

Rigidlok® Coupling Fig. 7401-2



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 Rigid: Figure 7401-2

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 A 536, 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 D 2000

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 (Standard)

Lubrication

Standard
Gruvlok Xtreme

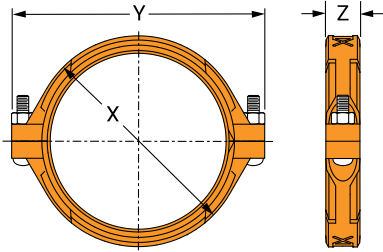
Working Pressure, End Load & Pipe End Separation

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



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

Rigidlok® Coupling Fig. 7401-2



Nominal Size	O.D.	Max. Working Pressure	Max. End Load	Range of Pipe End Separation	Coupling Dimensions			Coupling Bolts*		Specified Torque§		Approx. Wt. Ea.
					X	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	Ft.-Lbs/N-m		Lbs./kg
14 350	14 355.6	350 24.1	53,878 239.66	0- ³ / ₃₂ 0-2.38	16 ¹ / ₄ 413	19 ³ / ₄ 502	3 76	2	⁷ / ₈ x 5 ¹ / ₂ —	180 245	220 300	36.5 16.6
16 400	16 406.4	350 24.1	70,372 313.03	0- ³ / ₃₂ 0-2.38	18 ⁵ / ₁₆ 465	22 558	3 76	2	1 x 5 ¹ / ₂ —	250 340	300 408	46.0 20.9
18 450	18 457.2	350 24.1	89,064 396.18	0- ³ / ₃₂ 0-2.38	20 ³ / ₄ 527	24 ¹ / ₄ 615	3 ¹ / ₈ 79	2	1 x 5 ¹ / ₂ —	250 340	300 408	62.5 28.3
20 500	20 508.0	350 24.1	109,956 489.11	0- ³ / ₃₂ 0-2.38	23 582	27 ¹ / ₈ 691	3 ¹ / ₈ 79	2	1 ¹ / ₈ x 5 ¹ / ₂ —	375 510	425 578	73.5 33.3
24 600	24 609.6	350 24.1	158,336 704.31	0- ³ / ₃₂ 0-2.38	27 ¹ / ₄ 688	31 ¹ / ₈ 791	3 ³ / ₁₆ 81	2	1 ¹ / ₈ x 5 ¹ / ₂ —	375 510	425 578	90.5 41.1

Note:

Range of Pipe End Separation 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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Building connections that last™

Fig. 7401-2 Two-Piece Large Diameter Groove Couplings



Read and understand all instructions before use.

WARNING

Ensure system is drained and depressurized before installation or service.

Use appropriate personal protective equipment.

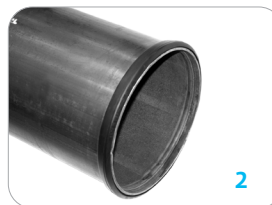
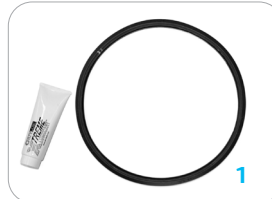


Failure to follow these instructions could result in serious personal injury and/or property damage.

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.

- 7401-2 bolts must be lightly coated with Gruvlok Xtreme lube before installation. See chart for torque requirements.
- Minimum wall pipe suitable for 14" – 24": 7401-2 roll grooved installation is 0.250" wall thickness.
- Pipe preparation grooved dimensions must conform to the Gruvlok Roll/Cut groove specification.

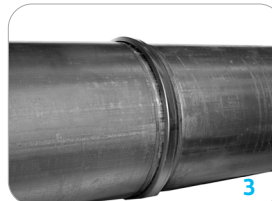


1 Check & Lubricate Gasket

Check gasket to be sure it is compatible for the intended service. Apply a thin coat of Gruvlok 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 Size	Bolt Size	Specified Bolt Torque	Lubrication
In.	In.	Ft.-Lbs	
14	7/8	180-220	Gruvlok 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.

