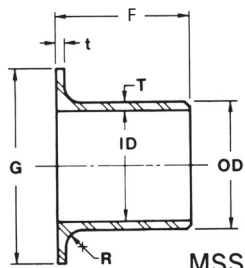
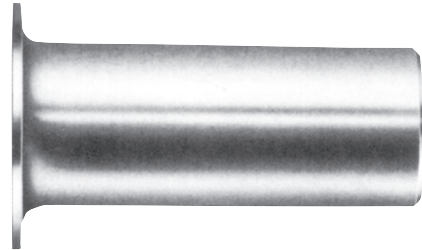
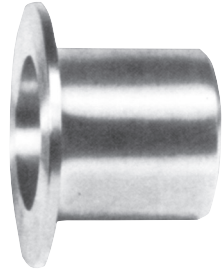
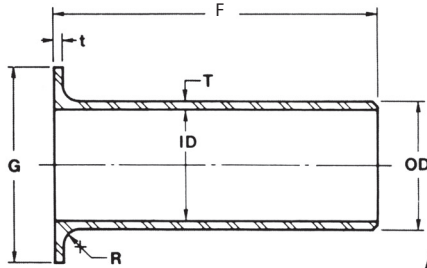


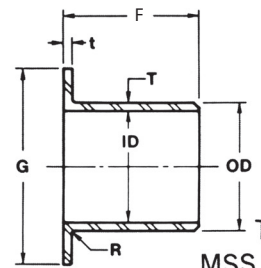
STUB ENDS



Type A
MSS Short



Type A
ANSI Long



Type B
MSS Short

Nom. Pipe Size	Outside Diameter (OD)	Lap Diameter (G)	Length (F)		Radius (R)		Schedule 10S Light N.P.S.					Schedule 40S Standard N.P.S.				
			Short (MSS)	Long (ANSI)	Type A	Type B	Inside Diameter (ID)	Wall Thickness (T)	Lap Thickness (t) Min.	Approx. Wt. in Pounds		Inside Diameter (ID)	Wall Thickness (T)	Lap Thickness (t) Min.	Approx. Wt. in Pounds	
										Short	Long				Short	Long
1/2	.840	1-3/8	2	3	1/8	1/32	.674	.083	.083	.09	.12	.622	.109	.109	.11	.15
3/4	1.050	1-11/16	2	3	1/8	1/32	.884	.083	.083	.12	.16	.824	.113	.113	.15	.21
1	1.315	2	2	4	1/8	1/32	1.097	.109	.109	.20	.33	1.049	.133	.133	.22	.39
1-1/4	1.660	2-1/2	2	4	3/16	1/32	1.442	.109	.109	.28	.45	1.380	.140	.140	.32	.55
1-1/2	1.900	2-7/8	2	4	1/4	1/32	1.682	.109	.109	.32	.52	1.610	.145	.145	.39	.68
2	2.375	3-5/8	2-1/2	6	5/16	1/32	2.157	.109	.109	.54	.98	2.067	.154	.154	.77	1.29
2-1/2	2.875	4-1/8	2-1/2	6	5/16	1/32	2.635	.120	.120	.71	1.30	2.469	.203	.203	1.01	1.94
3	3.500	5	2-1/2	6	3/8	1/32	3.260	.120	.120	.92	1.65	3.068	.216	.216	1.43	2.66
3-1/2	4.000	5-1/2	3	6	3/8	1/32	3.760	.120	.120	1.09	1.80	3.548	.226	.226	2.05	3.37
4	4.500	6-3/16	3	6	7/16	1/32	4.260	.120	.120	1.37	2.18	4.026	.237	.237	2.36	3.90
5	5.563	7-5/16	3	8	7/16	1/16	5.295	.134	.134	1.86	3.72	5.047	.258	.258	3.52	6.79
6	6.625	8-1/2	3-1/2	8	1/2	1/16	6.357	.134	.134	2.72	5.06	6.065	.280	.280	4.80	8.68
8	8.625	10-5/8	4	8	1/2	1/16	8.329	.148	.148	4.06	6.63	7.981	.322	.322	7.65	13.50
10	10.750	12-3/4	5	10	1/2	1/16	10.420	.165	.165	6.46	11.00	10.020	.365	.365	12.75	22.50
12	12.750	15	6	10	1/2	1/16	12.390	.180	.180	10.25	15.00	12.000	.375	.375	18.00	28.00
14	14.000	16-1/4	6	12	1/2	1/16	13.624	.188	.188	13.75	21.75	13.250	.375	.375	27.50	36.00
16	16.000	18-1/2	6	12	1/2	1/16	15.624	.188	.188	16.00	25.00	15.250	.375	.375	26.00	42.00
18	18.000	21	6	12	1/2	1/16	17.624	.188	.188	22.00	32.00	17.250	.375	.375	34.50	56.50
20	20.000	23	6	12	1/2	1/16	19.564	.218	.218	27.50	40.75	19.250	.375	.375	38.00	62.00
24	24.000	27-1/4	6	12	1/2	1/16	23.500	.250	.250	34.50	52.80	23.250	.375	.375	48.50	79.50

- All dimensions are in inches
- Dimensional tolerances conform to ASME B16.9
- Fitting wall thicknesses conform with standard schedule 10S and 40S ASME B36.19M wall pipe.
- Stub End Faces are supplied with a serrated spiral finish per ASME B16.5. Other surface finishes can be supplied on special order.
- Butt welding fittings are permanently marked by electro-chemical etching in accordance with ASME B16.9
- Estimated fitting weights are based on a density of .163 lbs/cubic inch