

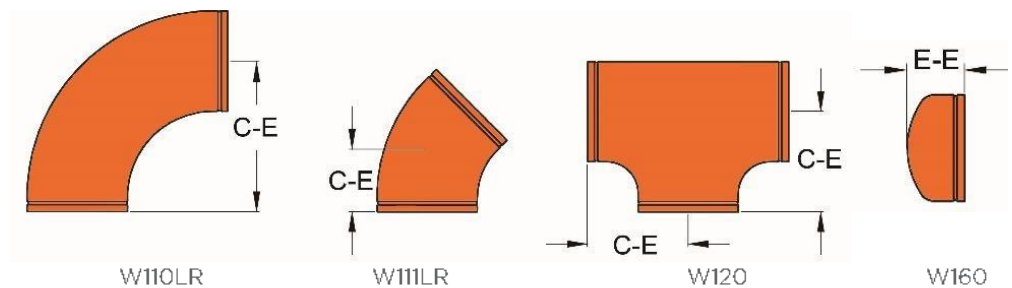
## WROUGHT STEEL GROOVED END FITTINGS

The Shurjoint wrought steel grooved end fittings are available 10" (250 mm) through 24" (600 mm) pipe sizes in a variety of styles. Fittings are fabricated with the carbon steel pipe to ASTM A234 Gr. WPB, standard weight (0.375" or 9.5 mm), or segmentally welded carbon steel of the same or equivalent grade. C-E dimensions conform to ANSI B16.9. Other styles not listed are available upon request.

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.

Fittings are painted orange, or as an option can be supplied hot-dip galvanized.

**MODEL W110LR 90° ELBOW**  
**W111LR 45° ELBOW**  
**W120 Tee**  
**W160 Cap**



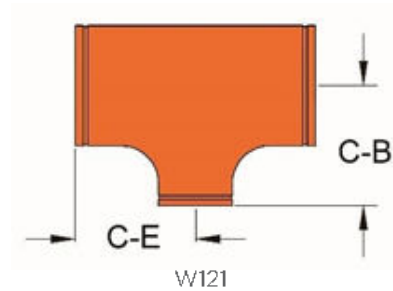
Models W110LR / W111LR / W120 / W160 Wrought Steel Grooved End Fittings

Nominal Pipe Size	Pipe O.D.	W110LR 90° Elbows		W111LR 45° Elbows		W120 Tee		W160 Cap	
		C-E	Weight	C-E	Weight	C-E	Weight	E-E	Weight
in	in	in	lbs	in	lbs	in	lbs	in	lbs
mm	mm	mm	kg	mm	kg	mm	kg	mm	kg
10	10.750	15.000	78.0	6.25	39.0	---	---	---	---
250	273.0	381.0	35.4	158.8	17.7	---	---	---	---
12	12.750	18.000	114.6	7.50	57.3	---	---	---	---
300	323.9	457.2	52.0	190.5	26.0	---	---	---	---
14	14.000	21.00	149.4	8.75	74.8	11.00	110.2	6.50	35.0
350	355.6	533.4	67.9	222.3	34.0	279.4	50.0	165.0	15.9
16	16.000	24.00	195.8	10.00	98.1	12.00	145.4	7.00	44.0
400	406.4	609.6	89.0	254.0	44.6	304.8	66.1	178.0	20.0
18	18.000	27.00	248.6	11.25	124.3	13.50	169.8	8.00	56.7
450	457.2	685.8	113.0	285.5	56.5	342.9	77.0	203.0	25.5
20	20.000	30.00	308.0	12.50	154.0	15.00	209.4	9.00	70.0
500	508.0	762.0	140.0	317.5	70.0	381.0	95.0	229.0	31.8
22	22.000	33.00	371.8	13.50	187.0	16.50	277.2	10.00	85.4
550	558.8	838.2	169.0	342.9	85.0	419.1	126.0	254.0	38.8
24	24.000	36.00	444.4	15.00	222.2	17.00	267.9	10.50	99.2
600	609.6	914.4	202.0	381.0	101.0	431.8	121.5	267.0	45.1

WROUGHT STEEL GROOVED END FITTINGS  
REV. 20220817

**MODEL W121 WROUGHT REDUCING TEE**

Material: Fabricated with ASTM A234 Gr. WPB, standard weight (0.375" or 9.5 mm), or segmentally welded carbon steel of the same or equivalent grade. C-E & C-B dimensions: conform to ANSI B16.9



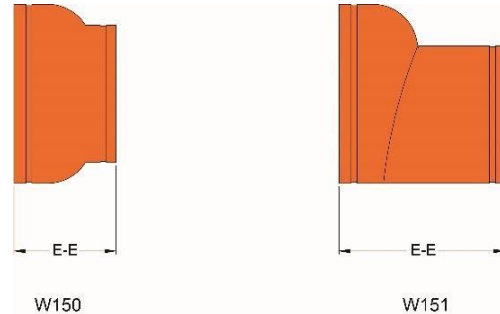
Model W121 Wrought Reducing Tee									
Nominal Pipe Size	Pipe O.D.	W121 Reducing Tee			Nominal Pipe Size	Pipe O.D.	W121 Reducing Tee		
		C-E	C-B	Weight			C-E	C-B	Weight
in	in	in	in	lb	in	in	in	in	lb
mm	mm	mm	mm	kg	mm	mm	mm	mm	kg
14 x 2½	14.000 x 2.875	11.0	9.37	--	16 x 10	16.000 x 10.750	12.0	11.4	129.6
350 x 65	355.6 x 73.0	279.0	238.0	--	400 x 250	406.4 x 273.0	305.0	283.0	58.9
14 x 3	14.000 x 3.500	11.0	9.37	--	16 x 12	16.000 x 12.750	12.0	11.61	132.2
350 x 80	355.6 x 88.9	279.0	238.0	--	400 x 300	406.4 x 323.9	305.0	295.0	60.1
14 x 4	14.000 x 4.5	11.0	9.37	--	16 x 14	16.000 x 14.000	12.0	12.00	134.4
350 x 100	355.6 x 114.3	279.0	238.0	--	400 x 350	406.4 x 355.6	305.0	305.0	61.1
14 x 6	14.000 x 6.625	11.0	9.37	101.2	18 x 6	18.000 x 6.625	13.5	11.38	159.7
350 x 150	355.6 x 168.3	279.0	238.0	46.0	450 x 150	457.2 x 168.3	343.0	289.0	72.6
14 x 8	14.000 x 8.625	11.0	9.76	102.3	18 x 8	18.000 x 8.625	13.5	11.75	160.6
350 x 200	355.6 x 219.1	279.0	248.0	46.5	450 x 200	457.2 x 219.1	343.0	298.0	73.0
14 x 10	14.000 x 10.750	11.0	10.12	104.9	18 x 10	18.000 x 10.750	13.5	12.13	162.8
350 x 250	355.6 x 273.0	279.0	257.0	47.7	450 x 250	457.2 x 273.0	343.0	308.0	74.0
14 x 12	14.000 x 12.750	11.0	10.63	96.8	18 x 12	18.000 x 12.750	13.5	12.64	165.2
350 x 300	355.6 x 323.9	279.0	270.0	44.0	450 x 300	457.2 x 323.9	343.0	321.0	75.1
16 x 6	16.000 x 6.625	12.0	10.40	125.8	18 x 14	18.000 x 14.000	13.5	13.00	167.2
400 x 150	406.4 x 168.3	305.0	264.0	57.2	450 x 350	457.2 x 355.6	343.0	330.0	76.0
16 x 8	16.000 x 8.625	12.0	10.75	127.2	18 x 16	18.000 x 16.000	13.5	13.00	167.9
400 x 200	406.4 x 219.1	305.0	273.0	57.8	450 x 400	457.2 x 406.4	343.0	330.0	76.3

Model W121 Wrought Reducing Tee									
Nominal Pipe Size	Pipe O.D.	W121 Reducing Tee			Nominal Pipe Size	Pipe O.D.	W121 Reducing Tee		
		C-2	C-3	Weight			C-2	C-3	Weight
n	n	n	n	bs	n	n	n	n	bs
mm	mm	mm	mm	kg	mm	mm	mm	mm	kg
20 x 6	20.000 x 6.625	15.0	12.36	196.9	24 x 8	24.000 x 8.625	17.0	14.76	270.6
500 x 150	508.0 x 168.3	381.0	314.0	89.5	600 x 200	609.6 x 219.1	432.0	375.0	123.0
20 x 8	20.000 x 8.625	15.0	12.76	198.0	24 x 10	24.000 x 10.750	17.0	15.12	271.0
500 x 200	508.0 x 219.1	381.0	324.0	90.0	600 x 250	609.6 x 273.0	432.0	384.0	123.2
20 x 10	18.000 x 10.750	15.0	13.11	200.0	24 x 12	24.000 x 12.750	17.0	15.63	273.2
500 x 250	508.0 x 273.0	381.0	333.0	90.9	600 x 300	609.6 x 323.9	432.0	397.0	124.2
20 x 12	20.000 x 12.750	15.0	13.62	202.4	24 x 14	24.000x14.000	17.0	16.00	275.0
500 x 300	508.0 x 323.9	381.0	346.0	92.0	600 x 350	609.6 x 355.6	432.0	406.0	125.0
20 x 14	20.000 x 14.000	15.0	14.02	204.4	24 x 16	24.000 x 16.000	17.0	16.00	275.0
500 x 350	508.0 x 355.6	381.0	356.0	92.9	600 x 400	609.6 x 406.4	432.0	406.0	125.0
20 x 16	20.000 x 16.000	15.0	14.02	204.6	24 x 18	24.000x18.000	17.0	16.50	279.6
500 x 400	508.0 x 406.4	381.0	356.0	93.6	600 x 450	609.6 x 457.2	432.0	419.0	127.1
20 x 18	20.000 x 18.000	15.0	14.50	207.9	24 x 20	24.000 x 20.000	17.0	17.00	281.6
500 x 450	508.0 x 457.2	381.0	368.0	94.5	600 x 500	609.6 x 508.0	432.0	432.0	128.0
24 x 6	24.000 x 6.625	17.0	14.38	268.4					
600 x 150	609.6 x 168.3	432.0	365.0	122.0					

**MODEL W150 WROUGHT CONCENTRIC REDUCER  
W151 WROUGHT ECCENTRIC REDUCER**

Material: Fabricated with ASTM A234 Gr. WPB, standard weight (0.375" or 9.5 mm), or segmentally welded carbon steel of the same or equivalent grade.

E-E dimensions: conform to ANSI B16.9.



Models W150 Wrought Concentric Reducer / W151 Wrought Eccentric Reducer

Nominal Pipe Size	Pipe O.D.	W150 Concentric Reducer		W151 Eccentric Reducer	
		E-E	Weight	E-E	Weight
		in	lb	in	lb
mm	mm	mm	kg	mm	kg
14 x 6	14.000 x 6.625	13.00	67.76	13.00	67.76
350 x 150	355.6 x 168.3	330.0	30.8	330.0	30.8
14 x 8	14.000 x 8.625	13.00	69.96	13.00	69.96
350 x 200	355.6 x 219.1	330.0	31.8	330.0	31.8
14 x 10	14.000 x 10.750	13.00	71.94	13.00	71.94
350 x 250	355.6 x 273.0	330.0	32.7	330.0	32.7
14 x 12	14.000 x 12.750	13.00	73.92	13.00	73.92
350 x 300	355.6 x 323.9	330.0	33.6	330.0	33.6
16 x 8	16.000 x 8.625	14.00	87.78	14.00	87.78
400 x 200	406.4 x 219.1	356.0	39.9	356.0	39.9
16 x 10	16.000 x 10.750	14.00	90.86	14.00	90.86
400 x 250	406.4 x 273.0	356.0	41.3	356.0	41.3
16 x 12	16.000 x 12.750	14.00	92.84	14.00	92.84
400 x 300	406.4 x 323.9	356.0	42.2	356.0	42.2
16 x 14	16.000 x 14.000	14.00	94.82	14.00	94.82
400 x 350	406.4 x 355.6	356.0	43.1	356.0	43.1
18 x 10	18.000 x 10.750	15.00	111.76	15.00	111.76
450 x 250	457.2 x 273.0	381.0	50.8	381.0	50.8
18 x 12	18.000 x 12.750	15.00	114.84	15.00	114.84
450 x 300	457.2 x 323.9	381.0	52.2	381.0	52.2
18 x 14	18.000 x 14.000	15.00	117.70	15.00	117.70
450 x 350	457.2 x 355.6	381.0	53.5	381.0	53.5
18 x 16	18.000 x 16.000	15.00	120.78	15.00	120.78
450 x 400	457.2 x 406.4	381.0	54.9	381.0	54.9
20 x 12	20.000 x 12.750	20.00	159.72	20.00	159.72
500 x 300	508.0 x 323.9	508.0	72.6	508.0	72.6
20 x 14	20.000 x 14.000	20.00	163.68	20.00	163.68
500 x 350	508.0 x 355.6	508.0	74.4	508.0	74.4

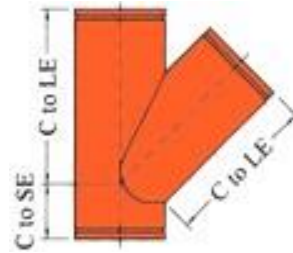
Models W150 Wrought Concentric Reducer / W151 Wrought Eccentric Reducer

Nominal Pipe Size	Pipe O.D.	W150 Concentric Reducer		W151 Eccentric Reducer	
		---	Weight	---	Weight
		mm	kg	mm	kg
20 x 16	20.000 x 16.000	20.00	167.64	20.00	167.64
500 x 400	508.0 x 406.4	508.0	76.2	508.0	76.2
20 x 18	20.000 x 18.000	20.00	171.60	20.00	171.6
500 x 450	508.0 x 457.2	508.0	78.0	508.0	78.0
24 x 16	24.000 x 16.000	20.00	197.56	20.00	197.56
600 x 400	609.6 x 406.4	508.0	89.8	508.0	89.8
24 x 18	24.000 x 18.000	20.00	199.54	20.00	199.54
600 x 450	609.6 x 457.2	508.0	90.7	508.0	90.7
24 x 20	24.000 x 20.000	20.00	203.50	20.00	203.50
600 x 500	609.6 x 508.0	508.0	92.5	508.0	92.5

**MODEL W130 45° LATERAL**

Material: Fabricated with ASTM A234 Gr. WPB, standard weight (0.375" or 9.5 mm), or segmentally welded carbon steel of the same or equivalent grade.

C-LE and C-SE dimensions: manufacturer's standard.

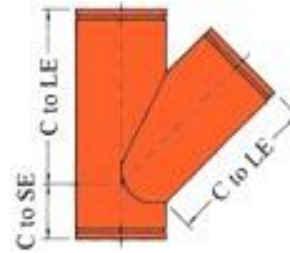


Model W130 45° Lateral				
Nominal Pipe Size	Pipe O.D.	C-LE	C-SE	Weight
in	in	in	in	lbs
mm	mm	mm	mm	kg
14	14.000	26.5	7.5	219.14
350	355.6	673	191	99.4
16	16.000	29.0	8.0	270.5
400	406.4	737	203	122.7
18	18.000	32.0	8.5	332.7
450	457.2	813	216	150.9
20	20.000	35.0	9.0	401.3
500	508.0	889	229	182.0
24	24.000	40.0	10.0	541.3
600	609.6	1016	254	245.5

**MODEL W131 45° REDUCING LATERAL**

Material: Fabricated with ASTM A234 Gr. WPB, standard weight (0.375" or 9.5 mm), or segmentally welded carbon steel of the same or equivalent grade.

C-LE and C-SE dimensions: manufacturer's standard.



Model W131 45° Lateral					
Nominal Pipe Size	Pipe O.D.	C-LE	C-SE	Weight:	
in	in	in	in	lb	
mm	mm	mm	mm	kg	
14 x 14 x 4	14.000 x 14.000 x 4.500	26.5	7.5	175.9	
350 x 350 x 100	355.6 x 355.6 x 114.3	673	191	79.8	
14 x 14 x 6	14.000 x 14.000 x 6.625	26.5	7.5	185.9	
350 x 350 x 150	355.6 x 355.6 x 168.3	673	191	84.3	
14 x 14 x 8	14.000 x 14.000 x 8.625	26.5	7.5	195.0	
350 x 350 x 200	355.6 x 355.6 x 219.1	673	191	88.4	
14 x 14 x 10	14.000 x 14.000 x 10.750	26.5	7.5	204.4	
350 x 350 x 250	355.6 x 355.6 x 273.0	673	191	92.7	
14 x 14 x 12	14.000 x 14.000 x 12.750	26.5	7.5	213.3	
350 x 350 x 300	355.6 x 355.6 x 323.9	673	191	96.8	
16 x 16 x 6	16.000 x 16.000 x 6.625	29.0	8.0	226.4	
400 x 400 x 150	406.4 x 406.4 x 168.3	737	203	102.7	
16 x 16 x 8	16.000 x 16.000 x 8.625	29.0	8.0	236.0	
400 x 400 x 200	406.4 x 406.4 x 219.1	737	203	107.1	
16 x 16 x 10	16.000 x 16.000 x 10.750	29.0	8.0	246.0	
400 x 400 x 250	406.4 x 406.4 x 273.0	737	203	111.6	
16 x 16 x 12	16.000 x 16.000 x 12.750	29.0	8.0	255.1	
400 x 400 x 300	406.4 x 406.4 x 323.9	737	203	115.7	
16 x 16 x 14	16.000 x 16.000 x 14.000	29.0	8.0	260.9	
400 x 400 x 350	406.4 x 406.4 x 355.6	737	203	118.4	
18 x 18 x 6	18.000 x 18.000 x 6.625	32.0	8.5	274.8	
450 x 450 x 150	457.2 x 457.2 x 168.3	813	216	124.6	
18 x 18 x 8	18.000 x 18.000 x 8.625	32.0	8.5	285.3	
450 x 450 x 200	457.2 x 457.2 x 219.1	813	216	129.4	
18 x 18 x 12	18.000 x 18.000 x 12.750	32.0	8.5	306.2	
450 x 450 x 300	457.2 x 457.2 x 323.9	813	216	138.9	
18 x 18 x 14	18.000 x 18.000 x 14.000	32.0	8.5	312.4	
450 x 450 x 350	457.2 x 457.2 x 355.6	813	216	141.7	
18 x 18 x 16	18.000 x 18.000 x 16.000	32.0	8.5	322.4	
450 x 450 x 400	457.2 x 457.2 x 406.4	813	216	146.2	

WROUGHT STEEL GROOVED END FITTINGS  
REV. 20220517

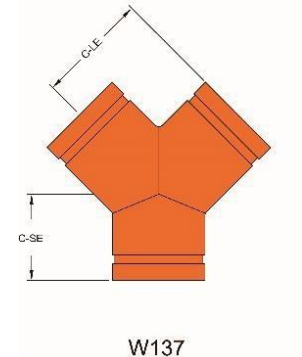
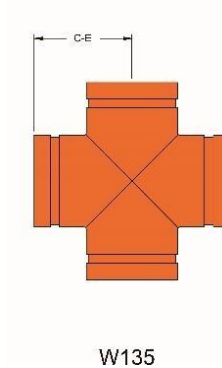
Model W131 45° Lateral					
Nominal Pipe Size	Pipe O.D.	C-LE	C-SE	Weight	
in	in	in	in	lb	
mm	mm	mm	mm	kg	
20 x 20 x 12	20.000 x 20.000 x 12.750	35.0	9.0	362.7	
500 x 500 x 300	508.0 x 508.0 x 323.9	889	229	164.3	
20 x 20 x 14	20.000 x 20.000 x 14.000	35.0	9.0	368.7	
500 x 500 x 350	508.0 x 508.0 x 355.6	889	229	167.2	
20 x 20 x 16	20.000 x 20.000 x 16.000	35.0	9.0	379.4	
500 x 500 x 400	508.0 x 508.0 x 406.4	889	229	172.1	
24 x 24 x 16	24.000 x 24.000 x 16.000	40.0	10.0	494.9	
600 x 600 x 400	609.6 x 609.6 x 406.4	1016	254	224.5	
24 x 24 x 20	24.000 x 24.000 x 20.000	40.0	10.0	517.7	
600 x 600 x 500	609.6 x 609.6 x 508.0	1016	254	254.8	



**MODEL W135 CROSS  
W137 TRUE Y**

Material: Fabricated with ASTM A234 Gr. WPB, standard weight (0.375" or 9.5 mm), or segmentally welded carbon steel of the same or equivalent grade.

C-LE and C-SE dimensions: manufacturer's standard.

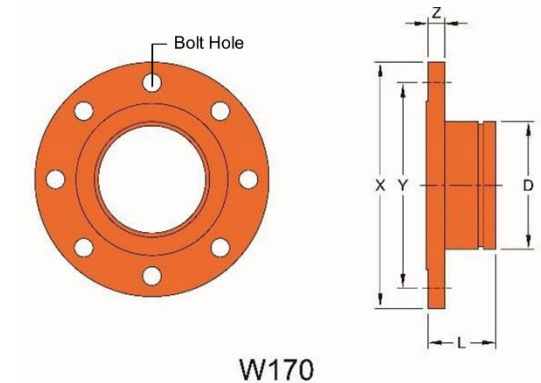


**Model W135 Cross / W137 True Y**

Nominal Pipe Size	Pipe O.D.	W135 Cross		W137 True Y		
		C-C	Weight	C-LE	C-SE	Weight
in	in	in	lbs	in	in	lbs
mm	mm	mm	kg	mm	mm	kg
14	14.000	11.00	121.0	11.00	7.50	98.0
350	355.6	279	54.9	279	191	44.4
16	16.000	12.00	146.4	12.00	8.00	119.3
400	406.4	305	66.4	305	203	54.1
18	18.000	13.50	185.4	13.50	8.50	148.3
450	457.2	343	84.1	343	216	67.3
20	20.000	15.00	229.1	15.00	9.00	180.4
500	508.0	38"	103.9	38"	229	81.8
24	24.000	17.00	298.7	17.00	10.00	238.3
600	609.6	432	135.5	432	254	108.7

**MODEL W170 FLANGE ADAPTER  
ANSI CLASS 125 / 150**

The Model W170 Flange Adapter fabricated in sizes 10" ~ 24" provide a direct connection to ANSI Class 125/150 flanges. Dimensions of NPS 10" - NPS 24" conform to ANSI/ASME B16.5.

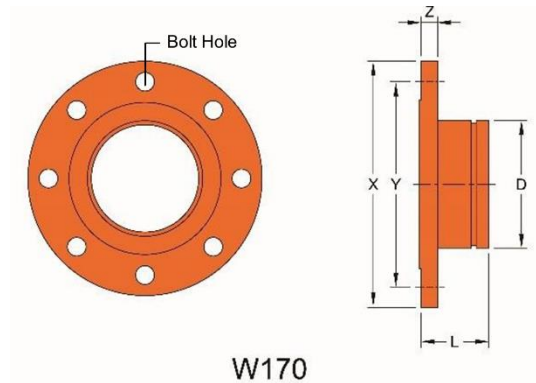


**Model W170 Flange Adapter ANSI Class 125/150**

Nominal Pipe Size	X	Y	Z	Bolt Size	Bolt Hole		D	L	Weight
					Dia.	No.			
in	in	in	in	in	in		in	in	lb
mm	mm	mm	mm	mm	mm		mm	mm	kg
10	16.00	14.25	1.18	3/8	1	12	10.75	5.00	9.9
250	406.4	362.0	30.0	3/8	1	12	273.0	127.0	21.9
12	19.00	17.00	1.25	3/8	1	12	12.75	5.00	14.1
300	483.0	432.0	32.0	3/8	1	12	323.9	127.0	31.1
14	21.00	18.75	1.38	1	1 1/4	12	14.00	5.00	18.7
350	533.0	476.3	35.0	1	1 1/4	12	355.6	127.0	40.0
16	23.50	21.25	1.46	1	1 1/4	16	16.00	5.00	22.2
400	597.0	539.7	37.0	1	1 1/4	16	406.4	127.0	49.0
18	25.00	22.75	1.57	1 1/4	1 1/4	16	18.00	5.50	25.2
450	635.0	577.8	40.0	1 1/4	1 1/4	16	457.2	140.0	55.6
20	27.50	25.00	1.69	1 1/4	1 1/4	20	20.00	6.00	31.1
500	699.0	635.0	43.0	1 1/4	1 1/4	20	508.0	152.0	68.6
24	32.00	29.50	1.89	1 1/2	1 3/4	20	24.00	6.00	42.7
600	813.6	749.3	48.0	1 1/2	1 3/4	20	609.6	152.0	92.8

**MODEL W170 FLANGE ADAPTER  
PN 10/16**

The Model W170 Flange Adapter fabricated in sizes 10" ~ 24" (250 mm ~ 600 mm) provide a direct connection to PN 10/16 flanges. Dimensions conform to BS EN 1092.



W170

**Model W170 Flange Adapter - PN 10**

Nominal Pipe Size	X	Y	Z	Bolt Size	Bolt Hole		D	L	Weight
					Dia.	No.			
mm	mm	mm	mm		mm		mm	mm	kg
250	395.0	350.0	26	M20	22.0	12	273.0	114.0	18.2
300	445.0	400.0	26	M20	22.0	12	323.9	114.0	21.4
350	505.0	460.0	30	M20	22.0	16	355.6	127.0	31.1
400	565.0	515.0	32	M24	26.0	16	406.4	127.0	38.1
450	615.0	565.0	36	M24	26.0	20	457.0	152.0	48.2
500	670.0	620.0	38	M24	26.0	20	508.0	152.0	56.4
600	780.0	725.0	42	M27	30.0	20	610.0	152.0	74.0

**Model W170 Flange Adapter - PN 16**

Nominal Pipe Size	X	Y	Z	Bolt Size	Bolt Hole		D	L	Weight
					Dia.	No.			
mm	mm	mm	mm		mm		mm	mm	kg
250	405.0	355.0	29	M24	26.0	12	273.0	114	20.4
300	460.0	410.0	32	M24	26.0	12	323.9	114	26.5
350	520.0	470.0	35	M24	26.0	16	355.6	140	38.1
400	580.0	525.0	38	M27	30.0	16	406.4	140	47.2
450	640.0	585.0	42	M27	30.0	20	457.0	165	61.4
500	715.0	650.0	46	M30	33.0	20	508.0	165	80.4
600	840.0	770.0	55	M33	36.0	20	610.0	190	123.8

**General note**

- Pressure ratings for grooved fittings conform to the working pressure of the coupling used to join the system.
- Pressure ratings for grooved flanged adapter fittings conform to the pressure rating of the engaging flange or grooved coupling, whichever is lower.
- Field Joint Test: For one time only, the system may be tested hydrostatically at 1½ times the maximum working pressure listed (ASME 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.