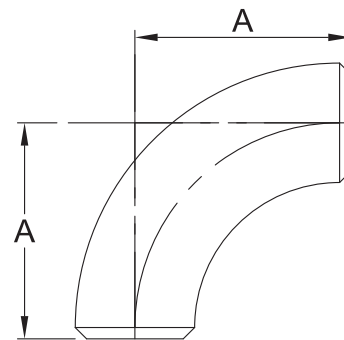


# ASME B16.9 Butt weld 90° elbow



- Specification: Wrought butt weld 90° elbow
- Wall thickness: Sch10 / Sch40 / Sch80
- Material: Carbon steel as ASTM A234 WPB
- Surface: Black paint / Galvanized
- Type: Long radius (R=1.5D) / Short radius (R=1D)



## Available Size - Long Radius

DN	Nominal pipe size	Outside diameter at bevel (mm)	A (mm)
15	1/2	21.3	38
20	3/4	26.7	38
25	1	33.4	38
32	1-1/4	42.2	48
40	1-1/2	48.3	57
50	2	60.3	76
65	2-1/2	73.0	95
80	3	88.9	114
90	3-1/2	101.6	133
100	4	114.3	152
125	5	141.3	190
150	6	168.3	229
200	8	219.1	305
250	10	273.0	381
300	12	323.8	457
350	14	355.6	533
400	16	406.4	610
450	18	457.0	686
500	20	508.0	762

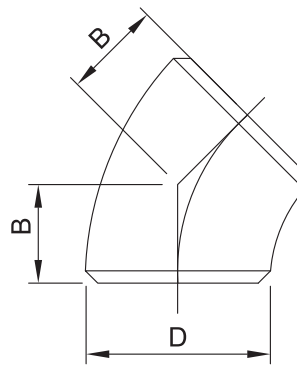
## Available Size - Short Radius

DN	Nominal pipe size	Outside diameter at bevel (mm)	A (mm)
25	1	33.4	25
32	1-1/4	42.2	32
40	1-1/2	48.3	38
50	2	60.3	51
65	2-1/2	73.0	64
80	3	88.9	76
90	3-1/2	101.6	89
100	4	114.3	102
125	5	141.3	127
150	6	168.3	152
200	8	219.1	203
250	10	273.0	254
300	12	323.8	305
350	14	355.6	356
400	16	406.4	406
450	18	457.0	457
500	20	508.0	508

## ASME B16.9 Butt weld 45° elbow



- Specification: Wrought butt weld 45° elbow
- Wall thickness: Sch10 / Sch40 / Sch80
- Material: Carbon steel as ASTM A234 WPB
- Surface: Black paint / Galvanized



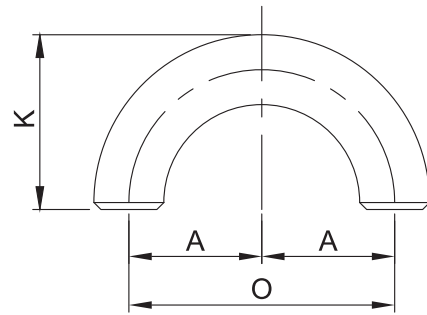
### Available Size

DN	Nominal pipe size	Outside diameter at bevel (mm)	B (mm)
15	1/2	21.3	16
20	3/4	26.7	19
25	1	33.4	22
32	1-1/4	42.2	25
40	1-1/2	48.3	29
50	2	60.3	35
65	2-1/2	73.0	44
80	3	88.9	51
90	3-1/2	101.6	57
100	4	114.3	64
125	5	141.3	79
150	6	168.3	95
200	8	219.1	127
250	10	273.0	159
300	12	323.8	190
350	14	355.6	222
400	16	406.4	254
450	18	457.0	286
500	20	508.0	318

# ASME B16.9 Butt weld 180° return



- Specification: Wrought butt weld 180° return
- Wall thickness: Sch10 / Sch40 / Sch80
- Material: Carbon steel as ASTM A234 WPB
- Surface: Black paint / Galvanized
- Type: Long radius (R=1.5D) / Short radius (R=1D)



## Available Size - Long Radius

DN	Nominal pipe size	Outside diameter at bevel (mm)	O (mm)	K (mm)
15	1/2	21.3	76	48
20	3/4	26.7	76	51
25	1	33.4	76	56
32	1-1/4	42.2	95	70
40	1-1/2	48.3	114	83
50	2	60.3	152	106
65	2-1/2	73.0	190	132
80	3	88.9	229	159
90	3-1/2	101.6	267	184
100	4	114.3	305	210
125	5	141.3	381	262
150	6	168.3	457	313
200	8	219.1	610	414
250	10	273.0	762	518
300	12	323.8	914	619
350	14	355.6	1067	711
400	16	406.4	1219	813
450	18	457.0	1372	914
500	20	508.0	1524	1016

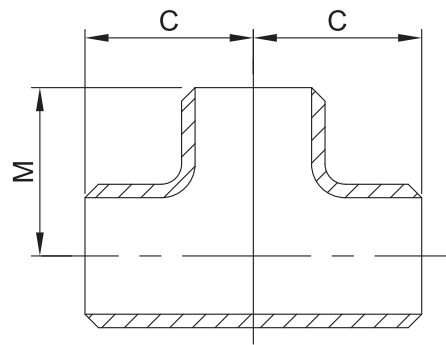
## Available Size - Short Radius

DN	Nominal pipe size	Outside diameter at bevel (mm)	O (mm)	K (mm)
25	1	33.4	51	41
32	1-1/4	42.2	64	52
40	1-1/2	48.3	76	62
50	2	60.3	102	81
65	2-1/2	73.0	127	100
80	3	88.9	152	121
90	3-1/2	101.6	178	140
100	4	114.3	203	159
125	5	141.3	254	197
150	6	168.3	305	237
200	8	219.1	406	313
250	10	273.0	508	391
300	12	323.8	610	467
350	14	355.6	711	533
400	16	406.4	813	610
450	18	457.0	914	686
500	20	508.0	1016	762

# ASME B16.9 Butt weld equal tee



- Specification: Wrought butt weld equal tee
- Wall thickness: Sch10 / Sch40 / Sch80
- Material: Carbon steel as ASTM A234 WPB
- Surface: Black paint / Galvanized



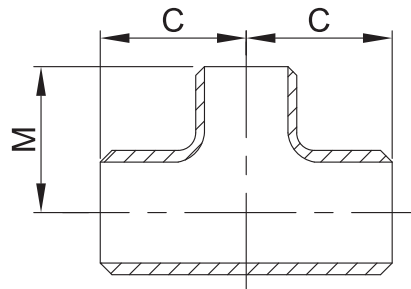
## Available Size

DN	Nominal pipe size	Outside diameter at bevel (mm)	C (mm)	M (mm)
15	1/2	21.3	25	25
20	3/4	26.7	29	29
25	1	33.4	38	38
32	1-1/4	42.2	48	48
40	1-1/2	48.3	57	57
50	2	60.3	64	64
65	2-1/2	73.0	76	76
80	3	88.9	86	86
90	3-1/2	101.6	95	95
100	4	114.3	105	105
125	5	141.3	124	124
150	6	168.3	143	143
200	8	219.1	178	178
250	10	273.0	216	216
300	12	323.8	254	254
350	14	355.6	279	279
400	16	406.4	305	305
450	18	457.0	343	343
500	20	508.0	381	381

# ASME B16.9 Butt weld reducing tee



- Specification: Wrought butt weld reducing tee
- Wall thickness: Sch10 / Sch40 / Sch80
- Material: Carbon steel as ASTM A234 WPB
- Surface: Black paint / Galvanized



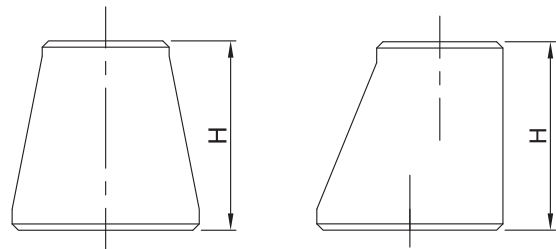
## Available Size

Nominal pipe size	C (mm)	M (mm)	Nominal pipe size	C (mm)	M (mm)	Nominal pipe size	C (mm)	M (mm)
1/2 x 1/2 x 3/8	25	25	3 1/2 x 3 1/2 x 2 1/2	95	89	12 x 12 x 10	254	241
1/2 x 1/2 x 1/4	25	25	3 1/2 x 3 1/2 x 2	95	83	12 x 12 x 8	254	229
3/4 x 3/4 x 1/2	29	29	3 1/2 x 3 1/2 x 1 1/2	95	79	12 x 12 x 6	254	219
3/4 x 3/4 x 3/8	29	29	4 x 4 x 3 1/2	105	102	12 x 12 x 5	254	216
1 x 1 x 3/4	38	38	4 x 4 x 3	105	98	14 x 14 x 12	279	270
1 x 1 x 1/2	38	38	4 x 4 x 2 1/2	105	95	14 x 14 x 10	279	257
1 1/4 x 1 1/4 x 1	48	48	4 x 4 x 2	105	89	14 x 14 x 8	279	248
1 1/4 x 1 1/4 x 3/4	48	48	4 x 4 x 1 1/2	105	86	14 x 14 x 6	279	238
1 1/4 x 1 1/4 x 1/2	48	48	5 x 5 x 4	124	117	16 x 16 x 14	305	305
1 1/2 x 1 1/2 x 1 1/4	57	57	5 x 5 x 3 1/2	124	114	16 x 16 x 12	305	295
1 1/2 x 1 1/2 x 1	57	57	5 x 5 x 3	124	111	16 x 16 x 10	305	283
1 1/2 x 1 1/2 x 3/4	57	57	5 x 5 x 2 1/2	124	108	16 x 16 x 8	305	273
1 1/2 x 1 1/2 x 1/2	57	57	5 x 5 x 2	124	105	16 x 16 x 6	305	264
2 x 2 x 1 1/2	64	60	6 x 6 x 5	143	137	18 x 18 x 16	343	330
2 x 2 x 1 1/4	64	57	6 x 6 x 4	143	130	18 x 18 x 14	343	330
2 x 2 x 1	64	51	6 x 6 x 3 1/2	143	127	18 x 18 x 12	343	321
2 x 2 x 3/4	64	44	6 x 6 x 3	143	124	18 x 18 x 10	343	308
2 1/2 x 2 1/2 x 2	76	70	6 x 6 x 2 1/2	143	121	18 x 18 x 8	343	298
2 1/2 x 2 1/2 x 1 1/2	76	67	8 x 8 x 6	178	168	20 x 20 x 18	381	368
2 1/2 x 2 1/2 x 1 1/4	76	64	8 x 8 x 5	178	162	20 x 20 x 16	381	356
2 1/2 x 2 1/2 x 1	76	57	8 x 8 x 4	178	156	20 x 20 x 14	381	356
3 x 3 x 2 1/2	86	83	8 x 8 x 3 1/2	178	152	20 x 20 x 12	381	346
3 x 3 x 2	86	76	10 x 10 x 8	216	203	20 x 20 x 10	381	333
3 x 3 x 1 1/2	86	73	10 x 10 x 6	216	194	20 x 20 x 8	381	324
3 x 3 x 1 1/4	86	70	10 x 10 x 5	216	191	-	-	-
3 1/2 x 3 1/2 x 3	95	92	10 x 10 x 4	216	184	-	-	-

# ASME B16.9 Butt weld reducer



- Specification: Wrought butt weld reducer
- Wall thickness: Sch10 / Sch40 / Sch80
- Material: Carbon steel as ASTM A234 WPB
- Surface: Black paint / Galvanized
- Type: Concentric / Eccentric



ASME Butt Weld Fitting

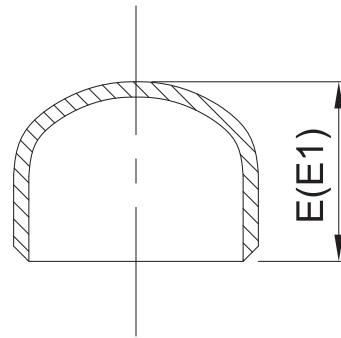
## Available Size

Nominal pipe size	Outside diameter at bevel (mm)		H (mm)	Nominal pipe size	Outside diameter at bevel (mm)		H (mm)	Nominal pipe size	Outside diameter at bevel (mm)		H (mm)
	Large end	Small end			Large end	Small end			Large end	Small end	
3/4 x 1/2	26.7	21.3	38	3 1/2 x 1 1/2	101.6	48.3	102	12 x 8	323.8	219.1	203
3/4 x 3/8	26.7	17.3	38	3 1/2 x 1 1/4	101.6	42.2	102	12 x 6	323.8	168.3	203
1 x 3/4	33.4	26.7	51	4 x 3 1/2	114.3	101.6	102	12 x 5	323.8	141.3	203
1 x 1/2	33.4	21.3	51	4 x 3	114.3	88.9	102	14 x 12	355.6	323.8	330
1 1/4 x 1	42.2	33.4	51	4 x 2 1/2	114.3	73.0	102	14 x 10	355.6	273.0	330
1 1/4 x 3/4	42.2	26.7	51	4 x 2	114.3	60.3	102	14 x 8	355.6	219.1	330
1 1/4 x 1/2	42.2	21.3	51	4 x 1 1/2	114.3	48.3	102	14 x 6	355.6	168.3	330
1 1/2 x 1 1/4	48.3	42.2	64	5 x 4	141.3	114.3	127	16 x 14	406.4	355.6	356
1 1/2 x 1	48.3	33.4	64	5 x 3 1/2	141.3	101.6	127	16 x 12	406.4	323.8	356
1 1/2 x 3/4	48.3	26.7	64	5 x 3	141.3	88.9	127	16 x 10	406.4	273.0	356
1 1/2 x 1/2	48.3	21.3	64	5 x 2 1/2	141.3	73.0	127	16 x 8	406.4	219.1	356
2 x 1 1/2	60.3	48.3	76	5 x 2	141.3	60.3	127	18 x 16	457.0	406.4	381
2 x 1 1/4	60.3	42.2	76	6 x 5	168.3	141.3	140	18 x 14	457.0	355.6	381
2 x 1	60.3	33.4	76	6 x 4	168.3	114.3	140	18 x 12	457.0	323.8	381
2 x 3/4	60.3	26.7	76	6 x 3 1/2	168.3	101.6	140	18 x 10	457.0	273.0	381
2 1/2 x 2	73.0	60.3	89	6 x 3	168.3	88.9	140	20 x 18	508.0	457.0	508
2 1/2 x 1 1/2	73.0	48.3	89	6 x 2 1/2	168.3	73.0	140	20 x 16	508.0	406.4	508
2 1/2 x 1 1/4	73.0	42.2	89	8 x 6	219.1	168.3	152	20 x 14	508.0	355.6	508
2 1/2 x 1	73.0	33.4	89	8 x 5	219.1	141.3	152	20 x 12	508.0	323.8	508
3 x 2 1/2	88.9	73.0	89	8 x 4	219.1	114.3	152	-	-	-	-
3 x 2	88.9	60.3	89	8 x 3 1/2	219.1	101.6	152	-	-	-	-
3 x 1 1/2	88.9	48.3	89	10 x 8	273.0	219.1	178	-	-	-	-
3 x 1 1/4	88.9	42.2	89	10 x 6	273.0	168.3	178	-	-	-	-
3 1/2 x 3	101.6	88.9	102	10 x 5	273.0	141.3	178	-	-	-	-
3 1/2 x 2 1/2	101.6	73.0	102	10 x 4	273.0	114.3	178	-	-	-	-
3 1/2 x 2	101.6	60.3	102	12 x 10	323.8	273.0	203	-	-	-	-

# ASME B16.9 Butt weld cap



- Specification: Wrought butt weld cap
- Wall thickness: Sch10 / Sch40 / Sch80
- Material: Carbon steel as ASTM A234 WPB
- Surface: Black paint / Galvanized



## Available Size

DN	Nominal pipe size	Outside diameter at bevel (mm)	E (mm) Note 1	Limiting wall thickness for length, E (mm)	E <sub>1</sub> (mm) Note 2
15	1/2	21.3	25	4.57	25
20	3/4	26.7	25	3.81	25
25	1	33.4	38	4.57	38
32	1-1/4	42.2	38	4.83	38
40	1-1/2	48.3	38	5.08	38
50	2	60.3	38	5.59	44
65	2-1/2	73.0	38	7.11	51
80	3	88.9	51	7.62	64
90	3-1/2	101.6	64	8.13	76
100	4	114.3	64	8.64	76
125	5	141.3	76	9.65	89
150	6	168.3	89	10.92	102
200	8	219.1	102	12.70	127
250	10	273.0	127	12.70	152
300	12	323.8	152	12.70	178
350	14	355.6	165	12.70	191
400	16	406.4	178	12.70	203
450	18	457.0	203	12.70	229
500	20	508.0	229	12.70	254

\*Note: 1. Length E applies for thickness not exceeding that given in column "Limiting wall thickness for Length, E."  
 2. Length E<sub>1</sub> applies for thickness greater than that given in column "Limiting wall thickness" for NPS 24 and smaller. For NPS 26 and larger, length E<sub>1</sub> shall be by agreement between the manufacturer and purchaser.