

## FIG. 7012

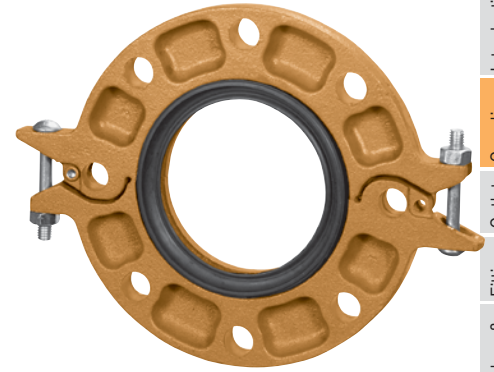
### Gruvlok Flanges

The Gruvlok® Fig. 7012 Flange allows direct connection of Class 125 or Class 150 flanged components to a grooved piping system. The two interlocking halves of the 2" thru 12" sizes of the Gruvlok Flange are hinged for ease of handling, and are drawn together by a latch bolt which eases assembly on the pipe. Precision machined bolt holes, key and mating surfaces assure concentricity and flatness to provide exact fit-up with flanged, lug, and wafer styles of pipe system equipment. A specially designed gasket provides a leak-tight seal on both the pipe and the mating flange face.

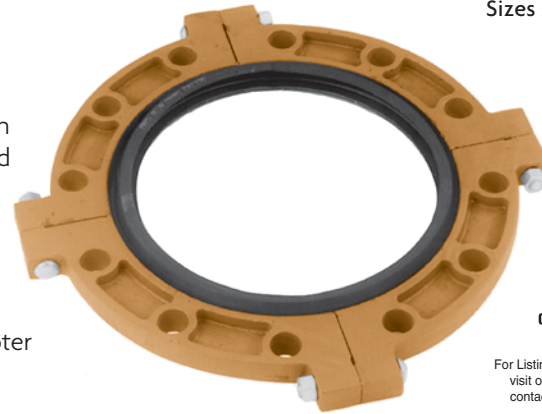
The 14" thru 24" sizes of the Gruvlok Fig. 7012 Flange are cast in four segments. A sleek profile gasket design allows quick and easy assembly of the Gruvlok Flange onto the pipe.

All Gruvlok Fig. 7012 Flanges have designed-in anti-rotation tines which bite into and grip the sides of the pipe grooves to provide a secure, rigid connection.

The Gruvlok Fig. 7012 Flange requires the use of a steel adapter insert when used against rubber faced surfaces, wafer/lug design valves and serrated or irregular sealing surfaces. In copper systems a phenolic adapter insert is required, in place of the steel adapter insert. (See Installation and Assembly Instructions Section or contact your Anvil Rep. for details.)



Sizes 2" - 12"



Sizes 14" - 24"

For Listings/Approval Details and Limitations, visit our website at [www.anvilintl.com](http://www.anvilintl.com) or contact an Anvil® Sales Representative.

## MATERIAL SPECIFICATIONS

### LATCH BOLT/NUT (2" - 12")

### SEGMENT BOLT/NUT (14" - 24"):

Heat treated, zinc electroplated, carbon steel oval neck track bolts conforming to ASTM A 183 and zinc electroplated heavy hex nuts of carbon steel conforming to ASTM A 563 Grade A or Grade B, or J995 Grade 2.

### 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), Red (optional)  
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.

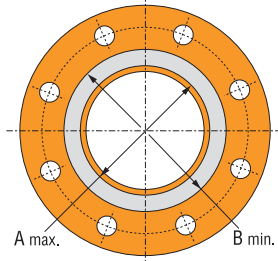
### LUBRICATION:

Standard Gruvlok

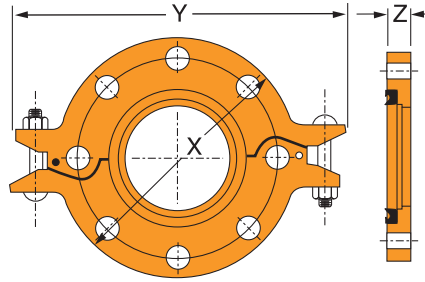
Gruvlok Xtreme™ (Do Not use with Grade "L")

## FIG. 7012

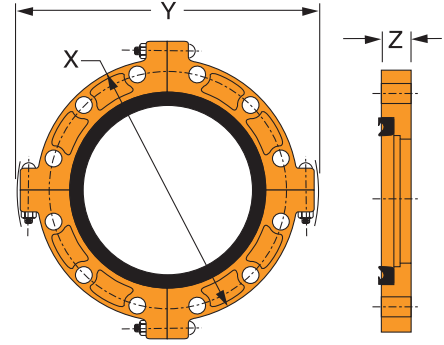
### Gruvlok Flanges



Mating Flange



2"-12" sizes



14"-24" sizes

### GRUVLOK FIGURE 7012 FLANGE: ANSI CLASS 150 OR ISO PN10 OR PN16 BOLT PATTERNS

Nominal Size	O.D.	Max. Working Pressure ▼	Max. End Load ▼	Latch Bolt		Dimensions			Sealing Surface		Mating Flange Bolts					Approx. Wt. Ea.		
				Latch Bolt Size*	Specified Torque §		X	Y	Z	A Max.	B Min.	Mating Flange Bolts		Specified Torque §				
					Min.	Max.						Qty. ANSI	Size (ANSI)	Bolt Circle Diameter	Bolt Hole Diameter		Min.	Max.
In./DN(mm)	In./mm	PSI/bar	Lbs./kN	In./mm	Ft.-Lbs/N-m	In./mm	In./mm	In./mm	In./mm	In./mm	PN10 (16)	in. (ISO) mm	In./mm	In./mm	Ft.-Lbs/N-m	Lbs./Kg		
2	2.375	300	1,329	3/8 x 2 3/4	30	45	6 1/4	8 3/8	3/4	2 3/8	3 7/16	4	5/8 x 2 3/4	4 3/4	3/4	110	140	4.2
50	60.3	20.7	5.91	M10 x 70	40	60	159	213	19	60	87	4	M16 x 70	120.7	19.1	149	190	1.9
2 1/2	2.875	300	1,948	3/8 x 2 3/4	30	45	7	9 1/2	3/4	2 7/8	4	4	5/8 x 2 3/4	5 1/2	3/4	110	140	4.6
65	73.0	20.7	8.66	M10 x 70	40	60	178	241	19	73	102	-	M16 x 70	139.7	19.1	149	190	2.1
3 O.D.	2.996	300	2,115	-	30	45	7 1/4	9 3/4	3/4	3	4 1/8	-	-	-	-	110	140	4.8
76.1	76.1	20.7	9.41	M10 x 70	40	60	184	248	19	76	105	4	M16 x 70	-	-	149	190	2.2
3	3.500	300	2,886	3/8 x 2 3/4	30	45	7 7/8	10 1/2	3/4	3 1/2	4 9/16	4	5/8 x 2 3/4	6	3/4	110	140	6.0
88.9	88.9	20.7	12.84	M10 x 70	40	60	200	267	19	89	116	8	M16 x 70	152.4	19.1	149	190	2.7
4	4.500	300	4,771	3/8 x 2 3/4	30	45	9	11 1/2	3/4	4 1/2	5 9/16	8	5/8 x 2 3/4	7 1/2	3/4	110	140	6.3
100	114.3	20.7	21.22	M10 x 70	40	60	229	292	19	114	141	8	M16 x 70	190.5	19.1	149	190	2.9
5 1/2 O.D.	5.500	300	7,127	-	30	45	9 7/8	12 7/8	7/8	5 9/16	6 3/4	-	-	-	-	220	250	15.6
139.7	139.7	20.7	31.70	M10 x 70	40	60	251	327	22	141	171	8	M16 x 75	-	-	298	339	7.1
5	5.563	300	7,292	3/8 x 2 3/4	30	45	10	12 1/2	7/8	5 9/16	6 3/4	8	3/4 x 2 7/8	8 1/2	7/8	220	250	8.8
125	141.3	20.7	32.44	M10 x 70	40	60	254	318	22	141	171	-	-	215.9	22.2	298	339	4.0
6 1/2 O.D.	6.500	300	9,955	-	30	45	11 1/4	14	7/8	6 3/8	7 13/16	-	-	-	-	220	250	9.7
165.1	165.1	20.7	44.28	M10 x 70	40	60	286	356	22	168	198	8	M20 x 80	-	-	298	339	4.4
6	6.625	300	10,341	3/8 x 2 3/4	30	45	11	14	7/8	6 3/8	7 13/16	8	3/4 x 3 3/8	9 1/2	7/8	220	250	9.6
150	168.3	20.7	46.00	M10 x 70	40	60	279	356	22	168	198	8	M20 x 80	241.1	22.2	298	339	4.4
8	8.625	300	17,528	3/8 x 2 3/4	30	45	13 1/2	16 1/2	1	8 3/8	10	8	3/4 x 3 1/4	11 3/4	7/8	220	250	15.6
200	219.1	20.7	77.97	M10 x 70	40	60	343	419	25	219	254	8 (12)	M20 x 80	298.5	22.2	298	339	7.1
10	10.750	300	27,229	3/8 x 2 3/4	30	45	16	19	1	10 3/4	12 7/8	12	7/8 x 3 1/2	14 1/4	1	320	400	18.2
250	273.1	20.7	121.12	M10 x 70	40	60	406	483	25	273	308	12	M20 x 90	362.0	25.4	439	542	8.3
12	12.750	300	38,303	3/8 x 2 3/4	30	45	19	21 3/4	1 1/4	12 3/4	14 1/8	12	7/8 x 3 3/4	17	1	320	400	29.9
300	323.9	20.7	170.38	M10 x 70	40	60	483	552	32	324	359	12	-	431.8	25.4	439	542	13.6
12 (PN)	12.750	300	38,303	-	30	45	18 1/8	21 1/4	1	12 3/4	14 1/8	12	-	-	-	320	400	20.9
300	323.9	20.7	170.38	M10 x 70	40	60	460	540	25	324	359	12	M20 x 90 +	-	-	439	542	9.5
14	14.000	300	46,181	5/8 x 4 1/4	100	130	21	24	1 1/2	14	16	12	1 x 4 1/4	18 3/4	1 1/8	360	520	52.5
350	355.6	20.7	205.43	-	136	176	533	610	38	356	406	-	-	476.3	28.6	488	705	23.8
16	16.000	300	60,319	5/8 x 4 1/4	100	130	23 1/2	26 1/2	1 1/2	16	18	16	1 x 4 1/4	21 1/4	1 1/8	360	520	67.0
400	406.4	20.7	268.31	-	136	176	597	673	38	406	457	-	-	539.8	28.6	488	705	30.4
18	18.000	300	76,341	3/4 x 5	130	180	25	29	1 5/8	18	20	16	1 1/8 x 4 3/4	22 3/4	1 1/4	450	725	82.5
450	457.2	20.7	339.58	-	176	244	635	737	41	457	508	-	-	577.9	31.8	610	983	37.4
20	20.000	300	94,248	3/4 x 5	130	180	27 1/2	31 1/2	1 3/4	20	22	20	1 1/8 x 4 3/4	25	1 1/4	450	725	106.5
500	508.0	20.7	419.23	-	176	244	699	800	44	508	559	-	-	635.0	31.8	610	983	48.3
24	24.000	250	113,097	7/8 x 5 1/2	180	220	32	36 1/2	1 7/8	24	26	20	1 1/4 x 5 1/2	29 1/2	1 3/8	620	1,000	138.5
600	609.6	17.2	503.08	-	244	298	813	927	48	610	660	-	-	749.3	34.92	841	1,356	62.8

**NOTES:**  
 The Gruvlok Flange bolt hole pattern conforms to ANSI Class 150 and Class 125 flanges.  
 To avoid interference issues, flanges cannot be assembled directly to Series 7700 butterfly valve. Flange can be assembled to one side of series 7500 and 7600 valve only.  
 Mating flange bolts must be at least Intermediate Strength Bolting per ASME B16.5. Bolts with material properties equal or greater than SAE J429 Grade 5 are acceptable.  
 Refer to Gruvlok Products Catalog or Anvil's web site for more information on installing this flange.

For additional details see "Coupling Data Chart Notes" on page 17.  
 + PN 16 uses M24 x 90 (PN) Dimensions for bolt circle PN 10 & 16 Flange.  
 \* 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 on page 176-178.