FIG. 7011
Standard Coupling

The Gruvlok® Figure 7011 Standard Coupling is a flexible coupling designed to join roll grooved or cut grooved 30" O.D. pipe for a wide range of applications, including Commercial/Industrial Construction, Mining, Process Piping and many others. This coupling's operating temperature ranges from –40°F to 230°F (-40°C to 110°C) with the Grade E EPDM gasket and –20°F to 180°F (-29°C to 82°C) with the Grade T Nitrile gasket. The operating pressure ranges 15" of Hg. vacuum to 300 psig on standard wall steel pipe.

MATERIAL SPECIFICATIONS

HOUSING DESIGN:
This six-segment coupling housing is cast in ductile iron per ASTM A 536 Grade 65-45-12. Each housing segment is machined to assure a close dimensional fit with pipe ends that are prepared in accordance with Gruvlok "Large Diameter Roll and Cut Groove Specifications."

GASKET DESIGN:
The gasket design is a "C" Style cross section and features a larger cross section to provide optimal sealing throughout the range of pipe dimensional variations and operating conditions. The gasket is available in EPDM and Nitrile, to facilitate use in a wide range of applications. For Gruvlok gasket material recommendations see the Gruvlok catalog.

BOLTS:
SAE J429, Grade 5, Zinc Electroplated

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

PIPE END PREPARATION:
Pipe grooving is simple, easy and quick. It is critical that the pipe ends be prepared in accordance with the Gruvlok "Large Diameter Roll and Cut Groove Specifications." **For roll grooved pipe, grinding the weld seam on the interior and exterior of the pipe may be required. Not performing this operation may result in improper assembly of the coupling, gasket leakage and damage to the roll grooving machine.**

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

FIG. 7011
Standard Coupling

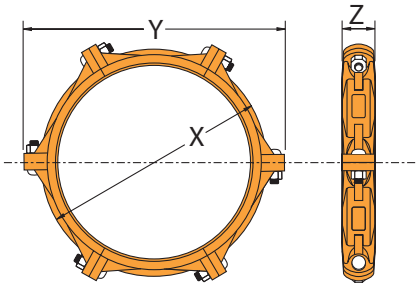
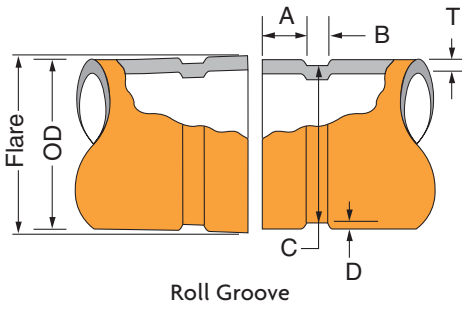


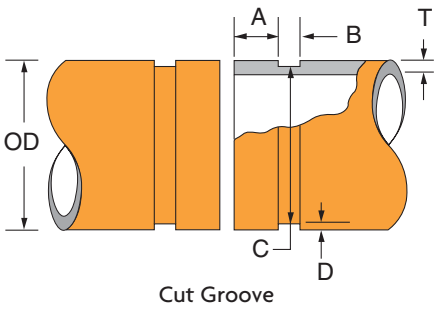
FIGURE 7011 STANDARD COUPLING														
Nominal Size	O.D.	Max. Working Pressure	Max. End Load	Range of Pipe End Separation	Deflection from ℄		Coupling Dimensions			Coupling Bolts*		Specified Torque §		Approx. Wt. Ea.
					Per Coupling	of Pipe	X	Y	Z	Qty.	Size	Min.	Max.	
In./DN(mm)	*In./mm*	*PSI/bar*	*Lbs./kN*	*In./mm*	*Degrees(°)-Minutes(')*	*In./ft-mm/m*	*In./mm*	*In./mm*	*In./mm*		*In./mm*	*Ft.-Lbs./N-m*		*Lbs./Kg*
30 O.D. *750*	30.000 *762.0*	300 *20.7*	212,058 *943.2*	0-9/64 *0-3.57*	0° 16'	0.06 *4.7*	34 *864*	39½ *1003*	5 *127*	6	1¼ x 4⅜ –	600 -	800 -	200 *90.9*

NOTE:
Working pressure and end load values are for standard wall pipe.
Range of pipe end separation values are for cut grooved pipe.
Roll and Cut Grooving Specifications can be found in the technical data section.

For additional details see "Coupling Data Chart Notes" in the Introduction Section of the Gruvlok Catalog.
* Available in ANSI or metric bolt sizes only as indicated.
§ – For additional Bolt Torque information, see the Technical Data Section of the Gruvlok Catalog.
See Installation & Assembly directions on next page.



Roll Groove



Cut Groove

LARGE DIAMETER PIPE ROLL & CUT GROOVE SPECIFICATIONS											
Nominal IPS Pipe Size	O.D.			Gasket Seat "A" +.030/-.060 +.77/-1.54	Groove Width "B" ±.030 ±.77	Groove Diameter "C"		Groove Depth "D" (Ref. Only)	Min. Wall Thickness "T"		Max. Flare Dia.
	Actual	Tolerance				Actual	Tol +0.000		Roll Groove	Cut Groove	
In./DN(mm)	*In./mm*	*+In./mm*	*-In./mm*	*In./mm*	*In./mm*	*In./mm*	*-In./mm*	*In./mm*	*In./mm*	*In./mm*	*In./mm*
30 O.D.	30.000	0.093	0.031	1.750	0.625	29.500	0.063	0.250	0.250	0.625	30.200
750	*762.0*	*2.36*	*0.79*	*44.45*	*15.88*	*749.30*	*1.60*	*6.35*	*6.35*	*15.88*	*767.1*

- Pipe O.D. must be within specified dimensions.
- Gasket Seat must be free from scores, seams, chips, rust or other scale, which may interfere with proper sealing of the gasket. Gasket Seat width, dimension A, is to be measured from the pipe end to the vertical flank in the groove.
- Groove width, dimension B, is to be measured between the vertical flank of the groove side walls.
- Groove depth must be uniform depth around the entire pipe circumference. (Reference column 6.)
- Maximum Flare Diameter is to be measured at the most extreme pipe end.
- **Out of Roundness:** Difference between the maximum and minimum pipe O.D. measured at 90° must not exceed the total pipe O.D. tolerance listed (Reference column 2).
- The maximum allowable tolerance from square cut ends is .125" measured from a true square line.
- Beveled end pipe in conformance with ANSI B16.25 (37½°) is acceptable, however square cut is preferred.

SPECIAL ROLL GROOVING INSTRUCTION:
- Weld seams must be ground flush with the pipe O.D. and I.D. prior to roll grooving. Failure to do so may result in damage to the roll grooving machine and unacceptable roll grooves may be produced.

FIG. 7011
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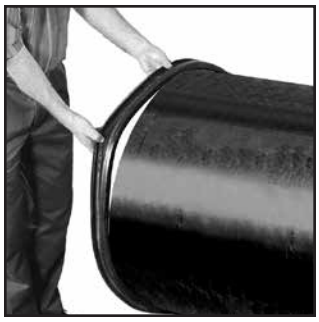
1 PIPE PREPARATION
Inspect the pipe ends making sure the criteria, in the Gruvlok Large Diameter Pipe Roll and Cut Groove Specifications, are met.



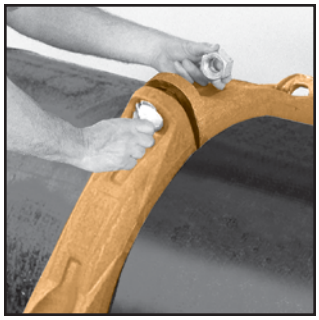
2 GASKET INSTALLATION
Turn the gasket inside out and slide the gasket completely over one of the pipe ends. Turning the gasket inside out will reduce the stretching necessary to put the gasket into position. Ideally, approximately 75% of the pipe's gasket-sealing surface, (Dimension A) should be visible when the gasket is in proper position. This will aid in step 4.

3 LUBRICATE GASKET
Lubricate the gasket sealing lips. The use of Gruvlok lubricants ensures compatibility between the lubricant and the gasket.

4 ALIGNMENT—Pull the two pipes into contact aligning the pipe ends.

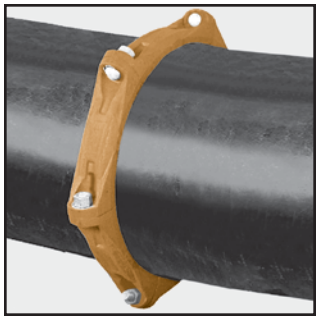
CAUTION: Be careful not to pinch fingers during this step. Working your way around the circumference of the pipe, flip the gasket toward the pipe end so that the proper side is facing out. The end of this procedure will result in the gasket snapping into place. Position the gasket centrally between the grooves of the two pipe ends.

5 LUBRICATE GASKET
Lubricate the exterior surface of the gasket. This helps prevent pinching of the gasket during assembly.



6 HOUSINGS—Secure the housings about the pipes making sure the coupling keys are engaged in the pipe end grooves. Hint: For horizontal assembly, place housing segment on top of the pipe to support the weight of the housing segment. Secure the adjacent housing with an oval neck track bolt and heavy hex nut and then rotate the secured housings, again balancing the weight of the housings on the top of the pipe. Continue this procedure for all segments.

7 TIGHTEN NUTS—
Firmly torque each bolt. The specified minimum torque for each nut is 600 ft.-lbs. The specified maximum torque for each nut is 800 ft.-lbs.



8 ASSEMBLY IS COMPLETE
Installation of the Figure 7011 Standard Coupling is completed.

CAUTION: 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. Pipe joint separation may result in significant property damage and serious injury.