

SCREWED FITTINGS



EQUAL TEE



CROSS



STREET ELBOW



M/F UNION



COUPLING



CAP



UNION



SQ HEAD PLUG



HEX BUSHING



FLUSH BUSHING



HEX HEAD PLUG



BARREL

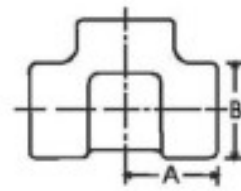
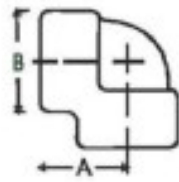


HEX NIPPLE

Used to allow flow of fluids through desired sizes of flowing cross-section with diversion of flow to the desired points under normal working condition.



SCREWED FITTINGS ■ ANSI B 16.11 - 1973



2000 POUND 90° ELBOW

45° ELBOW

TEE

Nominal Pipe Size	90° ELBOW			45° ELBOW			TEE		
	A	B	Approx Weight	C	E	Approx Weight	A	B	Approx Weight
6	21	22	0.11	17	22	0.06	21	22	0.11
8	21	22	0.11	17	22	0.06	21	22	0.11
10	25	25	0.14	19	25	0.11	25	25	0.14
15	29	33	0.25	22	33	0.20	29	33	0.25
20	33	38	0.31	25	38	0.29	33	38	0.43
25	38	46	0.51	29	46	0.43	38	46	0.65
32	44	56	0.77	33	56	0.63	44	56	0.91
40	51	62	1.02	35	62	0.74	51	62	1.25
50	60	75	1.59	43	75	1.22	60	75	2.10
65	76	92	2.95	52	92	3.52	76	92	3.94
80	86	110	4.76	64	110	5.13	86	110	5.98
100	106	146	10.31	79	146	8.68	106	146	12.36

3000 POUND

6	21	22	0.11	17	22	0.11	21	22	0.11
8	25	25	0.17	19	25	0.11	25	25	0.17
10	29	33	0.29	22	33	0.23	29	33	0.37
15	33	38	0.60	25	38	0.34	33	38	0.54
20	38	46	0.63	29	46	0.54	38	46	0.85
25	44	56	1.02	33	56	0.85	44	56	1.13
32	51	62	1.25	35	62	0.97	51	62	1.42
40	60	75	1.59	43	75	1.36	60	75	2.27
50	64	84	2.47	45	84	1.93	64	84	3.06
65	83	102	4.86	52	102	3.35	83	102	5.96
80	95	121	6.56	64	121	4.76	95	121	9.24
100	114	152	13.78	79	152	8.65	114	152	17.92

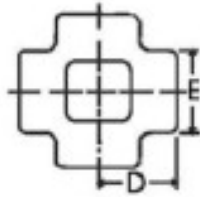
6000 POUND

6	25	25	0.11	19	25	0.11	25	25	0.23
8	29	33	0.29	22	33	0.23	29	33	0.45
10	33	38	0.48	25	38	0.23	33	38	0.63
15	38	46	0.74	29	46	0.65	38	46	0.97
20	44	56	1.19	33	56	0.99	44	56	1.65
25	51	62	1.59	35	62	1.22	51	62	2.10
32	60	75	3.06	43	75	2.13	60	75	3.46
40	64	84	3.40	44	84	2.61	64	84	4.37
50	83	102	6.10	52	102	4.31	83	102	8.56
65	95	121	9.47	64	121	6.80	95	121	12.73
80	106	146	15.68	79	146	13.86	106	146	20.70
100	114	152	15.78	79	152	18.65	114	152	27.92

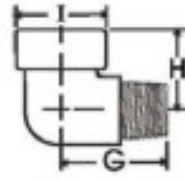
NOTES : All dimensions given in millimetre. Approx weights given in Kg.
 2000 pound fittings may be rated the same as Schedule 40 threaded pipe.
 3000 pound fittings may be rated the same as Schedule 80 threaded pipe.
 6000 pound fittings may be rated the same as Double Extra Strong threaded pipe.
 Reducing fittings are furnished by boring and tapping straight size blanks.
 All dimensions here in above are nominal.



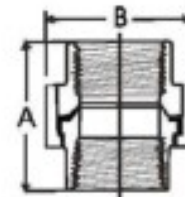
SCREWED FITTINGS ■ ANSI B 16.11 - 1973



CROSS



STREET ELBOW



UNION

2000 POUND

Nominal Pipe Size	CROSS			STREET ELBOW				UNION		
	D	E	Approx Weight	G	H	I	Approx Weight	A	B	Approx Weight
6	21	22	0.23					42	32	0.14
8	21	22	0.23					44	32	0.14
10	25	25	0.23					51	38	0.20
15	29	33	0.40					54	46	0.34
20	33	38	0.51					57	51	0.43
25	38	46	0.77					69	60	0.65
32	44	56	1.13					72	72	0.97
40	51	62	1.45					80	80	1.25
50	60	75	2.38					89	95	2.01
65	76	92	7.46					113	125	5.50
80	86	110	8.85					130	144	8.00
100	106	146	14.83					150	170	12.80

3000 POUND

6	21	22	0.20	32	22	27	0.11	42	32	0.14
8	25	25	0.27	32	22	27	0.11	44	32	0.14
10	29	33	0.45	38	25	32	0.17	51	38	0.20
15	33	38	0.68	41	29	38	0.23	54	46	0.34
20	38	46	1.13	48	35	44	0.40	57	51	0.43
25	44	56	1.61	57	44	51	0.65	69	60	0.65
32	51	62	1.87	67	51	62	1.02	72	72	0.97
40	60	75	2.95	71	54	70	1.36	80	80	1.25
50	64	84	3.69	84	64	84	2.35	89	95	2.01
65	83	102	7.60					118	125	5.50
80	95	121	8.96	—	—	—	—	130	144	8.00
100	114	152	14.52	—	—	—	—	150	176	12.80

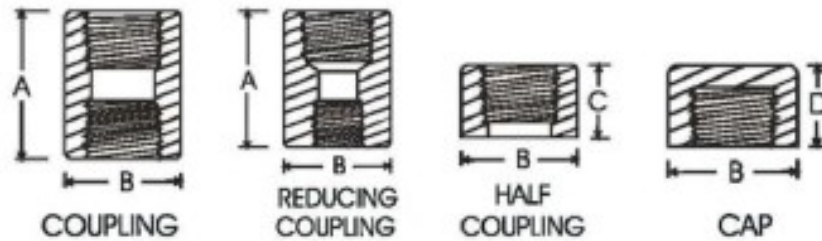
6000 POUND

6	25	25	0.25	—	—	—	—	44	32	0.45
8	29	33	0.54	38	25	32	0.17	51	38	0.45
10	33	38	0.68	41	29	38	0.20	54	46	0.59
15	38	46	1.25	48	35	44	0.45	57	51	0.85
20	44	56	1.96	57	44	51	0.74	69	60	1.39
25	51	62	2.55	67	51	62	1.13	72	72	1.76
32	60	75	4.88	71	54	70	1.67	80	80	3.01
40	64	84	5.22	84	64	84	2.92	89	95	4.00
50	83	102	10.07	—	—	—	—	118	125	6.10
65	95	121	12.47	—	—	—	—	130	144	9.40
80	106	146	24.50	—	—	—	—	150	176	15.50
100	114	152	34.52	—	—	—	—	—	—	—

NOTES : All dimensions given in millimetre. Approx weights given in Kg.
 2000 pound fittings may be rated the same as Schedule 40 threaded pipe.
 3000 pound fittings may be rated the same as Schedule 80 threaded pipe.
 6000 pound fittings may be rated the same as Double Extra Strong threaded pipe.
 Reducing fittings are furnished by boring and tapping straight size blanks.
 All dimensions herein above are nominal.



SCREWED FITTINGS ■ ANSI B 16.11 - 1973



3000 POUND

Nominal Pipe Size	Common Diameter B	COUPLING		REDUCING COUPLING		HALF COUPLING		CAP	
		A	Approx Weight	A	Approx Weight	C	Approx Weight	D	Approx Weight
6	16	32	0.06	—	—	16	0.03	19	0.02
8	19	35	0.06	35	0.06	18	0.03	25	0.03
10	22	38	0.11	38	0.11	19	0.09	25	0.06
15	29	48	0.11	48	0.11	24	0.09	32	0.11
20	35	51	0.20	51	0.20	26	0.11	37	0.14
25	44	60	0.29	60	0.29	30	0.14	41	0.23
32	57	67	0.71	67	0.71	34	0.34	44	0.45
40	64	79	0.99	79	0.99	40	0.51	44	0.74
50	76	86	1.42	86	1.42	43	0.71	48	1.42
65	92	92	1.81	92	1.81	46	0.91	60	2.27
80	108	108	3.06	108	3.06	54	1.53	65	3.86
100	140	121	7.60	121	7.60	61	3.80	68	6.35

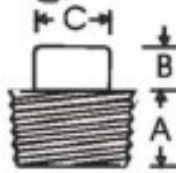
6000 POUND

6	22	32	0.09	—	—	16	0.04	—	0.03
8	25	35	0.09	35	0.09	18	0.04	27	0.06
10	32	38	0.11	38	0.11	19	0.06	27	0.11
15	38	48	0.23	48	0.23	24	0.11	33	0.14
20	44	51	0.45	51	0.45	26	0.23	38	0.23
25	57	60	0.97	60	0.97	30	0.48	43	0.48
32	64	67	1.08	67	1.08	34	0.54	46	0.75
40	76	79	1.99	79	1.99	40	0.99	48	1.42
50	92	86	3.52	86	3.52	43	1.76	51	2.27
65	108	92	4.88	92	4.88	46	2.44	64	3.86
80	127	108	6.12	108	6.12	54	3.06	68	6.35
100	159	121	11.11	121	11.11	61	5.56	75	10.43

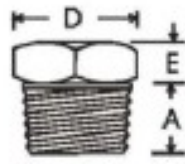
NOTES : All dimensions given in millimetre. Approx weights given in Kg.
 3000 pound fittings may be rated the same as Schedule 80 threaded pipe.
 6000 pound fittings may be rated the same as Double Extra Strong threaded pipe.
 Screwed Coupling, Reducing Couplings, Half Couplings and Caps are manufactured in 3000 & 6000 Pound classes only.
 All items on this page are manufactured from bar stock or forgings, depending upon size and type of fittings.
 All dimensions herein above are nominal.



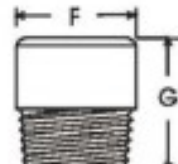
SCREWED FITTINGS ■ ANSI B 16.11 - 1973



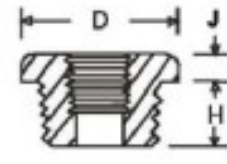
SQUARE HEAD
PLUG



HEXAGON HEAD
PLUG



ROUND HEAD
PLUG



HEXAGON HEAD
BUSHING

Nominal	Square Head Plug			Hexagon Head Plug			Round Head Plug		Hexagon Head Bushing		
Pipe Size	A (Min)	B (Min)	C (Min)	A (Min)	D (Nom)	E (Min)	F (Nom)	G (Min)	D (Nom)	H (Min)	J (Min)
6	9.5	6	7.0	9.5	11.0	6	10	35	—	—	—
8	11.0	6	9.5	11.0	16.0	6	13	41	16.0	11.0	3
10	12.7	8	11.0	12.7	17.5	8	17	41	17.5	12.7	4
15	14.5	10	14.5	14.5	22.0	8	21	44	22.0	14.5	5
20	16.0	11	16.0	16.0	27.0	10	27	44	27.0	16.0	6
25	19.0	13	20.5	19.0	35.0	10	33	51	35.0	19.0	6
32	20.5	14	24.0	20.5	44.5	14	43	51	44.5	20.5	7
40	20.5	16	28.5	20.5	51.0	16	48	51	51.0	20.5	8
50	22.0	17	33.5	22.0	63.5	17	60	64	63.5	22.0	9
65	27.0	19	38.0	27.0	76.0	19	73	70	76.0	27.0	10
80	28.5	21	43.0	28.5	89.0	21	89	70	89.0	28.5	10
100	32.0	25	63.5	32.0	117.5	32	114	76	117.5	32.0	13

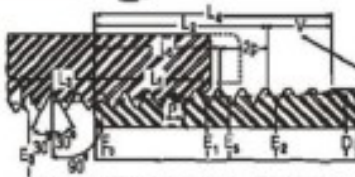
Nominal Pipe Size	APPROX. WEIGHT			
	Square Head Plug	Hex. Head Plug	Round Head Plug	Hex. Head Bushing
6	0.01	0.03	0.06	—
8	0.01	0.03	0.06	0.03
10	0.03	0.06	0.09	0.03
15	0.06	0.09	0.11	0.03
20	0.09	0.14	0.17	0.06
25	0.14	0.23	0.34	0.09
32	0.25	0.51	0.51	0.17
40	0.40	0.63	0.71	0.31
50	0.68	1.02	1.36	0.74
65	1.02	1.76	2.15	1.08
80	1.31	2.67	3.46	1.59
100	3.26	5.90	5.84	3.77

NOTES : All dimensions given in millimetre. Approx weights given in Kg.

All items on this page are manufactured from bar stock or forgings, depending upon size and type of fittings.

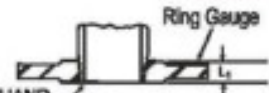


THREAD STANDARDS FOR FORGED STEEL FITTINGS

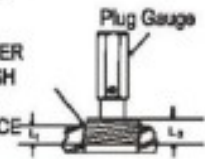


IMPERFECT THREADS
DUE TO LEAD OR DIE

0.8P = THREAD DEPTH - AMER.STD.
0.760P = THREAD DEPTH - A.P.I.STD.
TOTAL TAPER 19.1 PER 304.8 MM
(MEASURED ON DIAMETER)



GAUGE TO GO ON FLUSH BY HAND.
STANDARD TOLERANCE IS \pm
ONE TURN



PLUG GAUGE TO ENTER
UNTIL NOTCH IS FLUSH
WITH FIRST THREAD.
STANDARD TOLERANCE
IS \pm ONE TURN

Nominal Pipe Size (NPS)	Outside Diameter of Pipe (NOM) D	Threads per 25.4mm N	Pitch of Thread P	Pitch Diameter at beginning of external Threads E ₁	Handtight Engagement		Effective Thread External		Wrench Make-up length for internal thread		Overall length external Thread L ₄
					Length L ₁ ⁺	Pitch Diam. E ₁	Length L ₂ ⁺	Pitch Diam. E ₂	Length L ₃	Pitch Diam. E ₁	
6	10	27	0.9398	9.2329	4.572	9.5199	6.7031	9.6520	2.8219	9.0576	9.9670
8	14	18	1.4122	12.1260	5.080	12.4435	10.2057	12.7635	4.2342	11.8618	15.1028
10	17	18	1.4122	15.5448	6.096	15.9258	10.3581	16.1925	4.2342	15.2806	15.2552
15	21	14	1.8136	19.2634	7.620	19.7714	13.5560	20.1117	5.4432	18.9230	19.8501
20	27	14	1.8136	24.5796	8.611	25.1181	13.8608	25.4457	5.4432	24.2392	20.1549
25	33	11½	2.2098	30.8254	10.160	31.4604	17.3431	31.9100	6.6269	30.4114	25.0063
32	42	11½	2.2098	39.5503	10.668	40.2184	17.9527	40.6730	6.6269	39.1363	25.6159
40	48	11½	2.2098	45.6209	10.668	46.2864	18.3769	46.7690	6.6269	45.2069	26.0401
50	60	11½	2.2098	57.6326	11.074	58.3260	19.2100	58.8340	6.6269	57.2186	26.8783
65	73	8	3.175	69.0753	17.323	70.1599	28.8925	70.8812	6.3500	68.6791	39.9085
80	89	8	3.175	84.8512	19.456	86.0679	30.4800	86.7562	6.3500	84.4550	41.4960
90	102	8	3.175	97.4725	20.853	98.7755	31.7500	99.4562	6.3500	97.0763	42.7660
100	114	8	3.175	110.0938	21.438	111.4323	33.0200	112.1410	6.3500	109.6975	44.0360

NOTE : Data per American Standard B 2.1 - 1945 (For Taper Pipe Threads) and API Standard 6-A (for line pipe threads). + Also Length of Plug Gauge. *Length of ring gauge and length from gauging notch to small end of plug gauge. The American Standard Pipe Thread & the API Standard Line Pipe Thread are interchangeable.
All dimensions given in millimetre.



DIMENSIONAL TOLERANCES FOR FORGED STEEL SCREWED AND SOCKET WELDING FITTINGS ■ ANSI B16.11

CENTRE TO BOTTOM OF SOCKET

For Sizes 6 NPS and 8 NPS	±0.8
For Sizes 10 NPS , 15 NPS and 20 NPS	±1.5
For Sizes 25 NPS , 32 NPS , 40 NPS and 50 NPS	±2
For Sizes 65 NPS and larger	±2.5

Sizes 15 NPS through 80 NPS are included for use with Schedule 160 pipe. Fittings for use with Double Extra Strong pipe are not included in this standard.

BORE DIAMETER OF SOCKET

For Sizes 50 NPS and smaller	+ 0.25 - 0.00
For Sizes 65 NPS and larger	+ 0.35 - 0.00

BOTTOM TO BOTTOM OF SOCKETS COUPLINGS

For Sizes 6 NPS and 8 NPS	±1.5
For Sizes 10 NPS , 15 NPS and 20 NPS	±3
For Sizes 25 NPS , 40 NPS and 50 NPS	±4
For Sizes 65 and larger	±5

CONCENTRICITY OF BORES

The socket and fitting bores shall be concentric within a tolerance of ±0.8 for all sizes.

BOTTOM OF SOCKET TO OPPOSITE FACE HALF COUPLINGS

For Sizes 6 NPS and 8 NPS	±0.8
For Sizes 10 NPS , 15 NPS and 20 NPS	±1.5
For Sizes 25 NPS , 32 NPS , 40 NPS and 50 NPS	±2
For Sizes 65 NPS and larger	±2.5

COINCIDENCE OF AXES

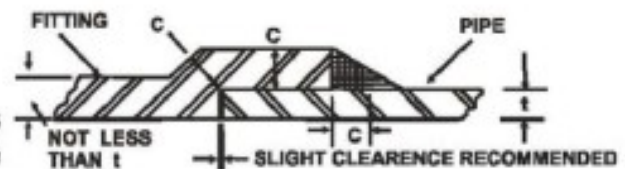
The maximum allowable variation in the alignment of the Socket and fitting bore axes shall be 1.5 mm in 304.8 mm.

AMERICAN STANDARD B-16.11

This standard covers the following range of sizes for use with Schedules 40 and 80 pipe as of the publication date of this catalogue.

90° and 45° Elbows	6 NPS through 100 NPS
Tees	6 NPS through 100 NPS
Crosses	6 NPS through 100 NPS
Couplings	6 NPS through 100

FILLET WELD DIMENSIONS



C-Minimum = 1.25t (but not less than 4.0 mm.)

t = Minimum Pipe Wall thickness

Manimum requirements for socket and fillet weld dimensions as prescribed in the American Standard Code for Pressure Piping, ASAB31.1.



MILD STEEL FITTINGS ■ IS : 1239 (PART II) - 1982

This standard covers the requirements for butt welded and seamless, plain ended, screwed and socketed mild steel tubulars and other welded and seamless wrought steel pipe fittings.

TOLERANCES :

---Where maximum or minimum dimensions are not specified, the tolerances for centre to face, face to face and centre to centre dimensions shall be as specified in Table below.

---Tolerance for the Alignment of Threads---The axes of the threads shall be coincident with the theoretical axes of the fitting within a tolerance of $\pm 0.50^\circ$ on the run and on the branches.

---Thread tolerances shall be in accordance with those specified in IS : 554-1975.

TABLE FOR TOLERANCES

Dimensions mm.		Tolerances mm.
Above	Up to and including	
-	30	± 1.5
30	50	± 2.0
50	75	± 2.5
75	100	± 3.0
100	150	± 3.5

- Notes : 1. Centre to face dimensions apply to elbows, bends, tees, crosses, etc.
2. Face to face dimensions apply to sockets, nipples, etc.
3. Centre to centre dimensions apply to return bends.

JOINTS:

Tubulars and fittings shall be screwed with taper or parallel threads or both as detailed in Tables. Unless otherwise specified, sockets for tubulars shall have parallel threads. All threads shall be in accordance with IS : 554-1975.

TESTS ON FITTINGS AND SOCKETS :

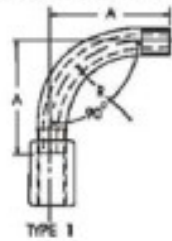
Pressure Tests: Each fittings, after being screwed and before any protective coating other than galvanizing being applied, shall be capable of withstanding without showing any sign of leakage :

- The application of an internal hydraulic pressure of 5 MPa, and
- The application of an internal air pressure of 0.7 MPa while the fitting is completely immersed in water or light oil.



MILD STEEL FITTINGS ■ IS : 1239 (PART II) - 1982

DIMENSIONS OF BENDS



DIMENSIONS OF MILD STEEL SOCKETS

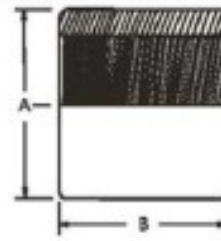


TABLE - 4 (PART)

NOMINAL BORE	BENDS 90° APPROXIMATE CENTRE TO FACE	APPROXIMATE RADIUS
	A	R
mm	mm	mm
6	51	32
8	64	41
10	73	48
15	86	57
20	102	73
25	121	89
32	146	108
40	165	127
50	203	159
65	248	197
80	292	232
100	381	308
125	540	—
150	622	—

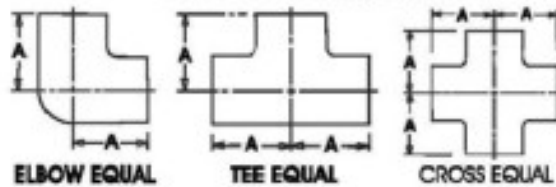
TABLE - 6

NOMINAL BORE	MINIMUM OUTSIDE DIAMETER	MINIMUM LENGTH
	A	B
mm	mm	mm
6	15	19
8	18.5	27
10	22	28
15	27	37
20	32.5	39
25	39.5	46
32	49	51
40	56	51
50	68	60
65	84	69
80	98	75
100	124	87
125	151	96
150	178	96



MILD STEEL FITTINGS ■ IS : 1239 (PART II) - 1982

DIMENSIONS OF ELBOWS, TEES AND CROSSES, EQUAL



ELBOW EQUAL

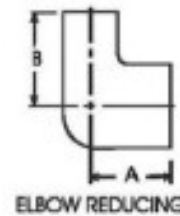
TEE EQUAL

CROSS EQUAL

TABLE - 8

NOMINAL SIZE OF OUTLET	MINIMUM LENGTH CENTRE TO FACE
	A mm
6	16
8	22
10	24
15	32
20	35
25	43
32	51
40	52
50	64
65	76
80	89
100	115
125	140
150	160

DIMENSIONS OF ELBOWS, REDUCING



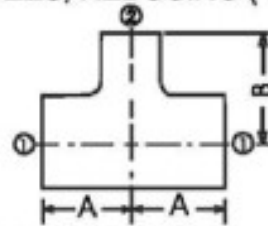
ELBOW REDUCING

TABLE - 9

NOMINAL SIZE OF OUTLET	MINIMUM LENGTH CENTRE TO FACE	MINIMUM LENGTH CENTRE TO FACE
	A mm	B mm
8 x 6	21	22
10 x 6	21	24
10 x 8	22	24
15 x 8	25	32
15 x 10	27	32
20 x 8	27	35
20 x 10	29	35
20 x 15	32	35
25 x 10	32	43
25 x 15	35	43
25 x 20	38	43
32 x 15	38	51
32 x 20	41	51
32 x 25	44	51
40 x 15	38	52
40 x 20	41	52
40 x 25	44	52
40 x 32	49	52
50 x 15	41	64
50 x 20	44	64
50 x 25	48	64
50 x 32	52	64
50 x 40	56	64
65 x 40	60	76
65 x 50	67	76
80 x 25	60	89
80 x 50	73	89
100 x 50	83	115
100 x 80	95	115

**MILD STEEL FITTINGS ■ IS : 1239 (PART II) - 1982**

DIMENSIONS OF TEES, REDUCING (ON THE BRANCH)

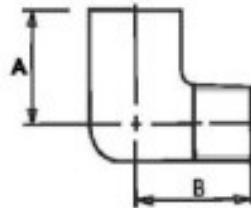
**TEE REDUCING (on the branch)****TABLE - 10**

NOMINAL SIZE OF OUTLETS (1) X (2)	MINIMUM LENGTH CENTRE TO FACE A	MINIMUM LENGTH CENTRE TO FACE B	NOMINAL SIZE OF OUTLETS (1) X (2)	MINIMUM LENGTH CENTRE TO FACE A	MINIMUM LENGTH CENTRE TO FACE B
mm x mm	mm	mm	mm x mm	mm	mm
8 X 6	21	22	50 X 15	41	64
10 X 6	21	24	50 X 20	44	64
10 X 8	22	24	50 X 25	48	64
15 X 8	25	32	50 X 32	52	64
15 X 10	27	32	50 X 40	56	64
20 X 8	27	35	65 X 25	54	76
20 X 10	29	35	65 X 32	57	76
20 X 15	32	35	65 X 40	60	76
25 X 8	30	43	65 X 50	67	76
25 X 10	32	43	80 X 25	60	89
25 X 15	35	43	80 X 32	64	89
25 X 20	38	43	80 X 40	67	89
32 X 10	35	51	80 X 50	73	89
32 X 15	38	51	80 X 65	79	89
32 X 20	41	51	100 X 25	70	115
32 X 25	44	51	100 X 40	76	115
40 X 10	37	52	100 X 50	83	115
40 X 15	38	52	100 X 80	95	115
40 X 20	41	52	125 X 80	115	140
40 X 25	48	52	125 X 100	130	140
40 X 32	49	52	150 X 80	120	160
			150 X 100	135	160



MILD STEEL FITTINGS ■ IS : 1239 (PART II) - 1982

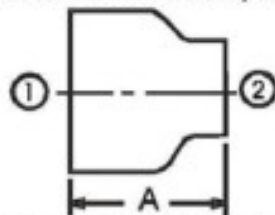
DIMENSIONS OF ELBOWS, ROUND, MALE AND FEMALE, EQUAL



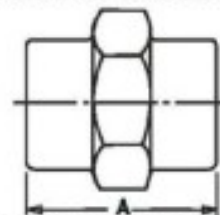
ELBOW, MALE AND FEMALE EQUAL

TABLE - 15

NOMINAL SIZE OF OUTLET	MINIMUM LENGTH CENTRE TO FACE A	MINIMUM LENGTH CENTRE TO FACE B	MINIMUM BORE OF MALE END	MAXIMUM BORE OF MALE END
mm	mm	mm	mm	mm
8	19	27	6.5	8
10	21	29	8.5	10.5
15	25	35	11.5	13
20	30	40	18	21
25	37	46	24	26
32	43	54	30	32
40	49	57	37	39
50	59	70	48	51
65	68	83	62	66
80	81	94	75	79
100	100	115	97	104

**MILD STEEL FITTINGS ■ IS : 1239 (PART II) - 1982****DIMENSIONS OF SOCKET, REDUCING****SOCKET, REDUCING****TABLE - 18**

NOMINAL SIZE OF OUTLET ① x ②	MINIMUM LENGTH A	NOMINAL SIZE OF OUTLET ① x ②	MINIMUM LENGTH A
mm x mm	mm	mm x mm	mm
8 X 6	25	50 X 15	70
10 X 6	30	50 X 20	68
10 X 8	29	50 X 25	67
15 X 6	41	50 X 32	65
15 X 8	40	50 X 40	64
15 X 10	38	65 X 25	76
20 X 8	44	65 X 32	75
20 X 10	43	65 X 40	73
20 X 15	41	65 X 50	71
25 X 8	54	80 X 25	86
25 X 10	52	80 X 32	84
25 X 15	51	80 X 40	83
25 X 20	49	80 X 50	81
32 X 10	60	80 X 65	79
32 X 15	59	100 X 40	105
32 X 20	57	100 X 50	100
32 X 25	56	100 X 65	100
40 X 15	65	100 X 80	98
40 X 20	64	125 X 80	115
40 X 25	62	125 X 100	115
40 X 32	60	150 X 80	140
		150 X 100	140

DIMENSIONS OF SOCKET UNIONS**SOCKET UNIONS****TABLE - 24**

NOMINAL SIZE OF OUTLET	MINIMUM LENGTH A
mm	mm
6	38
8	44
10	51
15	57
20	67
25	76
32	85
40	100
50	110
65	120
80	135
100	160
125	185
150	210

NOTE :- Unions are normally supplied with flat seats and fitted with a washer. Other types of seating are obtainable, if required.