



شرکت پخش فولاد
ماهان تهران
(سهامی خاص)

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KS/JIS

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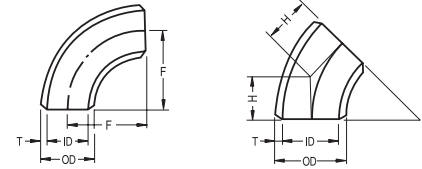
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191

90° Elbow (Long, Short) 45° Elbow (Long, Short)

SPP/SGP, 7.9T, STD, X-S



(Unit : mm)

KS B1522, JIS B2311

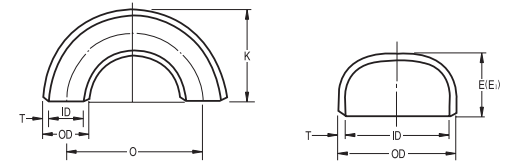
Nominal Pipe Size	Outside Diameter O.D	SPP/SGP		Center to Center			
		Inside Diameter I.D	Wall Thickness T	Long		Short	
				F [90°]	H [45°]	F [90°]	
15	21.7	16.1	2.8	38.1	15.8	-	
20	27.2	21.6	2.8	38.1	15.8	-	
25	34.0	27.6	3.2	38.1	15.8	25.4	
32	42.7	35.7	3.5	47.6	19.7	31.8	
40	48.6	41.6	3.5	57.2	23.7	38.1	
50	60.5	52.9	3.8	76.2	31.6	50.8	
65	76.3	67.9	4.2	95.3	39.5	63.5	
80	89.1	80.7	4.2	114.3	47.3	76.2	
90	101.6	93.2	4.2	133.4	55.3	88.9	
100	114.3	105.3	4.5	152.4	63.1	101.6	
125	139.8	130.8	4.5	190.5	78.9	127.0	
150	165.2	155.2	5.0	228.6	94.7	152.4	
200	216.3	204.7	5.8	304.8	126.3	203.2	
250	267.4	254.2	6.6	381.0	157.8	254.0	
300	318.5	304.7	6.9	457.2	189.4	304.8	
350	355.6	339.8	7.9	533.4	220.9	355.6	
400	406.4	390.6	7.9	609.6	252.5	406.4	
450	457.2	441.4	7.9	685.8	284.1	457.2	
500	508.0	492.2	7.9	762.0	315.6	508.0	

Wall Thickness T						Center to Center			
7.9T		STD		X-S		Long		Short	
I.D	T	I.D	T	I.D	T	F [90°]	H [45°]	F [90°]	
16.1	2.8	16.1	2.8	16.1	2.8	38.1	15.8	-	
21.6	2.8	21.6	2.8	21.6	2.8	38.1	15.8	-	
27.6	3.2	27.6	3.2	27.6	3.2	38.1	15.8	25.4	
35.7	3.5	35.7	3.5	35.7	3.5	47.6	19.7	31.8	
41.6	3.5	41.6	3.5	41.6	3.5	57.2	23.7	38.1	
52.9	3.8	52.9	3.8	52.9	3.8	76.2	31.6	50.8	
67.9	4.2	67.9	4.2	67.9	4.2	95.3	39.5	63.5	
80.7	4.2	80.7	4.2	80.7	4.2	114.3	47.3	76.2	
93.2	4.2	93.2	4.2	93.2	4.2	133.4	55.3	88.9	
105.3	4.5	105.3	4.5	105.3	4.5	152.4	63.1	101.6	
130.8	4.5	130.8	4.5	130.8	4.5	190.5	78.9	127.0	
155.2	5.0	155.2	5.0	155.2	5.0	228.6	94.7	152.4	
204.7	5.8	204.7	5.8	204.7	5.8	304.8	126.3	203.2	
254.2	6.6	254.2	6.6	254.2	6.6	381.0	157.8	254.0	
304.7	6.9	304.7	6.9	304.7	6.9	457.2	189.4	304.8	
339.8	7.9	339.8	9.5	339.8	12.7	533.4	220.9	355.6	
390.6	7.9	390.6	9.5	390.6	12.7	609.6	252.5	406.4	
441.4	7.9	441.4	9.5	441.4	12.7	685.8	284.1	457.2	
492.2	7.9	492.2	9.5	492.2	12.7	762.0	315.6	508.0	

- For Bevel Details See Page 358
- For Dimensional Tolerances See Page 370
- For Approx Weight See Page 394-421

180° Elbow (Long, Short) Cap

SPP/SGP



KS B1522, JIS B2311

Nominal Pipe Size (Unit : A)	Outside Diameter O.D	Inside Diameter I.D	Wall Thickness T
15	21.7	16.1	2.8
20	27.2	21.6	2.8
25	34.0	27.6	3.2
32	42.7	35.7	3.5
40	48.6	41.6	3.5
50	60.5	52.9	3.8
65	76.3	67.9	4.2
80	89.1	80.7	4.2
90	101.6	93.2	4.2
100	114.3	105.3	4.5
125	139.8	130.8	4.5
150	165.2	155.2	5.0
200	216.3	204.7	5.8
250	267.4	254.2	6.6
300	318.5	304.7	6.9
350	355.6	339.8	7.9
400	406.4	390.6	7.9
450	457.2	441.4	7.9
500	508.0	492.2	7.9

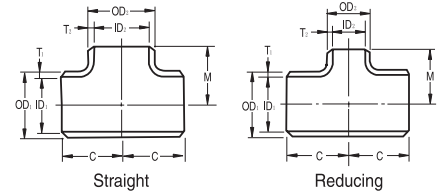
(Unit : mm)

Cap E	180° Elbow			
	Long		Short	
	O	K	O	K
-	76.2	49.0	-	-
-	76.2	51.7	-	-
38.1	76.2	55.1	50.8	42.4
38.1	95.2	69.0	63.6	53.2
38.1	114.4	81.5	76.2	62.4
38.1	152.4	106.5	101.6	81.1
38.1	190.6	133.5	127.0	101.7
50.8	228.6	158.9	152.4	120.8
63.5	266.8	184.2	177.8	139.7
63.5	304.8	209.6	203.2	158.8
76.2	381.0	260.4	254.0	196.9
88.9	457.2	311.2	304.8	235.0
101.6	609.6	413.0	406.4	311.4
127.0	762.0	514.7	508.0	387.7
152.4	914.4	616.5	609.6	464.1
165.1	1066.8	711.2	711.2	533.4
177.8	1219.2	812.8	812.8	609.6
203.2	-	-	-	-
228.6	-	-	-	-

- For Bevel Details See Page 358
- For Dimensional Tolerances See Page 370
- For Approx Weight See Page 394-421

Tee

SPP, SGP



(Unit : mm)

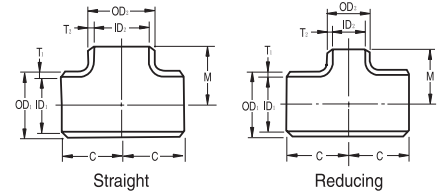
KS B1522, JIS B2311

Nominal Pipe Size (Unit : A)	Run		
	Outside Dia. O.D1	Inside Dia. I.D1	Wall Thick. T1
15	21.7	16.1	2.8
20	27.2	21.6	2.8
20 x 20 x 15	27.2	21.6	2.8
25	34.0	27.6	3.2
25 x 25 x 20	34.0	27.6	3.2
25 x 25 x 15	34.0	35.7	3.2
32	42.7	35.7	3.5
32 x 32 x 25	42.7	35.7	3.5
32 x 32 x 20	42.7	35.7	3.5
40	48.6	41.6	3.5
40 x 40 x 32	48.6	41.6	3.5
40 x 40 x 25	48.6	41.6	3.5
40 x 40 x 20	48.6	41.6	3.5
50	60.5	52.9	3.8
50 x 50 x 40	60.5	52.9	3.8
50 x 50 x 32	60.5	52.9	3.8
50 x 50 x 25	60.5	52.9	3.8
65	76.3	67.9	4.2
65 x 65 x 50	76.3	67.9	4.2
65 x 65 x 40	76.3	67.9	4.2
65 x 65 x 32	76.3	67.9	4.2
80	89.1	80.7	4.2
80 x 80 x 65	89.1	80.7	4.2
80 x 80 x 50	89.1	80.7	4.2
80 x 80 x 40	89.1	80.7	4.2

Outlet			Center to End	
Outside Dia. O.D2	Inside Dia. I.D2	Wall Thick. T2	C	M
21.7	16.1	2.8	25.4	25.4
27.2	21.6	2.8	28.6	28.6
21.7	16.1	2.8	28.6	28.6
34.0	27.6	3.2	38.1	38.1
27.2	21.6	2.8	38.1	38.1
21.7	16.1	2.8	38.1	38.1
42.7	35.7	3.5	47.6	47.6
34.0	27.6	3.2	47.6	47.6
27.2	21.6	2.8	47.6	47.6
48.6	41.6	3.5	57.2	57.2
42.7	35.7	3.5	57.2	57.2
34.0	27.6	3.2	57.2	57.2
27.2	21.6	2.8	57.2	57.2
60.5	52.9	3.8	63.5	63.5
48.6	41.6	3.5	63.5	60.3
42.7	35.7	3.5	63.5	57.2
34.0	27.6	3.2	63.5	50.8
76.3	67.9	4.2	76.2	76.2
60.5	52.9	3.8	76.2	69.9
48.6	41.6	3.5	76.2	66.7
42.7	35.7	3.5	76.2	63.5
89.1	80.7	4.2	85.7	85.7
76.3	67.9	4.2	85.7	82.6
60.5	52.9	3.8	85.7	76.2
48.6	41.6	3.5	85.7	73.0

Tee

SPP, SGP



(Unit : mm)

KS B1522, JIS B2311

Nominal Pipe Size (Unit : A)	Run		
	Outside Dia. O.D1	Inside Dia. I.D1	Wall Thick. T1
90	101.6	93.2	4.2
90 x 90 x 80	101.6	93.2	4.2
90 x 90 x 65	101.6	93.2	4.2
90 x 90 x 50	101.6	93.2	4.2
90 x 90 x 40	101.6	93.2	4.2
100	114.3	105.3	4.5
100 x 100 x 90	114.3	105.3	4.5
100 x 100 x 80	114.3	105.3	4.5
100 x 100 x 65	114.3	105.3	4.5
100 x 100 x 50	114.3	105.3	4.5
125	139.8	130.8	4.5
125 x 125 x 100	139.8	130.8	4.5
125 x 125 x 90	139.8	130.8	4.5
125 x 125 x 80	139.8	130.8	4.5
125 x 125 x 65	139.8	130.8	4.5
125 x 125 x 50	139.8	130.8	4.5
150	165.2	155.2	5.0
150 x 150 x 125	165.2	155.2	5.0
150 x 150 x 100	165.2	155.2	5.0
150 x 150 x 90	165.2	155.2	5.0
150 x 150 x 80	165.2	155.2	5.0
150 x 150 x 65	165.2	155.2	5.0
200	216.3	204.7	5.8
200 x 200 x 150	216.3	204.7	5.8
200 x 200 x 125	216.3	204.7	5.8

Outlet			Center to End	
Outside Dia. O.D2	Inside Dia. I.D2	Wall Thick. T2	C	M
101.6	93.2	4.2	95.3	95.3
89.1	80.7	4.2	95.3	92.1
76.3	67.9	4.2	95.3	88.9
60.5	52.9	3.8	95.3	82.6
48.6	41.6	3.5	95.3	79.4
114.3	105.3	4.5	104.8	104.8
101.6	93.2	4.2	104.8	101.6
89.1	80.7	4.2	104.8	98.4
76.3	67.9	4.2	104.8	95.3
60.5	52.9	3.8	104.8	88.9
139.8	130.8	4.5	123.8	123.8
114.3	105.3	4.5	123.8	117.5
101.6	93.2	4.2	123.8	114.3
89.1	80.7	4.2	123.8	111.1
76.3	67.9	4.2	123.8	108.0
60.5	52.9	3.8	123.8	104.8
165.2	155.2	5.0	142.9	142.9
139.8	130.8	4.5	142.9	136.5
114.3	105.3	4.5	142.9	130.2
101.6	93.2	4.2	142.9	127.0
89.1	80.7	4.2	142.9	123.8
76.3	67.9	4.2	142.9	120.7
216.3	204.7	5.8	177.8	177.8
165.2	155.2	5.0	177.8	168.3
139.8	130.8	4.5	177.8	161.9

Tee

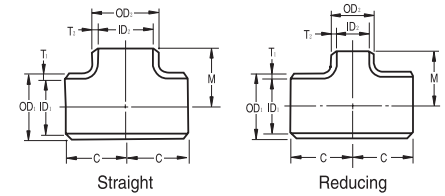
SPP, SGP

KS B1522, JIS B2311

Nominal Pipe Size (Unit : A)	Run		
	Outside Dia. O.D1	Inside Dia. I.D1	Wall Thick. T1
200 x 200 x 100	216.3	204.7	5.8
250	267.4	254.2	6.6
250 x 250 x 200	267.4	254.2	6.6
250 x 250 x 150	267.4	254.2	6.6
250 x 250 x 125	267.4	254.2	6.6
300	318.5	304.7	6.9
300 x 300 x 250	318.5	304.7	6.9
300 x 300 x 200	318.5	304.7	6.9
300 x 300 x 150	318.5	304.7	6.9
350	355.6	339.8	7.9
350 x 350 x 300	355.6	339.8	7.9
350 x 350 x 250	355.6	339.8	7.9
350 x 350 x 200	355.6	339.8	7.9
400	406.4	390.6	7.9
400 x 400 x 350	406.4	390.6	7.9
400 x 400 x 300	406.4	390.6	7.9
400 x 400 x 250	406.4	390.6	7.9
450	457.2	441.4	7.9
450 x 450 x 400	457.2	441.4	7.9
450 x 450 x 350	457.2	441.4	7.9
450 x 450 x 300	457.2	441.4	7.9
500	508.0	492.2	7.9
500 x 500 x 450	508.0	492.2	7.9
500 x 500 x 400	508.0	492.2	7.9
500 x 500 x 350	508.0	492.2	7.9

- For Bevel Details See Page 358
- For Approx Weight See Page 394-421

- For Dimensional Tolerances See Page 370

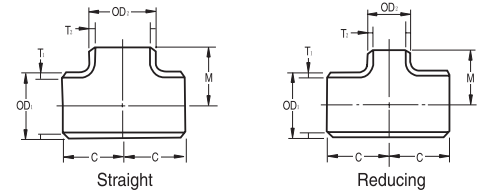


(Unit : mm)

Outside Dia. O.D2	Inside Dia. I.D2	Wall Thick. T2	Center to End	
			C	M
114.3	105.3	4.5	177.8	155.6
267.2	254.2	6.6	215.9	215.9
216.3	204.7	5.8	215.9	203.2
165.2	155.2	5.0	215.9	193.7
139.8	130.8	4.5	215.9	190.5
318.5	304.7	6.9	254.0	254.0
267.4	254.2	6.6	254.0	241.3
216.3	204.7	5.8	254.0	228.6
165.2	155.2	5.0	254.0	219.1
355.6	339.8	7.9	279.4	279.4
318.5	304.7	6.9	279.4	269.9
267.4	254.2	6.6	279.4	257.2
216.3	204.7	5.8	279.4	247.7
406.4	390.6	7.9	304.8	304.8
355.6	339.8	7.9	304.8	304.8
318.5	304.7	6.9	304.8	295.3
267.4	254.2	6.9	304.8	282.6
457.2	441.4	7.9	342.9	342.9
406.4	390.6	7.9	342.9	330.2
355.6	339.8	7.9	342.9	330.2
318.5	304.7	6.9	342.9	320.7
508.0	492.2	7.9	381.0	381.0
457.2	441.4	7.9	381.0	368.3
406.4	390.6	7.9	381.0	355.6
355.6	339.8	7.9	381.0	355.6

Tee

7.9T, STD, X-S



(Unit : mm)

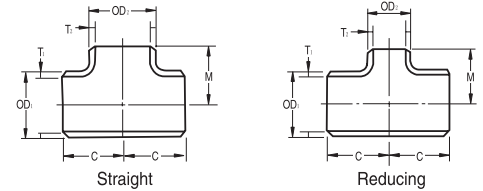
KS B1522/43, JIS B2311/3

Nominal Pipe Size (Unit : A)	Outside Diameter	
	O.D1	O.D2
400	406.4	406.4
400 x 400 x 350	406.4	355.6
400 x 400 x 300	406.4	318.5
400 x 400 x 250	406.4	267.4
450	457.2	457.2
450 x 450 x 400	457.2	406.4
450 x 450 x 350	457.2	355.6
450 x 450 x 300	457.2	318.5
500	508.0	508.0
500 x 500 x 450	508.0	457.2
500 x 500 x 400	508.0	406.4
500 x 500 x 350	508.0	355.6
550	558.8	558.8
550 x 550 x 500	558.8	508.0
550 x 550 x 450	558.8	457.2
550 x 550 x 400	558.8	406.4
600	609.6	609.6
600 x 600 x 550	609.6	558.8
600 x 600 x 500	609.6	508.0
600 x 600 x 450	609.6	457.2
650	660.4	660.4
650 x 650 x 600	660.4	609.6
650 x 650 x 550	660.4	558.8
650 x 650 x 500	660.4	508.0
700	711.2	711.2

Wall Thickness			Center to End	
7.9T T1, T2	STD T1, T2	X-S T1, T2	C	M
7.9	9.5	12.7	304.8	304.8
7.9	9.5	12.7	304.8	304.8
7.9	9.5	12.7	304.8	295.3
7.9	9.5	12.7	304.8	282.6
7.9	9.5	12.7	342.9	342.9
7.9	9.5	12.7	342.9	330.2
7.9	9.5	12.7	342.9	330.2
7.9	9.5	12.7	342.9	330.2
7.9	9.5	12.7	381.0	381.0
7.9	9.5	12.7	381.0	368.3
7.9	9.5	12.7	381.0	355.6
7.9	9.5	12.7	381.0	355.6
7.9	9.5	12.7	419.1	419.1
7.9	9.5	12.7	419.1	406.4
7.9	9.5	12.7	419.1	393.7
7.9	9.5	12.7	419.1	381.0
7.9	9.5	12.7	431.8	431.8
7.9	9.5	12.7	431.8	431.8
7.9	9.5	12.7	431.8	431.8
7.9	9.5	12.7	431.8	419.1
7.9	9.5	12.7	495.3	495.3
7.9	9.5	12.7	495.3	482.6
7.9	9.5	12.7	495.3	469.9
7.9	9.5	12.7	495.3	457.2
7.9	9.5	12.7	520.7	520.7

Tee

7.9T, STD, X-S



(Unit : mm)

KS B1522/43, JIS B2311/3

Nominal Pipe Size (Unit : A)	Outside Diameter	
	O.D1	O.D2
700 x 700 x 650	711.2	660.4
700 x 700 x 600	711.2	609.6
700 x 700 x 550	711.2	558.8
750	762.0	762.0
750 x 750 x 700	762.0	711.2
750 x 750 x 650	762.0	660.4
750 x 750 x 600	762.0	609.6
800	812.8	812.8
800 x 800 x 750	812.8	762.0
800 x 800 x 700	812.8	711.2
800 x 800 x 650	812.8	660.4
850	863.6	863.6
850 x 850 x 800	863.6	812.8
850 x 850 x 750	863.6	762.0
850 x 850 x 700	863.6	711.2
900	914.4	914.4
900 x 900 x 850	914.4	863.6
900 x 900 x 800	914.4	812.8
900 x 900 x 750	914.4	762.0
950	965.2	965.2
950 x 950 x 900	965.2	914.4
950 x 950 x 850	965.2	863.6
950 x 950 x 800	965.2	812.8
1000	1016.0	1016.0
1000 x 1000 x 950	1016.0	965.2

Wall Thickness			Center to End	
7.9T T1, T2	STD T1, T2	X-S T1, T2	C	M
7.9	9.5	12.7	520.7	520.7
7.9	9.5	12.7	520.7	508.0
7.9	9.5	12.7	520.7	495.3
7.9	9.5	12.7	558.8	558.8
7.9	9.5	12.7	558.8	546.1
7.9	9.5	12.7	558.8	546.1
7.9	9.5	12.7	558.8	533.4
7.9	9.5	12.7	569.9	596.9
7.9	9.5	12.7	569.9	584.2
7.9	9.5	12.7	569.9	571.5
7.9	9.5	12.7	569.9	571.5
7.9	9.5	12.7	635.0	635.0
7.9	9.5	12.7	635.0	622.3
7.9	9.5	12.7	635.0	609.6
7.9	9.5	12.7	635.0	596.9
7.9	9.5	12.7	673.1	673.1
7.9	9.5	12.7	673.1	660.4
7.9	9.5	12.7	673.1	647.7
7.9	9.5	12.7	673.1	635.0
7.9	9.5	12.7	711.2	711.2
7.9	9.5	12.7	711.2	711.2
7.9	9.5	12.7	711.2	698.5
7.9	9.5	12.7	711.2	685.8
7.9	9.5	12.7	749.3	749.3
7.9	9.5	12.7	749.3	749.3

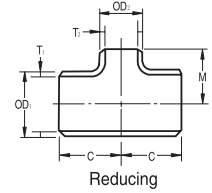
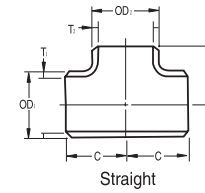
Tee

7.9T, STD, X-S

KS B1522/43, JIS B2311/3

Nominal Pipe Size (Unit : A)	Outside Diameter	
	O.D1	O.D2
1000 x 1000 x 900	1016.0	914.4
1000 x 1000 x 850	1016.0	863.6
1050	1066.8	1066.8
1050 x 1050 x 1000	1066.8	1016.0
1050 x 1050 x 950	1066.8	965.2
1050 x 1050 x 900	1066.8	914.4
1100	1117.6	1117.6
1100 x 1100 x 1050	1117.6	1066.8
1100 x 1100 x 1000	1117.6	1016.0
1100 x 1100 x 950	1117.6	965.2
1150	1168.4	1168.4
1150 x 1150 x 1100	1168.4	1117.6
1150 x 1150 x 1050	1168.4	1066.8
1150 x 1150 x 1000	1168.4	1016.0
1200	1219.2	1219.2
1200 x 1200 x 1150	1219.2	1168.4
1200 x 1200 x 1100	1219.2	1117.6
1200 x 1200 x 1050	1219.2	1066.8

- For Bevel Details See Page 358
- For Dimensional Tolerances See Page 370
- For Approx Weight See Page 394-421



(Unit : mm)

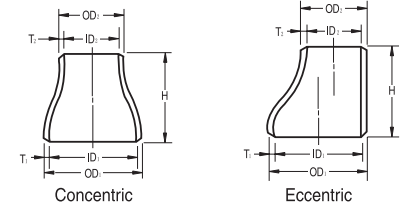
Wall Thickness			Center to End	
7.9T T1, T2	STD T1, T2	X-S T1, T2	C	M
7.9	9.5	12.7	749.3	736.6
7.9	9.5	12.7	749.3	723.9
7.9	9.5	12.7	762.0	711.2
7.9	9.5	12.7	762.0	711.2
7.9	9.5	12.7	762.0	711.2
7.9	9.5	12.7	762.0	711.2
7.9	9.5	12.7	812.8	762.0
7.9	9.5	12.7	812.8	762.0
7.9	9.5	12.7	812.8	749.3
7.9	9.5	12.7	812.8	736.6
7.9	9.5	12.7	850.9	800.1
7.9	9.5	12.7	850.9	800.1
7.9	9.5	12.7	850.9	787.4
7.9	9.5	12.7	850.9	774.7
7.9	9.5	12.7	889.0	838.2
7.9	9.5	12.7	889.0	838.2
7.9	9.5	12.7	889.0	838.2
7.9	9.5	12.7	889.0	812.8

Reducer

SPP, SGP

KS B1522, JIS B2311

Nominal Pipe Size (Unit : A)	Large End		
	Outside Dia. O.D1	Inside Dia. I.D1	Wall Thick. T1
20 x 15	27.2	21.6	2.8
25 x 20	34.0	27.6	3.2
25 x 15	34.0	35.7	3.2
32 x 25	42.7	35.7	3.5
32 x 20	42.7	35.7	3.5
32 x 15	42.7	35.7	3.5
40 x 32	48.6	41.6	3.5
40 x 25	48.6	41.6	3.5
40 x 20	48.6	41.6	3.5
50 x 40	60.5	52.9	3.8
50 x 32	60.5	52.9	3.8
50 x 25	60.5	52.9	3.8
50 x 15	60.5	52.9	3.8
65 x 50	76.3	67.9	4.2
65 x 40	76.3	67.9	4.2
65 x 32	76.3	67.9	4.2
65 x 32	76.3	67.9	4.2
80 x 65	89.1	80.7	4.2
80 x 50	89.1	80.7	4.2
80 x 40	89.1	80.7	4.2
80 x 32	89.1	80.7	4.2
90 x 80	101.6	93.2	4.2
90 x 65	101.6	93.2	4.2
90 x 50	101.6	93.2	4.2
90 x 40	101.6	93.2	4.2



(Unit : mm)

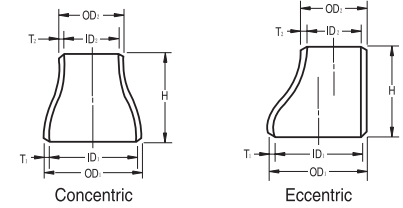
Small End			End to End H
Outside Dia. O.D2	Inside Dia. I.D2	Wall Thick. T2	
21.7	16.1	2.8	38.1
27.2	21.6	2.8	50.8
21.7	16.1	2.8	50.8
34.0	27.6	3.2	50.8
27.2	21.6	2.8	50.8
21.7	16.1	2.8	50.8
42.7	35.7	3.5	63.5
34.0	27.6	3.2	63.5
27.2	21.6	2.8	63.5
48.6	41.6	3.5	76.2
42.7	35.7	3.5	76.2
34.0	27.6	3.2	76.2
27.2	21.6	2.8	76.2
60.5	52.9	3.8	88.9
48.6	41.6	3.5	88.9
42.7	35.7	3.5	88.9
34.0	27.6	3.2	88.9
76.3	67.9	4.2	88.9
60.5	52.9	3.8	88.9
48.6	41.6	3.5	88.9
42.7	35.7	3.5	88.9
89.1	80.7	4.2	101.6
76.3	67.9	4.2	101.6
60.5	52.9	3.8	101.6
48.6	41.6	3.5	101.6

Reducer

SPP, SGP

KS B1522, JIS B2311

Nominal Pipe Size (Unit : A)	Large End		
	Outside Dia. O.D1	Inside Dia. I.D1	Wall Thick. T1
100 x 90	114.3	105.3	4.5
100 x 80	114.3	105.3	4.5
100 x 65	114.3	105.3	4.5
100 x 50	114.3	105.3	4.5
125 x 100	139.8	130.8	4.5
125 x 90	139.8	130.8	4.5
125 x 80	139.8	130.8	4.5
125 x 65	139.8	130.8	4.5
150 x 125	165.2	155.2	5.0
150 x 100	165.2	155.2	5.0
150 x 90	165.2	155.2	5.0
150 x 80	165.2	155.2	5.0
150 x 65	165.2	155.2	5.0
200 x 150	216.3	204.7	5.8
200 x 125	216.3	204.7	5.8
200 x 100	216.3	204.7	5.8
200 x 90	216.3	204.7	5.8
250 x 200	267.4	254.2	6.6
250 x 150	267.4	254.2	6.6
250 x 125	267.4	254.2	6.6
300 x 250	318.5	304.7	6.9
300 x 200	318.5	304.7	6.9
300 x 150	318.5	304.7	6.9
300 x 125	318.5	304.7	6.9
350 x 300	355.6	339.8	7.9



(Unit : mm)

Small End			End to End H
Outside Dia. O.D2	Inside Dia. I.D2	Wall Thick. T2	
101.6	93.2	4.2	101.6
89.1	80.7	4.2	101.6
76.3	67.9	4.2	101.6
60.5	52.9	3.8	101.6
114.3	105.3	4.5	127.0
101.6	93.2	4.2	127.0
89.1	80.7	4.2	127.0
76.3	67.9	4.2	127.0
139.8	130.8	4.5	139.7
114.3	105.3	4.5	139.7
101.6	93.2	4.2	139.7
89.1	80.7	4.2	139.7
76.3	67.9	4.2	139.7
165.2	155.2	5.0	152.4
139.8	130.8	4.5	152.4
114.3	105.3	4.5	152.4
101.6	93.2	4.2	152.4
216.3	204.7	5.8	177.8
165.2	155.2	5.0	177.8
139.8	130.8	4.5	177.8
267.4	254.2	6.6	203.2
216.3	204.7	5.8	203.2
165.2	155.2	5.0	203.2
139.8	130.8	4.5	203.2
318.5	304.7	6.9	330.2

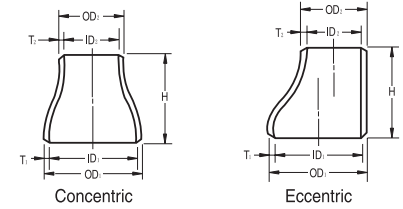
Reducer

SPP, SGP

KS B1522, JIS B2311

Nominal Pipe Size (Unit : A)	Large End		
	Outside Dia. O.D1	Inside Dia. I.D1	Wall Thick. T1
350 x 250	355.6	339.8	7.9
350 x 200	355.6	339.8	7.9
400 x 350	406.4	390.6	7.9
400 x 300	406.4	390.6	7.9
400 x 250	406.4	390.6	7.9
450 x 400	457.2	441.4	7.9
450 x 350	457.2	441.4	7.9
450 x 300	457.2	441.4	7.9
500 x 450	508.0	492.2	7.9
500 x 400	508.0	492.2	7.9
500 x 350	508.0	492.2	7.9

- For Bevel Details See Page 358
- For Dimensional Tolerances See Page 370
- For Approx Weight See Page 394-421



(Unit : mm)

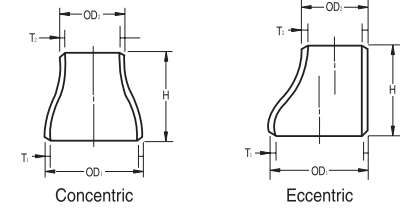
Small End			End to End H
Outside Dia. O.D2	Inside Dia. I.D2	Wall Thick. T2	
267.4	254.2	6.6	330.2
216.3	204.7	5.8	330.2
355.6	339.8	7.9	355.6
318.5	304.7	6.9	355.6
267.4	254.2	6.6	355.6
406.4	390.6	7.9	381.0
355.6	339.8	7.9	381.0
318.5	304.7	6.9	381.0
457.2	441.4	7.9	508.0
406.4	390.6	7.9	508.0
355.6	339.8	7.9	508.0

Reducer

7.9T, STD, X-S

KS B1522/43, JIS B2311/3

Nominal Pipe Size (Unit : A)	Outside Diameter	
	OD1	OD2
400 x 350	406.4	355.6
400 x 300	406.4	318.5
400 x 250	406.4	267.4
400 x 200	406.4	216.3
450 x 400	457.2	406.4
450 x 350	457.2	355.6
450 x 300	457.2	318.5
450 x 250	457.2	267.4
500 x 450	508.0	457.2
500 x 400	508.0	406.4
500 x 350	508.0	355.6
500 x 300	508.0	318.5
550 x 500	558.8	508.0
550 x 450	558.8	457.2
550 x 400	558.8	406.4
550 x 350	558.8	355.6
600 x 550	609.6	558.8
600 x 500	609.6	508.0
600 x 450	609.6	457.2
600 x 400	609.6	406.4
650 x 600	660.4	609.6
650 x 550	660.4	558.8
650 x 500	660.4	508.0
650 x 450	660.4	457.2
700 x 650	711.2	660.4

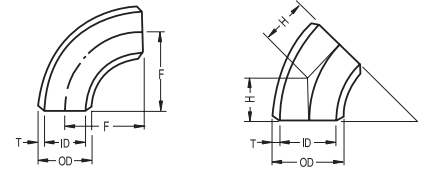


(Unit : mm)

Wall Thickness			End to End
7.9T T1, T2	STD T1, T2	X-S T1, T2	H
7.9	9.5	12.7	355.6
7.9	9.5	12.7	355.6
7.9	9.5	12.7	355.6
7.9	9.5	12.7	355.6
7.9	9.5	12.7	381.0
7.9	9.5	12.7	381.0
7.9	9.5	12.7	381.0
7.9	9.5	12.7	381.0
7.9	9.5	12.7	508.0
7.9	9.5	12.7	508.0
7.9	9.5	12.7	508.0
7.9	9.5	12.7	508.0
7.9	9.5	12.7	508.0
7.9	9.5	12.7	508.0
7.9	9.5	12.7	508.0
7.9	9.5	12.7	508.0
7.9	9.5	12.7	508.0
7.9	9.5	12.7	508.0
7.9	9.5	12.7	508.0
7.9	9.5	12.7	609.6
7.9	9.5	12.7	609.6
7.9	9.5	12.7	609.6
7.9	9.5	12.7	609.6

90° Elbow (Long, Short) 45° Elbow (Long, Short)

Sch40, Sch80, Sch120, Sch160



(Unit : mm)

KS B1541, JIS B2312

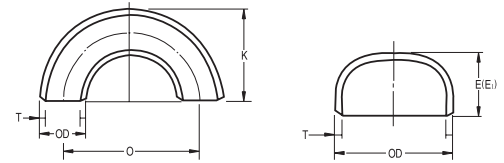
Nominal Pipe Size (Unit : A)	Outside Diameter O.D	Wall Thickness T			
		Sch 40		Sch 80	
		I.D	T	I.D	T
15	21.7	16.1	2.8	14.3	3.7
20	27.2	21.4	2.9	19.4	3.9
25	34.0	27.2	3.4	25.0	4.5
32	42.7	35.5	3.6	32.9	4.9
40	48.6	41.2	3.7	38.4	5.1
50	60.5	52.7	3.9	49.5	5.5
65	76.3	65.9	5.2	62.3	7.0
80	89.1	78.1	5.5	73.9	7.6
90	101.6	90.2	5.7	85.4	8.1
100	114.3	102.3	6.0	97.1	8.6
125	139.8	126.6	6.6	120.8	9.5
150	165.2	151	7.1	143.2	11.0
200	216.3	199.9	8.2	190.9	12.7
250	267.4	248.8	9.3	237.2	15.1
300	318.5	297.9	10.3	283.7	17.4
350	355.6	333.4	11.1	317.6	19.0
400	406.4	381	12.7	363.6	21.4
450	457.2	428.6	14.3	409.6	23.8
500	508.0	477.8	15.1	455.6	26.2

Wall Thickness T				Center to Center			
Sch 120		Sch 160		Long		Short	
I.D	T	I.D	T	F (90°)	H (45°)	F (90°)	
-	-	12.3	4.7	38.1	15.8	-	
-	-	16.2	5.5	38.1	15.8	-	
-	-	21.2	6.4	38.1	15.8	25.4	
-	-	29.9	6.4	47.6	19.7	31.8	
-	-	34.4	7.1	57.2	23.7	38.1	
-	-	43.1	8.7	76.2	31.6	50.8	
-	-	57.3	9.5	95.3	39.5	63.5	
-	-	66.9	11.1	114.3	47.3	76.2	
-	-	76.2	12.7	133.4	55.3	88.9	
92.1	11.1	87.3	13.5	152.4	63.1	101.6	
114.4	12.7	108	15.9	190.5	78.9	127.0	
136.6	14.3	128.8	18.2	228.6	94.7	152.4	
179.9	18.2	170.3	23.0	304.8	126.3	203.2	
224.6	21.4	210.2	28.6	381.0	157.8	254.0	
267.7	25.4	251.9	33.3	457.2	189.4	304.8	
300.0	27.8	284.2	35.7	533.4	220.9	355.6	
344.6	30.9	325.4	40.5	609.6	252.5	406.4	
387.4	34.9	366.8	45.2	685.8	284.1	457.2	
431.8	38.1	408.0	50.0	762.0	315.6	508.0	

- For Bevel Details See Page 358
- For Dimensional Tolerances See Page 370
- For Approx Weight See Page 394-421

180° Elbow (Long, Short) Cap

Sch40, Sch80, Sch120, Sch160



(Unit : mm)

KS B1541, JIS B2312

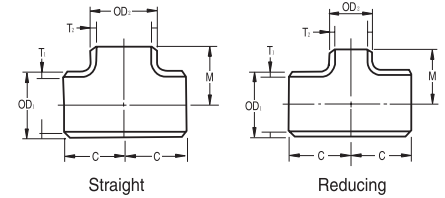
Nominal Pipe Size (Unit : A)	Outside Diameter O.D	Wall Thickness T			
		Sch 40	Sch 80	Sch 120	Sch 160
15	21.7	2.8	3.7	-	4.7
20	27.2	2.9	3.9	-	5.5
25	34.0	3.4	4.5	-	6.4
32	42.7	3.6	4.9	-	6.4
40	48.6	3.7	5.1	-	7.1
50	60.5	3.9	5.5	-	8.7
65	76.3	5.2	7.0	-	9.5
80	89.1	5.5	7.6	-	11.1
90	101.6	5.7	8.1	-	12.7
100	114.3	6.0	8.6	11.1	13.5
125	139.8	6.6	9.5	12.7	15.9
150	165.2	7.1	11.0	14.3	18.2
200	216.3	8.2	12.7	18.2	23.0
250	267.4	9.3	15.1	21.4	28.6
300	318.5	10.3	17.4	25.4	33.3
350	355.6	11.1	19.0	27.8	35.7
400	406.4	12.7	21.4	30.9	40.5
450	457.2	14.3	23.8	34.9	45.2
500	508.0	15.1	26.2	38.1	50.0

CAP			180° Elbow			
E	E1	Limited Wall Thickness for E	Long		Short	
			O	K	O	K
25.4	-	-	76.2	49.0	-	-
25.4	-	-	76.2	51.7	-	-
38.1	-	-	76.2	55.1	50.8	42.4
38.1	-	-	95.2	69.0	63.6	53.2
38.1	-	-	114.4	81.5	76.2	62.4
38.1	44.5	5.5	152.4	106.5	101.6	81.1
38.1	50.8	7.0	190.6	133.5	127.0	101.7
50.8	63.5	7.6	228.6	158.9	152.4	120.8
63.5	76.2	8.1	266.8	184.2	177.8	139.7
63.5	76.2	8.6	304.8	209.6	203.2	158.8
76.2	88.9	9.5	381.0	260.4	254.0	196.9
88.9	101.6	11.0	457.2	311.2	304.8	235.0
101.6	127.0	12.7	609.6	413.0	406.4	311.4
127.0	152.4	12.7	762.0	514.7	508.0	387.7
152.4	177.8	12.7	914.4	616.5	609.6	464.1
165.1	190.5	12.7	1066.8	711.2	711.2	533.4
177.8	203.2	12.7	1219.2	812.8	812.8	609.6
203.2	228.6	12.7	1371.6	914.4	914.4	685.8
228.6	254.0	12.7	1524.0	1016.0	1016.0	762.0

- The Back-To-Face Dimension of Cap Shall Be E, If The Basic Wall Thickness is Not More Than The "Limited Wall Thickness" And E1 If It Exceeds The "Limited Wall Thickness"
- For Bevel Details See Page 358
- For Dimensional Tolerances See Page 370
- For Approx Weight See Page 394-421

Tee

Sch40, Sch80, Sch120, Sch160



(Unit : mm)

KS B1541, JIS B2312

Nominal Pipe Size (Unit : A)	Outside Diameter		Wall Thickness T	
	OD1	OD2	Sch 40	
			T1	T2
15	21.7	21.7	2.8	2.8
20	27.2	27.2	2.9	2.9
20 x 20 x 15	27.2	21.7	2.9	2.8
25	34.0	34.0	3.4	3.4
25 x 25 x 20	34.0	27.2	3.4	2.9
25 x 25 x 15	34.0	21.7	3.4	2.8
32	42.7	42.7	3.6	3.6
32 x 32 x 25	42.7	34.0	3.6	3.4
32 x 32 x 20	42.7	27.2	3.6	2.9
40	48.6	48.6	3.7	3.7
40 x 40 x 32	48.6	42.7	3.7	3.6
40 x 40 x 25	48.6	34.0	3.7	3.4
40 x 40 x 20	48.6	27.2	3.7	2.9
50	60.5	60.5	3.9	3.9
50 x 50 x 40	60.5	48.6	3.9	3.7
50 x 50 x 32	60.5	42.7	3.9	3.6
50 x 50 x 25	60.5	34.0	3.9	3.4
65	76.3	76.3	5.2	5.2
65 x 65 x 50	76.3	60.5	5.2	3.9
65 x 65 x 40	76.3	48.6	5.2	3.7
65 x 65 x 32	76.3	42.7	5.2	3.6
80	89.1	89.1	5.5	5.5
80 x 80 x 65	89.1	76.3	5.5	5.2
80 x 80 x 50	89.1	60.5	5.5	3.9
80 x 80 x 40	89.1	48.6	5.5	3.7

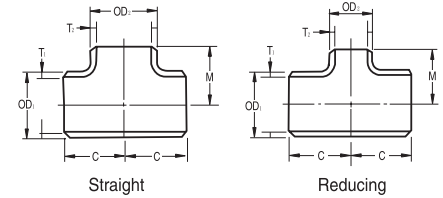
Wall Thickness T						Center to Center	
Sch 80		Sch 120		Sch160		C	M
T1	T2	T1	T2	T1	T2		
3.7	3.7	-	-	-	-	25.4	25.4
3.9	3.9	-	-	-	-	28.6	28.6
3.9	3.7	-	-	-	-	28.6	28.6
4.5	4.5	-	-	-	-	38.1	38.1
4.5	3.9	-	-	-	-	38.1	38.1
4.5	3.7	-	-	-	-	38.1	38.1
4.9	4.9	-	-	-	-	47.6	47.6
4.9	4.5	-	-	-	-	47.6	47.6
4.9	3.9	-	-	-	-	47.6	47.6
5.1	5.1	-	-	7.1	7.1	57.2	57.2
5.1	4.9	-	-	-	-	57.2	57.2
5.1	4.5	-	-	-	-	57.2	57.2
5.1	3.9	-	-	-	-	57.2	57.2
5.5	5.5	-	-	8.7	8.7	63.5	63.5
5.5	5.1	-	-	8.7	7.1	63.5	60.3
5.5	4.9	-	-	-	-	63.5	57.2
5.5	4.5	-	-	-	-	63.5	50.8
7.0	7.0	-	-	9.5	9.5	76.2	76.2
7.0	5.5	-	-	9.5	8.7	76.2	69.9
7.0	5.1	-	-	9.5	7.1	76.2	66.7
7.0	4.9	-	-	-	-	76.2	63.5
7.6	7.6	-	-	11.1	11.1	85.7	85.7
7.6	7.0	-	-	11.1	9.5	85.7	82.6
7.6	5.5	-	-	11.1	8.7	85.7	76.2
7.6	5.1	-	-	11.1	7.1	85.7	73.0

Tee

Sch40, Sch80, Sch120, Sch160

KS B1541, JIS B2312

Nominal Pipe Size (Unit : A)	Outside Diameter		Wall Thickness T	
	OD1	OD2	Sch 40	
			T1	T2
90	101.6	101.6	5.7	5.7
90 x 90 x 80	101.6	89.1	5.7	5.5
90 x 90 x 65	101.6	76.3	5.7	5.2
90 x 90 x 50	101.6	60.5	5.7	3.9
90 x 90 x 40	101.6	48.6	5.7	3.7
100	114.3	114.3	6.0	6.0
100 x 100 x 90	114.3	101.6	6.0	5.7
100 x 100 x 80	114.3	89.1	6.0	5.5
100 x 100 x 65	114.3	76.3	6.0	5.2
100 x 100 x 50	114.3	60.5	6.0	3.9
125	139.8	139.8	6.6	6.6
125 x 125 x 100	139.8	114.3	6.6	6.0
125 x 125 x 90	139.8	101.6	6.6	5.7
125 x 125 x 80	139.8	89.1	6.6	5.5
125 x 125 x 65	139.8	76.3	6.6	5.2
150	165.2	165.2	7.1	7.1
150 x 150 x 125	165.2	139.8	7.1	6.6
150 x 150 x 100	165.2	114.3	7.1	6.0
150 x 150 x 90	165.2	101.6	7.1	5.7
150 x 150 x 80	165.2	89.1	7.1	5.5
200	216.3	216.3	8.2	8.2
200 x 200 x 150	216.3	165.2	8.2	7.1
200 x 200 x 125	216.3	139.8	8.2	6.6
200 x 200 x 100	216.3	114.3	8.2	6.0
250	267.4	267.4	9.3	9.3

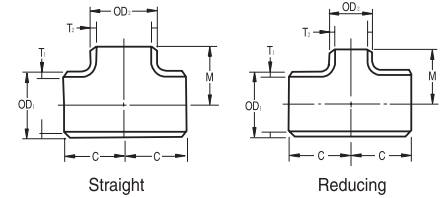


(Unit : mm)

Wall Thickness T						Center to Center	
Sch 80		Sch 120		Sch160		C	M
T1	T2	T1	T2	T1	T2		
8.1	8.1	-	-	12.7	12.7	95.3	95.3
8.1	7.6	-	-	12.7	11.1	95.3	92.1
8.1	7.0	-	-	12.7	9.5	95.3	88.9
8.1	5.5	-	-	12.7	8.7	95.3	82.6
8.1	5.1	-	-	12.7	7.1	95.3	79.4
8.6	8.6	-	-	13.5	13.5	104.8	104.8
8.6	8.1	-	-	13.5	12.7	104.8	101.6
8.6	7.6	-	-	13.5	11.1	104.8	98.4
8.6	7.0	-	-	13.5	9.5	104.8	95.3
8.6	5.5	-	-	13.5	8.7	104.8	88.9
9.5	9.5	12.7	12.7	15.9	15.9	123.8	123.8
9.5	8.6	12.7	11.1	15.9	13.5	123.8	117.5
9.5	8.1	-	-	15.9	12.7	123.8	114.3
9.5	7.6	-	-	15.9	11.1	123.8	111.1
9.5	7.0	-	-	15.9	9.5	123.8	108.0
11.0	11.0	14.3	14.3	18.2	18.2	142.9	142.9
11.0	9.5	14.3	12.7	18.2	15.9	142.9	136.5
11.0	8.6	14.3	11.1	18.2	13.5	142.9	130.2
11.0	8.1	-	-	18.2	12.7	142.9	127.0
11.0	7.6	-	-	18.2	11.1	142.9	123.8
12.7	12.7	18.2	18.2	23.0	23.0	177.8	177.8
12.7	11.0	18.2	14.3	23.0	18.2	177.8	168.3
12.7	9.5	18.2	12.7	23.0	15.9	177.8	161.9
12.7	8.6	18.2	11.1	23.0	13.5	177.8	155.6
15.1	15.1	21.4	21.4	28.6	28.6	215.9	215.9

Tee

Sch40, Sch80, Sch120, Sch160



(Unit : mm)

KS B1541, JIS B2312

Nominal Pipe Size (Unit : A)	Outside Diameter		Wall Thickness T	
	OD1	OD2	Sch 40	
			T1	T2
250 x 250 x 200	267.4	216.3	9.3	8.2
250 x 250 x 150	267.4	165.2	9.3	7.1
250 x 250 x 125	267.4	139.8	9.3	6.6
300	318.5	318.5	10.3	10.3
300 x 300 x 250	318.5	267.4	10.3	9.3
300 x 300 x 200	318.5	216.3	10.3	8.2
300 x 300 x 150	318.5	165.2	10.3	7.1
350	355.6	355.6	11.1	11.1
350 x 350 x 300	355.6	318.5	11.1	10.3
350 x 350 x 250	355.6	267.4	11.1	9.3
350 x 350 x 200	355.6	216.3	11.1	8.2
400	406.4	406.4	12.7	12.7
400 x 400 x 350	406.4	355.6	12.7	11.1
400 x 400 x 300	406.4	318.5	12.7	10.3
400 x 400 x 250	406.4	267.4	12.7	9.3
450	457.2	457.2	14.3	14.3
450 x 450 x 400	457.2	406.4	14.3	12.7
450 x 450 x 350	457.2	355.6	14.3	11.1
450 x 450 x 300	457.2	318.5	14.3	10.3
500	508.0	508.0	15.1	15.1
500 x 500 x 450	508.0	457.2	15.1	14.3
500 x 500 x 400	508.0	406.4	15.1	12.7
500 x 500 x 350	508.0	355.6	15.1	11.1

Wall Thickness T						Center to Center	
Sch 80		Sch 120		Sch160		C	M
T1	T2	T1	T2	T1	T2		
15.1	12.7	21.4	18.2	28.6	23.0	215.9	203.2
15.1	11.0	21.4	14.3	28.6	18.2	215.9	193.7
15.1	9.5	21.4	12.7	28.6	15.9	215.9	190.5
17.4	17.4	25.4	25.4	33.3	33.3	254.0	254.0
17.4	15.1	25.4	21.4	33.3	28.6	254.0	241.3
17.4	12.7	25.4	18.2	33.3	23.0	254.0	228.6
17.4	11.0	25.4	14.3	33.3	18.2	254.0	219.1
19.0	19.0	27.8	27.8	35.7	35.7	279.4	279.4
19.0	17.4	27.8	25.4	35.7	33.3	279.4	269.9
19.0	15.1	27.8	21.4	35.7	28.6	279.4	257.2
19.0	12.7	27.8	18.2	35.7	23.0	279.4	247.7
21.4	21.4	30.9	30.9	40.5	40.5	304.8	304.8
21.4	19.0	30.9	27.8	40.5	35.7	304.8	304.8
21.4	17.4	30.9	25.4	40.5	33.3	304.8	295.3
21.4	15.1	30.9	21.4	40.5	28.6	304.8	282.6
23.8	23.8	34.9	34.9	-	-	342.9	342.9
23.8	21.4	34.9	30.9	-	-	342.9	330.2
23.8	19.0	34.9	27.8	-	-	342.9	330.2
23.8	17.4	34.9	25.4	-	-	342.9	320.7
26.2	26.2	38.1	38.1	-	-	381.0	381.0
26.2	23.8	38.1	34.9	-	-	381.0	368.0
26.2	21.4	38.1	30.9	-	-	381.0	355.6
26.2	19.0	38.1	27.8	-	-	381.0	355.6

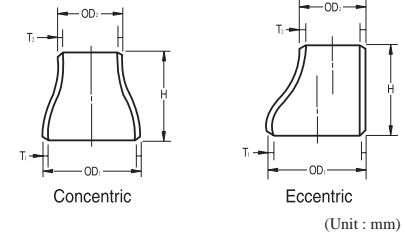
- For Bevel Details See Page 358
- For Dimensional Tolerances See Page 370
- For Approx Weight See Page 394-421

Reducer

Sch40, Sch80, Sch160

KS B1541, JIS B2312

Nominal Pipe Size (Unit : A)	Outside Diameter		Wall Thickness T	
	OD1	OD2	Sch 40	
			T1	T2
20 x 15	27.2	21.7	2.9	2.8
25 x 20	34.0	27.2	3.4	2.9
25 x 15	34.0	21.7	3.4	2.8
32 x 25	42.7	34.0	3.6	3.4
32 x 20	42.7	27.2	3.6	2.9
32 x 15	42.7	21.7	3.6	2.8
40 x 32	48.6	42.7	3.7	3.6
40 x 25	48.6	34.0	3.7	3.4
40 x 20	48.6	27.2	3.7	2.9
50 x 40	60.5	48.6	3.9	3.7
50 x 32	60.5	42.7	3.9	3.6
50 x 25	60.5	34.0	3.9	3.4
50 x 20	60.5	27.2	3.9	2.9
65 x 50	76.3	60.5	5.2	3.9
65 x 40	76.3	48.6	5.2	3.7
65 x 32	76.3	42.7	5.2	3.6
65 x 25	76.3	34.0	5.2	3.4
80 x 65	89.1	76.3	5.5	5.2
80 x 50	89.1	60.5	5.5	3.9
80 x 40	89.1	48.6	5.5	3.7
80 x 32	89.1	42.7	5.5	3.6
90 x 80	101.6	89.1	5.7	5.5
90 x 65	101.6	76.3	5.7	5.2
90 x 50	101.6	60.5	5.7	3.9
90 x 40	101.6	48.6	5.7	3.7



Wall Thickness T				End to End
Sch 80		Sch 160		H
T1	T2	T1	T2	
3.9	3.7	-	-	38.1
4.5	3.9	-	-	50.8
4.5	3.7	-	-	50.8
4.9	4.5	-	-	50.8
4.9	3.9	-	-	50.8
4.9	3.7	-	-	50.8
5.1	4.9	-	-	63.5
5.1	4.5	-	-	63.5
5.1	3.9	-	-	63.5
5.5	5.1	8.7	7.1	76.2
5.5	4.9	-	-	76.2
5.5	4.5	-	-	76.2
5.5	3.9	-	-	76.2
7.0	5.5	9.5	8.7	88.9
7.0	5.1	9.5	7.1	88.9
7.0	4.9	-	-	88.9
7.0	4.5	-	-	88.9
7.6	7.0	11.1	9.5	88.9
7.6	5.5	11.1	8.7	88.9
7.6	5.1	11.1	7.1	88.9
7.6	4.9	-	-	88.9
8.1	7.6	12.7	11.1	101.6
8.1	7.0	12.7	9.5	101.6
8.1	5.5	12.7	8.7	101.6
8.1	5.1	12.7	7.1	101.6

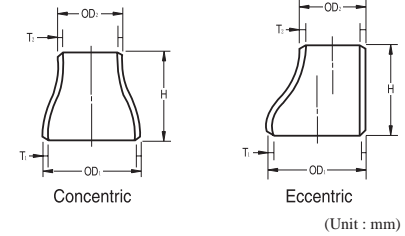
Reducer

Sch40, Sch80, Sch160

KS B1541, JIS B2312

Nominal Pipe Size (Unit : A)	Outside Diameter		Wall Thickness T	
	OD1	OD2	Sch 40	
			T1	T2
100 x 90	114.3	101.6	6.0	5.7
100 x 80	114.3	89.1	6.0	5.5
100 x 65	114.3	76.3	6.0	5.2
100 x 50	114.3	60.5	6.0	3.9
100 x 40	114.3	48.6	6.0	3.7

- For Bevel Details See Page 358
- For Dimensional Tolerances See Page 370
- For Approx Weight See Page 394-421



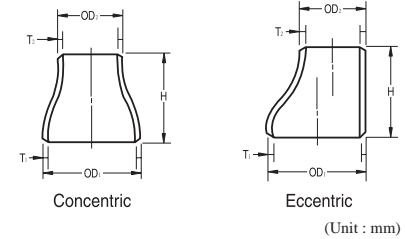
Wall Thickness T				End to End
Sch 80		Sch 160		H
T1	T2	T1	T2	
8.6	8.1	13.5	12.7	101.6
8.6	7.6	13.5	11.1	101.6
8.6	7.0	13.5	9.5	101.6
8.6	5.5	13.5	8.7	101.6
8.6	5.1	13.5	7.1	101.6

Reducer

Sch40, Sch80, Sch120, Sch160

KS B1541, JIS B2312

Nominal Pipe Size (Unit : A)	Outside Diameter		Wall Thickness T	
	OD1	OD2	Sch 40	
			T1	T2
125 x 100	139.8	114.3	6.6	6.0
125 x 90	139.8	101.6	6.6	5.7
125 x 80	139.8	89.1	6.6	5.5
125 x 65	139.8	76.3	6.6	5.2
150 x 125	165.2	139.8	7.1	6.6
150 x 100	165.2	114.3	7.1	6.0
150 x 90	165.2	101.6	7.1	5.7
150 x 80	165.2	89.1	7.1	5.5
150 x 65	165.2	76.3	7.1	5.2
200 x 150	216.3	165.2	8.2	7.1
200 x 125	216.3	139.8	8.2	6.6
200 x 100	216.3	114.3	8.2	6.0
200 x 90	216.3	101.6	8.2	5.7
250 x 200	267.4	216.3	9.3	8.2
250 x 150	267.4	165.2	9.3	7.1
250 x 125	267.4	139.8	9.3	6.6
250 x 100	267.4	114.3	9.3	6.0
300 x 250	318.5	267.4	10.3	9.3
300 x 200	318.5	216.3	10.3	8.2
300 x 150	318.5	165.2	10.3	7.1
300 x 125	318.5	139.8	10.3	6.6
350 x 300	355.6	318.5	11.1	10.3
350 x 250	355.6	267.4	11.1	9.3
350 x 200	355.6	216.3	11.1	8.2
400 x 350	406.4	355.6	12.7	11.1



Wall Thickness T						End to End H
Sch 80		Sch 120		Sch 160		
T1	T2	T1	T2	T1	T2	
9.5	8.6	12.7	11.1	15.9	13.5	127.0
9.5	8.1	-	-	15.9	12.7	127.0
9.5	7.6	-	-	15.9	11.1	127.0
9.5	7.0	-	-	15.9	9.5	127.0
11.0	9.5	14.3	12.7	18.2	15.9	139.7
11.0	8.6	14.3	11.1	18.2	13.5	139.7
11.0	8.1	-	-	18.2	12.7	139.7
11.0	7.6	-	-	18.2	11.1	139.7
11.0	7.0	-	-	18.2	9.5	139.7
12.7	11.0	18.2	14.3	23.0	18.2	152.4
12.7	9.5	18.2	12.7	23.0	15.9	152.4
12.7	8.6	18.2	11.1	23.0	13.5	152.4
12.7	8.1	-	-	23.0	12.7	152.4
15.1	12.7	21.4	18.2	28.6	23.0	177.8
15.1	11.0	21.4	14.3	28.6	18.2	177.8
15.1	9.5	21.4	12.7	28.6	15.9	177.8
15.1	8.6	-	-	28.6	13.5	177.8
17.4	15.1	25.4	21.4	33.3	28.6	203.2
17.4	12.7	25.4	18.2	33.3	23.0	203.2
17.4	11.0	25.4	14.3	33.3	18.2	203.2
17.4	9.5	25.4	12.7	33.3	15.9	203.2
19.0	17.4	27.8	25.4	35.7	33.3	330.2
19.0	15.1	27.8	21.4	35.7	28.6	330.2
19.0	12.7	27.8	18.2	35.7	23.0	330.2
21.4	19.0	30.9	27.8	40.5	35.7	355.6

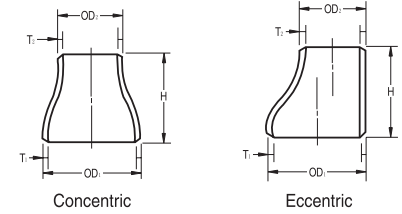
Reducer

Sch40, Sch80, Sch120, Sch160

KS B1541, JIS B2312

Nominal Pipe Size (Unit : A)	Outside Diameter		Wall Thickness T	
	OD1	OD2	Sch 40	
			T1	T2
400 x 300	406.4	318.5	12.7	10.3
400 x 250	406.4	267.4	12.7	9.3
450 x 400	457.2	406.4	14.3	12.7
450 x 350	457.2	355.6	14.3	11.1
450 x 300	457.2	318.5	14.3	10.3
500 x 450	508.0	457.2	15.1	14.3
500 x 400	508.0	406.4	15.1	12.7
500 x 350	508.0	355.6	15.1	11.1

- For Bevel Details See Page 358
- For Dimensional Tolerances See Page 370
- For Approx Weight See Page 394-421



(Unit : mm)

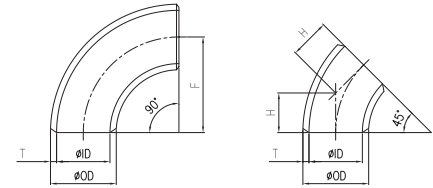
Wall Thickness T						End to End H
Sch 80		Sch 120		Sch 160		
T1	T2	T1	T2	T1	T2	
21.4	17.4	30.9	25.4	40.5	33.3	355.6
21.4	15.1	30.9	21.4	40.5	28.6	355.6
23.8	21.4	34.9	30.9	45.2	40.5	381.0
23.8	19.0	34.9	27.8	45.2	35.7	381.0
23.8	17.4	34.9	25.4	45.2	33.3	381.0
26.2	23.8	38.1	34.9	50.0	45.2	508.0
26.2	21.4	38.1	30.9	50.0	40.5	508.0
26.2	19.0	38.1	27.8	50.0	35.7	508.0



**WROUGHT
STAINLESS STEEL
BUTT WELD
PIPE FITTINGS**

90° Elbow (Long, Short) 45° Elbow (Long, Short)

Sch5s, Sch10s, Sch20s



(Unit : mm)

KS B1541/3, JIS B2312/3

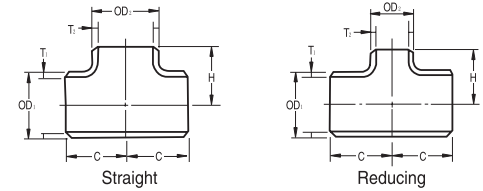
Nominal Pipe Size (Unit : A)	outside Diameter O.D	Wall Thickness T			
		Sch 5s		Sch10s	
		I.D	T	I.D	T
15	21.7	18.40	1.65	17.5	2.1
20	27.2	23.90	1.65	23.0	2.1
25	34.0	30.70	1.65	28.4	2.8
32	42.7	39.40	1.65	37.1	2.8
40	48.6	45.30	1.65	43.0	2.8
50	60.5	57.20	1.65	54.9	2.8
65	76.3	72.10	2.10	70.3	3.0
80	89.1	84.90	2.10	83.1	3.0
90	101.6	97.40	2.10	95.6	3.0
100	114.3	110.10	2.10	108.3	3.0
125	139.8	134.20	2.80	133.0	3.4
150	165.2	159.60	2.80	158.4	3.4
200	216.3	210.70	2.80	208.3	4.0
250	267.4	260.60	3.40	259.4	4.0
300	318.5	310.50	4.00	309.5	4.5
350	355.6	-	-	-	-
400	406.4	-	-	-	-
450	457.2	-	-	-	-
500	508.0	-	-	-	-
550	558.8	-	-	-	-
600	609.6	-	-	-	-
750	762.0	-	-	-	-

Wall Thickness T		Center to Center			
Sch20s		Long		Short	
I.D	T	F (90°)	H (45°)	F (90°)	
16.7	2.5	38.1	15.8	-	
22.2	2.5	38.1	15.8	-	
28.0	3.0	38.1	15.8	25.4	
36.7	3.0	47.6	19.7	31.8	
42.6	3.0	57.2	23.7	38.1	
53.5	3.5	76.2	31.6	50.8	
69.3	3.5	95.3	39.5	63.5	
81.1	4.0	114.3	47.3	76.2	
93.6	4.0	133.4	55.3	88.9	
106.3	4.0	152.4	63.1	101.6	
129.8	5.0	190.5	78.9	127.0	
155.2	5.0	228.6	94.7	152.4	
203.3	6.5	304.8	126.3	203.2	
254.4	6.5	381.0	157.8	254.0	
305.5	6.5	457.2	189.4	304.8	
-	-	533.4	220.9	355.6	
-	-	609.6	252.5	406.4	
-	-	685.8	284.1	457.2	
-	-	762.0	315.6	508.0	
-	-	838.2	347.2	558.8	
-	-	914.4	378.7	609.6	
-	-	1143.0	473.4	762.0	

- For Bevel Details See Page 358
- For Dimensional Tolerances See Page 370

Tee

Sch5s, Sch10s, Sch20s



(Unit : mm)

KS B1541/3, JIS B2312/3

Nominal Pipe Size (Unit : A)	Outside Diameter		Wall Thickness T	
	OD1	OD2	Sch 5s	
			T1	T2
15	21.7	21.7	1.65	1.65
20	27.2	27.2	1.65	1.65
25	34.0	34.0	1.65	1.65
32	42.7	42.7	1.65	1.65
32 x 32 x 25	42.7	34.0	1.65	1.65
40	48.6	48.6	1.65	1.65
40 x 40 x 32	48.6	42.7	1.65	1.65
40 x 40 x 25	48.6	34.0	1.65	1.65
50	60.5	60.5	1.65	1.65
50 x 50 x 40	60.5	48.6	1.65	1.65
50 x 50 x 32	60.5	42.7	1.65	1.65
65	76.3	76.3	2.10	2.10
65 x 65 x 50	76.3	60.5	2.10	1.65
65 x 65 x 40	76.3	48.6	2.10	1.65
80	89.1	89.1	2.10	2.10
80 x 80 x 65	89.1	76.3	2.10	2.10
80 x 80 x 50	89.1	60.5	2.10	1.65
90	101.6	101.6	2.10	2.10
90 x 90 x 80	101.6	89.1	2.10	2.10
90 x 90 x 65	101.6	76.3	2.10	2.10
100	114.3	114.3	2.10	2.10
100 x 100 x 90	114.3	101.6	2.10	2.10
100 x 100 x 80	114.3	89.1	2.10	2.10
100 x 100 x 65	114.3	76.3	2.10	2.10
125	139.8	139.8	2.80	2.80

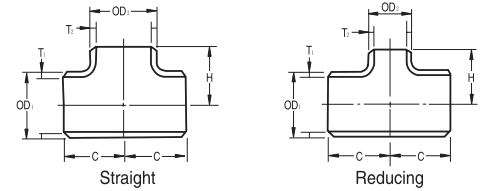
Wall Thickness T				Center to Center	
Sch 10s		Sch 20s		C	M
T1	T2	T1	T2		
2.1	2.1	2.5	2.5	25.4	25.4
2.1	2.1	2.5	2.5	28.6	28.6
2.8	2.8	3.0	3.0	38.1	38.1
2.8	2.8	3.0	3.0	47.6	47.6
2.8	2.8	3.0	3.0	47.6	47.6
2.8	2.8	3.0	3.0	57.2	57.2
2.8	2.8	3.0	3.0	57.2	57.2
2.8	2.8	3.5	3.5	63.5	63.5
2.8	2.8	3.5	3.0	63.5	60.3
2.8	2.8	3.5	3.0	63.5	57.2
3.0	3.0	3.5	3.5	76.2	76.2
3.0	2.8	3.5	3.5	76.2	69.9
3.0	2.8	3.5	3.0	76.2	66.7
3.0	3.0	4.0	4.0	85.7	85.7
3.0	3.0	4.0	3.5	85.7	82.6
3.0	2.8	4.0	3.5	85.7	76.2
3.0	3.0	4.0	4.0	95.3	95.3
3.0	3.0	4.0	4.0	95.3	92.1
3.0	3.0	4.0	3.5	95.3	88.9
3.0	3.0	4.0	4.0	104.8	104.8
3.0	3.0	4.0	4.0	104.8	101.6
3.0	3.0	4.0	4.0	104.8	98.4
3.0	3.0	4.0	3.5	104.8	95.3
3.4	3.4	5.0	5.0	123.8	123.8

Tee

Sch5s, Sch10s, Sch20s

KS B1541/3, JIS B2312/3

Nominal Pipe Size (Unit : A)	Outside Diameter		Wall Thickness T	
	OD1	OD2	Sch 5s	
			T1	T2
125 x 125 x 100	139.8	114.3	2.80	2.10
125 x 125 x 90	139.8	101.6	2.80	2.10
125 x 125 x 80	139.8	89.1	2.80	2.10
150	165.2	165.2	2.80	2.80
150 x 150 x 125	165.2	139.8	2.80	2.80
150 x 150 x 100	165.2	114.3	2.80	2.10
200	216.3	216.3	2.80	2.80
200 x 200 x 150	216.3	165.2	2.80	2.80
200 x 200 x 125	216.3	139.8	2.80	2.80
250	267.4	267.4	3.40	3.40
250 x 250 x 200	267.4	216.3	3.40	2.80
250 x 250 x 150	267.4	165.2	3.40	2.80
300	318.5	318.5	4.00	4.00
300 x 300 x 250	318.5	267.4	4.00	3.40
300 x 300 x 200	318.5	216.3	4.00	2.80
350	355.6	355.6	-	-
350 x 350 x 300	355.6	318.5	-	-
350 x 350 x 250	355.6	267.4	-	-
350 x 350 x 200	355.6	216.3	-	-
400	406.4	406.4	-	-
400 x 400 x 350	406.4	355.6	-	-
400 x 400 x 300	406.4	318.5	-	-
400 x 400 x 250	406.4	267.4	-	-
450	457.2	457.2	-	-
450 x 450 x 400	457.2	406.4	-	-



(Unit : mm)

Wall Thickness T				Center to Center	
Sch 10s		Sch 20s		C	M
T1	T2	T1	T2		
3.4	3.0	5.0	4.0	123.8	117.5
3.4	3.0	5.0	4.0	123.8	114.3
3.4	3.0	5.0	4.0	123.8	111.1
3.4	3.4	5.0	5.0	142.9	142.9
3.4	3.4	5.0	5.0	142.9	136.5
3.4	3.0	5.0	4.0	142.9	130.2
4.0	4.0	6.5	6.5	177.8	177.8
4.0	3.4	6.5	5.0	177.8	168.3
4.0	3.4	6.5	5.0	177.8	161.9
4.0	4.0	6.5	6.5	215.9	215.9
4.0	4.0	6.5	6.5	215.9	203.2
4.0	3.4	6.5	5.0	215.9	193.7
4.5	4.5	6.5	6.5	254.0	254.0
4.5	4.0	6.5	6.5	254.0	241.3
4.5	4.0	6.5	6.5	254.0	228.6
-	-	-	-	279.4	279.4
-	-	-	-	279.4	269.9
-	-	-	-	279.4	257.2
-	-	-	-	279.4	247.7
-	-	-	-	304.8	304.8
-	-	-	-	304.8	304.8
-	-	-	-	304.8	295.3
-	-	-	-	304.8	282.6
-	-	-	-	342.9	342.9
-	-	-	-	342.9	330.2

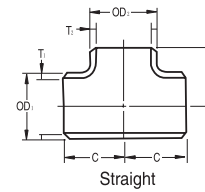
Tee

Sch5s, Sch10s, Sch20s

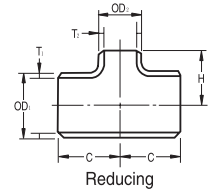
KS B1541/3, JIS B2312/3

Nominal Pipe Size (Unit : A)	Outside Diameter		Wall Thickness T	
	OD1	OD2	Sch 5s	
			T1	T2
450 x 450 x 350	457.2	355.6	-	-
450 x 450 x 300	457.2	318.5	-	-
500	508.0	508.0	-	-
500 x 500 x 450	508.0	457.2	-	-
500 x 500 x 400	508.0	406.4	-	-
500 x 500 x 350	508.0	355.6	-	-
550	558.8	558.8	-	-
550 x 550 x 500	558.8	508.0	-	-
550 x 550 x 450	558.8	457.2	-	-
550 x 550 x 400	558.8	406.4	-	-
600	609.6	609.6	-	-
600 x 600 x 550	609.6	558.8	-	-
600 x 600 x 500	609.6	508.0	-	-
600 x 600 x 450	609.6	457.2	-	-
750	762.0	762.0	-	-
750 x 750 x 600	762.0	609.6	-	-

- For Bevel Details See Page 358
- For Dimensional Tolerances See Page 370



Straight



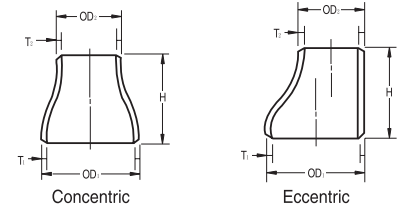
Reducing

(Unit : mm)

Wall Thickness T				Center to Center	
Sch 10s		Sch 20s		C	M
T1	T2	T1	T2		
-	-	-	-	342.9	330.2
-	-	-	-	342.9	320.7
-	-	-	-	381.0	381.0
-	-	-	-	381.0	368.3
-	-	-	-	381.0	355.6
-	-	-	-	381.0	355.6
-	-	-	-	419.1	419.1
-	-	-	-	419.1	406.4
-	-	-	-	419.1	393.7
-	-	-	-	419.1	381.0
-	-	-	-	431.8	431.8
-	-	-	-	431.8	431.8
-	-	-	-	431.8	431.8
-	-	-	-	431.8	419.1
-	-	-	-	558.8	558.8
-	-	-	-	558.8	533.4

Reducer

Sch5s, Sch10s, Sch20s



KS B1541/3, JIS B2312/3

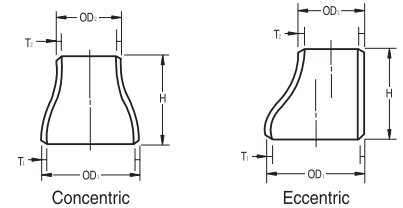
Nominal Pipe Size (Unit : A)	Outside Diameter		Wall Thickness T	
	OD1	OD2	Sch 5s	
			T1	T2
25 x 20	34.0	27.2	1.65	1.65
25 x 15	34.0	21.7	1.65	1.65
32 x 25	42.7	34.0	1.65	1.65
32 x 20	42.7	27.2	1.65	1.65
40 x 32	48.6	42.7	1.65	1.65
40 x 25	48.6	34.0	1.65	1.65
40 x 20	48.6	27.2	1.65	1.65
50 x 40	60.5	48.6	1.65	1.65
50 x 32	60.5	42.7	1.65	1.65
50 x 25	60.5	34.0	1.65	1.65
65 x 50	76.3	60.5	2.10	1.65
65 x 40	76.3	48.6	2.10	1.65
65 x 32	76.3	42.7	2.10	1.65
80 x 65	89.1	76.3	2.10	2.10
80 x 50	89.1	60.5	2.10	1.65
80 x 40	89.1	48.6	2.10	1.65
90 x 80	101.6	89.1	2.10	2.10
90 x 65	101.6	76.3	2.10	2.10
90 x 50	101.6	60.5	2.10	1.65
100 x 90	114.3	101.6	2.10	2.10
100 x 80	114.3	89.1	2.10	2.10
100 x 65	114.3	76.3	2.10	2.10
100 x 50	114.3	60.5	2.10	1.65

(Unit : mm)

Wall Thickness T				End to End
Sch 10s		Sch 20s		H
T1	T2	T1	T2	
2.8	2.1	3.0	2.5	50.8
2.8	2.1	3.0	2.5	50.8
2.8	2.8	3.0	3.0	50.8
2.8	2.1	3.0	2.5	50.8
2.8	2.8	3.0	3.0	63.5
2.8	2.8	3.0	3.0	63.5
2.8	2.1	3.0	2.5	63.5
2.8	2.8	3.5	3.0	76.2
2.8	2.8	3.5	3.0	76.2
2.8	2.8	3.5	3.0	76.2
3.0	2.8	3.5	3.5	88.9
3.0	2.8	3.5	3.0	88.9
3.0	2.8	3.5	3.0	88.9
3.0	3.0	4.0	3.5	88.9
3.0	2.8	4.0	3.5	88.9
3.0	2.8	4.0	3.0	88.9
3.0	3.0	4.0	4.0	101.6
3.0	3.0	4.0	3.5	101.6
3.0	2.8	4.0	3.5	101.6
3.0	3.0	4.0	4.0	101.6
3.0	3.0	4.0	4.0	101.6
3.0	3.0	4.0	3.5	101.6
3.0	2.8	4.0	3.5	101.6

Reducer

Sch5s, Sch10s, Sch20s



KS B1541/3, JIS B2312/3

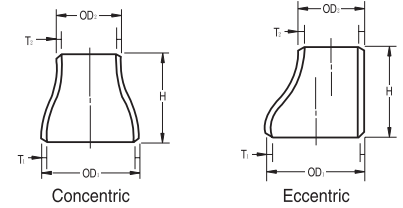
Nominal Pipe Size (Unit : A)	Outside Diameter		Wall Thickness T	
	OD1	OD2	Sch 5s	
			T1	T2
125 x 100	139.8	114.3	2.80	2.10
125 x 90	139.8	101.6	2.80	2.10
125 x 80	139.8	89.1	2.80	2.10
125 x 65	139.8	76.3	2.80	2.10
150 x 125	165.2	139.8	2.80	2.80
150 x 100	165.2	114.3	2.80	2.10
150 x 90	165.2	101.6	2.80	2.10
150 x 80	165.2	89.1	2.80	2.10
200 x 150	216.3	165.2	2.80	2.80
200 x 125	216.3	139.8	2.80	2.80
200 x 100	216.3	114.3	2.80	2.10
250 x 200	267.4	216.3	3.40	2.80
250 x 150	267.4	165.2	3.40	2.80
300 x 250	318.5	267.4	4.00	3.40
300 x 200	318.5	216.3	4.00	2.80
300 x 150	318.5	165.2	4.00	2.80
350 x 300	355.6	318.5	4.00	4.00
350 x 250	355.6	267.4	4.00	3.40
350 x 200	355.6	216.3	4.00	2.80
400 x 350	406.4	355.6	4.50	4.00
400 x 300	406.4	318.5	4.50	4.00
400 x 250	406.4	267.4	4.50	3.40

(Unit : mm)

Wall Thickness T				End to End
Sch 10s		Sch 20s		H
T1	T2	T1	T2	
3.4	3.0	5.0	4.0	127.0
3.4	3.0	5.0	4.0	127.0
3.4	3.0	5.0	4.0	127.0
3.4	3.0	5.0	3.5	127.0
3.4	3.4	5.0	5.0	139.7
3.4	3.0	5.0	4.0	139.7
3.4	3.0	5.0	4.0	139.7
3.4	3.0	5.0	4.0	139.7
4.0	3.4	6.5	5.0	152.4
4.0	3.4	6.5	5.0	152.4
4.0	3.0	6.5	4.0	152.4
4.0	4.0	6.5	6.5	177.8
4.0	3.4	6.5	5.0	177.8
4.5	4.0	6.5	6.5	203.2
4.5	4.0	6.5	6.5	203.2
4.5	3.4	6.5	5.0	203.2
4.8	4.5	8.0	6.5	330.2
4.8	4.0	8.0	6.5	330.2
4.8	4.0	8.0	6.5	330.2
4.8	4.8	8.0	8.0	355.6
4.8	4.5	8.0	6.5	355.6
4.8	4.0	8.0	6.5	355.6

Reducer

Sch5s, Sch10s, Sch20s



KS B1541/3, JIS B2312/3

Nominal Pipe Size (Unit : A)	Outside Diameter		Wall Thickness T	
	OD1	OD2	Sch 5s	
			T1	T2
450 x 400	457.2	406.4	4.50	4.50
450 x 350	457.2	355.6	4.50	4.00
450 x 300	457.2	318.5	5.00	4.00
500 x 300	508.0	457.2	5.00	4.00
550 x 500	558.8	508.0	5.00	5.00
550 x 450	558.8	457.2	5.00	4.50
550 x 400	558.8	406.4	5.00	4.50
600 x 400	609.6	406.4	5.50	4.50

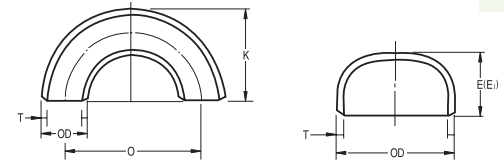
- For Bevel Details See Page 358
- For Dimensional Tolerances See Page 370

(Unit : mm)

Wall Thickness T				End to End
Sch 10s		Sch 20s		H
T1	T2	T1	T2	
4.8	5.0	8.0	8.0	381.0
4.8	5.0	8.0	8.0	381.0
4.8	4.5	8.0	6.5	381.0
5.5	4.5	9.5	6.5	508.0
5.5	5.5	-	-	508.0
5.5	5.0	-	-	508.0
5.5	5.0	-	-	508.0
6.5	5.0	9.5	8.0	508.0

180° Elbow (Long, Short) Cap

Sch5s, Sch10s, Sch20s



(Unit : mm)

KS B1541, JIS B2312

Nominal Pipe Size (Unit : A)	Outside Diameter O.D	Wall Thickness T		
		Sch 5s	Sch 10s	Sch 20s
15	21.7	1.65	2.1	2.5
20	27.2	1.65	2.1	2.5
25	34.0	1.65	2.8	3.0
32	42.7	1.65	2.8	3.0
40	48.6	1.65	2.8	3.0
50	60.5	1.65	2.8	3.5
65	76.3	2.10	3.0	3.5
80	89.1	2.10	3.0	4.0
90	101.6	2.10	3.0	4.0
100	114.3	2.10	3.0	4.0
125	139.8	2.80	3.4	5.0
150	165.2	2.80	3.4	5.0
200	216.3	2.80	4.0	6.5
250	267.4	3.40	4.0	6.5
300	318.5	4.00	4.5	6.5
350	355.6	4.00	5.0	8.0
400	406.4	4.50	5.0	8.0
450	457.2	4.50	5.0	8.0
500	508.0	5.00	5.5	9.5

CAP			180° Elbow			
E	E1	Limate Wall Thickness for E	Long		Short	
			O	K	O	K
25.4	-	-	76.2	49.0	-	-
25.4	-	-	76.2	51.7	-	-
38.1	-	-	76.2	55.1	50.8	42.4
38.1	-	-	95.2	69.0	63.6	53.2
38.1	-	-	114.4	81.5	76.2	62.4
38.1	44.5	5.5	152.4	106.5	101.6	81.1
38.1	50.8	7.0	190.6	133.5	127.0	101.7
50.8	63.5	7.6	228.6	158.9	152.4	120.8
63.5	76.2	8.1	266.8	184.2	177.8	139.7
63.5	76.2	8.6	304.8	209.6	203.2	158.8
76.2	88.9	9.5	381.0	260.4	254.0	196.9
88.9	101.6	11.0	457.2	311.2	304.8	235.0
101.6	127.0	12.7	609.6	413.0	406.4	311.4
127.0	152.4	12.7	762.0	514.7	508.0	387.7
152.4	177.8	12.7	914.4	616.5	609.6	464.1
165.1	190.5	12.7	1066.8	711.2	711.2	533.4
177.8	203.2	12.7	1219.2	812.8	812.8	609.6
203.2	228.6	12.7	1371.6	914.4	914.4	685.8
228.6	254.0	12.7	1524.0	1016.0	1016.0	762.0

- The Back-To-Face Dimension of Cap Shall Be E, If The Basic Wall Thickness is Not More Than The "Limited Wall Thickness" And E1 If It Exceeds The "Limited Wall Thickness"
- For Bevel Details See Page 358
- For Dimensional Tolerances See Page 370

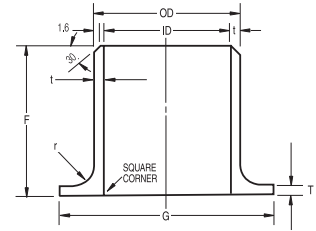
Lap Joint (Stub End)

Sch5s, Sch10s, Sch20s, Sch40s

JPI-75-15-70

Nominal Pipe Size (Unit : A)	Outside Diameter O.D	Sch 5s		Sch10s	
		I.D	t	I.D	t
15	21.7	18.4	1.65	17.5	2.1
20	27.2	23.9	1.65	23.0	2.1
25	34.0	30.7	1.65	28.4	2.8
32	42.7	39.4	1.65	37.1	2.8
40	48.6	45.3	1.65	43.0	2.8
50	60.5	57.2	1.65	54.9	2.8
65	76.3	72.1	2.10	70.3	3.0
80	89.1	84.9	2.10	83.1	3.0
90	101.6	97.4	2.10	95.6	3.0
100	114.3	110.1	2.10	108.3	3.0
125	139.8	134.2	2.80	133.0	3.4
150	165.2	159.6	2.80	158.4	3.4
200	216.3	210.7	2.80	208.3	4.0
250	267.4	260.6	3.40	259.4	4.0
300	318.5	310.5	4.00	309.5	4.5

• Minimum Lap Thickness "T" Shall not be less than Wall Thickness "t"

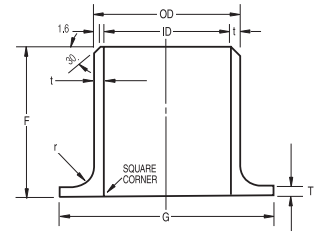


(Unit : mm)

Sch 20s		Sch 40s		F	G	r
I.D	t	I.D	t			
16.7	2.5	16.1	2.8	50	35	3.2
22.2	2.5	21.4	2.9	50	43	3.2
28.0	3.0	27.2	3.4	50	51	3.2
36.7	3.0	35.5	3.6	50	64	4.8
42.6	3.0	41.2	3.7	50	73	6.4
53.5	3.5	52.7	3.9	65	92	7.9
69.3	3.5	65.9	5.2	65	105	7.9
81.1	4.0	78.1	5.5	65	127	9.5
93.6	4.0	90.2	5.7	75	140	9.5
106.3	4.0	102.3	6.0	75	157	11.1
129.8	5.0	126.6	6.6	75	186	11.1
155.2	5.0	151.0	7.1	90	216	12.7
203.3	6.5	199.9	8.2	100	270	12.7
254.4	6.5	248.8	9.3	125	324	12.7
305.5	6.5	297.9	10.3	150	381	12.7

Lap Joint (Stub End)

Sch5s, Sch10s, Sch20s, Sch40s



(Unit : mm)

KS/JIS 10K

Nominal Pipe Size (Unit : A)	Outside Diameter O.D	Sch 5s		Sch 10s		Sch 20s	
		I.D	t	I.D	t	I.D	t
15	21.7	18.4	1.65	17.5	2.1	16.7	2.5
20	27.2	23.9	1.65	23.0	2.1	22.2	2.5
25	34.0	30.7	1.65	28.4	2.8	28.0	3.0
32	42.7	39.4	1.65	37.1	2.8	36.7	3.0
40	48.6	45.3	1.65	43.0	2.8	42.6	3.0
50	60.5	57.2	1.65	54.9	2.8	53.5	3.5
65	76.3	72.1	2.10	70.3	3.0	69.3	3.5
80	89.1	84.9	2.10	83.1	3.0	81.1	4.0
90	101.6	97.4	2.10	95.6	3.0	93.6	4.0
100	114.3	110.1	2.10	108.3	3.0	106.3	4.0
125	139.8	134.2	2.80	133.0	3.4	129.8	5.0
150	165.2	159.6	2.80	158.4	3.4	155.2	5.0
200	216.3	210.7	2.80	208.3	4.0	203.3	6.5
250	267.4	260.6	3.40	259.4	4.0	254.4	6.5
300	318.5	310.5	4.00	309.5	4.5	305.5	6.5

Sch 40s		F	G	r	Approx Weight			
I.D	t				Sch 5s	Sch 10s	Sch 20s	Sch 40s
16.1	2.8	50	35	3.2	-	0.059	0.070	0.078
21.4	2.9	50	43	3.2	-	0.073	0.086	0.099
27.2	3.4	50	51	3.2	-	0.172	0.184	0.207
35.5	3.6	50	64	4.8	-	0.217	0.231	0.275
41.2	3.7	50	73	8.4	-	0.242	0.258	0.316
52.7	3.9	65	92	7.9	-	0.308	0.383	0.424
65.9	5.2	65	105	7.9	-	0.430	0.499	0.731
78.1	5.5	65	127	9.5	-	0.484	0.640	0.870
90.2	5.7	75	140	9.5	-	0.536	0.710	1.000
102.3	6.0	75	157	11.1	-	0.614	0.814	1.210
126.6	6.6	75	186	11.1	-	0.879	1.280	1.680
151.0	7.1	90	216	12.7	-	1.070	1.570	2.210
199.9	8.2	100	270	12.7	-	1.940	3.120	3.920
248.8	9.3	125	324	12.7	-	2.530	4.080	5.800
297.9	10.3	150	381	12.7	-	3.250	4.670	7.340

- Dimensions Conform to TK Standards.
- This specification used for JIS 10K Flanges.