HDPE COUPLINGS

GRUVLOK

FIG. 7312 HDPE Flange Adapter

The Gruvlok® Figure 7312 forms a cost-effective, easy-toassemble mechanical joint between HDPE (high density polyethylene) pipe and fittings and ANSI Class 125 or Class 150 piping components without the need for costly fusion equipment. The flanged couplings are designed for wall thickness' SDR 32.5 to 7.3 HDPE pipe and fittings conforming to ASTM D 2447, D 3000, D 3035, or F 174. Each coupling uses two bolts to drive the sharply machined housing teeth into the outside of the pipe. The teeth are arranged in two banks, each bank consisting of at least three rows of spiral teeth that effectively grip the pipe, providing a secure mechanical joint with pressure capabilities exceeding that of the HDPE pipe itself The banks of teeth are positioned away from the gasket, enhancing the sealing ability of the gaskets throughout the entire operating temperature range.



MATERIAL SPECIFICATIONS

HOUSING:

Ductile Iron conforming to ASTM A 536, Grade 65-45-12

COATING:

Rust inhibiting paint – Color: Orange Other Colors Available (IE: RAL3000 and RAL9000) For other Coating requirements contact an Anvil Representative.

ANSI BOLTS & HEAVY HEX NUTS:

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

WARNING:

- 1. Gruvlok products for HDPE pipe must be installed using Gruvlok Xtreme™ Temperature Lubricant.
- 2. The gasket temperature rating may exceed the manufacturer temperature rating for the HDPE pipe. Consult the HDPE pipe manufacturer for the temperature and pressure ratings.

GASKETS: Properties in accordance with ASTM D 2000

Grade E EPDM (Green color code)

Service Temperature Range: -30°F to 230°F (-34°C to 110°C). Recommended for water service, dilute acids, alkaline solutions, oil free air and many chemical services. NOT FOR USE IN PETROLEUM APPLICATIONS.

Grade T Nitrile (Orange color code)

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

For specific chemical applications, reference the Gruvlok Gasket Recommendations section of the Gruvlok catalog.



FIG. 7312 HDPE Flange Adapter

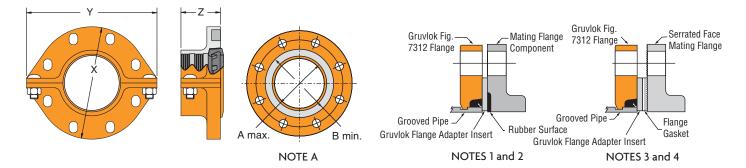


FIGURE 7312 HDPE FLANGE ADAPTER Flange Dimensions Sealing Surface Latch Bolt Mating Flange Bolts Nominal Approx. 0.D. Size Х Ζ A Max. B Min. Qty. Size Qty. Size Wt. Ea. In /mm In./mm In /DN(mm) In /mm In /mm In /mm Lbs./Ka In /mm In /mm In /mm 4.500 9 103% 31/8 **4**¹/₂ 5³/4 2 5% x 15% 8 5∕8 x 3 15 4 100 114.3 229 114 146 6.8 6.625 111/4 12% 37/8 65/8 73/4 2 5% x 23% 8 3/4 x 31/2 22 6 10.0 150 168.3 314 98 168 197 8.625 13½ 141/8 3½ 85/8 10¼ 2 3/4 x 23/4 8 ³/₄ x 3¹/₂ 26 8 200 219.1 343 378 89 219 260 12.7

- 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 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. 7312 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.

HDFE FIFE DIMENSIONAL SPECIFICATIONS										
Nominal Size	0.D. Actual	Tolerance +/-	Out of Roundness Tolerance +/-	Pipe Wall Thickness						
				SDR 7.3	SDR 9	SDR 11	SDR 15.5	SDR 17	SDR 21	SDR 32.5
In./DN(mm)	In./mm	In./mm	In./mm	In./mm	In./mm	In./mm	In./mm	In./mm	In./mm	In./mm
4	4.500	0.020	0.040	0.616	0.500	0.409	0.290	0.265	0.214	0.138
100	114.3	0.51	1.02	15.6	12.7	10.4	7.4	6.7	5.4	3.5
6	6.625	0.030	0.050	0.908	0.736	0.602	0.427	0.327	0.265	0.204
150	168.3	0.76	1.27	23.1	18.7	15.3	10.8	8.3	6.7	5.2
8	8.625	0.039	0.075	1.182	0.958	0.784	0.556	0.507	0.340	0.265
200	219.1	0.99	1.91	30.0	24.3	19.9	14.1	12.9	8.6	6.7

IDDE DIDE DIMENSIONIAL SPECIEICATION

1. Per ASTM F 714

2. Per ASTM D 2447 and D 3035

APPLICATIONS WHICH REQUIRE A GRUVLOK® FLANGE ADAPTER INSERT:

See Installation & Assembly directions on page 188

- 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 rubberfaced 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.

