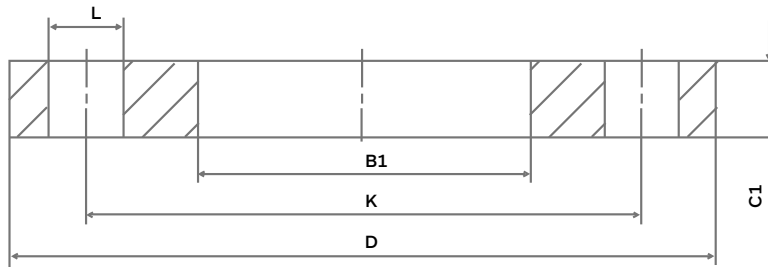


Plate Slip on Flange

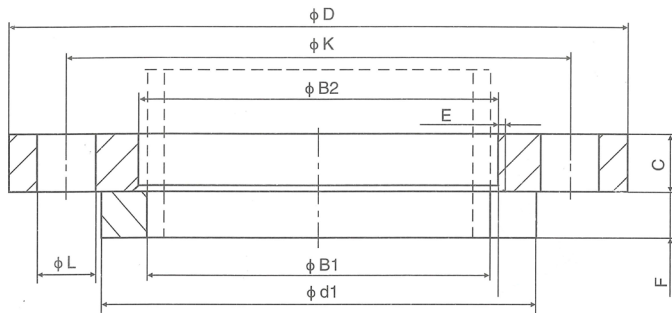


TYPE 02: PN 16 EN 1092-1

DN	Flange				Drilling Template			Weight (7,85kg/dm ³) kg
	B1	C1	D	K	Number	Thread	L	
15	22,0	95	95	65	4	M12	14	0,604
20	27,5	105	105	75	4	M12	14	0,670
25	34,5	115	115	85	4	M12	14	0,936
32	43,5	140	140	100	4	M16	18	1,11
40	49,5	150	150	110	4	M16	18	1,82
50	61,5	20	165	125	4	M16	18	2,73
65	77,5	20	185	145	4	M16	18	3,16
80	90,5	20	200	160	8	M16	18	3,60
100	116,0	22	220	180	8	M16	18	4,39
125	141,5	22	250	210	8	M16	18	5,41
150	170,5	24	285	240	8	M20	22	7,14
200	221,5	26	340	295	12	M20	22	9,73
250	276,5	29	405	355	12	M24	26	14,2
300	327,5	32	460	410	12	M24	26	19,0
350	359,0	35	520	470	16	M24	26	28,2
400	411,0	38	580	525	16	M27	30	35,9
450	462,0	42	640	585	20	M27	30	46,1
500	513,5	46	715	650	20	M30	33	64,0
600	616,5	55	840	770	20	M33	36	102,0
700	*	63	910	840	24	M33	36	*
800	*	74	1025	950	24	M36	39	*
900	*	82	1125	1050	28	M36	39	*
1000	*	90	1255	1170	28	M39	42	*

Description of a plate flange (type 01) with facing form

Slip-on Flange (Hubbed)



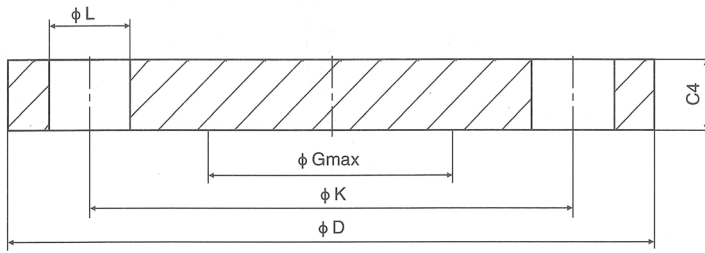
TYPE 02: PN 16 EN 1092-1

DN	Flange					Drilling Template			Collar			Weight (7,85kg/dm ³) kg	
	D	B2	C1	E	K	Number	Thread	L	d1	B1	F	Flange kg	Collar kg
15	95	25	14	3	65	4	M12	14		22,0	12	0,654	0,094
20	105	31	16	4	75	4	M12	14		27,5	14	0,909	0,114
25	115	38	16	4	85	4	M12	14		34,5	14	1,08	0,225
32	140	47	18	5	100	4	M16	18		43,5	14	1,77	0,296
40	150	53	18	5	110	4	M16	18		49,5	14	2,02	0,362
50	165	65	20	5	125	4	M16	18	102	61,5	16	2,66	0,653
65	185	81	20	6	145	4	M16	18	122	77,5	16	3,05	0,876
80	200	94	20	6	160	8	M16	18	138	90,5	16	3,48	1,07
100	220	120	22	6	180	8	M16	18	158	116,0	18	4,20	1,28
125	250	145	22	6	210	8	M16	18	188	141,5	18	5,21	1,70
150	285	174	24	6	240	8	M20	22	212	167,5	20	6,89	1,96
150	285	174	24	6	240	8	M20	22	212	170,5	20	6,89	1,96
200	340	226	26	6	295	12	M20	22	268	221,5	20	9,31	2,81
250	405	281	29	8	355	12	M24	26	320	276,5	22	13,5	3,52
300	460	333	32	8	410	12	M24	26	378	327,5	24	18,0	5,27
350	520	365	35	8	470	16	M24	26	438	359,5	26	27,0	10,1
400	580	416	38	8	525	16	M27	30	490	411,0	28	34,6	12,3
450	640	467	42	8	585	20	M27	30	550	462,0	30	44,6	16,5
500	715	519	46	8	650	20	M30	33	610	513,5	32	62,0	21,4
600	840	622	55	8	770	20	M33	36	725	616,5	32	98,8	28,7

Description of a slip-on flange (type 02) with a facing form

*errors and omissions excluded

Blanks Flange



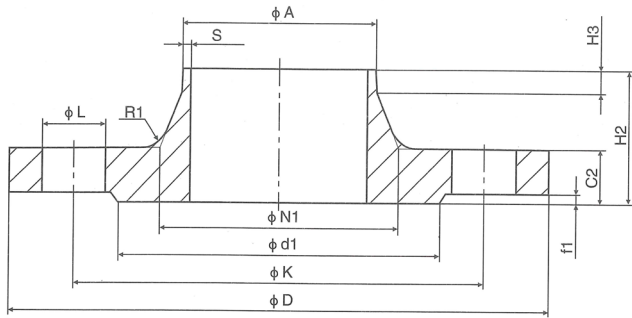
TYPE 05 PN 16 EN 1092-1

DN	Flange				Drilling Template		Gmax	Weight (7,85kg/dm ³) kg
	C4	D	K	Number	Thread	L		
15	95	16	65	4	M12	14	-	0,813
20	105	18	75	4	M12	14	-	1,14
25	115	18	85	4	M12	14	-	1,38
32	140	18	100	4	M16	18	-	2,03
40	150	18	110	4	M16	18	-	2,35
50	18	165	125	4	M16	18	-	2,88
65	18	185	145	4	M16	18	55	3,51
80	20	200	160	8	M16	18	70	4,61
100	20	220	180	8	M16	18	90	5,65
125	22	250	210	8	M16	18	115	8,13
150	22	285	240	8	M20	22	140	10,5
200	24	340	295	12	M20	22	190	16,2
250	26	405	355	12	M24	26	235	25,0
300	28	460	410	12	M24	26	0.285	35,1
350	30	520	470	16	M24	26	330	48,0
400	32	580	525	16	M27	30	380	63,5
450	40	640	585	20	M27	30	425	96,6
500	44	715	650	20	M30	33	475	133
600	54	840	770	20	M33	36	575	226
700	58	910	840	24	M33	36	670	285
800	62	1025	950	24	M36	39	770	388
900	64	1125	1050	28	M36	39	860	483
1000	68	1255	1170	28	M39	42	960	640

Description of a blank flange (type 05) with facing form

*errors and omissions excluded

Welding Neck Flange



TYPE 11 PN 16 EN 1092-1

DN	A	Flange				Hub				Facing		Drilling template			Weight (7,85kg/ dm ³) kg
		D	C2	K	H2	N1	S	R1	H3	d1	f1	Number	Thread	L	
15	21,3	95	16	65	38	32	2,0	4	6	45	2	4	M12	14	0,768
20	26,9	105	18	75	40	40	2,3	4	6	58	2	4	M12	14	1,09
25	33,7	115	18	85	40	46	2,6	4	6	68	2	4	M12	14	1,30
32	42,4	140	18	100	42	56	2,6	6	6	78	2	4	M16	18	1,91
40	48,3	150	18	110	45	64	2,6	6	7	88	2	4	M16	18	2,15
50	60,3	165	18	125	45	74	2,9	6	8	102	3	4	M16	18	2,53
65	76,1	185	18	145	45	92	2,9	6	10	122	3	4	M16	18	3,03
80	88,9	200	20	160	50	105	3,2	6	10	138	3	8	M16	18	3,92
100	114,3	220	20	180	52	131	3,6	8	12	158	3	8	M16	18	4,62
125	139,7	250	22	210	55	156	4,0	8	12	188	3	8	M16	18	6,30
150	168,3	285	22	240	55	184	4,5	10	12	212	3	8	M20	22	7,81
200	219,1	340	24	295	62	235	6,3	10	16	268	3	12	M20	22	11,5
250	273	405	26	355	70	292	6,3	12	16	320	3	12	M24	26	16,7
300	323,9	460	28	410	78	344	7,1	12	16	378	4	12	M24	26	22,1
350	355,6	520	30	470	82	390	8,0	12	16	438	4	16	M24	26	32,8
400	406,4	580	32	525	85	445	8,0	12	16	490	4	16	M27	30	41,1
450	457	640	34	585	83	490	8,0	12	16	550	4	20	M27	30	48,5
500	508	715	36	650	84	548	8,0	12	16	610	4	20	M30	33	63,4
600	610	840	40	770	88	670	10,0	12	18	725	5	20	M33	36	96,0
700	711	910	40	840	104	755	10,0	12	18	795	5	24	M33	36	96,5
800	813	1025	41	950	108	855	12,5	12	20	900	5	24	M36	39	122
900	914	1125	48	1050	118	955	12,5	12	20	1000	5	28	M36	39	155
1000	1016	1255	59	1170	137	1058	12,5	16	22	1115	5	28	M39	42	233
1200	1219	1485	78	1390	160	1262	14,2	16	30	1330	5	32	M45	48	390
1400	1422	1685	84	1590	177	1465	16,0	16	30	1530	5	36	M45	48	495
1600	1626	1930	102	1820	204	1668	17,5	16	35	1750	5	40	M52	56	760
1800	1829	2130	110	2020	218	1870	20,0	16	35	1950	5	44	M52	56	929
2000	2032	2345	124	2230	238	2072	22,0	16	40	2150	5	48	M56	62	1185

Description of a welding neck flange (type 11) with facing form

*errors and omissions excluded

Butt Weld Pipe Fittings

Dimensions of Elbows, Tees, Caps and Reducers from 1" n.b., Short Radius Elbows from 2" n.b. to 6" n.b. (6.1/2" o.d.) and Return Bends from 1" n.b. to 12" n.b. shall be as stated in the current edition of BS1965. Branch Bends are to dimensions shown on the relevant data sheet. Wall thicknesses are selected from Table 1 of the standard.

Material

Material of Elbows and Reducers is seamless or ERW tube to EN10216/17/A234WPB required by the standard (or equivalent)

Material of Tees and Branch Bends is seamless tube to EN10216/17/A234WPB as required by the standard (or equivalent)

Material for Caps is plate to BS4360 Grade 43A - stress relieved after manufacture.

Manufacture

Fittings are either hot or cold formed.

Heat Treatment

Cold formed fittings upon which the final forming operation is completed at a temperature below 620°C are normalised or stress relieved at 595°C to 690°C.

Weld Preparation

All fittings have weld preparations as shown in Figure 2 of BS1965.

Protection

All fittings are dipped in a rust inhibiting protective coating. This protects them against rust when stored in a weather proof environment.

Inspection

All stock is statistically sample inspected on receipt. The sampling plan is selected from BS6001.

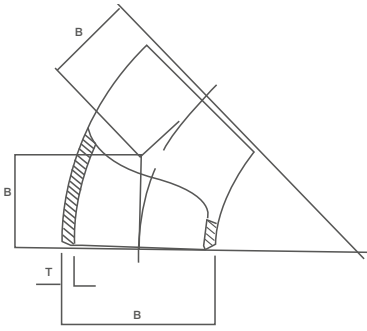
Testing

Fittings representative of those listed in BS1965 have been subjected to prototype bursting tests as required by the standard. A copy of the results of these bursting tests is held on file.

OTHER PRODUCTS AVAILABLE

Sweep Tees, Twin Elbows and larger size Branch Bends, also special wall thicknesses and finishes including galvanising to BS729.

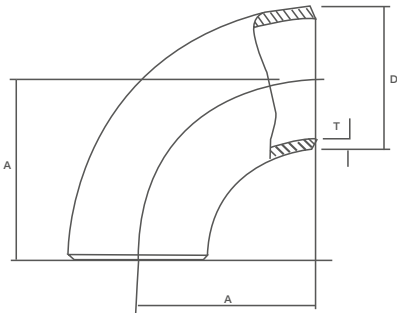
45° Long Radius Elbows



Nominal Pipe Size in.	Outside Diameter m/m	Centre to End m/m	SCH STD		SCH XS		SCH XXS		SCH 10		SCH 20		SCH 30	
			Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg
	D	B	T		T		T		T		T		T	
½"	21.00	16.00	2.77	0.04	3.73	0.08	7.47	0.16						
¾"	27.00	11.00	2.87	0.04	3.91	0.08	7.82	0.16						
1"	33.00	22.00	3.38	0.11	4.55	0.14	9.09	0.17						
1 ¼"	42.00	25.00	3.56	0.17	4.85	0.22	9.70	0.31						
1 ½"	48.00	29.00	3.68	0.23	5.08	0.29	10.15	0.45						
2"	60.00	35.00	3.91	0.37	5.54	0.49	11.07	0.84						
2 ½"	73.00	44.00	5.16	0.74	7.01	0.95	14.02	1.60						
3"	89.00	51.00	5.49	1.10	7.62	1.47	15.24	2.59						
3 ½"	102.00	57.00	5.14	1.49	8.08	2.01								
4"	114.00	64.00	6.02	1.95	8.56	2.66	17.12	5.15						
5"	141.00	79.00	6.55	3.31	9.53	4.63	19.05	9.05						
6"	168.00	95.00	1.11	5.13	10.97	7.57	21.95	14.95						
8"	219.00	127.00	8.18	10.30	12.70	15.40	22.23	27.20			6.35	8.37	7.04	9.25
10"	273.00	159.00	9.27	18.30	12.70	24.40	25.4	48.71			6.35	13.11	7.80	16.02
12"	324.00	190.00	9.53	27.00	12.70	35.50	25.4	70.44			6.35	18.73	8.38	24.56
14"	356.00	222.00	9.53	34.70	12.70	45.40			6.35	24.05	7.92	29.85	9.53	34.70
16"	406.00	254.00	9.53	45.40	12.70	59.90			6.35	31.48	7.92	39.10	9.53	45.40
18"	457.00	286.00	9.53	58.10	12.70	76.20			6.35	39.91	7.92	49.60	11.13	69.15
20"	508.00	318.00	9.53	71.70	12.70	94.30			6.35	49.34	9.53	71.70	12.70	94.30
22"	559.00	343.00	9.53	87.10	12.70	114.80			6.35	59.77	9.53	87.10	12.70	114.80
24"	610.00	381.00	9.53	103.90	12.70	137.00			6.35	71.2	9.53	103.90	14.27	157.68
26"	660.00	406.00	9.53	122.00	12.70	161.00			7.92	104.05	12.70	161.00		
28"	711.00	438.00	9.53	154.00	12.70	193.00			7.92	120.78	12.70	193.00	15.88	239.28
30"	762.00	470.00	9.53	162.40	12.70	215.50			7.92	138.76	12.70	215.50	15.88	275.10
32"	813.00	502.00	9.53	193.00	12.70	255.00			7.92	157.98	12.70	255.00	15.88	313.42
34"	864.00	533.00	9.53	210.00	12.70	279.00			7.92	178.44	12.70	279.00	15.88	354.24
36"	914.00	565.00	9.53	235.00	12.70	311.20			7.92	200.16	12.70	311.20	15.88	397.55
38"	965.00	600.00	9.53	272.00	12.70	354.00								
40"	1016.00	632.00	9.53	295.00	12.70	397.00								
42"	1067.00	660.00	9.53	320.70	12.70	425.00								
44"	1118.00	695.00	9.53	363.00	12.70	488.00								
46"	1168.00	727.00	9.53	408.00	12.70	530.00								
48"	1219.00	759.00	9.53	454.00	12.70	567.00								
52"	1321.00	821.00	9.53	600.00	12.70	700.00								
54"	1372.00	852.00	9.53	650.00	12.70	750.00								
56"	1422.00	883.00	9.53	700.00	12.70	815.00								
60"	1524.00	947.00	9.53	800.00	12.70	935.00								

*errors and omissions excluded

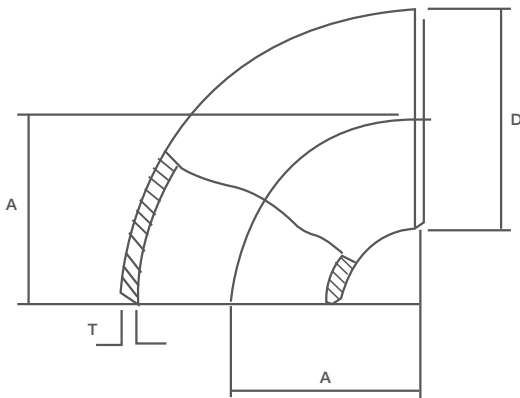
90° Long Radius Elbows



Nominal Pipe Size in.	Outside Diameter m/m	Centre to End m/m	SCH STD		SCH XS		SCH XXS		SCH 10		SCH 20		SCH 30	
			Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg
	D	B	T		T		T		T		T		T	
½"	21	38	2.77	0.05	3.73	0.09	7.47	0.18						
¾"	27	38	2.87	0.07	3.91	0.09	7.82	0.18						
1"	33	38	3.38	0.15	4.55	0.19	9.09	0.34						
1 ¼"	42	48	3.56	0.26	4.85	0.34	9.70	0.61						
1 ½"	48	57	3.68	0.38	5.08	0.48	10.15	0.90						
2"	60	76	3.91	0.68	5.54	0.91	11.07	1.68						
2 ½"	73	95	5.16	1.30	7.01	1.73	14.02	3.20						
3"	89	114	5.49	2.08	7.62	2.78	15.24	5.17						
3 ½"	102	133	5.74	2.92	8.08	3.96								
4"	114	152	6.02	3.95	8.56	5.40	17.12	10.30						
5"	141	190	6.55	6.67	9.53	9.34	19.05	18.10						
6"	168	229	7.11	10.40	10.97	15.50	21.95	29.90						
8"	219	305	8.18	20.90	12.70	31.30	22.23	54.40			6.35	16.74	7.04	18.50
10"	273	381	9.27	37.00	12.70	49.40	25.40	97.41			6.35	26.22	7.80	32.04
12"	324	457	9.53	54.00	12.70	71.20	25.40	140.87			6.35	37.46	8.38	49.12
14"	356	533	9.53	69.90	12.70	91.60			6.35	48.09	7.92	59.70	9.53	69.90
16"	406	610	9.53	91.20	12.70	120.20			6.35	62.95	7.92	78.20	9.53	91.20
18"	457	686	9.53	116.10	12.70	153.30			6.35	78.82	7.92	99.20	11.13	138.29
20"	508	762	9.53	143.80	12.70	190.10			6.35	98.67	9.53	143.80	12.70	190.10
22"	559	838	9.53	174.60	12.70	230.40			6.35	119.54	9.53	174.60	12.70	230.40
24"	610	914	9.53	207.70	12.70	274.90			6.35	142.40	9.53	207.70	14.27	315.36
26"	660	991	9.53	244.50	12.70	323.40			7.92	208.10	12.70	323.40		
28"	711	1067	9.53	308.00	12.70	385.00			7.92	241.56	12.70	385.00	15.88	478.56
30"	762	1143	9.53	326.60	12.70	452.30			7.92	271.51	12.70	452.30	15.88	550.20
32"	813	1219	9.53	386.00	12.70	511.00			7.92	315.95	12.70	511.00	15.88	626.84
34"	864	1295	9.53	420.00	12.70	557.90			7.92	356.88	12.70	557.90	15.88	708.47
36"	914	1372	9.53	471.70	12.70	626.00			7.92	400.31	12.70	626.00	15.88	795.09
38"	965	1448	9.53	544.00	12.70	717.00								
40"	1016	1524	9.53	590.00	12.70	794.00								
42"	1067	1600	9.53	644.10	12.70	852.70								
44"	1118	1676	9.53	726.00	12.70	975.00								
46"	1168	1753	9.53	816.00	12.70	1055.00								
48"	1219	1829	9.53	907.00	12.70	1134.00								
52"	1321	1982	9.53	1200.00	12.70	1400.00								
54"	1372	2058	9.53	1300.00	12.70	1510.00								
56"	1422	2133	9.53	1400.00	12.70	1630.00								
60"	1524	2286	9.53	1600.00	12.70	1870.00								

*errors and omissions excluded

90° Short Radius Elbows



Nominal Pipe Size in.	Outside Diameter m/m	Centre to End m/m	SCH STD		SCH XS		SCH XXS		SCH 10		SCH 20		SCH 30	
			Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg
	D	A	T		T		T		T		T		T	
1"	33	25	3.38	0.10	4.55	0.13	9.09	0.23						
1 ¼"	42	32	3.56	0.17	4.85	0.23	9.70	0.41						
1 ½"	48	38	3.68	0.25	5.08	0.33	10.15	0.60						
2"	60	51	3.91	0.45	5.54	0.60	11.07	1.13						
2 ½"	73	64	5.16	0.87	7.01	1.14	14.02	2.03						
3"	89	76	5.49	1.38	7.62	1.83	15.24	3.47						
3 ½"	102	89	5.74	1.93	8.08	2.61								
4"	114	102	6.02	2.62	8.56	3.58	17.12	6.86						
5"	141	127	6.55	4.42	9.53	6.21	19.05	12.02						
6"	168	152	7.11	6.89	10.97	10.30	21.95	19.90						
8"	219	203	8.18	13.80	12.70	20.70	22.23	36.12			6.35	11.16	7.04	12.34
10"	273	254	9.27	24.50	12.70	32.90	25.40	64.94			6.35	17.48	7.80	21.36
12"	324	305	9.53	36.10	12.70	47.20	25.40	93.91			6.35	24.97	8.38	32.75
14"	356	356	9.53	46.30	12.70	61.20			6.35	32.06	7.92	39.80	9.53	46.30
16"	406	406	9.53	61.20	12.70	80.30			6.35	41.97	7.92	52.14	9.53	61.20
18"	457	457	9.53	77.60	12.70	102.10			6.35	53.21	7.92	66.13	11.13	92.19
20"	508	508	9.53	96.20	12.70	126.10			6.35	65.78	9.53	96.20	12.70	126.10
22"	559	559	9.53	117.00	12.70	154.20			6.35	76.69	9.53	117.00	12.70	154.20
24"	610	610	9.53	138.30	12.70	183.30			6.35	94.93	9.53	138.30	14.27	210.24

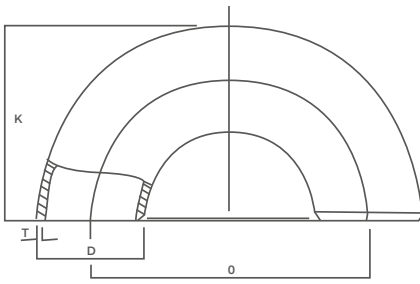
*errors and omissions excluded

90° Short Radius Elbows

SCH 40		SCH 60		SCH 80		SCH 100		SCH 120		SCH 140		SCH 160	
Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg
T		T		T		T		T		T		T	
3.38	0.10			4.55	0.13							6.35	0.18
3.56	0.17			4.85	0.23							6.35	0.29
3.68	0.25			5.08	0.33							7.14	0.45
3.91	0.45			5.54	0.60							8.74	0.93
5.16	0.87			7.01	1.14							9.53	1.56
5.49	1.38			7.62	1.83							11.13	2.68
5.74	1.93			8.08	2.61								
6.02	2.62			8.56	3.58			11.13	4.74			13.49	5.62
6.55	4.42			9.53	6.21			12.70	8.43			15.88	10.28
7.11	6.89			10.97	10.30			14.27	13.62			18.26	16.97
8.18	13.80	10.31	17.77	12.70	20.70	15.09	25.46	18.26	30.31	20.62	33.82	23.01	37.29
9.27	24.50	12.70	32.90	15.09	40.21	18.26	47.88	21.44	55.69	25.40	64.94	28.58	72.13
10.31	40.05	14.21	54.87	17.48	66.24	21.44	80.18	25.40	93.91	28.58	104.55	33.32	119.93
11.13	55.37	15.09	74.33	19.05	92.68	23.83	114.16	27.79	131.69	31.75	148.64	35.71	165.13
12.70	80.30	16.66	107.52	21.44	136.08	26.19	164.57	30.96	192.03	36.53	223.22	40.49	244.77
14.27	117.48	19.05	155.13	23.83	191.71	29.36	233.76	34.93	274.14	39.67	307.85	45.24	346.39
15.09	153.31	20.62	207.35	26.19	260.68	32.54	319.14	38.10	369.72	44.45	425.51	50.01	478.50
		22.23	270.84	28.58	344.24	34.93	415.57	41.28	485.29	47.63	553.08	53.98	626.70
17.48	256.07	24.61	356.63	30.96	443.95	38.89	550.15	46.02	642.73	52.37	734.42	59.54	834.76

*errors and omissions excluded

180° Return Bends Long Radius



Nominal Pipe Size in.	Outside Diameter m/m	Centre to Centre m/m	Back to Face m/m	SCH STD		SCH XS		SCH XXS		SCH 10		SCH 20	
				Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg
	D	O	K	T		T		T		T		T	
1"	33	76	56	3.38	0.31	4.55	0.40	9.09	0.68				
1 ¼"	42	95	70	3.56	0.53	4.85	0.69	9.70	1.22				
1 ½"	48	114	83	3.68	0.76	5.08	1.00	10.15	1.80				
2"	60	152	106	3.91	1.36	5.54	1.85	11.07	3.36				
2 ½"	73	191	132	5.16	2.67	7.01	3.50	14.02	6.40				
3"	89	229	159	5.49	4.19	7.62	5.62	15.24	10.34				
3 ½"	102	267	184	5.74	5.90	8.08	7.98						
4"	114	305	210	6.02	7.94	8.56	11.00	17.12	20.60				
5"	141	381	262	6.55	13.50	9.53	19.00	19.05	36.20				
6"	168	457	313	7.11	20.90	10.97	31.30	21.95	59.80				
8"	219	610	414	8.18	41.90	12.70	63.50	22.23	108.80			6.35	33.48
10"	273	762	518	9.27	74.40	12.70	100.20	25.40	194.82			6.35	52.44
12"	324	914	619	9.53	109.30	12.70	143.80	25.40	281.74			6.35	74.92
14"	356	1067	711	9.53	140.20	12.70	184.60			6.35	96.18	7.92	119.40
16"	406	1219	813	9.53	183.70	12.70	242.20			6.35	125.90	7.92	156.40
18"	457	1372	914	9.53	233.10	12.70	308.00			6.35	159.64	7.92	198.40
20"	508	1524	1016	9.53	288.90	12.70	381.50			6.35	197.34	9.53	288.90
22"	559	1676	1118	9.53	349.70	12.70	462.70			6.35	239.08	9.53	349.70
24"	610	1829	1219	9.53	417.30	12.70	553.40			6.35	284.80	9.53	417.30

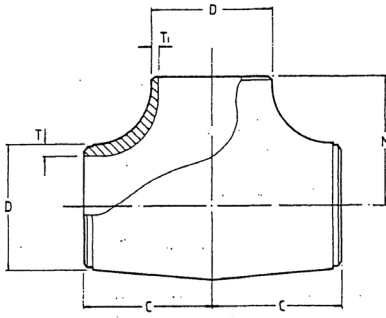
*errors and omissions excluded

180° Return Bends Long Radius

SCH 30		SCH 40		SCH 60		SCH 80		SCH 100		SCH 120		SCH 140		SCH 160	
Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg
T		T		T		T		T		T		T		T	
		3.38	0.31			4.55	0.40							6.35	0.54
		3.56	0.53			4.85	0.69							6.35	0.88
		3.68	0.76			5.08	1.00							7.14	1.36
		3.91	1.36			5.54	1.85							8.74	2.80
		5.16	2.67			7.01	3.50							9.53	4.68
		5.49	4.19			7.62	5.62							11.13	8.04
		5.74	5.90			8.08	7.98								
		6.02	7.94			8.56	11.00			11.13	14.22			13.49	16.84
		6.55	13.50			9.53	19.00			12.70	25.30			15.88	30.84
		7.11	20.90			10.97	31.30			14.27	40.84			18.26	50.92
7.04	37.00	8.18	41.90	10.31	53.32	12.70	63.50	15.09	76.38	18.26	90.92	20.62	101.48	23.01	111.86
7.80	64.08	9.27	74.40	12.70	100.20	15.09	120.62	18.26	143.64	21.44	167.08	25.40	194.82	28.58	216.38
8.38	98.24	10.31	120.14	14.27	164.52	17.48	198.72	21.44	240.54	25.40	281.74	28.58	313.64	33.32	359.80
9.53	140.20	11.13	166.12	15.09	222.98	19.05	277.36	23.83	342.46	27.79	395.08	31.75	445.92	35.71	495.40
9.53	183.70	12.70	242.20	16.66	322.58	21.44	408.34	26.19	493.70	30.96	576.10	36.53	669.66	40.49	734.30
11.13	276.58	14.27	352.42	19.05	465.40	23.83	575.14	29.36	701.28	34.93	822.42	39.67	923.54	45.24	1039.18
12.70	381.50	15.09	459.92	20.62	622.04	26.19	782.06	32.54	957.42	38.10	1109.16	44.45	1276.54	50.01	1435.00
12.70	462.70			22.23	812.52	28.58	1032.70	34.93	1246.72	41.28	1454.08	47.63	1659.22	53.98	1879.60
14.27	630.72	17.48	768.20	24.61	1069.90	30.96	1329.42	38.89	1650.46	46.02	1928.20	52.37	2203.24	59.54	2502.00

*errors and omissions excluded

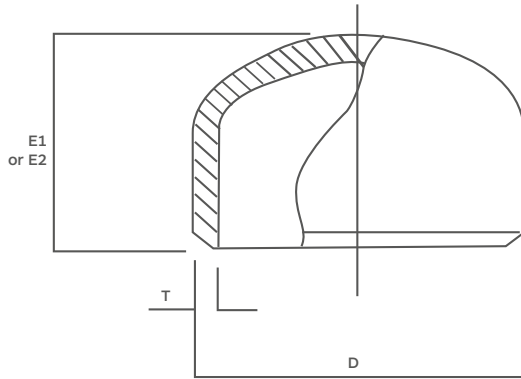
Tees



Nominal Pipe Size in.	Outside Diameter m/m	Centre to End Run m/m	Centre to End Branch m/m	SCH STD		SCH XS		SCH XXS		SCH 10		SCH 20		SCH 30	
				Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg
	D	C	M	T		T		T		T				T	
½"	21	25	25	2.77	0.21	3.73	0.30	7.47	0.45						
¾"	27	29	29	2.87	0.21	3.91	0.30	7.82	0.45						
1"	33	38	38	3.38	0.34	4.55	0.45	9.09	0.65						
1 ¼"	42	48	48	3.56	0.63	4.85	0.85	9.70	1.18						
1 ½"	48	57	57	3.68	0.92	5.08	1.27	10.15	2.54						
2"	60	64	64	3.91	1.49	5.54	2.15	11.07	4.00						
2 ½"	73	76	76	5.16	2.68	7.01	3.00	14.02	4.50						
3"	89	86	86	5.49	3.75	7.62	4.29	15.24	7.10						
3 ½"	102	95	95	5.74	5.00	8.08	6.15								
4"	114	105	105	6.02	6.50	8.56	7.65	17.12	15.00						
5"	141	124	124	6.55	10.00	9.53	13.5	19.05	29.90						
6"	168	143	143	7.11	16.00	10.97	19.3	21.95	47.48						
8"	219	178	178	8.18	27.00	12.70	33.00	22.23	68.00			6.35	23.00	7.04	24.60
10"	273	216	216	9.27	41.00	12.70	58.4	25.40	98.50			6.35	34.70	7.80	40.00
12"	324	254	254	9.53	65.00	12.70	78.00	25.40	150.00			6.35	43.40	8.38	56.60
14"	356	279	279	9.53	102.00	12.70	115.00			6.35	68.00	7.92	84.00	9.53	102.00
16"	406	305	305	9.53	110.00	12.70	167.00			6.35	90.80	7.92	100.00	9.53	110.00
18"	457	343	343	9.53	135.00	12.70	190.00			6.35	93.10	7.92	127.00	11.13	164.00
20"	508	381	381	9.53	168.00	12.70	245.00			6.35	112.00	9.53	168.00	12.70	245.00
22"	559	419	419	9.53	220.00	12.70	280.00			6.35	146.00	9.53	220.00	12.70	280.00
24"	610	432	432	9.53	240.00	12.70	350.00			6.35	160.00	9.53	240.00	14.27	373.00
26"	660	495	495	9.53	287.60	12.70	360.20			7.92	239.28	12.70	360.20		
28"	711	521	521	9.53	337.00	12.70	421.10			7.92	280.38	12.70	421.00	15.88	526.25
30"	762	559	559	9.53	387.80	12.70	483.10			7.92	322.64	12.70	483.10	15.88	603.75
32"	813	597	597	9.53	451.00	12.70	559.00			7.92	375.23	12.70	559.00	15.88	698.75
34"	864	635	635	9.53	515.30	12.70	644.10			7.92	428.72	12.70	644.10	15.88	805.13
36"	914	673	673	9.53	586.90	12.70	730.30			7.92	488.30	12.70	730.30	15.88	912.88
38"	965	711	711	9.53	638.00	12.70	812.00								
40"	1016	749	749	9.53	690.00	12.70	895.00								
42"	1067	762	711	9.53	795.00	12.70	1045.00								
44"	1118	813	762	9.53	899.00	12.70	1194.00								
46"	1168	851	800	9.53	1007.00	12.70	1346.00								
48"	1219	889	838	9.53	1113.00	12.70	1499.00								
52"	1321	965	914	9.53	1200.00	12.70	1580.00								
54"	1372	1093	952	9.53	1340.00	12.70	1670.00								
56"	1422	1041	991	9.53	1450.00	12.70	1830.00								
60"	1524	1117	1054	9.53	1650.00	12.70	2060.00								

*errors and omissions excluded

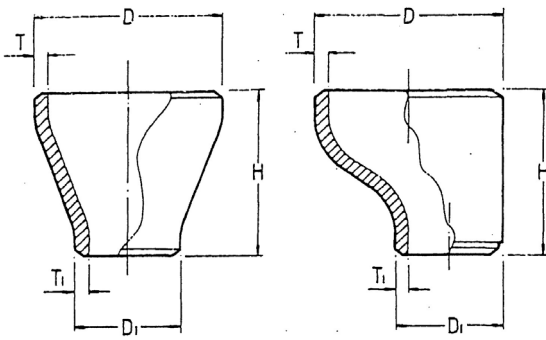
Caps



Nominal Pipe Size in.	Outside Diameter m/m	Length m/m	Length m/m	SCH STD		SCH XS		SCH XXS		SCH 10		SCH 20		SCH 30	
				Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg
	D	E(1)	E1(2)	T		T		T		T				T	
½"	21	25	25	2.77	0.05	3.13	0.07	7.47	0.15						
¾"	27	25	25	2.87	0.07	3.91	0.10	7.82	0.17						
1"	33	38	38	3.38	0.10	4.55	0.13	9.09	0.20						
1 ¼"	42	38	38	3.56	0.14	4.85	0.19	9.70	0.30						
1 ½"	48	38	38	3.68	0.20	5.08	0.23	10.15	0.35						
2"	60	38	44	3.91	0.25	5.54	0.30	11.07	0.60						
2 ½"	73	38	51	5.16	0.35	7.01	0.45	14.02	1						
3"	89	51	64	5.49	0.70	7.62	0.85	15.24	1.80						
3 ½"	102	64	76	5.74	1.00	8.08	1.30								
4"	114	64	76	6.02	1.10	8.56	1.60	17.12	3.50						
5"	141	76	89	6.55	2.00	9.52	2.70	19.05	5.50						
6"	168	89	102	7.11	3.00	10.97	4.40	21.95	8.10						
8"	219	102	127	8.18	5.50	12.70	8.35	22.23	14.91			6.35	4.50	7.04	5.00
10"	273	127	152	9.27	9.00	12.70	13.60	25.40	29.31			6.35	6.00	7.80	8.00
12"	324	152	178	9.53	15.00	12.70	22.50	25.40	41.00			6.35	10.00	8.38	13.00
14"	356	165	191	9.53	16.00	12.70	27.00			6.35	14.00	7.92	14.00	9.53	16.00
16"	406	178	203	9.53	21.00	12.70	31.50			6.35	18.00	7.92	18.00	9.53	21.00
18"	457	203	229	9.53	26.00	12.70	36.00			6.35	22.00	7.92	22.00	11.13	30.00
20"	508	229	254	9.53	32.00	12.70	42.00			6.35	29.00	9.53	32.00	12.70	42.00
22"	559	254	254	9.53	39.00	12.70	51.00			6.35	35.50	9.53	39.00	12.70	51.00
24"	610	267	305	9.53	46.00	12.70	60.00			6.35	44.00	9.53	46.00	14.27	74.50
26"	660	267		9.53	49.80	12.70	66.10			7.92	41.45	12.70	66.10		
28"	711	267		9.53	56.00	12.70	74.81			7.92	46.60	12.70	74.81	15.88	93.50
30"	762	267		9.53	62.00	12.70	82.80			7.92	51.68	12.70	82.80	15.88	103.50
32"	813	267		9.53	68.00	12.70	93.40			7.92	56.60	12.70	93.40	15.88	116.75
34"	864	267		9.53	72.60	12.70	96.91			7.92	60.40	12.70	96.91	15.88	121.15
36"	914	267		9.53	79.40	12.70	107.00			7.92	66.05	12.70	107.00	15.88	133.75
38"	965	305		9.53	86.20	12.70	124.70								
40"	1016	305		9.53	95.30	12.70	129.30								
42"	1067	305		9.53	104.00	12.70	136.00								
44"	1118	343		9.53	120.20	12.70	167.80								
46"	1168	343		9.53	136.00	12.70	186.00								
48"	1219	343		9.53	159.00	12.70	215.50								

*errors and omissions excluded

Reducers-Concentric-Eccentric



Nominal Pipe Size in.	Outside Diameter m/m		Length m/m	SCH STD			SCH XS			SCH XXS			SCH 10		SCH 20		SCH 30	
				Wall Thickness m/m		Weight kg	Wall Thickness m/m		Weight kg	Wall Thickness m/m		Weight kg	Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg	Wall Thickness m/m	Weight kg
				T	T ₁		T	T ₁		T	T ₁		T	T ₁		T	T ₁	
¾ x ½	27	x 21	38	2.87	x 2.77		3.91	x 3.73		7.82	x 7.47							
1 x ½	33	x 21	51	3.38	x 2.77	0.14	4.55	x 3.73	0.16	9.09	x 7.47							
		x 27	51		x 2.87	0.14		x 3.91	0.17		x 7.82							
1 ¼ x ½	42	x 21	51	3.56	x 2.77	0.19	4.85	x 3.73	0.22	9.70	x 7.47	0.40						
		x 27	51		x 2.87	0.20		x 3.91	0.23		x 7.82	0.42						
		x 33	51		x 3.38	0.20		x 4.55	0.24		x 9.09	0.42						
1 ½ x ½	48	x 21	64	3.68	x 2.77	0.20	5.08	x 3.73	0.28	10.15	x 7.47	0.61						
		x 27	64		x 2.87	0.22		x 3.91	0.27		x 7.82	0.67						
		x 33	64		x 3.38	0.24		x 4.55	0.31		x 9.09	0.73						
		x 42	64		x 3.56	0.26		x 4.85	0.33		x 9.70	0.79						
2 x ¾	60	x 27	76	3.91	x 2.87	0.33	5.54	x 3.91	0.46	11.07	x 7.82	1.02						
		x 33	76		x 3.38	0.37		x 4.55	0.45		x 9.09	1.14						
		x 42	76		x 3.56	0.39		x 4.85	0.53		x 9.70	1.20						
		x 48	76		x 3.68	0.41		x 5.08	0.54		x 10.15	1.26						
2 ½ x 1	73	x 33	89	5.16	x 3.38	0.59	7.01	x 4.55	0.79	14.02	x 9.09	1.82						
		x 42	89		x 3.56	0.67		x 4.85	0.79		x 9.70	2.07						
		x 48	89		x 3.68	0.68		x 5.08	0.86		x 10.15	2.09						
		x 60	89		x 3.91	0.73		x 5.54	0.94		x 11.07	2.26						
3 x 1 ¼	89	x 42	89	5.49	x 3.56	0.77	7.62	x 4.85	1.04	15.24	x 9.70	2.46						
		x 48	89		x 3.68	0.86		x 5.08	1.04		x 10.15	2.76						
		x 60	89		x 3.91	0.91		x 5.54	1.18		x 11.07	2.90						
		x 73	89		x 5.16	0.98		x 7.01	1.29		x 14.02	3.12						
3 ½ x 1 ½	102	x 48	102	5.74	x 3.68	1.14	8.08	x 5.08	1.43									
		x 60	102		x 3.91	1.23		x 5.54	1.61									
		x 73	102		x 5.16	1.34		x 7.01	1.75									
		x 89	102		x 5.49	1.38		x 7.62	1.85									
4 x 1 ½	114	x 48	102	6.02	x 3.68	1.24	8.56	x 5.08	1.73	17.12	x 10.15	4.18						
		x 60	102		x 3.91	1.44		x 5.54	1.78		x 11.07	4.85						
		x 73	102		x 5.16	1.52		x 7.01	2.01		x 14.02	5.14						
		x 89	102		x 5.49	1.59		x 7.62	2.13		x 15.24	5.35						
		x 102	102		x 5.74	1.64		x 8.08	2.21									
5 x 2	141	x 60	127	6.55	x 3.91	2.29	9.53	x 5.54	3.00	19.05	x 11.07	7.29						
		x 73	127		x 5.16	2.51		x 7.01	3.30		x 14.02	8.02						
		x 89	127		x 5.49	2.60		x 7.62	3.55		x 15.24	8.31						
		x 102	127		x 5.74	2.66		x 8.08	3.65									
		x 114	127		x 6.02	2.72		x 8.56	3.78		x 17.12	8.68						
6 x 2 ½	168	x 73	140	7.11	x 5.16	3.45	10.97	x 7.01	4.52	21.95	x 14.02	11.09						
		x 89	140		x 5.49	3.63		x 7.62	5.04		x 15.24	11.64						
		x 102	140		x 5.74	3.69		x 8.08	5.27									
		x 114	140		x 6.02	3.72		x 8.56	5.45		x 17.12	11.98						
		x 141	140		x 6.55	3.93		x 9.53	5.72		x 19.05	12.64						

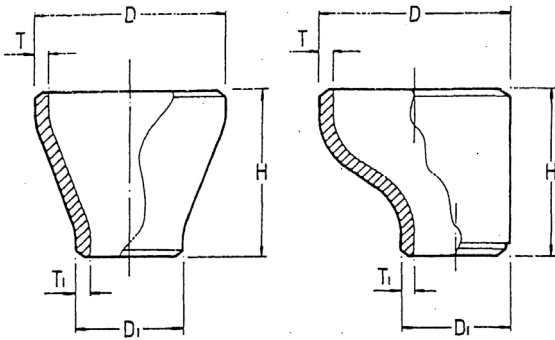
*errors and omissions excluded

Reducers-Concentric-Eccentric

SCH 40			SCH 60			SCH 80			SCH 100			SCH 120			SCH 140			SCH 160		
Wall Thickness m/m	Weight kg		Wall Thickness m/m	Weight kg		Wall Thickness m/m	Weight kg		Wall Thickness m/m	Weight kg		Wall Thickness m/m	Weight kg		Wall Thickness m/m	Weight kg		Wall Thickness m/m	Weight kg	
T	T ₁		T	T ₁		T	T ₁		T	T ₁		T	T ₁		T	T ₁		T	T ₁	
2.87	x 2.77					3.91	x 3.73											5.56	x 4.78	
3.38	x 2.77	0.14				4.55	x 3.73	0.16										6.35	x 4.78	0.22
	x 2.87	0.14					x 3.91	0.17											x 5.56	0.22
3.56	x 2.77	0.19				4.85	x 3.73	0.22										6.35	x 4.78	0.29
	x 2.87	0.20					x 3.91	0.23											x 5.56	0.30
	x 3.38	0.20					x 4.55	0.24											x 6.35	0.30
3.68	x 2.77	0.20				5.08	x 3.73	0.28										7.14	x 4.78	0.46
	x 2.87	0.22					x 3.91	0.27											x 5.56	0.51
	x 3.38	0.24					x 4.55	0.31											x 6.35	0.55
	x 3.56	0.26					x 4.85	0.33											x 6.35	0.60
3.91	x 2.87	0.33				5.54	x 3.91	0.46										8.74	x 5.56	0.84
	x 3.38	0.37					x 4.55	0.45											x 6.35	0.94
	x 3.56	0.39					x 4.85	0.53											x 6.35	0.99
	x 3.68	0.41					x 5.08	0.54											x 7.14	1.04
5.16	x 3.38	0.59				7.01	x 4.55	0.79										9.53	x 6.35	1.33
	x 3.56	0.67					x 4.85	0.79											x 6.35	1.52
	x 3.68	0.68					x 5.08	0.86											x 7.14	1.53
	x 3.91	0.73					x 5.54	0.94											x 8.74	1.65
5.49	x 3.56	0.77				7.62	x 4.85	1.04										11.13	x 6.35	1.89
	x 3.68	0.86					x 5.08	1.04											x 7.14	2.12
	x 3.91	0.91					x 5.54	1.18											x 8.74	2.23
	x 5.16	0.98					x 7.01	1.29											x 9.53	2.40
5.74	x 3.68	1.14				8.08	x 5.08	1.43												
	x 3.91	1.23					x 5.54	1.61												
	x 5.16	1.34					x 7.01	1.75												
	x 5.49	1.38					x 7.62	1.85												
6.02	x 3.68	1.24				8.56	x 5.08	1.73										13.49	x 7.14	3.42
	x 3.91	1.44					x 5.54	1.78											x 8.74	3.97
	x 5.16	1.52					x 7.01	2.01											x 9.53	4.21
	x 5.49	1.59					x 7.62	2.13											x 11.13	4.38
	x 5.74	1.64					x 8.08	2.21												
6.55	x 3.91	2.29				9.53	x 5.54	3.00										15.88	x 8.74	6.23
	x 5.16	2.51					x 7.01	3.30											x 9.53	6.68
	x 5.49	2.6					x 7.62	3.55											x 11.13	7.10
	x 5.74	2.66					x 8.08	3.65												
	x 6.02	2.72					x 8.56	3.78		12.70	x	11.13	6.09						x 13.49	7.41
7.11	x 5.16	3.45				10.97	x 7.01	4.52										18.26	x 9.53	9.46
	x 5.49	3.63					x 7.62	5.04											x 11.13	9.93
	x 5.74	3.69					x 8.08	5.27												
	x 6.02	3.72					x 8.56	5.45		14.27	x	11.13	8.20						x 13.49	10.22
	x 6.55	3.93					x 9.53	5.72			x	12.70	8.65						x 15.88	10.78

*errors and omissions excluded

Reducers-Concentric-Eccentric



Nominal Pipe Size in.	Outside Diameter m/m		Length m/m	SCH STD			SCH XS			SCH XXS			SCH 10		SCH 20		SCH 30			
	D	D ₁		H	T	T ₁	Weight kg	T	T ₁	Weight kg	T	T ₁	Weight kg	T	T ₁	Weight kg	T	T ₁	Weight kg	
8 x 4	219	x 114	152	8.18	x 6.02	5.95	12.70	x 8.56	8.44	22.23	x 17.12	16.73								
x 5		x 141	152		x 6.55	6.08		x 9.53	8.85		x 19.05	17.22								
x 6		x 168	152		x 7.11	9.31		x 10.97	9.26		x 21.95	17.88								
10 x 4	273	x 114	178	9.27	x 6.02	9.58	12.70	x 8.56	11.50	25.40	x 17.12	27.61								
x 5		x 141	178		x 6.55	9.90		x 9.53	13.00		x 19.05	28.44								
x 6		x 168	178		x 7.11	10.10		x 10.97	13.50		x 21.95	28.99								
x 8		x 219	178		x 8.18	10.50		x 12.70	14.20		x 22.23	29.27			6.35	x 6.35	7.89	7.80	x 7.04	9.62
12 x 5	324	x 141	203	9.53	x 6.55	13.80	12.70	x 9.53	17.70	25.40	x 19.05	37.94								
x 6		x 168	203		x 7.11	14.10		x 10.97	18.40		x 21.95	38.70								
x 8		x 219	203		x 8.18	14.60		x 12.70	19.08		x 22.23	40.22			6.35	x 6.35	10.70	8.38	x 7.04	14.03
x 10		x 273	203		x 9.27	15.20		x 12.70	19.80		x 25.40	41.73				x 6.35	11.10		x 7.80	14.56
14 x 6	356	x 168	330	9.53	x 7.11	25.30	12.70	x 12.70	33.70											
x 8		x 219	330		x 8.18	26.00		x 12.70	34.90						7.92	x 6.35	23.09	9.53	x 7.04	27.62
x 10		x 273	330		x 9.27	27.40		x 12.70	36.10							x 6.35	24.21		x 7.80	28.97
x 12		x 324	330		x 9.53	28.80		x 12.70	37.70							x 6.35	25.56		x 8.30	30.57
16 x 6	406	x 168	356	9.53	x 7.11	21.90	12.70	x 10.97	46.60											
x 8		x 219	356		x 8.18	21.90		x 12.70	46.60						7.92	x 6.35	27.72	9.53	x 7.04	33.18
x 10		x 273	356		x 9.27	33.10		x 12.70	43.70							x 6.35	28.83		x 7.80	34.51
x 12		x 324	356		x 9.53	34.30		x 12.70	45.00							x 6.35	29.94		x 8.38	35.83
x 14		x 356	356		x 9.53	35.20		x 12.70	46.30						6.35	x 6.35	24.53		x 9.53	36.50
18 x 8	457	x 219	381	9.53	x 8.18	39.40	12.70	x 12.70	51.80											
x 10		x 273	381		x 9.27	39.40		x 12.70	51.80						7.92	x 6.35	33.45	11.13	x 7.04	46
x 12		x 324	381		x 9.53	40.50		x 12.70	53.60							x 6.35	33.45		x 7.80	46.62
x 14		x 356	381		x 9.53	41.30		x 12.70	54.50							x 6.35	33.45		x 8.38	48.02
x 16		x 406	381		x 9.53	42.70		x 12.70	55.80						6.35	x 6.35	28.23		x 9.53	48.95
x 18		x 457	381		x 9.53	42.70		x 12.70	55.80							x 6.35	29.04		x 9.53	50.35
20 x 8	508	x 219	508	9.53	x 8.18	60.80	12.70	x 12.70	79.90											
x 10		x 273	508		x 9.27	60.80		x 12.70	79.90											
x 12		x 324	508		x 9.53	60.80		x 12.70	79.90											
x 14		x 356	508		x 9.53	61.30		x 12.70	81.30						6.35	x 6.35	40.30		x 9.53	79.58
x 16		x 406	508		x 9.53	62.60		x 12.70	82.60							x 6.35	41.10		x 9.53	81.15
x 18		x 457	508		x 9.53	64.50		x 12.70	84.40							x 6.35	42.72		x 11.13	83.52
22 x 10	559	x 273	508	9.53	x 9.27	67.20	12.70	x 12.70	88.50											
x 12		x 324	508		x 9.53	67.20		x 12.70	88.50											
x 14		x 356	508		x 9.53	67.20		x 12.70	88.50						6.35	x 6.35	49.32		x 9.53	86.87
x 16		x 406	508		x 9.53	68.50		x 12.70	89.90							x 6.35	50.31		x 9.53	88.61
x 18		x 457	508		x 9.53	69.90		x 12.70	91.70							x 6.35	51.29		x 11.13	90.34
x 20		x 508	508		x 9.53	71.30		x 12.70	94.00							x 6.35	52.28		x 12.70	92.08

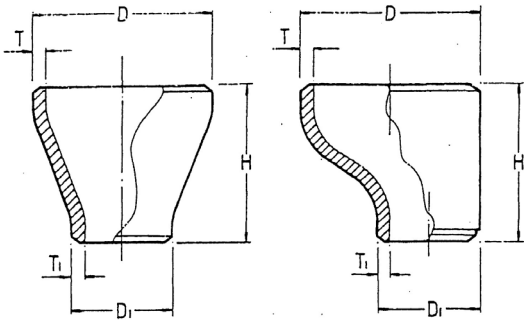
*errors and omissions excluded

Reducers-Concentric-Eccentric

SCH 40			SCH 60			SCH 80			SCH 100			SCH 120			SCH 140			SCH 160		
Wall Thickness m/m		Weight kg	Wall Thickness m/m		Weight kg	Wall Thickness m/m		Weight kg	Wall Thickness m/m		Weight kg	Wall Thickness m/m		Weight kg	Wall Thickness m/m		Weight kg	Wall Thickness m/m		Weight kg
T	T ₁		T	T ₁		T	T ₁		T	T ₁		T	T ₁		T	T ₁		T	T ₁	
8.18	x 6.02	5.95				12.70	x 8.56	8.44				18.26	x 11.13	14.03				23.01	x 13.49	17.25
	x 6.55	6.08					x 9.53	8.85					x 12.70	14.44					x 15.88	17.76
	x 7.11	6.31					x 10.97	9.26					x 14.27	14.99					x 18.26	18.43
9.27	x 6.02	9.58				15.09	x 8.56	17.08				21.44	x 11.13	23.67				28.58	x 13.49	30.66
	x 6.55	9.90					x 9.53	17.59					x 12.70	24.38					x 15.88	31.58
	x 7.11	10.10					x 10.97	17.93					x 14.27	24.85					x 18.26	32.19
	x 8.18	10.50	12.70	x 10.31	13.50		x 12.70	18.10	18.26	x 15.09	21.65		x 18.26	25.09	25.40	x 20.62	29.27		x 23.01	32.50
10.31	x 6.55	16.18				17.48	x 9.53	26.80				25.40	x 12.70	37.94				33.32	x 15.88	48.46
	x 7.11	16.50					x 10.97	27.34					x 14.27	38.70					x 18.26	49.43
	x 8.18	17.15	14.27	x 10.31	23.45		x 12.70	28.41	21.44	x 15.09	34.40		x 18.26	40.22	28.58	x 20.62	44.76		x 23.01	51.37
	x 9.27	17.80		x 12.70	24.33		x 15.09	29.48		x 18.26	35.70		x 21.44	41.73		x 25.40	46.25		x 28.58	53.31
11.13	x 7.11	31.18				19.05	x 10.97	52.17				27.79	x 14.27	74.12				35.71	x 18.26	92.95
	x 8.18	32.12	15.09	x 10.31	43.05		x 12.70	53.74	23.83	x 15.09	66.25		x 18.26	76.34	31.75	x 20.62	86.17		x 95.74	
	x 9.27	33.67		x 12.70	45.14		x 15.09	56.34		x 18.26	69.74		x 21.44	80.05		x 25.40	90.35		x 28.58	100.39
	x 10.31	35.55		x 14.27	47.65		x 17.48	59.47		x 21.44	73.32		25.40	84.50		x 28.58	95.37		x 33.32	105.96
12.70	x 7.11	43.89				21.44	x 10.97	72.44				30.96	x 14.24	101.75				40.49	x 18.26	130.05
	x 8.18	43.89	16.66	x 10.31	56.84		x 12.70	72.44	26.19	x 15.09	87.15		x 18.26	101.75	36.53	x 20.62	118.59		x 23.01	130.05
	x 9.27	45.65		x 12.70	59.11		x 15.09	75.34		x 18.26	90.64		x 21.44	105.82		x 25.40	123.33		x 28.58	135.25
	x 10.31	47.40		x 14.27	61.39		x 17.48	78.24		x 21.44	94.12		x 25.40	109.89		x 28.58	128.08		x 33.32	140.45
	x 11.13	48.28		x 15.09	62.52		x 19.05	79.68		x 23.28	95.87		x 27.79	111.93		x 31.75	130.45		x 35.71	143.06
14.27	x 8.18	59.40	19.05	x 10.31	78.41	23.83	x 12.70	97.00	29.36	x 15.09	118.02	34.93	x 18.26	138.55	36.67	x 20.62	155.62	45.24	x 23.01	175.07
	x 9.27	59.40		x 12.70	78.41		x 15.09	97.00		x 18.26	118.02		x 21.44	138.55		x 25.40	155.62		x 28.58	175.07
	x 10.31	61.18		x 14.27	80.76		x 17.48	99.91		x 21.44	121.56		x 25.40	142.71		x 28.58	160.29		x 33.32	180.32
	x 11.13	62.37		x 15.09	82.33		x 19.05	101.85		x 23.28	123.92		x 27.79	145.48		x 31.75	163.40		x 35.71	183.82
	x 12.70	64.15		x 16.66	84.68		x 21.44	104.76		x 26.19	127.46		x 30.96	149.63		x 36.53	168.07		x 40.49	189.08
15.09	x 8.18	93.15	20.62	x 10.31	125.91	26.19	x 12.70	158.04	32.54	x 15.09	193.78	38.10	x 18.26	224.25	44.45	x 20.62	320.00	50.01	x 23.01	340.00
	x 9.27	93.15		x 12.70	125.91		x 15.09	158.04		x 18.26	193.78		x 21.44	224.25		x 25.40	320.00		x 28.58	340.00
	x 10.31	93.15		x 14.27	125.91		x 17.48	158.04		x 21.44	193.78		x 25.40	224.25		x 28.58	320.00		x 33.32	340.00
	x 11.13	94.08		x 15.09	127.17		x 19.05	159.62		x 23.28	195.72		x 27.79	226.49		x 31.75	350.00		x 35.71	370.00
	x 12.70	95.94		x 16.66	129.69		x 21.44	162.78		x 26.19	199.59		x 30.96	230.98		x 36.53	350.00		x 40.49	370.00
	x 14.27	98.74		x 19.05	133.46		x 23.83	167.52		x 29.36	205.41		x 34.93	237.71		x 39.67	350.00		x 45.24	370.00
			22.23	x 12.70	149.37	28.58	x 15.09	189.78	34.93	x 18.26	229.18	41.28	x 21.44	290.00	47.63	x 25.40	370.00	53.98	x 28.58	420.00
				x 14.27	149.37		x 17.48	189.78		x 21.44	229.18		x 25.40	290.00		x 28.58	370.00		x 33.32	420.00
				x 15.09	149.37		x 19.05	189.78		x 23.83	229.18		x 27.79	290.00		x 31.75	370.00		x 35.71	450.00
				x 16.66	152.36		x 21.44	193.58		x 26.19	233.76		x 30.96	320.00		x 53	390.00		x 40.49	465.00
				x 19.05	155.34		x 23.83	197.37		x 29.36	238.35		x 34.93	320.00		x 39.67	390.00		x 45.24	475.00
				x 20.62	158.33		x 26.19	201.18		x 32.54	242.93		x 38.10	320.00		x 44.45	390.00		x 50.01	475.00

*errors and omissions excluded

Reducers-Concentric-Eccentric



Nominal Pipe Size in.	Outside Diameter m/m		Length m/m	SCH STD		SCH XS		SCH XXS		SCH 10		SCH 20		SCH 30				
	D	D ₁		H	T	T ₁	T	T ₁	T	T ₁	T	T ₁	T	T ₁	T	T ₁		
24 x 10	610	x 273	508	9.53	x 9.27	72.60	12.70	x 12.70	95.80					9.53	x 6.35	71.60	14.27	x 7.80
x 12		x 324	508		x 9.53	72.60		x 12.70	95.80						x 6.35	71.60		x 8.38
x 14		x 356	508		x 9.53	72.60		x 12.70	95.80		6.35	x 6.35	53.86		x 7.92	71.60		x 9.53
x 16		x 406	508		x 9.53	72.60		x 12.70	95.80			x 6.35	53.86		x 7.92	71.60		x 9.53
x 18		x 457	508		x 9.53	74.00		x 12.70	97.60			x 6.35	54.94		x 7.92	73.03		x 11.13
x 20		x 508	508		x 9.53	75.80		x 12.70	99.90			x 6.35	55.95		x 9.53	74.46		x 12.70
x 22		x 559	508		x 9.53	75.80		x 12.70	123.00			x 6.35	55.95		x 9.53	74.46		x 12.70
26 x 12	660	x 324	610	9.53	x 9.53	90.70	12.70	x 12.70	123.00					12.70	x 6.35	123.00		
x 14		x 356	610		x 9.53	90.70		x 12.70	123.00		7.92	x 6.35	75.45		x 7.92	123.00		
x 16		x 406	610		x 9.53	90.70		x 12.70	123.00			x 6.35	75.45		x 7.92	123.00		
x 18		x 457	610		x 9.53	90.70		x 12.70	123.00			x 6.35	75.45		x 7.92	123.00		
x 20		x 508	610		x 9.53	90.70		x 12.70	123.00			x 6.35	75.45		x 9.53	123.00		
x 22		x 559	610		x 9.53	90.70		x 12.70	123.00			x 6.35	75.45		x 9.53	123.00		
x 24		x 610	610		x 9.53	90.70		x 12.70	123.00			x 6.35	75.45		x 9.53	123.00		
28 x 14	711	x 356	610	9.53	x 9.53	95.30	12.70	x 12.70	132.00		7.92	x 6.35	79.30	12.70	x 7.92	131.43	15.88	x 9.53
x 16		x 406	610		x 9.53	95.30		x 12.70	132.00			x 6.35	79.30		x 7.92	131.43		x 9.53
x 18		x 457	610		x 9.53	95.30		x 12.70	132.00			x 6.35	79.30		x 7.92	131.43		x 11.13
x 20		x 508	610		x 9.53	95.30		x 12.70	132.00			x 6.35	79.30		x 9.53	131.43		x 12.70
x 22		x 559	610		x 9.53	95.30		x 12.70	132.00			x 6.35	79.30		x 9.53	131.43		x 12.70
x 24		x 610	610		x 9.53	95.30		x 12.70	132.00			x 6.35	79.30		x 9.53	131.43		x 14.27
x 26		x 660	610		x 9.53	95.30		x 12.70	132.00			x 6.35	79.30		x 12.70	131.43		
30 x 14	762	x 356	610	9.53	x 9.53	100.00	12.70	x 12.70	143.00			x 7.92	83.20	12.70	x 7.92	142.13	15.88	x 9.53
x 16		x 406	610		x 9.53	100.00		x 12.70	143.00			x 6.35	83.20		x 7.92	142.13		x 9.53
x 18		x 457	610		x 9.53	100.00		x 12.70	143.00			x 6.35	83.20		x 7.92	142.13		x 11.13
x 20		x 508	610		x 9.53	100.00		x 12.70	143.00			x 6.35	83.20		x 9.53	142.13		x 12.70
x 22		x 559	610		x 9.53	100.00		x 12.70	143.00			x 6.35	83.20		x 9.53	142.13		x 12.70
x 24		x 610	610		x 9.53	100.00		x 12.70	143.00			x 6.35	83.20		x 9.53	142.13		x 14.27
x 26		x 660	610		x 9.53	100.00		x 12.70	143.00			x 7.92	83.20		x 12.70	142.13		
x 28		x 711	610		x 9.53	100.00		x 12.70	143.00			x 7.92	83.20		x 12.70	142.13		x 15.88
32 x 16	813	x 406	610	9.53	x 9.53	115.00	12.70	x 12.70	150.00		7.92	x 6.35	95.70	12.70	x 7.92	150.00	15.88	x 9.53
x 18		x 457	610		x 9.53	115.00		x 12.70	150.00			x 6.35	95.70		x 7.92	150.00		x 11.13
x 20		x 508	610		x 9.53	115.00		x 12.70	150.00			x 6.35	95.70		x 9.53	150.00		x 12.70
x 24		x 610	610		x 9.53	115.00		x 12.70	150.00			x 6.35	95.70		x 9.53	150.00		x 14.27
x 26		x 660	610		x 9.53	115.00		x 12.70	150.00			x 7.92	95.70		x 12.70	150.00		
x 28		x 711	610		x 9.53	115.00		x 12.70	150.00			x 7.92	95.70		x 12.70	150.00		x 15.88
x 30		x 762	610		x 9.53	115.00		x 12.70	150.00			x 7.92	95.70		x 12.70	150.00		x 15.88

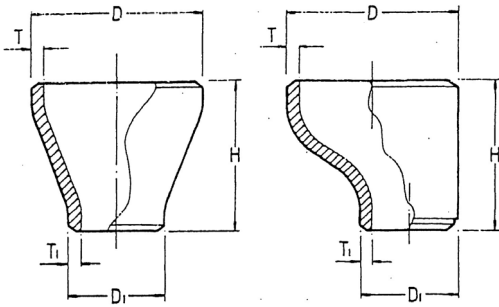
*errors and omissions excluded

Reducers-Concentric-Eccentric

SCH 30	SCH 40		SCH 60			SCH 80			SCH 100			SCH 120			SCH 140			SCH 160			
	Wall Thickness m/m		Weight kg	Wall Thickness m/m		Weight kg	Wall Thickness m/m		Weight kg	Wall Thickness m/m		Weight kg	Wall Thickness m/m		Weight kg	Wall Thickness m/m		Weight kg	Wall Thickness m/m		Weight kg
	T	T ₁		T	T ₁		T	T ₁		T	T ₁		T	T ₁		T	T ₁		T	T ₁	
106.45	17.48	x 9.27	129.61	24.61	x 12.70	180.35	30.96	x 15.09	224.41	38.89	x 18.26	277.99	46.02	x 21.44	360.00	52.37	x 25.40	520.00	59.54	x 28.58	580.00
106.45		x 10.31	129.61		x 14.27	180.35		x 17.48	224.41		x 21.44	277.99		x 25.40	360.00		x 28.58	520.00		x 33.32	580.00
106.45		x 11.13	129.61		x 15.09	180.35		x 19.05	224.41		x 23.83	277.99		x 27.79	360.00		x 31.75	520.00		x 35.71	580.00
106.45		x 12.70	129.61		x 16.66	180.35		x 21.44	224.41		x 26.19	277.99		x 30.96	360.00		x 36.53	570.00		x 40.49	580.00
108.58		x 14.27	132.20		x 19.05	183.96		x 23.83	228.90		x 29.36	283.55		x 34.93	394.00		x 39.67	570.00		x 45.24	610.00
110.71		x 15.09	134.79		x 20.62	187.56		x 26.19	233.39		x 32.54	289.11		x 38.10	394.00		x 44.45	570.00		x 50.01	610.00
110.71					x 22.23	187.56		x 28.58	233.39		x 34.93	289.11		x 41.28	394.00		x 47.63	570.00		x 53.98	610.00
166.03																					
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178.16																					
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*errors and omissions excluded

Reducers-Concentric-Eccentric



Nominal Pipe Size in.	Outside Diameter m/m		Length m/m	SCH STD			SCH XS		
	D	D ₁		H	Wall Thickness m/m		Weight kg	Wall Thickness m/m	
	D	D ₁	H	T	T ₁		T	T ₁	
34 x 16	864	x 406	610	9.53	x 9.53	112.00	12.70	x 12.70	157.00
x 18		x 457	610		x 9.53	112.00		x 12.70	157.00
x 20		x 508	610		x 9.53	112.00		x 12.70	157.00
x 22		x 559	610		x 9.53	112.00		x 12.70	157.00
x 24		x 610	610		x 9.53	112.00		x 12.70	157.00
x 26		x 660	610		x 9.53	112.00		x 12.70	157.00
x 28		x 711	610		x 9.53	112.00		x 12.70	157.00
x 30		x 762	610		x 9.53	112.00		x 12.70	157.00
x 32		x 813	610		x 9.53	112.00		x 12.70	157.00
36 x 16	914	x 406	610	9.53	x 9.53	129.00	12.70	x 12.70	172.00
x 18		x 457	610		x 9.53	129.00		x 12.70	172.00
x 20		x 508	610		x 9.53	129.00		x 12.70	172.00
x 22		x 559	610		x 9.53	129.00		x 12.70	172.00
x 24		x 610	610		x 9.53	129.00		x 12.70	172.00
x 26		x 660	610		x 9.53	129.00		x 12.70	172.00
x 28		x 711	610		x 9.53	129.00		x 12.70	172.00
x 30		x 762	610		x 9.53	129.00		x 12.70	172.00
x 32		x 813	610		x 9.53	129.00		x 12.70	172.00
x 34		x 864	610		x 9.53	129.00		x 12.70	172.00
38 x 18	965	x 457	610	9.53	x 9.53	136.00	12.70	x 12.70	186.00
x 20		x 508	610		x 9.53	136.00		x 12.70	186.00
x 24		x 610	610		x 9.53	136.00		x 12.70	186.00
x 26		x 660	610		x 9.53	136.00		x 12.70	186.00
x 28		x 711	610		x 9.53	136.00		x 12.70	186.00
x 30		x 762	610		x 9.53	136.00		x 12.70	186.00
x 32		x 813	610		x 9.53	136.00		x 12.70	186.00
x 34		x 864	610		x 9.53	136.00		x 12.70	186.00
x 36		x 914	610		x 9.53	136.00		x 12.70	186.00
40 x 20	1016	x 508	610	9.53	x 9.53	143.00	12.70	x 12.70	193.00
x 22		x 559	610		x 9.53	143.00		x 12.70	193.00
x 24		x 610	610		x 9.53	143.00		x 12.70	193.00
x 26		x 660	610		x 9.53	143.00		x 12.70	193.00
x 28		x 711	610		x 9.53	143.00		x 12.70	193.00
x 30		x 762	610		x 9.53	143.00		x 12.70	193.00
x 32		x 813	610		x 9.53	143.00		x 12.70	193.00
x 34		x 864	610		x 9.53	143.00		x 12.70	193.00
x 36		x 914	610		x 9.53	143.00		x 12.70	193.00
x 38		x 965	610		x 9.53	143.00		x 12.70	193.00

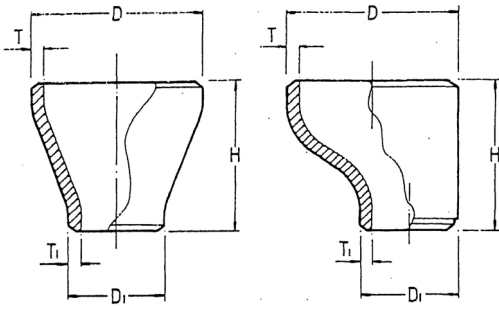
*errors and omissions excluded

Reducers-Concentric-Eccentric

SCH XXS			SCH 10			SCH 20			SCH 30		
Wall Thickness m/m		Weight kg	Wall Thickness m/m		Weight kg	Wall Thickness m/m		Weight kg	Wall Thickness m/m		Weight kg
T	T ₁		T	T ₁		T	T ₁		T	T ₁	
			7.92	x 6.35	112.35	12.70	x 7.92	157.00	15.88	x 9.53	202.42
				x 6.35	112.35		x 7.92	157.00		x 11.13	202.42
				x 6.35	112.35		x 9.53	157.00		x 12.70	202.42
				x 6.35	112.35		x 9.53	157.00		x 12.70	202.42
				x 6.35	112.35		x 9.53	157.00		x 14.27	202.42
				x 7.92	112.35		x 12.70	157.00			
				x 7.92	112.35		x 12.70	157.00		x 15.88	202.42
				x 7.92	112.35		x 12.70	157.00		x 15.88	202.42
				x 7.92	112.35		x 12.70	157.00		x 15.88	202.42
			7.92	x 6.35	123.00	12.70	x 7.92	172.00	15.88	x 9.53	221.00
				x 6.35	123.00		x 7.92	172.00		x 11.13	221.00
				x 6.35	123.00		x 9.53	172.00		x 12.70	221.00
				x 6.35	123.00		x 9.53	172.00		x 12.70	221.00
				x 6.35	123.00		x 9.53	172.00		x 14.27	221.00
				x 7.92	123.00		x 12.70	172.00			
				x 7.92	123.00		x 12.70	172.00		x 15.88	221.00
				x 7.92	123.00		x 12.70	172.00		x 15.88	221.00
				x 7.92	123.00		x 12.70	172.00		x 15.88	221.00
				x 7.92	123.00		x 12.70	172.00		x 15.88	221.00

*errors and omissions excluded

Reducers-Concentric-Eccentric



Nominal Pipe Size in.	Outside Diameter m/m		Length m/m m/m	SCH STD			SCH XS		
	D	D ₁		Wall Thickness m/m		Weight kg	Wall Thickness m/m		Weight kg
	D	D ₁	H	T	T ₁		T	T ₁	
42 x 24	1067	x 610	610.00	9.53	x 9.53	152.00	12.70	x 12.70	201.00
x 26		x 660	610.00		x 9.53	152.00		x 12.70	201.00
x 28		x 711	610.00		x 9.53	152.00		x 12.70	201.00
x 30		x 762	610.00		x 9.53	152.00		x 12.70	201.00
x 32		x 813	610.00		x 9.53	152.00		x 12.70	201.00
x 34		x 864	610.00		x 9.53	152.00		x 12.70	201.00
x 36		x 914	610.00		x 9.53	152.00		x 12.70	201.00
x 38		x 965	610.00		x 9.53	152.00		x 12.70	201.00
x 40		x 1016	610.00		x 9.53	152.00		x 12.70	201.00
44 x 26	1118	x 660	610.00	9.53	x 9.53	159.00	12.70	x 12.70	211.00
x 28		x 711	610.00		x 9.53	159.00		x 12.70	211.00
x 30		x 762	610.00		x 9.53	159.00		x 12.70	211.00
x 32		x 813	610.00		x 9.53	159.00		x 12.70	211.00
x 34		x 864	610.00		x 9.53	159.00		x 12.70	211.00
x 36		x 914	610.00		x 9.53	159.00		x 12.70	211.00
x 38		x 965	610.00		x 9.53	159.00		x 12.70	211.00
x 40		x 1016	610.00		x 9.53	159.00		x 12.70	211.00
x 42		x 1067	610.00		x 9.53	159.00		x 12.70	211.00
46 x 30	1168	x 762	711.00	9.53	x 9.53	170.00	12.70	x 12.70	225.00
x 32		x 813	711.00		x 9.53	170.00		x 12.70	225.00
x 34		x 864	711.00		x 9.53	170.00		x 12.70	225.00
x 36		x 914	711.00		x 9.53	170.00		x 12.70	225.00
x 38		x 965	711.00		x 9.53	170.00		x 12.70	225.00
x 40		x 1016	711.00		x 9.53	170.00		x 12.70	225.00
x 42		x 1067	711.00		x 9.53	170.00		x 12.70	225.00
x 44		x 1118	711.00		x 9.53	170.00		x 12.70	225.00
48 x 30	1219	x 762	711.00	9.53	x 9.53	181.00	12.70	x 12.70	238.00
x 32		x 813	711.00		x 9.53	181.00		x 12.70	238.00
x 34		x 864	711.00		x 9.53	181.00		x 12.70	238.00
x 36		x 914	711.00		x 9.53	181.00		x 12.70	238.00
x 38		x 965	711.00		x 9.53	181.00		x 12.70	238.00
x 40		x 1016	711.00		x 9.53	181.00		x 12.70	238.00
x 42		x 1067	711.00		x 9.53	181.00		x 12.70	238.00
x 44		x 1118	711.00		x 9.53	181.00		x 12.70	238.00
x 46		x 1168	711.00		x 9.53	181.00		x 12.70	238.00

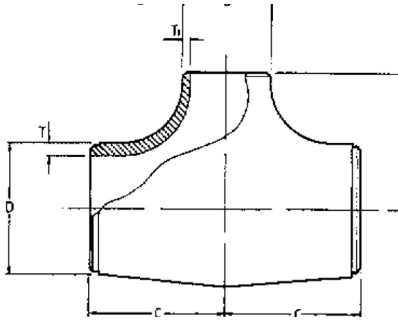
*errors and omissions excluded

CONVERSION FROM INCHES TO MILLIMETRES

Nominal Bore Inches	Outside Diameter	Nominal Bore Millimetre
1/8"	-	6mm
1/4"	-	8mm
3/8"	-	10mm
1/2"	21.3	15mm
3/4"	26.9	20mm
1"	33.7	25mm
1 1/4"	42.4	32mm
1 1/2"	48.3	40mm
2"	60.36	50mm
2 1/2"	76.1	65 mm
3"	88.9	80mm
3 1/2"	101.6	90mm
4"	114.3	100mm
5"	139.7	125mm
6"	165	150mm
8"	219.1	200mm
10"	273	250mm
12"	323.9	300mm
14"	355.6	350mm
16"	406.4	400mm
18"	457	450mm
20"	508	500mm
22"	559	550mm
24"	610	600mm
26"	660	650mm
28"	711	700mm
30"	762	750mm
32"	813	800mm
34"	-	850mm
36"	914	900mm

*errors and omissions excluded

Reducing Outlet Tees



Nominal Pipe Size in.	Outside Diameter m/m		Centre to End Run m/m	Centre to End Branch m/m	SCH STD			SCH XS			SCH XXS			SCH 10			SCH 20			SCH 30	
	D	D ₁			T	T ₁	Weight kg	T	T ₁	Weight kg	T	T ₁	Weight kg	T	T ₁	Weight kg	T	T ₁	Weight kg	T	T ₁
¾ x ½	27	x 21	29	29	2.87	x 2.77		3.91	x 3.73		7.82	x 7.47									
1 x ½	33	x 21	38	38	3.38	x 2.77	0.34	4.55	x 3.73	0.45	9.09	x 7.47	0.65								
x ¾		x 27	38	38		x 2.87	0.34		x 3.91	0.45		x 7.82	0.65								
1 ¼ x ½	42	x 21	48	48	3.56	x 2.77	0.63	4.85	x 3.73	0.85	9.70	x 7.47	1.18								
x ¾		x 27	48	48		x 2.87	0.63		x 3.91	0.85		x 7.82	1.18								
x 1		x 33	48	48		x 3.38	0.63		x 4.55	0.85		x 9.09	1.18								
1 ½ x ½	48	x 21	57	57	3.68	x 2.77	0.92	5.08	x 3.73	1.27	10.15	x 7.47	2.54								
x ¾		x 27	57	57		x 2.87	0.92		x 3.91	1.27		x 7.82	2.54								
x 1		x 33	57	57		x 3.38	0.92		x 4.55	1.27		x 9.09	2.54								
x 1 ¼		x 42	57	57		x 3.56	0.92		x 4.85	1.27		x 9.70	2.54								
2 x ¾	60	x 27	64	44	3.91	x 2.87	1.49	5.54	x 3.91	2.15	11.07	x 7.82	4.00								
x 1		x 33	64	51		x 3.38	1.49		x 4.55	2.15		x 9.09	4.00								
x 1 ¼		x 42	64	57		x 3.56	1.49		x 4.85	2.15		x 9.70	4.00								
x 1 ½		x 48	64	60		x 3.68	1.49		x 5.08	2.15		x 10.15	4.00								
2 ½ x 1	73	x 33	76	57	5.16	x 3.38	2.68	7.01	x 4.55	3.00	14.02	x 9.09	4.00								
x 1 ¼		x 42	76	64		x 3.56	2.68		x 4.85	3.00		x 9.70	4.15								
x 1 ½		x 48	76	67		x 3.68	2.68		x 5.08	3.00		x 10.15	4.20								
x 2		x 60	76	70		x 3.91	2.68		x 5.54	3.00		x 11.07	4.20								
3 x 1 ¼	89	x 42	86	70	5.49	x 3.56	3.75	7.62	x 4.85	4.29	15.24	x 9.70	6.25								
x 1 ½		x 48	86	73		x 3.68	3.75		x 5.08	4.29		x 10.15	6.30								
x 2		x 60	86	76		x 3.91	3.75		x 5.54	4.29		x 11.07	6.35								
x 2 ½		x 73	86	83		x 5.16	3.75		x 7.01	4.29		x 14.02	6.60								
3 ½ x 1 ½	102	x 48	95	79	5.74	x 3.68	5.00	8.08	x 5.08	6.15											
x 2		x 60	95	83		x 3.91	5.00		x 5.54	6.15											
x 2 ½		x 73	95	89		x 5.16	5.00		x 7.01	6.15											
x 3		x 89	95	92		x 5.49	5.00		x 7.62	6.15											
4 x 1 ½	114	x 48	105	86	6.02	x 3.68	6.50	8.56	x 5.08	7.65	17.12	x 10.15	14.50								
x 2		x 60	105	89		x 3.91	6.50		x 5.54	7.65		x 11.07	14.50								
x 2 ½		x 73	105	95		x 5.16	6.50		x 7.01	7.65		x 14.02	14.50								
x 3		x 89	105	98		x 5.49	6.50		x 7.62	7.65		x 15.24	14.50								
x 3 ½		x 102	105	102		x 5.74	6.50		x 8.08	7.65											
5 x 2	141	x 60	124	105	6.55	x 3.91	10.00	9.53	x 5.54	13.50	19.05	x 11.07	27.16								
x 2 ½		x 73	124	108		x 5.16	10.00		x 7.01	13.50		x 14.02	27.16								
x 3		x 89	124	111		x 5.49	10.00		x 7.62	13.50		x 15.24	27.71								
x 3 ½		x 102	124	114		x 5.74	10.00		x 8.08	13.50											
x 4		x 114	124	117		x 6.02	10.00		x 8.56	13.50		x 17.12	28.84								
6 x 2 ½	168	x 73	143	121	7.11	x 5.16	14.00	10.97	x 7.01	19.30	21.95	x 14.02	37.25								
x 3		x 89	143	124		x 5.49	14.00		x 7.62	19.30		x 15.24	37.25								
x 3 ½		x 102	143	127		x 5.74	14.00		x 8.08	19.30											
x 4		x 114	143	130		x 6.02	14.00		x 8.56	19.30		x 17.12	37.25								
x 5		x 141	143	137		x 6.55	16.00		x 9.53	19.30		x 19.05	47.48								

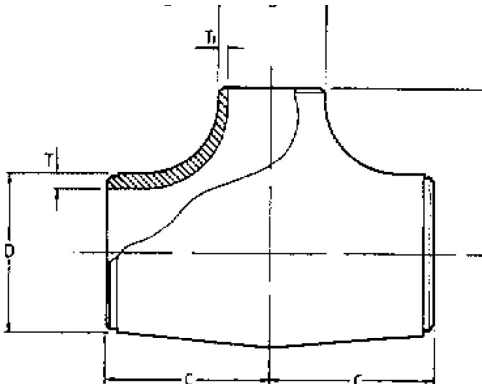
*errors and omissions excluded

Reducing Outlet Tees

SCH 30	SCH 40			SCH 60			SCH 80			SCH 100			SCH 120			SCH 140			SCH 160		
Weight kg	Wall Thickness m/m		Weight kg	Wall Thickness m/m		Weight kg	Wall Thickness m/m		Weight kg	Wall Thickness m/m		Weight kg	Wall Thickness m/m		Weight kg	Wall Thickness m/m		Weight kg	Wall Thickness m/m		Weight kg
	T	T ₁		T	T ₁		T	T ₁		T	T ₁		T	T ₁		T	T ₁		T	T ₁	
	2.87	x 2.77					3.91	x 3.73											5.56	x 4.78	
	3.38	x 2.77	0.34				4.55	x 3.73	0.45										6.35	x 4.78	0.47
		x 2.87	0.34					x 3.91	0.45											x 5.56	0.47
	3.56	x 2.77	0.63				4.85	x 3.73	0.85										6.35	x 4.78	1.00
		x 2.87	0.63					x 3.91	0.85											x 5.56	1.00
		x 3.38	0.63					x 4.55	0.85											x 6.35	1.00
	3.68	x 2.77	0.92				5.08	x 3.73	1.27										7.14	x 4.78	1.79
		x 2.87	0.92					x 3.91	1.27											x 5.56	1.79
		x 3.38	0.92					x 4.55	1.27											x 6.35	1.79
		x 3.56	0.92					x 4.85	1.27											x 6.35	1.79
	3.91	x 2.87	1.49				5.54	x 3.91	2.15										8.74	x 5.56	3.18
		x 3.38	1.49					x 4.55	2.15											x 6.35	3.18
		x 3.56	1.49					x 4.85	2.15											x 6.35	3.18
		x 3.68	1.49					x 5.08	2.15											x 7.14	3.18
	5.16	x 3.38	2.68				7.01	x 4.55	3.00										9.53	x 6.35	3.58
		x 3.56	2.68					x 4.85	3.00											x 6.35	3.58
		x 3.68	2.68					x 5.08	3.00											x 7.14	3.85
		x 3.91	2.68					x 5.54	3.00											x 8.74	3.85
	5.49	x 3.75	3.75				7.62	x 4.85	4.29										11.13	x 6.35	5.65
		x 3.68	3.75					x 5.08	4.29											x 7.14	5.75
		x 3.91	3.75					x 5.54	4.29											x 8.74	5.85
		x 5.16	3.75					x 7.01	4.29											x 9.53	6.13
	5.74	x 3.68	5.00				8.80	x 5.08	6.15												
		x 3.91	5.00					x 5.54	6.15												
		x 5.16	5.00					x 7.01	6.15												
		x 5.49	5.00					x 7.62	6.15												
	6.02	x 3.68	6.50				8.56	x 5.08	7.65										13.49	x 7.14	10.75
		x 3.91	6.50					x 5.54	7.65											x 8.74	10.75
		x 5.16	6.50					x 7.01	7.65											x 9.53	10.75
		x 5.49	6.50					x 7.62	7.65											x 11.13	11.10
		x 5.74	6.50					x 8.08	7.65												11.10
	6.55	x 3.91	10.00				9.53	x 5.54	13.50										15.88	x 8.74	23.00
		x 5.16	10.00					x 7.01	13.50											x 9.53	23.00
		x 5.49	10.00					x 7.62	13.50											x 11.13	23.00
		x 5.74	10.00					x 8.08	13.50												
		x 6.02	10.00					x 8.56	13.50											x 13.49	23.00
	7.11	x 5.16	14.00				10.97	x 7.01	19.30			12.70	x 11.13	17.50					18.26	x 9.53	30.85
		x 5.49	14.00					x 7.62	19.30											x 11.13	30.85
		x 5.74	14.00					x 8.08	19.30												
		x 6.02	14.00					x 8.56	19.30			14.27	x 11.13	24.00						x 13.49	32.70
		x 6.55	16.00					x 9.53	19.30				x 12.70	24.00						x 15.88	32.70

*errors and omissions excluded

Reducing Outlet Tees



Nominal Pipe Size in.	Outside Diameter m/m		Centre to End Run m/m	Centre to End Branch m/m	SCH STD			SCH XS			SCH XXS			SCH 10			SCH 20			SCH 30		
	D	D ₁			T	T ₁	Weight kg	T	T ₁	Weight kg	T	T ₁	Weight kg	T	T ₁	Weight kg	T	T ₁	Weight kg	T	T ₁	Weight kg
8 x 4		x 114	178	156	x 6.02	27.00		x 8.56	33.00	22.23	x 17.12	50.40										
x 5		x 141	178	162	x 6.55	27.00		x 9.53	33.00		x 19.05	50.40										
x 6		x 168	178	168	x 7.11	27.00		x 10.97	33.00		x 21.95	51.30										
10 x 4	273	x 114	216	184	9.27	x 6.02	39.63	12.70	x 8.56	53.53	25.40	x 17.12	79.30									
x 5		x 141	216	191		x 6.55	39.63		x 9.53	53.53		x 19.05	79.30									
x 6		x 168	216	194		x 7.11	39.63		x 10.97	53.53		x 21.95	90.93									
x 8		x 219	216	203		x 8.18	39.63		x 12.70	53.53		x 22.23	98.50			6.35	x 6.35	33.15	7.80	x 7.04	38.60	
12 x 5	324	x 140	254	216	9.53	x 6.55	63.00	12.70	x 9.53	74.82	25.40	x 19.05	119.50									
x 6		x 168	254	219		x 7.11	63.00		x 10.97	74.82		x 21.95	119.50									
x 8		x 219	254	229		x 8.18	63.00		x 12.70	74.82		x 22.23	129.07			6.35	x 6.35	41.20	8.38	x 7.04	54.78	
x 10		x 273	254	241		x 9.27	63.00		x 12.70	78.00		x 25.40	150.00				x 6.35	43.40		x 7.80	56.60	
14 x 6	356	x 168	279	238	9.53	x 7.11	97.60	12.70	x 10.97	109.55												
x 8		x 219	279	248		x 8.18	97.60		x 12.70	109.55						7.92	x 6.35	80.50	9.53	x 7.04	97.60	
x 10		x 273	279	257		x 9.27	97.60		x 12.70	109.55							x 6.35	80.50		x 7.80	97.60	
x 12		x 324	279	270		x 9.53	102.00		x 12.70	115.00							x 6.35	84.00		x 8.38	102.00	
16 x 6	406	x 168	305	264	9.53	x 7.11	106.50	12.70	x 10.97	160.00												
x 8		x 219	305	273		x 8.18	106.50		x 12.70	160.00						7.92	x 6.35	98.00	9.53	x 7.04	106.50	
x 10		x 273	305	283		x 9.27	106.50		x 12.70	160.00							x 6.35	98.00		x 7.80	106.50	
x 12		x 324	305	295		x 9.53	110.00		x 12.70	164.00							x 6.35	100.00		x 8.38	110.00	
x 14		x 356	305	305		x 9.53	110.00		x 12.70	167.00				6.35	x 6.35	90.80	x 7.92	100.00		x 9.53	110.00	
18 x 8	457	x 219	343	298	9.53	x 8.18	129.00	12.70	x 12.70	154.00						7.92	x 6.35	123.00	11.13	x 7.04	140.00	
x 10		x 273	343	308		x 9.27	129.00		x 12.70	154.00							x 6.35	123.00		x 7.80	140.00	
x 12		x 324	343	321		x 9.53	135.00		x 12.70	164.00							x 6.35	127.00		x 8.38	154.00	
x 14		x 356	343	330		x 9.53	135.00		x 12.70	190.00				6.35	x 6.35	93.10	x 7.92	127.00		x 9.53	164.00	
x 16		x 406	343	330		x 9.53	135.00		x 12.70	190.00					x 6.35	93.10	x 7.92	127.00		x 9.53	164.00	
20 x 8	508	x 219	381	324	9.53	x 8.18	163.50	12.70	x 12.70	214.00						9.53	x 6.35	163.50	12.70	x 7.04	214.00	
x 10		x 273	381	333		x 9.27	163.50		x 12.70	214.00							x 6.35	163.50		x 7.80	214.00	
x 12		x 324	381	346		x 9.53	163.50		x 12.70	214.00							x 6.35	163.50		x 8.38	214.00	
x 14		x 356	381	356		x 9.53	163.50		x 12.70	214.00				6.35	x 6.35	109.45	x 7.92	163.50		x 9.53	214.00	
x 16		x 406	381	356		x 9.53	168.00		x 12.70	218.00					x 6.35	112.00	x 7.92	168.00		x 9.53	218.00	
x 18		x 457	381	368		x 9.53	168.00		x 12.70	218.00					x 6.35	112.00	x 7.92	168.00		x 11.13	218.00	
22 x 10	559	x 273	419	359	9.53	x 9.27	172.50	12.70	x 12.70	245.00						9.53	x 6.35	170.00	12.70	x 7.80	245.00	
x 12		x 324	419	371		x 9.53	172.50		x 12.70	245.00							x 6.35	170.00		x 8.38	245.00	
x 14		x 356	419	381		x 9.53	172.50		x 12.70	245.00				6.35	x 6.35	111.50	x 7.92	170.00		x 9.53	245.00	
x 16		x 406	419	381		x 9.53	209.00		x 12.70	260.00					x 6.35	139.40	x 7.92	170.00		x 9.53	260.00	
x 18		x 457	419	394		x 9.53	209.00		x 12.70	260.00					x 6.35	139.40	x 7.92	220.00		x 11.13	260.00	
x 20		x 508	419	406		x 9.53	220.00		x 12.70	280.00					x 6.35	146.00	x 9.53	220.00		x 12.70	260.00	

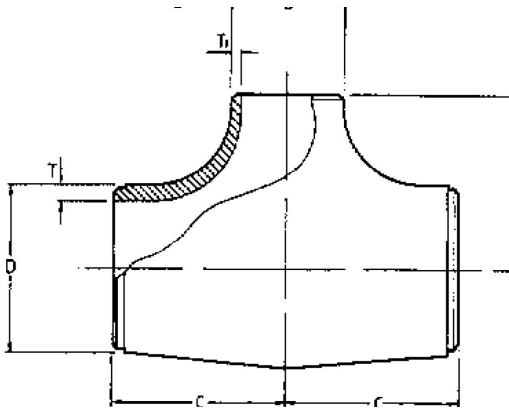
*errors and omissions excluded

Reducing Outlet Tees

SCH 40			SCH 60			SCH 80			SCH 100			SCH 120			SCH 140			SCH 160		
Wall Thickness m/m		Weight kg	Wall Thickness m/m		Weight kg	Wall Thickness m/m		Weight kg	Wall Thickness m/m		Weight kg	Wall Thickness m/m		Weight kg	Wall Thickness m/m		Weight kg	Wall Thickness m/m		Weight kg
T	T ₁		T	T ₁		T	T ₁		T	T ₁		T	T ₁		T	T ₁		T	T ₁	
	x 6.02						x 8.56	33.00				18.26	x 11.13	43.15				23.01	x 13.49	51.00
	x 6.55	27.00					x 9.53	33.00					x 12.70	43.15					x 15.88	55.60
	x 7.11	27.00					x 10.97	33.00					x 14.27	49.50					x 18.26	55.60
9.27	x 6.02	27.00				15.09	x 8.56	46.30				21.44	x 11.13	71.25				28.58	x 13.49	85.00
	x 6.55	39.63					x 9.53	16.30					x 12.70	71.25					x 15.88	91.25
	x 7.11	39.63					x 10.97	49.03					x 14.27	81.70					x 18.26	102.15
	x 8.18	39.63	12.70	x 10.31	53.60		x 12.70	65.83	18.26	x 15.09	73.50		x 18.26	88.50	25.40	x 20.62	95.00		x 23.01	113.00
10.31	x 6.55	67.20				17.48	x 9.53	85.35				25.40	x 12.70	102.60				33.32	x 15.88	140.25
	x 7.11	67.20					x 10.97	85.35					x 14.27	112.15					x 18.26	140.25
	x 8.18	67.20	14.27	x 10.31	77.50		x 12.70	85.35	21.44	x 15.09	122.50		x 18.26	131.20	28.58	x 20.62	140.00		x 23.01	152.30
	x 9.27	70.50		x 12.70	95.00		x 15.09	106.24		x 18.26	124.85		x 21.44	140.85		x 25.40	158.00		x 28.58	163.45
11.13	x 7.11	100.00				19.05	x 10.97	141.85				27.79	x 14.27	205.00				35.71	x 18.26	270.00
	x 8.18	100.00	15.09	x 10.31	127.10		x 12.70	141.85	23.83	x 15.09	195.00		x 18.26	220.00	31.75	x 20.62	250.00		x 23.01	270.00
	x 9.27	100.00		x 12.70	127.10		x 15.09	160.00		x 18.26	195.00		x 21.44	230.00		x 25.40	265.00		x 28.58	285.00
	x 10.31	105.00		x 14.27	135.00		x 17.48	162.28		x 21.44	206.00		x 25.40	235.00		x 28.58	275.00		x 33.32	300.00
12.70	x 7.11	160.00				21.44	x 10.97	163.89				30.96	x 14.27	250.00				40.49	x 18.26	295.00
	x 8.18	160.00	16.66	x 10.31	160.25		x 12.70	163.89	26.19	x 15.09	258.20		x 18.26	280.00	36.53	x 20.62	295.00		x 23.01	295.00
	x 9.27	160.00		x 12.70	162.75		x 15.09	163.89		x 18.26	266.50		x 21.44	295.00		x 25.40	310.00		x 28.58	360.00
	x 10.31	164.00		x 14.27	180.50		x 17.48	181.60		x 21.44	270.68		x 25.40	310.00		x 28.58	340.00		x 33.32	385.00
	x 11.13	167.00		x 15.09	206.50		x 19.05	230.00		x 23.83	279.00		x 27.79	320.00		x 31.75	360.00		x 35.71	410.00
14.27	x 18.26	149.15	19.05	x 10.31	187.00	23.83	x 12.70	203.50	29.36	x 15.09	273.30	34.93	x 18.26	340.00	39.67	x 20.62	360.00	45.24	x 23.01	455.00
	x 9.27	149.15		x 12.70	187.00		x 15.09	224.85		x 18.26	286.50		x 21.44	375.00		x 25.40	385.00		x 28.58	475.00
	x 10.31	192.95		x 14.27	212.50		x 17.48	233.90		x 21.44	286.50		x 25.40	400.00		x 28.58	410.00		x 33.32	500.00
	x 11.13	192.95		x 15.09	212.50		x 19.05	258.00		x 23.83	327.00		x 27.79	420.00		x 31.75	455.00		x 35.71	520.00
	x 12.70	237.45		x 16.66	256.50		x 21.44	278.87		x 26.19	335.00		x 30.96	440.00		x 36.53	475.00		x 40.49	550.00
15.09	x 8.18	220.20	20.62	x 10.31	223.85	26.19	x 12.70	228.25	32.54	x 15.06	390.00	38.10	x 18.26	430.00	44.45	x 20.62	450.00	50.01	x 23.01	660.00
	x 9.27	220.20		x 12.70	286.00		x 15.09	298.25		x 18.26	420.00		x 21.44	475.00		x 25.40	500.00		x 28.58	680.00
	x 10.31	224.00		x 14.27	292.00		x 17.48	319.15		x 21.44	450.00		x 25.40	500.00		x 28.58	540.00		x 33.32	700.00
	x 11.13	224.00		x 15.09	292.00		x 19.05	319.15		x 23.83	470.00		x 27.79	530.00		x 31.75	590.020		x 35.71	725.00
	x 12.70	230.00		x 16.66	322.50		x 21.44	350.50		x 26.19	470.00		x 30.96	550.00		x 36.53	630.00		x 40.49	750.00
	x 14.27	265.10		x 19.05	405.42		x 23.83	405.42		x 29.36	540.00		x 34.93	570.00		x 39.67	680.00		x 45.24	770.00
			22.23	x 12.70	619.00	28.58	x 15.09	619.00	34.93	x 18.26	757.00	41.28	x 21.44	894.90	47.63	x 25.40	1032.50	53.98	x 28.58	1040
				x 14.27	619.00		x 17.48	619.00		x 21.44	757.00		x 25.40	894.90		x 28.58	1032.00		x 33.32	1040
				x 15.09	619.00		x 19.05	619.00		x 23.83	757.00		x 27.79	894.90		x 31.75	132.50		x 35.71	1040
				x 16.66	567.34		x 21.44	657.34		x 26.19	803.16		x 30.96	949.45		x 36.53	1095.50		x 40.49	1241
				x 19.05	657.34		x 23.83	657.34		x 29.36	803.16		x 34.93	949.45		x 39.67	1095.50		x 45.24	1241
				x 20.62	657.34		x 26.19	657.34		x 32.54	803.16		x 38.10	949.45		x 44.45	1095.50		x 50.01	1241

*errors and omissions excluded

Reducing Outlet Tees



Nominal Pipe Size in.	Outside Diameter m/m		Centre to End Run m/m	Centre to End Branch m/m	SCH STD		SCH XS		SCH XXS		SCH 10		SCH 20		SCH 30					
	D	D ₁			T	T ₁	T	T ₁	T	T ₁	T	T ₁	T	T ₁	T	T ₁	T	T ₁		
24 x 10	610	x 273	432	384	9.53	x 9.27	204.00	12.70	x 12.70	300.00				9.53	x 6.35	204.00	14.27	x 7.80	320.00	
x 12		x 324	432	397		x 9.53	218.00		x 12.70	300.00					x 6.35	218.00		x 8.38	320.00	
x 14		x 356	432	406		x 9.53	222.00		x 12.70	300.00		6.35	x 6.35	98.10		x 7.92	222.00		x 9.53	320.00
x 16		x 406	432	406		x 9.53	222.00		x 12.70	320.00			x 6.35	98.10		x 7.92	222.00		x 9.53	340.00
x 18		x 457	432	419		x 9.53	227.00		x 12.70	320.00			x 6.35	123.90		x 7.92	227.00		x 11.13	340.00
x 20		x 508	432	432		x 9.53	227.00		x 12.70	350.00			x 6.35	123.90		x 9.53	227.00		x 12.70	373.00
x 22		x 559	432	432		x 9.53	237.00		x 12.70	350.00			x 6.35	140.40		x 9.53	237.00		x 12.70	373.00
26 x 12	660	x 324	495	422	9.53	x 9.53	234.10	12.70	x 12.70	294.40				12.70	x 6.35	294.40				
x 14		x 356	495	432		x 9.53	239.00		x 12.70	300.30		7.92	x 6.35	198.80		x 7.92	300.30			
x 16		x 406	495	432		x 9.53	246.80		x 12.70	310.30			x 6.35	205.30		x 7.92	310.30			
x 18		x 457	495	444		x 9.53	254.90		x 12.70	320.20			x 6.35	212.10		x 7.92	320.20			
x 20		x 508	495	457		x 9.53	263.50		x 12.70	330.20			x 6.35	219.20		x 9.53	330.20			
x 22		x 559	495	470		x 9.53	271.20		x 12.70	339.70			x 6.35	234.00		x 9.53	339.70			
x 24		x 610	495	483		x 9.53	279.40		x 12.70	349.70			x 6.35	234.00		x 9.53	349.70			
28 x 14	711	x 356	521	457	9.53	x 9.53	274.00	12.70	x 12.70	346.00		7.92	x 6.35	228.00	12.70	x 7.92	346.00	15.88	x 9.53	450.00
x 16		x 406	521	457		x 9.53	283.00		x 12.70	357.00			x 6.35	235.00		x 7.92	357.00		x 9.53	450.00
x 18		x 457	521	470		x 9.53	292.10		x 12.70	368.80			x 6.35	243.00		x 7.92	368.80		x 11.13	461.00
x 20		x 508	521	483		x 9.53	301.60		x 12.70	380.00			x 6.35	250.90		x 9.53	380.00		x 12.70	461.00
x 22		x 559	521	495		x 9.53	310.70		x 12.70	390.00			x 6.35	258.50		x 9.53	390.00		x 12.70	461.00
x 24		x 610	521	508		x 9.53	319.80		x 12.70	400.50			x 6.35	266.00		x 9.53	400.50		x 14.27	480.00
x 26		x 660	521	521		x 9.53	325.20		x 12.70	410.50			x 7.92	270.56		x 12.70	410.50			
30 x 14	762	x 356	559	483	9.53	x 9.53	308.90	12.70	x 12.70	392.40		7.92	x 6.35	257.00	12.70	x 7.92	392.40	15.88	x 9.53	470.00
x 16		x 406	559	483		x 9.53	319.30		x 12.70	403.70			x 6.35	265.65		x 7.92	403.70		x 9.53	470.00
x 18		x 457	559	495		x 9.53	329.80		x 12.70	417.30			x 6.35	274.40		x 7.92	417.30		x 11.13	500.00
x 20		x 508	559	508		x 9.53	339.70		x 12.70	428.60			x 6.35	282.65		x 9.53	428.60		x 12.70	500.00
x 22		x 559	559	521		x 9.53	350.20		x 12.70	440.00			x 6.35	291.35		x 9.53	440.00		x 12.70	500.00
x 24		x 610	559	533		x 9.53	360.60		x 12.70	451.30			x 6.35	300.00		x 9.53	451.30		x 14.27	541.50
x 26		x 660	559	546		x 9.53	370.60		x 12.70	462.70			x 7.92	308.33		x 12.70	462.70			
x 28		x 711	559	546		x 9.53	378.30		x 12.70	471.70			x 7.92	314.74		x 12.70	471.70		x 15.88	566.00
32 x 16	813	x 406	597	508	9.53	x 9.53	381.00	12.70	x 12.70	461.00		7.92	x 6.35	316.95	12.70	x 7.92	461.00	15.88	x 9.53	553.20
x 18		x 457	597	521		x 9.53	390.00		x 12.70	475.00			x 6.35	324.50		x 7.92	475.00		x 11.13	570.00
x 20		x 508	597	533		x 9.53	406.00		x 12.70	487.60			x 6.35	337.70		x 9.53	487.60		x 12.70	585.10
x 24		x 610	597	559		x 9.53	410.00		x 12.70	513.50			x 6.35	341.10		x 9.53	513.50		x 14.27	616.20
x 26		x 660	597	572		x 9.53	420.50		x 12.70	526.20			x 7.92	349.85		x 12.70	526.20			
x 28		x 711	597	572		x 9.53	429.10		x 12.70	536.20			x 7.92	357.00		x 12.70	536.20		x 15.88	643.44
x 30		x 762	597	584		x 9.53	441.40		x 12.70	543.40			x 7.92	452.10		x 12.70	543.40		x 15.88	651.60

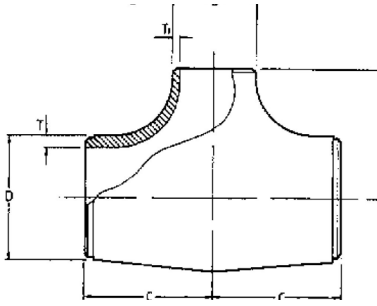
*errors and omissions excluded

Reducing Outlet Tees

SCH 40			SCH 60			SCH 80			SCH 100			SCH 120			SCH 140			SCH 160		
Wall Thickness m/m		Weight kg	Wall Thickness m/m		Weight kg	Wall Thickness m/m		Weight kg	Wall Thickness m/m		Weight kg	Wall Thickness m/m		Weight kg	Wall Thickness m/m		Weight kg	Wall Thickness m/m		Weight kg
T	T ₁		T	T ₁		T	T ₁		T	T ₁		T	T ₁		T	T ₁		T	T ₁	
17.48	x 9.27	307.80	24.61	x 12.70	389.00	30.96	x 15.09	451.96	38.89	x 18.26	635.00	46.02	x 21.44	920.00	52.37	x 25.40	950.00	59.54	x 28.58	1040.00
	x 10.31	307.80		x 14.27	389.00		x 17.48	451.96		x 21.44	700.00		x 25.40	950.00		x 28.58	980.00		x 33.32	1090.00
	x 11.13	308.75		x 15.09	426.75		x 19.05	490.55		x 23.83	770.00		x 27.79	1000.00		x 31.75	1050.00		x 35.71	1140.00
	x 12.70	308.75		x 16.66	426.75		x 21.44	490.55		x 26.19	815.00		x 30.96	1010.00		x 36.53	1040.00		x 40.49	1180.00
	x 14.27	389.50		x 19.05	471.50		x 23.83	533.25		x 29.36	815.00		x 34.93	1040.00		x 39.67	1090.00		x 45.24	1210.00
	x 15.09	390.45		x 20.62	544.80		x 26.19	606.10		x 32.54	910.00		x 38.10	1060.00		x 44.45	1140.00		x 50.01	1270.00
				x 22.23	653.75		x 28.58	748.00		x 34.93	910.00		x 41.28	1100.00		x 47.63	1180.00		x 53.98	1310.00

*errors and omissions excluded

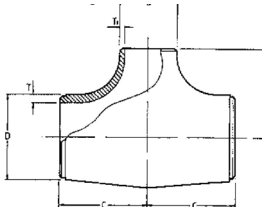
Reducing Outlet Tees



Nominal Pipe Size in.	Outside Diameter m/m		Centre to End Run m/m	Centre to End Branch m/m	SCH STD			SCH XS		
					Wall Thickness m/m		Weight kg	Wall Thickness m/m		Weight kg
					T	T ₁		T	T ₁	
34 x 16	864	x 406	635	533	9.53	x 9.53	411.40	12.70	x 12.70	519.40
x 18		x 457	635	546		x 9.53	423.20		x 12.70	532.0
x 20		x 508	635	559		x 9.53	435.40		x 12.70	546.60
x 22		x 559	635	572		x 9.53	447.20		x 12.70	562.50
x 24		x 610	635	584		x 9.53	459.50		x 12.70	576.10
x 26		x 660	635	597		x 9.53	471.30		x 12.70	589.70
x 28		x 711	635	597		x 9.53	480.40		x 12.70	601.00
x 30		x 762	635	610		x 9.53	492.10		x 12.70	614.60
x 32		x 813	635	622		x 9.53	503.90		x 12.70	630.50
36 x 16	914	x 406	673	559	9.53	x 9.53	460.40	12.70	x 12.70	580.60
x 18		x 457	673	572		x 9.53	473.60		x 12.70	596.50
x 20		x 508	673	584		x 9.53	486.30		x 12.70	610.10
x 22		x 559	673	597		x 9.53	499.00		x 12.70	626.00
x 24		x 610	673	610		x 9.53	512.10		x 12.70	641.80
x 26		x 660	673	622		x 9.53	525.30		x 12.70	653.20
x 28		x 711	673	622		x 9.53	535.70		x 12.70	669.00
x 30		x 762	673	635		x 9.53	547.50		x 12.70	684.90
x 32		x 813	673	648		x 9.53	561.10		x 12.70	698.50
x 34		x 864	673	660		x 9.53	573.30		x 12.70	714.40
38 x 18	965	x 457	711	597	9.53	x 9.53	WEIGHTS ON APPLICATION	12.70	x 12.70	WEIGHTS ON APPLICATION
x 20		x 508	711	610		x 9.53			x 12.70	
x 24		x 610	711	635		x 9.53			x 12.70	
x 26		x 660	711	648		x 9.53			x 12.70	
x 28		x 711	711	648		x 9.53			x 12.70	
x 30		x 762	711	673		x 9.53			x 12.70	
x 32		x 813	711	686		x 9.53			x 12.70	
x 34		x 864	711	698		x 9.53			x 12.70	
x 36		x 914	711	711		x 9.53			x 12.70	
40 x 20	1016	x 508	749	635	9.53	x 9.53			12.70	
x 22		x 559	749	648		x 9.53		x 12.70		
x 24		x 610	749	660		x 9.53		x 12.70		
x 26		x 660	749	673		x 9.53		x 12.70		
x 28		x 711	749	673		x 9.53		x 12.70		
x 30		x 762	749	698		x 9.53		x 12.70		
x 32		x 813	749	711		x 9.53		x 12.70		
x 34		x 864	749	724		x 9.53		x 12.70		
x 36		x 914	749	737		x 9.53		x 12.70		
x 38		x 965	749	749		x 9.53		x 12.70		

*errors and omissions excluded

Reducing Outlet Tees



Nominal Pipe Size in.	Outside Diameter m/m		Centre to End Run m/m	Centre to End Branch m/m	SCH STD		SCH XS	
	D	D ₁			C	M	Wall Thickness m/m	Weight kg
					T	T ₁	T	T ₁
42 x 24	1067	x 610	762	660	9.53	x 9.53	12.70	x 12.70
x 26		x 660	762	698		x 9.53		x 12.70
x 28		x 711	762	698		x 9.53		x 12.70
x 30		x 762	762	711		x 9.53		x 12.70
x 32		x 813	762	711		x 9.53		x 12.70
x 34		x 864	762	711		x 9.53		x 12.70
x 36		x 914	762	711		x 9.53		x 12.70
x 38		x 965	762	711		x 9.53		x 12.70
x 40		x 1016	762	711		x 9.53		x 12.70
44 x 26	1118	x 660	813	698	9.53	x 9.53	12.70	x 12.70
x 28		x 711	813	698		x 9.53		x 12.70
x 30		x 762	813	711		x 9.53		x 12.70
x 32		x 813	813	711		x 9.53		x 12.70
x 34		x 864	813	724		x 9.53		x 12.70
x 36		x 914	813	724		x 9.53		x 12.70
x 38		x 965	813	737		x 9.53		x 12.70
x 40		x 1016	813	749		x 9.53		x 12.70
x 42		x 1067	813	762		x 9.53		x 12.70
46 x 30	1168	x 762	851	737	9.53	x 9.53	12.70	x 12.70
x 32		x 813	851	749		x 9.53		x 12.70
x 34		x 864	851	749		x 9.53		x 12.70
x 36		x 914	851	762		x 9.53		x 12.70
x 38		x 965	851	762		x 9.53		x 12.70
x 40		x 1016	851	775		x 9.53		x 12.70
x 42		x 1067	851	787		x 9.53		x 12.70
x 44		x 1118	851	800		x 9.53		x 12.70
48 x 30	1219	x 762	889	762	9.53	x 9.53	12.70	x 12.70
x 32		x 813	889	787		x 9.53		x 12.70
x 34		x 864	889	787		x 9.53		x 12.70
x 36		x 914	889	787		x 9.53		x 12.70
x 38		x 965	889	813		x 9.53		x 12.70
x 40		x 1016	889	813		x 9.53		x 12.70
x 42		x 1067	889	813		x 9.53		x 12.70
x 44		x 1118	889	838		x 9.53		x 12.70
x 46		x 1168	889	838		x 9.53		x 12.70
52 x 42	1321	x 1067	965	889	9.53	x 9.53	12.70	x 12.70
x 48		x 1219	965	914		x 9.53		x 12.70
54 x 42	1372	x 1067	1093	889	9.53	x 9.53	12.70	x 12.70
x 48		x 1219	1093	914		x 9.53		x 12.70
56 x 42	1422	x 1067	1041	939	9.53	x 9.53	12.70	x 12.70
x 48		x 1219	1041	965		x 9.53		x 12.70
60 x 42	1524	x 1219	1117	1016	9.53	x 9.53	12.70	x 12.70
x 56		x 1422	1117	1041		x 9.53		x 12.70

WEIGHTS ON APPLICATION

WEIGHTS ON APPLICATION

*errors and omissions excluded