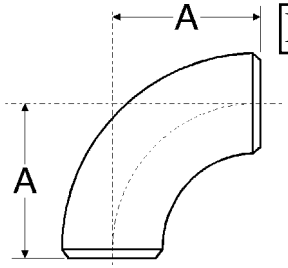
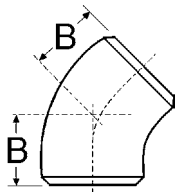
CHRYSSAFIDIS

Buttweld Fittings

90° and 45° Long Radius Elbows - ANSI B16.9

ΕΞΑΡΤΗΜΑΤΑ ΧΑΛΥΒΔΙΝΑ





Dimensions (based on ASME/ANSI B16.9) and example weights for long radius elbows

Nominal Pipe Size	Common		90° Elbow			45° Elbow		
	OD at Bevel		Dimension A		40S/STD[1]	Dimension B		40S/STD[1]
	in	mm	in	mm	kg/piece	in	mm	kg/piece
1/2	0.84	21	1.50	38	0.08	0.62	16	0.04
3/4	1.05	27	1.50	38	0.10	0.75	19	0.05
1	1.32	33	1.50	38	0.15	0.88	22	0.07
1 1/4	1.66	42	1.88	48	0.25	1.00	25	0.12
1 1/2	1.90	48	2.25	57	0.36	1.12	29	0.18
2	2.38	60	3.00	76	0.65	1.38	35	0.32
2 1/2	2.88	73	3.75	95	1.29	1.75	44	0.64
3	3.50	89	4.50	114	2.02	2.00	51	1.01
3 1/2	4.00	102	5.25	133	2.83	2.25	57	1.41
4	4.50	114	6.00	152	3.84	2.50	64	1.92
5	5.56	141	7.50	190	6.51	3.12	79	3.25
6	6.62	168	9.00	229	10.1	3.75	95	5.05
8	8.62	219	12.00	305	20.3	5.00	127	10.15
10	10.75	273	15.00	381	36.0	6.25	159	18.0
12	12.75	324	18.00	457	53.0	7.50	190	26.5
14	14.00	356	21.00	533	68.0	8.75	222	34.0
16	16.00	406	24.00	610	89.2	10.00	254	44.6
18	18.00	457	27.00	686	113.0	11.25	286	56.5
20	20.00	508	30.00	762	140.0	12.50	318	70.0
22	22.00	559	33.00	838	170.0	13.50	343	85.0
24	24.00	610	36.00	914	202.0	15.00	381	101.0
26	26.00	660	39.00	991	241.4	16.00	406	120.5
28	28.00	711	42.00	1067	279.9	17.25	438	140.0
30	30.00	762	45.00	1143	321.3	18.50	470	160.5
32	32.00	813	48.00	1219	365.6	19.75	502	183.0
34	34.00	864	51.00	1295	-	21.00	533	-
36	36.00	914	54.00	1372	462.7	22.25	565	231.0
38	38.00	965	57.00	1448	-	23.62	600	-
40	40.00	1016	60.00	1524	571.3	24.88	632	285.5
42	42.00	1067	63.00	1600	629.8	26.00	660	315.0
44	44.00	1118	66.00	1676	-	27.38	695	-
46	46.00	1168	69.00	1753	-	28.62	727	-
48	48.00	1219	72.00	1829	-	29.88	759	-

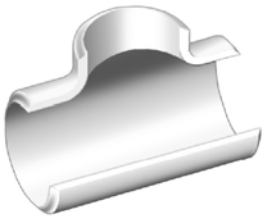
Notes

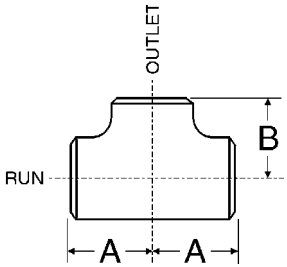
- Dimensions quoted in mm are 'Nominal' values from B16.9 (i.e. rounded equivalents of the inch dimensions). Refer to ASME/ANSI B16.9 for additional 'Max' and 'Min' metric dimensions.
- For tolerances see page 6-2.

1 Weights are approximate and based on manufacturers' data (where available) for Schedule 40S/Standard fittings. See page 6-6 for further information.

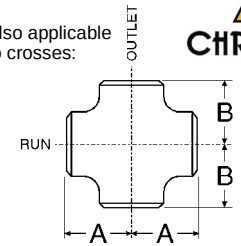
Buttweld Fittings

Equal Tees - ANSI B16.9





Also applicable to crosses:



Dimensions (based on ASME/ANSI B16.9) and example weights for equal tees

Nominal Pipe Size	OD at Bevelled OD		Run Dimension A		Outlet Dimension B		Weight (Tees only) 40S/STD[1]
	in	mm	in	mm	in	mm	kg/piece
1/2	0.84	21	1.00	25	1.00	25	0.08
3/4	1.05	27	1.12	29	1.12	29	0.11
1	1.32	33	1.50	38	1.50	38	0.24
1 1/4	1.66	42	1.88	48	1.88	48	0.41
1 1/2	1.90	48	2.25	57	2.25	57	0.60
2	2.38	60	2.50	64	2.50	64	0.87
2 1/2	2.88	73	3.00	76	3.00	76	1.66
3	3.50	89	3.38	86	3.38	86	1.90
3 1/2	4.00	102	3.75	95	3.75	95	-
4	4.50	114	4.12	105	4.12	105	4.13
5	5.56	141	4.88	124	4.88	124	6.55
6	6.62	168	5.62	143	5.62	143	9.73
8	8.62	219	7.00	178	7.00	178	18.0
10	10.75	273	8.50	216	8.50	216	30.8
12	12.75	324	10.00	254	10.00	254	44.3
14	14.00	356	11.00	279	11.00	279	53.7
16	16.00	406	12.00	305	12.00	305	66.3
18	18.00	457	13.50	343	13.50	343	84.1
20	20.00	508	15.00	381	15.00	381	104
22	22.00	559	16.50	419	16.50	419	126
24	24.00	610	17.00	432	17.00	432	140
26	26.00	660	19.50	495	19.50	495	158
28	28.00	711	20.50	521	20.50	521	176
30	30.00	762	22.00	559	22.00	559	203
32	32.00	813	23.50	597	23.50	597	231
34	34.00	864	25.00	635	25.00	635	-
36	36.00	914	26.50	673	26.50	673	294
38	38.00	965	28.00	711	28.00	711	-
40	40.00	1016	29.50	749	29.50	749	363
42	42.00	1067	30.00	762	28.00	711	382
44	44.00	1118	32.00	813	30.00	762	-
46	46.00	1168	33.50	851	31.50	800	-
48	48.00	1219	35.00	889	33.00	838	-

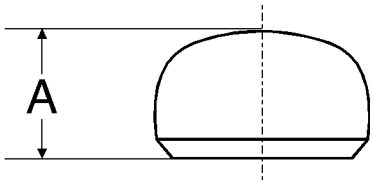
Notes

- For NPS 26 and larger: Dimensions are not applicable to crosses. Also, dimension B is recommended but not required.
- Dimensions quoted in mm are 'Nominal' values from B16.9 (i.e. rounded equivalents of the inch dimensions). Refer to B16.9 for additional 'Max' and 'Min' metric dimensions.
- For tolerances see page 6-2.

1 Weights are approximate and based on manufacturers' data (where available) for Schedule 40S/Standard fittings. See page 6-6 for further information.

Buttweld Fittings

End Caps - ANSI B16.9



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Dimensions (based on ASME/ANSI B16.9) and example weights

Nominal Pipe Size	Common: OD at Bevel		Limiting Wall Thickness: T		Length: Dimension A				Weight: 40S/STD[1]
					For wall ≤T		For wall >T		
	in	mm	in	mm	in	mm	in	mm	kg/piece
1/2	0.84	21	0.18	3.73	1.00	25	1.00	25	0.04
3/4	1.05	27	0.15	3.91	1.00	25	1.00	25	0.05
1	1.32	33	0.18	4.55	1.50	38	1.50	38	0.11
1 1/4	1.66	42	0.19	4.85	1.50	38	1.50	38	0.14
1 1/2	1.90	48	0.20	5.08	1.50	38	1.50	38	0.17
2	2.38	60	0.22	5.54	1.50	38	1.75	44	0.23
2 1/2	2.88	73	0.28	7.01	1.50	38	2.00	51	0.39
3	3.50	89	0.30	7.62	2.00	51	2.50	64	0.66
3 1/2	4.00	102	0.32	8.08	2.50	64	3.00	76	-
4	4.50	114	0.34	8.56	2.50	64	3.00	76	1.17
5	5.56	141	0.38	9.53	3.00	76	3.50	89	1.91
6	6.62	168	0.43	10.97	3.50	89	4.00	102	2.90
8	8.62	219	0.50	12.70	4.00	102	5.00	127	5.19
10	10.75	273	0.50	12.70	5.00	127	6.00	152	9.15
12	12.75	324	0.50	12.70	6.00	152	7.00	178	13.3
14	14.00	356	0.50	12.70	6.50	165	7.50	191	15.9
16	16.00	406	0.50	12.70	7.00	178	8.00	203	20.0
18	18.00	457	0.50	12.70	8.00	203	9.00	229	25.6
20	20.00	508	0.50	12.70	9.00	229	10.00	254	31.9
22	22.00	559	0.50	12.70	10.00	254	10.00	254	38.8
24	24.00	610	0.50	12.70	10.50	267	12.00	305	45.1
26	26.00	660	-	-	10.50	267	Subject to agreement with purchaser		53.8
28	28.00	711	-	-	10.50	267			62.4
30	30.00	762	-	-	10.50	267			71.7
32	32.00	813	-	-	10.50	267			81.6
34	34.00	864	-	-	10.50	267			-
36	36.00	914	-	-	10.50	267			103
38	38.00	965	-	-	12.00	305			-
40	40.00	1016	-	-	12.00	305			127
42	42.00	1067	-	-	12.00	305			140
44	44.00	1118	-	-	13.50	343			-
46	46.00	1168	-	-	13.50	343			-
48	48.00	1219	-	-	13.50	343			-

Notes

- Dimensions quoted in mm (except T) are 'Nominal' values from B16.9 (rounded equivalents of the inch dimensions). Refer to B16.9 for additional 'Max' and 'Min' metric dimensions.
- The shape of caps shall be ellipsoidal and conform to shape requirements in the ASME Boiler and Pressure Code.
- For tolerances see page 6-2.

1 Weights are approximate and based on manufacturers' data (where available) for Schedule 40S/Standard fittings. See page 6-6 for further information.

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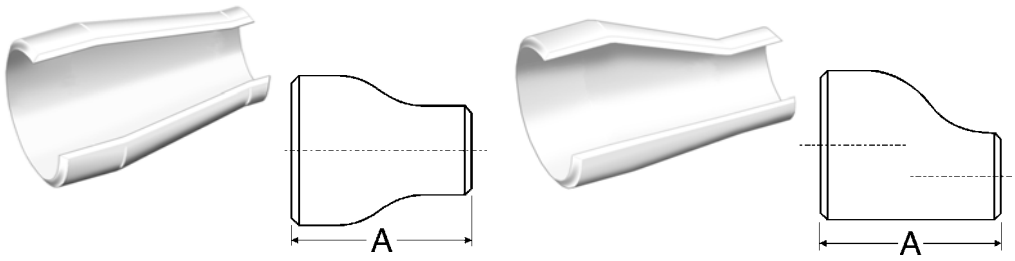
Buttweld Fittings

Concentric and Eccentric Reducers - ANSI B16.9



Dimensions (based on ASME/ANSI B16.9) and example weights for reducers

Nominal Pipe Size	Large End OD at Bevel		Small End OD at Bevel		End to End Dimension A		Weight 40S/STD[1]
	in	mm	in	mm	in	mm	kg/piece
3/4⇨1/2	1.05	27	0.84	21	1.50	38	0.06
3/4⇨3/8	1.05	27	0.68	17	1.50	38	-
1⇨3/4	1.32	33	1.05	27	2.00	51	0.12
1⇨1/2	1.32	32	0.84	21	2.00	51	0.11
1 1/4⇨1	1.66	42	1.32	33	2.00	51	0.16
1 1/4⇨3/4	1.66	42	1.05	27	2.00	51	0.14
1 1/4⇨1/2	1.66	42	0.84	21	2.00	51	0.13
1 1/2⇨1 1/4	1.90	48	1.66	42	2.50	64	0.24
1 1/2⇨1	1.90	48	1.32	33	2.50	64	0.22
1 1/2⇨3/4	1.90	48	1.05	27	2.50	64	0.20
1 1/2⇨1/2	1.90	48	0.84	21	2.50	64	0.18
2⇨1 1/2	2.38	60	1.90	48	3.00	76	0.37
2⇨1 1/4	2.38	60	1.66	42	3.00	76	0.35
2⇨1	2.38	60	1.32	33	3.00	76	0.32
2⇨3/4	2.38	60	1.05	27	3.00	76	0.30
2 1/2⇨2	2.88	73	2.38	60	3.50	89	0.72
2 1/2⇨1 1/2	2.88	73	1.90	48	3.50	89	0.66
2 1/2⇨1 1/4	2.88	73	1.66	42	3.50	89	0.63
2 1/2⇨1	2.88	73	1.32	33	3.50	89	-
3⇨2 1/2	3.50	89	2.88	73	3.50	89	0.93
3⇨2	3.50	89	2.38	60	3.50	89	0.85
3⇨1 1/2	3.50	89	1.90	48	3.50	89	0.78
3⇨1 1/4	3.50	89	1.66	42	3.50	89	0.75
3 1/2⇨3	4.00	102	3.50	89	4.00	102	-
3 1/2⇨2 1/2	4.00	102	2.88	73	4.00	102	-
3 1/2⇨2	4.00	102	2.38	60	4.00	102	-
3 1/2⇨1 1/2	4.00	102	1.90	48	4.00	102	-
Reducers 3 1/2⇨1 1/4, and 4, 5, 6, & 8⇨3 1/2 are also available							
4⇨3 1/2	4.50	114	4.00	102	4.00	102	-
4⇨3	4.50	114	3.50	89	4.00	102	1.45
4⇨2 1/2	4.50	114	2.88	73	4.00	102	1.37
4⇨2	4.50	114	2.38	60	4.00	102	1.27
4⇨1 1/2	4.50	114	1.90	48	4.00	102	1.18
5⇨4	5.56	141	4.50	114	5.00	127	2.50
5⇨3	5.56	141	3.50	89	5.00	127	2.27

Buttweld Fittings

Concentric and Eccentric Reducers - ANSI B16.9

Dimensions (based on ASME/ANSI B16.9) and example weights for reducers (Continued)

Nominal Pipe Size	Large End OD at Bevel		Small End OD at Bevel		End to End Dimension A		Weight 40S/STD[1]
	in	mm	in	mm	in	mm	kg/piece
5⇨2 1/2	5.56	141	2.88	73	5.00	127	2.16
6⇨5	6.62	168	5.56	141	5.50	140	3.57
6⇨4	6.62	168	4.50	114	5.50	140	3.30
6⇨3	6.62	168	3.50	89	5.50	140	3.04
8⇨6	8.62	219	6.62	168	6.00	152	5.71
8⇨5	8.62	219	5.56	141	6.00	152	5.40
8⇨4	8.62	219	4.50	114	6.00	152	5.10
10⇨8	10.75	273	8.62	219	7.00	178	9.58
10⇨6	10.75	273	6.62	168	7.00	178	8.78
10⇨5	10.75	273	5.56	141	7.00	178	8.42
12⇨10	12.75	324	10.75	273	8.00	203	13.6
12⇨8	12.75	324	8.62	219	8.00	203	12.7
12⇨6	12.75	324	6.62	168	8.00	203	11.8
14⇨12	14.00	356	12.75	324	13.00	330	25.4
14⇨10	14.00	356	10.75	273	13.00	330	23.6
14⇨8	14.00	356	8.62	219	13.00	330	21.8
16⇨14	16.00	406	14.00	356	14.00	356	31.0
16⇨12	16.00	406	12.75	324	14.00	356	29.6
16⇨10	16.00	406	10.75	273	14.00	356	27.8
18⇨16	18.00	457	16.00	406	15.00	381	37.8
18⇨14	18.00	457	14.00	356	15.00	381	35.7
18⇨12	18.00	457	12.75	324	15.00	381	34.3
20⇨18	20.00	508	18.00	457	20.00	508	56.4
20⇨16	20.00	508	16.00	406	20.00	508	53.5
20⇨14	20.00	508	14.00	356	20.00	508	50.8
22⇨20	22.00	559	20.00	508	20.00	508	62.6
22⇨18	22.00	559	18.00	457	20.00	508	59.7
22⇨16	22.00	559	16.00	406	20.00	508	57.1
24⇨22	24.00	610	22.00	559	20.00	508	68.6
24⇨20	24.00	610	20.00	508	20.00	508	65.7
24⇨18	24.00	610	18.00	457	20.00	508	63.0
26⇨24	26.00	600	24.00	610	24.00	610	-
26⇨22	26.00	600	22.00	559	24.00	610	-
26⇨20	26.00	600	20.00	508	24.00	610	-
26⇨18	26.00	600	18.00	457	24.00	610	-
28⇨26	28.00	711	26.00	660	24.00	610	-
28⇨24	28.00	711	24.00	610	24.00	610	-
28⇨20	28.00	711	20.00	508	24.00	610	-
28⇨18	28.00	711	18.00	457	24.00	610	-
30⇨28	30.00	762	28.00	711	24.00	610	-
30⇨26	30.00	762	26.00	660	24.00	610	-
30⇨24	30.00	762	24.00	610	24.00	610	-
30⇨20	30.00	762	20.00	508	24.00	610	-
32⇨30	32.00	813	30.00	762	24.00	610	-
32⇨28	32.00	813	28.00	711	24.00	610	-

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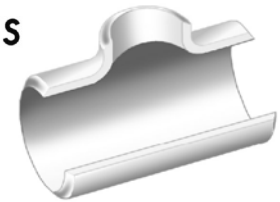
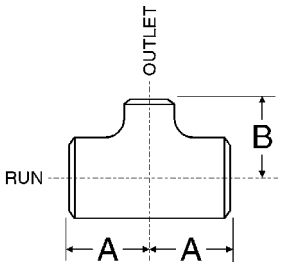
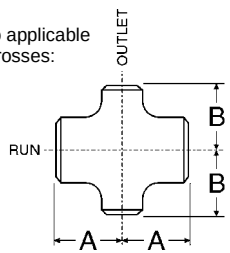
Buttweld Fittings
Reducing Tees - ANSI B16.9





Also applicable to crosses:



Nominal Pipe Size	Run OD OD at Bevel		Outlet OD OD at Bevel		Run Dimension A		Outlet Dimension B		Weight 40S/STD[1]
	in	mm	in	mm	in	mm	in	mm	kg/piece
1/2⇨3/8	0.84	21	0.68	17	1.00	25	1.00	25	-
1/2⇨1/4	0.84	21	0.54	14	1.00	25	1.00	25	-
3/4⇨1/2	1.05	27	0.84	21	1.12	29	1.12	29	0.12
3/4⇨3/8	1.05	27	0.68	17	1.12	29	1.12	29	-
1⇨3/4	1.32	33	1.05	27	1.50	38	1.50	38	0.23
1⇨1/2	1.32	33	0.84	21	1.50	38	1.50	38	0.22
1 1/4⇨1	1.66	42	1.32	33	1.88	48	1.88	48	0.39
1 1/4⇨3/4	1.66	42	1.05	27	1.88	48	1.88	48	0.37
1 1/4⇨1/2	1.66	42	0.84	21	1.88	48	1.88	48	-
1 1/2⇨1 1/4	1.90	48	1.66	42	2.25	57	2.25	57	0.57
1 1/2⇨1	1.90	48	1.32	33	2.25	57	2.25	57	0.55
1 1/2⇨3/4	1.90	48	1.05	27	2.25	57	2.25	57	0.52
1 1/2⇨1/2	1.90	48	0.84	21	2.25	57	2.25	57	0.51
2⇨1 1/2	2.38	60	1.90	48	2.50	64	2.38	60	0.83
2⇨1 1/4	2.38	60	1.66	42	2.50	64	2.25	57	0.80
2⇨1	2.38	60	1.32	33	2.50	64	2.00	51	0.74
2⇨3/4	2.38	60	1.05	27	2.50	64	1.75	44	-
2 1/2⇨2	2.88	73	2.38	60	3.00	76	2.75	70	1.53
2 1/2⇨1 1/2	2.88	73	1.90	48	3.00	76	2.62	67	1.49
2 1/2⇨1 1/4	2.88	73	1.66	42	3.00	76	2.50	64	1.38
2 1/2⇨1	2.88	73	1.32	33	3.00	76	2.25	57	-
3⇨2 1/2	3.50	89	2.88	73	3.38	86	3.25	83	2.29
3⇨2	3.50	89	2.38	60	3.38	86	3.00	76	2.16
3⇨1 1/2	3.50	89	1.90	48	3.38	86	2.88	73	2.05
3⇨1 1/4	3.50	89	1.66	42	3.38	86	2.75	70	-
3 1/2⇨3	4.00	102	3.50	89	3.75	95	3.62	92	-
3 1/2⇨2 1/2	4.00	102	2.88	73	3.75	95	3.50	89	-
3 1/2⇨2	4.00	102	2.38	60	3.75	95	3.25	83	-
3 1/2⇨1 1/2	4.00	102	1.90	48	3.75	95	3.12	79	-
4⇨3 1/2	4.50	114	4.00	102	4.12	105	4.00	102	-
4⇨3	4.50	114	3.50	89	4.12	105	3.88	98	3.83
4⇨2 1/2	4.50	114	2.88	73	4.12	105	3.75	95	3.70
4⇨2	4.50	114	2.38	60	4.12	105	3.50	89	3.52
4⇨1 1/2	4.50	114	1.90	48	4.12	105	3.38	86	3.41
5⇨4	5.56	141	4.50	114	4.88	124	4.62	117	6.14
5⇨3 1/2	5.56	141	4.00	102	4.88	124	4.50	114	-

Buttweld Fittings

Reducing Tees - ANSI B16.9

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Nominal Pipe Size	Run OD		Outlet OD		Run		Outlet		Weight
	OD at Bevel		OD at Bevel		Dimension A		Dimension B		40S/STD[1]
	in	mm	in	mm	in	mm	in	mm	kg/piece
5⇨3	5.56	141	3.50	89	4.88	124	4.38	111	5.85
5⇨2 1/2	5.56	141	2.88	73	4.88	124	4.25	108	5.71
5⇨2	5.56	141	2.38	60	4.88	124	4.12	105	-
6⇨5	6.62	168	5.56	141	5.62	143	5.38	137	9.21
6⇨4	6.62	168	4.50	114	5.62	143	5.12	130	8.81
6⇨3 1/2	6.62	168	4.00	102	5.62	143	5.00	127	-
6⇨3	6.62	168	3.50	89	5.62	143	4.88	124	8.52
6⇨2 1/2	6.62	168	2.88	73	5.62	143	4.75	121	-
8⇨6	8.62	219	6.62	168	7.00	178	6.62	168	16.8
8⇨5	8.62	219	5.56	141	7.00	178	6.38	162	16.3
8⇨4	8.62	219	4.50	114	7.00	178	6.12	156	15.9
8⇨3 1/2	8.62	219	4.00	102	7.00	178	6.00	152	-
10⇨8	10.75	273	8.62	219	8.50	216	8.00	203	28.9
10⇨6	10.75	273	6.62	168	8.50	216	7.62	194	27.6
10⇨5	10.75	273	5.56	141	8.50	216	7.50	191	27.1
10⇨4	10.75	273	4.50	114	8.50	216	7.25	184	-
12⇨10	12.75	324	10.75	273	10.00	254	9.50	241	42.3
12⇨8	12.75	324	8.62	219	10.00	254	9.00	229	40.3
12⇨6	12.75	324	6.62	168	10.00	254	8.62	219	39.1
12⇨5	12.75	324	5.56	140	10.00	254	8.50	216	-
14⇨12	14.00	356	12.75	324	11.00	279	10.62	270	52.2
14⇨10	14.00	356	10.75	273	11.00	279	10.12	257	50.2
14⇨8	14.00	356	8.625	219	11.00	279	9.75	248	48.4
14⇨6	14.00	356	6.62	168	11.00	279	9.38	238	-
16⇨14	16.00	406	14.00	356	12.00	305	12.00	305	65.1
16⇨12	16.00	406	12.75	324	12.00	305	11.62	295	63.6
16⇨10	16.00	406	10.75	273	12.00	305	11.12	283	61.6
16⇨8	16.00	406	8.62	219	12.00	305	10.75	273	-
16⇨6	16.00	406	6.62	168	12.00	305	10.38	264	-
18⇨16	18.00	457	16.00	406	13.50	343	13.00	330	81.5
18⇨14	18.00	457	14.00	356	13.50	343	13.00	330	80.3
18⇨12	18.00	457	12.75	324	13.50	343	12.62	321	78.9
18⇨10	18.00	457	10.75	273	13.50	343	12.12	308	-
18⇨8	18.00	457	8.62	219	13.50	343	11.75	298	-
20⇨18	20.00	508	18.00	457	15.00	381	14.50	368	101
20⇨16	20.00	508	16.00	406	15.00	381	14.00	356	98.6
20⇨14	20.00	508	14.00	356	15.00	381	14.00	356	97.4
20⇨12	20.00	508	12.75	321	15.00	381	13.62	346	-
20⇨10	20.00	508	10.75	273	15.00	381	13.12	333	-
20⇨8	20.00	508	8.62	219	15.00	381	12.75	324	-
22⇨20	22.00	559	20.00	508	16.50	419	16.00	406	123
22⇨18	22.00	559	18.00	457	16.50	419	15.50	394	120
22⇨16	22.00	559	16.00	406	16.50	419	15.00	381	118
22⇨14	22.00	559	14.00	356	16.50	419	15.00	381	-
22⇨12	22.00	559	12.75	324	16.50	419	14.62	371	-
22⇨10	22.00	559	10.75	273	16.50	419	14.12	359	-
24⇨22	24.00	610	22.00	559	17.00	432	17.00	432	138
24⇨20	24.00	610	20.00	508	17.00	432	17.00	432	137
24⇨18	24.00	610	18.00	457	17.00	432	16.50	419	134
24⇨16	24.00	610	16.00	406	17.00	432	16.00	406	-

American Buttweld Fittings - General

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Buttweld Fitting Weights

As mentioned previously, the ANSI/ASME and MSS buttweld fitting specifications do not specify wall thicknesses and weights for fittings. Weights quoted in the dimension and weight tables on the following pages are therefore based on manufacturers' information and should be considered as approximate and provided as a guide only (fitting weights can vary considerably between manufacturers due to differences in construction).

The example weights quoted on the following pages are for 40S or Standard (STD) wall thicknesses only. It is possible to calculate the approximate weight at any other wall thicknesses using the factors provided in the table below. These factors are calculated from the ANSI/ASME B36.19M and B36.10M pipe weights (see page 5-2 and following) and are based on the proportional relationship of the pipe weights (kg/m) to the weights of 40S and STD wall thickness pipe at each NPS.

ASME/ANSI pipe sizes and weight multiplication factors for use in obtaining approximate fitting weights. For use with the example (40S/STD) weights provided in the ANSI/ASME tables of this section

NPS	Multiplication Factors = Proportional relationship of pipe weights to 40S or STD pipe at each NPS[1]. Multiply the example 40S/STD fitting weights (at the required NPS) by the factors below (at the same NPS) to give approximate weights at different wall thicknesses.																
	5S	10S	40S	80S	10	20	30	40	STD	60	XS	80	100	120	140	160	XXS
1/8	-	0.76	1.00	1.27	-	-	0.86	1.00	1.00	-	1.27	1.27	-	-	-	-	-
1/4	-	0.78	1.00	1.27	-	-	0.86	1.00	1.00	-	1.27	1.27	-	-	-	-	-
3/8	-	0.75	1.00	1.31	-	-	0.83	1.00	1.00	-	1.31	1.31	-	-	-	-	-
1/2	0.64	0.79	1.00	1.28	-	-	0.88	1.00	1.00	-	1.28	1.28	-	-	-	1.54	2.01
3/4	0.61	0.76	1.00	1.30	-	-	0.85	1.00	1.00	-	1.30	1.30	-	-	-	1.72	2.15
1	0.52	0.84	1.00	1.30	-	-	0.87	1.00	1.00	-	1.30	1.30	-	-	-	1.70	2.18
1 1/4	0.49	0.80	1.00	1.32	-	-	0.85	1.00	1.00	-	1.32	1.32	-	-	-	1.65	2.29
1 1/2	0.47	0.77	1.00	1.34	-	-	0.87	1.00	1.00	-	1.34	1.34	-	-	-	1.79	2.36
2	0.44	0.72	1.00	1.38	-	-	0.82	1.00	1.00	-	1.38	1.38	-	-	-	2.04	2.47
2 1/2	0.43	0.61	1.00	1.32	-	-	0.93	1.00	1.00	-	1.32	1.32	-	-	-	1.73	2.36
3	0.40	0.57	1.00	1.35	-	-	0.88	1.00	1.00	-	1.35	1.35	-	-	-	1.89	2.45
3 1/2	0.38	0.55	1.00	1.37	-	-	0.84	1.00	1.00	-	1.37	1.37	-	-	-	-	-
4	0.36	0.52	1.00	1.39	-	-	0.80	1.00	1.00	-	1.39	1.39	-	1.76	-	2.09	2.55
5	0.44	0.53	1.00	1.42	-	-	-	1.00	1.00	-	1.42	1.42	-	1.85	-	2.26	2.64
6	0.40	0.49	1.00	1.51	-	-	-	1.00	1.00	-	1.51	1.51	-	1.92	-	2.39	2.80
8	0.35	0.47	1.00	1.52	-	0.78	0.87	1.00	1.00	1.25	1.52	1.52	1.78	2.13	2.37	2.62	2.54
10	0.38	0.46	1.00	1.59	-	0.69	0.85	1.00	1.00	1.35	1.35	1.59	1.90	2.21	2.57	2.86	2.57
12	0.42	0.49	1.00	1.79	-	0.67	0.88	1.08	1.00	1.47	1.32	1.79	2.16	2.53	2.82	3.23	2.53
14	0.42	0.51	-	-	0.67	0.83	1.00	1.16	1.00	1.56	1.32	1.94	2.40	2.76	3.12	3.46	-
16	0.45	0.51	-	-	0.67	0.83	1.00	1.32	1.00	1.72	1.32	2.18	2.73	3.07	3.57	3.92	-
18	0.45	0.51	-	-	0.67	0.83	1.16	1.48	1.00	1.96	1.32	2.42	2.94	3.46	3.88	4.37	-
20	0.51	0.59	-	-	0.67	1.00	1.32	1.57	1.00	2.12	1.32	2.66	3.26	0.38	4.34	4.82	-
22	0.51	0.58	-	-	0.67	1.00	1.32	-	1.00	2.28	1.32	2.89	3.50	4.08	4.65	5.21	-
24	0.58	0.67	-	-	0.67	1.00	1.49	1.81	1.00	2.52	1.33	3.13	3.88	4.54	5.10	5.73	-
26	-	-	-	-	0.83	1.33	-	-	1.00	-	1.33	-	-	-	-	-	-
28	-	-	-	-	0.83	1.33	1.65	-	1.00	-	1.33	-	-	-	-	-	-
30	0.67	0.83	-	-	0.83	1.33	1.65	-	1.00	-	1.33	-	-	-	-	-	-
32	-	-	-	-	0.83	1.33	1.65	1.82	1.00	-	1.33	-	-	-	-	-	-
34	-	-	-	-	0.83	1.33	1.66	1.82	1.00	-	1.33	-	-	-	-	-	-
36	-	-	-	-	0.83	1.33	1.65	1.98	1.00	-	1.33	-	-	-	-	-	-
38	-	-	-	-	-	-	-	-	1.00	-	1.33	-	-	-	-	-	-
40	-	-	-	-	-	-	-	-	1.00	-	1.33	-	-	-	-	-	-
42	-	-	-	-	-	-	-	-	1.00	-	1.33	-	-	-	-	-	-
44	-	-	-	-	-	-	-	-	1.00	-	1.33	-	-	-	-	-	-
46	-	-	-	-	-	-	-	-	1.00	-	1.29	-	-	-	-	-	-
48	-	-	-	-	-	-	-	-	1.00	-	1.33	-	-	-	-	-	-

Note

1 The relationship between pipe weights at each NPS can strictly only be applied to fittings where the same proportional relationship is maintained in the fitting. Less accurate results will therefore be obtained for reducing tees, for example, than for elbows, equal tees, etc. The type of fitting construction may also make the factors inaccurate.