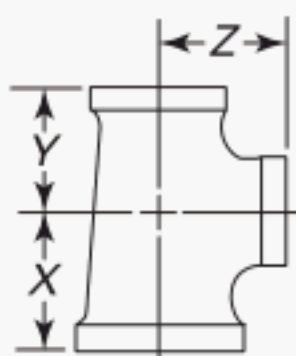
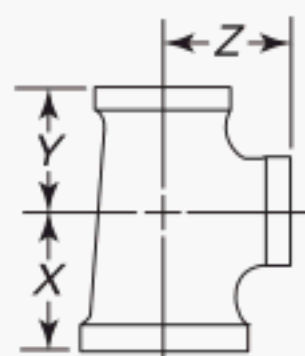


Table I-4 Dimensions of Class 125 Tees (Reducing Sizes)



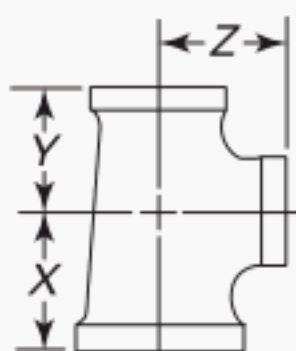
NPS	Center-to-End			NPS	Center-to-End		
	X	Y	Z		X	Y	Z
$\frac{1}{2} \times \frac{1}{2} \times \frac{3}{8}$	1.04	1.04	1.03	$1\frac{1}{2} \times 1\frac{1}{4} \times \frac{1}{2}$	1.41	1.34	1.66
$\frac{1}{2} \times \frac{1}{2} \times \frac{1}{4}$	0.97	0.97	0.98	$1\frac{1}{2} \times 1 \times 1\frac{1}{2}$	1.94	1.80	1.94
$\frac{3}{4} \times \frac{3}{4} \times \frac{1}{2}$	1.20	1.20	1.22	$1\frac{1}{2} \times 1 \times 1\frac{1}{4}$	1.82	1.67	1.88
$\frac{3}{4} \times \frac{3}{4} \times \frac{3}{8}$	1.12	1.12	1.13	$1\frac{1}{2} \times 1 \times 1$	1.65	1.50	1.80
$\frac{3}{4} \times \frac{3}{4} \times \frac{1}{4}$	1.05	1.05	1.08	$1\frac{1}{2} \times \frac{3}{4} \times 1\frac{1}{2}$	1.94	1.75	1.94
$\frac{3}{4} \times \frac{1}{2} \times \frac{3}{4}$	1.31	1.22	1.31	$1\frac{1}{2} \times \frac{3}{4} \times 1\frac{1}{4}$	1.82	1.62	1.88
$\frac{3}{4} \times \frac{1}{2} \times \frac{1}{2}$	1.20	1.12	1.22	$1\frac{1}{2} \times \frac{1}{2} \times 1\frac{1}{2}$	1.94	1.66	1.94
$\frac{1}{2} \times \frac{1}{2} \times \frac{3}{4}$	1.22	1.22	1.20	$1\frac{1}{4} \times 1\frac{1}{4} \times 1\frac{1}{2}$	1.88	1.88	1.82
$1 \times 1 \times \frac{3}{4}$	1.37	1.37	1.45	$1\frac{1}{4} \times 1 \times 1\frac{1}{2}$	1.88	1.80	1.82
$1 \times 1 \times \frac{1}{2}$	1.26	1.26	1.36	$1 \times 1 \times 1\frac{1}{2}$	1.80	1.80	1.65
$1 \times 1 \times \frac{3}{8}$	1.18	1.18	1.27	$2 \times 2 \times 1\frac{1}{2}$	2.02	2.02	2.16
$1 \times \frac{3}{4} \times 1$	1.50	1.45	1.50	$2 \times 2 \times 1\frac{1}{4}$	1.90	1.90	2.10
$1 \times \frac{3}{4} \times \frac{3}{4}$	1.37	1.31	1.45	$2 \times 2 \times 1$	1.73	1.73	2.02
$1 \times \frac{3}{4} \times \frac{1}{2}$	1.26	1.20	1.36	$2 \times 2 \times \frac{3}{4}$	1.60	1.60	1.97
$1 \times \frac{1}{2} \times 1$	1.50	1.36	1.50	$2 \times 2 \times \frac{1}{2}$	1.49	1.49	1.88
$1 \times \frac{1}{2} \times \frac{3}{4}$	1.37	1.22	1.45	$2 \times 1\frac{1}{2} \times 2$	2.25	2.16	2.25
$1 \times \frac{1}{2} \times \frac{1}{2}$	1.26	1.12	1.36	$2 \times 1\frac{1}{2} \times 1\frac{1}{2}$	2.02	1.94	2.16
$1 \times \frac{3}{8} \times 1$	1.50	1.27	1.50	$2 \times 1\frac{1}{2} \times 1\frac{1}{4}$	1.90	1.82	2.10
$\frac{3}{4} \times \frac{3}{4} \times 1$	1.45	1.45	1.37	$2 \times 1\frac{1}{2} \times 1$	1.73	1.65	2.02
$1\frac{1}{4} \times 1\frac{1}{4} \times 1$	1.58	1.58	1.67	$2 \times 1\frac{1}{2} \times \frac{3}{4}$	1.60	1.52	1.97
$1\frac{1}{4} \times 1\frac{1}{4} \times \frac{3}{4}$	1.45	1.45	1.62	$2 \times 1\frac{1}{2} \times \frac{1}{2}$	1.49	1.41	1.88
$1\frac{1}{4} \times 1\frac{1}{4} \times \frac{1}{2}$	1.34	1.34	1.53	$2 \times 1\frac{1}{4} \times 2$	2.25	2.10	2.25
$1\frac{1}{4} \times 1 \times 1\frac{1}{4}$	1.75	1.67	1.75	$2 \times 1\frac{1}{4} \times 1\frac{1}{2}$	1.02	1.88	2.16
$1\frac{1}{4} \times 1 \times 1$	1.58	1.50	1.67	$2 \times 1\frac{1}{4} \times 1\frac{1}{4}$	1.90	1.75	2.10
$1\frac{1}{4} \times 1 \times \frac{3}{4}$	1.45	1.37	1.62	$2 \times 1\frac{1}{4} \times 1$	1.73	1.58	2.02
$1\frac{1}{4} \times 1 \times \frac{1}{2}$	1.34	1.26	1.53	$2 \times 1 \times 2$	2.25	2.02	2.25
$1\frac{1}{4} \times \frac{3}{4} \times 1\frac{1}{4}$	1.75	1.62	1.75	$2 \times 1 \times 1\frac{1}{2}$	2.02	1.80	2.16
$1\frac{1}{4} \times \frac{3}{4} \times 1$	1.58	1.45	1.67	$2 \times 1 \times 1\frac{1}{4}$	1.90	1.67	2.10
$1\frac{1}{4} \times \frac{3}{4} \times \frac{3}{4}$	1.45	1.31	1.62	$2 \times \frac{3}{4} \times 2$	2.25	1.97	2.25
$1\frac{1}{4} \times \frac{1}{2} \times 1\frac{1}{4}$	1.75	1.53	1.75	$2 \times \frac{1}{2} \times 2$	2.25	1.88	2.25
$1\frac{1}{4} \times \frac{1}{2} \times 1$	1.58	1.36	1.67	$1\frac{1}{2} \times 1 \times 2$	2.16	2.02	2.02
$1 \times 1 \times 1\frac{1}{4}$	1.67	1.67	1.58	$1\frac{1}{4} \times 1\frac{1}{4} \times 2$	2.10	2.10	1.90
$1\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{4}$	1.82	1.82	1.88	$1\frac{1}{2} \times 1\frac{1}{2} \times 2$	2.16	2.16	2.02
$1\frac{1}{2} \times 1\frac{1}{2} \times 1$	1.65	1.65	1.80	$1\frac{1}{2} \times 1\frac{1}{4} \times 2$	2.16	2.10	2.02
$1\frac{1}{2} \times 1\frac{1}{2} \times \frac{3}{4}$	1.52	1.52	1.75	$2\frac{1}{2} \times 2\frac{1}{2} \times 2$	2.39	2.39	2.60
$1\frac{1}{2} \times 1\frac{1}{2} \times \frac{1}{2}$	1.41	1.41	1.66	$2\frac{1}{2} \times 2\frac{1}{2} \times 1\frac{1}{2}$	2.16	2.16	2.51
$1\frac{1}{2} \times 1\frac{1}{4} \times 1\frac{1}{2}$	1.94	1.88	1.94	$2\frac{1}{2} \times 2\frac{1}{2} \times 1\frac{1}{4}$	2.04	2.04	2.45
$1\frac{1}{2} \times 1\frac{1}{4} \times 1\frac{1}{4}$	1.82	1.75	1.88	$2\frac{1}{2} \times 2\frac{1}{2} \times 1$	1.87	1.87	2.37
$1\frac{1}{2} \times 1\frac{1}{4} \times 1$	1.65	1.58	1.80	$2\frac{1}{2} \times 2\frac{1}{2} \times \frac{3}{4}$	1.74	1.74	2.32
$1\frac{1}{2} \times 1\frac{1}{4} \times \frac{3}{4}$	1.52	1.45	1.75	$2\frac{1}{2} \times 2\frac{1}{2} \times \frac{1}{2}$	1.63	1.63	2.23

Table I-4 Dimensions of Class 125 Tees (Reducing Sizes) (Cont'd)



NPS	Center-to-End			NPS	Center-to-End		
	X	Y	Z		X	Y	Z
$2\frac{1}{2} \times 2 \times 2\frac{1}{2}$	2.70	2.60	2.70	$3 \times \frac{3}{4} \times 3$	3.08	2.61	3.08
$2\frac{1}{2} \times 2 \times 2$	2.39	2.25	2.60	$2\frac{1}{2} \times 2\frac{1}{2} \times 3$	2.99	2.99	2.83
$2\frac{1}{2} \times 2 \times 1\frac{1}{2}$	2.16	2.02	2.51	$2\frac{1}{2} \times 2 \times 3$	2.99	2.89	2.83
$2\frac{1}{2} \times 2 \times 1\frac{1}{4}$	2.04	1.90	2.45	$2 \times 2 \times 3$	2.89	2.89	2.52
$2\frac{1}{2} \times 2 \times 1$	1.87	1.73	2.37	$3\frac{1}{2} \times 3\frac{1}{2} \times 3$	3.18	3.18	3.33
$2\frac{1}{2} \times 2 \times \frac{3}{4}$	1.74	1.60	2.32	$3\frac{1}{2} \times 3\frac{1}{2} \times 2\frac{1}{2}$	2.93	2.93	3.24
$2\frac{1}{2} \times 2 \times \frac{1}{2}$	1.63	1.49	2.23	$3\frac{1}{2} \times 3\frac{1}{2} \times 2$	2.62	2.62	3.14
$2\frac{1}{2} \times 1\frac{1}{2} \times 2\frac{1}{2}$	2.70	2.51	2.70	$3\frac{1}{2} \times 3\frac{1}{2} \times 1\frac{1}{2}$	2.39	2.39	3.05
$2\frac{1}{2} \times 1\frac{1}{2} \times 2$	2.39	2.16	2.60	$3\frac{1}{2} \times 3\frac{1}{2} \times 1\frac{1}{4}$	2.27	2.27	2.99
$2\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{2}$	2.16	1.94	2.51	$3\frac{1}{2} \times 3\frac{1}{2} \times 1$	2.10	2.10	2.91
$2\frac{1}{2} \times 1\frac{1}{4} \times 2\frac{1}{2}$	2.70	2.45	2.70	$3\frac{1}{2} \times 3 \times 3$	3.18	3.08	3.33
$2\frac{1}{2} \times 1\frac{1}{4} \times 2$	2.39	2.10	2.60	$3\frac{1}{2} \times 3 \times 2\frac{1}{2}$	2.93	2.83	3.24
$2\frac{1}{2} \times 1 \times 2\frac{1}{2}$	2.70	2.37	2.70	$3\frac{1}{2} \times 3 \times 2$	2.62	2.52	3.14
$2\frac{1}{2} \times 1 \times 2$	2.39	2.02	2.60	$3\frac{1}{2} \times 3 \times 1\frac{1}{2}$	2.39	2.29	3.05
$2\frac{1}{2} \times \frac{3}{4} \times 2\frac{1}{2}$	2.70	2.32	2.70	$3\frac{1}{2} \times 2\frac{1}{2} \times 3\frac{1}{2}$	3.42	3.24	3.42
$2\frac{1}{2} \times \frac{1}{2} \times 2\frac{1}{2}$	2.70	2.23	2.70	$3\frac{1}{2} \times 2\frac{1}{2} \times 3$	3.18	2.99	3.33
$2 \times 2 \times 2\frac{1}{2}$	2.60	2.60	2.39	$3\frac{1}{2} \times 2\frac{1}{2} \times 2\frac{1}{2}$	2.93	2.70	3.24
$2 \times 2 \times 2$	2.60	2.51	2.39	$3\frac{1}{2} \times 2 \times 3\frac{1}{2}$	3.42	3.14	3.42
$2 \times 2 \times 1\frac{1}{2}$	2.60	2.45	2.39	$3\frac{1}{2} \times 2 \times 3$	3.42	3.05	3.42
$2 \times 2 \times 1\frac{1}{4}$	2.51	2.51	2.16	$3\frac{1}{2} \times 1\frac{1}{2} \times 3\frac{1}{2}$	3.42	2.99	3.42
$2 \times 2 \times 1$	2.51	2.51	2.16	$3\frac{1}{2} \times 1\frac{1}{4} \times 3\frac{1}{2}$	3.42	2.99	3.42
$3 \times 3 \times 2\frac{1}{2}$	2.83	2.83	2.99	$3\frac{1}{2} \times 1 \times 3\frac{1}{2}$	3.42	2.91	3.42
$3 \times 3 \times 2$	2.52	2.52	2.89	$3 \times 3 \times 3\frac{1}{2}$	3.33	3.33	3.18
$3 \times 3 \times 1\frac{1}{2}$	2.29	2.29	2.80	$4 \times 4 \times 3\frac{1}{2}$	3.54	3.54	3.69
$3 \times 3 \times 1\frac{1}{4}$	2.17	2.17	2.74	$4 \times 4 \times 3$	3.30	3.30	3.60
$3 \times 3 \times 1$	2.00	2.00	2.66	$4 \times 4 \times 2\frac{1}{2}$	3.05	3.05	3.51
$3 \times 3 \times \frac{3}{4}$	1.87	1.87	2.61	$4 \times 4 \times 2$	2.74	2.74	3.41
$3 \times 3 \times \frac{1}{2}$	1.76	1.76	2.52	$4 \times 4 \times 1\frac{1}{2}$	2.51	2.51	3.32
$3 \times 2\frac{1}{2} \times 3$	3.08	2.99	3.08	$4 \times 4 \times 1\frac{1}{4}$	2.39	2.39	3.26
$3 \times 2\frac{1}{2} \times 2\frac{1}{2}$	2.83	2.70	2.99	$4 \times 4 \times 1$	2.22	2.22	3.18
$3 \times 2\frac{1}{2} \times 2$	2.52	2.39	2.89	$4 \times 4 \times \frac{3}{4}$	2.09	2.09	3.13
$3 \times 2\frac{1}{2} \times 1\frac{1}{2}$	2.29	2.16	2.80	$4 \times 3\frac{1}{2} \times 4$	3.79	3.69	3.79
$3 \times 2\frac{1}{2} \times 1\frac{1}{4}$	2.17	2.04	2.74	$4 \times 3\frac{1}{2} \times 3\frac{1}{2}$	3.54	3.42	3.69
$3 \times 2\frac{1}{2} \times 1$	2.00	1.87	2.66	$4 \times 3\frac{1}{2} \times 3$	3.30	3.18	3.60
$3 \times 2 \times 3$	3.08	2.89	3.08	$4 \times 3\frac{1}{2} \times 2\frac{1}{2}$	3.05	2.93	3.51
$3 \times 2 \times 2\frac{1}{2}$	2.83	2.60	2.99	$4 \times 3\frac{1}{2} \times 2$	2.74	2.62	3.41
$3 \times 2 \times 2$	2.52	2.25	2.89	$4 \times 3\frac{1}{2} \times 1\frac{1}{2}$	2.51	2.39	3.32
$3 \times 2 \times 1\frac{1}{2}$	2.29	2.02	2.80	$4 \times 3\frac{1}{2} \times 1\frac{1}{4}$	2.39	2.27	3.26
$3 \times 1\frac{1}{2} \times 3$	3.08	2.80	3.08	$4 \times 3 \times 4$	3.79	3.60	3.79
$3 \times 1\frac{1}{4} \times 3$	3.08	2.74	3.08	$4 \times 3 \times 3$	3.30	3.08	3.60
$3 \times 1 \times 3$	3.08	2.66	3.08	$4 \times 3 \times 2\frac{1}{2}$	3.05	2.83	3.51

Table I-4 Dimensions of Class 125 Tees (Reducing Sizes) (Cont'd)



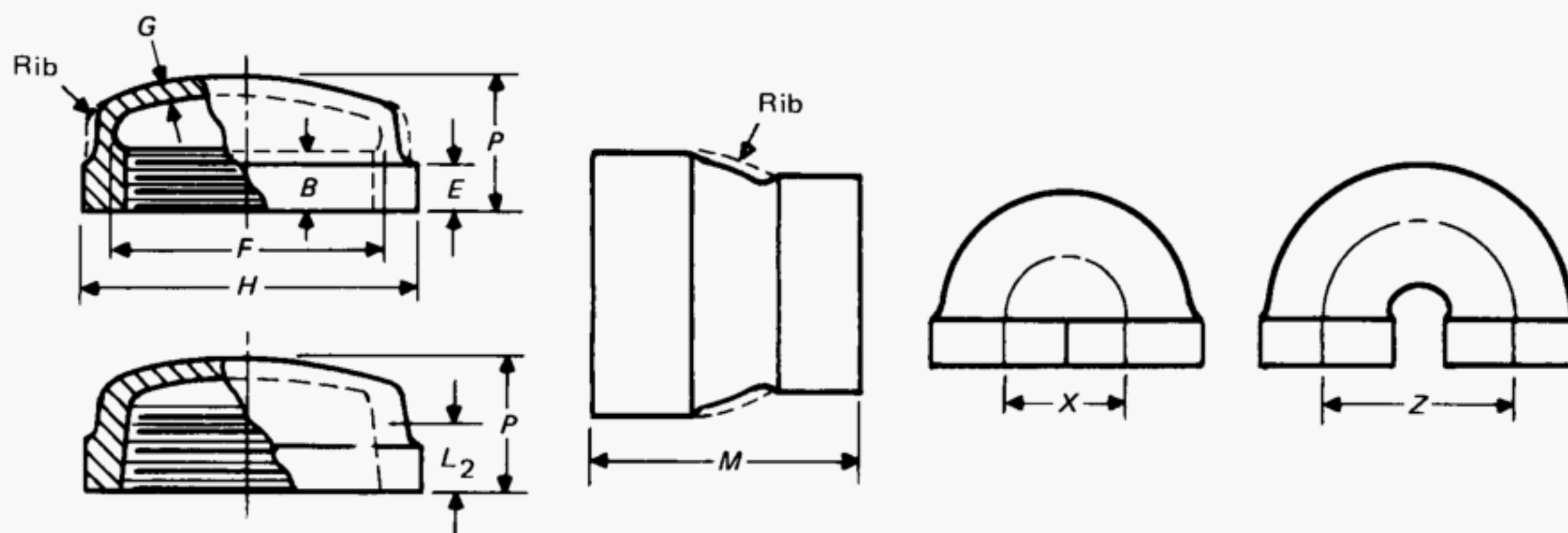
NPS	Center-to-End			NPS	Center-to-End		
	X	Y	Z		X	Y	Z
4 × 3 × 2	2.74	2.52	3.41	6 × 6 × 5	4.63	4.63	5.03
4 × 2½ × 4	3.79	3.51	3.79	6 × 6 × 4	4.13	4.13	4.94
4 × 2½ × 3	3.30	2.99	3.60	6 × 6 × 3	3.64	3.64	4.75
4 × 2½ × 2½	3.05	2.70	3.51	6 × 6 × 2½	3.39	3.39	4.66
4 × 2 × 4	3.79	3.41	3.79	6 × 6 × 2	3.08	3.08	4.56
4 × 2 × 3	3.30	2.89	3.60	6 × 6 × 1½	2.85	2.85	4.47
4 × 2 × 2	2.74	2.25	3.41	6 × 6 × 1¼	2.73	2.73	4.41
4 × 1½ × 4	3.79	3.32	3.79	6 × 6 × 1	2.56	2.56	4.33
4 × 1¼ × 4	3.79	3.26	3.79	6 × 5 × 6	5.13	5.03	5.13
4 × 1 × 4	3.79	3.18	3.79	6 × 5 × 5	4.63	4.50	5.03
3½ × 3½ × 4	3.69	3.69	3.54	6 × 5 × 4	4.13	4.00	4.94
3 × 3 × 4	3.60	3.60	3.30	6 × 5 × 3	3.64	3.51	4.75
2½ × 2½ × 4	3.51	3.51	3.05	6 × 5 × 2½	3.39	3.26	4.66
2 × 2 × 4	3.41	3.41	2.74	6 × 5 × 2	3.08	2.95	4.56
5 × 5 × 4	4.00	4.00	4.41	6 × 4 × 6	5.13	4.94	5.13
5 × 5 × 3½	3.75	3.75	4.31	6 × 4 × 5	4.63	4.41	5.03
5 × 5 × 3	3.51	3.51	4.22	6 × 4 × 4	4.13	3.79	4.94
5 × 5 × 2½	3.26	3.26	4.13	6 × 3 × 6	5.13	4.75	5.13
5 × 5 × 2	2.95	2.95	4.03	6 × 3 × 3	3.64	3.08	4.75
5 × 5 × 1½	2.72	2.72	3.94	6 × 2½ × 6	5.13	4.66	5.13
5 × 5 × 1¼	2.60	2.60	3.88	6 × 2 × 6	5.13	4.56	5.13
5 × 5 × 1	2.43	2.43	3.80	5 × 5 × 6	5.03	5.03	4.63
5 × 4 × 5	4.50	4.41	4.50	5 × 3 × 6	5.03	4.75	4.63
5 × 4 × 4	4.00	3.79	4.41	4 × 4 × 6	4.94	4.94	4.13
5 × 4 × 3½	3.75	3.54	4.31	8 × 8 × 6	5.56	5.56	6.37
5 × 4 × 3	3.51	3.30	4.22	8 × 8 × 5	5.03	5.03	6.27
5 × 4 × 2½	3.26	3.05	4.13	8 × 8 × 4	4.50	4.50	6.17
5 × 4 × 2	2.95	2.74	4.03	8 × 8 × 4	4.00	4.00	6.07
5 × 4 × 1½	2.72	2.51	3.94	8 × 8 × 2½	3.69	3.69	6.01
5 × 3 × 5	4.50	4.22	4.50	8 × 8 × 2	3.44	3.44	5.84
5 × 3 × 4	4.00	3.60	4.41	8 × 6 × 8	6.56	6.37	6.56
5 × 3 × 3	3.51	3.08	4.22	8 × 6 × 6	5.56	5.13	6.37
5 × 2½ × 5	4.50	4.13	4.50	8 × 4 × 8	6.56	6.17	6.56
5 × 2 × 5	4.50	4.03	4.50	6 × 6 × 8	6.37	6.37	5.56
4 × 4 × 5	4.41	4.41	4.00				

GENERAL NOTES:

(a) Dimensions are in inches.

(b) For dimensions not given, see Table I-2.

Table I-5 Dimensions of Class 125 Caps, Reducing Couplings, and Closed- and Open-Pattern Return Bends



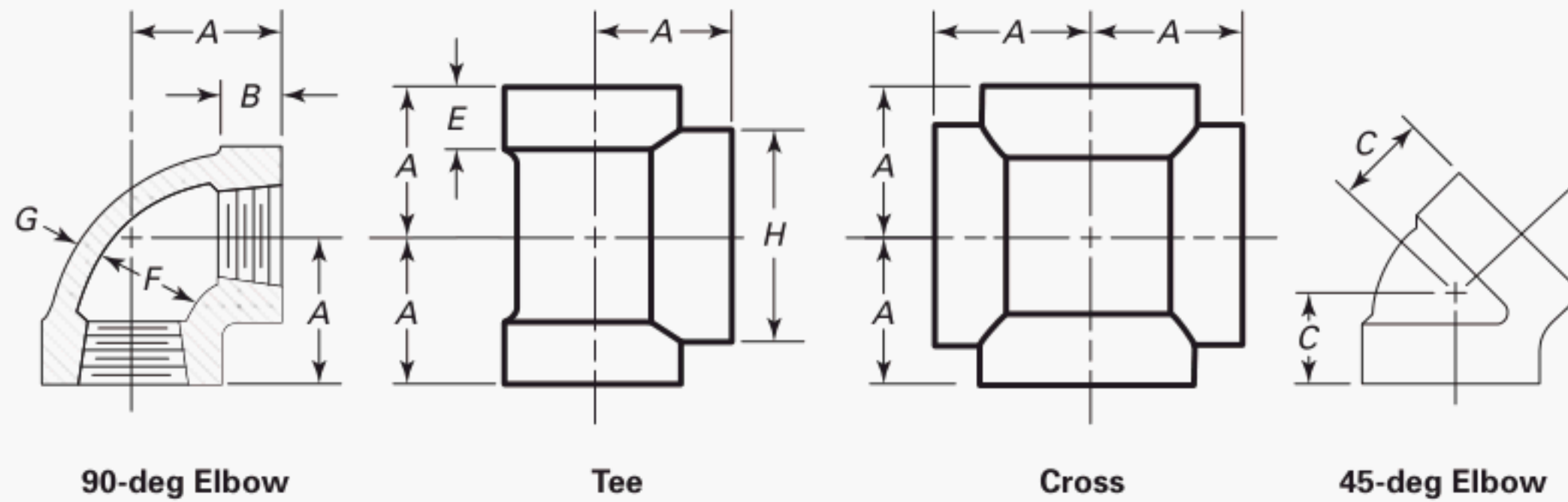
NPS	Minimum Length of Thread [Note (1)]		Minimum Width of Band, <i>E</i>	Inside Diameter of Fitting, <i>F</i> [Note (1)]		Metal Thickness, <i>G</i>	Minimum Outside Diameter of Band, <i>H</i>	Length of Reducing Concentric Couplings, <i>M</i> [Note (2)]	Minimum Height, <i>P</i> [Note (1)]	Center-to-Center	
	<i>B</i>	<i>L</i> ₂		Min.	Max.					Closed, <i>X</i>	Open, <i>Z</i>
1/2	0.43	...	0.50	0.84	0.90	0.13	1.34	1.38	...	1.25	1.75
3/4	0.50	...	0.56	1.05	1.11	0.15	1.63	1.50	...	1.50	1.88
1	0.58	...	0.62	1.31	1.38	0.17	1.95	1.70	...	1.75	2.50
1 1/4	0.67	...	0.69	1.66	1.73	0.18	2.39	2.13	...	2.25	3.00
1 1/2	0.70	...	0.75	1.90	1.97	0.20	2.68	2.25	...	2.50	3.50
2	0.75	...	0.84	2.37	2.44	0.22	3.28	2.32	...	3.25	4.50
2 1/2	0.92	1.14	0.94	2.87	2.97	0.24	3.86	2.63	1.81	3.75	5.50
3	0.98	1.20	1.00	3.50	3.60	0.26	4.62	2.88	1.91	4.50	6.50
3 1/2	1.03	1.25	1.06	4.00	4.10	0.28	5.20	3.13	2.03	...	...
4	1.08	1.30	1.12	4.50	4.60	0.31	5.79	3.38	2.22	6.00	7.50
5	1.18	1.41	1.18	5.56	5.66	0.38	7.05	3.57	2.38	...	...
6	1.28	1.51	1.28	6.62	6.72	0.43	8.28	3.81	2.63	...	...
8	1.47	1.71	1.47	8.62	8.72	0.55	10.63	5.25	2.88	...	...
10	1.68	1.92	1.68	10.75	10.85	0.69	13.12	...	3.50	...	...
12	1.88	2.12	1.88	12.75	12.85	0.80	15.47	...	3.88	...	...

GENERAL NOTES:

- (a) Dimensions are in inches.
 (b) Caps may be made flat or with a radius as shown in the illustrations.

NOTES:

- (1) Caps may be made without recess. Caps so made shall be of such height, *P*, that the length of perfect thread shall be not less than *B*, and the length of useful thread (*B* plus threads with fully formed roots and flat crests) shall be not less than *L* (effective length of external thread) required by ASME B1.20.1.
 (2) Dimension *M* for all reduction of reducing couplings (concentric only) shall be the same as shown for the largest opening. Dimension *M* for eccentric couplings is not standard and such information should be obtained from the manufacturer.

Table I-6 Dimensions of Class 250, 90-deg and 45-deg Elbows, Tees, and Crosses (Straight Sizes)

NPS	Center-to-End Elbows, Tees, and Crosses, A	Center-to-End, 45 deg Elbows, C	Minimum Length of Thread, B	Minimum Width of Band, E	Inside Diameter of Fitting, F		Metal Thickness, G	Minimum Outside Diameter of Band, H
					Min.	Max.		
1/4	0.94	0.81	0.43	0.49	0.54	0.58	0.18	1.17
3/8	1.06	0.88	0.47	0.55	0.67	0.72	0.18	1.36
1/2	1.25	1.00	0.57	0.60	0.84	0.90	0.20	1.59
3/4	1.44	1.13	0.64	0.68	1.05	1.11	0.23	1.88
1	1.63	1.31	0.75	0.76	1.31	1.38	0.28	2.24
1 1/4	1.94	1.50	0.84	0.88	1.66	1.73	0.33	2.73
1 1/2	2.13	1.69	0.87	0.97	1.90	1.97	0.35	3.07
2	2.50	2.00	1.00	1.12	2.37	2.44	0.39	3.74
2 1/2	2.94	2.25	1.17	1.30	2.87	2.97	0.43	4.60
3	3.38	2.50	1.23	1.40	3.50	3.60	0.48	5.36
3 1/2	3.75	2.63	1.28	1.49	4.00	4.10	0.52	5.98
4	4.13	2.81	1.33	1.57	4.50	4.60	0.56	6.61
5	4.88	3.19	1.43	1.74	5.56	5.66	0.66	7.92
6	5.63	3.50	1.53	1.91	6.62	6.72	0.74	9.24
8	7.00	4.31	1.72	2.24	8.62	8.72	0.90	11.73
10	8.63	5.19	1.93	2.58	10.75	10.85	1.08	14.37
12	10.00	6.00	2.13	2.91	12.75	12.85	1.24	16.84

GENERAL NOTES:

- (a) Dimensions are in inches.
 (b) The Class 250 standard for threaded fittings covers only the straight sizes of 90-deg and 45-deg elbows, tees, and crosses.

Table I-7 Inspection Tolerances

NPS	Tolerance, in.
1/4	±0.04
3/8	±0.05
1/2, 3/4	±0.06
1, 1 1/4	±0.07
1 1/2, 2	±0.08
2 1/2, 3, 3 1/2	±0.10
4, 5	±0.12
6	±0.14
8	±0.16
10	±0.19
12	±0.21

MANDATORY APPENDIX II REFERENCES

(11)

The following is a list of publications referenced in this Standard. Unless otherwise stated, the latest edition of ASME publications shall apply. Materials manufactured to other editions of the referenced ASTM Standard shall be permitted to be used to manufacture fittings meeting the requirements of this Standard as long as the fitting manufacturer verifies the material meets the requirements of the referenced edition.

ANSI/ASME B1.20.1, Pipe Threads, General Purpose (Inch)

ASME B16.14, Ferrous Pipe Plugs, Bushings, and Locknuts With Pipe Threads

Publisher: The American Society of Mechanical Engineers (ASME), Three Park Avenue, New York, NY 10016-5990; Order Department: 22 Law Drive, P.O. Box 2900, Fairfield, NJ 07007-2900 (www.asme.org)

ASTM A126-04(2009), Specification for Gray Iron Castings for Valves, Flanges, and Pipe Fittings

ASTM A153/A153M-09, Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware

ASTM B633-98¹, Specification for Electrodeposited Coatings of Zinc on Iron and Steel

ASTM E29-08, Standard Practice for Using Significant Digits in Test Data to Determine Conformance With Specifications

Publisher: American Society for Testing and Materials (ASTM International), 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959 (www.astm.org)

ISO 9000:2005, Quality management systems — fundamentals and vocabulary¹

ISO 9001:2008, Quality management systems — requirements¹

ISO 9004:2009, Managing for the sustained success of an organization — A quality management approach¹

Publisher: International Organization for Standardization (ISO) Central Secretariat, 1, ch. de la Voie-Creuse, Case postale 56, CH-1211 Genève 20, Switzerland/Suisse (www.iso.org)

¹ May also be obtained from the American National Standards Institute (ANSI), 25 West 43rd Street, New York, NY 10036.

NONMANDATORY APPENDIX A

QUALITY SYSTEM PROGRAM

The products manufactured in accordance with this Standard shall be produced under a quality system program following the principles of the ISO 9000 series.¹ A determination of the need for registration and/or

¹ The series is also available from the American National Standards Institute (ANSI) and the American Society for Quality (ASQ) as American National Standards that are identified by the prefix "Q," replacing the prefix "ISO." Each standard of the series is listed under References in Mandatory Appendix II.

certification of the product manufacturer's quality system program by an independent organization shall be the responsibility of the manufacturer. The detailed documentation demonstrating program compliance shall be available to the purchaser at the manufacturer's facility. A written summary description of the program utilized by the product manufacturer shall be available to the purchaser upon request. The product manufacturer is defined as the entity whose name or trademark appears on the product in accordance with the marking or identification requirements of this Standard.

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