

MODEL 7041 FLANGE ADAPTER – ANSI CLASS 125/150

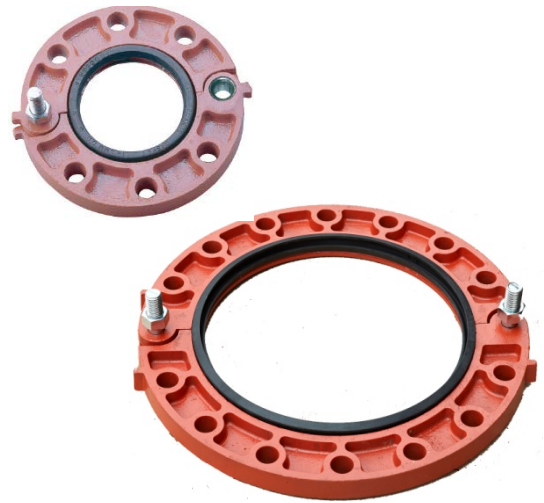
The Model 7041 Flange Adapter allows for a direct connection with ANSI class 125/150 flanges. The specially designed gasket enables the transition from a grooved system to a flanged system or component with this single flange adapter. The two-segment design provides an easy and fast installation. 2" through 12" flange adapters are supplied hinged as a single assembly, while 14" - 24" (Model 7041N) are supplied with two separate segments and a draw kit. All include an EPDM rubber gasket and plated track bolts and nuts. Housing segments are supplied with our standard painted finishes, i.e. orange or RAL3000 red. Optional finishes such as hot dipped zinc galvanized and custom epoxy coatings are available.



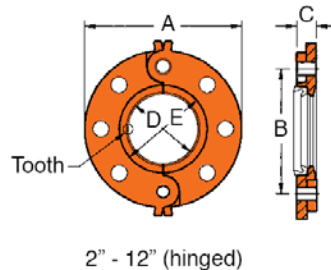
Always use factory-supplied bolts and nuts to assemble flange segments. The use of other bolts may cause of joint failure.



Always fasten the bolts to the required torque. Please refer to page 3.



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



Full warranty terms can be found on www.shurjoint.com

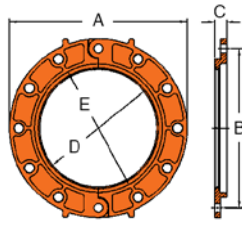
Model 7041 Flange Adapter - ANSI Class 125/150

Nominal Size	Pipe OD	Max. Working Pressure (CWP)*	ASME/ANSI Pressure Class Rating^ @100°F/@38°C	Max. End Load (CWP)	Dimensions			Sealing Surface		Bolts		Weight
					A	B	C	D	E	No	Size	
in mm	in mm	PSI Bar	PSI Nom. Class	Lbs kN	in mm	in mm	in mm	in mm	in mm	in	Lbs Kgs	
2 50	2.375 60.3	300 20	300 150	1330 5.71	6.00 152	4.75 121	0.75 19	2.36 60	3.42 87	4	5/8	4.0 1.8
2½ 65	2.875 73.0	300 20	300 150	1950 8.37	7.00 178	5.50 140	0.87 22	2.87 73	4.00 102	4	5/8	5.1 2.3
3 80	3.500 88.9	300 20	300 150	2880 12.41	7.50 190	6.00 152	0.94 24	3.50 89	4.56 116	4	5/8	6.2 2.8
4 100	4.500 114.3	300 20	300 150	4770 20.51	9.00 229	7.50 191	0.94 24	4.50 114	5.56 141	8	5/8	8.3 3.8
5 125	5.563 141.3	300 20	300 150	7290 31.35	10.00 254	8.50 216	0.94 24	5.56 141	6.73 171	8	¾	10.3 4.7
6 150	6.625 168.3	300 20	300 150	10340 44.47	11.00 279	9.50 241	1.00 25	6.62 168	7.79 198	8	¾	11.1 5.0
8 200	8.625 219.1	300 20	300 150	17520 75.37	13.50 343	11.75 298	1.12 28	8.62 219	10.00 254	8	¾	17.2 7.8
10 250	10.750 273.0	300 20	300 150	27210 117.01	16.00 406	14.25 362	1.18 30	10.75 273	12.12 308	12	7/8	25.7 11.7
12 300	12.750 323.9	300 20	300 150	38280 164.71	19.00 482	17.00 432	1.25 32	12.75 324	14.13 359	12	7/8	37.6 17.1

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

^ The ASME/ANSI pressure class rating is not the design or maximum pressure rating, rather is provided for those that are accustomed to specifying or using ASME/ANSI pressure class rated components such as flange, valves, etc.

MODEL 7041N FLANGE ADAPTER - ANSI CLASS 125/150



7041N 14" - 24"



14" ~ 24": Supplied with a draw kit.

Model 7041N Flange Adapter - ANSI Class 125 / 150

Nominal Size	Pipe OD	Max. Working Pressure (CWP)*	ASME/ANSI Pressure Class Rating [^]	Max. End Load (CWP)	Dimensions			Sealing Surface		Bolts		Weight
					A	B	C	D	E	No	Size	
in	in	PSI	PSI	Lbs	in	in	in	in	in	in	in	Lbs
mm	mm	Bar	Nom. Class	kN	mm	mm	mm	mm	mm			Kgs
14	14.000	300	300	46160	21.00	18.75	1.42	13.82	15.08	12	1	61.7
350	355.6	20	150	198.5	533	476	36	351	383			28.0
16	16.000	300	300	60290	23.50	21.25	1.50	15.79	16.97	16	1	77.1
400	406.4	20	150	259.3	597	540	38	401	431			35.0
18	18.000	300	300	76300	25.00	22.75	1.56	17.80	19.13	16	1½	86.0
450	457.2	20	150	328.2	635	578	40	452	486			39.0
20	20.000	300	300	94200	27.50	25.00	1.60	19.80	21.14	20	1½	109.1
500	508.0	20	150	405.2	699	635	43	503	537			49.5
22	22.000	300	300	113980	29.50	27.25	1.90	21.70	23.15	20	1¾	133.1
550	559.0	20	150	490.2	749	692	48	551	588			60.4
24	24.000	300	300	135650	32.00	29.50	1.89	23.66	25.00	20	1¾	157.6
600	609.6	20	150	583.4	813	749	48	601	635			71.5

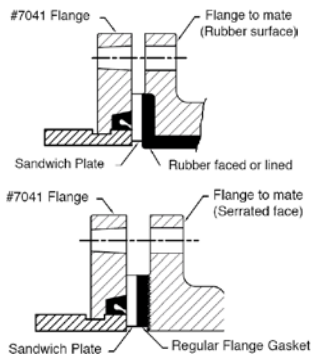
* Working Pressure is based on roll grooved standard wall carbon steel pipe.

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Important Notes:

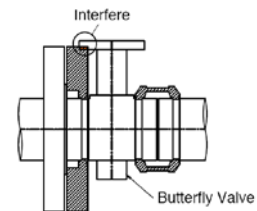
1. The Model 7041 flange adapter requires a hard flat face for effective sealing. When the mating surface is not adequate as with the serrated faces of some valves or the rubber-faced wafer valves, a sandwich plate (Model #49, see cut sheet #V-03) must be used.



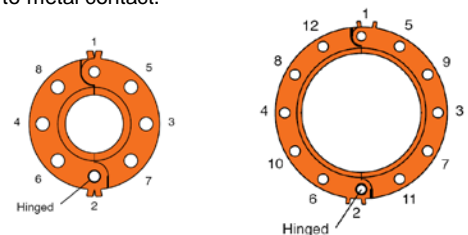
2. The Model 7041 flange adapter has small triangular teeth inside the key shoulder to prevent the pipe from rotating. The teeth should be ground off when mating to a rubber-lined flange.

3. The Models 7041 flange adapter shall not be used as anchor points for tie-rods across non-restrained joints.

4. When assembling a Model 7041 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.



5. 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.



Performance Data

The following tables show the maximum working pressures (CWP) of **Shurjoint** Model 7041 Flange Adapter ANSI Class 125/150 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.

Model 7041 on Carbon Steel Pipe					
Nom. Size in / mm	Cut-Grooved		Roll-Grooved		
	XS PSI / Bar	STD PSI / Bar	STD PSI / Bar	Sch. 10 PSI / Bar	Sch. 7 PSI / Bar
2 50	300 20	300 20	300 20	250 17	NR
2½ 65	300 20	300 20	300 20	250 17	NR
3 80	300 20	300 20	300 20	250 17	NR
4 100	300 20	300 20	300 20	250 17	NR
5 125	300 20	300 20	300 20	250 17	NR
6 150	300 20	300 20	300 20	250 17	NR
8 200	300 20	300 20	300 20	250 17	NR
10 250	300 20	300 20	300 20	250 17	NR
12 300	300 20	300 20	300 20	250 17	NR

Note: Hydrostatic shell test: 450 psi (30 Bar) per ANSI B16.5

Model 7041 on Stainless Steel Pipe					
Nom. Size in / mm	Cut-Grooved		Roll-Grooved		
	Sch. 80S PSI / Bar	Sch. 40S PSI / Bar	Sch. 40S PSI / Bar	Sch. 10S PSI / Bar	Sch. 5S PSI / Bar
2 50	300 20	300 20	275 19	275 19	175 12
2½ 65	300 20	300 20	275 19	275 19	175 12
3 80	300 20	300 20	275 19	275 19	175 12
4 100	300 20	300 20	275 19	275 19	175 12
5 125	300 20	300 20	275 19	200 14	175 12
6 150	300 20	300 20	250 17	200 14	125 9
8 200	300 20	300 20	200 14	NR	NR
10 250	300 20	300 20	200 14	NR	NR
12 300	300 20	300 20	200 14	NR	NR

Required Bolt Torque

The table below provides the standard torque values for proper assembly of **Shurjoint** flange adapters. Use a torque wrench so that all the nuts are tightened equally with a same torque value. **Shurjoint** flange adapters are sealed with elastic (rubber) gaskets, which require much lower torques than those that utilize metallic gaskets.

Model 7041 Flange Adapter - ANSI Class 125 / 150				
Nom. Size in	Bolt		Required Torque	
	No	Size (in)	Lbs-Ft	Nm
2	4	5/8	110 ~ 140	149 ~ 190
2½	4	5/8	110 ~ 140	149 ~ 190
3	4	5/8	110 ~ 140	149 ~ 190
4	8	5/8	110 ~ 140	149 ~ 190
5	8	3/4	220 ~ 250	298 ~ 339
6	8	3/4	220 ~ 250	298 ~ 339
8	8	3/4	220 ~ 250	298 ~ 339
10	12	7/8	320 ~ 400	434 ~ 542
12	12	7/8	320 ~ 400	434 ~ 542
14	12	1	360 ~ 520	488 ~ 705
16	16	1	360 ~ 520	488 ~ 705
18	16	1½	450 ~ 725	610 ~ 982
20	20	1½	450 ~ 725	610 ~ 982
22	20	1¾	620 ~ 1000	841 ~ 1356
24	20	1¾	620 ~ 1000	841 ~ 1356

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 orange or RAL3000 red.

- 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 unless couplings or components are accessible for frequent gasket replacement.

- (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). 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 additional details contact **Shurjoint**.

• **Standard Hex 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.

• **Draw Kit:**

Screw Rod: Carbon Steel.
Assembly holders: Ductile Iron.
Bolts & Nuts: Commercial.



General Notes:

- **ASME/ANSI Pressure-Temperature Rating** is provided as an aid in selecting a proper coupling to incorporate with other piping components (valves, flanges, and etc.) that are used in the same system and carry the ASME/ANSI rating. Select a Class 150 coupling to incorporate with Class 150 valves and flanges.
- **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 1½ 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.

Job Name:	System No.	Location:
Contractor:	Approved:	Date:
Engineer:	Approved:	Date:

Shurjoint product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact **Shurjoint** Technical Service. **Shurjoint** reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligations to make such changes and modifications on **Shurjoint** products previously subsequently sold.