

American National Standard Forged Steel Fittings Socket-Welding and Threaded

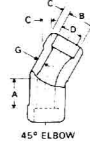
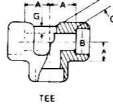
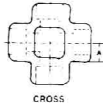
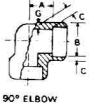


Table 2 Steel Socket — Welding Fittings

Nom. Pipe Size	Socket Bore Dia. B ²	Bore Diameter of Fitting D ¹			Socket Wall Thickness G						Body Wall G			Center to Bottom of Socket — A						Laying Lengths Tolerances:							
		Pressure Class Designation			Pressure Class Designation						Pressure Class Designation			90° Elbows, Tees, and Crosses						45° Elbows and Crosses			couplings E.B.	Half Couplings I	A	E	F
		3000 lb	6000 lb	9000 lb	3000 lb		6000 lb		9000 lb		3000 lb	6000 lb	9000 lb	3000 lb	6000 lb	9000 lb	3000 lb	6000 lb	9000 lb								
		Ave.	Min.		Ave.	Min.	Ave.	Min.	Ave.	Min.	Min.	Min.	Min.	Min.	Min.	Min.	Min.	Min.	Min.	Min.							
1/8	0.430	0.299	0.189	0.125	0.125	0.156	0.135					0.095	0.124		0.38	0.44	0.44		0.31	0.31		0.25	0.62	0.03	0.06	0.03	
1/4	0.420	0.239	0.126	0.149	0.130	0.181	0.158					0.119	0.145		0.38	0.44	0.53	0.31	0.31	0.31		0.25	0.62	0.03	0.06	0.03	
3/8	0.565	0.394	0.280	0.158	0.138	0.198	0.172					0.126	0.158		0.38	0.53	0.62		0.31	0.44		0.25	0.69	0.06	0.12	0.06	
1/2	0.690	0.463	0.329	0.184	0.161	0.235	0.204	0.368	0.322	0.147	0.188	0.294	0.38	0.62	0.75	1.00	0.44	0.50	0.62	0.38	0.88	0.06	0.12	0.06			
3/4	0.865	0.652	0.494	0.185	0.161	0.235	0.204	0.368	0.322	0.147	0.188	0.294	0.38	0.62	0.75	1.00	0.44	0.50	0.62	0.38	0.88	0.06	0.12	0.06			
1	1.075	0.854	0.642	0.193	0.168	0.274	0.238	0.385	0.337	0.154	0.219	0.308	0.50	0.75	0.88	1.12	0.50	0.56	0.75	0.38	0.94	0.06	0.12	0.06			
1 1/4	1.340	1.079	0.845	0.224	0.196	0.312	0.273	0.448	0.392	0.179	0.250	0.358	0.50	0.88	1.06	1.25	0.56	0.69	0.81	0.50	1.12	0.08	0.16	0.08			
1 1/2	1.685	1.410	1.190	0.239	0.208	0.312	0.273	0.478	0.418	0.191	0.250	0.382	0.50	1.06	1.25	1.38	0.69	0.81	0.88	0.50	1.19	0.08	0.16	0.08			
2	1.925	1.640	1.368	0.250	0.218	0.351	0.307	0.500	0.438	0.200	0.281	0.400	0.50	1.25	1.50	1.50	0.81	1.00	1.00	0.50	1.25	0.08	0.16	0.08			
2 1/2	2.416	2.097	1.717	0.273	0.238	0.430	0.374	0.545	0.477	0.218	0.344	0.436	0.62	1.50	1.62	2.12	1.00	1.12	1.12	0.75	1.62	0.08	0.16	0.08			
3	2.406	2.037	1.657	0.345	0.302					0.276			0.62	1.62			1.12			0.75	1.69	0.10	0.20	0.10			
3 1/2	2.921	2.529		0.375	0.327					0.300			0.62	2.25			1.25			0.75	1.75	0.10	0.20	0.10			
4	3.535	3.008		0.421	0.368					0.337			0.75	2.62			1.62			0.75	1.88	0.10	0.20	0.10			

1. Average of Socket Wall Thickness around periphery shall be no less than listed values. The minimum values are permitted in localized areas.
2. Upper and lower values for each size are the respective maximum and minimum dimensions.

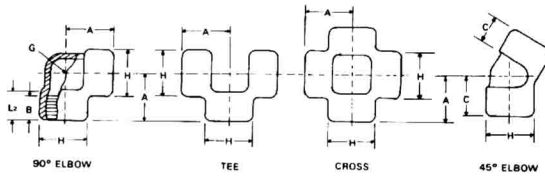


Table Forged Steel Threaded Fittings

Nom. Pipe Size	Center to End Elbows, Tees, Crosses			Center to End 45° Elbow			Outside Diameter of Band			Minimum Wall Thickness			Length of Thread, Min. *	
	2000 lb	3000 lb	6000 lb	2000 lb	3000 lb	6000 lb	2000 lb	3000 lb	6000 lb	2000 lb	3000 lb	6000 lb	lb	B
1/8	0.81	0.81	0.97	0.69	0.69	0.75	0.88	0.88	1.00	0.125	0.125	0.250	0.25	0.2639
1/4	0.81	0.97	1.12	0.69	0.75	0.88	0.88	1.00	1.31	0.125	0.130	0.260	0.32	0.4018
3/8	0.97	1.12	1.31	0.75	0.83	1.00	1.00	1.31	1.50	0.125	0.138	0.275	0.36	0.4078
1/2	1.12	1.31	1.50	0.88	1.00	1.12	1.31	1.50	1.81	0.125	0.161	0.321	0.43	0.5337
3/4	1.31	1.50	1.75	1.00	1.12	1.31	1.50	1.81	2.19	0.125	0.170	0.336	0.50	0.5457
1	1.50	1.75	2.00	1.12	1.31	1.38	1.81	2.19	2.44	0.145	0.196	0.391	0.58	0.6828
1-1/4	1.75	2.00	2.38	1.31	1.38	1.69	2.19	2.44	2.97	0.153	0.208	0.417	0.67	0.7068
1-1/2	2.00	2.38	3.00	1.38	1.69	1.72	2.44	2.97	3.31	0.158	0.219	0.436	0.70	0.7235
2	2.38	2.50	3.25	1.69	1.72	2.06	2.97	3.31	4.00	0.168	0.281	0.476	0.75	0.7565
2-1/2	3.00	3.25	3.75	2.06	2.06	2.50	3.62	4.00	4.75	0.221	0.301	0.602	0.93	1.138
3	3.38	3.75	4.19	2.50	2.50	3.12	4.31	4.75	5.75	0.236	0.348	0.655	1.02	1.200
4	4.19	4.50	4.50	3.12	3.12	3.12	5.75	6.00	6.00	0.258	0.440	0.735	1.09	1.300

* Dimension B is minimum length of perfect thread. The length of useful thread (B plus threads with fully formed roots and flat crests) shall not be less than L₂ (effective length of external thread) required by American National Standard for Pipe Threads (ANSI B2.1)