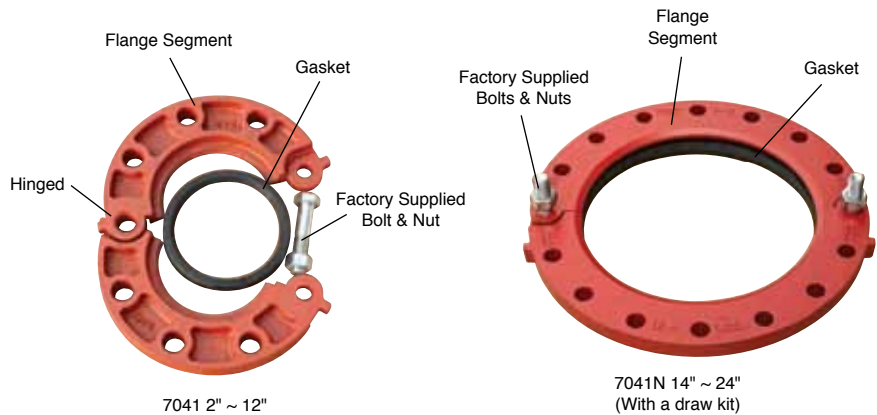


Flange Adapters

Shurjoint offers a variety of flange adapters 2" through 24" (50mm – 600mm) to transition from a flanged system to a grooved system. Flange drillings available include ANSI Class 125/150, Class 300, PN 10/16 and BS 10 Table E.

Flange adapters 2" through 12" are supplied hinged as a single assembly while 14" through 24" (7041N) are supplied with two independent segments and a draw kit.

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



14" – 24": Supplied with a draw kit



Important Notes

1. Models 7041 and 7043 flange adapters require a hard flat face for effective sealing. When the mating surface is not adequate as with the serrated faces of some valves or rubber-faced wafer valves, a sandwich plate (Model 49, see page 30) must be used.

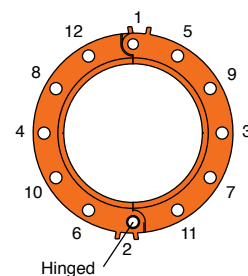
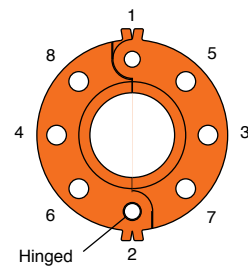
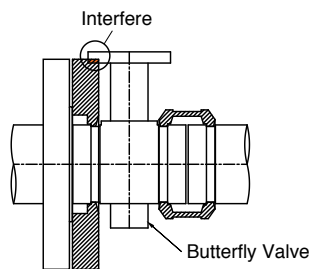
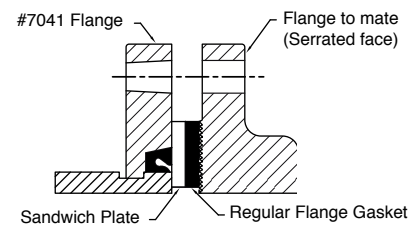
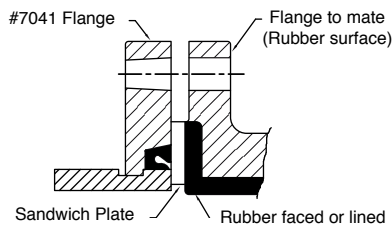
2. The Model 7041 flange adapter has small triangular teeth inside the key shoulder to prevent the pipe from rotating. The teeth should be ground off when mating to a rubber-lined flange, plastic pipe and or light wall pipe.

3. Models 7041 and 7043 flange adapters shall not be used as anchor points for tie-rods across non-restrained joints.

4. When assembling a Model 7041 or 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.

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.



MODEL

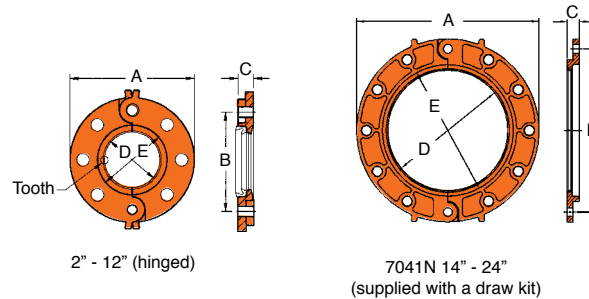
7041 FLANGE ADAPTER - ANSI CLASS 125/150

The **Shurjoint** Model 7041 flange adapters 2" through 12" are supplied hinged as a single assembly, while 14" - 24" (7041N) are supplied with two independent segments and a draw kit.

Pressure-Temperature Rating

Nom. Rating	Working Pressure (STD, Roll-grooved)	Max. Service Temperature
Class 150	300 psi @ 100°F 20 Bar @ 38°C	EPDM: 230°F / 110°C Nitrile: 180°F / 82°C

*Working pressure is based on roll- or cut-grooved standard wall carbon steel pipe.
*Hydrostatic Shell Test: 450 psi (30 bar) per ANSI B16.5.



Nominal Size mm / in	Pipe O. D. mm / in	Max. Working Pressure Bar / PSI	Max. End Load kN / Lbs	Dimensions			Sealing Surface		Bolts		Weight Kgs / Lbs
				A mm / in	B mm / in	C mm / in	D mm / in	E mm / in	No.	Size in	
50	60.3	20	5.71	152	121	19	60	87	4	5/8	1.8
2	2.375	300	1330	6.00	4.75	0.75	2.36	3.42	4	5/8	4.0
65	73.0	20	8.37	178	140	22	73	102	4	5/8	2.3
2½	2.875	300	1950	7.00	5.50	0.87	2.87	4.00	4	5/8	5.1
80	88.9	20	12.41	190	152	24	89	116	4	5/8	2.8
3	3.500	300	2880	7.50	6.00	0.94	3.50	4.56	4	5/8	6.2
100	114.3	20	20.51	229	191	24	114	141	8	5/8	3.8
4	4.500	300	4770	9.00	7.50	0.94	4.50	5.56	8	5/8	8.3
125	141.3	20	31.35	254	216	24	141	171	8	3/4	4.7
5	5.563	300	7290	10.00	8.50	0.94	5.56	6.73	8	3/4	10.3
150	168.3	20	44.47	279	241	25	168	198	8	3/4	5.0
6	6.625	300	10340	11.00	9.50	1.00	6.62	7.79	8	3/4	11.1
200	219.1	20	75.37	343	298	28	219	254	8	3/4	7.8
8	8.625	300	17520	13.50	11.75	1.12	8.62	10.00	8	3/4	17.2
250	273.0	20	117.01	406	362	30	273	308	12	7/8	11.7
10	10.750	300	27210	16.00	14.25	1.18	10.75	12.12	12	7/8	25.7
300	323.9	20	164.71	482	432	32	324	359	12	7/8	17.1
12	12.750	300	38280	19.00	17.00	1.25	12.75	14.13	12	7/8	37.6
350	355.6	20	198.53	533	476	37	356	416	12	1	28.0
14	14.000	300	46160	21.00	18.75	1.44	14.0	16.40	12	1	61.7
400	406.4	20	259.3	597	540	37	406	467	16	1	35.0
16	16.000	300	60290	23.50	21.25	1.44	16.0	18.40	16	1	77.1
450	457.2	20	328.18	635	578	40	457	508	16	1 1/8	39.0
18	18.000	300	76300	25.80	22.75	1.56	18.0	20.00	16	1 1/8	86.0
500	508.0	20	405.18	699	635	43	508	572	20	1 1/8	49.5
20	20.000	300	94200	27.50	25.00	1.69	20.0	22.50	20	1 1/8	109.1
550	558.8	20	490.24	749	692	48	551	588	20	1 1/4	60.4
22	22.000	300	113980	29.50	27.25	1.90	21.70	23.15	20	1 1/4	133.1
600	609.6	20	583.43	813	749	49	602	635	20	1 1/4	71.5
24	24.000	300	135650	32.00	29.50	1.94	23.70	25.0	20	1 1/4	157.6



Required bolt torque

The tables show 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.

Required Torque for Model 7041 Flange Adapters (ANSI Class 125/150)

Nom. Size inch	Bolt Size inch	Required Torque	
		N-m	Lbs-Ft
2"	5/8 (4)	30 - 50	22 - 37
2½"	5/8 (4)	30 - 50	22 - 37
3"	5/8 (4)	40 - 68	30 - 50
4"	5/8 (8)	40 - 68	30 - 50
5"	3/4 (8)	40 - 68	30 - 50
6"	3/4 (8)	40 - 68	30 - 50
8"	3/4 (8)	68 - 90	50 - 66
10"	7/8 (12)	80 - 120	59 - 89
12"	7/8 (12)	80 - 120	59 - 89
14"	1 (12)	100 - 135	74 - 100
16"	1 (16)	100 - 135	74 - 100
18"	1 1/8 (16)	110 - 160	81 - 118
20"	1 1/8 (20)	110 - 160	81 - 118
24"	1 1/4 (20)	135 - 190	100 - 140

() : No. of bolts

Required Torque for Model 7041 Flange Adapters (PN 10/16)

Nom. Size mm	Bolt Size mm	Required Torque	
		N-m	Lbs-Ft
50	M16 (4)	30 - 50	22 - 37
65	M16 (4)	30 - 50	22 - 37
80	M16 (8)	40 - 68	30 - 50
100	M16 (8)	40 - 68	30 - 50
125	M20 (8)	40 - 68	30 - 50
150	M20 (8)	40 - 68	30 - 50
200	M20 (12)	68 - 90	50 - 66
250	M24 (12)	80 - 120	59 - 89
300	M24 (12)	80 - 120	59 - 89
350	M24 (16)	100 - 135	74 - 100
400	M27 (16)	100 - 135	74 - 100
450	M27 (20)	110 - 160	81 - 118
500	M30 (20)	110 - 160	81 - 118
600	M33 (20)	135 - 190	100 - 140

() : No. of bolts

MODEL

7041 FLANGE ADAPTER - PN 10 / PN 16

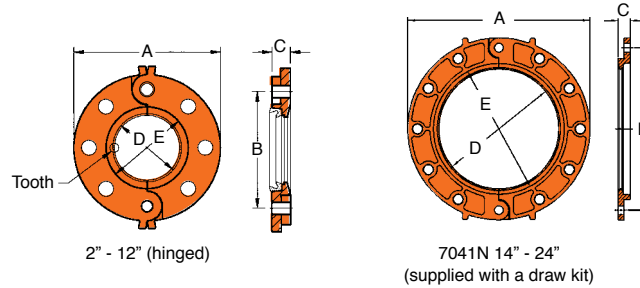
The **Shurjoint** Model 7041 flange adapter allows for a direct connection with PN 10/16 flanges. The two-segment design provides an easy and fast installation. 2" through 12"

flange adapters are supplied hinged as a single assembly, while 14" - 24" (7041N) are supplied with two independent segments and a draw kit.

Pressure-Temperature Rating

Nom. Rating	Working Pressure (STD, Roll-grooved)	Max. Service Temperature
PN 16	225 psi @ 100°F 16 Bar @ 38°C	EPDM: 230°F / 110°C Nitrile: 180°F / 82°C

*Working pressure is based on roll- or cut-grooved standard wall carbon steel pipe.
*Hydrostatic Shell Test: 1.5 times the working pressure, non-shock cold water.



Nominal Size mm	Pipe O. D. mm	Max. Working Pressure Bar	Max. End Load kN	Dimensions			Sealing Surface		Bolts		Weight Kgs
				A mm	B mm	C mm	D mm	E mm	mm	Size No.	
50	60.3	16	4.6	165	125	22	60	87	M16	4	2.3
65	76.1	16	7.3	185	145	22	76	105	M16	4	2.6
80	88.9	16	9.9	200	160	24	89	116	M16	8	3.2
100	114.3	16	16.4	220	180	24	114	141	M16	8	3.4
150	165.1	16	34.2	285	240	24	165	195	M20	8	5.1
150	168.3	16	35.6	285	240	24	168	198	M20	8	4.6
200	219.1	16	60.3	340	295	24	219	254	M20	12	7.8
250	273.0	16	93.6	405	355	26	273	308	M24	12	11.4
300	323.9	16	131.8	460	410	28	324	359	M24	12	13.7
350	355.6	16	158.8	520	470	30	356	416	M24	16	23.0
400	406.4	16	207.4	580	525	32	406	467	M27	16	28.0
450	457.2	16	262.5	640	585	36	457	508	M27	20	42.5
500	508.0	16	324.0	715	650	36	508	572	M30	20	47.0
600	609.6	16	466.7	840	770	40	610	706	M33	20	73.0

Note: 2" - 6" flange drilling to PN10 / PN16 and 8" and above to PN16. See page 28 for required bolt torque.

MODEL

7041 FLANGE ADAPTER - BS 10-E

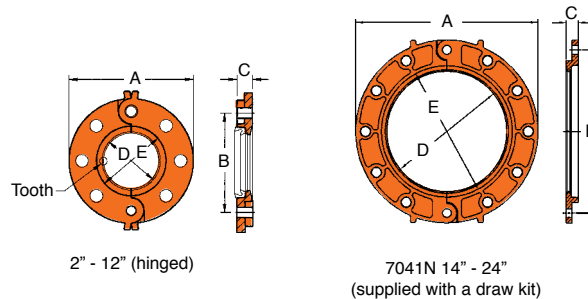
The **Shurjoint** Model 7041 flange adapter allows for a direct connection with BS 10 Table E flanges. The two-segment design provides an easy and fast installation. 2"

through 12" flange adapters are supplied hinged as a single assembly, while 14" - 24" (7041N) are supplied with two independent segments and a draw kit.

Pressure-Temperature Rating

Nom. Rating	Working Pressure (STD, Roll-grooved)	Max. Service Temperature
PN 14	200 psi @ 100°F 14 Bar @ 38°C	EPDM: 230°F / 110°C Nitrile: 180°F / 82°C

*Working pressure is based on roll- or cut-grooved standard wall carbon steel pipe.
*Hydrostatic Shell Test: 1.5 times the working pressure, non-shock cold water.



Nominal Size mm	Pipe O. D. mm	Max. Working Pressure Bar	Max. End Load kN	Dimensions			Sealing Surface		Bolts		Weight Kgs
				A mm	B mm	C mm	D mm	E mm	No.	Size in	
65	76.1	14	6.36	165	127	22	76	105	4	3/8	2.5
80	88.9	14	8.69	184	146	24	89	116	4	5/8	3.4
100	114.3	14	14.36	216	178	24	114	141	8	5/8	4.0
125	139.7	14	21.45	254	210	24	140	170	8	5/8	4.5
150	165.1	14	29.96	279	235	24	165	195	8	3/4	5.0
200	219.1	14	52.76	337	292	29	219	254	8	3/4	8.4
250	273.0	14	81.91	406	356	30	273	308	12	3/4	10.8
300	323.9	14	115.30	457	406	32	324	359	12	7/8	12.0
350	355.6	14	138.97	527	470	32	356	416	12	7/8	20.8
400	406.4	14	181.51	578	521	32	406	467	12	7/8	21.0
450	457.2	14	229.73	641	584	36	457	508	16	7/8	28.9
500	508.0	14	283.61	705	641	38	508	572	16	7/8	38.1
600	609.6	14	408.4	826	756	42	610	706	16	1 1/2	54.6

MODEL

7043 FLANGE ADAPTER - ANSI CLASS 300

The Shurjoint Model 7043 flange adapter allows for direct connection of a grooved system to ANSI Class 300 flanged components. 2" through 8" Model 7043

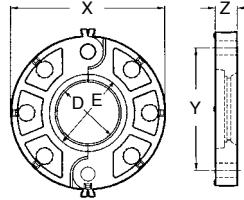
flange adapters are supplied hinged as a single assembly, while large sizes are supplied with separate segments.

Pressure-Temperature Rating

Nom. Rating	Working Pressure (STD, Roll-grooved)	Max. Service Temperature
Class 300	750 psi @100°F 52 Bar @38°C	EPDM: 230°F / 110°C Nitrile: 180°F / 82°C

*Working pressure is based on roll- or cut-grooved standard wall carbon steel pipe.

*Hydrostatic Shell Test: 1125 psi (77 bar) per ANSI B16.5.



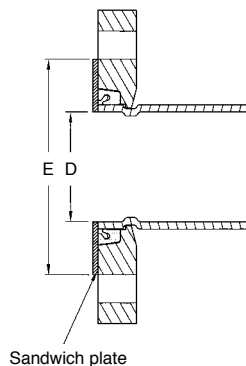
Nominal Size mm / in	Pipe O. D. mm / in	Max. Working Pressure Bar / PSI	Max. End Load kN / Lbs	Dimensions			Sealing Surface		Bolts		Weight Kgs / Lbs
				X mm / in	Y mm / in	Z mm / in	D mm / in	E mm / in	No.	Size in	
50	60.3	52	14.84	165	127	24	60	87	8	5/8	2.4
2	2.375	750	3320	6.50	5.00	0.94	2.36	3.41	8	3/4	5.3
65	73.0	52	21.75	191	149	27	73	99	8	3/4	3.6
2½	2.875	750	4870	7.50	5.88	1.06	2.88	3.91	8	3/4	7.9
80	88.9	52	32.28	210	168	30	89	115	8	3/4	4.6
3	3.500	750	7210	8.25	6.63	1.19	3.50	4.53	8	3/4	10.0
100	114.3	52	53.33	254	202	33	114	140	8	3/4	7.8
4	4.500	750	11920	10.00	7.95	1.31	4.50	5.53	8	3/4	17.3
125	141.3	52	81.50	279	235	37	141	171	8	3/4	9.6
5	5.563	750	18220	11.00	9.25	1.44	5.56	6.72	8	3/4	21.2
150	168.3	52	115.62	318	270	38	168	198	12	3/4	12.5
6	6.625	750	25840	12.50	10.63	1.50	6.63	7.78	12	3/4	27.6
200	219.1	52	195.96	381	330	43	219	252	12	7/8	16.4
8	8.625	750	43800	15.00	13.00	1.69	8.63	9.94	12	7/8	36.2
250	273.0	52	304.23	445	387	49	273	313	16	1	25.8
10	10.750	750	68040	17.50	15.25	1.94	10.75	12.31	16	1	56.9
300	323.9	52	428.25	521	451	51	324	364	16	1 1/8	35.2
12	12.750	750	95710	20.50	17.75	2.00	12.75	14.31	16	1 1/8	77.7

MODEL

49 SANDWICH PLATE

The Model 7041 and 7043 flange adapters require a hard flat surface for effective gasket sealing. A sandwich plate is required and should always be used when the mating surface is not adequate as with the serrated faces of some valves or the rubber-faced or rubber-lined flange adapters of a wafer valve.

Material: Mild-steel, electro-zinc plated. Stainless steel, type 304 or 316 is available on request.



Nominal Size mm / in	E mm / in	D mm / in
50	95	54
2	3.74	2.13
65	118	67
2½	4.65	2.64
80	130	81
3	5.12	3.19
100	158	105
4	6.22	4.13
125	188	128
5	7.40	5.00
150	216	155
6	8.50	6.10
200	271	205
8	10.67	8.07
250	326	258
10	12.83	10.15
300	381	305
12	15.00	12.00
350	414	337
14	16.30	13.25
400	470	387
16	18.50	15.25
450	533	438
18	21.00	17.25
500	584	489
20	23.00	19.25
600	692	590
24	27.25	23.25

MODEL

7180 UNIVERSAL FLANGE ADAPTER

The Model 7180 Universal Flange Adapter provides a rigid transition from a flanged component to a grooved system. The single unit is compatible for a range of flange types including ANSI Class 125/150, PN10, PN16, and JIS 10K.

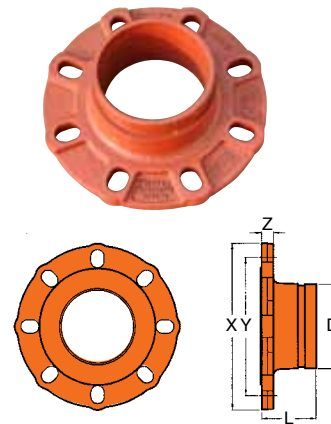
Pressure-Temperature Rating

Nom. Rating	Working Pressure (STD, Roll-grooved)	Max. Service Temperature
Class 150	300 psi @100°F 20 Bar @38°C	EPDM: 230°F / 110°C Nitrile: 180°F / 82°C

*Working pressure is based on roll- or cut-grooved standard wall carbon steel pipe.

*Proof test pressure: 1.5 times the working pressure, non-shock cold water.

*Burst pressure is engineered minimum 3 times the working pressure.



Nominal Size mm / in	Pipe O.D. mm / in	L mm / in	X mm / in	Y : Flange Drilling				Z mm / in	Bolts Size		Weight Kgs / Lbs
				ANSI 125 / 150 mm / in	PN 10,16 mm / in	JIS 10K mm / in	BS 10E mm / in		Dia mm / in	No.	
50	60.3	64	165	121	125	120	114	16	M16	4	2.30
2	2.375	2.50	6.50	4.75	4.92	4.72	4.49	0.63	5/8	4	5.10
65	73.0	70	185	140	145	140	127	16	M16	4	2.96
2½	2.875	2.75	7.28	5.50	5.70	5.50	5.00	0.63	5/8	4	6.53
76.1mm	76.1	70	185	140	145	140	127	16	M16	4	2.90
	3.000	2.75	7.28	5.50	5.70	5.50	5.00	0.63	5/8	4	6.40
80	88.9	70	200	152	160	150	146	16	M16	8	3.39
3	3.500	2.75	7.87	6.00	6.30	5.90	5.75	0.63	5/8	4	7.47
100	114.3	76	229	191	180	175	178	16	M16	8	3.85
4	4.500	3.00	9.00	7.50	7.09	6.89	7.00	0.63	5/8	8	8.49
139.7mm	139.7	76	250	216	210	210	210	22	M16 / M20	8	6.50
	5.500	3.00	9.84	8.50	8.27	8.27	8.27	0.87	5/8 / 3/4	8	14.33
125	141.3	76	250	216	210	210	---	22	M16 / M20	8	6.50
5	5.563	3.00	9.84	8.50	8.27	8.27	---	0.87	5/8 / 3/4	8	14.33
165.1mm	165.1	76	291	241	240	240	235	24	M20	8	6.30
	6.500	3.00	11.46	9.50	9.45	9.45	9.30	0.94	3/4	8	13.86
150	168.3	89	291	241	240	240	---	24	M20	8	5.72
6	6.625	3.50	11.46	9.50	9.45	9.45	---	0.94	3/4	8	12.58
200	219.1	102	343	298	295	290	292	29	M20	8 / 12	13.65
8	8.625	4.00	13.50	11.75	11.61	11.42	11.50	1.14	3/4	8 / 12	30.09
200 JIS	216.3	102	343	298	295	290	---	29	M20	8 / 12	13.65
	8.516	4.00	13.50	11.75	11.61	11.42	---	1.14	3/4	8 / 12	30.09

MODEL

7181 UNIVERSAL REDUCING FLANGE ADAPTER

The Model 7181 Universal Reducing Flange Adapter provides a rigid transition between a flanged piping system and a one or two-size reduced grooved system without the need of a concentric reducer. The flange drilling is compatible to ANSI 125/150, PN10/16, BS-10E and JIS 10K.

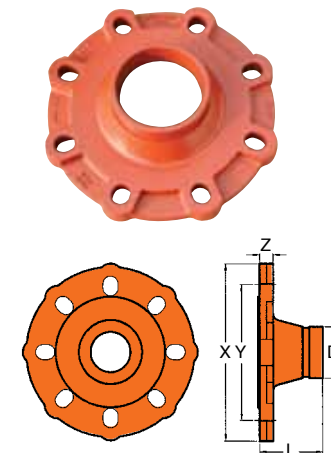
Pressure-Temperature Rating

Nom. Rating	Working Pressure (STD, Roll-grooved)	Max. Service Temperature
Class 150	300 psi @100°F 20 Bar @38°C	EPDM: 230°F / 110°C Nitrile: 180°F / 82°C

*Working pressure is based on roll- or cut-grooved standard wall carbon steel pipe.

*Proof test pressure: 1.5 times the working pressure, non-shock cold water.

*Burst pressure is engineered minimum 3 times the working pressure.



Nominal Size mm / in	Pipe OD mm / in	L mm / in	X mm / in	Z mm / in	Y: Flange Drilling			D mm / in	Bolts		Weight Kgs / Lb
					ANSI 125 / 150 mm / in	PN 10, 16 mm / in	JIS 10K mm / in		Dia. mm / in	No.	
80 x 50	88.9 x 60.3	75.0	208.0	16.0	152	160	150	60.3	M16	8	2.70
3 x 2	3.500 x 2.375	2.95	8.19	0.63	8.00	6.30	5.90	2	5/8	8	5.95
100 x 65	114.3 x 73.0	76.0	225.5	16.0	191	180	175	73.0	M16	8	4.00
4 x 2½	4.500 x 2.875	3.00	8.88	6.30	7.52	7.09	6.89	2.875	5/8	8	8.80
100 x 76.1mm	114.3 x 76.1	76.0	225.5	16.0	191	180	175	76.1	M16	8	4.00
	4.500 x 3.000	3.00	8.88	6.30	7.52	7.09	6.89	3.000	5/8	8	8.80
100 x 80	114.3 x 88.9	75.0	225.5	16.0	191	180	175	88.9	M16	8	3.45
4 x 3	4.500 x 3.500	2.95	8.88	0.63	7.50	7.09	6.89	3	5/8	8	7.61
150 x 100	168.3 x 114.3	75.0	291.0	24.0	241	240	240	114.3	M20	8	7.08
6 x 4	6.625 x 4.500	2.95	11.46	0.95	9.50	9.45	9.45	4	3/4	8	15.61

MODEL

7170 FLANGE ADAPTER - ANSI CLASS 125/150

The Model 7170 Flange Adaptor provides a rigid transition between ANSI class 125/150 flanged components and a grooved system.

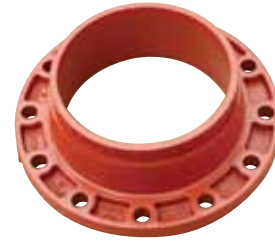
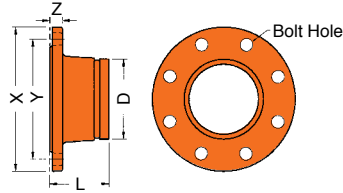
Pressure-Temperature Rating

Nom. Rating	Working Pressure (STD, Roll-grooved)	Max. Service Temperature
Class 150	300 psi @100°F 20 Bar @38°C	EPDM: 230°F / 110°C Nitrile: 180°F / 82°C

*Working pressure is based on roll- or cut-grooved standard wall carbon steel pipe.

*Proof test pressure: 1.5 times the working pressure, non-shock cold water.

*Burst pressure is engineered minimum 3 times the working pressure.



Nominal Pipe Size mm / in	X mm / in	Y mm / in	Z mm / in	Bolt Size in	Bolt Hole		D mm / in	L mm / in	Weight Kgs / Lbs
					Dia. in	No.			
250	406.4	362.0	30.0	¾	1	12	273.0	127.0	22.0
10	16.00	14.25	1.18				10.75	5.00	48.4
300	483.0	432.0	32.0	¾	1	12	323.9	127.0	28.0
12	19.00	17.00	1.25				12.75	5.00	61.6
350	533.0	476.3	35.0	1	1½	12	355.6	127.0	49.5
14	21.00	18.75	1.38				14.00	5.00	108.9
400	597.0	539.7	37.0	1	1½	16	406.4	127.0	50.0
16	23.50	21.25	1.46				16.00	5.00	110
450	635.0	577.8	40.0	1½	1¼	16	457.2	140.0	62.5
18	25.00	22.75	1.57				18.00	5.50	137.5
500	699.0	635.0	43.0	1½	1¼	20	508.0	152.0	72.0
20	27.50	25.00	1.69				20.00	6.00	158.4
600	813.6	749.3	48.0	1¼	1¾	20	609.6	152.0	99.5
24	32.00	29.50	1.89				24.00	6.00	218.9