



SHURJOINT®

submittal sheet

7041

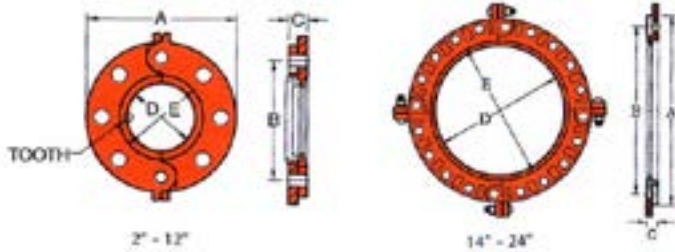
flange adapter | ANSI class 125/150



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 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" a four piece segment coupling. 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.

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.

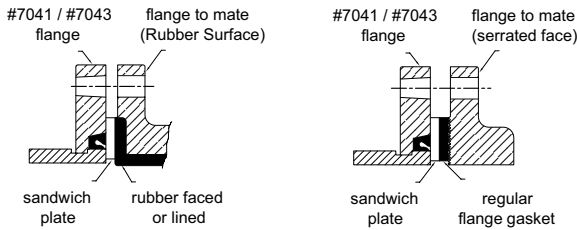
dimensions

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		in	lb
mm	mm	Bar	kN	mm	mm	mm	mm	mm			kg
2	2.375	300	1330	6.00	4.75	0.75	2.38	3.07	4	5/8	4.0
50	60.3	20	5.71	152	121	19	60	78			1.8
2-1/2	2.875	300	1950	7.00	5.50	0.87	2.88	3.54	4	5/8	5.1
65	73.0	20	8.37	178	140	22	73	90			2.3
3	3.500	300	2880	7.52	6.00	0.94	3.50	4.17	4	5/8	6.2
80	88.9	20	12.41	191	152	24	89	106			2.8
4	4.500	300	4770	9.00	7.50	0.94	4.50	5.20	8	5/8	8.3
100	114.3	20	20.51	229	191	24	114	132			3.8
5	5.563	300	7290	10.00	8.50	1.00	5.56	6.26	8	3/4	10.3
125	141.3	20	31.35	254	216	25	141	159			4.7
6	6.625	300	10340	11.00	9.50	1.00	6.63	7.32	8	3/4	11.1
150	168.3	20	44.47	279	241	25	168	186			5.0
8	8.625	300	17520	13.50	11.75	1.14	8.63	9.29	8	3/4	17.2
200	219.1	20	75.37	343	298	29	219	236			7.8
10	10.750	300	27210	16.00	14.25	1.18	10.75	11.61	12	7/8	25.7
250	273.0	20	117.01	406	362	30	273	295			11.7
12	12.750	300	38280	19.02	17.00	1.25	12.75	13.62	12	7/8	37.6
300	323.9	20	164.71	483	432	32	324	346			17.1
14	14.000	300	46160	21.00	18.75	1.42	14.00	15.08	12	1	61.7
350	355.6	20	198.5	533	476	36	356	383			28.0
16	16.000	300	60290	23.50	21.25	1.42	16.00	16.97	16	1	77.1
400	406.4	20	259.3	597	540	36	406	431			35.0
18	18.000	300	76300	25.00	22.75	1.56	18.00	19.13	16	1-1/8	86.0
450	457.2	20	328.2	635	578	40	457	486			39.0
20	20.000	300	94200	27.50	25.00	1.73	20.00	21.14	20	1-1/8	109.1
500	508.0	20	405.2	699	635	44	508	537			49.5
24	24.000	300	135650	32.00	29.50	1.89	24.00	25.00	20	1-1/4	157.6
600	609.6	20	583.4	813	749	48	610	635			71.5

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

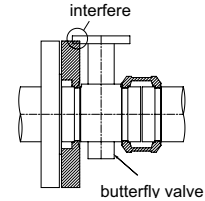
important notes

- the Model 7041 flange adapter requires a hard flat face for effective sealing. 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.

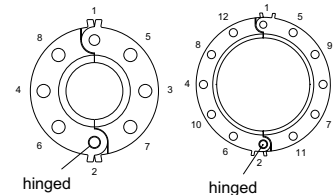


- the model 7041 flange adapter has small triangular teeth inside the key shoulder to prevent the pipe from rotating. these teeth should be removed when being connected to schedule 5 pipe, plastic pipe or components or surfaces that could be damaged by these teeth.
- the models 7041 flange adapter shall 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 does 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 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.



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 orange paint finish.
- 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)

- good for cold & hot water up to +230°F (+110°C). also good for services for water with acid, water with chlorine, chloramine, deionized water, seawater and waste water, dilute acids, oil-free air and many chemicals.
- good for cold +86°F (+30°C) and hot +180°F (+82°C) potable water services. EPDM is UL classified per NSF/ANSI 61 & NSF/ANSI 372.
- 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.
- 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.

draw kit:

- screw rod: carbon steel
- assembly holders: ductile iron
- bolts & nuts: commercial



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 noncorrosive 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	SCH. 5
in	psi	psi	psi	psi	psi
mm	Bar	Bar	Bar	Bar	Bar
2	300	300	300	250	175
50	20	20	20	17	12
2-1/2	300	300	300	250	175
65	20	20	20	17	12
3	300	300	300	250	175
80	20	20	20	17	12
4	300	300	300	250	175
100	20	20	20	17	12
5	300	300	300	250	175
125	20	20	20	17	12
6	300	300	300	250	125
150	20	20	20	17	9
8	300	300	300	200	NR
200	20	20	20	14	
10	300	300	300	200	NR
250	20	20	20	14	
12	300	300	300	200	NR
300	20	20	20	14	
14	300	300	300	200	NR
350	20	20	20	14	
16	300	300	300	175	NR
400	20	20	20	12	
18	300	300	300	175	NR
450	20	20	20	12	
20	300	300	300	150	NR
500	20	20	20	10	
24	300	300	300	150	NR
600	20	20	20	10	

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

stainless steel pipe

NOM. SIZE	CUT-GROOVED		ROLL-GROOVED		
	SCH. 80S	SCH. 40S	SCH. 40S	SCH. 10S	SCH. 5S
in	psi	psi	psi	psi	psi
mm	Bar	Bar	Bar	Bar	Bar
2	300	300	275	275	175
50	20	20	19	19	12
2-1/2	300	300	275	275	175
65	20	20	19	19	12
3	300	300	275	275	175
80	20	20	19	19	12
4	300	300	275	275	175
100	20	20	19	19	12
5	300	300	275	200	175
125	20	20	19	14	12
6	300	300	250	200	125
150	20	20	17	14	9
8	300	300	200	75	NR
200	20	20	14	5	
10	300	300	200	75	NR
250	20	20	14	5	
12	300	300	200	50	NR
300	20	20	14	3.5	
14	250	250	125	NR	NR
350	17	17	9		
16	250	250	125	NR	NR
400	17	17	9		
18	250	250	125	NR	NR
450	17	17	9		
20	250	250	100	NR	NR
500	17	17	7		
24	250	250	100	NR	NR
600	17	17	7		

torque values

ANSI class 125/150, BS 10-E

NOMINAL SIZE INCH	BOLT		REQUIRED TORQUE	
	SIZE INCH	NO.	LBS-FT	NM
2	5/8	4	110 - 140	149 - 190
2-1/2	5/8	4	110 - 140	149 - 190
3	5/8	4	110 - 140	149 - 190
4	5/8	8	110 - 140	149 - 190
5	3/4	8	220 - 250	298 - 339
6	3/4	8	220 - 250	298 - 339
8	3/4	8	220 - 250	298 - 339

NOMINAL SIZE INCH	BOLT		REQUIRED TORQUE	
	SIZE INCH	NO.	LBS-FT	NM
10	7/8	12	320 - 400	434 - 542
12	7/8	12	320 - 400	434 - 542
14	1	12	360 - 520	488 - 705
16	1	16	360 - 520	488 - 705
18	1-1/8	16	450 - 725	610 - 982
20	1-1/8	20	450 - 725	610 - 982
24	1-1/4	20	620 - 1000	841 - 1356

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			
NOM. SIZE	SCH 40	SCH 10	BS13 87(M)
in	psi	psi	psi
mm	Bar	Bar	Bar
2	175	175	NA
50	12	12	
2-1/2	175	175	NA
65	12	12	
76.1 mm	175	175	300
65	12	12	20
3	175	175	NA
80	12	12	
4	175	175	300
100	12	12	20
5	175	175	300
125	12	12	20
6	175	175	NA
150	12	12	
8	175	175	NA
200	12	12	
10	175	†175	NA
250	12	†12	
12	175		NA
300	12	NA	NA

† 0.188" wall pipe

FM			
NOM. SIZE	SCH 40	SCH 10	BS13 87(M)
in	psi	psi	psi
mm	Bar	Bar	Bar
2	†300	300	NA
50	†20	20	
2-1/2	†300	300	NA
65	†20	20	
76.1 mm	300	300	175
65	20	20	12
3	†300	300	NA
80	†20	20	
4	†300	300	175
100	†20	20	12
5	300	300	NA
125	20	20	
6	300	300	NA
150	20	20	
8	300	300	NA
200	20	20	
10	175	NA	NA
250	12		
12	175	NA	NA
300	12		
14	175	NA	NA
350	12		
16	175	NA	NA
400	12		
18	175	NA	NA
450	12		
20	175	NA	NA
500	12		
24	175	NA	NA
600	12		

‡ Also on stainless steel pipe

LPCB	
NOM. SIZE	PRESSURE
in	psi
mm	Bar
2	232
50	16
76.1 mm	232
65	16
3	232
80	16
4	232
100	16
165.1 mm	232
150	16
8	232
200	16

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.