

## WROUGHT STEEL GROOVED END FITTINGS

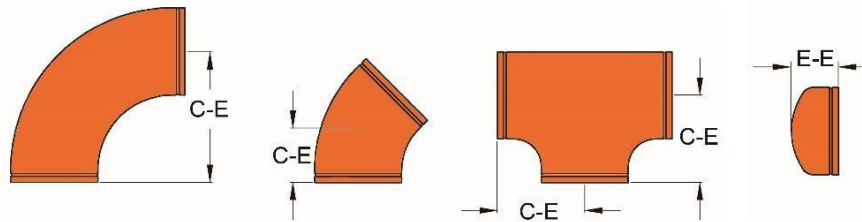
The **Shurjoint** wrought steel grooved end fittings are available 10" (250 mm) through 24" (600 mm) pipe sizes in a variety of styles. Fittings are fabricated with the carbon steel pipe to ASTM A234 Gr. WPB, standard weight (0.375" or 9.5 mm), or segmentally welded carbon steel of the same or equivalent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

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



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

### MODELS W110LR 90° ELBOW, L/R W111LR 45° ELBOW W120 Tee W160 Cap



W110LR

W111LR

W120

W160

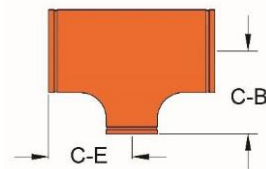
### Models W110LR / W111LR / W120 / W160 Wrought Steel Grooved End Fittings

Nominal Pipe Size	Pipe O.D.	W110LR 90° L/R 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	Kgs	mm	Kgs	mm	Kgs	mm	Kgs
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	56.1
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

**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



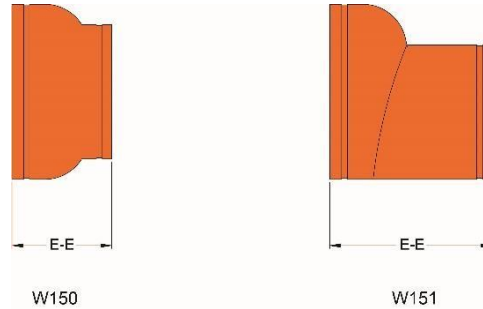
W121

Model W121 Wrought Reducing Tee										
Nominal Pipe Size	Pipe O.D.	W121 Reducing Tee			Weight	Nominal Pipe Size	Pipe O.D.	W121 Reducing Tee		
		C-E	C-B					C-E	C-B	
in	in	in / mm	in / mm	Lbs / Kgs	in	in	in / mm	in / mm	Lbs / Kgs	
14 x 2½	14.000 x 2.875	11.0	9.37	--	20 x 6	20.000 x 6.625	15.0	12.36	196.9	
350 x 65	355.6 x 73.0	279.0	238.0	--	500 x 150	508.0 x 168.3	381.0	314.0	89.5	
14 x 3	14.000 x 3.500	11.0	9.37	--	20 x 8	20.000 x 8.625	15.0	12.76	198.0	
350 x 80	355.6 x 88.9	279.0	238.0	--	500 x 200	508.0 x 219.1	381.0	324.0	90.0	
14 x 4	14.000 x 4.5	11.0	9.37	--	20 x 10	18.000 x 10.750	15.0	13.11	200.0	
350 x 100	355.6 x 114.3	279.0	238.0	--	500 x 250	508.0 x 273.0	381.0	333.0	90.9	
14 x 6	14.000 x 6.625	11.0	9.37	101.2	20 x 12	20.000 x 12.750	15.0	13.62	202.4	
350 x 150	355.6 x 168.3	279.0	238.0	46.0	500 x 300	508.0 x 323.9	381.0	346.0	92.0	
14 x 8	14.000 x 8.625	11.0	9.76	102.3	20 x 14	20.000 x 14.000	15.0	14.02	204.4	
350 x 200	355.6 x 219.1	279.0	248.0	46.5	500 x 350	508.0 x 355.6	381.0	356.0	92.9	
14 x 10	14.000 x 10.750	11.0	10.12	104.9	20 x 16	20.000 x 16.000	15.0	14.02	204.6	
350 x 250	355.6 x 273.0	279.0	257.0	47.7	500 x 400	508.0 x 406.4	381.0	356.0	93.6	
14 x 12	14.000 x 12.750	11.0	10.63	96.8	20 x 18	20.000 x 18.000	15.0	14.50	207.9	
350 x 300	355.6 x 323.9	279.0	270.0	44.0	500 x 450	508.0 x 457.2	381.0	368.0	94.5	
16 x 6	16.000 x 6.625	12.0	10.40	125.8	24 x 6	24.000 x 6.625	17.0	14.38	268.4	
400 x 150	406.4 x 168.3	305.0	264.0	57.2	600 x 150	609.6 x 168.3	432.0	365.0	122.0	
16 x 8	16.000 x 8.625	12.0	10.75	127.2	24 x 8	24.000 x 8.625	17.0	14.76	270.6	
400 x 200	406.4 x 219.1	305.0	273.0	57.8	600 x 200	609.6 x 219.1	432.0	375.0	123.0	
16 x 10	16.000 x 10.750	12.0	11.14	129.6	24 x 10	24.000 x 10.750	17.0	15.12	271.0	
400 x 250	406.4 x 273.0	305.0	283.0	58.9	600 x 250	609.6 x 273.0	432.0	384.0	123.2	
16 x 12	16.000 x 12.750	12.0	11.61	132.2	24 x 12	24.000 x 12.750	17.0	15.63	273.2	
400 x 300	406.4 x 323.9	305.0	295.0	60.1	600 x 300	609.6 x 323.9	432.0	397.0	124.2	
16 x 14	16.000 x 14.000	12.0	12.00	134.4	24 x 14	24.000 x 14.000	17.0	16.00	275.0	
400 x 350	406.4 x 355.6	305.0	305.0	61.1	600 x 350	609.6 x 355.6	432.0	406.0	125.0	
18 x 6	18.000 x 6.625	13.5	11.38	159.7	24 x 16	24.000 x 16.000	17.0	16.00	275.0	
450 x 150	457.2 x 168.3	343.0	289.0	72.6	600 x 400	609.6 x 406.4	432.0	406.0	125.0	
18 x 8	18.000 x 8.625	13.5	11.75	160.6	24 x 18	24.000 x 18.000	17.0	16.50	279.6	
450 x 200	457.2 x 219.1	343.0	298.0	73.0	600 x 450	609.6 x 457.2	432.0	419.0	127.1	
18 x 10	18.000 x 10.750	13.5	12.13	162.8	24 x 20	24.000 x 20.000	17.0	17.00	281.6	
450 x 250	457.2 x 273.0	343.0	308.0	74.0	600 x 500	609.6 x 508.0	432.0	432.0	128.0	
18 x 12	18.000 x 12.750	13.5	12.64	165.2						
450 x 300	457.2 x 323.9	343.0	321.0	75.1						
18 x 14	18.000 x 14.000	13.5	13.00	167.2						
450 x 350	457.2 x 355.6	343.0	330.0	76.0						
18 x 16	18.000 x 16.000	13.5	13.00	167.9						
450 x 400	457.2 x 406.4	343.0	330.0	76.3						

## MODELS 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.

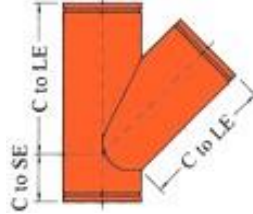


Models W150 Wrought Concentric Reducer / W151 Wrought Eccentric Reducer					
Nominal Pipe Size	Pipe O.D.	W150 Concentric Reducer		W151 Eccentric Reducer	
		E-E	Weight	E-E	Weight
in mm	in mm	in / mm	Lbs / Kgs	in / mm	Lbs / Kgs
14 x 6 350 x 150	14.000 x 6.625 355.6 x 168.3	13.00 330.0	67.76 30.8	13.00 330.0	67.76 30.8
14 x 8 350 x 200	14.000 x 8.625 355.6 x 219.1	13.00 330.0	69.96 31.8	13.00 330.0	69.96 31.8
14 x 10 350 x 250	14.000 x 10.750 355.6 x 273.0	13.00 330.0	71.94 32.7	13.00 330.0	71.94 32.7
14 x 12 350 x 300	14.000 x 12.750 355.6 x 323.9	13.00 330.0	73.92 33.6	13.00 330.0	73.92 33.6
16 x 8 400 x 200	16.000 x 8.625 406.4 x 219.1	14.00 356.0	87.78 39.9	14.00 356.0	87.78 39.9
16 x 10 400 x 250	16.000 x 10.750 406.4 x 273.0	14.00 356.0	90.86 41.3	14.00 356.0	90.86 41.3
16 x 12 400 x 300	16.000 x 12.750 406.4 x 323.9	14.00 356.0	92.84 42.2	14.00 356.0	92.84 42.2
16 x 14 400 x 350	16.000 x 14.000 406.4 x 355.6	14.00 356.0	94.82 43.1	14.00 356.0	94.82 43.1
18 x 10 450 x 250	18.000 x 10.750 457.2 x 273.0	15.00 381.0	111.76 50.8	15.00 381.0	111.76 50.8
18 x 12 450 x 300	18.000 x 12.750 457.2 x 323.9	15.00 381.0	114.84 52.2	15.00 381.0	114.84 52.2
18 x 14 450 x 350	18.000 x 14.000 457.2 x 355.6	15.00 381.0	117.70 53.5	15.00 381.0	117.70 53.5
18 x 16 450 x 400	18.000 x 16.000 457.2 x 406.4	15.00 381.0	120.78 54.9	15.00 381.0	120.78 54.9
20 x 12 500 x 300	20.000 x 12.750 508.0 x 323.9	20.00 508.0	159.72 72.6	20.00 508.0	159.72 72.6
20 x 14 500 x 350	20.000 x 14.000 508.0 x 355.6	20.00 508.0	163.68 74.4	20.00 508.0	163.68 74.4
20 x 16 500 x 400	20.000 x 16.000 508.0 x 406.4	20.00 508.0	167.64 76.2	20.00 508.0	167.64 76.2
20 x 18 500 x 450	20.000 x 18.000 508.0 x 457.2	20.00 508.0	171.60 78.0	20.00 508.0	171.60 78.0
24 x 16 600 x 400	24.000 x 16.000 609.6 x 406.4	20.00 508.0	197.56 89.8	20.00 508.0	197.56 89.8
24 x 18 600 x 450	24.000 x 18.000 609.6 x 457.2	20.00 508.0	199.54 90.7	20.00 508.0	199.54 90.7
24 x 20 600 x 500	24.000 x 20.000 609.6 x 508.0	20.00 508.0	203.50 92.5	20.00 508.0	203.50 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.

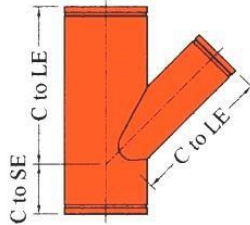


Model W130 45° Lateral					
Nominal Pipe Size	Pipe O.D.	C-LE	C-SE	Weight	
in mm	in mm	in mm	in mm	Lbs Kgs	
14 350	14.000 355.6	26.5 673	7.5 191	219.14 99.4	
16 400	16.000 406.4	29.0 737	8.0 203	270.5 122.7	
18 450	18.000 457.2	32.0 813	8.5 216	332.7 150.9	
20 500	20.000 508.0	35.0 889	9.0 229	401.3 182.0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

## 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.

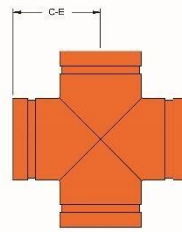


Model W131 Reducing Lateral					
Nominal Pipe Size	Pipe O.D.	C-LE	C-SE	Weight	
in mm	in mm	in mm	in mm	Lbs	Kgs
14 x 14 x 4 350 x 350 x 100	14.000 x 14.000 x 4.500 355.6 x 355.6 x 114.3	26.5 673	7.5 191	175.9	79.8
14 x 14 x 6 350 x 350 x 150	14.000 x 14.000 x 6.625 355.6 x 355.6 x 168.3	26.5 673	7.5 191	185.9	84.3
14 x 14 x 8 350 x 350 x 200	14.000 x 14.000 x 8.625 355.6 x 355.6 x 219.1	26.5 673	7.5 191	195.0	88.4
14 x 14 x 10 350 x 350 x 250	14.000 x 14.000 x 10.750 355.6 x 355.6 x 273.0	26.5 673	7.5 191	204.4	92.7
14 x 14 x 12 350 x 350 x 300	14.000 x 14.000 x 12.750 355.6 x 355.6 x 323.9	26.5 673	7.5 191	213.3	96.8
16 x 16 x 6 400 x 400 x 150	16.000 x 16.000 x 6.625 406.4 x 406.4 x 168.3	29.0 737	8.0 203	226.4	102.7
16 x 16 x 8 400 x 400 x 200	16.000 x 16.000 x 8.625 406.4 x 406.4 x 219.1	29.0 737	8.0 203	236.0	107.1
16 x 16 x 10 400 x 400 x 250	16.000 x 16.000 x 10.750 406.4 x 406.4 x 273.0	29.0 737	8.0 203	246.0	111.6
16 x 16 x 12 400 x 400 x 300	16.000 x 16.000 x 12.750 406.4 x 406.4 x 323.9	29.0 737	8.0 203	255.1	115.7
16 x 16 x 14 400 x 400 x 350	16.000 x 16.000 x 14.000 406.4 x 406.4 x 355.6	29.0 737	8.0 203	260.9	118.4
18 x 18 x 6 450 x 450 x 150	18.000 x 18.000 x 6.625 457.2 x 457.2 x 168.3	32.0 813	8.5 216	274.8	124.6
18 x 18 x 8 450 x 450 x 200	18.000 x 18.000 x 8.625 457.2 x 457.2 x 219.1	32.0 813	8.5 216	285.3	129.4
18 x 18 x 12 450 x 450 x 300	18.000 x 18.000 x 12.750 457.2 x 457.2 x 323.9	32.0 813	8.5 216	306.2	138.9
18 x 18 x 14 450 x 450 x 350	18.000 x 18.000 x 14.000 457.2 x 457.2 x 355.6	32.0 813	8.5 216	312.4	141.7
18 x 18 x 16 450 x 450 x 400	18.000 x 18.000 x 16.000 457.2 x 457.2 x 406.4	32.0 813	8.5 216	322.4	146.2
20 x 20 x 12 500 x 500 x 300	20.000 x 20.000 x 12.750 508.0 x 508.0 x 323.9	35.0 889	9.0 229	362.1	164.3
20 x 20 x 14 500 x 500 x 350	20.000 x 20.000 x 14.000 508.0 x 508.0 x 355.6	35.0 889	9.0 229	368.7	167.2
20 x 20 x 16 500 x 500 x 400	20.000 x 20.000 x 16.000 508.0 x 508.0 x 406.4	35.0 889	9.0 229	379.4	172.1
24 x 24 x 16 600 x 600 x 400	24.000 x 24.000 x 16.000 609.6 x 609.6 x 406.4	40.0 1016	10.0 254	494.9	224.5
24 x 24 x 20 600 x 600 x 500	24.000 x 24.000 x 20.000 609.6 x 609.6 x 508.0	40.0 1016	10.0 254	517.7	254.8

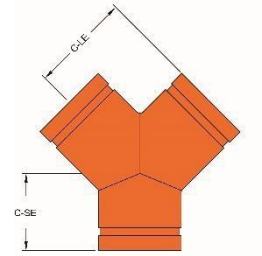
## MODEL W135 CROSS MODEL W137 TRUE WYE

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.



W135

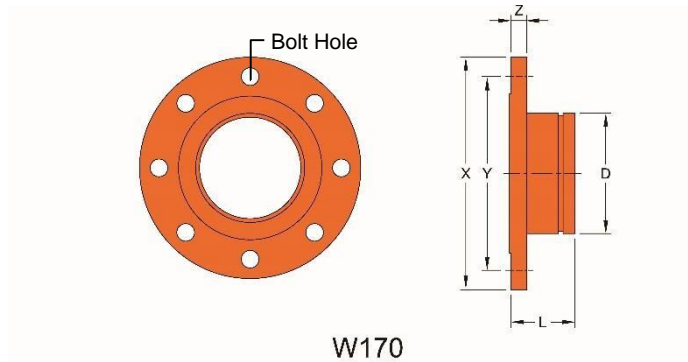


W137

Model W135 Cross / W137 True Wye						
Nominal Pipe Size	Pipe O.D.	W135 Cross		W137 True Wye		
		C-E	Weight	C-LE	C-SE	Weight
in	in	in / mm	Lbs / Kgs	in / mm	in / mm	Lbs / Kgs
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	381	103.9	381	229	81.8
24	24.000	17.00	298.7	17.00	10.00	238.3
600	609.6	432	135.5	432	254	108.1

### 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.

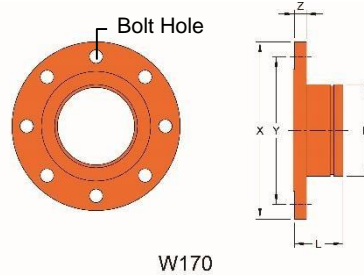


**Model W170 Flange Adapter ANSI Class 125/150**

Nominal Pipe Size	X	Y	Z	Bolt Size	Bolt Hole		D	L	Weight
					Dia.	No.			
in mm	in ØBmm	in mm	in mm	in	in		in mm	in mm	Lbs Kgs
10 250	16.00 406.4	14.25 362.0	1.18 30.0	7/8	1	12	10.75 273.0	5.00 127.0	9.9 21.9
12 300	19.00 483.0	17.00 432.0	1.25 32.0	7/8	1	12	12.75 323.9	5.00 127.0	14.1 31.1
14 350	21.00 533.0	18.75 476.3	1.38 35.0	1	1 1/8	12	14.00 355.6	5.00 127.0	18.1 40.0
16 400	23.50 597.0	21.25 539.7	1.46 37.0	1	1 1/8	16	16.00 406.4	5.00 127.0	22.2 49.0
18 450	25.00 635.0	22.75 577.8	1.57 40.0	1 1/8	1 1/4	16	18.00 457.2	5.50 140.0	25.2 55.6
20 500	27.50 699.0	25.00 635.0	1.69 43.0	1 1/8	1 1/4	20	20.00 508.0	6.00 152.0	31.1 68.6
24 600	32.00 813.6	29.50 749.3	1.89 48.0	1 1/4	1 1/2	20	24.00 609.6	6.00 152.0	42.1 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.



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	Kgs
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	Wt.
					Dia.	No.			
mm	mm	mm	mm		mm		mm	mm	Kgs
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 Notes:

- **Pressure Ratings** for fittings conform to the working pressure of the coupling used to join the system.
- **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.