

FIG. C-4 Rigid Coupling



The C-4 Rigid Coupling is our standard coupling and is designed for rigid piping applications. The C-4 is specially designed to provide a rigid, locked-in pipe connection to meet the specific demands of rigid design steel pipe.

For the latest UL/ULC listed, LPCB, VdS and FM Approved pressure ratings versus pipe schedule, see www.anvilintl.com or contact your local Anvil Representative.



For Listings/Approval Details and Limitations, visit our website at www.anvilintl.com or contact an Anvil® Sales Representative.

MATERIAL SPECIFICATIONS

HOUSING:

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

ANSI BOLTS & HEAVY HEX NUTS:

Heat treated, oval-neck track head bolts conforming to ASTM A-183 Grade 2 with a minimum tensile strength of 110,000 psi and heavy hex nuts of carbon steel conforming to ASTM A-563 Grade A or Grade B, or SAE J995 Grade 2. Bolts and nuts are provided zinc electroplated as standard.

METRIC BOLTS & HEAVY HEX NUTS:

Heat treated, zinc electroplated oval-neck track head bolts made of carbon steel with mechanical properties per ISO 898-1 Class 8.8. Hex nuts and bolts are zinc electroplated followed by a yellow chromate dip.

COATINGS:

- ☐ Rust inhibiting paint Color: ORANGE (standard)
 - ☐ Hot Dipped Zinc Galvanized (optional)
 - ☐ Other available options: Example: RAL3000 or RAL9000 Series
- For other coating requirements contact an Anvil Representative.

LUBRICATION:

- ☐ Standard Gruvlok
- ☐ Gruvlok Xtreme™ required for dry pipe systems and freezer applications.

GASKETS: Materials

Properties as designated in accordance with ASTM D-2000.

- ☐ **Pre-Lubricated Grade "E" EPDM, Type A Gasket** (Violet color code)
-40°F to 150°F (Service Temperature Range)(-40°C to 65°C)
Recommended for wet and dry (oil free air) pipe fire protection sprinkler systems. For dry pipe systems and freezer applications, Gruvlok Xtreme™ Lubricant is required.
- ☐ **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 chemical services.
NOT FOR USE IN PETROLEUM APPLICATIONS.
- ☐ **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, alkalies solutions, oil-free air and many other chemical services.
NOT FOR USE IN PETROLEUM APPLICATIONS.

GASKET TYPE:

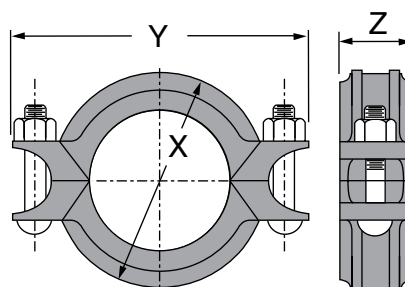
- ☐ Standard C Style
- ☐ Flush Gap

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. C-4 Rigid Coupling



C-4 RIGID COUPLING

Nominal Size	Pipe 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	
1 25	1.315 33.4	300 20.7	407 1.81	0-1/2 0-0.79	2 3/8 60	4 102	1 3/4 44	2	3/8 x 2 1/4 M10 x 57	30 40	45 60	1.2 0.5
1 1/4 32	1.660 42.2	300 20.7	649 2.89	0-1/2 0-0.79	2 3/4 70	4 5/8 117	1 7/8 48	2	3/8 x 2 1/4 M10 x 57	30 40	45 60	1.5 0.7
1 1/2 40	1.900 48.3	300 20.7	851 3.78	0-1/2 0-0.79	2 13/16 71	4 7/8 124	1 7/8 48	2	3/8 x 2 1/4 M10 x 57	30 40	45 60	1.7 0.8
2 50	2.375 60.3	300 20.7	1,329 5.91	0-1/2 0-0.79	3 1/2 89	5 3/8 137	2 51	2	3/8 x 2 1/4 M10 x 57	30 40	45 60	1.9 0.9
2 1/2 65	2.875 73.0	300 20.7	1,948 8.66	0-1/2 0-0.79	4 102	6 152	2 51	2	3/8 x 2 1/2 M10 x 63	30 40	45 60	1.9 0.9
3 O.D. 76.1	2.996 76.1	300 20.7	2,115 9.41	0-1/2 0-0.79	4 1/8 105	6 1/8 156	1 7/8 48	2	3/8 x 2 1/2 M10 x 63	30 40	45 60	2.2 1.0
3 80	3.500 88.9	300 20.7	2,886 12.84	0-1/2 0-0.79	4 3/4 121	6 3/8 168	2 51	2	3/8 x 2 1/2 M10 x 63	30 40	45 60	2.4 1.1
4 100	4.500 114.3	300 20.7	4,771 21.22	0-3/2 0-2.38	5 7/8 149	7 3/4 197	2 1/8 54	2	3/8 x 2 1/2 M10 x 63	30 40	45 60	3.2 1.4
5 1/2 O.D. 139.7	5.500 139.7	300 20.7	7,127 31.70	0-3/2 0-2.38	6 7/8 175	9 1/4 235	2 1/8 52	2	1/2 x 3 M12 x 76	80 110	100 150	5 2.2
5 125	5.563 141.3	300 20.7	7,292 32.44	0-3/2 0-2.38	6 15/16 176	9 1/8 230	2 1/8 52	2	1/2 x 3 M12 x 76	80 110	100 150	4.5 2.0
6 1/2 O.D. 165.1	6.500 165.1	300 20.7	9,955 44.28	0-3/2 0-2.38	8 7/8 207	10 3/8 264	2 3/8 54	2	1/2 x 3 M12 x 76	80 110	100 150	5.8 2.6
6 150	6.625 168.3	300 20.7	10,341 46.00	0-3/2 0-2.38	8 1/4 210	10 3/8 264	2 3/8 54	2	1/2 x 3 1/4 M12 x 82	80 110	100 150	5.8 2.6
8 200	8.625 219.1	300 20.7	17,528 77.97	0-3/2 0-2.38	10 1/2 267	13 1/4 337	2 1/2 64	2	5/8 x 3 1/2 M16 x 89	100 130	130 175	10.8 4.9
10 250	10.750 273.1	300 20.7	27,229 121.12	0-3/2 0-2.38	13 331	16 3/4 425	2 3/8 67	2	7/8 x 5 M22 x 125	180 245	220 298	21.5 9.8
12 300	12.750 323.9	300 20.7	38,303 170.38	0-3/2 0-2.38	15 3/8 391	19 1/4 489	2 3/8 67	2	7/8 x 5 1/2 M22 x 140	180 245	220 298	27.4 12.4

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

- Working pressure and/or end load are total allowable, based on standard weight steel pipe, roll or cut grooved.
- One time field test pressure may be increased to 1.5 times the figures listed above.

§ – For additional Bolt Torque information see Technical Data Section.

▲ – Working Pressure Ratings are for reference only and based on Sch. 40 pipe. For the latest UL/ULC, FM, VdS and LPCB pressure ratings versus pipe schedule, please visit anvilintl.com or contact your local Anvil Representative.

Other sizes available, contact an Anvil Representative.



For dry pipe systems and freezer applications lubrication of the gasket is required, Gruvlok® Xtreme™ Lubricant is required.