FIG. 7401

Rigidlok® Coupling

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

The Fig. 7401 Rigidlok Coupling from Gruvlok provides a rigid pipe connection. Rigidity is attained simply; it is designed in.

The Fig. 7401 Rigidlok coupling utilizes a technologically advanced housing design that conforms to and grips the pipe. With the Fig. 7401 there emerges a new generation of rigid couplings.

Coupling installation is fast and easy, remove only one nut and swing the housing over the gasket and into the grooves. The exclusive Guidelok® feature automatically separates the grooved pipe ends and guides the coupling into position as the bolts are tightened. Precisely sized and oriented tines in the housing key section firmly grip the pipe. The combination of these designed in features produce a secure, rigid pipe joint connection.

This coupling is an ideal connector for service and applications that require a rigid connection.

The Fig. 7401 Rigidlok Coupling is designed for use with roll grooved or cut grooved standard weight and roll grooved lightweight pipe, as well as with grooved-end fittings and valves. The Rigidlok Coupling maintains a rigid connection with support and hanging in conformance with applicable ANSI B31.1 Power Piping Code, ANSI B31.9 Building Service Pipe Code as well as NFPA 13 sprinkler systems.

The Fig. 7401 Rigidlok Coupling allows for working pressure ratings to 750 psi (51.7 bar) when used on standard wall roll or cut grooved pipe.

MATERIAL SPECIFICATIONS

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 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 are zinc electroplated followed by a yellow chromate dip.

STAINLESS STEEL BOLTS & NUTS:
Stainless steel bolts and nuts are also available. Contact an Anvil Representative for more information.

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 "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 "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.

  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)
  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)
  -40°F to 350°F (Service Temperature Range)(-40°C to 177°C)
  Recommended for dry, hot air and some high temperature chemical services. Contact an Anvil Representative for availability.

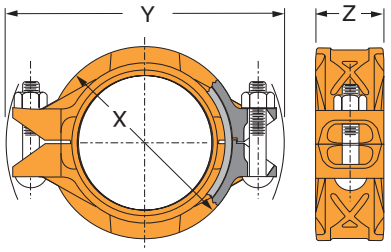
GASKET TYPE:
- ☐ C Style (Standard 1" - 12")
- ☐ Flush Gap (Standard 14" - 24", Available 1" - 12")

LUBRICATION:
- ☐ Standard
- ☐ Gruvlok Xtreme™ (Do Not use with Grade "L")

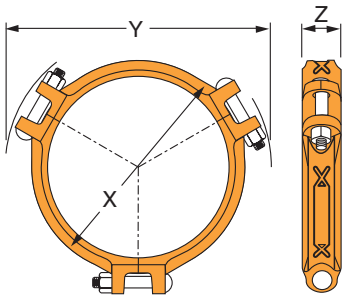
PROJECT INFORMATION	APPROVAL STAMP
Project:	☐ **Approved**
Address:	☐ **Approved as noted**
Contractor:	☐ **Not approved**
Engineer:	**Remarks:**
Submittal Date:	
Notes 1:	
Notes 2:	

FIG. 7401

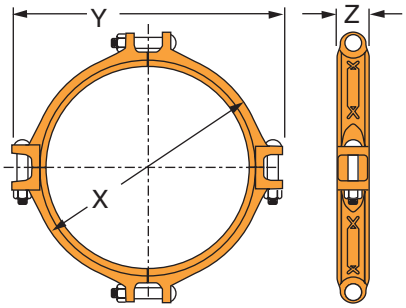
Rigidlok® Coupling



SIZES 1 1/2" - 14"



SIZE 16"



SIZES 18" - 24"

FIGURE 7401 RIGIDLOK COUPLING

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*
1½ *40*	1.900 *48.3*	750 *51.7*	2,126 *9.46*	0-1/32 *0-0.79*	3 *76*	5⅛ *130*	1⅞ *48*	2	⅜ x 2¼ *M10 x 57*	30 *40*	45 *60*	1.8 *0.8*
2 *50*	2.375 *60.3*	750 *51.7*	3,323 *14.78*	0-1/32 *0-0.79*	3½ *89*	5⅝ *143*	1⅞ *48*	2	⅜ x 2½ *M10 x 63*	30 *40*	45 *60*	2.4 *1.1*
2½ *65*	2.875 *73.0*	750 *51.7*	4,869 *21.66*	0-1/32 *0-0.79*	4 *102*	6⅛ *156*	1⅞ *48*	2	⅜ x 2½ *M10 x 63*	30 *40*	45 *60*	2.9 *1.3*
3 O.D. 76.1	*2.996* 76.1	*750* 51.7	*5,207* 23.52	*0-1/32* 0-0.79	*4⅛* 105	*6⅛* 156	*1⅞* 48	*2*	*⅜ x 2½* M10 x 63	*80* 110	*100* 150	*3.4* 1.5
3 *80*	3.500 *88.9*	750 *51.7*	7,216 *32.10*	0-1/32 *0-0.79*	4¾ *121*	7¼ *184*	1⅞ *48*	2	½ x 3 *M12 x 76*	80 *110*	100 *150*	3.6 *1.6*
4 *100*	4.500 *114.3*	750 *51.7*	11,928 *53.06*	0-3/32 *0-2.38*	5⅞ *149*	8⅜ *213*	2⅛ *54*	2	½ x 3 *M12 x 76*	80 *110*	100 *150*	5.0 *2.3*
5½ O.D. 139.7	*5.500* 139.7	*750* 51.7	*17,819* 79.26	0-3/32 *0-2.38*	*7* 178	*9¾* 248	*2⅛* 54	*2*	*⅝ x 3½* M16 x 85	*100* 135	*130* 175	*6.9* 3.1
5 *125*	5.563 *141.3*	750 *51.7*	18,229 *81.09*	0-3/32 *0-2.38*	7 *178*	10 *254*	2⅛ *54*	2	⅝ x 3½ *M16 x 85*	100 *135*	130 *175*	6.9 *3.1*
6½ O.D. 165.1	*6.500* 165.1	*750* 51.7	*24,887* 110.70	*0-3/32* 0-2.38	*8* 203	*11* 279	*2⅛* 54	*2*	*⅝ x 3½* M16 x 85	*100* 135	*130* 175	*7.6* 3.4
6 *150*	6.625 *168.3*	750 *51.7*	25,854 *115.00*	0-3/32 *0-2.38*	8⅛ *206*	11⅛ *283*	2⅛ *54*	2	⅝ x 3½ *M16 x 85*	100 *135*	130 *175*	7.9 *3.6*
8 *200*	8.625 *219.1*	600 *41.4*	35,056 *155.94*	0-3/32 *0-2.38*	10½ *267*	14⅛ *359*	2⅝ *67*	2	¾ x 4½ *M20 x 110*	130 *175*	180 *245*	15.9 *7.2*
10 *250*	10.750 *273.1*	500 *34.5*	45,381 *201.87*	0-3/32 *0-2.38*	12⅞ *327*	17½ *445*	2⅝ *67*	2	1 x 6 *M24 x 150*	200 *270*	250 *340*	25.6 *11.6*
12 *300*	12.750 *323.9*	400 *27.6*	51,070 *227.17*	0-3/32 *0-2.38*	15 *381*	19½ *495*	2⅝ *67*	2	⅞ x 6 *M22 x 150*	180 *245*	220 *300*	30.5 *13.8*
14 *350*	14.000 *355.6*	300 *20.7*	46,181 *205.43*	0-3/32 *0-2.38*	16¼ *413*	19¾ *502*	3 *76*	2	⅞ x 5½ *M22 x 140*	180 *245*	220 *300*	36.1 *16.4*
16 *400*	16.000 *406.4*	300 *20.7*	60,319 *268.31*	0-3/32 *0-2.38*	18⅛ *460*	22¼ *565*	3 *76*	3	⅞ x 5½ *M22 x 140*	180 *245*	220 *300*	42.0 *19.1*
18 *450*	18.000 *457.2*	300 *20.7*	76,341 *339.58*	0-3/32 *0-2.38*	20½ *521*	24⅜ *619*	3⅛ *79*	4	1 x 4 *M24 x 100*	200 *270*	250 *340*	51.6 *23.4*
20 *500*	20.000 *508.0*	300 *20.7*	94,248 *419.23*	0-3/32 *0-2.38*	23 *581*	26⅞ *683*	3⅛ *79*	4	1 x 4 *M24 x 100*	200 *270*	250 *340*	68.3 *31.0*
24 *600*	24.000 *609.6*	250 *17.2*	113,097 *503.08*	0-3/32 *0-2.38*	27⅛ *689*	30⅞ *784*	3⅛ *79*	4	1 x 4 *M24 x 100*	200 *270*	250 *340*	89.3 *40.5*

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

For additional details see "Coupling Data Chart Notes" on page 17.
* Available in ANSI or metric bolt sizes only as indicated.
§ – For additional Bolt Torque information, see page 190.
See Installation & Assembly directions on page 153.
Not for use in copper systems.