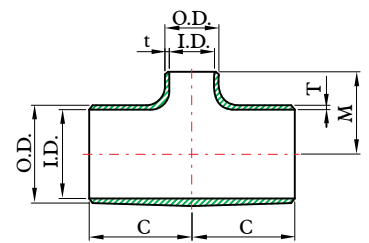
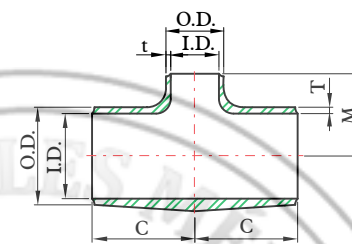
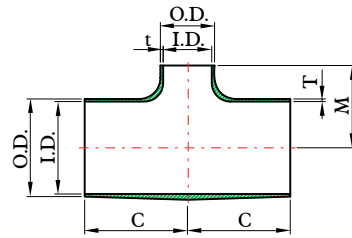


ASTM A403 WELDED FITTINGS

REDUCING OUTLET TEES



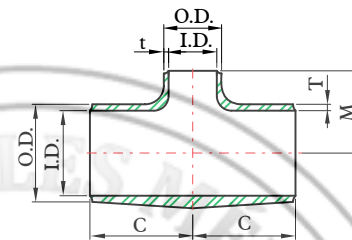
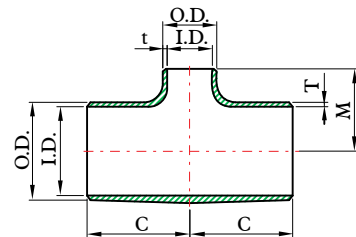
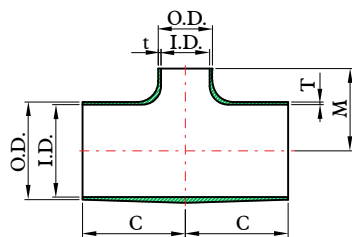
DIMENSIONS

unit : inch / lb

Nominal Pipe Size Run X Outlet	Outside Diameter Run (O.D.)	Outside Diameter Outlet (O.D.)	Center to End Run (C)	Center to End Outlet (M)	Schedule 5S					Schedule 10S					Schedule 40S				
					Inside Diameter Run (I.D.)	Inside Diameter Outlet (I.D.)	Wall Thickness Run (T)	Wall Thickness Outlet (t)	Approx. Weight **	Inside Diameter Run (I.D.)	Inside Diameter Outlet (I.D.)	Wall Thickness Run (T)	Wall Thickness Outlet (t)	Approx. Weight **	Inside Diameter Run (I.D.)	Inside Diameter Outlet (I.D.)	Wall Thickness Run (T)	Wall Thickness Outlet (t)	Approx. Weight **
1/2 x 1/4	.840	.540	1	1	.710	.410	.065	.065	.16	.674	.410	.083	.065	.18	.622	.364	.109	.088	.20
1/2 x 3/8	.840	.675	1	1	.710	.545	.065	.065	.17	.674	.545	.083	.065	.19	.622	.493	.109	.091	.21
3/4 x 3/8	1.050	.675	1-1/8	1-1/8	.920	.545	.065	.065	.19	.884	.545	.083	.065	.24	.824	.493	.113	.091	.32
3/4 x 1/2	1.050	.840	1-1/8	1-1/8	.920	.710	.065	.065	.20	.884	.674	.083	.083	.25	.824	.622	.113	.109	.34
1 x 3/8	1.315	.675	1-1/2	1-1/2	1.185	.545	.065	.065	.34	1.097	.545	.109	.065	.54	1.049	.493	.133	.091	.56
1 x 1/2	1.315	.840	1-1/2	1-1/2	1.185	.710	.065	.065	.35	1.097	.674	.109	.083	.55	1.049	.622	.133	.109	.57
1 x 3/4	1.315	1.050	1-1/2	1-1/2	1.185	.920	.065	.065	.36	1.097	.884	.109	.083	.56	1.049	.824	.133	.113	.59
1-1/4 x 1/2	1.660	.840	1-7/8	1-7/8	1.530	.710	.065	.065	.64	1.442	.674	.109	.083	.95	1.380	.622	.140	.109	1.12
1-1/4 x 3/4	1.660	1.050	1-7/8	1-7/8	1.530	.920	.065	.065	.66	1.442	.884	.109	.083	.97	1.380	.824	.140	.113	1.15
1-1/4 x 1	1.660	1.315	1-7/8	1-7/8	1.530	1.185	.065	.065	.68	1.442	1.097	.109	.109	.99	1.380	1.049	.140	.133	1.17
1-1/2 x 1/2	1.900	.840	2-1/4	2-1/4	1.770	.710	.065	.065	.81	1.682	.674	.109	.083	1.27	1.610	.622	.145	.109	1.61
1-1/2 x 3/4	1.900	1.050	2-1/4	2-1/4	1.770	.920	.065	.065	.82	1.682	.884	.109	.083	1.29	1.610	.824	.145	.113	1.63
1-1/2 x 1	1.900	1.315	2-1/4	2-1/4	1.770	1.185	.065	.065	.83	1.682	1.097	.109	.109	1.32	1.610	1.049	.145	.133	1.67
1-1/2 x 1-1/4	1.900	1.660	2-1/4	2-1/4	1.770	1.530	.065	.065	.85	1.682	1.442	.109	.109	1.35	1.610	1.380	.145	.140	1.71
2 x 3/4	2.375	1.050	2-1/2	1-3/4	2.245	.920	.065	.065	1.02	2.157	.884	.109	.083	1.59	2.067	.824	.154	.113	2.40
2 x 1	2.375	1.315	2-1/2	2	2.245	1.185	.065	.065	1.03	2.157	1.097	.109	.109	1.60	2.067	1.049	.154	.133	2.43
2 x 1-1/4	2.375	1.660	2-1/2	2-1/4	2.245	1.530	.065	.065	1.05	2.157	1.442	.109	.109	1.64	2.067	1.380	.154	.140	2.49
2 x 1-1/2	2.375	1.900	2-1/2	2-3/8	2.245	1.770	.065	.065	1.08	2.157	1.682	.109	.109	1.68	2.067	1.610	.154	.145	2.54
2-1/2 x 1	2.875	1.315	3	2-1/4	2.709	1.185	.083	.065	1.83	2.635	1.097	.120	.109	2.63	2.469	1.049	.203	.133	4.12
2-1/2 x 1-1/4	2.875	1.660	3	2-1/2	2.709	1.530	.083	.065	1.85	2.635	1.442	.120	.109	2.66	2.469	1.380	.203	.140	4.17
2-1/2 x 1-1/2	2.875	1.900	3	2-5/8	2.709	1.770	.083	.065	1.89	2.635	1.682	.120	.109	2.73	2.469	1.610	.203	.145	4.27
2-1/2 x 2	2.875	2.375	3	2-3/4	2.709	2.245	.083	.065	1.93	2.635	2.157	.120	.109	2.79	2.469	2.067	.203	.154	4.36
3 x 1	3.500	1.315	3-3/8	2-5/8	3.334	1.185	.083	.065	2.85	3.260	1.097	.120	.109	3.27	3.068	1.049	.216	.133	6.13
3 x 1-1/4	3.500	1.660	3-3/8	2-3/4	3.334	1.530	.083	.065	2.89	3.260	1.442	.120	.109	3.31	3.068	1.380	.216	.140	6.20
3 x 1-1/2	3.500	1.900	3-3/8	2-7/8	3.334	1.770	.083	.065	2.93	3.260	1.682	.120	.109	3.35	3.068	1.610	.216	.145	6.28
3 x 2	3.500	2.375	3-3/8	3	3.334	2.245	.083	.065	2.99	3.260	2.157	.120	.109	3.43	3.068	2.067	.216	.154	6.42
3 x 2-1/2	3.500	2.875	3-3/8	3-1/4	3.334	2.709	.083	.083	3.06	3.260	2.635	.120	.120	3.51	3.068	2.469	.216	.203	6.57
3-1/2 x 1-1/2	4.000	1.900	3-3/4	3-1/8	3.834	1.770	.083	.065	4.67	3.760	1.682	.120	.109	4.99	3.548	1.610	.226	.145	7.65
3-1/2 x 2	4.000	2.375	3-3/4	3-1/4	3.834	2.245	.083	.065	4.73	3.760	2.157	.120	.109	5.05	3.548	2.067	.226	.154	7.74
3-1/2 x 2-1/2	4.000	2.875	3-3/4	3-1/2	3.834	2.709	.083	.083	4.84	3.760	2.635	.120	.120	5.17	3.548	2.469	.226	.203	8.97
3-1/2 x 3	4.000	3.500	3-3/4	3-5/8	3.834	3.334	.083	.083	4.95	3.760	3.260	.120	.120	5.29	3.548	3.068	.226	.216	9.10
4 x 1-1/2	4.500	1.900	4-1/8	3-3/8	4.334	1.770	.083	.065	6.05	4.260	1.682	.120	.109	6.40	4.026	1.610	.237	.145	9.76
4 x 2	4.500	2.375	4-1/8	3-1/2	4.334	2.245	.083	.065	6.12	4.260	2.157	.120	.109	6.48	4.026	2.067	.237	.154	9.88
4 x 2-1/2	4.500	2.875	4-1/8	3-3/4	4.334	2.709	.083	.083	6.19	4.260	2.635	.120	.120	6.56	4.026	2.469	.237	.203	10.00
4 x 3	4.500	3.500	4-1/8	3-7/8	4.334	3.334	.083	.083	6.33	4.260	3.260	.120	.120	6.71	4.026	3.068	.237	.216	10.23
4 x 3-1/2	4.500	4.000	4-1/8	4	4.334	3.834	.083	.083	6.48	4.260	3.760	.120	.120	6.86	4.026	3.548	.237	.226	10.40

ASTM A403 WELDED FITTINGS

REDUCING OUTLET TEES



DIMENSIONS

unit : inch / lb

Nominal Pipe Size Run X Outlet	Outside Diameter Run (O.D.)	Outside Diameter Outlet (O.D.)	Center to End Run (C)	Center to End Outlet (M)	Schedule 80S					Schedule 160					XX Strong Wall					
					Inside Diameter Run (I.D.)	Inside Diameter Outlet (I.D.)	Wall Thickness Run (T)	Wall Thickness Outlet (t)	Approximate Weight **	Inside Diameter Run (I.D.)	Inside Diameter Outlet (I.D.)	Wall Thickness Run (T)	Wall Thickness Outlet (t)	Approximate Weight **	Inside Diameter Run (I.D.)	Inside Diameter Outlet (I.D.)	Wall Thickness Run (T)	Wall Thickness Outlet (t)	Approximate Weight **	
1/2 x 1/4	.840	.540	1	1	.546	.302	.147	.119	.25	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1/2 x 3/8	.840	.675	1	1	.546	.423	.147	.126	.27	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3/4 x 3/8	1.050	.675	1-1/8	1-1/8	.742	.423	.154	.126	.38	.612	.301	.219	.187	.55	-----	-----	-----	-----	-----	-----
3/4 x 1/2	1.050	.840	1-1/8	1-1/8	.742	.546	.154	.147	.40	.612	.466	.219	.187	.57	.434	.252	.308	.294	.81	-----
1 x 3/8	1.315	.675	1-1/2	1-1/2	.957	.423	.179	.126	.73	.815	.301	.250	.187	1.02	-----	-----	-----	-----	-----	-----
1 x 1/2	1.315	.840	1-1/2	1-1/2	.957	.546	.179	.147	.75	.815	.466	.250	.187	1.04	.599	.252	.358	.294	1.49	-----
1 x 3/4	1.315	1.050	1-1/2	1-1/2	.957	.742	.179	.154	.76	.815	.614	.250	.218	1.07	.599	.434	.358	.308	1.53	-----
1-1/4 x 1/2	1.660	.840	1-7/8	1-7/8	1.278	.546	.191	.147	1.29	1.160	.466	.250	.187	1.69	.896	.252	.382	.294	2.58	-----
1-1/4 x 3/4	1.660	1.050	1-7/8	1-7/8	1.278	.742	.191	.154	1.32	1.160	.614	.250	.218	1.73	.896	.434	.382	.308	2.64	-----
1-1/4 x 1	1.660	1.315	1-7/8	1-7/8	1.278	.957	.191	.179	1.35	1.160	.815	.250	.250	1.77	.896	.599	.382	.358	2.70	-----
1-1/2 x 1/2	1.900	.840	2-1/4	2-1/4	1.500	.546	.200	.147	1.91	1.338	.466	.281	.187	2.67	1.100	.252	.400	.294	3.82	-----
1-1/2 x 3/4	1.900	1.050	2-1/4	2-1/4	1.500	.742	.200	.154	1.93	1.338	.614	.281	.218	2.71	1.100	.434	.400	.308	3.87	-----
1-1/2 x 1	1.900	1.315	2-1/4	2-1/4	1.500	.957	.200	.179	1.98	1.338	.815	.281	.250	2.77	1.100	.599	.400	.358	3.96	-----
1-1/2 x 1-1/4	1.900	1.660	2-1/4	2-1/4	1.500	1.278	.200	.191	2.02	1.338	1.160	.281	.250	2.83	1.100	.896	.400	.382	4.05	-----
2 x 3/4	2.375	1.050	2-1/2	1-3/4	1.939	.742	.218	.154	2.97	1.689	.614	.343	.218	4.67	1.503	.434	.436	.308	5.95	-----
2 x 1	2.375	1.315	2-1/2	2	1.939	.957	.218	.179	3.01	1.689	.815	.343	.250	4.73	1.503	.599	.436	.358	6.02	-----
2 x 1-1/4	2.375	1.660	2-1/2	2-1/4	1.939	1.278	.218	.191	3.08	1.689	1.160	.343	.250	4.84	1.503	.896	.436	.382	6.16	-----
2 x 1-1/2	2.375	1.900	2-1/2	2-3/8	1.939	1.500	.218	.200	3.15	1.689	1.338	.343	.281	4.95	1.503	1.100	.436	.400	6.30	-----
2-1/2 x 1	2.875	1.315	3	2-1/4	2.323	.957	.276	.179	5.86	2.125	.815	.375	.250	7.97	1.771	.599	.552	.358	11.73	-----
2-1/2 x 1-1/4	2.875	1.660	3	2-1/2	2.323	1.278	.276	.191	5.93	2.125	1.160	.375	.250	8.06	1.771	.896	.552	.382	11.87	-----
2-1/2 x 1-1/2	2.875	1.900	3	2-5/8	2.323	1.500	.276	.200	6.07	2.125	1.338	.375	.281	8.25	1.771	1.100	.552	.400	12.14	-----
2-1/2 x 2	2.875	2.375	3	2-3/4	2.323	1.939	.276	.218	6.21	2.125	1.689	.375	.343	8.44	1.771	1.503	.552	.436	12.42	-----
3 x 1	3.500	1.315	3-3/8	2-5/8	2.900	.957	.300	.179	8.23	2.624	.815	.438	.250	12.02	2.300	.599	.600	.358	16.46	-----
3 x 1-1/4	3.500	1.660	3-3/8	2-3/4	2.900	1.278	.300	.191	8.33	2.624	1.160	.438	.250	12.16	2.300	.896	.600	.382	16.66	-----
3 x 1-1/2	3.500	1.900	3-3/8	2-7/8	2.900	1.500	.300	.200	8.43	2.624	1.338	.438	.281	12.30	2.300	1.100	.600	.400	16.85	-----
3 x 2	3.500	2.375	3-3/8	3	2.900	1.939	.300	.218	8.62	2.624	1.689	.438	.343	12.59	2.300	1.503	.600	.436	17.24	-----
3 x 2-1/2	3.500	2.875	3-3/8	3-1/4	2.900	2.323	.300	.276	8.82	2.624	2.125	.438	.375	12.88	2.300	1.771	.600	.552	17.64	-----
3-1/2 x 1-1/2	4.000	1.900	3-3/4	3-1/8	3.364	1.500	.318	.200	10.20	-----	-----	-----	-----	-----	2.728	1.100	.636	.400	20.40	-----
3-1/2 x 2	4.000	2.375	3-3/4	3-1/4	3.364	1.939	.318	.218	10.32	-----	-----	-----	-----	-----	2.728	1.503	.636	.436	20.64	-----
3-1/2 x 2-1/2	4.000	2.875	3-3/4	3-1/2	3.364	2.323	.318	.276	10.56	-----	-----	-----	-----	-----	2.728	1.771	.636	.552	21.12	-----
3-1/2 x 3	4.000	3.500	3-3/4	3-5/8	3.364	2.900	.318	.300	10.80	-----	-----	-----	-----	-----	2.728	2.300	.636	.600	21.60	-----
4 x 1-1/2	4.500	1.900	4-1/8	3-3/8	3.826	1.500	.337	.200	14.28	3.438	1.338	.531	.281	22.56	3.152	1.100	.674	.400	28.56	-----
4 x 2	4.500	2.375	4-1/8	3-1/2	3.826	1.939	.337	.218	14.45	3.438	1.689	.531	.343	22.83	3.152	1.503	.674	.436	28.90	-----
4 x 2-1/2	4.500	2.875	4-1/8	3-3/4	3.826	2.323	.337	.276	14.62	3.438	2.125	.531	.375	23.10	3.152	1.771	.674	.552	29.24	-----
4 x 3	4.500	3.500	4-1/8	3-7/8	3.826	2.900	.337	.300	14.96	3.438	2.624	.531	.438	23.63	3.152	2.300	.674	.600	29.92	-----
4 x 3-1/2	4.500	4.000	4-1/8	4	3.826	3.364	.337	.318	15.30	-----	-----	-----	-----	-----	3.152	2.728	.674	.636	30.60	-----

ASTM A403 WELDED FITTINGS

REDUCING OUTLET TEES

DIMENSIONS

unit : inch / lb

Nominal Pipe Size Run X Outlet	Outside Diameter Run (O.D.)	Outside Diameter Outlet (O.D)	Center to End Run (C)	Center to End Outlet (M)	Schedule 5S					Schedule 10S					Schedule 40S				
					Inside Diameter Run (I.D.)	Inside Diameter Outlet (I.D.)	Wall Thickness Run (T)	Wall Thickness Outlet (t)	Approx. Weight**	Inside Diameter Run (I.D.)	Inside Diameter Outlet (I.D.)	Wall Thickness Run (T)	Wall Thickness Outlet (t)	Approx. Weight**	Inside Diameter Run (I.D.)	Inside Diameter Outlet (I.D.)	Wall Thickness Run (T)	Wall Thickness Outlet (t)	Approx. Weight**
5 x 2	5.563	2.375	4-7/8	4-1/8	5.345	2.245	.109	.065	10.92	5.295	2.157	.134	.109	11.29	5.047	2.067	.258	.154	17.43
5 x 2-1/2	5.563	2.875	4-7/8	4-1/4	5.345	2.709	.109	.083	11.05	5.295	2.635	.134	.120	11.43	5.047	2.469	.258	.203	17.63
5 x 3	5.563	3.500	4-7/8	4-3/8	5.345	3.334	.109	.083	11.18	5.295	3.260	.134	.120	11.56	5.047	3.068	.258	.216	17.84
5 x 3-1/2	5.563	4.000	4-7/8	4-1/2	5.345	3.834	.109	.083	11.44	5.295	3.760	.134	.120	11.83	5.047	3.548	.258	.226	18.26
5 x 4	5.563	4.500	4-7/8	4-5/8	5.345	4.334	.109	.083	11.70	5.295	4.260	.134	.120	12.10	5.047	4.026	.258	.237	18.67
6 x 2-1/2	6.625	2.875	5-5/8	4-3/4	6.407	2.709	.109	.083	14.48	6.357	2.635	.134	.120	14.95	6.065	2.469	.280	.203	20.37
6 x 3	6.625	3.500	5-5/8	4-7/8	6.407	3.334	.109	.083	14.62	6.357	3.260	.134	.120	15.13	6.065	3.068	.280	.216	26.32
6 x 3-1/2	6.625	4.000	5-5/8	5	6.407	3.834	.109	.083	14.79	6.357	3.760	.134	.120	15.31	6.065	3.548	.280	.226	20.85
6 x 4	6.625	4.500	5-5/8	5-1/8	6.407	4.334	.109	.083	15.13	6.357	4.260	.134	.120	15.66	6.065	4.026	.280	.237	21.34
6 x 5	6.625	5.563	5-5/8	5-3/8	6.407	5.345	.109	.109	15.48	6.357	5.295	.134	.134	16.02	6.065	5.047	.280	.258	21.82
8 x 3	8.625	3.500	7	6	8.407	3.334	.109	.083	26.04	8.329	3.260	.148	.120	29.00	7.981	3.068	.322	.216	38.72
8 x 3-1/2	8.625	4.000	7	6	8.407	3.834	.109	.083	26.35	8.329	3.760	.148	.120	29.32	7.981	3.548	.322	.226	39.18
8 x 4	8.625	4.500	7	6-1/8	8.407	4.334	.109	.083	26.66	8.329	4.260	.148	.120	29.67	7.981	4.026	.322	.237	39.64
8 x 5	8.625	5.563	7	6-3/8	8.407	5.345	.109	.109	27.28	8.329	5.295	.148	.134	30.36	7.981	5.047	.322	.258	40.56
8 x 6	8.625	6.625	7	6-5/8	8.407	6.407	.109	.109	27.90	8.329	6.357	.148	.134	31.05	7.981	6.065	.322	.280	41.49
10 x 4	10.750	4.500	8-1/2	7-1/4	10.482	4.334	.134	.083	46.75	10.420	4.260	.165	.120	50.15	10.020	4.026	.365	.237	66.30
10 x 5	10.750	5.563	8-1/2	7-1/2	10.482	5.345	.134	.109	47.30	10.420	5.295	.165	.134	50.74	10.020	5.047	.365	.258	67.08
10 x 6	10.750	6.625	8-1/2	7-5/8	10.482	6.407	.134	.109	48.40	10.420	6.357	.165	.134	51.92	10.020	6.065	.365	.280	68.64
10 x 8	10.750	8.625	8-1/2	8	10.482	8.407	.134	.109	49.50	10.420	8.329	.165	.148	53.10	10.020	7.981	.365	.322	70.20
12 x 5	12.750	5.563	10	8-1/2	12.438	5.345	.156	.109	70.55	12.390	5.295	.180	.134	73.95	12.000	5.047	.375	.258	116.00
12 x 6	12.750	6.625	10	8-5/8	12.438	6.407	.156	.109	71.38	12.390	6.357	.180	.134	74.82	12.000	6.065	.375	.280	118.00
12 x 8	12.750	8.625	10	9	12.438	8.407	.156	.109	73.04	12.390	8.329	.180	.148	76.56	12.000	7.981	.375	.322	120.00
12 x 10	12.750	10.750	10	9-1/2	12.438	10.482	.156	.134	74.70	12.390	10.420	.180	.165	78.30	12.000	10.020	.375	.365	123.00
14 x 6	14.000	6.625	11	9-3/8	13.688	6.407	.156	.109	75.65	13.624	6.357	.188	.134	90.95	13.250	6.065	.375	.280	148.00
14 x 8	14.000	8.625	11	9-3/4	13.688	8.407	.156	.109	76.54	13.624	8.329	.188	.148	92.02	13.250	7.981	.375	.322	150.00
14 x 10	14.000	10.750	11	10-1/8	13.688	10.482	.156	.134	78.32	13.624	10.420	.188	.165	94.16	13.250	10.020	.375	.365	154.00
14 x 12	14.000	12.750	11	10-5/8	13.688	12.438	.156	.156	80.10	13.624	12.390	.188	.180	96.30	13.250	12.000	.375	.375	157.00
16 x 6	16.000	6.625	12	10-3/8	15.670	6.407	.165	.109	96.60	15.624	6.357	.188	.134	109.00	15.250	6.065	.375	.280	184.00
16 x 8	16.000	8.625	12	10-3/4	15.670	8.407	.165	.109	97.75	15.624	8.329	.188	.148	110.00	15.250	7.981	.375	.322	187.00
16 x 10	16.000	10.750	12	11-1/8	15.670	10.482	.165	.134	98.90	15.624	10.420	.188	.165	112.00	15.250	10.020	.375	.365	189.00
16 x 12	16.000	12.750	12	11-5/8	15.670	12.438	.165	.156	101.00	15.624	12.390	.188	.180	114.00	15.250	12.000	.375	.375	193.00
16 x 14	16.000	14.000	12	12	15.670	13.688	.165	.156	103.00	15.624	13.624	.188	.188	117.00	15.250	13.250	.375	.375	198.00
18 x 8	18.000	8.625	13-1/2	11-3/4	17.670	8.407	.165	.109	125.00	17.624	8.329	.188	.148	142.00	17.250	7.981	.375	.322	240.00
18 x 10	18.000	10.750	13-1/2	12-1/8	17.670	10.482	.165	.134	126.00	17.624	10.420	.188	.165	143.00	17.250	10.020	.375	.365	243.00
18 x 12	18.000	12.750	13-1/2	12-5/8	17.670	12.438	.165	.156	128.00	17.624	12.390	.188	.180	145.00	17.250	12.000	.375	.375	246.00
18 x 14	18.000	14.000	13-1/2	13	17.670	13.688	.165	.156	131.00	17.624	13.624	.188	.188	148.00	17.250	13.250	.375	.375	251.00
18 x 16	18.000	16.000	13-1/2	13	17.670	15.670	.165	.165	134.00	17.624	15.624	.188	.188	152.00	17.250	15.250	.375	.375	257.00
20 x 8	20.000	8.625	15	12-3/4	19.624	8.407	.188	.109	141.00	19.564	8.329	.218	.148	189.00	19.250	7.981	.375	.322	297.00
20 x 10	20.000	10.750	15	13-1/8	19.624	10.482	.188	.134	143.00	19.564	10.420	.218	.165	191.00	19.250	10.020	.375	.365	300.00
20 x 12	20.000	12.750	15	13-5/8	19.624	12.438	.188	.156	145.00	19.564	12.390	.218	.180	193.00	19.250	12.000	.375	.375	304.00
20 x 14	20.000	14.000	15	14	19.624	13.688	.188	.156	147.00	19.564	13.624	.218	.188	196.00	19.250	13.250	.375	.375	308.00
20 x 16	20.000	16.000	15	14	19.624	15.670	.188	.165	150.00	19.564	15.624	.218	.188	200.00	19.250	15.250	.375	.375	315.00
20 x 18	20.000	18.000	15	14-1/2	19.624	17.670	.188	.165	154.00	19.564	17.624	.218	.188	205.00	19.250	17.250	.375	.375	322.00
24 x 10	24.000	10.750	17	15-1/8	23.564	10.482	.218	.134	247.00	23.500	10.420	.250	.165	284.00	23.250	10.020	.375	.365	413.00
24 x 12	24.000	12.750	17	15-5/8	23.564	12.438	.218	.156	250.00	23.500	12.390	.250	.180	288.00	23.250	12.000	.375	.375	418.00
24 x 14	24.000	14.000	17	16	23.564	13.688	.218	.156	253.00	23.500	13.624	.250	.188	291.00	23.250	13.250	.375	.375	423.00
24 x 16	24.000	16.000	17	16	23.564	15.670	.218	.165	256.00	23.500	15.624	.250	.188	295.00	23.250	15.250	.375	.375	428.00
24 x 18	24.000	18.000	17	16-1/2	23.564	17.670	.218	.165	262.00	23.500	17.624	.250	.188	302.00	23.250	17.250	.375	.375	438.00
24 x 20	24.000	20.000	17	17	23.564	19.624	.218	.188	268.00	23.500	19.564	.250	.218	308.00	23.250	19.250	.375	.375	448.00



ASTM A403 WELDED FITTINGS

REDUCING OUTLET TEES

DIMENSIONS

unit : inch / lb

Nominal Pipe Size Run X Outlet	Outside Diameter Run (O.D.)	Outside Diameter Outlet (O.D.)	Center to End Run (C)	Center to End Outlet (M)	Schedule 80S					Schedule 160					XX Strong Wall				
					Inside Diameter Run (I.D.)	Inside Diameter Outlet (I.D.)	Wall Thickness (T)	Wall Thickness (t)	Approx. Weight **	Inside Diameter Run (I.D.)	Inside Diameter Outlet (I.D.)	Wall Thickness (T)	Wall Thickness (t)	Approx. Weight **	Inside Diameter Run (I.D.)	Inside Diameter Outlet (I.D.)	Wall Thickness (T)	Wall Thickness (t)	Approx. Weight **
					5 x 2	5.563	2.375	4-7/8	4-1/8	4.813	1.939	.375	.218	21.00	4.313	1.689	.625	.343	35.07
5 x 2-1/2	5.563	2.875	4-7/8	4-1/4	4.813	2.323	.375	.276	21.25	4.313	2.125	.625	.375	35.48	4.063	1.771	.750	.552	42.50
5 x 3	5.563	3.500	4-7/8	4-3/8	4.813	2.900	.375	.300	21.50	4.313	2.624	.625	.438	35.90	4.063	2.300	.750	.600	43.00
5 x 3-1/2	5.563	4.000	4-7/8	4-1/2	4.813	3.364	.375	.318	22.00	-----	-----	-----	-----	-----	4.063	2.728	.750	.636	44.00
5 x 4	5.563	4.500	4-7/8	4-5/8	4.813	3.826	.375	.337	22.50	4.313	3.438	.625	.531	37.57	4.063	3.152	.750	.674	45.00
6 x 2-1/2	6.625	2.875	5-5/8	4-3/4	5.761	2.323	.432	.276	25.20	5.187	2.125	.719	.375	41.83	4.897	1.771	.864	.552	50.40
6 x 3	6.625	3.500	5-5/8	4-7/8	5.761	2.900	.432	.300	25.50	5.187	2.624	.719	.438	42.33	4.897	2.300	.864	.600	51.00
6 x 3-1/2	6.625	4.000	5-5/8	5	5.761	3.364	.432	.318	25.80	-----	-----	-----	-----	-----	4.897	2.728	.864	.636	51.60
6 x 4	6.625	4.500	5-5/8	5-1/8	5.761	3.826	.432	.337	26.40	5.187	3.438	.719	.531	43.82	4.897	3.152	.864	.674	52.80
6 x 5	6.625	5.563	5-5/8	5-3/8	5.761	4.813	.432	.375	27.00	5.187	4.313	.719	.625	44.82	4.897	4.063	.864	.750	54.00
8 x 3	8.625	3.500	7	6	7.625	2.900	.500	.300	52.08	6.813	2.624	.906	.438	94.00	6.875	2.300	.875	.600	90.70
8 x 3-1/2	8.625	4.000	7	6	7.625	3.364	.500	.318	52.70	-----	-----	-----	-----	-----	6.875	2.728	.875	.636	91.80
8 x 4	8.625	4.500	7	6-1/8	7.625	3.826	.500	.337	53.32	6.813	3.438	.906	.531	96.30	6.875	3.152	.875	.674	92.90
8 x 5	8.625	5.563	7	6-3/8	7.625	4.813	.500	.375	54.56	6.813	4.313	.906	.625	98.50	6.875	4.063	.875	.750	95.00
8 x 6	8.625	6.625	7	6-5/8	7.625	5.761	.500	.432	55.80	6.813	5.187	.906	.719	101.00	6.875	4.897	.875	.864	97.20
10 x 4	10.750	4.500	8-1/2	7-1/4	9.750	3.826	.500	.337	93.50	8.500	3.438	1.125	.531	210.00	-----	-----	-----	-----	-----
10 x 5	10.750	5.563	8-1/2	7-1/2	9.750	4.813	.500	.375	94.60	8.500	4.313	1.125	.625	212.00	-----	-----	-----	-----	-----
10 x 6	10.750	6.625	8-1/2	7-5/8	9.750	5.761	.500	.432	96.80	8.500	5.187	1.125	.719	217.00	-----	-----	-----	-----	-----
10 x 8	10.750	8.625	8-1/2	8	9.750	7.625	.500	.500	99.00	8.500	6.813	1.125	.906	222.00	-----	-----	-----	-----	-----
12 x 5	12.750	5.563	10	8-1/2	11.750	4.813	.500	.375	157.00	10.126	4.313	1.312	.625	411.00	-----	-----	-----	-----	-----
12 x 6	12.750	6.625	10	8-5/8	11.750	5.761	.500	.432	159.00	10.126	5.187	1.312	.719	416.00	-----	-----	-----	-----	-----
12 x 8	12.750	8.625	10	9	11.750	7.625	.500	.500	163.00	10.126	6.813	1.312	.906	426.00	-----	-----	-----	-----	-----
12 x 10	12.750	10.750	10	9-1/2	11.750	9.750	.500	.500	166.00	10.126	8.500	1.312	1.125	435.00	-----	-----	-----	-----	-----
14 x 6	14.000	6.625	11	9-3/8	13.000	5.761	.500	.432	178.00	11.188	5.187	1.406	.719	-----	-----	-----	-----	-----	-----
14 x 8	14.000	8.625	11	9-3/4	13.000	7.625	.500	.500	180.00	11.188	6.813	1.406	.906	-----	-----	-----	-----	-----	-----
14 x 10	14.000	10.750	11	10-1/8	13.000	9.750	.500	.500	185.00	11.188	8.500	1.406	1.125	-----	-----	-----	-----	-----	-----
14 x 12	14.000	12.750	11	10-5/8	13.000	11.750	.500	.500	189.00	11.188	10.126	1.406	1.312	-----	-----	-----	-----	-----	-----
16 x 6	16.000	6.625	12	10-3/8	15.000	5.761	.500	.432	222.00	12.812	5.187	1.594	.719	-----	-----	-----	-----	-----	-----
16 x 8	16.000	8.625	12	10-3/4	15.000	7.625	.500	.500	225.00	12.812	6.813	1.594	.906	-----	-----	-----	-----	-----	-----
16 x 10	16.000	10.750	12	11-1/8	15.000	9.750	.500	.500	228.00	12.812	8.500	1.594	1.125	-----	-----	-----	-----	-----	-----
16 x 12	16.000	12.750	12	11-5/8	15.000	11.750	.500	.500	233.00	12.812	10.126	1.594	1.312	-----	-----	-----	-----	-----	-----
16 x 14	16.000	14.000	12	12	15.000	13.000	.500	.500	238.00	12.812	11.188	1.594	1.406	-----	-----	-----	-----	-----	-----
18 x 8	18.000	8.625	13-1/2	11-3/4	17.000	7.625	.500	.500	289.00	14.438	6.813	1.781	.906	-----	-----	-----	-----	-----	-----
18 x 10	18.000	10.750	13-1/2	12-1/8	17.000	9.750	.500	.500	292.00	14.438	8.500	1.781	1.125	-----	-----	-----	-----	-----	-----
18 x 12	18.000	12.750	13-1/2	12-5/8	17.000	11.750	.500	.500	296.00	14.438	10.126	1.781	1.312	-----	-----	-----	-----	-----	-----
18 x 14	18.000	14.000	13-1/2	13	17.000	13.000	.500	.500	303.00	14.438	11.188	1.781	1.406	-----	-----	-----	-----	-----	-----
18 x 16	18.000	16.000	13-1/2	13	17.000	15.000	.500	.500	309.00	14.438	12.812	1.781	1.594	-----	-----	-----	-----	-----	-----
20 x 8	20.000	8.625	15	12-3/4	19.000	7.625	.500	.500	357.00	16.062	6.813	1.969	.906	-----	-----	-----	-----	-----	-----
20 x 10	20.000	10.750	15	13-1/8	19.000	9.750	.500	.500	361.00	16.062	8.500	1.969	1.125	-----	-----	-----	-----	-----	-----
20 x 12	20.000	12.750	15	13-5/8	19.000	11.750	.500	.500	365.00	16.062	10.126	1.969	1.312	-----	-----	-----	-----	-----	-----
20 x 14	20.000	14.000	15	14	19.000	13.000	.500	.500	370.00	16.062	11.188	1.969	1.406	-----	-----	-----	-----	-----	-----
20 x 16	20.000	16.000	15	14	19.000	15.000	.500	.500	378.00	16.062	12.812	1.969	1.594	-----	-----	-----	-----	-----	-----
20 x 18	20.000	18.000	15	14-1/2	19.000	17.000	.500	.500	387.00	16.062	14.438	1.969	1.781	-----	-----	-----	-----	-----	-----
24 x 10	24.000	10.750	17	15-1/8	23.000	9.750	.500	.500	498.00	19.312	8.500	2.344	1.125	-----	-----	-----	-----	-----	-----
24 x 12	24.000	12.750	17	15-5/8	23.000	11.750	.500	.500	504.00	19.312	10.126	2.344	1.312	-----	-----	-----	-----	-----	-----
24 x 14	24.000	14.000	17	16	23.000	13.000	.500	.500	510.00	19.312	11.188	2.344	1.406	-----	-----	-----	-----	-----	-----
24 x 16	24.000	16.000	17	16	23.000	15.000	.500	.500	516.00	19.312	12.812	2.344	1.594	-----	-----	-----	-----	-----	-----
24 x 18	24.000	18.000	17	16-1/2	23.000	17.000	.500	.500	528.00	19.312	14.438	2.344	1.781	-----	-----	-----	-----	-----	-----
24 x 20	24.000	20.000	17	17	23.000	19.000	.500	.500	540.00	19.312	16.062	2.344	1.969	-----	-----	-----	-----	-----	-----