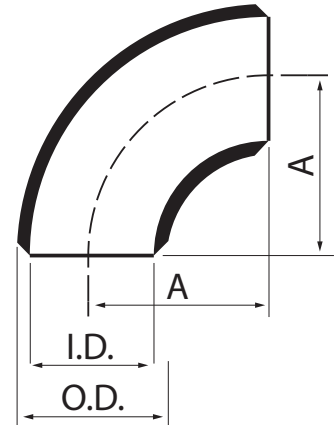


BUTT-WELD-FITTINGS

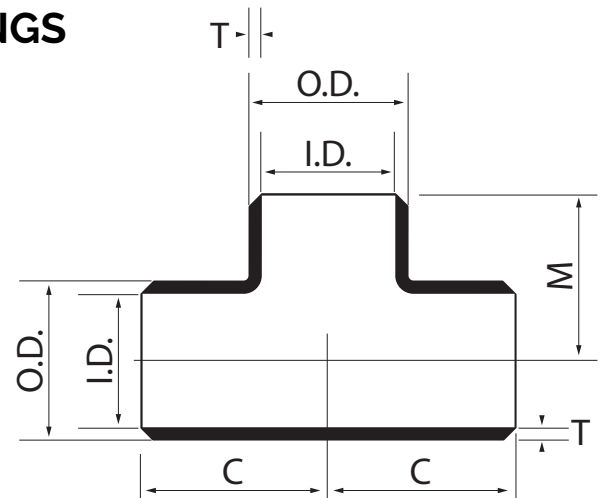
Dimensions and Weights
Long radius elbows SCH 10 S
ANSI B16.9



Nominal Pipe Size	Outside Diameter	mm	Inside Diameter ID	Wall Thickness T	mm	Center to End A	Approx. Weight (kgs)
1/2	0.840	21.34	0.674	0.083	2.11	1.500	0.06
3/4	1.050	26.67	0.884	0.083	2.11	1.125	0.06
1	1.315	33.40	1.097	0.109	2.77	1.500	0.16
1 3/4	1.660	42.16	1.442	0.109	2.77	1.875	0.20
1 1/2	1.900	48.26	1.682	0.109	2.77	2.250	0.28
2	2.375	60.33	2.157	0.109	2.77	3.000	0.47
2 1/2	2.875	73.03	2.635	0.120	3.05	3.750	0.79
3	3.500	88.90	3.260	0.120	3.05	4.500	1.16
4	4.500	114.30	4.260	0.120	3.05	6.000	2.00
5	5.563	141.30	5.295	0.134	3.40	7.500	3.46
6	6.625	168.28	6.357	0.134	3.40	9.000	4.96
8	8.625	219.08	8.329	0.148	3.76	12.000	9.55
10	10.750	273.05	10.420	0.165	4.19	15.000	16.60
12	12.750	323.85	12.390	0.180	4.57	18.000	25.80
14	14.000	355.60	13.624	0.188	4.78	21.000	34.60
16	16.000	406.40	15.624	0.188	4.78	24.000	45.20
18	18.000	457.20	17.624	0.188	4.78	27.000	57.30
20	20.000	508.00	19.564	0.218	5.54	30.000	82.00
22	22.000	558.80	21.564	0.218	5.54	33.000	99.40
24	24.000	609.60	23.500	0.250	6.35	36.000	136.00
26	26.000	660.40	25.376	0.312	7.92	39.000	204.50
28	28.000	711.20	27.376	0.312	7.92	42.000	237.10
30	30.000	762.00	29.376	0.312	7.92	45.000	272.20
32	32.000	812.80	31.376	0.312	7.92	48.000	309.70
36	36.000	914.40	35.376	0.312	7.92	54.000	392.00

BUTT-WELD-FITTINGS

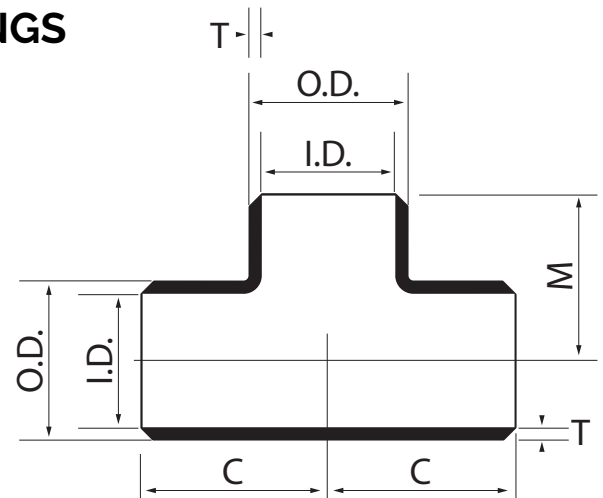
Dimensions and Weights
Straight Tees SCH 80 S
ANSI B16.9



Nominal Pipe Size	Outside Diameter OD	mm	Inside Diameter ID	Wall Thickness T	mm	Center to End		Approx. Weight (kgs)
						Run C	Outlet M	
1/2	0.840	21.34	0.546	0.147	3.73	1.000	1.000	0.11
3/4	1.050	26.67	0.742	0.154	3.91	1.125	1.125	0.16
1	1.315	33.40	0.957	0.179	4.55	1.500	1.500	0.32
1 1/4	1.660	42.16	1.278	0.191	4.85	1.875	1.875	0.54
1 1/2	1.900	48.26	1.500	0.200	5.08	2.250	2.250	0.80
2	2.375	60.33	1.939	0.218	5.54	2.500	2.500	1.20
2 1/2	2.875	73.03	2.323	0.276	7.01	3.000	3.000	2.19
3	3.500	88.90	2.900	0.300	7.62	3.375	3.375	3.25
4	4.500	114.30	3.826	0.337	8.56	4.125	4.125	5.74
5	5.563	141.30	4.813	0.375	9.53	4.875	4.875	9.31
6	6.625	168.28	5.761	0.432	10.97	5.625	5.625	12.80
8	8.625	219.08	7.625	0.500	12.70	7.000	7.000	27.40
10	10.750	273.05	9.750	0.500	12.70	8.500	8.500	41.70
12	12.750	323.85	11.750	0.500	12.70	10.000	10.000	58.40
14	14.000	355.60	13.000	0.500	12.70	11.000	11.000	70.90
16	16.000	406.40	15.000	0.500	12.70	12.000	12.000	87.70
18	18.000	457.20	17.000	0.500	12.70	13.500	13.500	111.00
20	20.000	508.00	19.000	0.500	12.70	15.000	15.000	138.00
22	22.000	558.80	21.000	0.500	12.70	16.500	16.500	167.00
24	24.000	609.60	23.000	0.500	12.70	17.000	17.000	185.00
26	26.000	660.40	25.000	0.500	12.70	19.500	19.500	211.50
28	28.000	711.20	27.000	0.500	12.70	20.500	20.500	236.40
30	30.000	762.00	29.000	0.500	12.70	22.000	22.000	271.80
32	32.000	812.80	31.000	0.500	12.70	23.500	23.500	309.70
36	36.000	914.40	35.000	0.500	12.70	26.500	26.500	392.90
40	40.000	1016.00	39.000	0.500	12.70	29.500	29.500	486.00
42	42.000	1066.80	41.000	0.500	12.70	30.000	30.000	510.30

BUTT-WELD-FITTINGS

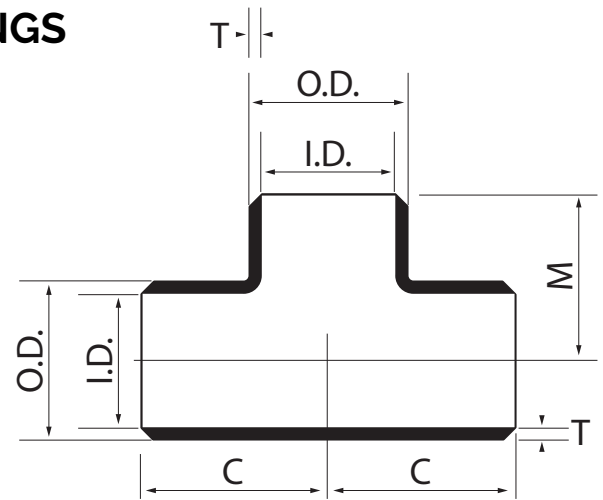
Dimensions and Weights
Straight Tees SCH 40 S
ANSI B16.9



Nominal Pipe Size	Outside Diameter OD	mm	Inside Diameter ID	Wall Thickness T	mm	Center to End		Approx. Weight (kgs)
						Run C	Outlet M	
1/2	0.840	21.34	0.622	0.109	2.77	1.000	1.000	.08
3/4	1.050	26.67	0.824	0.113	2.87	1.125	1.125	0.11
1	1.315	33.40	1.049	0.133	3.38	1.500	1.500	0.24
1 1/4	1.660	42.16	1.380	0.140	3.56	1.875	1.875	0.41
1 1/2	1.900	48.26	1.610	0.145	3.68	2.250	2.250	0.60
2	2.375	60.33	2.067	0.154	3.91	2.500	2.500	0.87
2 1/2	2.875	73.03	2.469	0.203	5.16	3.000	3.000	1.66
3	3.500	88.90	3.068	0.216	5.49	3.375	3.375	1.90
4	4.500	114.30	4.026	0.237	6.02	4.125	4.125	4.13
5	5.563	141.30	5.047	0.258	6.55	4.875	4.875	6.55
6	6.625	168.28	6.065	0.280	7.11	5.625	5.625	9.73
8	8.625	219.08	7.981	0.322	8.18	7.000	7.000	18.00
10	10.750	273.05	10.020	0.365	9.27	8.500	8.500	30.80
12	12.750	323.85	12.000	0.375	9.53	10.000	10.000	44.30
14	14.000	355.60	13.250	0.375	9.53	11.000	11.000	53.70
16	16.000	406.40	15.250	0.375	9.53	12.000	12.000	66.30
18	18.000	457.20	17.250	0.375	9.53	13.500	13.500	84.10
20	20.000	508.00	19.250	0.375	9.53	15.000	15.000	104.00
22	22.000	558.80	21.250	0.375	9.53	16.500	16.500	126.00
24	24.000	609.60	23.250	0.375	9.53	17.000	17.000	140.00
26	26.000	660.40	25.250	0.375	9.53	19.500	19.500	158.20
28	28.000	711.20	27.250	0.375	9.53	20.500	20.500	176.80
30	30.000	762.00	29.250	0.375	9.53	22.000	22.000	203.40
32	32.000	812.80	31.250	0.375	9.53	23.500	23.500	231.80
36	36.000	914.40	35.250	0.375	9.53	26.500	26.500	294.10
40	40.000	1016.00	39.250	0.375	9.53	29.500	29.500	363.90
42	42.000	1066.80	41.250	0.375	9.53	30.000	30.000	382.10

BUTT-WELD-FITTINGS

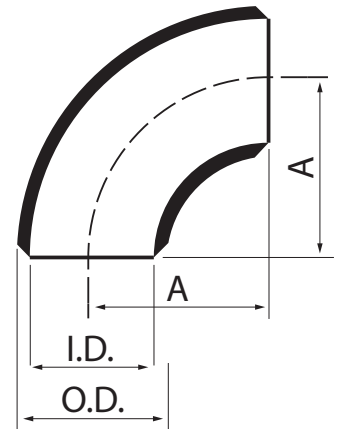
Dimensions and Weights
Straight Tees SCH 10 S
ANSI B16.9



Nominal Pipe Size	Outside Diameter OD	mm	Inside Diameter ID	Wall Thickness T	mm	Center to End		Approx. Weight (kgs)
						Run C	Outlet M	
1/2	0.840	21.34	0.674	0.083	2.11	1.000	1.000	0.07
3/4	1.050	26.67	0.884	0.083	2.11	1.125	1.125	0.09
1	1.315	33.40	1.097	0.109	2.77	1.500	1.500	0.20
1 1/2	1.660	42.16	1.442	0.109	2.77	1.875	1.875	0.33
1 1/2	1.900	48.26	1.682	0.109	2.77	2.250	2.250	0.46
2	2.375	60.33	2.157	0.109	2.77	2.500	2.500	0.63
2 1/2	2.875	73.03	2.635	0.120	3.05	3.000	3.000	1.01
3	3.500	88.90	3.260	0.120	3.05	3.375	3.375	1.37
4	4.500	114.30	4.260	0.120	3.05	4.125	4.125	2.15
5	5.563	141.30	5.295	0.134	3.40	4.875	4.875	3.48
6	6.625	168.28	6.357	0.134	3.40	5.625	5.625	4.76
8	8.625	219.08	8.329	0.148	3.76	7.000	7.000	8.46
10	10.750	273.05	10.420	0.165	4.19	8.500	8.500	14.20
12	12.750	323.85	12.390	0.180	4.57	10.000	10.000	21.60
14	14.000	355.60	13.624	0.188	4.78	11.000	11.000	27.30
16	16.000	406.40	15.624	0.188	4.78	12.000	12.000	33.60
18	18.000	457.20	17.624	0.188	4.78	13.500	13.500	47.30
20	20.000	508.00	19.564	0.218	5.54	15.000	15.000	61.00
22	22.000	558.80	21.564	0.218	5.54	16.500	16.500	73.80
24	24.000	609.60	23.500	0.250	6.35	17.000	17.000	93.50

BUTT-WELD-FITTINGS

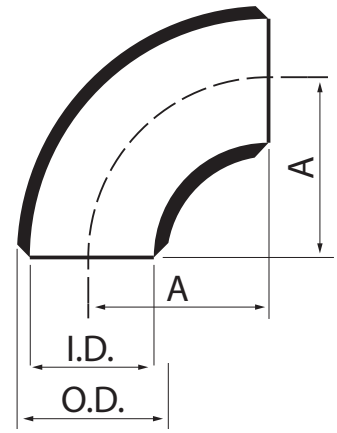
Dimensions and Weights
Long Radius Elbows SCH 80 S
ANSI B16.9



Nominal Pipe Size	Outside Diameter	mm	Inside Diameter ID	Wall Thickness T	mm	Center to End A	Approx. Weight (kgs)
1/2	0.840	21.34	0.546	0.147	3.73	1.500	0.10
3/4	1.050	26.67	0.742	0.154	3.91	1.125	0.12
1	1.315	33.40	0.957	0.179	4.55	1.500	0.19
1 1/4	1.660	42.16	1.278	0.191	4.85	1.875	0.33
1 1/2	1.900	48.26	1.500	0.200	5.08	2.250	0.49
2	2.375	60.33	1.939	0.218	5.54	3.000	0.89
2 1/2	2.875	73.03	2.323	0.276	7.01	3.750	1.70
3	3.500	88.90	2.900	0.300	7.62	4.500	2.74
4	4.500	114.30	3.826	0.337	8.56	6.000	5.34
5	5.563	141.30	4.813	0.375	9.53	7.500	9.25
6	6.625	168.28	5.761	0.432	10.97	9.000	15.30
8	8.625	219.08	7.625	0.500	12.70	12.000	30.90
10	10.750	273.05	9.750	0.500	12.70	15.000	48.80
12	12.750	323.85	11.750	0.500	12.70	18.000	69.90
14	14.000	355.60	13.000	0.500	12.70	21.000	89.90
16	16.000	406.40	15.000	0.500	12.70	24.000	118.00
18	18.000	457.20	17.000	0.500	12.70	27.000	150.00
20	20.000	508.00	19.000	0.500	12.70	30.000	185.00
22	22.000	558.80	21.000	0.500	12.70	33.000	225.00
24	24.000	609.60	23.000	0.500	12.70	36.000	268.00
26	26.000	660.40	25.000	0.500	12.70	39.000	327.80
28	28.000	711.20	27.000	0.500	12.70	42.000	380.20
30	30.000	762.00	29.000	0.500	12.70	45.000	436.50
32	32.000	812.80	31.000	0.500	12.70	48.000	496.60
36	36.000	914.40	35.000	0.500	12.70	54.000	628.50
40	40.000	1016.00	39.000	0.500	12.70	60.000	776.00
42	42.000	1066.80	41.000	0.500	12.70	63.000	855.50

BUTT-WELD-FITTINGS

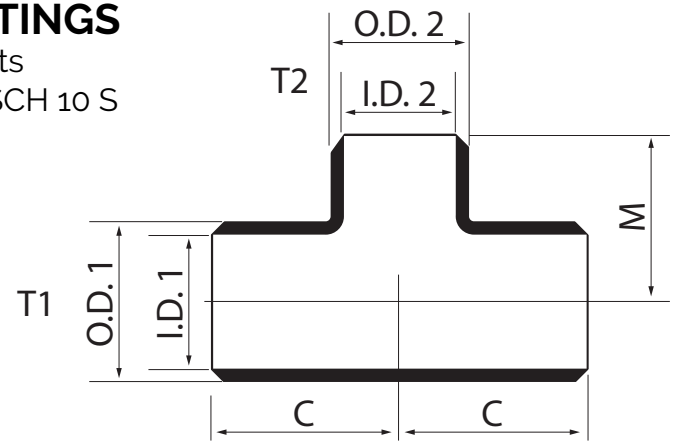
Dimensions and Weights
Long Radius Elbows SCH 40 S
ANSI B16.9



Nominal Pipe Size	Outside Diameter	mm	Inside Diameter ID	Wall Thickness T	mm	Center to End A	Approx. Weight (kgs)
1/2	0.840	21.34	0.622	0.109	2.77	1.500	0.08
3/4	1.050	26.67	0.824	0.113	2.87	1.125	0.10
1	1.315	33.40	1.049	0.133	3.38	1.500	0.15
1 1/4	1.660	42.16	1.380	0.140	3.56	1.875	629.57
1 1/2	1.900	48.26	1.610	0.145	3.68	2.250	629.58
2	2.375	60.33	2.067	0.154	3.91	3.000	629.59
2 1/2	2.875	73.03	2.469	0.203	5.16	3.750	629.60
3	3.500	88.90	3.068	0.216	5.49	4.500	629.61
4	4.500	114.30	4.026	0.237	6.02	6.000	629.62
5	5.563	141.30	5.047	0.258	6.55	7.500	629.63
6	6.625	168.28	6.065	0.280	7.11	9.000	629.64
8	8.625	219.08	7.781	0.322	8.18	12.000	629.65
10	10.750	273.05	10.020	0.365	9.27	15.000	629.66
12	12.750	323.85	12.000	0.375	9.53	18.000	629.67
14	14.000	355.60	13.250	0.375	9.53	21.000	629.68
16	16.000	406.40	15.250	0.375	9.53	24.000	629.69
18	18.000	457.20	17.250	0.375	9.53	27.000	629.70
20	20.000	508.00	19.250	0.375	9.53	30.000	629.71
22	22.000	558.80	21.250	0.375	9.53	33.000	629.72
24	24.000	609.60	23.250	0.375	9.53	36.000	629.73
26	26.000	660.40	25.264	0.375	9.53	39.000	629.74
28	28.000	711.20	27.264	0.375	9.53	42.000	629.75
30	30.000	762.00	29.264	0.375	9.53	45.000	629.76
32	32.000	812.80	31.264	0.375	9.53	48.000	629.77
36	36.000	914.40	35.264	0.375	9.53	54.000	629.78
40	40.000	1016.00	39.264	0.375	9.53	60.000	629.79
42	42.000	1066.80	41.264	0.375	9.53	63.000	629.80

BUTT-WELD-FITTINGS

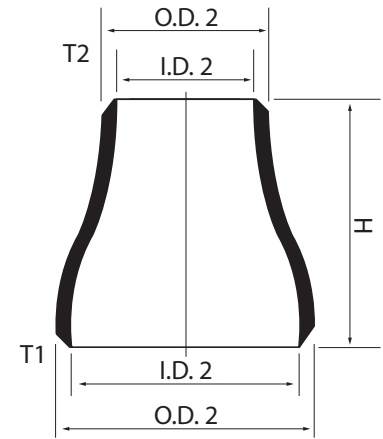
Dimensions and Weights
Reducing Outlet Tees SCH 10 S
ANSI B16.9



Nominal Pipe Size	Outside Diameter OD1	Run		Outside Diameter OD2	Outlet			Center to End		Approx. Weight (kgs)	
		mm	Wall Thickness T1		mm	Wall Thickness T2		mm	Run C		Outlet M
3/4 x 3/4 x 1/2	1.050	26.67	0.083	2.11	0.840	21.34	0.083	2.11	1.125	1.125	0.08
1 x 1 x 3/4	1.315	33.40	0.109	2.77	1.050	26.17	0.083	2.11	1.500	1.500	0.19
1 x 1 x 1/2	1.315	33.40	0.109	2.77	0.840	21.34	0.083	2.11	1.500	1.500	0.19
1 1/4 x 1 1/4 x 1	1.660	42.16	0.109	2.77	1.315	33.40	0.109	2.77	1.875	1.875	0.31
1 1/4 x 1 1/4 x 3/4	1.660	42.16	0.109	2.77	1.050	26.67	0.083	2.11	1.875	1.875	0.29
1 1/2 x 1 1/2 x 1 1/4	1.900	48.26	0.109	2.77	1.660	42.16	0.109	2.77	2.250	2.250	0.44
1 1/2 x 1 1/2 x 1	1.900	48.26	0.109	2.77	1.316	33.40	0.109	2.77	2.250	2.250	0.42
1 1/2 x 1 1/2 x 3/4	1.900	48.26	0.109	2.77	1.050	26.67	0.083	2.11	2.250	2.250	0.40
1 1/2 x 1 1/2 x 1/2	1.900	48.26	0.109	2.77	0.840	21.34	0.083	2.11	2.250	2.250	0.39
2 x 2 x 1 1/2	2.375	60.33	0.109	2.77	1.900	48.26	0.109	2.77	2.500	2.375	0.59
2 x 2 x 1 1/4	2.375	60.33	0.109	2.77	1.660	42.16	0.109	2.77	2.500	2.250	0.57
2 x 2 x 1	2.375	60.33	0.109	2.77	1.315	33.40	0.109	2.77	2.500	2.000	0.54
2 1/2 x 2 1/2 x 2	2.875	73.03	0.120	3.05	2.375	60.33	0.109	2.77	3.000	2,750	0.94
2 1/2 x 2 1/2 x 1 1/2	2.875	73.03	0.120	3.05	1.900	48.26	0.109	2.77	3.000	2.625	0.90
2 1/2 x 2 1/2 x 1 1/4	2.875	73.03	0.120	3.05	1.660	42.16	0.109	2.77	3.000	2.500	0.87
3 x 3 x 2 1/2	3.500	88.90	0.120	3.05	2.875	73.03	0.120	3.05	3.375	3.250	1.31
3 x 3 x 2	3.500	88.90	0.120	3.05	2.375	60.33	0.109	2.77	3.375	3.000	1.23
3 x 3 x 1 1/2	3.500	88.90	0.120	3.05	1.900	48.26	0.109	2.77	3.375	2.875	1.19
4 x 4 x 3	4.500	114.30	0.120	3.05	3.500	88.90	0.120	3.05	4.125	3.875	2.02
4 x 4 x 2 1/2	4.500	114.30	0.120	3.05	2.875	73.03	0.120	3.05	4.125	3.750	1.95
4 x 4 x 2	4.500	114.30	0.120	3.05	2.375	60.33	0.120	2.77	4.125	3.500	1.88
4 x 4 x 1 1/2	4.500	114.30	0.120	3.05	1.900	48.26	0.109	2.77	4.125	3.375	1.75
5 x 5 x 4	5.563	141.30	0.134	3.40	4.500	114.30	0.120	3.05	4.875	4.675	3.26
5 x 5 x 3	5.563	141.30	0.134	3.40	3.500	88.90	0.120	3.05	4.875	4.375	3.13
5 x 5 x 5/2	5.563	141.30	0.134	3.40	2.875	73.03	0.120	3.05	4.875	4.250	3.06

BUTT-WELD-FITTINGS

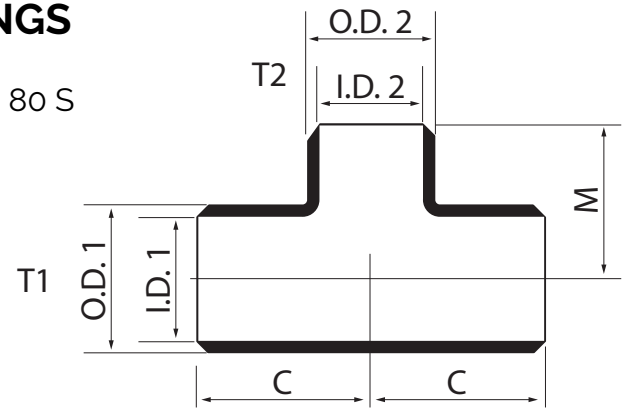
Dimensions and Weights
Reducers, Conc. SCH 10 S
ANSI B16.9



Nominal Pipe Size	Outside Diameter OD1	Large End		mm	Outside Diameter OD2	Small End		mm	End to End H	Approx. Weight (kgs)
		mm	Wall Thickness T1			mm	Wall Thickness T2			
3/4 x 1/2	1.050	26.67	0.083	2.11	0.840	21.34	0.083	2.11	1.500	0.04
1 x 3/4	1.315	33.40	0.109	2.77	1.050	26.67	0.083	2.11	2.000	0.10
1 x 1/2	1.315	33.40	0.109	2.77	0.840	21.34	0.083	2.11	2.000	0.09
1 1/4 x 1	1.660	42.16	0.109	2.77	1.315	33.40	0.109	2.77	2.000	0.12
1 1/4 x 3/4	1.660	42.16	0.109	2.77	1.050	26.67	0.083	2.11	2.000	0.11
1 1/4 x 1/2	1.660	42.16	0.109	2.77	0.840	21.34	0.083	2.11	2.000	0.10
1 1/2 x 1 1/4	1.900	48.26	0.109	2.77	1.660	42.16	0.109	2.77	2.500	0.18
1 1/2 x 1	1.900	48.26	0.109	2.77	1.315	33.40	0.109	2.77	2.500	0.17
1 1/2 x 1/4	1.900	48.26	0.109	2.77	1.050	26.67	0.083	2.11	2.500	0.15
1 1/2 x 1/2	1.900	48.26	0.109	2.77	0.840	21.34	0.083	2.11	2.500	0.14
2 x 1 1/2	2.375	60.33	0.109	2.77	1.900	48.26	0.109	2.77	3.000	0.27
2 x 1 1/4	2.375	60.33	0.109	2.77	1.660	42.16	0.109	2.77	3.000	0.25
2 x 1	2.375	60.33	0.109	2.77	1.315	33.40	0.109	2.77	3.000	0.23
2 x 3/4	2.375	60.33	0.109	2.77	1.050	26.67	0.083	2.11	3.000	0.22
2 x 1/2	2.875	60.33	0.109	2.77	0.840	21.34	0.083	2.11	3.000	0.23
2 1/2 x 2	2.875	73.03	0.120	3.05	2.375	60.33	0.109	2.77	3.500	0.43
2 1/2 x 1 1/2	2.875	73.03	0.120	3.05	1.900	48.26	0.109	2.77	3.500	0.39
2 1/4 x 1 1/4	2.875	73.03	0.120	3.05	1.660	42.16	0.109	2.77	3.500	0.37
3 x 2 1/2	3.500	88.90	0.120	3.05	2.875	73.03	0.120	3.05	3.500	0.52
3 x 2	3.500	88.90	0.120	3.05	2.375	60.33	0.109	2.77	3.500	0.48
3 x 1 1/2	3.500	88.90	0.120	3.05	1.900	48.26	0.109	2.77	3.500	0.45
3 x 1 1/4	3.500	88.90	0.120	3.05	1.660	42.16	0.109	2.77	3.500	0.43
3 x 1	3.500	88.90	0.120	3.05	1.315	33.40	0.109	2.77	3.500	0.43
4 x 3	4.500	114.30	0.120	3.05	3.500	88.90	0.120	3.05	4.000	0.76
4 x 2 1/2	4.500	114.30	0.120	3.05	2.875	73.03	0.120	3.05	4.000	0.71
4 x 2	4.500	114.30	0.120	3.05	2.375	60.33	0.109	2.77	4.000	0.67
4 x 1 1/2	4.500	114.30	0.120	3.05	1.900	48.26	0.109	2.77	4.000	0.63
5 x 4	5.563	141.30	0.134	3.40	4.500	114.30	0.120	3.05	5.000	1.33
5 x 3	5.563	141.30	0.134	3.40	3.500	88.90	0.120	3.05	5.000	1.22
5 x 2 1/2	5.563	141.30	0.134	3.40	2.875	73.03	0.120	3.05	5.000	1.14

BUTT-WELD-FITTINGS

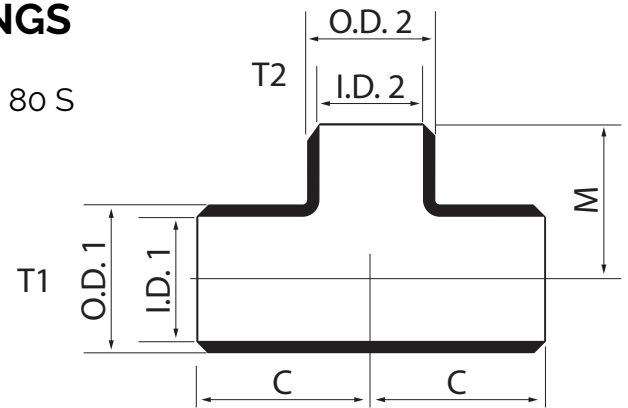
Dimensions and Weights
Reducing Outlet Tees SCH 80 S
ANSI B16.9



Nominal Pipe Size	Outside Diameter OD1	Run		Outside Diameter OD2	Outlet			Centre to End		Approx. Weight (kgs)	
		mm	Wall Thickness T1		mm	Wall Thickness T2		mm	Run C		Outlet M
6 x 6 x 5	6.625	168.28	0.432	10.97	5.563	141.30	0.375	9.53	5.625	5.375	13.80
6 x 6 x 4	6.625	168.28	0.432	10.97	4.500	114.30	0.337	8.56	5.625	5.125	13.00
6 x 6 x 3	6.625	168.28	0.432	10.97	3.500	88.90	0.300	7.62	5.625	4.875	12.60
8 x 8 x 6	8.625	219.08	0.500	12.70	6.625	168.28	0.432	10.97	7.000	6.625	25.00
8 x 8 x 5	8.625	219.08	0.500	12.70	5.563	141.30	0.375	9.35	7.000	6.375	24.00
8 x 8 x 4	8.625	219.08	0.500	12.70	4.500	114.30	0.337	8.56	7.000	6.125	24.00
10 x 10 x 8	10.750	273.05	0.500	12.70	8.625	219.08	0.500	12.70	8.500	8.000	39.00
10 x 10 x 6	10.750	273.05	0.500	12.70	6.625	168.28	0.432	10.97	8.500	7.625	37.00
10 x 10 x 5	10.750	273.05	0.500	12.70	5.563	141.30	0.375	9.53	8.500	7.500	36.00
12 x 12 x 10	12.750	323.85	0.500	12.70	10.750	273.05	0.500	12.70	10.000	9.500	55.00
12 x 12 x 8	12.750	323.85	0.500	12.70	8.625	219.08	0.500	12.70	10.000	9.500	53.00
12 x 12 x 6	12.750	323.85	0.500	12.70	6.625	168.28	0.432	10.97	10.000	9.625	51.00
14 x 14 x 12	14.000	355.60	0.500	12.70	12.750	323.85	0.500	12.70	11.000	10.625	69.00
14 x 14 x 10	14.000	355.60	0.500	12.70	10.750	273.05	0.500	12.70	11.000	10.125	66.00
14 x 14 x 8	14.000	355.60	0.500	12.70	8.625	219.08	0.500	12.70	11.000	9.750	64.00
16 x 16 x 14	16.000	406.40	0.500	12.70	14.000	355.60	0.500	12.70	12.000	12.000	86.00
16 x 16 x 12	16.000	406.40	0.500	12.70	12.750	323.85	0.500	12.70	12.000	11.625	84.00
16 x 16 x 10	16.000	406.40	0.500	12.70	10.750	273.05	0.500	12.70	12.000	11.125	81.00
18 x 18 x 16	18.000	457.20	0.500	12.70	16.000	406.40	0.500	12.70	13.500	13.000	108.00
18 x 18 x 14	18.000	457.20	0.500	12.70	14.000	355.60	0.500	12.70	13.500	13.000	106.00
18 x 18 x 12	18.000	457.20	0.500	12.70	12.750	323.85	0.500	12.70	13.500	12.625	104.00
20 x 20 x 18	20.000	508.00	0.500	12.70	18.000	457.20	0.500	12.70	15.000	14.500	134.00
20 x 20 x 16	20.000	508.00	0.500	12.70	16.000	406.40	0.500	12.70	15.000	14.000	131.00
20 x 20 x 14	20.000	508.00	0.500	12.70	14.000	355.60	0.500	12.70	15.000	14.000	129.00
22 x 22 x 20	22.000	558.80	0.500	12.70	20.000	508.00	0.500	12.70	16.500	16.000	163.00
22 x 22 x 18	22.000	558.80	0.500	12.70	18.000	457.20	0.500	12.70	16.500	15.500	159.00
22 x 22 x 16	22.000	558.80	0.500	12.70	16.000	406.40	0.500	12.70	16.500	15.000	156.00
24 x 24 x 22	24.000	609.60	0.500	12.70	22.000	558.80	0.500	12.70	17.000	17.000	183.00
24 x 24 x 20	24.000	609.60	0.500	12.70	20.000	508.00	0.500	12.70	17.000	17.000	181.00
24 x 24 x 18	24.000	609.60	0.500	12.70	18.000	457.20	0.500	12.70	17.000	16.500	177.00

BUTT-WELD-FITTINGS

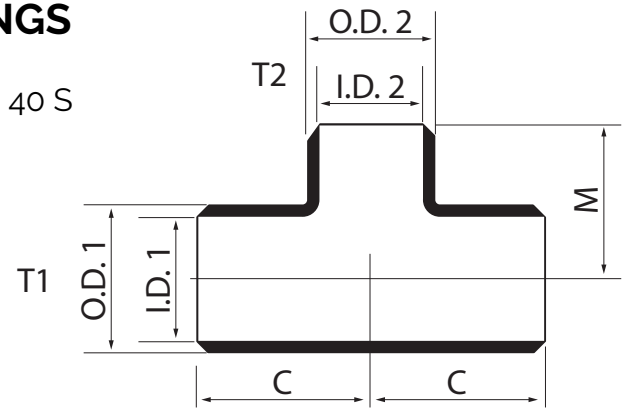
Dimensions and Weights
Reducing Outlet Tees SCH 80 S
ANSI B16.9



Nominal Pipe Size	Outside Diameter OD1	Run		mm	Outside Diameter OD2	Outlet		mm	Center to End		Approx. Weight (kgs)
		mm	Wall Thickness T1			mm	Wall Thickness T2		Run C	Outlet M	
3/4 x 3/4 x 1/2	1.050	26.67	0.154	3.91	0.840	21.34	0.147	3.73	1.125	1.125	0.15
1 x 1 x 3/4	1.315	33.40	0.179	4.55	1.050	26.67	0.154	3.91	1.500	1.500	0.29
1 x 1 x 1/2	1.315	33.40	0.179	4.55	0.840	21.34	0.147	3.73	1.500	1.500	0.28
1 1/4 x 1 1/4 x 1	1.660	42.16	0.191	4.85	1.315	33.40	0.179	4.55	1.875	1.875	0.51
1 1/4 x 1 1/4 x 3/4	1.660	42.16	0.191	4.85	1.050	26.67	0.154	3.91	1.875	1.875	0.48
1 1/2 x 1 1/2 x 1 1/4	1.900	48.26	0.200	5.08	1.660	42.16	0.191	4.85	2.250	2.250	0.77
1 1/2 x 1 1/2 x 1	1.900	48.26	0.200	5.08	1.315	33.40	0.179	4.55	2.250	2.250	0.73
1 1/2 x 1 1/2 x 3/4	1.900	48.26	0.200	5.08	1.050	26.67	0.154	3.91	2.250	2.250	0.69
1 1/2 x 1 1/2 x 1/2	1.900	48.26	0.200	5.08	0.840	21.34	0.147	3.73	2.250	2.250	0.67
2 x 2 x 1 1/2	2.375	60.33	0.218	5.54	1.900	48.26	0.200	5.08	2.500	2.375	1.11
2 x 2 x 1 1/4	2.375	60.33	0.218	5.54	1.660	42.16	0.191	4.85	2.500	2.250	1.07
2 x 2 x 1	2.375	60.33	0.218	5.54	1.315	33.40	0.179	4.55	2.500	2.000	1.02
2 1/2 x 2 1/2 x 2	2.875	73.03	0.276	7.01	2.375	60.33	0.218	5.54	3.000	2.750	1.99
2 1/2 x 2 1/2 x 1 1/2	2.875	73.03	0.276	7.01	1.900	48.26	0.200	5.08	3.000	2.625	1.90
2 1/2 x 2 1/2 x 1 1/4	2.875	73.03	0.276	7.01	1.660	42.16	0.191	4.85	3.000	2.500	1.86
3 x 3 x 2 1/2	3.500	88.90	0.300	7.62	2.875	73.03	0.276	7.01	3.375	3.250	3.05
3 x 3 x 2	3.500	88.90	0.300	7.62	2.375	60.33	0.218	5.54	3.375	3.000	2.85
3 x 3 x 1 1/2	3.500	88.90	0.300	7.62	1.900	48.26	0.200	5.08	3.375	2.875	2.77
4 x 4 x 3	4.500	114.30	0.337	8.56	3.500	88.90	0.300	7.62	4.125	3.875	5.31
4 x 4 x 2 1/2	4.500	114.30	0.337	8.56	2.875	73.03	0.276	7.01	4.125	3.750	5.11
4 x 4 x 2	4.500	114.30	0.337	8.56	2.375	60.33	0.218	5.54	4.125	3.500	4.91
4 x 4 x 1 1/2	4.500	114.30	0.377	8.56	1.900	48.26	0.200	5.08	4.125	3.375	4.83
5 x 5 x 4	5.563	141.30	0.375	9.53	4.500	114.30	0.337	8.56	4.875	4.625	8.71
5 x 5 x 3	5.563	141.30	0.375	9.53	3.500	88.90	0.300	7.62	4.875	4.375	8.28
5 x 5 x 5 1/2	5.563	141.30	0.375	9.53	2.875	73.03	0.276	7.01	4.875	4.250	8.09

BUTT-WELD-FITTINGS

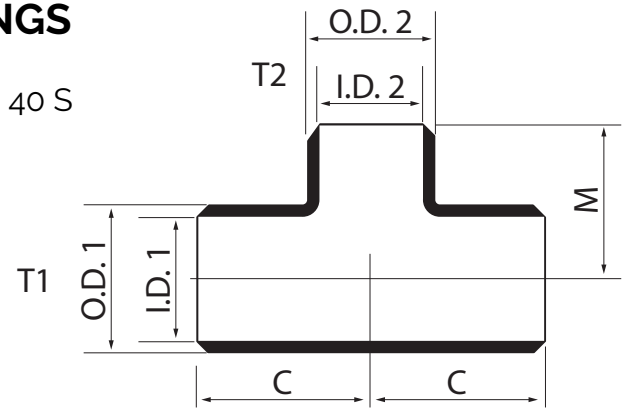
Dimensions and Weights
Reducing Outlet Tees SCH 40 S
ANSI B16.9



Nominal Pipe Size	Outside Diameter OD1	Run		Outside Diameter OD2	Outlet		mm	Center to End		Approx. Weight (kgs)
		mm	Wall Thickness T1		mm	Wall Thickness T2		Run C	Outlet M	
6 x 6 x 5	6.625	168.28	0.280	7.11	5.563	141.30	0.258	6.55	5.625	9.21
6 x 6 x 4	6.625	168.28	0.280	7.11	4.500	114.30	0.237	6.02	5.625	8.81
6 x 6 x 3	6.625	168.28	0.280	7.11	3.500	88.90	0.216	5.49	5.625	8.52
8 x 8 x 6	8.625	219.08	0.322	8.18	6.625	168.28	0.280	7.11	7.000	16.80
8 x 8 x 5	8.625	219.08	0.322	8.18	5.563	141.30	0.258	6.55	7.000	16.30
8 x 8 x 4	8.625	219.08	0.322	8.18	4.500	114.30	0.237	6.02	7.000	15.90
10 x 10 x 8	10.750	273.05	0.365	9.27	8.625	219.08	0.322	8.18	8.500	28.90
10 x 10 x 6	10.750	273.05	0.365	9.27	6.625	168.28	0.280	7.11	8.500	27.60
10 x 10 x 5	10.750	273.05	0.365	9.27	5.563	141.30	0.258	6.55	8.500	27.10
12 x 12 x 10	12.750	323.85	0.375	9.53	10.750	273.05	0.365	9.27	10.000	42.30
12 x 12 x 8	12.750	323.85	0.375	9.53	8.625	219.08	0.322	8.18	10.000	40.30
12 x 12 x 6	12.750	323.85	0.375	9.53	6.625	168.28	0.280	7.11	10.000	39.10
14 x 14 x 12	14.000	355.60	0.375	9.53	12.750	323.85	0.375	9.53	11.000	52.20
14 x 14 x 10	14.000	355.60	0.375	9.53	10.750	273.05	0.365	9.27	11.000	50.20
14 x 14 x 8	14.000	355.60	0.375	9.53	8.625	219.08	0.322	8.18	11.000	48.40
16 x 16 x 14	16.000	406.40	0.375	9.53	14.000	355.60	0.375	9.53	12.000	65.10
16 x 16 x 12	16.000	406.40	0.375	9.53	12.750	323.85	0.375	9.53	12.000	63.60
16 x 16 x 10	16.000	406.40	0.375	9.53	10.750	273.05	0.365	9.27	12.000	61.60
18 x 18 x 16	18.000	457.20	0.375	9.53	16.000	406.40	0.375	9.53	13.500	81.50
18 x 18 x 14	18.000	457.20	0.375	9.53	14.000	355.60	0.375	9.53	13.500	80.30
18 x 18 x 12	18.000	457.20	0.375	9.53	12.750	323.85	0.375	9.53	13.500	78.90
20 x 20 x 18	20.000	508.00	0.375	9.53	18.000	457.20	0.375	9.53	15.000	101.00
20 x 20 x 16	20.000	508.00	0.375	9.53	16.000	406.40	0.375	9.53	15.000	98.60
20 x 20 x 14	20.000	508.00	0.375	9.53	14.000	355.60	0.375	9.53	15.000	97.40
22 x 22 x 20	22.000	558.80	0.375	9.53	20.000	508.00	0.375	9.53	16.500	123.00
22 x 22 x 18	22.000	558.80	0.375	9.53	18.000	457.20	0.375	9.53	16.500	120.00
22 x 22 x 16	22.000	558.80	0.375	9.53	16.000	406.40	0.375	9.53	16.500	118.00
24 x 24 x 22	24.000	609.60	0.375	9.53	22.000	558.80	0.375	9.53	17.000	138.00
24 x 24 x 20	24.000	609.60	0.375	9.53	20.000	508.00	0.375	9.53	17.000	137.00
24 x 24 x 18	24.000	609.60	0.375	9.53	18.000	457.20	0.375	9.53	17.000	134.00

BUTT-WELD-FITTINGS

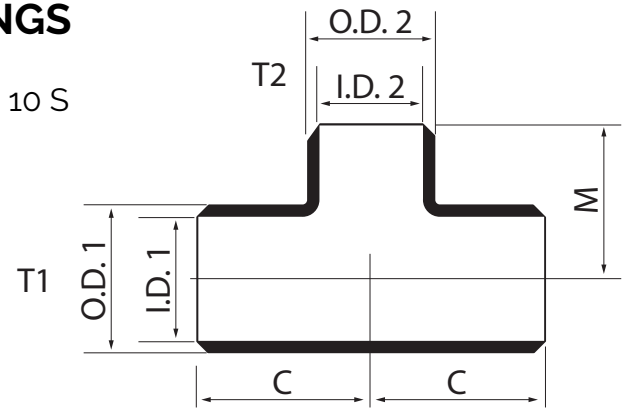
Dimensions and Weights
Reducing Outlet Tees SCH 40 S
ANSI B16.9



Nominal Pipe Size	Outside Diameter OD1	Run		Outside Diameter OD2		Outlet			Center to End		Approx. Weight (kgs)
		mm	Wall Thickness T1	mm	mm	mm	Wall Thickness T2		Run C	Outlet M	
3/4 x 3/4 x 1/2	1.050	26.67	0.113	2.87	0.840	21.34	0.109	2.77	1.125	1.125	1.12
1 x 1 x 1/4	1.315	33.40	0.133	3.38	1.050	26.67	0.113	2.87	1.500	1.500	0.23
1 x 1 x 1/2	1.315	33.40	0.133	3.38	0.840	21.34	0.109	2.77	1.500	1.500	0.22
1 1/4 x 1 1/4 x 1	1.660	42.16	0.140	3.56	1.315	33.40	0.133	3.38	1.875	1.875	0.39
1 1/4 x 1 1/4 x 1/4	1.660	42.16	0.140	3.56	1.050	26.67	0.113	2.87	1.875	1.875	0.37
1 1/2 x 1 1/2 x 1 1/4	1.900	48.26	0.145	3.68	1.660	42.16	0.140	3.56	2.250	2.250	0.57
1 1/2 x 1 1/2 x 1	1.900	48.26	0.145	3.68	1.315	33.40	0.133	3.38	2.250	2.250	0.55
1 1/2 x 1 1/2 x 3/4	1.900	48.26	0.145	3.68	1.050	26.67	0.113	2.87	2.250	2.250	0.52
1 1/2 x 1 1/2 x 1/2	1.900	48.26	0.145	3.68	0.840	21.34	0.109	2.77	2.250	2.250	0.51
2 x 2 x 1 1/2	2.375	60.33	0.154	3.91	1.900	48.26	0.145	3.68	2.500	2.375	0.83
2 x 2 x 1 1/4	2.375	60.33	0.154	3.91	1.660	42.16	0.140	3.56	2.500	2.250	0.80
2 x 2 x 1	2.375	60.33	0.154	3.91	1.315	33.40	0.133	3.38	2.500	2.000	0.74
2 1/2 x 2 1/2 x 2	2.875	73.03	0.203	5.16	2.375	60.33	0.154	3.91	3.000	2.750	1.53
2 1/2 x 2 1/2 x 1 1/2	2.875	73.03	0.203	5.16	1.900	48.26	0.145	3.68	3.000	2.625	1.49
2 1/2 x 2 1/2 x 1 1/4	2.875	73.03	0.203	5.16	1.660	42.16	0.140	3.56	3.000	2.500	1.38
3 x 3 x 2 1/2	3.500	88.90	0.216	5.49	2.875	73.03	0.203	5.16	3.375	3.250	2.29
3 x 3 x 2	3.500	88.90	0.216	5.49	2.375	60.33	0.154	3.91	3.375	3.000	2.16
3 x 3 x 1 1/2	3.500	88.90	0.216	5.49	1.900	48.26	0.145	3.68	3.375	2.875	2.05
4 x 4 x 3	4.500	114.30	0.237	6.02	3.500	88.90	0.216	5.49	4.125	3.875	3.83
4 x 4 x 2 1/2	4.500	114.30	0.237	6.02	2.875	73.03	0.203	5.16	4.125	3.750	3.70
4 x 4 x 2	4.500	114.30	0.237	6.02	2.375	60.33	0.154	3.91	4.125	3.500	3.52
4 x 4 x 1 1/2	4.500	114.30	0.237	6.02	1.900	48.26	0.145	3.68	4.125	3.375	3.41
5 x 5 x 4	5.563	141.30	0.258	6.55	4.500	114.30	0.237	6.02	4.875	4.625	6.14
5 x 5 x 3	5.563	141.30	0.258	6.55	3.500	88.90	0.216	5.49	4.875	4.375	5.85
5 x 5 x 5 1/2	5.563	141.30	0.258	6.55	2.875	73.03	0.203	5.16	4.875	4.250	5.71

BUTT-WELD-FITTINGS

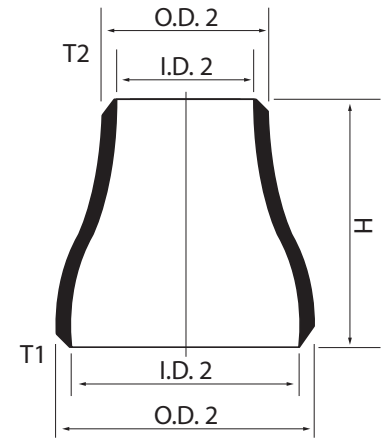
Dimensions and Weights
Reducing Outlet Tees SCH 10 S
ANSI B16.9



Nominal Pipe Size	Outside Diameter OD1	Run		mm	Outside Diameter OD2	Outlet		mm	Center to End		Approx. Weight (kgs)
		mm	Wall Thickness T1			mm	Wall Thickness T2		Run C	Outlet M	
6 x 6 x 5	6.625	168.28	0.134	3.40	5.563	141.30	0.134	3.40	5.625	5.375	4.56
6 x 6 x 4	6.625	168.28	0.134	3.40	4.500	114.30	0.120	3.05	5.625	5.125	4.34
6 x 6 x 3	6.625	168.28	0.134	3.40	3.500	88.90	0.120	3.05	5.625	4.875	4.21
8 x 8 x 6	8.625	219.08	0.148	3.76	6.625	168.28	0.134	3.40	7.000	6.625	7.91
8 x 8 x 5	8.625	219.08	0.148	3.76	5.563	141.30	0.134	3.40	7.000	6.375	7.70
8 x 8 x 4	8.625	219.08	0.148	3.76	4.500	114.30	0.120	3.05	7.000	6.125	7.48
10 x 10 x 8	10.750	273.05	0.165	4.19	8.625	219.08	0.148	3.76	8.500	8.000	13.30
10 x 10 x 6	10.750	273.05	0.165	4.19	6.625	168.28	0.134	3.40	8.500	7.625	12.80
10 x 10 x 5	10.750	273.05	0.165	4.19	5.563	141.30	0.134	3.40	8.500	7.500	12.60
12 x 12 x 10	12.750	323.85	0.180	4.57	10.750	273.05	0.165	4.19	10.000	9.500	20.50
12 x 12 x 8	12.750	323.85	0.180	4.57	8.625	219.08	0.148	3.76	10.000	9.500	19.60
12 x 12 x 6	12.750	323.85	0.180	4.57	6.625	168.28	0.134	3.40	10.000	9.625	19.10
14 x 14 x 12	14.000	355.60	0.188	4.78	12.750	323.85	0.180	4.57	11.000	10.625	26.40
14 x 14 x 10	14.000	355.60	0.188	4.78	10.750	273.05	0.165	4.19	11.000	10.125	25.60
14 x 14 x 8	14.000	355.60	0.188	4.78	8.625	219.08	0.148	3.76	11.000	9.750	24.50
16 x 16 x 14	16.000	406.40	0.188	4.78	14.000	355.60	0.188	4.78	12.000	12.000	33.00
16 x 16 x 12	16.000	406.40	0.188	4.78	12.750	323.85	0.180	4.57	12.000	11.625	32.00
16 x 16 x 10	16.000	406.40	0.188	4.78	10.750	273.05	0.165	4.19	12.000	11.125	31.00
18 x 18 x 16	18.000	457.20	0.188	4.78	16.000	406.40	0.188	4.78	13.500	13.000	41.90
18 x 18 x 14	18.000	457.20	0.188	4.78	14.000	355.60	0.188	4.78	13.500	13.000	41.20
18 x 18 x 12	18.000	457.20	0.188	4.78	12.750	323.85	0.180	4.57	13.500	12.625	40.60
20 x 20 x 18	20.000	508.00	0.218	5.54	18.000	457.20	0.188	4.78	15.000	14.500	59.00
20 x 20 x 16	20.000	508.00	0.218	5.54	16.000	406.40	0.188	4.78	15.000	14.000	58.30
20 x 20 x 14	20.000	508.00	0.218	5.54	14.000	355.60	0.188	4.78	15.000	14.000	57.50
22 x 22 x 20	22.000	558.80	0.218	5.54	20.000	508.00	0.218	5.54	16.500	16.000	72.90
22 x 22 x 18	22.000	558.80	0.218	5.54	18.000	457.20	0.188	4.78	16.500	15.500	70.70
22 x 22 x 16	22.000	558.80	0.218	5.54	16.000	406.40	0.188	4.78	16.500	15.000	69.90
24 x 24 x 22	24.000	609.60	0.250	6.35	22.000	558.80	0.218	5.54	17.000	17.000	91.10
24 x 24 x 20	24.000	609.60	0.250	6.35	20.000	508.00	0.218	5.54	17.000	17.000	90.30
24 x 24 x 18	24.000	609.60	0.250	6.35	18.000	457.20	0.188	4.78	17.000	16.500	88.30

BUTT-WELD-FITTINGS

Dimensions and Weights
Reducers, Conc. SCH 10 S
ANSI B16.9



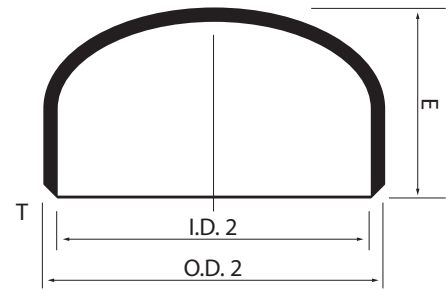
Nominal Pipe Size	Outside Diameter OD1	Large End		mm	Outside Diameter OD2	Small End		mm	End to End H	Approx. Weight (kgs)
		mm	Wall Thickness T1			mm	Wall Thickness T2			
6 x 5	6.625	168.28	0.134	3.40	5.563	141.30	0.134	3.40	5.500	1.78
6 x 4	6.625	168.28	0.134	3.40	4.500	114.30	0.120	3.05	5.500	1.65
6 x 3	6.625	168.28	0.134	3.40	3.500	88.90	0.120	3.05	5.500	1.53
8 x 6	8.625	219.08	0.148	3.76	6.625	168.28	0.134	3.40	6.000	2.72
8 x 5	8.625	219.08	0.148	3.76	5.563	141.30	0.134	3.40	6.000	2.57
8 x 4	8.625	219.08	0.148	3.76	4.500	114.30	0.120	3.05	6.000	2.43
10 x 8	10.750	273.05	0.165	4.19	8.625	219.08	0.148	3.76	7.000	4.49
10 x 6	10.750	273.05	0.165	4.19	6.625	168.28	0.134	3.40	7.000	4.14
10 x 5	10.750	273.05	0.165	4.19	5.563	141.30	0.134	3.40	7.000	3.98
12 x 10	12.750	323.85	0.180	4.57	10.750	273.05	0.135	4.19	8.000	6.78
12 x 8	12.750	323.85	0.180	4.57	8.625	219.08	0.148	3.76	8.000	6.31
12 x 6	12.750	323.85	0.180	4.57	6.625	168.28	0.134	3.40	8.000	5.92
14 x 12	14.000	355.60	0.188	4.78	12.750	323.85	0.180	4.57	13.000	13.00
14 x 10	14.000	355.60	0.188	4.78	10.750	273.05	0.135	4.19	13.000	12.10
14 x 8	14.000	355.60	0.188	4.78	8.625	219.08	0.148	3.76	13.000	11.20
16 x 14	16.000	406.40	0.188	4.78	14.000	355.60	0.188	4.78	14.000	15.80
16 x 12	16.000	406.40	0.188	4.78	12.750	323.85	0.180	4.57	14.000	15.20
16 x 10	16.000	406.40	0.188	4.78	10.750	273.05	0.135	0.135	14.000	14.40
18 x 16	18.000	457.20	0.188	4.78	16.000	406.40	0.188	4.78	15.000	19.20
18 x 14	18.000	457.20	0.188	4.78	14.000	355.60	0.188	4.78	15.000	18.20
18 x 12	18.000	457.20	0.188	4.78	12.750	323.85	0.180	4.57	15.000	17.60
20 x 18	20.000	508.00	0.218	5.54	18.000	457.20	0.188	4.78	15.000	33.10
20 x 16	20.000	508.00	0.218	5.54	16.000	406.40	0.188	4.78	20.000	31.70
20 x 14	20.000	508.00	0.218	5.54	14.000	355.60	0.188	4.78	20.000	29.90
22 x 20	22.000	558.80	0.218	5.54	20.000	508.00	0.218	5.54	20.000	36.60
22 x 18	22.000	558.80	0.218	5.54	18.000	457.20	0.188	4.78	20.000	35.00
22 x 16	22.000	558.80	0.218	5.54	16.000	406.40	0.188	4.78	20.000	33.40
24 x 22	24.000	609.60	0.250	6.35	22.000	558.80	0.218	5.54	20.000	46.00
24 x 20	24.000	609.60	0.250	6.35	20.000	508.00	0.218	5.54	20.000	44.10
24 x 18	24.000	609.60	0.250	6.35	18.000	457.20	0.188	5.54	20.000	42.40

BUTT-WELD-FITTINGS

Dimensions and Weights

Caps SCH 80 S

ANSI B16.9



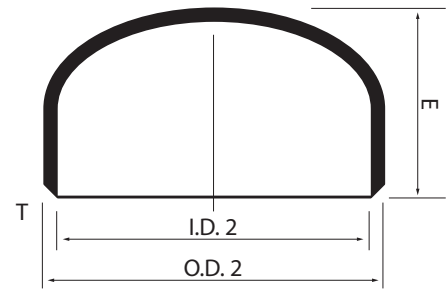
Nominal Pipe Size	Outside Diameter OD	mm	Inside Diameter ID	Wall Thickness T	mm	Length E	Approx. Weight (kgs)
1/2	0.840	21.34	0.546	0.147	3.73	1.000	0.05
3/4	1.050	26.67	0.742	0.154	3.91	1.000	0.07
1	1.315	33.40	0.957	0.179	4.55	1.500	0.14
1 1/4	1.660	42.16	1.278	0.191	4.85	1.500	0.19
1 1/2	1.900	48.26	1.500	0.200	5.08	1.500	0.23
2	2.375	60.33	1.939	0.218	5.54	1.500	.033
2 1/2	2.875	73.03	2.323	0.276	7.01	1.500	0.53
3	3.500	88.90	2.900	0.300	7.62	2.000	0.92
4	4.500	114.30	3.823	0.337	8.56	2.500	1.67
5	5.563	141.30	4.813	0.375	9.53	3.000	2.78
6	6.625	168.28	5.761	0.432	10.97	3.500	4.47
8	8.625	219.08	7.625	0.500	12.70	4.000	8.05
10	10.750	273.05	9.750	0.500	12.70	5.000	12.50
12	12.750	323.85	11.750	0.500	12.70	6.000	17.70
14	14.000	355.60	13.000	0.500	12.70	6.500	21.20
16	16.000	406.40	15.000	0.500	12.70	7.000	26.700
18	18.000	457.20	17.000	0.500	12.70	8.000	34.10
20	20.000	508.00	19.000	0.500	12.70	9.000	42.50
22	22.000	558.80	21.000	0.500	12.70	10.000	51.70
24	24.000	609.60	23.000	0.500	12.70	10.500	60.10
26	26.000	660.40	25.000	0.500	12.70	10.500	73.10
28	28.000	711.20	27.000	0.500	12.70	10.500	84.80
30	30.000	762.00	29.000	0.500	12.70	10.500	97.40
32	32.000	812.80	32.000	0.500	12.70	10.500	110.80
36	36.000	914.40	35.000	0.500	12.70	10.500	140.20
40	40.000	1016.00	39.000	0.500	12.70	12.000	173.10
42	42.000	1066.80	41.000	0.500	12.70	12.000	190.80

BUTT-WELD-FITTINGS

Dimensions and Weights

Caps SCH 40 S

ANSI B16.9



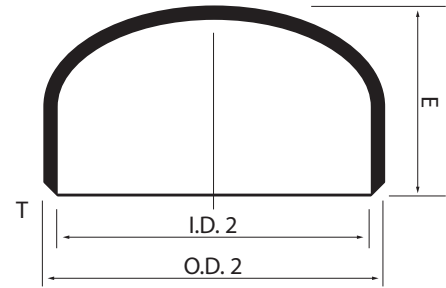
Nominal Pipe Size	Outside Diameter OD	mm	Inside Diameter ID	Wall Thickness T	mm	Length E	Approx. Weight (kgs)
1/2	0.840	21.34	0.622	0.109	2.77	1.000	0.04
3/4	1.050	26.67	0.824	0.113	2.87	1.000	0.05
1	1.315	33.40	1.049	0.133	3.38	1.500	0.11
1 1/4	1.660	42.16	1.380	0.140	3.56	1.500	0.14
1 1/2	1.900	48.26	1.610	0.145	3.68	1.500	0.17
2	2.375	60.33	2.067	0.154	3.91	1.500	0.23
2 1/2	2.875	73.03	2.469	0.203	5.16	1.500	0.39
3	3.500	88.90	3.068	0.216	5.49	2.000	0.66
4	4.500	114.30	4.026	0.237	6.02	2.500	1.17
5	5.563	141.30	5.047	0.258	6.55	3.000	1.91
6	6.625	168.28	6.065	0.280	7.11	3.500	2.90
8	8.625	219.08	7.981	0.322	8.18	4.000	5.19
10	10.750	273.05	10.020	0.365	9.27	5.000	9.15
12	12.750	323.85	12.000	0.375	9.53	6.000	13.30
14	14.000	355.60	13.250	0.375	9.53	6.500	15.90
16	16.000	406.40	15.250	0.375	9.53	7.000	20.00
18	18.000	457.20	17.250	0.375	9.53	8.000	25.60
20	20.000	508.00	19.250	0.375	9.53	9.000	31.90
22	22.000	558.80	21.250	0.375	9.53	10.000	38.80
24	24.000	609.60	23.250	0.375	9.53	10.500	45.10
26	26.000	660.40	25.264	0.368	9.35	10.500	53.80
28	28.000	711.20	27.264	0.368	9.35	10.500	62.40
30	30.000	762.00	29.264	0.368	9.35	10.500	71.70
32	32.000	812.80	31.264	0.368	9.35	10.500	81.60
36	36.000	914.40	35.264	0.368	9.35	10.500	103.20
40	40.000	1016.00	39.264	0.368	9.35	12.000	127.40
42	42.000	1066.80	41.264	0.368	9.35	12.000	140.50

BUTT-WELD-FITTINGS

Dimensions and Weights

Caps SCH 10 S

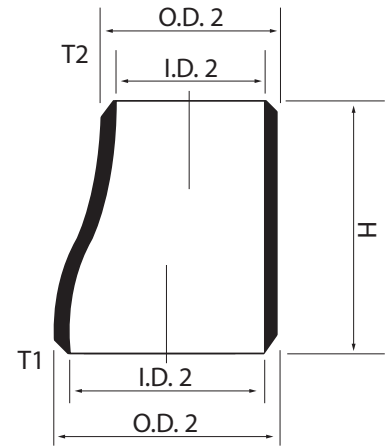
ANSI B16.9



Nominal Pipe Size	Outside Diameter OD	mm	Inside Diameter ID	Wall Thickness T	mm	Length E	Approx. Weight (kgs)
1/2	0.840	21.34	0.674	0.083	2.11	1.000	0.03
3/4	1.050	26.67	0.884	0.083	2.11	1.000	0.04
1	1.315	33.40	1.097	0.109	2.77	1.500	0.09
1 1/4	1.660	42.16	1.442	0.109	2.77	1.500	0.11
1 1/2	1.900	48.26	1.682	0.109	2.77	1.500	0.13
2	2.375	60.33	2.157	0.109	2.77	1.500	0.17
2 1/2	2.875	73.03	2.635	0.120	3.05	1.500	0.23
3	3.500	88.90	3.260	0.120	3.05	2.000	0.37
4	4.500	114.30	4.260	0.120	3.05	2.500	0.59
5	5.563	141.30	5.295	0.134	3.40	3.000	0.99
6	6.625	168.28	6.357	0.134	3.40	3.500	1.39
8	8.625	219.08	8.329	0.148	3.76	4.000	2.38
10	10.750	273.05	10.420	0.165	4.19	5.000	4.14
12	12.750	323.85	12.390	0.180	4.57	6.000	6.39
14	14.000	355.60	13.624	0.188	4.78	6.500	7.98
16	16.000	406.40	15.624	0.188	4.78	7.000	10.00
18	18.000	457.20	17.624	0.188	4.78	8.000	12.80
20	20.000	508.00	19.564	0.218	5.54	9.000	18.50
22	22.000	558.80	21.564	0.218	5.54	10.000	22.60
24	24.000	609.60	23.500	0.250	6.35	10.500	30.10

BUTT-WELD-FITTINGS

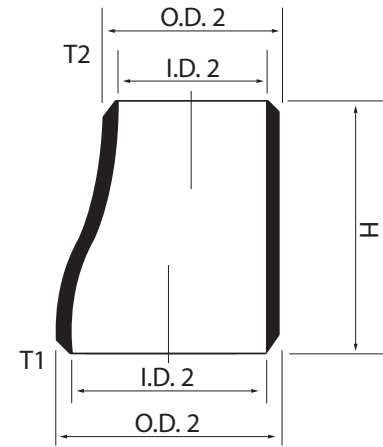
Dimensions and Weights
Reducers, Conc. SCH 80 S
ANSI B16.9



Nominal Pipe Size	Outside Diameter OD1	Large End		Outside Diameter OD2	Small End		End to End H	Approx. Weight (kgs)		
		mm	Wall Thickness T1		mm	Wall Thickness T2				
6 x 5	6.625	168.28	0.432	10.97	5.563	141.30	0.375	9.53	5.500	5.38
6 x 4	6.625	168.28	0.432	10.97	4.500	114.30	0.337	8.86	5.500	4.96
6 x 3	6.625	168.28	0.432	10.97	3.500	88.90	0.300	7.62	5.500	4.56
8 x 6	8.625	219.08	0.500	12.70	6.625	168.28	0.432	10.97	6.000	8.63
8 x 5	8.625	219.08	0.500	12.70	5.563	141.30	0.375	9.53	6.000	8.14
8 x 4	8.625	219.08	0.500	12.70	4.500	114.30	0.337	8.56	6.000	7.68
10 x 8	10.750	273.05	0.500	12.70	8.625	219.08	0.500	12.70	7.000	12.90
10 x 6	10.750	273.05	0.500	12.70	6.625	168.28	0.432	10.97	7.000	11.80
10 x 5	10.750	273.05	0.500	12.70	5.563	141.30	0.375	9.53	7.000	11.30
12 x 10	12.750	323.85	0.500	12.70	10.750	273.05	0.500	12.70	8.000	18.00
12 x 8	12.750	323.85	0.500	12.70	8.625	219.08	0.500	12.70	8.000	16.70
12 x 6	12.750	323.85	0.500	12.70	6.625	168.28	0.432	10.97	8.000	15.90
14 x 12	14.000	355.60	0.500	12.70	12.750	323.85	0.500	12.70	13.000	33.60
14 x 10	14.000	355.60	0.500	12.70	10.750	273.05	0.500	12.70	13.000	31.20
14 x 8	14.000	355.60	0.500	12.70	8.625	219.08	0.500	12.70	13.000	28.90
16 x 14	16.000	406.40	0.500	12.70	14.000	355.60	0.500	12.70	14.000	41.10
16 x 12	16.000	406.40	0.500	12.70	12.750	323.85	0.500	12.70	14.000	39.20
16 x 10	16.000	406.40	0.500	12.70	10.750	273.05	0.500	12.70	14.000	36.80
18 x 16	18.000	457.20	0.500	12.70	16.000	406.40	0.500	12.70	15.000	50.10
18 x 14	18.000	457.20	0.500	12.70	14.000	355.60	0.500	12.70	15.000	47.40
18 x 12	18.000	457.20	0.500	12.70	12.750	323.85	0.500	12.70	15.000	45.50
20 x 18	20.000	508.00	0.500	12.70	18.000	457.20	0.500	12.70	15.000	74.90
20 x 16	20.000	508.00	0.500	12.70	16.000	406.40	0.500	12.70	20.000	71.10
20 x 14	20.000	508.00	0.500	12.70	14.000	355.60	0.500	12.70	20.000	67.40
22 x 20	22.000	558.80	0.500	12.70	20.000	508.00	0.500	12.70	20.000	82.90
22 x 18	22.000	558.80	0.500	12.70	18.000	457.20	0.500	12.70	20.000	79.20
22 x 16	22.000	558.80	0.500	12.70	16.000	406.40	0.500	12.70	20.000	75.60
24 x 22	24.000	609.60	0.500	12.70	22.000	558.80	0.500	12.70	20.000	91.00
24 x 20	24.000	609.60	0.500	12.70	20.000	508.00	0.500	12.70	20.000	87.30
24 x 18	24.000	609.60	0.500	12.70	18.000	457.20	0.500	12.70	20.000	83.70

BUTT-WELD-FITTINGS

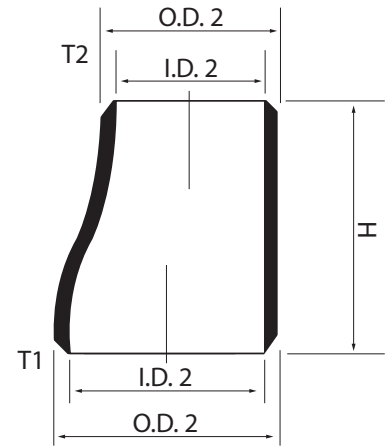
Dimensions and Weights
Reducers, Conc. SCH 80 S
ANSI B16.9



Nominal Pipe Size	Outside Diameter OD1	Large End		Outside Diameter OD2	Small End		mm	End to End H	Approx. Weight (kgs)	
		mm	Wall Thickness T1		mm	Wall Thickness T2				
3/4 x 1/2	1.050	26.67	0.154	3.91	0.840	21.34	0.147	3.73	1.500	0.08
1 x 3/4	1.315	33.40	0.179	4.55	1.050	26.67	0.154	3.91	2.000	0.15
1 x 1/2	1.315	33.40	0.179	4.55	0.840	21.34	0.147	3.73	2.000	0.13
1 1/4 x 1	1.660	42.16	0.191	4.85	1.315	33.40	0.179	4.55	2.000	0.21
1 1/4 x 3/4	1.660	42.16	0.191	4.85	1.050	26.67	0.154	3.91	2.000	0.19
1 1/4 x 1/2	1.660	42.16	0.191	4.85	0.840	21.34	0.147	3.73	2.000	0.17
1 1/2 x 1 1/4	1.900	48.26	0.200	5.08	1.660	42.16	0.191	4.85	2.500	0.32
1 1/2 x 1	1.900	48.26	0.200	5.08	1.315	33.40	0.179	4.55	2.500	0.29
1 1/2 x 1/4	1.900	48.26	0.200	5.08	1.050	26.67	0.154	3.91	2.500	0.27
1 1/2 x 1/2	1.900	48.26	0.200	5.08	0.840	21.34	0.147	3.73	2.500	0.24
2 x 1 1/2	2.375	60.33	0.218	5.54	1.900	48.26	0.200	5.08	3.000	0.51
2 x 1 1/4	2.375	60.33	0.218	5.54	1.660	42.16	0.191	4.85	3.000	0.48
2 x 1	2.375	60.33	0.218	5.54	1.315	33.40	0.179	4.55	3.000	0.44
2 x 3/4	2.375	60.33	0.218	5.54	1.050	26.67	0.154	3.91	3.000	0.41
2 x 1/2	2.875	60.33	0.218	5.54	0.840	21.34	0.147	3.73	3.000	0.38
2 1/2 x 2	2.875	73.03	0.276	7.01	2.375	60.33	0.218	5.54	3.500	0.92
2 1/2 x 1 1/2	2.875	73.03	0.276	7.01	1.900	48.26	0.200	5.08	3.500	0.83
2 1/4 x 1 1/4	2.875	73.03	0.276	7.01	1.660	42.16	0.191	4.85	3.500	0.79
3 x 2 1/2	3.500	88.90	0.300	7.62	2.875	73.03	0.276	7.01	3.500	1.23
3 x 2	3.500	88.90	0.300	7.62	2.375	60.33	0.218	5.54	3.500	1.13
3 x 1 1/2	3.500	88.90	0.300	7.62	1.900	48.26	0.200	5.08	3.500	1.04
3 x 1 1/4	3.500	88.90	0.300	7.62	1.660	42.16	0.191	4.85	3.500	0.96
3 x 1	3.500	88.90	0.300	7.62	1.315	33.40	0.179	4.55	3.500	0.83
4 x 3	4.500	114.30	0.337	8.56	3.500	88.90	0.300	7.62	4.000	2.02
4 x 2 1/2	4.500	114.30	0.337	8.56	2.875	73.03	0.276	7.01	4.000	1.86
4 x 2	4.500	114.30	0.337	8.56	2.375	60.33	0.218	5.54	4.000	1.76
4 x 1 1/2	4.500	114.30	0.337	8.56	1.900	48.26	0.200	5.08	4.000	1.64
5 x 4	5.563	141.30	0.375	9.53	4.500	114.30	0.337	8.56	5.000	3.52
5 x 3	5.563	141.30	0.375	9.53	3.500	88.90	0.300	7.62	5.000	3.18
5 x 2 1/2	5.563	141.30	0.375	9.53	2.875	73.03	0.276	7.01	5.000	3.01

BUTT-WELD-FITTINGS

Dimensions and Weights
Reducers, Conc. SCH 40 S
ANSI B16.9

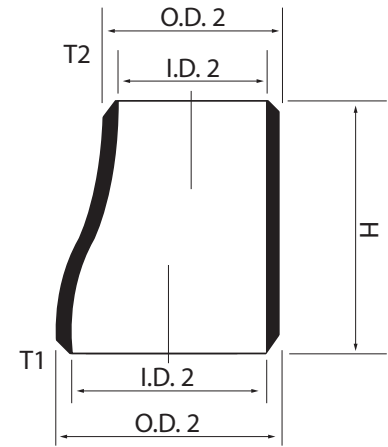


Nominal Pipe Size	Outside Diameter OD1	Large End		Outside Diameter OD2	Small End		End to End H	Approx. Weight (kgs)
		mm	Wall Thickness T1		mm	Wall Thickness T2		
6 x 5	6.625	168.28	0.280	7.11	5.563	141.30	6.55	3.57
6 x 4	6.625	168.28	0.280	7.11	4.500	114.30	6.02	3.30
6 x 3	6.625	168.28	0.280	7.11	3.500	88.90	5.49	3.04
8 x 6	8.625	219.08	0.322	8.18	6.625	168.28	7.11	5.71
8 x 5	8.625	219.08	0.322	8.18	5.563	141.30	6.55	5.40
8 x 4	8.625	219.08	0.322	8.18	4.500	114.30	6.02	5.10
10 x 8	10.750	273.05	0.365	9.27	8.625	219.08	8.18	9.58
10 x 6	10.750	273.05	0.365	9.27	6.625	168.28	7.11	8.78
10 x 5	10.750	273.05	0.365	9.27	5.563	141.30	6.55	8.42
12 x 10	12.750	323.85	0.375	9.53	10.750	273.05	9.27	13.60
12 x 8	12.750	323.85	0.375	9.53	8.625	219.08	8.18	12.70
12 x 6	12.750	323.85	0.375	9.53	6.625	168.28	7.11	11.80
14 x 12	14.000	355.60	0.375	9.53	12.750	323.85	9.53	25.40
14 x 10	14.000	355.60	0.375	9.53	10.750	273.05	9.27	23.60
14 x 8	14.000	355.60	0.375	9.53	8.625	219.08	8.18	21.80
16 x 14	16.000	406.40	0.375	9.53	14.000	355.60	9.53	31.00
16 x 12	16.000	406.40	0.375	9.53	12.750	323.85	9.53	29.60
16 x 10	16.000	406.40	0.375	9.53	10.750	273.05	9.27	27.80
18 x 16	18.000	457.20	0.375	9.53	16.000	406.40	9.53	37.80
18 x 14	18.000	457.20	0.375	9.53	14.000	355.60	9.53	35.70
18 x 12	18.000	457.20	0.375	9.53	12.750	323.85	9.53	34.30
20 x 18	20.000	508.00	0.375	9.53	18.000	457.20	9.53	56.40
20 x 16	20.000	508.00	0.375	9.53	16.000	406.40	9.53	53.50
20 x 14	20.000	508.00	0.375	9.53	14.000	355.60	9.53	50.80
22 x 20	22.000	558.80	0.375	9.53	20.000	508.00	9.53	62.60
22 x 18	22.000	558.80	0.375	9.53	18.000	457.20	9.53	59.70
22 x 16	22.000	558.80	0.375	9.53	16.000	406.40	9.53	57.10
24 x 22	24.000	609.60	0.375	9.53	22.000	558.80	9.53	68.60
24 x 20	24.000	609.60	0.375	9.53	20.000	508.00	9.53	65.70
24 x 18	24.000	609.60	0.375	9.53	18.000	457.20	9.53	63.00

Larger sizes may be conical type

BUTT-WELD-FITTINGS

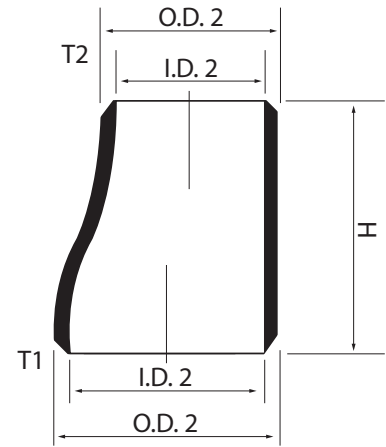
Dimensions and Weights
Reducers, Ecc. SCH 40 S
ANSI B16.9



Nominal Pipe Size	Outside Diameter OD1	Large End		Outside Diameter OD2	Small End		mm	End to End H	Approx. Weight (kgs)	
		mm	Wall Thickness T1		mm	Wall Thickness T2				
3/4 x 1/2	1.050	26.67	0.113	2.87	0.840	21.34	0.109	2.77	1.500	0.06
1 x 3/4	1.315	33.40	0.133	3.38	1.050	26.67	0.113	2.87	2.000	0.12
1 x 1/2	1.315	33.40	0.133	3.38	0.840	21.34	0.109	2.77	2.000	0.11
1 1/4 x 1	1.660	42.16	0.140	3.56	1.315	33.40	0.133	3.38	2.000	0.16
1 1/4 x 3/4	1.660	42.16	0.140	3.56	1.050	26.67	0.113	2.87	2.000	0.14
1 1/4 x 1/2	1.660	42.16	0.140	3.56	0.840	21.34	0.109	2.77	2.000	0.13
1 1/2 x 1 1/4	1.900	48.26	0.145	3.68	1.660	42.16	0.140	3.56	2.500	0.24
1 1/2 x 1	1.900	48.26	0.145	3.68	1.315	33.40	0.133	3.38	2.500	0.22
1 1/2 x 1/4	1.900	48.26	0.145	3.67	1.050	26.67	0.113	2.87	2.500	0.20
1 1/2 x 1/2	1.900	48.26	0.145	3.68	0.840	21.34	0.109	2.77	2.500	0.18
2 x 1 1/2	2.375	60.33	0.154	3.91	1.900	48.26	0.145	3.68	3.000	0.37
2 x 1 1/4	2.375	60.33	0.154	3.91	1.660	42.16	0.140	3.56	3.000	0.35
2 x 1	2.375	60.33	0.154	3.91	1.315	33.40	0.133	3.38	3.000	0.32
2 x 3/4	2.375	60.33	0.154	3.91	1.050	26.67	0.113	2.87	3.000	0.30
2 x 1/2	2.875	60.33	0.154	3.91	0.840	21.34	0.109	2.77	3.000	0.28
2 1/2 x 2	2.875	73.03	0.203	5.16	2.375	60.33	0.154	3.91	3.500	0.72
2 1/2 x 1 1/2	2.875	73.03	0.203	5.16	1.900	48.26	0.145	3.68	3.500	0.66
2 1/4 x 1 1/4	2.875	73.03	0.203	5.16	1.660	42.16	0.140	3.56	3.500	0.63
3 x 2 1/2	3.500	88.90	0.216	5.49	2.875	73.03	0.203	5.16	3.500	0.93
3 x 2	3.500	88.90	0.216	5.49	2.375	60.33	0.154	3.91	3.500	0.85
3 x 1 1/2	3.500	88.90	0.216	5.49	1.900	48.26	0.145	3.68	3.500	0.78
3 x 1 1/4	3.500	88.90	0.216	5.49	1.660	42.16	0.140	3.56	3.500	0.75
3 x 1	3.500	88.90	0.216	5.49	1.315	33.40	0.133	3.38	3.500	0.74
4 x 3	4.500	114.30	0.237	6.02	3.500	88.90	0.216	5.49	4.000	1.45
4 x 2 1/2	4.500	114.30	0.237	6.02	2.875	73.03	0.203	5.16	4.000	1.37
4 x 2	4.500	114.30	0.237	6.02	2.375	60.33	0.154	3.91	4.000	1.27
4 x 1 1/2	4.500	114.30	0.237	6.02	1.900	48.26	0.145	3.68	4.000	1.18
5 x 4	5.563	141.30	0.258	6.55	4.500	114.30	0.237	5.02	5.000	2.50
5 x 3	5.563	141.30	0.258	6.55	3.500	88.90	0.216	5.49	5.000	2.27
5 x 2 1/2	5.563	141.30	0.258	6.55	2.875	73.03	0.203	5.16	5.000	2.16

BUTT-WELD-FITTINGS

Dimensions and Weights
Reducers, Conc. SCH 40 S
ANSI B16.9

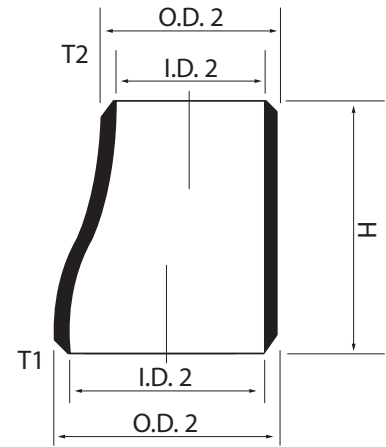


Nominal Pipe Size	Outside Diameter OD1	Large End		Outside Diameter OD2	Small End		mm	End to End H	Approx. Weight (kgs)	
		mm	Wall Thickness T1		mm	Wall Thickness T2				
6 x 5	6.625	168.28	0.134	3.40	5.563	141.30	0.134	3.40	5.500	1.78
6 x 4	6.625	168.28	0.134	3.40	4.500	114.30	0.120	3.05	5.500	1.65
6 x 3	6.625	168.28	0.134	3.40	3.500	88.90	0.120	3.05	5.500	1.53
8 x 6	8.625	219.08	0.148	3.76	6.625	168.28	0.134	3.40	6.000	2.72
8 x 5	8.625	219.08	0.148	3.76	5.563	141.30	0.134	3.40	6.000	2.57
8 x 4	8.625	219.08	0.148	3.76	4.500	114.30	0.120	3.05	6.000	2.43
10 x 8	10.750	273.05	0.165	4.19	8.625	219.08	0.148	3.76	7.000	4.49
10 x 6	10.750	273.05	0.165	4.19	6.625	168.28	0.134	3.40	7.000	4.14
10 x 5	10.750	273.05	0.180	4.19	5.563	141.30	0.134	3.40	7.000	3.98
12 x 10	12.750	323.85	0.180	4.57	10.750	273.05	0.165	4.19	8.000	6.78
12 x 8	12.750	323.85	0.180	4.57	8.625	219.08	0.148	3.76	8.000	6.31
12 x 6	12.750	323.85	0.188	4.57	6.625	168.28	0.134	3.40	8.000	5.92
14 x 12	14.000	355.60	0.188	4.78	12.750	323.85	0.180	4.57	13.000	13.00
14 x 10	14.000	355.60	0.188	4.78	10.750	273.05	0.165	4.19	13.000	12.10
14 x 8	14.000	355.60	0.188	4.78	8.625	219.08	0.148	3.76	13.000	11.20
16 x 14	16.000	406.40	0.188	4.78	14.000	355.60	0.188	4.78	14.000	15.80
16 x 12	16.000	406.40	0.188	4.78	12.750	323.85	0.180	4.57	14.000	15.20
16 x 10	16.000	406.40	0.188	4.78	10.750	273.05	0.165	4.19	14.000	14.40
18 x 16	18.000	457.20	0.188	4.78	16.000	406.40	0.188	4.78	15.000	19.20
18 x 14	18.000	457.20	0.188	4.78	14.000	355.60	0.188	4.78	15.000	18.20
18 x 12	18.000	457.20	0.188	4.78	12.750	323.85	0.180	4.57	15.000	17.60
20 x 18	20.000	508.00	0.218	5.54	18.000	457.20	0.188	4.78	20.000	33.10
20 x 16	20.000	508.00	0.218	5.54	16.000	406.40	0.188	4.78	20.000	31.70
20 x 14	20.000	508.00	0.218	5.54	14.000	355.60	0.188	4.78	20.000	29.90
22 x 20	22.000	558.80	0.218	5.54	20.000	508.00	0.218	5.54	20.000	36.60
22 x 18	22.000	558.80	0.218	5.54	18.000	457.20	0.188	4.78	20.000	35.00
22 x 16	22.000	558.80	0.218	5.54	16.000	406.40	0.188	4.78	20.000	33.40
24 x 22	24.000	609.60	0.250	6.35	22.000	558.80	0.218	5.54	20.000	46.00
24 x 20	24.000	609.60	0.250	6.35	20.000	508.00	0.218	5.54	20.000	44.10
24 x 18	24.000	609.60	0.250	6.35	18.000	457.20	0.188	4.78	20.000	42.40

Larger sizes may be conical type

BUTT-WELD-FITTINGS

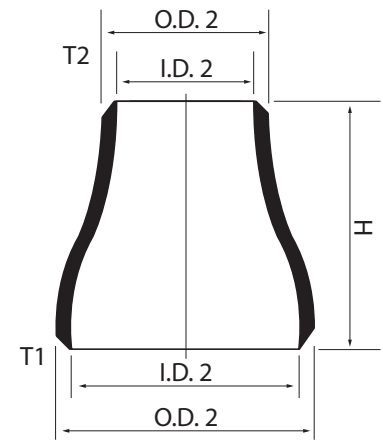
Dimensions and Weights
Reducers, Ecc. SCH 10 S I
ANSI B16.9



Nominal Pipe Size	Outside Diameter OD1	Large End		Outside Diameter OD2	Small End		End to End H	Approx. Weight (kgs)		
		mm	Wall Thickness T1		mm	Wall Thickness T2				
3/4 x 1/2	1.050	26.67	0.083	2.11	0.840	21.34	0.083	2.11	1.500	0.04
1 x 3/4	1.315	33.40	0.109	2.77	1.050	26.67	0.083	2.11	2.000	0.10
1 x 1/2	1.315	33.40	0.109	2.77	0.840	21.34	0.083	2.11	2.000	0.09
1 1/4 x 1	1.660	42.16	0.109	2.77	1.315	33.40	0.109	2.77	2.000	0.12
1 1/4 x 3/4	1.660	42.16	0.109	2.77	1.050	26.67	0.083	2.11	2.000	0.11
1 1/4 x 1/2	1.660	42.16	0.109	2.77	0.840	21.34	0.083	2.11	2.000	0.10
1 1/2 x 1 1/4	1.900	48.26	0.109	2.77	1.660	42.16	0.109	2.77	2.500	0.18
1 1/2 x 1	1.900	48.26	0.109	2.77	1.315	33.40	0.109	2.77	2.500	0.17
1 1/2 x 1/4	1.900	48.26	0.109	2.77	1.050	26.67	0.083	2.11	2.500	0.15
1 1/2 x 1/2	1.900	48.26	0.109	2.77	0.840	21.34	0.083	2.11	2.500	0.14
2 x 1 1/2	2.375	60.33	0.109	2.77	1.900	48.26	0.109	2.77	3.000	0.27
2 x 1 1/4	2.375	60.33	0.109	2.77	1.660	42.16	0.109	2.77	3.000	0.25
2 x 1	2.375	60.33	0.109	2.77	1.315	33.40	0.109	2.77	3.000	0.23
2 x 3/4	2.375	60.33	0.109	2.77	1.050	26.67	0.083	2.11	3.000	0.22
2 x 1/2	2.875	60.33	0.109	2.77	0.840	21.34	0.083	2.11	3.000	0.23
2 1/2 x 2	2.875	73.03	0.120	3.05	2.375	60.33	0.109	2.77	3.500	0.43
2 1/2 x 1 1/2	2.875	73.03	0.120	3.05	1.900	48.26	0.109	2.77	3.500	0.39
2 1/4 x 1 1/4	2.875	73.03	0.120	3.05	1.660	42.16	0.109	2.77	3.500	0.37
3 x 2 1/2	3.500	88.90	0.120	3.05	2.875	73.03	0.120	3.05	3.500	0.52
3 x 2	3.500	88.90	0.120	3.05	2.375	60.33	0.109	2.77	3.500	0.48
3 x 1 1/2	3.500	88.90	0.120	3.05	1.900	48.26	0.109	2.77	3.500	0.45
3 x 1 1/4	3.500	88.90	0.120	3.05	1.660	42.16	0.109	2.77	3.500	0.43
3 x 1	3.500	88.90	0.120	3.05	1.315	33.40	0.109	2.77	3.500	0.43
4 x 3	4.500	114.30	0.120	3.05	3.500	88.90	0.120	3.05	4.000	0.76
4 x 2 1/2	4.500	114.30	0.120	3.05	2.875	73.03	0.120	3.05	4.000	0.71
4 x 2	4.500	114.30	0.120	3.05	2.375	60.33	0.109	2.77	4.000	0.67
4 x 1 1/2	4.500	114.30	0.120	3.05	1.900	48.26	0.109	2.77	4.000	0.63
5 x 4	5.563	141.30	0.134	3.40	4.500	114.30	0.120	3.05	5.000	1.33
5 x 3	5.563	141.30	0.134	3.40	3.500	88.90	0.120	3.05	5.000	1.22
5 x 2 1/2	5.563	141.30	0.134	3.40	2.875	73.03	0.120	3.05	5.000	1.14

BUTT-WELD-FITTINGS

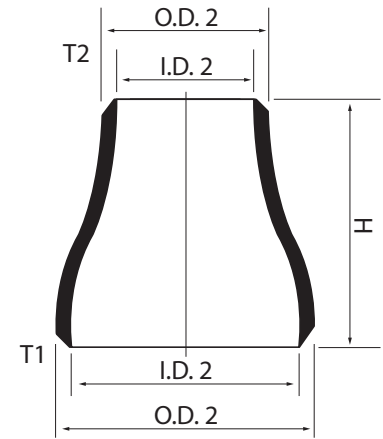
Dimensions and Weights
Reducers, Cone. SCH 80 S
ANSI B16.9



Nominal Pipe Size	Outside Diameter OD1	Large End		mm	Outside Diameter OD2	Small End		mm	End to End H	Approx. Weight (kgs)
		mm	Wall Thickness T1			mm	Wall Thickness T2			
6 x 5	6.625	168.28	0.432	10.97	5.563	141.30	0.375	9.53	5.500	5.38
6 x 4	6.625	168.28	0.432	10.97	4.500	114.30	0.337	8.56	5.500	4.96
6 x 3	6.625	168.28	0.432	10.97	3.500	88.90	0.300	7.62	5.500	4.56
8 x 6	8.625	219.08	0.500	12.70	6.625	168.28	0.432	10.97	6.000	8.63
8 x 5	8.625	219.08	0.500	12.70	5.563	141.30	0.375	9.53	6.000	8.14
8 x 4	8.625	219.08	0.500	12.70	4.500	114.30	0.337	8.56	6.000	7.68
10 x 8	10.750	273.05	0.500	12.70	8.625	219.08	0.500	12.70	7.000	12.90
10 x 6	10.750	273.05	0.500	12.70	6.625	168.28	0.432	10.97	7.000	11.80
10 x 5	10.750	273.05	0.500	12.70	5.563	141.30	0.375	9.53	7.000	11.30
12 x 10	12.750	323.85	0.500	12.70	10.750	273.05	0.500	12.70	8.000	18.00
12 x 8	12.750	323.85	0.500	12.70	8.625	219.08	0.500	12.70	8.000	16.70
12 x 6	12.750	323.85	0.500	12.70	6.625	168.28	0.432	10.97	8.000	15.90
14 x 12	14.000	355.60	0.500	12.70	12.750	323.85	0.500	12.70	13.000	33.60
14 x 10	14.000	355.60	0.500	12.70	10.750	273.05	0.500	12.70	13.000	31.20
14 x 8	14.000	355.60	0.500	12.70	8.625	219.08	0.500	12.70	13.000	28.90
16 x 14	16.000	406.40	0.500	12.70	14.000	355.60	0.500	12.70	14.000	41.10
16 x 12	16.000	406.40	0.500	12.70	12.750	323.85	0.500	12.70	14.000	39.20
16 x 10	16.000	406.40	0.500	12.70	10.750	273.05	0.500	12.70	14.000	36.80
18 x 16	18.000	457.20	0.500	12.70	16.000	406.40	0.500	12.70	15.000	50.10
18 x 14	18.000	457.20	0.500	12.70	14.000	355.60	0.500	12.70	15.000	47.40
18 x 12	18.000	457.20	0.500	12.70	12.750	323.85	0.500	12.70	15.000	45.50
20 x 18	20.000	508.00	0.500	12.70	18.000	457.20	0.500	12.70	20.000	74.90
20 x 16	20.000	508.00	0.500	12.70	16.000	406.40	0.500	12.70	20.000	71.10
20 x 14	20.000	508.00	0.500	12.70	14.000	355.60	0.500	12.70	20.000	67.40
22 x 20	22.000	558.80	0.500	12.70	20.000	508.00	0.500	12.70	20.000	82.90
22 x 18	22.000	558.80	0.500	12.70	18.000	457.20	0.500	12.70	20.000	79.20
22 x 16	22.000	558.80	0.500	12.70	16.000	406.40	0.500	12.70	20.000	75.60
24 x 22	24.000	609.60	0.500	12.70	22.000	558.80	0.500	12.70	20.000	91.00
24 x 20	24.000	609.60	0.500	12.70	20.000	508.00	0.500	12.70	20.000	87.30
24 x 18	24.000	609.60	0.500	12.70	18.000	457.20	0.500	12.70	20.000	83.70

BUTT-WELD-FITTINGS

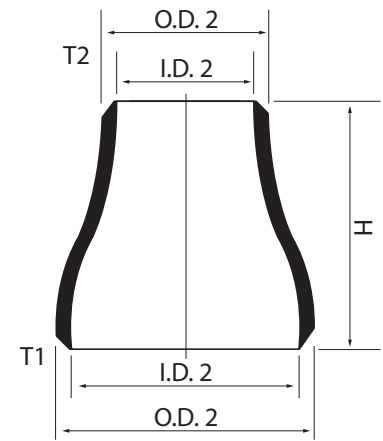
Dimensions and Weights
Reducers, Conc. SCH 80 S
ANSI B16.9



Nominal Pipe Size	Outside Diameter OD1	Large End		Outside Diameter OD2	Small End		mm	End to End H	Approx. Weight (kgs)	
		mm	Wall Thickness T1		mm	Wall Thickness T2				
3/4 x 1/2	1.050	26.67	0.154	3.91	0.840	21.34	0.147	3.73	1.500	0.08
1 x 3/4	1.315	33.40	0.179	4.55	1.050	26.67	0.154	3.91	2.000	0.15
1 x 1/2	1.315	33.40	0.179	4.55	0.840	21.34	0.147	3.73	2.000	0.13
1 1/4 x 1	1.660	42.16	0.191	4.85	1.315	33.40	0.179	4.55	2.000	0.21
1 1/4 x 3/4	1.660	42.16	0.191	4.85	1.050	26.67	0.154	3.91	2.000	0.19
1 1/4 x 1/2	1.660	42.16	0.191	4.85	0.840	21.34	0.147	3.73	2.000	0.17
1 1/2 x 1 1/4	1.900	48.26	0.200	5.08	1.660	42.16	0.191	4.85	2.500	0.32
1 1/2 x 1	1.900	48.26	0.200	5.08	1.315	33.40	0.179	4.55	2.500	0.29
1 1/2 x 1/4	1.900	48.26	0.200	5.08	1.050	26.67	0.154	3.91	2.500	0.27
1 1/2 x 1/2	1.900	48.26	0.200	5.08	0.840	21.34	0.147	3.73	2.500	0.24
2 x 1 1/2	2.375	60.33	0.218	5.54	1.900	48.26	0.200	5.08	3.000	0.51
2 x 1 1/4	2.375	60.33	0.218	5.54	1.660	42.16	0.191	4.85	3.000	0.48
2 x 1	2.375	60.33	0.218	5.54	1.315	33.40	0.179	4.55	3.000	0.44
2 x 3/4	2.375	60.33	0.218	5.54	1.050	26.67	0.154	3.91	3.000	0.41
2 x 1/2	2.875	60.33	0.218	5.54	0.840	21.34	0.147	3.73	3.000	0.38
2 1/2 x 2	2.875	73.03	0.276	7.01	2.375	60.33	0.218	5.54	3.500	0.92
2 1/2 x 1 1/2	2.875	73.03	0.276	7.01	1.900	48.26	0.200	5.08	3.500	0.83
2 1/4 x 1 1/4	2.875	73.03	0.276	7.01	1.660	42.16	0.191	4.85	3.500	0.79
3 x 2 1/2	3.500	88.90	0.300	7.62	2.875	73.03	0.276	7.01	3.500	1.23
3 x 2	3.500	88.90	0.300	7.62	2.375	60.33	0.218	5.54	3.500	1.13
3 x 1 1/2	3.500	88.90	0.300	7.62	1.900	48.26	0.200	5.08	3.500	1.04
3 x 1 1/4	3.500	88.90	0.300	7.62	1.660	42.16	0.191	4.85	3.500	0.96
3 x 1	3.500	88.90	0.300	7.62	1.315	33.40	0.179	4.55	3.500	0.83
4 x 3	4.500	114.30	0.337	8.56	3.500	88.90	0.300	7.62	4.000	2.02
4 x 2 1/2	4.500	114.30	0.337	8.56	2.875	73.03	0.276	7.01	4.000	1.86
4 x 2	4.500	114.30	0.337	8.56	2.375	60.33	0.218	5.54	4.000	1.76
4 x 1 1/2	4.500	114.30	0.337	8.56	1.900	48.26	0.200	5.08	4.000	1.65
5 x 4	5.563	141.30	0.375	9.53	4.500	114.30	0.337	8.56	5.000	3.52
5 x 3	5.563	141.30	0.375	9.53	3.500	88.90	0.300	7.62	5.000	3.18
5 x 2 1/2	5.563	141.30	0.375	9.53	2.875	73.03	0.276	7.01	5.000	3.01

BUTT-WELD-FITTINGS

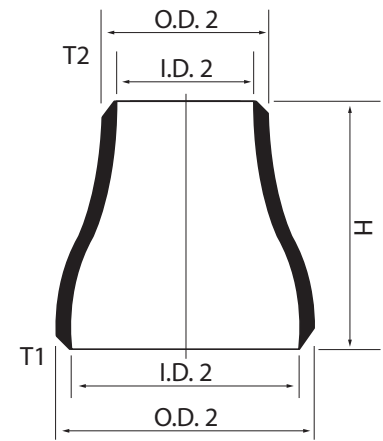
Dimensions and Weights
Reducers, Conc. SCH 40 S
ANSI B16.9



Nominal Pipe Size	Outside Diameter OD1	Large End		Outside Diameter OD2	Small End		End to End H	Approx. Weight (kgs)
		mm	Wall Thickness T1		mm	Wall Thickness T2		
6 x 5	6.625	168.28	0.280	7.11	5.563	141.30	6.55	3.57
6 x 4	6.625	168.28	0.280	7.11	4.500	114.30	6.02	3.30
6 x 3	6.625	168.28	0.280	7.11	3.500	88.90	5.49	3.04
8 x 6	8.625	219.08	0.322	8.18	6.625	168.28	7.11	5.71
8 x 5	8.625	219.08	0.322	8.18	5.563	141.30	6.55	5.40
8 x 4	8.625	219.08	0.322	8.18	4.500	114.30	6.02	5.10
10 x 8	10.750	273.05	0.365	9.27	8.625	219.08	8.18	9.58
10 x 6	10.750	273.05	0.365	9.27	6.625	168.28	7.11	8.78
10 x 5	10.750	273.05	0.365	9.27	5.563	141.30	6.55	8.42
12 x 10	12.750	323.85	0.375	9.53	10.750	273.05	9.27	13.60
12 x 8	12.750	323.85	0.375	9.53	8.625	219.08	8.18	12.70
12 x 6	12.750	323.85	0.375	9.53	6.625	168.28	7.11	11.80
14 x 12	14.000	355.60	0.375	9.53	12.750	323.85	9.53	25.40
14 x 10	14.000	355.60	0.375	9.53	10.750	273.05	9.27	23.60
14 x 8	14.000	355.60	0.375	9.53	8.625	219.08	8.18	21.80
16 x 14	16.000	406.40	0.375	9.53	14.000	355.60	9.53	31.00
16 x 12	16.000	406.40	0.375	9.53	12.750	323.85	9.53	29.60
16 x 10	16.000	406.40	0.375	9.53	10.750	273.05	9.27	27.80
18 x 16	18.000	457.20	0.375	9.53	16.000	406.40	9.53	37.80
18 x 14	18.000	457.20	0.375	9.53	14.000	355.60	9.53	35.70
18 x 12	18.000	457.20	0.375	9.53	12.750	323.85	9.53	34.30
20 x 18	20.000	508.00	0.375	9.53	18.000	457.20	9.53	56.40
20 x 16	20.000	508.00	0.375	9.53	16.000	406.40	9.53	53.50
20 x 14	20.000	508.00	0.375	9.53	14.000	355.60	9.53	50.80
22 x 20	22.000	558.80	0.375	9.53	20.000	508.00	9.53	62.60
22 x 18	22.000	558.80	0.375	9.53	18.000	457.20	9.53	59.70
22 x 16	22.000	558.80	0.375	9.53	16.000	406.40	9.53	57.10
24 x 22	24.000	609.60	0.375	9.53	22.000	558.80	9.53	68.60
24 x 20	24.000	609.60	0.375	9.53	20.000	508.00	9.53	65.70
24 x 18	24.000	609.60	0.375	9.53	18.000	457.20	9.53	63.00

BUTT-WELD-FITTINGS

Dimensions and Weights
Reducers, Conc. SCH 40 S
ANSI B16.9

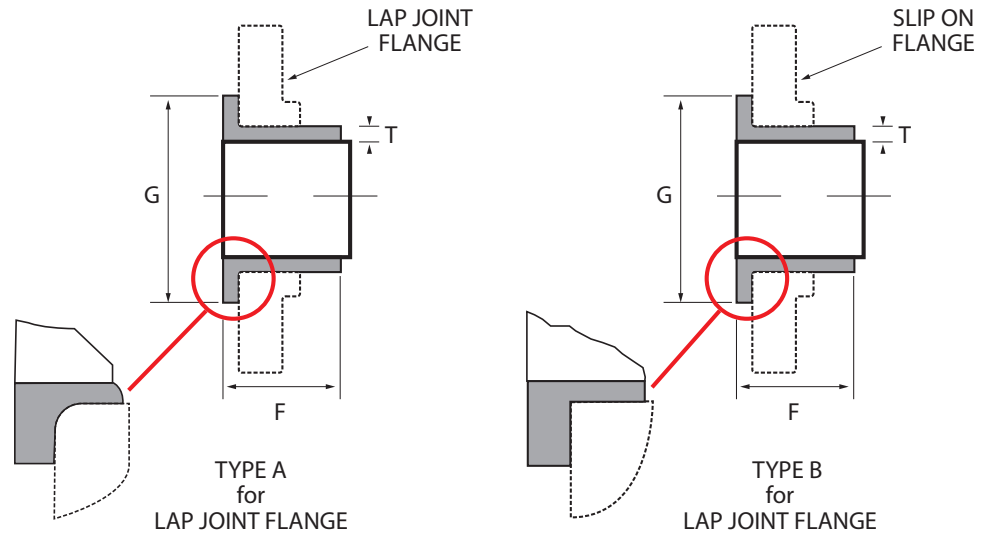


Nominal Pipe Size	Outside Diameter OD1	Large End		mm	Outside Diameter OD2	Small End		mm	End to End H	Approx. Weight (kgs)
		mm	Wall Thickness T1			mm	Wall Thickness T2			
3/4 x 1/2	1.050	26.67	0.113	2.87	0.840	21.34	0.109	2.77	1.500	0.06
1 x 3/4	1.315	33.40	0.133	3.38	1.050	26.67	0.113	2.87	2.000	0.12
1 x 1/2	1.315	33.40	0.133	3.38	0.840	21.34	0.109	2.77	2.000	0.11
1 1/4 x 1	1.660	42.16	0.140	3.56	1.315	33.40	0.133	3.38	2.000	0.16
1 1/4 x 3/4	1.660	42.16	0.140	3.56	1.050	26.67	0.113	2.87	2.000	0.14
1 1/4 x 1/2	1.660	42.16	0.140	3.56	0.840	21.34	0.109	2.77	2.000	0.13
1 1/2 x 1 1/4	1.900	48.26	0.145	3.68	1.660	42.16	0.140	3.56	2.500	0.24
1 1/2 x 1	1.900	48.26	0.145	3.68	1.315	33.40	0.133	3.38	2.500	0.22
1 1/2 x 1/4	1.900	48.26	0.145	3.67	1.050	26.67	0.113	2.87	2.500	0.20
1 1/2 x 1/2	1.900	48.26	0.145	3.68	0.840	21.34	0.109	2.77	2.500	0.18
2 x 1 1/2	2.375	60.33	0.154	3.91	1.900	48.26	0.145	3.68	3.000	0.37
2 x 1 1/4	2.375	60.33	0.154	3.91	1.660	42.16	0.140	3.56	3.000	0.35
2 x 1	2.375	60.33	0.154	3.91	1.315	33.40	0.133	3.38	3.000	0.32
2 x 3/4	2.375	60.33	0.154	3.91	1.050	26.67	0.113	2.87	3.000	0.30
2 x 1/2	2.875	60.33	0.154	3.91	0.840	21.34	0.109	2.77	3.000	0.28
2 1/2 x 2	2.875	73.03	0.203	5.16	2.375	60.33	0.154	3.91	3.500	0.72
2 1/2 x 1 1/2	2.875	73.03	0.203	5.16	1.900	48.26	0.145	3.68	3.500	0.66
2 1/4 x 1 1/4	2.875	73.03	0.203	5.16	1.660	42.16	0.140	3.56	3.500	0.63
3 x 2 1/2	3.500	88.90	0.216	5.49	2.875	73.03	0.203	5.16	3.500	0.93
3 x 2	3.500	88.90	0.216	5.49	2.375	60.33	0.154	3.91	3.500	0.85
3 x 1 1/2	3.500	88.90	0.216	5.49	1.900	48.26	0.145	3.68	3.500	0.78
3 x 1 1/4	3.500	88.90	0.216	5.49	1.660	42.16	0.140	3.56	3.500	0.75
3 x 1	3.500	88.90	0.216	5.49	1.315	33.40	0.133	3.38	3.500	0.74
4 x 3	4.500	114.30	0.237	6.02	3.500	88.90	0.216	5.49	4.000	1.45
4 x 2 1/2	4.500	114.30	0.237	6.02	2.875	73.03	0.203	5.16	4.000	1.37
4 x 2	4.500	114.30	0.237	6.02	2.375	60.33	0.154	3.91	4.000	1.27
4 x 1 1/2	4.500	114.30	0.237	6.02	1.900	48.26	0.145	3.68	4.000	1.18
5 x 4	5.563	141.30	0.258	6.55	4.500	114.30	0.237	5.02	5.000	2.50
5 x 3	5.563	141.30	0.258	6.55	3.500	88.90	0.216	5.49	5.000	2.27
5 x 2 1/2	5.563	141.30	0.258	6.55	2.875	73.03	0.203	5.16	5.000	2.16

BUTT-WELD-FITTINGS

Dimensions and Weights

Lap Joint Stub Ends SCH 5S, 10S and 40 S
ANSI B16.9



Nominal Pipe Size	Nominal OD at Bevel OD	Length F	Dia. of Lap-G Nominal & Maximum	Radius of Fillet		Wall Thickness T			Approx. Weight (kgs)		
				A Nominal Max.	B Max.	SCH 5 S	SCH 10 S	SCH 40 S	SCH 5 S	SCH 10 S	SCH 40 S
1/2	0.84	2.00	1.38	0.12	0.03	0.065	0.083	0.109	0.05	0.06	0.08
3/4	1.05	2.00	1.69	0.12	0.03	0.065	0.083	0.113	0.06	0.08	0.10
1	1.32	2.00	2.00	0.12	0.03	0.065	0.109	0.133	0.08	0.13	0.16
1 1/4	1.66	2.00	2.50	0.19	0.03	0.065	0.109	0.140	0.11	0.18	0.23
1 1/2	1.90	2.00	2.88	0.25	0.03	0.065	0.109	0.145	0.13	0.21	0.28
2	2.38	2.50	3.62	0.31	0.03	0.065	0.109	0.154	0.20	0.34	0.47
2 1/2	2.88	2.50	4.12	0.31	0.03	0.083	0.120	0.203	0.31	0.45	0.74
3	3.50	2.50	5.00	0.38	0.03	0.083	0.120	0.216	0.40	0.57	1.01
4	4.50	3.00	6.19	0.44	0.03	0.083	0.120	0.237	0.61	0.87	1.68
5	5.56	3.00	7.31	0.44	0.06	0.109	0.134	0.258	0.99	1.21	2.28
6	6.62	3.50	8.50	0.50	0.06	0.109	0.134	0.280	1.34	1.64	3.37
8	8.62	4.00	10.62	0.50	0.06	0.109	0.148	0.322	1.96	2.65	5.67
10	10.75	5.00	12.75	0.50	0.06	0.134	0.165	0.365	3.57	4.38	9.55
12	12.75	6.00	15.00	0.50	0.06	0.156	0.180	0.375	5.85	6.74	13.80
14	14.00	6.00	16.25	0.50	0.06	0.156	0.188	-	6.42	7.73	-
16	16.00	6.00	18.50	0.50	0.06	0.165	0.188	-	7.91	9.00	-
18	18.00	6.00	21.00	0.50	0.06	0.165	0.188	-	9.24	10.50	-
20	20.00	6.00	23.00	0.50	0.06	0.188	0.218	-	11.70	13.50	-
24	24.00	6.00	27.25	0.50	0.06	0.218	0.250	-	16.50	18.90	-