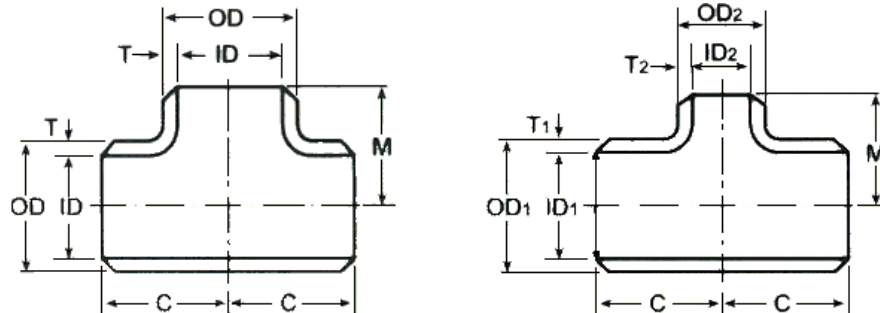


Equal Tee / Reducing Tee

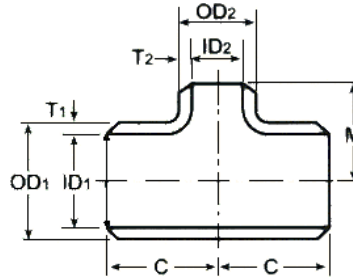
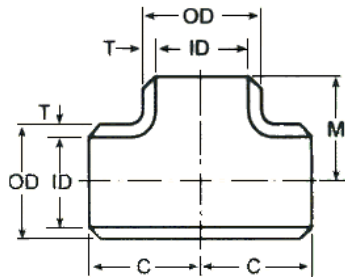


ANSI B16.9 / MSS SP-75 (in mm)

Nominal Pipe Size (NPS)	Outside Diameter At Bevel D		Center to End		Nominal Pipe Size (NPS)	Outside Diameter At Bevel D		Center to End	
	Run	Outlet	Run C	Outlet M		Run	Outlet	Run C	Outlet M
1/2 x 1/2	21.3	21.3	25.4	25.4	3-1/2 x 2		60.3		82.6
1/2 x 3/8		17.1		25.4	3-1/2 x 1-1/2		48.3		79.2
1/2 x 1/4		13.7		25.4	4 x 4	114.3	114.3	104.6	104.6
3/4 x 3/4	26.7	26.7	28.4	28.4	4 x 3-1/2		101.6		101.6
3/4 x 1/2		21.3		28.4	4 x 3		88.9		98.6
3/4 x 3/8		17.1		28.4	4 x 2-1/2		73.0		95.2
1 x 1	33.4	33.4	38.1	38.1	4 x 2		60.3		88.9
1 x 3/4		26.7		38.1	4 x 1-1/2		48.3		85.9
1 x 1/2		21.3		38.1	4 x 1-1/4		42.2		
1-1/4 x 1-1/4	42.2	42.2	47.8	47.8	5 x 5	141.3	141.3	124.0	124.0
1-1/4 x 1		33.4		47.8	5 x 4		114.3		117.3
1-1/4 x 3/4		26.7		47.8	5 x 3-1/2		101.6		114.3
1-1/4 x 1/2		21.3		47.8	5 x 3		88.9		111.3
1-1/2 x 1-1/2	48.3	48.3	57.2	57.2	5 x 2-1/2		73.0		108.0
1-1/2 x 1-1/4		42.2		57.2	5 x 2		60.3		104.6
1-1/2 x 1		33.4		57.2	6 x 6	168.3	168.3	142.7	142.7
1-1/2 x 3/4		26.7		57.2	6 x 5		141.3		136.7
1-1/2 x 1/2		21.3		57.2	6 x 4		114.3		130.0
2 x 2	60.3	60.3	63.5	63.5	6 x 3-1/2		101.6		127.0
2 x 1-1/2		48.3		60.5	6 x 3		88.9		124.0
2 x 1-1/4		42.2		57.2	6 x 2-1/2		73.0		120.6
2 x 1		33.4		50.8	8 x 8	219.1	219.1	177.8	177.8
2 x 3/4		26.7		44.4	8 x 6		168.3		168.1
2-1/2 x 2-1/2	73.0	73.0	76.2	76.2	8 x 5		141.3		162.1
2-1/2 x 2		60.3		69.8	8 x 4		114.3		155.4
2-1/2 x 1-1/2		48.3		66.5	8 x 3-1/2		101.6		152.4
2-1/2 x 1-1/4		42.2		63.5	10 x 10	273.1	273.1	215.9	215.9
2-1/2 x 1		33.4		57.2	10 x 8		219.1		203.2
3 x 3	88.9	88.9	85.9	85.9	10 x 6		168.3		193.5
3 x 2-1/2		73.0		82.6	10 x 5		141.3		190.5
3 x 2		60.3		76.2	10 x 4		114.3		184.2
3 x 1-1/2		48.3		73.2	12 x 12	323.9	323.9	254.0	254.0
3 x 1-1/4		42.2		69.8	12 x 10		273.1		241.3
3-1/2 x 3-1/2	101.6	101.6	95.2	95.2	12 x 8		219.1		228.6
3-1/2 x 3		88.9		91.9	12 x 6		168.3		218.9
3-1/2 x 2-1/2		73.0		88.9	12 x 5		141.3		215.9

Stainless Steel & Carbon Steel  
Butt Welded Fittings

IIF (Institutional International Fittings)

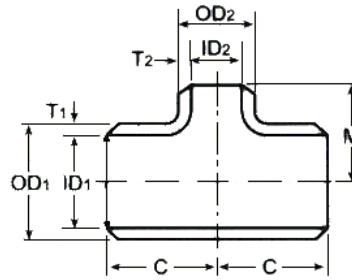
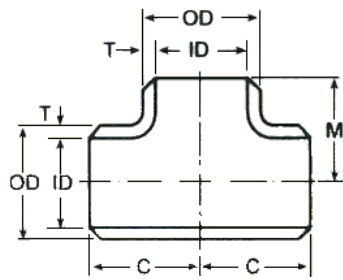


ANSI B16.9 / MSS SP-75 (in mm)

Nominal Pipe Size (NPS)	Outside Diameter At Bevel D		Center to End		Nominal Pipe Size (NPS)	Outside Diameter At Bevel D		Center to End	
	Run	Outlet	Run C	Outlet M		Run	Outlet	Run C	Outlet M
14 x 14	355.6	355.6	279.4	279.4	26 x 22		558.8		469.9
14 x 12		323.9		269.7	26 x 20		508.0		457.2
14 x 10		273.1		257.0	26 x 18		457.2		444.5
14 x 8		219.1		247.6	26 x 16		406.4		431.8
14 x 6		168.3		238.3	26 x 14		355.6		431.8
16 x 16	406.4	406.4	304.8	304.8	26 x 12		323.1		422.1
16 x 14		355.6		304.8	28 x 28	711.2	711.2	520.7	520.7
16 x 12		323.9		295.1	28 x 26		660.4		520.7
16 x 10		273.1		282.4	28 x 24		609.6		508.0
16 x 8		219.1		373.0	28 x 22		558.8		495.3
16 x 6		168.3		263.7	28 x 20		508.0		482.6
18 x 18	457.2	457.2	342.9	342.9	28 x 18		457.2		469.9
18 x 16		406.4		330.2	28 x 16		406.4		457.2
18 x 14		355.6		330.2	28 x 14		355.6		457.2
18 x 12		323.9		320.5	28 x 12		323.1		447.5
18 x 10		273.1		307.8	30 x 30	762.0	762.0	558.8	558.8
18 x 8		219.1		298.4	30 x 28		711.2		546.1
20 x 20	508.0	508.0	381.0	381.0	30 x 26		660.4		546.1
20 x 18		457.2		369.3	30 x 24		609.6		533.4
20 x 16		406.4		355.6	30 x 22		558.8		520.7
20 x 14		355.6		355.6	30 x 20		508.0		508.0
20 x 12		323.9		345.9	30 x 18		457.2		495.3
20 x 10		273.1		333.2	30 x 16		406.4		482.6
20 x 8		219.1		323.8	30 x 14		355.6		482.6
22 x 22	558.8	558.8	419.1	419.1	30 x 12		323.9		472.6
22 x 20		508.0		406.4	30 x 10		273.1		460.2
22 x 18		457.2		393.7	32 x 32	812.8	812.8	596.9	596.9
22 x 16		406.4		381.0	32 x 30		762.0		584.2
22 x 14		355.6		381.0	32 x 28		711.2		571.5
22 x 12		323.9		371.3	32 x 26		660.4		571.5
22 x 10		273.1		358.6	32 x 24		609.6		558.8
24 x 24	609.6	609.6	431.8	431.8	32 x 22		558.8		546.1
24 x 22		558.8		431.8	32 x 20		508.0		533.4
24 x 20		508.0		431.8	32 x 18		457.2		520.7
24 x 18		457.2		419.1	32 x 16		406.4		508.0
24 x 16		406.4		406.4	32 x 14		355.6		508.0
24 x 14		355.6		406.4	34 x 34	863.6	863.6	635.0	635.0
24 x 12		323.9		396.7	34 x 32		812.8		622.3
24 x 10		273.1		384.0	34 x 30		762.0		609.6
26 x 26	660.4	660.4	495.3	495.3	34 x 28		711.2		596.9
26 x 24		609.6		482.6	34 x 26		660.4		596.9

Stainless Steel & Carbon Steel  
Butt Welded Fittings

IIF (Institutional International Fittings)



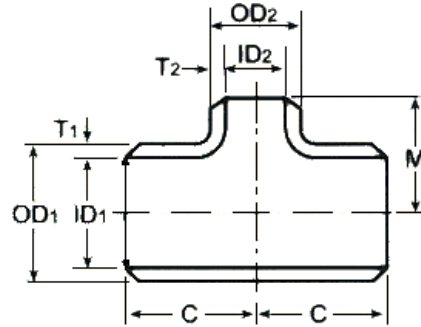
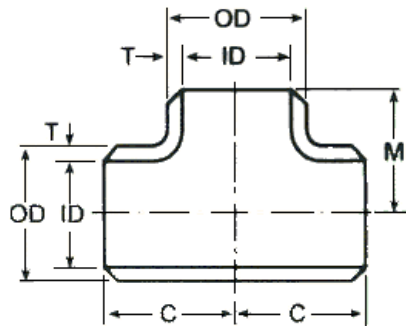
ANSI B16.9 / MSS SP-75 (in mm)

Nominal Pipe Size (NPS)	Outside Diameter At Bevel D		Center to End	
	Run	Outlet	Run C	Outlet M
34 x 24		609.6		584.2
34 x 22		558.8		571.5
34 x 20		508.0		558.8
34 x 18		457.2		546.1
34 x 16		406.4		533.4
36 x 36	914.4	914.4	673.1	673.1
36 x 34		863.6		660.4
36 x 32		812.8		647.7
36 x 30		762.0		635.0
36 x 28		711.2		622.3
36 x 26		660.4		622.3
36 x 24		609.6		609.6
36 x 22		558.8		596.9
36 x 20		508.0		584.2
36 x 18		457.2		571.5
36 x 16		406.4		558.8
38 x 38	965.2	965.2	711.2	711.2
38 x 36		914.4		711.2
38 x 34		863.6		698.5
38 x 32		812.8		685.8
38 x 30		762.0		673.1
38 x 28		711.2		647.7
38 x 26		660.4		647.7
38 x 24		609.6		635.0
38 x 22		558.8		622.3
38 x 20		508.0		609.6
38 x 18		457.2		596.9
40 x 40	1016.0	1016.0	749.3	749.3
40 x 38		965.2		749.3
40 x 36		914.4		736.6
40 x 34		863.6		723.9
40 x 32		812.8		711.2
40 x 30		762.0		698.5
40 x 28		711.2		673.1
40 x 26		660.4		673.1
40 x 24		609.6		660.4
40 x 22		558.8		647.7
40 x 20		508.0		635.0
40 x 18		457.2		622.3
42 x 42	1066.8	1066.8	762.0	711.2
42 x 40		1016.0		711.2

Nominal Pipe Size (NPS)	Outside Diameter At Bevel D		Center to End	
	Run	Outlet	Run C	Outlet M
42 x 38		965.2		711.2
42 x 36		914.4		711.2
42 x 34		863.6		711.2
42 x 32		812.8		711.2
42 x 30		762.0		711.2
42 x 28	1066.8	711.2	762.0	698.5
42 x 26		660.4		698.5
42 x 24		609.6		660.4
42 x 22		558.8		660.4
42 x 20		508.0		660.4
42 x 18		457.2		647.7
42 x 16		406.4		635.0
44 x 44	1117.6	1117.6	812.8	762.0
44 x 42		1066.8		762.0
44 x 40		1016.0		749.3
44 x 38		965.2		736.6
44 x 36		914.4		723.9
44 x 34		863.6		723.9
44 x 32		812.8		711.2
44 x 30		762.0		711.2
44 x 28		711.2		698.5
44 x 26		660.4		698.5
44 x 24		609.6		698.5
44 x 22		558.8		685.8
44 x 20		508.0		685.8
46 x 46	1168.4	1168.4	850.9	800.1
46 x 44		1117.6		800.1
46 x 42		1066.8		787.4
46 x 40		1016.0		774.7
46 x 38		965.2		762.0
46 x 36		914.4		762.0
46 x 34		863.6		749.3
46 x 32		812.8		749.3
46 x 30		762.0		736.6
46 x 28		711.2		736.6
46 x 26		660.4		736.6
46 x 24		609.6		723.9
48 x 48	1219.2	1219.2	889.0	838.2
48 x 46		1168.4		838.2
48 x 44		1117.6		838.2
48 x 42		1066.8		812.8

Stainless Steel & Carbon Steel  
Butt Welded Fittings

IIF (Institutional International Fittings)



ANSI B16.9 / MSS SP-75 (in mm)

Nominal Pipe Size (NPS)	Outside Diameter At Bevel D		Center to End	
	Run	Outlet	Run C	Outlet M
48 x 40		1016.0		812.8
48 x 38		965.2		812.8
48 x 36		914.4		787.4
48 x 34		863.6		787.4
48 x 32	1219.2	812.8	889.0	787.4
48 x 44		1117.6		838.2
48 x 42		1066.8		812.8
48 x 40		1016.0		812.8
48 x 38		965.2		812.8

Nominal Pipe Size (NPS)	Outside Diameter At Bevel D		Center to End	
	Run	Outlet	Run C	Outlet M
48 x 36		914.4		787.4
48 x 34		863.6		787.4
48 x 32		812.8		787.4
48 x 30		762.0		762.0
48 x 28		711.2		762.0
48 x 26		660.4		762.0
48 x 24		609.6		736.6
48 x 22		558.8		736.6