

## 7041 FLANGE ADAPTER - BS 10-E



For pressure rating, listing, and approval information, refer to data sheet or visit SHURJOINT website [www.shurjoint.com](http://www.shurjoint.com) for details or contact your SHURJOINT representatives.

The Model 7041 Flange Adapter allows for a direct connection of BS 10 Table E 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 hex 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 joint failure. If the factory supplied bolts cannot be used for the component that is being connected, consult Shurjoint technical services for further guidance.



Always fasten the bolts to the required torque.

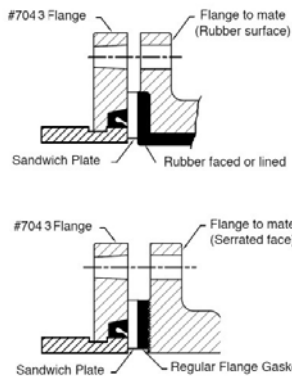
### material specification

- **Housing:**  
Ductile Iron to ASTM A536, Gr. 65-45-12, min. tensile strength 65,000 psi (448 MPa).

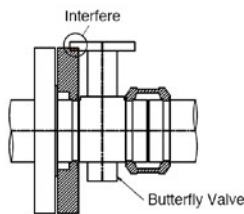
- **Surface Finish:**  
Standard painted finishes in orange or RAL3000 red.
    - Hot dip zinc galvanized (Option).
    - Epoxy coatings in RAL3000 red or other colors (Option).
  - **Rubber Gasket:**  
Grade E-pw EPDM (Color code: Double Green stripe) certified under NSF/ANSI 61 and NSF/ANSI 372 for potable water service to +180°F (+82°C). Also good for services for water with acid, water with chlorine, 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.
    - Other options: Grade "E" – EPDM  
Grade "T" – Nitrile  
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.

**Important Notes**

1. The Model 7041 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.

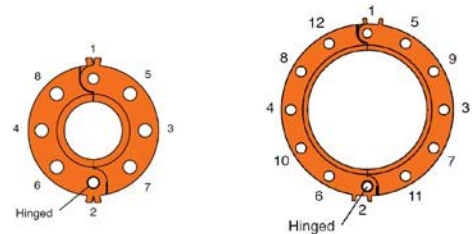


2. The Model 7041 flange adapter has small triangular teeth inside the key shoulder to prevent the pipe from rotating. These teeth should be removed when being connected to schedule 5 pipe, plastic pipe or components or surfaces that could be damaged by these teeth.
3. The Models 7041 flange adapter 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. When using two model 7041 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.

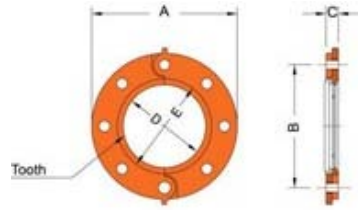


**Required Bolt Torque**

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 - BS 10-E				
Nominal Size	Bolt		Required Torque	
	in	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	1 1/8	450 - 725	610 - 982
20	20	1 1/8	450 - 725	610 - 982
24	20	1 1/4	620 - 1000	841 - 1356

MODEL 7041 FLANGE ADAPTER - BS 10-E, 2" - 12"

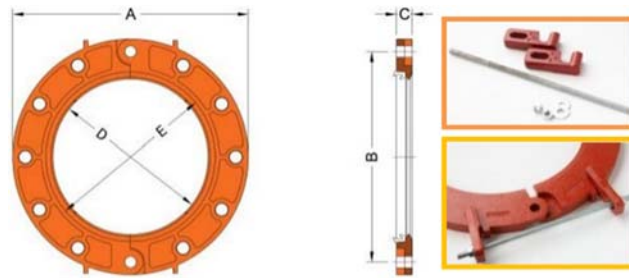


2"-12" (Hinged)

Model 7041 Flange Adapter BS 10-E

Normal Size	Pipe O.D.	Max. Working Pressure (CWP)*	Max. End Load (CWP)	Dimensions			Sealing Surface		Bolt		Weight
				A	B	C	D	E	No.	Size	
mm	mm	bar	kN	mm	mm	mm	mm	mm		in	kg
76.1	76.1	20	6.36	165	127	22	76	92	4	5/8	2.5
80	88.9	20	8.69	184	146	24	89	106	4	5/8	2.8
100	114.3	20	14.36	216	178	24	114	132	8	5/8	3.4
139.7	139.7	20	21.45	254	210	24	140	170	8	5/8	4.5
165.1	165.1	20	29.96	279	235	24	165	182	8	3/4	5.0
200	219.1	20	52.76	343	292	29	219	236	8	3/4	8.4
250	273.0	20	81.91	405	356	30	273	295	12	3/4	10.8
300	323.9	20	115.30	457	406	32	324	359	12	7/8	12.0

\* Working Pressure is based on roll grooved standard wall carbon steel pipe. Pressure ratings for use on cut grooved pipe, thin wall carbon steel pipe, and on stainless steel pipe can be found on Shurjoint publication [B-33](#).



14" ~ 24": Supplied with a draw kit

**Model 7041 Flange Adapter BS 10-E**

Normal 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	in	in	in		in	
				in	in	in	in	in			kg
		psi	lbf	mm	mm	mm	mm	mm			
		bar	kN								
14	14.000	300	46150	20.75	18.50	1.26	14.02	15.08	12	7/8	45.9
350	355.6	20	198.53	527	470	32	356	383			20.8
16	16.000	300	60280	22.76	20.51	1.26	15.98	16.97	12	7/8	46.3
400	406.4	20	259.30	578	521	32	406	431			21.0
18	18.000	300	76300	25.24	22.99	1.42	17.99	19.13	16	7/8	63.7
450	457.2	20	328.18	641	584	36	457	486			28.9
20	20.000	300	94200	27.76	25.24	1.50	20.00	21.14	16	7/8	84.0
500	508.0	20	405.16	705	641	38	508	537			38.1
24	24.000	300	135640	32.52	29.76	1.65	24.02	25.00	16	1 1/8	120.4
600	609.6	20	583.43	826	756	42	610	635			54.6

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

General note

- 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 1/2 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.