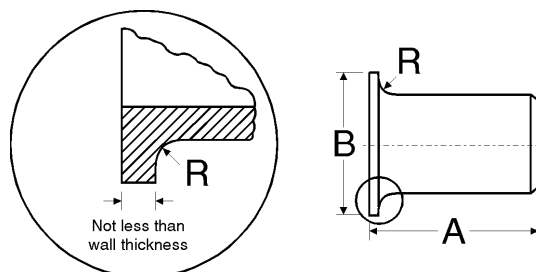


Lap Joint Stub Ends - ANSI B16.9



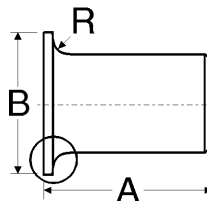
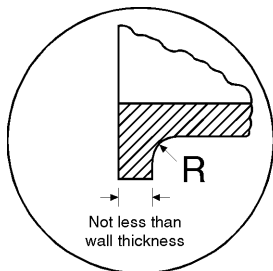
Dimensions (based on ASME/ANSI B16.9) and example weights

Nominal Pipe Size	Common		Long Pattern		Short Pattern		Diameter of Lap		Radius of Fillet		OD of Barrel				Weight
	OD at Bevel 		Dimension 		Dimension 		Dimension 		Dimension 						40S/STD ¹ 
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	kg/piece
1/2	0.84	21	3.00	76	2.00	51	1.38	35	0.12	3	0.90	23	0.81	21	0.14
3/4	1.05	27	3.00	76	2.00	51	1.69	43	0.12	3	1.11	28	1.02	26	0.18
1	1.32	33	4.00	102	2.00	51	2.00	51	0.12	3	1.38	35	1.28	33	0.30
1 1/4	1.66	42	4.00	102	2.00	51	2.50	64	0.19	5	1.72	44	1.63	41	0.41
1 1/2	1.90	48	4.00	102	2.00	51	2.88	73	0.25	6	1.97	50	1.87	47	0.55
2	2.38	60	6.00	152	2.50	64	3.62	92	0.31	8	2.46	62	2.34	60	1.00
2 1/2	2.88	73	6.00	152	2.50	64	4.12	105	0.31	8	2.97	75	2.84	72	1.56
3	3.50	89	6.00	152	2.50	64	5.00	127	0.38	10	3.60	91	3.47	88	2.15
3 1/2	4.00	102	6.00	152	3.00	76	5.50	140	0.38	10	4.10	104	3.97	101	-
4	4.50	114	6.00	152	3.00	76	6.19	157	0.44	11	4.59	117	4.47	114	3.05
5	5.56	141	8.00	203	3.00	76	7.31	186	0.44	11	5.68	144	5.53	141	5.30
6	6.62	168	8.00	203	3.50	89	8.50	216	0.50	13	6.74	171	6.59	168	6.90
8	8.62	219	8.00	203	4.00	102	10.62	270	0.50	13	8.74	222	8.59	218	10.45
10	10.75	273	10.00	254	5.00	127	12.75	324	0.50	13	10.91	277	10.72	272	18.15
12	12.75	324	10.00	254	6.00	152	15.00	381	0.50	13	12.91	328	12.72	323	22.25
14	14.00	356	12.00	305	6.00	152	16.25	413	0.50	13	14.17	360	13.97	355	29.05
16	16.00	406	12.00	305	6.00	152	18.50	470	0.50	13	16.18	411	15.97	406	32.69
18	18.00	457	12.00	305	6.00	152	21.00	533	0.50	13	18.19	462	17.97	456	38.60
20	20.00	508	12.00	305	6.00	152	23.00	584	0.50	13	20.24	514	19.97	507	42.68
22	22.00	559	12.00	305	6.00	152	25.25	641	0.50	13	22.24	565	21.97	558	-
24	24.00	610	12.00	305	6.00	152	27.25	692	0.50	13	24.24	616	23.97	609	51.30

Notes

- Dimensions quoted in mm are 'Nominal' values from B16.9 (rounded equivalents of the inch dimensions). Refer to B16.9 for additional 'Max' and 'Min' metric dimensions.
- OD of barrel max and min dimensions (in and mm) are rounded. Refer to B16.9 for the exact values.
- Long pattern stub ends are standard. Purchaser should specify if short pattern is required. Long pattern stub ends are also known as ASA Stub Ends.
- Short pattern stub ends are used with larger flanges in Classes 300 and 600, and with most sizes in Class 900 and higher. When long pattern stub ends are used with flanges in Classes 1500 and 2500, it may be necessary to increase the length A.
- Additional lap thickness must be provided for special facings (e.g. tongue and groove); this is within length A.
- Dimension B conforms to ASME/ANSI B16.5, Pipe Flanges and Forged Fittings.
- Gasket face finish shall be accordance with ASME/ANSI B16.5 for raised face flanges.
- For tolerances see page 6-2.
- 1 Long pattern weights are listed (short pattern weights are similar to MSS SP-43 lap joint stub ends, page 6-20). Weights are approximate and based on manufacturers' data (where available) for Schedule 40S/Standard fittings. See page 6-6 for further information.

Lap Joint Stub Ends - MSS SP-43



Note:
Type A is shown.
Type B has a square corner, as indicated by the maximum dimension R in the table below.

Dimensions (based on MSS SP-43)

Common			Length		Diameter of Lap		Radius of Fillet				Weight
Nominal Pipe Size	OD at Bevel 		Dimension 		Dimension 		Dimension 				40S/STD ¹ 
							Type A for Lap Joint Flange, max		Type B for Slip-on Flange, max		
	in	mm	in	mm	in	mm	in	mm	in	mm	kg/piece
1/2	0.84	21	2.00	50.8	1.38	35	0.12	3.05	0.03	0.76	0.09
3/4	1.05	27	2.00	50.8	1.69	43	0.12	3.05	0.03	0.76	0.12
1	1.32	33	2.00	50.8	2.00	51	0.12	3.05	0.03	0.76	0.15
1 1/4	1.66	42	2.00	50.8	2.50	64	0.19	4.83	0.03	0.76	0.20
1 1/2	1.90	48	2.00	50.8	2.88	73	0.25	6.35	0.03	0.76	0.28
2	2.38	60	2.50	63.5	3.62	92	0.31	7.87	0.03	0.76	0.41
2 1/2	2.88	73	2.50	63.5	4.12	105	0.31	7.87	0.03	0.76	0.66
3	3.50	89	2.50	63.5	5.00	127	0.38	9.65	0.03	0.76	0.89
3 1/2	4.00	102	3.00	76.2	5.50	140	0.38	9.65	0.03	0.76	-
4	4.50	114	3.00	76.2	6.19	157	0.44	11.18	0.03	0.76	1.51
5	5.56	141	3.00	76.2	7.31	186	0.44	11.18	0.06	1.52	2.66
6	6.62	168	3.50	88.9	8.50	216	0.50	12.70	0.06	1.52	3.02
8	8.62	219	4.00	101.6	10.62	270	0.50	12.70	0.06	1.52	5.22
10	10.75	273	5.00	127.0	12.75	324	0.50	12.70	0.06	1.52	9.08
12	12.75	324	6.00	152.4	15.00	381	0.50	12.70	0.06	1.52	13.35
14	14.00	356	6.00	152.4	16.25	413	0.50	12.70	0.06	1.52	14.53
16	16.00	406	6.00	152.4	18.50	470	0.50	12.70	0.06	1.52	16.34
18	18.00	457	6.00	152.4	21.00	533	0.50	12.70	0.06	1.52	19.30
20	20.00	508	6.00	152.4	23.00	584	0.50	12.70	0.06	1.52	21.34
24	24.00	610	6.00	152.4	27.25	692	0.50	12.70	0.06	1.52	25.65

Notes

- Dimensions quoted in mm are equivalents of the inch dimensions (i.e. 25.4 x in). Metric dimensions are not specified in MSS SP-43.
- Length A and Radius R are applicable for Schedule 40S or thinner.
- Contact faces of stub ends shall have a modified spiral or concentric serration.
- For tolerances see page 6-4.
- 1 Weights are approximate and based on manufacturers' data (where available) for Schedule 40S/Standard fittings. See page 6-6 for further information.