

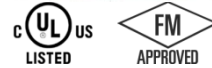
## MODEL 7041 FLANGE ADAPTER- PN 10 / PN 16

The Model 7041 Flange Adapter allows for a direct connection of PN 10\* and PN 16 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" (50 mm – 300 mm) 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.

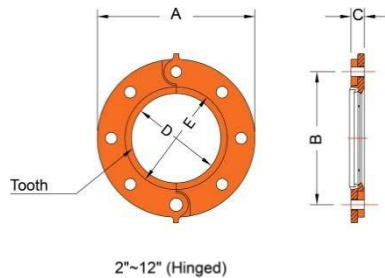
\* PN10: 2" - 6" (50 mm – 150 mm) only.



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](http://www.shurjoint.com) for details or contact your **SHURJOINT** Representative.



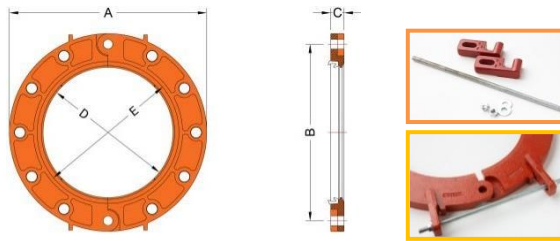
Full warranty terms can be found on [www.shurjoint.com](http://www.shurjoint.com)

Model 7041 Flange Adapter - PN 10 / PN 16												
Nominal Size	Pipe O.D.	Max. Working Pressure (CWP)*	Max. End Load (CWP)	Dimensions			Sealing Surface		Bolts			Weight
				A	B	C	D	E	No.	Size		
in mm	in mm	PSI Bar	Lbs kN	mm	mm	mm	mm	mm		mm	Lbs Kgs	
2 50	2.375 60.3	300 20	1000 4.6	165	125	22	60	78	4	M16	5.1 2.3	
76.1 mm	3.000 76.1	300 20	1590 7.3	185	145	22	76	92	4	M16	5.7 2.6	
3 80	3.500 88.9	300 20	2165 9.9	200	160	24	89	106	8	M16	7.1 3.2	
4 100	4.500 114.3	300 20	3580 16.4	220	180	24	114	132	8	M16	7.5 3.4	
139.7 mm	5.500 139.7	300 20	5340 24.5	250	210	25	140	159	8	M16	9.8 4.4	
165.1 mm	6.500 165.1	300 20	7460 34.2	285	240	24	165	182	8	M20	11.3 5.1	
6 150	6.625 168.3	300 20	7750 35.6	285	240	24	168	182	8	M20	10.1 4.6	
8 200	8.625 219.1	300 20	13140 60.3	340	295	29	219	236	12	M20	17.2 7.8	
10 250	10.750 273.0	300 20	20410 93.6	405	355	30	273	295	12	M24	25.2 11.4	
12 300	12.750 323.9	300 20	28710 131.8	460	410	32	324	346	12	M24	30.2 13.7	

Note: 2" - 6" flange drilling to PN 10 / PN 16 and 8" and above to PN 16.

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

MODEL 7041N FLANGE ADAPTER - PN 16, 14" ~ 24"



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

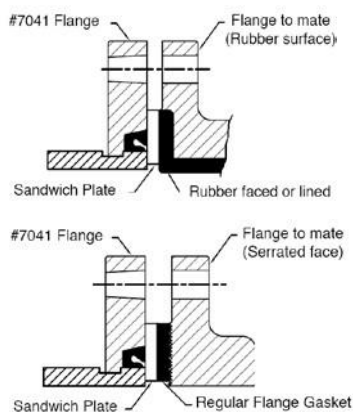
Model 7041N Flange Adapter - PN 16												
Nominal Size	Pipe O.D.	Max. Working Pressure (CWP)*	Max. End Load (CWP)	Dimensions			Sealing Surface		Bolts		Weight	
				A	B	C	D	E	No.	Size		
in mm	in mm	PSI Bar	Lbs kN	mm	mm	mm	mm	mm		mm	Lbs Kgs	
14 350	14.000 355.6	300 20	34620 158.8	520	470	36	356	383	16	M24	48.7 22.1	
16 400	16.000 406.4	300 20	45220 207.4	580	525	38	406	431	16	M27	59.7 27.1	
18 450	18.000 457.2	300 20	57230 262.5	640	585	40	457	486	20	M27	71.6 32.5	
20 500	20.000 508.0	300 20	70650 324.0	715	650	43	508	537	20	M30	103.4 47.0	
24 600	24.000 609.6	300 20	101740 466.7	840	770	48	610	635	20	M33	160.6 73.0	

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



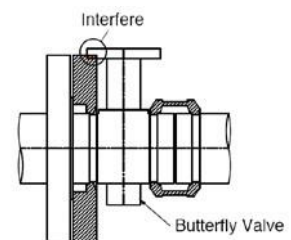
Important Notes:

- 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 must be used.

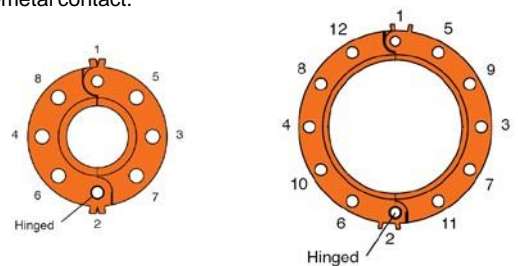


- The Model 7041 flange adapter has small triangular teeth inside the key shoulder to prevent the pipe from rotating. The teeth should be ground off when mating to a rubber-lined flange.
- The Models 7041 flange adapter shall not be used as anchor points for tie-rods across non-restrained joints.

- 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.



- 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 PN 10 / PN 16 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	250 17
2½ 65	300 20	300 20	300 20	250 17	250 17
3 80	300 20	300 20	300 20	250 17	250 17
4 100	300 20	300 20	300 20	250 17	250 17
5 125	300 20	300 20	300 20	250 17	200 14
6 150	300 20	300 20	300 20	250 17	200 14
8 200	300 20	300 20	300 20	200 14	NR
10 250	300 20	300 20	300 20	200 14	NR
12 300	300 20	300 20	300 20	200 14	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	250 17
2½ 65	300 20	300 20	275 19	275 19	250 17
3 80	300 20	300 20	275 19	275 19	250 17
4 100	300 20	300 20	275 19	275 19	250 17
5 125	300 20	300 20	275 19	200 14	200 14
6 150	300 20	300 20	250 17	200 14	200 14
8 200	300 20	300 20	200 14	75 5	NR
10 250	300 20	300 20	200 14	75 5	NR
12 300	300 20	300 20	200 14	50 3	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 – PN 10 / PN 16				
Nom. Size mm	Bolt		Required Torque	
	No	Size (mm)	Lbs-Ft	Nm
50	4	M16	110 ~ 140	149 ~ 190
65	4	M16	110 ~ 140	149 ~ 190
80	8	M16	110 ~ 140	149 ~ 190
100	8	M16	110 ~ 140	149 ~ 190
125	8	M20	220 ~ 250	298 ~ 339
150	8	M20	220 ~ 250	298 ~ 339
200	12	M20	220 ~ 250	298 ~ 339
250	12	M24	320 ~ 400	434 ~ 542
300	12	M24	320 ~ 400	434 ~ 542
350	16	M24	320 ~ 400	434 ~ 542
400	16	M27	360 ~ 520	488 ~ 705
450	20	M27	360 ~ 520	488 ~ 705
500	20	M30	450 ~ 725	610 ~ 982
600	20	M33	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-pw EPDM** (Color code: Double Green stripe) approved under NSF/ANSI 61 and NSF/ANSI 372 for potable water service to +180°F (+82°C). Also good for services for water with acid, water with chlorine or chloramines, 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 seat for water services are not recommended for steam services unless valves or components are accessible for frequent replacement.

- (Option) **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 seat for water services are not recommended for steam services unless valves or components are accessible for frequent 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:

- **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.

**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.