Steel Mart(India)

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ASME B16.11 Forged Fittings

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ASME B16.11 Forged Fittings

ASME B16.11 Threaded Fittings Supplier in India, Stockist of ASME B16.11 Forged Steel Fittings in Mumbai.

Stockholder of Stainless Steel Fittings ASME B16.11, Check ASME B16.11 Fittings Weight

ASTM B16.11 is the standard used for the forged steel fittings which includes socket weld and threaded fittings type. This standard is available in carbon steel, alloy steel and stainless steel materials. 45 and 90 degree elbow, its size range is 1/2" to 4", and the classes of the product are ranging in 3000, 6000 and 9000 lbs. ASME B16.11 Fittings are designated as Class 2000, 3000, and 6000 for threaded fittings and Class 3000, 6000, and 9000 for socket-weld fittings.

ASME B16.11 Forged Fittings are manufactured by forging and machining solid steel and are available in various shapes like tees, reducers, unions, elbows, couplings. Normally Class 3000 fittings are used for pipes in schedule 80/XS; Class 6000 for pipes Sch. 160; Class 9000 fittings for pipes with larger wall thickness (XXS).

ASTM B16.11 Forged fittings are manufactured from solid blocks of steel, that are machined to obtain the final required shape within the tolerances. Forged tee are used to branch a pipe at 90 degrees. These Forged tee can be Equal tee or Reducing Tee. Couplings are the fittings which is used to join pipes.

ASME B16.11 Socket weld fittings are available in sizes from 15mm nominal bore which can be delivered anywhere in the world. ASME B16.11 Socket Weld Union should be screwed tight before the ends are welded, to minimize warping of seat.

Steel Mart(India)

Buy ASME B16.11 Socket Weld Fittings at best price, Manufacturer of ASME B16.11 Elbow in Mumbai, ASME B16.11 Forged Fittings Distributor, ASME B16 11 Union Stockholder in India

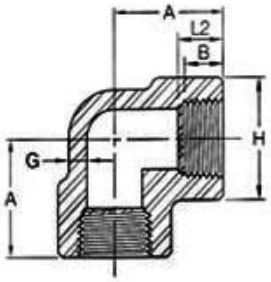
Our ASME B16.11 stainless steel threaded fittings & ASME B16.11 forged fittings are provided safely to all over world, out of 6 top manufacturers of forged fittings in India based on pressure rating of our forged fittings. Steel Mart India is a manufacturer of ASME B16.11 Fittings offering in all Ratings up to 6000#, we have built a distribution network with more then 65 countries globally to deliver our ASME B16.11 Union Worldwide.

ASME B16.11 Forged Socket Weld Fittings are used in Marine engineering, Petrochemical plants, Nuclear power projects, Valves manufacturing, Chemical processing, Hydro-carbon processing, Heat exchangers, Pumps manufacturing. We are supplier of raw materials to manufacture Forged fittings from ISO and PED approved mills- Raw Material Origin Indian. We have gained several orders of ASME B16.11 Socket Weld Fittings from countries like Oman, Riyadh(Saudi Arabia), Qatar, Kuwait, Indonesia, Thailand, Turkey, Singapore, United Arab Emirates, Vietnam, Bangladesh & other countries in the GCC region.

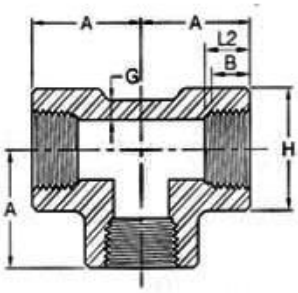
Steel Mart India employees take personal pride in production and delivery efforts and are committed to a high standard of excellence for customer service. Our products order is packaged according to the customer's requirement including preparation for export such as wooden case, pallet or according to customer's requirement.

Steel Mart(India)

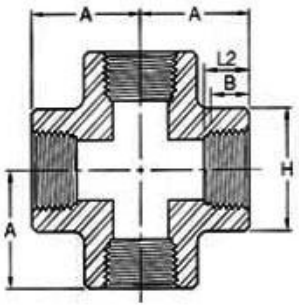
ASME B16.11 Threaded Fittings



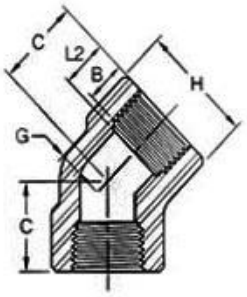
90° ELBOW



TEE



CROSS



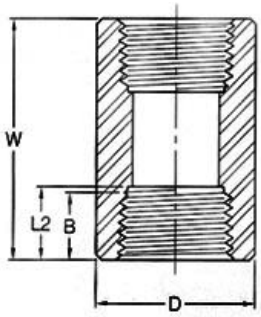
45° ELBOW

DN	Nom. Pipe Size	Center to End Elbow, Tee, Cross A			Center to End 45° Elbow C			Outside Diameter Of Band H			Minimum Wall Thickness G			Length of Thread Min. (1)	
		2000	3000	6000	2000	3000	6000	2000	3000	6000	2000	3000	6000	B	L2
6	1/8”	21	21	25	17	17	19	22	22	25	3.18	3.18	6.35	6.4	6.7
8	1/4”	21	25	28	17	19	22	22	25	33	3.18	3.30	6.60	8.1	10.2
10	3/8”	25	28	33	19	22	25	25	33	38	3.18	3.51	6.98	9.1	10.4
15	1/2”	28	33	38	22	25	28	33	38	46	3.18	4.09	8.15	10.9	13.6
20	3/4”	33	38	44	25	28	33	38	46	56	3.18	4.32	8.53	12.7	13.9
25	1”	38	44	51	28	33	35	46	56	62	3.68	4.98	9.93	14.7	17.3
32	1-1/4”	44	51	60	33	35	43	56	62	75	3.89	5.28	10.59	17.0	18.0
40	1-1/2”	51	60	64	35	43	44	62	75	84	4.01	5.56	11.07	17.8	18.4
50	2”	60	64	83	43	44	52	75	84	102	4.27	7.14	12.09	19.0	19.2
65	2-1/2”	76	83	95	52	52	64	92	102	121	5.61	7.65	15.29	23.6	28.9
80	3”	86	95	106	64	64	79	109	121	146	5.99	8.84	16.64	25.9	30.5
100	4”	106	114	114	79	79	79	146	152	152	6.55	11.18	18.67	27.7	33.0

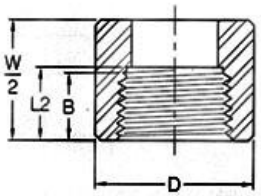
(1) Dimensions in Millimeters.

(2) 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/ASME B1.20.1)

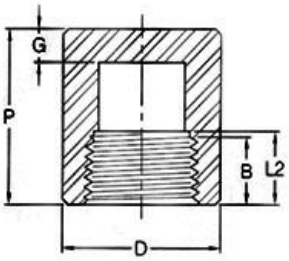
ASME B16.11 Threaded Fittings



COUPLING



HALF COUPLING



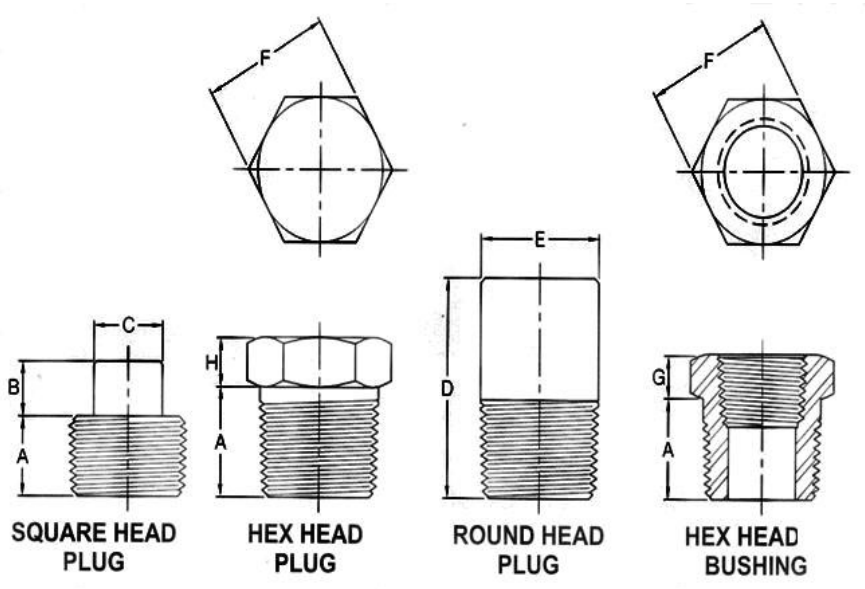
CAP

DN	Nom. Pipe Size	Center to End Coupling W	Center to End Cap P		Outside Diameter D		End Wall Thickness G Min.		Length of Thread Min. (1)	
		3000 & 6000	3000	6000	3000	6000	3000	6000	B	L2
6	1/8”	32	19		16		4.8		6.4	6.7
8	1/4”	35	25	27	19	25	4.8	6.4	8.1	10.2
10	3/8”	38	25	27	22	32	4.8	6.4	9.1	10.4
15	1/2”	48	32	33	28	38	6.4	7.9	10.9	13.6
20	3/4”	51	37	38	35	44	6.4	7.9	12.7	13.9
25	1”	60	41	43	44	57	9.7	11.2	14.7	17.3
32	1-1/4”	67	44	46	57	64	9.7	11.2	17.0	18.0
40	1-1/2”	79	44	48	64	76	11.2	12.7	17.8	18.4
50	2”	86	48	51	76	92	12.7	15.7	19.0	19.2
65	2-1/2”	92	60	64	92	108	15.7	19.0	23.6	28.9
80	3”	108	65	68	108	127	19.0	22.4	25.9	30.5
100	4”	121	68	75	140	159	22.4	28.4	27.7	33.0

(1) Dimensions in Millimeters.

(2) 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/ASME B1.20.1)

ASME B16.11 Threaded Fittings



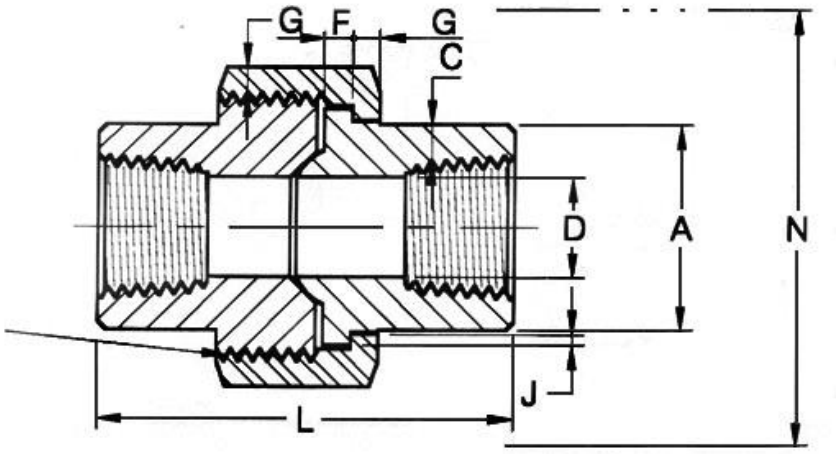
DN	Nom. Pipe Size	Length (Min.)	Square Head Plug		Round Head Plug		Hex. Head Plug & Bushing		
			Height of Square (Min.)	Width Flat (Min.)	Nominal Diameter of Head (Nom)	Length (Min.)	Width Flat (Nom.)	Hex. Height (Min.)	
								Bushing	Plug
		A	B	C	E	D	F	G	H
6	1/8”	10	6	7	10	35			6
8	1/4”	11	6	10	14	41	16	3	6
10	3/8”	13	8	11	18	41	18	4	8
15	1/2”	14	10	14	21	44	22	5	8
20	3/4”	16	11	16	27	44	27	6	10
25	1”	19	13	21	33	51	36	6	10
32	1-1/4”	21	14	24	43	51	46	7	14
40	1-1/2”	21	16	28	48	51	50	8	16
50	2”	22	18	32	60	64	65	9	18
65	2-1/2”	27	19	36	73	70	75	10	19
80	3”	28	21	41	89	70	90	10	21
100	4”	32	25	65	114	76	115	13	25

(1) Dimensions in Millimeters.
(2) CAUTIONARY NOTE REGARDING HEX BUSHINGS.

Hex head bushing of one-size reduction should not be used in services where they might be subject to harmful loads and forces other than internal pressure.

ASME B16.11 Unions Threaded Fittings

H-Thrd's
Minimum 4 Full Thrd's
Engagement Class 2A/2B Fit
ANSI B1.1

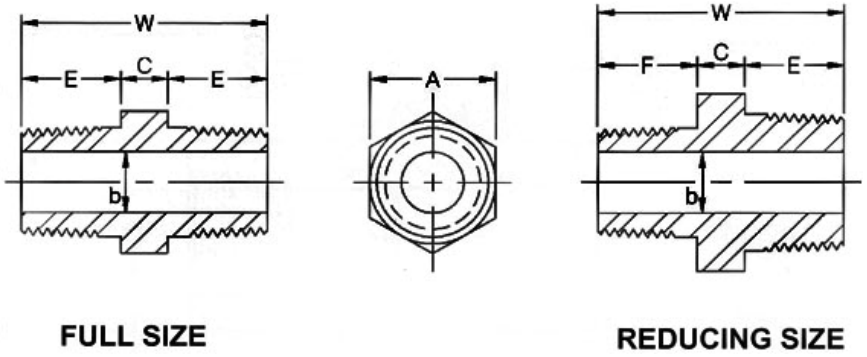


Nom. Pipe Size	Pipe End	Wall	Water Way Bore	Male Flange	Nut	Threads Per 25.4mm	Bearing	Length Assem. Nom.	Clear Assem. Nut
	Min. A	Min. C	D	Min. F	Min. G	Max. H	Min. J	L	N
1/8”	14.7	2.41	8.43 6.43	3.18	3.18	16	1.24	41.4	50.8
1/4”	19.0	3.02	11.13 9.45	3.18	3.18	16	1.24	41.4	50.8
3/8”	22.9	3.20	14.27 13.51	3.43	3.43	14	1.37	46.0	55.9
1/2”	27.7	3.73	17.86 17.07	3.68	3.68	14	1.50	49.0	58.4
3/4”	33.5	3.91	23.01 21.39	4.06	4.06	11	1.68	56.9	66.0
1”	41.4	4.55	28.98 27.74	4.57	4.45	11	1.85	62.0	78.7
1-1/4”	50.5	4.85	37.69 35.36	5.33	5.21	11	2.13	71.1	94.0
1-1/2”	57.2	5.08	43.54 41.20	5.84	5.59	10	2.31	76.5	111.8
2”	70.1	5.54	55.58 52.12	6.60	6.35	10	2.69	86.1	132.1

2-1/2”	85.3	7.01	66.27 64.31	7.49	7.11	8	3.07	102.4	149.9
3”	102.4	7.62	88.25 77.27	8.26	8.00	8	3.53	109.0	175.3

(1) Dimensions in Millimeters.
(2) Upper and lower values for each size are the respective maximum and minimum dimensions.

ASME B16.11 Hex Nipples Threaded Fittings



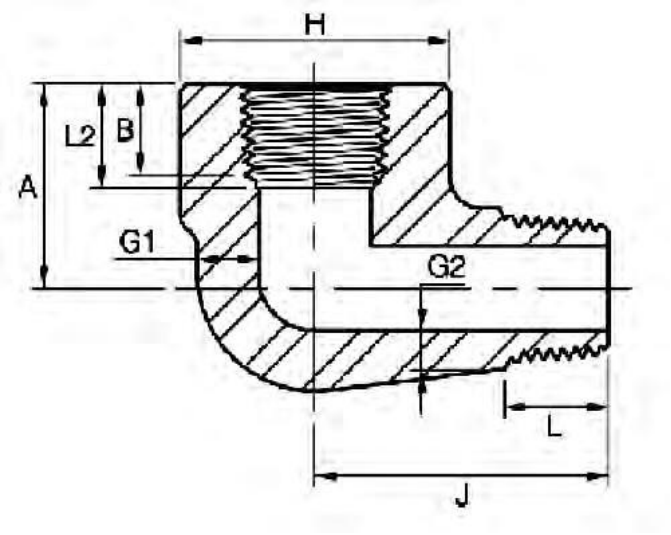
FULL SIZE REDUCING SIZE

Nominal Size		A	W	E	b		C	F
DN	Inch	(Min)	(Min)	(Min)	3000	6000	(Min)	(Min)
6	1/8”	11	26	10	5	2	6	-
8	1/4”	15	36	15	8	6	6	-
8 x 6	1/4”x1/8”	15	31	15	5	2	6	10
10	3/8”	18	40	16	11	8	8	-
10 x 8	3/8”x1/4”	18	39	16	8	6	8	15
15	1/2”	22	48	20	14	11	8	-
15 x 10	1/2”x3/8”	22	44	20	11	8	8	16
15 x 8	1/2”x1/4”	22	43	20	8	6	8	15
20	3/4”	27	52	21	19	13	10	-
20 x 15	3/4”x1/2”	27	50	21	14	11	9	20
20 x 10	3/4”x3/8”	27	46	21	11	8	9	16
25	1”	35	60	25	24	17	10	-
25 x 20	1”x3/4”	35	56	25	19	13	10	21
25 x 15	1”x1/2”	35	55	25	14	11	10	20
40	1-1/2”	50	68	26	38	30	16	-
40 x 25	1-1/2”x1”	50	67	26	24	17	16	25

40 x 20	1-1/2”x3/4”	50	63	26	19	13	16	21
40 x 15	1-1/2”x1/2”	50	62	26	14	11	16	20
50	2”	62	71	27	49	39	17	-
50 x 40	2”x1-1/2”	62	70	27	38	30	17	26
50 x 25	2”x1”	62	70	27	24	17	18	25
50 x 20	2”x3/4”	62	65	27	19	13	17	21
50 x 15	2”x1/2”	62	65	27	14	11	18	20

Dimensions in Millimeters.

Street Elbows Threaded Fittings

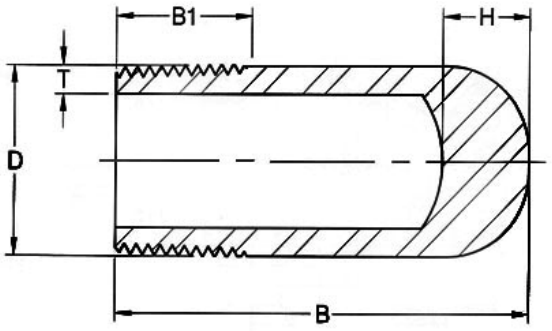


DN	Nom. Pipe Size	H		A		J		G1 (Min.)		G2 (1) (Min)		B (2) (Min)	L2 (2) (Min)	L (Min)
		3000	6000	3000	6000	3000	6000	3000	6000	3000	6000			
6	1/8”	19	25	19	22	25	32	3.18	5.08	2.74	4.22	6.4	6.7	10.0
8	1/4”	25	32	22	25	32	38	3.30	5.66	3.22	5.28	8.1	10.2	11.0
10	3/8”	32	38	25	28	38	41	3.50	6.98	3.50	5.59	9.1	10.4	13.0
15	1/2	38	44	28	35	41	48	4.09	8.15	4.16	6.53	10.9	13.6	14.0
20	3/4	44	51	35	44	48	57	4.32	8.53	4.88	6.86	12.7	13.9	16.0
25	1	51	62	44	51	57	66	4.98	9.93	5.56	7.95	14.7	17.3	19.0
32	1-1/4	62	70	51	54	66	71	5.28	10.59	5.56	8.48	17.0	18.0	21.0
40	1-1/2	70	84	54	64	71	84	5.56	11.07	6.25	8.89	17.8	18.4	21.0

50	2	84	102	64	83	84	105	7.14	12.09	7.64	9.70	19.0	19.0	22.0

(1) Dimensions in Millimeters.
(2) 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/ASME B1.20.1)

Bull Plugs Threaded Fittings

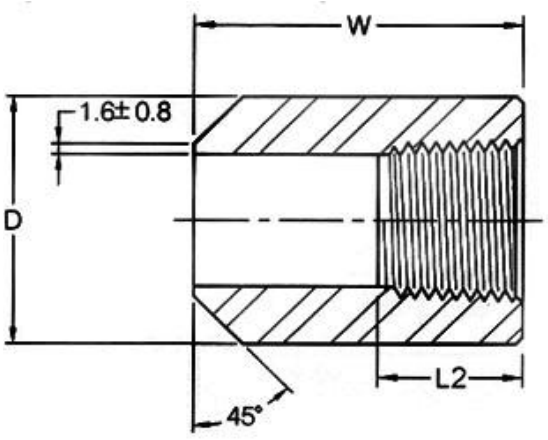


Nom. Pipe Size	D	B	B1	T (Min)				H
				Sch.40 (STD)	Sch.80 (XS)	Sch.160	XXS	
1/8”	10.3	34	9.5	1.73	2.41			14
1/4”	13.7	34	11.0	2.24	3.02			14
3/8”	17.1	57	12.5	2.31	3.20			14
1/2”	21.3	64	14.5	2.77	3.73	4.78	7.47	14
3/4”	26.7	70	16.0	2.87	3.91	5.56	7.82	18
1”	33.4	76	19.0	3.38	4.56	6.35	9.09	18
1-1/4”	42.2	83	20.5	3.56	4.85	6.35	9.70	18
1-1/2”	48.3	89	20.5	3.68	5.05	7.14	10.15	18

2”	60.3	102	22.0	3.91	5.54	8.74	11.07	20
2-1/2”	73.0	127	27.0	5.16	7.01	9.53	14.02	20
3”	88.9	152	28.5	5.49	7.60	11.13	15.24	20
4”	114.3	178	32.0	6.35	8.08	13.49	17.12	20

(1) Dimensions in Millimeters.
(2) Thread in accordance with ASME B1.20.1
(3) Wall thickness (T Min.) in accordance with ASME B36.10M.

ASME B16.11 Fittings Bosses Threaded Fittings

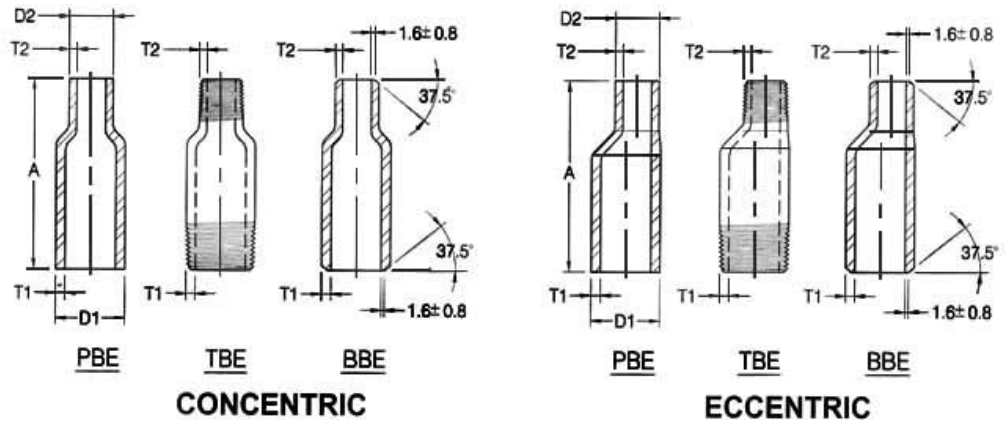


DN	Nom. Pipe Size	D		W		L2 (Min)	
		3000lb	6000lb	3000lb	6000lb	3000lb	6000lb
6	1/8”	16.0	22.0	38.0		6.70	
8	1/4”	19.0	26.0	41.0		10.21	
10	3/8”	22.0	32.0	45.0		10.36	
15	1/2”	29.0	38.0	51.0		13.56	

20	3/4”	35.0	45.0	51.0	13.86
25	1”	45.0	60.0	51.0	17.34
40	1-1/2”	64.0	76.0	51.0	18.38
50	2”	76.0	95.0	51.0	19.22
65	2-1/2”	95.0		51.0	28.89
80	3”	110.0		57.0	30.48
100	4”	140.0		64.0	33.02

Dimensions in Millimeters.

Swaged Nipples

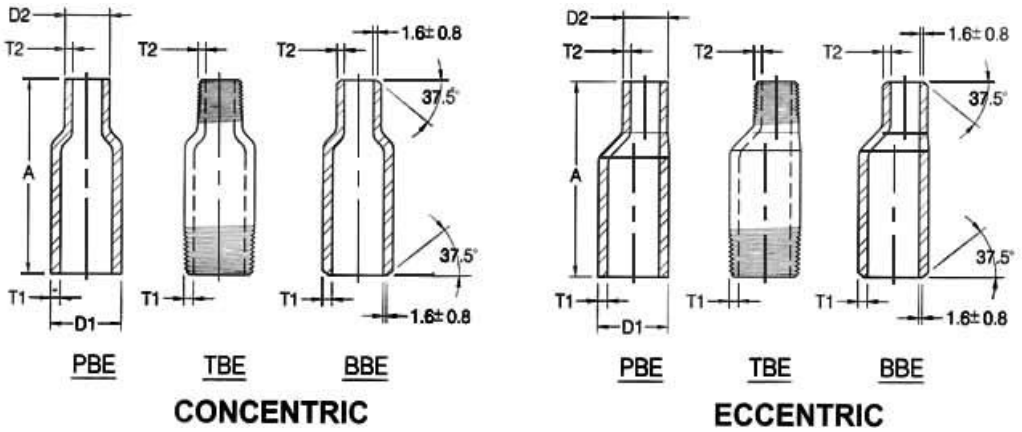


Nominal Pipe Size (NPS)	Outside Diameter		End To End “A”	Wall Thickness							
				T1				T2			
	Large End D1	Small End D2		Sch40 (STD)	Sch80 (XS)	Sch160	XXS	Sch40 (STD)	Sch80 (XS)	Sch160	XXS
1/4”x1/8”	13.7	10.3	57	2.2	3.0	3.7	6.1	1.7	2.4		

3/8”x1/8”	17.1	10.3	64	2.3	3.2	4.0	6.4	1.7	2.4		
3/8”x1/4”	17.1	13.7	64	2.3	3.2	4.0	6.4	2.2	3.0		
1/2”x1/8”	21.3	10.3	70	2.8	3.7	4.8	7.5	1.7	2.4		
1/2”x1/4”	21.3	13.7	70	2.8	3.7	4.8	7.5	2.2	3.0		
1/2”x3/8”	21.3	17.1	70	2.8	3.7	4.8	7.5	2.3	3.2		
3/4”x1/8”	26.7	10.3	76	2.9	3.9	5.6	7.8	1.7	2.4		
3/4’x1/4”	26.7	13.7	76	2.9	3.9	5.6	7.8	2.2	3.0		
3/4”x3/8”	26.7	17.1	76	2.9	3.9	5.6	7.8	2.3	3.2		
3/4”x1/2”	26.7	21.3	76	2.9	3.9	5.6	7.8	2.8	3.7	4.8	7.5
1”x1/8”	33.4	10.3	89	3.4	4.5	6.4	9.1	1.7	2.4		
1”x1/4”	33.4	13.7	89	3.4	4.5	6.4	9.1	2.2	3.0		
1”x3/8”	33.4	17.1	89	3.4	4.5	6.4	9.1	2.3	3.2		
1”x1/2”	33.4	21.3	89	3.4	4.5	6.4	9.1	2.8	3.7	4.8	7.5
1”x3/4”	33.4	26.7	89	3.4	4.5	6.4	9.1	2.9	3.9	5.6	7.8
1-1/4”x1/8”	42.2	10.3	102	3.6	4.9	6.4	9.7	1.7	2.4		
1-1/4”x1/4”	42.2	13.7	102	3.6	4.9	6.4	9.7	2.2	3.0		
1-1/4”x3/8”	42.2	17.1	102	3.6	4.9	6.4	9.7	2.3	3.2		
1-1/4”x1/2”	42.2	21.3	102	3.6	4.9	6.4	9.7	2.8	3.7	4.8	7.5
1-1/4”x3/4”	42.2	26.7	102	3.6	4.9	6.4	9.7	2.9	3.9	5.6	7.8
1-1/4”x1”	42.2	33.4	102	3.6	4.9	6.4	9.7	3.4	4.5	6.4	9.1
1-1/2”x1/8”	48.3	10.3	114	3.7	5.1	7.1	10.2	1.7	2.4		
1-1/2”x1/4”	48.3	13.7	114	3.7	5.1	7.1	10.2	2.2	3.0		
1-1/2”x3/8”	48.3	17.1	114	3.7	5.1	7.1	10.2	2.3	3.2		
1-1/2”x1/2”	48.3	21.3	114	3.7	5.1	7.1	10.2	2.8	3.7	4.8	7.5
1-1/2”x3/4”	48.3	26.7	114	3.7	5.1	7.1	10.2	2.9	3.9	5.6	7.8
1-1/2”x1”	48.3	33.4	114	3.7	5.1	7.1	10.2	3.4	4.5	6.4	9.1
1-1/2”x1-1/4”	48.3	42.2	114	3.7	5.1	7.1	10.2	3.6	4.9	6.4	9.7
2”x1/8”	60.3	10.3	165	3.9	5.5	8.7	11.1	1.7	2.4		
2”x1/4”	60.3	13.7	165	3.9	5.5	8.7	11.1	2.2	3.0		
2”x3/8”	60.3	17.1	165	3.9	5.5	8.7	11.1	2.3	3.2		
2”x1/2”	60.3	21.3	165	3.9	5.5	8.7	11.1	2.8	3.7	4.8	7.5

(Continued)

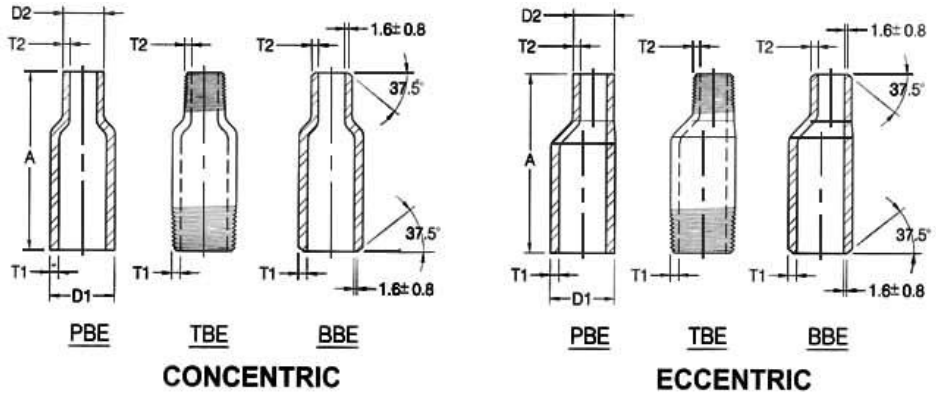
Swaged Nipples



Nominal Pipe Size (NPS)	Outside Diameter		End To End “A”	Wall Thickness							
				T1				T2			
	Large End D1	Small End D2		Sch40 (STD)	Sch80 (XS)	Sch160	XXS	Sch40 (STD)	Sch80 (XS)	Sch160	XXS
2”x3/4”	60.3	26.7	165	3.9	5.5	8.7	11.1	2.9	3.9	5.6	7.8
2”x1”	60.3	33.4	165	3.9	5.5	8.7	11.1	3.4	4.5	6.4	9.1
2”x1-1/4”	60.3	42.2	165	3.9	5.5	8.7	11.1	3.6	4.9	6.4	9.7
2”x1-1/2”	60.3	48.3	165	3.9	5.5	8.7	11.1	3.7	5.1	7.1	10.2

2-1/2”x1/8”	73.0	10.3	178	5.2	7.0	9.5	14.0	1.7	2.4		
2-1/2”x1/4”	73.0	13.7	178	5.2	7.0	9.5	14.0	2.2	3.0		
2-1/2”x3/8”	73.0	17.1	178	5.2	7.0	9.5	14.0	2.3	3.2		
2-1/2”x1/2”	73.0	21.3	178	5.2	7.0	9.5	14.0	2.8	3.7	4.8	7.5
2-1/2”x3/4”	73.0	26.7	178	5.2	7.0	9.5	14.0	2.9	3.9	5.6	7.8
2-1/2”x1”	73.0	33.4	178	5.2	7.0	9.5	14.0	3.4	4.5	6.4	9.1
2-1/2”x1-1/4”	73.0	42.2	178	5.2	7.0	9.5	14.0	3.6	4.9	6.4	9.7
2-1/2”x1-1/2”	73.0	48.3	178	5.2	7.0	9.5	14.0	3.7	5.1	7.1	10.2
2-1/2”x2”	73.0	60.3	178	5.2	7.0	9.5	14.0	3.9	5.5	8.7	11.1
3”x1/8”	88.9	10.3	203	5.5	7.6	11.1	15.2	1.7	2.4	3.2	4.8
3”x1/4”	88.9	13.7	203	5.5	7.6	11.1	15.2	2.2	3.0	3.7	6.1
3”x3/8”	88.9	17.1	203	5.5	7.6	11.1	15.2	2.3	3.2	4.0	6.4
3”x1/2”	88.9	21.3	203	5.5	7.6	11.1	15.2	2.8	3.7	4.8	7.5
3”x3/4”	88.9	26.7	203	5.5	7.6	11.1	15.2	2.9	3.9	5.6	7.8
3”x1”	88.9	33.4	203	5.5	7.6	11.1	15.2	3.4	4.5	6.4	9.1
3”x1-1/4”	88.9	42.2	203	5.5	7.6	11.1	15.2	3.6	4.9	6.4	9.7
3”x1-1/2”	88.9	48.3	203	5.5	7.6	11.1	15.2	3.7	5.1	7.1	10.2
3”x2”	88.9	60.3	203	5.5	7.6	11.1	15.2	3.9	5.5	8.7	11.1
3”x2-1/2”	88.9	73.0	203	5.5	7.6	11.1	15.2	5.2	7.0	9.5	14.0
3-1/2”x1/8”	101.6	10.3	203	5.7	8.1			1.7	2.4		
3-1/2”x1/4”	101.6	13.7	203	5.7	8.1			2.2	3.0		
3-1/2”x3/8”	101.6	17.1	203	5.7	8.1			2.3	3.2		
3-1/2”x1/2”	101.6	21.3	203	5.7	8.1			2.8	3.7	4.8	7.5
3-1/2”x3/4”	101.6	26.7	203	5.7	8.1			2.9	3.9	5.6	7.8
3-1/2”x1”	101.6	33.4	203	5.7	8.1			3.4	4.5	6.4	9.1
3-1/2”x1-1/4”	101.6	42.2	203	5.7	8.1			3.6	4.9	6.4	9.7

Swaged Nipples



Nominal Pipe Size (NPS)	Outside Diameter		End To End "A"	Wall Thickness							
				T1				T2			
	Large End D1	Small End D2		Sch40 (STD)	Sch80 (XS)	Sch160	XXS	Sch40 (STD)	Sch80 (XS)	Sch160	XXS
3-1/2"x1-1/2"	101.6	48.3	203	5.7	8.1			3.7	5.1	7.1	10.2
3-1/2"x2"	101.6	60.3	203	5.7	8.1			3.9	5.5	8.7	11.1
3-1/2"x2-1/2"	101.6	73.0	203	5.7	8.1			5.2	7.0	9.5	14.0
3-1/2"x3"	101.6	88.9	203	5.7	8.1			5.5	7.6	11.1	15.2
4"x1/4"	114.3	13.7	229	6.0	8.6	13.5	17.1	2.2	3.0		
4"x3/8"	114.3	17.1	229	6.0	8.6	13.5	17.1	2.3	3.2		
4"x1/2"	114.3	21.3	229	6.0	8.6	13.5	17.1	2.8	3.7	4.8	7.5
4"x3/4"	114.3	26.7	229	6.0	8.6	13.5	17.1	2.9	3.9	5.6	7.8
4"x1"	114.3	33.4	229	6.0	8.6	13.5	17.1	3.4	4.5	6.4	9.1
4"x1-1/4"	114.3	42.2	229	6.0	8.6	13.5	17.1	3.6	4.9	6.4	9.7
4"x1-1/2"	114.3	48.3	229	6.0	8.6	13.5	17.1	3.7	5.1	7.1	10.2
4"x2"	114.3	60.3	229	6.0	8.6	13.5	17.1	3.9	5.5	8.7	11.1
4"x2-1/2"	114.3	73.0	229	6.0	8.6	13.5	17.1	5.2	7.0	9.5	14.0
4"x3"	114.3	88.9	229	6.0	8.6	13.5	17.1	5.5	7.6	11.1	15.2
4"x3-1/2"	114.3	101.6	229	6.0	8.6	13.5	17.1	5.7	8.1		

(1) Dimensions in Millimeters.

(2) Wall Thickness：T1 & T2 in accordance with ASME B36.10M

PBE：Plain Both Ends　BBE：Bevel Both Ends　TBE：Thread Both Ends

PSE：Plain Small End　BSE：Bevel Small End　TSE：Thread Small End

PLE：Plain Large End　BLE：Bevel Large End　TLE：Thread Large End

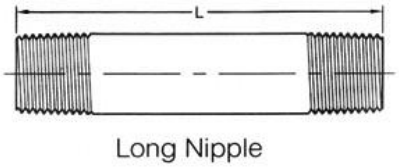
Dimensional Tolerance of Swaged Nipple

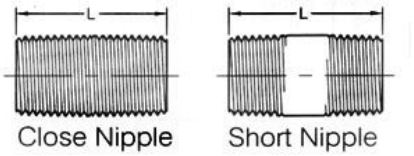
Nominal Pipe Size (inch)	Overall Length (mm)	Outside diamete at end r		Wall Thickness (prior to threading or grooving)
		Square Cut Ends (mm)	Other End Connection (mm)	
1/8" to 3/8"	± 1.5	+ 0.40 - 0.80	± 0.80	Not less than 87.5% of nominal wall thickness
1/2" to 1-1/2"	± 1.5	+ 0.40 - 0.80	+ 1.50 - 0.80	
2" to 2-1/2"	± 3.0	± 0.80	+ 1.50 - 0.80	
3" to 4"	± 3.0	± 0.80	± 1.50	

(1) Dimensions in Millimeters.

(2) Prior to threading or grooving

Pipe Nipples Threaded

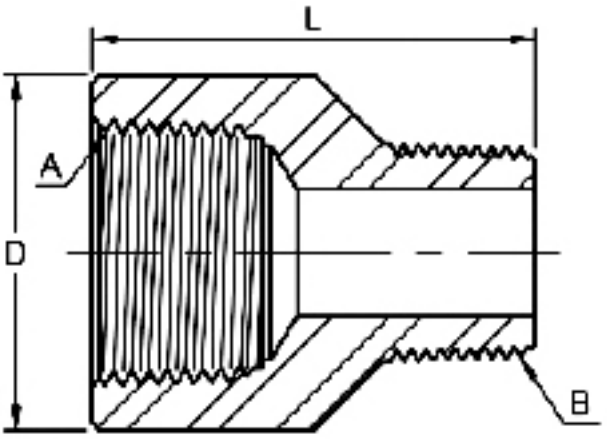




Nom. Pipe Size	L			Plain End Weight (kg/m)			
	Close Nipple	Short Nipple	Long Nipple	Sch40/STD	Sch80/XS	Sch160	XXS
1/8”	3/4	1-1/2	2~12	0.37	0.47		
1/4”	7/8	1-1/2	2~12	0.63	0.80		
3/8”	1	1-1/2	2~12	0.84	1.10		
1/2”	1-1/8	1-1/2	2~12	1.27	1.62	1.95	2.55
3/4”	1-3/8	2	2-1/2~12	1.69	2.20	2.90	3.64
1”	1-1/2	2	2-1/2~12	2.50	3.24	4.24	5.45
1-1/4”	1-5/8	2-1/2	3~12	3.39	4.47	5.61	7.77
1-1/2”	1-3/4	2-1/2	3~12	4.05	5.41	7.25	9.55
2”	2	2-1/2	3~12	5.44	7.48	11.11	13.44
2-1/2”	2-1/2	3	3-1/2~12	8.63	11.41	14.92	20.39
3”	2-5/8	3	3-1/2~12	11.29	15.27	21.35	27.68
3-1/2”	2-3/4	4	4-1/2~12	13.57	18.64		
4”	2-7/8	4	4-1/2~12	16.08	22.32	33.54	41.03
5”	3	4-1/2	5~12	21.77	30.97	49.12	57.43
6”	3-1/8	4-1/2	5~12	28.26	42.56	67.57	79.22

(1) Dimensions in Millimeters.
(2) Thickness in accordance with ASME B1.20.1
(3) Weld bevel in accordance with ASME B16.25
(4) Weight in accordance with ASME B36.10M Table 1.

Adapter Threaded Fittings

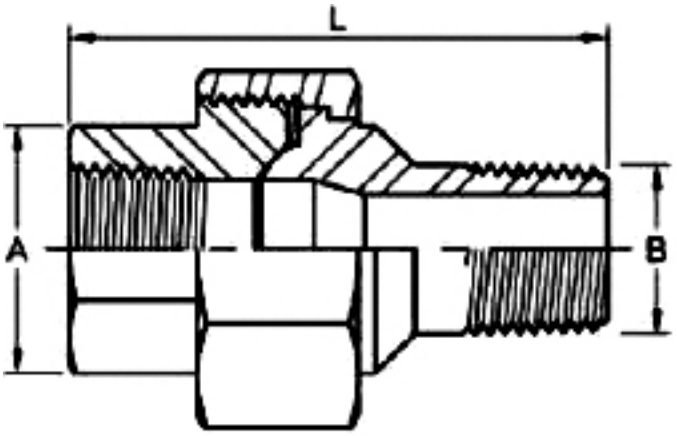


3000LB

DN	Nom Pipe Size A	D	L	Threaded Size B
8	1/4”	19	33	1/8”
10	3/8”	22	35	1/4”
15	1/2”	28	42	3/8”
20	3/4”	35	47	1/2”
25	1”	44	55	3/4”
32	1-1/4”	57	63	1”
40	1-1/2”	64	66	1-1/4”
50	2”	76	76	1-1/2”
65	2-1/2”	92	90	2”
80	3”	108	110	2-1/2”
100	4”	140	120	3”

(1) Dimensions in Millimeters.
(2) Thickness in accordance with ANSI / ASME B1.20.1 1983
(3) Dimensions may vary according to the customers’ and manufacturer’s requirement.

Union (Male x Female)

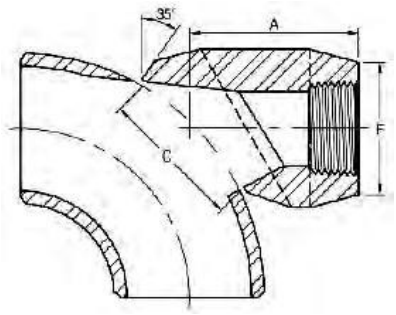


3000LB

Nom Pipe Size	A (2) (Min)	B	L
1/4”	19.0	13.7	55.4
3/8”	22.9	17.1	60.0
1/2”	27.7	21.3	68.0
3/4”	33.5	26.7	75.9
1”	41.4	33.4	86.0
1-1/4”	50.5	42.2	95.1
1-1/2”	57.2	48.3	100.5
2”	70.1	60.3	112.1

(1) Dimensions in Millimeters.
(2) Dimensions refer to MSS SP-83 Table 5.
(3) Thickness in accordance with ANSI / ASME B1.20.1 1983
(4) Dimensions may vary according to the customers’ and manufacturer’s requirement.

90˚ Elbow Outlet Threaded



3000LB

Outlet Pipe		A	C	F
DN	Inch			
8	1/4”	40.5	35.2	22.0
10	3/8”	40.5	35.2	25.9
15	1/2”	40.5	35.2	31.4
20	3/4”	47.6	43.6	37.1
25	1”	55.6	54.0	45.5
32	1-1/4”	60.3	67.5	57.0
40	1-1/2”	66.7	76.2	64.0
50	2”	81.0	104.8	76.0
65	2-1/2”	82.6	106.4	92.0
80	3”	96.8	125.4	109.2
100	4”	114.3	163.5	140.0

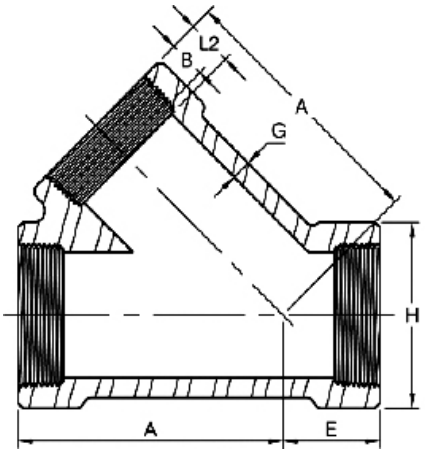
6000LB

Outlet Pipe		A	C	F
DN	Inch			
8	1/4”	40.5	34.9	26.0
10	3/8”	40.5	34.9	33.0
15	1/2”	47.6	34.9	38.0
20	3/4”	55.6	43.6	44.0
25	1”	60.3	54.0	57.0
32	1-1/4”	66.7	67.5	64.0

40	1-1/2”	85.7	76.2	76.0

(1) Dimensions in Millimeters.
(2) Thread in accordance with ASME B1.20.1
(3) Dimensions may vary according to the customer’s and manufacturer’s requirement.

45˚ Lateral Tee Threaded



2000LB

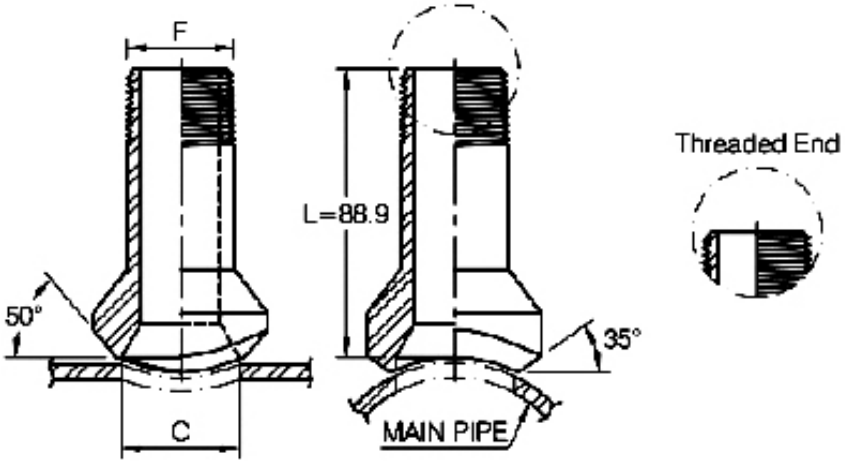
DN	Nom. Pipe Size	Length of Thread (Min)		A	E	G (2) (Min)	H (2)
		B (3)	L2 (3)				
15	1/2”	10.9	13.6	46	20	3.18	33
20	3/4”	12.7	13.9	55	23	3.18	38
25	1”	14.7	17.3	65	26	3.68	46
32	1-1/4”	17.0	18.0	73	31	3.89	56
40	1-1/2”	17.8	18.4	82	35	4.01	62
50	2”	19.0	19.2	113	42	4.27	75
65	2-1/2”	23.6	28.9	136	56	5.61	92

3000LB

DN	Nom. Pipe Size	Length of Thread (Min)		A	E	G (2) (Min)	H (2)
		B (3)	L2 (3)				
15	1/2”	10.9	13.6	55	23	4.09	38
20	3/4”	12.7	13.9	65	26	4.32	46
25	1”	14.7	17.3	73	31	4.98	56
32	1-1/4”	17.0	18.0	82	35	5.28	62
40	1-1/2”	17.8	18.4	113	42	5.56	75
50	2”	19.0	19.2	136	56	7.14	84

(1) Dimensions in Millimeters.
(2) Dimensions refer to ANSI B16.11
(3) 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/ASME B1.20.1)
(4) Dimensions of BSP and PT are available if required.
(5) Dimensions may vary according to the customer's and manufacturer's requirement.

Nipple Branch Outlet Threaded

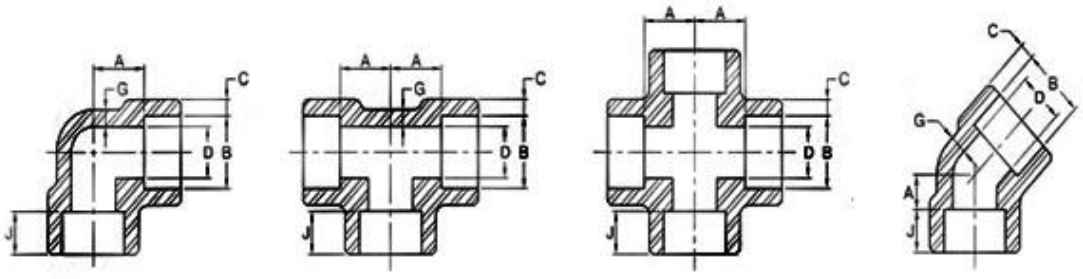


Outlet Pipe	C		F
	3000LB	6000LB	
1/2”	23.8	13.8	21.3
3/4”	30.2	18.9	26.7
1”	36.5	24.3	33.4
1-1/4”	44.5	32.5	42.2
1-1/2”	50.8	38.1	48.3
2”	65.1	49.2	60.3

(1) Dimensions in Millimeters.
(2) Thread in accordance with ASME B1.20.1
(3) Dimensions may vary according to the customer’s and manufacturer’s requirement.

Steel Mart(India)

Socket Weld Fittings



DN	Nom. Pipe Size	Center to Bottom of Socket-A						Socket Bore Dia. B	Bore Dia. Of Fitting D			Socket Wall Thickness (2) C						Body Wall Thickness G			Depth of Socket Min. J
		90° Elbows Tees, Crosses			45° Elbows							Class Designation						Class Designation			
		Class Designation			Class Designation				Class Designation			3000		6000		9000		3000	6000	9000	
		3000	6000	9000	3000	6000	9000		3000	6000	9000	Ave.	Min	Ave.	Min	Ave.	Min	Min.	Min.	Min.	
6	1/8”	11.0	11.0		8.0	8.0		10.8	6.9	4.0		3.18	3.18	3.96	3.43			2.41	3.15		9.5
8	1/4”	11.0	13.5		8.0	8.0		14.2	9.3	6.4		3.78	3.30	4.60	4.01			3.02	3.68		9.5
10	3/8”	13.5	15.5		8.0	11.0		17.6	12.6	9.2		4.01	3.50	5.03	4.37			3.20	4.01		9.5
15	1/2”	15.5	19.0	25.5	11.0	12.5	15.5	21.8	15.8	11.8	6.4	4.67	4.09	5.97	5.18	9.35	8.18	3.73	4.78	7.47	9.5
20	3/4”	19.0	22.5	28.5	13.0	14.0	19.0	27.2	21.0	15.6	11.1	4.90	4.27	6.96	6.04	9.78	8.56	3.91	5.56	7.82	12.5
25	1”	22.5	27.0	32.0	14.0	17.5	20.5	33.9	26.7	20.7	15.2	5.69	4.98	7.92	6.93	11.38	9.96	4.55	6.35	9.09	12.5
32	1-1/4”	27.0	32.0	35.0	17.5	20.5	22.5	42.7	35.1	29.5	22.8	6.07	5.28	7.92	6.93	12.14	10.62	4.85	6.35	9.70	12.5
40	1-1/2”	32.0	38.0	38.0	20.5	25.5	25.5	48.8	40.9	34.0	28.0	6.35	5.54	8.92	7.80	12.70	11.12	5.08	7.14	10.15	12.5
50	2”	38.0	41.0	54.0	25.5	28.5	28.5	61.2	52.5	42.9	38.2	6.93	6.04	10.92	9.50	13.84	12.12	5.54	8.74	11.07	16.0
65	2-1/2”	41.0			28.5			73.9	62.7			8.76	7.67					7.01			16.0
80	3”	57.0			32.0			89.8	78.0			9.52	8.30					7.62			16.0
100	4”	66.5			41.0			115.2	102.3			10.69	9.35					8.56			19.0

(1) Dimensions in Millimeters.
(2) Average of socket wall thickness around periphery shall be no less than listed values. The minimum values are permitted in localized areas.
(3) Upper and lower values for each size are the respective maximum and minimum dimensions.