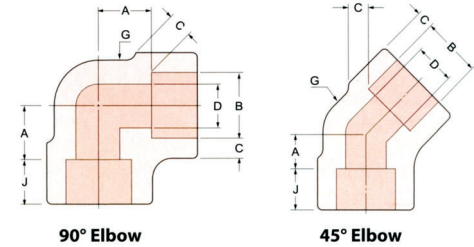


90° Elbow, 45° Elbow,

3000# 6000# 9000#



90° Elbow

45° Elbow

ANSI B16.11

Nom Pipe Size	Socket Bore Dia	Bore Diameter of Fitting-D		
		B	3000	6000
1/8	10.8 11.2	6.1~7.6	3.2~4.8	-
1/4	14.2 14.6	8.5~10.0	5.6~7.1	-
3/8	17.6 18.0	11.8~13.3	8.4~9.9	-
1/2	21.8 22.2	15.0~16.6	11.0~12.5	5.6~7.2
3/4	27.2 27.6	20.2~21.7	14.8~16.3	10.3~11.8
1	33.9 34.3	25.9~27.4	19.9~21.5	14.4~16.0
1 1/4	42.7 43.1	34.3~35.8	28.7~30.2	22.0~23.5
1 1/2	48.8 49.2	40.1~41.6	33.2~34.7	27.2~28.7
2	61.2 61.7	51.7~53.3	42.1~43.6	37.4~38.9
2 1/2	73.9 74.4	61.2~64.2	-	-
3	89.8 90.3	76.4~79.4	-	-
4	115.2 115.7	100.7~103.8	-	-

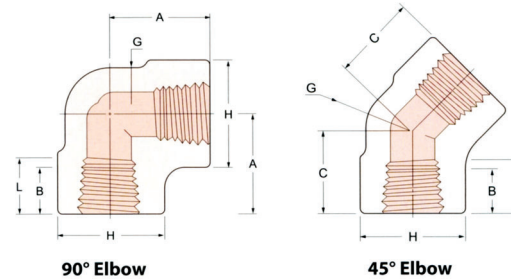
(Unit : mm)

Socket Wall Thickness C(Ave/Min)			Depth of Socket Min-J
3000	6000	9000	
3.18 / 3.18	3.96 / 3.43	-	9.5
3.78 / 3.30	4.60 / 4.01	-	9.5
4.01 / 3.50	5.03 / 4.37	-	9.5
4.67 / 4.09	5.97 / 5.18	9.35 / 8.18	9.5
4.90 / 4.27	6.96 / 6.04	9.78 / 8.56	12.5
5.69 / 4.98	7.92 / 6.93	11.38 / 9.96	12.5
6.07 / 5.28	7.92 / 6.93	12.14 / 10.62	12.5
6.35 / 5.54	8.92 / 7.80	12.70 / 11.12	12.5
6.93 / 6.04	10.92 / 9.50	13.84 / 12.12	16.0
8.76 / 7.67	-	-	16.0
9.52 / 8.30	-	-	16.0
10.69 / 9.35	-	-	19.0

- Dimensions are in millimeters.
- Average of socket wall thickness around periphery shall be no less than listed values. The minimum values are permitted in localized areas.

90° Elbow, 45° Elbow

2000# 3000# 6000#



ANSI B16.11

Nom Pipe Size	Center to End Elbow, Tees, Crosses A			Center to End 45° Elbow C		
	2000	3000	6000	2000	3000	6000
1/8	21	21	25	17	17	19
1/4	21	25	28	17	19	22
3/8	25	28	33	19	22	25
1/2	289	33	38	22	25	28
3/4	33	38	44	25	28	33
1	38	44	51	28	33	35
1 1/4	44	51	60	33	35	43
1 1/2	51	60	64	35	43	44
2	60	64	83	43	44	52
2 1/2	76	83	95	52	52	64
3	86	95	106	64	64	79
4	106	114	114	79	79	79

(Unit : mm)

Outside Diameter of Bend H			Minimum Wall Thickness G			Length of thread Min(1)	
2000	3000	6000	2000	3000	6000	B	L
22	22	25	3.18	3.18	6.35	6.4	6.7
22	25	33	3.18	3.30	6.60	8.1	10.2
25	33	38	3.18	3.51	6.98	9.1	10.4
33	38	46	3.18	4.09	8.15	10.9	13.6
38	46	56	3.18	4.32	8.53	12.7	13.9
46	56	62	3.68	4.98	9.93	14.7	17.3
56	62	75	3.89	5.28	10.59	17.0	18.0
62	75	84	4.01	5.56	11.07	17.8	18.4
75	84	102	4.27	7.14	12.09	19.0	19.2
92	102	121	5.61	7.65	15.29	23.6	28.9
110	121	146	5.99	8.84	16.64	25.9	30.5
146	152	152	6.55	11.18	18.67	27.7	33.0

• Dimensions B is minimum length of perfect thread. The length of useful thread(L plus threads with fully formed roots and crests) shall not be less than L(effective length of external thread) required by American National Standard for Pipe Threads(ASME B1.20.1)