

## FIG. 7013

### Gruvlok Flanges (300# Flange)

The Gruvlok Fig. 7013 300# Flange allows direct connection of Class 250 or Class 300 flanged components to a Gruvlok piping system. The two halves of the 2" thru 12" sizes of both Gruvlok Flanges are drawn together by a latch bolt which eases assembly on the pipe. A specially designed gasket provides a leak-tight seal on both the pipe and the mating flange face.

Gruvlok Flanges have designed-in anti-rotation tines which bite into and grip the side of the pipe groove to provide a secure, rigid connection.

Gruvlok flange adapter insert required when mating to rubber surfaces or serrated faced mating flanges.

\* The 7013 Gruvlok adapter flange should not be used with the 78FP or 7800 check valve.



### **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.

#### **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 "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.

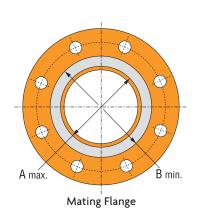
#### **LUBRICATION:**

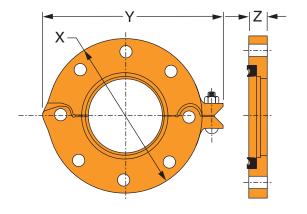
Standard Gruvlok Gruvlok Xtreme™ (Do Not use for Grade "L")



# FIG. 7013

Gruvlok Flanges (300# Flange)





| GRUVLOK FIGURE 7013 FLANGE: ANSI CLASS 250 AND 300 BOLT PATTERN |        |                      |                    |                     |                    |      |            |        |        |                 |        |                     |   |                  |                |         |
|---|--------|----------------------|--------------------|---------------------|--------------------|------|------------|--------|--------|-----------------|--------|---------------------|---|------------------|----------------|---------|
| Nominal<br>Size   | 0.D.   | Max. Wk.<br>Pressure | Max. End<br>Load ▼ | Latch*<br>Bolt Size | Specified Torque § |      | Dimensions |        |        | Sealing Surface |        | Mating Flange Bolts |   |                  |                | Approx. |
|   |        |                      |                    |                     | Min.               | Max. | Х          | Υ      | Z      | A Max.          | B Min. | Qty. ANSI           | Size (ANSI) in.   | Bolt Circle Dia. | Bolt Hole Dia. | Wt. Ea. |
| In./DN(mm)  | In./mm | PSI/bar              | Lbs./kN            | In.                 | FtLbs/N-m          |      | In./mm     | In./mm | In./mm | In./mm          | In./mm |                     | (ISO) mm  | In./mm           | In./mm         | Lbs./Kg |
| 2   | 2.375  | 750                  | 3,323              | 3/8 x 21/2          | 30                 | 45   | 6½         | 8      | 1      | 23/8            | 37/16  | 8                   | 5% x 3  | 5                | 3/4            | 5.0     |
| 50  | 60.3   | 51.7                 | 14.78              | -                   | -                  | -    | 165        | 203    | 25     | 60              | 87     | -                   | -   | 127.0            | 19.1           | 2.3     |
| 21/2  | 2.875  | 750                  | 4,869              | 3/8 x 21/2          | 30                 | 45   | 71/2       | 91/8   | 1      | 27//8           | 4      | 8                   | 3/4 x 31/4  | 57//8            | 7/8            | 6.9     |
| 65  | 73.0   | 51.7                 | 21.66              | -                   | -                  | -    | 191        | 232    | 25     | 73              | 102    | -                   | -   | 149.2            | 22.2           | 3.1     |
| 3   | 3.500  | 750                  | 7,216              | 3/8 x 21/2          | 30                 | 45   | 81/4       | 97/8   | 11//8  | 3½              | 49/16  | 8                   | 3/4 x 31/2  | 65//8            | 7/8            | 9.4     |
| 80  | 88.9   | 51.7                 | 32.10              | -                   | -                  | -    | 210        | 251    | 29     | 89              | 116    | -                   | -   | 168.3            | 22.2           | 4.3     |
| 4   | 4.500  | 750                  | 11,928             | 3/8 x 21/2          | 30                 | 45   | 10         | 11%    | 11/4   | 41/2            | 55/8   | 8                   | 3/4 x 33/4  | 77//8            | 7/8            | 14.4    |
| 100   | 114.3  | 51.7                 | 53.06              | -                   | -                  | -    | 254        | 289    | 32     | 114             | 143    | -                   | -   | 200.0            | 22.2           | 6.5     |
| 5   | 5.563  | 750                  | 18,229             | 3/8 x 21/2          | 30                 | 45   | 11         | 125/8  | 1%     | 5%16            | 63/4   | 8                   | 3/4 x 41/2  | 91/4             | 7/8            | 18.3    |
| 125   | 141.3  | 51.7                 | 81.09              | -                   | -                  | -    | 279        | 321    | 35     | 141             | 171    | -                   | -   | 235.0            | 22.2           | 8.3     |
| 6   | 6.625  | 750                  | 25,854             | 3/8 x 21/2          | 30                 | 45   | 121/2      | 141//8 | 11/2   | 65/8            | 713/16 | 12                  | 3/4 x 41/2  | 105/8            | 7/8            | 24.9    |
| 150   | 168.3  | 51.7                 | 115.00             | -                   | -                  | -    | 318        | 359    | 38     | 168             | 198    | -                   | -   | 269.9            | 22.2           | 11.3    |
| 8   | 8.625  | 750                  | 43,820             | ½ x 3½              | 80                 | 100  | 15         | 161/8  | 15/8   | 85/8            | 10     | 12                  | <sup>7</sup> / <sub>8</sub> x 4 <sup>3</sup> / <sub>4</sub> | 13               | 1              | 35.4    |
| 200   | 219.1  | 51.7                 | 194.92             | -                   | -                  | -    | 381        | 429    | 41     | 219             | 254    | -                   | -   | 330.2            | 25.4           | 16.1    |
| 10  | 10.750 | 750                  | 68,072             | ½ x 3½              | 80                 | 100  | 17½        | 19%    | 111//8 | 10¾             | 121/8  | 16                  | 1 x 5   | 151/4            | 11//8          | 54.0    |
| 250   | 273.1  | 51.7                 | 302.80             | -                   | -                  | -    | 445        | 492    | 48     | 273             | 308    | -                   | -   | 387.4            | 28.6           | 24.5    |
| 12  | 12.750 | 750                  | 95,757             | ½ x 3½              | 80                 | 100  | 201/2      | 221/2  | 2      | 123/4           | 143/16 | 16                  | 11/8 x 53/4   | 17¾              | 11/4           | 74.8    |
| 300   | 323.9  | 51.7                 | 425.95             | -                   | -                  | -    | 521        | 572    | 51     | 324             | 360    | -                   | -   | 450.9            | 31.8           | 33.9    |

Effective sealing area of mating flange must be free from gouges, undulations or deformities of any type to ensure proper sealing of the gasket. Flange cannot be assembled directly to Series 7700 butterfly valve. Flange can be assembled to one side of series 7500 and 7600 valve.

For additional details see "Coupling Data Chart Notes" on page 17.

\* Available in ANSI or metric bolt sizes only as indicated.

▼ Based on use with standard wall pipe.

§ - For additional Bolt Torque information, see page 204.

See Installation & Assembly directions or contact your Anvil Representative Not for use with copper systems.

