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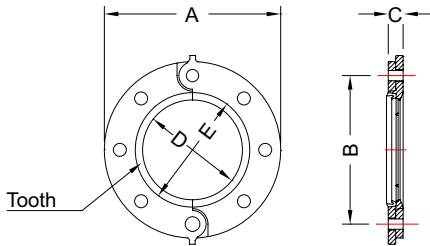
Flange Adapter | ANSI Class 300



Always fasten the bolts to the required torque.

Always use factory-supplied bolts and nuts to assemble flange segments. The use of other bolts may cause joint failure. If the factory supplied bolts cannot be used for the component that is being connected consult Shurjoint technical services for further guidance

| | |
|------------------|--|
| Job Name: | |
| Job Location: | |
| Engineer: | |
| Contractor: | |
| Tag: | |
| PO#: | |
| Rep: | |
| Wholesale Dist.: | |



The Model 7043 flange adapter allows for a direct connection with ANSI Class 300 flanges. The specially designed gasket enables the transition from a grooved system to a flanged system or component with this single flange. 2" through 8" Model 7043 flange adapters are supplied hinged as a single assembly, while larger sizes are supplied with separate segments. The Model 7043 flange adapters are comprised of two identical ductile iron segments complete with an EPDM gasket and two pairs of bolts and nuts. The flange segments are painted black. The Model 7043 flange adapter has been designed with small projections on the outside face of the flange for mating with 1/16" (1.6 mm) raised face flanges. For mating with flat-face flanges these projections must be removed, this can be accomplished with a grinder or other tool.

For Fire Protection pressure rating, listing, and approval information, refer to Data Sheet B-42 or visit www.shurjoint.com for details or contact Shurjoint.

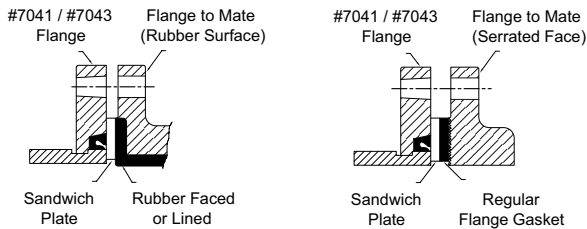
DIMENSIONS

| NOMINAL SIZE | PIPE O.D. | MAX. WORKING PRESSURE (CWP)* | MAX. END LOAD (CWP) | DIMENSIONS | | | SEALING SURFACE | | BOLT | | WEIGHT |
|--------------|-----------|------------------------------|---------------------|------------|-------|------|-----------------|-------|------|-------|--------|
| | | | | A | B | C | D | E | NO. | SIZE | |
| in | in | PSI | lb | in | in | in | in | in | | | lb |
| mm | mm | Bar | kN | mm | mm | mm | mm | mm | | | kg |
| 2 | 2.375 | 750 | 3320 | 6.50 | 5.00 | 0.94 | 2.38 | 3.07 | 8 | 5/8 | 5.3 |
| 50 | 60.3 | 52 | 14.84 | 165 | 127 | 24 | 60 | 78 | | | 2.4 |
| 2-1/2 | 2.875 | 750 | 4860 | 7.50 | 5.88 | 1.06 | 2.88 | 3.54 | 8 | 3/4 | 7.9 |
| 65 | 73.0 | 52 | 21.75 | 191 | 149 | 27 | 73 | 90 | | | 3.6 |
| 3 | 3.500 | 750 | 7210 | 8.25 | 6.63 | 1.19 | 3.50 | 4.17 | 8 | 3/4 | 10.0 |
| 80 | 88.9 | 52 | 32.26 | 210 | 168 | 30 | 89 | 106 | | | 4.6 |
| 4 | 4.500 | 750 | 11920 | 10.00 | 7.95 | 1.31 | 4.50 | 5.20 | 8 | 3/4 | 17.3 |
| 100 | 114.3 | 52 | 53.33 | 254 | 202 | 33 | 114 | 132 | | | 7.8 |
| 5 | 5.563 | 750 | 18220 | 11.00 | 9.25 | 1.44 | 5.56 | 5.55 | 8 | 3/4 | 21.3 |
| 125 | 141.3 | 52 | 81.50 | 279 | 235 | 37 | 141 | 141 | | | 9.7 |
| 6 | 6.625 | 750 | 25840 | 12.50 | 10.63 | 1.50 | 6.63 | 7.32 | 12 | 3/4 | 26.9 |
| 150 | 168.3 | 52 | 115.62 | 318 | 270 | 38 | 168 | 186 | | | 12.2 |
| 8 | 8.625 | 750 | 43790 | 15.00 | 13.00 | 1.61 | 8.63 | 9.29 | 12 | 7/8 | 36.2 |
| 200 | 219.1 | 52 | 195.96 | 381 | 330 | 41 | 219 | 236 | | | 16.4 |
| 10 | 10.750 | 750 | 68030 | 17.68 | 15.25 | 1.89 | 10.75 | 11.61 | 16 | 1 | 56.9 |
| 250 | 273.0 | 52 | 304.23 | 449 | 387 | 48 | 273 | 295 | | | 25.8 |
| 12 | 12.750 | 750 | 95700 | 20.50 | 17.75 | 1.93 | 12.75 | 13.62 | 16 | 1-1/8 | 77.7 |
| 300 | 323.9 | 52 | 428.25 | 521 | 451 | 49 | 324 | 346 | | | 35.2 |

* Working Pressure is based on roll grooved standard wall carbon steel pipe.

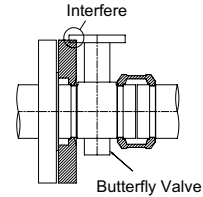
IMPORTANT NOTES

- The Model 7043 flange adapter requires a hard flat face for effective sealing. Sealing surface D is the maximum inside face requirement, sealing surface E is the minimum outside face requirement. If the mating flange face is outside these dimensions, a flange gasket and model 49 sandwich plate (Model #49, see cut sheet #V-03) must be used. With the serrated faces of some valves or rubber-faced wafer valves, the mating surface might also be inadequate and a sandwich plate must be used.

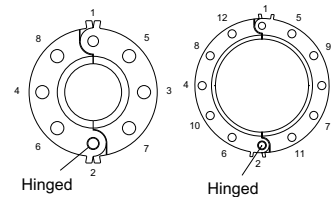


- Model 7043 flange adapter has small triangular teeth inside the key shoulder to prevent the pipe from rotating. The teeth should be ground off when mating to a rubber-lined flange.
- The Model 7043 flange adapter shall not be used as anchor points for tie-rods across non-restrained joints.

- When assembling a Model 7043 flange adapter against a butterfly valve or ball valve, make sure that the outside diameter of the flange adapters do not interfere with the valve actuator or the mounting pad of the actuator.



- Bolt tightening sequence: Like a regular flange joint, it is important to make flange faces contact parallel. Tighten nuts alternately in the sequence of diagonally opposite pairs as shown below until the flange faces meet and make a metal-to-metal contact. When using two model 7043 flange adapters to mate pipe, or wafer / lug valves, the hinge point locations must be staggered 90° to each other, a model 49 sandwich plate must be used where appropriate, and flange adapter segment housings must remain parallel during nut tightening sequence.



MATERIAL SPECIFICATIONS

HOUSING:

- Ductile Iron to ASTM A536, Gr. 65-45-12 and or ASTM A395, Gr. 65-45-15, min. tensile strength 65,000 psi (448 MPa).

SURFACE FINISH:

- Standard painted finishes in black painted.
- Hot dip zinc galvanized (option).
- Epoxy coatings in RAL3000 red or other colors (option).

RUBBER GASKET:

Grade "E" EPDM (Color code: Green stripe)

- Good for cold & hot water up to +230°F (+110°C). Also good for services for water with acid, water with chlorine, deionized water, seawater and waste water, dilute acids, oil-free air and many chemicals.
- Not recommended for petroleum oils, minerals oils, solvents and aromatic hydrocarbons.**
- Maximum Temperature Range: -30°F (-34°C) to +230°F (+110°C).
*EPDM gaskets for water services are not recommended for steam services.

(Option) Grade "T" Nitrile (Color code: Orange stripe)

- Recommended for petroleum products, air with oil vapors, vegetable and mineral oils within the specified temperature range. Also good for water services under +150°F (+66°C)
- Hot dip zinc galvanized (Optional). Temperature range: -20°F to +180°F (-29°C to +82°C)
- Do not use for HOT WATER above +150°F (+66°C) or HOT DRY AIR above +140°F (+60°C).**

OTHER OPTIONS

Grade "O" - Fluoroelastomer

Grade "L" - Silicone

- For dry systems we recommend the use of the Shurjoint GapSeal gasket.
- For additional details contact Shurjoint.

BOLTS & NUTS:

- Plated hex bolts conforming to ASTM A307 with hex nuts. (2 nuts and bolts are supplied). Bolts and nuts for the flange connection to be supplied by installer.

PERFORMANCE DATA

The following tables show the maximum working pressures (CWP) of Shurjoint Model 7043 Flange Adapter ANSI Class 300 used on both carbon steel and stainless steel pipes. Shurjoint ductile iron couplings can be used in conjunction with stainless steel pipe in non-corrosive environment as the flow media does not come in direct contact with the coupling housings but rather only the gasket.

CARBON STEEL PIPE

| NOM. SIZE | CUT-GROOVED | | ROLL-GROOVED | |
|-----------|-------------|-----|--------------|---------|
| | XS | STD | STD | SCH. 10 |
| in | psi | psi | psi | psi |
| mm | Bar | Bar | Bar | Bar |
| 2 | 750 | 750 | 750 | 500 |
| 50 | 52 | 52 | 52 | 35 |
| 2-1/2 | 750 | 750 | 750 | 500 |
| 65 | 52 | 52 | 52 | 35 |
| 3 | 750 | 750 | 750 | 500 |
| 80 | 52 | 52 | 52 | 35 |
| 4 | 750 | 750 | 750 | 500 |
| 100 | 52 | 52 | 52 | 35 |
| 5 | 750 | 750 | 750 | 450 |
| 125 | 52 | 52 | 52 | 31 |
| 6 | 750 | 750 | 750 | 450 |
| 150 | 52 | 52 | 52 | 31 |
| 8 | 750 | 750 | 750 | 300 |
| 200 | 52 | 52 | 52 | 20 |
| 10 | 750 | 750 | 750 | 300 |
| 250 | 52 | 52 | 52 | 20 |
| 12 | 750 | 750 | 750 | 250 |
| 300 | 52 | 52 | 52 | 17 |

Note: Hydrostatic shell test: 1125 psi (77 Bar) per ANSI B16.5

STAINLESS STEEL PIPE

| NOM. SIZE | CUT-GROOVED | | ROLL-GROOVED | |
|-----------|-------------|----------|--------------|----------|
| | SCH. 80S | SCH. 40S | SCH. 40S | SCH. 10S |
| in | psi | psi | psi | psi |
| mm | Bar | Bar | Bar | Bar |
| 2 | 400 | 400 | 400 | 275 |
| 50 | 28 | 28 | 28 | 19 |
| 2-1/2 | 400 | 400 | 400 | 275 |
| 65 | 28 | 28 | 28 | 19 |
| 3 | 400 | 400 | 400 | 275 |
| 80 | 28 | 28 | 28 | 19 |
| 4 | 300 | 300 | 300 | 275 |
| 100 | 20 | 20 | 20 | 19 |
| 5 | 300 | 300 | 250 | 200 |
| 125 | 20 | 20 | 31 | 14 |
| 6 | 300 | 300 | 200 | 200 |
| 150 | 20 | 20 | 14 | 14 |
| 8 | 250 | 250 | 150 | 75 |
| 200 | 17 | 17 | 10 | 5 |
| 10 | 250 | 250 | 150 | 75 |
| 250 | 17 | 17 | 10 | 5 |
| 12 | 250 | 250 | 150 | 50 |
| 300 | 17 | 17 | 10 | 3 |

LISTINGS/APPROVALS

The information provided below is based on the latest listing and approval data at the time of publication. Listings/Approvals are subject to change and/or additions by the approvals agencies. Contact Shurjoint for the performance on other pipes and the latest listings and approvals

| UL / CUL | | | FM | |
|-----------|--------|--------|-----------|--------|
| NOM. SIZE | SCH 40 | SCH 10 | NOM. SIZE | SCH 40 |
| in | psi | psi | in | psi |
| mm | Bar | Bar | mm | Bar |
| 2 | 300 | 300 | 2 | 300 |
| 50 | 20 | 20 | 50 | 20 |
| 2-1/2 | 300 | 300 | 2-1/2 | 300 |
| 65 | 20 | 20 | 65 | 20 |
| 76.1 mm | 300 | 300 | 76.1 mm | 300 |
| 65 | 20 | 20 | 65 | 20 |
| 3 | 300 | 300 | 3 | 300 |
| 80 | 20 | 20 | 80 | 20 |
| 4 | 300 | 300 | 4 | 300 |
| 100 | 20 | 20 | 100 | 20 |
| 5 | 300 | 300 | 5 | 300 |
| 125 | 20 | 20 | 125 | 20 |
| 6 | 300 | 300 | 6 | 300 |
| 150 | 20 | 20 | 150 | 20 |
| 8 | 300 | 300 | 8 | 300 |
| 200 | 20 | 20 | 200 | 20 |
| 10 | 300 | 300 | 10 | 300 |
| 250 | 20 | 20 | 250 | 20 |
| 12 | 300 | 300 | 12 | 300 |
| 300 | 20 | 20 | 300 | 20 |

TORQUE VALUES

| NOM. SIZE (IN) | BOLT | | REQUIRED TORQUE | |
|----------------|------|-----------|-----------------|-----------|
| | NO | SIZE (IN) | LB-FT | NM |
| 2 | 8 | 5/8 | 110 - 140 | 149 - 190 |
| 2-1/2 | 8 | 3/4 | 220 - 250 | 298 - 339 |
| 3 | 8 | 3/4 | 220 - 250 | 298 - 339 |
| 4 | 8 | 3/4 | 220 - 250 | 298 - 339 |
| 5 | 8 | 3/4 | 220 - 250 | 298 - 339 |
| 6 | 12 | 3/4 | 220 - 250 | 298 - 339 |
| 8 | 12 | 7/8 | 320 - 400 | 434 - 542 |
| 10 | 16 | 1 | 360 - 520 | 488 - 705 |
| 12 | 16 | 1-1/8 | 450 - 725 | 610 - 982 |

GENERAL NOTES

- Maximum Working Pressure (CWP) listed is the maximum cold water pressure for general piping services tested to ASTM F1476 and or AWWA C606 methods. Figures listed are based on roll- or cut-grooved standard wall carbon steel pipe. For other pipe schedules or pipe materials, contact Shurjoint for additional information.
- Max. End Load is calculated based on the maximum working pressure (CWP).
- Listed and or Approved Pressures are pressure ratings for fire protection systems, tested and approved by various approval bodies. Please always refer to the latest approval data posted on the Shurjoint website.
- Field Joint Test: For one time only the system may be tested hydrostatically at 1.5 times the maximum working pressure listed (AWWA C606 5.2.3).
- Warning: Piping systems must always be depressurized and drained before attempting disassembly and or removal of any components.
- The 10 Year Limited Warranty applies to manufacturing defects only and does not cover severe service/temperature applications or wear parts.
- Shurjoint reserves the right to change specifications, designs and or standard without notice and without incurring any obligations.