

## Flexible Coupling Fig. 7001-2



Gruvlok introduces new 2-piece large diameter standard groove couplings in both rigid and flexible styles

- Uses standard grooves (conforming to AWWA C-606)
- No special grooves or grooving tools needed
- Pressures to 350 P.S.I. on cut or roll grooved pipe with a wall thickness of 0.250" or greater
- No special fittings needed
- No special valves needed
- Up to 23% less weight than competitive models
- Sizes: 14" through 24" in Flexible: Figure 7001-2

### Material Specifications

#### Bolts

SAE J429, Grade 5, Zinc Electroplated

#### Heavy Hex Nuts

ASTM A563, Grade A, Zinc Electroplated

#### Stainless Steel Bolts & Nuts

304SS bolts and nuts are available as a standard option.

(316SS are available for special order).

### Material Specifications (continued)

#### Housing

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

#### Coatings

Rust inhibiting paint  
Color: Orange (standard)  
Hot Dipped Zinc Galvanized (optional)  
Other Colors Available  
(IE: RAL3000 and RAL9000)

For other Coating requirements contact an ASC Engineered Solutions™ Representative.

#### Gasket Materials

Properties as designated in accordance with ASTM D2000

##### Grade "E" EPDM (Green color code)

-40°F to 230°F (Service Temperature Range)  
(-40°C to 110°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.

#### Gasket Type

Flush Gap (14" - 24")

#### Lubrication

Standard

Gruvlok Xtreme

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

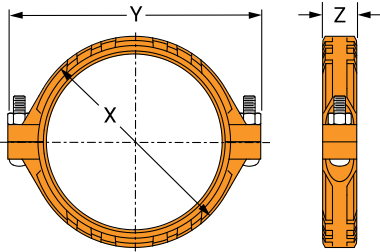
Based on standard wall steel pipe with cut or roll grooves in accordance with Gruvlok specifications. See technical data section for design factors.



**GRUVLOK**  
An ASC Engineered Solution

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

## Flexible Coupling Fig. 7001-2



| Nominal Size | O.D.            | Max. Working Pressure | Max. End Load     | Range of Pipe End Separation | Deflection from C <sub>e</sub> |             | Coupling Dimensions |               |              | Bolt Dimensions* |                    | Specified Torque § |             | Approx. Wt. Ea. |
|--------------|-----------------|-----------------------|-------------------|------------------------------|--------------------------------|-------------|---------------------|---------------|--------------|------------------|--------------------|--------------------|-------------|-----------------|
|              |                 |                       |                   |                              | Per Coupling                   | of Pipe     | X                   | Y             | Z            | Qty.             | Size               | Min.               | Max.        |                 |
| In./DN(mm)   | In./mm          | PSI/bar               | Lbs./kN           | In./mm                       | Deg(°)-Min(')                  | In./Ft-mm/m | In./mm              | In./mm        | In./mm       |                  | In./mm             | Ft.-Lbs/N-m        | Ft.-Lbs/N-m | Lbs./kg         |
| 14<br>350    | 14.000<br>355.6 | 350<br>24.1           | 53,878<br>239.66  | 0-3/32<br>0-2.38             | 0° 23'                         | 0.08<br>6.7 | 16 1/4<br>413       | 19 3/4<br>502 | 3<br>76      | 2                | 7/8 x 5 1/2<br>—   | 180<br>245         | 220<br>300  | 36.0<br>16.3    |
| 16<br>400    | 16.000<br>406.4 | 350<br>24.1           | 70,372<br>313.03  | 0-3/32<br>0-2.38             | 0° 20'                         | 0.07<br>5.9 | 18 5/16<br>465      | 22<br>558     | 3<br>76      | 2                | 1 x 5 1/2<br>—     | 250<br>340         | 300<br>408  | 45.0<br>20.4    |
| 18<br>450    | 18.000<br>457.2 | 350<br>24.1           | 89,064<br>396.18  | 0-3/32<br>0-2.38             | 0° 18'                         | 0.06<br>5.2 | 20 3/4<br>527       | 24 1/4<br>615 | 3 1/8<br>79  | 2                | 1 x 5 1/2<br>—     | 250<br>340         | 300<br>408  | 60.0<br>27.2    |
| 20<br>500    | 20.000<br>508.0 | 350<br>24.1           | 109,956<br>489.11 | 0-3/32<br>0-2.38             | 0° 16'                         | 0.06<br>4.7 | 23<br>582           | 27 1/8<br>691 | 3 1/8<br>79  | 2                | 1 1/8 x 5 1/2<br>— | 375<br>510         | 425<br>578  | 72.5<br>32.9    |
| 24<br>600    | 24.000<br>609.6 | 350<br>24.1           | 158,336<br>704.31 | 0-3/32<br>0-2.38             | 0° 13'                         | 0.05<br>3.9 | 27 1/4<br>688       | 31 1/8<br>791 | 3 3/16<br>81 | 2                | 1 1/8 x 5 1/2<br>— | 375<br>510         | 425<br>578  | 90.0<br>40.8    |

### Notes:

Range of Pipe End Separation and Angular Deflection values are for roll grooved pipe and may be doubled for cut groove pipe.

See Installation & Assembly directions on next page.



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**Fig. 7001-2 2-Piece Large Diameter Couplings**

Read and understand all instructions before use.

**WARNING**

Ensure system is drained and depressurized before installation or service.

Use appropriate personal protective equipment.

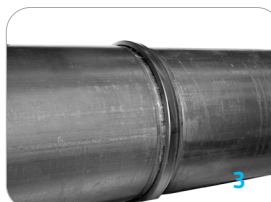
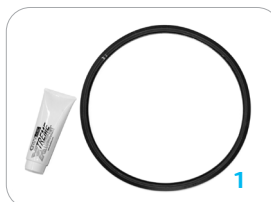


Failure to follow these instructions could result in serious personal injury and/or property damage.

**Pipe Preparation**

Check pipe ends for proper grooved dimensions and to ensure that the pipe is free of indentations, projections, or other imperfections that would prevent proper sealing of the gasket.

- 7001-2 bolts must be lightly coated with Guvlok Xtreme lube before installation. See chart for torque requirements.
- Minimum wall pipe suitable for 14" – 24": 7001-2 roll grooved installation is 0.250" wall thickness.
- Pipe preparation grooved dimensions must conform to the Guvlok Roll/Cut groove specification.

**1 Check & Lubricate Gasket**

Check gasket to be sure it is compatible for the intended service. Apply a thin coat of Guvlok lubricant to the exterior surface and sealing lips of the gasket. Be careful that foreign particles do not adhere to lubricated surfaces.

**2 Gasket Installation**

Slip the gasket over the pipe end, making sure the gasket lip does not overhang the pipe end.

**3 Alignment**

After aligning 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.

**4 Housing**

Place each housing half on the pipe and into each groove making sure that the gasket does not slip out of position in between the pipe ends or groove.

**5 Bolts**

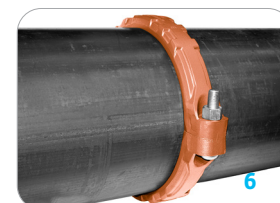
Apply a thin coat of Xtreme lube to the bolt threads. Tighten the nuts alternately and equally to the specified bolt torque.

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

| ANSI Specified Bolt Torque |           |                       |                         |
|----------------------------|-----------|-----------------------|-------------------------|
| Pipe Sizes                 | Bolt Size | Specified Bolt Torque | Lubrication             |
| In.                        | In.       | Ft.-Lbs               |                         |
| 14                         | 7/8       | 180-220               | Guvlok Xtreme Lubricant |
| 16                         | 1         | 250-300               |                         |
| 18                         | 1         | 250-300               |                         |
| 20                         | 1 1/8     | 375-425               |                         |
| 24                         | 1 1/8     | 375-425               |                         |

**6 Final Assembly**

Visually inspect the pipe joint to assure the coupling keys are fully engaged in the pipe grooves, the bolt pads are in firm even metal-to-metal contact on both sides of the coupling, and gasket is not visible.



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