

Butt Weld Pipe Fittings





Butt Weld Fittings

Dimension	: ANSI B16.9, B16.25, B16.28, MSS SP-43, SP-48, SP-59
Material Spec.	: ASTM A403, A240, A312, A234 WPB
Material Grades	: 304, 304L, 316, 316L, CARBON STEEL



90° ELBOW



45° ELBOW



180° ELBOW



EQUAL TEE







CAP



CON. REDUCER

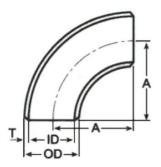


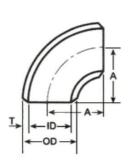
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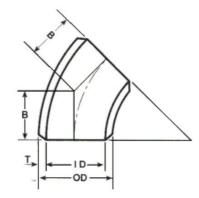


STUB END

Long and Short Radius 45°/ 90° Elbows







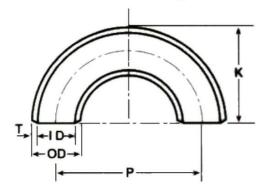
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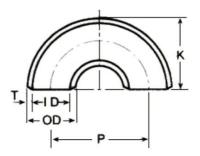
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ANSI B16.9 B16.28 (in mm) * Wellgrow's standard.

Nominal	Outside Diameter	Center to End Long Radius Elbows Short Radius Elbows								
Pipe Size	at Bevel									
(NPS)	D	90 degree. A	45 degree B	90 degree A	45 degree B					
1/2	21.3	38.1	15.7	-	-					
3/4	26.7	38.1	19.1	_	_					
1	33.4	38.1	22.4	25.4						
1-1/4	42.2	47.8	25.4	31.8	-					
1-1/2	48.3	57.2	28.4	38.1	-					
2	60.3	76.2	35.1	50.8	-					
2-1/2	73.0	95.2	44.4	63.5	-					
3	88.9	114.3	50.8	76.2	31.6					
3-1/2	101.6	133.4	57.2	88.9	36.8					
4	114.3	152.4	63.5	101.6	42.1					
5	141.3	190.5	79.2	127.0	52.6					
6	168.3	228.6	95.2	152.4	63.4					
8	219.1	304.8	127.0	203.2	84.2					
10	273.1	381.0	158.8	254.0	105.2					
12	323.9	457.2	190.5	304.8	126.3					
14	355.6	533.4	222.2	355.6	147.3					
16	406.4	609.6	254.0	406.4	168.3					
18	457.2	685.8	285.8	457.2	189.4					
20	508.0	762.0	317.5	508.0	210.4					
22	558.8	838.2	342.9	558.8	231.5					
24	609.6	914.4	381.0	609.6	252.5					
26	660.4	990.6	406.4	660.4	273.5					
28	711.2	1066.8	438.2	711.2	294.6					
30	762.0	1143.0	469.9	762.0	315.6					
32	812.8	1219.2	501.6	812.8	378.1					
34	863.6	1295.4	533.4	863.6	357.7					
36	914.4	1371.6	565.2	914.4	378.8					
38	965.2	1447.8	599.9	-	-					
40	1016.0	1524.0	632.0	1016.0	420.8					
42	1066.8	1600.2	660.4	1066.8	441.9					
44	1117.6	1676.4	695.5	1117.6	462.9					
46	1168.4	1752.6	726.9	-	1-					
48	1219.2	1828.8	759.0	1219.2	505.0					
52*	1320.8	-	-	1320.8	547.1					
54*	1371.6	2057.4	852.2	1371.6	568.1					
56*	1422.4	2133.6	883.8	1422.4	589.2					
60*	1524.0	2286.0	946.9	1524.0	631.3					
66*	1676.4	2514.6	1041.6	-	-					
68*	1727.0	2591	1073	1727	-					
72*	1829.0	2743	1137	1829	-					
76*	1930.0	2896	1199	1930	(. !					
80	2032.0	3048	1263	2032	-					

Long and Short Radius 180° Elbows



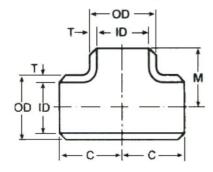


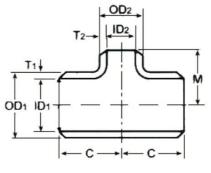
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ANSI B16.9 B16.28 (in mm)

Nominal Pipe Size (NPS)	Outside Diameter at Bevel D	Long Radi	us Elbows	Short Radius Elbows			
		Center to Center. P	Back to Face K	Center to Center. P	Back to Face K		
1/2	21.3	76.2	47.8	-	-		
3/4	26.7	76.2	50.8	-	-		
1	33.4	76.2	55.6	50.8	41.1		
1-1/4	42.2	95.2	69.8	63.5	52.3		
1-1/2	48.3	114.3	82.6	76.2	62.0		
2	60.3	152.4	106.4	101.6	81.0		
2-1/2	73.0	109.5	131.8	127.0	100.1		
3	88.9	228.6	158.8	152.4	120.7		
3-1/2	101.6	266.7	184.2	177.8	139.7		
4	114.3	304.8	209.6	203.2	158.8		
5	141.3	381.0	261.9	254.0	196.9		
6	168.3	457.2	312.7	304.8	236.5		
8	219.1	609.6	414.3	406.4	312.7		
10	273.1	762.0	517.7	508.0	390.7		
12	323.9	914.4	619.3	609.6	466.9		
14	355.6	1066.8	711.2	711.2	533.4		
16	406.4	1219.2	812.8	812.8	609.6		
18	457.2	1371.6	914.4	914.4	685.8		
20	508.0	1524.0	1016.0	1016.0	762.0		
22	558.8	1676.4	1117.6	1117.6	838.2		
24	609.6	1828.8	1219.2	1219.2	914.4		

Equal and Reducing Tees

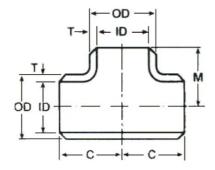


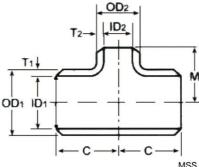


MSS SP-75 ANSI B16.9 (in mm) * Wellgrow's standard.

	Nominal Pipe Size			Diameter evel D	Center to End			Nomir Pipe S			Diameter evel D	Center to End		
	NPS		Run	Outlet	Run C	Outlet (1) M		(NPS		Run	Outlet	Run C	Outlet (1) M	
1/2	х	1/2	21.3	21.3	25.4	25.4	4	х	4	114.3	114.3	104.6	104.6	
1/2	х	3/8		17.1		25.4	4	х	3-1/2		101.6		101.6	
1/2	х	1/4		13.7		25.4	4	х	3		88.9		98.6	
3/4	х	3/4	26.7	26.7	28.4	28.4	4	х	2-1/2		73.0		95.2	
3/4	х	1/2		21.3		28.4	4	х	2		60.3		88.9	
3/4	х	3/8		17.1		28.4	4	х	1-1/2		48.3		85.9	
1	х	1	33.4	33.4	38.1	38.1	4	х	1-1/4		42.2			
1	х	3/4		26.7		38.1	4	х	1*		33.5			
1	x	1/2		21.3		38.1	5	х	5	141.3	141.3	124.0	124.0	
1-1/4	х	1-1/4	42.2	42.2	47.8	47.8	5	х	4		114.3		117.3	
1-1/4	х	1		33.4		47.8	5	х	3-1/2		101.6		114.3	
1-1/4	х	3/4		26.7		47.8	5	х	3		88.9		111.3	
1-1/4	х	1/2		21.3		47.8	5	х	2-1/2		73.0		108.0	
1-1/2	х	1-1/2	48.3	48.3	57.2	57.2	5	х	2		60.3		104.6	
1-1/2	x	1-1/4		42.2		57.2	5	х	1-1/2*		48.3			
1-1/2	х	1		33.4		57.2	6	х	6	168.3	168.3	142.7	142.7	
1-1/2	х	3/4		26.7		57.2	6	х	5		141.3		136.7	
1-1/2	х	1/2		21.3		57.2	6	х	4		114.3		130.0	
2	х	2	60.3	60.3	63.5	63.5	6	х	3-1/2		101.6		127.0	
2	х	1-1/2		48.3		60.5	6	х	3		88.9		124.0	
2	х	1-1/4		42.2		57.2	6	х	2-1/2		73.0		120.6	
2	х	1		33.4		50.8	6	х	2*		60.3			
2	х	3/4		26.7		44.4	8	х	8	219.1	219.1	177.8	177.8	
2	х	1/2*		21.3			8	х	6		168.3		168.1	
2-1/2	x	2-1/2	73.0	73.0	76.2	76.2	8	х	5		141.3		162.1	
2-1/2	х	2		60.3		69.8	8	х	4		114.3		155.4	
2-1/2	х	1-1/2		48.3		66.5	8	х	3-1/2		101.6		152.4	
2-1/2	х	1-1/4		42.2		63.5	8	х	3*		88.9			
2-1/2	х	1		33.4		57.2	10	х	10	273.1	273.1	215.9	215.9	
3	х	3	88.9	88.9	85.9	85.9	10	х	8		219.1	i	203.2	
3	х	2-1/2		73.0		82.6	10	х	6		168.3		193.5	
3	х	2		60.3		76.2	10	х	5		141.3		190.5	
3	х	1-1/2		48.3		73.2	10	х	4		114.3		184.2	
3	х	1-1/4		42.2		69.8	12	х	12	323.9	323.9	254.0	254.0	
3	х	1*		33.4			12	х	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	х	5		141.3		215.9	
3-1/2	x	2		60.3		82.6								
3-1/2	x	1-1/2		48.3		79.2								

Equal and Reducing Tees





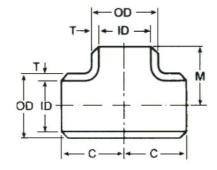
MSS SP-75 ANSI B16.9 (in mm) * Wellgrow's standard.

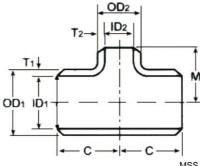
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	Nomina Pipe Siz			Diameter evel D	Cente	r to End		Nomina Pipe Siz			e Diameter Bevel D	Cente	r to End
	(NPS)	e	Run	Outlet	Run C	Outlet (1) M		(NPS)	1000	Run	Outlet	Run C	Outlet (1) M
14	х	14	355.6	355.6	279.4	279.4	26	х	22		558.8		469.9
14	х	12		323.9		269.7	26	x	20		508.0		457.2
14	х	10		273.1		257.0	26	х	18		457.2		444.5
14	х	8		219.1		247.6	26	х	16		406.4		431.8
14	х	6		168.3		238.3	26	х	14		355.6		431.8
16	х	16	406.4	406.4	304.8	304.8	26	х	12		323.1		422.1
16	х	14		355.6		304.8	28	х	28	711.2	711.2	520.7	520.7
16	х	12		323.9		295.1	28	х	26		660.4		520.7
16	х	10		273.1		282.4	28	х	24		609.6		508.0
16	х	8		219.1		373.0	28	х	22		558.8		495.3
16	х	6		168.3		263.7	28	х	20		508.0		482.6
18	х	18	457.2	457.2	342.9	342.9	28	х	18		457.2		469.9
18	х	16		406.4		330.2	28	х	16		406.4		457.2
18	х	14		355.6		330.2	28	х	14		355.6		457.2
18	х	12		323.9		320.5	28	х	12		323.1		447.5
18	х	10		273.1		307.8	30	х	30	762.0	762.0	558.8	558.8
18	х	8		219.1		298.4	30	х	28		711.2		546.1
20	х	20	508.0	508.0	381.0	381.0	30	х	26		660.4		546.1
20	х	18		457.2		369.3	30	х	24		609.6		533.4
20	х	16		406.4		355.6	30	х	22		558.8		520.7
20	х	14		355.6		355.6	30	х	20		508.0		508.0
20	х	12		323.9		345.9	30	х	18		457.2		495.3
20	х	10		273.1		333.2	30	х	16		406.4		482.6
20	х	8		219.1		323.8	30	х	14		355.6		482.6
22	х	22	558.8	558.8	419.1	419.1	30	х	12		323.9		472.6
22	х	20		508.0		406.4	30	х	10		273.1		460.2
22	х	18		457.2		393.7	32	х	32	812.8	812.8	596.9	596.9
22	х	16		406.4		381.0	32	х	30		762.0		584.2
22	х	14		355.6		381.0	32	х	28		711.2		571.5
22	х	12		323.9		371.3	32	х	26		660.4		571.5
22	х	10		273.1		358.6	32	х	24		609.6		558.8
24	х	24	609.6	609.6	431.8	431.8	32	х	22		558.8		546.1
24	х	22		558.8		431.8	32	х	20		508.0		533.4
24	х	20		508.0		431.8	32	х	18		457.2		520.7
24	х	18		457.2		419.1	32	х	16		406.4		508.0
24	х	16		406.4		406.4	32	х	14		355.6		508.0
24	х	14		355.6		406.4	34	х	34	863.6	863.6	635.0	635.0
24	х	12		323.9		396.7	34	х	32		812.8		622.3
24	х	10		273.1		384.0	34	х	30		762.0		609.6
26	х	26	660.4	660.4	495.3	495.3	34	х	28		711.2		596.9
26	х	24		609.6		482.6	34	х	26		660.4		596.9

Equal and Reducing Tees



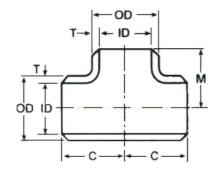


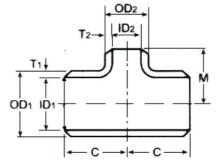
MSS SP-75 ANSI B16.9 (in mm) * Wellgrow's standard.

	Nominal Pipe Size			Diameter evel D	Cente	er to End		lomin ipe Si		
	(NPS)	, L	Run	Outlet	Run C	Outlet (1) M		(NPS		
34	х	24		609.6		584.2	42	х	38	
34	х	22		558.8		571.5	42	х	36	
34	х	20		508.0		558.8	42	х	34	
34	х	18		457.2		546.1	42	х	32	
34	х	16		406.4		533.4	42	х	30	
36	х	36	914.4	914.4	673.1	673.1	42	х	28	1
36	х	34		863.6		660.4	42	х	26	
36	х	32		812.8		647.7	42	х	24	
36	х	30		762.0		635.0	42	х	22	
36	х	28		711.2		622.3	42	х	20	
36	х	26		660.4		622.3	42	х	18	
36	х	24		609.6		609.6	42	х	16	
36	х	22		558.8		596.9	44	х	44	1
36	х	20		508.0		584.2	44	х	42	
36	x	18		457.2		571.5	44	х	40	
36	x	16		406.4		558.8	44	x	38	
38	x	38	965.2	965.2	711.2	711.2	44	х	36	
38	x	36		914.4		711.2	44	х	34	
38	x	34		863.6		698.5	44	x	32	
38	x	32		812.8		685.8	44	x	30	
38	x	30		762.0		673.1	44	x	28	
38	x	28		711.2		647.7	44	х	26	
38	x	26		660.4		647.7	44	х	24	
38	x	24		609.6		635.0	44	x	22	
38	x	22		558.8		622.3	44	x	20	
38	x	20		508.0		609.6	46	x	46	1
38	x	18		457.2		596.9	46	x	44	
40	x	40	1016.0	1016.0	749.3	749.3	46	x	42	
40	x	38		965.2		749.3	46	x	40	
40	x	36		914.4		736.6	46	x	38	
40	x	34		863.6		723.9	46	x	36	
40	x	32		812.8		711.2	46	x	34	
40	x	30		762.0		698.5	46	x	32	
40	x	28		711.2		673.1	46	х	30	
40	x	26		660.4		673.1	46	x	28	
40	x	24		609.6		660.4	46	x	26	
40	x	22		558.8		647.7	46	x	24	
40	x	20		508.0		635.0	46	x	20*	
40	x	18		457.2		622.3	48	x	48	1
42	x	42	1066.8	1066.8	762.0	711.2	48	x	46	
42	x	40		1016.0		711.2	48	x	44	

	Nomina Pipe Siz			Diameter evel D		r to End
F	(NPS)		Run	Outlet	Run C	Outlet (1) M
42	х	38		965.2		711.2
42	х	36		914.4		711.2
42	х	34		863.6		711.2
42	х	32		812.8		711.2
42	х	30		762.0		711.2
42	х	28	1066.8	711.2	762.0	698.5
42	х	26		660.4		698.5
42	х	24		609.6		660.4
42	х	22		558.8		660.4
42	х	20		508.0		660.4
42	х	18		457.2		647.7
42	х	16		406.4		635.0
44	х	44	1117.6	1117.6	812.8	762.0
44	х	42		1066.8		762.0
44	х	40		1016.0		749.3
44	х	38		965.2		736.6
44	х	36		914.4		723.9
44	х	34		863.6		723.9
44	х	32		812.8		711.2
44	х	30		762.0		711.2
44	х	28		711.2		698.5
44	х	26		660.4		698.5
44	х	24		609.6		698.5
44	х	22		558.8		685.8
44	х	20		508.0		685.8
46	х	46	1168.4	1168.4	850.9	800.1
46	х	44		1117.6		800.1
46	х	42		1066.8		787.4
46	х	40		1016.0		774.7
46	х	38		965.2		762.0
46	х	36		914.4		762.0
46	х	34		863.6		749.3
46	х	32		812.8		749.3
46	х	30		762.0		736.6
46	х	28		711.2		736.6
46	х	26		660.4		736.6
46	х	24		609.6		723.9
46	х	20*		508.0		723.9
48	х	48	1219.2	1219.2	889.0	838.2
48	х	46		1168.4		838.2
48	х	44		1117.6		838.2

Equal and Reducing Tees

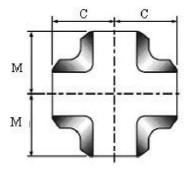




MSS SP-75 ANSI B16.9 (in mm) * Wellgrow's standard.

	Nominal Pipe Size			Diameter evel D	Cente	Center to End		Nomin			Diameter evel D	Center to End		
	(NPS)		Run	Outlet	Run C	Outlet (1) M		ipe Si (NPS		Run	Outlet	Run C	Outlet (1) M	
48	x	42		1066.8		812.8	60	х	40*		1016.0		863.6	
48	х	40		1016.0		812.8	60	х	28*		711.2		863.6	
48	х	38		965.2		812.8	60	х	20*		508.0		863.6	
48	х	36		914.4		787.4	64	х	64*	1626.0	1626.0	1194.0	1092.0	
48	х	34		863.6		787.4	64	х	60*		1524.0		1067.0	
48	х	32	1219.2	812.8	889.0	787.4	64	х	56*		1422.0		1016.0	
48	x	44		1117.6		838.2	64	х	52*		1321.0		965.0	
48	х	42		1066.8		812.8	64	х	48*		1219.0		914	
48	х	40		1016.0		812.8	66	х	66*	1676.4	1676.4	1219.2	1066.8	
48	x	38		965.2		812.8	68	х	68*	1727.0	1727.0	1270.0	1168.0	
48	х	36		914.4		787.4	68	х	64*		1626.0		1143.0	
48	х	34		863.6		787.4	68	х	60*		1524.0		1118.0	
48	х	32		812.8		787.4	68	х	56*		1422.0		1067.0	
48	x	30		762.0		762.0	68	х	52*		1321.0		1016.0	
48	х	28		711.2		762.0	68	х	48*		1219.0		965.0	
48	х	26		660.4		762.0	72	х	72*	1829.0	1829.0	1320.0	1245.0	
48	x	24		609.6		736.6	72	х	68*		1727.0		1219.0	
48	х	22		558.8		736.6	72	х	64*		1626.0		1194.0	
52	х	52*	1320.8	1320.8	965.2	914.4	72	х	60*		1524.0		1168.0	
52	x	48*		1219.2		863.6	72	х	56*	1829.0	1422.0	1320.0	1118.0	
52	x	44*		1117.6		812.8	72	х	52*		1321.0		1067.0	
52	х	40*		1016.0		762.0	72	х	48*		1219.0		1016.0	
54	х	54*	1371.6	1371.6	1003.3	952.5	76	х	76*	1930.0	1930.0	1422.0	1320.0	
54	x	52*		1320.8		914.4	76	х	72*		1829.0		1295.0	
54	х	48*		1219.2		863.6	76	х	68*		1727.0		1270.0	
54	х	44*		1117.6		863.6	76	х	64*		1626.0		1245.0	
54	х	40*		1016.0		812.8	76	х	60*		1524.0		1219.0	
54	х	28*		711.2		787.4	76	х	56*		1422.0		1168.0	
54	х	20*		508.0		787.4	76	х	52*		1321.0		1118.0	
56	х	56*	1422.4	1422.4	1041.4	965.2	76	х	48*		1219.0		1067.0	
56	х	52*		1320.8		914.4	80	х	80*	2032.0	2032.0	1499.0	1397.0	
56	х	48*		1219.2		863.6	80	х	76*		1930.0		1372.0	
56	х	44*		1117.6		812.8	80	х	72*		1829.0		1346.0	
56	х	40*		1016.0		812.8	80	х	68*		1727.0		1321.0	
56	х	28*		711.2		812.8	80	х	64*		1626.0		1295.0	
56	х	20*		508.0		812.8	80	х	60*		1524.0		1270.0	
60	х	60*	1524.0	1524.0	1117.6	1016.0	80	х	56*		1422.0		1219.0	
60	х	56*		1422.4		965.2	80	х	52*		1321.0		1168.0	
60	х	52*		1320.8		914.4	80	х	48*		1219.0		1118.0	
60	х	48*		1219.2		863.6								

Equal and Reducing Crosses



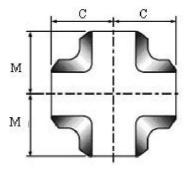
MSS SP-75 ANSI B16.9 (in mm) * Wellgrow's standard.

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Nominal			Diameter evel D	Cente	Center to End			nal		Diameter evel D	Wellgrow's standard. Center to End		
	oe Si NPS		Run	Outlet	Run C	Outlet (1) M	F	Pipe S (NPS	222232223	Run	Outlet	Run C	Outlet (1) M
1/2	х	1/2	21.3	21.3	25.4	25.4	4	х	4	114.3	114.3	104.6	104.6
1/2	х	3/8		17.1		25.4	4	х	3-1/2		101.6	-	101.6
1/2	х	1/4		13.7		25.4	4	x	3		88.9		98.6
3/4	х	3/4	26.7	26.7	28.4	28.4	4	x	2-1/2		73.0	1	95.2
3/4	х	1/2		21.3		28.4	4	x	2		60.3		88.9
3/4	х	3/8		17.1		28.4	4	x	1-1/2		48.3		85.9
1	х	1	33.4	33.4	38.1	38.1	4	x	1-1/4		42.2		
1	х	3/4		26.7		38.1	4	х	1*		33.5		1
1	х	1/2		21.3		38.1	5	х	5	141.3	141.3	124.0	124.0
1-1/4	х	1-1/4	42.2	42.2	47.8	47.8	5	x	4		114.3		117.3
1-1/4	х	1		33.4		47.8	5	х	3-1/2		101.6		114.3
1-1/4	х	3/4		26.7		47.8	5	х	3		88.9		111.3
1-1/4	х	1/2		21.3		47.8	5	х	2-1/2		73.0		108.0
1-1/2	х	1-1/2	48.3	48.3	57.2	57.2	5	х	2		60.3		104.6
1-1/2	х	1-1/4		42.2		57.2	5	х	1-1/2*		48.3		
1-1/2	х	1		33.4		57.2	6	х	6	168.3	168.3	142.7	142.7
1-1/2	х	3/4		26.7		57.2	6	x	5		141.3		136.7
1-1/2	х	1/2		21.3		57.2	6	х	4		114.3		130.0
2	х	2	60.3	60.3	63.5	63.5	6	х	3-1/2		101.6		127.0
2	х	1-1/2		48.3		60.5	6	х	3		88.9		124.0
2	х	1-1/4		42.2		57.2	6	х	2-1/2		73.0		120.6
2	х	1		33.4		50.8	6	х	2*		60.3		
2	х	3/4		26.7		44.4	8	х	8	219.1	219.1	177.8	177.8
2	х	1/2*		21.3			8	х	6		168.3		168.1
2-1/2	х	2-1/2	73.0	73.0	76.2	76.2	8	х	5		141.3		162.1
2-1/2	х	2		60.3		69.8	8	х	4		114.3		155.4
2-1/2	х	1-1/2		48.3		66.5	8	x	3-1/2		101.6		152.4
2-1/2	х	1-1/4		42.2		63.5	8	х	3*		88.9		
2-1/2	х	1		33.4		57.2	10	х	10	273.1	273.1	215.9	215.9
3	х	3	88.9	88.9	85.9	85.9	10	х	8		219.1		203.2
3	х	2-1/2		73.0		82.6	10	х	6		168.3		193.5
3	х	2		60.3		76.2	10	х	5		141.3		190.5
3	х	1-1/2		48.3		73.2	10	х	4		114.3		184.2
3	х	1-1/4		42.2		69.8	12	x	12	323.9	323.9	254.0	254.0
3	х	1*		33.4			12	х	10		273.1		241.3
3-1/2	х	3-1/2	101.6	101.6	95.2	95.2	12	х	8		219.1		228.6
3-1/2	х	3		88.9		91.9	12	х	6		168.3		218.9
3-1/2	х	2-1/2		73.0		88.9	12	х	5		141.3	2	215.9
3-1/2	х	2		60.3		82.6							
3-1/2	х	1-1/2		48.3		79.2							

Equal and Reducing Crosses



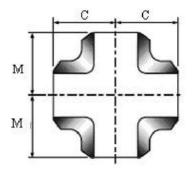
MSS SP-75 ANSI B16.9 (in mm) * Wellgrow's standard.

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	Nomina			Diameter evel D	Cente	r to End		lomina	-		Diameter evel D		r to End
F	Pipe Siz (NPS)	e -	Run	Outlet	Run C	Outlet (1) M		ipe Siz (NPS)	e	Run	Outlet	Run C	Outlet (1) M
14	х	14	355.6	355.6	279.4	279.4	26	х	22		558.8		469.9
14	х	12		323.9		269.7	26	х	20		508.0		457.2
14	х	10		273.1		257.0	26	х	18		457.2		444.5
14	х	8		219.1		247.6	26	х	16		406.4	1	431.8
14	х	6		168.3		238.3	26	х	14		355.6		431.8
16	x	16	406.4	406.4	304.8	304.8	26	х	12		323.1		422.1
16	x	14		355.6		304.8	28	х	28	711.2	711.2	520.7	520.7
16	х	12		323.9		295.1	28	х	26		660.4		520.7
16	х	10		273.1		282.4	28	х	24		609.6		508.0
16	x	8		219.1	-	373.0	28	х	22		558.8		495.3
16	х	6		168.3		263.7	28	х	20		508.0		482.6
18	х	18	457.2	457.2	342.9	342.9	28	х	18		457.2		469.9
18	х	16		406.4	-	330.2	28	х	16		406.4		457.2
18	х	14		355.6		330.2	28	х	14		355.6		457.2
18	х	12		323.9		320.5	28	х	12		323.1		447.5
18	x	10		273.1		307.8	30	х	30	762.0	762.0	558.8	558.8
18	x	8		219.1		298.4	30	x	28		711.2		546.1
20	х	20	508.0	508.0	381.0	381.0	30	х	26		660.4	1	546.1
20	х	18		457.2		369.3	30	х	24		609.6		533.4
20	х	16		406.4		355.6	30	x	22		558.8		520.7
20	х	14		355.6		355.6	30	х	20		508.0		508.0
20	x	12		323.9		345.9	30	х	18		457.2		495.3
20	x	10		273.1		333.2	30	х	16		406.4		482.6
20	х	8		219.1		323.8	30	х	14		355.6		482.6
22	х	22	558.8	558.8	419.1	419.1	30	х	12		323.9	1	472.6
22	х	20		508.0		406.4	30	х	10		273.1		460.2
22	x	18		457.2		393.7	32	х	32	812.8	812.8	596.9	596.9
22	х	16		406.4		381.0	32	х	30		762.0		584.2
22	х	14		355.6		381.0	32	х	28		711.2		571.5
22	х	12		323.9		371.3	32	х	26		660.4		571.5
22	х	10		273.1		358.6	32	х	24		609.6		558.8
24	х	24	609.6	609.6	431.8	431.8	32	х	22		558.8		546.1
24	х	22		558.8		431.8	32	x	20		508.0		533.4
24	х	20		508.0		431.8	32	х	18		457.2		520.7
24	х	18		457.2		419.1	32	х	16		406.4		508.0
24	х	16		406.4		406.4	32	x	14		355.6		508.0
24	х	14		355.6		406.4	34	x	34	863.6	863.6	635.0	635.0
24	х	12		323.9		396.7	34	х	32		812.8		622.3
24	х	10		273.1		384.0	34	х	30		762.0		609.6
26	х	26	660.4	660.4	495.3	495.3	34	x	28		711.2		596.9
26	х	24		609.6		482.6	34	х	26		660.4		596.9

Equal and Reducing Crosses



MSS SP-75 ANSI B16.9 (in mm) * Wellgrow's standard.

	Nomina			Diameter evel D	Cente	er to End		Nomina			Diameter evel D	Cente	r to End
	Pipe Size (NPS)	e	Run	Outlet	Run C	Outlet (1) M	F	ipe Siz (NPS)		Run	Outlet	Run C	Outlet (1) M
34	х	24		609.6		584.2	42	х	38		965.2		711.2
34	х	22		558.8		571.5	42	х	36		914.4		711.2
34	х	20		508.0		558.8	42	х	34		863.6		711.2
34	х	18		457.2		546.1	42	х	32		812.8		711.2
34	х	16		406.4		533.4	42	х	30		762.0		711.2
36	х	36	914.4	914.4	673.1	673.1	42	х	28	1066.8	711.2	762.0	698.5
36	х	34		863.6		660.4	42	х	26		660.4		698.5
36	х	32		812.8		647.7	42	х	24		609.6		660.4
36	х	30		762.0		635.0	42	х	22		558.8		660.4
36	х	28		711.2		622.3	42	х	20		508.0		660.4
36	х	26		660.4		622.3	42	х	18		457.2		647.7
36	х	24		609.6		609.6	42	х	16		406.4		635.0
36	х	22		558.8		596.9	44	х	44	1117.6	1117.6	812.8	762.0
36	х	20		508.0		584.2	44	х	42		1066.8		762.0
36	х	18		457.2		571.5	44	х	40		1016.0		749.3
36	х	16		406.4		558.8	44	х	38		965.2		736.6
38	х	38	965.2	965.2	711.2	711.2	44	х	36		914.4		723.9
38	х	36		914.4		711.2	44	х	34		863.6		723.9
38	х	34		863.6		698.5	44	х	32		812.8		711.2
38	х	32		812.8		685.8	44	х	30		762.0		711.2
38	х	30		762.0		673.1	44	Х	28		711.2		698.5
38	х	28		711.2		647.7	44	х	26		660.4		698.5
38	х	26		660.4		647.7	44	х	24		609.6		698.5
38	х	24		609.6		635.0	44	Х	22		558.8		685.8
38	х	22		558.8		622.3	44	х	20		508.0		685.8
38	х	20		508.0		609.6	46	х	46	1168.4	1168.4	850.9	800.1
38	х	18		457.2		596.9	46	х	44		1117.6		800.1
40	х	40	1016.0	1016.0	749.3	749.3	46	Х	42		1066.8		787.4
40	х	38		965.2		749.3	46	х	40		1016.0		774.7
40	х	36		914.4		736.6	46	Х	38		965.2		762.0
40	х	34		863.6		723.9	46	х	36		914.4		762.0
40	х	32		812.8	-	711.2	46	х	34		863.6		749.3
40	x	30		762.0		698.5	46	X	32		812.8		749.3
40	х	28		711.2		673.1	46	х	30		762.0		736.6
40	х	26		660.4		673.1	46	х	28		711.2		736.6
40	X	24		609.6		660.4	46	x	26		660.4		736.6
40	x	22		558.8		647.7	46	x	24		609.6		723.9
40	X	20		508.0		635.0	46	x	20*	1010.0	508.0	000.0	723.9
40	X	18	1000.0	457.2	700.0	622.3	48	X	48	1219.2	1219.2	889.0	838.2
42	X	42	1066.8	1066.8	762.0	711.2	48	X	46		1168.4		838.2
42	х	40		1016.0		711.2	48	х	44		1117.6		838.2

(1) Outlet dimension "M" for run sizes 14 and larger is recommended but not mandatory.