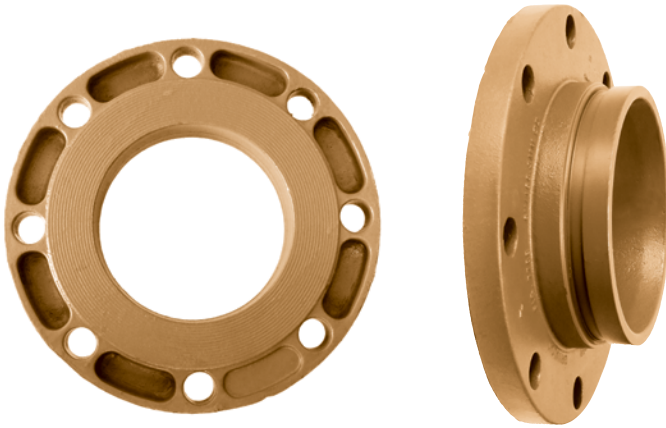
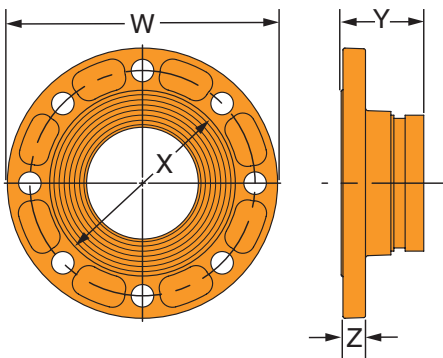


FIG. 7788

Gruvlok® Flange Adapter



The Gruvlok Fig. 7788 Flange Adapter allows for direct connection of Class 125 or Class 150 flanged components to a grooved piping system. The Gruvlok Flange Adapter provides an alternative method of connecting to flanged components than the traditional Fig. 7012 Gruvlok Flange. The Gruvlok Flange Adapter provides a raised serrated face flange connection with a shorter overall length than Anvil's Fig. 7084 Flange x Groove Nipple.



MATERIAL SPECIFICATIONS

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 for more information.

FIGURE 7788 GRUVLOK FLANGE ADAPTER

Nominal Size	O.D.	Max. Working Pressure	Dimensions				Mating Flange Bolts						Approx. Wt. Ea.
			W	X	Y	Z	Qty.	Size	Bolt Circle Diameter	Bolt Hole Diameter	Specified Torque		
											Min.	Max.	
2	2.375	300	6	3 ⁵ / ₁₆	2 ¹ / ₂	1 ¹ / ₁₆	4	5/8 x 2 ³ / ₄	4 ³ / ₄	3/4	110	140	4.39
50	60.3	20.7	152.4	91.9	63.5	17.5	4	M16 x 70	120.7	19.1	149	190	2.0
2 ¹ / ₂	2.875	300	7	4 ¹ / ₂	2 ¹ / ₂	3/4	4	5/8 x 2 ³ / ₄	5 ¹ / ₂	3/4	110	140	6.17
65	73.0	20.7	177.8	104.6	63.5	19.1	4	M16 x 70	139.7	19.1	149	190	2.8
3	3.500	300	7 ¹ / ₂	5	2 ¹ / ₂	3/4	4	5/8 x 2 ³ / ₄	6	3/4	110	140	7.19
80	88.9	20.7	190.5	127.0	63.5	19.1	4	M16 x 70	152.4	19.1	149	190	3.3
4	4.500	300	9	6 ³ / ₁₆	2 ³ / ₄	3/4	8	5/8 x 2 ³ / ₄	7 ¹ / ₂	3/4	110	140	10.68
100	114.3	20.7	228.6	157.2	69.9	19.1	8	M16 x 70	190.5	19.1	149	190	4.9
5	5.563	300	10	7 ⁵ / ₁₆	2 ¹ / ₂	7/8	8	3/4 x 2 ⁷ / ₈	8 ¹ / ₂	7/8	220	250	13.99
125	141.3	20.7	254.0	185.7	69.9	22.1	8	–	215.9	22.2	298	339	6.4
6	6.625	300	11	8 ¹ / ₂	2 ³ / ₄	7/8	8	3/4 x 3 ¹ / ₈	9 ¹ / ₂	7/8	220	250	16.47
150	168.3	20.7	279.4	215.9	69.9	22.1	8	M20 x 80	241.1	22.2	298	339	7.5
8*	8.625	300	13 ¹ / ₂	10 ⁹ / ₁₆	3	6 ¹ / ₆₄	8	3/4 x 3 ¹ / ₄	11 ³ / ₄	7/8	220	250	24.79
200	219.1	20.7	342.9	269.7	76.2	24.1	8	M20 x 80	298.5	22.2	298	339	11.3
10*	10.750	300	16	12 ¹ / ₄	3 ³ / ₈	1	12	7/8 x 3 ¹ / ₂	14 ¹ / ₄	1	320	400	36.75
250	273.1	20.7	406.4	323.9	85.7	25.4	12	M20 x 90	362.0	25.4	439	542	16.7
12*	12.750	300	19	15	3 ¹ / ₂	1 ¹³ / ₆₄	12	7/8 x 3 ³ / ₄	17	1	320	400	56.31
300	323.9	20.7	482.6	381.0	88.9	30.5	12	–	431.8	25.4	439	542	25.6

NOTE: 8", 10" and 12" Flange Adapters have a machined raise face. 2" through 6" Flange Adapters have a cast raised face.

FIG. 7012

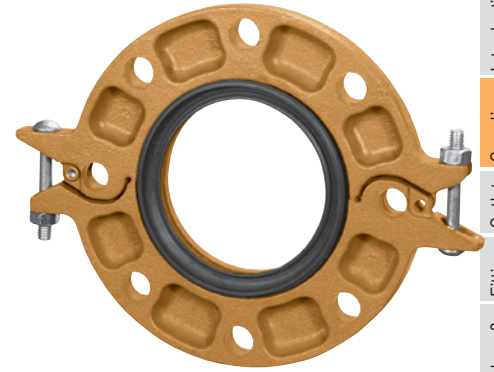
Gruvlok Flanges

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.

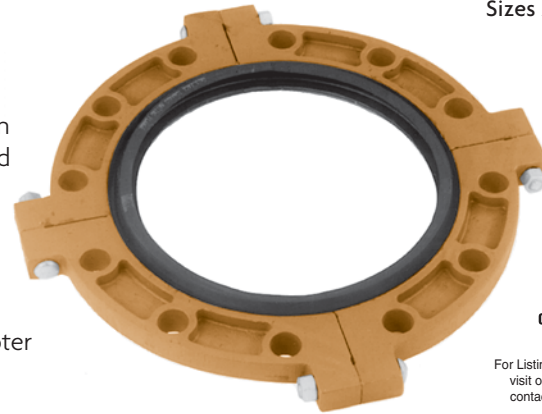
The 14" thru 24" sizes of the Gruvlok Fig. 7012 Flange are cast in four segments. A sleek profile gasket design allows quick and easy assembly of the Gruvlok Flange onto the pipe.

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 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)

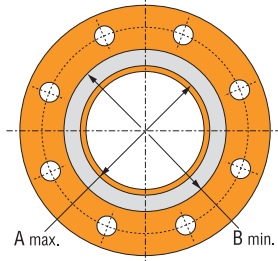
-20°F to 180°F (Service Temperature Range)(-29°C to 82°C)
Recommended for petroleum applications. air with oil vapors and vegetable and mineral oils.
NOT FOR USE IN HOT WATER.

LUBRICATION:

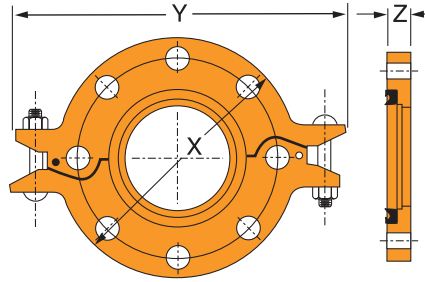
Standard Gruvlok
Gruvlok Xtreme™ (Do Not use with Grade "L")

FIG. 7012

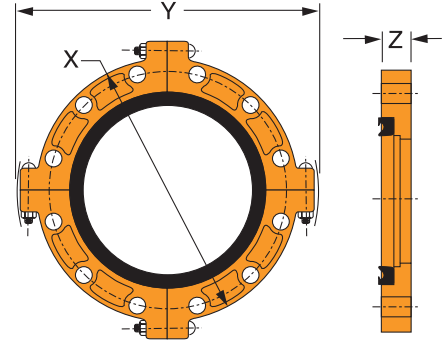
Gruvlok Flanges



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.
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 1/8	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 1/8	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 1/8	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
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

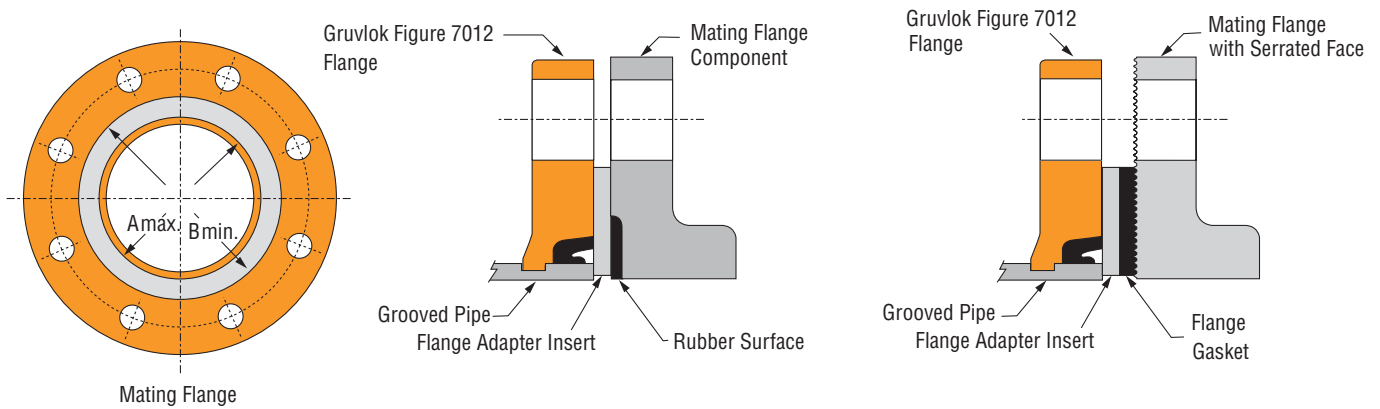
NOTES:

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.

FIG. 7012

Gruvlok Flanges



- A. The sealing surfaces A Max. to B Min. of the mating flange must be free from gouges, undulations and deformities of any type to ensure proper sealing of the gasket.
- B. Gruvlok Flanges are to be assembled on butterfly valves so as not to interfere with actuator or handle operation.
- C. Do not use Gruvlok Flanges within 90 degrees of one another on standard fittings because the outside dimensions may cause interference.
- D. Gruvlok Flanges should not be used as anchor points for tierods across non-restrained joints.
- E. Fig. 7012 Gruvlok Flange sealing gaskets require a hard flat surface for adequate sealing. The use of a Gruvlok Flange Adapter Insert is required for applications against rubber faced valves or other equipment. The Gruvlok Flange Adapter Insert is installed between the Gruvlok Flange sealing gasket and the mating flange or surface to provide a good sealing surface area.
- F. Gruvlok Flanges are not recommended for use against formed rubber flanges.
- G. Contact an Anvil Representative for Di-Electric Flange connections.

Applications which require a Gruvlok Flange Adapter Insert (page 47):

1. When mating to a wafer valve (lug valve), if the valve is rubber faced in the area designated by the sealing surface dimensions (A Max. to B Min.), place the Gruvlok Flange Adapter Insert between the valve and the Gruvlok flange.
2. When mating to a rubber-faced metal flange, the Gruvlok Flange Adapter Insert is placed between the Gruvlok Flange and the rubber-faced flange.
3. When mating to a serrated flange surface, a standard full-faced flange gasket is installed against the serrated flange face and the Gruvlok Flange Adapter Insert is placed between the Gruvlok Flange and the standard Flange gasket.
4. When mating to valves or other component equipment where the flange face has an insert, use procedure described in note 3.

FIG. 7013

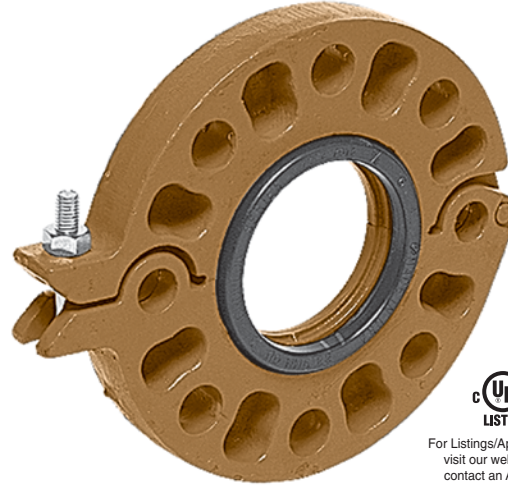
Gruvlok Flanges (300# Flange)

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.**



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

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)

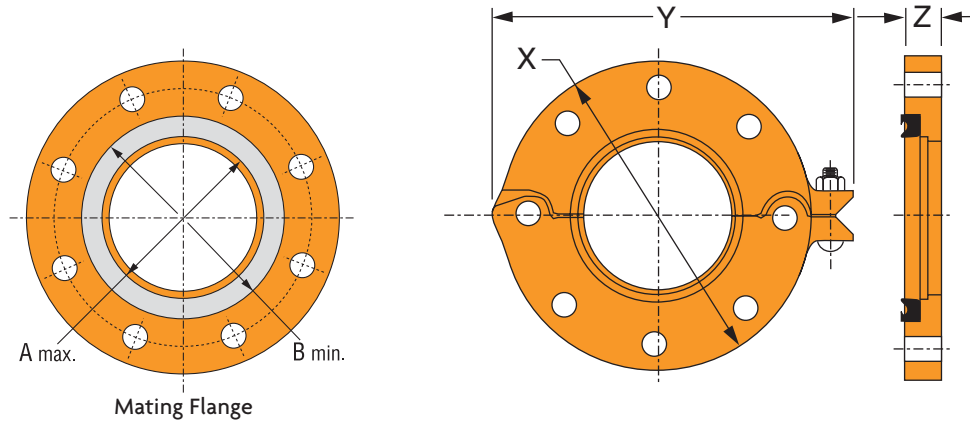
-20°F to 180°F (Service Temperature Range)(-29°C to 82°C)
Recommended for petroleum applications. air with oil vapors and vegetable and mineral oils.
NOT FOR USE IN HOT WATER OR HOT AIR.

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 Size	O.D.	Max. Wk. Pressure ▼	Max. End Load ▼	Latch* Bolt Size	Specified Torque §		Dimensions			Sealing Surface		Mating Flange Bolts				Approx. Wt. Ea.
					Min.	Max.	X	Y	Z	A Max.	B Min.	Qty. ANSI	Size (ANSI) in.	Bolt Circle Dia.	Bolt Hole Dia.	
In./DN(mm)	In./mm	PSI/bar	Lbs./kN	In.	Ft.-Lbs/N-m		In./mm	In./mm	In./mm	In./mm	In./mm		(ISO) mm	In./mm	In./mm	Lbs./Kg
2 50	2.375 60.3	750 51.7	3,323 14.78	3/8 x 2 1/2 -	30 -	45 -	6 1/2 165	8 203	1 25	2 5/8 60	3 7/16 87	8 -	5/8 x 3 -	5 127.0	3/4 19.1	5.0 2.3
2 1/2 65	2.875 73.0	750 51.7	4,869 21.66	3/8 x 2 1/2 -	30 -	45 -	7 1/2 191	9 1/8 232	1 25	2 7/8 73	4 102	8 -	3/4 x 3 1/4 -	5 7/8 149.2	7/8 22.2	6.9 3.1
3 80	3.500 88.9	750 51.7	7,216 32.10	3/8 x 2 1/2 -	30 -	45 -	8 1/4 210	9 7/8 251	1 1/8 29	3 1/2 89	4 9/16 116	8 -	3/4 x 3 1/2 -	6 5/8 168.3	7/8 22.2	9.4 4.3
4 100	4.500 114.3	750 51.7	11,928 53.06	3/8 x 2 1/2 -	30 -	45 -	10 254	11 3/8 289	1 1/4 32	4 1/2 114	5 5/8 143	8 -	3/4 x 3 3/4 -	7 1/8 200.0	7/8 22.2	14.4 6.5
5 125	5.563 141.3	750 51.7	18,229 81.09	3/8 x 2 1/2 -	30 -	45 -	11 279	12 5/8 321	1 3/8 35	5 5/8 141	6 3/4 171	8 -	3/4 x 4 1/2 -	9 1/4 235.0	7/8 22.2	18.3 8.3
6 150	6.625 168.3	750 51.7	25,854 115.00	3/8 x 2 1/2 -	30 -	45 -	12 1/2 318	14 1/8 359	1 1/2 38	6 5/8 168	7 13/16 198	12 -	3/4 x 4 1/2 -	10 5/8 269.9	7/8 22.2	24.9 11.3
8 200	8.625 219.1	750 51.7	43,820 194.92	1/2 x 3 1/2 -	80 -	100 -	15 381	16 7/8 429	1 5/8 41	8 5/8 219	10 254	12 -	7/8 x 4 3/4 -	13 330.2	1 25.4	35.4 16.1
10 250	10.750 273.1	750 51.7	68,072 302.80	1/2 x 3 1/2 -	80 -	100 -	17 1/2 445	19 3/8 492	1 7/8 48	10 3/4 273	12 1/2 308	16 -	1 x 5 -	15 1/4 387.4	1 1/8 28.6	54.0 24.5
12 300	12.750 323.9	750 51.7	95,757 425.95	1/2 x 3 1/2 -	80 -	100 -	20 1/2 521	22 1/2 572	2 51	12 3/4 324	14 3/16 360	16 -	1 1/8 x 5 3/4 -	17 3/4 450.9	1 1/4 31.8	74.8 33.9

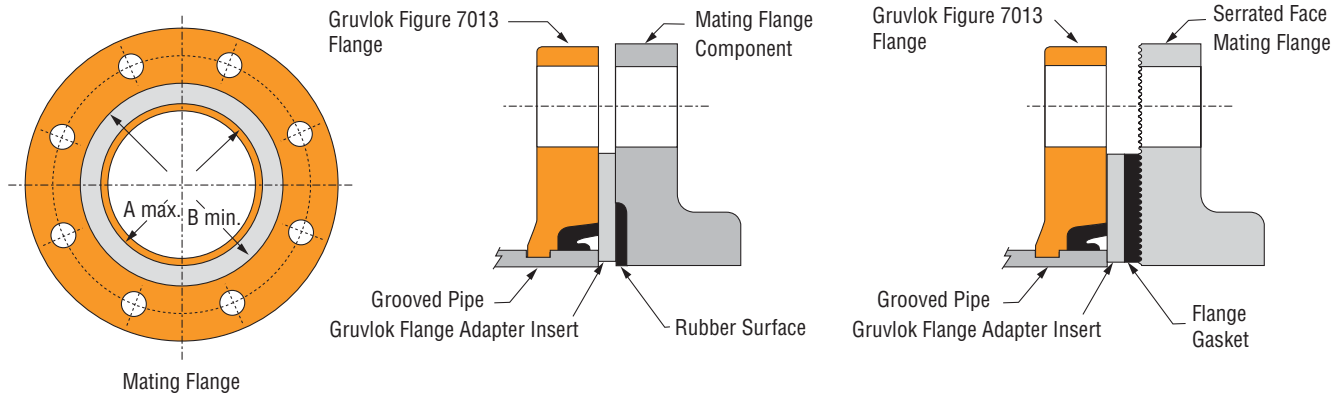
NOTES:

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.

FIG. 7013

Gruvlok Flanges (300# Flange)



- A. The sealing surfaces A Max. to B Min. of the mating flange must be free from gouges, undulations and deformities of any type to ensure proper sealing of the gasket.
- B. Gruvlok Flanges are to be assembled on butterfly valves so as not to interfere with actuator or handle operation.
- C. Do not use Gruvlok Flanges within 90 degrees of one another on standard fittings because the outside dimensions may cause interference.
- D. Gruvlok Flanges should not be used as anchor points for tierods across non-restrained joints.
- E. Fig. 7013 Gruvlok Flange sealing gaskets require a hard flat surface for adequate sealing. The use of a Gruvlok Flange Adapter Insert is required for applications against rubber faced valves or other equipment. The Gruvlok Flange Adapter Insert is installed between the Gruvlok Flange sealing gasket and the mating flange or surface to provide a good sealing surface area.
- F. Gruvlok Flanges are not recommended for use against formed rubber flanges.
- G. Contact an Anvil Representative for Di-Electric Flange connections.

Applications which require a Gruvlok Flange Adapter Insert (page 47):

1. When mating to a wafer valve (lug valve), if the valve is rubber faced in the area designated by the sealing surface dimensions (A Max. to B Min.), place the Gruvlok Flange Adapter Insert between the valve and the Gruvlok flange.
2. When mating to a rubber-faced metal flange, the Gruvlok Flange Adapter Insert is placed between the Gruvlok Flange and the rubber-faced flange.
3. When mating to a serrated flange surface, a standard fullfaced flange gasket is installed against the serrated flange face and the Gruvlok Flange Adapter Insert is placed between the Gruvlok Flange and the standard Flange gasket.
4. When mating to valves or other component equipment where the flange face has an insert, use procedure described in note 3.

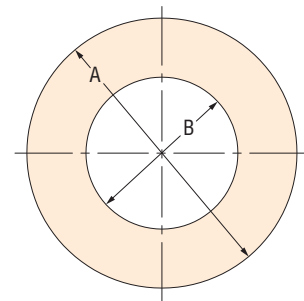
FLANGED SEAL RINGS

Flange Adapter Inserts for use with Fig. 7012/7013 Flanges

The Gruvlok flange adapter insert is designed for use with the Gruvlok 7012 & 7013. The flange adapter is required when mating the Gruvlok 7012 & 7013 to a rubber line valve or serrated face flange surface. The flange adapter ring is used in combination with a rubber lined valve or flange gasket to provide a smooth sealing surface for the 7012 & 7013 flange gasket. The seal rings are available in galvanized carbon steel.

MATERIAL SPECIFICATIONS

Carbon steel conforming to ASTM A 569



FLANGED SEAL RINGS

Nominal Size	O.D.	Fig. 7012 ANSI		Fig. 7012 PN 10/16			Fig. 7013 ANSI	
		A	B	PN	A	B	A	B
ln./DN(mm)	ln./mm	ln./mm	ln./mm	-	ln./mm	ln./mm	ln./mm	ln./mm
2 50	2.375 60.3	4 102	2¼ 57	10/16	4 ¹ / ₆₄ 106	2¼ 57	4½ 105	100 150
2½ 65	2.875 73.0	4¾ 121	2¾ 70	-	-	-	5 127	100 150
3 O.D. 76.1	2.996 76.1	-	-	10/16	4 ³ / ₃₂ 126	2½ 73	-	-
3 88.9	3.500 88.9	5¼ 133	3¾ 86	10/16	5 ³ / ₆₄ 141	3¾ 89	5¾ 146	100 150
4 100	4.500 114.3	6¾ 171	4¾ 111	10/16	6 ¹ / ₃₂ 161	4¾ 111	7 178	130 175
5½ O.D. 139.7	5.500 139.7	-	-	10/16	7 ³ / ₆₄ 191	5½ 137	-	-
5 125	5.563 141.3	7⅞ 194	5 ¹ / ₁₆ 138	-	-	-	8⅞ 213	130 175
6½ O.D. 165.1	6.500 165.1	-	-	10/16	8 ³ / ₆₄ 216	6½ 162	-	-
6 150	6.625 168.3	8⅞ 219	6½ 165	10/16	8 ³ / ₆₄ 216	6½ 162	9¼ 248	6½ 165
8 200	8.625 219.1	10⅞ 276	8½ 216	10/16	10 ⁰ / ₃₂ 272	8½ 216	12 305	8½ 216
10 250	10.750 273.1	13¼ 337	10⅞ 270	10/16	12 ¹ / ₆ 327	10⅞ 270	14⅞ 359	8½ 216
12 300	12.750 323.9	16 406	12⅝ 321	-	-	-	16½ 419	8½ 216
12 (PN10) 300	12.750 323.9	-	-	10	14 ¹ / ₃₂ 377	12⅝ 321	-	-
12 (PN16) 300	12.750 323.9	-	-	16	15 ⁵ / ₆₄ 383	12⅝ 321	-	-
14 350	14.000 355.6	17⅞ 448	13¾ 349	-	-	-	-	-
16 400	16.000 406.4	20⅞ 511	15¾ 400	-	-	-	-	-
18 450	18.000 457.2	21½ 546	17¾ 451	-	-	-	-	-
20 500	20.000 508.0	23¾ 603	19¾ 502	-	-	-	-	-
24 600	24.000 609.6	28⅞ 714	23¾ 603	-	-	-	-	-