

BUTT-WELDING FITTINGS WEIGHT AND VOLUME

Nominal Pipe Size	WEIGHT (Kg)									
	90° LONG		90° SHORT		TEE		CAP		REDUCER	
	STD	XS	STD	XS	STD	XS	STD	XS	STD	XS
1/2	0.08	0.10	—	—	0.08	0.11	0.04	0.05	—	—
3/4	0.10	0.13	—	—	0.12	0.16	0.05	0.07	0.06	0.07
1	0.15	0.19	0.10	0.13	0.25	0.31	0.11	0.14	0.11	0.14
1-1/4	0.26	0.34	0.17	0.22	0.42	0.55	0.14	0.19	0.15	0.20
1-1/2	0.37	0.49	0.24	0.32	0.60	0.80	0.17	0.23	0.24	0.32
2	0.65	0.89	0.43	0.59	0.87	1.19	0.23	0.33	0.37	0.50
2-1/2	1.30	1.70	0.87	1.14	1.67	2.19	0.40	0.53	0.70	0.91
3	2.03	2.73	1.35	1.82	2.41	3.25	0.66	0.91	0.91	1.22
3-1/2	2.82	3.91	1.88	2.61	3.17	4.39	0.96	1.36	1.28	1.77
4	3.83	5.36	2.55	3.57	4.11	5.75	1.17	1.68	1.53	2.14
5	6.55	9.23	4.37	6.15	6.60	9.30	1.92	2.77	2.50	3.52
6	10.1	15.3	6.75	10.2	9.71	14.7	2.89	4.48	3.61	5.45
8	20.4	30.9	13.6	20.6	18.1	27.4	5.20	8.05	5.71	8.63
10	36.2	48.7	24.1	32.5	30.9	41.7	9.17	12.5	9.65	13.0
12	52.8	69.9	35.2	46.6	44.2	58.4	13.3	17.7	13.7	18.2
14	67.9	89.9	45.2	59.9	53.5	70.9	15.9	21.2	25.5	33.8
16	89.0	118.0	59.3	78.6	66.1	87.7	20.0	26.7	30.9	41.0
18	112.9	149.8	75.3	99.9	83.9	111.3	25.5	34.1	37.7	50.0
20	139.7	185.5	93.1	123.7	103.8	137.8	31.8	42.5	56.3	74.7
22	169.3	225.0	112.8	150.0	125.8	167.2	38.7	51.7	62.3	82.8
24	201.7	268.3	134.5	178.8	139.2	185.1	45.0	60.1	68.4	90.9
26	237.0	315.3	158.0	210.2	176.1	234.3	50.3	67.3	89.3	118.7
28	275.2	366.2	183.5	244.2	198.2	263.8	56.0	74.8	96.5	128.4
30	316.2	420.9	210.8	280.6	228.3	303.9	61.9	82.8	103.8	138.1
32	360.1	479.4	240.0	319.6	260.4	346.7	68.2	91.2	111.0	147.8
34	406.8	541.7	271.2	361.2	294.6	392.4	74.8	100.0	118.3	157.5
36	456.3	607.8	304.2	405.2	331.0	440.9	81.7	109.2	125.5	167.2
38	508.7	677.8	—	—	369.5	492.3	94.4	126.2	132.8	176.9
40	563.9	751.5	376.0	501.0	410.1	546.5	102.1	136.5	140.0	186.6
42	622.0	829.0	414.7	552.7	421.3	561.6	110.1	147.2	147.3	196.3
44	682.9	910.3	455.3	606.9	474.5	632.5	124.9	166.9	154.5	206.0
46	746.7	995.5	—	—	520.4	693.8	133.7	178.7	188.8	251.6
48	813.3	1,084.4	542.2	722.9	568.4	757.9	142.8	191.0	197.2	262.9

* Weight and volume are according to theoretical calculation.

* Figures of tees are on equal tees and figures of reducers are on one size reduction reducers.

VOLUME (m ³)					Nominal Pipe Size
90° LONG	90° SHORT	TEE	CAP	REDUCER	
—	—	—	—	—	1/2
—	—	—	—	—	3/4
—	—	—	—	—	1
—	—	—	—	—	1-1/4
—	—	—	—	—	1-1/2
0.001	0.001	0.001	—	—	2
0.002	0.001	0.001	—	0.001	2-1/2
0.003	0.002	0.002	—	0.001	3
0.004	0.003	0.003	0.001	0.001	3-1/2
0.005	0.004	0.004	0.001	0.001	4
0.010	0.007	0.007	0.001	0.002	5
0.016	0.011	0.011	0.002	0.004	6
0.037	0.025	0.022	0.005	0.007	8
0.070	0.046	0.040	0.009	0.013	10
0.118	0.079	0.067	0.015	0.021	12
0.164	0.109	0.091	0.021	0.042	14
0.245	0.163	0.126	0.029	0.059	16
0.349	0.232	0.179	0.042	0.080	18
0.479	0.319	0.246	0.059	0.131	20
0.638	0.424	0.327	0.052	0.159	22
0.828	0.551	0.388	0.066	0.189	24
1.053	0.700	0.540	0.083	0.266	26
1.315	0.875	0.649	0.103	0.308	28
1.618	1.076	0.800	0.125	0.354	30
1.964	1.306	0.974	0.151	0.403	32
2.355	1.566	1.170	0.180	0.455	34
2.796	1.859	1.391	0.212	0.510	36
3.288	2.187	1.639	0.248	0.568	38
3.835	2.550	1.914	0.288	0.629	40
4.440	2.953	2.023	0.332	0.694	42
5.105	3.395	2.400	0.381	0.761	44
5.833	3.879	2.753	0.433	0.971	46
6.627	4.407	3.138	0.491	1.057	48