

FIG. 7400 Rigidlite® Coupling



The Fig. 7400 Rigidlite Coupling from Gruvlok is specially designed to provide a rigid, locked-in pipe connection to meet the specific demands of rigid design steel pipe systems. Fast and easy swing-over installation of the rugged lightweight housing produces a secure, rigid pipe joint.

The Fig. 7400 Rigidlite Coupling is UL/ULC Listed and FM Approved for 300 psi (20.7 bar) with roll grooved or cut grooved steel pipe prepared in accordance with Gruvlok grooving specifications.

The galvanized Fig. 7400 is ideal for stainless steel piping application where the external corrosion properties of stainless steel is not required. For Gruvlok coupling pressure ratings on stainless steel pipe, please refer to the technical data section of the Gruvlok catalog.

MATERIAL SPECIFICATIONS

BOLTS:

SAE J429, Grade 5, Zinc Electroplated
ISO 898-1, Class 8.8, Zinc Electroplated followed by a Yellow Chromate Dip

HEAVY HEX NUTS:

ASTM A563, Grade A, Zinc Electroplated
ISO 898-2, Class 8.8, Zinc Electroplated followed by a Yellow Chromate Dip

STAINLESS STEEL BOLTS & NUTS:

304SS bolts and nuts are available as a standard option.
(316SS are available for special order).

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 Anvil Representative.

GASKETS: Materials

Properties as designated in accordance with ASTM D 2000

- Grade “EP” EPDM (Green and Red color code)
-40°F to 250°F (Service Temperature Range)(-40°C to 121°C)
Recommended for water service, diluted acids, alkalis solutions, oil-free air and many other chemical services.
NOT FOR USE IN PETROLEUM APPLICATIONS.

For hot water applications the use of Gruvlok Extreme Temperature lubricant is recommended. NSF-61 Certified for cold and hot water applications up through 12”.

- 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
- Grade “O” Fluoro-Elastomer (Blue color code)
Size Range: 1” - 8” (C style only)
20°F to 300°F (Service Temperature Range)(-29°C to 149°C)
Recommended for high temperature resistance to oxidizing acids, petroleum oils, hydraulic fluids, halogenated hydrocarbons and lubricants.
- Grade “L” Silicone (Red color code)
Size Range: 1” - 8” (C style only)
-40°F to 350°F (Service Temperature Range)(-40°C to 177°C)
Recommended for dry, hot air and some high temperature chemical services.

GASKET TYPE:

- Standard C Style (1” - 8”)
- Flush Gap (1” - 8”)

LUBRICATION:

- Standard Gruvlok
- Gruvlok Xtreme™ (Do Not use with Grade “L”)

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. 7400 Rigidlite® Coupling

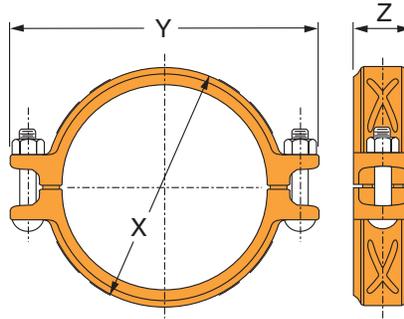


FIGURE 7400 RIGIDLITE COUPLING

Nominal Size	O.D.	Max. Wk. 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
1	1.315	300	407	0-1/32	2 1/4	4 1/2	1 3/4	2	3/8 x 2 1/4	30	45	1.2
25	33.4	20.7	1.81	0-0.79	57	114	44		M10 x 57	40	60	0.5
1 1/4	1.660	300	649	0-1/32	2 5/8	4 3/4	1 3/4	2	3/8 x 2 1/4	30	45	1.3
32	42.2	20.7	2.89	0-0.79	67	121	44		M10 x 57	40	60	0.6
1 1/2	1.900	300	851	0-1/32	2 7/8	4 7/8	1 3/4	2	3/8 x 2 1/4	30	45	1.4
40	48.3	20.7	3.78	0-0.79	73	124	44		M10 x 57	40	60	0.6
2	2.375	300	1,329	0-1/32	3 1/4	5 1/2	1 3/4	2	3/8 x 2 1/4	30	45	1.6
50*	60.3	20.7	5.91	0-0.79	83	140	44		M10 x 57	40	60	0.7
2 1/2	2.875	300	1,948	0-1/32	3 7/8	6	1 3/4	2	3/8 x 2 1/4	30	45	1.9
65	73.0	20.7	8.66	0-0.79	98	152	44		M10 x 57	40	60	0.9
3 O.D.	2.996	300	2,115	0-1/32	4	5 7/8	1 3/4	2	3/8 x 2 1/4	30	45	1.9
76.1	76.1	20.7	9.41	0-0.79	102	149	44		M10 x 57	40	60	0.9
3	3.500	300	2,886	0-1/32	4 1/2	6 3/4	1 3/4	2	3/8 x 2 3/4	30	45	2.1
80	88.9	20.7	12.84	0-0.79	114	171	44		M10 x 70	40	60	1.0
4	4.500	300	4,771	0-3/32	5 5/8	7 3/4	1 7/8	2	3/8 x 2 3/4	30	45	3.1
100	114.3	20.7	21.22	0-2.38	143	197	48		M10 x 70	40	60	1.4
5 1/2 O.D.	5.500	300	7,127	0-3/32	6 3/4	9 1/4	2	2	1/2 x 3	80	100	4.5
139.7	139.7	20.7	31.70	0-2.38	171	235	51		M12 x 76	110	150	2.0
5	5.563	300	7,292	0-3/32	6 7/8	9 1/4	2	2	1/2 x 3	80	100	4.6
125	141.3	20.7	32.44	0-2.38	175	235	51		M12 x 76	110	150	2.1
6 1/2 O.D.	6.500	300	9,955	0-3/32	7 3/4	10 3/8	2	2	1/2 x 3	80	100	5.5
165.1	165.1	20.7	44.28	0-2.38	200	264	51		M12 x 76	110	150	2.5
6	6.625	300	10,341	0-3/32	7 7/8	10 3/8	2	2	1/2 x 3	80	100	5.5
150	168.3	20.7	46.00	0-2.38	200	264	51		M12 x 76	110	150	2.5
8	8.625	300	17,528	0-3/32	10 1/4	12 3/4	2 3/8	2	1/2 x 3	80	100	8.4
200*	219.1	20.7	77.97	0-2.38	260	324	60		M12 x 76	110	150	3.8

NOTES:

Range of Pipe End Separation values are for roll grooved pipe and may be doubled for cut groove pipe.
 † Maximum Working Pressure Rating is for schedule 40 steel pipe. For light wall, stainless steel, aluminum and ISO pipe pressure ratings, please refer to the technical data section.
 Other sizes available, contact an Anvil Representative for more information.

For additional details see "Coupling Data Chart Notes" in the Introduction Section of the Gruvlok Catalog.
 * DN 50 and DN 200 sizes are VdS approved.
 § - For additional Bolt Torque information, see the Technical Data Section of the Gruvlok Catalog.
 See Installation & Assembly directions on next page.

FIG. 7400
Rigidlite® Coupling



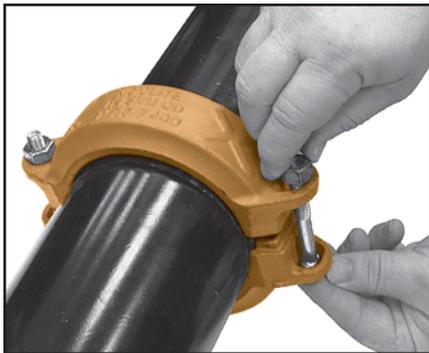
1 CHECK & LUBRICATE GASKET— Check the gasket to be sure it is compatible for the intended service. Apply a thin coating of Gruvlok Xtreme Lubricant to the entire surface, both internal and external, of the gasket. Be careful that foreign particles do not adhere to lubricated surfaces.



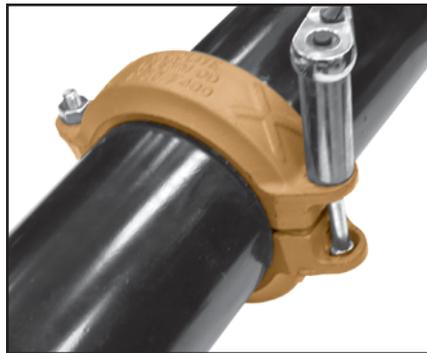
2 GASKET INSTALLATION— Slip the gasket over the one pipe, making sure the gasket lip does not overhang the pipe end.



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



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 pipe grooves. Swing the other housing over the gasket and into the grooves on both pipes, making sure the tongue and recess of each housing is properly mated. Reinsert 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.

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

6 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.

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.