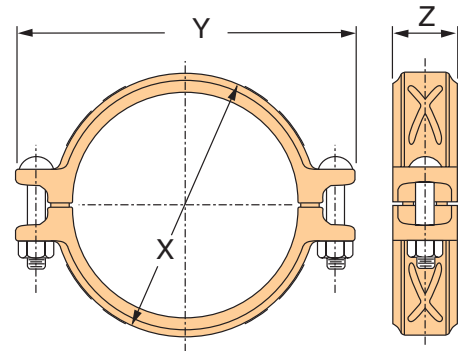


## FIG. 6400

### Rigid Coupling

The Figure 6400 Rigid Coupling is specially designed to provide a rigid pipe connection to meet the specific demands of copper tubing installation size 2"-8". Fast and easy swing-over installation of the rugged lightweight housing produces a secure rigid pipe joint. Available with Grade "EP" Copper EPDM flush gap style gasket. Gasket has service temperature range of -40°F to +250°F. NSF 61 Certified for cold +86°F (+30°C) and hot +180°F (+82°C) potable water service.



### MATERIAL SPECIFICATIONS

**HOUSING:**

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

**COATINGS:**

Rust inhibiting enamel paint — Color: Copper  
For other coating requirements contact your Anvil Representative.

**BOLTS:**

SAE J429, Grade 5, Zinc Electroplated

**HEAVY HEX NUTS:**

ASTM A563, Grade A, Zinc Electroplated

**GASKETS:**

Grade "EP" EPDM Flush Gap Gasket (Copper Color Code)  
Service Temperature Range: -40°F to +250°F (-40°C to +121°C)  
Recommended for water service, diluted acids, alkaline solutions, oil-free air and many chemical services. NOT FOR USE IN PETROLEUM APPLICATIONS.

NSF 61 Certified for cold +86°F (+30°C) and hot +180°F (+82°C) potable water service.

**FIGURE 6400 RIGID COUPLING**

Nominal Size	Copper Tube Diameter	Max Wk. Pressure	Max End Load	Range of Pipe End Separation	Coupling Dimensions			Coupling Bolts		Approx. Wt. Ea.
					X	Y	Z	Qty.	Size	
<i>In.</i>	<i>In./mm</i>	<i>PSI/bar</i>	<i>Lbs./kN</i>	<i>In./mm</i>	<i>In./mm</i>			<i>In./mm</i>	<i>Lbs./Kg</i>	
2	2.125 <i>54.0</i>	300 <i>20.7</i>	1063 <i>4.73</i>	0 - 0.08 <i>0 - 2.0</i>	3.00 <i>76</i>	5.00 <i>127</i>	1.68 <i>43</i>	2	3/8 x 2 1/4	1.53 <i>0.69</i>
2 1/2	2.625 <i>66.7</i>	300 <i>20.7</i>	1623 <i>7.22</i>	0 - 0.08 <i>0 - 2.0</i>	3.50 <i>89</i>	5.50 <i>140</i>	1.68 <i>43</i>	2	3/8 x 2 1/4	1.78 <i>0.81</i>
3	3.125 <i>79.4</i>	300 <i>20.7</i>	2300 <i>10.23</i>	0 - 0.08 <i>0 - 2.0</i>	4.18 <i>106</i>	6.28 <i>159</i>	1.68 <i>43</i>	2	1/2 x 3	2.76 <i>1.25</i>
4	4.125 <i>104.8</i>	300 <i>20.7</i>	4007 <i>17.82</i>	0 - 0.13 <i>0 - 2.4</i>	5.20 <i>132</i>	7.50 <i>191</i>	1.70 <i>43</i>	2	1/2 x 3	3.27 <i>1.48</i>
5	5.125 <i>130.2</i>	300 <i>20.7</i>	6186 <i>27.51</i>	0 - 0.13 <i>0 - 2.4</i>	6.20 <i>157</i>	9.10 <i>231</i>	1.80 <i>46</i>	2	5/8 x 3 1/4	4.71 <i>2.14</i>
6	6.125 <i>155.6</i>	300 <i>20.7</i>	8835 <i>39.30</i>	0 - 0.13 <i>0 - 2.4</i>	7.20 <i>183</i>	10.20 <i>259</i>	1.80 <i>46</i>	2	5/8 x 3 1/4	5.24 <i>2.38</i>
8	8.125 <i>206.4</i>	300 <i>20.7</i>	15547 <i>69.15</i>	0 - 0.13 <i>0 - 2.4</i>	9.32 <i>237</i>	12.40 <i>315</i>	2.00 <i>51</i>	2	5/8 x 3 1/4	7.67 <i>3.48</i>

Pressure ratings and end loads are based on use with ASTM B88 Type K or L tubing. For pressure ratings on Type M and DWV, contact your Anvil Representative. See Installation & Assembly directions on next page.

PROJECT INFORMATION		APPROVAL STAMP	
Project:		<input type="checkbox"/> Approved	
Address:		<input type="checkbox"/> Approved as noted	
Contractor:		<input type="checkbox"/> Not approved	
Engineer:		Remarks:	
Submittal Date:			
Notes 1:			
Notes 2:			

## FIG. 6400

### Rigid Coupling

The Fig. 6400 Coupling from Gruvlok is specially designed to provide a rigid pipe connection to meet the specific demands of copper tubing installation. Fast and easy swing-over installation of the rugged lightweight housing produces a secure, rigid pipe joint. Available with the EPDM flush gap style gasket as the standard gasket.

**CAUTION:** Uneven tightening may cause the gasket to pinch. The gasket should not be visible between segments after the bolts are tightened. Proper torquing of coupling bolts is required to obtain specified performance. Over torquing the bolts may result in damage to the bolt and/or casting which could result in pipe joint separation. Under torquing the bolts may result in lower pressure retention capabilities, lower bend load capabilities, joint leakage and pipe joint separation.

#### SPECIFIED BOLT TORQUE

Bolt Size	Wrench Size	Specified Bolt Torque*
<i>In.</i>	<i>In.</i>	<i>Ft.-Lbs</i>
3/8	1 1/16	30-45
1/2	7/8	30-45
5/8	1 1/16	60-90

\* Non-lubricated bolt torques.



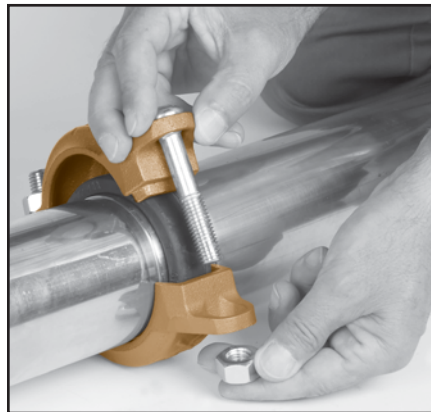
**1 CHECK & LUBRICATE GASKET-** Check the gasket to be sure it is compatible for the intended service. Apply a thin coating of Gruvlok® Xtreme Lubricant to the entire surface, both internal and external, of the gasket. Be careful that foreign particles do not adhere to the lubricated surfaces.



**2 GASKET INSTALLATION-** Slip the gasket over one tube, making sure the gasket lip does not overhang the tube end.



**3 ALIGNMENT-** After aligning the two tube ends together, pull the gasket into position, centering it between the grooves on each tube. The gasket should not extend into the groove on either tube or between the tube ends.



**4 HOUSINGS-** Remove one nut and bolt and loosen the other nut. Place one housing over the gasket, making sure the housing keys fit into the tube grooves. Swing the other housing over the gasket and into the grooves on both tubes, making sure the tongue and recess of each housing is properly mated. Re-insert the bolt and run-up both nuts finger tight.



**5 TIGHTEN NUTS-** Securely tighten nuts alternately and equally to the specified bolt torque, keeping the gaps at the bolt pads evenly spaced. 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.

**NOTE:** Copper is a soft material, in some cases, the bolt pads may come close to metal-to-metal contact.

**CAUTION:** Uneven tightening may cause the gasket to pinch. The gasket should not be visible between segments after the bolts are tightened. Proper torquing of coupling bolts is required to obtain specified performance. Over torquing the bolts may result in damage to the bolt and/or casting which could result in pipe joint separation. Under torquing the bolts may result in lower pressure retention capabilities, lower bend load capabilities, joint leakage and pipe joint separation.