

Rigidlok® Coupling  
Fig. 7401



The Fig. 7401 Rigidlok Coupling is an ideal connector for service and applications that require a rigid connection.

The Fig. 7401 Rigidlok coupling utilizes a technologically advanced housing design that conforms to and grips the pipe.

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.

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 provides a rigid pipe connection allowing pipe hanging practices per ASME B31 pipe codes.

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

Material Specifications

- Bolts**  
SAE J429, Grade 5, Zinc Electroplated (standard)
- Heavy Hex Nuts**  
SAE A563, Grade A, Zinc Electroplated (standard)

- Hardware Kits**
- ☐ 304 Stainless Steel (available in sizes up to ¾")  
Kit includes:
    - (2) Bolts per ASTM A193, Grade B8 and
    - (2) Heavy Hex Nuts per ASTM A194, Grade 8.

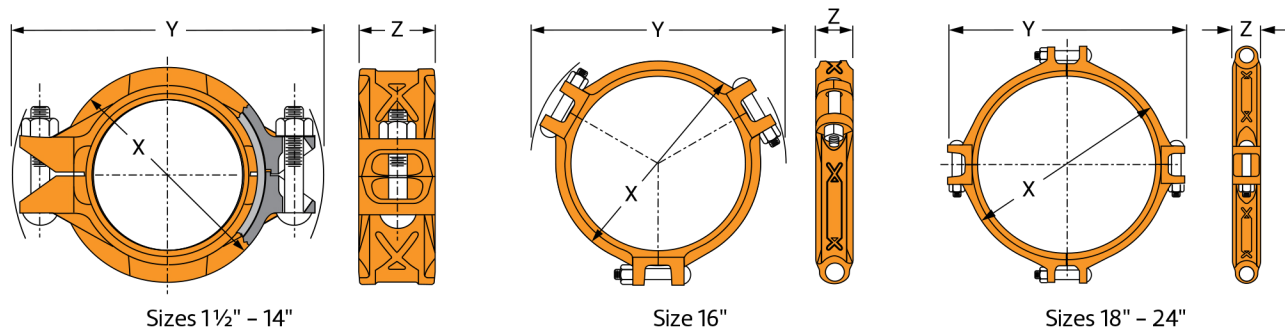
Material Specifications (continued)

- Hardware Kits (continued)**
- ☐ EcoGuard (available in sizes up to ¾")  
Kit includes:
    - Bolts per SAE J429, Grade 5, with EcoGuard corrosion-resistant zinc flake coating and
    - (2) Heavy Hex Nuts per ASTM A563, Grade A, EcoGuard corrosion-resistant zinc flake coating.
- Housing**  
Ductile Iron conforming to ASTM A536, Grade 65-45-12.
- Coatings**
- ☐ Rust inhibiting paint  
Color: Orange (standard)
  - ☐ Hot Dipped Zinc Galvanized (optional)
- Gaskets**  
Properties as designated in accordance with ASTM D2000
- ☐ **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 Xtreme Temperature lubricant is recommended. NSF-61.
  - ☐ **Grade "T" Nitrile** (Orange color code)  
NOT FOR USE IN DRINKING WATER  
-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)  
NOT FOR USE IN DRINKING WATER  
Size Range: 1" - 12" (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)  
NOT FOR USE IN DRINKING WATER  
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**
- ☐ C Style (1" - 24")
  - ☐ Flush Gap (1" - 24")
- Lubrication**
- ☐ Standard
  - ☐ Gruvlok Xtreme (Do Not use for 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:            |  |  |  |

## Rigidlok® Coupling Fig. 7401



| Nominal Size     | Pipe O.D.       | Max. Working Pressure† | Max. End Load     | Range of Pipe End Separation | Coupling Dimensions |            |          | Coupling Bolts |                     | Approx. Wt. Ea. |
|------------------|-----------------|------------------------|-------------------|------------------------------|---------------------|------------|----------|----------------|---------------------|-----------------|
|                  |                 |                        |                   |                              | X                   | Y          | Z        | Qty.           | Size                |                 |
| In./DN(mm)       | In./mm          | PSI/bar                | Lbs./kN           | In./mm                       | In./mm              | In./mm     | In./mm   |                | In./mm              | Lbs./kg         |
| 1½<br>40         | 1.900<br>48.3   | 750<br>51.7            | 2,126<br>9.46     | 0-½ <sub>32</sub><br>0-0.79  | 3<br>76             | 5⅞<br>130  | 1⅞<br>48 | 2              | ¾ x 2¼<br>M10 x 57  | 1.8<br>0.8      |
| 2<br>50          | 2.375<br>60.3   | 750<br>51.7            | 3,323<br>14.78    | 0-½ <sub>32</sub><br>0-0.79  | 3½<br>89            | 5⅞<br>143  | 1⅞<br>48 | 2              | ¾ x 2½<br>M10 x 63  | 2.4<br>1.1      |
| 2½<br>65         | 2.875<br>73.0   | 750<br>51.7            | 4,869<br>21.66    | 0-½ <sub>32</sub><br>0-0.79  | 4<br>102            | 6⅞<br>156  | 1⅞<br>48 | 2              | ¾ x 2½<br>M10 x 63  | 2.9<br>1.3      |
| 3 O.D.<br>76.1   | 2.996<br>76.1   | 750<br>51.7            | 5,207<br>23.52    | 0-½ <sub>32</sub><br>0-0.79  | 4⅞<br>105           | 6⅞<br>156  | 1⅞<br>48 | 2              | ¾ x 2½<br>M10 x 63  | 3.4<br>1.5      |
| 3<br>80          | 3.500<br>88.9   | 750<br>51.7            | 7,216<br>32.10    | 0-½ <sub>32</sub><br>0-0.79  | 4¾<br>121           | 7¼<br>184  | 1⅞<br>48 | 2              | ½ x 3<br>M12 x 76   | 3.6<br>1.6      |
| 4<br>100         | 4.500<br>114.3  | 750<br>51.7            | 11,928<br>53.06   | 0-¾ <sub>32</sub><br>0-2.38  | 5⅞<br>149           | 8⅞<br>213  | 2⅞<br>54 | 2              | ½ x 3<br>M12 x 76   | 5.0<br>2.3      |
| 5½ O.D.<br>139.7 | 5.500<br>139.7  | 750<br>51.7            | 17,819<br>79.26   | 0-¾ <sub>32</sub><br>0-2.38  | 7<br>178            | 9¾<br>248  | 2⅞<br>54 | 2              | ⅝ x 3½<br>M16 x 85  | 6.9<br>3.1      |
| 5<br>125         | 5.563<br>141.3  | 750<br>51.7            | 18,229<br>81.09   | 0-¾ <sub>32</sub><br>0-2.38  | 7<br>178            | 10<br>254  | 2⅞<br>54 | 2              | ⅝ x 3½<br>M16 x 85  | 6.9<br>3.1      |
| 6½ O.D.<br>165.1 | 6.500<br>165.1  | 750<br>51.7            | 24,887<br>110.70  | 0-¾ <sub>32</sub><br>0-2.38  | 8<br>203            | 11<br>279  | 2⅞<br>54 | 2              | ⅝ x 3½<br>M16 x 85  | 7.6<br>3.4      |
| 6<br>150         | 6.625<br>168.3  | 750<br>51.7            | 25,854<br>115.00  | 0-¾ <sub>32</sub><br>0-2.38  | 8⅞<br>206           | 11⅞<br>283 | 2⅞<br>54 | 2              | ⅝ x 3½<br>M16 x 85  | 7.9<br>3.6      |
| 8<br>200         | 8.625<br>219.1  | 600<br>41.4            | 35,056<br>155.94  | 0-¾ <sub>32</sub><br>0-2.38  | 10½<br>267          | 14⅞<br>359 | 2⅞<br>67 | 2              | ¾ x 4½<br>M20 x 110 | 15.9<br>7.2     |
| 10<br>250        | 10.750<br>273.1 | 500<br>34.5            | 45,381<br>201.87  | 0-¾ <sub>32</sub><br>0-2.38  | 12⅞<br>327          | 17½<br>445 | 2⅞<br>67 | 2              | 1 x 6<br>M24 x 150  | 25.6<br>11.6    |
| 12<br>300        | 12.750<br>323.9 | 400<br>27.6            | 51,070<br>227.17  | 0-¾ <sub>32</sub><br>0-2.38  | 15<br>381           | 19½<br>495 | 2⅞<br>67 | 2              | ⅞ x 6<br>M22 x 150  | 30.5<br>13.8    |
| 14<br>350        | 14.000<br>355.6 | 300<br>20.7            | 46,181<br>205.43  | 0-¾ <sub>32</sub><br>0-2.38  | 16¼<br>413          | 19¾<br>502 | 3<br>76  | 2              | ⅞ x 5½<br>M22 x 140 | 36.1<br>16.4    |
| 16<br>400        | 16.000<br>406.4 | 300<br>20.7            | 60,319<br>268.31  | 0-¾ <sub>32</sub><br>0-2.38  | 18⅞<br>460          | 22¼<br>565 | 3<br>76  | 3              | ⅞ x 5½<br>M22 x 140 | 42.0<br>19.1    |
| 18<br>450        | 18.000<br>457.2 | 300<br>20.7            | 76,341<br>339.58  | 0-¾ <sub>32</sub><br>0-2.38  | 20½<br>521          | 24⅞<br>619 | 3⅞<br>79 | 4              | 1 x 4<br>M24 x 100  | 51.6<br>23.4    |
| 20<br>500        | 20.000<br>508.0 | 300<br>20.7            | 94,248<br>419.23  | 0-¾ <sub>32</sub><br>0-2.38  | 23<br>581           | 26⅞<br>683 | 3⅞<br>79 | 4              | 1 x 4<br>M24 x 100  | 68.3<br>31.0    |
| 24<br>600        | 24.000<br>609.6 | 250<br>17.2            | 113,097<br>503.08 | 0-¾ <sub>32</sub><br>0-2.38  | 27⅞<br>689          | 30⅞<br>784 | 3⅞<br>79 | 4              | 1 x 4<br>M24 x 100  | 89.3<br>40.5    |

### 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.

For additional details see "Coupling Data Chart Notes" in the Introduction Section of the Gruvlok Catalog.

See Installation & Assembly directions on next page.



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