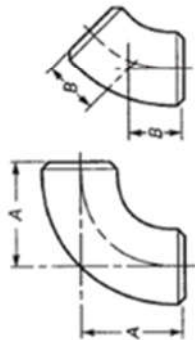


Carbon Steel Buttwelding Fittings – Dimensions

Buttwelding Fittings to a SME B16.9

Nominal size		OD	Elbows			Returns			Caps	Reducers Note 1	Stub ends				
			90 deg	45 deg	Short 90 deg	Long	Short	Long			Long	Short	Radius of Fillet	Diam of Lap	
DN	NPS	D	A	B	A	O	K	O	E	H	F	F	R	R	G
15	½	21.3	38	16		76	48		25		76	51	3	3	35
20	¾	26.7	38	19		76	51		25		76	51	3	3	43
25	1	33.4	38	22	25	76	56	51	38		102	51	3	3	51
32	1¼	42.2	48	25	32	95	70	64	38		102	51	5	5	64
40	1½	48.3	57	29	38	114	83	76	38		102	51	6	6	73
50	2	60.3	76	35	51	152	106	102	38		152	64	8	8	92
65	2½	73.0	95	44	64	190	132	127	38		152	64	8	8	106
80	3	88.9	114	51	76	229	159	152	51		152	64	10	10	127
90	3½	101.6	133	57	89	267	184	178	64		152	76	11	11	140
100	4	114.3	152	64	102	305	210	203	64		152	76	11	11	157
125	5	141.3	190	79	127	381	262	254	76		203	76	13	13	185
150	6	168.3	229	95	152	457	313	305	89		203	89	13	13	218
200	8	219.1	305	127	203	610	414	406	102		203	102	13	13	270
250	10	273.0	381	159	254	762	518	508	127		254	127	13	13	324
300	12	323.8	457	190	305	914	619	610	152		254	152	13	13	381
350	14	355.6	533	222	356	1067	711	711	165		305	152	13	13	413
400	16	406.4	610	254	406	1219	813	813	178		305	152	13	13	470
450	18	457	686	286	457	1372	914	914	203		305	152	13	13	533
500	20	508	762	318	508	1524	1016	1016	229		305	152	13	13	584
550	22	559	838	343	559	1676	1118	1118	254		305	152	13	13	641
600	24	610	914	381	610	1829	1219	1219	267		305	152	13	13	692
650	26	660	991	405					267						
700	28	711	1067	438					267						
750	30	762	1143	470					267						
800	32	813	1219	502					267						
850	34	864	1295	533					267						
900	36	914	1372	565					267						
950	38	965	1448	600					305						
1000	40	1016	1524	632					305						
1050	42	1067	1600	660					305						
1100	44	1118	1676	695					343						
1150	46	1168	1753	727					343						
1200	48	1219	1829	759					343						

Note 1: Reducer dimension "H" is based on large end nominal size



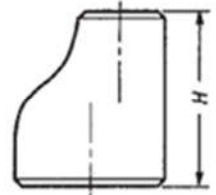
ELBOW



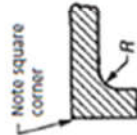
RETURN



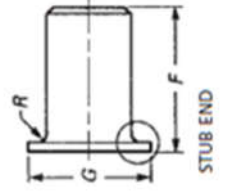
CAP



REDUCER



Enlarged section of Lap



STUB END

Carbon Steel Buttwelding Fittings – Weight

Buttwelding Fittings (kg per unit)												
Standard Weight												
Nominal size		OD	Elbows			Returns		Caps	Reducers	Stub Ends		Tees
			Long		Short	Long	Short			MSS	ASME	
DN	NPS	mm	90 deg	45 deg	90 deg							
15	½	21.3	0.08	0.04		0.16		0.04		0.12	0.14	0.09
20	¾	26.7	0.11	0.06		0.21		0.05	0.06	0.15	0.18	0.13
25	1	33.4	0.16	0.08	0.11	0.31	0.21	0.11	0.12	0.19	0.30	0.25
32	1¼	42.2	0.26	0.13	0.18	0.52	0.35	0.14	0.16	0.26	0.41	0.43
40	1½	48.3	0.37	0.19	0.25	0.74	0.49	0.17	0.25	0.38	0.55	0.61
50	2	60.3	0.66	0.33	0.44	1.30	0.87	0.24	0.38	0.54	0.99	0.88
65	2½	73.0	1.29	0.69	0.91	2.73	1.82	0.42	0.73	0.8	1.56	1.74
80	3	88.9	2.04	1.02	1.36	4.07	2.71	0.67	0.94	1.13	2.13	2.41
90	3½	101.6	2.94	1.47	1.97	5.65	3.77	0.92	1.19	1.47	2.58	3.26
100	4	114.3	3.84	1.92	2.56	7.67	5.11	1.17	1.45	1.81	3.04	4.12
125	5	141.3	6.48	3.24	4.32	13.0	8.64	1.9	2.50	2.53	5.3	6.54
150	6	168.3	9.94	4.97	6.63	19.9	13.3	2.83	3.60	3.73	6.89	9.58
200	8	219.1	20.1	10.1	13.4	40.3	26.8	5.11	5.70	5.89	10.4	17.9
250	10	273.0	35.4	17.7	23.6	70.8	47.2	8.92	9.60	10.4	18.1	30.4
300	12	323.8	52.0	26.0	34.6	112	71.9	13.1	13.6	14.9	22.2	43.6
350	14	355.6	67.9	34.0	45.3			15.9	25.4	15.5	28.3	53.5
400	16	406.4	89.0	44.5	59.1			20.0	31.0	18.0	32.7	66.1
450	18	457	113	56.5	75.3			25.5	37.8	21.0	37.5	83.9
500	20	508	140	70.0	93.1			31.8	55.4	23.3	41.7	104
550	22	559	169	84.5	113			38.8	62.4	25.8	46.3	126
600	24	610	202	101	135			45.1	68.4	28.4	50.5	139
650	26	660	237	119	158			50.5	89.4			176
700	28	711	276	138	184			56.2	96.6			198
750	30	762	316	158	211			62.1	104			228
800	32	813	361	180	241			68.4	111			259
850	34	864	406	204	272			75.4	116			295
900	36	914	457	228	304			81.9	125			331
950	38	965	510	255	340			94.7	133			370
1000	40	1016	565	282	377			102	140			411
1050	42	1067	622	311	416			110	147			422
1100	44	1118	684	342	456			126	155			475
1150	46	1168	748	374	499			134	189			521
1200	48	1219	814	407	543			143	197			569