGHT OUT OF THE BOX

Do not disassemble the CTS SlideLOK™ Coupling. The Figure 6402 coupling is ready for installation. The bolt and gasket do not need to be removed.

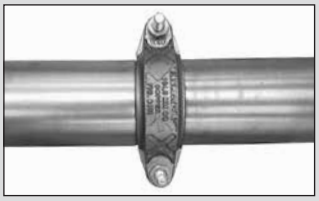
1 Copper Tube Preparation— Copper tube ends are to be roll grooved copper tube according to Anvil specifications. The tube end must be smooth and free from metal burrs or projections.

2 Gasket Preparation— Ensure the gasket is suitable for the intended application by referring to the Anvil gasket compatibility chart. Apply a light coating of Gruvlok® Xtreme™ Lubricant to exposed gasket surfaces.

3 Assembly— The CTS SlideLOK Figure 6402 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.

METHOD #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.

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.

METHOD #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 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.

4 Final Assembly

The CTS SlideLOK coupling is designed to achieve pad to pad (metal-to-metal contact) using either an impact wrench* or wrench. The intended torque range for the coupling is located in Table 1. Securely tighten nuts alternately and equally until the housing halves are in metal-to-metal contact.

*** CAUTION:** When using an impact wrench, verify that the output of the impact wrench is within the required torque range. It is recommended that a torque wrench be used for accurate assembly in order to obtain specified performance.

5 Final Inspection

Ensure the coupling is properly aligned in the grooves and the housing halves are in metal-to-metal contact, depicted in the pictures to the right.

TABLE 1 – TORQUE RANGES

Sizes	Torque
In.	*Ft.-Lbs*
2 - 4	80 - 100

FIG. 6402

CTS SlideLOK™ Rigid Coupling

RE-INSTALLATION

REINSTALLATION OF THE FIGURE 6402 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. 6402 CTS SlideLOK coupling.

1 De-pressurize the System— 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® XTreme™ 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. Pull the gasket into position, centering it between the grooves on each copper tube. Gasket should not extend into the groove on either copper tube.

5 Housing Assembly Place each housing halves on the copper tube 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 Final Assembly The CTS SlideLOK coupling is designed to achieve pad to pad (metal-to-metal contact) using either an impact wrench* or wrench. The intended torque range for the coupling is located in Table 1. Securely tighten nuts alternately and equally until the housing halves are in metal-to-metal contact.

*** CAUTION:** When using an impact wrench, verify that the output of the impact wrench is within the required torque range. It is recommended that a torque wrench be used for accurate assembly in order to obtain specified performance.

7 Final Inspection Ensure the coupling is properly aligned in the grooves and the housing halves are in metal-to-metal contact, depicted in the pictures to the right.

TABLE 1 – TORQUE RANGES

Sizes	Torque
In.	*Ft.-Lbs*
2 - 4	80 - 100

Incorrect Installation Examples

Low Torque or Out of Groove

Excess Torque or Shallow Groove Dimension