

FIG. 7400SS

Rigidlite® Coupling

The Gruvlok Figure 7400SS coupling is available in 1 1/4" – 8" sizes. The standard material is ASTM A 743 CF8M (Type 316) cast stainless steel which is ideal for corrosive environments.

Any Gruvlok gasket material may be utilized in the 7400SS coupling for a broad array of applications. Gasket properties are as designated in accordance with ASTM D 2000. The 7400SS is provided with ASTM A 193 B8M bolts and ASTM A 194 Grade 8M nuts.



MATERIAL SPECIFICATIONS

STAINLESS STEEL BOLTS & NUTS:

Hex head stainless steel bolts, Type 316 per ASTM A 193 Grade B8M class 1 and heavy hex stainless steel nuts, Type 316 per ASTM A 194 Grade 8M class 1. Nuts and bolts are zinc plated to prevent common thread galling. Contact an Anvil Representative for more information.

HOUSING:

Cast Stainless Steel (Type 316) - ASTM A 743 CF8M

GASKETS: Materials

Properties as designated in accordance with ASTM D 2000

Grade "E" EPDM (Green color code) NSF 61 Certified

-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 "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.

GASKET TYPE:

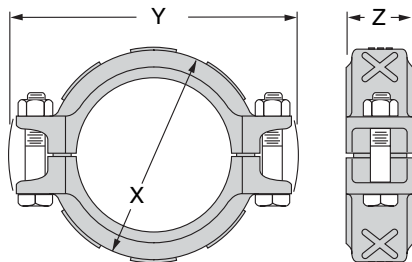
Standard C Style

Flush Gap (1 1/4" – 8")

LUBRICATION:

Standard Gruvlok

Gruvlok Xtreme™ (Do Not use with Grade "L")



CAUTION: Contact your local Anvil representative for corrosive application environments.

No coatings or zinc options.

* All bolts are hex head design Type 316 Grade B8M Class 1 stainless steel to ASTM A 193, with Type 316 Grade 8M stainless steel heavy hex nuts conforming to ASTM A 194. Use of suitable anti-galling thread compound is recommended.

† Ratings apply when used with Schedule 40 ASTM A 312 Type 304 stainless steel pipe for all sizes. Refer to ratings chart for additional data.

FIGURE 7400SS - RIGIDLITE STAINLESS STEEL 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./mm | In./mm | PSI/bar | Lbs./kN | In./mm | In./mm | In./mm | In./mm | | In./mm | Ft.-Lbs./N-m | Lbs./Kg | |
| 1 1/4 32 | 1.660 42.4 | 300 20.7 | 649 2.89 | 0-1/32 0-0.79 | 2 1/8 73 | 4 1/8 105 | 1 3/4 44 | 2 | 3/8 x 2 1/4 M10 x 57 | 15 21 | 20 27 | 1.6 0.7 |
| 1 1/2 40 | 1.900 48.3 | 300 20.7 | 851 3.78 | 0-1/32 0-0.79 | 3 1/8 79 | 4 3/8 117 | 1 3/4 44 | 2 | 3/8 x 2 1/4 M10 x 57 | 15 21 | 20 27 | 1.7 0.8 |
| 2 50 | 2.375 60.3 | 300 20.7 | 1,329 5.91 | 0-1/32 0-0.79 | 3 3/8 92 | 5 3/8 137 | 1 3/4 45 | 2 | 3/8 x 2 1/4 M10 x 57 | 15 21 | 20 27 | 2.1 1.0 |
| 2 1/2 65 | 2.875 73.0 | 300 20.7 | 1,948 8.66 | 0-1/32 0-0.79 | 4 1/8 105 | 5 7/8 149 | 1 3/4 44 | 2 | 3/8 x 2 1/4 M10 x 57 | 15 21 | 20 27 | 2.3 1.0 |
| 3 80 | 3.500 88.9 | 300 20.7 | 2,886 12.84 | 0-1/32 0-0.79 | 4 3/8 117 | 6 3/8 168 | 1 3/4 44 | 2 | 1/2 x 2 3/4 M12 x 70 | 50 68 | 60 80 | 3.1 1.4 |
| 4 100 | 4.500 114.3 | 300 20.7 | 4,771 21.22 | 0-3/32 0-2.38 | 6 152 | 7 3/4 197 | 1 7/8 48 | 2 | 1/2 x 2 3/4 M12 x 70 | 50 68 | 60 80 | 4.4 2.0 |
| 6 150 | 6.625 168.3 | 275 19.0 | 9,480 42.17 | 0-3/32 0-2.38 | 8 3/8 206 | 11 1/8 283 | 2 51 | 2 | 3/4 x 3 M20 x 76 | 80 110 | 100 150 | 7.8 3.5 |
| 8 200 | 8.625 219.1 | 275 19.0 | 16,067 71.47 | 0-3/32 0-2.38 | 10 3/8 264 | 13 3/8 346 | 2 3/8 60 | 2 | 3/4 x 3 M20 x 76 | 80 110 | 100 150 | 13.2 6.0 |

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

GRUVLOK STAINLESS STEEL FITTINGS

Anvil offers two different sets of stainless steel fittings. The Gruvlok Series Fittings have full flow designs formed from type 304SS pipe. The Schedule 10 fittings are fabricated from segmentally welded 316SS unless otherwise noted and are also available as Schedule 40 and/or Type 304SS.

GRUVLOK COUPLING & FLANGE WORKING PRESSURE RATINGS (PSI)

The following are pressure ratings for Gruvlok Stainless Steel Piping Systems. The ratings for Schedule 10S pipe are based upon the use of roll-groover roll sets that have been specifically designed for use on Schedule 10 Stainless Steel pipe. Using roll sets that were designed for roll grooving standard wall pipe may

significantly reduce the pressure ratings that can be obtained. The Model 1007/3007 roll groovers require the use of the optional Schedule 10 roll set to groove Schedule 5S and 10S. For grooving Schedule 40S on the Model 1007/3007 roll groovers, the standard steel roll grooving set should be used.

**GRUVLOK COUPLING & FLANGE WORKING PRESSURE RATINGS (PSI)
ON 304 AND 316 STAINLESS STEEL ROLL GROOVED PIPE**

| Nominal Pipe Size | Pipe O.D. | Nominal Wall Thickness | Pipe Schedule Number | Coupling and Flanges | | | | | | | | | | |
|-------------------|-----------------|------------------------|----------------------|-----------------------|--------------------|--------------------|---------------|---------------------|------------------|------------------|---------------------|--------------------|----------------------|-----|
| | | | | Fig. 7000 Lightweight | Fig. 7001 Standard | Fig. 7003 Hingelok | Fig. 7004 HPR | Fig. 7010* Reducing | Fig. 7012 Flange | Fig. 7013 Flange | Fig. 7400 Rigidlite | Fig. 7401 Rigidlok | Fig. 7400SS Coupling | |
| In./DN(mm) | In./mm | Inches | — | PSI | | | | | | | | | | |
| 1 25 | 1.315 33.4 | 0.065 | 5S | 400 | 400 | — | — | — | — | — | — | 300 | — | — |
| | | 0.109 | 10S | 400 | 500 | — | — | — | — | — | — | 300 | — | — |
| | | 0.133 | 40 | 500 | 750 | — | — | — | — | — | — | 300 | — | — |
| 1¼ 32 | 1.660 42.4 | 0.065 | 5S | 400 | 400 | — | — | — | — | — | — | 300 | — | 275 |
| | | 0.109 | 10S | 500 | 500 | — | — | — | — | — | — | 300 | — | 300 |
| | | 0.140 | 40 | 500 | 750 | — | — | — | — | — | — | 300 | — | 300 |
| 1½ 40 | 1.900 48.3 | 0.065 | 5S | 400 | 400 | 275 | — | — | — | — | — | 300 | 400 | 275 |
| | | 0.109 | 10S | 500 | 500 | 300 | — | — | — | — | — | 300 | 500 | 300 |
| | | 0.145 | 40 | 500 | 750 | 300 | — | — | — | — | — | 300 | 750 | 300 |
| 2 50 | 2.375 60.3 | 0.065 | 5S | 250 | 325 | 250 | 325 | 250 | 250 | 250 | 275 | 250 | 325 | 275 |
| | | 0.109 | 10S | 500 | 500 | 300 | 500 | 500 | 300 | 300 | 300 | 300 | 500 | 300 |
| | | 0.154 | 40 | 500 | 750 | 300 | 750 | 500 | 300 | 300 | 300 | 300 | 750 | 300 |
| 2½ 65 | 2.875 73.0 | 0.083 | 5S | 250 | 325 | 250 | 325 | 250 | 250 | 250 | 275 | 250 | 325 | 200 |
| | | 0.120 | 10S | 500 | 500 | 300 | 500 | 500 | 300 | 300 | 300 | 300 | 500 | 300 |
| | | 0.203 | 40 | 500 | 750 | 300 | 750 | 500 | 300 | 300 | 300 | 300 | 750 | 300 |
| 3 80 | 3.500 88.9 | 0.083 | 5S | 250 | 325 | 250 | 325 | 250 | 250 | 250 | 275 | 250 | 325 | 200 |
| | | 0.120 | 10S | 500 | 500 | 300 | 500 | 500 | 300 | 300 | 300 | 300 | 500 | 300 |
| | | 0.216 | 40 | 500 | 750 | 300 | 750 | 500 | 300 | 300 | 300 | 300 | 750 | 300 |
| 4 100 | 4.500 114.3 | 0.083 | 5S | 200 | 250 | 200 | 250 | 200 | 200 | 200 | 250 | 200 | 250 | 200 |
| | | 0.120 | 10S | 300 | 400 | 300 | 400 | 300 | 300 | 300 | 300 | 300 | 400 | 300 |
| | | 0.237 | 40 | 500 | 750 | 300 | 750 | 500 | 300 | 300 | 300 | 300 | 750 | 300 |
| 5 125 | 5.563 141.3 | 0.109 | 5S | 125 | 200 | 125 | 200 | 125 | 125 | 125 | 200 | 125 | 200 | — |
| | | 0.134 | 10S | 200 | 300 | 200 | 300 | 200 | 200 | 200 | 300 | 200 | 300 | — |
| | | 0.258 | 40 | 300 | 500 | 300 | 500 | 300 | 300 | 300 | 300 | 300 | 500 | — |
| 6 150 | 6.625 168.3 | 0.109 | 5S | 75 | 125 | 75 | 125 | 75 | 75 | 75 | 125 | 75 | 125 | 125 |
| | | 0.134 | 10S | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 250 |
| | | 0.280 | 40 | 300 | 500 | 300 | 500 | 300 | 300 | 300 | 300 | 300 | 500 | 275 |
| 8 200 | 8.625 219.1 | 0.109 | 5S | 50 | 75 | 50 | 75 | 50 | 50 | 50 | 75 | 50 | 75 | 75 |
| | | 0.148 | 10S | 150 | 200 | 150 | 200 | 150 | 150 | 150 | 200 | 150 | 200 | 150 |
| | | 0.322 | 40 | 300 | 400 | 300 | 400 | 300 | 300 | 300 | 300 | 300 | 400 | 275 |
| 10 250 | 10.750 273.0 | 0.134 | 5S | — | 50 | — | 50 | — | 50 | 50 | — | 50 | — | — |
| | | 0.165 | 10S | — | 100 | — | 100 | — | 100 | 100 | — | 100 | — | — |
| | | 0.365 | 40 | — | 400 | — | 400 | — | 400 | 300 | — | 400 | — | — |
| 12 300 | 12.750 323.9 | 0.156 | 5S | — | 75 | — | 75 | — | 75 | — | 50 | 75 | — | — |
| | | 0.180 | 10S | — | 125 | — | 125 | — | 125 | — | 100 | 125 | — | — |
| | | 0.375 | 40 | — | 400 | — | 400 | — | 400 | — | 300 | 300 | — | — |

- Notes:**
- 1) Pressure ratings based on ASTM A312 Type 304 stainless steel pipe or equivalent.
 - 2) Failure to use Rollers specifically designed for Stainless Steel Pipe may significantly reduce pressure retention capabilities.
 - 3) Pressure ratings on cut grooved pipe meet or exceed the schedule 40 pressure ratings listed above. For information regarding higher ratings contact Anvil.
 - 4) * For pressure ratings on Figure 7010 Reducing Couplings use larger pipe size.
 - 5) For pressure ratings for the reducing tees, concentric reducers and eccentric reducers, use the rating of the weakest end.
 - 6) Pressure ratings on schedule 10 stainless steel pipe may be increased by using Anvil's 1007/3007 roll groovers with the schedule 10 roller set. Contact Anvil for details.