

Butt Weld Fittings

RANGE/SIZES
 90° AND 45°
 LONG RADIUS
 ELBOWS
 ANSI B16.9

DIMENSIONS (BASED ON ASME/ANSI B16.9) AND EXAMPLE WEIGHTS FOR LONG RADIUS ELBOWS

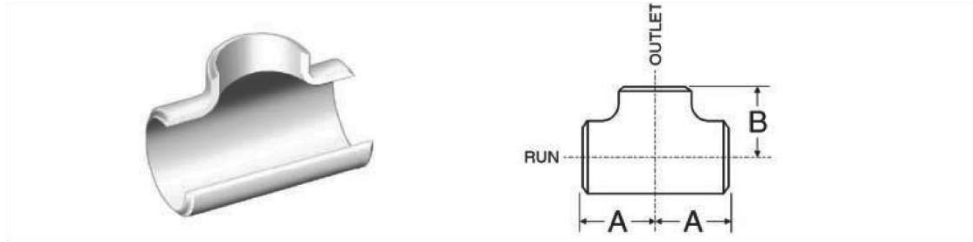
Nominal Pipe Size	Common		90° Elbow			45° Elbow		
	OD at Bevel		A		40S/STD ¹	B		40S/STD ¹
	in	mm	in	mm	kg/piece	in	mm	kg/piece
½	0.84	21	1.50	38	0.08	0.62	16	0.04
¾	1.05	27	1.50	38	0.10	0.75	19	0.05
1	1.32	33	1.50	38	0.15	0.88	22	0.07
1¼	1.66	42	1.88	48	0.25	1.00	25	0.12
1½	1.90	48	2.25	57	0.36	1.12	29	0.18
2	2.38	60	3.00	76	0.65	1.38	35	0.32
2½	2.88	73	3.75	95	1.29	1.75	44	0.64
3	3.50	89	4.50	114	2.02	2.00	51	1.01
3½	4.00	102	5.25	133	2.83	2.25	57	1.41
4	4.50	114	6.00	152	3.84	2.50	64	1.92
5	5.56	141	7.50	190	6.51	3.12	79	3.25
6	6.62	168	9.00	229	10.1	3.75	95	5.05
8	8.62	219	12.00	305	20.3	5.00	127	10.15
10	10.75	273	15.00	381	36.0	6.25	159	18.0
12	12.75	324	18.00	457	53.0	7.50	190	26.5
14	14.00	356	21.00	533	68.0	8.75	222	34.0
16	16.00	406	24.00	610	89.2	10.00	254	44.6
18	18.00	457	27.00	686	113.0	11.25	286	56.5
20	20.00	508	30.00	762	140.0	12.50	318	70.0
22	22.00	559	33.00	838	170.0	13.50	343	85.0
24	24.00	610	36.00	914	202.0	15.00	381	101.0
26	26.00	660	39.00	991	241.4	16.00	406	120.5
28	28.00	711	42.00	1067	279.9	17.25	438	140.0
30	30.00	762	45.00	1143	321.3	18.50	470	160.5
32	32.00	813	48.00	1219	365.6	19.75	502	183.0
34	34.00	864	51.00	1295	-	21.00	533	-
36	36.00	914	54.00	1372	462.7	22.25	565	231.0
38	38.00	965	57.00	1448	-	23.62	600	-
40	40.00	1016	60.00	1524	571.3	24.88	632	285.5
42	42.00	1067	63.00	1600	629.8	26.00	660	315.0
44	44.00	1118	66.00	1676	-	27.38	695	-
46	46.00	1168	69.00	1753	-	28.62	727	-
48	48.00	1219	72.00	1829	-	29.88	759	-

NOTES:

- Dimensions quoted in mm are 'Nominal' values from B16.9 (i.e. rounded equivalents of the inch dimensions). Refer to ASME/ANSI B16.9 for additional 'Max' and 'Min' metric dimensions.
- For tolerances see page 37.
- 1 Weights are approximate and based on manufacturers' data (where available) for Schedule 40S/Standard fittings. See page 38 for further information.

Butt Weld Fittings

RANGE/SIZES
EQUAL TEES
ANSI B16.9



DIMENSIONS (BASED ON ASME/ANSI B16.9) AND EXAMPLE WEIGHTS FOR EQUAL TEES

Nominal Pipe Size	OD at Bevelled		Run		Outlet		Weight (Tees only)
	OD		A		B		40S/STD'
	in	mm	in	mm	in	mm	kg/piece
1/2	0.84	21	1.00	25	1.00	25	0.08
3/4	1.05	27	1.12	29	1.12	29	0.11
1	1.32	33	1.50	38	1.50	38	0.24
1 1/4	1.66	42	1.88	48	1.88	48	0.41
1 1/2	1.90	48	2.25	57	2.25	57	0.60
2	2.38	60	2.50	64	2.50	64	0.87
2 1/2	2.88	73	3.00	76	3.00	76	1.66
3	3.50	89	3.38	86	3.38	86	1.90
3 1/2	4.00	102	3.75	95	3.75	95	-
4	4.50	114	4.12	105	4.12	105	4.13
5	5.56	141	4.88	124	4.88	124	6.55
6	6.62	168	5.62	143	5.62	143	9.73
8	8.62	219	7.00	178	7.00	178	18.0
10	10.75	273	8.50	216	8.50	216	30.8
12	12.75	324	10.00	254	10.00	254	44.3
14	14.00	356	11.00	279	11.00	279	53.7
16	16.00	406	12.00	305	12.00	305	66.3
18	18.00	457	13.50	343	13.50	343	84.1
20	20.00	508	15.00	381	15.00	381	104
22	22.00	559	16.50	419	16.50	419	126
24	24.00	610	17.00	432	17.00	432	140
26	26.00	660	19.50	495	19.50	495	158
28	28.00	711	20.50	521	20.50	521	176
30	30.00	762	22.00	559	22.00	559	203
32	32.00	813	23.50	597	23.50	597	231
34	34.00	864	25.00	635	25.00	635	-
36	36.00	914	26.50	673	26.50	673	294
38	38.00	965	28.00	711	28.00	711	-
40	40.00	1016	29.50	749	29.50	749	363
42	42.00	1067	30.00	762	28.00	711	382
44	44.00	1118	32.00	813	30.00	762	-
46	46.00	1168	33.50	851	31.50	800	-
48	48.00	1219	35.00	889	33.00	838	-

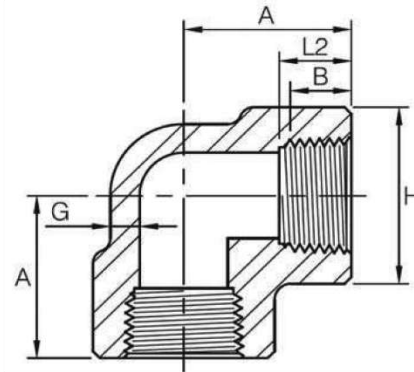
NOTES:

- For NPS 26 and larger: Dimensions are not applicable to crosses. Also, dimension B is recommended but not required.
 - Dimensions quoted in mm are 'Nominal' values from B16.9 (i.e. rounded equivalents of the inch dimensions). Refer to B16.9 for additional 'Max' and 'Min' metric dimensions.
 - For tolerances see page 37.
- 1 Weights are approximate and based on manufacturers' data (where available) for Schedule 40S/Standard fittings. See page 38 for further information.

FORGED PIPE FITTINGS

Wellgrow Industries Corp.

90° Elbow Threaded



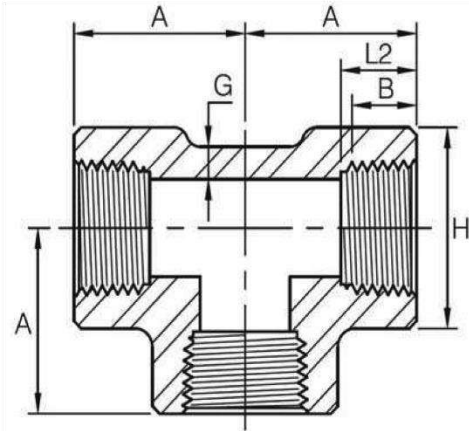
DN	Nom. Pipe Size	Center to End A			Outside Diameter Of Band H			Minimum Wall Thickness G			Length of Thread (Min)	
		2M	3M	6M	2M	3M	6M	2M	3M	6M	B ⁽¹⁾	L2 ⁽¹⁾
6	1/8"	21	21	25	22	22	25	3.18	3.18	6.35	6.4	6.7
8	1/4"	21	25	28	22	25	33	3.18	3.30	6.60	8.1	10.2
10	3/8"	25	28	33	25	33	38	3.18	3.51	6.98	9.1	10.4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

- (1) 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).
- (2) 2M, 3M and 6M denote 2000Lb, 3000Lb and 6000Lb.
- (3) Dimension in accordance with ASME B16.11-2011.

FORGED PIPE FITTINGS

Wellgrow Industries Corp.

Tee Threaded



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

(1) 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).

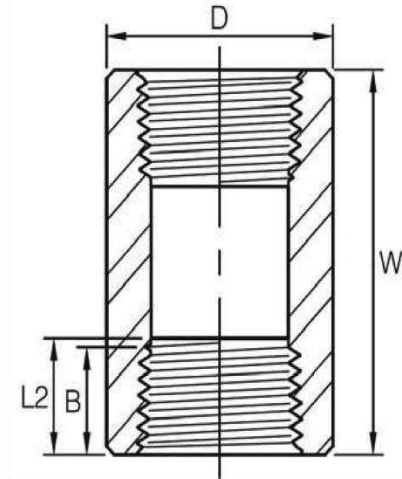
(2) 2M, 3M and 6M denote 2000Lb, 3000Lb and 6000Lb.

(3) Dimensions in accordance with ASME B16.11-2011.

FORGED PIPE FITTINGS

Wellgrow Industries Corp.

Full Coupling Threaded



DN	Nom. Pipe Size	End to End Coupling W	Outside Diameter D		Length of Thread (Min)	
			3000Lb	6000Lb	B ⁽¹⁾	L2 ⁽¹⁾
6	1/8"	32	16	22	6.4	6.7
8	1/4"	35	19	25	8.1	10.2
10	3/8"	38	22	32	9.1	10.4
15	1/2"	48	28	38	10.9	13.6
20	3/4"	51	35	44	12.7	13.9
25	1"	60	44	57	14.7	17.3
32	1-1/4"	67	57	64	17.0	18.0
40	1-1/2"	79	64	76	17.8	18.4
50	2"	86	76	92	19.0	19.2
65	2-1/2"	92	92	108	23.6	28.9
80	3"	108	108	127	25.9	30.5
100	4"	121	140	159	27.7	33.0

- (1) 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).
- (2) Dimensions in accordance with ASME B16.11-2011.