

SOCKET-WELD FITTINGS



45° ELBOW



90° ELBOW



EQUAL TEE



FULL COUPLING



CAP

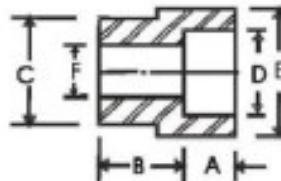
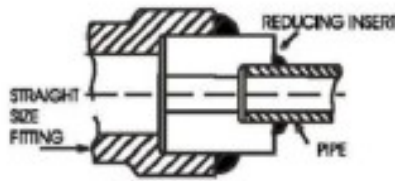


UNION

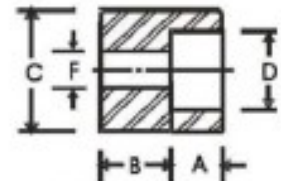
- Used to allow flow of fluids, like steam, water, air, oil, etc. through the desired sizes of flowing cross-section with diversion of flow to the desired points under critical working conditions.



SOCKET WELDING REDUCING INSERTS ■ ANSI B 16.11 - 1973



INSERT TYPE 1



INSERT TYPE 2

Nominal Pipe Size	Common Dimensions Diameter	3000 POUND						6000 POUND					
		C	D	INSERT TYPE	A	B	E	F	INSERT TYPE	A	B	E	F
15	X 10	21.60	17.55	1	11	24	25	12	1	13	33	29	9
	X 8	21.60	14.10	2	10	16	—	9	1	11	33	29	7
	X 6	21.60	10.65	2	10	16	—	7	1	10	33	29	4
20	X 15	26.90	21.70	1	13	25	32	16	1	14	37	41	12
	X 10	26.90	17.55	2	11	14	—	12	1	13	37	29	9
	X 8	26.90	14.10	2	10	16	—	9	2	11	37	—	7
	X 6	26.90	10.65	2	10	16	—	7	2	10	22	—	4
25	X 20	33.70	27.05	1	14	24	38	21	1	16	41	48	16
	X 15	33.70	21.70	2	13	21	—	16	1	14	43	41	12
	X 10	33.70	17.55	2	11	22	—	12	2	13	22	—	9
	X 8	33.70	14.10	2	10	24	—	9	2	11	24	—	7
32	X 25	42.40	33.80	1	16	27	44	27	1	17	46	57	21
	X 20	42.40	27.05	2	14	21	—	21	1	16	44	51	16
	X 15	42.40	21.70	2	13	22	—	16	2	14	22	—	12
40	X 32	48.50	42.55	1	17	30	54	35	1	19	54	67	29
	X 25	48.50	33.80	2	16	21	—	27	1	17	54	57	21
	X 20	48.50	27.05	2	14	22	—	21	2	16	27	—	16
	X 15	48.50	21.70	2	13	24	—	16	2	14	29	—	12
50	X 40	61.00	48.65	2	19	21	—	41	1	22	51	76	34
	X 32	61.00	42.55	2	17	22	—	35	1	19	51	68	29
	X 25	61.00	33.80	2	16	24	—	27	2	17	22	—	21
	X 20	61.00	27.05	2	14	25	—	21	2	16	24	—	16
	X 15	61.00	21.70	2	13	27	—	16	2	14	25	—	12
65	X 50	73.70	61.10	1	22	49	75	52	1	22	68	89	43
	X 40	73.70	48.65	2	19	44	—	41	2	22	35	—	34
	X 32	73.70	42.55	2	17	46	—	35	2	19	38	—	29
	X 25	73.70	33.80	2	16	44	—	27	2	17	40	—	21
80	X 65	89.70	73.80	1	22	46	92	63	1	25	76	111	54
	X 50	89.70	61.10	2	22	41	—	52	2	22	40	—	43
	X 40	89.70	48.65	2	19	40	—	41	2	22	40	—	34
	X 32	89.70	42.55	2	17	40	—	35	2	19	43	—	29
	X 25	89.70	33.80	2	16	38	—	27	2	17	44	—	21
100	X 80	115.10	89.80	2	29	54	—	78	1	32	86	127	67
	X 65	115.10	73.80	2	22	52	—	63	2	25	44	—	54
	X 50	115.10	61.10	2	22	54	—	52	2	22	48	—	43
	X 40	115.10	48.65	2	19	54	—	41	2	22	48	—	34

NOTES : All dimensions given in millimetre.

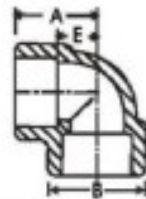
3000 pound inserts are regularly used for both Schedule 40 and Schedule 80 pipe and warrant the Schedule 80 rating.

6000 pound inserts are regularly used for both Schedule 160 and Double Extra Strong pipe and warrant the Double Extra Strong rating.

All dimensions herein above are nominal.



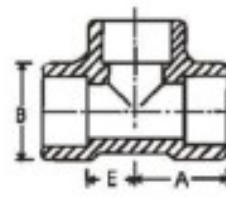
SOCKET WELDING FITTINGS ■ ANSI B 16.11 - 1973



90° ELBOW



45° ELBOW



TEE

3000 POUND

Nominal Pipe Size	Common Diameter of Socket Min.	Common Diameter of Bore		90° ELBOW				45° ELBOW				TEE			
		Min.	Max.	A	B	E	Approx Weight	C	D	F	Approx Weight	A	B	E	Approx Weight
6	10.65	6.10	7.60	21	22	11	0.06	17	22	8	0.06	21	22	11	0.11
8	14.10	8.50	10.00	21	22	11	0.06	17	22	8	0.06	21	22	11	0.11
10	17.55	11.80	13.30	25	25	14	0.11	19	25	8	0.09	25	25	14	0.14
15	21.70	15.00	16.60	29	33	16	0.23	22	33	11	0.20	29	33	16	0.31
20	27.05	20.20	21.70	33	38	19	0.31	25	38	12	0.23	33	38	19	0.40
25	33.80	25.90	27.40	38	46	22	0.48	29	46	14	0.40	38	46	22	0.65
32	42.55	34.30	35.80	44	56	27	0.74	33	56	18	0.59	44	56	27	0.97
40	48.65	40.10	41.70	51	62	32	0.97	35	62	21	0.79	51	62	32	1.11
50	61.10	51.70	53.50	60	75	38	1.61	43	75	25	1.30	60	75	38	2.01
65	73.80	61.20	64.20	76	92	41	2.89	52	92	29	3.35	76	92	41	4.03
80	89.80	76.40	79.50	86	110	57	4.94	64	110	32	5.22	86	110	57	6.21
100	115.45	100.70	103.80	106	146	67	10.75	79	146	41	8.96	106	146	67	12.90

6000 POUND

6	10.65	3.20	4.80	21	22	11	0.23	17	22	8	0.25	21	22	11	0.45
8	14.10	5.60	7.10	25	25	14	0.40	19	25	8	0.31	25	25	14	0.48
10	17.55	8.40	9.90	29	33	16	0.23	22	33	11	0.25	29	33	16	0.45
15	21.70	11.00	12.50	33	38	19	0.40	25	38	12	0.31	33	38	19	0.48
20	27.05	14.80	16.30	38	46	22	0.65	29	46	14	0.59	38	46	22	0.93
25	33.80	19.90	21.50	44	56	27	1.13	33	56	18	0.91	44	56	27	1.53
32	42.55	28.70	30.20	51	62	32	1.47	35	62	21	1.19	51	62	32	1.96
40	48.65	33.20	34.70	60	75	38	2.36	43	75	25	2.15	60	75	38	3.54
50	61.10	42.10	43.60	64	84	41	2.89	45	84	29	2.67	64	84	41	3.94

9000 POUND

15	21.70	5.60	7.20	33	38	19	0.60	25	38	12	0.47	33	38	19	0.72
20	27.05	10.30	11.80	38	46	22	0.95	29	46	14	0.89	38	46	22	1.40
25	33.80	14.50	16.00	44	56	27	1.70	33	56	18	1.37	44	56	27	2.30
32	42.55	22.00	23.50	51	62	32	2.20	35	62	21	2.79	51	62	32	2.94
40	48.65	27.20	28.70	60	75	38	3.54	43	75	25	3.23	60	75	38	5.31
50	61.10	37.40	38.90	64	84	41	4.34	45	84	29	4.00	64	84	41	5.91

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

3000 pound fittings are regularly used for both Schedule 40 and Schedule 80 pipe and warrant the Schedule 80 rating.

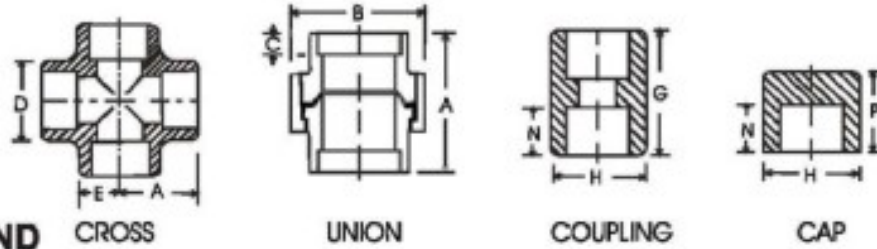
6000 pound fittings are regularly used for Schedule 160 pipe and warrant the Schedule 160 rating.

9000 pound fittings are regularly used for Schedule XXS pipe and warrant the Schedule XXS rating.

Reducing fittings are furnished by boring straight size blanks.



SOCKET WELDING FITTINGS ■ ANSI B 16.11 - 1973



3000 POUND

Nominal Pipe Size	CROSS				UNION				COUPLING				CAP			
	A	D	E	Approx Weight	A	B	C	Approx Weight	G	H	N	Approx Weight	H	N	P	Approx Weight
6	21	22	11	0.14	42	32	10	0.15	25	19	10	0.06	19	10	16	0.06
8	21	22	11	0.14	44	32	10	0.15	25	22	10	0.06	22	10	17	0.06
10	25	25	14	0.14	51	38	10	0.28	29	25	11	0.09	25	11	19	0.09
15	29	33	16	0.37	54	46	10	0.38	35	32	13	0.11	32	13	22	0.11
20	33	38	19	0.51	57	51	13	0.45	38	38	14	0.17	38	14	25	0.17
25	38	46	22	0.71	69	60	13	0.71	44	45	16	0.34	45	16	27	0.20
32	44	56	27	1.11	72	72	13	1.20	48	56	17	0.51	56	17	30	0.48
40	51	62	32	1.47	80	80	13	1.50	51	63	19	0.59	63	19	33	0.54
50	60	75	38	2.49	89	95	16	2.58	64	75	22	0.91	75	22	40	0.91
65	76	92	41	7.17	118	125	16	6.10	64	92	22	1.49	92	22	43	1.36
80	86	110	57	9.16	130	144	16	8.79	70	110	25	2.07	110	25	49	2.10
100	106	146	67	14.29	150	176	20	13.49	76	138	29	3.91	138	29	55	3.86

6000 POUND

6	21	22	11	0.45	44	32	10	0.51	25	19	10	0.05	19	11	24	0.05
8	25	25	14	0.45	51	38	10	0.51	25	25	10	0.10	25	11	24	0.10
10	29	33	16	0.45	54	46	10	0.65	29	28	11	0.17	28	11	24	0.17
15	33	38	19	0.54	57	51	10	0.91	35	34	13	0.23	34	13	25	0.17
20	38	46	22	1.13	69	60	13	1.81	38	40	14	0.34	40	14	27	0.29
25	44	56	27	1.81	72	72	13	2.00	44	50	16	0.71	50	16	32	0.54
32	51	62	32	2.33	80	80	13	2.49	48	59	17	0.82	59	17	35	0.63
40	60	75	38	4.08	89	95	13	3.90	51	67	19	1.36	67	19	38	1.02
50	64	84	41	4.31	118	125	16	6.49	64	83	22	2.15	83	22	46	1.31

9000 POUND

15	33	38	19	1.24	57	51	10	0.98	35	40	13	0.23	40	13	27	0.30
20	38	46	22	2.04	69	60	13	1.90	38	48	14	0.34	48	14	32	0.55
25	44	56	27	2.60	72	72	13	2.10	44	56	16	0.71	56	16	35	0.65
32	51	62	32	4.17	80	80	13	2.60	48	67	17	0.82	67	17	38	1.05
40	60	75	38	5.25	89	95	13	4.10	51	74	19	1.36	74	19	46	1.35
50	64	84	41	10.05	118	125	16	6.60	64	90	22	2.15	90	22	51	2.95

NOTES : All dimensions given in millimetre. Approx weights given in Kg.
 Half Couplings and Reducing couplings are available with same overall dimensions as straight couplings.
 3000 pound fittings are regularly used for both Schedule 40 and Schedule 80 pipe and warrant the Schedule 80 rating.
 6000 pound fittings are regularly used for Schedule 160 pipe and warrant the Schedule 160 rating.
 9000 pound fittings are regularly used for Schedule XXS pipe and warrant the Schedule XXS rating.
 All Unions are with Octagonal Nuts. For common dimensions, refer to Socket Welding Fittings; Elbows, Tees etc.



DIMENSIONS OF HEXAGONAL NIPPLES ■ BS 3799 - 1974

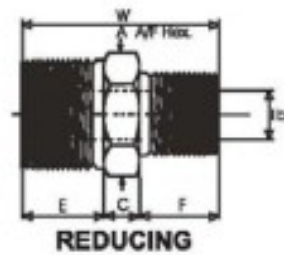
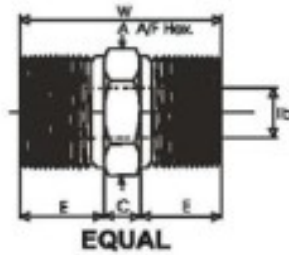


TABLE : 8

Nominal Pipe size		A	W	E	b		C	F
Equal	Reducing	(min.)	(min.)	(min.)	3000 Pound	6000 Pound	(min.)	(min.)
6	—	11	26	10	5	2	6	—
8	—	15	36	15	8	6	6	—
—	8 X 6	15	31	15	5	2	6	10
10	—	18	40	16	11	8	8	—
—	10 X 8	18	39	16	8	6	8	15
15	—	22	48	20	14	11	8	—
—	15 X 10	22	44	20	11	8	8	16
—	15 X 8	22	43	20	8	6	8	15
20	—	27	52	21	19	13	10	—
—	20 X 15	27	50	21	14	11	9	20
—	20 X 10	27	46	21	11	8	9	16
25	—	35	60	25	24	17	10	—
—	25 X 20	35	56	25	19	13	10	21
—	25 X 15	35	55	25	14	11	10	20
40	—	50	68	26	38	30	16	—
—	40 X 25	50	67	26	24	17	16	25
—	40 X 20	50	63	26	19	13	16	21
—	40 X 15	50	62	26	14	11	16	20
50	—	62	71	27	49	39	17	—
—	50 X 40	62	70	27	38	30	17	26
—	50 X 25	62	70	27	24	17	18	25
—	50 X 20	62	65	27	19	13	17	21
—	50 X 15	62	65	27	14	11	18	20

NOTES : All dimensions given in millimetre.

All dimensions herein above are nominal and subject to normal manufacturing tolerances.



DIMENSIONS OF SWAGE NIPPLES ■ BS-3799 - 1974

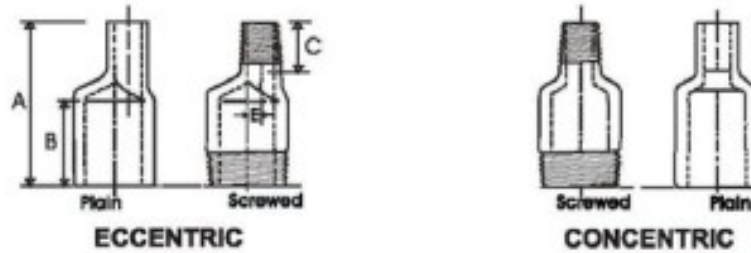


TABLE : 12

Nominal Pipe Size			Parallel Length			Eccentricity (E)	
			A (minm.)	B (minm.)	C (minm.)	3000 Pound	6000 Pound
10	X	8	76	48	16	1.6	—
15	X	10	89	56	19	1.6	—
15	X	8	89	56	19	3.2	—
20	X	15	95	57	22	2.4	2.4
20	X	10	95	57	22	4	—
25	X	20	102	64	22	2.8	2.0
25	X	15	102	64	22	5.2	4.4
40	X	25	114	70	25	6.7	6.4
40	X	20	114	70	25	9.5	8.3
40	X	15	114	70	25	11.9	10.7
50	X	40	165	108	29	5.6	5.2
50	X	25	165	108	29	12.7	11.5
50	X	20	165	108	29	15.5	13.5
50	X	15	165	108	29	17.5	15.9
65	X	50	178	114	32	4.8	3.2
65	X	40	178	114	32	10.3	8.3
80	X	65	203	133	41	7.1	6.7
80	X	50	203	133	41	11.9	9.9
80	X	40	203	133	41	17.5	15.5
100	X	80	229	140	48	11.9	10.7
100	X	65	229	140	48	19.1	17.5

NOTES : All dimensions given in millimetre.

Thickness and outside diameters of swage nipples shall correspond to those of the appropriate nominal pipe size.
All dimensions herein above are nominal and subject to normal manufacturing tolerances.