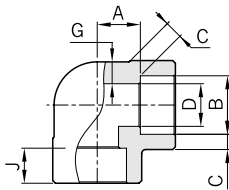
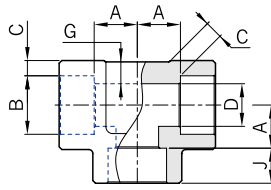


## Pipe Fittings

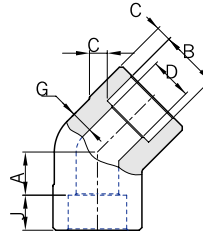
90° Elbow  
**SWLA**



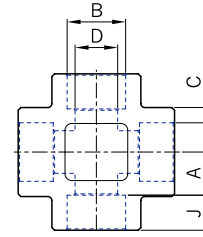
Tee  
**SWTA**



45° Elbow  
**SWLB**



Cross  
**SWXA**



### ASME B16.11

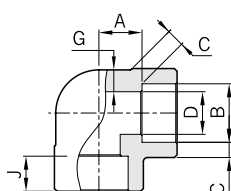
Class Designation of Fittings	Nom. Pipe Size	DN	B Socket Bore Dia. <sup>(1)</sup>	D Bore Dia. <sup>(1)</sup>	Socket Wall Thk. C <sup>(2)</sup>	Body Wall Thk. Min. G	Depth of socket Min. J	A	A 45° Elbows
3000	1/8	6	11.2 10.8	7.6 6.1	3.18 3.18	2.41	9.5	11.0	8.0
	1/4	8	14.6 14.2	10.0 8.5	3.78 3.30	3.01	9.5	11.0	8.0
	3/8	10	18.0 17.6	13.3 11.8	4.01 3.50	3.20	9.5	13.5	8.0
	1/2	15	22.2 21.8	16.6 15.0	4.67 4.09	3.73	9.5	15.5	11.0
	3/4	20	27.6 27.2	21.7 20.2	4.90 4.27	3.91	12.5	19.0	12.5
	1	25	34.3 33.9	27.4 25.9	5.69 4.98	4.55	12.5	22.5	14.0
	1 1/4	32	43.1 42.7	35.8 34.3	6.07 5.28	4.85	12.5	27.0	17.5
	1 1/2	40	49.2 48.8	41.6 40.1	6.35 5.54	5.08	12.5	32.0	20.5
	2	50	61.7 61.2	53.3 51.7	6.93 6.04	5.54	16.0	38.0	25.5
	2 1/2	65	74.4 73.9	64.2 61.2	8.76 7.67	7.01	16.0	41.0	28.5
	3	80	90.3 89.8	79.4 76.4	9.52 8.30	7.62	16.0	57.0	32.0
4	100	115.7 115.2	103.8 100.7	10.69 9.35	8.56	19.0	66.5	41.0	

Note : (1) Upper and lower values for each size are the respective maximum and minimum dimensions.

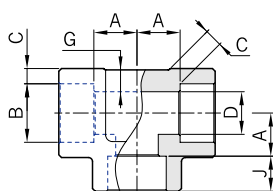
(2) Average of socket wall thickness around periphery shall be no less than listed values.  
The minimum values are permitted in localized areas.

All dimensions are in millimeters.

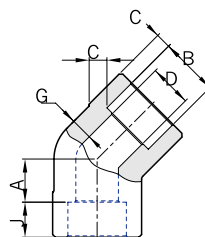
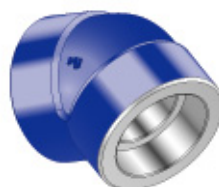
90° Elbow  
**SWLA**



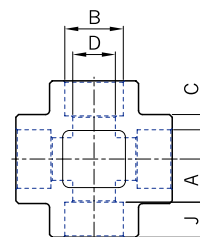
Tee  
**SWTA**



45° Elbow  
**SWLB**



Cross  
**SWXA**



**ASME B16.11**

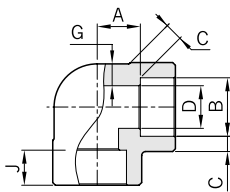
Class Designation of Fittings	Nom. Pipe Size	DN	B Socket Bore Dia. <sup>(1)</sup>	D Bore Dia. <sup>(1)</sup>	Socket Wall Thk. C <sup>(2)</sup>	Body Wall Thk. Min. G	Depth of socket Min. J	A	A 45° Elbows
6000	1/8	6	11.2 10.8	4.8 3.2	3.96 3.43	3.15	9.5	11.0	8.0
	1/4	8	14.6 14.2	7.1 5.6	4.60 4.01	3.68	9.5	13.5	8.0
	3/8	10	18.0 17.6	9.9 8.4	5.03 4.37	4.01	12.5	15.5	11.0
	1/2	15	22.2 21.8	12.5 11.0	5.97 5.18	4.78	9.5	19.0	12.5
	3/4	20	27.6 27.2	16.3 14.8	6.96 6.04	5.56	12.5	22.5	14.0
	1	25	34.3 33.9	21.5 19.9	7.92 6.93	6.35	12.5	27.0	17.5
	1 1/4	32	43.1 42.7	30.2 28.7	7.92 6.93	6.35	12.5	32.0	20.5
	1 1/2	40	49.2 48.8	34.7 33.2	8.92 7.80	7.14	12.5	38.0	25.5
	2	50	61.7 61.2	43.6 42.1	10.92 9.50	8.74	16.0	41.0	28.5

Note : (1) Upper and lower values for each size are the respective maximum and minimum dimensions.

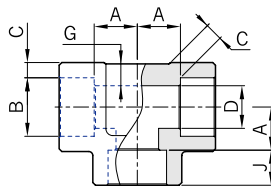
(2) Average of socket wall thickness around periphery shall be no less than listed values. The minimum values are permitted in localized areas.

## Pipe Fittings

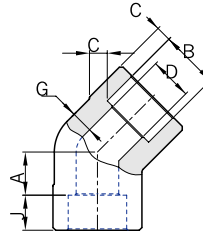
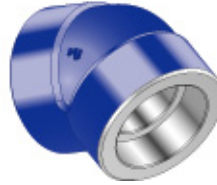
90° Elbow  
**SWLA**



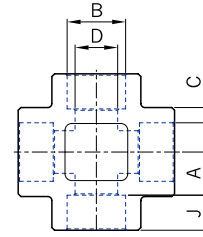
Tee  
**SWTA**



45° Elbow  
**SWLB**



Cross  
**SWXA**



### ASME B16.11

Class Designation of Fittings	Nom. Pipe Size	DN	B Socket Bore Dia. <sup>(1)</sup>	D Bore Dia. <sup>(1)</sup>	Socket Wall Thk. C <sup>(2)</sup>	Body Wall Thk. Min. G	Depth of socket Min. J	A	A 45° Elbows
9000	1/2	15	22.2 21.8	7.2 5.6	9.35 8.18	7.47	9.5	25.5	15.5
	3/4	20	27.6 27.2	11.8 10.3	9.78 8.56	7.82	12.5	28.5	19.0
	1	25	34.3 33.9	16.0 14.4	11.38 9.96	9.09	12.5	32.0	20.5
	1 1/4	32	43.1 42.7	23.5 22.0	12.14 10.62	9.70	12.5	35.0	22.5
	1 1/2	40	49.2 48.8	28.7 27.2	12.70 11.12	10.15	12.5	38.0	25.5
	2	50	61.7 61.2	38.9 37.4	13.84 12.12	11.07	16.0	54.0	28.5

Note : (1) Upper and lower values for each size are the respective maximum and minimum dimensions.

(2) Average of socket wall thickness around periphery shall be no less than listed values.  
The minimum values are permitted in localized areas.

All dimensions are in millimeters.